Version
22.0

MODU System
Product Catalogue



25
MODU®
Simplicity · Solutions
1995-2020
Celebrating 25 Years

MODU®
Simplicity · Solutions

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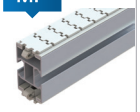
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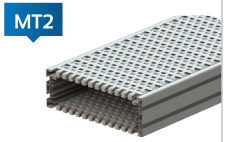
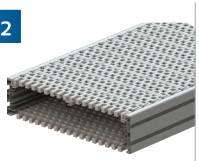
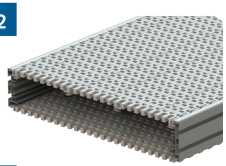
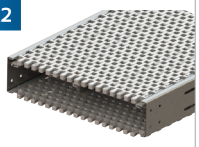
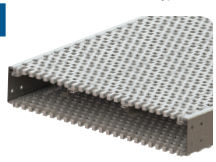
Plastic Chain

MODU System provides diverse plastic chain conveyor systems. All conveyor systems can be effortlessly assembled with standard tools. MODU System components are prepared with anodized aluminium and moulded plastic, giving a spotless and aesthetic outlook.

	MP	MS3	MM3	ML2	MX2
Aluminium Frame					
Stainless Steel Frame					
Chain width	35 mm	63 mm	83 mm	140 mm	220 mm
Beam width	45 mm	65 mm	85 mm	145 mm	225 mm

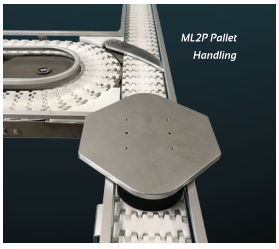
Plastic Belt

The new modular plastic belt conveyor system from MODU is a simplified solution for conveying large products. All components of the plastic belt conveyor are standardized for easy engineering, maintenance and operation. Simplicity in its design makes MODU System's new plastic belt conveyor reliable, flexible, safe and adaptive to any requirements. The white POM belt surface is flat and smooth which minimizes the risk of scratches on products, allowing safe handling of sensitive products. Plastic belt conveyor systems are designed to integrate with new and existing production equipment. Machinery that has been laid out to fulfil Factory and operator requirement can easily be linked using suitable components and conveyors from our modular range.

	MT2	MR2	MF2
Aluminium Frame			
Stainless Steel Frame			
Chain Width	315 mm	438 mm	585 mm
Beam width	360 mm	480 mm	625 mm
Beam width (BT)	320 mm	442 mm	590 mm

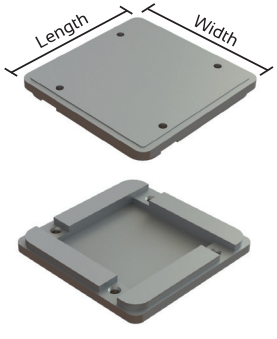
Pallet Handling System

Twin track pallets assembly solutions were designed to convey pallets/slave board from one process or assembly station to another. Based on a modular system, these solutions offered customers plug and play solutions with flexible configurable options.



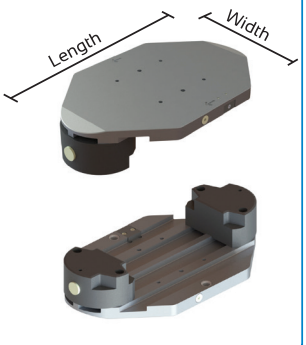


MP Pallet



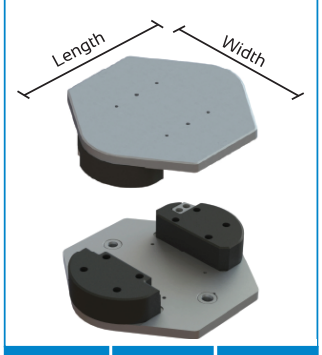
Pallet	Width	Length
Type 1	250mm	250mm
Type 2	330mm	330mm
Type 3	410mm	410mm
Type 4	490mm	490mm

MM3P Pallet



Pallet	Width	Length
Type 1	160mm	141mm
Type 2	160mm	165mm
Type 3	160mm	215mm
Type 4	160mm	265mm

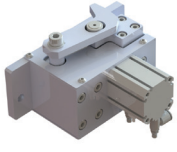
ML2P Pallet



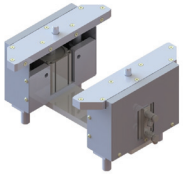
Pallet	Width	Length
Type 1	215mm	222mm
Type 2	256mm	272mm
Type 3	306mm	347mm

m

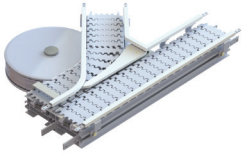
Singulator & Stopper



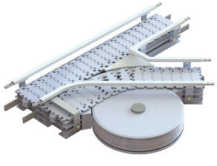
Locating Station



Divert Devices



Merge Devices



Industry: Food & Packaging



Candy Packing Line



Tea Bag Packing Line



High Speed (95m/min) Chocolate Packing Line



Cake Packing Line





Biscuit Packing Line



Cookies Packing Line

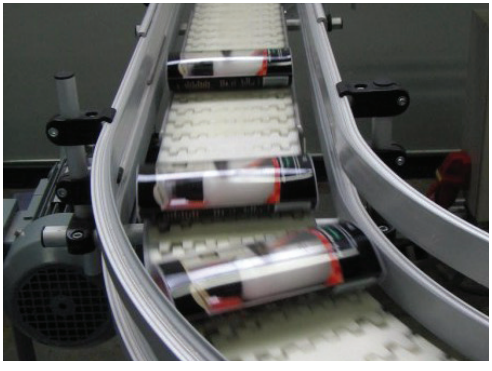
Industry: Personal & Pharmaceutical Product



Shampoo Bottle Depucking System



Vertical Gripper Conveyor



Personal Product Packing Line



Conveyor System for Sanitary Napkins



Handling of Liquid Bottles on Puck

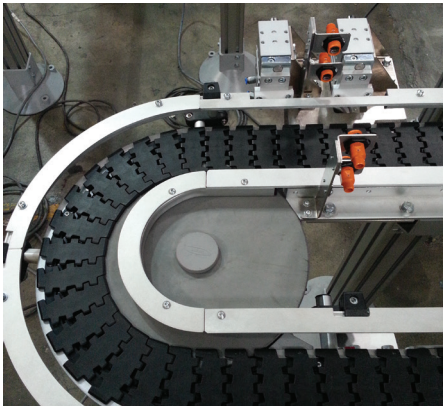


Conveyor for Diaper Line

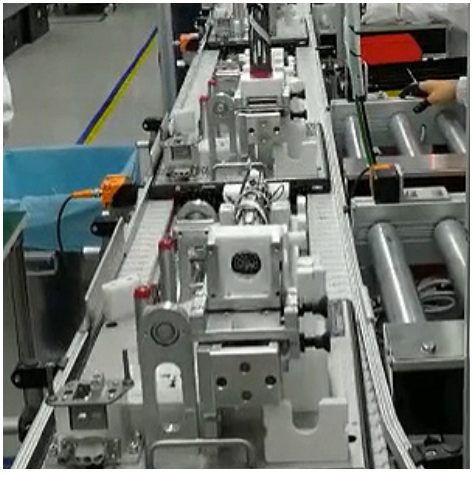
Industry: Electronic & Electrical



Conveyor Line for Hair Dryer Assembly



Anti-Static Conveyor Chain



Conveyor Line for Pallet Handling

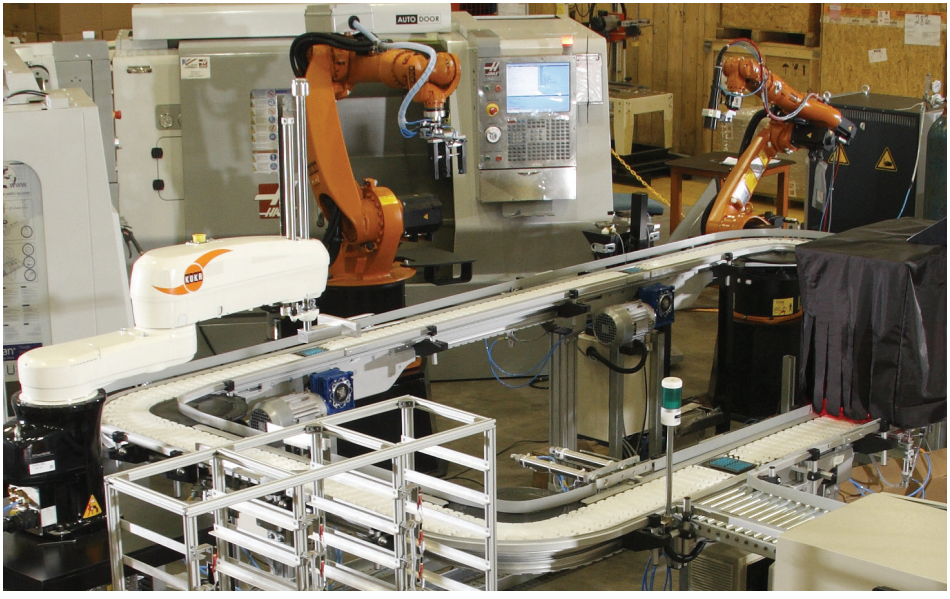


Pick and place for electronic board



Conveyor Line for Various Electronic Components

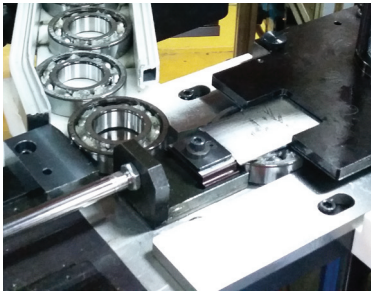
Industry: Automotive & Machine Parts



Robotic Parts Assembly



Conveyor System With Robotic Palletizing



Bearing Manufacturing Line



Automotive Oil Filter Line



Bearing Manufacturing Line

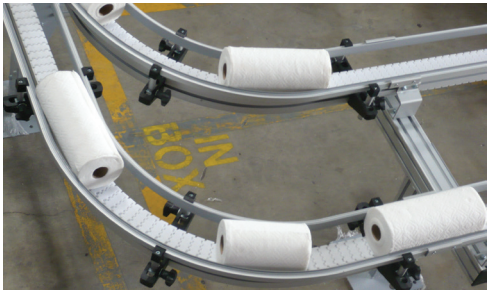
Industry: Paper Converting



Vertical Diverter & Conveyor System for Tissue Rolls



Paper Converting Line



Paper Converting Line



Kitchen Towel Line with Quick Adjust Side Guide

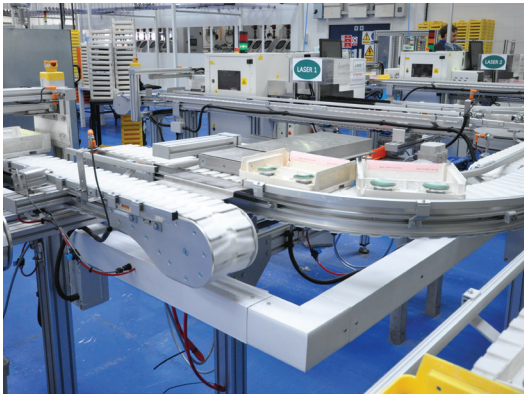


Paper Converting Line

Industry: Optical Lens



Friction Chain Decline of 25°



Tray Distribution Line



Conveyor Line For Optical Trays



Complete Distribution System



Side Transfer Unit for Optical Trays

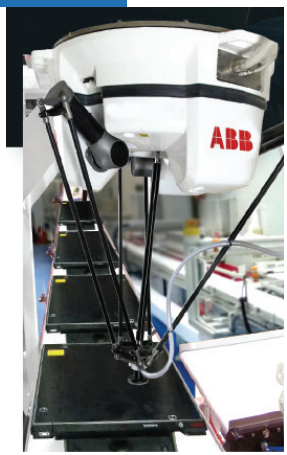


Automatic Optical Tray De-Palletizing System

Application: Robotic Palletizing & Automation



Robotic Palletizing of Carton Boxes



Pick & Place with Delta Robot



Label Pasting with Scara Robot



Robotic Palletizing of Cement Bags



Robotic Pick and Place for Electronic Industry

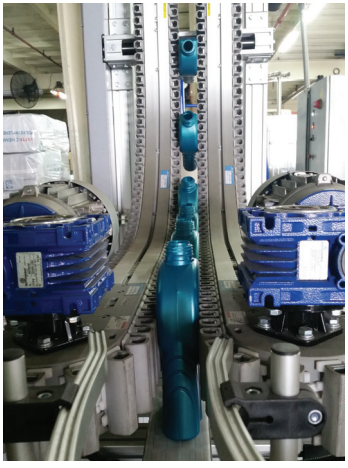


Cobot Palletizing using Omron Cobot

Application: Gripper System



360° Gripper System for Bottles



Lowerator - Continuous Bottle Transfer



Stainless Steel Gripper for Tin Can Handling



S-Flow Gripper Conveyor to Elevate Carton Boxes



Gripper Conveyor System Intergrated with Can Cleaner to Remove Dust Particles from the Can

Application: Alpine & Spiral Conveyor

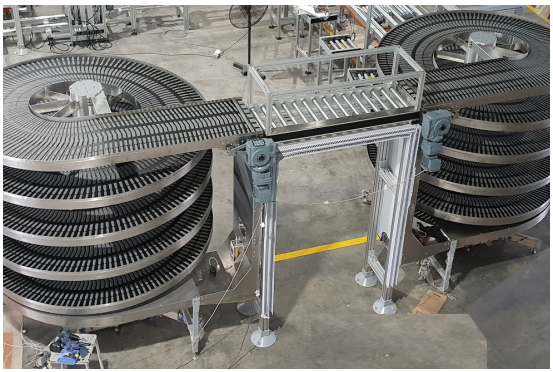
The Alpine Conveyor System consists of multiple layers of conveyors that are stacked above each other. It is used for buffer processes, storage towers, accumulations, and incline or decline from overhead transport systems.



Alpine Conveyor for Puck Storage



Spiral Conveyor



Spiral Conveyor



Spiral Conveyor

Application: Box Handling



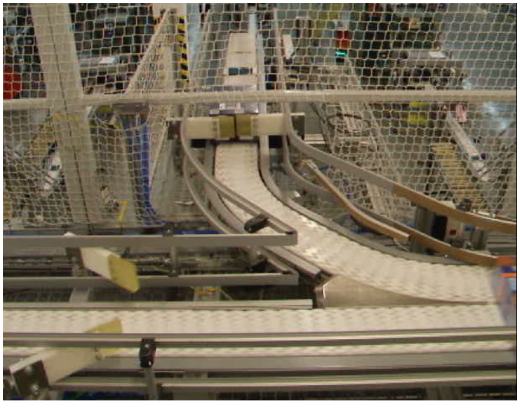
Box Distribution System



Carton Box Sorting System (Bar Code)



Continuous Carton Elevator



Pneumatic Traffic Controller for Merging



Friction Incline Conveyor



Friction Decline Conveyor

Application: Stainless Steel Conveyor



Food Processing Line



Food Processing Line



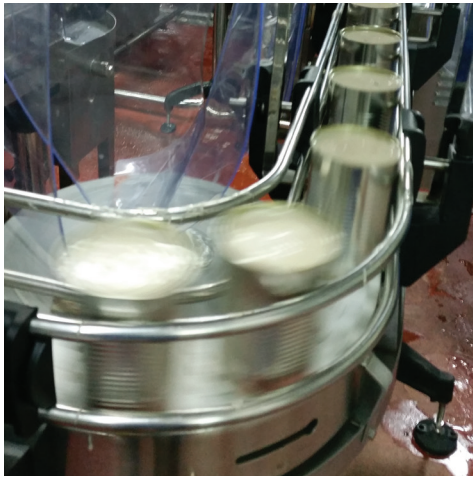
Food Processing Line



Cooking Oil Production Line



Intravenous Fluids (IV) Production Line



Stainless Steel Conveyor for Wet Environment

Application: Accumulation Conveyor

Accumulation conveyor provides large storage capacities. The accumulator stores products to create mass buffering to accommodate other processes.



Accumulation for Composite Can



Accumulation Conveyor for Plastic Bottles



Bi-Directional Accumulation Table

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Basic System Selection



MODU System provides a wide selection of plastic chains and belt sizes to cover a wide variety of product sizes and shapes. In order to select the right chain size for your application, consider the following selection criterias:

- ***Product Dimensions***
  Products can be two or three times wider in width than the conveyor chain, as long as the center of gravity of the product falls within the chain width. Supporting guide rails are required and testing is recommended.

- ***Product Weight***
  Product weight is essential in chain or belt selection as each has maximum traction force. Traction force calculation is required will further increase if the products are accumulated on the conveyor.

- ***Conveyor Functions***
  Most of the conveyor functions are available in all the MODU System's conveyor series. However, there are differences in chain types, drive units and idler units. Selection of drives are important as different drives have different traction force. MODU System's conveyors are to be used after products have been packed.

- ***Technical Calculation***
  It is important to calculate the total load of the conveyor, based on product weight, distance between products, accumulation distance, conveyor length and speed of the conveyor. The frequency of start /stop, chain tension and service factor is important. If the calculated capacity is higher than the selected drive of the chain series, shorten the conveyor or select system with higher capacity.

Product Overview

1. Straight Conveyor (AL / SS)

MODU System's conveyor system is based on aluminium or stainless steel profiled beam, ranging from 35mm to 580mm width, guiding a plastic chain. This plastic chain travels on low-friction plastic extruded slide rails. The products that are to be conveyed ride directly on the chain, or on pallets depending on application. Guide rails on the sides of the conveyor ensures that the product stays on track. Optional drip trays can be provided under the conveyor track.

2. Drive Units (AL / SS)

- ***End Drive Unit***
  An end drive unit pulls the chain from one end of the conveyor and returns on the bottom of the conveyor beam. The traction force is the highest compared to other drive units due to more engagement between drive sprocket and chain.

- ***Intermediate Drive Unit***
  An intermediate drive is best utilized when space restriction prohibits the placement of the end drive unit. It requires two idler end units on each end. The gear motor can be coupled directly or suspended underneath the drive unit. The traction force is lower than end drive unit due to less engagement between drive sprocket and chain.

- ***Catenary Drive Unit***
  Catenary Drive is designed to accommodate top-running chains. Commonly used in the application of single loop or alpine conveyor system. Additional idler end unit is not required.



- ***Combined Drive and Idler Unit***
  A combined drive and idler unit consists of one end drive and one idler end unit mounted in a single assembly with transfer bridge for smooth transfer of products. It has a smaller footprint compared to side transfer designs. The gear motor can be coupled at both left and right orientation.

- ***Wheel Bend Drive Unit***
  Wheel bend drive are used in single loop or alpine conveyor system without return chain. The gear motor is mounted underneath. The traction force is lower than the end drive unit as the sprocket wheel engages at the side of the chain.

3. Idler End Unit (AL / SS)

The function of an idler end is to change the direction of the moving chain.

4. Bends (AL / SS)

Bends are used to change the direction of conveyors. There are 3 types of bends available.

- ***Wheel Bends***
  Designed with top and bottom wheels that rotate freely with the chain and are supported by ball bearings. It has the lowest friction, minimum bend force and smallest turning radius compared to other types of bends. Besides standard 30°, 45°, 60°, 90° and 180° configurations, customised angles are available upon request. Select a horizontal wheel bend whenever possible.

- ***Horizontal Bends***
  An alternative to wheel bends, horizontal bends are used where product has a large turning radius, twin – track bends and pallet applications. It has higher friction compared to wheel bend. A larger radius of bend is recommended for lower friction on slide rail.

- ***Vertical Bends***
  A vertical bend provides vertical change of conveyor direction. Vertical bends increases the tension in the chain thus causing higher stress on the slide rail. Avoid using more than four 90° vertical bends in one conveyor.

5. Slide Rail

A slide rail provides low friction and wear resistant track for chains to slide on. It is mounted to a conveyor beam via screws or rivets. Various types of slide rails are available to cater to different requirements and applications.

6. Conveyor Beams (AL / SS)

Conveyor beams are made of anodized aluminium extrusion that comes in a standard length of 3 meters. T-slot profile allow drives, idlers, bends, guide rail brackets, leg supports and other accessories to be connected using connecting strips or bolts and nuts. Aluminium extrusion has advantages of high strength and lightweight. 2 connecting strips are required for joining. Option of beams made in stainless steel are available with standard length of 2.4 meters.

7. Guide Rail Assembly System (AL / SS)

Guide rail components are used to guide and contain products throughout the conveyor system and prevent them from falling off the conveyor. MODU System provides a comprehensive range of guide rails, covers and brackets either fixed or adjustable to cover a wide range of application.

8. Structural System (AL / SS)

MODU System structural support system consists of support beams, support brackets, foots and end caps that are interconnected to form robust support structure for a wide range of applications.

9. Conveyor Accessories (AL / SS)

MODU System offers a wide selection of conveyor accessories from special bolts & nuts, brackets, connecting strips, rivets, rollers, T-slot covers to washers for inter-connection between modules and components.

Material

Material	Components
Acetal Copolymer, POM (PolyOxyMethylene)	Conveyor Chain
Acetal Copolymer, POM PERMASTAT (PolyOxyMethylene)	Conveyor Chain, Anti-static
Acetal Homopolymer Delrin, Kevlar fiber reinforced	Conveyor Chain, Kevlar
Polypropylene, PP	Conveyor Chain
	Chain guards
	Wheel cap
	End caps
Aluminium, extruded & anodised AA 6063-T6 (All Straight Sections) AA 6063-T5 (Bend Sections)	Angle Brackets
	Beam Support Brackets
	Conveyor Beam
	Vertical Bends
	Guide Rail
	Guide Rail Distance Tube
	Support Beam
	Drive/Idler Side Plate (ML2)
	Drip Tray
Polyethylene, PE 500 (HDPE)	Vertical Bend (special case)
Polyamide injection, PA 6	Pivot for Chain
	Machining sprocket / roller (MM3,ML2 & MX2)
Polyamide, glass fibre reinforced, PA 6 GF30%	Guide Rail Bracket
	Guide Rail Support
	Wheel Bend Wheel
	Drive Sprocket
	Idler Roller (MS3)
High Density Polyethylene, HDPE	Slide Rail
	Guide rail & Guide rail cover
Cast Nylon	Chain Return Guide
Thermoplastic Elastomer	
TPE 50A	Inserts for Gripper Chain (Soft)
TPE 60A	Inserts for Friction Top Chain
	T-slot cover
	Inserts for Gripper Chain (Medium)
TPE 73A	Inserts for Gripper Chain (Hard)
TPU	Inserts for Gripper Pad and Wedge
UHMW-PE	Slide Rail
PVDF	Slide Rail
Nylon	Inner Slide Rail for Plain Bend

Resistance to chemical

MODU System components can withstand continuous contact with most chemicals. However, it is recommended to avoid:

- Acids with pH less than 4
- Bases with pH higher than 9

The following table specifies the resistance of several materials used in the conveyor on selected chemicals

Legend

1 = Very good
2 = Good
3 = Moderate resistance
4 = Not recommended
5 = No data available

Material	Acetal POM	Polyamide PA	High-density Polyethylene HDPE	Thermoplastic Elastomer TPE	Aluminium AL
Acids:					
Acetic acid	3	4	3	-	2
Benzoic acid	3	4	1	-	4
Citric acid	3	2	2	-	2
Chromic acid	4	4	1	-	3
Hydrofluoric acid	4	4	1	-	4
Hydrochloric acid	4	4	1	-	3
Hydro cyanic acid	4	4	2	-	1
Nitric acid	4	4	4	-	3
Phosphoric acid	4	4	1	-	3
Sulphuric acid	4	4	2	1	3
Tartaric acid	3	2	1	-	1
Basic compounds:					
Ammonia	1	2	1	-	2
Calcium hydroxide	1	2	1	-	4
Caustic soda	1	2	1	1	3
Potassium hydroxide	1	2	1	-	4
Salts:					
Potassium bicarbonate	2	2	2	-	1
Potassium permanganate	2	4	2	-	1
Sodium cyanic	2	2	2	-	4
Sodium hydrochloride	3	4	1	-	4
Acid salt	2	3	1	-	-
Basic salt	1	2	1	-	-
Neutral salt	1	2	1	-	-

Organic compounds and solvents:					
Acetone	1	1	4	3	1
Benzene	1	2	4	3	1
Butyl alcohol	2	2	2	-	1
Carbon disulphide	1	2	3	-	1
Chloroform	1	3	4	-	-
Ethyl acetate	1	2	2	-	1
Ethyl alcohol	1	2	1	-	1
Heptane	2	1	2	-	-
Methyl alcohol	1	2	1	-	2
Methyl ethyl ketone	1	1	4	4	2
Nitrobenzene	2	2	3	-	1
Phenol	3	4	2	-	1
Gasses:					
Carbon dioxide	3	1	1	-	1
Carbon monoxide	2	1	1	-	1
Chlorine	2	4	3	-	1
Hydrogen sulphide	3	1	2	-	1
Sulphur dioxide	2	3	2	-	1
Others:					
Beer	1	2	2	-	1
Fruit juices	1	2	3	-	2
Gasoline	1	2	2	-	1
Milk	1	1	2	-	1
Oil	1	1	2	-	1
Vinegar	1	2	3	-	1

Note: The table above is valid for temperature range up to 60ºC and it is considered as a guideline only. Furthermore, precautions should be taken when using cleaning agents. If you are in doubt on the material to withstand your special environment, you should go for chemical testing or contact our local distributor.

Chains Properties:

MODU Plastic Modular Chain

Properties	MP	MS3	MM3	ML2	MX2
Chain width	35mm	63mm	83mm	140mm	220mm
Tensile strength at 20°C (POM)	2000N	3000N	4000N	5000N	5000N
Tensile strength at 20°C (PP)		-	2000N	2600N	-
Maximum working tension (POM)	500N	700N	1000N	1200N	1200N
Maximum working tension (PP)		-	600N	700N	-
Working temperature	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
Recommended running speed	5-40 m/min	5-50 m/min	5-50 m/min	5-50 m/min	5-50 m/min
Max.conveyor length (depend on layout)	20m	30m	30m	30m	30m
Minimum turning radius	150mm	150mm	160mm	200mm	500mm
Link spacing (Pitch)	25.4mm	25.4mm	33.5mm	44.5mm	44.5mm
Chain weight (POM plain chain)	0.45kg/m	0.75kg/m	1.3kg/m	2.5kg/m	3.4kg/m
Chain weight (PP plain chain)		-	-	-	-
Chain weight (POM friction chain)		0.75kg/m	1.42kg/m	1.91kg/m	3.6kg/m
Chain weight (PP friction chain)		-	-	-	-
Chain weight (gripper chain)		-	1.47kg/m - 1.87kg/m	-	-

MODU Plastic Modular Belt

Properties	MT2	MR2	MF2
Chain width	315mm	435mm	585mm
Tensile strength at 20°C (POM)	>30000N	>30000N	>30000N
Tensile strength at 20°C (PP)	>15000N	>15000N	>15000N
Maximum working tension (POM)	1500N	1900N	2200N
Working temperature	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C
Recommended running speed	3-50 m/min	3-50 m/min	3-50 m/min
Max.conveyor length (depend on layout)	30m	30m	30m
Minimum turning radius	900mm	1200mm	1700mm
Link spacing (Pitch)	45.0mm	45.0mm	45.0mm
Chain weight (POM plain chain)	3.8kg/m	5.3kg/m	7.1kg/m

Chain Strength and Expansion vs. Temperature

Temperature ºC	*Tensile strength factor*	*Linear expansion %*
-20	1.2	-0.4
0	1.1	-0.2
20	1	0.1
40	0.9	0.2
60	0.8	0.5
80	0.6	0.8
100	0.5	1
120	0.3	1.3

Friction Coefficient

Friction Coefficients between chain and slide rail is 0.15-0.20. The friction coefficients between chains and products are as follows:

Product	*Plain Chain*	*Friction Top*	*Roller Top*
Steel (dry)	0.15 - 0.25	0.60 - 0.70	0.05 - 0.06
Steel (lubricated)	0.10 - 0.15	-	-
Glass (dry)	0.15 - 0.20	0.50 - 0.60	0.05 - 0.06
Glass (lubricated)	0.10 - 0.15	-	-
Aluminium	0.15 - 0.25	0.60 - 0.70	0.06 - 0.07
Plastic	0.15 - 0.25	0.60 - 0.70	0.05 - 0.07
Wood and paper	0.15 - 0.30	0.60 - 0.70	0.07 - 0.08

Temperature Limits

This conveyor system can operate continuously in an environment between -10ºC to 60ºC.





Sound Level

Noise levels are higher during the run-in period. The noise level should go down after a few days of operation. Generally noise level will increase proportionally with the conveyor speed. The noise level reading in dB should be around the following:

Chain	*Conveyor Speed m/min*				
	5	10	20	30	40
MP	55	59	68	71	72
MS3	55	59	68	71	75
MM3	59	62	70	77	75
ML2	61	65	72	76	79
MX2	61	65	72	76	79
MT2	58	58	60	62	65
MR2	58	58	60	62	65
MF2	58	58	60	62	65

Static Electricity

The standard plastic materials used for conveyors have low electrical conductivity. Static electricity can build up in the conveyor. When a conveyor is running under normal environment (20ºC and humidity 60%) without load, the static electricity build up should be around the following figures:

Above the drive unit	1800-2500V
Idler end	400-500V
Above the wheel bend	400-500V
Above the straight section	250-350V

Chain Tension Calculation

Calculation is necessary to determine the maximum chain tension on a particular conveyor configuration design, the results are used to decide :

- Drive unit capacity
- Tension limit of conveyor chain

Drive Unit Output Capacity, P(W) requirement depend on:

The required motor output power P depends on

- Traction force F
- Chain speed v

The following equation applies:

P [W] = 1/60 × F [N] × v [m/min]

The maximum permissible traction force of the various drive units is shown in the following table:

Drive Unit Type	Maximum Traction Force in Newton (N)							
	MP	MS3	MM3	ML2	MX2	MT2	MR2	MF2
Front	300	600	1000	1200	1300	1500	1900	2200
Combined	300	600	1000	1200	1300	1500	1900	2200
Intermediate	-	100	200	300	-	-	-	-
Wheel	-	100	200	-	-	-	-	-
Catenary	-	300	500	-	-	-	-	-
Suspended	-	600	1000	1200	-	-	-	-

Diagram 1 *Maximum chain tension versus conveyor length*

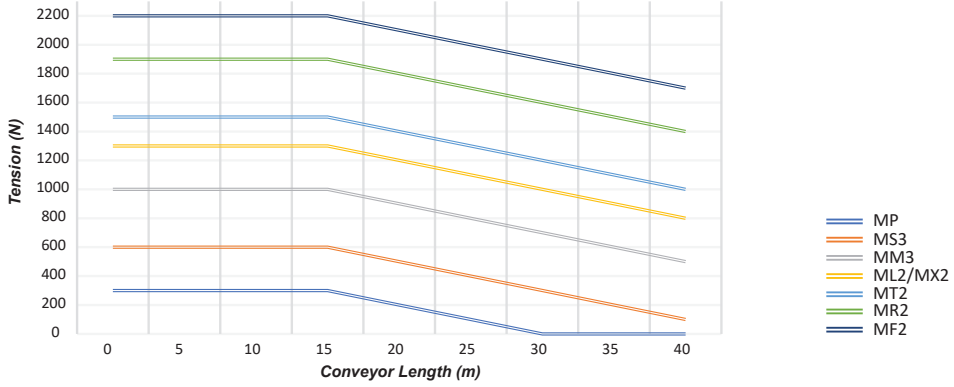
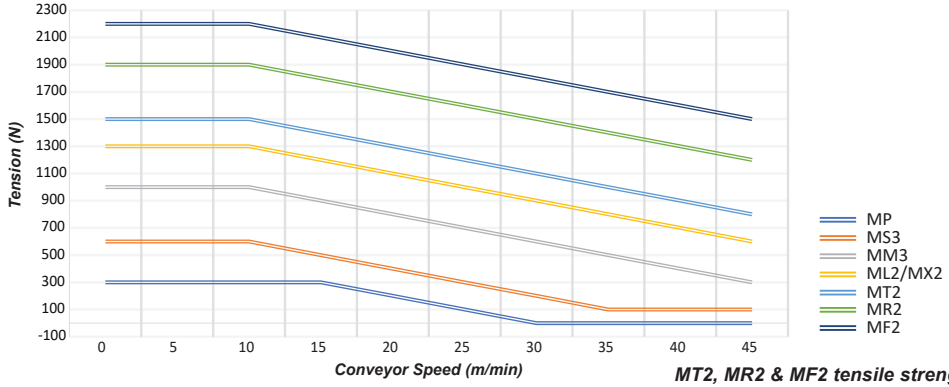


Diagram 2 *Maximum chain tension versus conveyor speed*

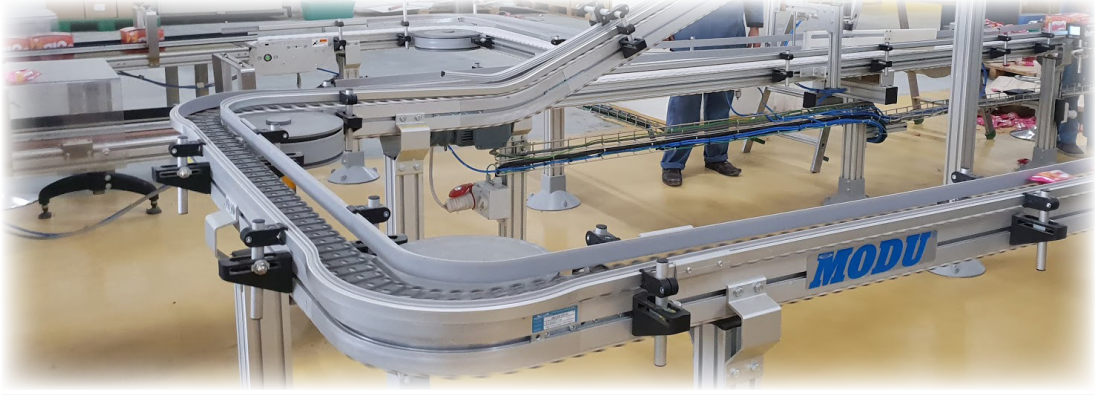


MT2, MR2 & MF2 tensile strength >20,000N

Service Factor

Chain tension limit can be derived from the diagram on the next page. It is dependent on various operating conditions, the actual calculation result have to be reduced by a service factor. Conveyors with high frequency of start/stop will have a high service factor but this could be reduced by providing a frequency inverter incorporated with start/stop function.

Operating conditions	*Service factor*
Low speed (<15m/min) & max. 1 start/stop per hour	1.0
Low speed & max. 10 start/stop per hour	1.2
Low speed & max. 20 start/stop per hour	1.4
High speed (>15m/min) & max 20 start/stop per hour	1.6



Bend Factors

Bend factors must be considered and calculated. It depends on the angle of the bend α in radians and friction coefficient μ between chain and slide rails. In applications where conveyor is dry and clean, the friction coefficient μ is close to 0.2.

The bend factor is important to calculate since the frictional force of a plain bend depends not only on the weight of chain and product but also the actual tension through the bend. The result is an additional pressure force of the chain towards the conveyor beam directed towards the center of the bend. Since the chain tension varies throughout the conveyor, calculation of this additional pressure force is complicated. The highest value is present at the pulling side of the drive unit and virtually zero at the chain inlet. Using bend factor is the easiest way of including added friction in the plain bend for both horizontal and vertical into the calculation. Always use wheel bend unless for exceptional cases. **If plain bend is a must, the combined plain bend angle should not be more than 180º (MT2/DT2 not more than 90º), unless it is a very short and light application. All the bends should be connected to straight section of 200mm minimum at the infeed and outfeed.**

Bend type, horizontal or vertical plain bend	*Bend factor α*
30º	1.2
45º	1.3
60º	1.4
90º	1.6

7º incline is the maximum a product could convey for plain chain whereas friction top chain could take up to 30º.

Calculation

MODU System chain tension calculation could be simplified as below:

Step 1: Divide the conveyor into sections, each containing a straight part and up to the next plain bend (horizontal or vertical).First section should be from the end furthest away from the drive unit.

Step 2: Wheel bends are considered equivalent to a straight section. A conveyor with wheel bend but without plain bend should be considered as one straight section. Calculate the force caused by gravity load of the return chain.

Step 3: Calculate the forces caused by transport friction, accumulation and gravity in the first section and multiply with bend factor. Repeat the steps above on each section of the conveyor until the last section with the drive unit. The result of the calculation indicates the amount of traction force required to move the conveyor.

Traction force, the chain tension is caused by several components such as:
- Friction between unloaded chain and slide rail. For example on the return chain.
- Friction between loaded chain and slide rails.
- Friction between accumulating products and top surface of chain.
- Gravity force acting on products and top surface of chain.
- Additional friction in horizontal and vertical bend.

Traction force F requires to move the chain depends on the following factors:

Conveyor length	*L*
Product gravity load per m	
Transport	*qp*
Accumulation	*qpa*
Chain gravity load per m	qc
Friction coefficient	
Between chain and slide rail	*μr*
Between chain and products	*μp*
Bend factor, α° plain bend (hor./vert.)	*kα*
Inclination angle	*β*

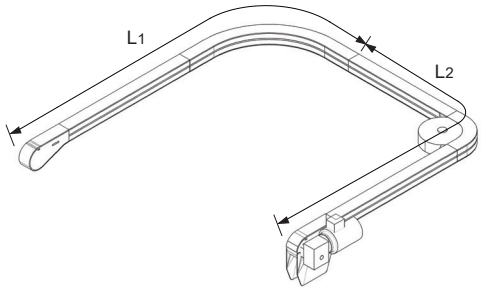
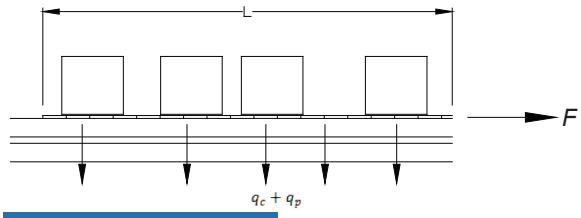


Diagram A

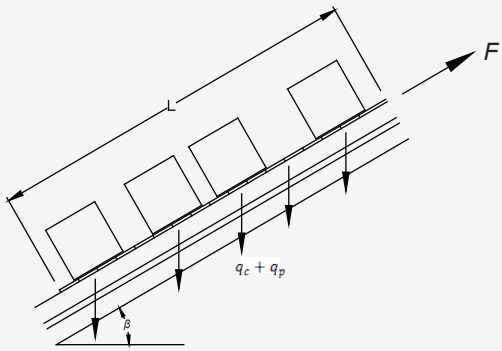
Horizontal without accumulation.



F = L(qc + qp).μr

Diagram B

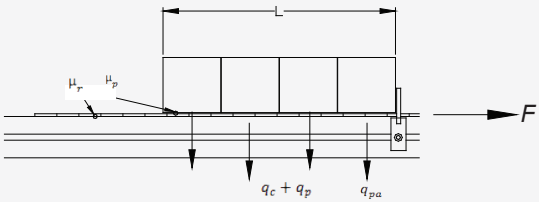
Incline without accumulation.



F = L(qc + qp) (μr cosβ + sinβ)

Diagram C

Horizontal with accumulation.

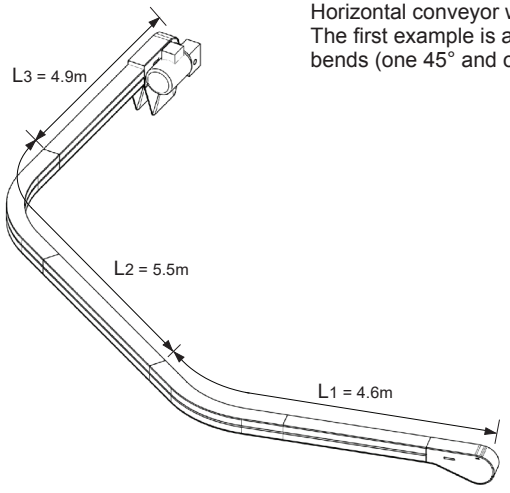


F = L [(qc + qp). μr + qpa . μp]

If the calculated traction force exceeds the chain capacity or the drive unit capacity, modifications will be necessary.

- Shorten the conveyor: For example, the layout could be changed so that the conveyor becomes shorter.
- Divide the conveyor into two separate conveyors with individual drive units.

Example 1: Horizontal conveyor



Horizontal conveyor with two plain bends
The first example is a horizontal conveyor with three straight parts and two plain bends (one 45° and one 60°).

Conveyor Data

Conveyor Series	MM3
Conveyor speed, v	15 m/min
Start/stops	30 /hour
Total length	15m
Friction coefficient, μr	0.1
Friction coefficient, μp	0.2
Load due to chain weight, qc	12.75 N/m
Load due to product weight	
Transport (qp): Five 1kg item (1kg/m)	49 N/m
Accumulation (qpa): Ten item (1kg/m)	98 N/m

Divide the conveyor
Start by dividing the conveyor into three elementary sections. Then start at the section furthest away from the drive unit “pull” side.

Section 1

Without accumulation:
F1 = { F0+ L1(qc + qp).μr }.kα1
F1 = { 0 + 4.6 (12.75 + 49) 0.1 } 1.3
F1 = 36.92N

With accumulation:
F1’ = { F0+ L1 [(qc + qp). μr + L1. qpa . μp] }.kα1
F1’ = [0 + 4.6 (12.75 + 49) 0.1 + 4.6 (98) (0.2)] 1.3
F1’ = 154.13N

Section 2

Without accumulation:
F2 = { F1+ L2(qc + qp).μr }.kα2
F2 = { 36.92 + 5.5 (12.75 + 49) 0.1 } 1.4
F2 = 99.24N

With accumulation:
F2’ = { F1+ L2 [(qc + qp). μr + L2. qpa . μp] }.kα2
F2’ = { 154.13 + 5.5 (12.75 + 49) 0.1 + 5.5 (98) (0.2) } 1.4
F2’ = 414.25N

Section 3

Without accumulation:
F3 = F2+ L3(qc + qp).μr
F3 = 92.81 + 4.9 (12.75 + 49) 0.1
F3 = 129.50N

With accumulation:
F3’ = F2+ [L3 (qc + qp). μr + L3.qpa . μp]
F3’ = 414.25 + [4.9 (12.75 + 49) 0.1 + 4.9 (98) (0.2)]
F3’ = 540.55N

Comparison with rating
The result of the calculation can now be compared with the maximum permissible chain tension.

Tension limit
The maximum chain tension for a 15m MM3 conveyor is 1000 N and for a conveyor speed of 15 m/min is 900 N. The lower value, 900 N, is the basic tension limit. With a start/stop frequency of 30 per hour, the service factor is 1.6. Therefore, the basic tension limit must be de-rated to 900/1.6 = 562.5 N.

Summary

a) Without accumulation:

F3 = 129.50 N (<562.5 N).

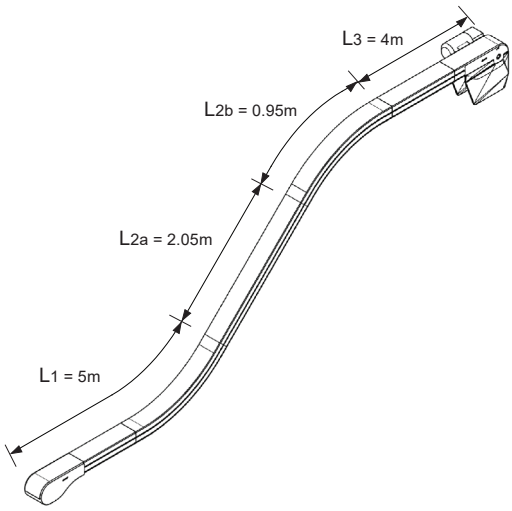
This conveyor will operate with a chain tension well below the maximum permissible value

b) With accumulation on the whole of L3:

F3 = 540.55 (<562.5 N).

This conveyor will operate with a chain tension well below the maximum permissible value.

Example 2: Inclined conveyor



Inclined conveyor
The second example is an inclined conveyor with three straight parts and two 60° vertical bends.

Conveyor Data

Conveyor Series	ML2
Conveyor speed,v	5 m/min
Start/stops	10 /hour
Total length	12m
Friction coefficient, μr	0.1
Load due to chain weight, q	24.5 N/m
Load due to product weight	
Transport (qp): Five 1kg item (1kg/m)	49 N/m

Divide the conveyor
Start by dividing the conveyor into three elementary sections. Then start at the section furthest away from the drive unit “pull” side.

Section 1

Gravity forces in the bend are ignored
F1 = { F0+ L1(qc + qp).μr }.kα1
F1 = { 0 + 5 (24.5 + 49) 0.1 } 1.3
F1 = 47.78N

Section 2

F2 = {F1+ L2a(qc + qp)(μr cosβ + sinβ)+ L2b (qc + qp) μr }.kα1
F2 = { 47.78 + 2.05 (24.5 + 49) (0.1 x 0.71 + 0.71) + 0.95 (24.5 + 49) 0.1}1.3
F2 = 224.17N

Section 3

F3 = F2+ [L3(qc + qp).μr]
F3 = 224.17 + [4 (24.5 + 49) 0.1] F3 = 253.57N

Comparison with rating
The result of the calculation can now be compared with the maximum permissible chain tension.

Tension limit
The maximum chain tension for a 12m ML2 conveyor is 1500 N. The maximum chain tension for a conveyor speed of 5 m/min is also 1500 N. With a start/stop frequency of 10 per hour the service factor is 1.2 (see table on page TR7). Therefore, the basic tension limit must be de-rated to 1500/1.2 = 1250 N.

Summary

Since F3 is calculated to 253.57 N (<1250 N), this conveyor will operate with a chain tension well below the maximum permissible value.

Component Guide

MODU Plastic Modular Chain

Type / Model	MP	MS3	MM3	ML2	MX2
Drive	Front, Combined	Front, Combined, Intermediate, Catenary, Wheel Bend, Suspended	Front, Combined, Intermediate, Catenary, Wheel Bend, Suspended	Front, Combined, Suspended, Intermediate	Front, Combined
Idler	End	End	End	End	End
Chain	Plain	Plain, Friction, Flocked, Cleated	Plain, Friction, Cleated, Gripper, Flocked	Plain, Friction, Cleated, Flocked	Plain, Friction, Cleated
Horizontal Wheel Bend					
Radius 150mm	30°, 45°, 60° , 90°, 180°	30°, 45°, 60° , 90°, 180°	-	-	-
Radius 160mm		-	30°, 45°, 60° , 90°, 180°	-	-
Radius 200mm		-	-	30°, 45°, 60° , 90°, 180°	-
Horizontal Plain Bend (Minimum Radius)					
Radius 500mm		30°, 45°, 60°, 90°	30°, 45°, 60°, 90°	30°, 45°, 60°, 90°	30°, 45°, 60°, 90°
Radius 700mm		30°, 45°, 60°, 90°	30°, 45°, 60°, 90°	30°, 45°, 60°, 90°	30°, 45°, 60°, 90°
Radius 10000mm		30°, 45°, 60°, 90°	30°, 45°, 60°, 90°	30°, 45°, 60°, 90°	30°, 45°, 60°, 90°
Vertical Bend					
Radius 300mm	5°	5°, 7°, 15°, 25°, 30° 45°, 90°	-	-	-
Radius 400mm		-	5°, 7°, 15°, 25°, 30° 45°, 90°	-	-
Radius 1000mm		25°, 30°, 45°, 90°	25°, 30°, 45°, 90°	5°, 7°, 15°, 25°, 30°, 45°, 90°	5°, 7°, 15°, 25°, 30°, 45°, 90°

MODU Plastic Modular Belt

Type / Model	MT2	MR2	MF2
Drive	Front	Front	Front
Idler	End	End	End
Chain	Plain, Friction, Cleated	Plain, Friction, Cleated	Plain, Friction, Cleated
Horizontal Wheel Bend			
Radius 150mm	-	-	-
Radius 160mm	-	-	-
Radius 200mm	-	-	-
Horizontal Plain Bend			
Radius 900mm	30°, 45°, 60°, 90°	-	-
Radius 1200mm	-	30°, 45°, 60°, 90°	-
Radius 1700mm	-	-	30°, 45°, 60°, 90°
Vertical Bend			
Radius 500mm	5°, 7° ,15°, 25°, 45°	5°, 7° ,15°, 25°, 45	5°, 7° ,15°, 25°, 45



Geared Motor Data

50 Hz motors

Parameter / Motor Type	Output Speed (rpm)	Output Torque (Nm)	Gear Ratio (i)	Service Factor (sf)	Conveyor Speed (m/min)		
					MP	MS3 / DS3 ; MM3 / DM3 ; ML2 / DL2 ; MX2 / DL2	MT2 / DT2 ; MR2 / DR2 ; MF2 / DF2
SEW WA20 DR 63L4 0.25kW, 3ph, 415VAC	33	41	39	1.0	10.1	13.5	15.1
	53	30	25	1.3	16.2	21.7	24.3
	67	26	20	1.4	20.4	27.4	30.7
	91	21	14	1.5	27.7	37.2	41.7
	127	16	10	1.6	38.7	51.9	58.3
SEW WA30 DR 63L4 0.25kW, 3ph, 415VAC	17	62	75	1.2	5.2	6.9	7.8
	27	50	48	1.4	8.2	11.0	12.4
SEW WA30 DRS 71S4 0.37kW, 3ph, 415VAC	71	39	20	1.8	21.6	29	32.6
	96	30	14	2.0	29.3	39.2	44
	135	23	10	2.2	41.2	55.1	61.9
SEW SA37 DRS 71M4 0.55kW, 3ph, 415VAC	72	60	19	1.2	21.9	29.4	33
	103	45	13	1.1	31.4	42.1	47.2
	135	35	10	1.4	41.1	55.1	61.9
SEW SA47 DRS 71MA 0.55kW, 3ph, 415VAC	21	167	67	1	6.4	8.6	9.7
	42	100	32	1.6	12.8	17.2	19.3
SEW SA47 DRS 80S4 0.75kW, 3ph, 415VAC	99	64	14	1.7	30.2	40.4	45.4
	131	49	11	2.2	39.9	53.5	60.1
Transtechno CM040U 71A4 0.25kW, 3ph, 415VAC	35	44	40	0.9	10.7	14.3	16.1
	70	27	20	1.5	21.3	28.6	32.1
	93	21	15	1.9	28.3	38	42.7
	140	15	10	2.8	42.7	57.2	64.2
Transtechno CM050U 80A4 0.55kW, 3ph, 415VAC	47	81	30	1.0	14.3	19.2	21.6
	70	59	20	1.2	21.3	28.6	32.1
	93	46	15	1.6	28.3	38	42.7
	140	32	10	2.2	42.7	57.2	64.2
Transtechno CM050U 80B4 0.75kW, 3ph, 415VAC	70	81	20	0.9	21.3	28.6	32.1
	93	63	15	1.2	28.3	38	42.7
	140	44	10	1.6	42.7	57.1	64.2

eg. Code for Ordering Motor :-

SEW SA47 DRS 71M4 72 => Gearmotor for SEW SA47 0.55kW rating with 72rpm output speed

- SEW — Motor Brand
- SA47 — Gear size
- DRS 71M4 — Motor Type
- 72 — Output speed rpm

*standard terminal box will be place at 180° from shaft mounting (please see TR-14 for illustration)

Sprocket Data

Series	MP	MS3 / DS3	MM3 / DM3	ML2 / DL2	MX2 / DX2	MT2 / DT2	MR2 / DR2	MF2 / DF2
PCD, mm	97	130				146		
No. of teeth	12	16	12	11	11	9		

Our Partners

SEW EURODRIVE

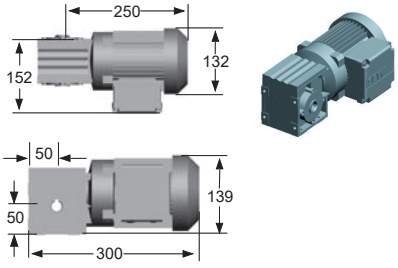
TRANSTECNO® the modular gearmotor

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Geared Motor Dimension

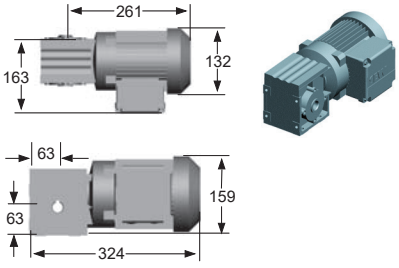
SEW WA20 DR 63L4



Shaft Diameter: 20mm

Item Code	Weight	Supply
SEW WA20 DR 63L4 **	7.0 kg	1 unit

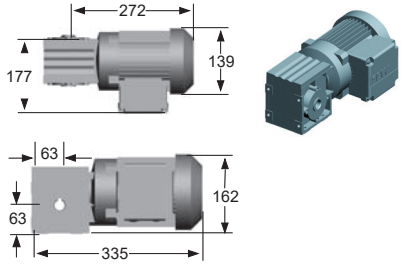
SEW WA30 DR 63L4



Shaft Diameter: 20mm

Item Code	Weight	Supply
SEW WA30 DR 63L4 **	10.0 kg	1 unit

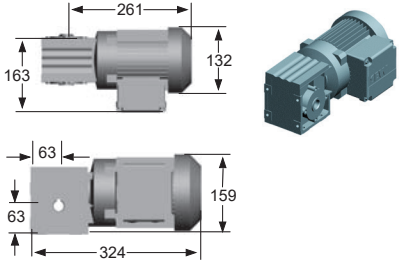
SEW WA30 DRS 71S4



Shaft Diameter: 20mm

Item Code	Weight	Supply
SEW WA30 DRS 71S4 **	11.0 kg	1 unit

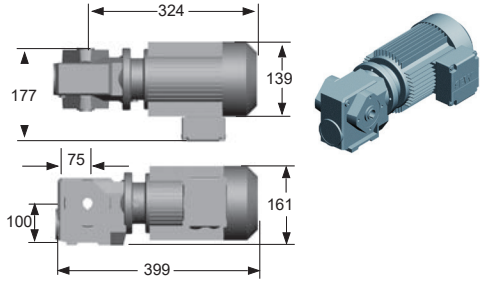
SEW SA37 DRS 71M4



Shaft Diameter: 20mm

Item Code	Weight	Supply
SEW SA37 DRS 71M4 **	14.0 kg	1 unit

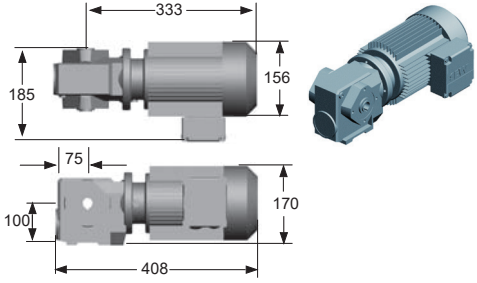
SEW SA47 DRS 71M4



Shaft Diameter: 25mm

Item Code	Weight	Supply
SEW SA47 DRS 71M4 **	18.0 kg	1 unit

SEW SA47 DRS 80S4



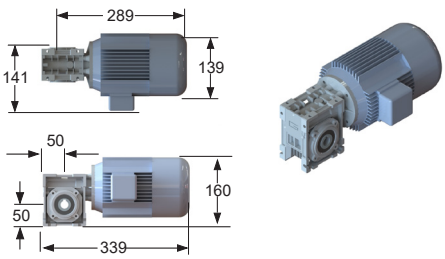
Shaft Diameter: 25mm

Item Code	Weight	Supply
SEW SA47 DRS 80S4 **	21.0 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

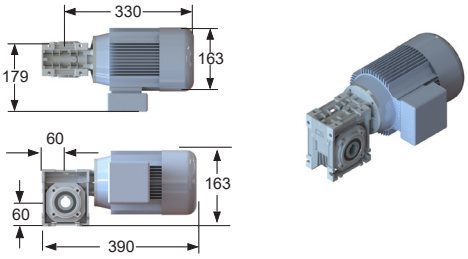
TRANSTECHNO CM040U 71A4



Shaft Diameter: 18mm

Item Code	Weight	Supply
MOV CM040U 71A4 **	8.0 kg	1 unit

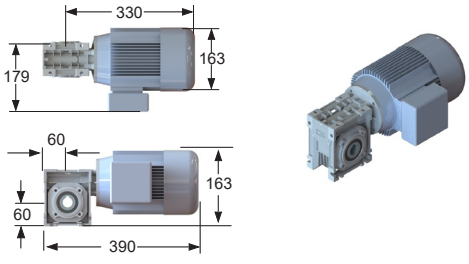
TRANSTECHNO CM050U 80A4



Shaft Diameter: 25mm

Item Code	Weight	Supply
MOV CM050U 80A4 **	12.0 kg	1 unit

TRANSTECHNO CM050U 80B4



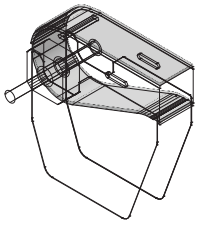
Shaft Diameter: 25mm

Item Code	Weight	Supply
MOV CM050U 80B4 **	12.0 kg	1 unit

Track Length

The following tables list the effective track lengths for various MODU System's components. These should be considered when determining how much conveyor chain is required in a system. The effective track length is the total length of chain required through a bend or drive unit. The value for twoway chain applies when the chain returns on the bottom side.

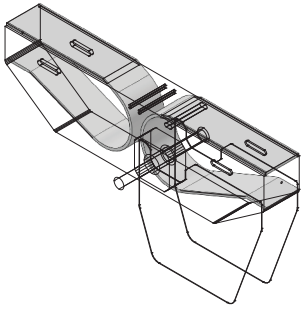
Front Drive Unit



Effective track length (m)

Series	MP	MS3 / DS3	MM3 / DM3	ML2 / DL2	MX2 / DX2	MT2 / MR2 / MF2
2-way Chain	0.6	0.82	0.8	1.16	1.16	0.8

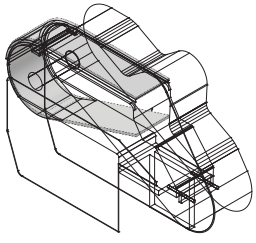
Combined Drive Unit



Effective track length (m)

Series	MP	MS3 / DS3	MM3 / DM3	ML2 / DL2	MX2 / DX2
2-way Chain	0.6	1.32	1.63	2.19	2.19

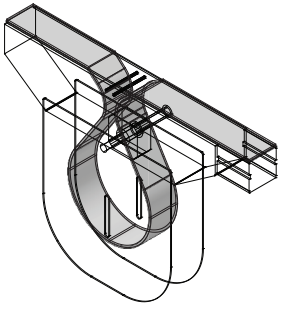
Suspended Drive Unit



Effective track length (m)

Series	MS3 / DS3	MM3 / DM3	ML2 / DL2	MX2 / DX2
2-way Chain	0.8	0.82	1.16	1.16

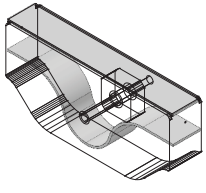
Catenary Drive Unit



Effective track length (m)

Series	MS3 / DS3	MM3 / DM3
1-way Chain	1.8	1.8

Intermediate Drive Unit



Effective track length (m)

Series	MS3 / DS3	MM3 / DM3
2-way Chain	1.2	1.2

Slide Rail

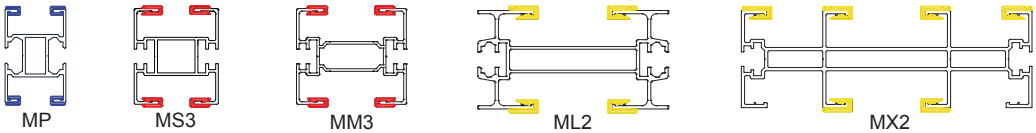
It is very important to assemble the slide rails correctly to ensure smooth conveyor operation.

Slide rail color reference



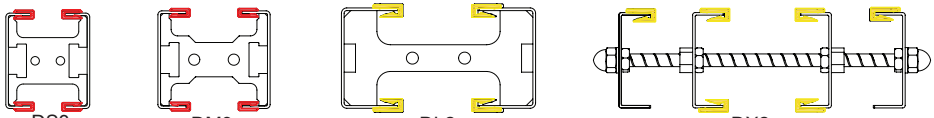
MP SR 25 MS SR 25 MA2 SR 25

Plastic Chain: X-X cross sectional view for aluminium frame conveyor



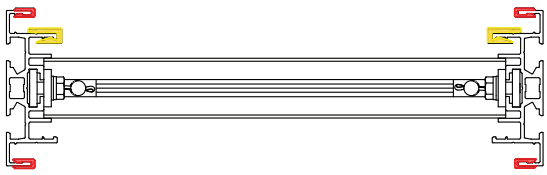
MP MS3 MM3 ML2 MX2

Plastic Chain: X-X cross sectional view for stainless steel frame conveyor

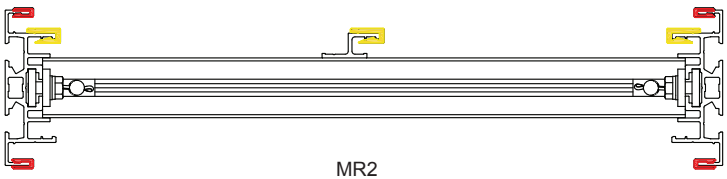


DS3 DM3 DL2 DX2

Plastic Belt: X-X cross sectional view for aluminium frame conveyor



MT2

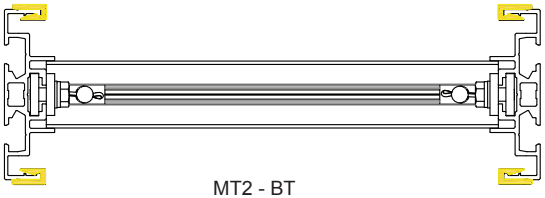


MR2

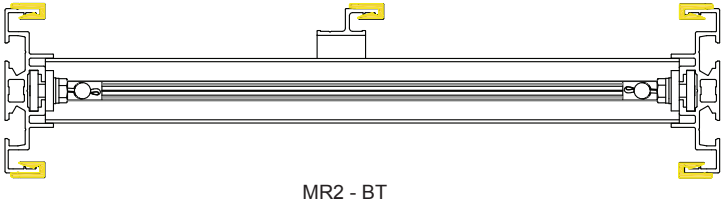


MF2

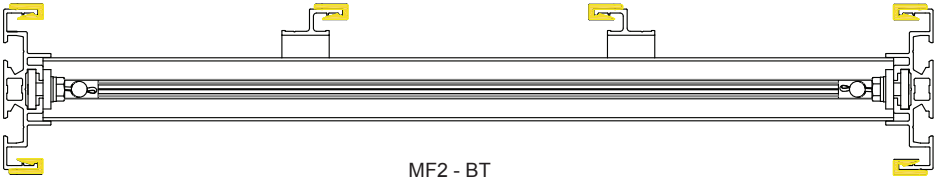
Plastic Belt: X-X cross sectional view for bottom tap chain of aluminium frame conveyor



MT2 - BT



MR2 - BT

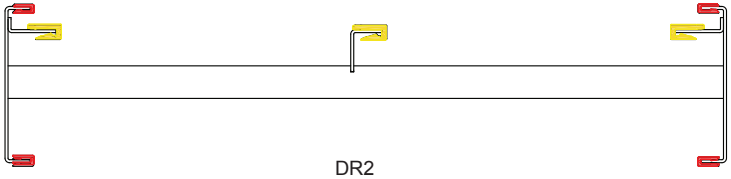


MF2 - BT

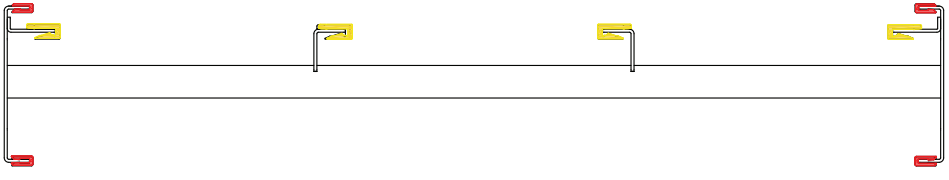
Plastic Belt: X-X cross sectional view for stainless steel frame conveyor



DT2

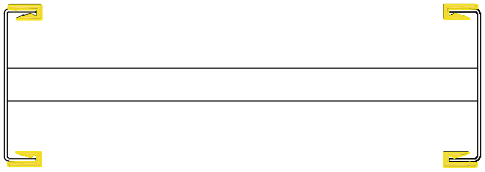


DR2

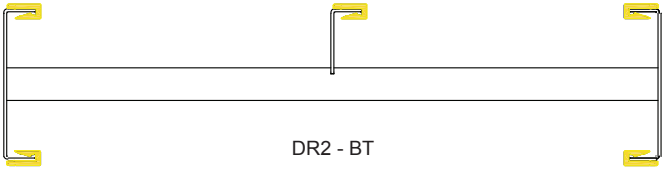


DF2

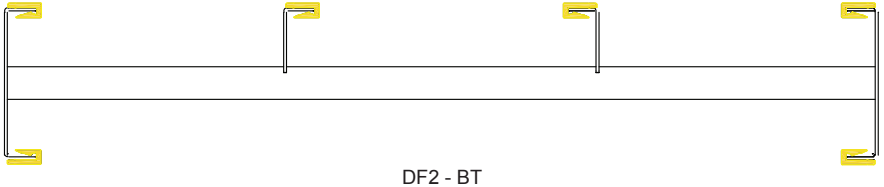
Plastic Belt: X-X cross sectional view for bottom tap chain of stainless steel frame conveyor



DT2 - BT

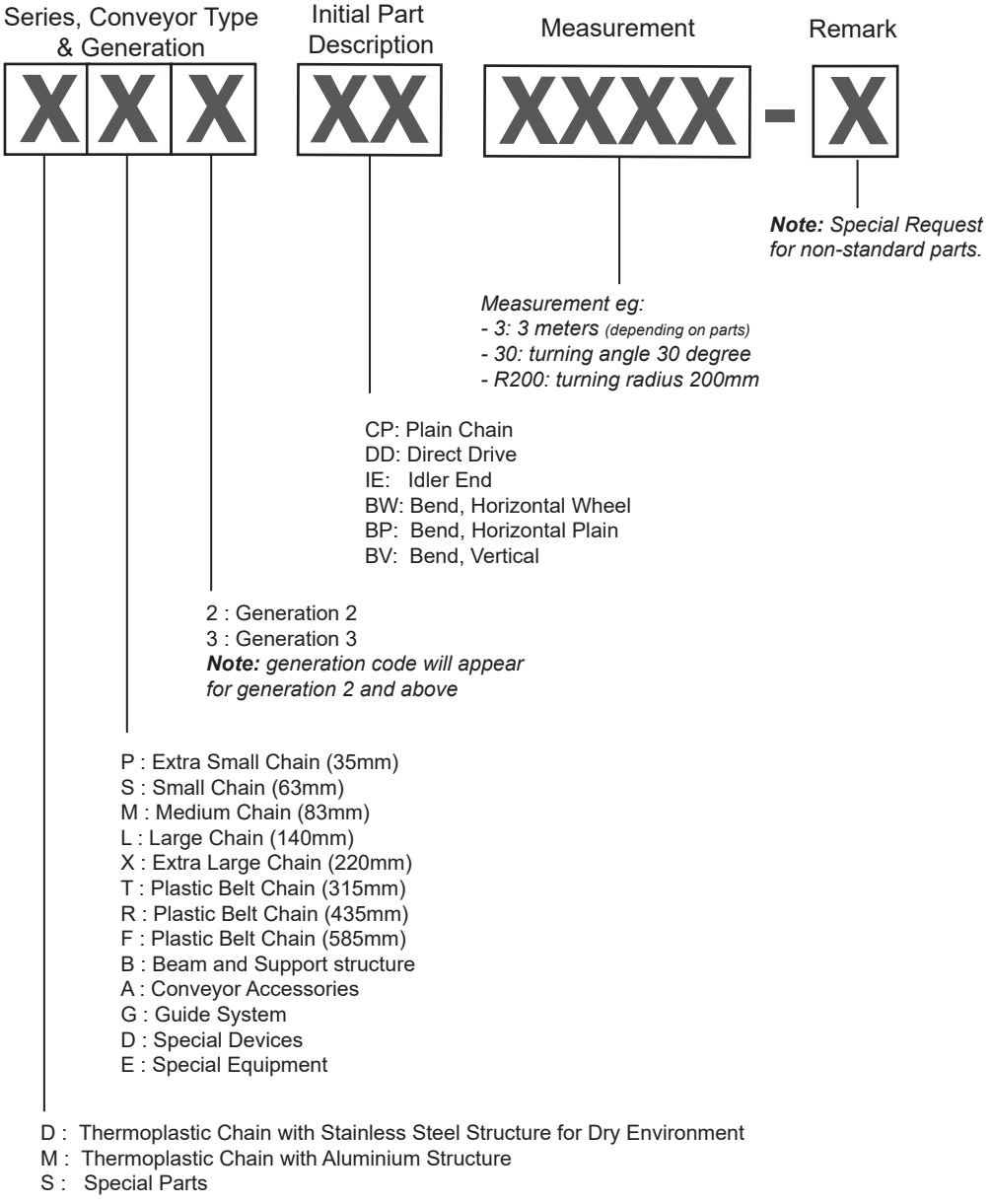


DR2 - BT



DF2 - BT

Part Number Guideline



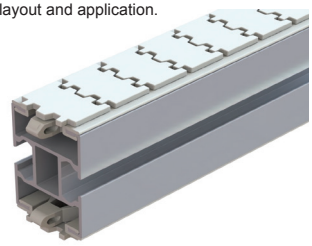
MODU MP CONVEYOR SERIES



Technical Characteristics

Chain Width	35 mm
Chain Pitch	25.4 mm
Chain Working Tension (Max)	500 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 7.5 kg 5 kg
Total Load*	100 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	20 m
Max speed*	40 m/min
Drive Unit Capacity	500 N
Item Width*	15 - 70 mm

* Actual limit may vary according to conveyor layout and application.

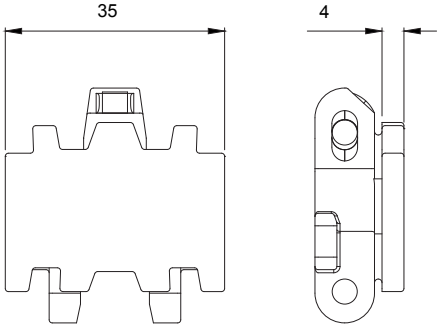


Chain Width 35mm

Contents

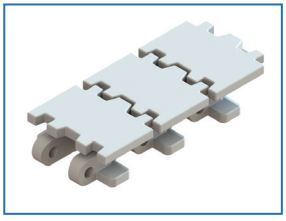
Chain MP.....40
Chain Accessories MP.....40
Drive Units MP.....41
Idler End MP.....42
Conveyor Beam MP 42
Accessories MP.....42
Horizontal Wheel Bend MP 43
Horizontal Plain Bend MP..... 44
Vertical Bend 45
Sprocket MP 45

Chain MP



Plain Chain

- Suitable for conveyor configuration with incline/decline up to 5˚.
- Accumulation possible.



Item Code	Material	Color	Weight	Supply
MP CP 5	POM	White	2.1kg/roll	5m/roll

Chain Accessories MP

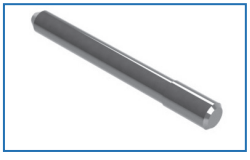
Lubricant For Chain



Silicone-based lubricant, 400ml

Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Stainless Steel Pin



Item Code	Weight	Supply
MP PN M4x20	0.03 kg	10 pcs / pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units MP

Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Transtechno)
T40 = CMRV 040
T50 = CMRV 050

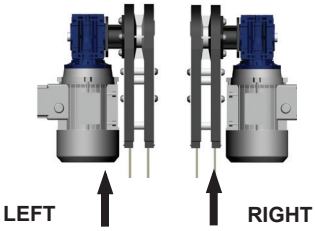
Gearmotor position: L or R

D: Front Drive
T: Combined Drive

MP DD L S20 TR

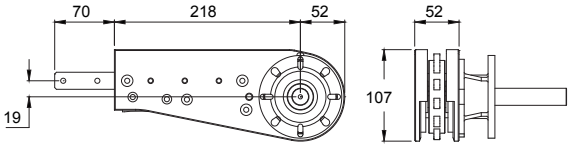
Front direct drive unit, motor on left side for 0.25kW SEW geared motor.

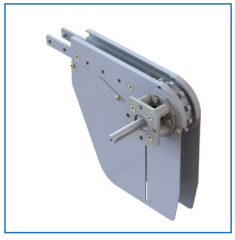
Motor Orientation Guideline



Example. Code for Basic unit;
MP DT R M40 => Combined drive unit, motor on right side for Motovario NMRV 040 geared motor.

Front Drive Unit

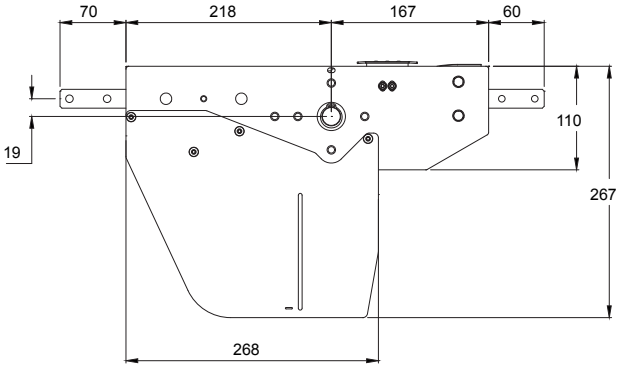


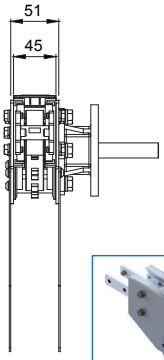


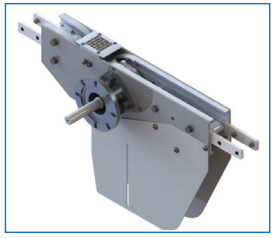
- Effective track length: 0.6m
- Traction force: 500N
- Connecting strip and set screw included.
  Note:
- Safety Cover comes as compulsory

Item Code	Weight	Supply
MP DD R/L S/T	1.4 kg	1 unit

Combined Drive Unit







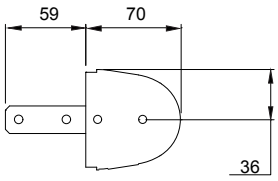
- Effective track length: 0.6m
- Traction force: 500N
- Connecting strip and set screw included.
  Note:
- Safety Cover comes as compulsory

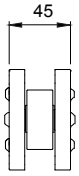
Item Code	Weight	Supply
MP DT R/L S/T	2.4 kg	1 unit

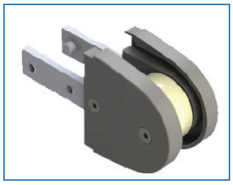
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Idler End MP



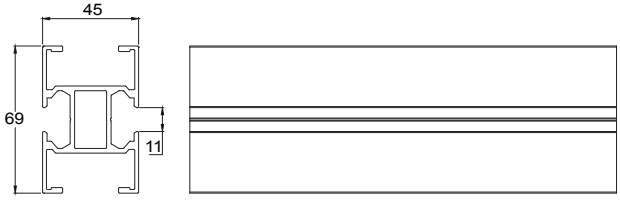


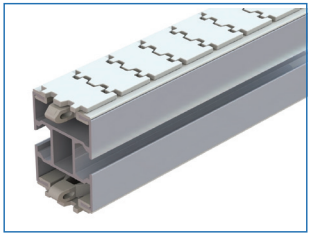


- Effective track length: 0.11m
- Traction force: 300N
- Connecting strip and set screw included.

Item Code	Weight	Supply
MP IE 70	0.6 kg	1 unit

Conveyor Beam MP

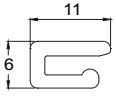




Item Code	Weight	Supply
MP CB 3	5.0 kg	3m / beam

Accessories MP

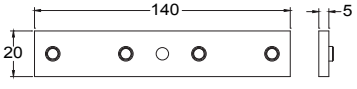
Slide Rail



Material : HDPE
Color: Semi-Transparent White

Item Code	Weight	Supply
MP SR 25	1.2 kg/roll	25m / roll

Connecting Strip



Item Code	Weight	Supply
MA CS 20x140	1.1 kg	10 pcs/pkt

Rivet



Item Code	Weight	Supply
MA RR 3	0.02 kg	50 pcs/pkt

Rivet Crimping

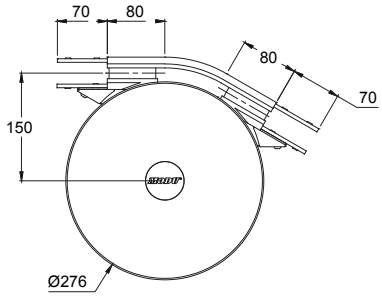


Item Code	Weight	Supply
MA RC MP	0.24 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

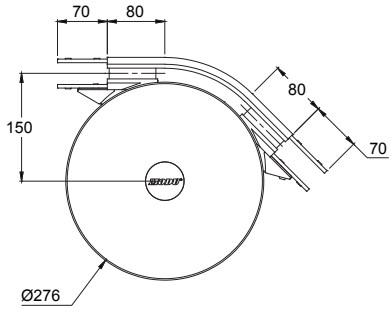
Horizontal Wheel Bend MP



Wheel Bend, 30°

Effective track length:
0.24m 1-way (0.48 m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included

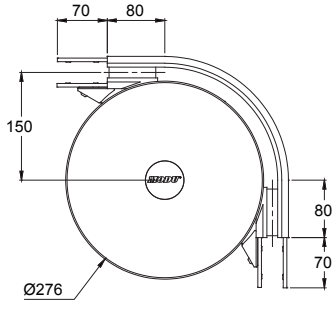
Item Code	Weight	Supply
MP BW 30R150	5.4 kg	1 unit



Wheel Bend, 45°

Effective track length:
0.28m 1-way (0.56m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included

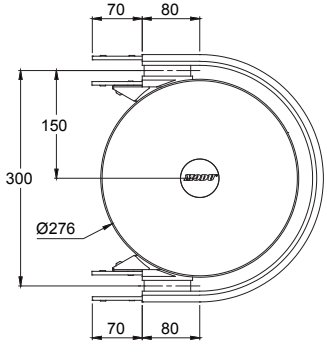
Item Code	Weight	Supply
MP BW 45R150	5.5 kg	1 unit



Wheel Bend, 90°

Effective track length:
0.4m 1-way (0.8m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included

Item Code	Weight	Supply
MP BW 90R150	5.6 kg	1 unit



Wheel Bend, 180°

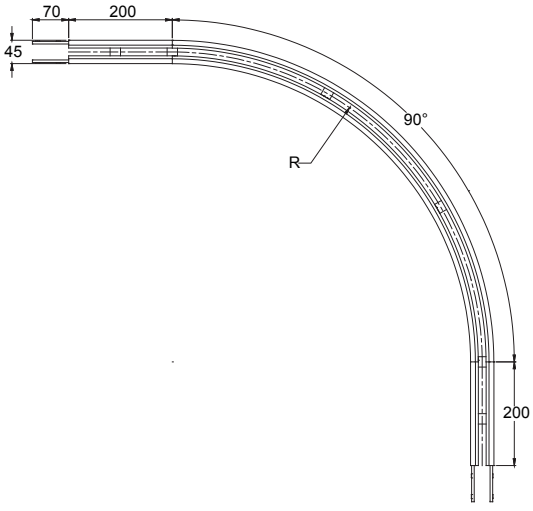
Effective track length:
0.63m 1-way (1.26 m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included

Item Code	Weight	Supply
MP BW 180R150	5.7 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

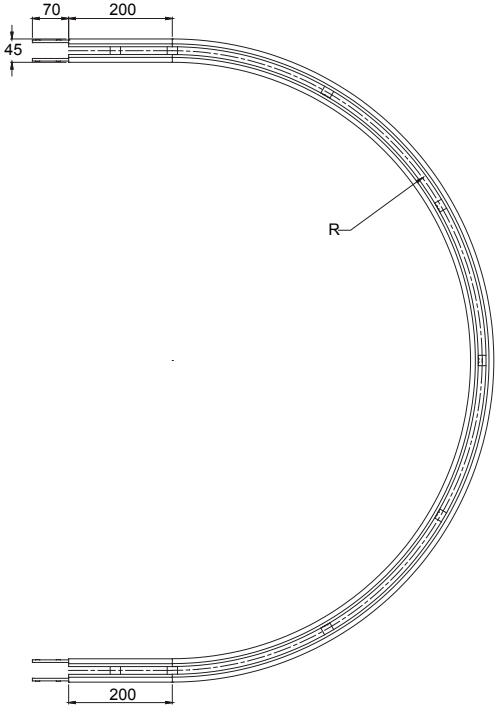
Horizontal Plain Bend MP



Horizontal Plain Bend, 90°

Effective track length:
R360: 0.97m 1-way (1.93m 2-way)
R440: 1.09m 1-way (2.18m 2-way)
R520: 1.22m 1-way (2.43m 2-way)
R600: 1.34m 1-way (2.69m 2-way)
R760: 1.59m 1-way (3.19m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Radius (R)	Weight	Supply
MP BP 90R360	360 mm	2.0 kg	1 unit
MP BP 90R440	440 mm	2.2 kg	1 unit
MP BP 90R520	520 mm	2.4 kg	1 unit
MP BP 90R600	600 mm	2.6 kg	1 unit
MP BP 90R760	760 mm	2.8 kg	1 unit



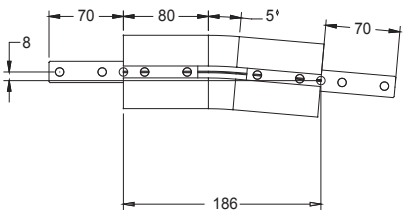
Horizontal Plain Bend, 180°

Effective track length:
R360: 1.53m 1-way (3.06m 2-way)
R440: 1.78m 1-way (3.56m 2-way)
R520: 2.03m 1-way (4.07m 2-way)
R600: 2.29m 1-way (4.57m 2-way)
R760: 2.79m 1-way (5.58m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Radius (R)	Weight	Supply
MP BP 180R360	360 mm	3.0 kg	1 unit
MP BP 180R440	440 mm	3.2 kg	1 unit
MP BP 180R520	520 mm	3.6 kg	1 unit
MP BP 180R600	600 mm	4.0 kg	1 unit
MP BP 180R760	760 mm	4.8 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Vertical Bend

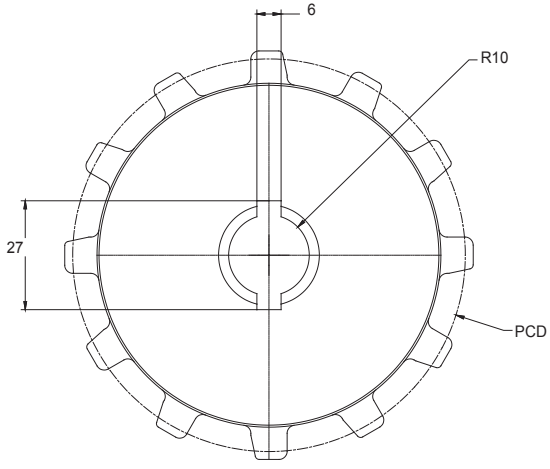


Vertical Bend, 5°

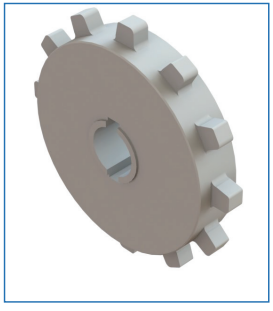
Effective track length:
R300: 0.19m 1-way (0.38m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MP BV 5R300	0.77 kg	1 unit

Sprocket MP



Description:
PCD: 97mm
Teeth: 12



Item Code	Weight	Supply
MP DS 97	0.12 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

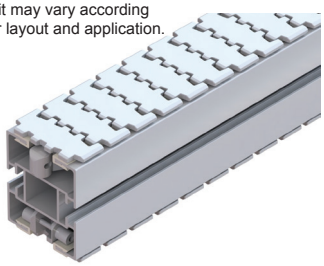
MODU MS3
CONVEYOR SERIES



Technical Characteristics

Chain Width	63 mm
Chain Pitch	25.4 mm
Chain Weight	0.8 kg/m
Chain Working Tension (Max)	700 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 15.0 kg 10.0 kg
Total Load*	200 kg
Working Temperature*	10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	700 N
Item Width*	15 - 140 mm

* Actual limit may vary according to conveyor layout and application.

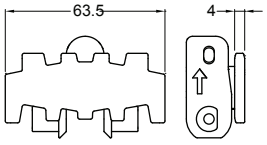


Chain Width 63mm

Contents

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Vertical Bend MS3..... 59
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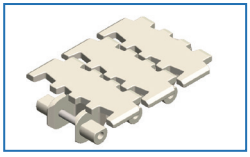
Chain MS3

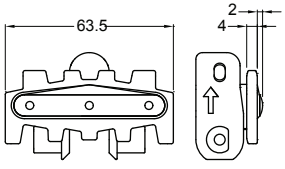


Plain Chain

- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

Item Code	Material	Color	Weight	Supply
MS3 CP 5	POM	White	4.0 kg/roll	5m/roll
MS3 CP 5A	Anti-Static	Yellow	4.0 kg/roll	5m/roll
MS3 CP 5K	Kevlar	Yellow	6.0 kg/roll	5m/roll

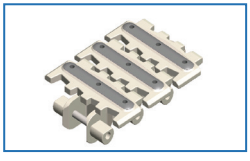


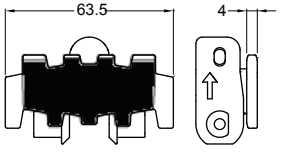


Friction Chain

- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPU (grey).
- Accumulation not possible

Item Code	Material	Color	Weight	Supply
MS3 CF 5	POM	White	4.5 kg/roll	5m/roll
MS3 CF 5A	Anti-Static	Yellow	4.5 kg/roll	5m/roll
MS3 CF 5K	Kevlar	Yellow	6.5 kg/roll	5m/roll

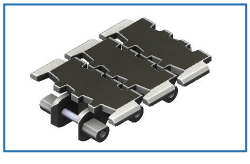




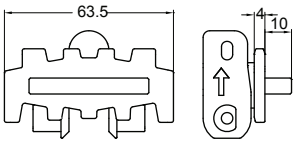
Flocked Chain

- Suitable for scratch sensitive material.
- Flock colour : Black
- Accumulation possible for light product only.
- Sticker type only

Item Code	Material	Color	Weight	Supply
MS3 CL 5	POM	White	4.2 kg/roll	5m/roll



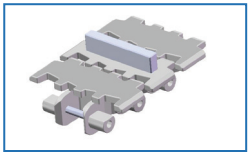
Please consult MODU representative for further information and assistance. Units: Dimension (mm)



Cleated Chain Link

- Required for vertical or steeply inclined / declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined and Catenary Drive.
- Supply in pieces.
- Please specify pitch between cleat for ordering
- (eg. MS3 CC 3x10 *P ; 3P = Every 3rd link to be cleated).
  **Please consult MODU representative for actual chain weight.

Item Code	Material	Color	Weight	Supply
MS3 CC 3x10 *P	POM	White	** kg/pc	1 pc



Chain Accessories MS3

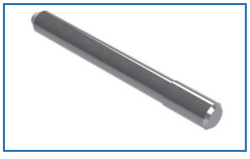
Lubricant For Chain



Silicone-based lubricant, 400ml

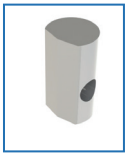
Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Stainless Steel Pin



Item Code	Weight	Supply
MS3 PN M4x37	0.1 kg	10 pcs / pkt

Chain Pivot

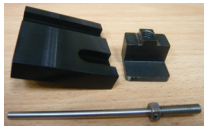


Item Code	Weight	Supply
MS3 PV	0.01 kg	10 pcs / pkt

Chain Pin Insertion Tool



Chain pin insertion tool shown without attachment and specific drive pin



Chain attachment and drive pin

Item Code	Description	Weight	Supply
TR CP 1	Pin Insertion Tool	1.2 kg	1 pc
MS3 AC	Chain Attachment	0.2 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units MS3

Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Transtechno)
T40 = CMRV 040
T50 = CMRV 050

Transfer Device
NIL = Basic Unit
TR = Free Roller
DR = Driven Roller

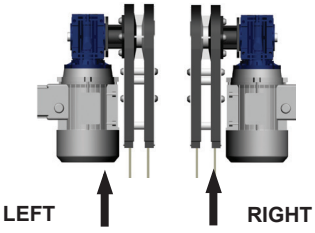
Gearmotor position: L or R

D: Front Drive
T: Combined Drive
C: Catenary Drive
S: Suspended Drive
I: Intermediate Drive
W: Wheel Bend Drive

Clutch
NIL = Basic Unit
C = With Clutch

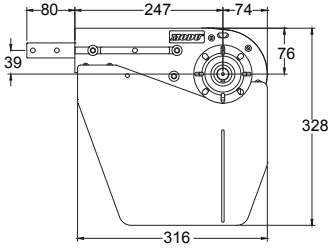
MS3 DD L S20 TR C
Front direct drive unit, motor on left side for 0.25kW SEW geared motor, with Free Roller and Clutch.

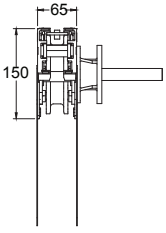
Motor Orientation Guideline

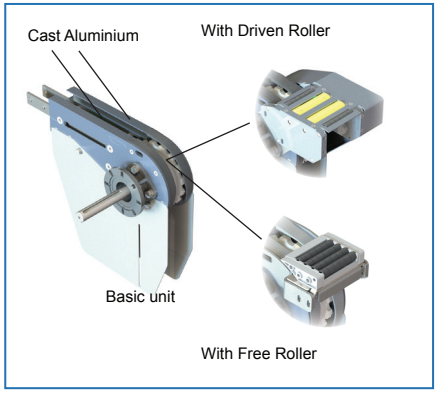


Front Drive Unit

Basic Front Drive

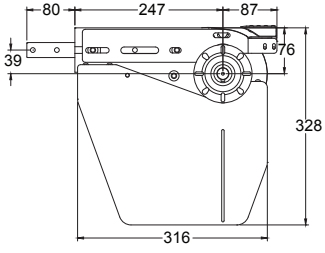


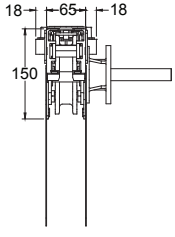




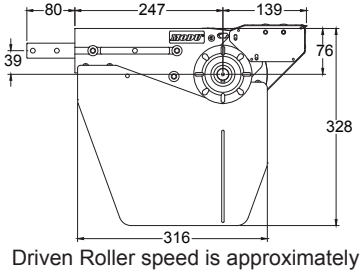
**Comes without safety cover

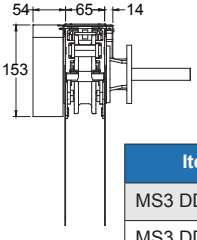
Front Drive with Free Roller





Front Drive with Driven Roller





Driven Roller speed is approximately 10% higher than conveyor speed.

- Effective track length: 0.80m
- Traction force: 700N
- Connecting strip and set screw included.

Note:

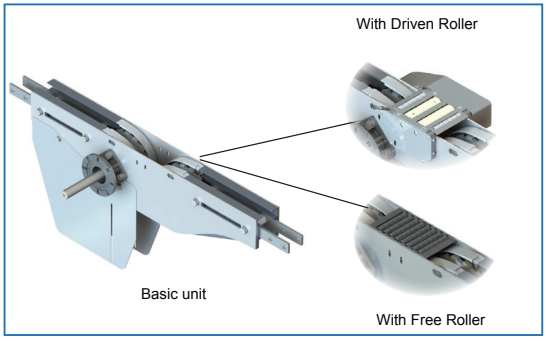
- Safety Cover comes as an option.
- Recommended maximum chain elongation is 328mm from top conveyor to chain slack.

Item Code	Description	Weight	Supply
MS3 DD R/L S/T	Basic drive unit	3.0 kg	1 unit
MS3 DD R/L S/T TR	With transfer roller	4.0 kg	1 unit
MS3 DD R/L S/T DR	With driven roller	5.3 kg	1 unit

Please consult MODU representative for further information and assistance.

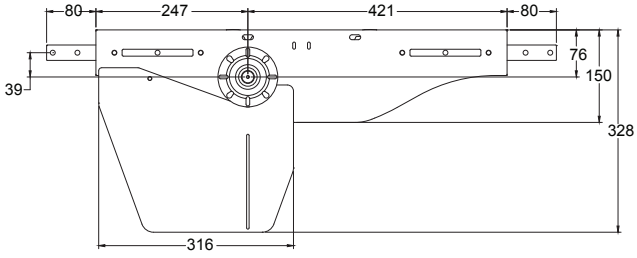
Units: Dimension (mm)

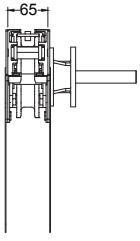
Combined Drive Unit



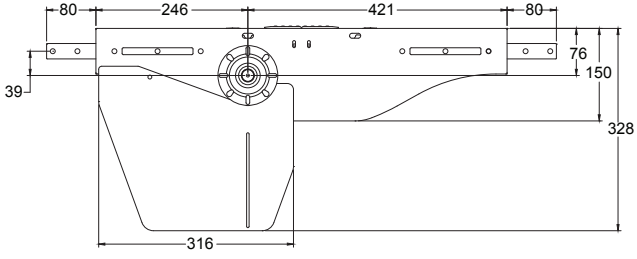
**Comes without safety cover

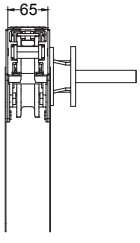
Basic Combined Drive



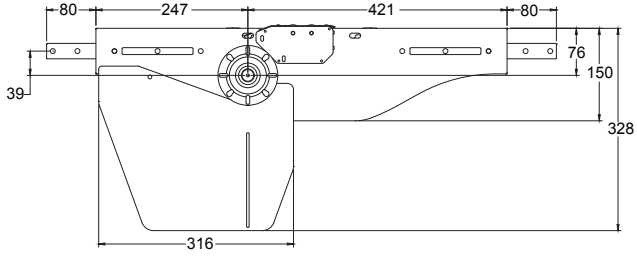


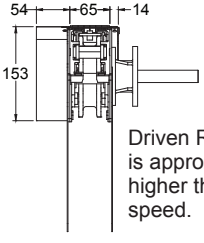
Combined Drive with Free Roller





Combined Drive with Driven Roller





Driven Roller speed is approximately 10% higher than conveyor speed.

Item Code	Description	Weight	Supply
MS3 DT R/L S/T	Basic drive unit	8.9 kg	1 unit
MS3 DT R/L S/T TR	With transfer roller	9.1 kg	1 unit
MS3 DT R/L S/T DR	With driven roller	10.4 kg	1 unit

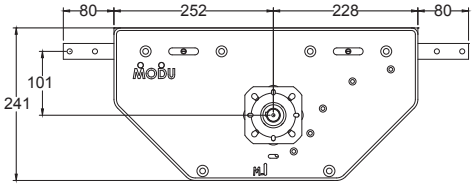
- Effective track length: 1.32m
- Traction force: 700N
- Connecting strip and set screw included.

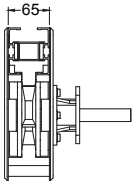
Note:

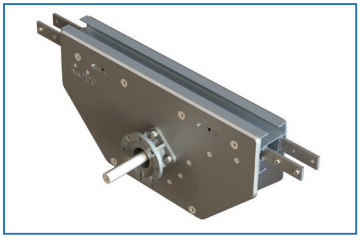
- Safety Cover comes as an option.
- Recommended maximum chain elongation is 328mm from top conveyor to chain slack.

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Intermediate Drive Unit



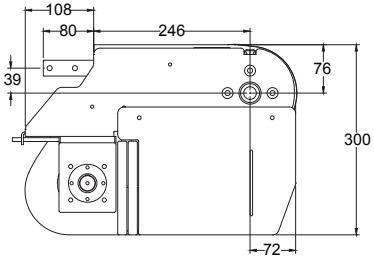


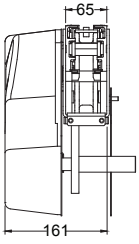


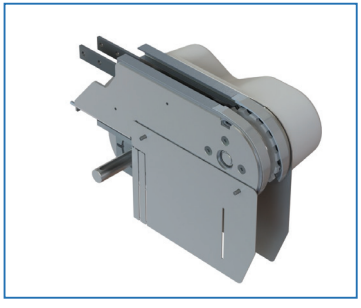
- Effective track length: 1.2m
- Traction force: 200N
- Connecting strip and set screw included.

Item Code	Weight	Supply
MS3 DI R/L S/T	13.0 kg	1 unit

Suspended Drive Unit



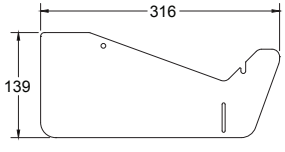




- Effective track length: 0.8m
- Traction force: 700N
- Connecting strip and set screw included.

Item Code	Description	Weight	Supply
MS3 DS R/L S/T	Without clutch	14.5 kg	1 unit
MS3 DS R/L S/T C	With clutch	15.5 kg	1 unit

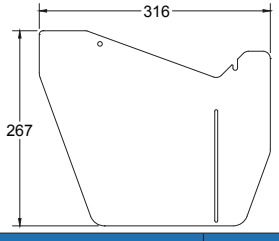
Short Safety Cover



Material : Stainless Steel

Item Code	Weight	Supply
SC2 139	0.8 kg	2 pcs/set

Standard Safety Cover



Material :
Stainless Steel

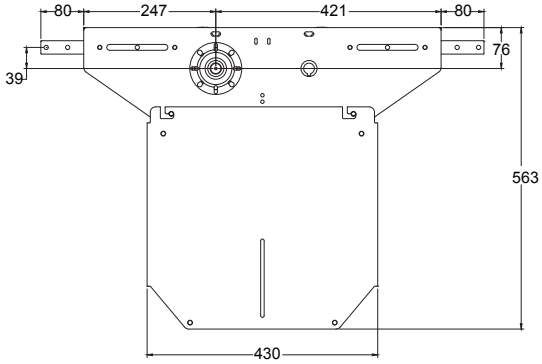
Item Code	Weight	Supply
SC2 267	0.8 kg	2 pcs/set

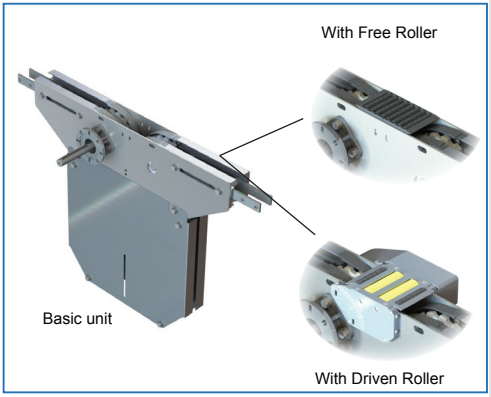
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

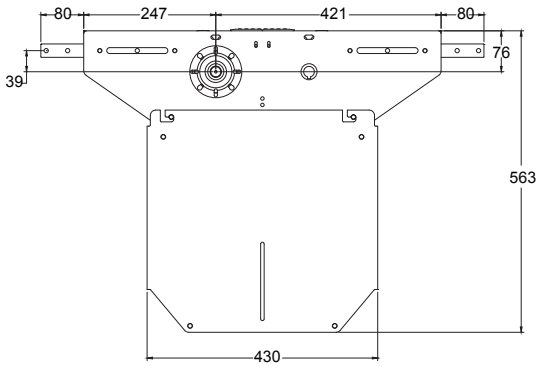
Catenary Drive Unit

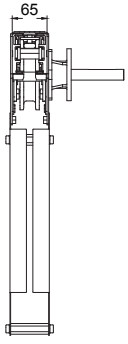
Basic Catenary Drive



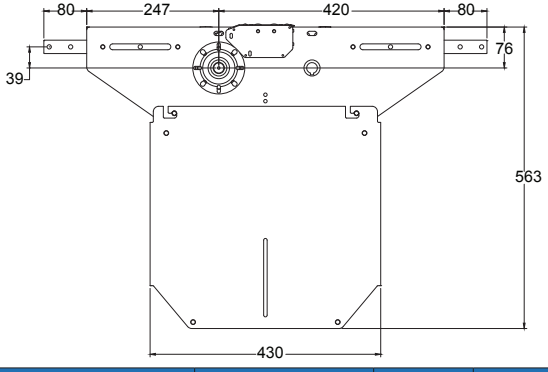


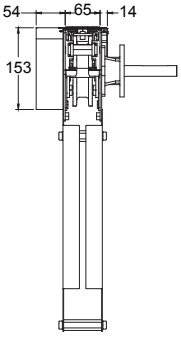
Catenary Drive with Free Roller





Catenary Drive with Driven Roller





Driven Roller speed is approximately 10% higher than conveyor speed.

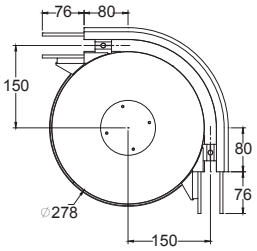
Item Code	Description	Weight	Supply
MS3 DC R/L S/T	Basic drive unit	15.5 kg	1 unit
MS3 DC R/L S/T TR	With transfer roller	15.7 kg	1 unit
MS3 DC R/L S/T DR	With driven roller	17.0 kg	1 unit

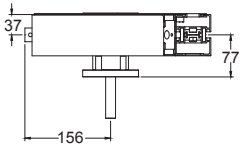
- Effective track length: 1.8m
- Traction force: 300N
- Connecting strip and set screw included.

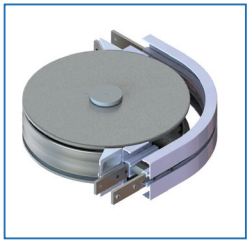
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

90° Wheel Bend Drive Unit



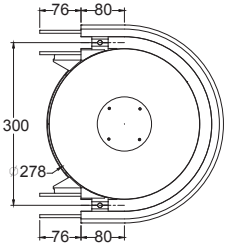


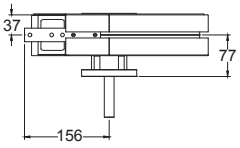


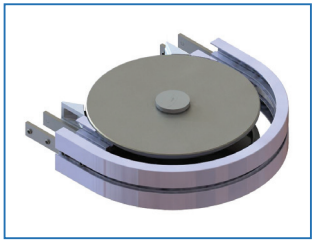
Item Code	Weight	Supply
MS3 DW 90R150 S/M	6.0 kg	1 unit

- Effective track length: 0.4m
- Traction force: 100N
- Connecting strip and set screw included.

180° Wheel Bend Drive Unit





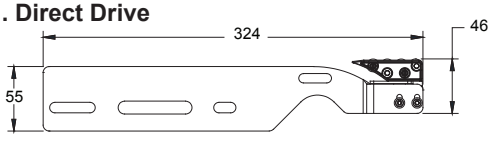


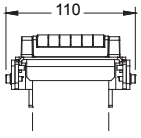
Item Code	Weight	Supply
MS3 DW 180R150 S/M	7.0 kg	1 unit

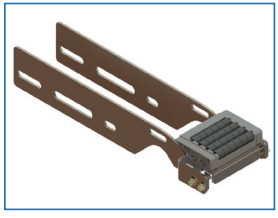
- Effective track length: 0.63m
- Traction force: 100N
- Connecting strip and set screw included.

Free Transfer Roller

1. Direct Drive



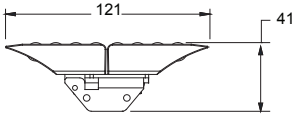


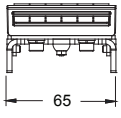


Item Code	Weight	Supply
MS3 TR DD/IE	0.84 kg	1 unit

Note:
Suitable for all motor flange except SA47

2. Combined Drive







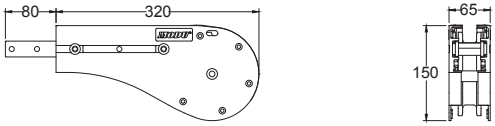
Item Code	Weight	Supply
MS3 TR DT	0.84 kg	1 unit

Please consult MODU representative for further information and assistance.

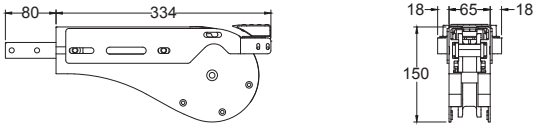
Units: Dimension (mm)

Idler End MS3

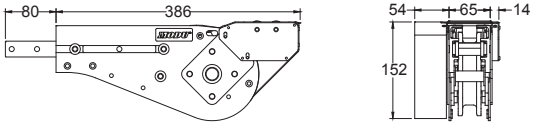
Basic Idler End

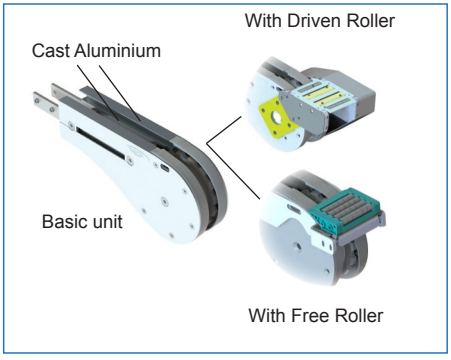


Idler End with Free Roller



Idler End with Driven Roller





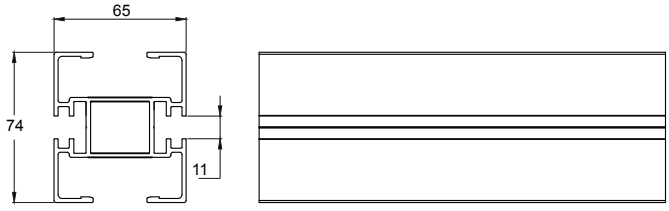
- Effective track length: 0.8m
- Connecting strip and set screw included.

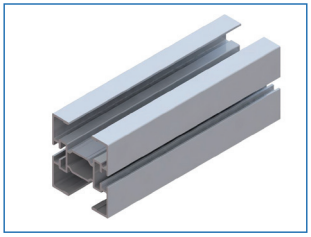
Item Code	Description	Weight	Supply
MS3 IE 320	Basic idler end	3.0 kg	1 unit
MS3 IE 320 TR	With transfer roller	3.2 kg	1 unit
MS3 IE 320 DR L/R	With driven roller	4.5 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor Beam MS3

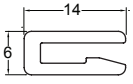




Item Code	Weight	Supply
MS3 CB 3	6.1 kg	3m / beam

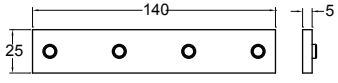
Accessories MS3

Slide Rail



Item Code	Material	Color	Weight	Supply
MS SR 25	HDPE	Semi-Transparent White	1.2 kg	25m/roll
MS SR 25A	Anti-Static	Grey	1.2 kg	25m/roll

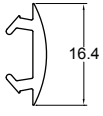
Connecting Strip



- 4 pcs M8 set screw included.

Item Code	Weight	Supply
MA CS 25x140	1.1 kg	10 pcs/pkt

T-Slot Cover



Item Code	Material	Color	Weight	Supply
MB SC 25T	TPE	Grey	1.5 kg	25m/roll
MB SC 25P	PVC	Light Grey	1.3 kg	25m/roll

Rivet



Item Code	Weight	Supply
MA RR 3	0.02 kg	50 pcs/pkt

Rivet Crimping



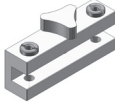
Item Code	Weight	Supply
MA RC	0.13 kg	1 pc

Slide Rail Mounting Tool



Item Code	Weight	Supply
MS3 SRA	0.4 kg	1 pc

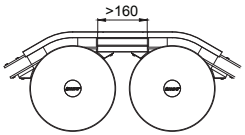
Slide Rail Drill Fixture



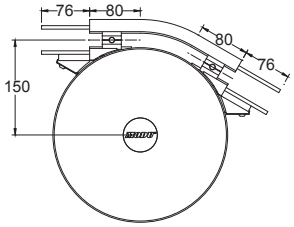
Item Code	Weight	Supply
MA SRF	0.24 kg	1 pc

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Horizontal Wheel Bend MS3



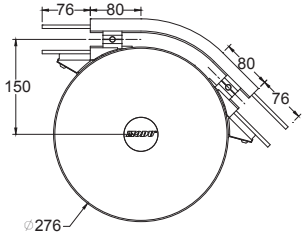
Minimum straight section for all wheel bend connection.



Wheel Bend, 30°

Effective track length:
0.24m 1-way (0.48 m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

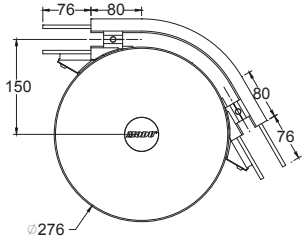
Item Code	Weight	Supply
MS3 BW 30R150	5.6 kg	1 unit



Wheel Bend, 45°

Effective track length:
0.28m 1-way (0.56m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

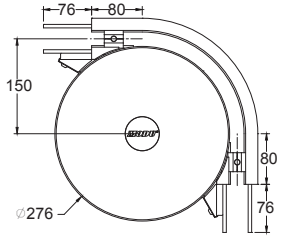
Item Code	Weight	Supply
MS3 BW 45R150	5.7 kg	1 unit



Wheel Bend, 60°

Effective track length:
0.31m 1-way (0.62m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

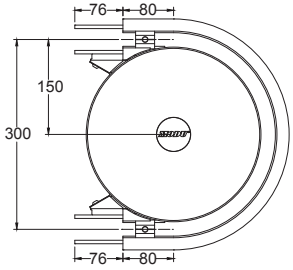
Item Code	Weight	Supply
MS3 BW 60R150	5.7 kg	1 unit



Wheel Bend, 90°

Effective track length:
0.4m 1-way (0.8m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MS3 BW 90R150	5.8 kg	1 unit



Wheel Bend, 180°

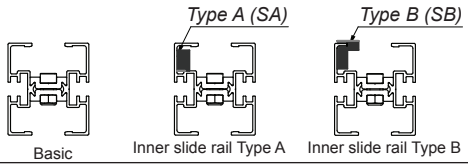
Effective track length:
0.63m 1-way (1.26 m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

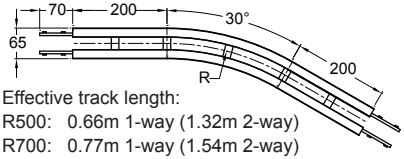
Item Code	Weight	Supply
MS3 BW 180R150	5.9 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Horizontal Plain Bend MS3

Plain bends comes with options for optimum usage
-Plain bend basic unit.
-Plain bend with inner slide rail Type A (SA), Material = PE.
-Plain bend with inner slide rail Type B (SB), Material = Nylon
*(SB) is recommended when conveyor speed is 30m/min and above

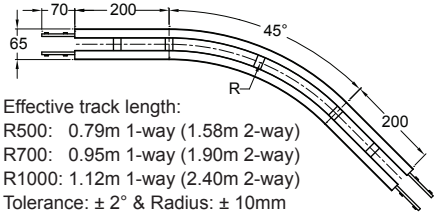




Effective track length:
R500: 0.66m 1-way (1.32m 2-way)
R700: 0.77m 1-way (1.54m 2-way)
R1000: 0.92m 1-way (1.84m 2-way).
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Horizontal Plain Bend, 30°

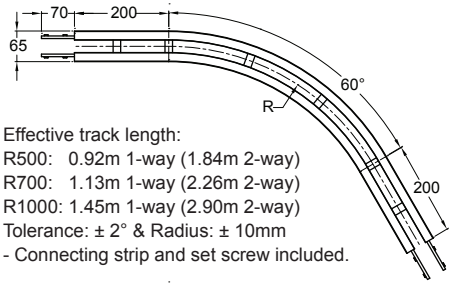
Item Code	Radius (R)	Weight	Supply
MS3 BP 30R500	500 mm	1.8 kg	1 unit
MS3 BP 30R700	700 mm	2.1 kg	1 unit
MS3 BP 30R1000	1000 mm	2.4 kg	1 unit



Effective track length:
R500: 0.79m 1-way (1.58m 2-way)
R700: 0.95m 1-way (1.90m 2-way)
R1000: 1.12m 1-way (2.40m 2-way)
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Horizontal Plain Bend, 45°

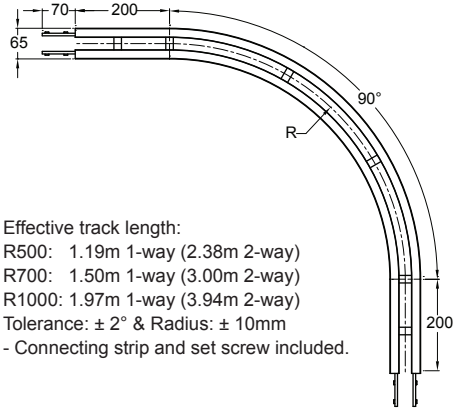
Item Code	Radius (R)	Weight	Supply
MS3 BP 45R500	500 mm	2.1 kg	1 unit
MS3 BP 45R700	700 mm	2.4 kg	1 unit
MS3 BP 45R1000	1000 mm	2.8 kg	1 unit



Effective track length:
R500: 0.92m 1-way (1.84m 2-way)
R700: 1.13m 1-way (2.26m 2-way)
R1000: 1.45m 1-way (2.90m 2-way)
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
MS3 BP 60R500	500 mm	2.4 kg	1 unit
MS3 BP 60R700	700 mm	2.8 kg	1 unit
MS3 BP 60R1000	1000 mm	3.4 kg	1 unit



Effective track length:
R500: 1.19m 1-way (2.38m 2-way)
R700: 1.50m 1-way (3.00m 2-way)
R1000: 1.97m 1-way (3.94m 2-way)
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

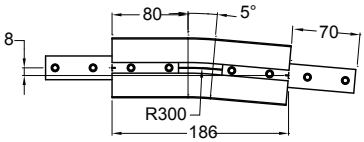
Horizontal Plain Bend, 90°

Item Code	Radius (R)	Weight	Supply
MS3 BP 90R500	500 mm	2.9 kg	1 unit
MS3 BP 90R700	700 mm	3.6 kg	1 unit
MS3 BP 90R1000	1000 mm	4.5 kg	1 unit

When ordering plain bends with inner slide rail, please specify the type using the following part number as an example.
Type A - MS3 BP 30R500 SA
Type B - MS3 BP 90R500 SB

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

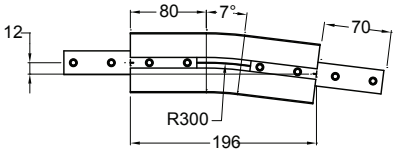
Vertical Bend MS3



Vertical Bend, 5°

Effective track length:
R300: 0.19m 1-way (0.38m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

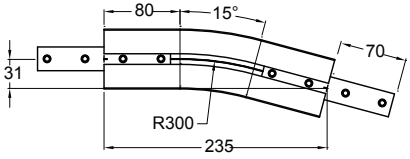
Item Code	Weight	Supply
MS3 BV 5R300	1.0 kg	1 unit



Vertical Bend, 7°

Effective track length:
R300: 0.20m 1-way (0.40m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

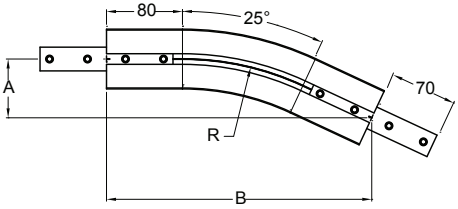
Item Code	Weight	Supply
MS3 BV 7R300	1.0 kg	1 unit



Vertical Bend, 15°

Effective track length:
R300: 0.24m 1-way (0.48m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MS3 BV 15R300	1.0 kg	1 unit

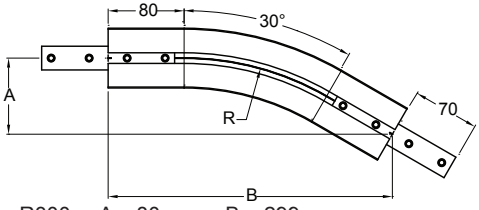


R300 : A = 62mm ; B = 279 mm
R1000 : A = 128mm ; B = 575 mm

Vertical Bend, 25°

Effective track length:
R300: 0.29m 1-way (0.58m 2-way)
R1000: 0.60m 1-way (1.20m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MS3 BV 25R300	1.1 kg	1 unit
MS3 BV 25R1000	2.0 kg	1 unit



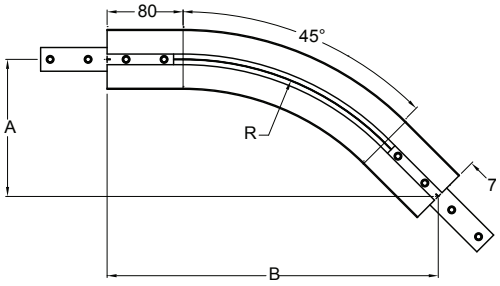
R300 : A = 80mm ; B = 299 mm
R1000 : A = 174mm ; B = 649 mm

Vertical Bend, 30°

Effective track length:
R300: 0.32m 1-way (0.64m 2-way)
R1000: 0.68m 1-way (1.36m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MS3 BV 30R300	1.3 kg	1 unit
MS3 BV 30R1000	2.5 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

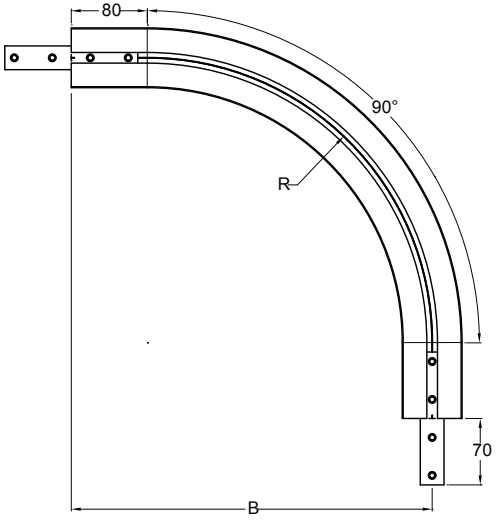


R300 : A = 145mm ; B = 349 mm
R1000 : A = 350mm ; B = 844 mm

Vertical Bend, 45°

Effective track length:
R300: 0.40m 1-way (0.80m 2-way)
R1000: 0.95m 1-way (1.90m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MS3 BV 45R300	1.3 kg	1 unit
MS3 BV 45R1000	2.3 kg	1 unit



R300 : B = 380 mm
R1000 : B = 1080 mm

Vertical Bend, 90°

Effective track length:
R300: 0.63m 1-way (1.26m 2-way)
R1000: 1.73m 1-way (3.46m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

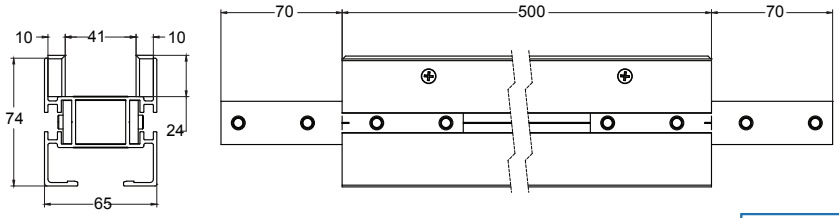
Item Code	Weight	Supply
MS3 BV 90R300	1.7 kg	1 unit
MS3 BV 90R1000	4.0 kg	1 unit

Non-Standard Vertical Bend is available in PE with minimum radius of 300mm.

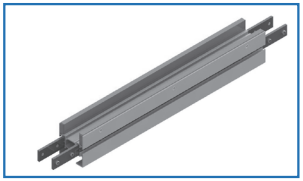
Please consult MODU representative for further information and assistance.

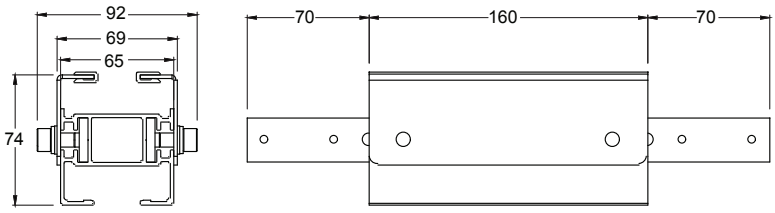
Units: Dimension (mm)

Chain Installation Section MS3

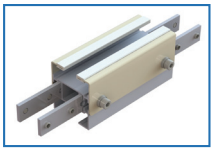


Item Code	Weight	Supply
MS3 LU 500	1.4 kg	1 unit

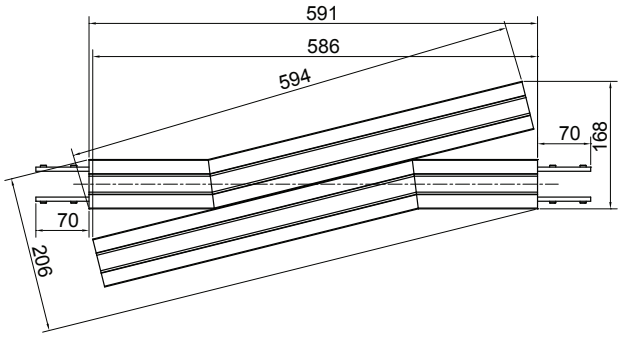




Item Code	Weight	Supply
MS3 CIS 160	1.3 kg	1 unit

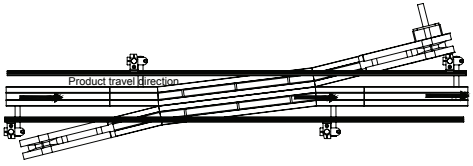


Diagonal Beam MS3



- A combination drive and idler unit used for smooth transfering of unstable products between conveyors.
- All available standard drives fit this unit.
- Please indicate the drive unit type when placing an order.

Item Code	Weight	Supply
MS3 BXD	12.9 kg	1 unit



- Drive and idler not included.
- Connecting strip and set screw included.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

MODU MM3
CONVEYOR SERIES



Technical Characteristics

Chain Width	83 mm
Chain Pitch	33.5 mm
Chain Weight	1.3 kg/m
Chain Working Tension (Max) With Wheel Bend Without Wheel Bend	 800 N 1000 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 15.0 kg 10.0 kg
Total Load*	250 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	1000 N
Item Width*	20 - 200 mm

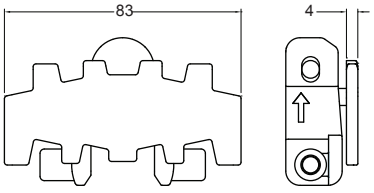
* Actual limit may vary according to conveyor layout and application.

Chain Width 83mm

Contents

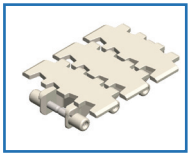
Chain MM3 64
Chain Top Replacement MM3 66
Chain Accessories MM3 67
Drive Units MM3 68
Idler End MM3 73
Conveyor Beam MM3 74
Accessories MM3 74
Horizontal Wheel Bend MM3 75
Horizontal Plain Bend MM3 76
Vertical Bend MM3 77
Chain Installation Section MM3 79
Diagonal Beam MM3 79
Wrap Beam MM3 79
Gripper System MM3 80

Chain MM3

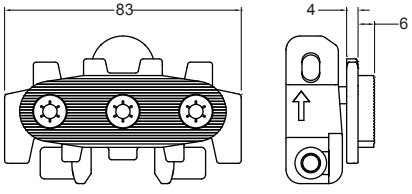


Plain Chain

- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

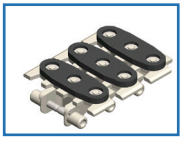


Item Code	Material	Color	Weight	Supply
MM3 CP 5	POM	White	6.5 kg/roll	5m/roll
MM3 CP 5A	Anti-Static	Yellow	6.5 kg/roll	5m/roll
MM3 CP 5K	Kevlar	Yellow	8.0 kg/roll	5m/roll

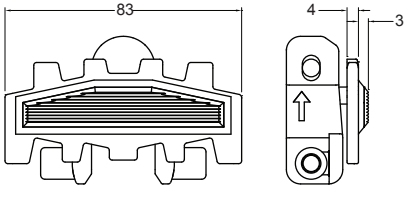


Insert Friction Chain

- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Accumulation not possible

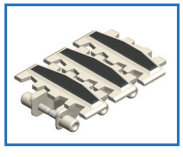


Item Code	Material	Color	Weight	Supply
MM3 CF 5	POM	White	7.5 kg/roll	5m/roll
MM3 CF 5A	Anti-Static	Yellow	7.5 kg/roll	5m/roll
MM3 CF 5K	Kevlar	Yellow	9.5 kg/roll	5m/roll

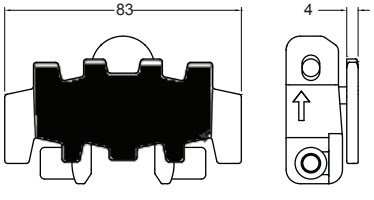


Molded Friction Chain

- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Accumulation not possible
- PP chain working material tension = 500N

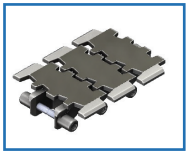


Item Code	Material	Color	Weight	Supply
MM3 CF 5P	PP	White	6.8 kg/roll	5m/roll



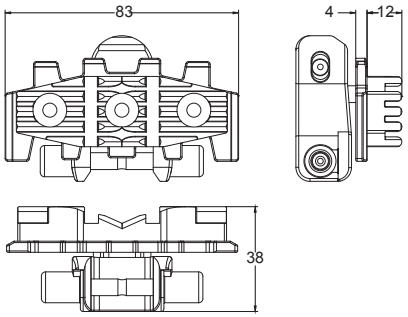
Flocked Chain

- Suitable for scratch sensitive material.
- Flock colour : Black
- Accumulation possible for light product only.
- Sticker type only

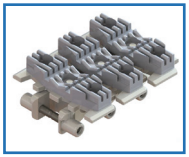


Item Code	Material	Color	Weight	Supply
MM3 CL 5	POM	White	7.0 kg/roll	5m/roll

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

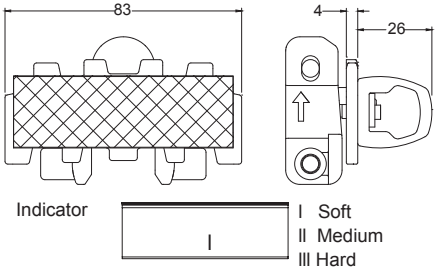


Silicone Pad Friction Chain

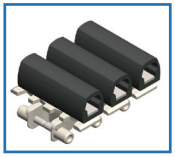


- High friction for incline of cylindral product up to 40˚
- Accumulation not possible.
- Not suitable to use with Combined Drive

Item Code	Material	Color	Weight	Supply
MM3 CF 3S	POM	White	5.4 kg/roll	3m/roll
MM3 CF 3SA	Anti-Static	Yellow	5.4 kg/roll	3m/roll
MM3 CF 3SK	Kevlar	Yellow	7.2 kg/roll	3m/roll



Box Gripper Chain



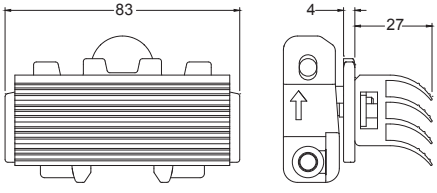
- Suitable to be use for transfering product using gripper system.
- Accumulation not possible.
- Not suitable to use with Combined Drive

Soft Type

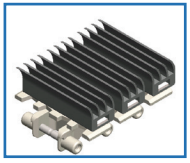
Item Code	Material	Color	Weight	Supply
MM3 CG 3BS	POM	White	7.7 kg/roll	3m/roll
MM3 CG 3BSA	Anti-Static	Yellow	7.7 kg/roll	3m/roll
MM3 CG 3BSK	Kevlar	Yellow	8.7 kg/roll	3m/roll

For other gripper box hardness, use the following item code:
Medium Type - MM3 CG 3BM
Hard Type - MM3 CG 3BH

Gripper Box	Max Product Weight
Soft Type – 50A Shore Hardness	up to 2 kg
Medium Type – 60A Shore Hardness	up to 5 kg
Hard Type – 73A Shore Hardness	up to 10 kg

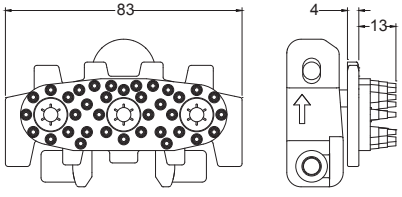


Wedge Gripper Chain

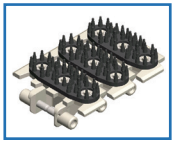


- Suitable to be use for transfering product using gripper system.
- Accumulation not possible.
- Not suitable to use with Combined Drive

Item Code	Material	Color	Weight	Supply
MM3 CG 3W	POM	White	5.0 kg/roll	3m/roll
MM3 CG 3WA	Anti-Static	Yellow	5.0 kg/roll	3m/roll
MM3 CG 3WK	Kevlar	Yellow	6.7 kg/roll	3m/roll



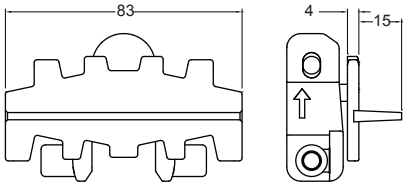
Finger Gripper Chain



- Suitable to be use for transfering product using gripper system.
- Accumulation not possible.
- Not suitable to use with Combined Drive

Item Code	Material	Color	Weight	Supply
MM3 CG 3F	POM	White	5.0 kg/roll	3m/roll
MM3 CG 3FA	Anti-Static	Yellow	5.0 kg/roll	3m/roll
MM3 CG 3FK	Kevlar	Yellow	6.0 kg/roll	3m/roll

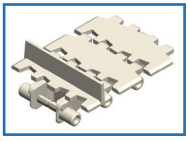
Please consult MODU representative for further information and assistance. Units: Dimension (mm)



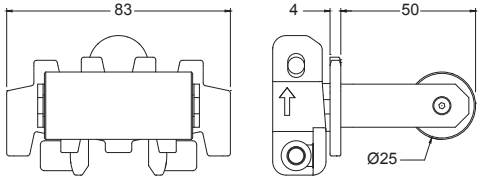
*P
Please specify pitch between cleat for ordering
(eg. MM3 CC 3x15 3P ; 3P = Every 3rd link to be cleated).

Cleated Link - Molded Cleated

- Required for vertical or steeply inclined / declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined and Catenary Drive.
- Supply in pieces.



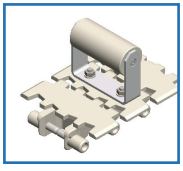
Item Code	Material	Color	Weight	Supply
MM3 CC 3X15 *P	POM	White	** kg/pc	1 pc
MM3 CC 3X15A *P	Anti-Static	Yellow	** kg/pc	1 pc
MM3 CC 3X15K *P	Kevlar	Yellow	** kg/pc	1 pc



*P
Please specify pitch between cleat for ordering
(eg. MM3 CR 3x15 3P ; 3P = Every 3rd link to be cleated).

Roller Cleated Link

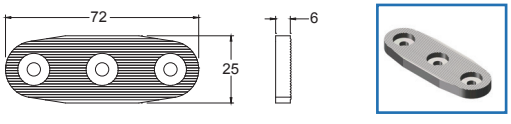
- Required for vertical or steeply inclined / declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined and Catenary Drive.
- Supply in pieces.



Item Code	Material	Color	Weight	Supply
MM3 CR 3X50 *P	POM	White	** kg/pc	1 pc

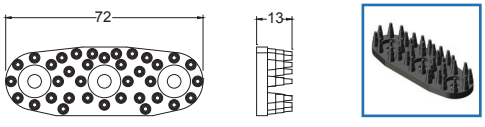
Chain Top Replacement MM3

Friction Pad



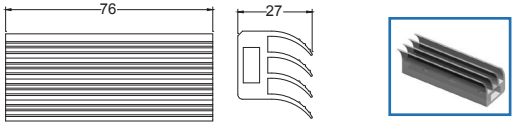
Item Code	Material	Color	Weight	Supply
MM3 FP 83	TPE	Grey	0.01 kg	10 pcs/pkt

Finger Gripper Pad



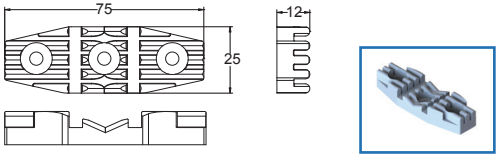
Item Code	Material	Color	Weight	Supply
MM3 GP 83F	TPU	Grey	0.09 kg	10 pcs/pkt

Wedge Gripper



Item Code	Material	Color	Weight	Supply
MM3 FP 83W	TPU	Grey	0.2 kg	10 pcs/pkt

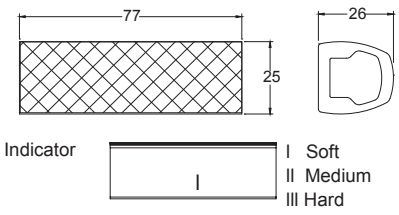
Friction Silicone Pad



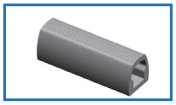
Item Code	Material	Color	Weight	Supply
MM3 FP 83S	Silicone	Grey	0.3 kg	10 pcs/pkt

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Gripper Box



- Box material : TPE (Grey).



Item Code	Hardness	Weight	Supply
MM3 GP 83 BS	Soft - 50A	0.2 kg	10 pcs/pkt
MM3 GP 83 BM	Medium - 60A	0.2 kg	10 pcs/pkt
MM3 GP 83 BH	Hard - 73A	0.2 kg	10 pcs/pkt

Chain Accessories MM3

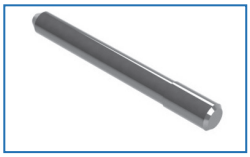
Lubricant For Chain



Silicone-based lubricant, 400ml

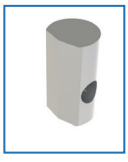
Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Stainless Steel Pin



Item Code	Weight	Supply
MM3 PN M6x53	0.07 kg	10 pcs / pkt

Chain Pivot



Item Code	Weight	Supply
MM3 PV	0.01 kg	10 pcs / pkt

Chain Pin Insertion Tool



Chain pin insertion tool shown without attachment and drive pin



Chain attachment and drive pin

Item Code	Description	Weight	Supply
TR CP 1	Pin Insertion Tool	1.2 kg	1 pc
MM3 AC	Chain Attachment	0.2 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units MM3

Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Transtechno)
T40 = CMRV 040
T50 = CMRV 050

Transfer Device
NIL = Basic Unit
TR = Free Roller
DR = Driven Roller

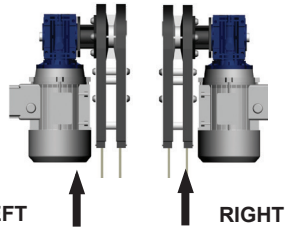
Gearmotor position: L or R

D: Front Drive
T: Combined Drive
C: Catenary Drive
S: Suspended Drive
I: Intermediate Drive
W: Wheel Bend Drive

Clutch
NIL = Basic Unit
C = With Clutch

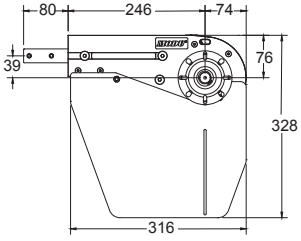
MM3 DD L S37 TR C
Front direct drive unit, motor on left side for 0.55kW SEW geared motor, with Free Roller and Clutch.

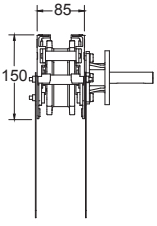
Motor Orientation Guideline

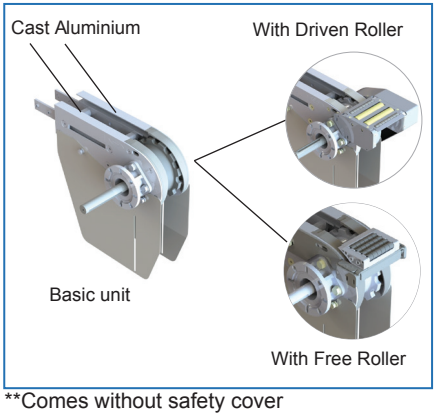


Front Drive Unit

Basic Front Drive

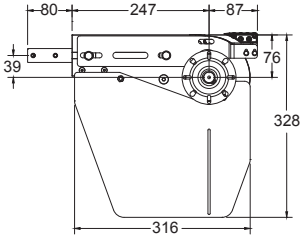


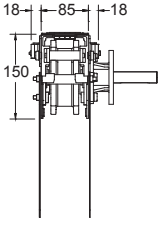




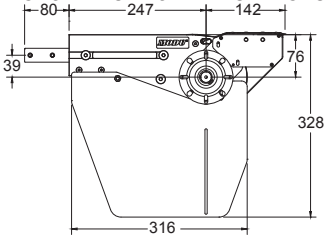
**Comes without safety cover

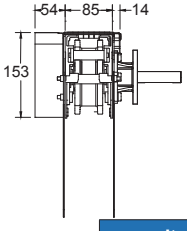
Front Drive with Free Roller





Front Drive with Driven Roller





- Effective track length: 1.63m
- Traction force: 1000N
- Connecting strip and set screw included.

Note:
- Safety Cover comes as an option.
- Recommended maximum chain elongation is 328mm from top conveyor to chain slack.

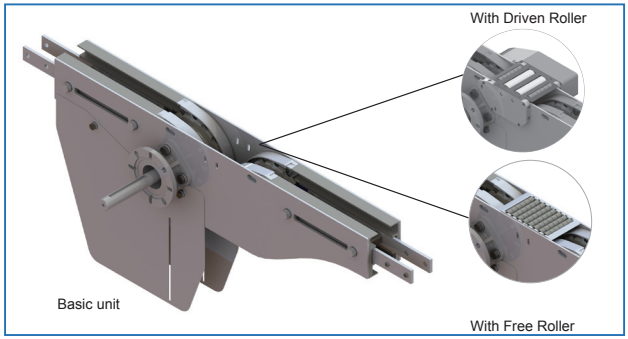
Item Code	Description	Weight	Supply
MM3 DD2 R/L S/T	Basic drive unit	4.9 kg	1 unit
MM3 DD2 R/L S/T TR	With transfer roller	5.1 kg	1 unit
MM3 DD2 R/L S/T DR	With driven roller	6.6 kg	1 unit

Driven Roller speed is approximately 10% higher than conveyor speed.

Please consult MODU representative for further information and assistance.

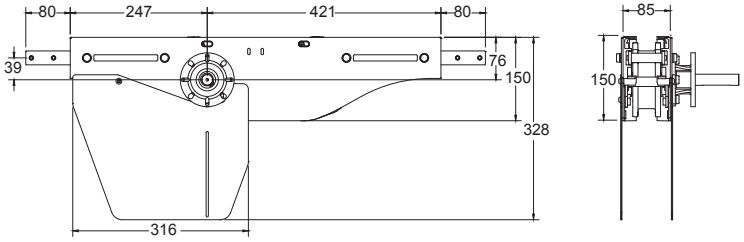
Units: Dimension (mm)

Combined Drive Unit

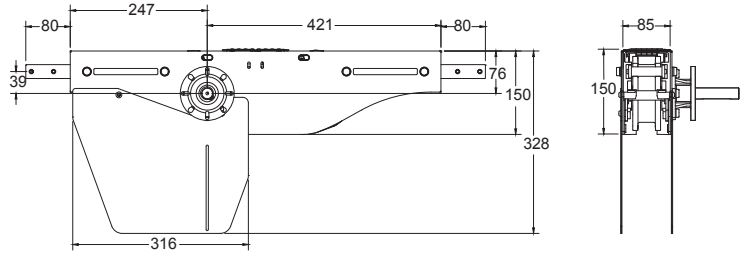


**Comes without safety cover

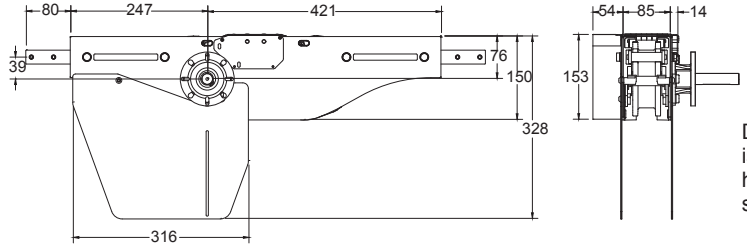
Basic Combined Drive



Combined Drive with Free Roller



Combined Drive with Driven Roller



Driven Roller speed is approximately 10% higher than conveyor speed.

Item Code	Description	Weight	Supply
MM3 DT R/L S/T	Basic drive unit	10.2 kg	1 unit
MM3 DT R/L S/T TR	With transfer roller	10.4 kg	1 unit
MM3 DT R/L S/T DR	With driven roller	11.9 kg	1 unit

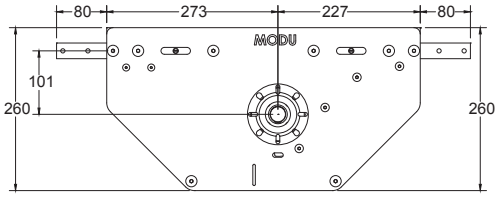
- Effective track length: 1.63m
- Traction force: 1000N
- Connecting strip and set screw included.

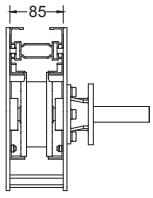
Note:

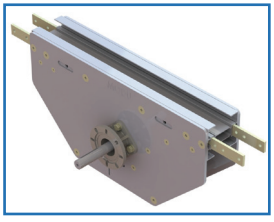
- Safety Cover comes as an option.
- Recommended maximum chain elongation is 328mm from top conveyor to chain slack.

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Intermediate Drive Unit



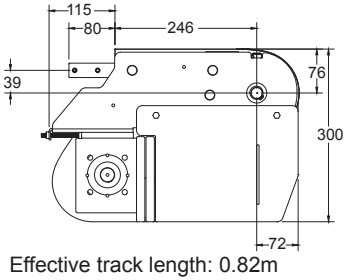


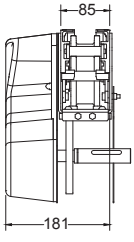


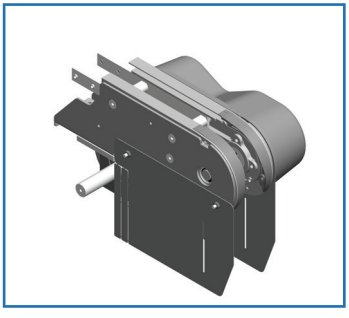
- Effective track length: 1.2m
- Traction force: 200N
- Horizontal use only
- Connecting strip and set screw included.

Item Code	Weight	Supply
MM3 DI R/L S/T	13.0 kg	1 unit

Suspended Drive Unit



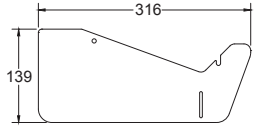




- Effective track length: 0.82m
- Traction force: 1000N
- Connecting strip and set screw included.

Item Code	Description	Weight	Supply
MM3 DS R/L S/T	Without clutch	14.5 kg	1 unit
MM3 DS R/L S/T C	With clutch	15.5 kg	1 unit

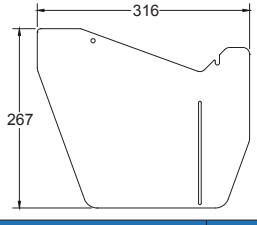
Short Safety Cover



Material : Stainless Steel

Item Code	Weight	Supply
SC2 139	0.8 kg	2 pcs/set

Standard Safety Cover



Material :
Stainless Steel

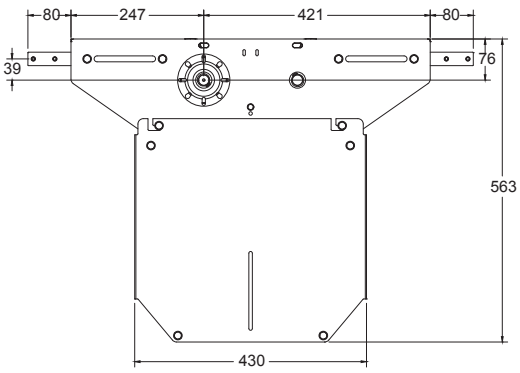
Item Code	Weight	Supply
SC2 267	0.8 kg	2 pcs/set

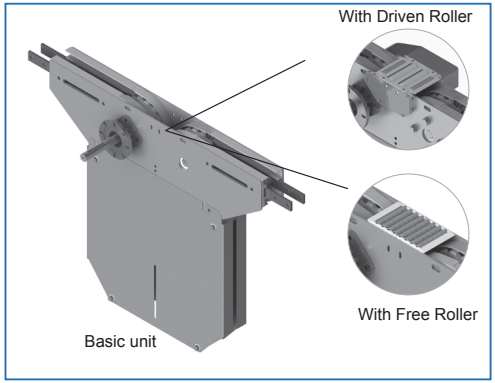
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

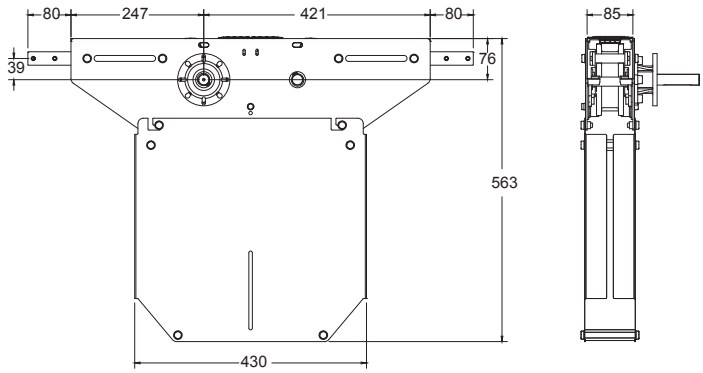
Catenary Drive Unit

Basic Catenary Drive Unit

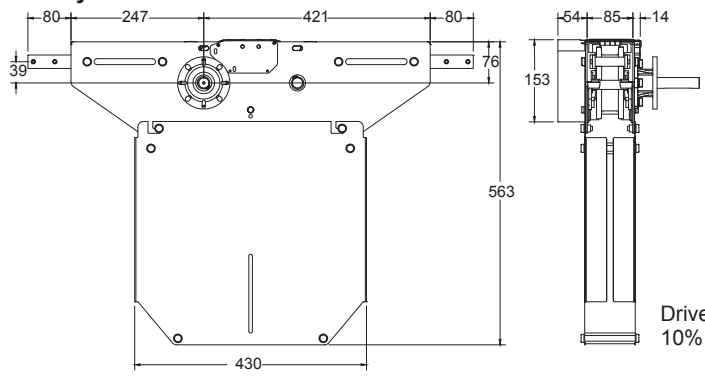




Catenary Drive with Free Roller



Catenary Drive with Driven Roller



Driven Roller speed is approximately 10% higher than conveyor speed.

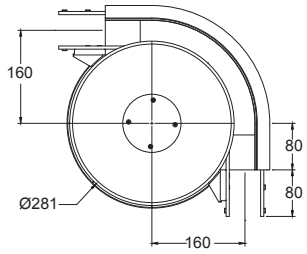
Item Code	Description	Weight	Supply
MM3 DC R/L S/T	Basic drive unit	18.9 kg	1 unit
MM3 DC R/L S/T TR	With transfer roller	19.1 kg	1 unit
MM3 DC R/L S/T DR	With driven roller	20.6 kg	1 unit

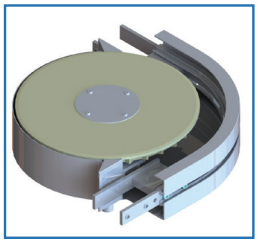
- Effective track length: 1.66m
- Traction force: 500N
- Connecting strip and set screw included.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

90° Wheel Bend Drive Unit

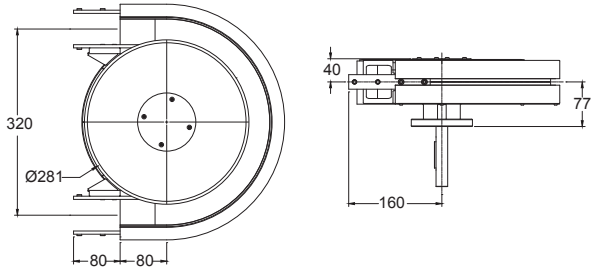


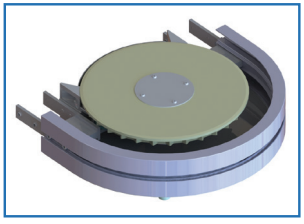


Item Code	Weight	Supply
MM3 DW 90R160 S/T	8.0 kg	1 unit

- Effective track length: 0.41m
- Traction force: 200N
- Connecting strip and set screw included.

180° Wheel Bend Drive Unit



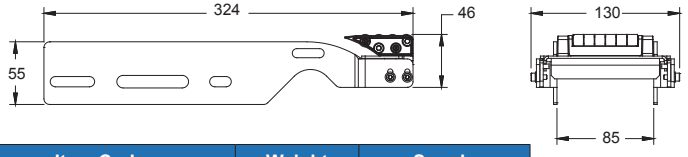


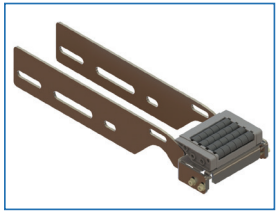
Item Code	Weight	Supply
MM3 DW 180R160 S/T	8.0 kg	1 unit

- Effective track length: 0.82m
- Traction force: 200N
- Connecting strip and set screw included.

Free Transfer Roller

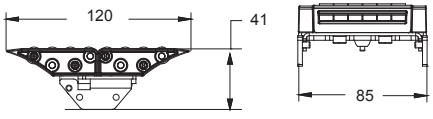
Direct Drive Unit

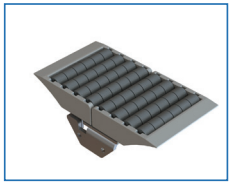




Item Code	Weight	Supply
MM3 TR DD/IE	0.85 kg	1 unit

Combined Drive Unit



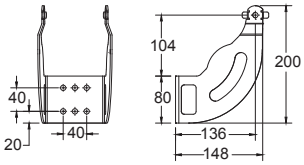


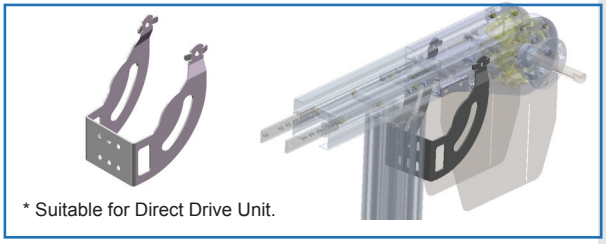
Item Code	Weight	Supply
MM3 TR DT	0.25 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Support Bracket for Drive Unit



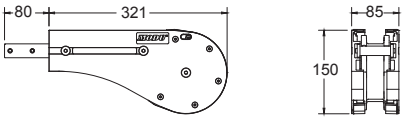


* Suitable for Direct Drive Unit.

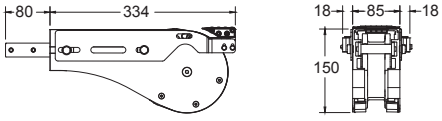
Item Code	Weight	Supply
MM3 BD	1.0 kg	1 unit

Idler End MM3

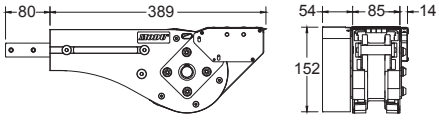
Basic Idler End Unit

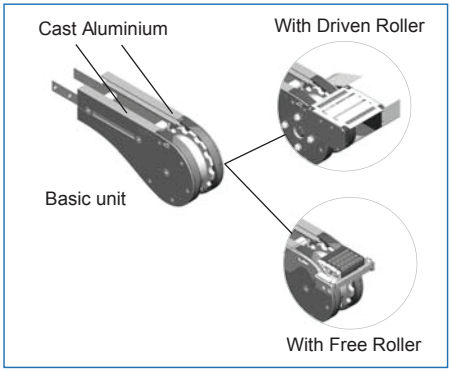


Idler End Unit with Free Roller



Idler End Unit with Driven Roller





Driven Roller speed is approximately 10% higher than conveyor speed.

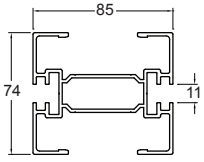
- Effective track length: 0.8m
- Connecting strip and set screw included.

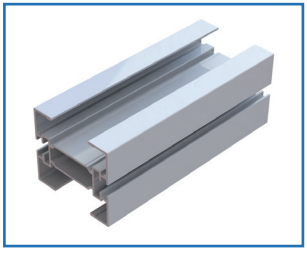
Item Code	Description	Weight	Supply
MM3 IE2 320	Basic idler unit	2.6 kg	1 unit
MM3 IE2 320 TR	With transfer roller	2.8 kg	1 unit
MM3 IE2 320 DR L/R	With driven roller	4.1 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor Beam MM3

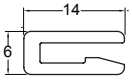




Item Code	Weight	Supply
MM3 CB 3	7.6 kg	3m / beam

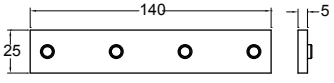
Accessories MM3

Slide Rail



Item Code	Material	Color	Weight	Supply
MS SR 25	HDPE	Semi-Transparent White	1.2 kg	25m/roll
MS SR 25A	Anti-Static	Grey	1.2 kg	25m/roll

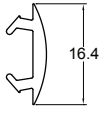
Connecting Strip



- 4 pcs M8 set screw included.

Item Code	Weight	Supply
MA CS 25x140	1.1 kg	10 pcs/pkt

T-Slot Cover



Item Code	Material	Color	Weight	Supply
MB SC 25T	TPE	Grey	1.5 kg	25m/roll
MB SC 25P	PVC	Light Grey	1.3 kg	25m/roll

Rivet



Item Code	Weight	Supply
MA RR 3	0.02 kg	50 pcs/pkt

Rivet Crimping



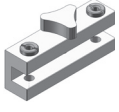
Item Code	Weight	Supply
MA RC	0.13 kg	1 pc

Slide Rail Mounting Tool



Item Code	Weight	Supply
MM3 SRA	0.4 kg	1 pc

Slide Rail Drill Fixture

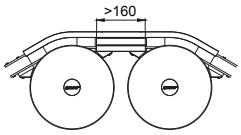


Item Code	Weight	Supply
MA SRF	0.24 kg	1 pc

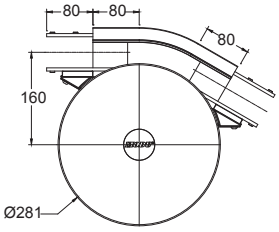
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Wheel Bend MM3



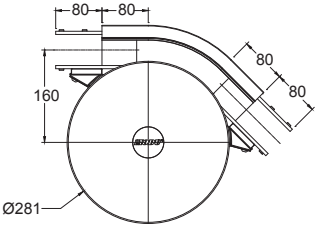
Minimum straight section for all wheel bend connection.



Wheel Bend, 30°

Effective track length:
0.24m 1-way (0.48 m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

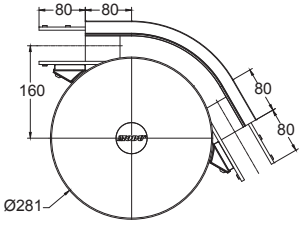
Item Code	Weight	Supply
MM3 BW 30R160	6.0 kg	1 unit



Wheel Bend, 45°

Effective track length:
0.28m 1-way (0.56m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

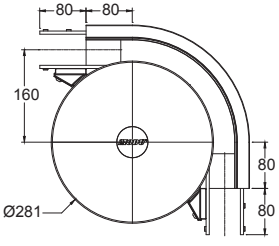
Item Code	Weight	Supply
MM3 BW 45R160	6.0 kg	1 unit



Wheel Bend, 60°

Effective track length:
0.33m 1-way (0.66 m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

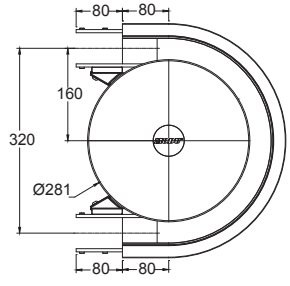
Item Code	Weight	Supply
MM3 BW 60R160	6.1 kg	1 unit



Wheel Bend, 90°

Effective track length:
0.41m 1-way (0.82m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MM3 BW 90R160	6.1 kg	1 unit



Wheel Bend, 180°

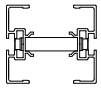
Effective track length:
0.66m 1-way (1.32 m 2-way).
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

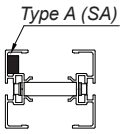
Item Code	Weight	Supply
MM3 BW 180R160	6.2 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

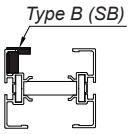
Horizontal Plain Bend MM3

Plain bends comes with options for optimum usage
-Plain bend basic unit.
-Plain bend with inner slide rail Type A (SA), Material = PE.
-Plain bend with inner slide rail Type B (SB), Material = Nylon
*(SB) is recommended when conveyor speed is 30m/min and above

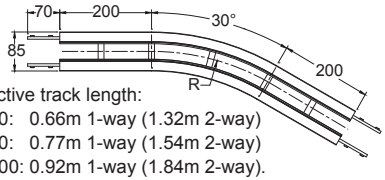

Basic



Inner slide rail Type A



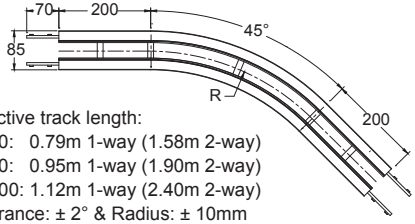
Inner slide rail Type B



Effective track length:
R500: 0.66m 1-way (1.32m 2-way)
R700: 0.77m 1-way (1.54m 2-way)
R1000: 0.92m 1-way (1.84m 2-way).
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Horizontal Plain Bend, 30°

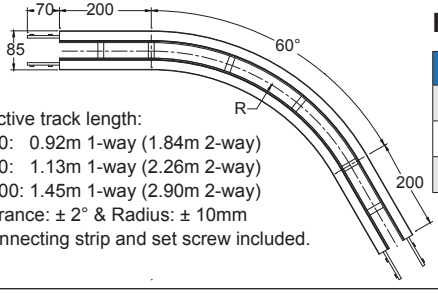
Item Code	Radius (R)	Weight	Supply
MM3 BP 30R500	500 mm	2.3 kg	1 unit
MM3 BP 30R700	700 mm	2.6 kg	1 unit
MM3 BP 30R1000	1000 mm	2.9 kg	1 unit



Effective track length:
R500: 0.79m 1-way (1.58m 2-way)
R700: 0.95m 1-way (1.90m 2-way)
R1000: 1.12m 1-way (2.40m 2-way)
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Horizontal Plain Bend, 45°

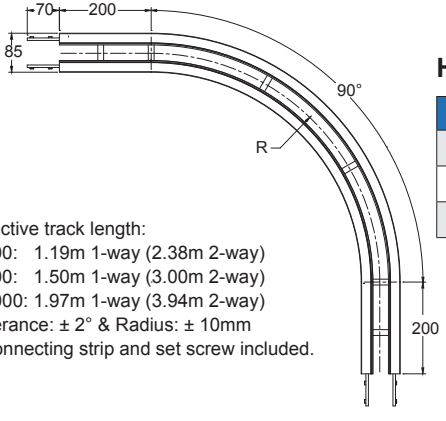
Item Code	Radius (R)	Weight	Supply
MM3 BP 45R500	500 mm	2.6 kg	1 unit
MM3 BP 45R700	700 mm	3.0 kg	1 unit
MM3 BP 45R1000	1000 mm	3.3 kg	1 unit



Effective track length:
R500: 0.92m 1-way (1.84m 2-way)
R700: 1.13m 1-way (2.26m 2-way)
R1000: 1.45m 1-way (2.90m 2-way)
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
MM3 BP 60R500	500 mm	2.9 kg	1 unit
MM3 BP 60R700	700 mm	3.5 kg	1 unit
MM3 BP 60R1000	1000 mm	4.2 kg	1 unit



Effective track length:
R500: 1.19m 1-way (2.38m 2-way)
R700: 1.50m 1-way (3.00m 2-way)
R1000: 1.97m 1-way (3.94m 2-way)
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Horizontal Plain Bend, 90°

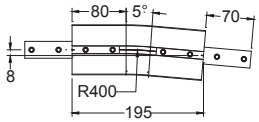
Item Code	Radius (R)	Weight	Supply
MM3 BP 90R500	500 mm	3.6 kg	1 unit
MM3 BP 90R700	700 mm	4.4 kg	1 unit
MM3 BP 90R1000	1000 mm	5.6 kg	1 unit

When ordering plain bends with inner slide rail, please specify the type using the following part number as an example.
Type A - MM3 BP 30R500 SA
Type B - MM3 BP 90R500 SB

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

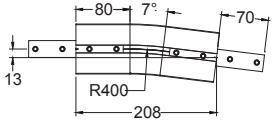
Vertical Bend MM3



Vertical Bend, 5°

Effective track length:
R400: 0.19m 1-way (0.38m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

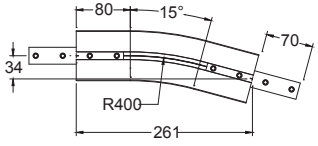
Item Code	Weight	Supply
MM3 BV 5R400	1.0 kg	1 unit



Vertical Bend, 7°

Effective track length:
R400: 0.20m 1-way (0.40m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

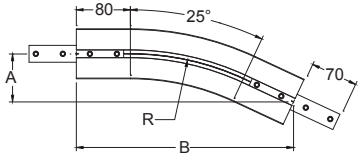
Item Code	Weight	Supply
MM3 BV 7R400	1.1 kg	1 unit



Vertical Bend, 15°

Effective track length:
R400: 0.26m 1-way (0.52m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MM3 BV 15R400	1.2 kg	1 unit

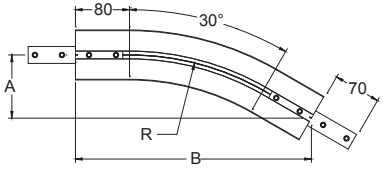


R400 : A = 71mm ; B = 322 mm
R1000 : A = 128mm ; B = 575 mm

Vertical Bend, 25°

Effective track length:
R400: 0.33m 1-way (0.66m 2-way)
R1000: 0.60m 1-way (1.20m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MM3 BV 25R400	1.4 kg	1 unit
MM3 BV 25R1000	2.0 kg	1 unit



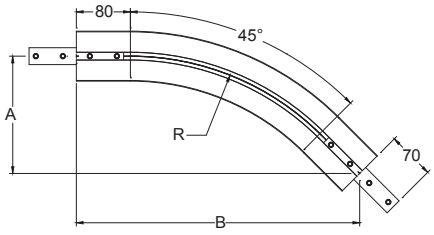
R400 : A = 80mm ; B = 299 mm
R1000 : A = 174mm ; B = 649 mm

Vertical Bend, 30°

Effective track length:
R400: 0.37m 1-way (0.74m 2-way)
R1000: 0.68m 1-way (1.36m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MM3 BV 30R400	1.3 kg	1 unit
MM3 BV 30R1000	2.5 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

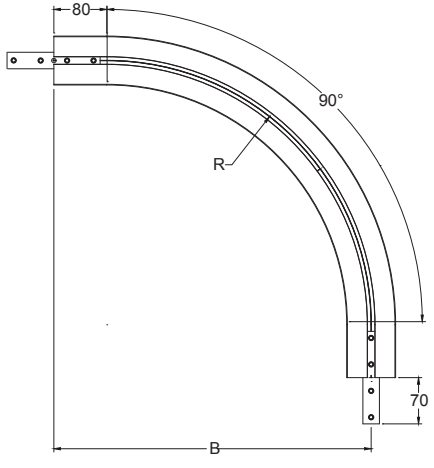


R400 : A = 174mm ; B = 419 mm
R1000 : A = 350mm ; B = 844 mm

Vertical Bend, 45°

Effective track length:
R400: 0.47m 1-way (0.94m 2-way)
R1000: 0.95m 1-way (1.90m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MM3 BV 45R400	1.7 kg	1 unit
MM3 BV 45R1000	3.0 kg	1 unit



R400 : B = 480 mm
R1000 : B = 1180 mm

Vertical Bend, 90°

Effective track length:
R400: 0.63m 1-way (1.26m 2-way)
R1000: 1.73m 1-way (3.46m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

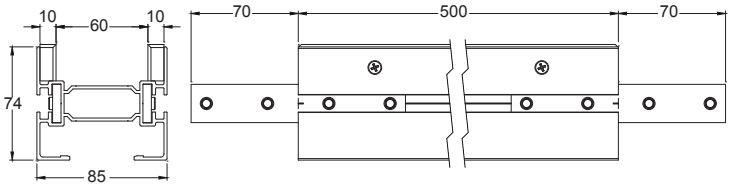
Item Code	Weight	Supply
MM3 BV 90R400	2.5 kg	1 unit
MM3 BV 90R1000	5.0 kg	1 unit

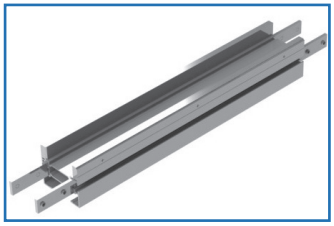
Non-Standard Vertical Bend is available in PE with minimum radius of 400mm.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

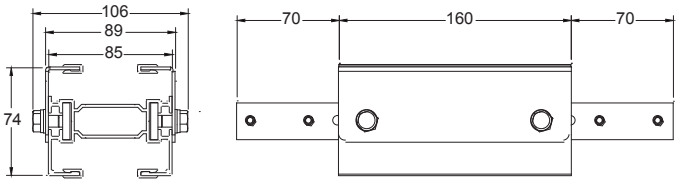
Chain Installation Section MM3

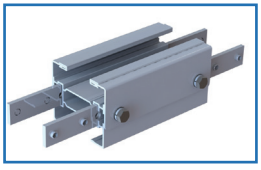




Item Code	Weight	Supply
MM3 LU 500	1.9 kg	1 unit

- Connecting strip and set screw included.

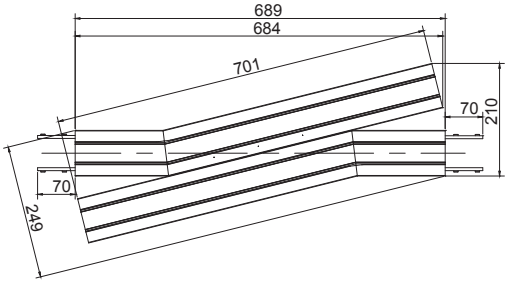




Item Code	Weight	Supply
MM3 CIS 160	1.3 kg	1 unit

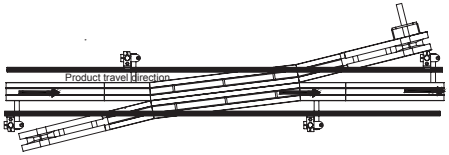
**Stainless steel side plate available on request

Diagonal Beam MM3

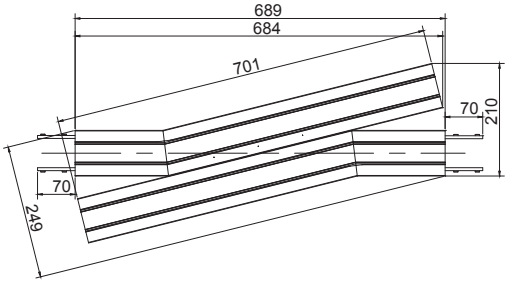


- A combination drive and idler unit used for smooth transfering of unstable products between conveyors.
- All available standard drives fit this unit.
- Please indicate the drive unit type when placing an order.

Item Code	Weight	Supply
MM3 BXD	14.8 kg	1 unit

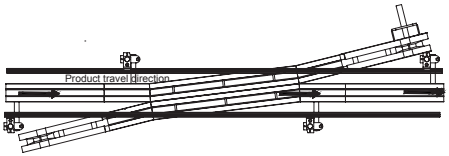


Wrap Beam MM3



- Wrap drive is used for smooth power transfer on top runing chain conveyors. An excellent product for multi drive alpine system.
- All available standard drives fit this unit.
- Please indicate the drive unit type when placing an order.

Item Code	Weight	Supply
MM3 BXW	16.2 kg	1 unit

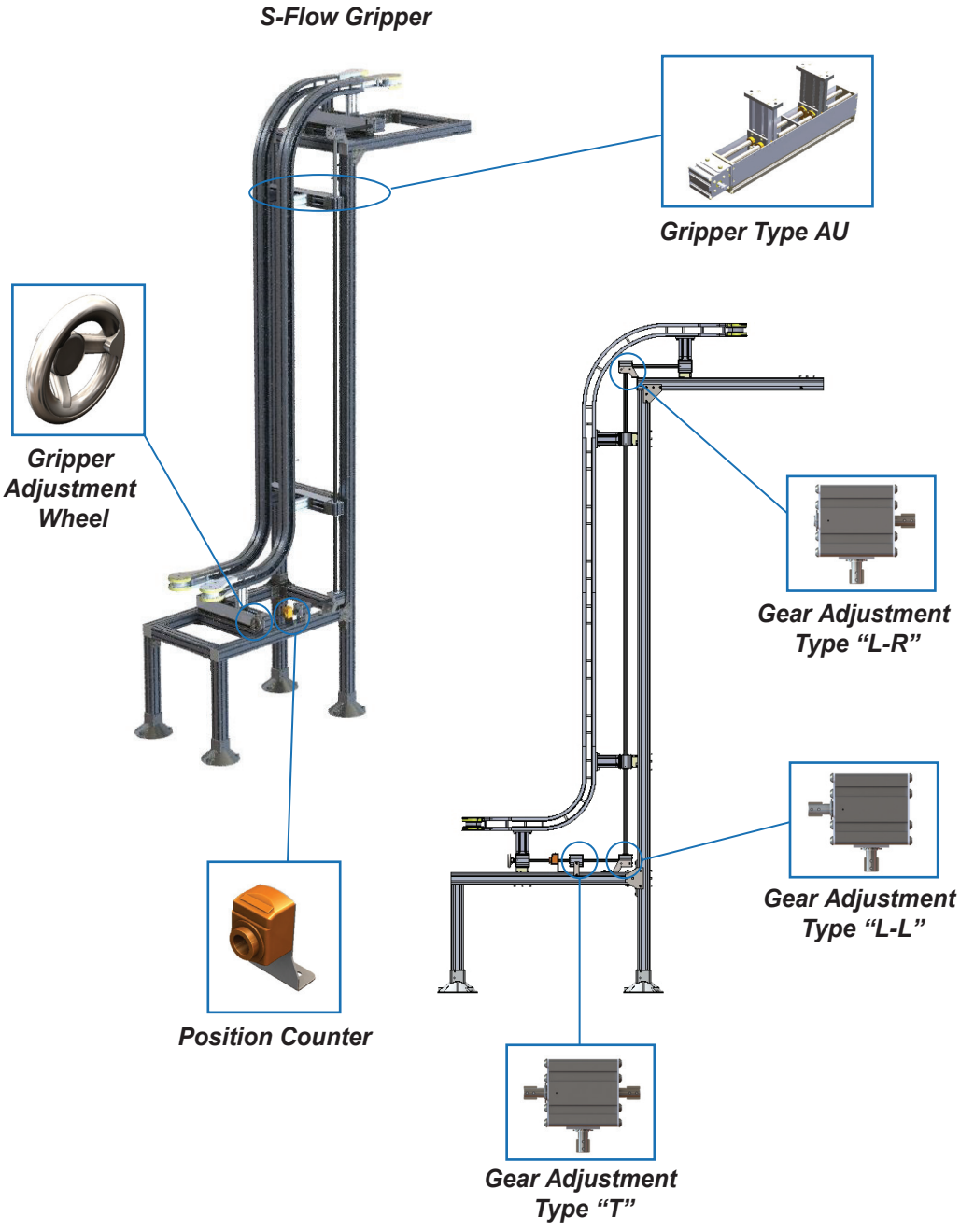


Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Gripper System MM3

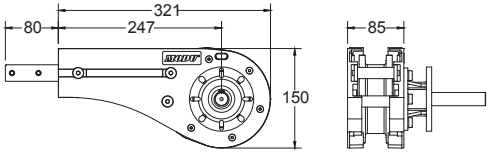
Gripper S-Flow type (Configuration)

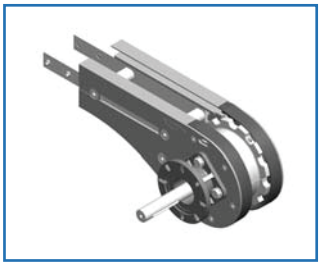


Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Gripper Drive Unit

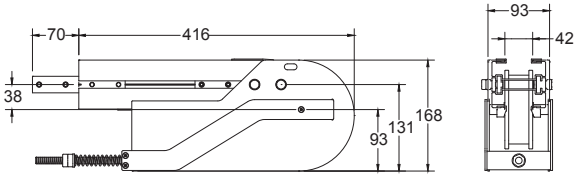


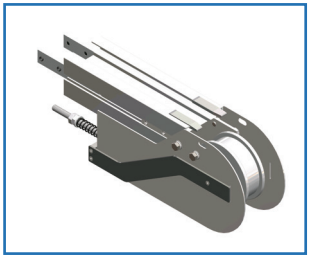


- Effective track length: 0.82m
- Traction force: 1000N
- Connecting strip and set screw included.

Item Code	Weight	Supply
MM3 DG R/L S/T	5.4 kg	1 unit

Gripper Idler End

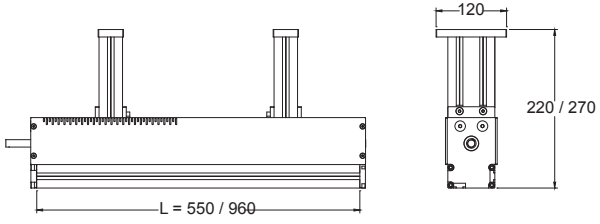


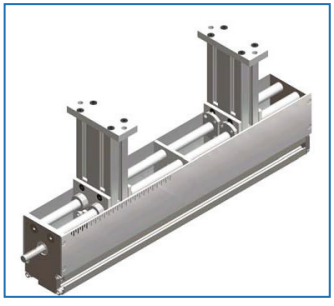


- Effective track length: 0.82 m
- Connecting strip and set screw included.

Item Code	Weight	Supply
MM3 IG 400	5.4 kg	1 unit

Gripper Adjustment Unit





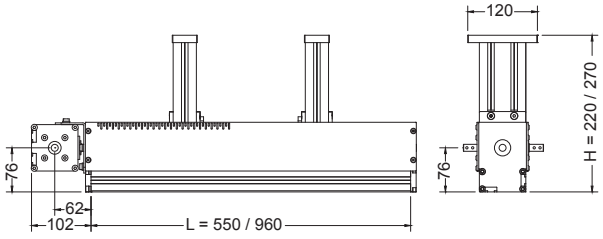
Item Code	Product Size Width	Product Size Height	Weight	Supply
MA AU2 550x220	50-300 mm	90-200 mm	9.0 kg	1 unit
MA AU2 550x270	50-300 mm	90-300 mm	9.5 kg	1 unit
MA AU2 960x220	100-700 mm	90-200 mm	13.0 kg	1 unit
MA AU2 960x270	100-700 mm	90-300 mm	13.5 kg	1 unit

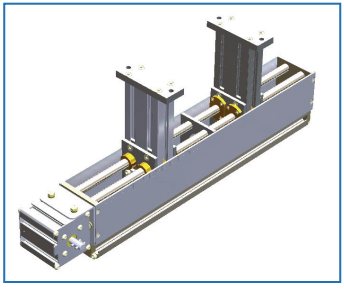
**improved
- Lighter, more rigid and easier to rotate.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Gripper Adjustment Unit with Gear

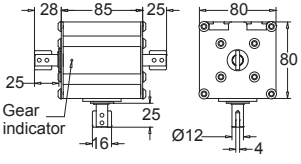




Item Code	Product Size Width	Height	Weight	Supply
MA AU2 550x220-BG	50-300 mm	90-200 mm	9.0 kg	1 unit
MA AU2 550x270-BG	50-300 mm	90-300 mm	9.5 kg	1 unit
MA AU2 960x220-BG	100-700 mm	90-200 mm	13.0 kg	1 unit
MA AU2 960x270-BG	100-700 mm	90-300 mm	13.5 kg	1 unit

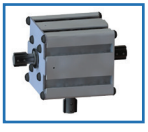
**improved
- Lighter, rigid and easier to rotate.

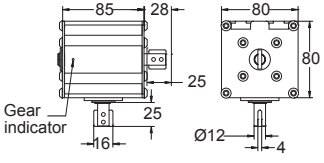
Bevel Gears for Gripper Unit



'T'
- Clockwise + Clockwise + Counter Clockwise

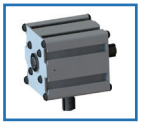
Item Code	Weight	Supply
MA BG T	1.09 kg	1 unit

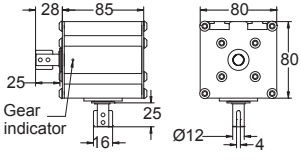




'L - R'
- Clockwise + Clockwise

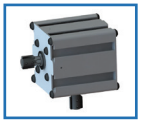
Item Code	Weight	Supply
MA BG L-R	0.94 kg	1 unit





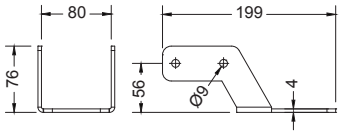
'L - L'
- Clockwise + Counter Clockwise

Item Code	Weight	Supply
MA BG L-L	0.94 kg	1 unit

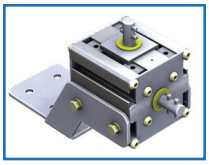


Please consult MODU representative for further information and assistance. Units: Dimension (mm)

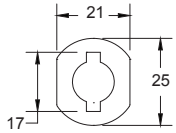
Gear Bracket Holder



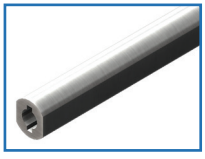
Item Code	Weight	Supply
MA BG BR	1.69 kg	1 unit



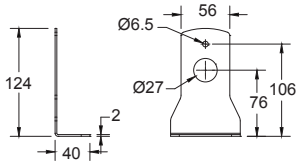
Connecting Rod for Gear Unit



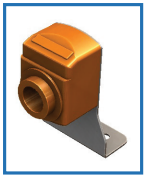
Item Code	Weight	Supply
MA BG 3x25	0.86 kg	3m



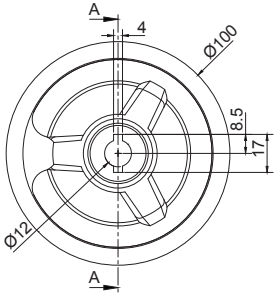
Counter with Support Plate

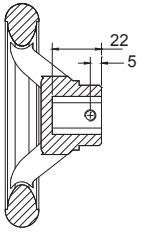


Item Code	Weight	Supply
MA BG C	0.6 kg	1 unit



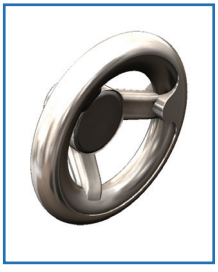
Gripper Adjustment Wheel





SECTION A-A

Item Code	Weight	Supply
MA WH 100	0.45 kg	1 unit



Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

MODU ML2
CONVEYOR SERIES



Technical Characteristics

Chain Width	140 mm
Chain Pitch	44.5 mm
Chain Weight	2.5 kg/m
Chain Working Tension (Max) With Wheel Bend Without Wheel Bend	 1000 N 1200 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 25.0 kg 15.0 kg
Total Load*	400 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	1200 N
Item Width*	25 - 320 mm

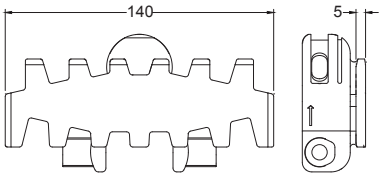
* Actual limit may vary according to conveyor layout and application.

Chain Width 140mm

Contents

Chain ML2 86
Chain Top Replacement ML2 88
Chain Accessories ML2 88
Drive Units ML2 89
Idler End ML2 93
Conveyor Beam ML2 94
Accessories ML2 94
Horizontal Wheel Bend ML2 95
Horizontal Plain Bend ML2 96
Vertical Bend ML2 97
Chain Installation Section ML2 99
Diagonal Beam ML2 99

Chain ML2

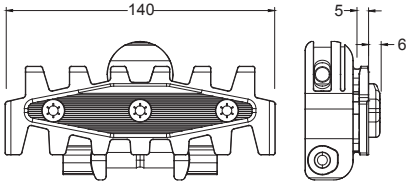


Plain Chain

- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

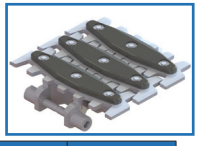


Item Code	Material	Color	Weight	Supply
ML2 CP 5	POM	White	13.0 kg/roll	5m/roll
ML2 CP 5A	Anti-Static	Yellow	13.0 kg/roll	5m/roll
ML2 CP 5K	Kevlar	Yellow	15.6 kg/roll	5m/roll

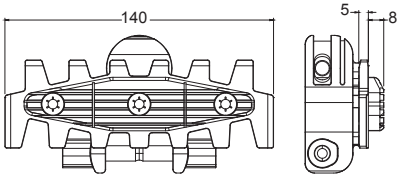


Friction Chain

- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Accumulation not possible

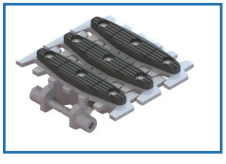


Item Code	Material	Color	Weight	Supply
ML2 CF 5	POM	White	15.0 kg/roll	5m/roll
ML2 CF 5A	Anti-Static	Yellow	15.0 kg/roll	5m/roll
ML2 CF 5K	Kevlar	Yellow	17.0 kg/roll	5m/roll

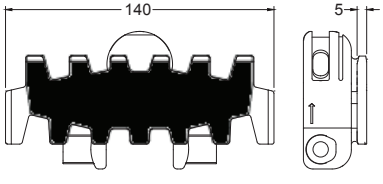


Silicone Pad Friction Chain

- High friction for incline of carton boxes up to 40˚
- Accumulation not possible.
- Not suitable to use with Combined Drive

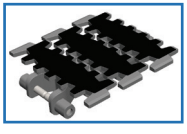


Item Code	Material	Color	Weight	Supply
ML2 CF 3S	POM	White	16.0 kg/roll	3m/roll
ML2 CF 3SA	Anti-Static	Yellow	16.0 kg/roll	3m/roll
ML2 CF 3SK	Kevlar	Yellow	17.0 kg/roll	3m/roll



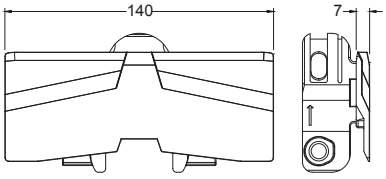
Flocked Chain

- Suitable for scratch sensitive material.
- Flock colour : Black
- Accumulation possible for light product only.
- Sticker type only



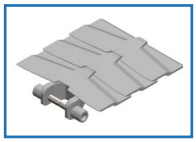
Item Code	Material	Color	Weight	Supply
ML2 CL 5	POM	White	12.5 kg/roll	5m/roll

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

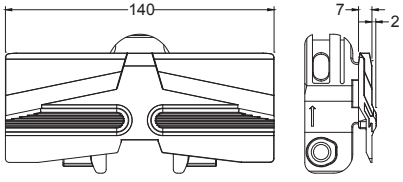


Safety Chain

- Suitable for conveyor configuration with incline/decline up to 5˚.
- Accumulation possible.

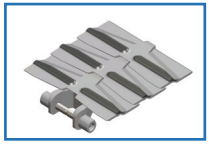


Item Code	Material	Color	Weight	Supply
ML2 CP 5S	POM	White	12.4 kg/roll	5m/roll

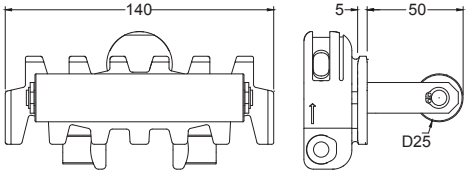


Safety Friction Chain

- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Accumulation not possible
- PP chain material working tension is less than POM, please refer to technical reference



Item Code	Material	Color	Weight	Supply
ML2 CF 5S	PP	White	12.4 kg/roll	5m/roll

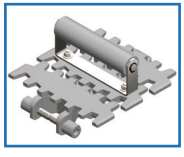


*P
Please specify pitch between cleat for ordering
(eg. ML2 CR 3 4P ; 4P = Every 4rd link to be cleated).

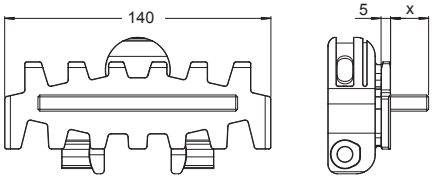
* Non-standard height are available upon request.

Roller Cleated Link

- Required for vertical or steeply inclined /declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined and Catenary Drive.
- Supply in pieces.



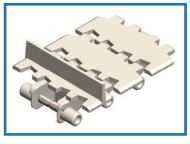
Item Code	Material	Color	Weight	Supply
ML2 CR 3 *P	POM	White	** kg/pc	1 pc



*P
Please specify pitch between cleat for ordering
(eg. ML2 CC 3x15 3P ; 3P = Every 3rd link to be cleated).

Machined Cleated Link

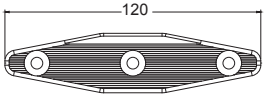
- Required for vertical or steeply inclined /declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined and Catenary Drive.
- Supply in pieces.

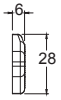


Item Code	Material	Color	Weight	Supply
ML2 CC 3X15 *P	POM	White	** kg/pc	1 pc
ML2 CC 3X15A *P	Anti-Static	Yellow	** kg/pc	1 pc
ML2 CC 3X15K *P	Kevlar	Yellow	** kg/pc	1 pc

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Chain Top Replacement ML2

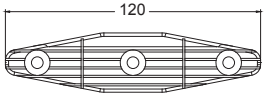




Friction Pad

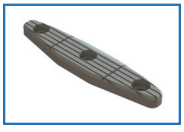


Item Code	Material	Color	Weight	Supply
ML2 FP 140	TPE	Grey	0.01 kg	10 pcs/pkt





Friction Silicone Pad



Item Code	Material	Color	Weight	Supply
ML2 FP 140S	Silicone	Grey	0.5 kg	10 pcs/pkt

Chain Accessories ML2

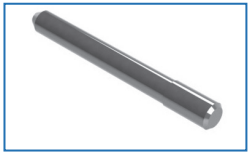
Lubricant For Chain



Silicone-based lubricant, 400ml

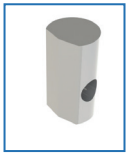
Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Stainless Steel Pin



Item Code	Weight	Supply
ML2 PN M8x73	0.07 kg	10 pcs / pkt

Chain Pivot



Item Code	Weight	Supply
ML2 PV	0.07 kg	10 pcs / pkt

Chain Pin Insertion Tool



Chain pin insertion tool shown without attachment and drive pin



Chain attachment and drive pin

Item Code	Description	Weight	Supply
TR CP 1	Pin Insertion Tool	1.2 kg	1 pc
ML2 AC	Chain Attachment	0.3 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units ML2

Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Transtechno)
T40 = CMRV 040
T50 = CMRV 050

Transfer Device
NIL = Basic Unit
TR = Free Roller
DR = Driven Roller

Gearmotor position: L or R

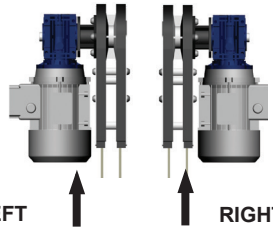
D: Front Drive
T: Combined Drive
S: Suspended Drive
I: Intermediate Drive

Clutch
NIL = Basic Unit
C = With Clutch

ML2 DD L S37 TR C

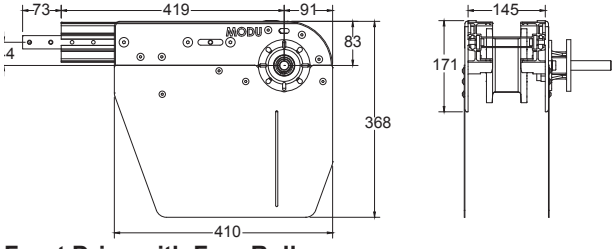
Front direct drive unit, motor on left side for 0.55kW SEW geared motor, with Free Roller and Clutch.

Motor Orientation Guideline

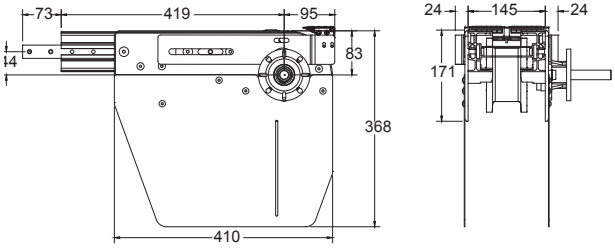


Front Drive Unit

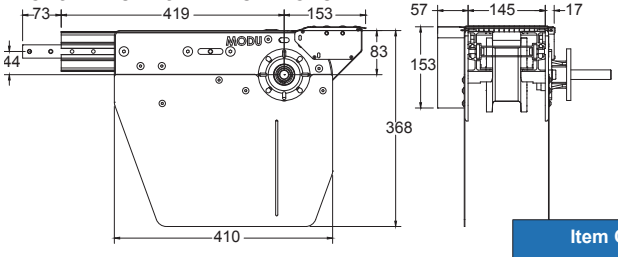
Basic Front Drive

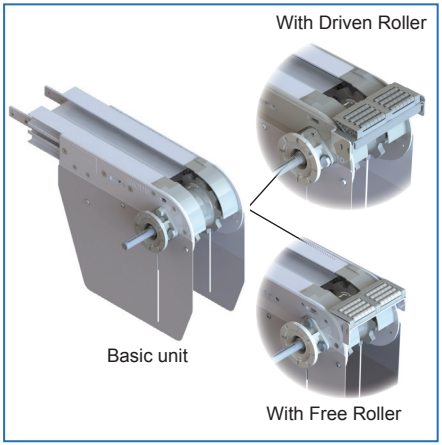


Front Drive with Free Roller



Front Drive with Driven Roller





**Comes without safety cover

- Effective track length: 1.16m
- Traction force: 1200N
- Connecting strip and set screw included.
  Note:
- Safety Cover comes as an option.
- Recommended maximum chain elongation is 328mm from top conveyor to chain slack.

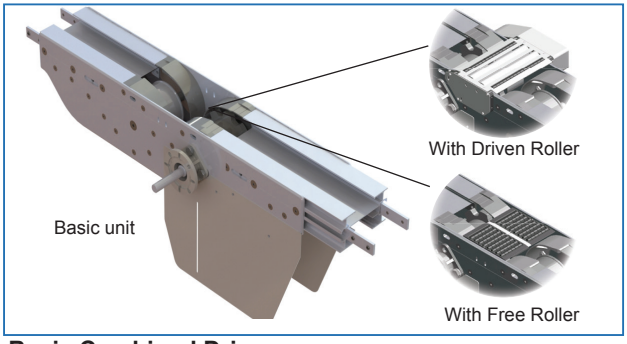
Item Code	Description	Weight	Supply
ML2 DD R/L S/T	Basic drive unit	6.3 kg	1 unit
ML2 DD R/L S/T TR	With transfer roller	6.8 kg	1 unit
ML2 DD R/L S/T DR	With driven roller	8.3 kg	1 unit

Driven Roller speed is approximately 10% higher than conveyor speed.

Please consult MODU representative for further information and assistance.

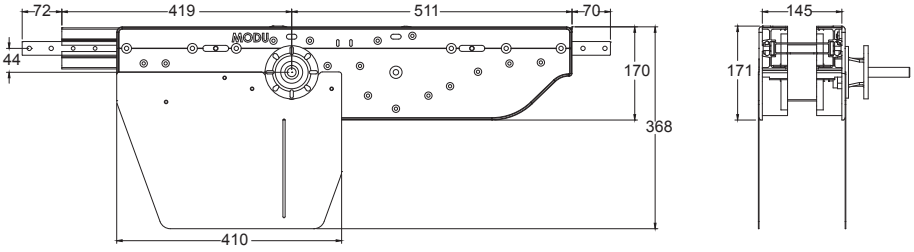
Units: Dimension (mm)

Combined Drive Unit

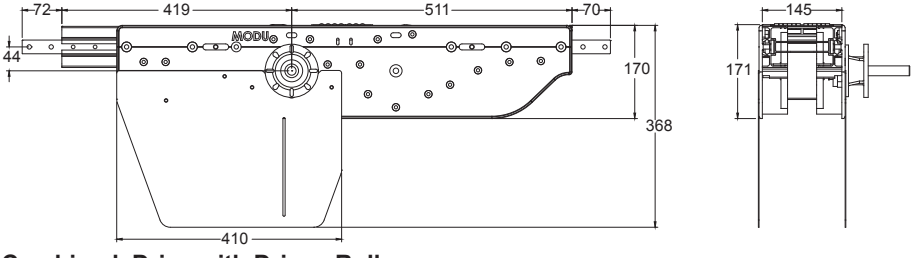


**Comes without safety cover

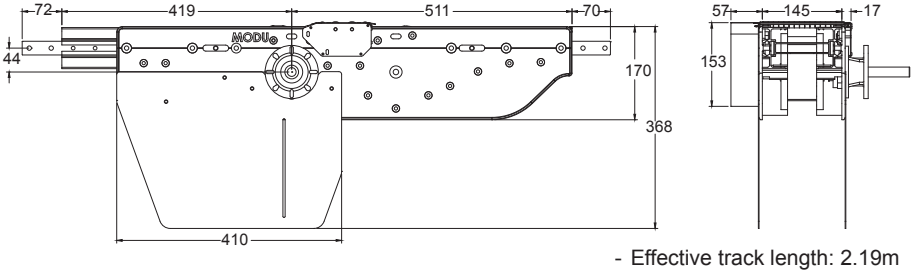
Basic Combined Drive



Combined Drive with Free Roller



Combined Drive with Driven Roller



Driven Roller speed is approximately 10% higher than conveyor speed.

Item Code	Description	Weight	Supply
ML2 DT R/L S/T	Basic drive unit	12.0 kg	1 unit
ML2 DT R/L S/T TR	With transfer roller	12.0 kg	1 unit
ML2 DT R/L S/T DR	With driven roller	13.8 kg	1 unit

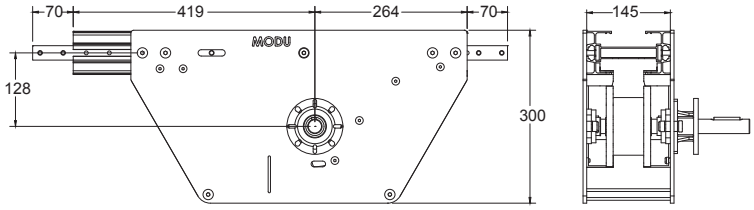
- Effective track length: 2.19m
- Traction force: 1200N
- Connecting strip and set screw included.

Note:

- Safety Cover comes as an option.
- Recommended maximum chain elongation is 328mm from top conveyor to chain slack.

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Intermediate Drive Unit

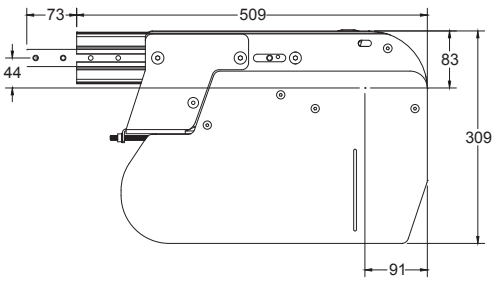


- Effective track length: 1.49m
- Traction force: 300N
- Horizontal use only
- Connecting strip and set screw included.

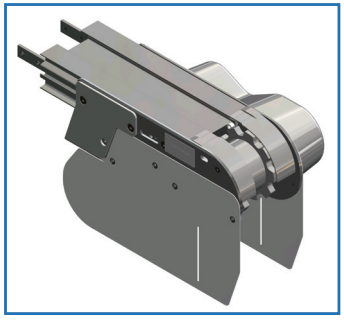


Item Code	Weight	Supply
ML2 DI R/L S/T	14.0 kg	1 unit

Suspended Drive Unit



- Effective track length: 1.16m
- Traction force: 1200N
- Connecting strip and set screw included.

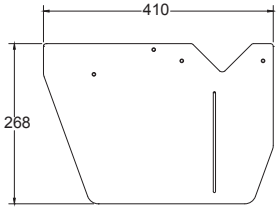


Item Code	Description	Weight	Supply
ML2 DS R/L S/T	Without clutch	14.5 kg	1 unit
ML2 DS R/L S/T C	With clutch	15.5 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Standard Safety Cover

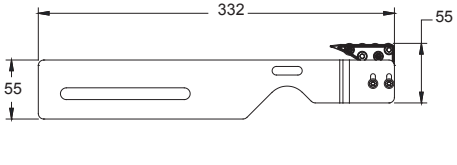


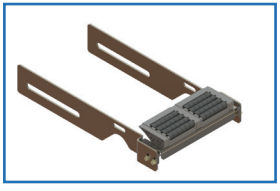
- Material : Stainless Steel
- Suitable to be used with front drive unit and combined drive unit

Item Code	Weight	Supply
SC2 268	1.8 kg	2 pcs/set

Free Transfer Roller

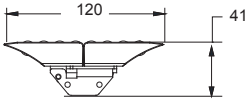
Direct Drive Unit





Item Code	Weight	Supply
ML2 TR DD/IE	0.86 kg	1 unit

Combined Drive Unit





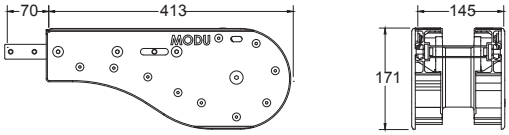
Item Code	Weight	Supply
ML2 TR DT	0.42 kg	1 unit

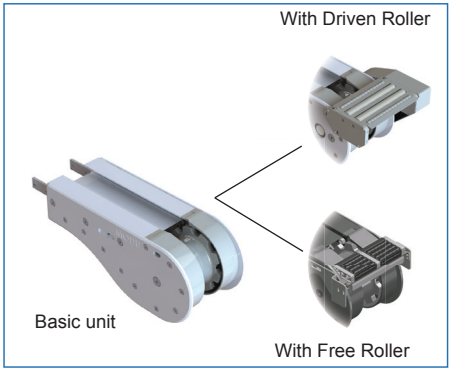
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

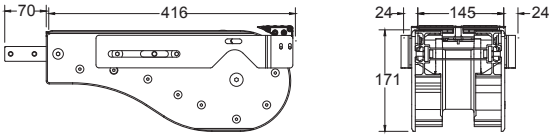
Idler End ML2

Basic Idler End Unit

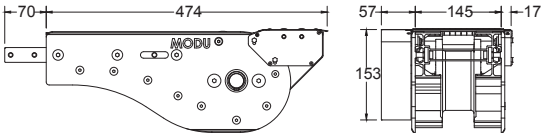




Idler End Unit with Free Roller



Idler End Unit with Driven Roller



Driven Roller speed is approximately 10% higher than conveyor speed.

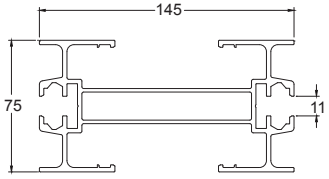
- Effective track length: 1.02m
- Connecting strip and set screw included.

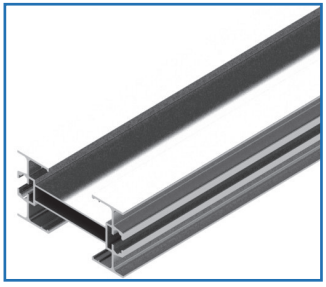
Item Code	Description	Weight	Supply
ML2 IE 400	Basic idler unit	4.1 kg	1 unit
ML2 IE 400 TR	With transfer roller	4.4 kg	1 unit
ML2 IE 400 DR L/R	With driven roller	5.9 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor Beam ML2

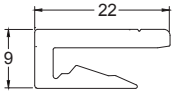




Item Code	Weight	Supply
ML2 CB 3	12.9 kg	3m / beam

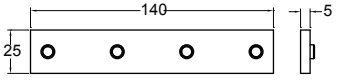
Accessories ML2

Slide Rail



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll
MA2 SR 25U	UHMW-PE	-	-	-

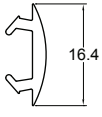
Connecting Strip



- 4 pcs M8 set screw included.

Item Code	Weight	Supply
MA CS 25x140	1.1 kg	10 pcs/pkt

T-Slot Cover



Item Code	Material	Color	Weight	Supply
MB SC 25T	TPE	Grey	1.5 kg	25m/roll
MB SC 25P	PVC	Light Grey	1.3 kg	25m/roll

Screw



Item Code	Weight	Supply
MA RS 6.5	0.02 kg	50 pcs/pkt

Slide Rail Mounting Tool



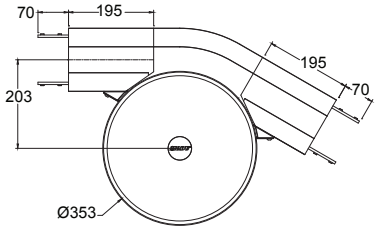
Item Code	Weight	Supply
ML2 SRA	0.4 kg	1 pc

**ML2 & MX2 uses the same mounting tool

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

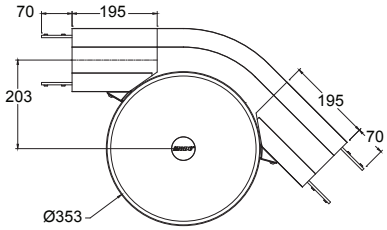
Horizontal Wheel Bend ML2



Wheel Bend, 30°

Effective track length:
0.6m 1-way (1.2m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

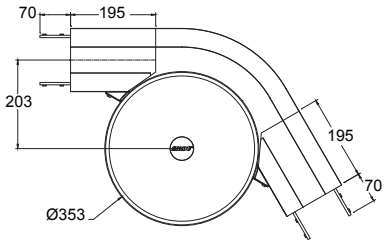
Item Code	Weight	Supply
ML2 BW 30R200	6.8 kg	1 unit



Wheel Bend, 45°

Effective track length:
0.66m 1-way (1.32m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

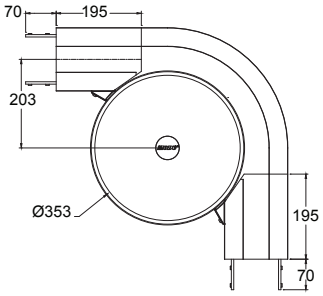
Item Code	Weight	Supply
ML2 BW 45R200	6.9 kg	1 unit



Wheel Bend, 60°

Effective track length:
0.71m 1-way (1.42m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

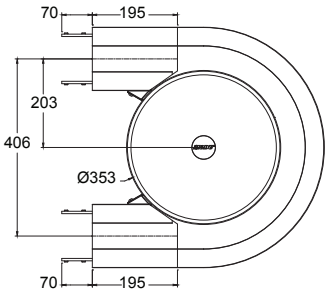
Item Code	Weight	Supply
ML2 BW 60R200	7.0 kg	1 unit



Wheel Bend, 90°

Effective track length:
0.81m 1-way (1.62m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
ML2 BW 90R200	7.2 kg	1 unit



Wheel Bend, 180°

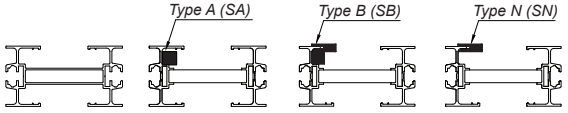
Effective track length:
1.13m 1-way (2.26m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
ML2 BW 180R200	8.2 kg	1 unit

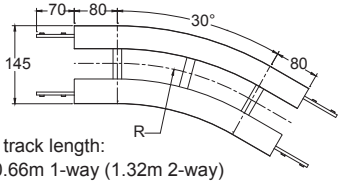
Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Horizontal Plain Bend ML2

Plain bends comes with options for optimum usage
-Plain bend basic unit.
-Plain bend with inner slide rail Type A (SA), Material = PE.
-Plain bend with inner slide rail Type B (SB), Material = Nylon
-Plain bend with inner slide rail Type N (SN), Material = UHMW-PE
*(SB) is recommended when conveyor speed is 30m/min and above



Basic | Inner slide rail Type A | Inner slide rail Type B | Inner slide rail Type N

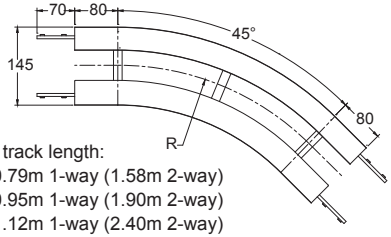


Effective track length:
R500: 0.66m 1-way (1.32m 2-way)
R700: 0.77m 1-way (1.54m 2-way)
R1000: 0.92m 1-way (1.84m 2-way).

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
ML2 BP 30R500	500 mm	2.8 kg	1 unit
ML2 BP 30R700	700 mm	3.3 kg	1 unit
ML2 BP 30R1000	1000 mm	3.6 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

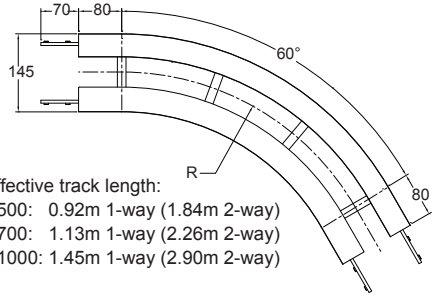


Effective track length:
R500: 0.79m 1-way (1.58m 2-way)
R700: 0.95m 1-way (1.90m 2-way)
R1000: 1.12m 1-way (2.40m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
ML2 BP 45R500	500 mm	3.4 kg	1 unit
ML2 BP 45R700	700 mm	4.1 kg	1 unit
ML2 BP 45R1000	1000 mm	5.1 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

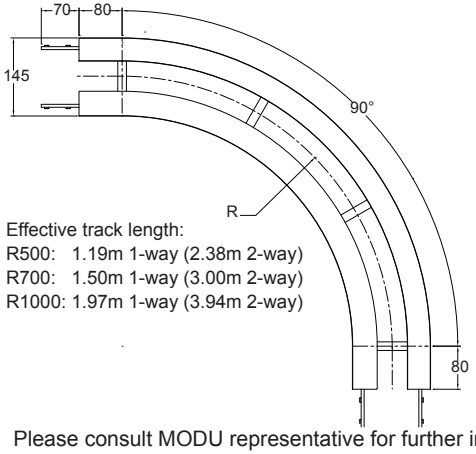


Effective track length:
R500: 0.92m 1-way (1.84m 2-way)
R700: 1.13m 1-way (2.26m 2-way)
R1000: 1.45m 1-way (2.90m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
ML2 BP 60R500	500 mm	3.9 kg	1 unit
ML2 BP 60R700	700 mm	4.1 kg	1 unit
ML2 BP 60R1000	1000 mm	6.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.



Effective track length:
R500: 1.19m 1-way (2.38m 2-way)
R700: 1.50m 1-way (3.00m 2-way)
R1000: 1.97m 1-way (3.94m 2-way)

Horizontal Plain Bend, 90°

Item Code	Radius (R)	Weight	Supply
ML2 BP 90R500	500 mm	5.1 kg	1 unit
ML2 BP 90R700	700 mm	6.4 kg	1 unit
ML2 BP 90R1000	1000 mm	8.4 kg	1 unit

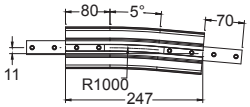
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

When ordering plain bends with inner slide rail, please specify the type using the following part number as an example.
Type A - ML2 BP 30R500 SA
Type B - ML2 BP 90R500 SB
Type N - ML2 BP 90R500 SN

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

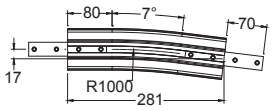
Vertical Bend ML2



Vertical Bend, 5°

Effective track length:
R1000: 0.25m 1-way (0.5m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

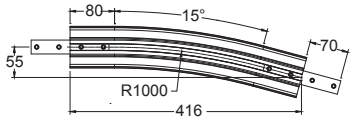
Item Code	Weight	Supply
ML2 BV 5R1000	1.6 kg	1 unit



Vertical Bend, 7°

Effective track length:
R1000: 0.28m 1-way (0.56m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

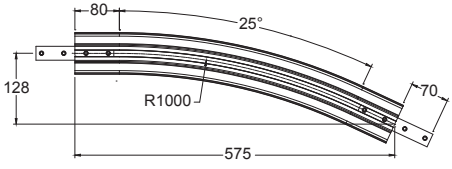
Item Code	Weight	Supply
ML2 BV 7R1000	1.8 kg	1 unit



Vertical Bend, 15°

Effective track length:
R1000: 0.42m 1-way (0.84m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

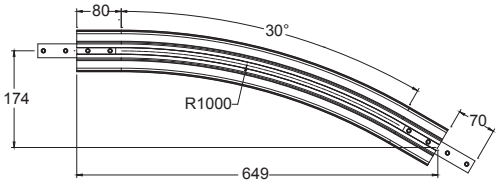
Item Code	Weight	Supply
ML2 BV 15R1000	2.4 kg	1 unit



Vertical Bend, 25°

Effective track length:
R1000: 0.60m 1-way (1.20m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
ML2 BV 25R1000	3.2 kg	1 unit

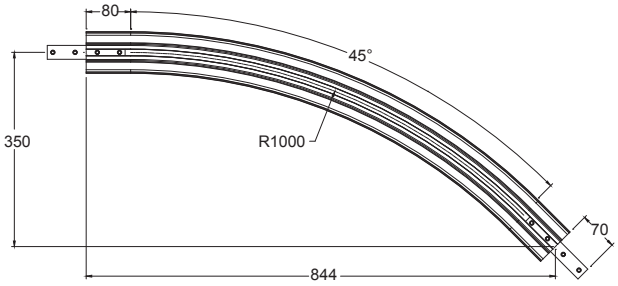


Vertical Bend, 30°

Effective track length:
R1000: 0.68m 1-way (1.36m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
ML2 BV 30R1000	3.5 kg	1 unit

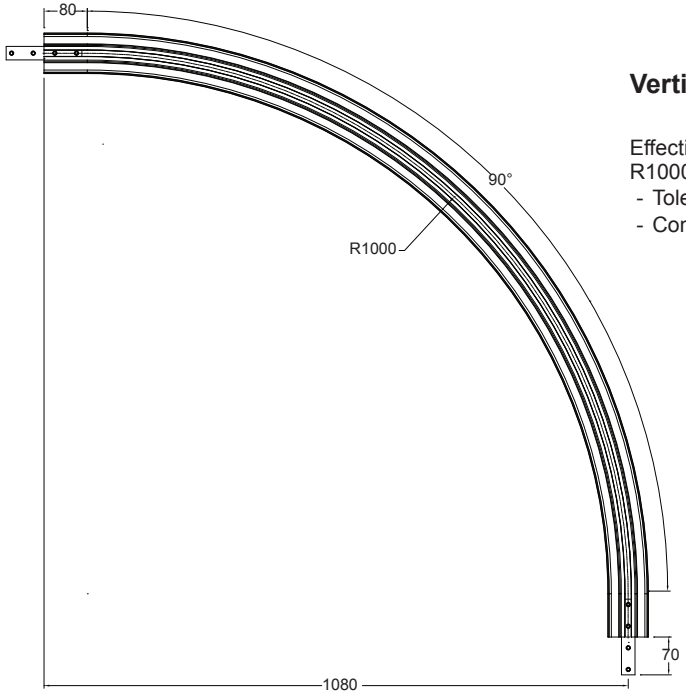
Please consult MODU representative for further information and assistance. Units: Dimension (mm)



Vertical Bend, 45°

Effective track length:
R1000: 0.95m 1-way (1.90m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
ML2 BV 45R1000	4.5 kg	1 unit



Vertical Bend, 90°

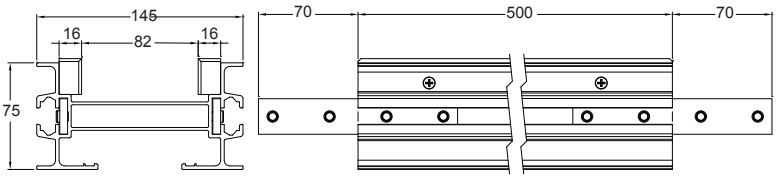
Effective track length:
R1000: 1.73m 1-way (3.46m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

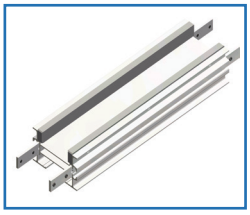
Item Code	Weight	Supply
ML2 BV 90R1000	7.9 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

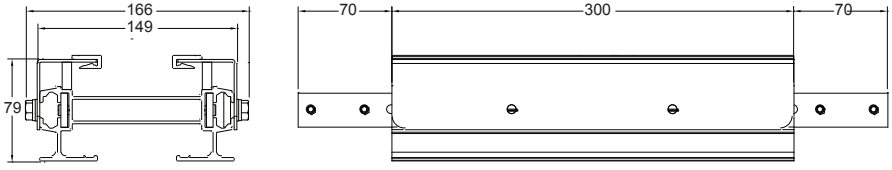
Chain Installation Section ML2

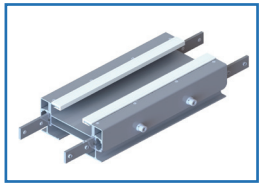




- Connecting strip and set screw included.

Item Code	Weight	Supply
ML2 LU 500	2.2 kg	1 unit

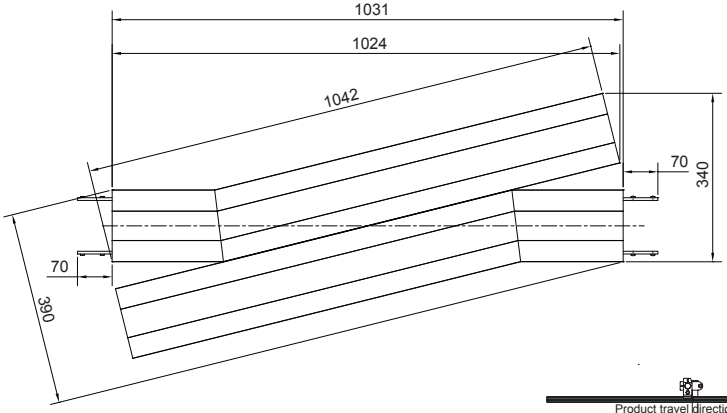




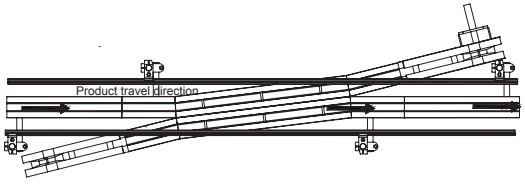
Item Code	Weight	Supply
ML2 CIS 300	2.0 kg	1 unit

**Stainless steel side plate available on request

Diagonal Beam ML2



- A combination drive and idler unit used for smooth transfering of unstable products between conveyors.
- All available standard drives fit this unit.
- Please indicate the drive unit type when placing an order.

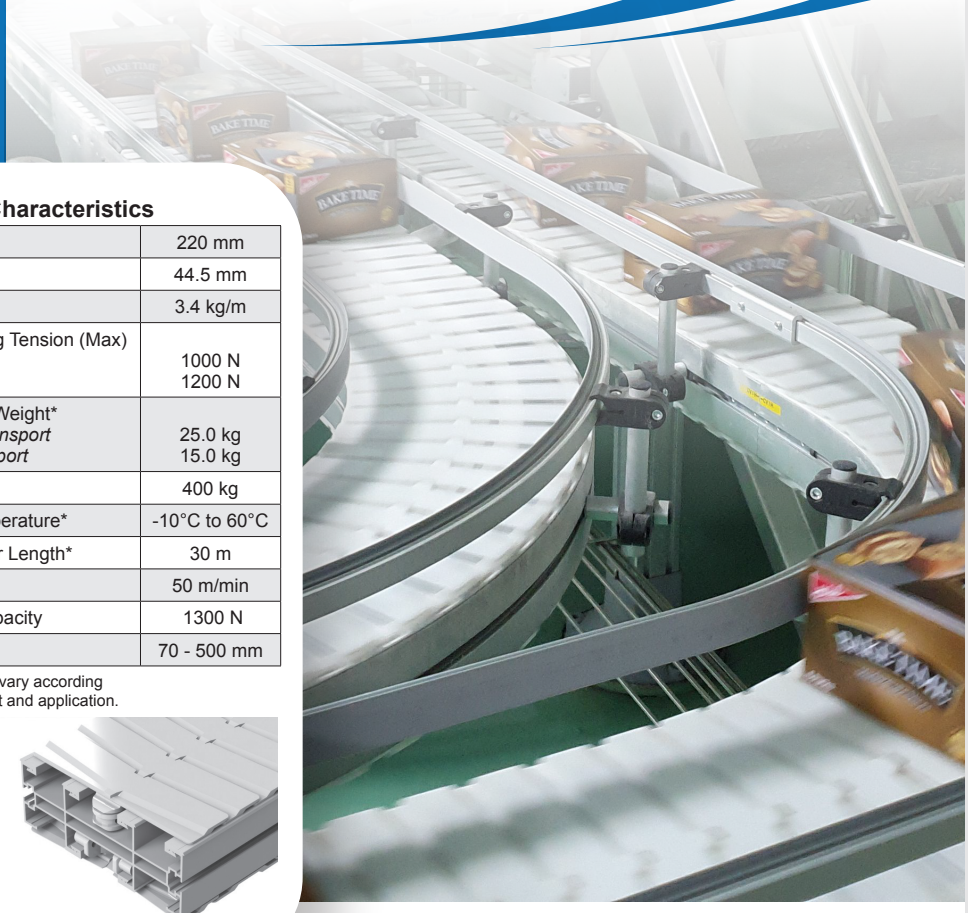


Item Code	Weight	Supply
ML2 BXD	26.3 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

MODU MX2
CONVEYOR SERIES



Technical Characteristics

Chain Width	220 mm
Chain Pitch	44.5 mm
Chain Weight	3.4 kg/m
Chain Working Tension (Max) With Bend Without Bend	 1000 N 1200 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 25.0 kg 15.0 kg
Total Load*	400 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	1300 N
Item Width*	70 - 500 mm

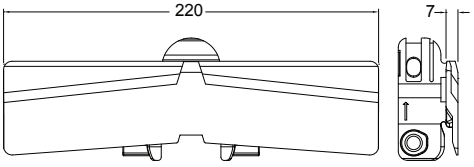
* Actual limit may vary according to conveyor layout and application.

Chain Width 220mm

Contents

Chain MX2..... 102
Chain Accessories MX2..... 103
Drive Units MX2..... 104
Idler End MX2..... 107
Conveyor Beam MX2 108
Accessories MX2..... 108
Horizontal Plain Bend MX2..... 109
Vertical Bend MX2.....110
Chain Installation Section MX2.....112

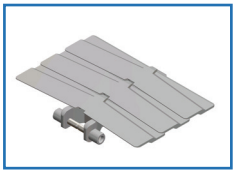
Chain MX2

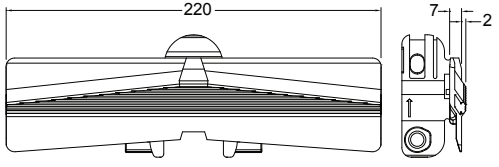


Item Code	Material	Color	Weight	Supply
MX2 CP 5	POM	White	17.2 kg/roll	5m/roll

Plain Chain

- Suitable for conveyor configuration with incline/ decline up to 7˚.
- Accumulation possible.

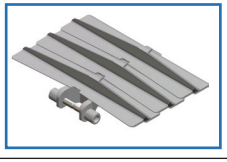


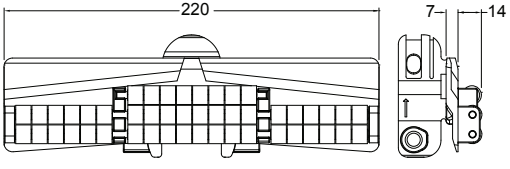


Item Code	Material	Color	Weight	Supply
MX2 CF 5	POM	White	18.2 kg/roll	5m/roll

Friction Chain

- Suitable for conveyor configuration with incline/ decline up to 25˚.
- Friction material : TPE (grey).
- Accumulation not possible

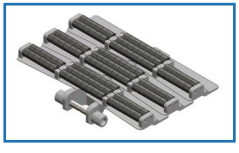


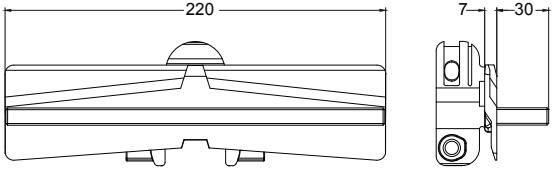


Item Code	Material	Color	Weight	Supply
MX2 RT 3	POM	White	22.0 kg/roll	3m/roll

Roller Top Chain

- Accumulation possible.
- Low back force.





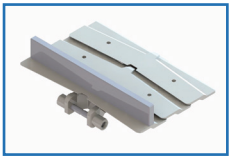
*P
Please specify pitch between cleat for ordering
(eg. MX2 CC 3x30 4P ; 4P = Every 4rd link to be cleated).

* Non-standard height are available upon request.

Item Code	Material	Color	Weight	Supply
MX2 CC 3x30 *P	POM	White	** kg/pc	1 pc

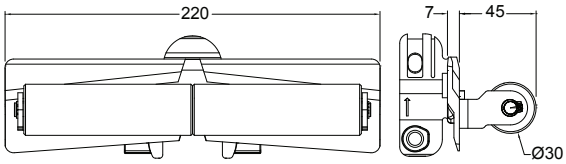
Cleated Link - PE Cleated (Machine)

- Required for vertical or steeply inclined /declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined Drive.
- Supply in pieces.



Please consult MODU representative for further information and assistance.

Units: Dimension (mm)



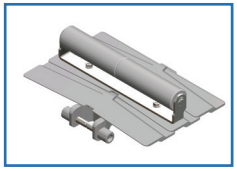
Roller Cleated Link

- Required for vertical or steeply inclined / declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined Drive.
- Supply in pieces.

*p
Please specify pitch between cleat for ordering
(eg. MX2 CR 3x15P 3p = Every 3rd link to be cleated).

* Non-standard height are available upon request.

Item Code	Material	Color	Weight	Supply
MX2 CR 3X15P *p	POM	White	** kg/pc	1 pc



Chain Accessories MX2

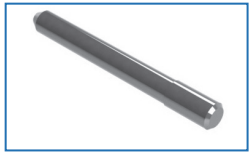
Lubricant For Chain



Silicone-based lubricant, 400ml

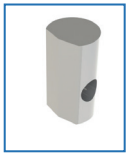
Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Stainless Steel Pin



Item Code	Weight	Supply
ML2 PN M8x73	0.07 kg	10 pcs / pkt

Chain Pivot



Item Code	Weight	Supply
ML2 PV	0.07 kg	10 pcs / pkt

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Drive Units MX2

Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Motovario / Transtechno)
T40 = CMRV 040
T50 = CMRV 050

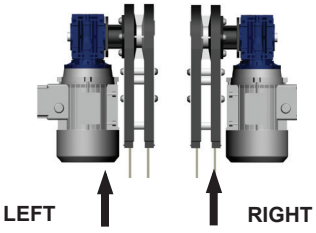
Transfer Device
NIL = Basic Unit
TR = Free Roller
DR = Driven Roller

Gearmotor position: L or R
D: Front Drive
T: Combined Drive

Clutch
NIL = Basic Unit
C = With Clutch

MX2 DD L S47 TR C
Front direct drive unit, motor on left side for 0.55kW SEW geared motor, with Free Roller and Clutch.

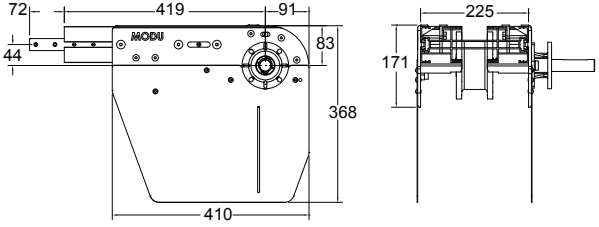
Motor Orientation Guideline



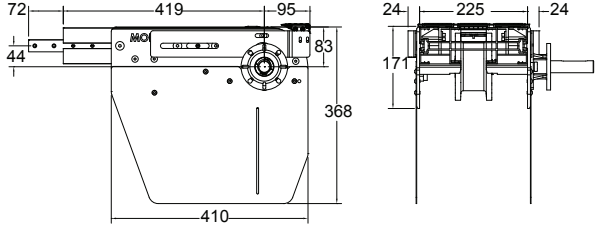
Example. Code for Basic unit;
MX2 DD R S47 => Front drive unit, motor on right side for SEW SA47 gearmotor.

Front Drive Unit

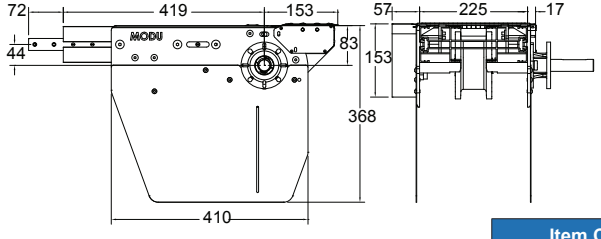
Basic Front Drive



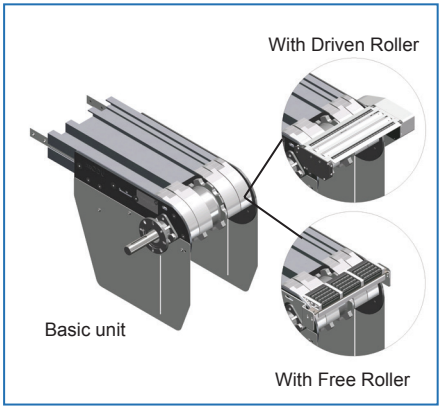
Front Drive with Free Roller



Front Drive with Driven Roller



Driven Roller speed is approximately 10% higher than conveyor speed.



**Comes without safety cover

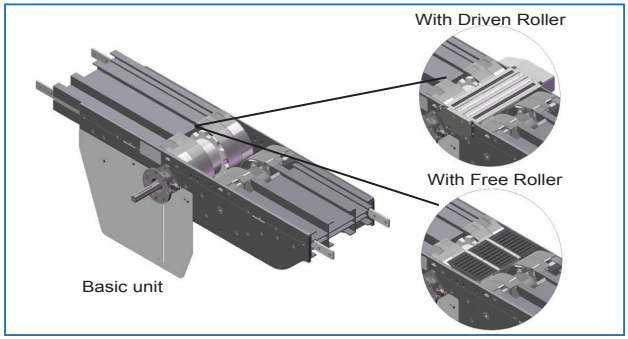
- Effective track length: 1.16m
- Traction force: 1300N
- Connecting strip and set screw included.

Note:
- Safety Cover comes as an option.
- Recommended maximum chain elongation is 328mm from top conveyor to chain slack.

Item Code	Description	Weight	Supply
MX2 DD R/L S/T	Basic drive unit	8.5 kg	1 unit
MX2 DD R/L S/T TR	With transfer roller	8.8 kg	1 unit
MX2 DD R/L S/T DR	With driven roller	10.3 kg	1 unit

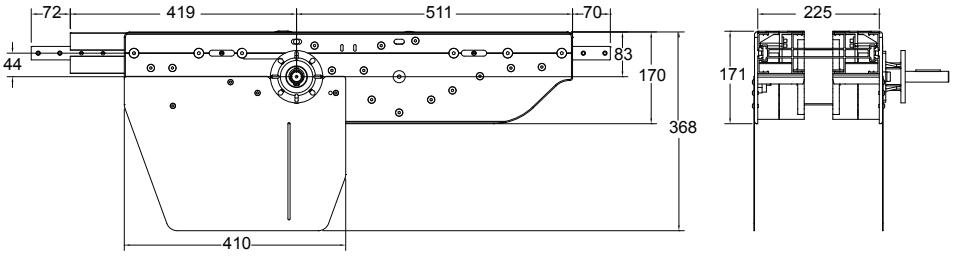
Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Combined Drive Unit

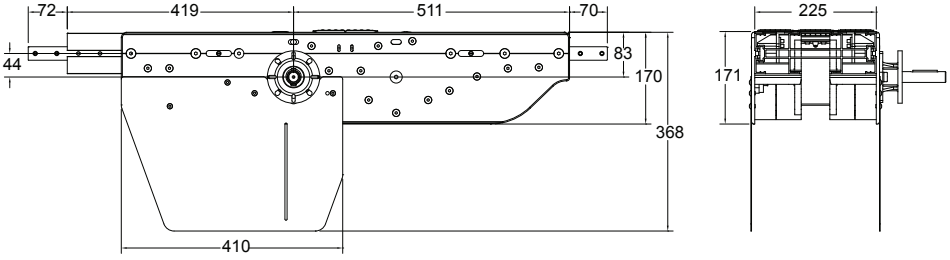


**Comes without safety cover

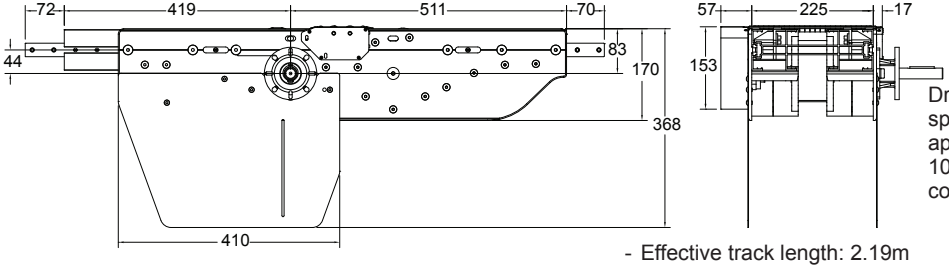
Basic Combined Drive



Combined Drive with Free Roller



Combined Drive with Driven Roller



Driven Roller speed is approximately 10% higher than conveyor speed.

Item Code	Description	Weight	Supply
MX2 DT R/L S/T	Basic drive unit	24.0 kg	1 unit
MX2 DT R/L S/T TR	With transfer roller	24.2 kg	1 unit
MX2 DT R/L S/T DR	With driven roller	26.0 kg	1 unit

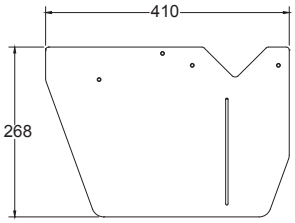
- Effective track length: 2.19m
- Traction force: 1300N
- Connecting strip and set screw included.

Note:

- Safety Cover comes as an option.
- Recommended maximum chain elongation is 328mm from top conveyor to chain slack.

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Standard Safety Cover

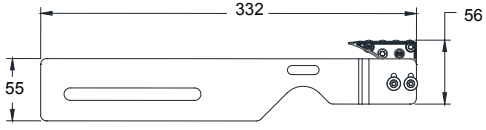


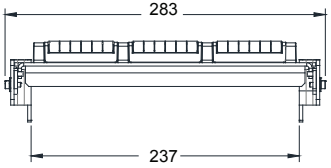
- Material : Stainless Steel
- Suitable to be used with front drive unit and combined drive unit

Item Code	Weight	Supply
SC2 268	1.8 kg	2 pcs/set

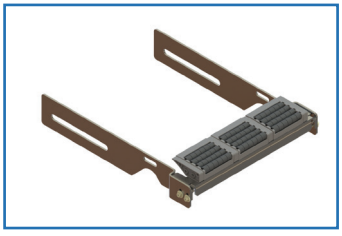
Free Transfer Roller

Direct Drive Unit

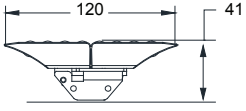


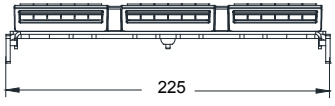


Item Code	Weight	Supply
MX2 TR DD/IE	1.2 kg	1 unit

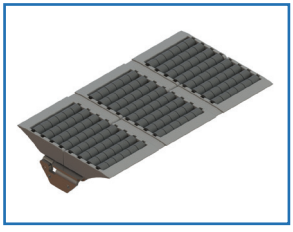


Combined Drive Unit





Item Code	Weight	Supply
MX2 TR DT	0.62 kg	1 unit

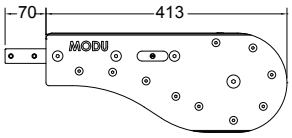


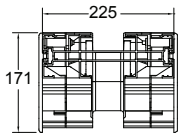
Please consult MODU representative for further information and assistance.

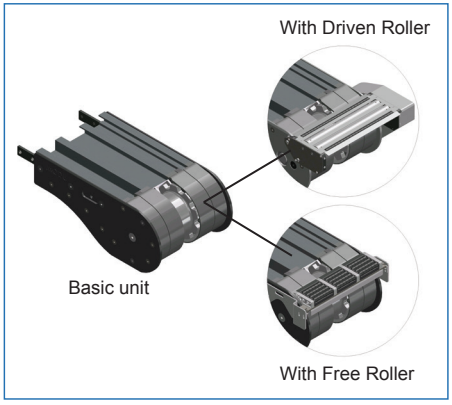
Units: Dimension (mm)

Idler End MX2

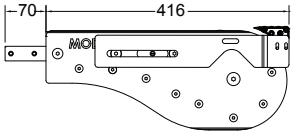
Basic Idler End Unit

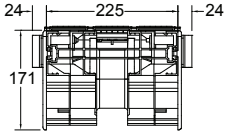




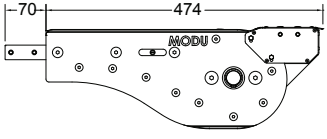


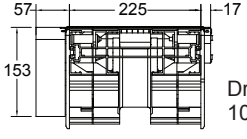
Idler End Unit with Free Roller





Idler End Unit with Driven Roller





Driven Roller speed is approximately 10% higher than conveyor speed.

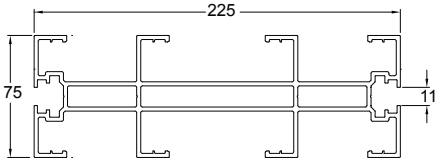
- Effective track length: 1.02m
- Connecting strip and set screw included.

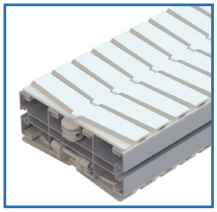
Item Code	Description	Weight	Supply
MX2 IE 400	Basic idler unit	8.4 kg	1 unit
MX2 IE 400 TR	With transfer roller	8.6 kg	1 unit
MX2 IE 400 DR L/R	With driven roller	10.4 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor Beam MX2

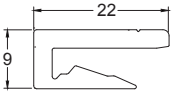




Item Code	Weight	Supply
MX2 CB 3	19.2 kg	3m / beam

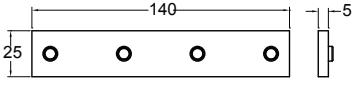
Accessories MX2

Slide Rail



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll
MA2 SR 25U	UHMW-PE	-	-	-

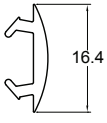
Connecting Strip



Item Code	Weight	Supply
MA CS 25x140	1.1 kg	10 pcs/pkt

- 4 pcs M8 set screw included.

T-Slot Cover



Item Code	Material	Color	Weight	Supply
MB SC 25T	TPE	Grey	1.5 kg	25m/roll
MB SC 25P	PVC	Light Grey	1.3 kg	25m/roll

Screw



Item Code	Weight	Supply
MA RS 6.5	0.02 kg	50 pcs/pkt

Slide Rail Mounting Tool



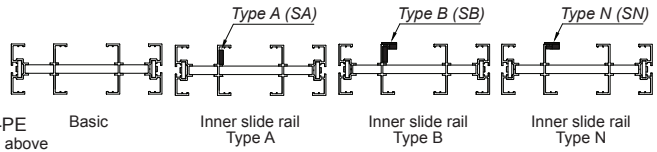
Item Code	Weight	Supply
ML2 SRA	0.4 kg	1 pc

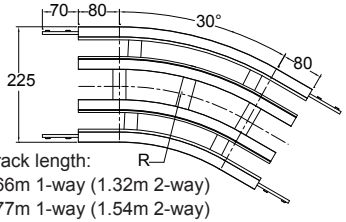
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend MX2

Plain bends comes with options for optimum usage
-Plain bend basic Unit.
-With inner slide rail Type A (SA), Material = PE.
-With inner slide rail Type B (SB), Material = Nylon
-With inner slide rail Type N (SN), Material = UHMW-PE
*(SB) is recommended when conveyor speed is 30m/min and above



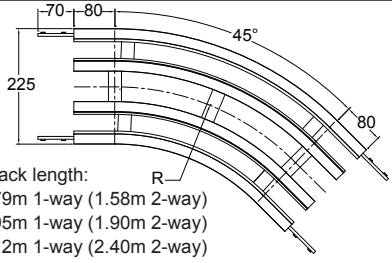


Effective track length:
R500: 0.66m 1-way (1.32m 2-way)
R700: 0.77m 1-way (1.54m 2-way)
R1000: 0.92m 1-way (1.84m 2-way).

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
MX2 BP 30R500	500 mm	3.8 kg	1 unit
MX2 BP 30R700	700 mm	4.5 kg	1 unit
MX2 BP 30R1000	1000 mm	5.5 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

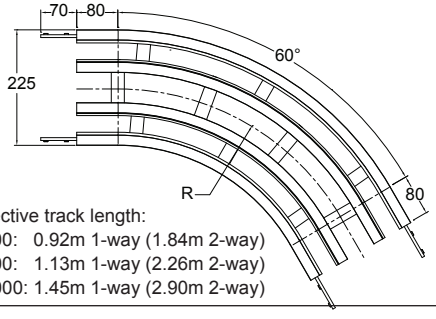


Effective track length:
R500: 0.79m 1-way (1.58m 2-way)
R700: 0.95m 1-way (1.90m 2-way)
R1000: 1.12m 1-way (2.40m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
MX2 BP 45R500	500 mm	4.6 kg	1 unit
MX2 BP 45R700	700 mm	5.6 kg	1 unit
MX2 BP 45R1000	1000 mm	7.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

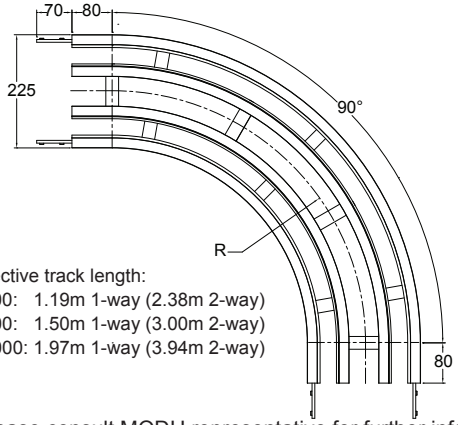


Effective track length:
R500: 0.92m 1-way (1.84m 2-way)
R700: 1.13m 1-way (2.26m 2-way)
R1000: 1.45m 1-way (2.90m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
MX2 BP 60R500	500 mm	5.4 kg	1 unit
MX2 BP 60R700	700 mm	5.8 kg	1 unit
MX2 BP 60R1000	1000 mm	8.8 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.



Effective track length:
R500: 1.19m 1-way (2.38m 2-way)
R700: 1.50m 1-way (3.00m 2-way)
R1000: 1.97m 1-way (3.94m 2-way)

Horizontal Plain Bend, 90°

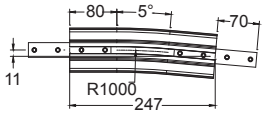
Item Code	Radius (R)	Weight	Supply
MX2 BP 90R500	500 mm	7.2 kg	1 unit
MX2 BP 90R700	700 mm	9.2 kg	1 unit
MX2 BP 90R1000	1000 mm	12.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

When ordering plain bends with inner slide rail, please specify the type using the following part number as an example.
Type A - MX2 BP 45R500 SA
Type B - MX2 BP 90R500 SB
Type N - MX2 BP 90R500 SN

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

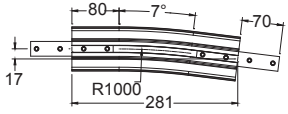
Vertical Bend MX2



Vertical Bend, 5°

Effective track length:
R1000: 0.25m 1-way (0.5m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

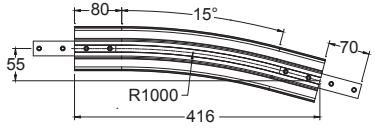
Item Code	Weight	Supply
MX2 BV 5R1000	2.1 kg	1 unit



Vertical Bend, 7°

Effective track length:
R1000: 0.28m 1-way (0.56m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

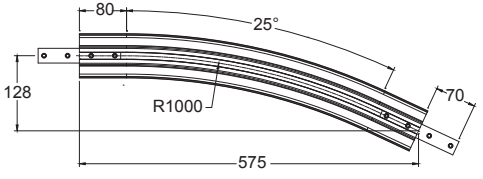
Item Code	Weight	Supply
MX2 BV 7R1000	2.3 kg	1 unit



Vertical Bend, 15°

Effective track length:
R1000: 0.42m 1-way (0.84m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

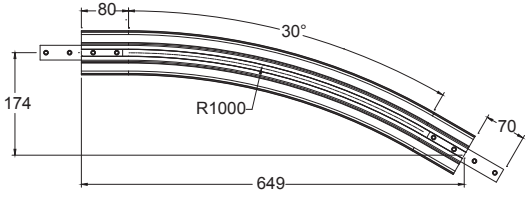
Item Code	Weight	Supply
MX2 BV 15R1000	3.2 kg	1 unit



Vertical Bend, 25°

Effective track length:
R1000: 0.60m 1-way (1.20m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MX2 BV 25R1000	4.3 kg	1 unit

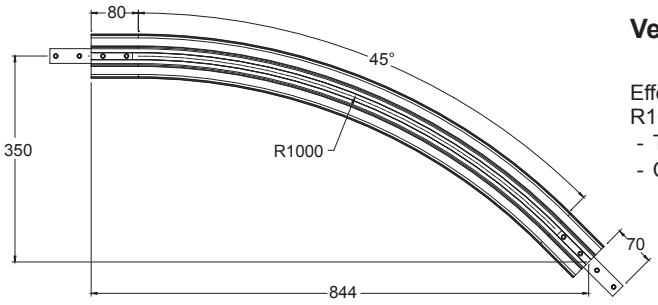


Vertical Bend, 30°

Effective track length:
R1000: 0.68m 1-way (1.36m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MX2 BV 30R1000	5.6 kg	1 unit

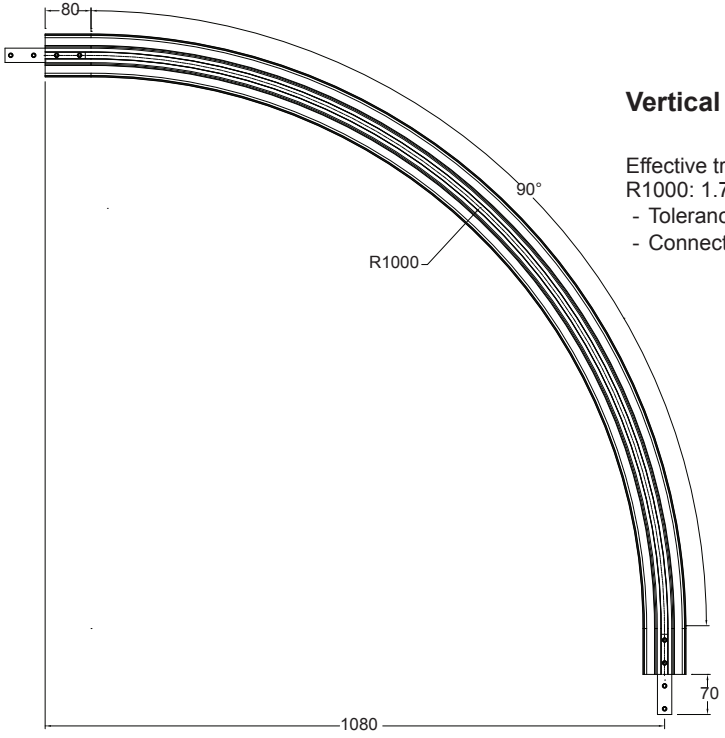
Please consult MODU representative for further information and assistance. Units: Dimension (mm)



Vertical Bend, 45°

Effective track length:
R1000: 0.95m 1-way (1.90m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MX2 BV 45R1000	6.6 kg	1 unit



Vertical Bend, 90°

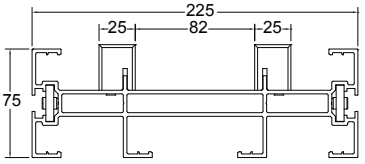
Effective track length:
R1000: 1.73m 1-way (3.46m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

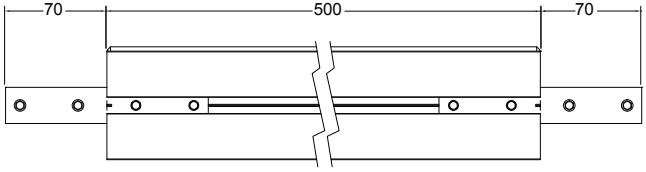
Item Code	Weight	Supply
MX2 BV 90R1000	11.6 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Chain Installation Section MX2

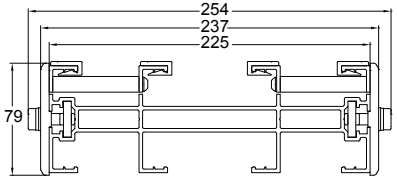


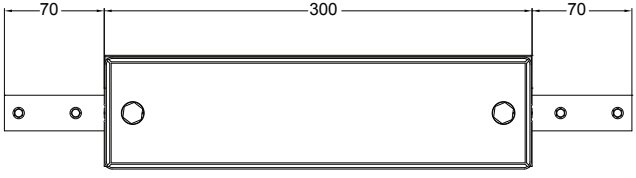


- Connecting strip and set screw included.

Item Code	Weight	Supply
MX2 LU 500	4.0 kg	1 unit

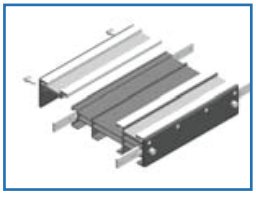






- Slide rail, connecting strip and set screw included
**Stainless steel side plate available on request

Item Code	Weight	Supply
MX2 CIS 300	3.5 kg	1 unit



Please consult MODU representative for further information and assistance. Units: Dimension (mm)

MODU MT2
CONVEYOR SERIES

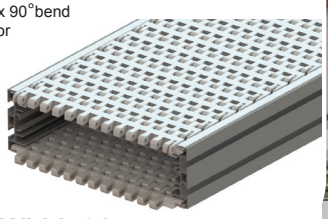


Technical Characteristics

Chain Width	315 mm
Chain Pitch	45.0 mm
Chain Weight	3.8 kg/m
Chain Working Tension (Max) With Bend Without Bend	 1400 N 1500 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 30.0 kg 15.0 kg
Total Load*	400 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	1500 N
Item Width*	<500 mm

* Actual limit may vary according to conveyor layout and application.

** Maximum 1x 90°bend in one conveyor

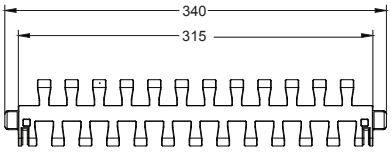


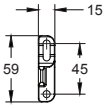
Chain Width 315mm

Contents

Belt MT2 114
Belt Accessories MT2 115
Drive Units MT2 116
Idler Unit MT2 116
Conveyor Beam MT2 117
Accessories MT2 117
Horizontal Plain Bend MT2 118
Vertical Bend MT2 119
Belt Elongation Section MT2 120
Bottom Tab (BT) Belt MT2 121
Conveyor Beam (BT) MT2 121
Accessories MT2 121
Drive Units (BT) MT2 122
Idler Unit (BT) MT2 122
Horizontal Plain Bend (BT) MT2 123
Vertical Bend (BT) MT2 124

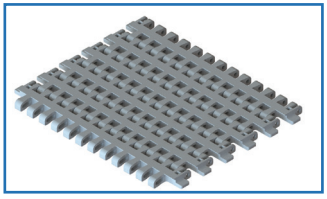
Belt MT2



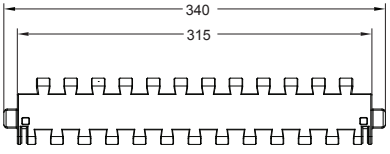


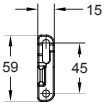
Plastic Plain Curve Belt

- 8.5mm opening gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.



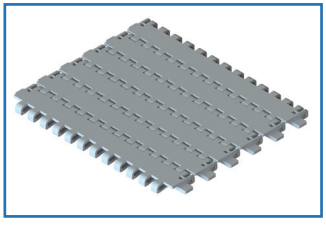
Item Code	Material	Color	Weight	Supply
MT2 CP 5	POM	White	19.0 kg/roll	5m/roll
MT2 CP 5 P	PP	White	13.5 kg/roll	5m/roll



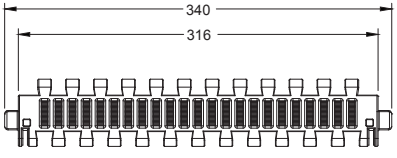


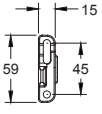
Plastic Plain Straight Belt

- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.



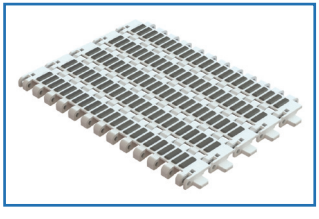
Item Code	Material	Color	Weight	Supply
MT2 CP 5 ZG	POM	White	20.6 kg/roll	5m/roll
MT2 CP 5 ZG P	PP	White	14.8 kg/roll	5m/roll





Friction Belt

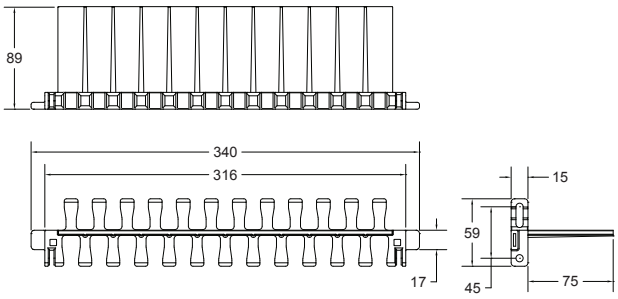
- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Straight running only (0mm gap)
- Accumulation not possible.



Item Code	Material	Color	Weight	Supply
MT2 CF 5 ZG	PP	White	19.0 kg/roll	5m/roll

Please consult MODU representative for further information and assistance.

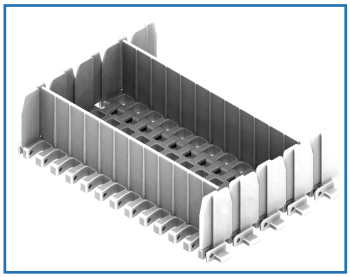
Units: Dimension (mm)



*P
Please specify pitch between cleat for ordering
(eg. MT2 CC 3x75 3P ; 3P = Every 3rd link to be cleated).

Plastic Cleated Link

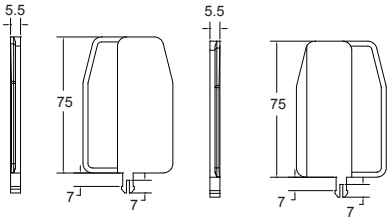
- Required for vertical or steeply inclined / declined conveyor.
- Accumulation not possible.
- Supply in pieces without side guide.



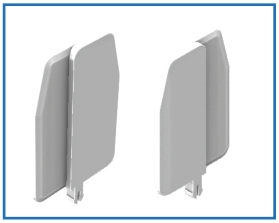
Item Code	Material	Color	Weight	Supply
MT2 CC 3x75 *P	POM	White	** kg/pc	1 pc

* Non-standard height available upon request but cleat material is different.

* Side guide cleats are optional



Side Guard L-R



Item Code	Material	Color	Weight	Supply
MT2 CLP G-75	POM	White	1.7 kg	50 set/pkt

Belt Accessories MT2

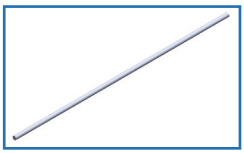
Lubricant For Belt



Silicone-based lubricant, 400ml

Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Belt Pin



Item Code	Material	Weight	Supply
MT2 PC	POM	0.12 kg	10 pcs / pkt

Belt Lock



Item Code	Material	Color	Weight	Supply
MT2 BL	POM	White	0.07 kg	10 pcs / pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units MT2

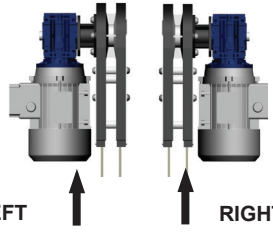
Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Transtechno)
T40 = CMRV 040
T50 = CMRV 050

Gearmotor position: L or R
D: Front Drive

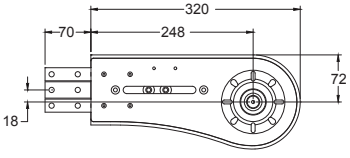
MT2 DD L S47
Front direct drive unit, motor on left side for 0.55kW SEW geared motor

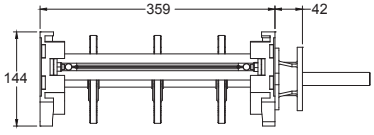
Motor Orientation Guideline



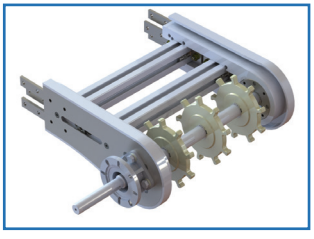
Example. Code for Basic unit;
MT2 DD R S47 => Front drive unit, motor on right side for SEW SA47 gearmotor.

Front Drive Unit



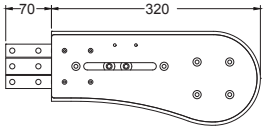


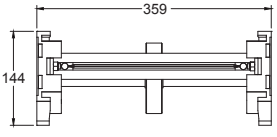
- Effective track length: 0.8m
- Traction force: 1500N
- Connecting strip and set screw included.
- Built in with CIS



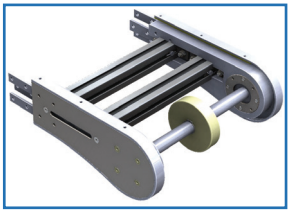
Item Code	Description	Weight	Supply
MT2 DD R/L S/T	Basic drive unit	9.4 kg	1 unit

Idler Unit MT2





- Effective track length: 0.8m
- Connecting strip and set screw included.
- Built in with CIS



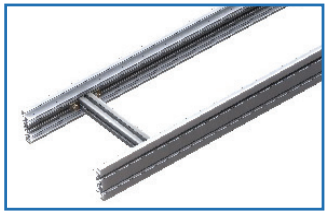
Item Code	Description	Weight	Supply
MT2 IE 320	Basic idler unit	8.3 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor Beam MT2

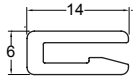




Item Code	Weight	Supply
MT2 CB 3	18.5 kg	3m / beam

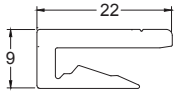
Accessories MT2

Slide Rail



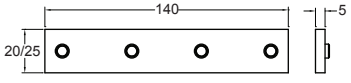
Item Code	Material	Color	Weight	Supply
MS SR 25	HDPE	Semi-Transparent White	1.2 kg	25m/roll
MS SR 25A	Anti-Static	Grey	1.2 kg	25m/roll

Slide Rail



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

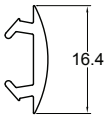
Connecting Strip



- 4 pcs M8 set screw included.

Item Code	Weight	Supply
MA CS 20x140	1.1 kg	10 pcs/pkt
MA CS 25x140	1.1 kg	10 pcs/pkt

T-Slot Cover



Item Code	Material	Color	Weight	Supply
MB SC 25T	TPE	Grey	1.5 kg	25m/roll
MB SC 25P	PVC	Light Grey	1.3 kg	25m/roll

Screw



Item Code	Weight	Supply
MA RS 6.5	0.02 kg	50 pcs/pkt

Rivet



Item Code	Weight	Supply
MA RR 3	0.02 kg	50 pcs/pkt

Slide Rail Assembling Tool

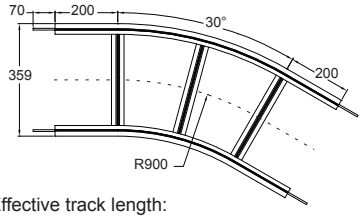


Item Code	Weight	Supply
MT2 SRA	0.4 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend MT2

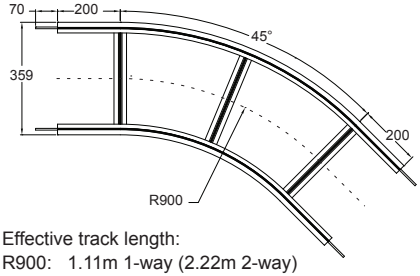


Effective track length:
R900: 0.87m 1-way (1.74m 2-way)

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
MT2 BP 30R900	900 mm	7.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

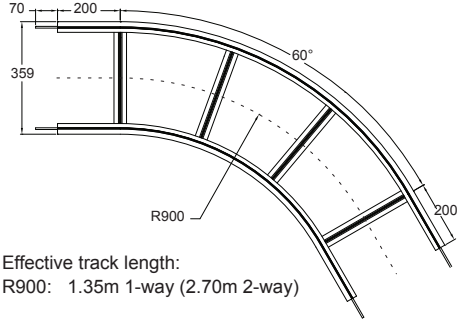


Effective track length:
R900: 1.11m 1-way (2.22m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
MT2 BP 45R900	900 mm	8.3 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

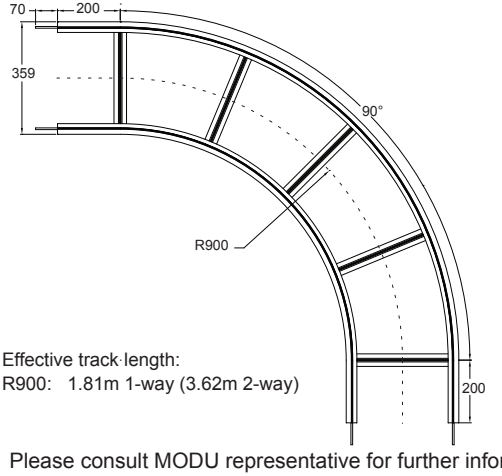


Effective track length:
R900: 1.35m 1-way (2.70m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
MT2 BP 60R900	900 mm	10.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.



Effective track length:
R900: 1.81m 1-way (3.62m 2-way)

Horizontal Plain Bend, 90°

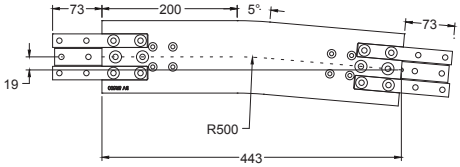
Item Code	Radius (R)	Weight	Supply
MT2 BP 90R900	900 mm	14.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Vertical Bend MT2

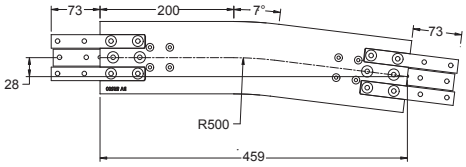


Material: PE

Vertical Bend, 5°

Effective track length:
R500: 0.44m 1-way (0.88m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MT2 BV 5R500	5.6 kg	1 unit

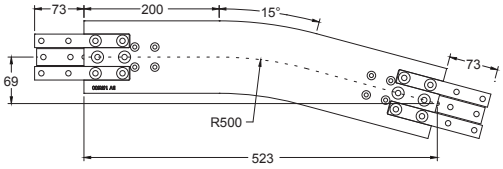


Material: PE

Vertical Bend, 7°

Effective track length:
R500: 0.46m 1-way (0.92m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MT2 BV 7R500	5.9 kg	1 unit

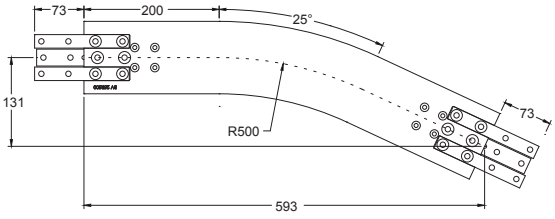


Material: PE

Vertical Bend, 15°

Effective track length:
R500: 0.53m 1-way (1.06m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MT2 BV 15R500	6.2 kg	1 unit

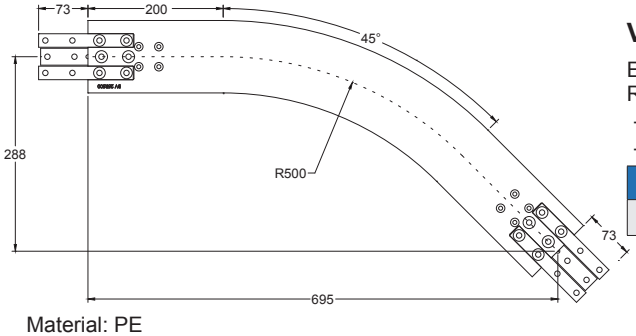


Material: PE

Vertical Bend, 25°

Effective track length:
R500: 0.62m 1-way (1.24m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MT2 BV 25R500	6.8 kg	1 unit



Material: PE

Vertical Bend, 45°

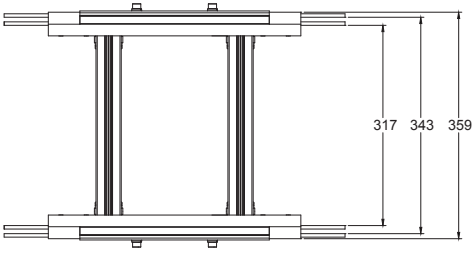
Effective track length:
R500: 0.84m 1-way (1.68m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

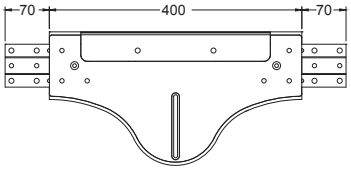
Item Code	Weight	Supply
MT2 BV 45R500	7.0 kg	1 unit

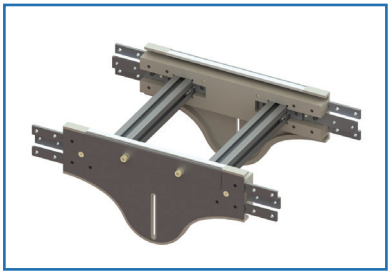
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Belt Elongation Section MT2





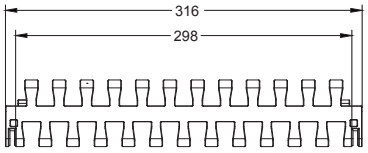


- Must be used with straight belt (zero gap) & conveyor length more than 20m.
- Slide rail, connecting strip and set screw included.

Item Code	Weight	Supply
MT2 CSS 400	7.3 kg	1 unit

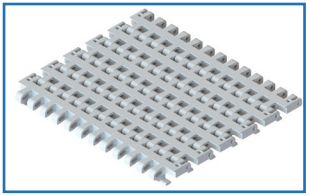
Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Bottom Tab (BT) Belt MT2



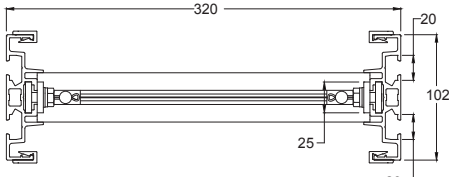
Plastic Plain Curve Belt (Bottom Tab)

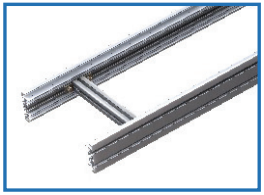
- 8.5mm opening gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.



Item Code	Material	Color	Weight	Supply
MT2 CP 5 BT	POM	White	19.0 kg/roll	5m/roll
MT2 CP 5 BT P	PP	White	13.5 kg/roll	5m/roll

Conveyor Beam (BT) MT2

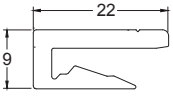




Item Code	Weight	Supply
MT2 CB 3 BT	18.5 kg	3m / beam

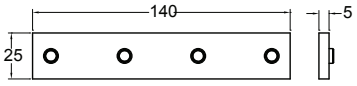
Accessories MT2

Slide Rail



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Pure White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

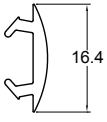
Connecting Strip



- 4 pcs M8 set screw included.

Item Code	Weight	Supply
MA CS 20x140	1.1 kg	10 pcs/pkt

T-Slot Cover



Item Code	Material	Color	Weight	Supply
MB SC 25T	TPE	Grey	1.5 kg	25m/roll
MB SC 25P	PVC	Light Grey	1.3 kg	25m/roll

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

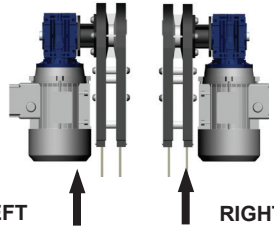
Drive Units (BT) MT2

Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Transtechno)
T40 = CMRV 040
T50 = CMRV 050

Gearmotor position: L or R
D: Front Drive

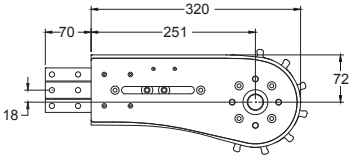
Motor Orientation Guideline

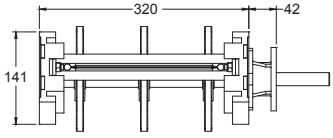


MT2 DD L S47 BT
Front direct drive unit, motor on left side for 0.55kW SEW geared motor, for Bottom Tab belt design.

Example. Code for Basic unit;
MT2 DD R S47 BT => Front drive unit for bottom tab chain, motor on right side for SEW SA47 gearmotor .

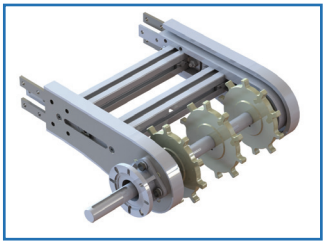
Front Drive Unit



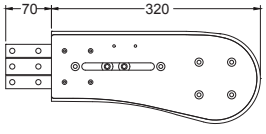


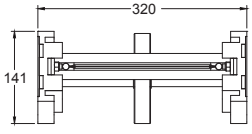
- Effective track length: 0.8m
- Traction force: 1500N
- Connecting strip and set screw included.
- Built in with CIS

Item Code	Description	Weight	Supply
MT2 DD R/L S/T BT	Basic drive unit	9.4 kg	1 unit



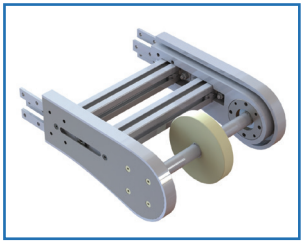
Idler Unit (BT) MT2





- Effective track length: 0.8m
- Connecting strip and set screw included.
- Built in with CIS

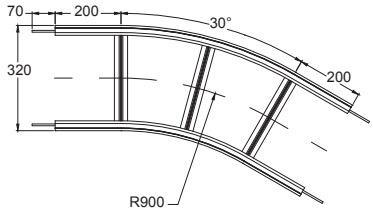
Item Code	Description	Weight	Supply
MT2 IE 320 BT	Basic idler unit	8.3 kg	1 unit



Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend (BT) MT2

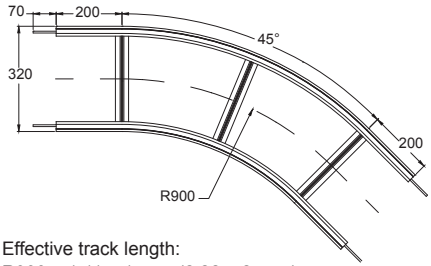


Effective track length:
R900: 0.87m 1-way (1.74m 2-way)

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
MT2 BP 30R900 BT	900 mm	7.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

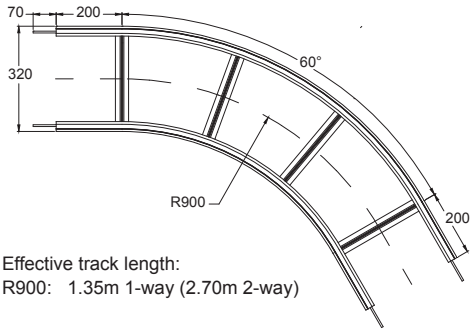


Effective track length:
R900: 1.11m 1-way (2.22m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
MT2 BP 45R900 BT	900 mm	8.3 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

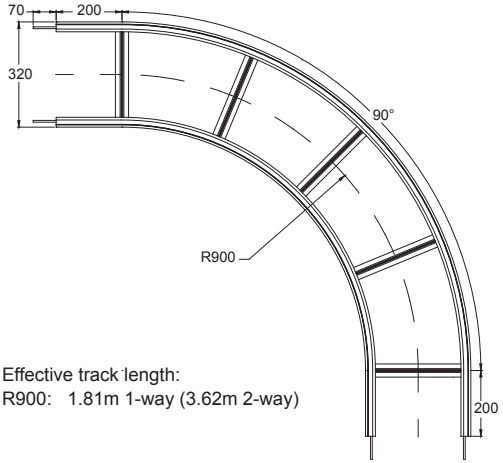


Effective track length:
R900: 1.35m 1-way (2.70m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
MT2 BP 60R900 BT	900 mm	10.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.



Effective track length:
R900: 1.81m 1-way (3.62m 2-way)

Horizontal Plain Bend, 90°

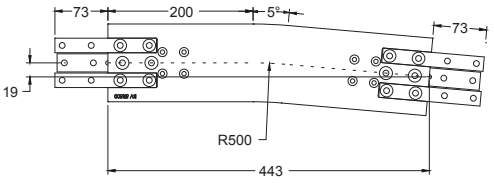
Item Code	Radius (R)	Weight	Supply
MT2 BP 90R900 BT	900 mm	14.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

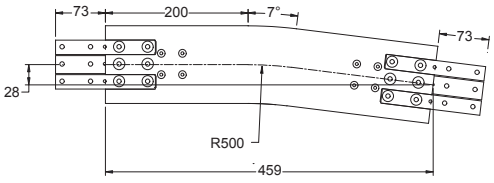
Vertical Bend (BT) MT2



Vertical Bend, 5°

Effective track length:
R500: 0.44m 1-way (0.88m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

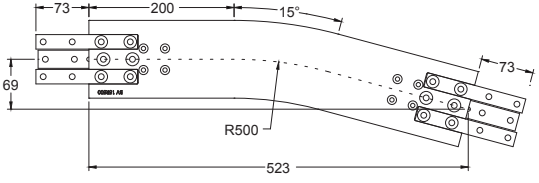
Item Code	Weight	Supply
MT2 BV 5R500 BT	5.6 kg	1 unit



Vertical Bend, 7°

Effective track length:
R500: 0.46m 1-way (0.92m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

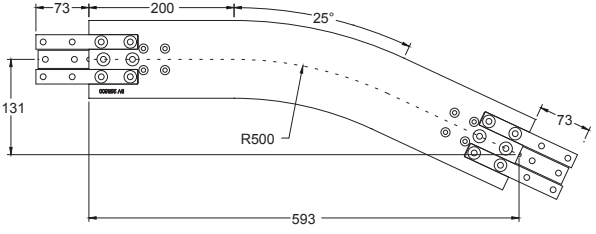
Item Code	Weight	Supply
MT2 BV 7R500 BT	5.9 kg	1 unit



Vertical Bend, 15°

Effective track length:
R500: 0.53m 1-way (1.06m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

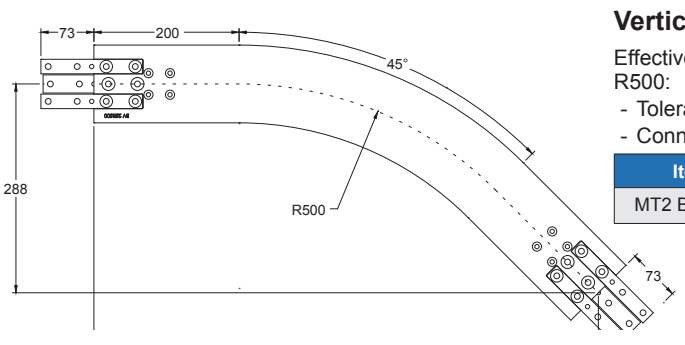
Item Code	Weight	Supply
MT2 BV 15R500 BT	6.2 kg	1 unit



Vertical Bend, 25°

Effective track length:
R500: 0.62m 1-way (1.24m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MT2 BV 25R500 BT	6.8 kg	1 unit



Vertical Bend, 45°

Effective track length:
R500: 0.84m 1-way (1.68m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MT2 BV 45R500 BT	7.0 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

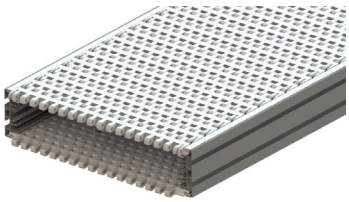
MODU MR2
CONVEYOR SERIES



Technical Characteristics

Chain Width	438 mm
Chain Pitch	45.0 mm
Chain Weight	5.3 kg/m
Chain Working Tension (Max) With Bend Without Bend	 1800 N 1900 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 30.0 kg 15.0 kg
Total Load*	400 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	1900 N
Item Width*	<600 mm

* Actual limit may vary according to conveyor layout and application.



Chain Width 438 mm

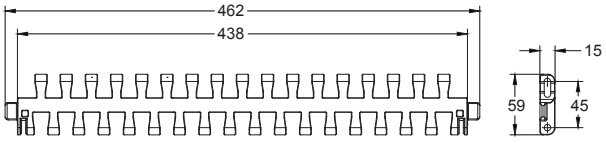
Contents

Belt MR2 126
Belt Accessories MR2 127
Drive Units MR2 128
Idler Unit MR2 128
Conveyor Beam MR2 129
Accessories MR2 129
Horizontal Plain Bend MR2 130
Vertical Bend MR2 131
Belt Elongation Section MR2 132
Bottom Tab (BT) Belt MR2 133
Conveyor Beam (BT) MR2 133
Accessories MR2 133
Drive Units (BT) MR2 134
Idler Unit (BT) MR2 134
Horizontal Plain Bend (BT) MR2 135
Vertical Bend (BT) MR2 136

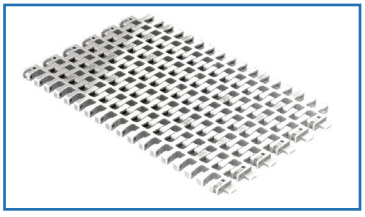
Belt MR2

Plastic Plain Curve Belt

- 8.5mm belt gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

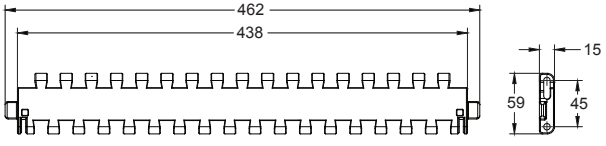


Item Code	Material	Color	Weight	Supply
MR2 CP 5	POM	White	26.4 kg/roll	5m/roll
MR2 CP 5 P	PP	White	18.5 kg/roll	5m/roll

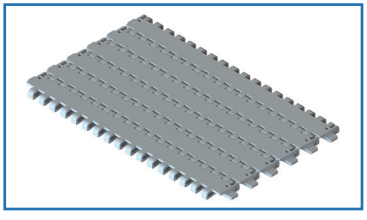


Plastic Plain Straight Belt

- 0mm belt gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

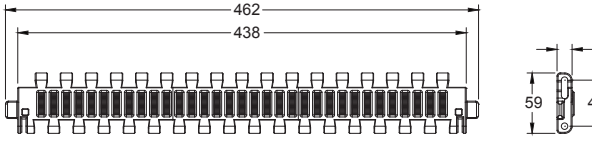


Item Code	Material	Color	Weight	Supply
MR2 CP 5 ZG	POM	White	28.6 kg/roll	5m/roll
MR2 CP 5 ZG P	PP	White	20.0 kg/roll	5m/roll

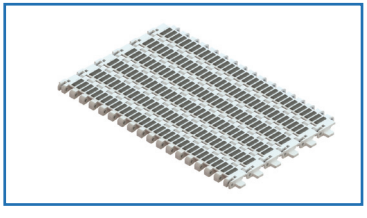


Friction Belt

- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Straight running only (0mm gap)
- Accumulation not possible.

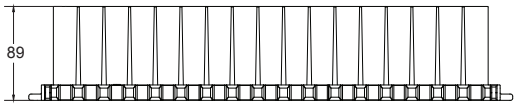


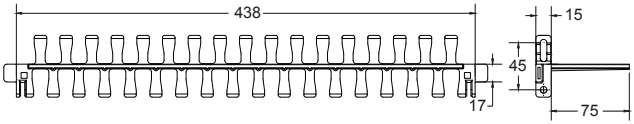
Item Code	Material	Color	Weight	Supply
MR2 CF 5 ZG	PP	White	29.2 kg/roll	5m/roll



Please consult MODU representative for further information and assistance.

Units: Dimension (mm)





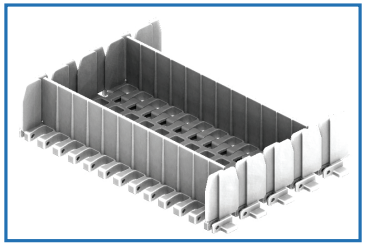
*P
Please specify pitch between cleat for ordering
(eg. MR2 CC 3x75 3P ; 3P= Every 3rd link to be cleated).

Item Code	Material	Color	Weight	Supply
MR2 CC 3x75 *P	POM	White	** kg/pc	1 pc

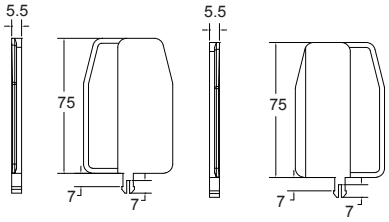
* Non-standard height are available upon request but cleat material will be different.

Plastic Cleated Link

- Required for vertical or steeply inclined / declined conveyor.
- Accumulation not possible.
- Supply in pieces without side guide.

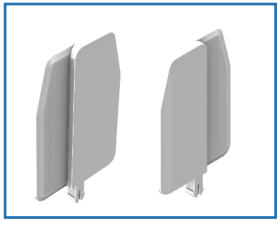


* Side guide cleats are optional



Item Code	Material	Color	Weight	Supply
MT2 CLP G-75	POM	White	1.7 kg	50 set/pkt

Side Guard L-R



Belt Accessories MR2

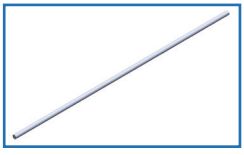
Lubricant For Belt



Silicone-based lubricant, 400ml

Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Belt Pin



Item Code	Material	Weight	Supply
MR2 PC	POM	0.14 kg	10 pcs / pkt

Belt Lock



Item Code	Material	Color	Weight	Supply
MT2 BL	POM	White	0.07 kg	10 pcs / pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units MR2

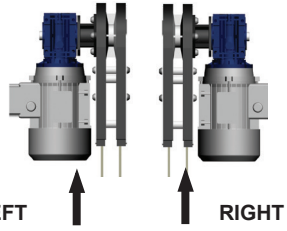
Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Motovario / Transtechno)
T40 = CMRV 040
T50 = CMRV 050

Gearmotor position: L or R
D: Front Drive

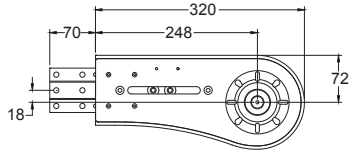
MR2 DD L S47
Front direct drive unit, motor on left side for 0.55kW SEW geared motor

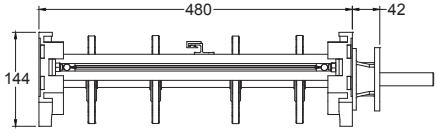
Motor Orientation Guideline



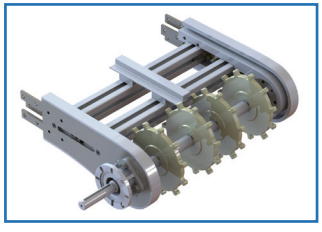
Example. Code for Basic unit;
MR2 DD R S47 => Front drive unit, motor on right side for SEW SA47 gearmotor.

Front Drive Unit



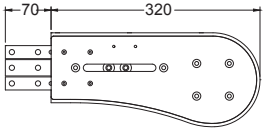


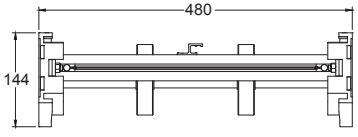
- Effective track length: 0.8m
- Traction force: 1900N
- Connecting strip and set screw included.
- Built in with CIS



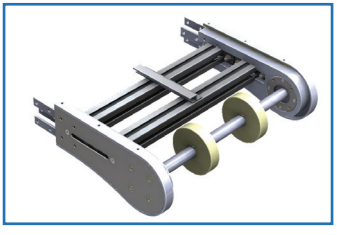
Item Code	Description	Weight	Supply
MR2 DD R/L S/T	Basic drive unit	10.4 kg	1 unit

Idler Unit MR2





- Effective track length: 0.8m
- Connecting strip and set screw included.
- Built in with CIS

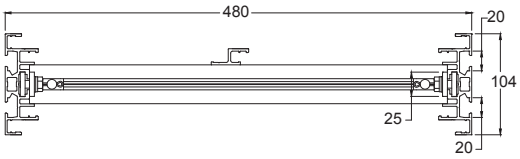


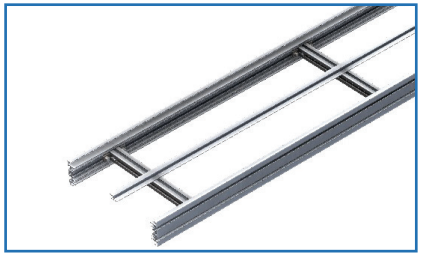
Item Code	Description	Weight	Supply
MR2 IE 320	Basic idler unit	9.8 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor Beam MR2

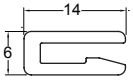




Item Code	Weight	Supply
MR2 CB 3	20.4 kg	3m / beam

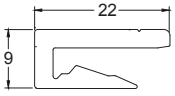
Accessories MR2

Slide Rail



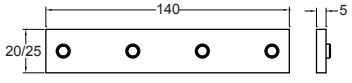
Item Code	Material	Color	Weight	Supply
MS SR 25	HDPE	Semi-Transparent White	1.2 kg	25m/roll
MS SR 25A	Anti-Static	Grey	1.2 kg	25m/roll

Slide Rail



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

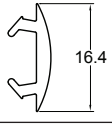
Connecting Strip



- 4 pcs M8 set screw included.

Item Code	Weight	Supply
MA CS 20x140	1.1 kg	10 pcs/pkt
MA CS 25x140	1.1 kg	10 pcs/pkt

T-Slot Cover



Item Code	Material	Color	Weight	Supply
MB SC 25T	TPE	Grey	1.5 kg	25m/roll
MB SC 25P	PVC	Light Grey	1.3 kg	25m/roll

Screw



Item Code	Weight	Supply
MA RS 6.5	0.02 kg	50 pcs/pkt

Rivet



Item Code	Weight	Supply
MA RR 3	0.02 kg	50 pcs/pkt

Slide Rail Assembling Tool

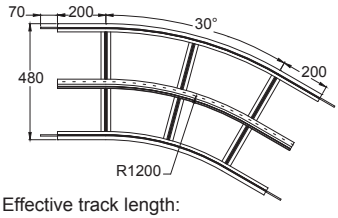


Item Code	Weight	Supply
MT2 SRA	0.4 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend MR2

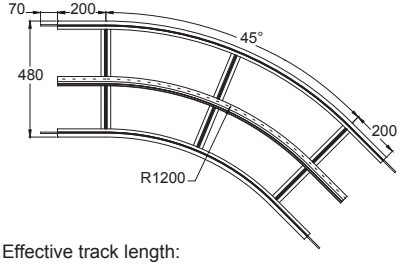


Effective track length:
R1200: 1.03m 1-way (2.06m 2-way)

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
MR2 BP 30R1200	1200 mm	8.9 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

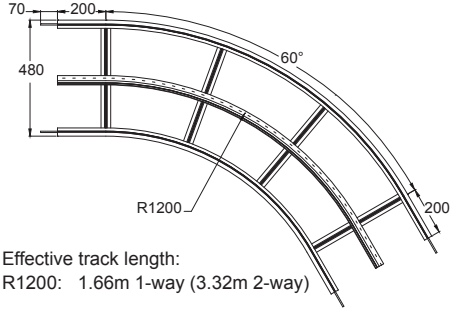


Effective track length:
R1200: 1.35m 1-way (2.70m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
MR2 BP 45R1200	1200 mm	10.5 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

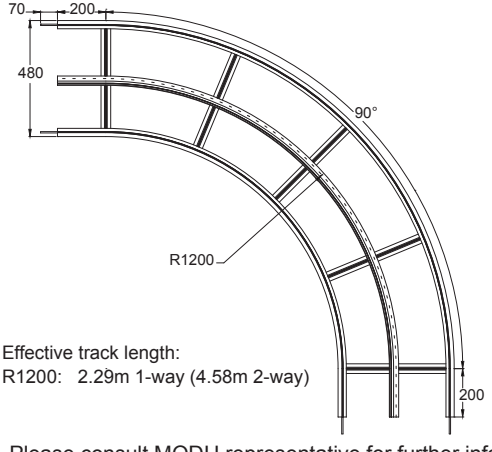


Effective track length:
R1200: 1.66m 1-way (3.32m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
MR2 BP 60R1200	1200 mm	13.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.



Effective track length:
R1200: 2.29m 1-way (4.58m 2-way)

Horizontal Plain Bend, 90°

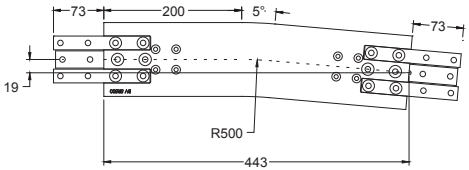
Item Code	Radius (R)	Weight	Supply
MR2 BP 90R1200	1200 mm	16.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

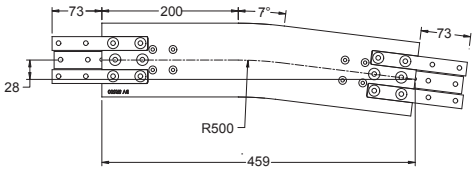
Vertical Bend MR2



Vertical Bend, 5°

Effective track length:
R500: 0.44m 1-way (0.88m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

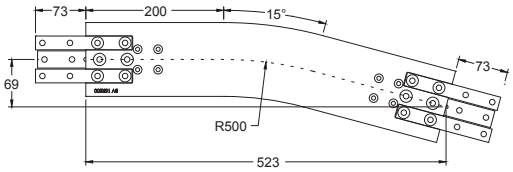
Item Code	Weight	Supply
MR2 BV 5R500	6.6 kg	1 unit



Vertical Bend, 7°

Effective track length:
R500: 0.46m 1-way (0.92m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

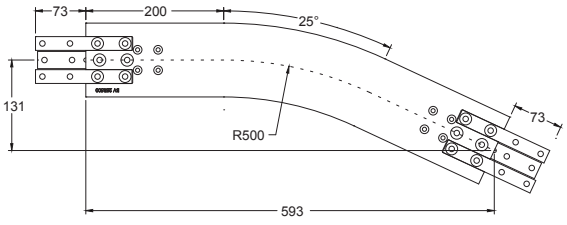
Item Code	Weight	Supply
MR2 BV 7R500	6.9 kg	1 unit



Vertical Bend, 15°

Effective track length:
R500: 0.53m 1-way (1.06m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

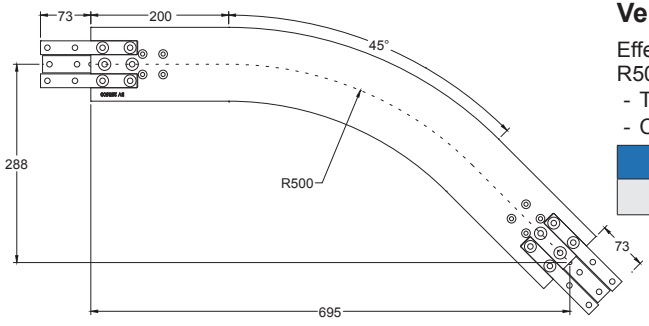
Item Code	Weight	Supply
MR2 BV 15R500	7.2 kg	1 unit



Vertical Bend, 25°

Effective track length:
R500: 0.62m 1-way (1.24m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MR2 BV 25R500	7.8 kg	1 unit



Vertical Bend, 45°

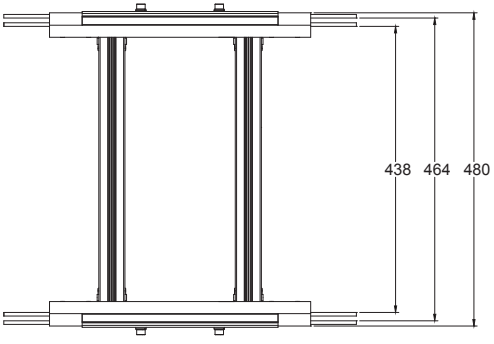
Effective track length:
R500: 0.84m 1-way (1.68m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

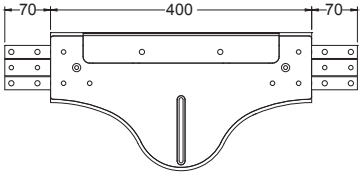
Item Code	Weight	Supply
MR2 BV 45R500	8.2 kg	1 unit

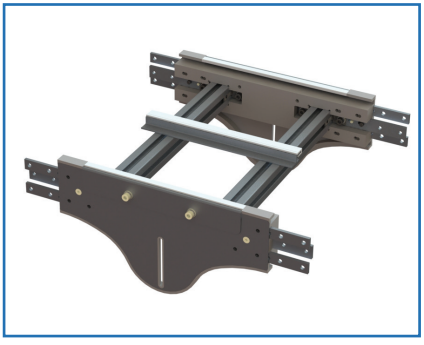
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Belt Elongation Section MR2





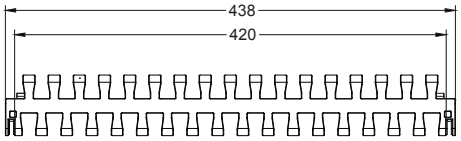


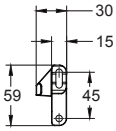
- To be used with straight plastic belt (zero gap).
- Slide rail, connecting strip and set screw included.

Item Code	Weight	Supply
MR2 CSS 400	8.3 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

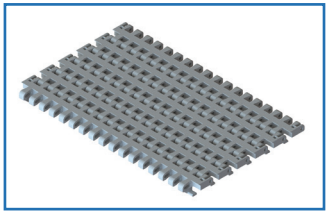
Bottom Tab (BT) Belt MR2





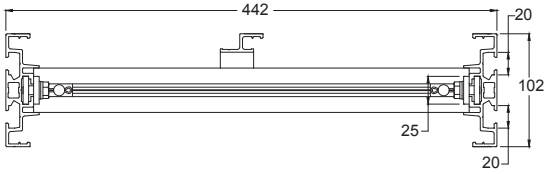
Plastic Plain Curve Belt (Bottom Tab)

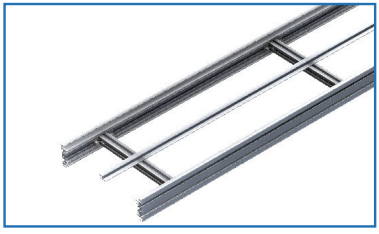
- 8.5mm belt gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.



Item Code	Material	Color	Weight	Supply
MR2 CP 5 BT	POM	White	26.4kg/roll	5m/roll
MR2 CP 5 BT P	PP	White	18.5kg/roll	5m/roll

Conveyor Beam (BT) MR2

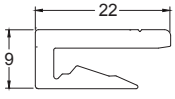




Item Code	Weight	Supply
MR2 CB 3 BT	20.4 kg	3m / beam

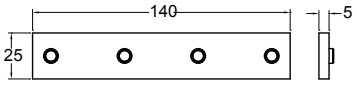
Accessories MR2

Slide Rail



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Pure White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

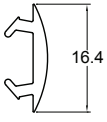
Connecting Strip



- 4 pcs M8 set screw included.

Item Code	Weight	Supply
MA CS 20x140	1.1 kg	10 pcs/pkt

T-Slot Cover



Item Code	Material	Color	Weight	Supply
MB SC 25T	TPE	Grey	1.5 kg	25m/roll
MB SC 25P	PVC	Light Grey	1.3 kg	25m/roll

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Drive Units (BT) MR2

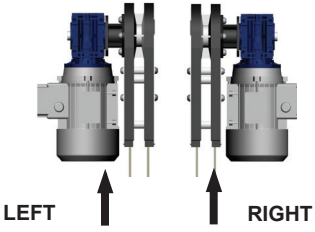
Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Motovario / Transtechno)
T40 = NMRV 040 / CMRV 040
T50 = NMRV 050 / CMRV 050

Gearmotor position: L or R
D: Front Drive

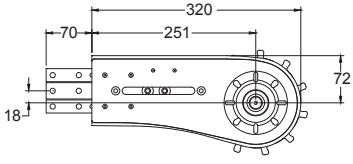
MR2 DD L S37 BT
Front direct drive unit, motor on left side for 0.55kW
SEW geared motor,forr Bottom Tab chain design..

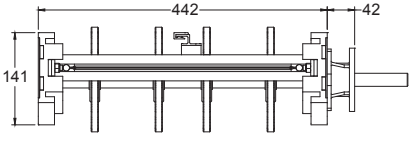
Motor Orientation Guideline



Example. Code for Basic unit;
MR2 DD R S47 BT => Front drive unit for bottom tab chain, motor on right side for SEW SA47 gearmotor.

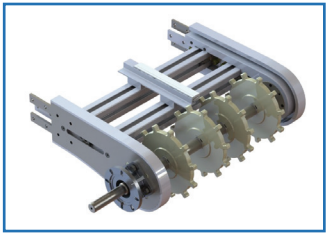
Front Drive Unit



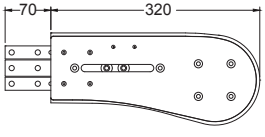


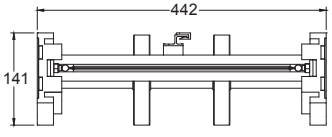
- Effective track length: 0.8m
- Traction force: 1900N
- Connecting strip and set screw included.
- Built in with CIS

Item Code	Description	Weight	Supply
MR2 DD R/L S/T BT	Basic drive unit	10.4 kg	1 unit



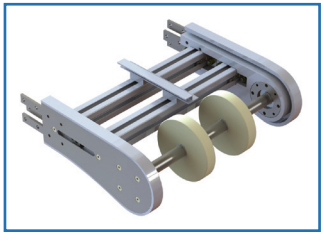
Idler Unit (BT) MR2





- Effective track length: 0.8m
- Connecting strip and set screw included.
- Built in with CIS

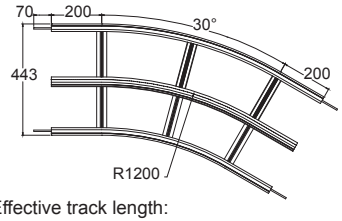
Item Code	Description	Weight	Supply
MR2 IE 320 BT	Basic drive unit	8.3 kg	1 unit



Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend (BT) MR2

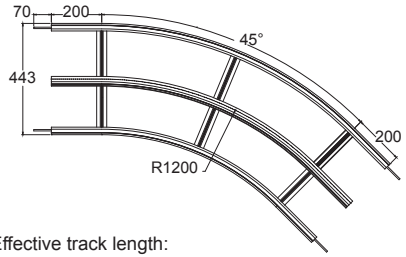


Effective track length:
R1200: 1.03m 1-way (2.06m 2-way)

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
MR2 BP 30R1200 BT	1200 mm	8.9 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

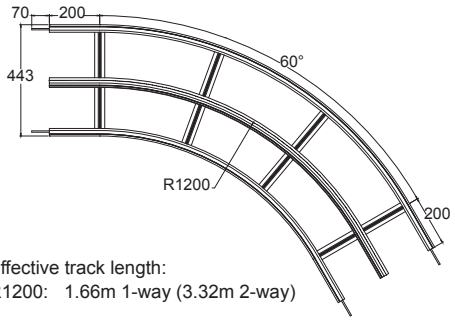


Effective track length:
R1200: 1.35m 1-way (2.70m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
MR2 BP 45R1200 BT	1200 mm	10.5 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

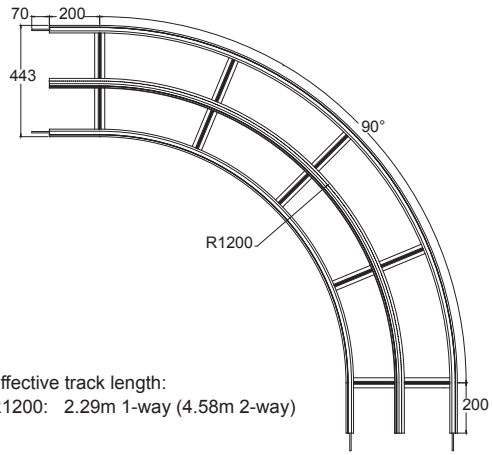


Effective track length:
R1200: 1.66m 1-way (3.32m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
MR2 BP 60R1200 BT	1200 mm	13.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.



Effective track length:
R1200: 2.29m 1-way (4.58m 2-way)

Horizontal Plain Bend, 90°

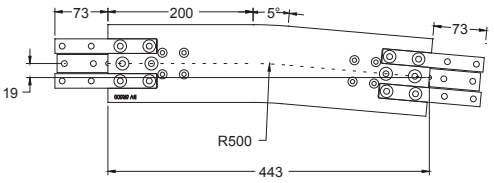
Item Code	Radius (R)	Weight	Supply
MR2 BP 90R1200 BT	1200 mm	16.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

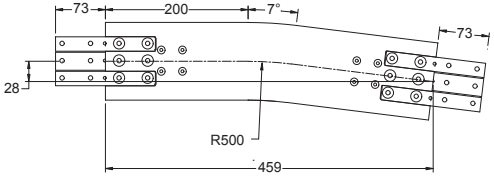
Vertical Bend (BT) MR2



Vertical Bend, 5°

Effective track length:
R500: 0.44m 1-way (0.88m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

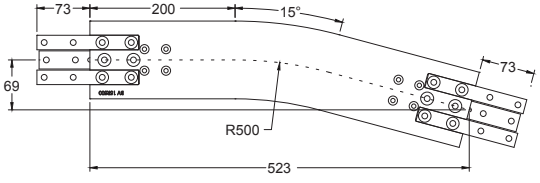
Item Code	Weight	Supply
MR2 BV 5R500 BT	6.6 kg	1 unit



Vertical Bend, 7°

Effective track length:
R500: 0.46m 1-way (0.92m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

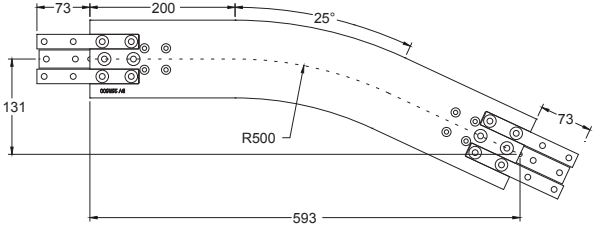
Item Code	Weight	Supply
MR2 BV 7R500 BT	6.9 kg	1 unit



Vertical Bend, 15°

Effective track length:
R500: 0.53m 1-way (1.06m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

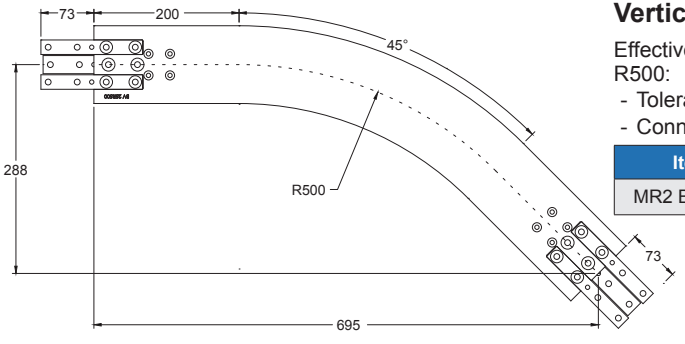
Item Code	Weight	Supply
MR2 BV 15R500 BT	7.2 kg	1 unit



Vertical Bend, 25°

Effective track length:
R500: 0.62m 1-way (1.24m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MR2 BV 25R500 BT	7.8 kg	1 unit



Vertical Bend, 45°

Effective track length:
R500: 0.84m 1-way (1.68m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MR2 BV 45R500 BT	8.2 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

MODU MF2
CONVEYOR SERIES



Technical Characteristics

Chain Width	585 mm
Chain Pitch	45.0 mm
Chain Weight	7.1 kg/m
Chain Working Tension (Max) With Bend Without Bend	 2100 N 2200 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 30.0 kg 15.0 kg
Total Load*	400 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	2200 N
Item Width*	<700 mm

* Actual limit may vary according to conveyor layout and application.

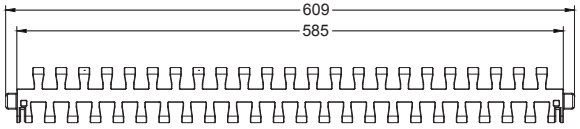
Chain Width 585 mm

Contents

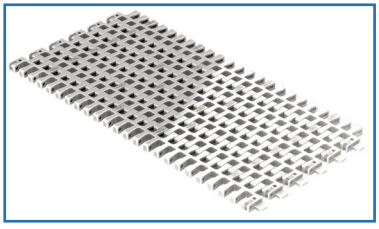
Belt MF2 138
Belt Accessories MF2 139
Drive Units MF2 140
Idler Unit MF2 140
Conveyor Beam MF2 141
Accessories MF2 141
Horizontal Plain Bend MF2 142
Vertical Bend MF2 143
Belt Elongation Section MF2 144
Bottom Tab (BT) Belt MF2 145
Conveyor Beam (BT) MF2 145
Accessories MF2 145
Drive Units (BT) MF2 146
Idler Unit (BT) MF2 146
Horizontal Plain Bend (BT) MF2 147
Vertical Bend (BT) MF2 148

Belt MF2

Plastic Plain Curve Belt



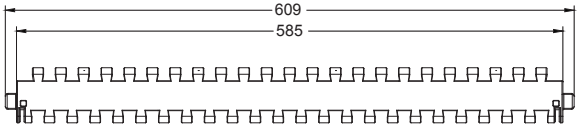




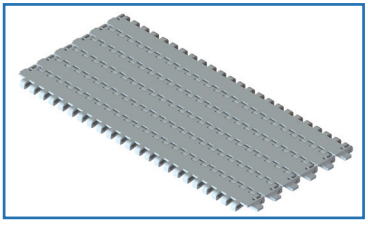
- 8.5mm belt gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

Item Code	Material	Color	Weight	Supply
MF2 CP 5	POM	White	35.4 kg/roll	5m/roll
MF2 CP 5 P	PP	White	24.8 kg/roll	5m/roll

Plastic Plain Straight Belt



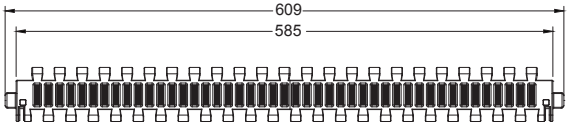




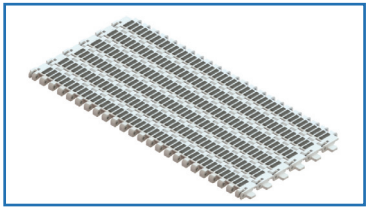
- 0mm belt gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

Item Code	Material	Color	Weight	Supply
MF2 CP 5 ZG	POM	White	38.2 kg/roll	5m/roll
MF2 CP 5 ZG P	PP	White	26.7 kg/roll	5m/roll

Friction Belt





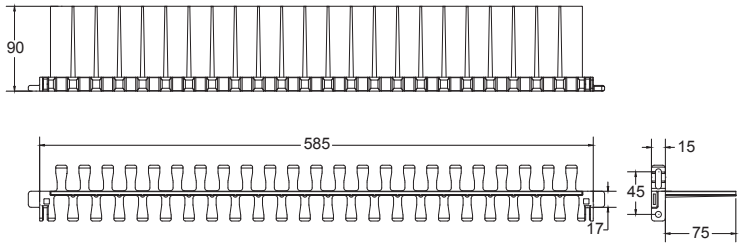


- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Straight running only (0mm gap)
- Accumulation not possible.

Item Code	Material	Color	Weight	Supply
MF2 CF 5 ZG	PP	White	39.2 kg/roll	5m/roll

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Plastic Cleated Link

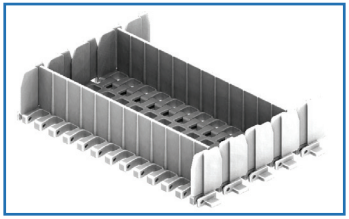


- Required for vertical or steeply inclined /declined conveyor.
- Accumulation not possible.
- Supply in pieces without side guide.

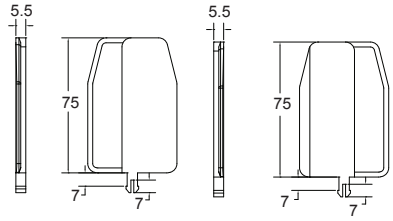
*P
Please specify pitch between cleat for ordering
(eg. MF2 CC 3x75 3P ; 3P = Every 3rd link to be cleated).

Item Code	Material	Color	Weight	Supply
MF2 CC 3x75 *P	POM	White	** kg/pc	1 pc

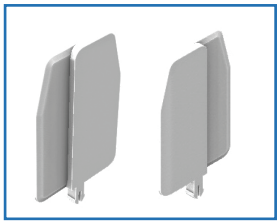
* Non-standard height are available upon request but cleat material will be different.



* Side guide cleats are optional



Side Guard L-R



Item Code	Material	Color	Weight	Supply
MT2 CLP G-75	POM	White	1.7 kg	50 set/pkt

Belt Accessories MF2

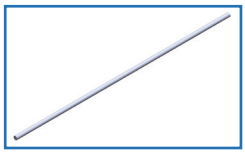
Lubricant For Belt



Silicone-based lubricant, 400ml

Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Belt Pin



Item Code	Material	Weight	Supply
MF2 PC	POM	0.16 kg	10 pcs / pkt

Belt Lock



Item Code	Material	Color	Weight	Supply
MT2 BL	POM	White	0.07 kg	10 pcs / pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units MF2

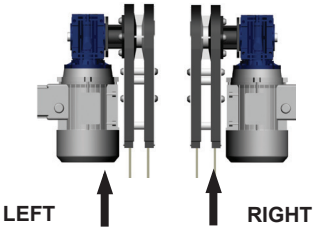
Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Motovario / Transtechno)
T40 = NMRV 040 / CMRV 040
T50 = NMRV 050 / CMRV 050

Gearmotor position: L or R
D: Front Drive

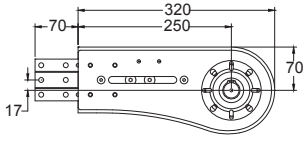
MF2 DD L S47
Front direct drive unit, motor on left side for 0.55kW SEW geared motor,

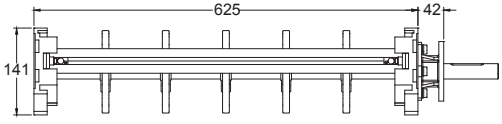
Motor Orientation Guideline



Example. Code for Basic unit;
MF2 DD R S47 => Front drive unit, motor on right side for SEW SA47 gearmotor.

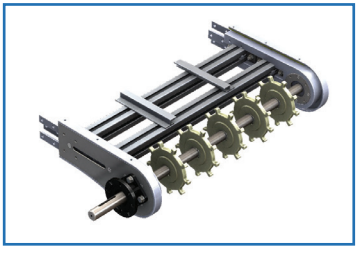
Front Drive Unit



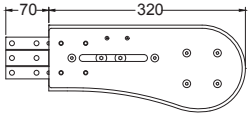


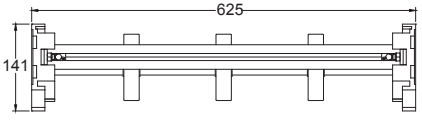
- Effective track length: 0.8m
- Traction force: 2200N
- Connecting strip and set screw included.
- Built in with CIS

Item Code	Description	Weight	Supply
MF2 DD R/L S/T	Basic drive unit	12.0 kg	1 unit



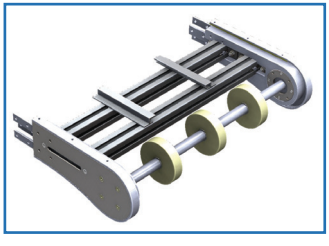
Idler Unit MF2





- Effective track length: 0.8m
- Connecting strip and set screw included.
- Built in with CIS

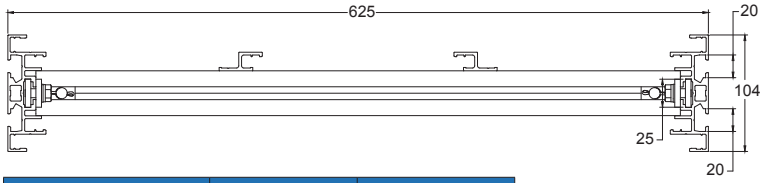
Item Code	Description	Weight	Supply
MF2 IE 320	Basic idler unit	11.3 kg	1 unit

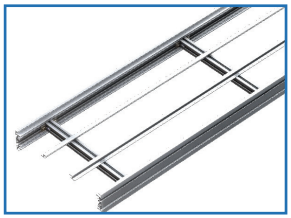


Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor Beam MF2

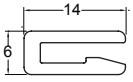




Item Code	Weight	Supply
MF2 CB 3	21.0kg	3m / beam

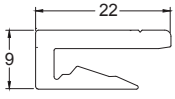
Accessories MF2

Slide Rail



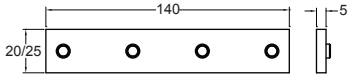
Item Code	Material	Color	Weight	Supply
MS SR 25	HDPE	Semi-Transparent White	1.2 kg	25m/roll
MS SR 25A	Anti-Static	Grey	1.2 kg	25m/roll

Slide Rail



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

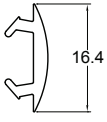
Connecting Strip



- 4 pcs M8 set screw included.

Item Code	Weight	Supply
MA CS 20x140	1.1 kg	10 pcs/pkt
MA CS 25x140	1.1 kg	10 pcs/pkt

T-Slot Cover



Item Code	Material	Color	Weight	Supply
MB SC 25T	TPE	Grey	1.5 kg	25m/roll
MB SC 25P	PVC	Light Grey	1.3 kg	25m/roll

Screw



Item Code	Weight	Supply
MA RS 6.5	0.02 kg	50 pcs/pkt

Rivet



Item Code	Weight	Supply
MA RR 3	0.02 kg	50 pcs/pkt

Slide Rail Assembling Tool

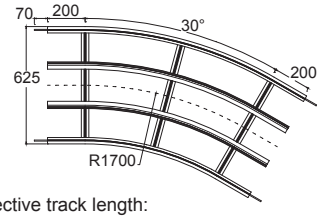


Item Code	Weight	Supply
MT2 SRA	0.4 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend MF2

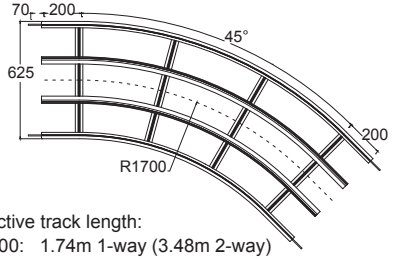


Effective track length:
R1700: 1.29m 1-way (2.58m 2-way)

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
MF2 BP 30R1700	1700 mm	11.5 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

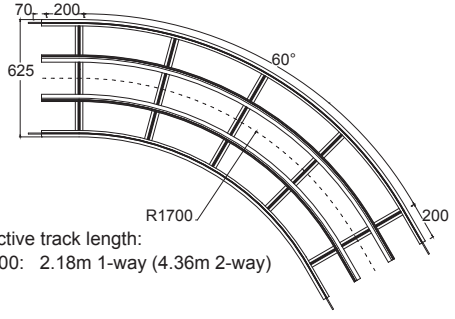


Effective track length:
R1700: 1.74m 1-way (3.48m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
MF2 BP 45R1700	1700 mm	15.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

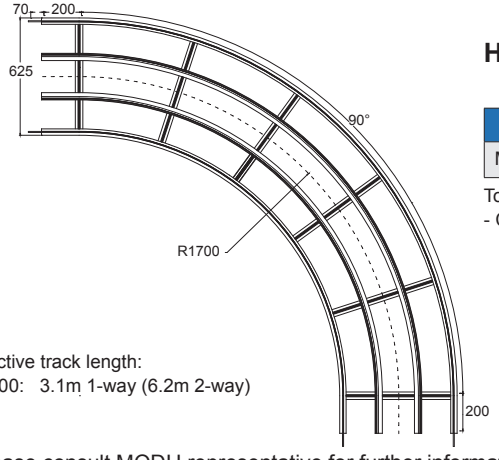


Effective track length:
R1700: 2.18m 1-way (4.36m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
MF2 BP 60R1700	1700 mm	19.0 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.



Effective track length:
R1700: 3.1m 1-way (6.2m 2-way)

Horizontal Plain Bend, 90°

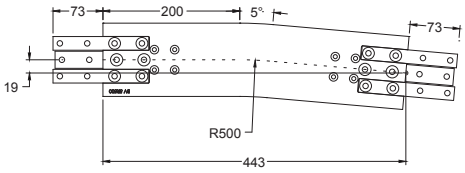
Item Code	Radius (R)	Weight	Supply
MF2 BP 90R1700	1700 mm	25.1 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

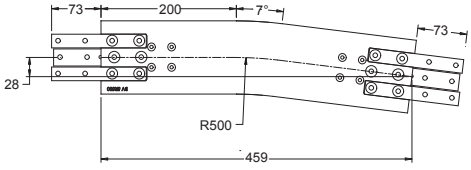
Vertical Bend MF2



Vertical Bend, 5°

Effective track length:
R500: 0.44m 1-way (0.88m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

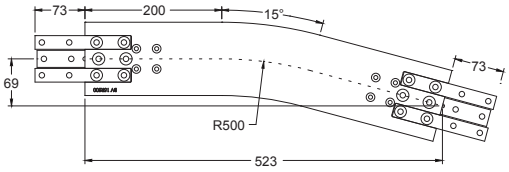
Item Code	Weight	Supply
MF2 BV 5R500	7.6 kg	1 unit



Vertical Bend, 7°

Effective track length:
R500: 0.46m 1-way (0.92m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

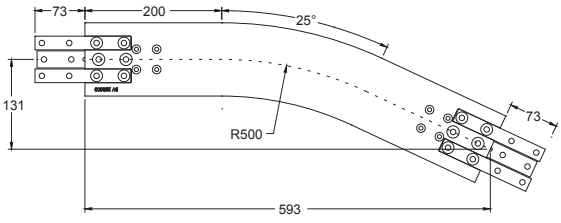
Item Code	Weight	Supply
MF2 BV 7R500	7.9 kg	1 unit



Vertical Bend, 15°

Effective track length:
R500: 0.53m 1-way (1.06m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

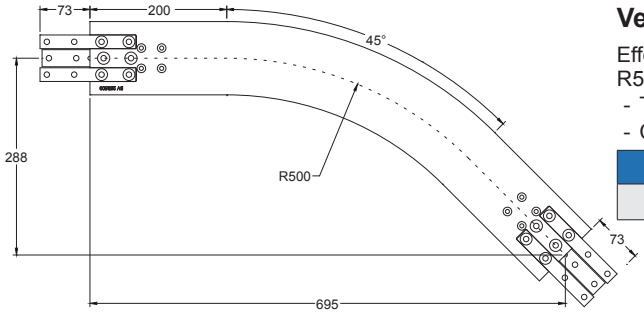
Item Code	Weight	Supply
MF2 BV 15R500	8.2 kg	1 unit



Vertical Bend, 25°

Effective track length:
R500: 0.62m 1-way (1.24m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MF2 BV 25R500	8.8 kg	1 unit



Vertical Bend, 45°

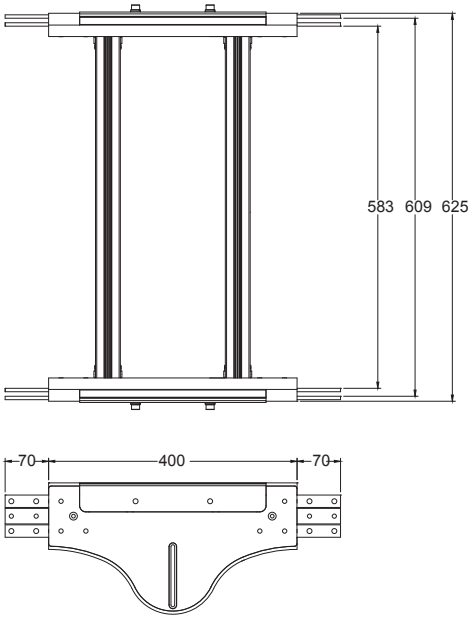
Effective track length:
R500: 0.84m 1-way (1.68m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

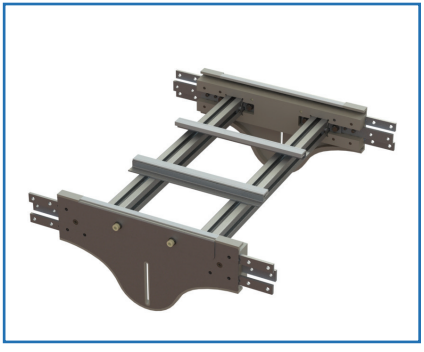
Item Code	Weight	Supply
MF2 BV 45R500	9.2 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Belt Elongation Section MF2





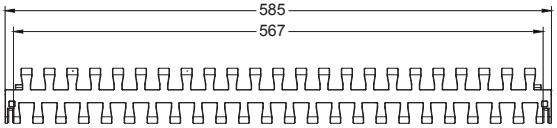
- To be used with straight plastic belt (zero gap).
- Slide rail, connecting strip and set screw included.

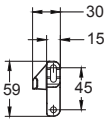
Item Code	Weight	Supply
MF2 CSS 400	9.3 kg	1 unit

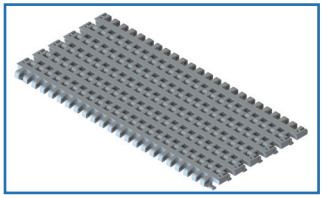
Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Bottom Tab (BT) Belt MF2

Plastic Plain Curve Belt (Bottom Tab)



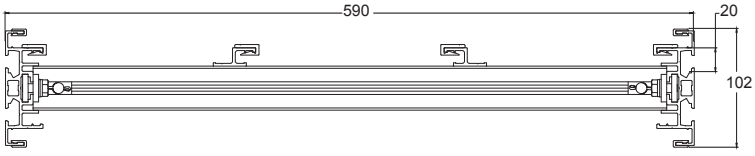


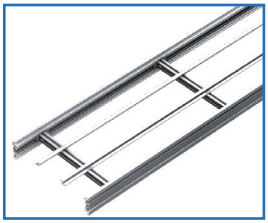


- 8.5mm belt gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

Item Code	Material	Color	Weight	Supply
MF2 CP 5 BT	POM	White	35.4kg/roll	5m/roll
MF2 CP 5 BT P	PP	White	24.8kg/roll	5m/roll

Conveyor Beam (BT) MF2

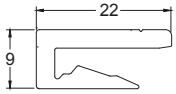




Item Code	Weight	Supply
MF2 CB 3 BT	21.0 kg	3m / beam

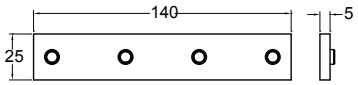
Accessories MF2

Slide Rail



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Pure White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

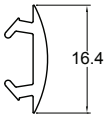
Connecting Strip



- 4 pcs M8 set screw included.

Item Code	Weight	Supply
MA CS 20x140	1.1 kg	10 pcs/pkt

T-Slot Cover



Item Code	Material	Color	Weight	Supply
MB SC 25T	TPE	Grey	1.5 kg	25m/roll
MB SC 25P	PVC	Light Grey	1.3 kg	25m/roll

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Drive Units (BT) MF2

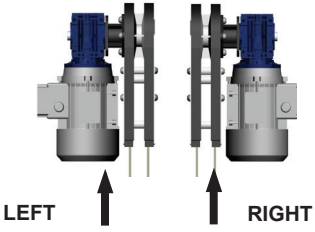
Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Motovario / Transtechno)
T40 = CMRV 040
T50 = CMRV 050

Gearmotor position: L or R
D: Front Drive

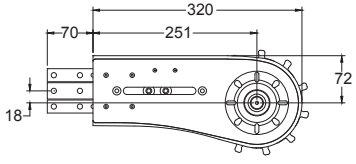
MF2 DD L S47 BT
Front direct drive unit, motor on left side for 0.55kW SEW geared motor for Bottom Tab chain design.

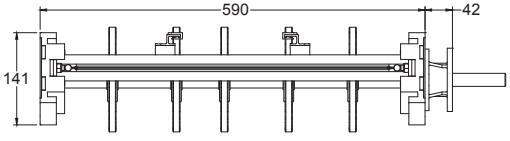
Motor Orientation Guideline



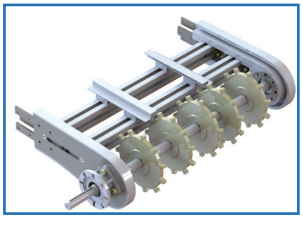
Example. Code for Basic unit;
MF2 DD R S47 BT =>Front drive unit for bottom tab chain, motor on right side for SEW SA47 gearmotor.

Front Drive Unit



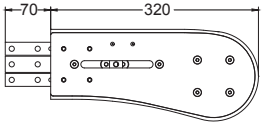


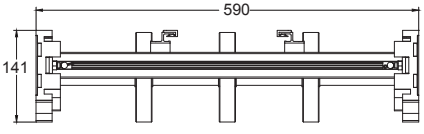
- Effective track length: 0.8m
- Traction force: 1900N
- Connecting strip and set screw included.
- Built in with CIS



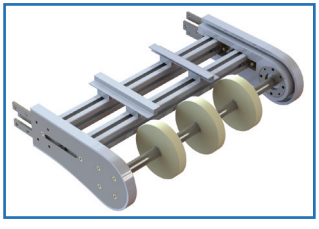
Item Code	Description	Weight	Supply
MF2 DD R/L S/T BT	Basic drive unit	12.0 kg	1 unit

Idler Unit (BT) MF2





- Effective track length: 0.8m
- Connecting strip and set screw included.
- Built in with CIS

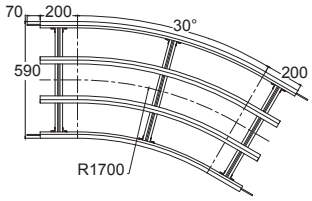


Item Code	Description	Weight	Supply
MF2 IE 320 BT	Basic drive unit	11.3 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend (BT) MF2

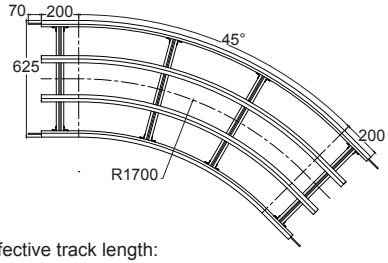


Effective track length:
R1700: 1.29m 1-way (2.58m 2-way)

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
MF2 BP 30R1700 BT	1700 mm	11.5 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

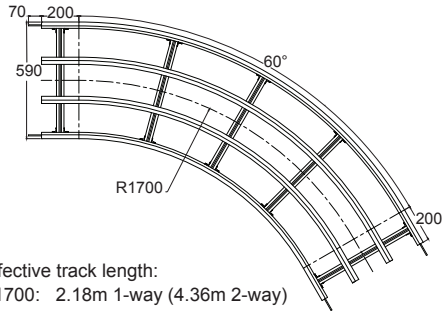


Effective track length:
R1700: 1.74m 1-way (3.48m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
MF2 BP 45R1700 BT	1700 mm	15.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

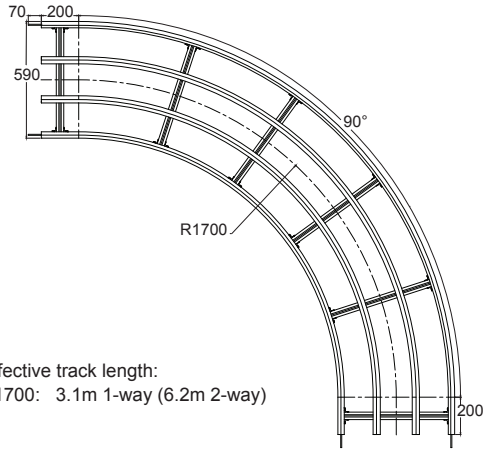


Effective track length:
R1700: 2.18m 1-way (4.36m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
MF2 BP 60R1700 BT	1700 mm	19.0 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.



Effective track length:
R1700: 3.1m 1-way (6.2m 2-way)

Horizontal Plain Bend, 90°

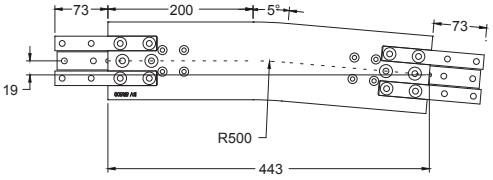
Item Code	Radius (R)	Weight	Supply
MF2 BP 90R1700 BT	1700 mm	25.1 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

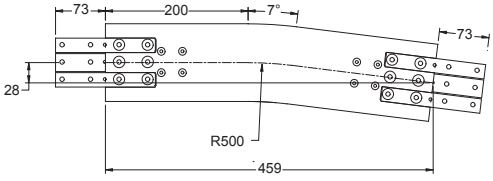
Vertical Bend (BT) MF2



Vertical Bend, 5°

Effective track length:
R500: 0.44m 1-way (0.88m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

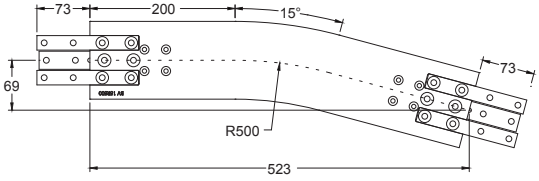
Item Code	Weight	Supply
MF2 BV 5R500 BT	7.6 kg	1 unit



Vertical Bend, 7°

Effective track length:
R500: 0.46m 1-way (0.92m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

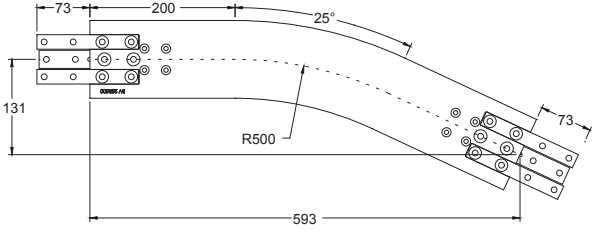
Item Code	Weight	Supply
MF2 BV 7R500 BT	8.2 kg	1 unit



Vertical Bend, 15°

Effective track length:
R500: 0.53m 1-way (1.06m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

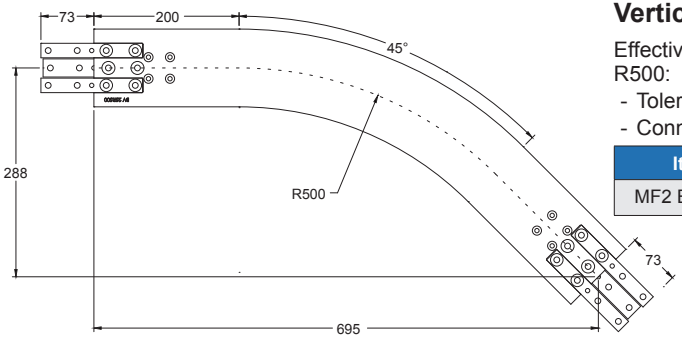
Item Code	Weight	Supply
MF2 BV 15R500 BT	8.2 kg	1 unit



Vertical Bend, 25°

Effective track length:
R500: 0.62m 1-way (1.24m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MF2 BV 25R500 BT	8.8 kg	1 unit



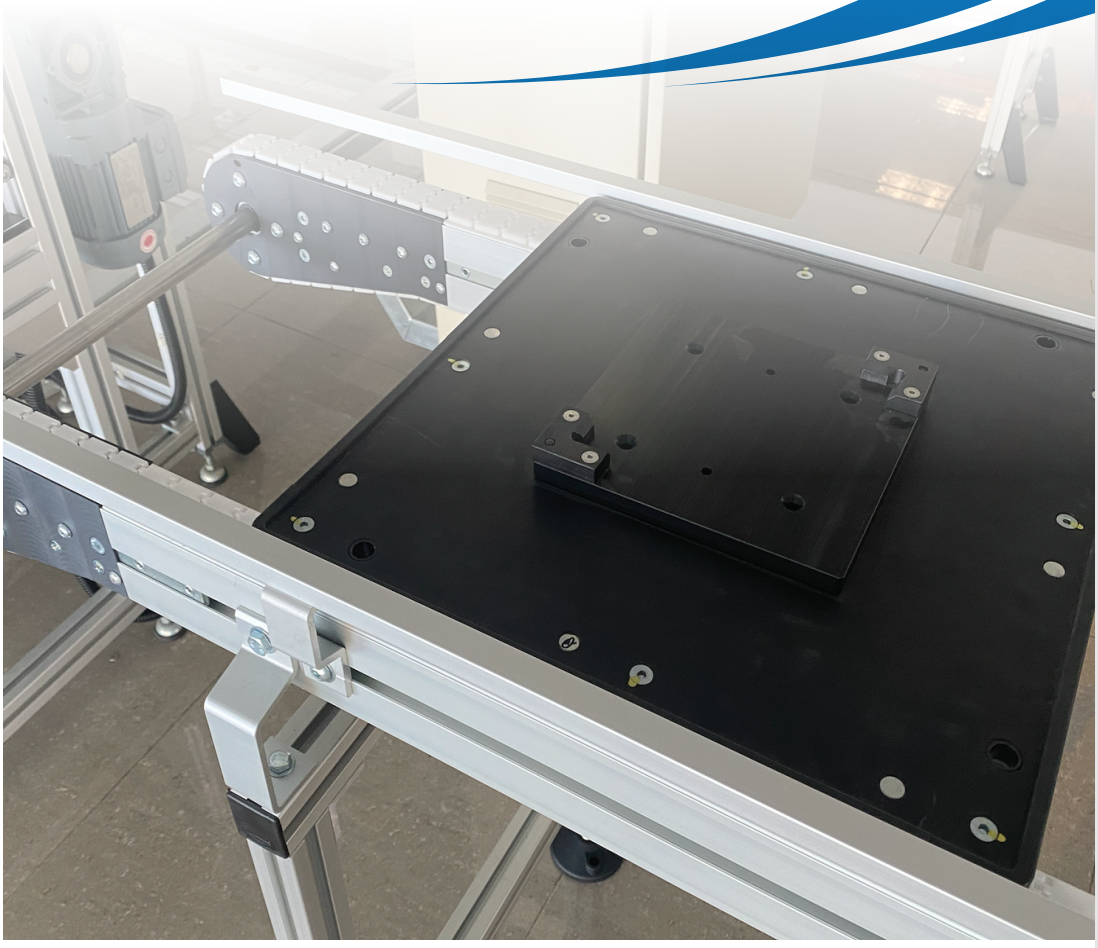
Vertical Bend, 45°

Effective track length:
R500: 0.84m 1-way (1.68m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and set screw included.

Item Code	Weight	Supply
MF2 BV 45R500 BT	9.2 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

MODU MP PALLET CONVEYOR SERIES



Contents

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Pallet Locating Station.....161
Lift-and-Locate Module.....162



System Based on Modules

MODU's MP pallet system is a complete system for handling products on pallets (product carriers). An automated system is built on configurable standard modules.

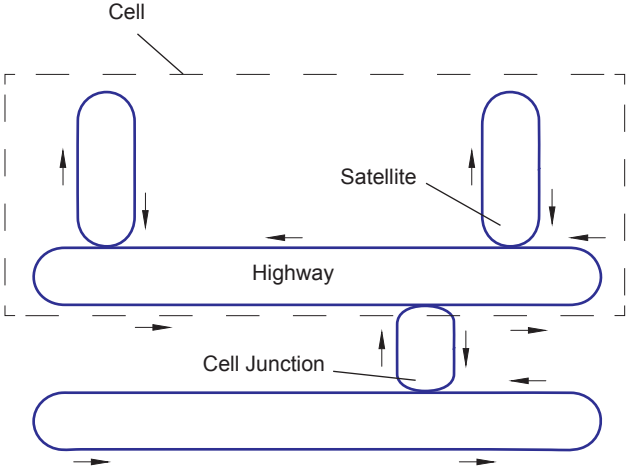
Standard modules make it very easy and fast to create simple as well as advanced layouts for routing, balancing, buffering and positioning of pallets. RFID identification in the pallets enables one piece track and trace and logistic control for the production line.

Divert or Merge Devices

Divert or merge devices are used for routing products by dividing or combining flows of products.

There is a main conveyor, a "highway", and separate subordinated conveyors, "satellites". On the satellites, products can be subjected to various operations such as turning, grinding, assembly or testing, without disturbing the main flow. After the operations, the products canconveyed back to the highway.

A combination of a highway and one or more satellites is often called a cell. Using divert/merge modules, it is possible to build cell junctions which facilitate transfer of a pallet from one cell to another. See figure.

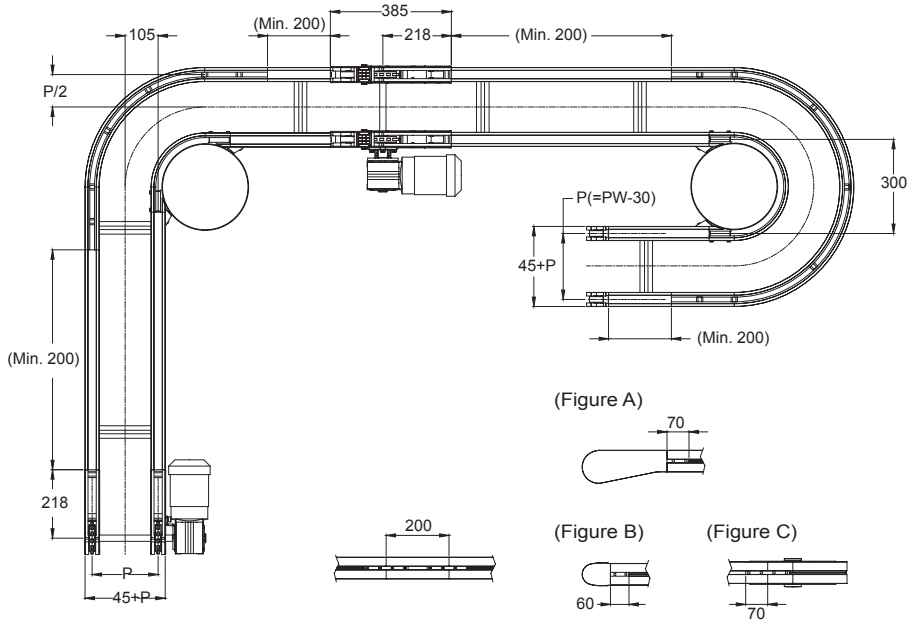


Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

General Dimension Guidelines

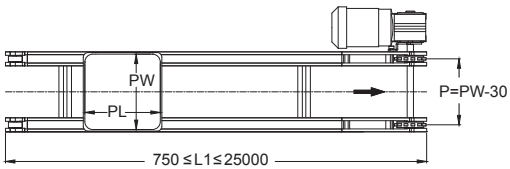
Minimum length of conveyor beam section



Note:
- Attachment of a support module normally requires more space in this section than 200mm.
- Near a drive unit (Figure A) or idler end unit (Figure B, or a wheel bend (Figure C), the T-slots are occupied by connecting strip

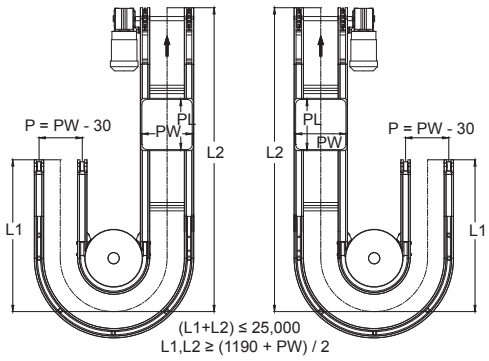
Conveyor Modules

Straight Conveyor



For use as standard alone unit, in-line with perpendicular to another module. Reversible operation is not possible.

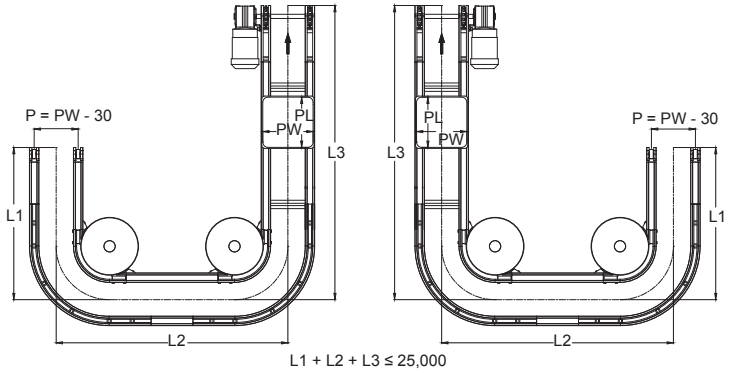
Conveyor J



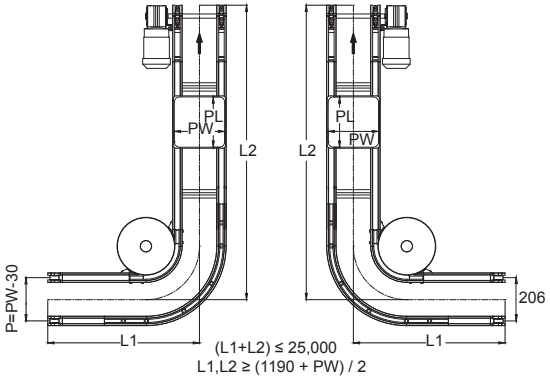
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor U

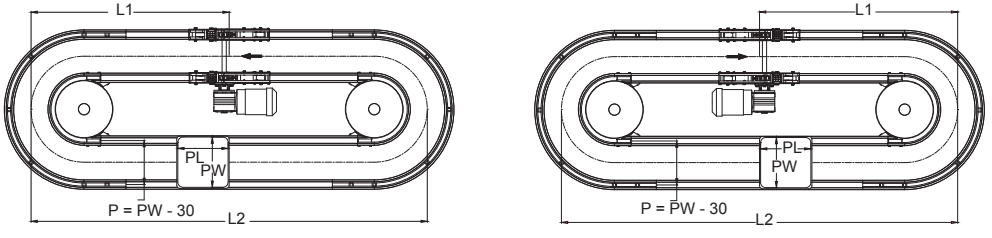


Conveyor L



For use as standard alone unit, in-line with perpendicular to another module. Reversible operation is not possible.

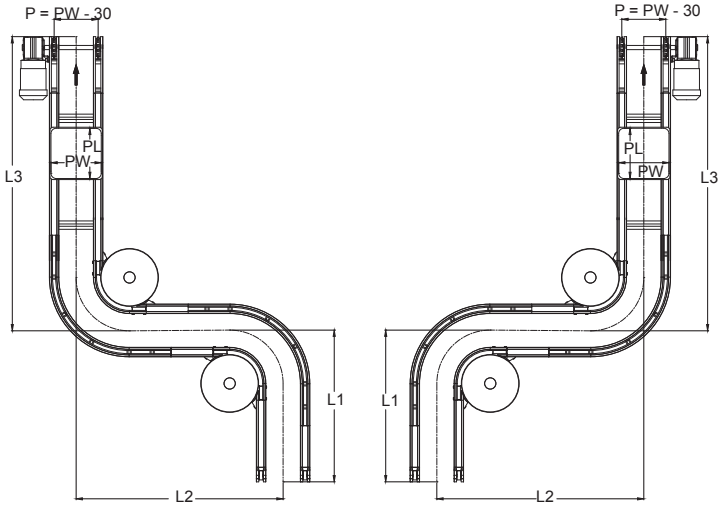
Conveyor Q



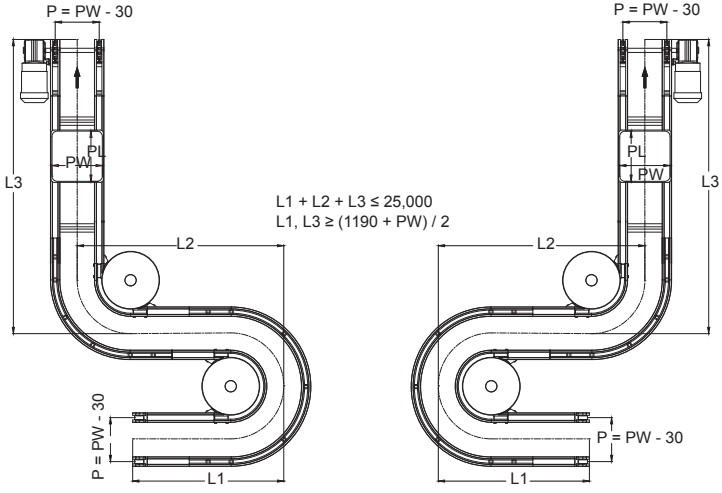
For use as standard alone unit, in-line with perpendicular to another module. Reversible operation is not possible.

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Conveyor Z



Conveyor F



For use as standard alone unit, in-line with perpendicular to another module.
Reversible operation is not possible.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

MP Pallet

Pallet Assortment

MODU MP pallet system includes pallets that can be adapted to specific requirements such as

- Low friction
- High precision locating
- Fast indexing
- Fast pallet exchange
- Easy attachment of fixtures
- Low cost

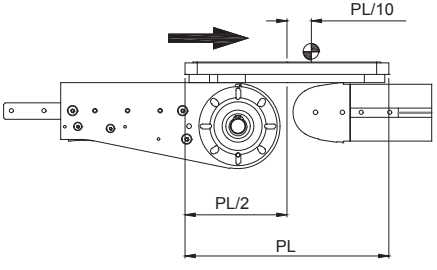
A pallet consists of a pallet plate riding on two guide discs. The pallet plate is aluminium and machined. For normal environments each guide disc is equipped with a plastic slide plate.

Technical Characteristics

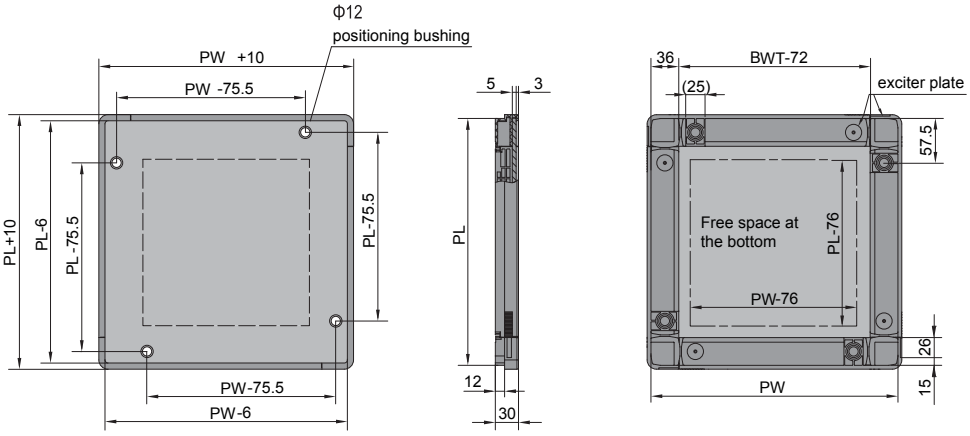
Seven Pallet sizes are available:
- 240 x 240 mm
- 240 x 320 mm
- 320 x 320 mm
- 320 x 400 mm
- 400 x 400 mm
- 400 x 480 mm
- 480 x 480 mm

- Maximum load on the pallet is 80N per 100mm of pallet length (PL).
- Friction between pallet and chain, μ=0.3 (under normal condition).
- The table below shows maximum pallet or each pallet size

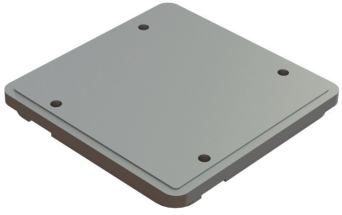
Size (PW x PL)	Pallet Weight (kg)	Max Load on Pallet (kg)
240 X 240 mm	0.76 kg	17
240 X 320 mm	1.01 kg	22
320 x 320 mm	1.35 kg	22
320 x 400 mm	1.71 kg	24
400 x 400 mm	2.13 kg	23
400 x 480 mm	2.56 kg	22
480 x 480 mm	3.06 kg	20



Please consult MODU representative for further information and assistance. Units: Dimension (mm)



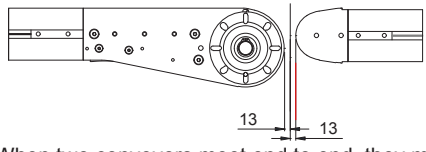
PW x PL	
240 X 240 mm	0.3
240 X 320 mm	0.5
320 x 320 mm	0.5
320 x 400 mm	0.6
400 x 400 mm	0.6
400 x 480 mm	0.8
480 x 480 mm	0.8



Pallet Order Details:

Item Code	Size (PW x PL)	Weight
MP PL 240-240	240 X 240 mm	0.76 kg
MP PL 240-320	240 X 320 mm	1.01 kg
MP PL 320-320	320 x 320 mm	1.35 kg
MP PL 320-400	320 x 400 mm	1.71 kg
MP PL 400-400	400 x 400 mm	2.13 kg
MP PL 400-480	400 x 480 mm	2.56 kg
MP PL 480-480	480 x 480 mm	3.06 kg

Minimum Clearance Details

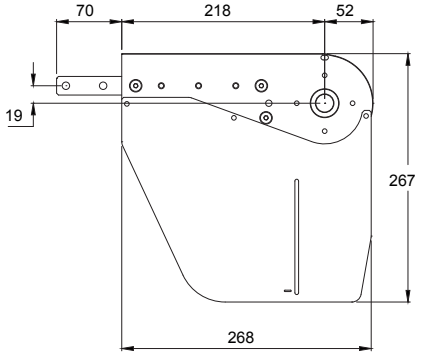


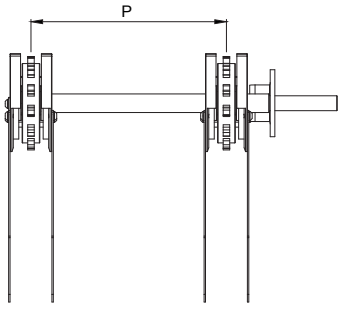
When two conveyors meet end to end, they must be seperated by a mininum clearance

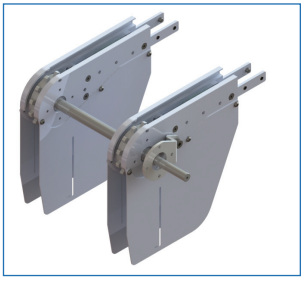
Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Twin Drive Unit MP

Twin Direct Drive Unit



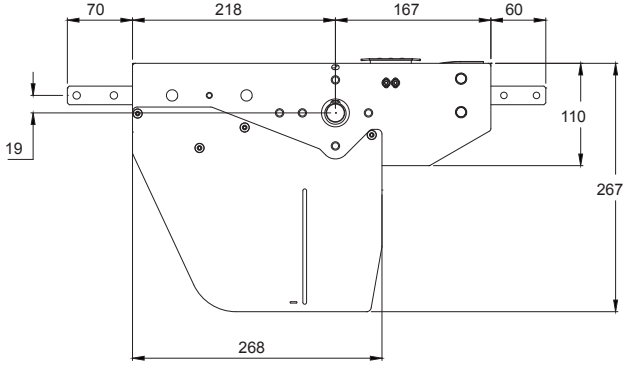


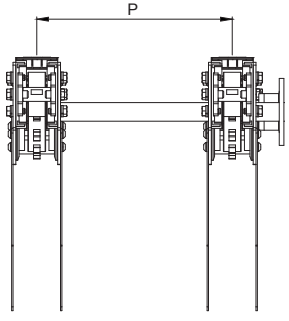


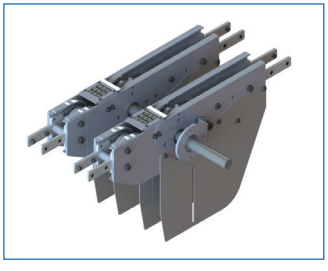
- Effective track length: 0.6m
- Traction force: 300N
- Connecting strip and set screw included.

Item Code	Pitch (P)	Pallet Size (PW x PL)
MP TDD R/L S/M 210	210 mm	240 X 240 / 320 mm
MP TDD R/L S/M 290	290 mm	320 x 320 / 400 mm
MP TDD R/L S/M 370	370 mm	400 x 400 / 480 mm
MP TDD R/L S/M 450	450 mm	480 x 480 mm

Twin Combined Drive Unit







- Effective track length: 0.6m
- Traction force: 300N
- Connecting strip and set screw included.

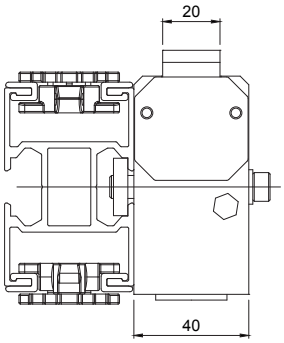
Item Code	Pitch (P)	Pallet Size (PW x PL)
MP TDT R/L S/M 210	210 mm	240 X 240 / 320 mm
MP TDT R/L S/M 290	290 mm	320 x 320 / 400 mm
MP TDT R/L S/M 370	370 mm	400 x 400 / 480 mm
MP TDT R/L S/M 450	450 mm	480 x 480 mm

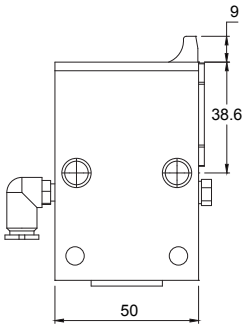
Please consult MODU representative for further information and assistance.

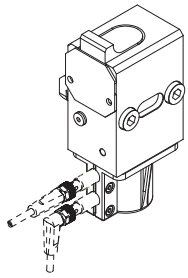
Units: Dimension (mm)

Pallet Stop Devices

Pallet Stop, Undamped





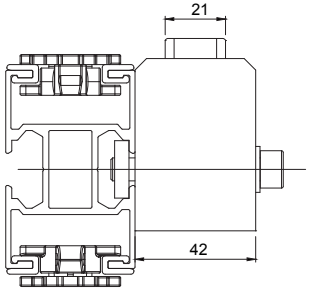


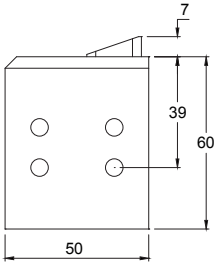
Pallet stop, undamped, 0–200 kg
Pressure range : Treated compressed air: 4–8 bar
Air connection : 6 mm outside diameter tubing

Separating function:
Open: pneumatically. Close: spring-loaded.
**Mounting hardware is included.

Item Code	Supply
MP PD U200	1 pc

Pallet Return Stop, Undamped



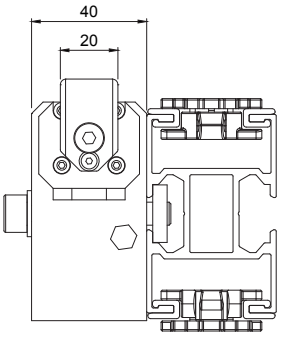


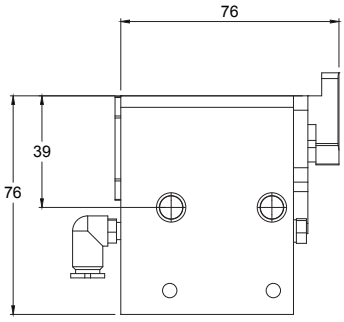
To be used with Pallet stop device, damped
MP PD U200

Item Code	Supply
MP PD UR	1 pc

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Pallet Stop, Damped





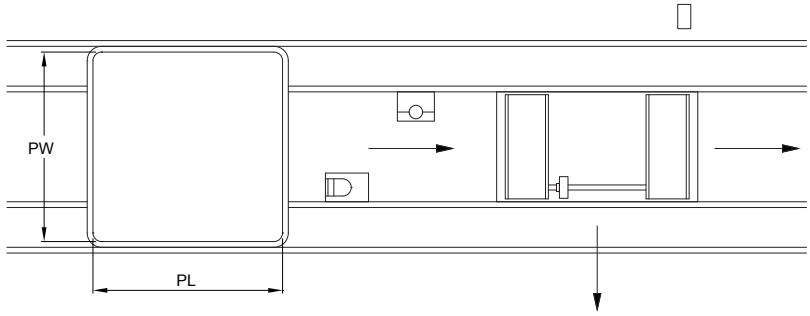
Pallet stop, damped, 0–35 kg
Pressure range : Treated compressed air: 4–8 bar
Air connection : 6 mm outside diameter tubing

Separating function:
Open: pneumatically. Close: spring-loaded.
**Mounting hardware is included.

Item Code	Supply
MP PD D35	1 pc

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

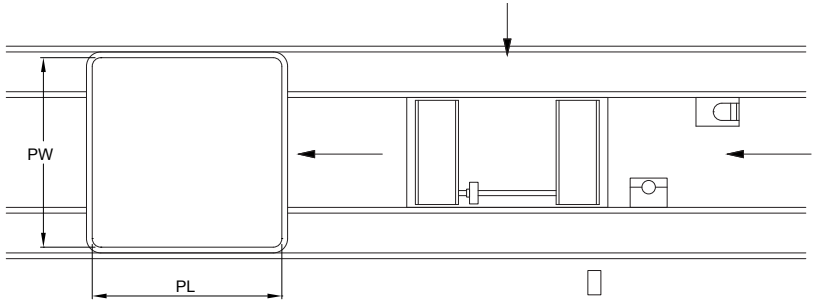
Transfer module - main to cross



For transfer of pallets/products away from a conveyor.
Maximum lifting payload: 30 kg at 6 bar.

Item Code	Supply
MP TM MTC	1 unit

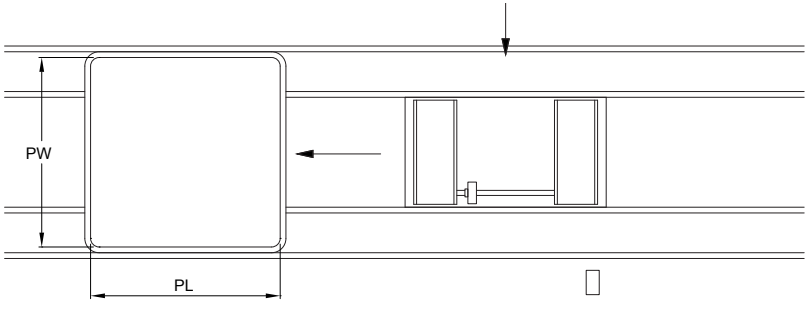
Transfer module - cross to mid main



For receiving of pallets/products to a conveyor with oncoming traffic.
Maximum lifting payload: 30 kg at 6 bar.

Item Code	Supply
MP TM CTM	1 unit

Transfer module - cross to end main



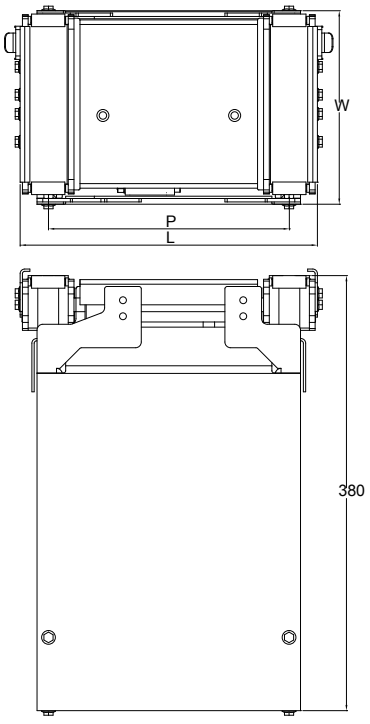
For receiving of pallets/products to a conveyor without oncoming traffic.
Maximum lifting payload: 30 kg at 6 bar.

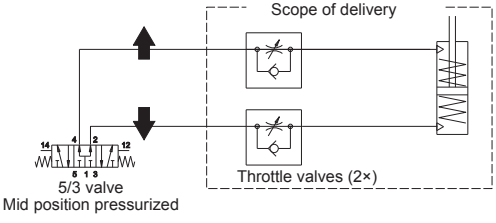
Item Code	Supply
MP TM CTE	1 unit

Please consult MODU representative for further information and assistance.

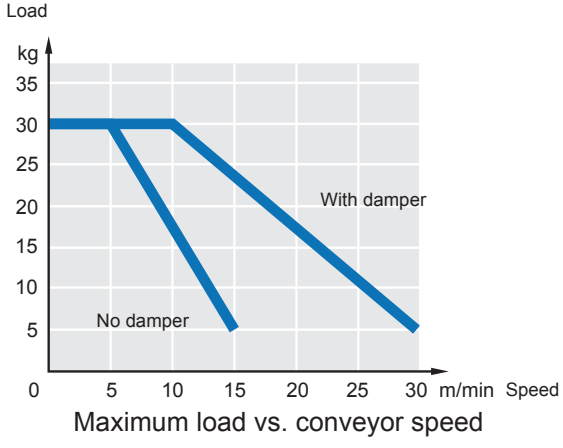
Units: Dimension (mm)

Pneumatic Transfer Unit





The diagram shows the maximum permissible weight of a pallet (product weight + pallet weight), which the transfer is capable of stopping, as a function of the conveyor speed.



Maximum load vs. conveyor speed

When ordering, insert the pallet size instead of PW×PL in the designation.

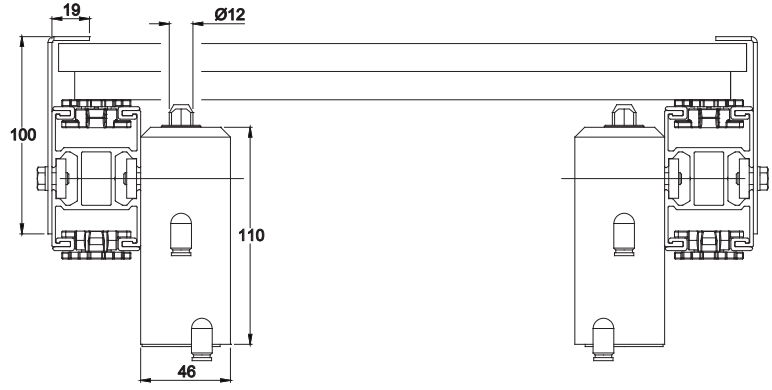
Seven Pallet sizes are available:
- 240 x 240 mm
- 240 x 320 mm
- 320 x 320 mm
- 320 x 400 mm
- 400 x 400 mm
- 400 x 480 mm
- 480 x 480 mm

Item Code	Supply
MP PT PWxPL	1 pc

Please consult MODU representative for further information and assistance.

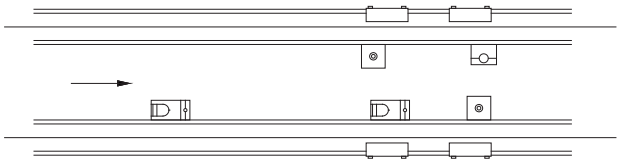
Units: Dimension (mm)

Pallet Locating Station



The locating station consists of locating cylinders including pins and brackets.
Pressure range, treated compressed air: 4–8 bar
Air connection: 2×6 mm outside diameter tubing

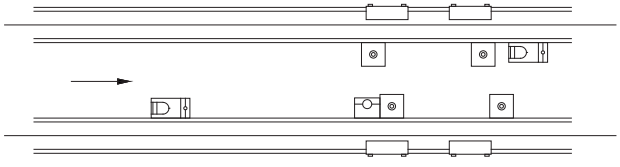
Diagonal Lift Units



Singulate to stop and locate single pallet at one time along the conveyor.
Two diagonal lift units with guide pin

Item Code	Supply
MP LS DLU	1 unit

Four Lift Units



Singulate to stop and locate single pallet at one time along the conveyor.
Four lift units: Two diagonal lift units with guide pin.

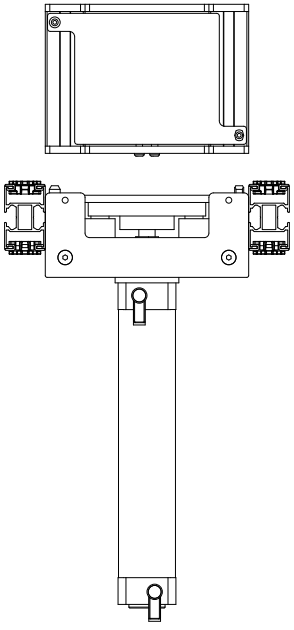
Item Code	Supply
MP LS FLU	1 unit

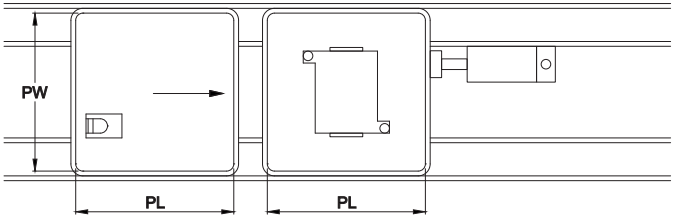
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Lift-and-Locate Module

The lift-and-locate function is used when a product needs to be located at a specific height prior to a machine operation.



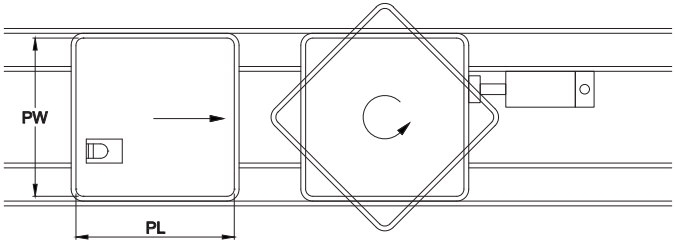


The lift-and-locate unit consists of a plate which can be elevated by a pneumatic cylinder. The plate has two locating pins.
The unit can be delivered with top plates adapted for the standard pallet sizes.
Lift height: 0–225mm (adjustable)
Locating repeatability in x and y directions: ±0,05mm

In order to avoid influence from conveyor movements, attach the conveyor to a reference support.
It is recommended to enclose the unit to protect persons from the clamp risk.

Item Code	Supply
MP LL LM	1 unit

Lift and Rotate Module

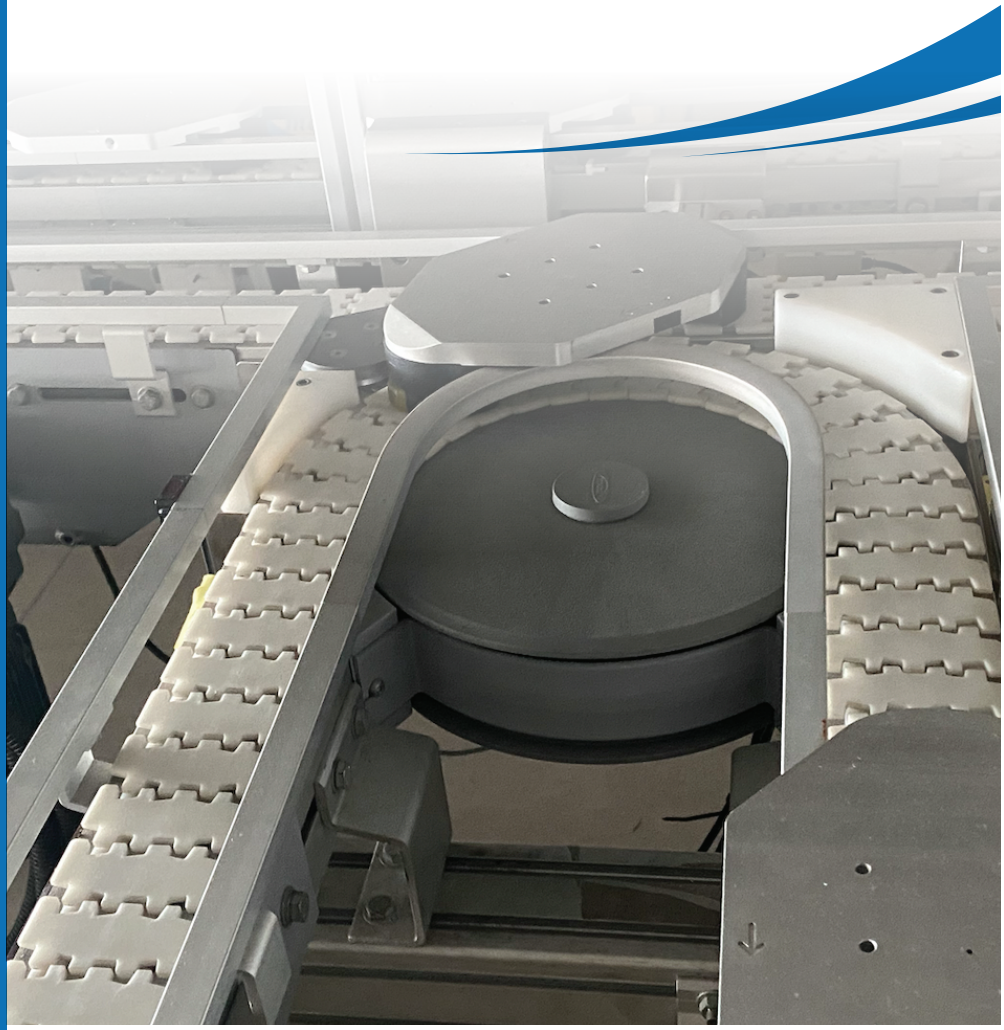


This module is used when a pallet needs to be located and rotated to desired orientation according to the machine needs

Item Code	Supply
MP LL RM	1 unit

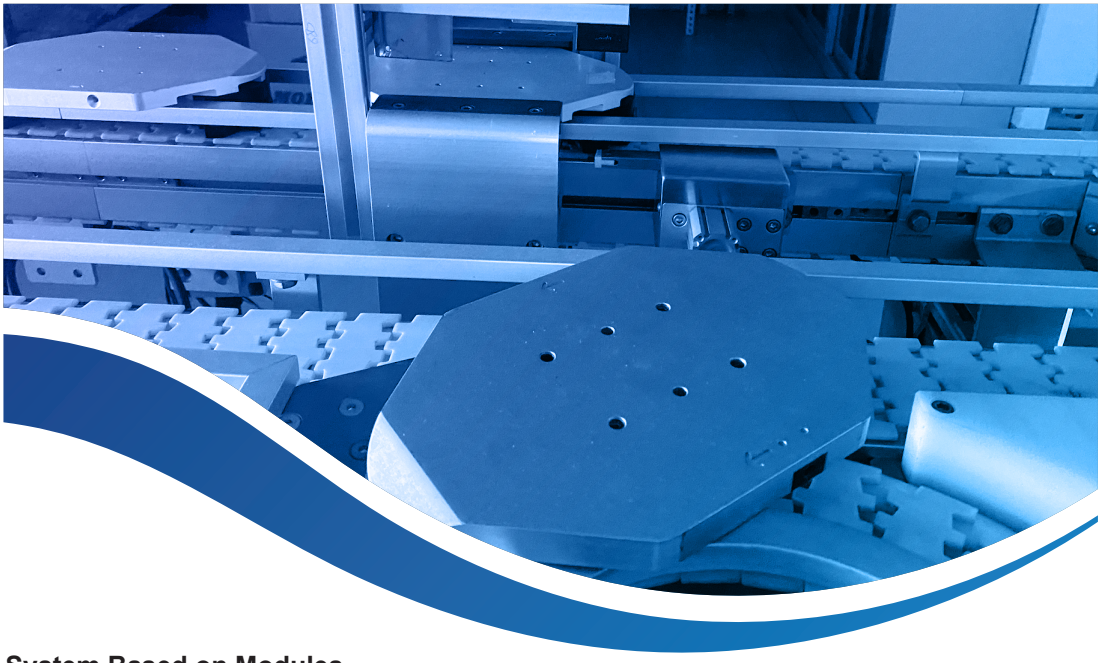
Please consult MODU representative for further information and assistance. Units: Dimension (mm)

MODU MM3 PALLET CONVEYOR SERIES



Contents

MM3 Pallet 165
Pallet Stop Devices 168
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Merge Modules.....170
Combined Modules.....171
Pallet Locating Station.....172
Guide Rail Accessories.....173



System Based on Modules

MODU's MM3 pallet system is a complete system for handling products on pallets (product carriers). An automated system is built on configurable standard modules.

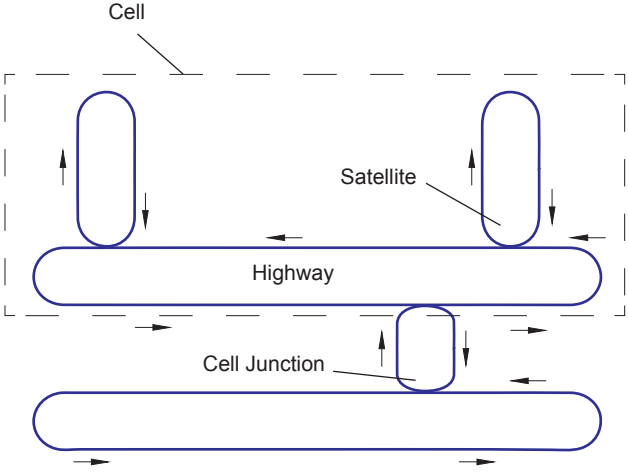
Standard modules make it very easy and fast to create simple as well as advanced layouts for routing, balancing, buffering and positioning of pallets. RFID identification in the pallets enables one piece track and trace and logistic control for the production line.

Divert or Merge Devices

Divert or merge devices are used for routing products by dividing or combining flows of products.

There is a main conveyor, a "highway", and separate subordinated conveyors, "satellites". On the satellites, products can be subjected to various operations such as turning, grinding, assembly or testing, without disturbing the main flow. After the operations, the products canconveyed back to the highway.

A combination of a highway and one or more satellites is often called a cell. Using divert/merge modules, it is possible to build cell junctions which facilitate transfer of a pallet from one cell to another. See figure.



Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

MM3 Pallet

Pallet Assortment

MODU MM3 pallet system includes pallets that can be adapted to specific requirements such as

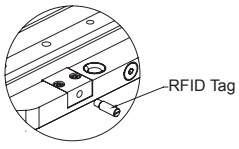
- Low friction
- High precision locating
- Fast indexing
- Fast pallet exchange
- Easy attachment of fixtures
- Low cost

A pallet consists of a pallet plate riding on two guide discs. The pallet plate is aluminium and machined. For normal environments each guide disc is equipped with a plastic slide plate.

RFID

- The pallet plate is equipped with a bracket for an IFM RFID tag.
- IFM read on the fly at speeds up to 30m/min.

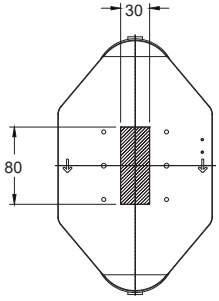
Threaded Type	M5x16.5mm
Operating Frequency	125 kHz
Memory (BIT)	224



Read/Write Head:
The read/write heads exchange data with the passive RFID tags at a maximum distance of 20mm. The read/write head has an M12 connector. The M12 cable is connected to an M12. The M12 cable is connected to an M12 ASi socket. Up to 31 read/write heads can be connected to one ASi system.

Technical Characteristics

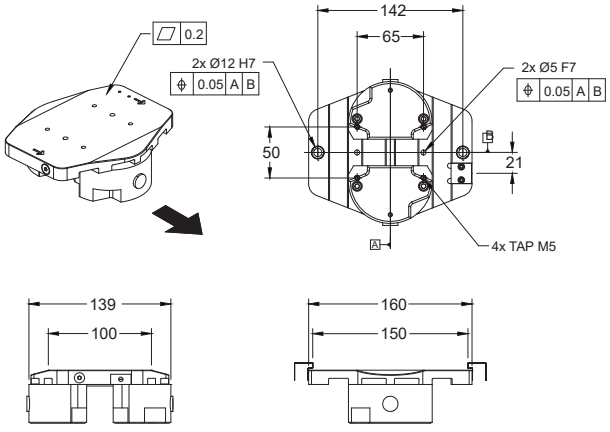
Four Pallet sizes are available:
- 160 mm x 100 mm (139 mm) x 52 mm
- 160 mm x 130 mm (163 mm) x 52 mm
- 160 mm x 175 mm (213 mm) x 52 mm
- 160 mm x 225 mm (263 mm) x 52 mm

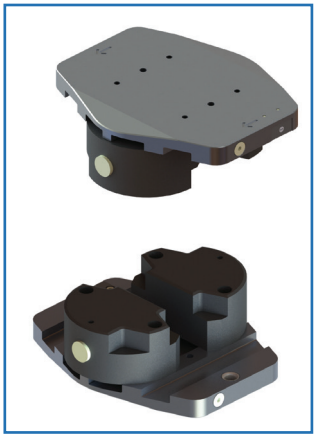


- Maximum load on the pallet is 10kg.
- The maximum permissible load on one pallet is 10 kg (including fixture). The centre of gravity must be located inside a 30 mm x 80 mm rectangle on the pallet. See figure.

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Pallet Type 1

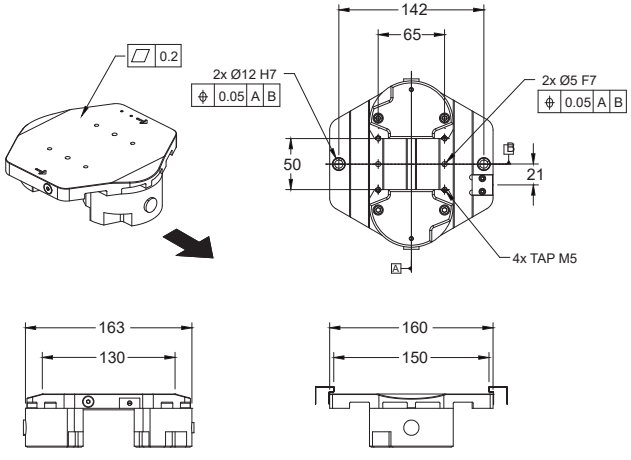


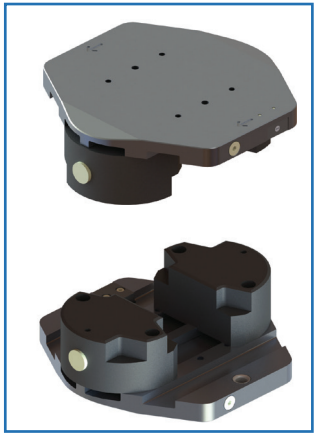


- Fully assembled unit, including two guide disc

Item Code	Weight	Supply
MM3P - PL L/160X100	0.77 kg	1 unit

Pallet Type 2





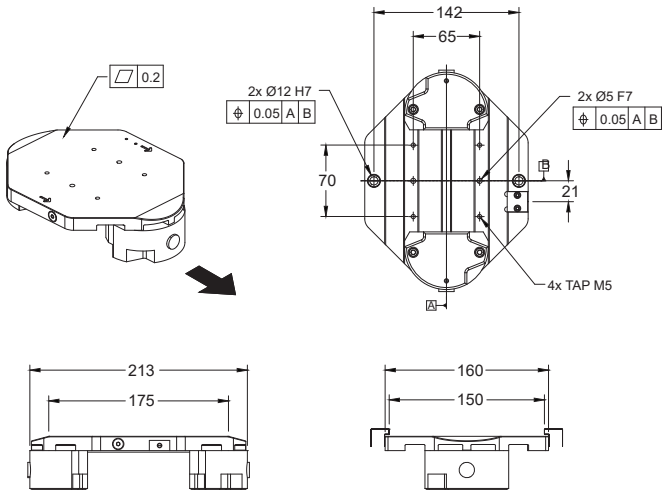
- Fully assembled unit, including two guide disc

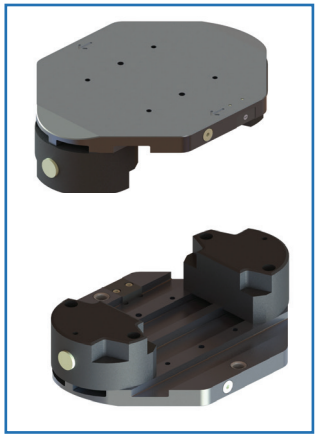
Item Code	Weight	Supply
MM3P - PL L/160X130	0.85 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Pallet Type 3

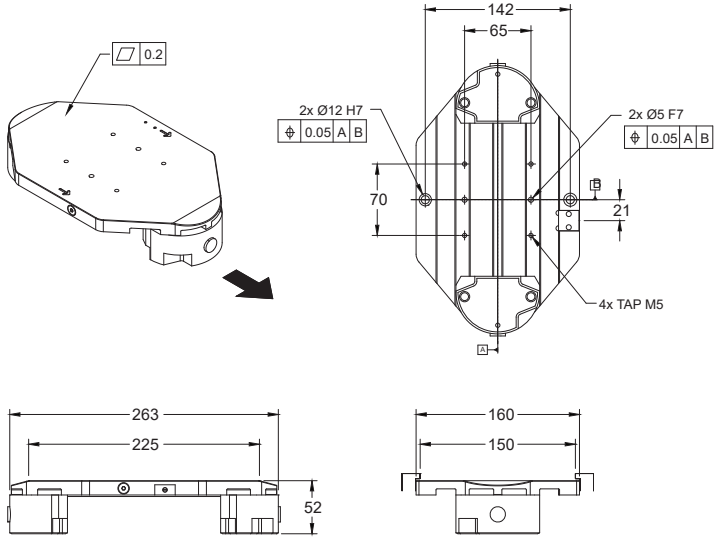


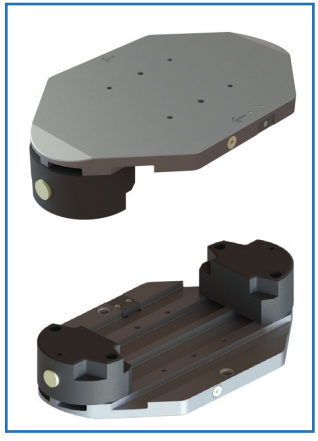


- Fully assembled unit, including two guide disc

Item Code	Weight	Supply
MM3P - PL L/160X175	1.0 kg	1 unit

Pallet Type 4





- Fully assembled unit, including two guide disc

Item Code	Weight	Supply
MM3P - PL L/160X225	1.2 kg	1 unit

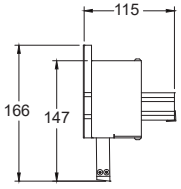
Please consult MODU representative for further information and assistance.

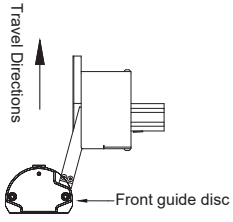
Units: Dimension (mm)

Pallet Stop Devices

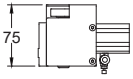
Pneumatic pallet stoppers are used to stop pallets at selected position along the line. The stopper is mounted on the right side of the conveyor.

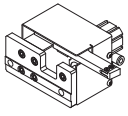
Type 1



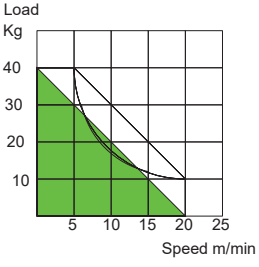


Working Conditions



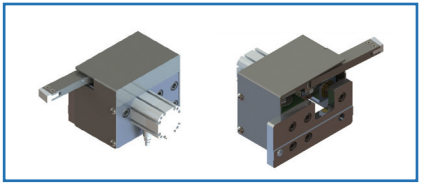


- Pneumatic stop device, Single-actuated
- Structure: anodized aluminium.
- Cover: stainless steel.
- Included ø 6 pipe connection and necessary mounting hardware.
- Connection: M5, Stroke: 15 mm

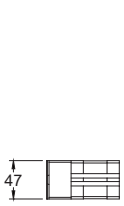


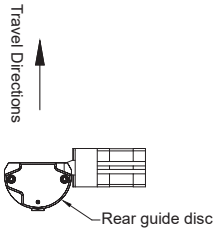
The diagram shows the maximum permissible weight of a group of pallets (product weight+pallet weight) comparison with the conveyor speed.

Item Code	Weight	Supply
MM3P - ST - F	1.4 kg	1 unit

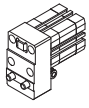


Type 2

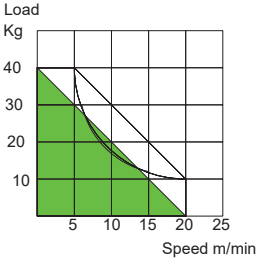




Working Conditions

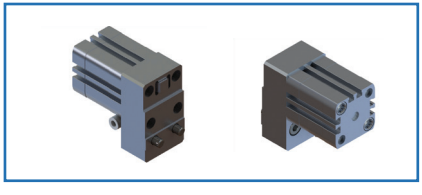


- Pneumatic stop device, Single-actuated
- Structure: anodized aluminium.
- Included ø 6 pipe connection and necessary mounting hardware.
- Connection: 1/8, Stroke: 15 mm



The diagram shows the maximum permissible weight of a group of pallets (product weight+pallet weight) comparison with the conveyor speed.

Item Code	Weight	Supply
MM3P - ST - R	1.1 kg	1 unit



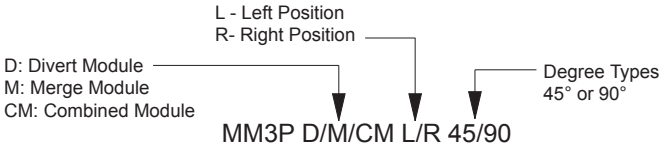
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

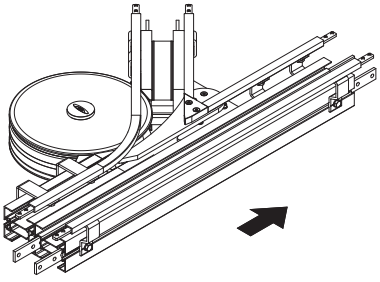
Divert & Merge Modules

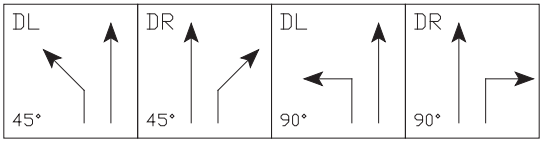
Divert and merge devices are used for routing products by dividing or combining flows of products.

Item Code Guidelines

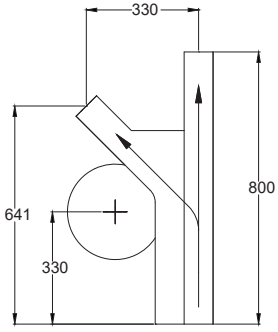


Divert Modules





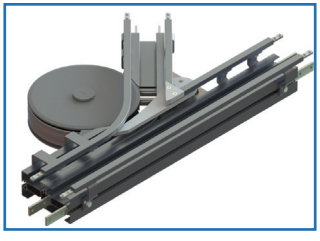
Divert Module 45°



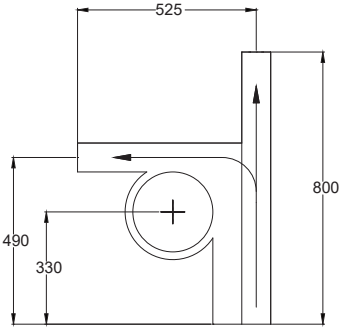
- Type L (divert to Left)

Effective track length: 1.30 m 1-way (2.60 m 2-way)

Item Code	Weight	Supply
MM3P - D - L/R - 45	8.2 kg	1 unit



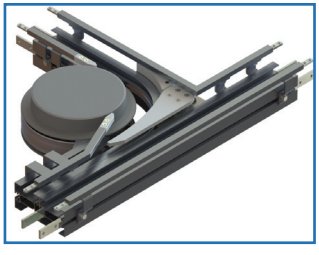
Divert Module 90°



- Type L (divert to Left)

Effective track length: 1.40 m 1-way (2.80 m 2-way)

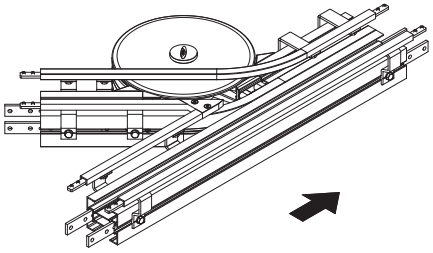
Item Code	Weight	Supply
MM3P - D - L/R - 90	8.4 kg	1 unit

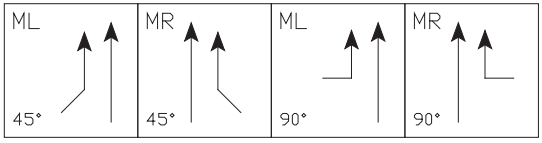


Please consult MODU representative for further information and assistance.

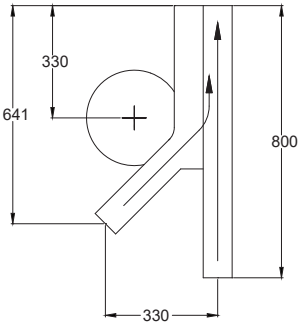
Units: Dimension (mm)

Merge Modules



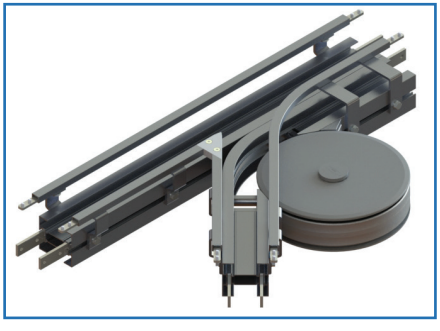


Merge Module 45°

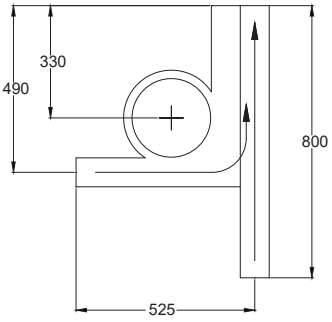


- Type R (merge to Right)
Effective track length: 1.30 m 1-way (2.60 m 2-way)

Item Code	Weight	Supply
MM3P - M - L/R - 45	7.6 kg	1 unit

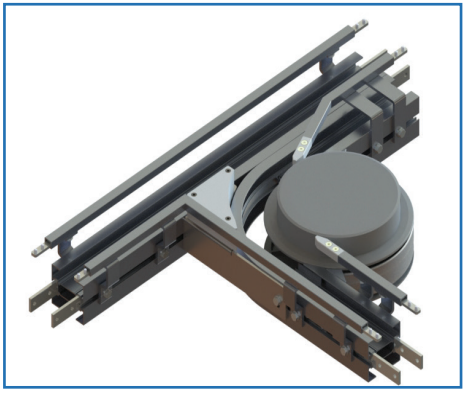


Divert Module 90°



- Type R (merge to Right)
Effective track length: 1.40 m 1-way (2.80 m 2-way)

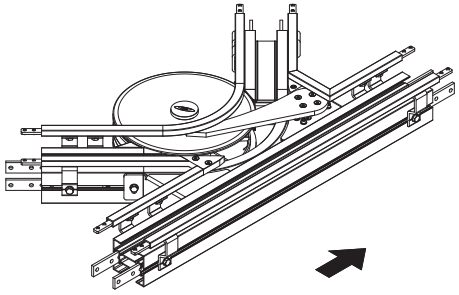
Item Code	Weight	Supply
MM3P - M - L/R - 90	8.2 kg	1 unit

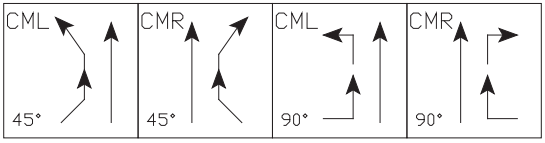


Please consult MODU representative for further information and assistance.

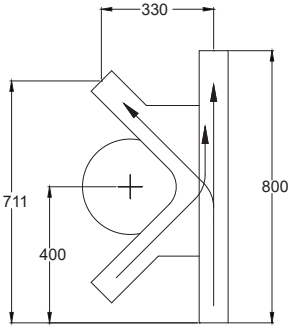
Units: Dimension (mm)

Combined Modules



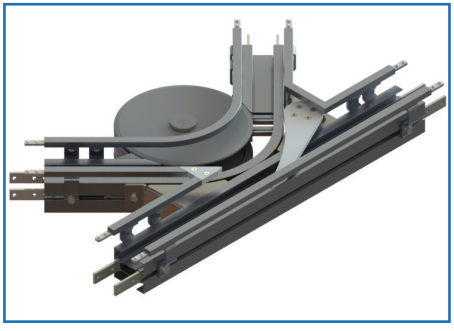


Divert & Merge Module 45°

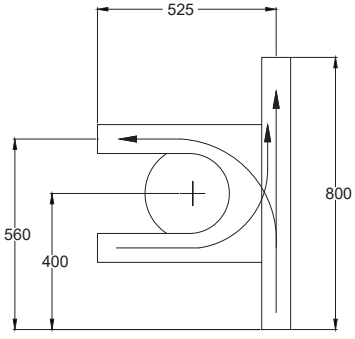


- Type L (divert to Left)
Effective track length: 1.70 m 1-way (3.40 m 2-way)

Item Code	Weight	Supply
MM3P - CM - L/R - 45	8.8 kg	1 unit

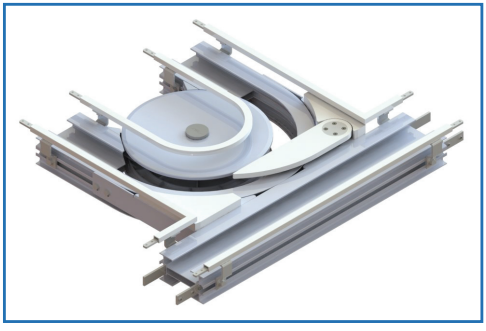


Divert & Merge Module 90°



- Type L (divert to Left)
Effective track length: 2.00 m 1-way (4.00 m 2-way)

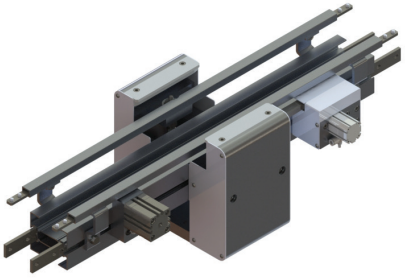
Item Code	Weight	Supply
MM3P - CM - L/R - 90	9.0 kg	1 unit



Please consult MODU representative for further information and assistance.

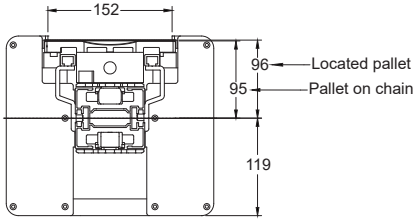
Units: Dimension (mm)

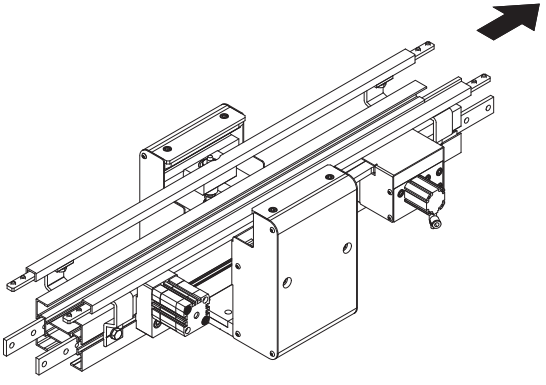
Pallet Locating Station

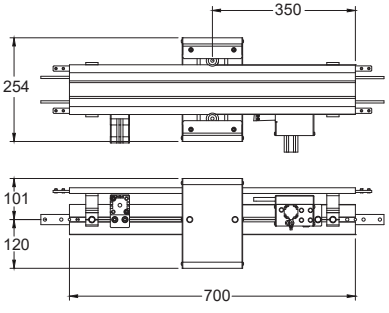


Locating station is component for positioning pallets in preparation for operations such as assembly, machining or testing. The locating stations are delivered complete with conveyor beam, guide rails and guide rail brackets and stoppers, for installation into a conveyor line.

Principles of operation
The pallet is lifted 1mm by means of two locating pins up against a hold-down guide on each side of the station. All actuating movements are made by means of pneumatic cylinders.

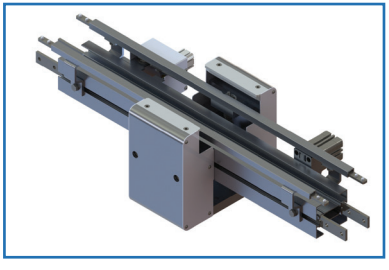






- Structure : Aluminum
- Locating accuracy: ±0.1 mm.
- Maximum vertical load (including pallet and product) in located position is 400N.

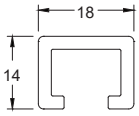
Item Code	Weight	Supply
MM3P - LS/160x100	13.0 kg	1 unit
MM3P - LS/160x130	13.7 kg	1 unit
MM3P - LS/160x175	14.4 kg	1 unit
MM3P - LS/160x225	15.0 kg	1 unit



Please consult MODU representative for further information and assistance.

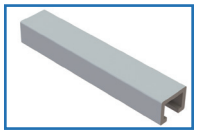
Units: Dimension (mm)

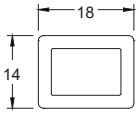
Guide Rail Accessories



Guide Rail - Straight

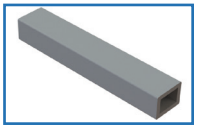
Item Code	Weight	Supply
ML2P RR 3S	1.08 kg	3m

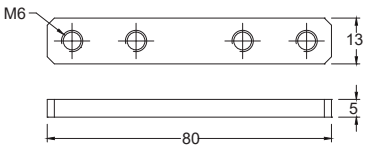




Guide Rail - Curve

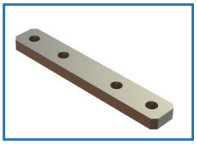
Item Code	Weight	Supply
ML2P RR 3C	1.3 kg	3m

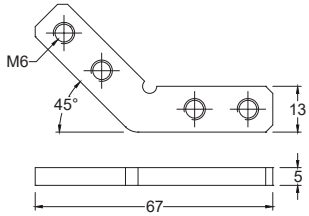




Guide Rail - Connector

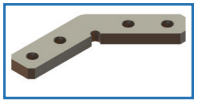
Item Code	Weight	Supply
ML2P CS 13X80	0.4 kg	10 pcs/pkt

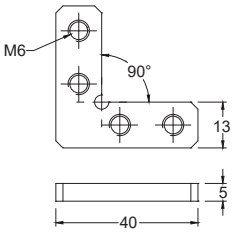




Guide Rail Connector 45°

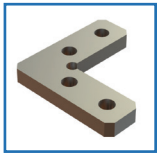
Item Code	Weight	Supply
ML2P CS 45	0.35 kg	10 pcs/pkt

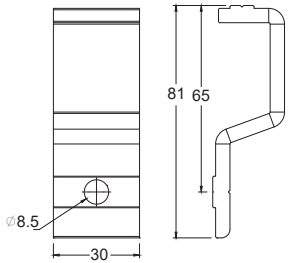




Guide Rail Connector 90°

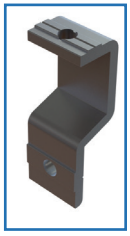
Item Code	Weight	Supply
ML2P CS 90	0.32 kg	10 pcs/pkt





Guide Rail Bracket

Item Code	Weight	Supply
ML2P BS 30	0.05 kg	1 pc



Please consult MODU representative for further information and assistance.

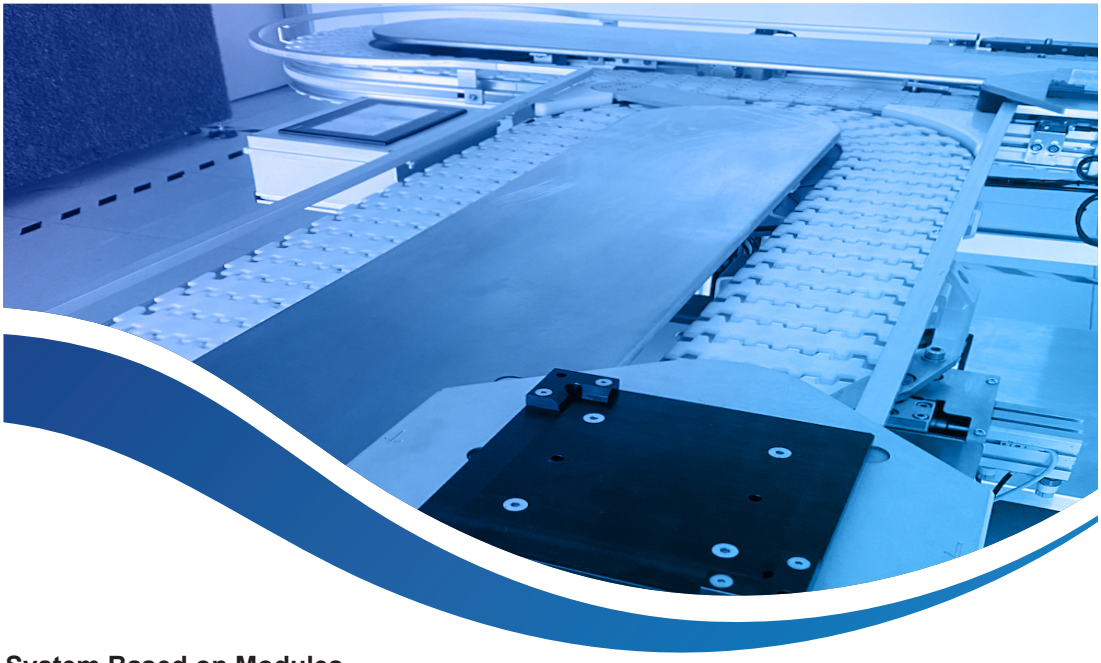
Units: Dimension (mm)

MODU ML2 PALLET CONVEYOR SERIES



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System Based on Modules

MODU's ML2 pallet system is a complete system for handling products on pallets (product carriers). An automated system is built on configurable standard modules.

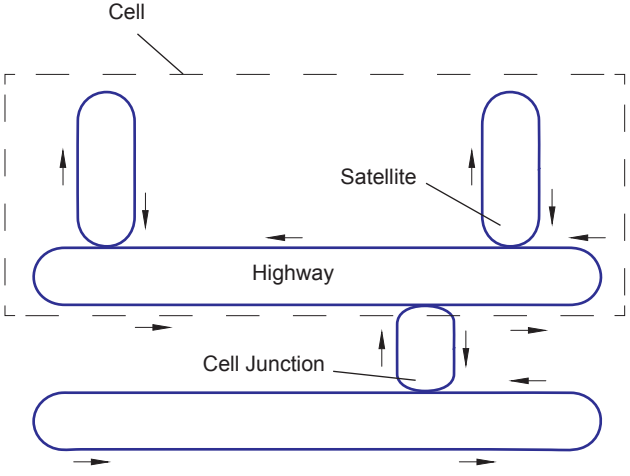
Standard modules make it very easy and fast to create simple as well as advanced layouts for routing, balancing, buffering and positioning of pallets. RFID identification in the pallets enables one piece track and trace and logistic control for the production line.

Divert or Merge Devices

Divert or merge devices are used for routing products by dividing or combining flows of products.

There is a main conveyor, a "highway", and separate subordinated conveyors, "satellites". On the satellites, products can be subjected to various operations such as turning, grinding, assembly or testing, without disturbing the main flow. After the operations, the products canconveyed back to the highway.

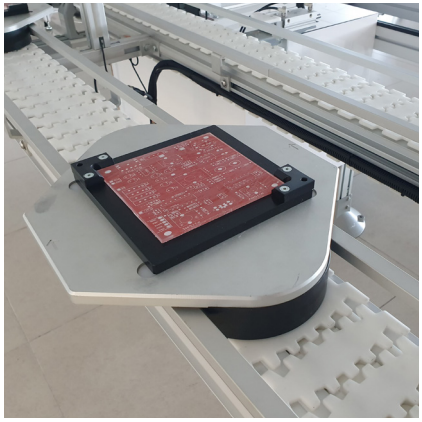
A combination of a highway and one or more satellites is often called a cell. Using divert/merge modules, it is possible to build cell junctions which facilitate transfer of a pallet from one cell to another. See figure.



Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

ML2 Pallet



Pallet Assortment

MODU ML2 pallet system includes pallets that can be adapted to specific requirements such as

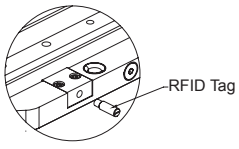
- Low friction
- High precision locating
- Fast indexing
- Fast pallet exchange
- Easy attachment of fixtures
- Low cost

A pallet consists of a pallet plate riding on two guide discs. The pallet plate is aluminium and machined. For normal environments each guide disc is equipped with a plastic slide plate.

RFID

- The pallet plate is equipped with a bracket for an IFM RFID tag.
- IFM read on the fly at speeds up to 30m/min.

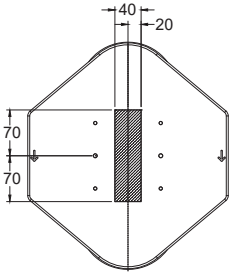
Threaded Type	M5x16.5mm
Operating Frequency	125 kHz
Memory (BIT)	224



Read/Write Head:
The read/write heads exchange data with the passive RFID tags at a maximum distance of 20mm. The read/write head has an M12 connector. The M12 cable is connected to an M12. The M12 cable is connected to an M12 ASi socket. Up to 31 read/write heads can be connected to one ASi system.

Technical Characteristics

Three Pallet sizes are available:
- 215 mm x 150mm x 53mm (LxWxH)
- 256 mm x 204mm x 53mm (LxWxH)
- 306 mm x 272mm x 53mm (LxWxH)

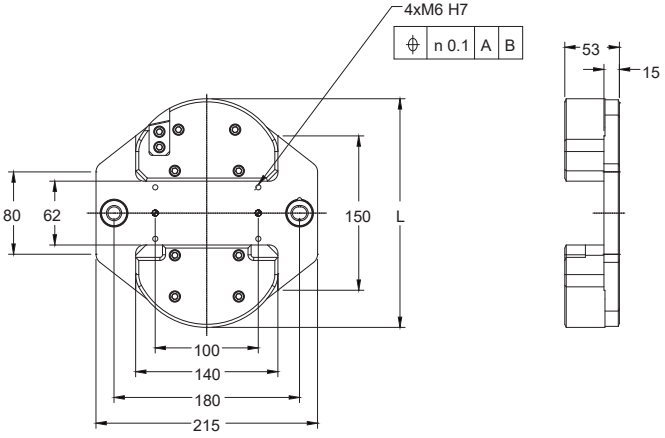


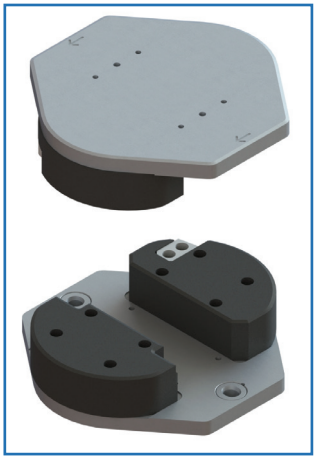
- Maximum Load on pallet is 30kg (Including pallet and fixture).

Pallet Loading
The centre of gravity of the product on the pallet (including fixture) must be located inside a 40 mm x 140 mm rectangle on the pallet. See figure.

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Pallet Type 1

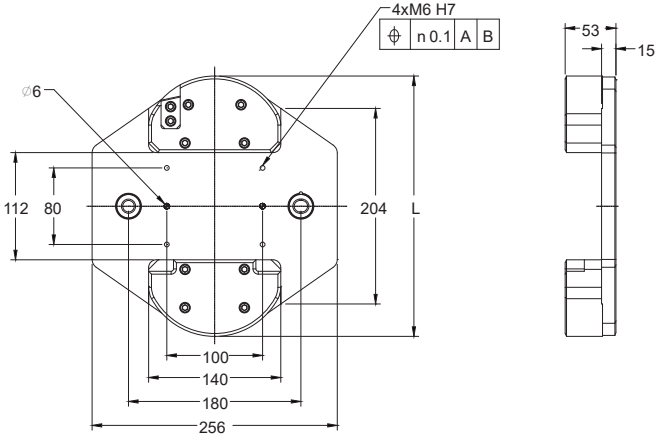


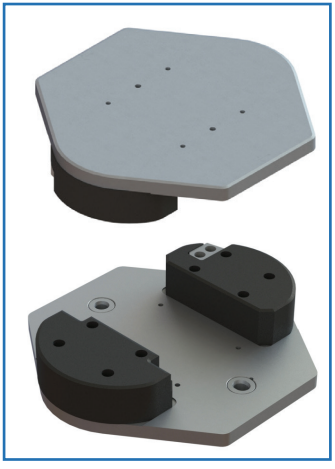


- Fully assembled unit, including two guide disc

Item Code	Length (L) mm	Weight	Supply
ML2P-PL S/215 X 222	222	3.0 kg	1 unit
ML2P-PL S/215 X 272	272	3.4 kg	1 unit
ML2P-PL S/215 X 322	322	4.0 kg	1 unit

Pallet Type 2





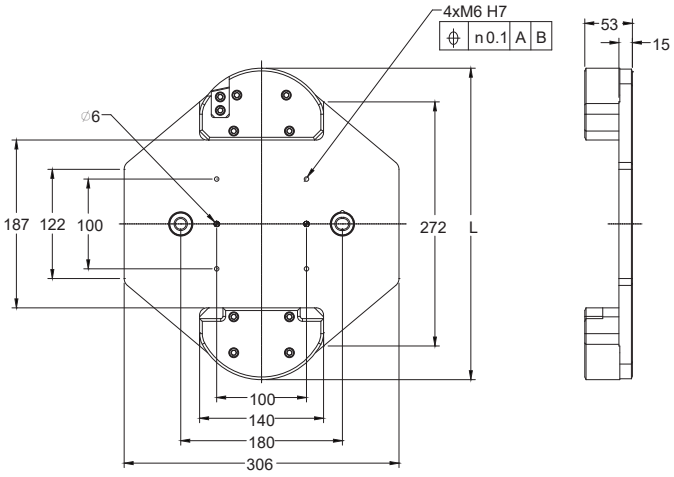
- Fully assembled unit, including two guide disc

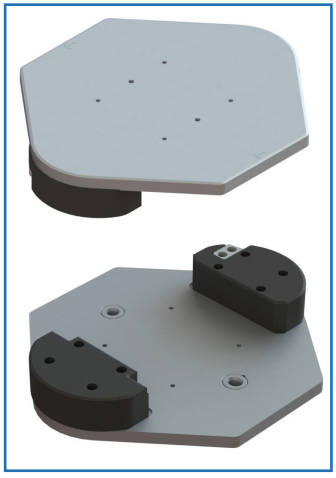
Item Code	Length (L) mm	Weight	Supply
ML2P-PL M/256 X 272	272	3.5 kg	1 unit
ML2P-PL M/256 X 322	322	4.0 kg	1 unit
ML2P-PL S/215 X 372	372	4.6 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Pallet Type 3





- Fully assembled unit, including two guide disc

Item Code	Length (L) mm	Weight	Supply
ML2P-PL L/306 X 347	347	4.0 kg	1 unit
ML2P-PL M/256 X 397	397	4.8 kg	1 unit
ML2P-PL S/215 X 447	447	5.7 kg	1 unit

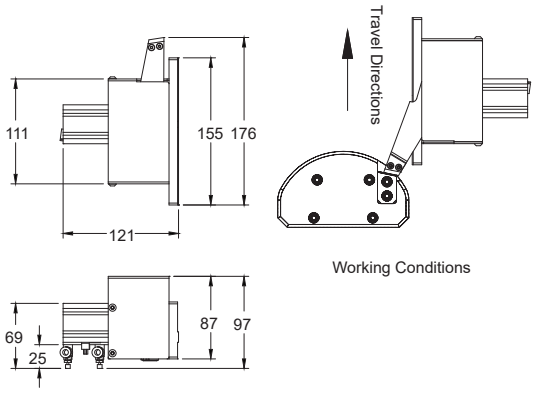
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

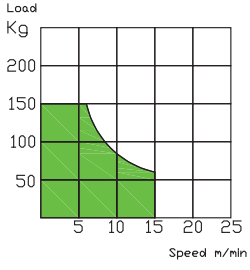
Pallet Stop Devices

Pneumatic pallet stoppers are used to stop pallets at selected position along the line. The stopper is mounted on the right side of the conveyor.

Type 1

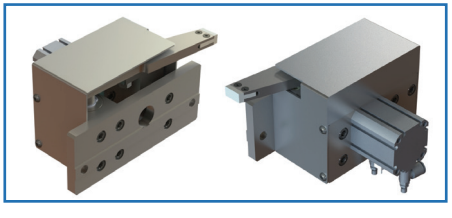


- Pneumatic stop device, Double-actuated
- Structure: anodized aluminium.
- Cover: stainless steel.
- Included ø 6 pipe connection and necessary mounting hardware.
- Connection: M5, Stroke: 20 mm

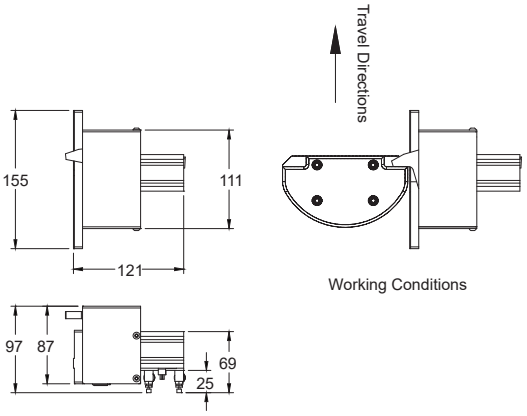


The diagram shows the maximum permissible weight of a group of pallets (product weight+pallet weight) comparison with the conveyor speed.

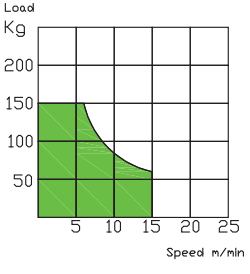
Item Code	Weight	Supply
ML2P - ST - F	1.8 kg	1 unit



Type 2

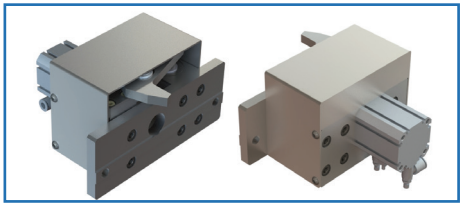


- Pneumatic stop device, Double-actuated
- Structure: anodized aluminium.
- Cover: stainless steel.
- Included ø 6 pipe connection and necessary mounting hardware.
- Connection: M5, Stroke: 20 mm



The diagram shows the maximum permissible weight of a group of pallets (product weight+pallet weight) comparison with the conveyor speed.

Item Code	Weight	Supply
ML2P - ST - R	1.4 kg	1 unit



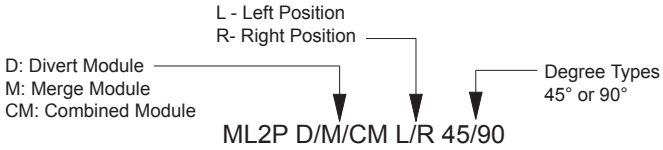
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

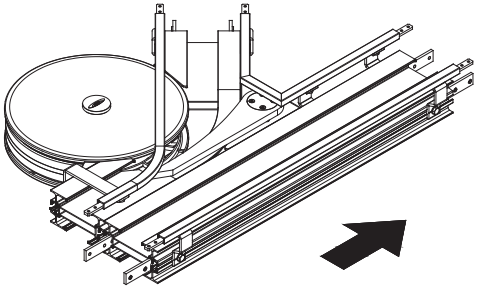
Divert & Merge Modules

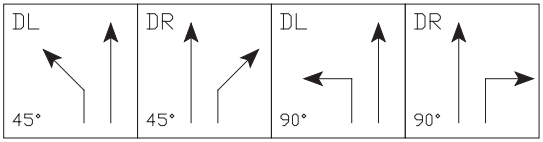
Divert and merge devices are used for routing products by dividing or combining flows of products.

Item Code Guidelines

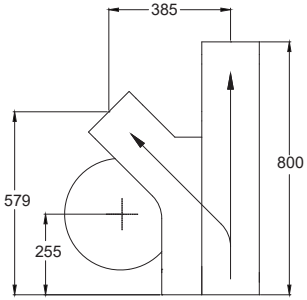


Divert Modules





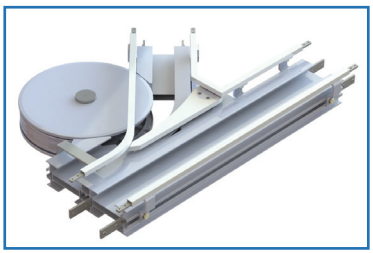
Divert Module 45°



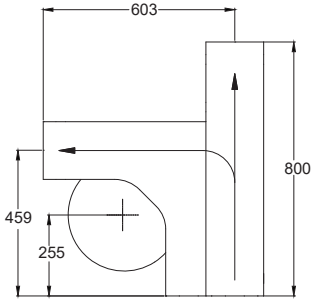
- Type L (divert to Left)

Effective track length: 1.50 m 1-way (3.00 m 2-way)

Item Code	Weight	Supply
ML2P - D - L/R - 45	15.9 kg	1 unit



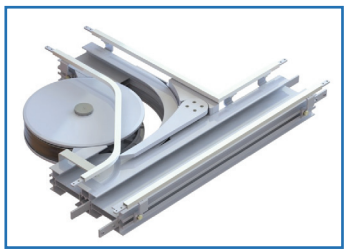
Divert Module 90°



- Type L (divert to Left)

Effective track length: 1.70 m 1-way (3.40 m 2-way)

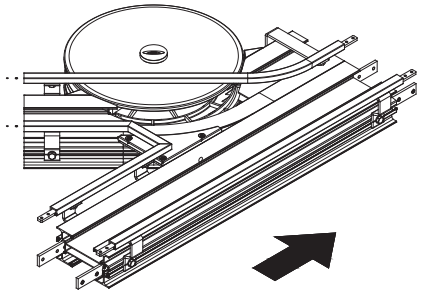
Item Code	Weight	Supply
ML2P - D - L/R - 90	19.2 kg	1 unit

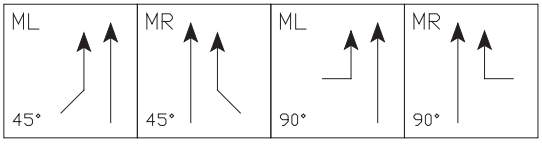


Please consult MODU representative for further information and assistance.

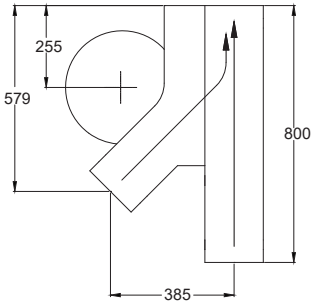
Units: Dimension (mm)

Merge Modules



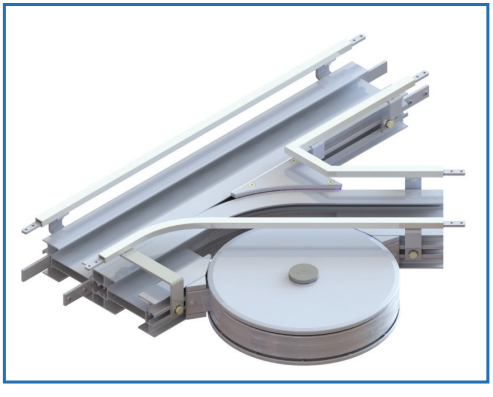


Merge Module 45°

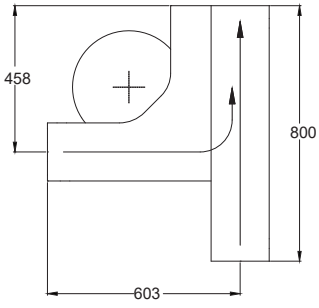


- Type R (merge to Right)
Effective track length: 1.50 m 1-way (3.00 m 2-way)

Item Code	Weight	Supply
ML2P - M - L/R - 45	13.0kg	1 unit

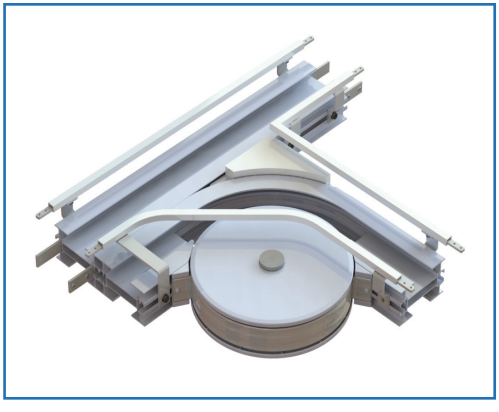


Divert Module 90°



- Type R (merge to Right)
Effective track length: 1.70 m 1-way (3.40 m 2-way)

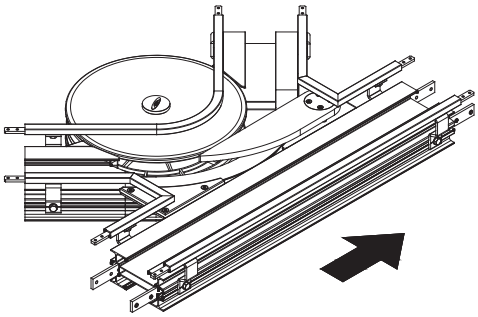
Item Code	Weight	Supply
ML2P - M - L/R - 90	15.0 kg	1 unit

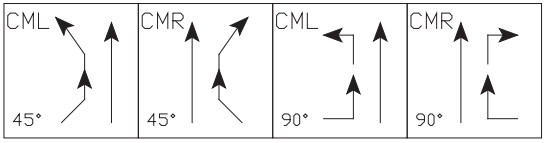


Please consult MODU representative for further information and assistance.

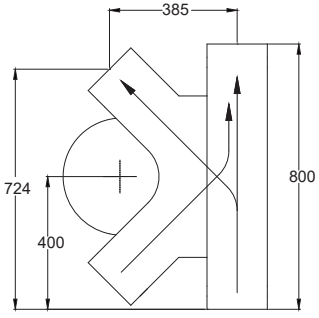
Units: Dimension (mm)

Combined Modules



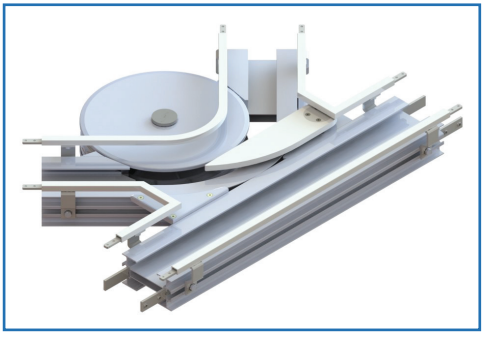


Divert & Merge Module 45°

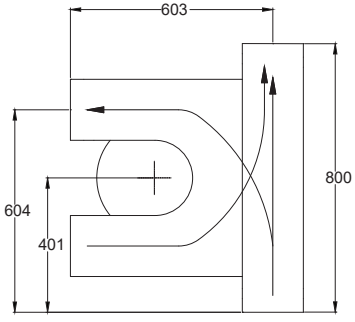


- Type L (divert to Left)
Effective track length: 1.60 m 1-way (3.20 m 2-way)

Item Code	Weight	Supply
ML2P - CM - L/R - 45	16.5 kg	1 unit

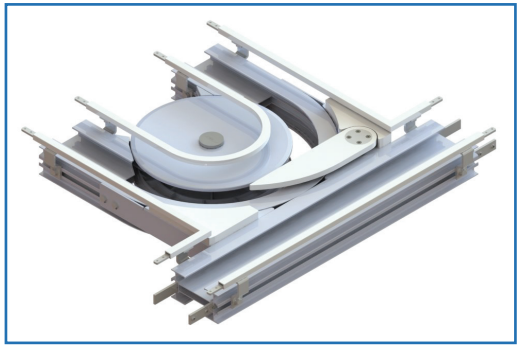


Divert & Merge Module 90°



- Type L (divert to Left)
Effective track length: 2.00 m 1-way (4.00 m 2-way)

Item Code	Weight	Supply
ML2P - CM - L/R - 90	19.0 kg	1 unit



Please consult MODU representative for further information and assistance.

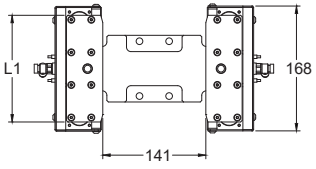
Units: Dimension (mm)

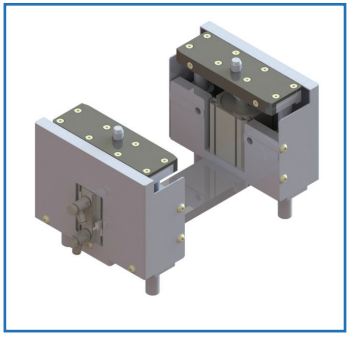
Pallet Locating Station

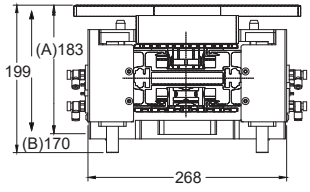
Locating station is component for positioning pallets in preparation for operations such as assembly, machining or testing. The locating stations are delivered complete with conveyor beam, guide rails and guide rail brackets and stoppers, for installation into a conveyor line.

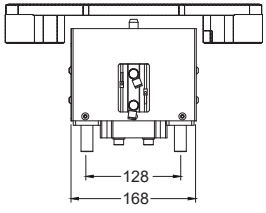
Principles of operation
The pallet is lifted 1mm by means of two locating pins up against a hold-down guide on each side of the station. All actuating movements are made by means of pneumatic cylinders.

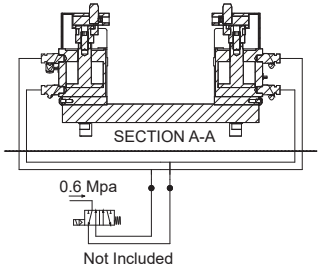
Type 1 - L1









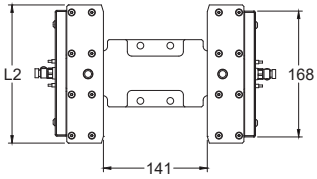


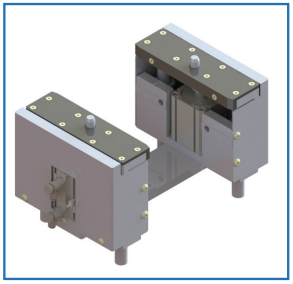
- Frame : Stainless Steel and Aluminum
- Locating accuracy: ±0.3 mm.
- Maximum vertical force per ruler at 0.6 Mpa : 500N including pallet weight.
- The locating station should be installed on a separate support which is not rigidly connected to the conveyor beam.

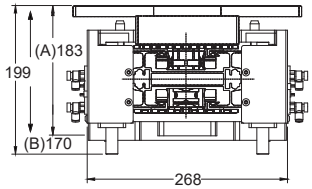
Item Code	L	Weight	Supply
ML2P - LS - L1	150 mm	2.6 kg	1 unit

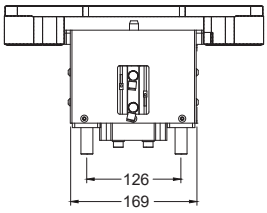
Please consult MODU representative for further information and assistance. Units: Dimension (mm)

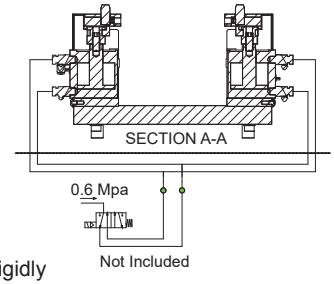
Type 2 - L2







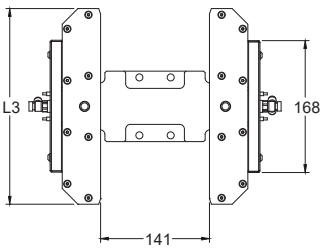


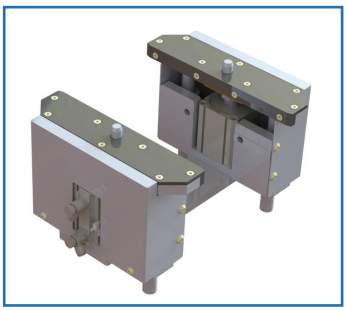


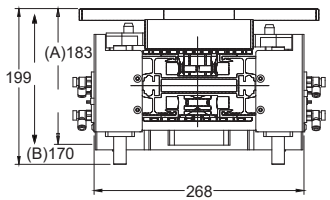
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- Maximum vertical force per ruler at 0.6 Mpa : 500N including pallet weight.
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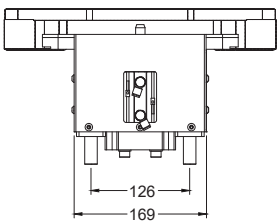
Item Code	L	Weight	Supply
ML2P - LS - L2	168 mm	2.8 kg	1 unit

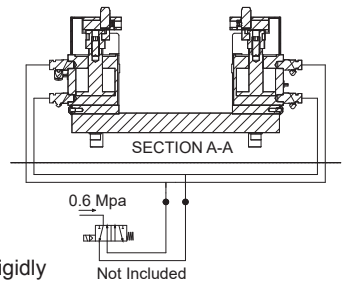
Type 3 - L3











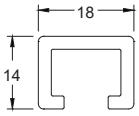
- Frame : Stainless Steel and Aluminum
- Locating accuracy: ±0.3 mm.
- Maximum vertical force per ruler at 0.6 Mpa : 500N including pallet weight.
- The locating station should be installed on a separate support which is not rigidly connected to the conveyor beam.

Item Code	L	Weight	Supply
ML2P - LS - L3	240 mm	3.0 kg	1 unit

Please consult MODU representative for further information and assistance.

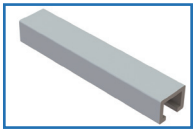
Units: Dimension (mm)

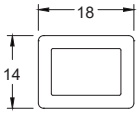
Guide Rail Accessories



Guide Rail - Straight

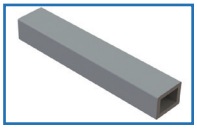
Item Code	Weight	Supply
ML2P RR 3S	1.08 kg	3m

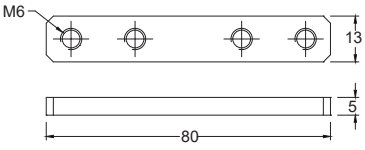




Guide Rail - Curve

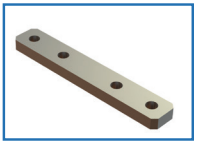
Item Code	Weight	Supply
ML2P RR 3C	1.3 kg	3m

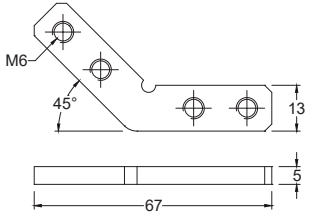




Guide Rail - Connector

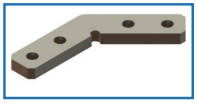
Item Code	Weight	Supply
ML2P CS 13X80	0.4 kg	10 pcs/pkt

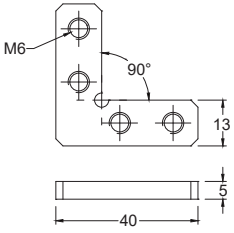




Guide Rail Connector 45°

Item Code	Weight	Supply
ML2P CS 45	0.35 kg	10 pcs/pkt

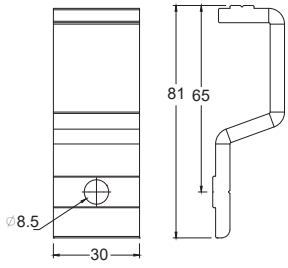




Guide Rail Connector 90°

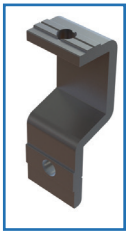
Item Code	Weight	Supply
ML2P CS 90	0.32 kg	10 pcs/pkt





Guide Rail Bracket

Item Code	Weight	Supply
ML2P BS 30	0.05 kg	1 pc



Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

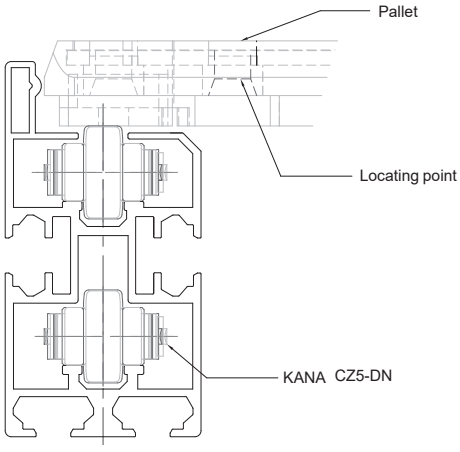
MODU DOUBLE PLUS PALLET CONVEYOR SERIES



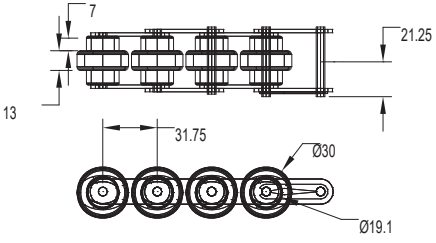
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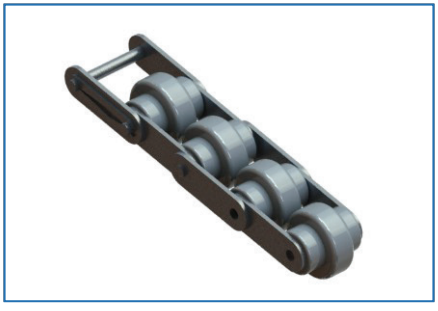
Cross Section 188
Chain 188
Drive Unit 189
Idler Unit 189
Pallet Stopper 190
Pallet Pop Up Unit 190
Conveyor Beam 191
Support Structure 191

Cross Section



Chain





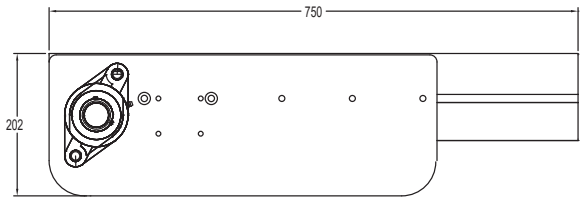
KANA Chain

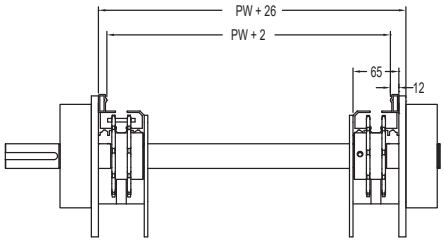
Item Code	Supply
MDP CP 3	3m/roll

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Unit

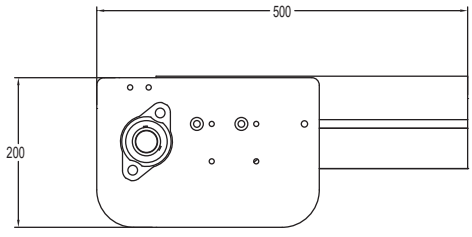


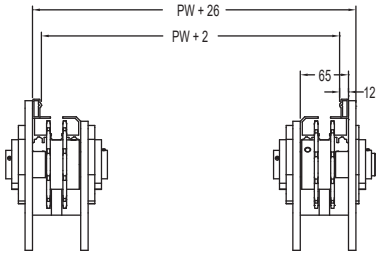


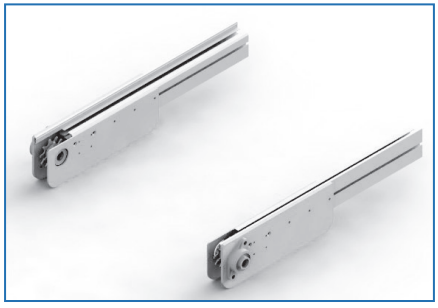


Item Code	Supply
MDP DD R/L S/M	1 unit

Idler Unit





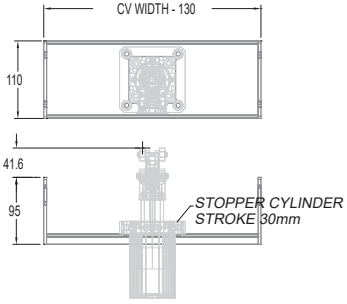


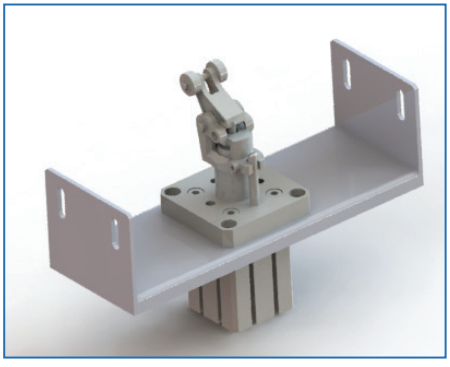
Item Code	Supply
MDP IE 500	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

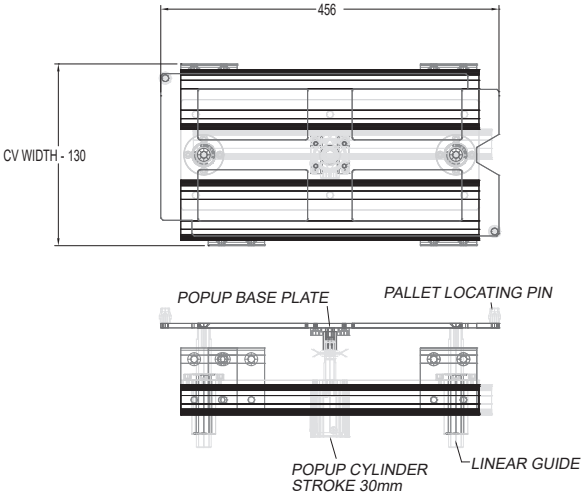
Pallet Stopper

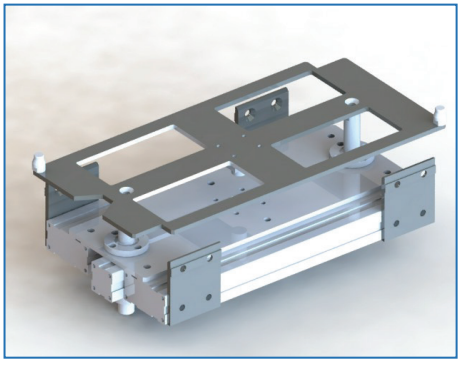




Item Code	Supply
MDP ST	1 unit

Pallet Pop Up Unit



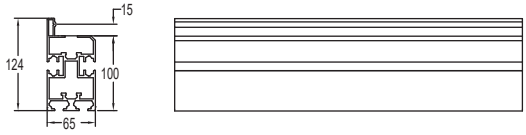


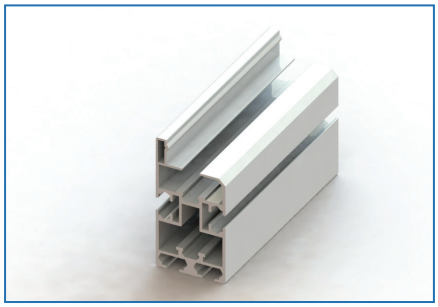
Item Code	Supply
MDP PLS	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor Beam

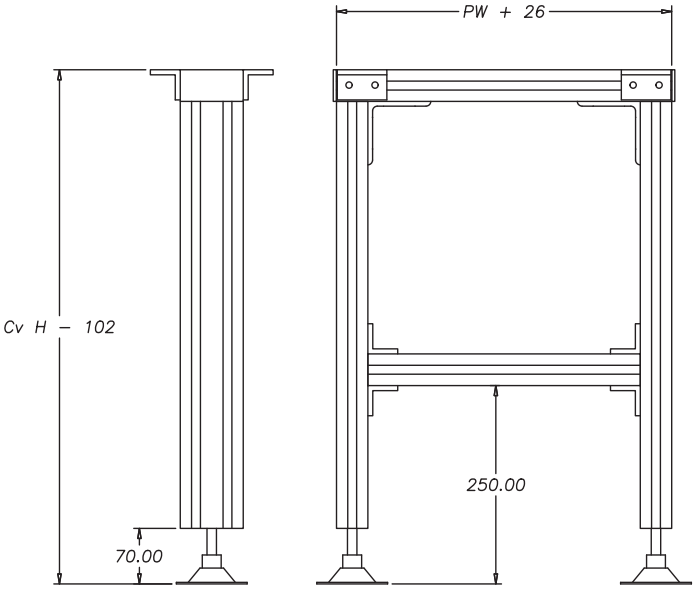


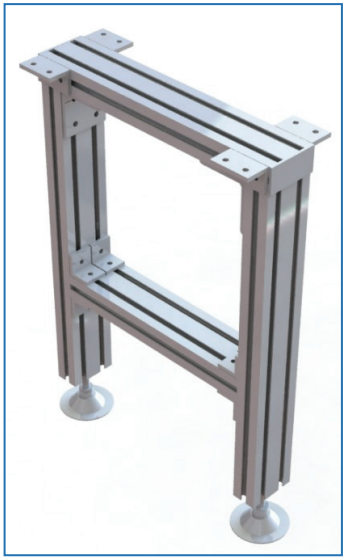


- Minimum order length: 250mm

Item Code	Material	Supply	Weight
MDP-CB 3	Aluminium	3m	10.4 kg

Support Structure





Item Code	Material	Supply
MDP B1	Aluminium	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

MODU CONVEYOR GUIDE (MG)

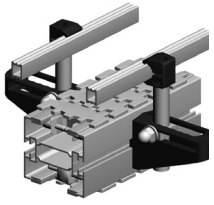
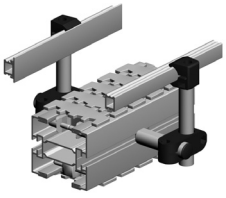
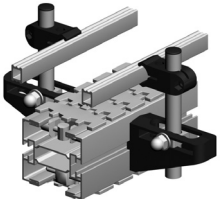
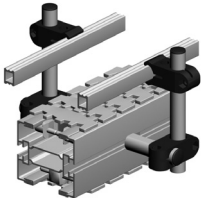
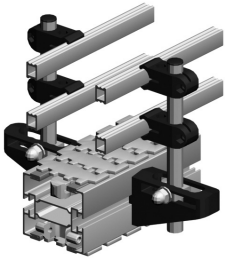
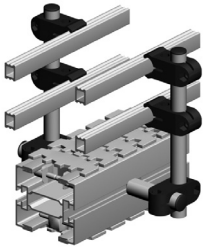
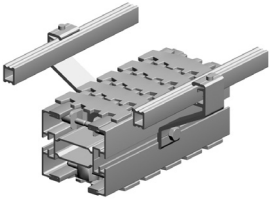
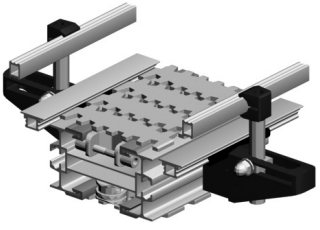
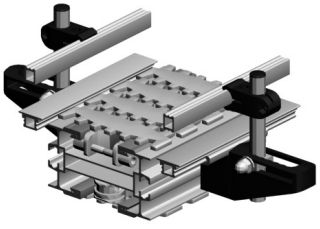
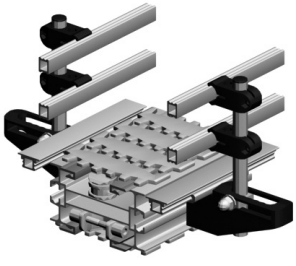
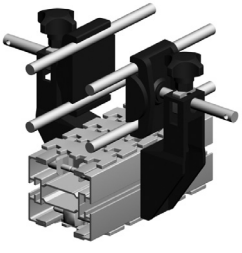
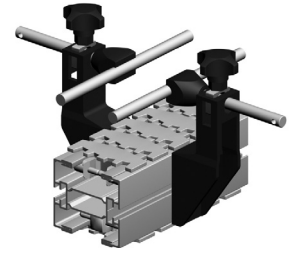


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Guide Rail Support MG 202
Guide Rail Accessories MG..... 204

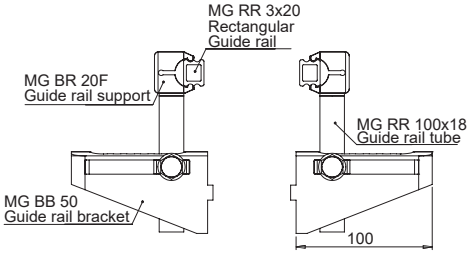
Side Guide Configuration MG

Guide Assembly

		
Type 1	Type 2	Type 3
		
Type 4	Type 5	Type 6
		
Type 7	Type 8	Type 9
		
Type 10	Type 11	Type 12

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

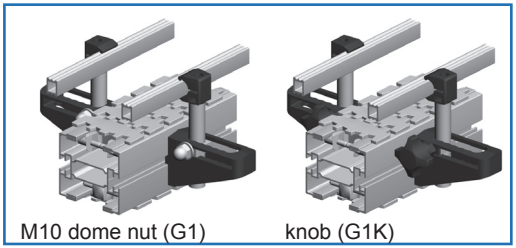
Guide Assembly - Type 1 (G1 &G1K)



Supply:
- Items are supplied individually.

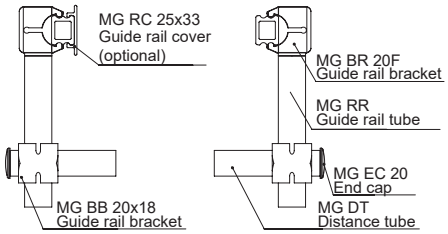
Features:
- Height & width adjustable by single dome nut or knob.
- Adjustment every 10mm on one side and other sidecontinuous adjustment.

Option:
- PE Guide rail cover (MG RC 25x23 or MG RC 25x33)



Series	Width Adjustment		Item Code	Description
	Min	Max		
MP	50	150	MP G1	M10 dome nut
	50	150	MP G1K	With knob
MS3	70	170	MS3 G1	M10 dome nut
	70	170	MS3 G1K	With knob
MM3	90	190	MM3 G1	M10 dome nut
	90	190	MM3 G1K	With knob
ML2	150	250	ML2 G1	M10 dome nut
	150	250	ML2 G1K	With knob
MX2	230	330	MX2 G1	M10 dome nut
	230	330	MX2 G1K	With knob
MT2	364	464	MT2 G1	M10 dome nut
	364	464	MT2 G1K	With knob
MR2	485	585	MR2 G1	M10 dome nut
	485	585	MR2 G1K	With knob
MF2	630	730	MF2 G1	M10 dome nut
	630	730	MF2 G1K	With knob

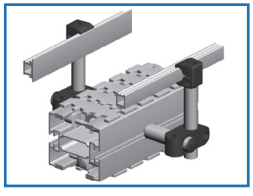
Guide Assembly - Type 2



Supply:
- Items are supplied individually.

Features:
- Height and width adjustable
- Distance tube standard width:
  70 & 100mm
  Other size, please specify

Option:
- PE Guide rail cover (MG RC 25x23 or MG RC 25x33)

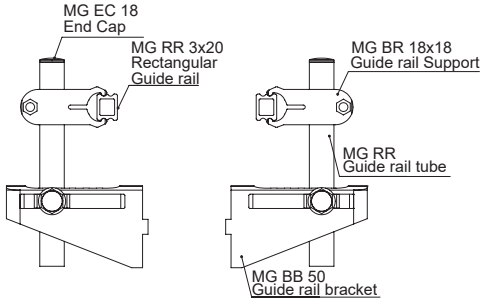


Series	Item Code
MP	MP G2
MS3	MS3 G2
MM3	MM3 G2
ML2	ML2 G2
MX2	MX2 G2
MT2	MT2 G2
MR2	MR2 G2
MF2	MF2 G2

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

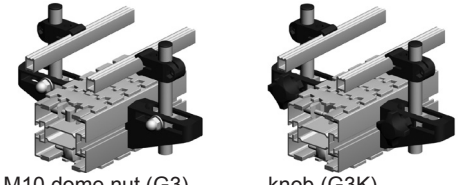
Guide Assembly - Type 3 (G3 &G3K)



Supply:
- Items are supplied individually.

Features:
- Height & width adjustable by single dome nut or knob.
- Adjustment every 10mm on one side and other sidecontinuous adjustment.

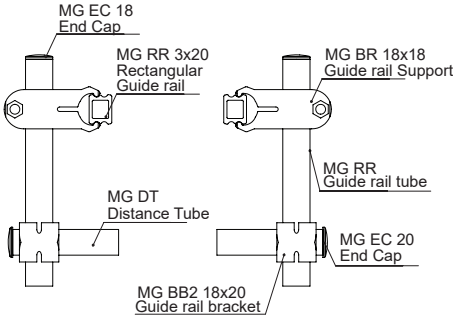
Option:
- PE Guide rail cover (MG RC 25x23 or MG RC 25x33)



M10 dome nut (G3) knob (G3K)

Series	Width Adjustment		Item Code	Description
	Min	Max		
MP	10	110	MP G3	M10 dome nut
	10	110	MP G3K	With knob
MS3	25	125	MS3 G3	M10 dome nut
	25	125	MS3 G3K	With knob
MM3	45	145	MM3 G3	M10 dome nut
	45	145	MM3 G3K	With knob
ML2	100	200	ML2 G3	M10 dome nut
	100	200	ML2 G3K	With knob
MX2	185	285	MX2 G3	M10 dome nut
	185	285	MX2 G3K	With knob
MT2	319	419	MT2 G3	M10 dome nut
	319	419	MT2 G3K	With knob
MR2	440	540	MR2 G3	M10 dome nut
	440	540	MR2 G3K	With knob
MF2	585	685	MF2 G3	M10 dome nut
	585	685	MF2 G3K	With knob

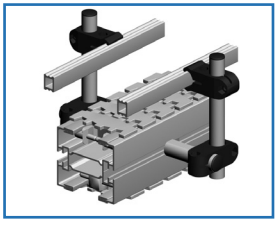
Guide Assembly - Type 4



Supply:
- Items are supplied individually.

Features:
- Height and width adjustable
- Distance tube standard width: 70 & 100mm
  Other size, please specify

Option:
- PE Guide rail cover (MG RC 25x23 or MG RC 25x33)

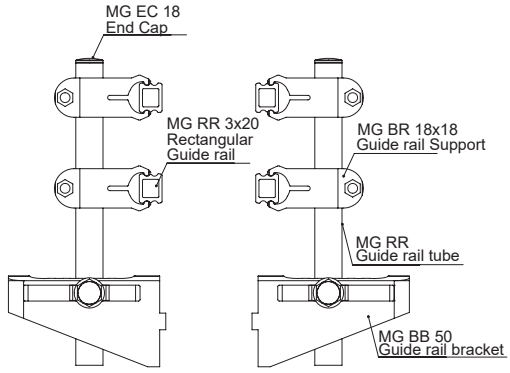


Series	Item Code
MP	MP G4
MS3	MS3 G4
MM3	MM3 G4
ML2	ML2 G4
MX2	MX2 G4
MT2	MT2 G4
MR2	MR2 G4
MF2	MF2 G4

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

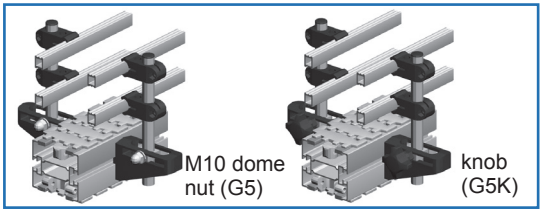
Guide Assembly - Type 5 (G5 &G5K)



Supply:
- Items are supplied individually.

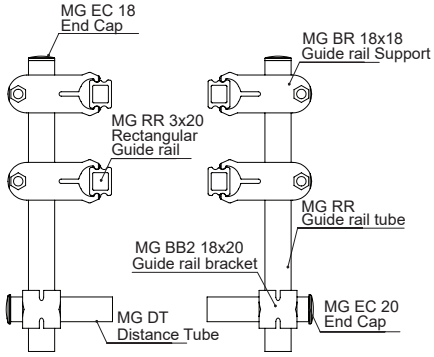
Features:
- Height & width adjustable by single dome nut or knob.
- Adjustment every 10mm on one side and other sidecontinuous adjustment.

Option:
- PE Guide rail cover (MG RC 25x23 or MG RC 25x33)



Series	Width Adjustment		Item Code	Description
	Min	Max		
MP	10	110	MP G5	M10 dome nut
	10	110	MP G5K	With knob
MS3	25	125	MS3 G5	M10 dome nut
	25	125	MS3 G5K	With knob
MM3	45	145	MM3 G5	M10 dome nut
	45	145	MM3 G5K	With knob
ML2	100	200	ML2 G5	M10 dome nut
	100	200	ML2 G5K	With knob
MX2	185	285	MX2 G5	M10 dome nut
	185	285	MX2 G5K	With knob
MT2	319	419	MT2 G5	M10 dome nut
	319	419	MT2 G5K	With knob
MR2	440	540	MR2 G5	M10 dome nut
	440	540	MR2 G5K	With knob
MF2	585	685	MF2 G5	M10 dome nut
	585	685	MF2 G5K	With knob

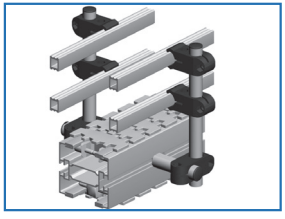
Guide Assembly - Type 6



Supply:
- Items are supplied individually.

Features:
- Height and width adjustable
- Distance tube standard width:
  70 & 100mm
  Other size, please specify

Option:
- PE Guide rail cover (MG RC 25x23 or MG RC 25x33)

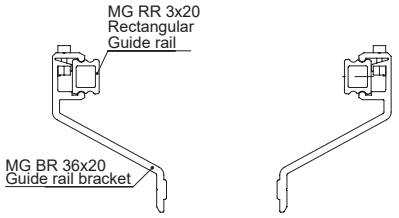


Series	Item Code
MP	MP G6
MS3	MS3 G6
MM3	MM3 G6
ML2	ML2 G6
MX2	MX2 G6
MT2	MT2 G6
MR2	MR2 G6
MF2	MF2 G6

Please consult MODU representative for further information and assistance.

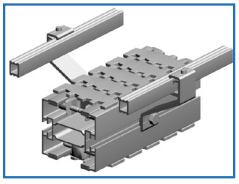
Units: Dimension (mm)

Guide Assembly - Type 7

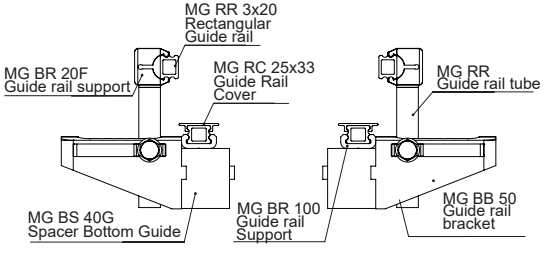


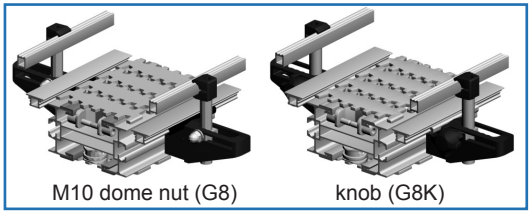
Supply:
- Items are supplied individually.

Series	Max Width	Item Code
MP	117.5	MP G7
MS3	137.5	MS3 G7
MM3	157.5	MM3 G7
ML2	216.5	ML2 G7
MX2	296.5	MX2 G7
MT2	431.5	MT2 G7
MR2	552.5	MR2 G7
MF2	697.5	MF2 G7



Guide Assembly - Type 8

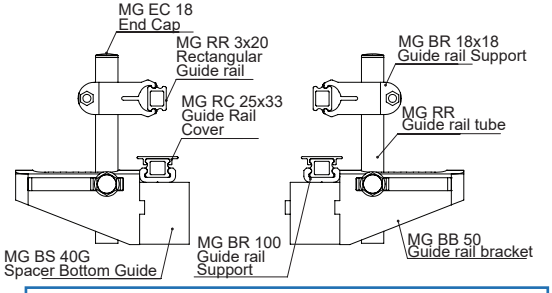


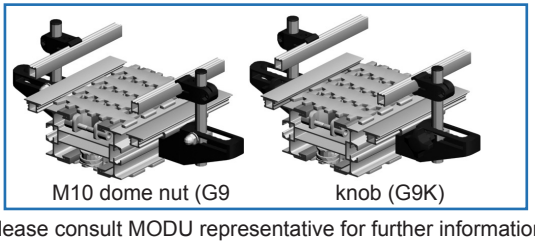


Supply:
- Items are supplied individually.

Series	Width Adjustment		Item Code	Description
	Min	Max		
ML2	230	330	ML2 G8	M10 dome nut
	230	330	ML2 G8K	With knob
MX2	310	410	MX2 G8	M10 dome nut
	310	410	MX2 G8K	With knob
MT2	364	464	MT2 G8	M10 dome nut
	364	464	MT2 G8K	With knob
MR2	485	585	MR2 G8	M10 dome nut
	485	585	MR2 G8K	With knob
MF2	630	730	MF2 G8	M10 dome nut
	630	730	MF2 G8K	With knob

Guide Assembly - Type 9



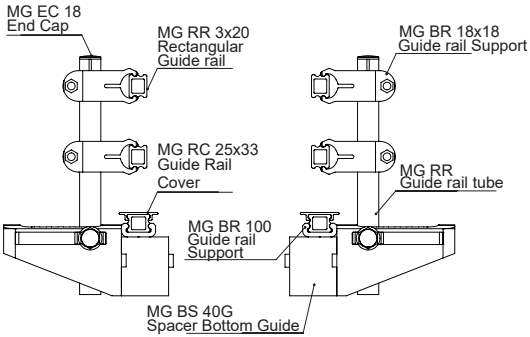


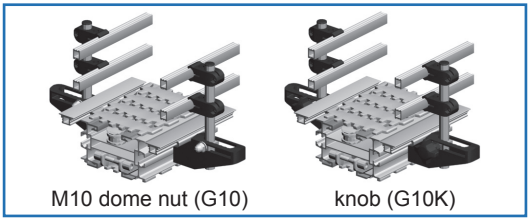
Supply:
- Items are supplied individually.

Series	Width Adjustment		Item Code	Description
	Min	Max		
ML2	175	275	ML2 G9	M10 dome nut
	175	275	ML2 G9K	With knob
MX2	255	355	MX2 G9	M10 dome nut
	255	355	MX2 G9K	With knob
MT2	359	459	MT2 G9	M10 dome nut
	359	459	MT2 G9K	With knob
MR2	510	610	MR2 G9	M10 dome nut
	510	610	MR2 G9K	With knob
MF2	655	755	MF2 G9	M10 dome nut
	655	755	MF2 G9K	With knob

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Guide Assembly - Type 10

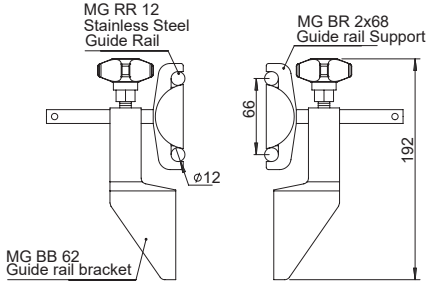




Supply:
- Items are supplied individually.

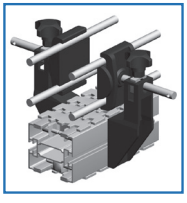
Series	Width Adjustment		Item Code	Description
	Min	Max		
ML2	175	275	ML2 G10	M10 dome nut
	175	275	ML2 G10K	With knob
MX2	255	355	MX2 G10	M10 dome nut
	255	355	MX2 G10K	With knob
MT2	359	459	MT2 G10	M10 dome nut
	359	459	MT2 G10K	With knob
MR2	510	610	MR2 G10	M10 dome nut
	510	610	MR2 G10K	With knob
MF2	655	755	MF2 G10	M10 dome nut
	655	755	MF2 G10K	With knob

Guide Assembly - Type 11

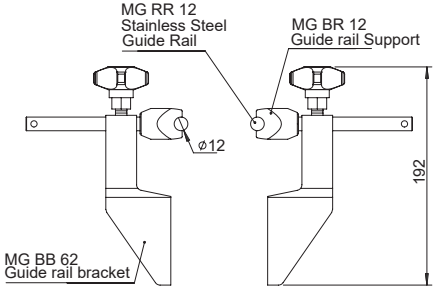


Supply:
- Items are supplied individually.

Series	Max Width	Item Code
MP	35	MP G11
MS3	55	MS3 G11
MM3	75	MM3 G11
ML2	135	ML2 G11
MX2	215	MX2 G11
MT2	349	MT2 G11
MR2	470	MR2 G11
MF2	615	MF2 G11

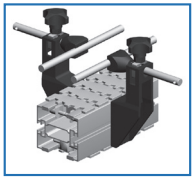


Guide Assembly - Type 12



Supply:
- Items are supplied individually.

Series	Max Width	Item Code
MP	40	MP G12
MS3	60	MS3 G12
MM3	80	MM3 G12
ML2	140	ML2 G12
MX2	220	MX2 G12
MT2	354	MT2 G12
MR2	475	MR2 G12
MF2	620	MF2 G12

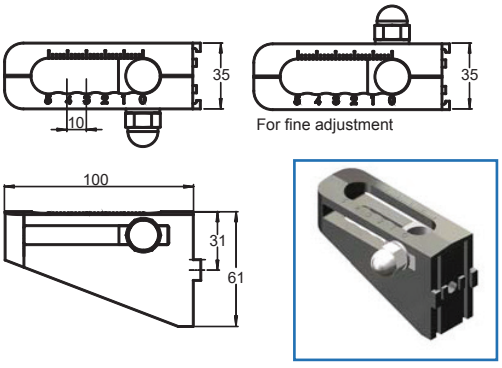


Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Guide Rail Brackets MG

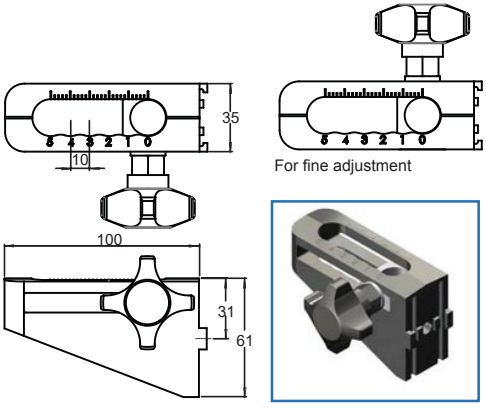
Guide Rail Bracket (Dome Nut)



- M10 dome nut and eye bolt included

Item Code	Weight	Supply
MG BB 50N	0.13 kg	1 set

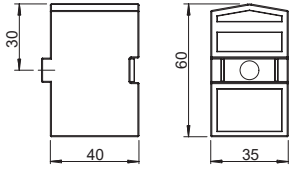
Guide Rail Bracket (Knob)



- Knob included

Item Code	Weight	Supply
MG BB 50K	0.16 kg	1 set

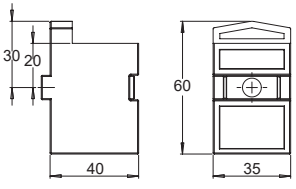
Spacer



- To be used with MG BB 50 & MG BB 50K

Item Code	Weight	Supply
MG BS 40	0.04 kg	1 pc

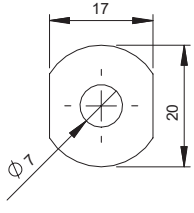
Spacer with bottom guide



- To be used with MG BR 100, guide rail support not included
- To be used with MG BB 50 & MG BB 50K

Item Code	Weight	Supply
MG BS 40G	0.06 kg	1 pc

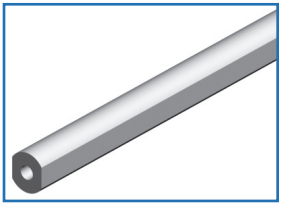
Distance Tube



- Standard Length, L = 70mm or 100mm
- Non standard length to be specified

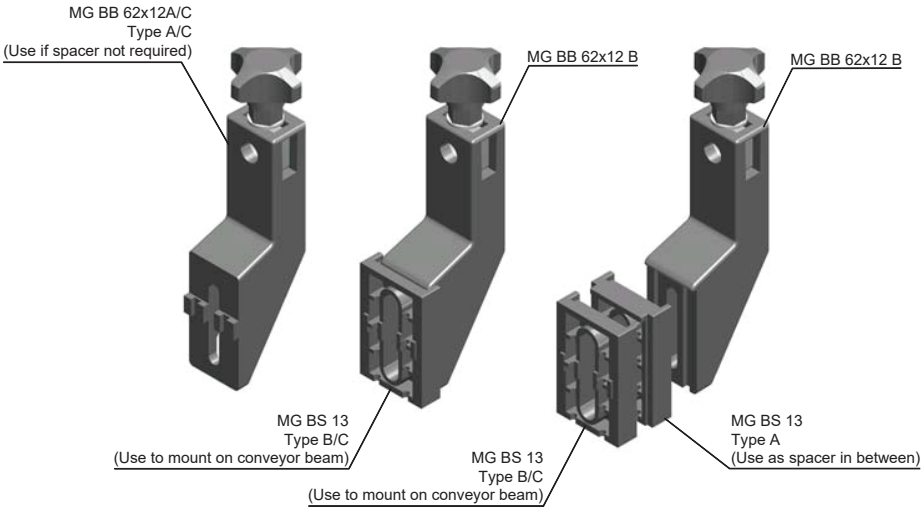
Item Code	Weight	Supply
MG DT 3x20	5 kg	3m
MG DT 70x20	0.5 kg	10 pcs/pkt
MG DT 100x20	0.7 kg	10 pcs/pkt
MG DT Lx20	** kg	10 pcs/pkt

Single side tap M8x35

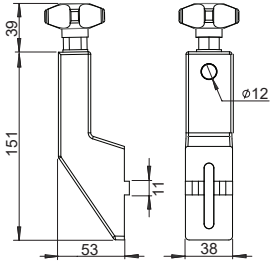


Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

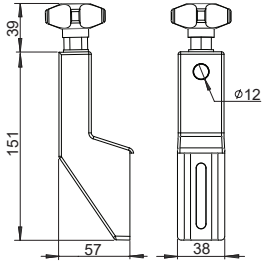


Guide Rail Bracket Type A/C



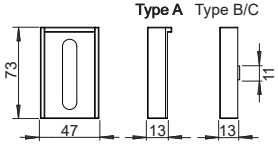
Item Code	Weight	Supply
MG BB 62x12 A/C	0.25 kg	1 pc

Guide Rail Bracket Type B



Item Code	Weight	Supply
MG BB 62x12 B	0.25 kg	1 pc

Spacer Type A/B/C



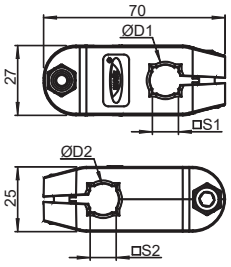
- Type A use to increase width by n x 13mm
  (where n=no. of spacer use)
- Type B for MS3, MM3, ML2, MX2, MT2, MR2, MF2
- Type C for MP, MS2

Item Code	Weight	Supply
MG BS 13 A/B/C	0.04 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Guide Rail Bracket



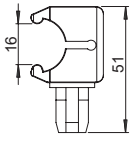


- Screws included

Item Code	D1	S1	D2	S2	Weight	Supply
MG BB2 12x12	12 mm	10 mm	12 mm	10 mm	0.06 kg	10 pcs/pkt
MG BB2 18x18	18 mm	15 mm	18 mm	15 mm	0.06 kg	10 pcs/pkt
MG BB2 18x20	18 mm	15 mm	20 mm	16 mm	0.06 kg	10 pcs/pkt
MG BB2 20x20	20 mm	16 mm	20 mm	16 mm	0.06 kg	10 pcs/pkt

Guide Rail Support MG

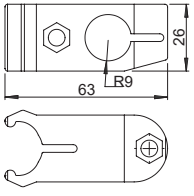
Guide Rail Support

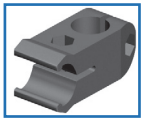




Item Code	Weight	Supply
MG BR 20F	0.25 kg	10 pcs/pkt

Guide Rail Support



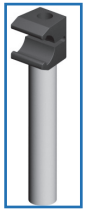


Item Code	Weight	Supply
MG BR 18x18	0.25 kg	10 pcs/pkt

Guide Rail Support with Tube

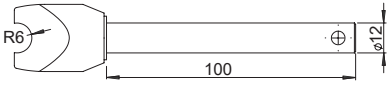


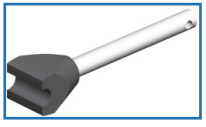
- MG BR 20F bracket preassembled with guide rail tube, Ø18mm
- Standard length, L = 100, 150, 200mm or to be specified



Item Code	Weight	Supply
MG BR 20Fx100	0.65 kg	10 pcs/pkt
MG BR 20Fx150	0.75 kg	10 pcs/pkt
MG BR 20Fx200	0.95 kg	10 pcs/pkt
MG BR 20FxL	** kg	10 pcs/pkt

Guide Rail Support





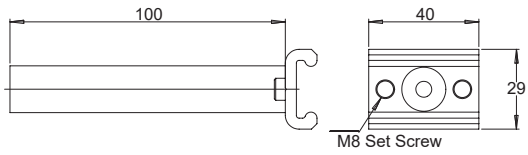
- Single clamp for 12mm diameter shaft.

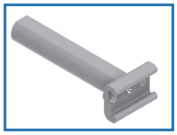
Item Code	Weight	Supply
MG BR 12	0.1 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

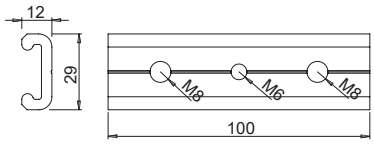
Guide Rail Support

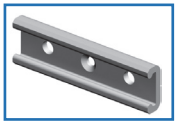




Item Code	Weight	Supply
MG BR 40H	0.1 kg	1 pc

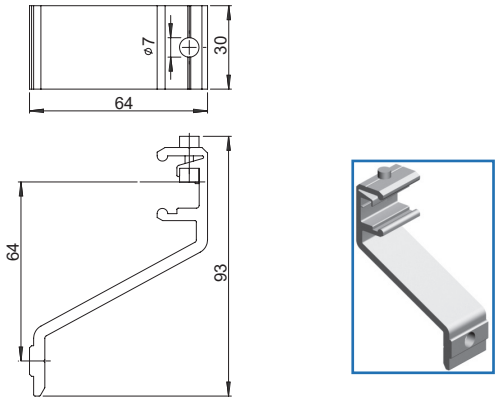
Guide Rail Support





Item Code	Weight	Supply
MG BR 100	0.5 kg	10 pcs/pkt

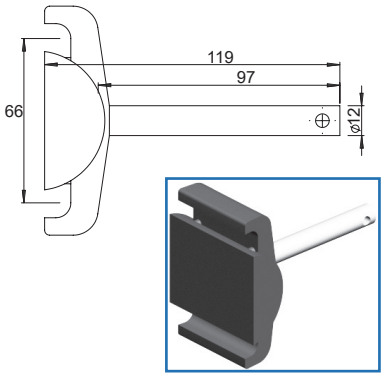
Guide Rail Support



- fixed height and width

Item Code	Weight	Supply
MG BR 36x20	0.5 kg	1 pc

Guide Rail Support



- Double clamp for 12mm diameter shaft.

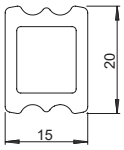
Item Code	Weight	Supply
MG BR 2x68	0.2 kg	1 pc

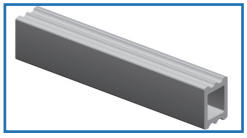
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Guide Rail Accessories MG

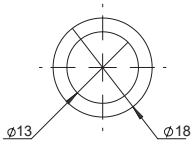
Rectangular Guide Rail

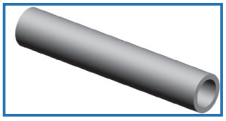




Item Code	Material	Weight	Supply
MG RR 3x20	Aluminium	1.2 kg	3m
MG RR 3x20P	PE	1.0 kg	3m

Guide Rail Tube

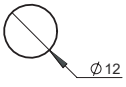


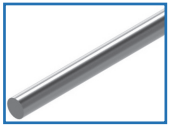


- Standard length L = 100, 150 or 200mm
- Non standard length to be specified.

Item Code	Weight	Supply
MG RR 3x18	1.2 kg	3m
MG RR 100x18	0.4 kg	10 pcs/pkt
MG RR 150x18	0.5 kg	10 pcs/pkt
MG RR 200x18	0.7 kg	10 pcs/pkt
MG RR Lx18	** kg	10 pcs/pkt

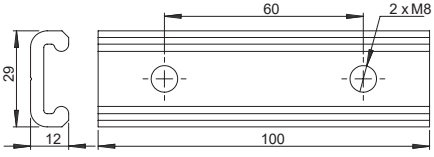
Stainless Steel Guide Rail





Item Code	Weight	Supply
MG RR 12	2.7 kg	3m

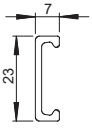
Connecting Sleeve

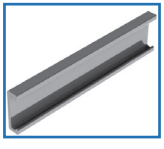




Item Code	Weight	Supply
MG RC 100	0.5 kg	10 pcs/pkt

PE Guide Rail Cover

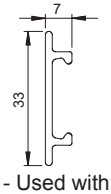


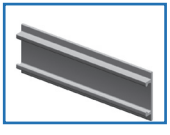


- Used with rectangular guide rail (MG RR 3x20)

Item Code	Weight	Supply
MG RC 25x23	1.4 kg	25m/roll

PE Guide Rail Cover





- Used with rectangular guide rail (MG RR 3x20)

Item Code	Weight	Supply
MG RC 25x33	1.5 kg	25m/roll

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

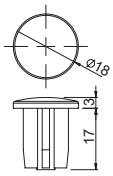
End Cap, Ø12mm

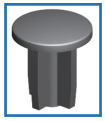


- To be used with MG RR 12

Item Code	Weight	Supply
MG EC 12	0.02 kg	10 pcs/pkt

End Cap, Ø18mm

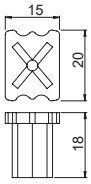


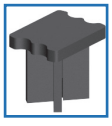


- To be used with MG RR 3x18

Item Code	Weight	Supply
MG EC 18	0.05 kg	50 pcs/pkt

End Cap, Ø20mm

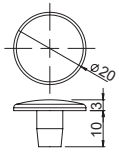




- To be used with MG RR 3x20

Item Code	Weight	Supply
MG EC 20S	0.08 kg	50 pcs/pkt

End Cap, Ø20mm

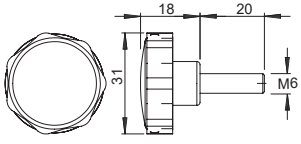




- To be used with MG DT 3x20

Item Code	Weight	Supply
MG EC 20	0.05 kg	50 pcs/pkt

Knob





Item Code	Weight	Supply
MG BK 20	0.01 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

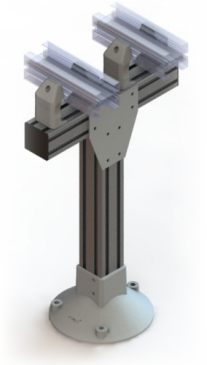
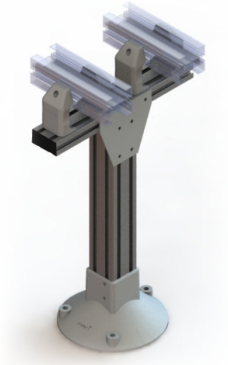
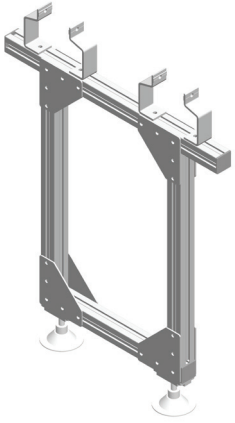
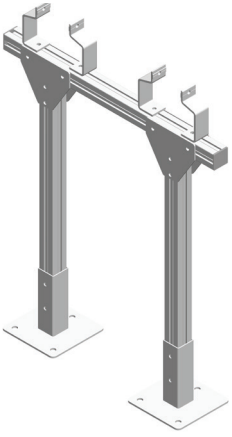
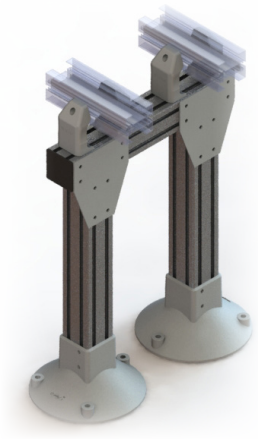
MODU SUPPORT STRUCTURE (MB)



Contents

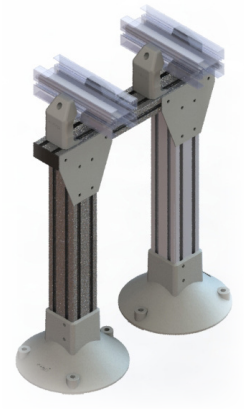
Support Structure Configuration 208
Structural Beams MB..... 210
Support Bracket MB 211
Bracket & Accessories MB 213
Structural Beam End Caps MB..... 216
Connecting Plates MB 217
Foot Caps MB..... 219
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Support Structure Configuration

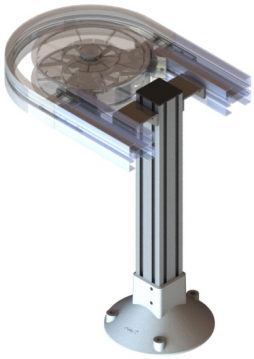
		
Type 1 (B1)	**Type 2 (B2)**	**Type 2A (B2A)**
		
Type 3 (B3)	**Type 4 (B4)**	**Type 5 (B5)**

Please consult MODU representative for further information and assistance.

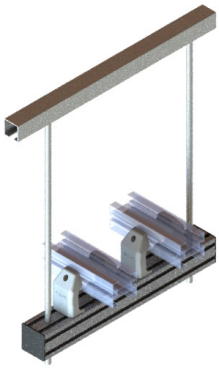
Units: Dimension (mm)



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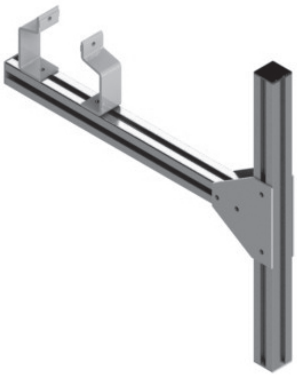
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Type 7 (B7)



Type 10 (B10)



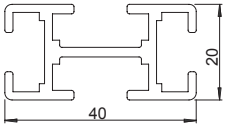
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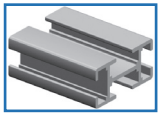
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Structural Beams MB

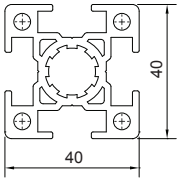
Structural Beam 20x40mm

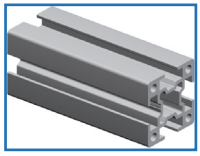




Item Code	Weight	Supply
MB BL 3x20x40	4.8 kg	3m

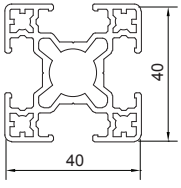
Structural Beam 40x40mm

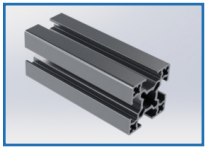




Item Code	Weight	Supply
MB BL 3x40x40	5.4 kg	3m

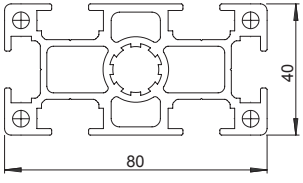
Structural Beam 40x40mm Lite

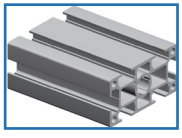




Item Code	Weight	Supply
MB BL 3x40x40 LW	3.6 kg	3m

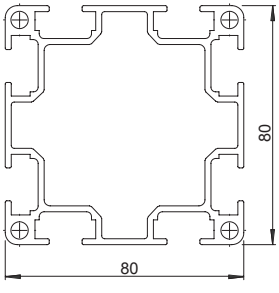
Structural Beam 40x80mm

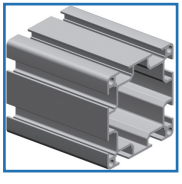




Item Code	Weight	Supply
MB BL 3x40x80	8.7 kg	3m

Structural Beam 80x80mm





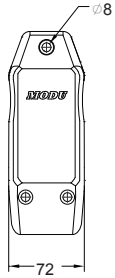
Item Code	Weight	Supply
MB BL 3x80x80	8.7 kg	3m

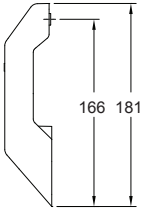
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

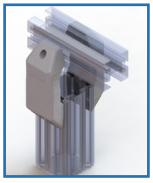
Support Bracket MB

MS3 Verticle Support Bracket





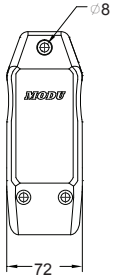


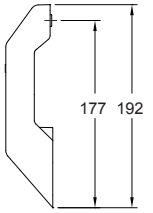


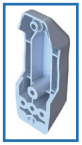
- Material: Cast Aluminum, Powder Coated

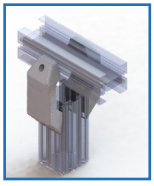
Item Code	Weight	Supply
MS3 BSV CA	0.2 kg	1 pc

MM3 Verticle Support Bracket





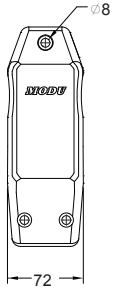


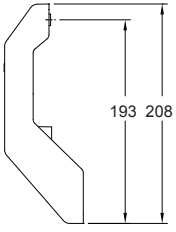


- Material: Cast Aluminum, Powder Coated

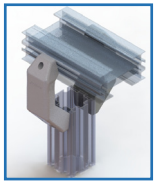
Item Code	Weight	Supply
MM3 BSV CA	0.25 kg	1 pc

ML2 Verticle Support Bracket





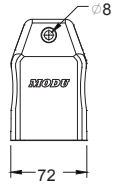


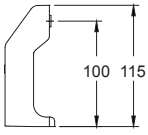


- Material: Cast Aluminum, Powder Coated

Item Code	Weight	Supply
ML2 BSV CA	0.26 kg	1 pc

Horizontal Support Bracket







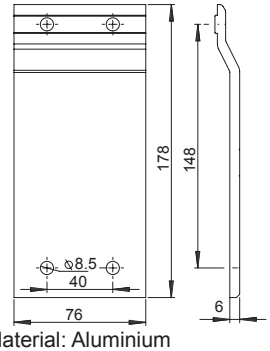
- Material: Cast Aluminum, Powder Coated

Item Code	Weight	Supply
MB BSH CA	0.12 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

MS3 Verticle Support Bracket

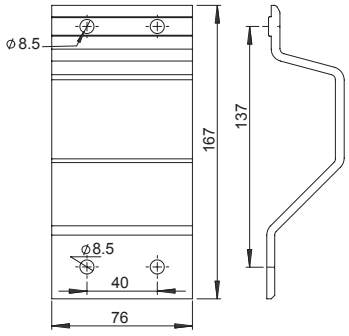


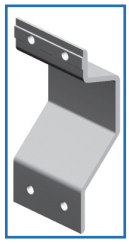


- Material: Aluminium

Item Code	Weight	Supply
MS BS 80	0.25 kg	1 pc

MM3 Verticle Support Bracket

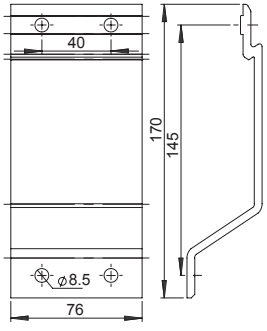


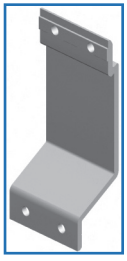


- Material: Aluminium

Item Code	Weight	Supply
MM BS 80	0.16 kg	1 pc

ML2 Beam Support Bracket

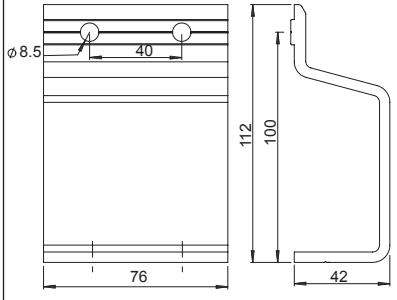


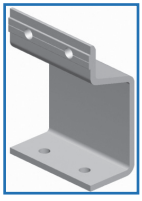


- Material: Aluminium

Item Code	Weight	Supply
ML BS 80	0.18 kg	1 pc

Horizontal Support Bracket, 80mm

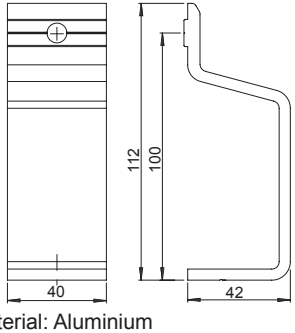


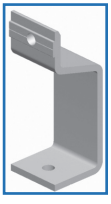


- Material: Aluminum

Item Code	Weight	Supply
MA BS 100	0.16 kg	1 pc

Horizontal Support Bracket, 40mm

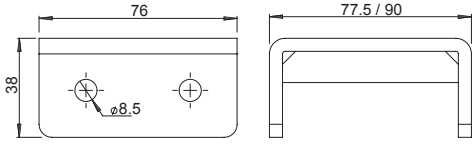




- Material: Aluminium

Item Code	Weight	Supply
MA BS 100A	0.07 kg	1 pc

Beam C Support Bracket



- For MS2 & MM3, bracket length = 77.5mm
- For ML2, bracket length = 90mm
- Material: Mild Steel



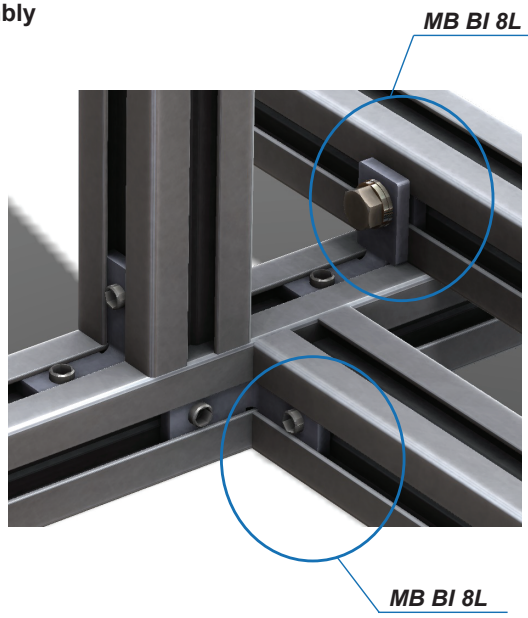
Item Code	Weight	Supply
MB CB 78	0.2 kg	1 pc
MB CB 90	0.3 kg	1 pc

Please consult MODU representative for further information and assistance.

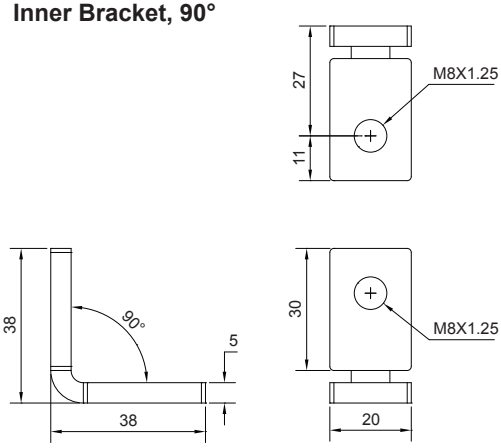
Units: Dimension (mm)

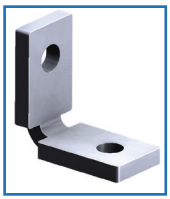
Bracket & Accessories MB

Application Assembly



Inner Bracket, 90°

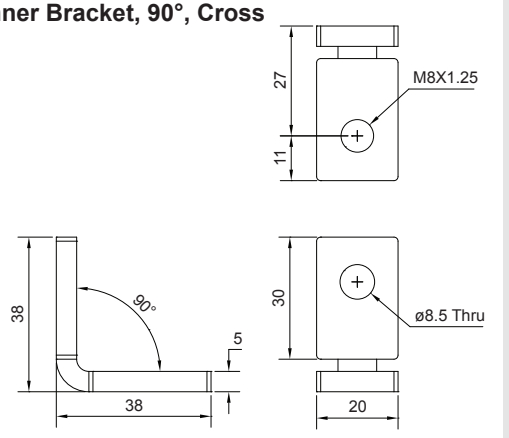




- Material : Mild Steel, Zinc Plated.
- Set screw include

Item Code	Weight	Supply
MB BI 8L	0.3 kg	10 pcs/pkt

Inner Bracket, 90°, Cross





- Material : Mild Steel, Zinc Plated.
- Set screw include

Item Code	Weight	Supply
MB BI 8L-X	0.3 kg	10 pcs/pkt

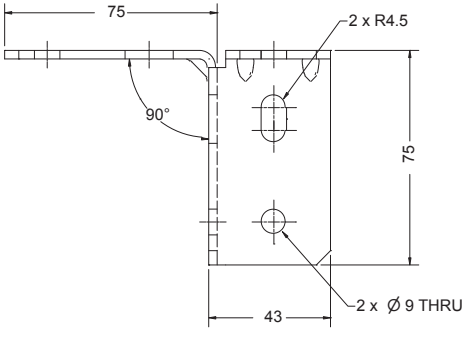
Please consult MODU representative for further information and assistance.

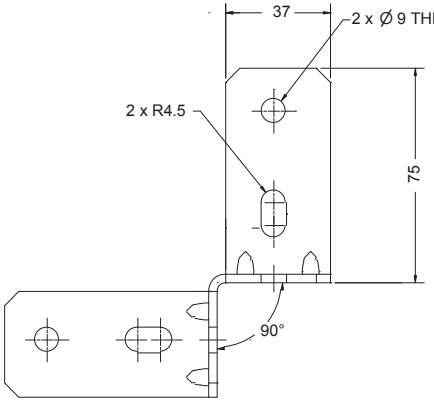
Units: Dimension (mm)

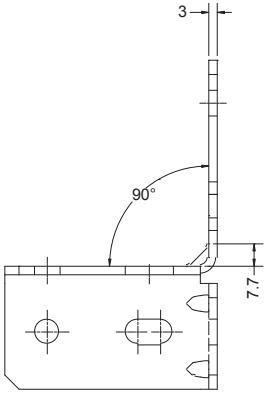
Application Assembly

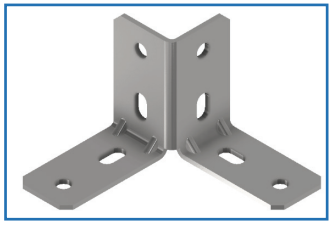


Outer Bracket Double Corner, 90°









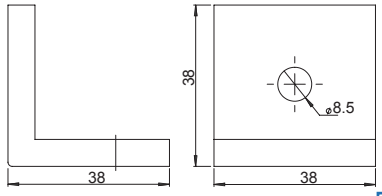
- Material : Mild Steel, Zinc Plated.
- Set screw include

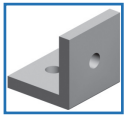
Item Code	Weight	Supply
MB BC 40	0.25 kg	10 pcs/pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Angle Bracket, 90°

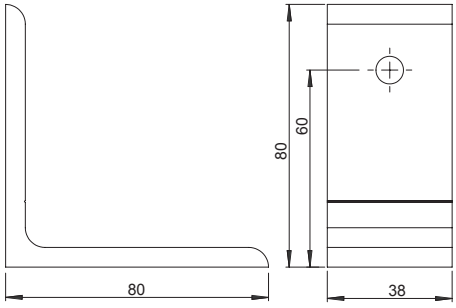


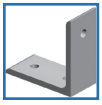


- Material : aluminum, used with 40x40mm beam

Item Code	Weight	Supply
MB BA 40L	0.05 kg	1 pc

Angle Bracket, 90°

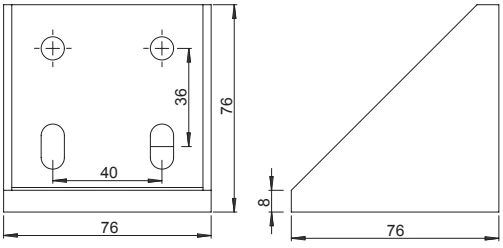




- Material : aluminum, used with 40x80mm beam

Item Code	Weight	Supply
MA BA 40x80L	0.08 kg	1 pc

Cast Angle Bracket, 90°

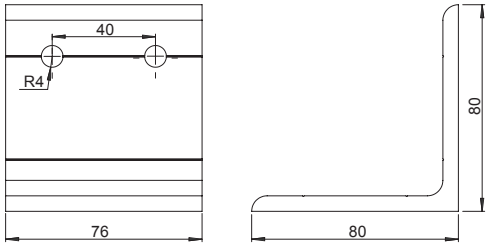


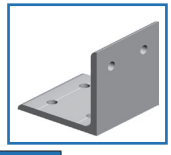


- Material : aluminum, used with 80x80mm beam

Item Code	Weight	Supply
MB BA 76L	0.3 kg	1 pc

Angle Bracket, 90°

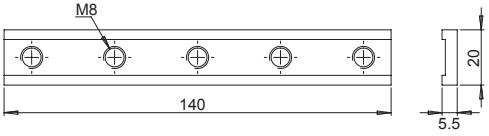




- Material : aluminum, used with 80x80mm beam

Item Code	Weight	Supply
MB BA 80L	0.7 kg	1 pc

Connecting Strip



- Material:
  Mild steel powder coated
- Used with structural beam



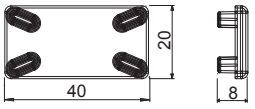
Item Code	Weight	Supply
MB CS 20x140	0.3 kg	10 pcs/pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Structural Beam End Caps MB

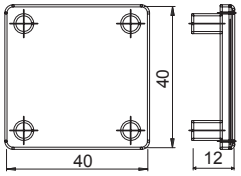
End Cap 20x40mm

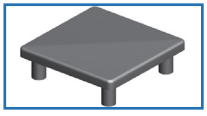




Item Code	Weight	Supply
MB EC 20x40	0.06 kg	10 pcs/pkt

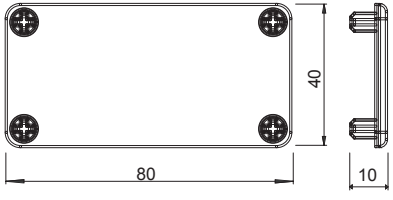
End Cap 40x40mm





Item Code	Weight	Supply
MB EC 40x40	0.06 kg	10 pcs/pkt

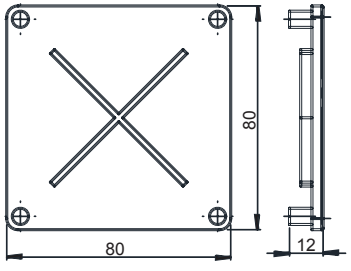
End Cap 40x80mm

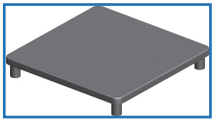




Item Code	Weight	Supply
MB EC 40x80	0.06 kg	10 pcs/pkt

End Cap 80x80mm





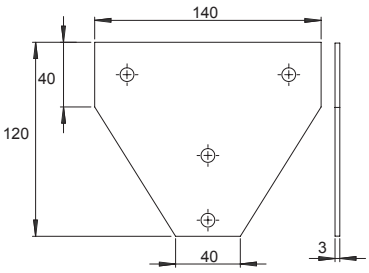
Item Code	Weight	Supply
MB EC 80x80	1 kg	10 pcs/pkt

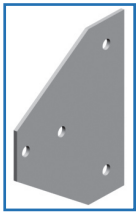
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Connecting Plates MB

Connecting Plate T

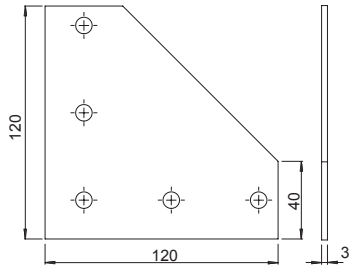


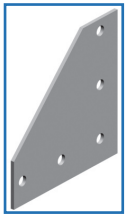


- Material :
  Mild Steel, Powder Coated
- T-joint for 40x40mm Structural Beam

Item Code	Weight	Supply
MB CP 40T	0.3 kg	1 pc

Connecting Plate L

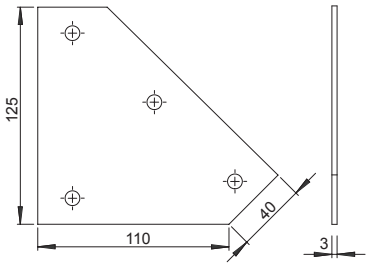


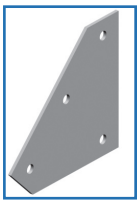


- Material :
  Mild Steel, Powder Coated
- L-joint for 40x40mm Structural Beam

Item Code	Weight	Supply
MB CP 40L	0.3 kg	1 pc

Connecting Plate V





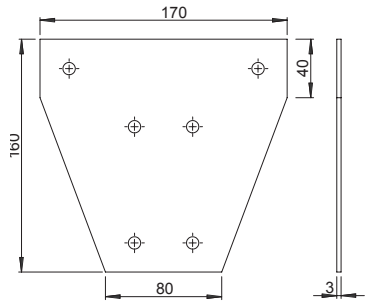
- Material :
  Mild Steel, Powder Coated
- V-joint for 40x40mm Structural Beam

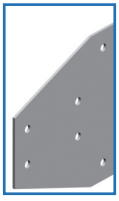
Item Code	Weight	Supply
MB CP 40V	0.3 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Connecting Plate T

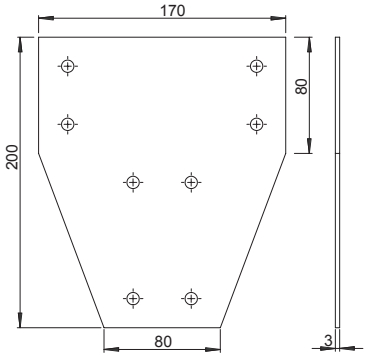


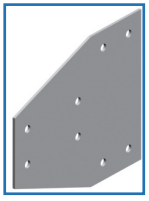


- Material :
  Mild Steel, Powder Coated
- T-joint for 40x80mm Structural Beam

Item Code	Weight	Supply
MB CP 40x80T	0.7 kg	1 pc

Connecting Plate T

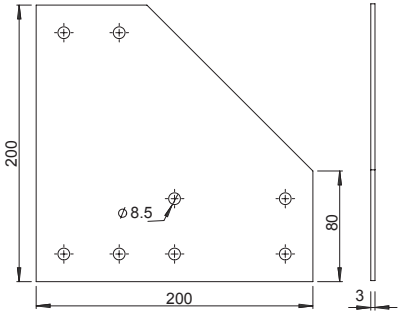


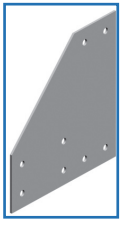


- Material :
  Mild Steel, Powder Coated
- T-joint for 80x80mm Structural Beam

Item Code	Weight	Supply
MB CP 80T	1.2 kg	1 pc

Connecting Plate L

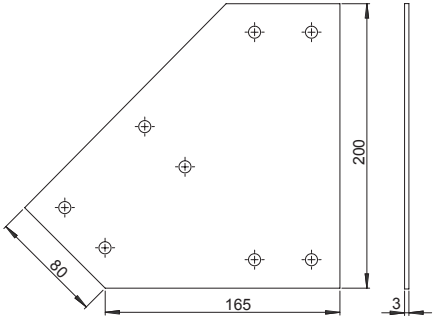


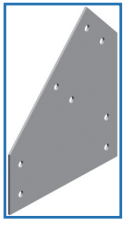


- Material :
  Mild Steel, Powder Coated
- L-joint for 80x80mm Structural Beam

Item Code	Weight	Supply
MB CP 80L	1.2 kg	1 pc

Connecting Plate V





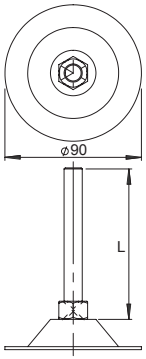
- Material :
  Mild Steel, Powder Coated
- V-joint for 80x80mm Structural Beam

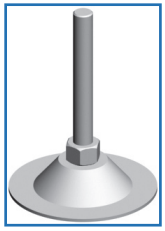
Item Code	Weight	Supply
MB CP 80V	1.2 kg	1 pc

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Foot Caps MB

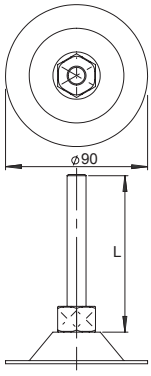
Adjusting Foot Cap, M12

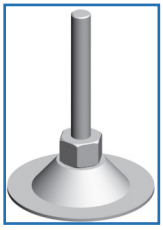




Item Code	Material	Weight	Supply
MB FF 12x100	Mild Steel, Zinc Plated	0.15 kg	1 pc
MB FF 12x150	Mild Steel, Zinc Plated	0.18 kg	1 pc
MB FF 12x100S	Stainless Steel	0.13 kg	1 pc
MB FF 12x150S	Stainless Steel	0.13 kg	1 pc

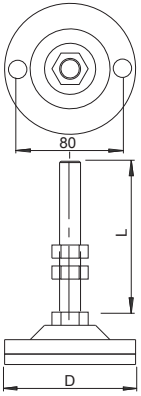
Adjusting Foot Cap, M16





Item Code	Material	Weight	Supply
MB FF 16x100	Mild Steel, Zinc Plated	0.3 kg	1 pc
MB FF 16x150	Mild Steel, Zinc Plated	0.4 kg	1 pc
MB FF 16x100S	Stainless Steel	0.26 kg	1 pc
MB FF 16x150S	Stainless Steel	0.3 kg	1 pc

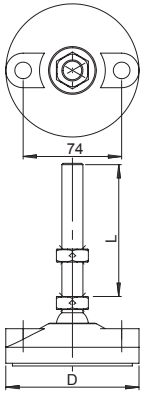
Adjusting Foot Cap, M16





Item Code (DxL)	Material	Weight	Supply
DB FP 60x100	Stainless Steel	0.7 kg	1 pc
DB FP 100x100	Stainless Steel	0.8 kg	1 pc
DB FP 100x150	Stainless Steel	0.8 kg	1 pc

Adjusting Foot Cap, M16



Plastic Base

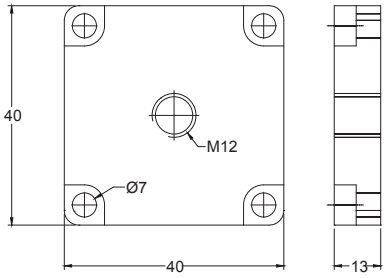


Item Code (DxL)	Material	Weight	Supply
MB FP 60x100	Zinc Plated	0.4 kg	1 pc
MB FP 100x100	Zinc Plated	0.4 kg	1 pc
MB FP 100x150	Zinc Plated	0.4 kg	1 pc
MB FP 60x100S	SUS	0.5 kg	1 pc
MB FP 100x100S	SUS	0.5 kg	1 pc
MB FP 100x150S	SUS	0.5 kg	1 pc

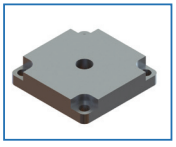
Please consult MODU representative for further information and assistance. Units: Dimension (mm)

End Plates MB

End Plate for 40x40 Beam

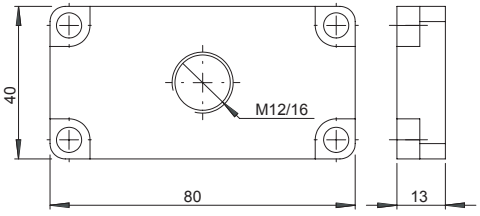


- Material: Aluminum
- Used with adjusting foot cap
- M12 foot thread adjusting foot cap

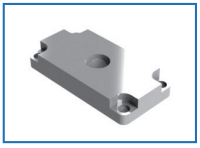


Item Code	Weight	Supply
MB FB 40x40x16	0.2 kg	1 pc

End Plate for 40x80 Beam

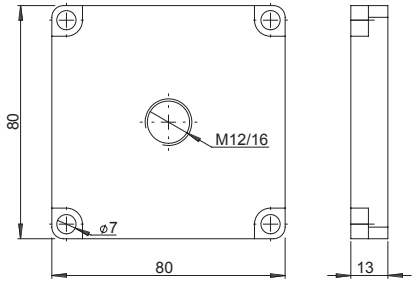


- Material: Aluminum
- Used with adjusting foot cap
- M12 foot thread adjusting foot cap
- M16 foot thread adjusting foot cap

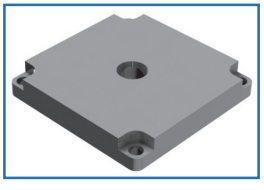


Item Code	Weight	Supply
MB FB 40x80x12	0.3 kg	1 pc
MB FB 40x80x16	0.3 kg	1 pc

End Plate for 80x80 Beam



- Material: Aluminum
- Used with adjusting foot cap
- M12 foot thread adjusting foot cap
- M16 foot thread adjusting foot cap



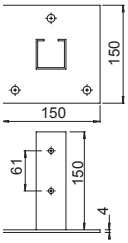
Item Code	Weight	Supply
MB FB 80x80x12	0.6 kg	1 pc
MB FB 80x80x16	0.6 kg	1 pc

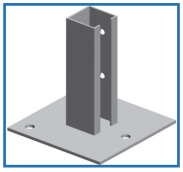
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Foot MB

Foot 40x40mm

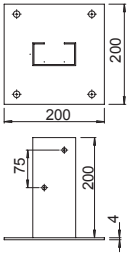


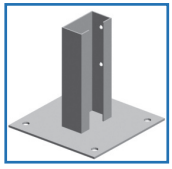


- Material: Mild Steel Powder Coated
- Height adjustment range: ± 50mm

Item Code	Weight	Supply
MB FF 40	1.2 kg	1 pc

Foot 40x80mm

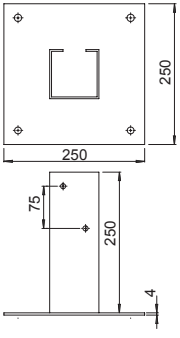


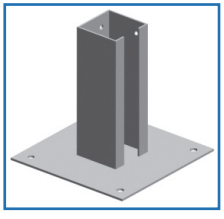


- Material: Mild Steel Powder Coated
- Height adjustment range: ± 50mm

Item Code	Weight	Supply
MB FF 40x80	2.0 kg	1 pc

Foot 80x80mm

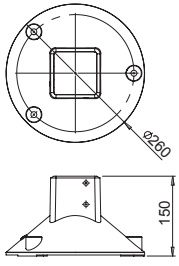


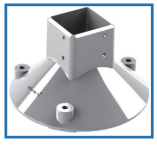


- Material: Mild Steel Powder Coated
- Height adjustment range: ± 50mm

Item Code	Weight	Supply
MB FF 80	2.0 kg	1 pc

Foot 80x80mm





- Material: Cast Aluminium
- Height adjustment range: ± 30mm

Item Code	Weight	Supply
MB FF 80A	1.2 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

MODU ACCESSORIES (MA)

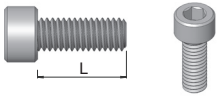


Contents

Fasteners MA 224
Chain Top Replacements MA 226
Chain Accessories MA 227
Beam Accessories MA 227
Return Chain Guide MA 228
Chain Accessories MA 229
Sensor Brackets MA 230
Lubricant 230

Fasteners MA

Cap Screw, M6 & M8



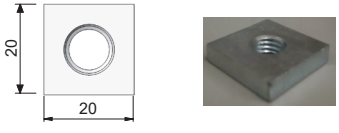
Item Code	Description	Weight	Supply
MA BC M6x16	M6 x 16mm	0.6 kg	100 pcs/pkt
MA BC M6x20	M6 x 20mm	1.2 kg	100 pcs/pkt
MA BC M8x16	M8 x 16mm	1.2 kg	100 pcs/pkt
MA BC M8x20	M8 x 20mm	1.3 kg	100 pcs/pkt

Lock Nut, M6, M8 & M10



Item Code	Weight	Supply
MA NL 6	0.6 kg	200 pcs/pkt
MA NL 8	1.2 kg	200 pcs/pkt
MA NL 10	1.2 kg	200 pcs/pkt

Square Nut, M6 & M8



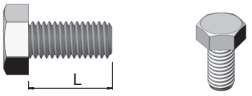
Item Code	Weight	Supply
MA NS 6	1.4 kg	100 pcs/pkt
MA NS 8	1.3 kg	100 pcs/pkt

Locking Washer



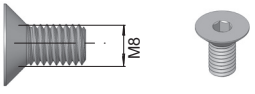
Item Code	Weight	Supply
MA WL 5	0.01 kg	50 pcs/pkt

Hex Head Bolt, M6, M8 & M10



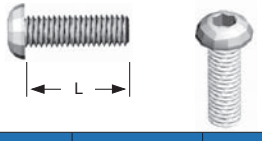
Item Code	Description	Weight	Supply
MA BH M6x16	M6 x 16mm	0.6 kg	100 pcs/pkt
MA BH M6x20	M6 x 20mm	0.8 kg	100 pcs/pkt
MA BH M8x12	M8 x 12mm	1.2 kg	100 pcs/pkt
MA BH M8x16	M8 x 16mm	1.2 kg	100 pcs/pkt
MA BH M8x20	M8 x 20mm	1.3 kg	100 pcs/pkt
MA BH M8x25	M8 x 25mm	1.3 kg	100 pcs/pkt
MA BH M10x20	M10 x 20mm	2.2 kg	100 pcs/pkt
MA BH M10x25	M10 x 25mm	2.3 kg	100 pcs/pkt

Countersunk Screw



Item Code	Description	Weight	Supply
MA SC M8x16	M8 x 16mm	0.7 kg	100 pcs/pkt
MA SC M8x20	M8 x 20mm	1.0 kg	100 pcs/pkt

Button Head Bolt



Item Code	Description	Weight	Supply
MA BB M8x16	M8 x 16mm	1.0 kg	100 pcs/pkt
MA BB M8x20	M8 x 20mm	1.1 kg	100 pcs/pkt

Floor Anchor Bolt



Item Code	Weight	Supply
MA BF M10	2.5 kg	50 pcs/pkt

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Screw



Item Code	Weight	Supply
MA RS 6.5	0.02 kg	50 pcs/pkt

Rivet



Material: Brass Nickel plated (3mm)

Item Code	Weight	Supply
MA RR 3	0.02 kg	50 pcs/pkt

Flat Washer, M6, M8 & M10



- Zinc plated

Item Code	Weight	Supply
MA WF 6	0.25 kg	200 pcs/pkt
MA WF 8	0.48 kg	200 pcs/pkt
MA WF 10	0.80 kg	200 pcs/pkt

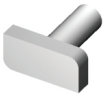
Set Screw



- Length, L=40mm

Item Code	Weight	Supply
MA SS M8x40	1.0 kg	100 pcs/pkt

T-Bolt



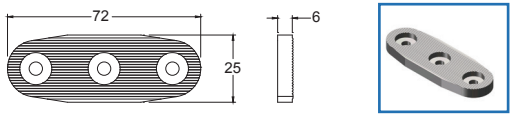
Item Code	Weight	Supply
MA BT 20	0.7 kg	50 pcs/pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

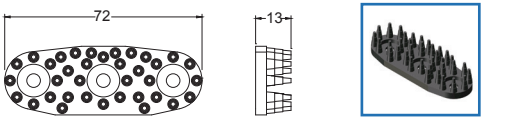
Chain Top Replacements MA

Friction Pad, MM3



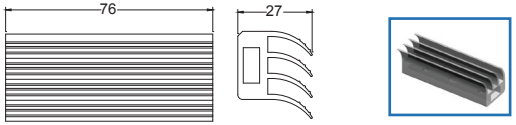
Item Code	Material	Color	Weight	Supply
MM3 FP 83	TPE	Grey	0.01 kg	10 pcs/pkt

Finger Gripper Pad, MM3



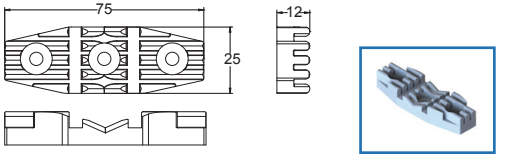
Item Code	Material	Color	Weight	Supply
MM3 GP 83F	TPU	Grey	0.09 kg	10 pcs/pkt

Wedge Gripper, MM3



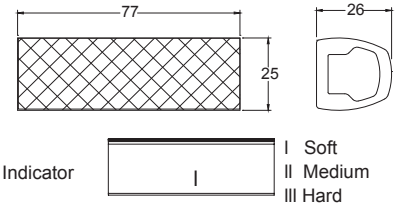
Item Code	Material	Color	Weight	Supply
MM3 GP 83W	TPU	Grey	0.2 kg	10 pcs/pkt

Friction Silicone Pad, MM3

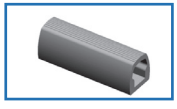


Item Code	Material	Color	Weight	Supply
MM3 FP 83S	Silicone	Grey	0.3 kg	10 pcs/pkt

Gripper Box, MM3

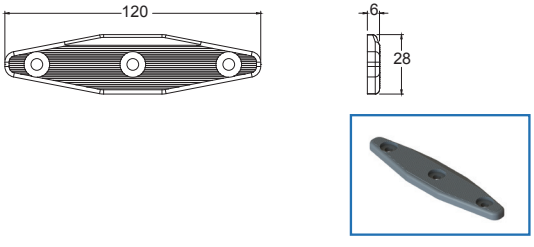


- Box material : TPE (Grey).



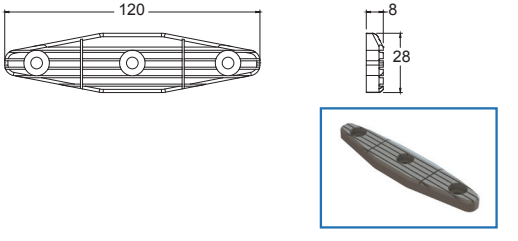
Item Code	Hardness	Weight	Supply
MM3 GP 83 BS	Soft - 50A	0.2 kg	10 pcs/pkt
MM3 GP 83 BM	Medium - 60A	0.2 kg	10 pcs/pkt
MM3 GP 83 BH	Hard - 73A	0.2 kg	10 pcs/pkt

Friction Pad, ML2



Item Code	Material	Color	Weight	Supply
ML2 FP 140	TPE	Grey	0.01 kg	10 pcs/pkt

Friction Silicone Pad, ML2



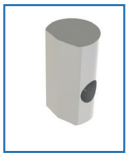
Item Code	Material	Color	Weight	Supply
ML2 FP 140S	Silicone	Grey	0.5 kg	10 pcs/pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

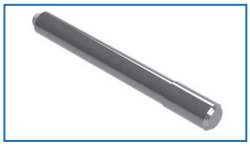
Chain Accessories MA

Chain Pivot



Item Code	Weight	Supply
MS3 PV	0.01 kg	10 pcs / pkt
MM3 PV	0.03 kg	10 pcs / pkt
ML2 PV	0.07 kg	10 pcs / pkt

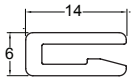
Stainless Steel Pin



Item Code	Weight	Supply
MP PN M4x20	0.01 kg	10 pcs / pkt
MS3 PN M4x37	0.01 kg	10 pcs / pkt
MM3 PN M6x53	0.07 kg	10 pcs / pkt
ML2 PN M8x73	0.11 kg	10 pcs / pkt

Beam Accessories MA

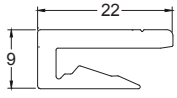
Slide Rail



- For MP, MS3, MM3 & Plastic Belt Series

Item Code	Material	Color	Weight	Supply
MS SR 25	HDPE	Semi-Transparent White	1.2 kg	25m/roll
MS SR 25A	Anti-Static	Grey	1.2 kg	25m/roll
MS SR 25P	PVDF	Natural White	2.7 kg	25m/roll

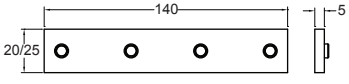
Slide Rail



- For ML2, MX2 & Plastic Belt Series

Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

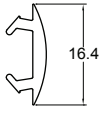
Connecting Strip



- 4 pcs M8 set screw included.

Item Code	Weight	Supply
MA CS 20x140	1.1 kg	10 pcs/pkt
MA CS 25x140	1.1 kg	10 pcs/pkt

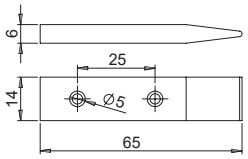
T-Slot Cover



Item Code	Material	Color	Weight	Supply
MB SC 25T	TPE	Grey	1.5 kg	25m/roll
MB SC 25P	PVC	Light Grey	1.3 kg	25m/roll

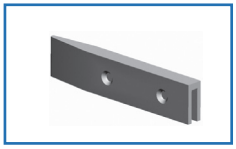
Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Guide Rail End Cap



- MA RC 6x65 - MS3 & MM3 only
- MA RC 10x65 - ML2 only
- To be used for wheel bend

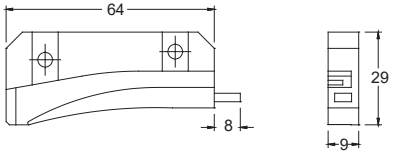
Item Code	Weight	Supply
MA RC 6x65	0.03 kg	1 pc
MA RC 10x65	0.05 kg	1 pc



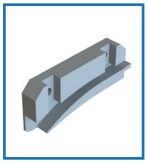
*Supplied without holes

Return Chain Guide MA

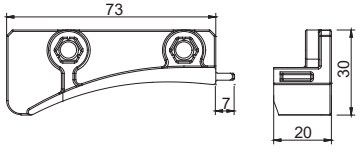
MP Return Chain Guide



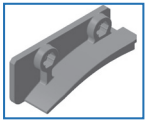
Item Code	Weight	Supply
MP RG	0.01 kg	1 pc



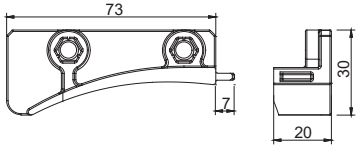
MS3 Return Chain Guide



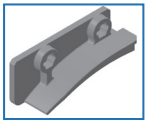
Item Code	Weight	Supply
MS3 RG	0.05 kg	1 pc



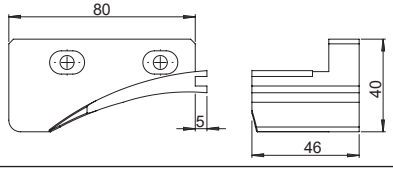
MM3 Return Chain Guide



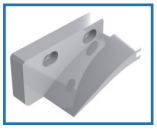
Item Code	Weight	Supply
MM3 RG	0.05 kg	1 pc



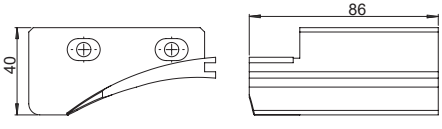
ML2 Return Chain Guide



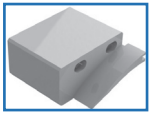
Item Code	Weight	Supply
ML2 RG	0.03 kg	1 pc



MX2 Return Chain Guide



Item Code	Weight	Supply
MX2 RG	0.06 kg	1 pc

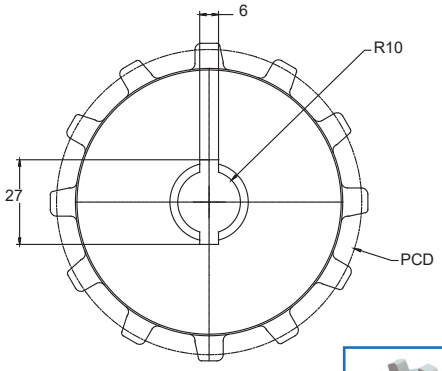


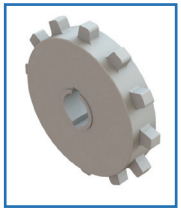
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Chain Accessories MA

MP Drive Sprocket

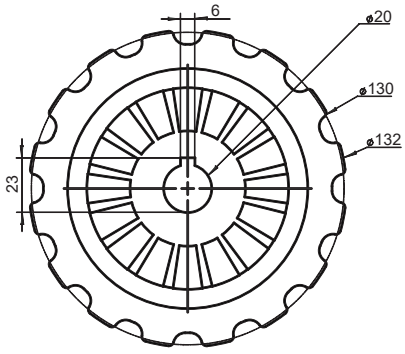




Description:
- PCD: 97mm
- Teeth: 12

Item Code	Weight	Supply
MP DS 97	0.12 kg	1 pc

MS3 Drive Sprocket

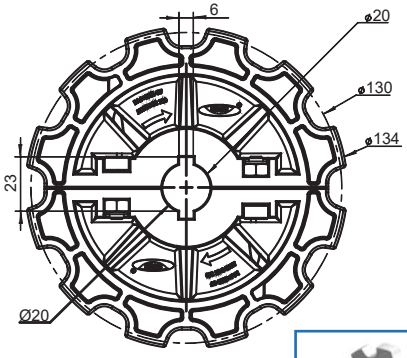




Description:
- PCD: 130mm
- Teeth: 16

Item Code	Weight	Supply
MS3 DS 130	0.2 kg	1 pc

MM3 Drive Sprocket



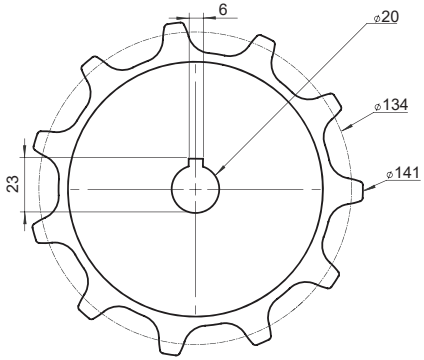


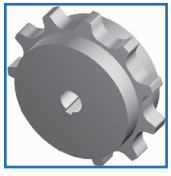
Description:
- PCD: 97mm
- Teeth: 12

2 Pcs injection mold

Item Code	Weight	Supply
MM3 DS130	0.5 kg	1 pc

ML Drive Sprocket





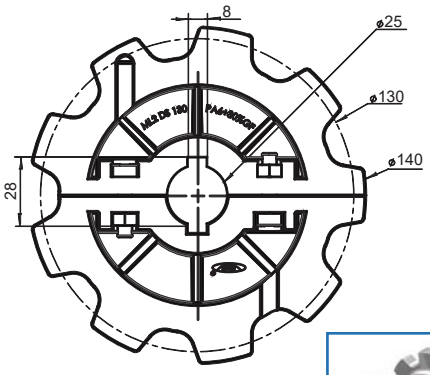
Description:
- PCD: 134mm
- Teeth: 11

Item Code	Weight	Supply
ML DS 134	0.2 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

ML2 / MX2 Drive Sprocket

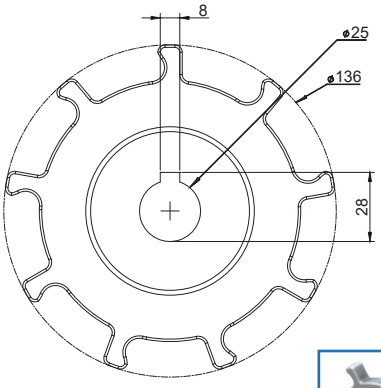




Description:
- PCD: 130mm
- Teeth: 9
- For ML2 and MX2 drive
- 2 Pcs injection mold

Item Code	Weight	Supply
ML2 DS 130	0.97 kg	1 pc

MT2 / MR2 & MF2 Drive Sprocket



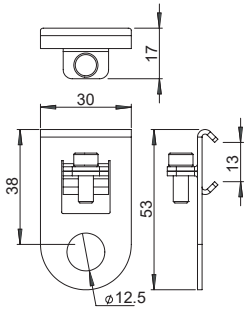


Description:
- PCD: 136mm
- Teeth: 9

Item Code	Weight	Supply
MT2 DS 146	0.2 kg	1 pc

Sensor Brackets MA

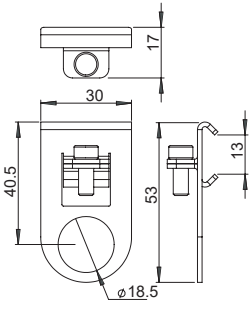
Ø12mm Proximity Sensor



- Guide rail mount sensor bracket

Item Code	Weight	Supply
MA BA 12	0.03 kg	1 pc

Ø18mm Proximity Sensor



- Guide rail mount sensor bracket

Item Code	Weight	Supply
MA BA 18	0.03 kg	1 pc

Lubricant

Lubricant For Chain

Silicone-based lubricant, 400ml



Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

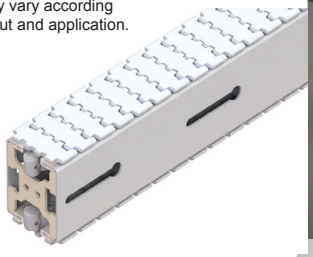
MODU DS3
CONVEYOR SERIES



Technical Characteristics

Chain Width	63 mm
Chain Pitch	25.4 mm
Chain Weight	0.8 kg/m
Chain Working Tension (Max)	700 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 15.0 kg 10.0 kg
Total Load*	200 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	700 N
Item Width*	15 - 140 mm

* Actual limit may vary according to conveyor layout and application.

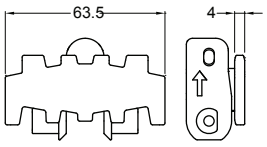


Chain Width 63mm

Contents

Chain MS3 232
Chain Accessories MS3 233
Drive Units DS3 234
Idler End DS3 236
Conveyor Beam DS3 237
Accessories DS3 237
Horizontal Wheel Bend DS3 238
Horizontal Plain Bend DS3 239
Vertical Bend DS3 240

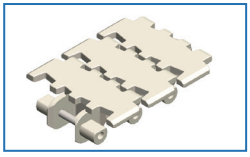
Chain MS3

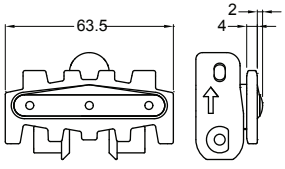


Plain Chain

- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

Item Code	Material	Color	Weight	Supply
MS3 CP 5	POM	White	4.0 kg/roll	5m/roll
MS3 CP 5A	Anti-Static	Yellow	4.0 kg/roll	5m/roll
MS3 CP 5K	Kevlar	Yellow	6.0 kg/roll	5m/roll

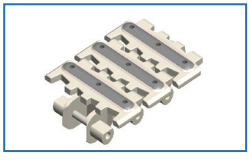


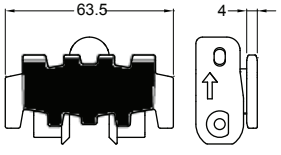


Friction Chain

- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Accumulation not possible

Item Code	Material	Color	Weight	Supply
MS3 CF 5	POM	White	4.5 kg/roll	5m/roll
MS3 CF 5A	Anti-Static	Yellow	4.5 kg/roll	5m/roll
MS3 CF 5K	Kevlar	Yellow	6.5 kg/roll	5m/roll

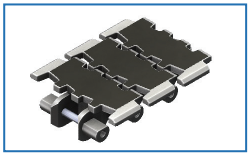




Flocked Chain

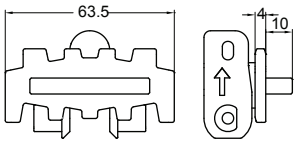
- Suitable for scratch sensitive material.
- Flock colour : Black
- Accumulation possible for light product only.
- Sticker type only

Item Code	Material	Color	Weight	Supply
MS3 CL 5	POM	White	4.2 kg/roll	5m/roll



Please consult MODU representative for further information and assistance.

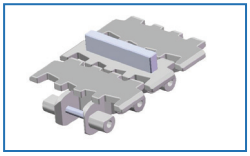
Units: Dimension (mm)



Cleated Chain Link

- Required for vertical or steeply inclined / declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined and Catenary Drive.
- Supply in pieces.
- Please specify pitch between cleat for ordering
- (eg. MS3 CC 3x10 *P ; 3P = Every 3rd link to be cleated).
  **Please consult MODU representative for actual chain weight.

Item Code	Material	Color	Weight	Supply
MS3 CC 3x10 *P	POM	White	** kg/pc	1 pc



Chain Accessories MS3

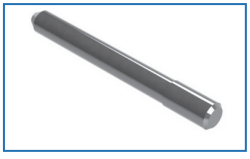
Lubricant For Chain



Silicone-based lubricant, 400ml

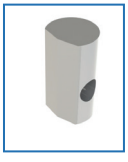
Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Stainless Steel Pin



Item Code	Weight	Supply
MS3 PN M4x37	0.1 kg	10 pcs / pkt

Chain Pivot

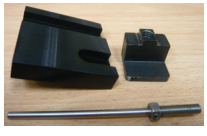


Item Code	Weight	Supply
MS3 PV	0.01 kg	10 pcs / pkt

Chain Pin Insertion Tool



Chain pin insertion tool shown without attachment and specific drive pin



Chain attachment and drive pin

Item Code	Description	Weight	Supply
TR CP 1	Pin Insertion Tool	1.2 kg	1 pc
MS3 AC	Chain Attachment	0.2 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units DS3

Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Transtechno)
T40 = CMRV 040
T50 = CMRV 050

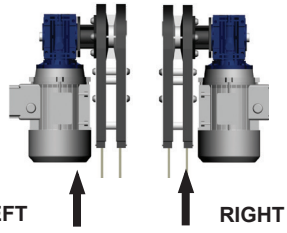
Transfer Device
NIL = Basic Unit
TR = Free Roller
DR = Driven Roller

Gearmotor position: L or R
D: Front Drive

Clutch
NIL = Basic Unit
C = With Clutch

DS3 DD L S20 TR C
Front direct drive unit, motor on left side for 0.25kW SEW geared motor, with Free Roller and Clutch.

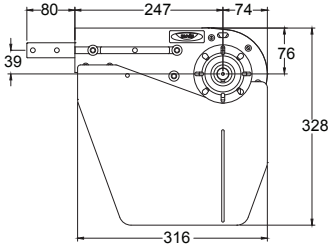
Motor Orientation Guideline

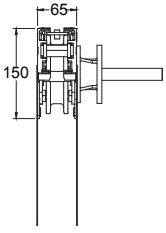


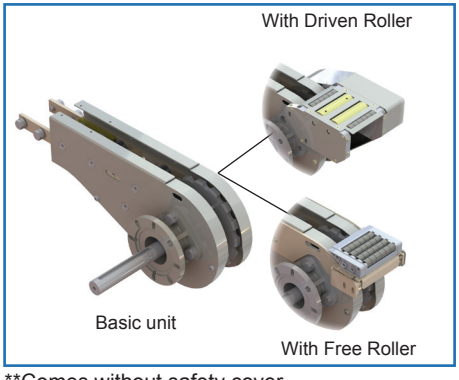
Example. Code for Basic unit;
DS3 DT R M50 => Combined drive unit, motor on right side for Transtechno CMRV 050 geared motor.

Front Drive Unit

Basic Front Drive

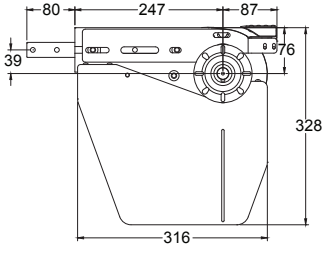


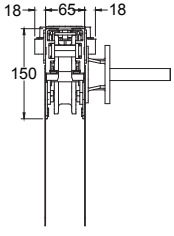




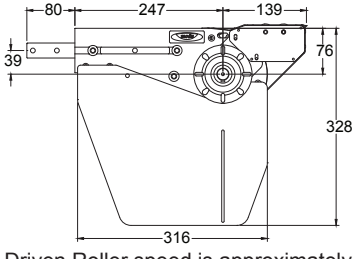
**Comes without safety cover

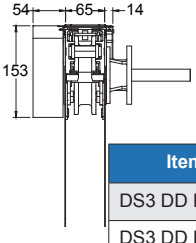
Front Drive with Free Roller





Front Drive with Driven Roller





Driven Roller speed is approximately 10% higher than conveyor speed.

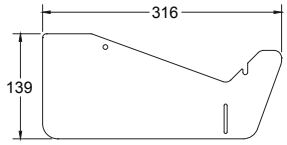
- Effective track length: 0.80m
- Traction force: 700N
- Connecting strip and M8 hex screw included.
  Note:
- Safety Cover comes as an option.
- Recommended maximum chain elongation is 328mm from top conveyor to chain slack.

Item Code	Description	Weight	Supply
DS3 DD R/L S/T	Basic drive unit	3.8 kg	1 unit
DS3 DD R/L S/T TR	With transfer roller	4.0 kg	1 unit
DS3 DD R/L S/T DR	With driven roller	5.0 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

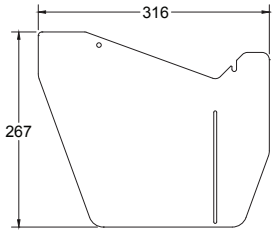
Short Safety Cover



Material : Stainless Steel

Item Code	Weight	Supply
SC2 139	0.8 kg	2 pcs/set

Standard Safety Cover

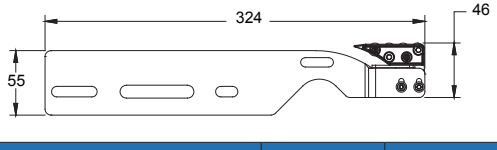


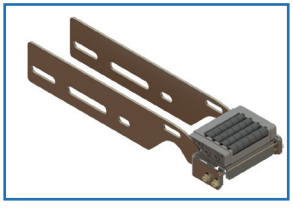
Material : Stainless Steel

Item Code	Weight	Supply
SC2 267	0.8 kg	2 pcs/set

Free Transfer Roller

1. Direct Drive

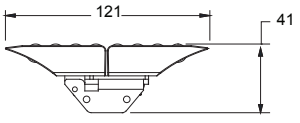


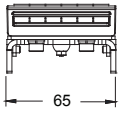


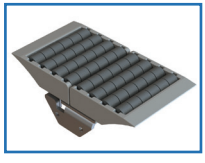
Item Code	Weight	Supply
MS3 TR DD/IE	0.84 kg	1 unit

Note:
Suitable for all motor flange except SA47

2. Combined Drive







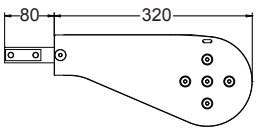
Item Code	Weight	Supply
MS3 TR DT	0.84 kg	1 unit

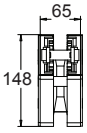
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

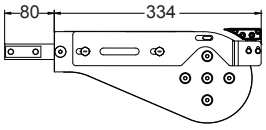
Idler End DS3

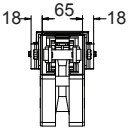
Basic Idler End



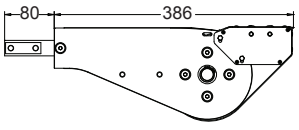


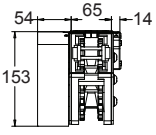
Idler End with Free Roller

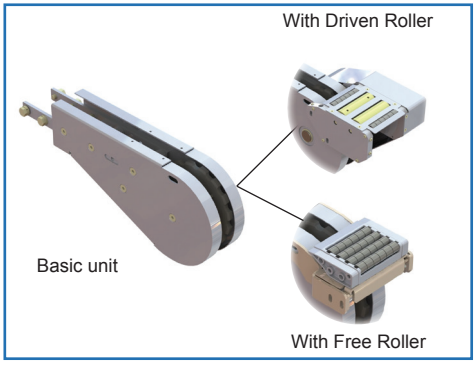




Idler End with Driven Roller





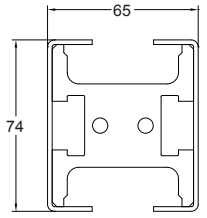


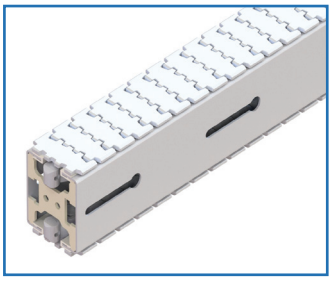
- Effective track length: 0.8m
- Connecting strip and M8 hex screw included.

Item Code	Description	Weight	Supply
DS3 IE 320	Basic idler end	3.0 kg	1 unit
DS3 IE 320 TR	With transfer roller	3.4 kg	1 unit
DS3 IE 320 DR L/R	With driven roller	4.5 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Conveyor Beam DS3



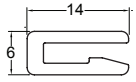


Item Code	Weight	Supply
DS3 CB 2.4	6.2 kg	2.4m / beam
DS3 CB L	** kg	L / beam

- Available length:
L = between 200mm up to 1200mm
- eg: for 200mm beam, part number is DS3 CB 0.2
- if beam required is 1.5m, then L = 1.2m + 0.3m
(order part number = DS3 CB 1.2 & DS3 CB 0.3)

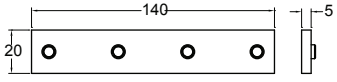
Accessories DS3

Slide Rail



Item Code	Material	Color	Weight	Supply
MS SR 25	HDPE	Semi-Transparent White	1.2 kg	25m/roll
MS SR 25A	Anti-Static	Grey	1.2 kg	25m/roll

Connecting Strip



Item Code	Weight	Supply
DA CS 20x140	1.1 kg	10 pcs/pkt

- 4 pcs M8 set screw included.

Rivet



Item Code	Weight	Supply
MA RR 3	0.02 kg	50 pcs/pkt

Rivet Crimping



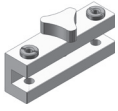
Item Code	Weight	Supply
MA RC	0.13 kg	1 pc

Slide Rail Mounting Tool



Item Code	Weight	Supply
MS3 SRA	0.4 kg	1 pc

Slide Rail Drill Fixture

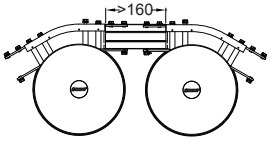


Item Code	Weight	Supply
MA SRF	0.24 kg	1 pc

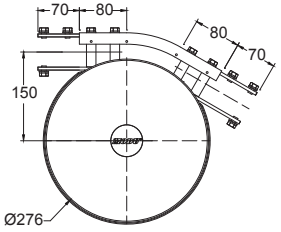
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Wheel Bend DS3



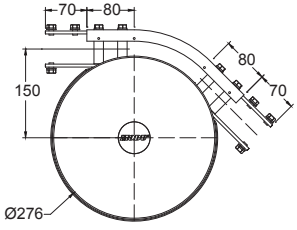
Minimum straightsection for all wheel bend connection.



Wheel Bend, 30°

Effective track length:
0.24m 1-way (0.48 m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

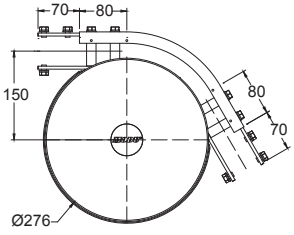
Item Code	Weight	Supply
DS3 BW 30R150	2.6 kg	1 unit



Wheel Bend, 45°

Effective track length:
0.28m 1-way (0.56m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

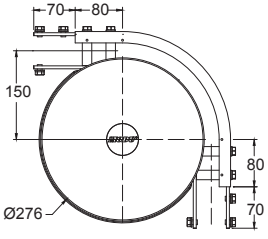
Item Code	Weight	Supply
DS3 BW 45R150	2.7 kg	1 unit



Wheel Bend, 60°

Effective track length:
0.31m 1-way (0.62m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

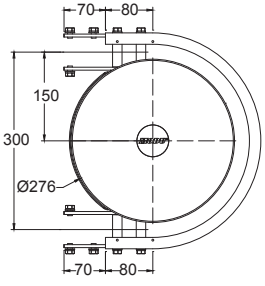
Item Code	Weight	Supply
DS3 BW 60R150	2.7 kg	1 unit



Wheel Bend, 90°

Effective track length:
0.4m 1-way (0.8m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DS3 BW 90R150	3.1 kg	1 unit



Wheel Bend, 180°

Effective track length:
0.63m 1-way (1.26 m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

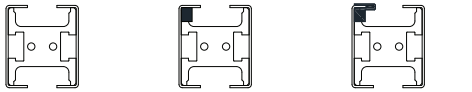
Item Code	Weight	Supply
DS3 BW 180R150	3.4 kg	1 unit

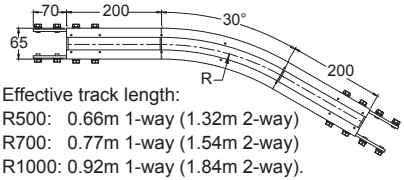
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend DS3

Plain bends comes with options for optimum usage
-Plain bend basic Unit.
-With inner slide rail Type A (SA), Material = PE.
-With inner slide rail Type B (SB), Material = Nylon
*(SB) is recommended when conveyor speed is 30m/min and above

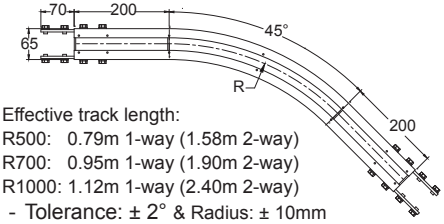




Effective track length:
R500: 0.66m 1-way (1.32m 2-way)
R700: 0.77m 1-way (1.54m 2-way)
R1000: 0.92m 1-way (1.84m 2-way).
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Horizontal Plain Bend, 30°

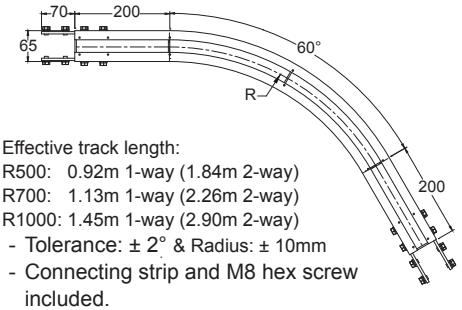
Item Code	Radius (R)	Weight	Supply
DS3 BP 30R500	500 mm	2.1 kg	1 unit
DS3 BP 30R700	700 mm	2.4 kg	1 unit
DS3 BP 30R1000	1000 mm	2.9 kg	1 unit



Effective track length:
R500: 0.79m 1-way (1.58m 2-way)
R700: 0.95m 1-way (1.90m 2-way)
R1000: 1.12m 1-way (2.40m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Horizontal Plain Bend, 45°

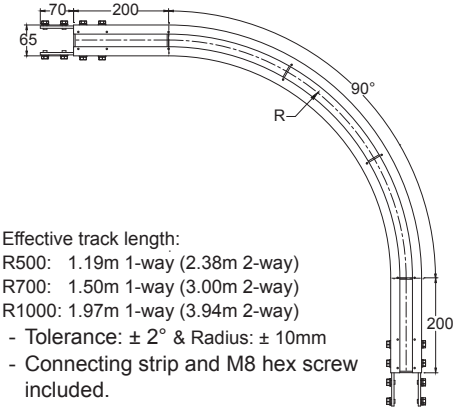
Item Code	Radius (R)	Weight	Supply
DS3 BP 45R500	500 mm	2.5 kg	1 unit
DS3 BP 45R700	700 mm	3.0 kg	1 unit
DS3 BP 45R1000	1000 mm	3.7 kg	1 unit



Effective track length:
R500: 0.92m 1-way (1.84m 2-way)
R700: 1.13m 1-way (2.26m 2-way)
R1000: 1.45m 1-way (2.90m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
DS3 BP 60R500	500 mm	2.9 kg	1 unit
DS3 BP 60R700	700 mm	3.5 kg	1 unit
DS3 BP 60R1000	1000 mm	4.5 kg	1 unit



Effective track length:
R500: 1.19m 1-way (2.38m 2-way)
R700: 1.50m 1-way (3.00m 2-way)
R1000: 1.97m 1-way (3.94m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

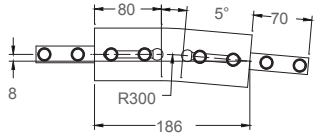
Horizontal Plain Bend, 90°

Item Code	Radius (R)	Weight	Supply
DS3 BP 90R500	500 mm	3.7 kg	1 unit
DS3 BP 90R700	700 mm	4.7 kg	1 unit
DS3 BP 90R1000	1000 mm	6.1 kg	1 unit

When ordering plain bends with inner slide rail, please specify the type using the following part number as an example.
Type A - DS3 BP 45R500 SA
Type B - DS3 BP 90R500 SB

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

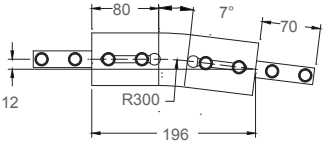
Vertical Bend DS3



Vertical Bend, 5°

Effective track length:
R300: 0.19m 1-way (0.38m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

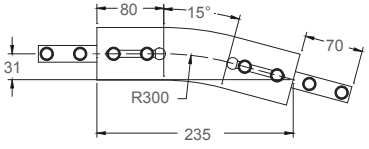
Item Code	Weight	Supply
DS3 BV 5R300	0.6 kg	1 unit



Vertical Bend, 7°

Effective track length:
R300: 0.20m 1-way (0.40m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

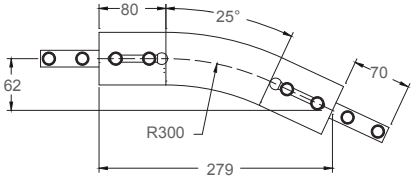
Item Code	Weight	Supply
DS3 BV 7R300	0.6 kg	1 unit



Vertical Bend, 15°

Effective track length:
R300: 0.24m 1-way (0.48m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DS3 BV 15R300	0.8 kg	1 unit

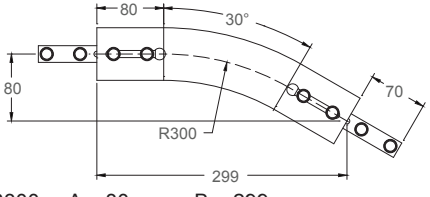


R300 : A = 62mm ; B = 279 mm
R1000 : A = 128mm ; B = 575 mm

Vertical Bend, 25°

Effective track length:
R300: 0.29m 1-way (0.58m 2-way)
R1000: 0.60m 1-way (1.20m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DS3 BV 25R300	1.0 kg	1 unit
DS3 BV 25R1000	2.0 kg	1 unit



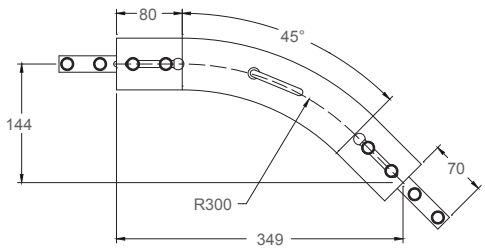
R300 : A = 80mm ; B = 299 mm
R1000 : A = 174mm ; B = 649 mm

Vertical Bend, 30°

Effective track length:
R300: 0.32m 1-way (0.64m 2-way)
R1000: 0.68m 1-way (1.36m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DS3 BV 30R300	1.1 kg	1 unit
DS3 BV 30R1000	2.5 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

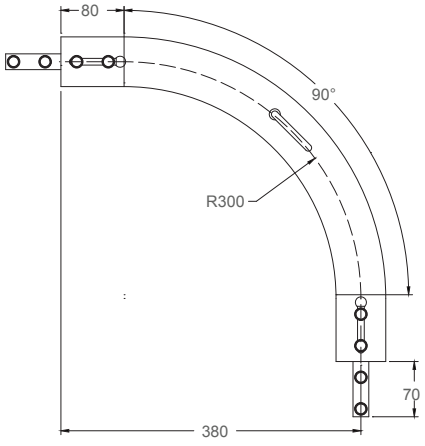


R300 : A = 145mm ; B = 349 mm
R1000 : A = 350mm ; B = 844 mm

Vertical Bend, 45°

Effective track length:
R300: 0.40m 1-way (0.80m 2-way)
R1000: 0.95m 1-way (1.90m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DS3 BV 45R300	1.3 kg	1 unit
DS3 BV 45R1000	2.9 kg	1 unit



R300 : B = 380 mm
R1000 : B = 1080 mm

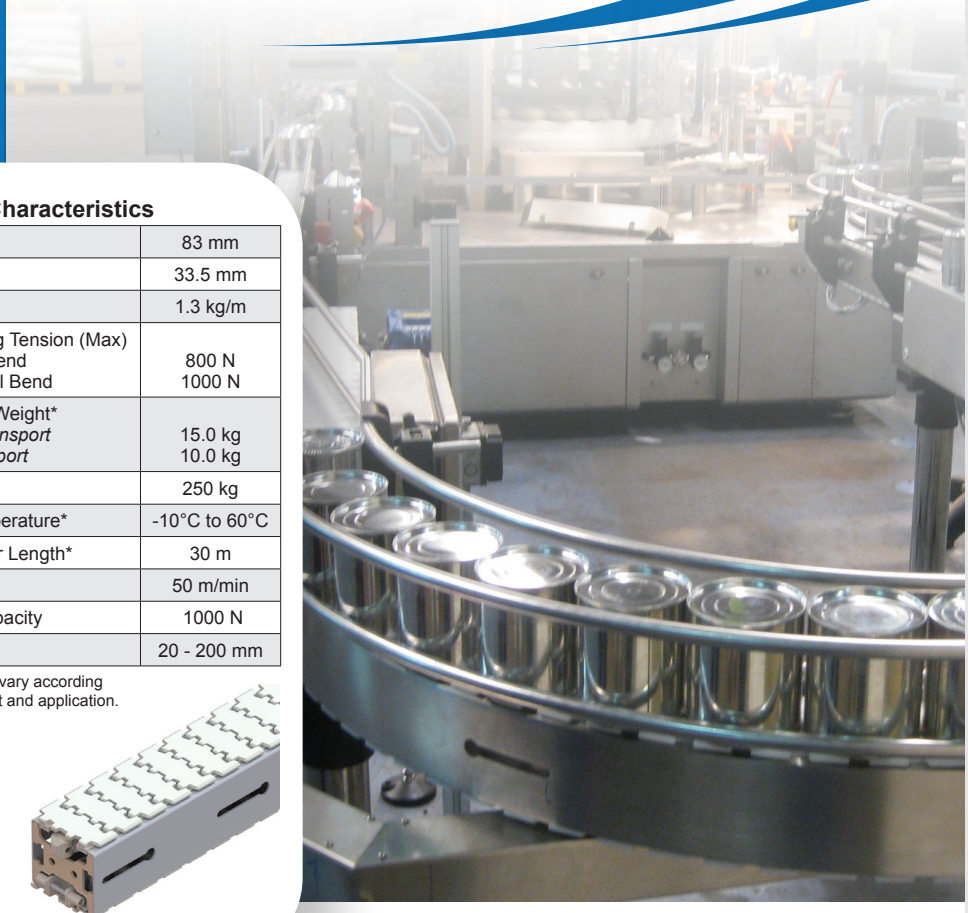
Vertical Bend, 90°

Effective track length:
R300: 0.63m 1-way (1.26m 2-way)
R1000: 1.73m 1-way (3.46m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DS3 BV 90R300	2.0 kg	1 unit
DS3 BV 90R1000	5.4 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

MODU DM3
CONVEYOR SERIES



Technical Characteristics

Chain Width	83 mm
Chain Pitch	33.5 mm
Chain Weight	1.3 kg/m
Chain Working Tension (Max) With Wheel Bend Without Wheel Bend	 800 N 1000 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 15.0 kg 10.0 kg
Total Load*	250 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	1000 N
Item Width*	20 - 200 mm

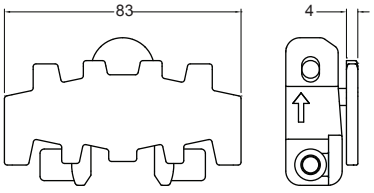
* Actual limit may vary according to conveyor layout and application.

Chain Width 83mm

Contents

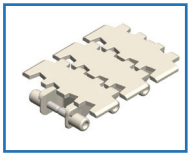
Chain MM3 244
Chain Top Replacement MM3 246
Chain Accessories MM3 247
Drive Units DM3 248
Idler End DM3 253
Conveyor Beam DM3 254
Accessories DM3 254
Horizontal Wheel Bend DM3 255
Horizontal Plain Bend DM3 256
Vertical Bend DM3 257

Chain MM3

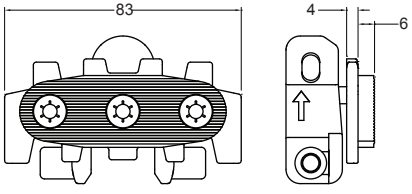


Plain Chain

- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

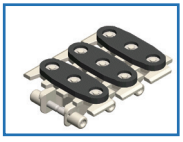


Item Code	Material	Color	Weight	Supply
MM3 CP 5	POM	White	6.5 kg/roll	5m/roll
MM3 CP 5A	Anti-Static	Yellow	6.5 kg/roll	5m/roll
MM3 CP 5K	Kevlar	Yellow	8.0 kg/roll	5m/roll

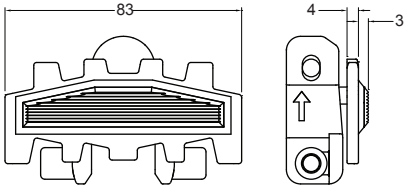


Insert Friction Chain

- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Accumulation not possible

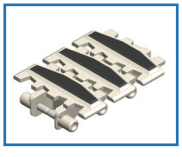


Item Code	Material	Color	Weight	Supply
MM3 CF 5	POM	White	7.5 kg/roll	5m/roll
MM3 CF 5A	Anti-Static	Yellow	7.5 kg/roll	5m/roll
MM3 CF 5K	Kevlar	Yellow	9.5 kg/roll	5m/roll

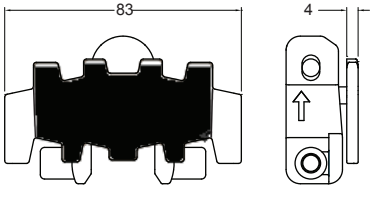


Molded Friction Chain

- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Accumulation not possible
- PP chain working material tension = 500N

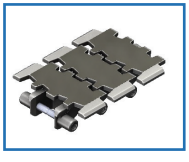


Item Code	Material	Color	Weight	Supply
MM3 CF 5P	PP	White	6.8 kg/roll	5m/roll



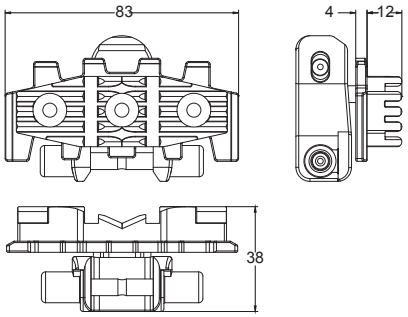
Flocked Chain

- Suitable for scratch sensitive material.
- Flock colour : Black
- Accumulation possible for light product only.
- Sticker type only

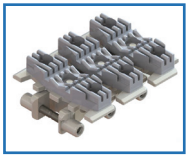


Item Code	Material	Color	Weight	Supply
MM3 CL 5	POM	White	7.0 kg/roll	5m/roll

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

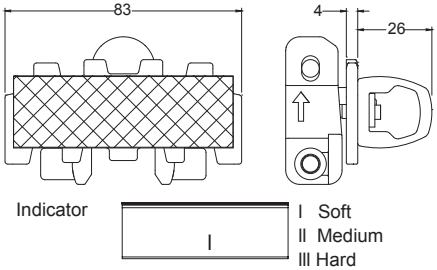


Silicone Pad Friction Chain

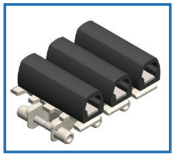


- High friction for incline of cylindral product up to 40˚
- Accumulation not possible.
- Not suitable to use with Combined Drive

Item Code	Material	Color	Weight	Supply
MM3 CF 3S	POM	White	5.4 kg/roll	3m/roll
MM3 CF 3SA	Anti-Static	Yellow	5.4 kg/roll	3m/roll
MM3 CF 3SK	Kevlar	Yellow	7.2 kg/roll	3m/roll



Box Gripper Chain



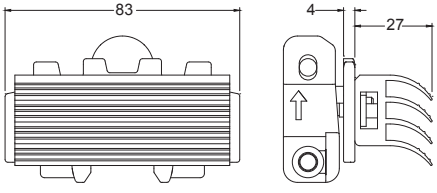
- Suitable to be use for transfering product using gripper system.
- Accumulation not possible.
- Not suitable to use with Combined Drive

Soft Type

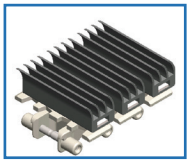
Item Code	Material	Color	Weight	Supply
DM3 CG 3BS	POM	White	7.7 kg/roll	3m/roll
DM3 CG 3BSA	Anti-Static	Yellow	7.7 kg/roll	3m/roll
DM3 CG 3BSK	Kevlar	Yellow	8.7 kg/roll	3m/roll

For other gripper box hardness, use the following item code:
Medium Type - DM3 CG 3BM
Hard Type - DM3 CG 3BH

Gripper Box	Max Product Weight
Soft Type – 50A Shore Hardness	up to 2 kg
Medium Type – 60A Shore Hardness	up to 5 kg
Hard Type – 73A Shore Hardness	up to 10 kg

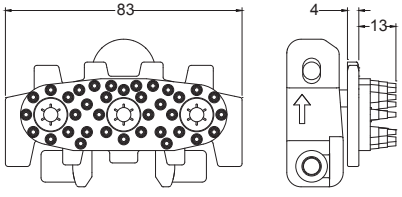


Wedge Gripper Chain

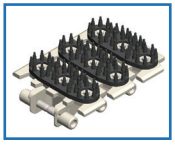


- Suitable to be use for transfering product using gripper system.
- Accumulation not possible.
- Not suitable to use with Combined Drive

Item Code	Material	Color	Weight	Supply
MM3 CG 3W	POM	White	5.0 kg/roll	3m/roll
MM3 CG 3WA	Anti-Static	Yellow	5.0 kg/roll	3m/roll
MM3 CG 3WK	Kevlar	Yellow	6.7 kg/roll	3m/roll



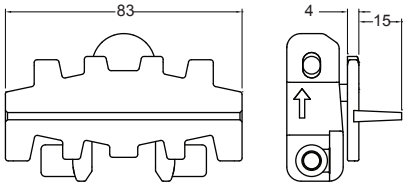
Finger Gripper Chain



- Suitable to be use for transfering product using gripper system.
- Accumulation not possible.
- Not suitable to use with Combined Drive

Item Code	Material	Color	Weight	Supply
MM3 CG 3F	POM	White	5.0 kg/roll	3m/roll
MM3 CG 3FA	Anti-Static	Yellow	5.0 kg/roll	3m/roll
MM3 CG 3FK	Kevlar	Yellow	6.0 kg/roll	3m/roll

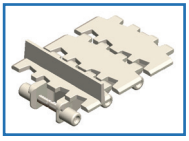
Please consult MODU representative for further information and assistance. Units: Dimension (mm)



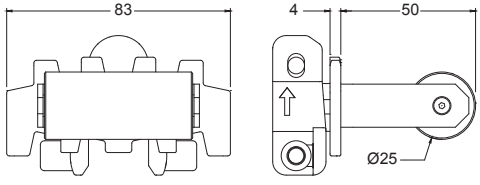
*P
Please specify pitch between cleat for ordering
(eg. MM3 CC 3x15 3P ; 3P = Every 3rd link to be cleated).

Cleated Link - Molded Cleated

- Required for vertical or steeply inclined / declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined and Catenary Drive.
- Supply in pieces.



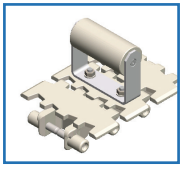
Item Code	Material	Color	Weight	Supply
MM3 CC 3X15 *P	POM	White	** kg/pc	1 pc
MM3 CC 3X15A *P	Anti-Static	Yellow	** kg/pc	1 pc
MM3 CC 3X15K *P	Kevlar	Yellow	** kg/pc	1 pc



*P
Please specify pitch between cleat for ordering
(eg. MM3 CR 3x15 3P ; 3P = Every 3rd link to be cleated).

Roller Cleated Link

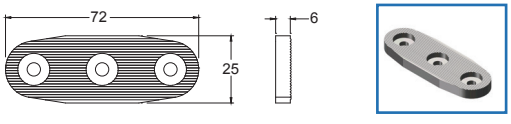
- Required for vertical or steeply inclined / declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined and Catenary Drive.
- Supply in pieces.



Item Code	Material	Color	Weight	Supply
MM3 CR 3X50 *P	POM	White	** kg/pc	1 pc

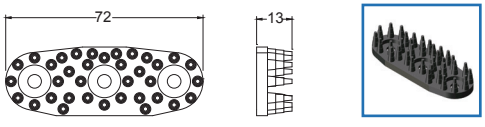
Chain Top Replacement MM3

Friction Pad



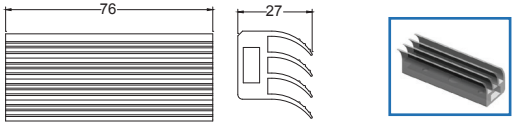
Item Code	Material	Color	Weight	Supply
MM3 FP 83	TPE	Grey	0.01 kg	10 pcs/pkt

Finger Gripper Pad



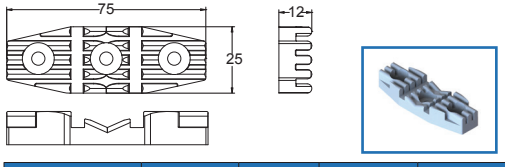
Item Code	Material	Color	Weight	Supply
MM3 GP 83F	TPU	Grey	0.09 kg	10 pcs/pkt

Wedge Gripper



Item Code	Material	Color	Weight	Supply
MM3 FP 83W	TPU	Grey	0.2 kg	10 pcs/pkt

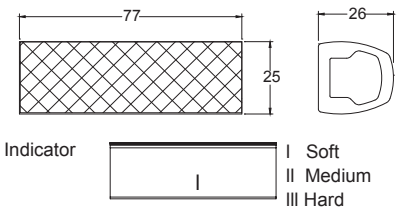
frictionSilicone Pad



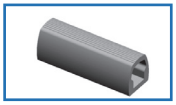
Item Code	Material	Color	Weight	Supply
MM3 FP 83S	Silicone	Grey	0.3 kg	10 pcs/pkt

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Gripper Box



- Box material : TPE (Grey).



Item Code	Hardness	Weight	Supply
MM3 GP 83 BS	Soft - 50A	0.2 kg	10 pcs/pkt
MM3 GP 83 BM	Medium - 60A	0.2 kg	10 pcs/pkt
MM3 GP 83 BH	Hard - 73A	0.2 kg	10 pcs/pkt

Chain Accessories MM3

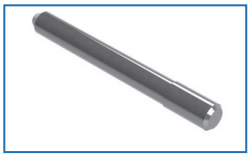
Lubricant For Chain



Silicone-based lubricant, 400ml

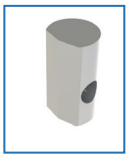
Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Stainless Steel Pin



Item Code	Weight	Supply
MM3 PN M6x53	0.07 kg	10 pcs / pkt

Chain Pivot

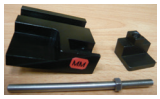


Item Code	Weight	Supply
MM3 PV	0.01 kg	10 pcs / pkt

Chain Pin Insertion Tool



Chain pin insertion tool shown without attachment and drive pin



Chain attachment and drive pin

Item Code	Description	Weight	Supply
TR CP 1	Pin Insertion Tool	1.2 kg	1 pc
MM3 AC	Chain Attachment	0.2 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units DM3

Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Transtechno)
T40 = CMRV 040
T50 = CMRV 050

Transfer Device
NIL = Basic Unit
TR = Free Roller
DR = Driven Roller

Gearmotor position: L or R

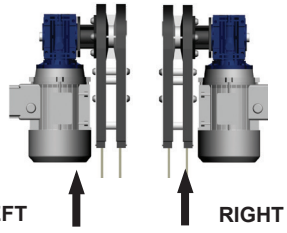
D: Front Drive
T: Combined Drive
C: Catenary Drive
S: Suspended Drive
I: Intermediate Drive
W: Wheel Bend Drive

Clutch
NIL = Basic Unit
C = With Clutch

DM3 DD L S20 TR C

Front direct drive unit, motor on left side for 0.25kW SEW geared motor, with Free Roller and Clutch.

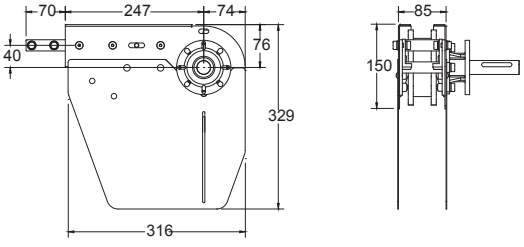
Motor Orientation Guideline



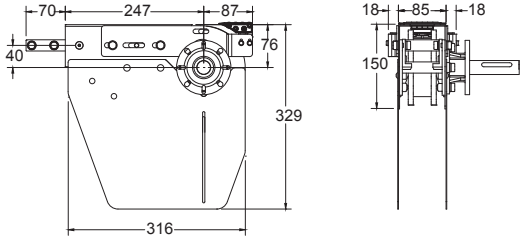
Example.
DM3 DD L S37 => Front drive unit, motor on left side for SEW SA37 gearmotor.

Front Drive Unit

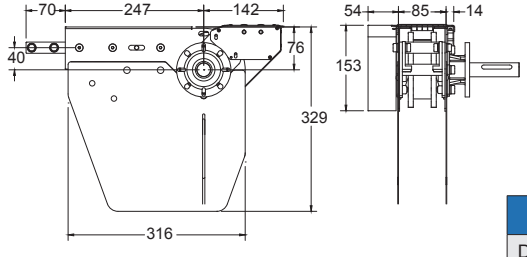
Basic Front Drive



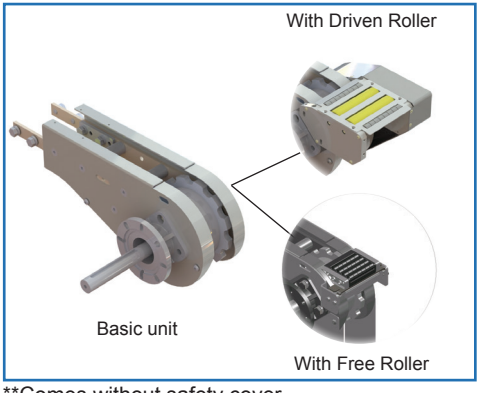
Front Drive with Free Roller



Front Drive with Driven Roller



Driven Roller speed is approximately 10% higher than conveyor speed.



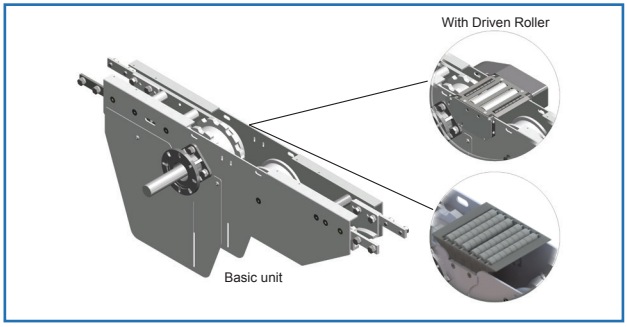
**Comes without safety cover

- Effective track length: 1.63m
- Traction force: 1000N
- Connecting strip and M8 hex screw included.
  Note:
- Safety Cover comes as an option.
- Recommended maximum chain elongation is 328mm from top conveyor to chain slack.

Item Code	Description	Weight	Supply
DM3 DD R/L S/T	Basic drive unit	5.5 kg	1 unit
DM3 DD R/L S/T TR	With transfer roller	5.7 kg	1 unit
DM3 DD R/L S/T DR	With driven roller	7.2 kg	1 unit

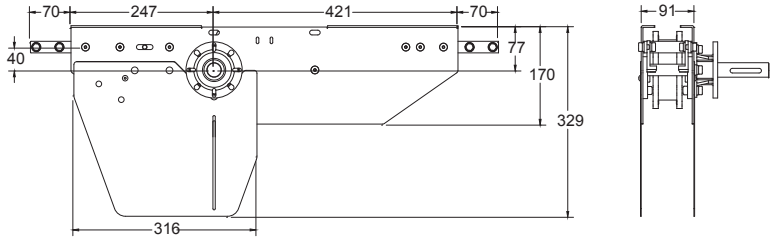
Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Combined Drive Unit

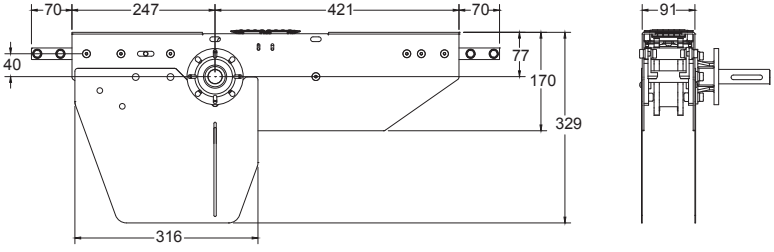


**Comes without safety cover

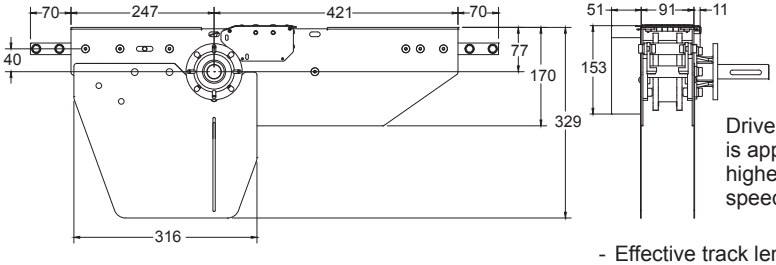
Basic Combined Drive



Combined Drive with Free Roller



Combined Drive with Driven Roller



Driven Roller speed is approximately 10% higher than conveyor speed.

Item Code	Description	Weight	Supply
DM3 DT R/L S/T	Basic drive unit	10.8 kg	1 unit
DM3 DT R/L S/T TR	With transfer roller	11.0 kg	1 unit
DM3 DT R/L S/T DR	With driven roller	12.5 kg	1 unit

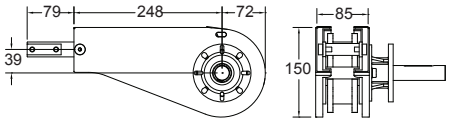
- Effective track length: 1.63m
- Traction force: 1000N
- Connecting strip and M8 hex screw included.

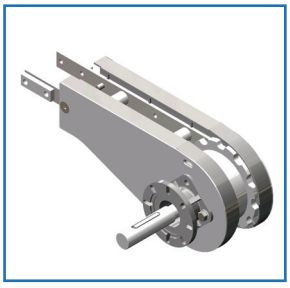
Note:

- Safety Cover comes as an option.
- Recommended maximum chain elongation is 328mm from top conveyor to chain slack.

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Gripper Drive Unit

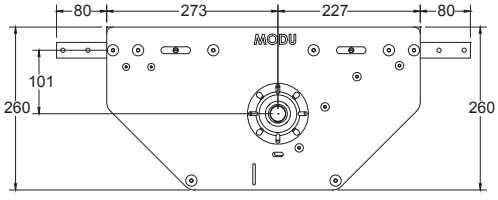


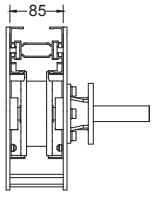


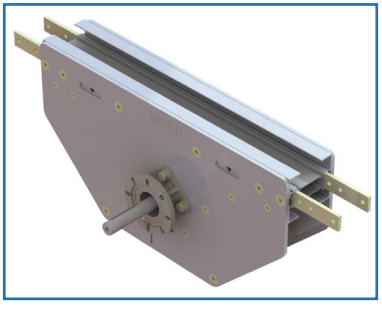
- Effective track length: 0.82m
- Traction force: 1000N
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DM3 DG R/L S/T	6.0 kg	1 unit

Intermediate Drive Unit



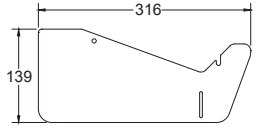




- Effective track length: 1.2m
- Traction force: 200N
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DM3 DI R/L S/T	13.0 kg	1 unit

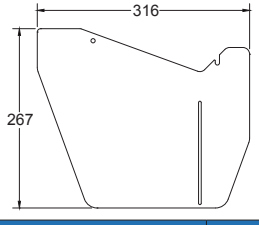
Short Safety Cover



Material : Stainless Steel

Item Code	Weight	Supply
SC2 139	0.8 kg	2 pcs/set

Standard Safety Cover



Material :
Stainless Steel

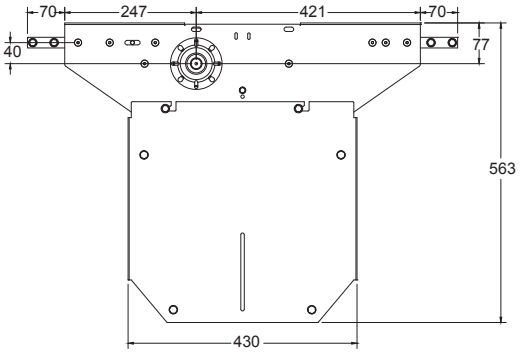
Item Code	Weight	Supply
SC2 267	0.8 kg	2 pcs/set

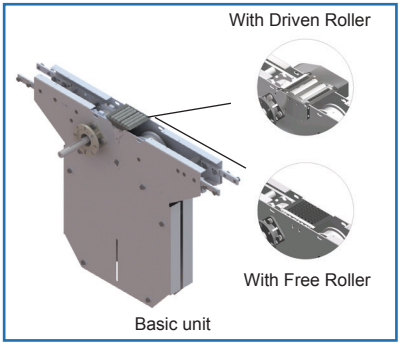
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

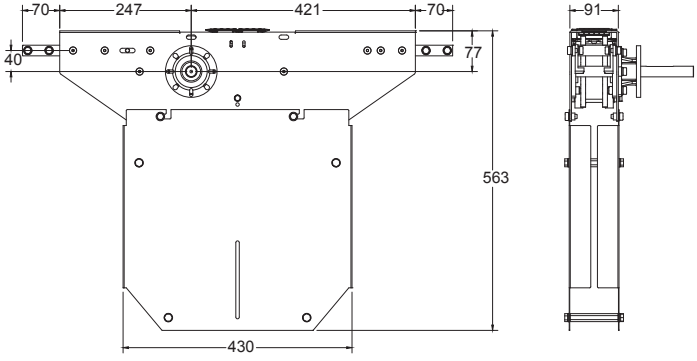
Catenary Drive Unit

Basic Catenary Drive Unit

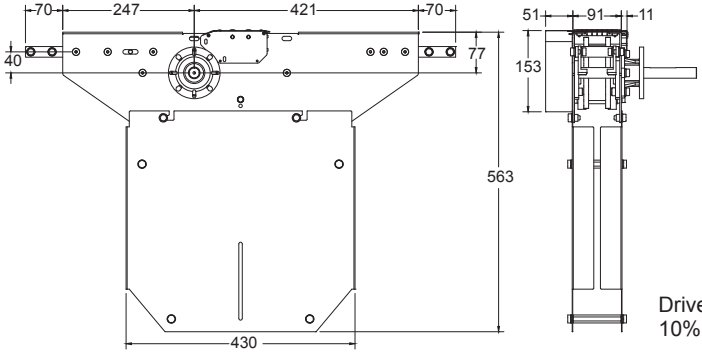




Catenary Drive with Free Roller



Catenary Drive with Driven Roller



Driven Roller speed is approximately 10% higher than conveyor speed.

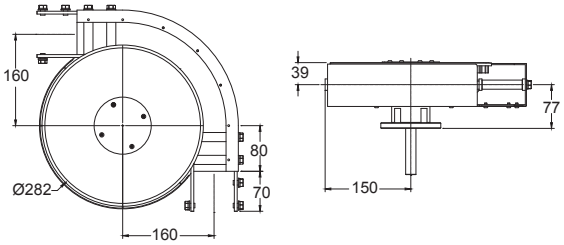
Item Code	Description	Weight	Supply
DM3 DC R/L S/T	Basic drive unit	19.5 kg	1 unit
DM3 DC R/L S/T TR	With transfer roller	19.7 kg	1 unit
DM3 DC R/L S/T DR	With driven roller	21.2 kg	1 unit

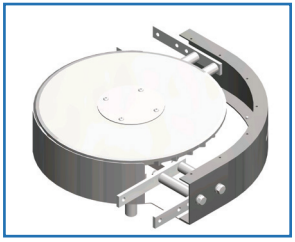
- Effective track length: 1.66m
- Traction force: 500N
- Connecting strip and M8 hex screw included.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

90° Wheel Bend Drive Unit

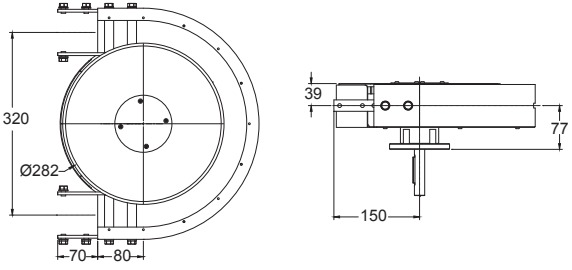


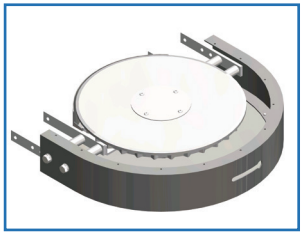


Item Code	Weight	Supply
DM3 DW 90R160 S/T	8.0 kg	1 unit

- Effective track length: 0.41m
- Traction force: 200N
- Connecting strip and M8 hex screw included.

180° Wheel Bend Drive Unit



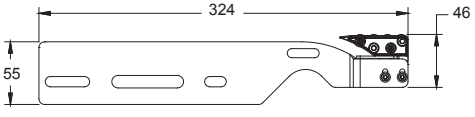


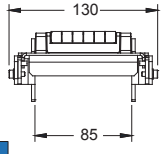
Item Code	Weight	Supply
DM3 DW 180R160 S/T	8.5 kg	1 unit

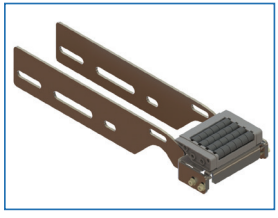
- Effective track length: 0.82m
- Traction force: 200N
- Connecting strip and M8 hex screw included.

Free Transfer Roller

Direct Drive Unit

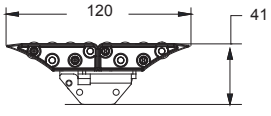


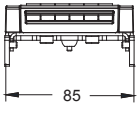




Item Code	Weight	Supply
MM3 TR DD/IE	0.85 kg	1 unit

Combined Drive Unit







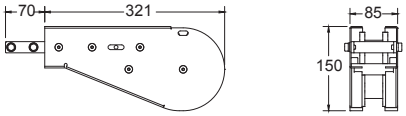
Item Code	Weight	Supply
MM3 TR DT	0.25 kg	1 unit

Please consult MODU representative for further information and assistance.

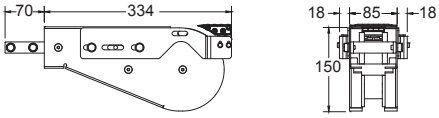
Units: Dimension (mm)

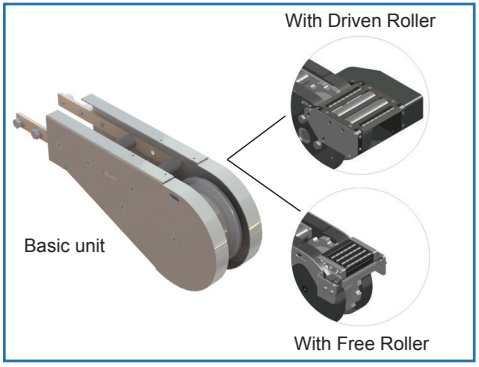
Idler End DM3

Basic Idler End Unit

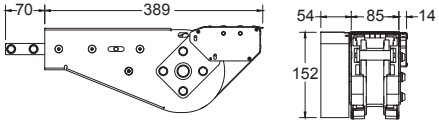


Idler End Unit with Free Roller





Idler End Unit with Driven Roller

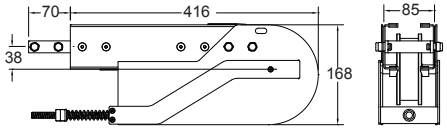


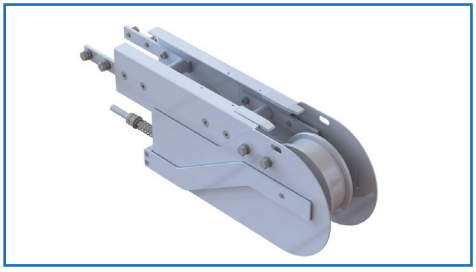
Driven Roller speed is approximately 10% higher than conveyor speed.

- Effective track length: 0.82m
- Connecting strip and M8 hex screw included.

Item Code	Description	Weight	Supply
DM3 IE 320	Basic idler unit	3.2 kg	1 unit
DM3 IE 320 TR	With transfer roller	3.6 kg	1 unit
DM3 IE 320 DR L/R	With driven roller	5.9 kg	1 unit

Gripper Idler End





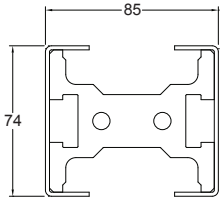
- Effective track length:1.02 m
- Connecting strip and M8 hex screw included.

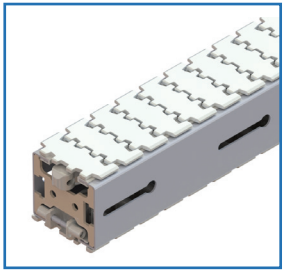
Item Code	Weight	Supply
DM3 IG 400	6.2 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor Beam DM3



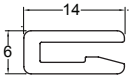


Item Code	Weight	Supply
DM3 CB 2.4	7.6 kg	2.4m / beam
DM3 CB L	** kg	L / beam

- Available length:
L = between 100, 200mm up 1200mm
- eg: for 200mm beam, part number is DM3 CB 0.2
- if beam required is 2.0m, then L = 1.2m + 0.8m
(order part number = DM3 CB 1.2 & DM3 CB 0.8)

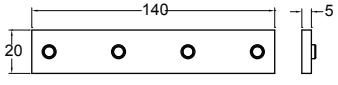
Accessories DM3

Slide Rail



Item Code	Material	Color	Weight	Supply
MS SR 25	HDPE	Semi-Transparent White	1.2 kg	25m/roll
MS SR 25A	Anti-Static	Grey	1.2 kg	25m/roll

Connecting Strip



Item Code	Weight	Supply
DA CS 20x140	1.1 kg	10 pcs/pkt

- 4 pcs M8 set screw included.

Rivet



Item Code	Weight	Supply
MA RR 3	0.02 kg	50 pcs/pkt

Rivet Crimping



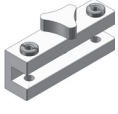
Item Code	Weight	Supply
MA RC	0.13 kg	1 pc

Slide Rail Mounting Tool



Item Code	Weight	Supply
MM3 SRA	0.4 kg	1 pc

Slide Rail Drill Fixture

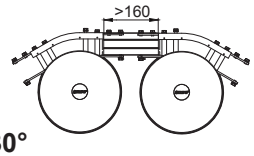


Item Code	Weight	Supply
MA SRF	0.24 kg	1 pc

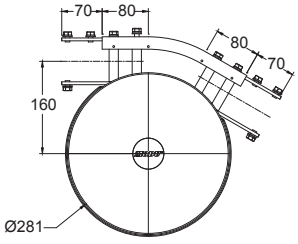
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Wheel Bend DM3



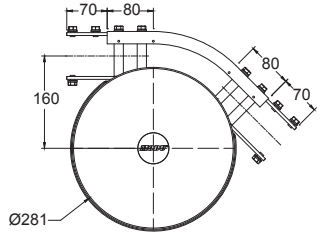
Minimum straightsection for all wheel bend connection.



Wheel Bend, 30°

Effective track length:
0.24m 1-way (0.48 m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

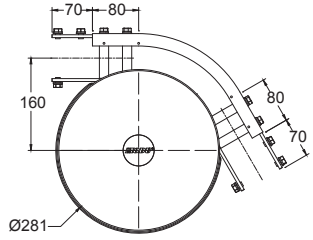
Item Code	Weight	Supply
DM3 BW 30R160	3.6 kg	1 unit



Wheel Bend, 45°

Effective track length:
0.28m 1-way (0.56m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

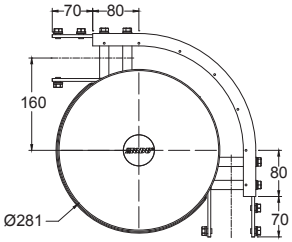
Item Code	Weight	Supply
DM3 BW 45R160	4.0 kg	1 unit



Wheel Bend, 60°

Effective track length:
0.33m 1-way (0.66 m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

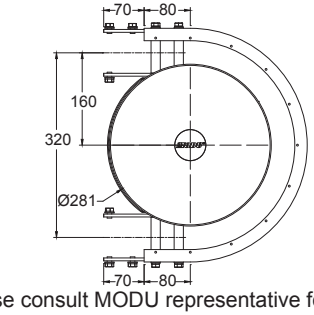
Item Code	Weight	Supply
DM3 BW 60R160	4.1 kg	1 unit



Wheel Bend, 90°

Effective track length:
0.41m 1-way (0.82m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DM3 BW 90R160	4.2 kg	1 unit



Wheel Bend, 180°

Effective track length:
0.66m 1-way (1.32 m 2-way).
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

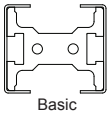
Item Code	Weight	Supply
DM3 BW 180R160	4.4 kg	1 unit

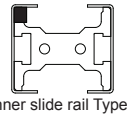
Please consult MODU representative for further information and assistance.

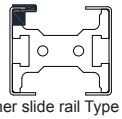
Units: Dimension (mm)

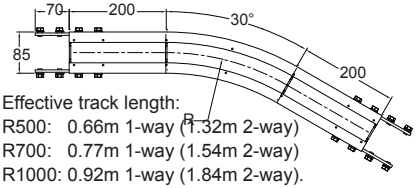
Horizontal Plain Bend DM3

Plain bends comes with options for optimum usage
-With inner slide rail Type A (SA), Material = PE.
-With inner slide rail Type B (SB), Material = Nylon
*(SB) is recommended when conveyor speed is 30m/min and above


Basic


Inner slide rail Type A

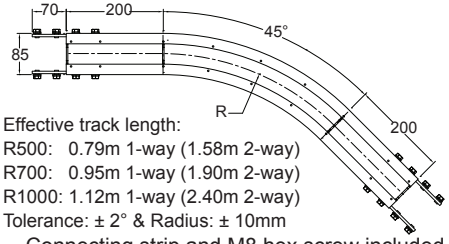

Inner slide rail Type B



Effective track length:
R500: 0.66m 1-way (1.32m 2-way)
R700: 0.77m 1-way (1.54m 2-way)
R1000: 0.92m 1-way (1.84m 2-way).
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Horizontal Plain Bend, 30°

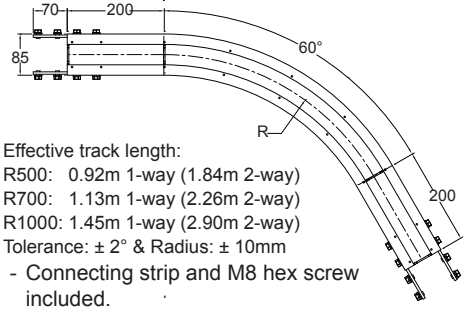
Item Code	Radius (R)	Weight	Supply
DM3 BP 30R500	500 mm	2.5 kg	1 unit
DM3 BP 30R700	700 mm	2.9 kg	1 unit
DM3 BP 30R1000	1000 mm	3.5 kg	1 unit



Effective track length:
R500: 0.79m 1-way (1.58m 2-way)
R700: 0.95m 1-way (1.90m 2-way)
R1000: 1.12m 1-way (2.40m 2-way)
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Horizontal Plain Bend, 45°

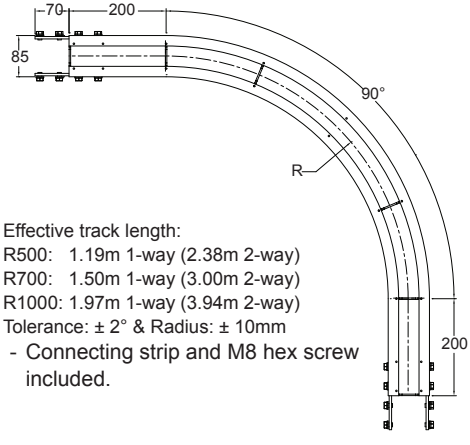
Item Code	Radius (R)	Weight	Supply
DM3 BP 45R500	500 mm	3.0 kg	1 unit
DM3 BP 45R700	700 mm	3.7 kg	1 unit
DM3 BP 45R1000	1000 mm	4.4 kg	1 unit



Effective track length:
R500: 0.92m 1-way (1.84m 2-way)
R700: 1.13m 1-way (2.26m 2-way)
R1000: 1.45m 1-way (2.90m 2-way)
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
DM3 BP 60R500	500 mm	3.5 kg	1 unit
DM3 BP 60R700	700 mm	4.2 kg	1 unit
DM3 BP 60R1000	1000 mm	5.4 kg	1 unit



Effective track length:
R500: 1.19m 1-way (2.38m 2-way)
R700: 1.50m 1-way (3.00m 2-way)
R1000: 1.97m 1-way (3.94m 2-way)
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Horizontal Plain Bend, 90°

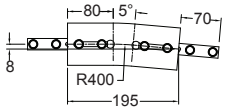
Item Code	Radius (R)	Weight	Supply
DM3 BP 90R500	500 mm	4.5 kg	1 unit
DM3 BP 90R700	700 mm	5.6 kg	1 unit
DM3 BP 90R1000	1000 mm	7.3 kg	1 unit

When ordering plain bends with inner slide rail, please specify the type using the following part number as an example.
Type A - DM3 BP 45R500 SA
Type B - DM3 BP 90R500 SB

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

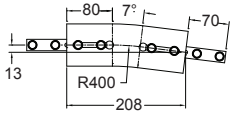
Vertical Bend DM3



Vertical Bend, 5°

Effective track length:
R400: 0.19m 1-way (0.38m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

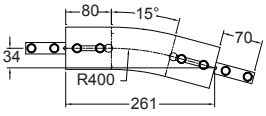
Item Code	Weight	Supply
DM3 BV 5R400	0.8 kg	1 unit



Vertical Bend, 7°

Effective track length:
R400: 0.20m 1-way (0.40m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

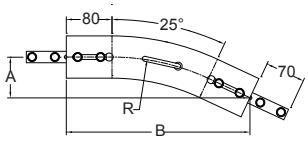
Item Code	Weight	Supply
DM3 BV 7R400	0.8 kg	1 unit



Vertical Bend, 15°

Effective track length:
R400: 0.26m 1-way (0.52m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DM3 BV 15R400	1.0 kg	1 unit

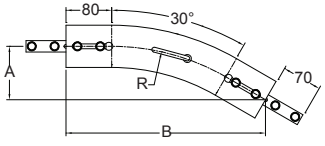


R400 : A = 71mm ; B = 322 mm
R1000 : A = 128mm ; B = 575 mm

Vertical Bend, 25°

Effective track length:
R400: 0.33m 1-way (0.66m 2-way)
R1000: 0.60m 1-way (1.20m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DM3 BV 25R400	1.3 kg	1 unit
DM3 BV 25R1000	2.3 kg	1 unit



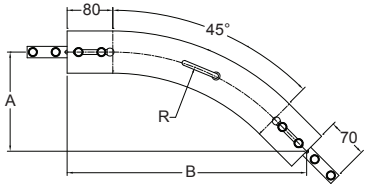
R400 : A = 80mm ; B = 299 mm
R1000 : A = 174mm ; B = 649 mm

Vertical Bend, 30°

Effective track length:
R400: 0.37m 1-way (0.74m 2-way)
R1000: 0.68m 1-way (1.36m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DM3 BV 30R400	1.6 kg	1 unit
DM3 BV 30R1000	3.3 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

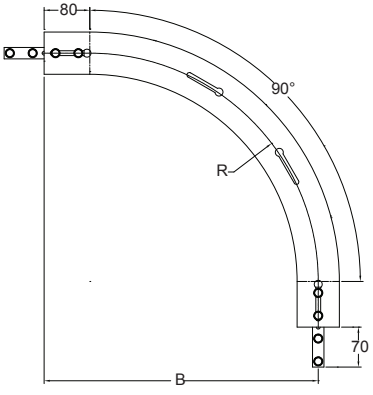


R400 : A = 174mm ; B = 419 mm
R1000 : A = 350mm ; B = 844 mm

Vertical Bend, 45°

Effective track length:
R400: 0.47m 1-way (0.94m 2-way)
R1000: 0.95m 1-way (1.90m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DM3 BV 45R400	1.8 kg	1 unit
DM3 BV 45R1000	3.5 kg	1 unit



R400 : B = 480 mm
R1000 : B = 1180 mm

Vertical Bend, 90°

Effective track length:
R400: 0.63m 1-way (1.26m 2-way)
R1000: 1.73m 1-way (3.46m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DM3 BV 90R400	3.0 kg	1 unit
DM3 BV 90R1000	6.4 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

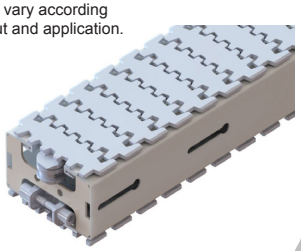
MODU DL2
CONVEYOR SERIES



Technical Characteristics

Chain Width	140 mm
Chain Pitch	44.5 mm
Chain Weight	2.5 kg/m
Chain Working Tension (Max) With Wheel Bend Without Wheel Bend	 1000 N 1200 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 25.0 kg 15.0 kg
Total Load*	400 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	1200 N
Item Width*	25 - 320 mm

* Actual limit may vary according to conveyor layout and application.

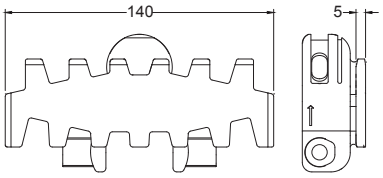


Chain Width 140mm

Contents

Chain ML2 260
Chain Top Replacement ML2 262
Chain Accessories ML2 262
Drive Units DL2 263
Idler End DL2 265
Conveyor Beam DL2 266
Accessories DL2 266
Horizontal Wheel Bend DL2 267
Horizontal Plain Bend DL2 268
Vertical Bend DL2 269

Chain ML2

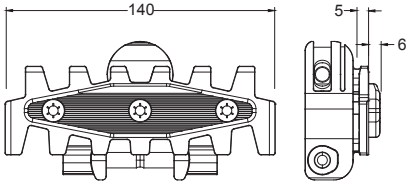


Plain Chain

- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

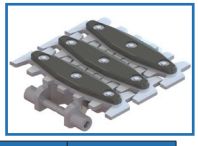


Item Code	Material	Color	Weight	Supply
ML2 CP 5	POM	White	13.0 kg/roll	5m/roll
ML2 CP 5A	Anti-Static	Yellow	13.0 kg/roll	5m/roll
ML2 CP 5K	Kevlar	Yellow	15.6 kg/roll	5m/roll

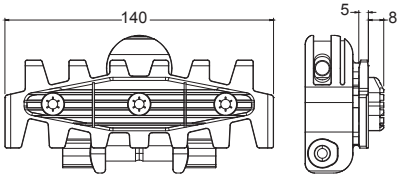


Friction Chain

- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Accumulation not possible

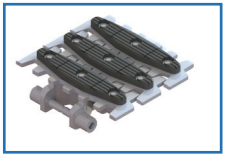


Item Code	Material	Color	Weight	Supply
ML2 CF 5	POM	White	15.0 kg/roll	5m/roll
ML2 CF 5A	Anti-Static	Yellow	15.0 kg/roll	5m/roll
ML2 CF 5K	Kevlar	Yellow	17.0 kg/roll	5m/roll

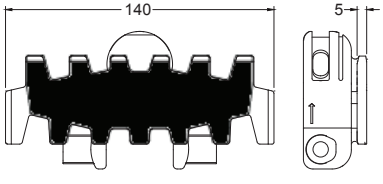


Silicone Pad Friction Chain

- High friction for incline of carton boxes up to 40˚
- Accumulation not possible.
- Not suitable to use with Combined Drive

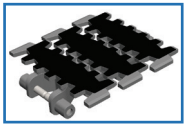


Item Code	Material	Color	Weight	Supply
ML2 CF 3S	POM	White	16.0 kg/roll	3m/roll
ML2 CF 3SA	Anti-Static	Yellow	16.0 kg/roll	3m/roll
ML2 CF 3SK	Kevlar	Yellow	17.0 kg/roll	3m/roll



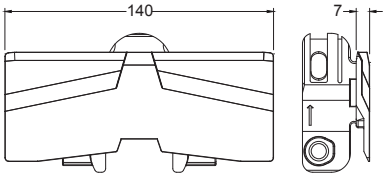
Flocked Chain

- Suitable for scratch sensitive material.
- Flock colour : Black
- Accumulation possible for light product only.
- Sticker type only



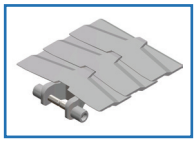
Item Code	Material	Color	Weight	Supply
ML2 CL 5	POM	White	12.5 kg/roll	5m/roll

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

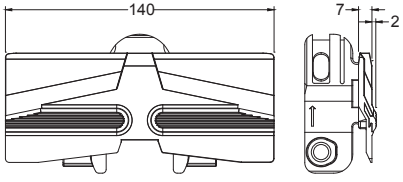


Safety Chain

- Suitable for conveyor configuration with incline/decline up to 5˚.
- Accumulation possible.

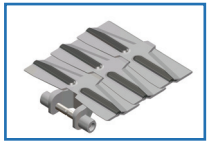


Item Code	Material	Color	Weight	Supply
ML2 CP 5S	POM	White	12.4 kg/roll	5m/roll

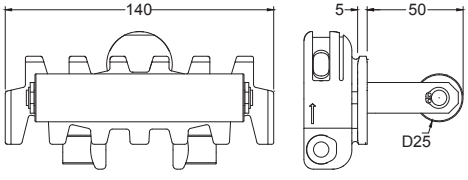


Safety Friction Chain

- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Accumulation not possible
- PP chain material working tension is less than POM, please refer to technical reference



Item Code	Material	Color	Weight	Supply
ML2 CF 5S	PP	White	12.4 kg/roll	5m/roll

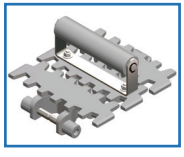


*P
Please specify pitch between cleat for ordering
(eg. ML2 CR 3 4P ; 4P = Every 4rd link to be cleated).

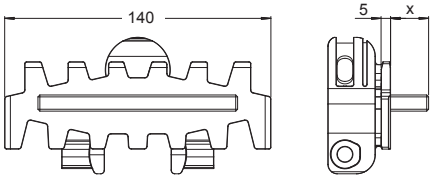
* Non-standard height are available upon request.

Roller Cleated Link

- Required for vertical or steeply inclined /declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined and Catenary Drive.
- Supply in pieces.



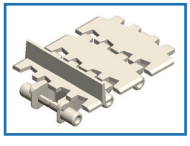
Item Code	Material	Color	Weight	Supply
ML2 CR 3 *P	POM	White	** kg/pc	1 pc



*P
Please specify pitch between cleat for ordering
(eg. ML2 CC 3x15 3P ; 3P = Every 3rd link to be cleated).

Machined Cleated Link

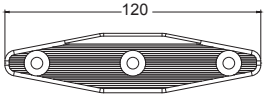
- Required for vertical or steeply inclined /declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined and Catenary Drive.
- Supply in pieces.

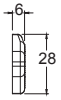


Item Code	Material	Color	Weight	Supply
ML2 CC 3X15 *P	POM	White	** kg/pc	1 pc
ML2 CC 3X15A *P	Anti-Static	Yellow	** kg/pc	1 pc
ML2 CC 3X15K *P	Kevlar	Yellow	** kg/pc	1 pc

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Chain Top Replacement ML2

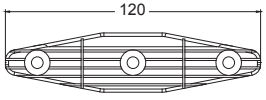




Friction Pad

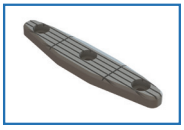


Item Code	Material	Color	Weight	Supply
ML2 FP 140	TPE	Grey	0.01 kg	10 pcs/pkt





Friction Silicone Pad



Item Code	Material	Color	Weight	Supply
ML2 FP 140S	Silicone	Grey	0.5 kg	10 pcs/pkt

Chain Accessories ML2

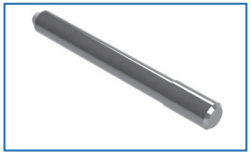
Lubricant For Chain



Silicone-based lubricant, 400ml

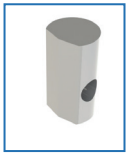
Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Stainless Steel Pin



Item Code	Weight	Supply
ML2 PN M8x73	0.07 kg	10 pcs / pkt

Chain Pivot



Item Code	Weight	Supply
ML2 PV	0.07 kg	10 pcs / pkt

Chain Pin Insertion Tool



Chain pin insertion tool shown without attachment and drive pin



Chain attachment and drive pin

Item Code	Description	Weight	Supply
TR CP 1	Pin Insertion Tool	1.2 kg	1 pc
ML2 AC	Chain Attachment	0.3 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units DL2

Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Transtechno)
T40 = CMRV 040
T50 = CMRV 050

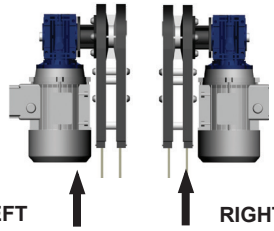
Transfer Device
NIL = Basic Unit
TR = Free Roller
DR = Driven Roller

Gearmotor position: L or R
D: Front Drive

Clutch
NIL = Basic Unit
C = With Clutch

DL2 DD L S37 TR C
Front direct drive unit, motor on left side for 0.55kW SEW geared motor, with Free Roller and Clutch.

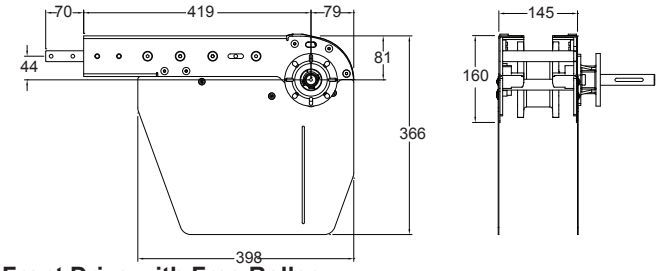
Motor Orientation Guideline



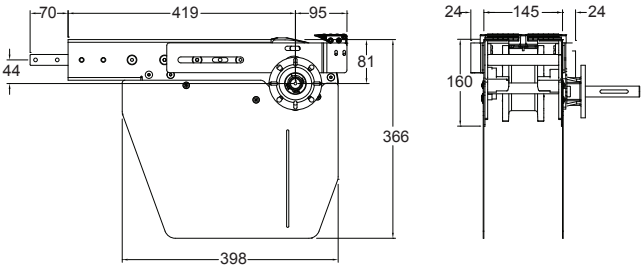
Example. Code for Basic unit;
DL2 DD R S47 => Front drive unit, motor on right side for SEW SA47 gearmotor.

Front Drive Unit

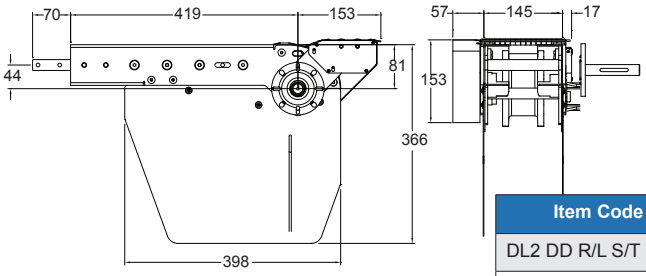
Basic Front Drive

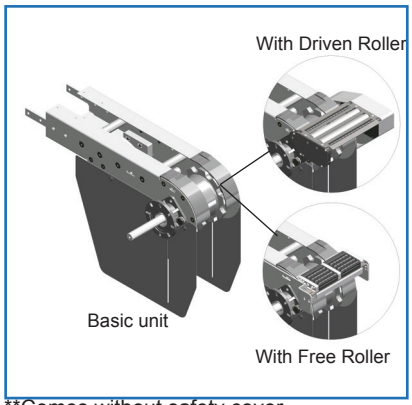


Front Drive with Free Roller



Front Drive with Driven Roller





**Comes without safety cover

- Effective track length: 1.16m
- Traction force: 1200N
- Connecting strip and M8 hex screw included.
  Note:
- Safety Cover comes as an option.
- Recommended maximum chain elongation is 328mm from top conveyor to chain slack.

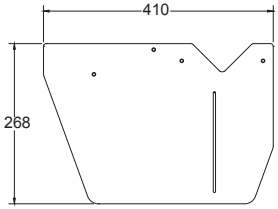
Item Code	Description	Weight	Supply
DL2 DD R/L S/T	Basic drive unit	6.4 kg	1 unit
DL2 DD R/L S/T TR	With transfer roller	7.1 kg	1 unit
DL2 DD R/L S/T DR	With driven roller	8.1 kg	1 unit

Driven Roller speed is approximately 10% higher than conveyor speed.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Standard Safety Cover

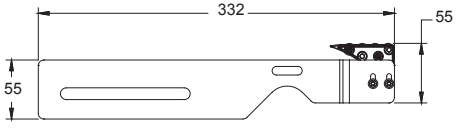


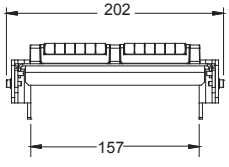
- Material : Stainless Steel
- Suitable to be used with front drive unit and combined drive unit

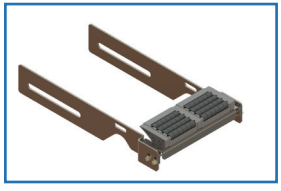
Item Code	Weight	Supply
SC2 268	1.8 kg	2 pcs/set

Free Transfer Roller

Direct Drive Unit

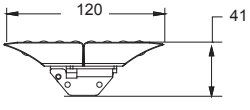


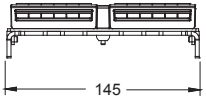




Item Code	Weight	Supply
ML2 TR DD/IE	0.86 kg	1 unit

Combined Drive Unit





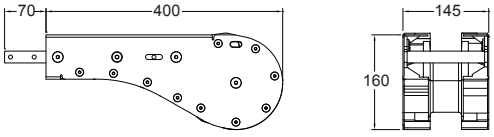


Item Code	Weight	Supply
ML2 TR DT	0.42 kg	1 unit

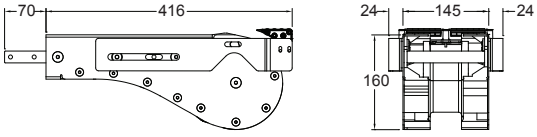
Please consult MODU representative for further information and assistance. Units: Dimension (mm)

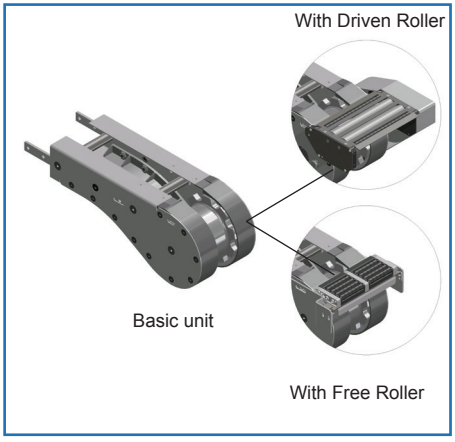
Idler End DL2

Basic Idler End Unit

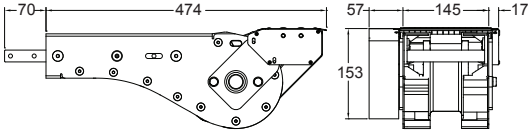


Idler End Unit with Free Roller





Idler End Unit with Driven Roller



Driven Roller speed is approximately 10% higher than conveyor speed.

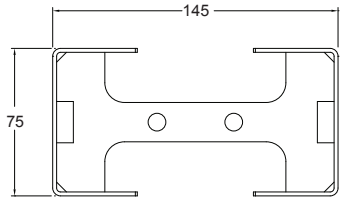
- Effective track length: 1.02m
- Connecting strip and M8 hex screw included.

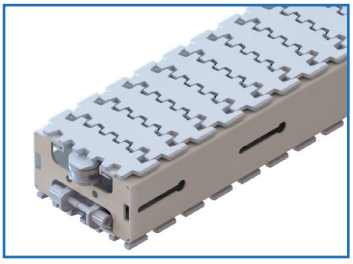
Item Code	Description	Weight	Supply
DL2 IE 400	Basic idler unit	6.7 kg	1 unit
DL2 IE 400 TR	With transfer roller	7.0 kg	1 unit
DL2 IE 400 DR L/R	With driven roller	8.5 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor Beam DL2



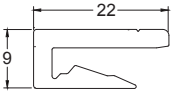


Item Code	Weight	Supply
DL2 CB 2.4	18.9 kg	2.4m / beam
DL2 CB L	**L kg	L / beam

- Available length:
L = between 100, 200mm up 1200mm
- eg: for 200mm beam, part number is DL2 CB 0.2
- if beam required is 1.8m, then L = 1.2m + 0.6m
(order part number = DL2 CB 1.2 & DL2 CB 0.6)

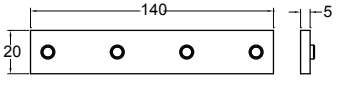
Accessories DL2

Slide Rail



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll
MA2 SR 25U	UHMW-PE	-	-	-

Connecting Strip



- 4 pcs M8 set screw included.

Item Code	Weight	Supply
DA CS 20x140	1.1 kg	10 pcs/pkt

Screw



Item Code	Weight	Supply
MA RS 6.5	0.02 kg	50 pcs/pkt

Slide Rail Mounting Tool

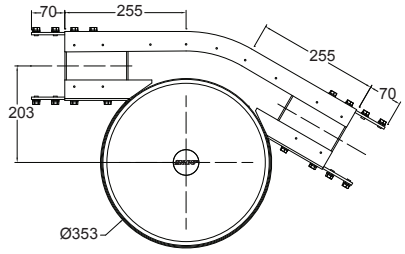


Item Code	Weight	Supply
MX2 SRA	0.4 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

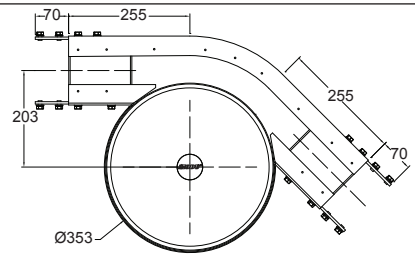
Horizontal Wheel Bend DL2



Wheel Bend, 30°

Effective track length:
0.6m 1-way (1.2m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

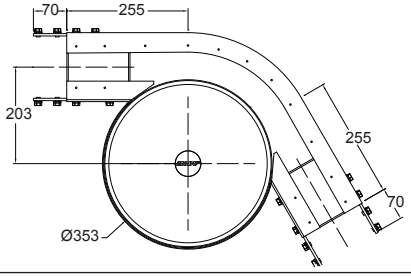
Item Code	Weight	Supply
DL2 BW 30R200	6.0 kg	1 unit



Wheel Bend, 45°

Effective track length:
0.66m 1-way (1.32m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

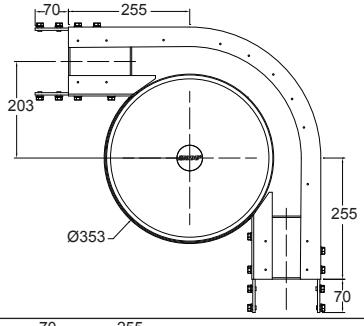
Item Code	Weight	Supply
DL2 BW 45R200	6.1 kg	1 unit



Wheel Bend, 60°

Effective track length:
0.71m 1-way (1.42m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

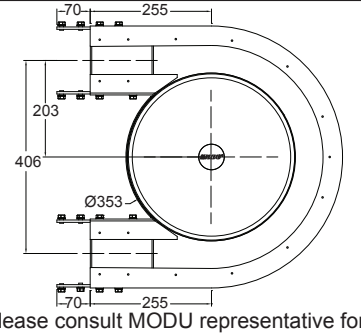
Item Code	Weight	Supply
DL2 BW 60R200	6.6 kg	1 unit



Wheel Bend, 90°

Effective track length:
0.81m 1-way (1.62m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DL2 BW 90R200	7.0 kg	1 unit



Wheel Bend, 180°

Effective track length:
1.13m 1-way (2.26m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

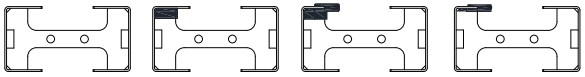
Item Code	Weight	Supply
DL2 BW 180R200	8.4 kg	1 unit

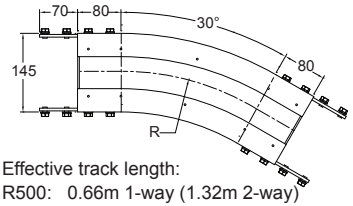
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend DL2

Plain bends comes with options for optimum usage
-With inner slide rail Type A (SA), Material = PE.
-With inner slide rail Type B (SB), Material = Nylon
-With inner slide rail Type N (SN), Material = UHMW-PE
*(SB) is recommended when conveyor speed is 30m/min and above



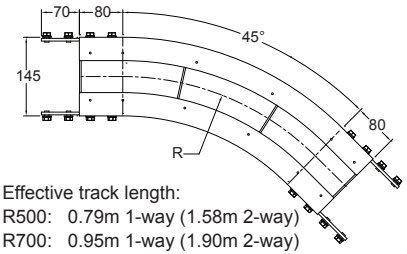


Effective track length:
R500: 0.66m 1-way (1.32m 2-way)
R700: 0.77m 1-way (1.54m 2-way)
R1000: 0.92m 1-way (1.84m 2-way).

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
DL2 BP 30R500	500 mm	2.2 kg	1 unit
DL2 BP 30R700	700 mm	2.8 kg	1 unit
DL2 BP 30R1000	1000 mm	3.6 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

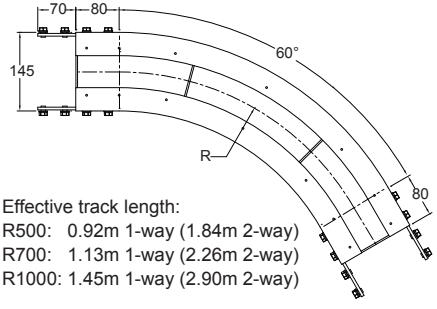


Effective track length:
R500: 0.79m 1-way (1.58m 2-way)
R700: 0.95m 1-way (1.90m 2-way)
R1000: 1.12m 1-way (2.40m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
DL2 BP 45R500	500 mm	2.9 kg	1 unit
DL2 BP 45R700	700 mm	3.7 kg	1 unit
DL2 BP 45R1000	1000 mm	4.9 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

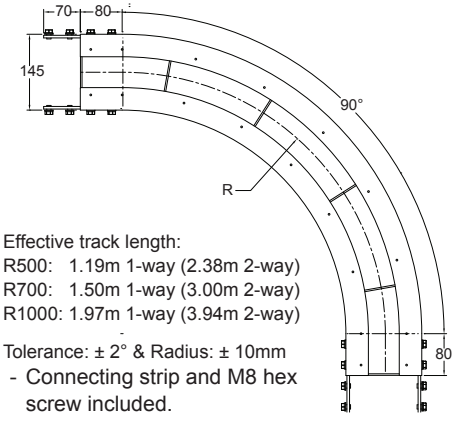


Effective track length:
R500: 0.92m 1-way (1.84m 2-way)
R700: 1.13m 1-way (2.26m 2-way)
R1000: 1.45m 1-way (2.90m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
DL2 BP 60R500	500 mm	3.6 kg	1 unit
DL2 BP 60R700	700 mm	4.6 kg	1 unit
DL2 BP 60R1000	1000 mm	6.1 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.



Effective track length:
R500: 1.19m 1-way (2.38m 2-way)
R700: 1.50m 1-way (3.00m 2-way)
R1000: 1.97m 1-way (3.94m 2-way)

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Horizontal Plain Bend, 90°

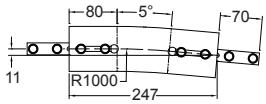
Item Code	Radius (R)	Weight	Supply
DL2 BP 90R500	500 mm	4.9 kg	1 unit
DL2 BP 90R700	700 mm	6.5 kg	1 unit
DL2 BP 90R1000	1000 mm	8.8 kg	1 unit

When ordering plain bends with inner slide rail, please specify the type using the following part number as an example.
Type A - DL2 BP 30R500 SA
Type B - DL2 BP 90R500 SB
Type N - DL2 BP 90R500 SN

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

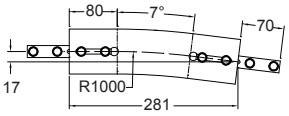
Vertical Bend DL2



Vertical Bend, 5°

Effective track length:
R1000: 0.25m 1-way (0.5m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

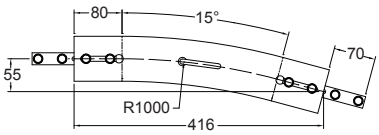
Item Code	Weight	Supply
DL2 BV 5R1000	1.3 kg	1 unit



Vertical Bend, 7°

Effective track length:
R1000: 0.28m 1-way (0.56m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

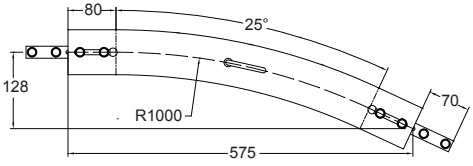
Item Code	Weight	Supply
DL2 BV 7R1000	1.5 kg	1 unit



Vertical Bend, 15°

Effective track length:
R1000: 0.42m 1-way (0.84m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

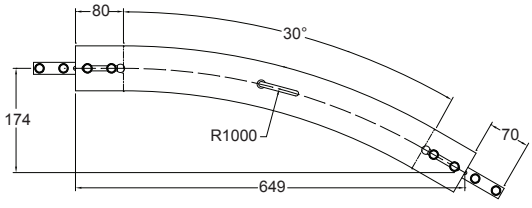
Item Code	Weight	Supply
DL2 BV 15R1000	2.2 kg	1 unit



Vertical Bend, 25°

Effective track length:
R1000: 0.60m 1-way (1.20m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DL2 BV 25R1000	3.1 kg	1 unit

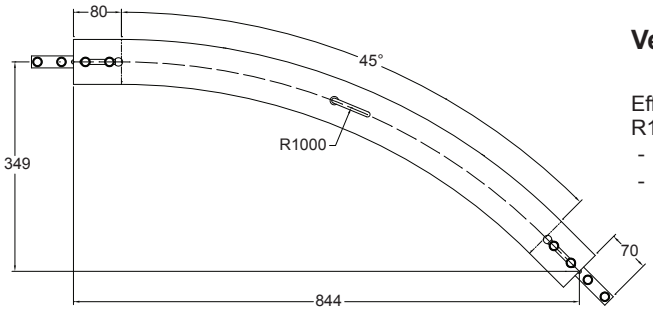


Vertical Bend, 30°

Effective track length:
R1000: 0.68m 1-way (1.36m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DL2 BV 30R1000	3.5 kg	1 unit

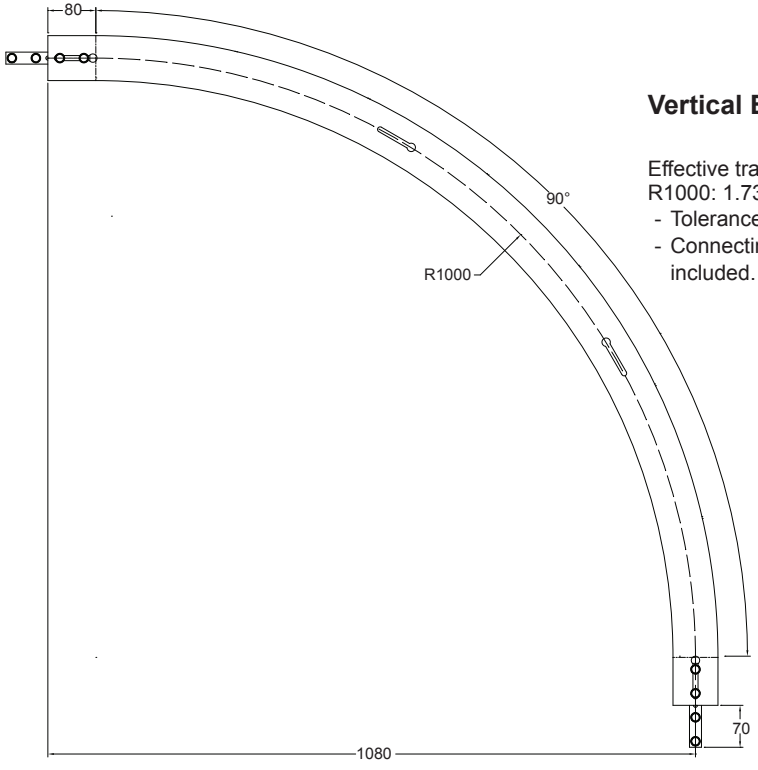
Please consult MODU representative for further information and assistance. Units: Dimension (mm)



Vertical Bend, 45°

Effective track length:
R1000: 0.95m 1-way (1.90m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DL2 BV 45R1000	4.8 kg	1 unit



Vertical Bend, 90°

Effective track length:
R1000: 1.73m 1-way (3.46m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DL2 BV 90R1000	8.8 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

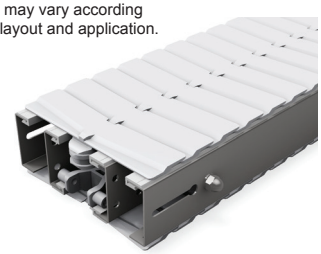
MODU DX2
CONVEYOR SERIES



Technical Characteristics

Chain Width	220 mm
Chain Pitch	44.5 mm
Chain Weight	3.4 kg/m
Chain Working Tension (Max) With Bend Without Bend	 1000 N 1200 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 25.0 kg 15.0 kg
Total Load*	400 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	1300 N
Item Width*	70 - 500 mm

* Actual limit may vary according to conveyor layout and application.

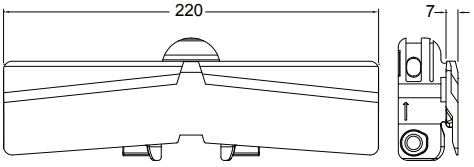


Chain Width 220mm

Contents

Chain MX2 272
Chain Accessories MX2 273
Drive Units DX2 274
Idler End DX2 276
Conveyor Beam DX2 277
Accessories DX2 277
Horizontal Plain Bend DX2 278
Vertical Bend DX2 279

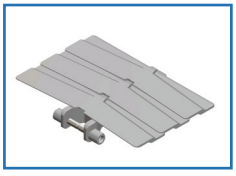
Chain MX2

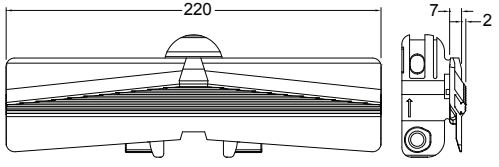


Item Code	Material	Color	Weight	Supply
MX2 CP 5	POM	White	17.2 kg/roll	5m/roll

Plain Chain

- Suitable for conveyor configuration with incline/ decline up to 7˚.
- Accumulation possible.

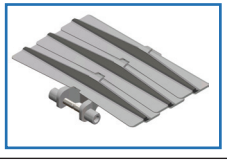


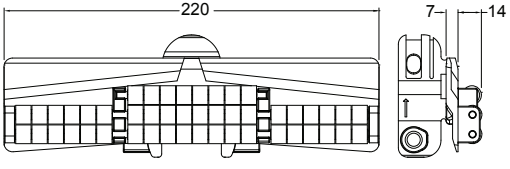


Item Code	Material	Color	Weight	Supply
MX2 CF 5	POM	White	18.2 kg/roll	5m/roll

Friction Chain

- Suitable for conveyor configuration with incline/ decline up to 25˚.
- Friction material : TPE (grey).
- Accumulation not possible

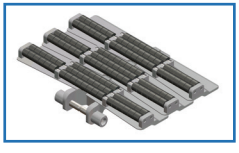


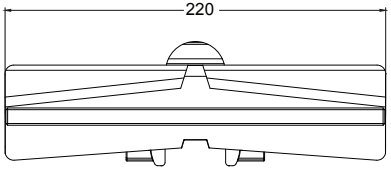


Item Code	Material	Color	Weight	Supply
MX2 RT 3	POM	White	22.0 kg/roll	3m/roll

Roller Top Chain

- Accumulation possible.
- Low back force.





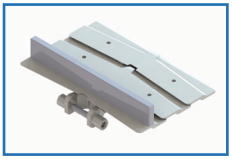
*P
Please specify pitch between cleat for ordering
(eg. MX2 CC 3x30 4P ; 4P = Every 4rd link to be cleated).

* Non-standard height are available upon request.

Item Code	Material	Color	Weight	Supply
MX2 CC 3x30 *P	POM	White	** kg/pc	1 pc

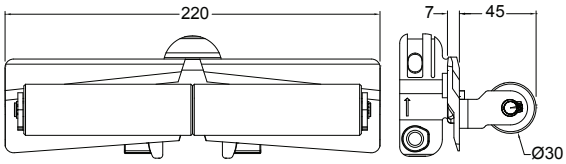
Cleated Link - PE Cleated (Machine)

- Required for vertical or steeply inclined /declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined Drive.
- Supply in pieces.



Please consult MODU representative for further information and assistance.

Units: Dimension (mm)



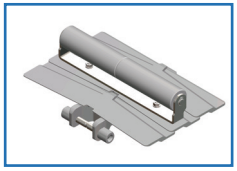
Roller Cleated Link

- Required for vertical or steeply inclined / declined conveyor.
- Accumulation not possible.
- Not suitable to be use with Combined Drive.
- Supply in pieces.

*p
Please specify pitch between cleat for ordering
(eg. MX2 CR 3x15P 3p = Every 3rd link to be cleated).

* Non-standard height are available upon request.

Item Code	Material	Color	Weight	Supply
MX2 CR 3X15P *p	POM	White	** kg/pc	1 pc



Chain Accessories MX2

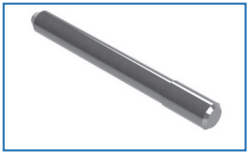
Lubricant For Chain



Silicone-based lubricant, 400ml

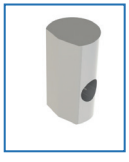
Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Stainless Steel Pin



Item Code	Weight	Supply
ML2 PN M8x73	0.07 kg	10 pcs / pkt

Chain Pivot



Item Code	Weight	Supply
ML2 PV	0.07 kg	10 pcs / pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units DX2

Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Transtechno)
T40 = CMRV 040
T50 = CMRV 050

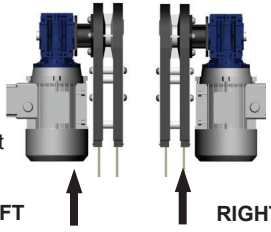
Transfer Device
NIL = Basic Unit
TR = Free Roller
DR = Driven Roller

Gearmotor position: L or R
D: Front Drive

Clutch
NIL = Basic Unit
C = With Clutch

DX2 DD L S47 TR C
Front direct drive unit, motor on left side for 0.55kW SEW geared motor

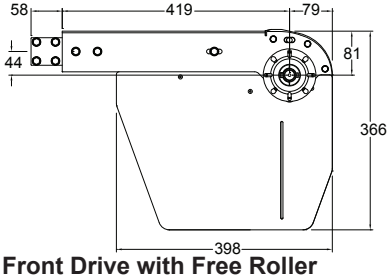
Motor Orientation Guideline

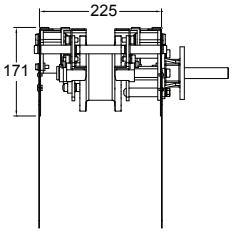


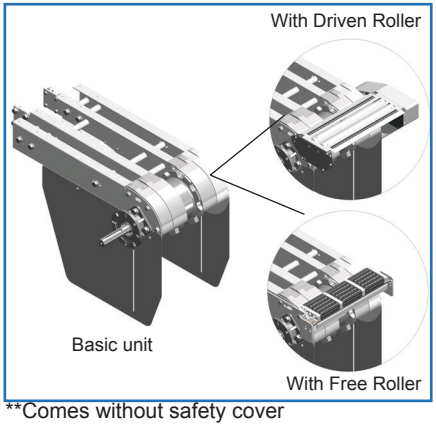
Example. Code for Basic unit;
DX2 DD R S47 => Front drive unit, motor on right side for SEW SA47 gearmotor.

Front Drive Unit

Basic Front Drive

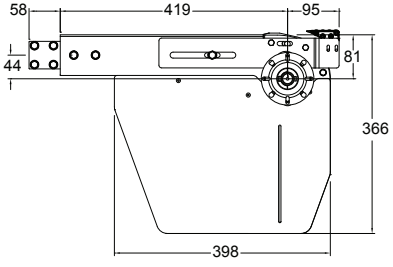


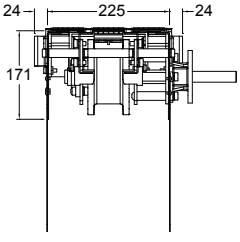




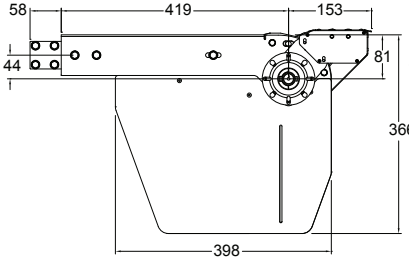
**Comes without safety cover

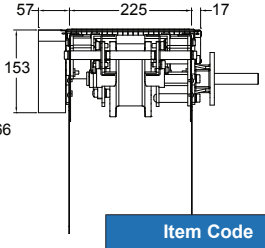
Front Drive with Free Roller





Front Drive with Driven Roller





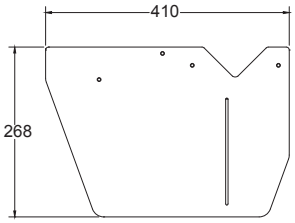
Driven Roller speed is approximately 10% higher than conveyor speed.

- Effective track length: 1.16m
- Traction force: 1300N
- Connecting strip and M8 hex screw included.
  Note:
- Safety Cover comes as an option.
- Recommended maximum chain elongation is 328mm from top conveyor to chain slack.

Item Code	Description	Weight	Supply
DX2 DD R/L S/T	Basic drive unit	8.5 kg	1 unit
DX2 DD R/L S/T TR	With transfer roller	9.0 kg	1 unit
DX2 DD R/L S/T DR	With driven roller	10.5 kg	1 unit

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Standard Safety Cover

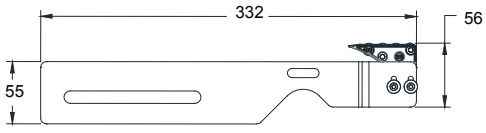


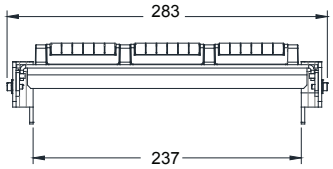
- Material : Stainless Steel
- Suitable to be used with front drive unit and combined drive unit

Item Code	Weight	Supply
SC2 268	1.8 kg	2 pcs/set

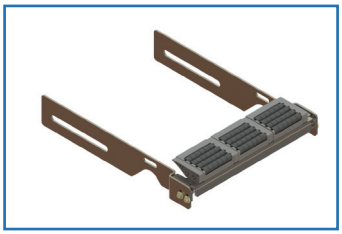
Free Transfer Roller

Direct Drive Unit

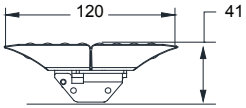


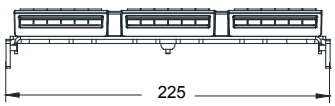


Item Code	Weight	Supply
MX2 TR DD/IE	1.2 kg	1 unit

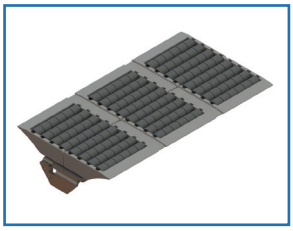


Combined Drive Unit





Item Code	Weight	Supply
MX2 TR DT	0.62 kg	1 unit

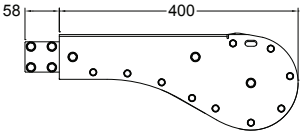


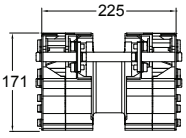
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

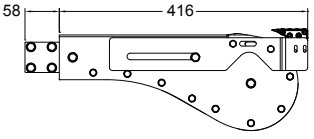
Idler End DX2

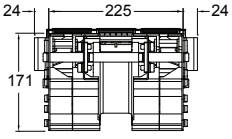
Basic Idler End Unit



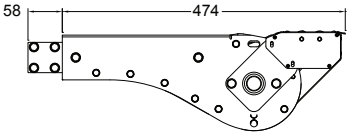


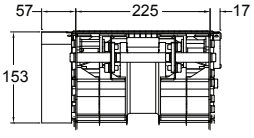
Idler End Unit with Free Roller

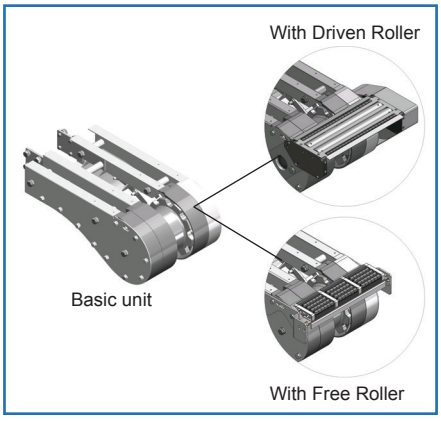




Idler End Unit with Driven Roller







Driven Roller speed is approximately 10% higher than conveyor speed.

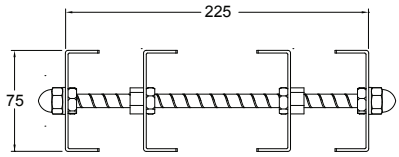
- Effective track length: 1.02m
- Connecting strip and M8 hex screw included.

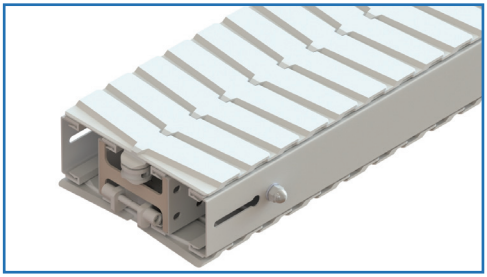
Item Code	Description	Weight	Supply
DX2 IE 400	Basic idler unit	8.4 kg	1 unit
DX2 IE 400 TR	With transfer roller	8.6 kg	1 unit
DX2 IE 400 DR L/R	With driven roller	10.4 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor Beam DX2



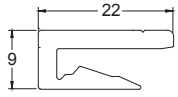


Item Code	Weight	Supply
DX2 CB 2.4	19.2 kg	2.4m / beam
DX2 CB L	**L kg	L / beam

- Available length:
L = between 100, 200mm up 1200mm
- eg: for 200mm beam, part number is DX2 CB 0.2
- if beam required is 1.5m, then L = 1.2m + 0.3m
(order part number = DX2 CB 1.2 & DX2 CB 0.6)

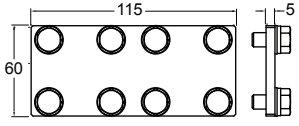
Accessories DX2

Slide Rail

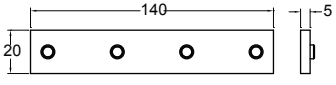


Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll
MA2 SR 25U	UHMW-PE	-	-	-

Connecting Strip



Item Code	Weight	Supply
DA CS 5x50.8x115	3.0 kg	10 pcs/pkt



Item Code	Weight	Supply
DA CS 20x140	1.1 kg	10 pcs/pkt

- M8 set screw included

Screw



Item Code	Weight	Supply
MA RS 6.5	0.02 kg	50 pcs/pkt

Slide Rail Mounting Tool



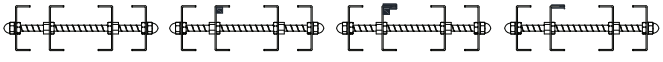
Item Code	Weight	Supply
MX2 SRA	0.4 kg	1 pc

Please consult MODU representative for further information and assistance.

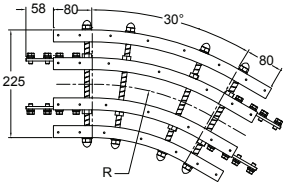
Units: Dimension (mm)

Horizontal Plain Bend DX2

Plain bends comes with options for optimum usage
-With inner slide rail Type A (SA), Material = PE.
-With inner slide rail Type B (SB), Material = Nylon
-With inner slide rail Type N (SN), Material = UHMW-PE
*(SB) is recommended when conveyor speed is 30m/min and above



Basic | Inner slide rail Type A | Inner slide rail Type B | Inner slide rail Type N

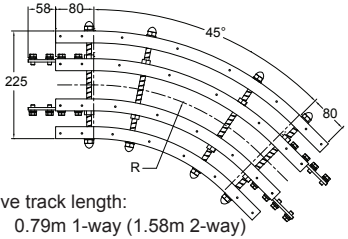


Effective track length:
R500: 0.66m 1-way (1.32m 2-way)
R700: 0.77m 1-way (1.54m 2-way)
R1000: 0.92m 1-way (1.84m 2-way).

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
DX2 BP 30R500	500 mm	5.8 kg	1 unit
DX2 BP 30R700	700 mm	6.5 kg	1 unit
DX2 BP 30R1000	1000 mm	8.0 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

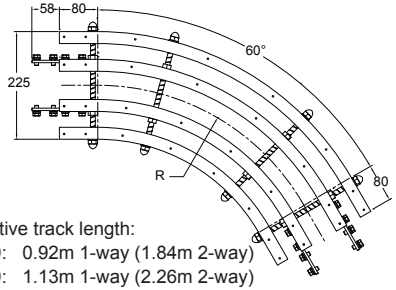


Effective track length:
R500: 0.79m 1-way (1.58m 2-way)
R700: 0.95m 1-way (1.90m 2-way)
R1000: 1.12m 1-way (2.40m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
DX2 BP 45R500	500 mm	7.0 kg	1 unit
DX2 BP 45R700	700 mm	8.5 kg	1 unit
DX2 BP 45R1000	1000 mm	10.0 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

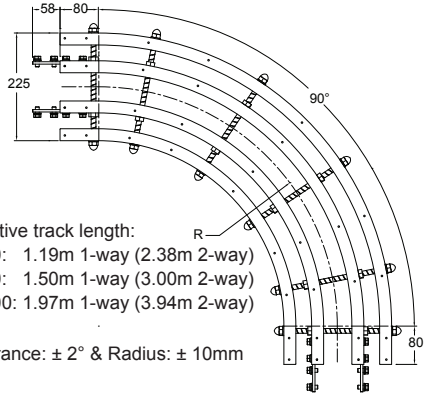


Effective track length:
R500: 0.92m 1-way (1.84m 2-way)
R700: 1.13m 1-way (2.26m 2-way)
R1000: 1.45m 1-way (2.90m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
DX2 BP 60R500	500 mm	8.0 kg	1 unit
DX2 BP 60R700	700 mm	9.5 kg	1 unit
DX2 BP 60R1000	1000 mm	12.0 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.



Effective track length:
R500: 1.19m 1-way (2.38m 2-way)
R700: 1.50m 1-way (3.00m 2-way)
R1000: 1.97m 1-way (3.94m 2-way)

Tolerance: ± 2° & Radius: ± 10mm

Horizontal Plain Bend, 90°

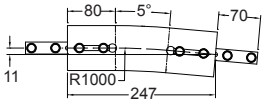
Item Code	Radius (R)	Weight	Supply
DX2 BP 90R500	500 mm	10.5kg	1 unit
DX2 BP 90R700	700 mm	13.5 kg	1 unit
DX2 BP 90R1000	1000 mm	15.0 kg	1 unit

- Connecting strip and M8 hex screw included.

When ordering plain bends with inner slide rail, please specify the type using the following part number as an example.
Type A - DX2 BP 30R500 SA
Type B - DX2 BP 90R500 SB
Type N - DX2 BP 90R500 SN

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

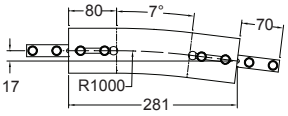
Vertical Bend DX2



Vertical Bend, 5°

Effective track length:
R1000: 0.25m 1-way (0.5m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

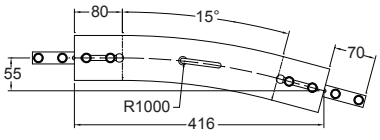
Item Code	Weight	Supply
DX2 BV 5R1000	4.0 kg	1 unit



Vertical Bend, 7°

Effective track length:
R1000: 0.28m 1-way (0.56m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

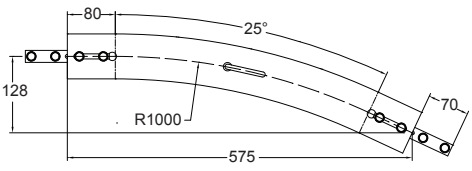
Item Code	Weight	Supply
DX2 BV 7R1000	5.0 kg	1 unit



Vertical Bend, 15°

Effective track length:
R1000: 0.42m 1-way (0.84m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

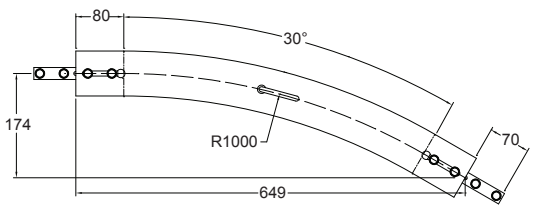
Item Code	Weight	Supply
DX2 BV 15R1000	5.5 kg	1 unit



Vertical Bend, 25°

Effective track length:
R1000: 0.60m 1-way (1.20m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DX2 BV 25R1000	7.3 kg	1 unit

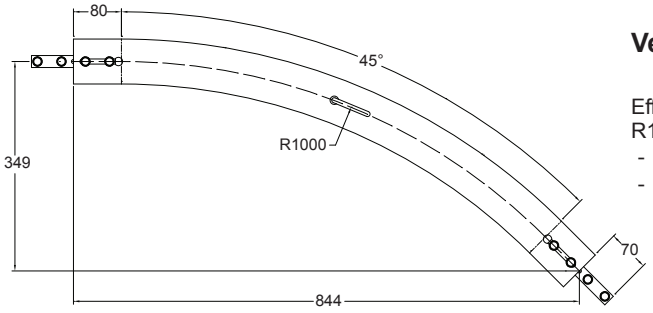


Vertical Bend, 30°

Effective track length:
R1000: 0.68m 1-way (1.36m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DX2 BV 30R1000	8.5 kg	1 unit

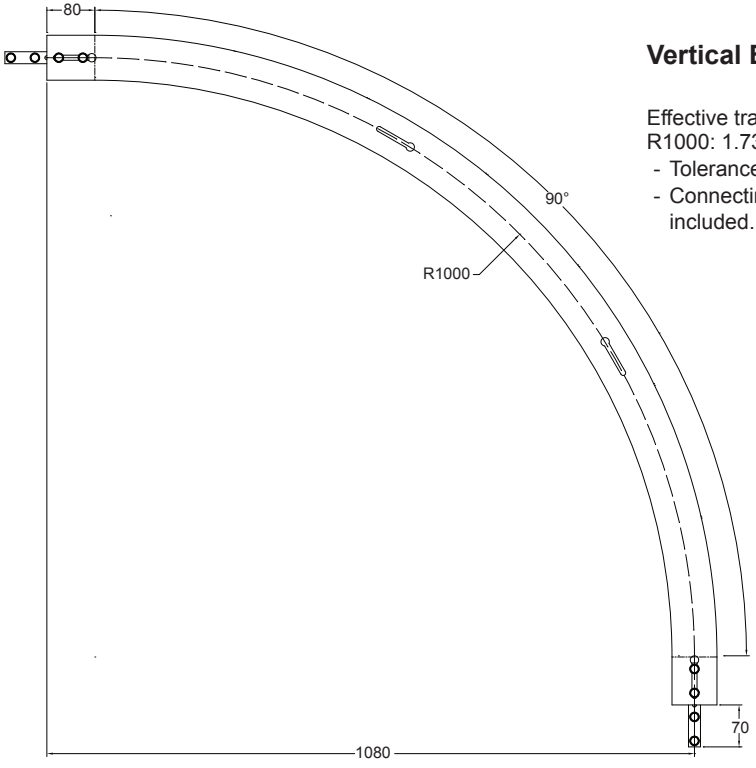
Please consult MODU representative for further information and assistance. Units: Dimension (mm)



Vertical Bend, 45°

Effective track length:
R1000: 0.95m 1-way (1.90m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DX2 BV 45R1000	10.0 kg	1 unit



Vertical Bend, 90°

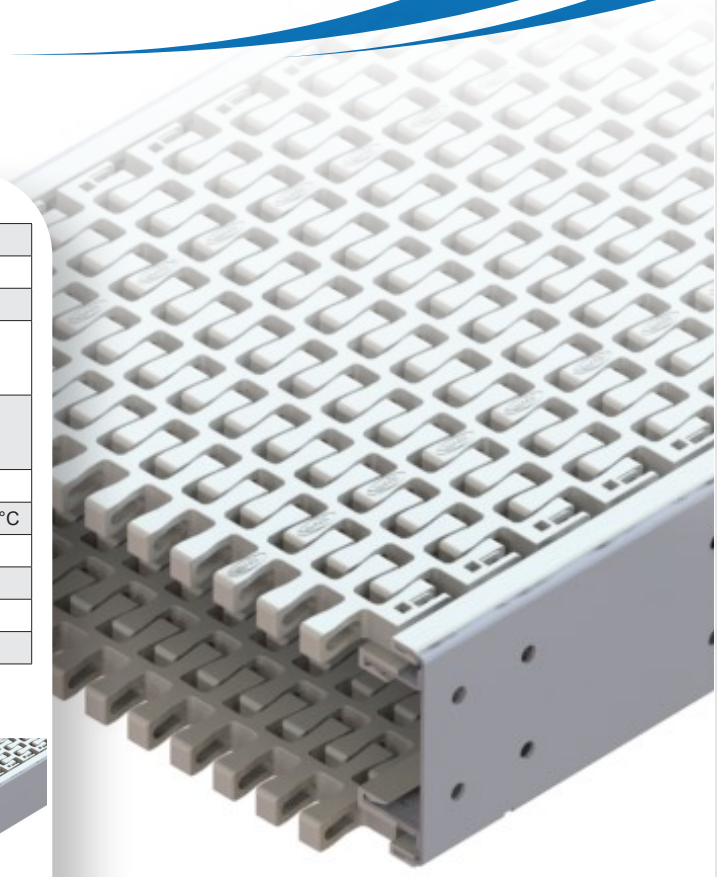
Effective track length:
R1000: 1.73m 1-way (3.46m 2-way)
- Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Item Code	Weight	Supply
DX2 BV 90R1000	16.5 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

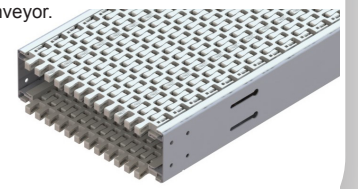
MODU DT2
CONVEYOR SERIES



Technical Characteristics

Chain Width	315 mm
Chain Pitch	45.0 mm
Chain Weight	3.8 kg/m
Chain Working Tension (Max) With Bend Without Bend	 1400 N 1500 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 30.0 kg 15.0 kg
Total Load*	400 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	1500 N
Item Width*	<500 mm

* Actual limit may vary according to conveyor layout and application.
** Maximum 1x 90° bend in one conveyor.

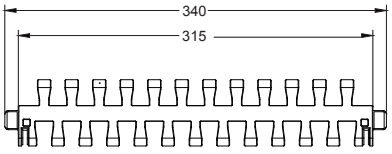


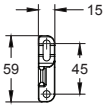
Chain Width 315mm

Contents

Belt MT2 282
Belt Accessories MT2 283
Drive Units DT2 284
Idler Unit DT2 284
Conveyor Beam DT2 285
Accessories DT2 285
Horizontal Plain Bend DT2 286
Belt Elongation Section DT2 287
Bottom Tab (BT) Belt DT2 288
Conveyor Beam (BT) DT2 288
Accessories DT2 288
Drive Units (BT) DT2 289
Idler Unit (BT) DT2 289
Horizontal Plain Bend (BT) DT2 290

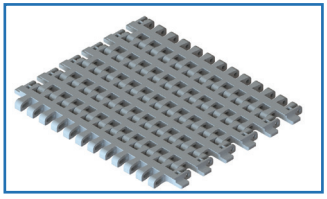
Belt MT2



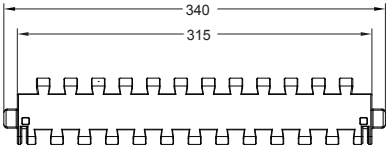


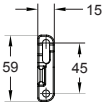
Plastic Plain Curve Belt

- 8.5mm opening gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.



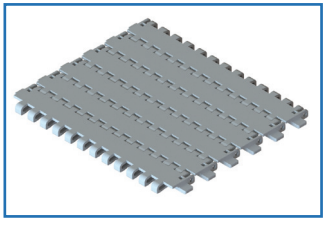
Item Code	Material	Color	Weight	Supply
MT2 CP 5	POM	White	19.0 kg/roll	5m/roll
MT2 CP 5 P	PP	White	13.5 kg/roll	5m/roll



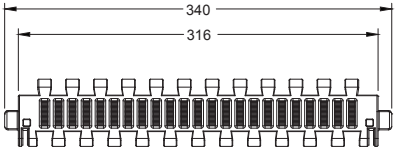


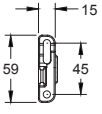
Plastic Plain Straight Belt

- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.



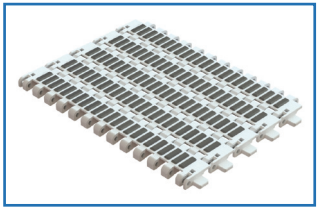
Item Code	Material	Color	Weight	Supply
MT2 CP 5 ZG	POM	White	20.6 kg/roll	5m/roll
MT2 CP 5 ZG P	PP	White	14.8 kg/roll	5m/roll





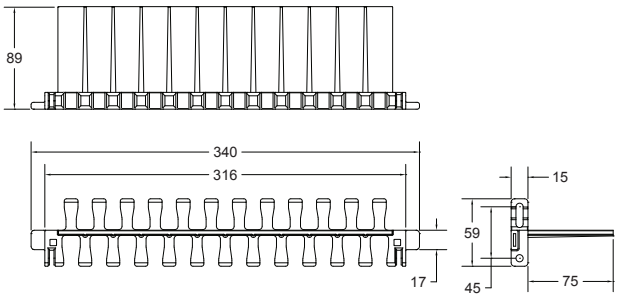
Friction Belt

- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Straight running only (0mm gap)
- Accumulation not possible.



Item Code	Material	Color	Weight	Supply
MT2 CF 5 ZG	PP	White	19.0 kg/roll	5m/roll

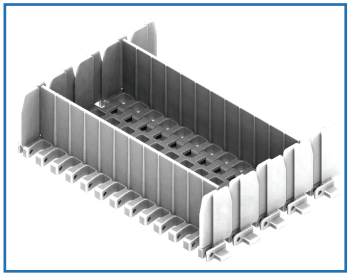
Please consult MODU representative for further information and assistance. Units: Dimension (mm)



*P
Please specify pitch between cleat for ordering
(eg. MT2 CC 3x75 3P ; 3P = Every 3rd link to be cleated).

Plastic Cleated Link

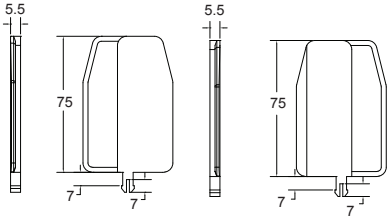
- Required for vertical or steeply inclined / declined conveyor.
- Accumulation not possible.
- Supply in pieces without side guide.



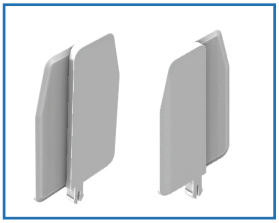
* Side guide cleats are optional

Item Code	Material	Color	Weight	Supply
MT2 CC 3x75 *P	POM	White	** kg/pc	1 pc

* Non-standard height available upon request but cleat material is different.



Side Guard L-R



Item Code	Material	Color	Weight	Supply
MT2 CLP G-75	POM	White	1.7 kg	50 set/pkt

Belt Accessories MT2

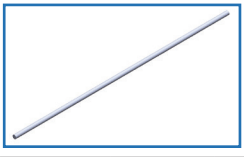
Lubricant For Belt



Silicone-based lubricant, 400ml

Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Belt Pin



Item Code	Material	Weight	Supply
MT2 PC	POM	0.12 kg	10 pcs / pkt

Belt Lock



Item Code	Material	Color	Weight	Supply
MT2 BL	POM	White	0.07 kg	10 pcs / pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units DT2

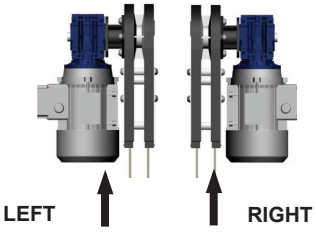
Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Transtechno)
T40 = CMRV 040
T50 = CMRV 050

Gearmotor position: L or R
D: Front Drive

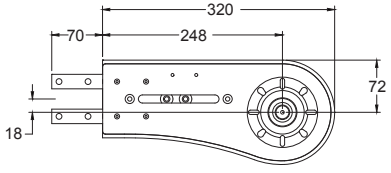
DT2 DD L S47
Front direct drive unit, motor on left side for 0.55kW SEW geared motor.

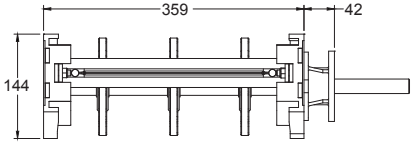
Motor Orientation Guideline



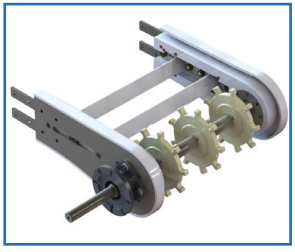
Example. Code for Basic unit;
DT2 DD R S47 => Front drive unit, motor on right side for SEW SA47 gearmotor.

Front Drive Unit



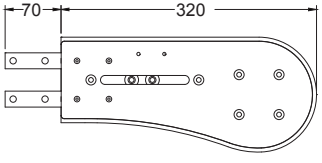


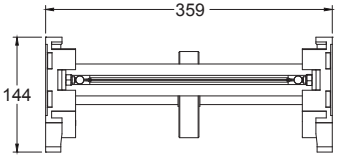
- Effective track length: 0.8m
- Traction force: 1500N
- Connecting strip and M8 hex screw included.
- Built in with CIS



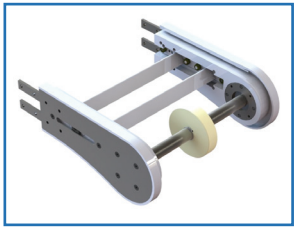
Item Code	Description	Weight	Supply
DT2 DD R/L S/T	Basic drive unit	9.4 kg	1 unit

Idler Unit DT2





- Effective track length: 0.8m
- Connecting strip and M8 hex screw included.
- Built in with CIS

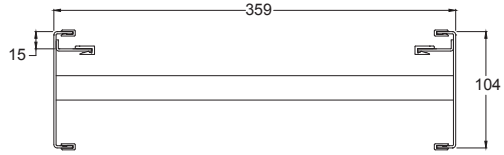


Item Code	Description	Weight	Supply
DT2 IE 320	Basic idler unit	8.3 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor Beam DT2



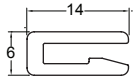


Item Code	Weight	Supply
DT2 CB 2.4	18.5 kg	2.4m / beam
DT2 CB L	**L kg	L / beam

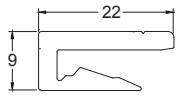
- Available length:
L = between 100, 200mm up 1200mm
- eg: for 500mm beam, part number is DT2 CB 0.5
- if beam required is 1.5m, then L = 1.2m + 0.3m
(order part number = DT2 CB 1.2 & DT2 CB 0.3)

Accessories DT2

Slide Rail

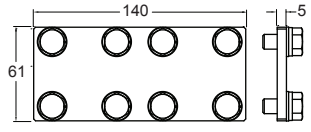


Item Code	Material	Color	Weight	Supply
MS SR 25	HDPE	Semi-Transparent White	1.2 kg	25m/roll
MS SR 25A	Anti-Static	Grey	1.2 kg	25m/roll

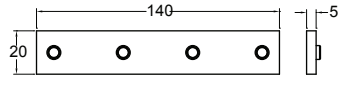


Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

Connecting Strip



Item Code	Weight	Supply
DA CS 61x140	4.0 kg	10 pcs/pkt



Item Code	Weight	Supply
DA CS 20x140	1.1 kg	10 pcs/pkt

- M8 set screw included

Screw



Item Code	Weight	Supply
MA RS 6.5	0.02 kg	50 pcs/pkt

Rivet



Item Code	Weight	Supply
MA RR 3	0.02 kg	50 pcs/pkt

Slide Rail Assembling Tool

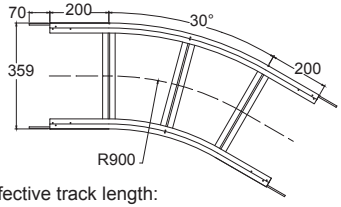


Item Code	Weight	Supply
MT2 SRA	0.4 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend DT2

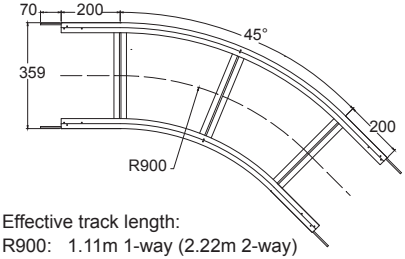


Effective track length:
R900: 0.87m 1-way (1.74m 2-way)

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
DT2 BP 30R900	900 mm	7.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

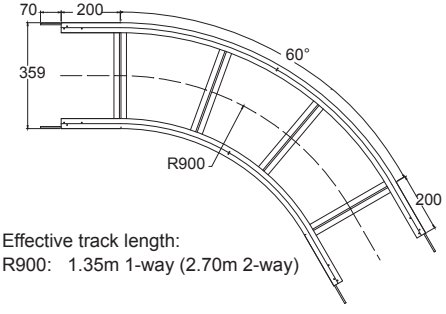


Effective track length:
R900: 1.11m 1-way (2.22m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
DT2 BP 45R900	900 mm	8.3 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

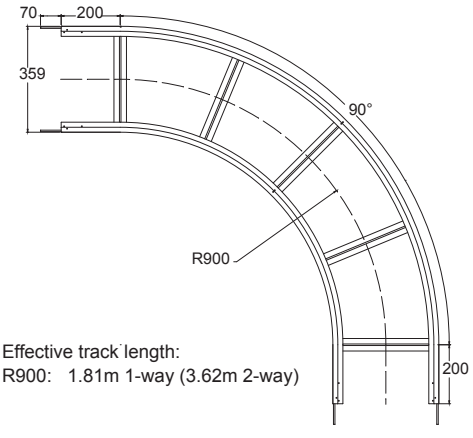


Effective track length:
R900: 1.35m 1-way (2.70m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
DT2 BP 60R900	900 mm	10.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.



Effective track length:
R900: 1.81m 1-way (3.62m 2-way)

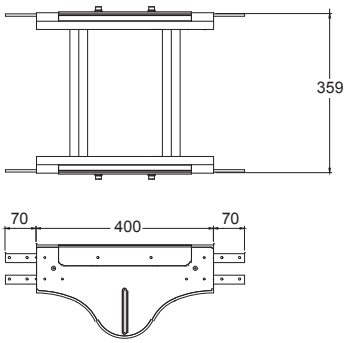
Horizontal Plain Bend, 90°

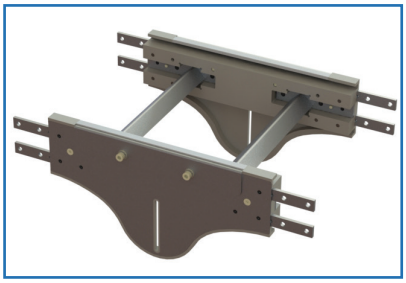
Item Code	Radius (R)	Weight	Supply
DT2 BP 90R900	900 mm	14.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Belt Elongation Section DT2





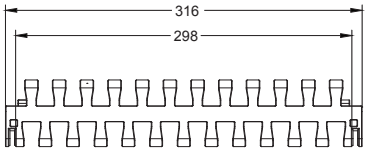
- To be used with straight belt (zero gap).
- Slide rail, connecting strip and M8 hex screw included.

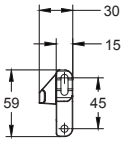
Item Code	Weight	Supply
DT2 CSS 400	7.3 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

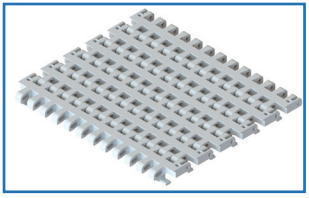
Bottom Tab (BT) Belt DT2





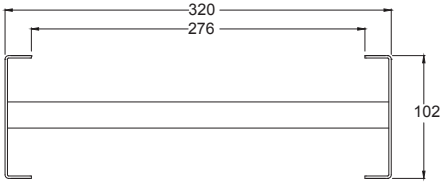
Plastic Plain Curve Belt (Bottom Tab)

- 8.5mm belt gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.



Item Code	Material	Color	Weight	Supply
MT2 CP 5 BT	POM	White	19.0 kg/roll	5m/roll
MT2 CP 5 BT PP	PP	White	13.5 kg/roll	5m/roll

Conveyor Beam (BT) DT2



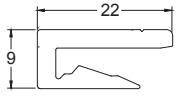


Item Code	Weight	Supply
DT2 CB 2.4 BT	18.5 kg	2.4m / beam
DT2 CB L BT	**L kg	L / beam

- Available length:
L = between 100, 200mm up 1200mm
- eg: for 500mm beam, part number is DT2 CB 0.5 BT
- if beam required is 1.5m, then L = 1.2m + 0.3m
(order part number = DT2 CB 1.2 BT & DT2 CB 0.3 BT)

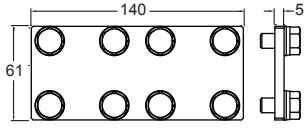
Accessories DT2

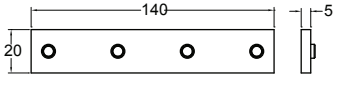
Slide Rail



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

Connecting Strip





Item Code	Weight	Supply
DA CS 61x140	4.0 kg	10 pcs/pkt

Item Code	Weight	Supply
DA CS 20x140	1.1 kg	10 pcs/pkt

- M8 set screw included

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units (BT) DT2

Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Motovario / Transtechno)
T40 = NMRV 040 / CMRV 040
T50 = NMRV 050 / CMRV 050

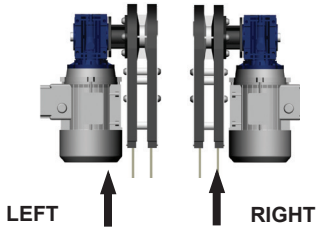
Transfer Device
NIL = Basic Unit
TR = Free Roller
DR = Driven Roller

Gearmotor position: L or R
D: Front Drive

Clutch
NIL = Basic Unit
C = With Clutch

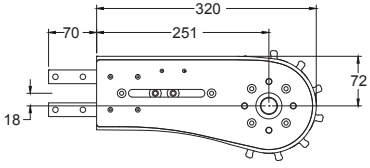
DT2 DD L S37 TR C BT
Front direct drive unit, motor on left side for 0.55kW SEW geared motor, with Free Roller and Clutch.

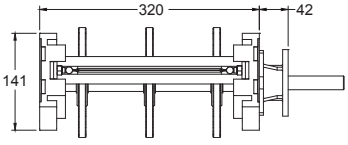
Motor Orientation Guideline



Example. Code for Basic unit;
DT2 DD R S47 BT => Front drive unit for bottom tab chain, motor on right side for SEW SA47 gearmotor.

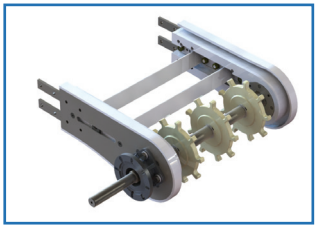
Front Drive Unit



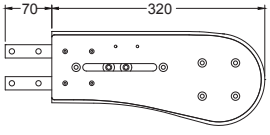


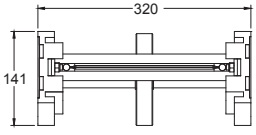
- Effective track length: 0.8m
- Traction force: 1500N
- Connecting strip and M8 hex screw included.
- Built in with CIS

Item Code	Description	Weight	Supply
DT2 DD R/L S/T BT	Basic drive unit	9.4 kg	1 unit



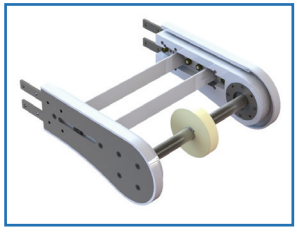
Idler Unit (BT) DT2





- Effective track length: 0.8m
- Connecting strip and M8 hex screw included.
- Built in with CIS

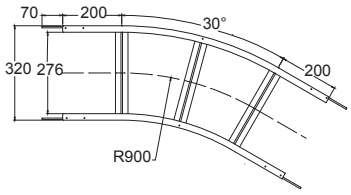
Item Code	Description	Weight	Supply
DT2 IE 320 BT	Basic idler unit	8.3 kg	1 unit



Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend (BT) DT2

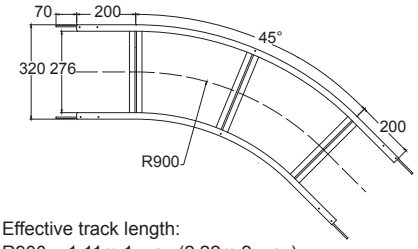


Effective track length:
R900: 0.87m 1-way (1.74m 2-way)

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
DT2 BP 30R900 BT	900 mm	7.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

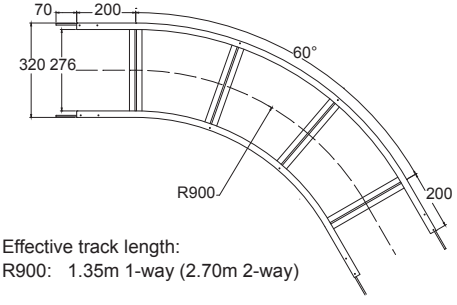


Effective track length:
R900: 1.11m 1-way (2.22m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
DT2 BP 45R900 BT	900 mm	8.3 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

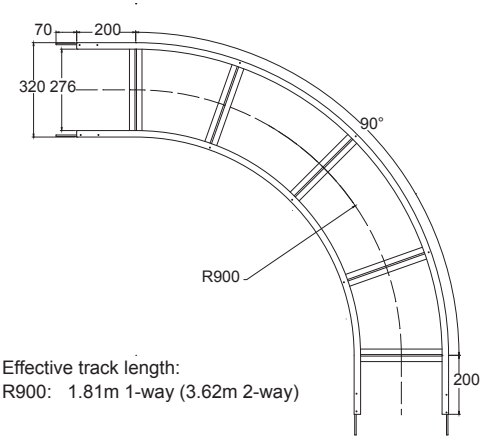


Effective track length:
R900: 1.35m 1-way (2.70m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
DT2 BP 60R900 BT	900 mm	10.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.



Effective track length:
R900: 1.81m 1-way (3.62m 2-way)

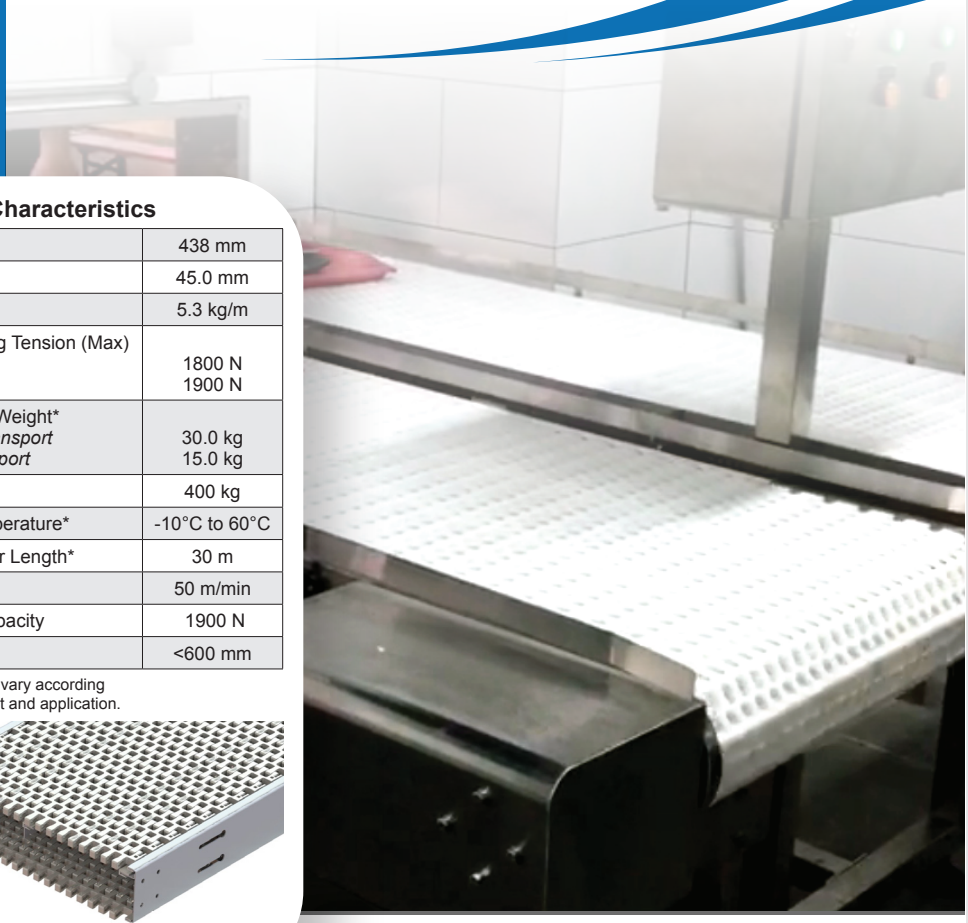
Horizontal Plain Bend, 90°

Item Code	Radius (R)	Weight	Supply
DT2 BP 90R900 BT	900 mm	14.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

MODU DR2
CONVEYOR SERIES



Technical Characteristics

Chain Width	438 mm
Chain Pitch	45.0 mm
Chain Weight	5.3 kg/m
Chain Working Tension (Max) With Bend Without Bend	 1800 N 1900 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 30.0 kg 15.0 kg
Total Load*	400 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	1900 N
Item Width*	<600 mm

* Actual limit may vary according to conveyor layout and application.

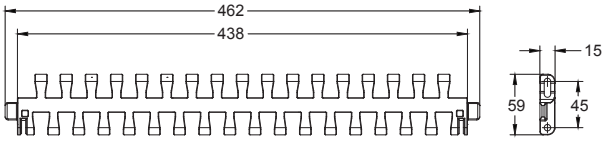
Chain Width 438 mm

Contents

Belt MR2 292
Belt Accessories MR2 293
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Idler Unit DR2 294
Conveyor Beam DR2 295
Accessories DR2 295
Horizontal Plain Bend DR2 296
Belt Elongation Section DR2 297
Bottom Tab (BT) Belt DR2 298
Conveyor Beam (BT) DR2 298
Accessories DR2 298
Drive Units (BT) MR2 299
Idler Unit (BT) DR2 299
Horizontal Plain Bend (BT) DR2 300

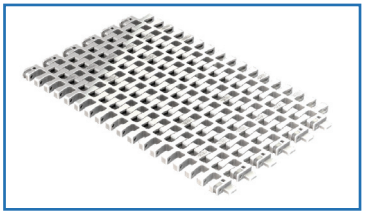
Belt MR2

Plastic Plain Curve Belt

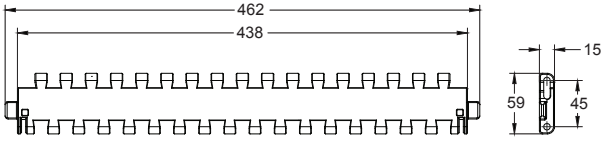


- 8.5mm belt gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

Item Code	Material	Color	Weight	Supply
MR2 CP 5	POM	White	26.4 kg/roll	5m/roll
MR2 CP 5 P	PP	White	18.5 kg/roll	5m/roll

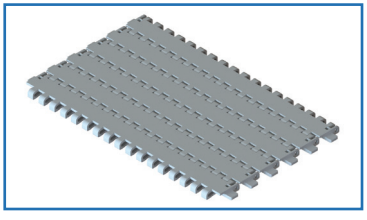


Plastic Plain Straight Belt

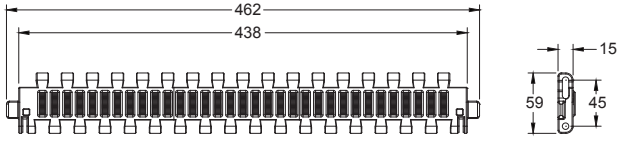


- 0mm belt gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

Item Code	Material	Color	Weight	Supply
MR2 CP 5 ZG	POM	White	28.6 kg/roll	5m/roll
MR2 CP 5 ZG P	PP	White	20.0 kg/roll	5m/roll

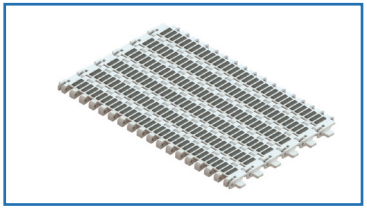


Friction Belt

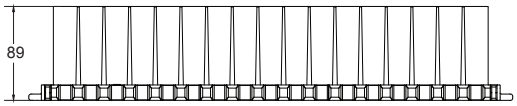


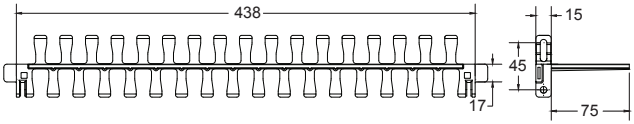
- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Straight running only (0mm gap)
- Accumulation not possible.

Item Code	Material	Color	Weight	Supply
MR2 CF 5 ZG	PP	White	29.2 kg/roll	5m/roll



Please consult MODU representative for further information and assistance. Units: Dimension (mm)





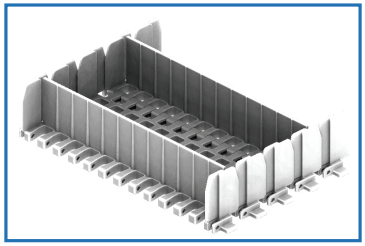
Plastic Cleated Link

- Required for vertical or steeply inclined / declined conveyor.
- Accumulation not possible.
- Supply in pieces without side guide.

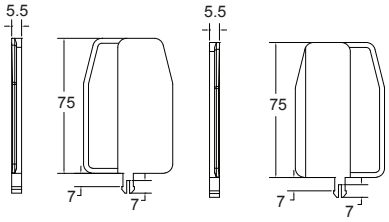
*P
Please specify pitch between cleat for ordering
(eg. MR2 CC 3x75 3P ; 3P= Every 3rd link to be cleated).

Item Code	Material	Color	Weight	Supply
MR2 CC 3x75 *P	POM	White	** kg/pc	1 pc

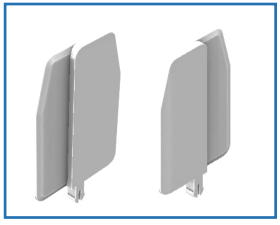
* Non-standard height are available upon request but cleat material will be different.



* Side guide cleats are optional



Side Guard L-R



Item Code	Material	Color	Weight	Supply
MT2 CLP G-75	POM	White	1.7 kg	50 set/pkt

Belt Accessories MR2

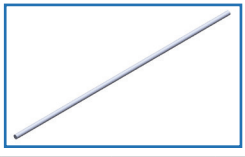
Lubricant For Belt



Silicone-based lubricant, 400ml

Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Belt Pin



Item Code	Material	Weight	Supply
MR2 PC	POM	0.14 kg	10 pcs / pkt

Belt Lock



Item Code	Material	Color	Weight	Supply
MT2 BL	POM	White	0.07 kg	10 pcs / pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units DR2

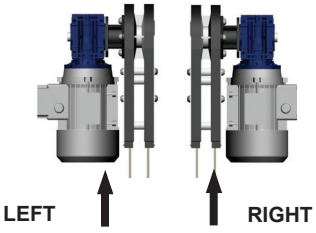
Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Transtechno)
T40 = CMRV 040
T50 = CMRV 050

Gearmotor position: L or R
D: Front Drive

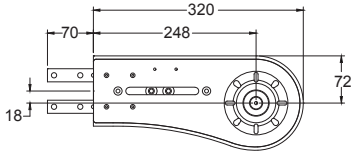
DR2 DD L S37
Front direct drive unit, motor on left
side for 0.55kW SEW geared motor

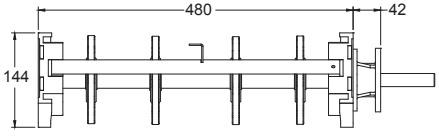
Motor Orientation Guideline



Example. Code for Basic unit;
DR2 DD R S47 => Front drive unit, motor on right side for SEW SA47 gearmotor.

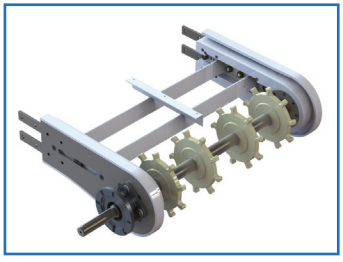
Front Drive Unit



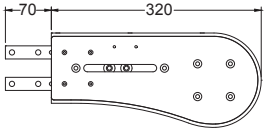


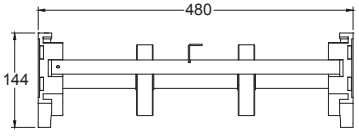
- Effective track length: 0.8m
- Traction force: 1900N
- Connecting strip and M8 hex screw included.
- Built in with CIS

Item Code	Description	Weight	Supply
DR2 DD R/L S/T	Basic drive unit	10.4 kg	1 unit



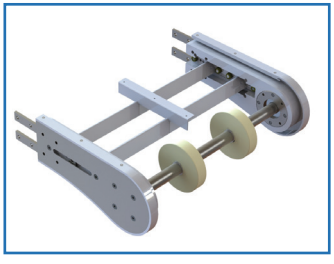
Idler Unit DR2





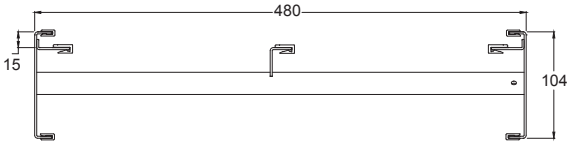
- Effective track length: 0.8m
- Connecting strip and M8 hex screw included.
- Built in with CIS

Item Code	Description	Weight	Supply
DR2 IE 320	Basic idler unit	9.8 kg	1 unit



Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Conveyor Beam DR2



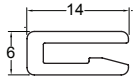


Item Code	Weight	Supply
DR2 CB 2.4	20.4 kg	2.4m / beam
DR2 CB L	**L kg	L / beam

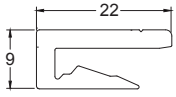
- Available length:
L = between 100, 200mm up 1200mm
- eg: for 500mm beam, part number is DR2 CB 0.5
- if beam required is 1.8m, then L = 1.2m + 0.6m
(order part number = DR2 CB 1.2 & DR2 CB 0.6)

Accessories DR2

Slide Rail

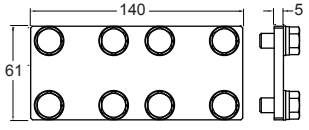


Item Code	Material	Color	Weight	Supply
MS SR 25	HDPE	Semi-Transparent White	1.2 kg	25m/roll
MS SR 25A	Anti-Static	Grey	1.2 kg	25m/roll



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

Connecting Strip



Item Code	Weight	Supply
DA CS 61x140	4.0 kg	10 pcs/pkt

Item Code	Weight	Supply
DA CS 20x140	1.1 kg	10 pcs/pkt

- M8 set screw included

Screw



Item Code	Weight	Supply
MA RS 6.5	0.02 kg	50 pcs/pkt

Rivet



Item Code	Weight	Supply
MA RR 3	0.02 kg	50 pcs/pkt

Slide Rail Assembling Tool

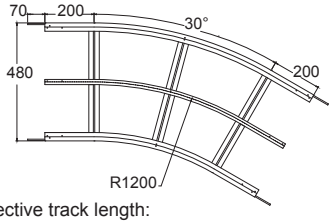


Item Code	Weight	Supply
MT2 SRA	0.4 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend DR2

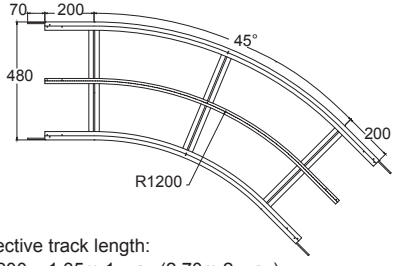


Effective track length:
R1200: 1.03m 1-way (2.06m 2-way)

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
DR2 BP 30R1200	1200 mm	8.9 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

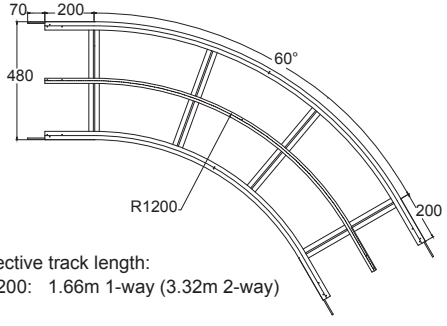


Effective track length:
R1200: 1.35m 1-way (2.70m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
DR2 BP 45R1200	1200 mm	10.5 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

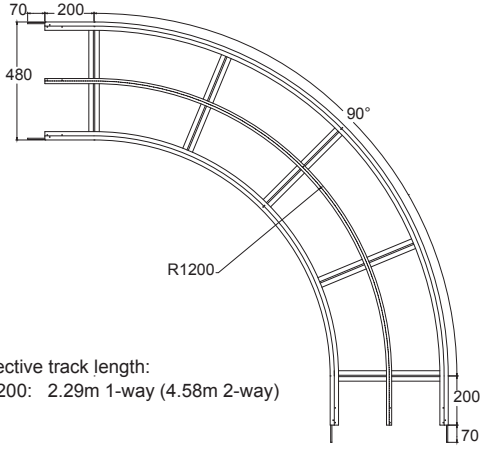


Effective track length:
R1200: 1.66m 1-way (3.32m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
DR2 BP 60R1200	1200 mm	13.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.



Effective track length:
R1200: 2.29m 1-way (4.58m 2-way)

Horizontal Plain Bend, 90°

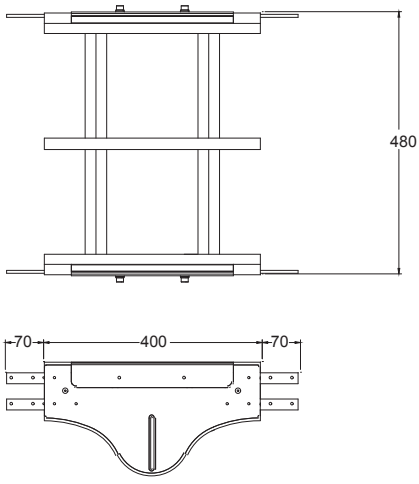
Item Code	Radius (R)	Weight	Supply
DR2 BP 90R1200	1200 mm	16.2 kg	1 unit

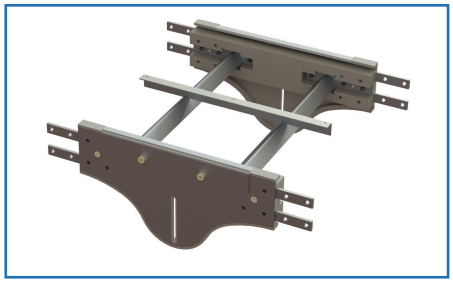
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Belt Elongation Section DR2





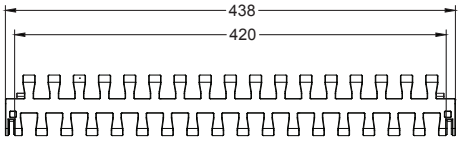
- To be used with straight plastic belt (zero gap).
- Slide rail, connecting strip and M8 hex screw included.

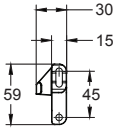
Item Code	Weight	Supply
DR2 CSS 400	8.3 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

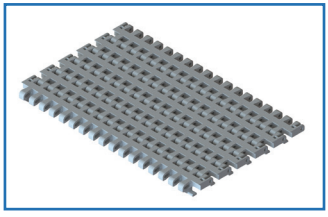
Bottom Tab (BT) Belt DR2





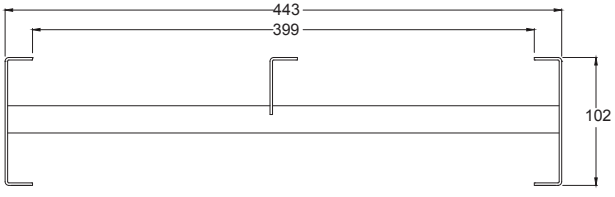
Plastic Plain Curve Belt (Bottom Tab)

- 8.5mm belt gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.



Item Code	Material	Color	Weight	Supply
MR2 CP 5 BT	POM	White	26.4kg/roll	5m/roll
MR2 CP 5 BT PP	PP	White	18.5kg/roll	5m/roll

Conveyor Beam (BT) DR2



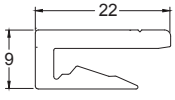


Item Code	Weight	Supply
DR2 CB 2.4 BT	20.4 kg	2.4m / beam
DR2 CB L BT	**L kg	L / beam

- Available length:
L = between 100, 200mm up 1200mm
- eg: for 500mm beam, part number is DR2 CB 0.5 BT
- if beam required is 1.5m, then L = 1.2m + 0.3m
(order part number = DR2 CB 1.2 BT & DR2 CB 0.3 BT)

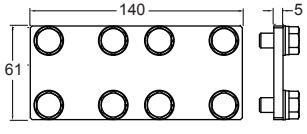
Accessories DR2

Slide Rail



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

Connecting Strip



Item Code	Weight	Supply
DA CS 61x140	4.0 kg	10 pcs/pkt

Item Code	Weight	Supply
DA CS 20x140	1.1 kg	10 pcs/pkt

- M8 set screw included

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units (BT) MR2

Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Motovario / Transtechno)
T40 = NMRV 040 / CMRV 040
T50 = NMRV 050 / CMRV 050

Transfer Device
NIL = Basic Unit
TR = Free Roller
DR = Driven Roller

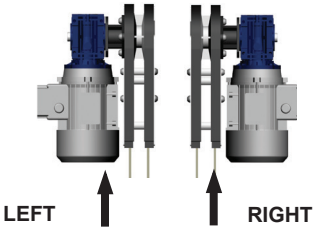
Gearmotor position: L or R
D: Front Drive

Clutch
NIL = Basic Unit
C = With Clutch

DR2 DD L S37 TR C BT

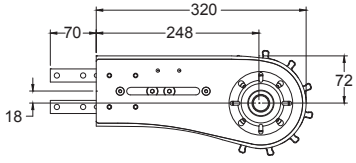
Front direct drive unit, motor on left side for 0.55kW SEW geared motor, with Free Roller and Clutch.

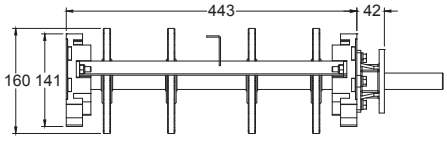
Motor Orientation Guideline



Example. Code for Basic unit;
DR2 DD R S47 BT => Front drive unit for bottom tab chain, motor on right side for SEW SA47 gearmotor.

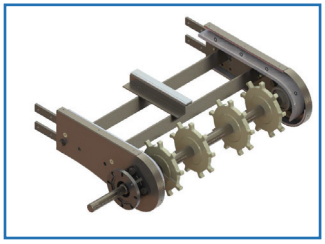
Front Drive Unit



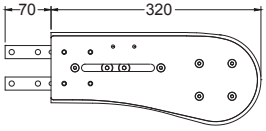


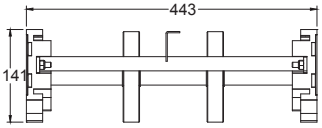
- Effective track length: 0.8m
- Traction force: 1900N
- Connecting strip and M8 hex screw included.
- Built in with CIS

Item Code	Description	Weight	Supply
DR2 DD R/L S/T BT	Basic drive unit	10.4 kg	1 unit



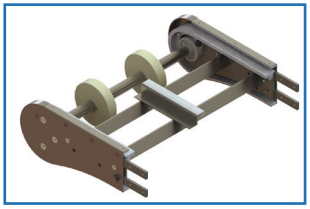
Idler Unit (BT) DR2





- Effective track length: 0.8m
- Connecting strip and M8 hex screw included.
- Built in with CIS

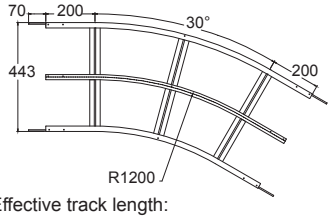
Item Code	Description	Weight	Supply
DR2 IE 320 BT	Basic drive unit	8.3 kg	1 unit



Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend (BT) DR2

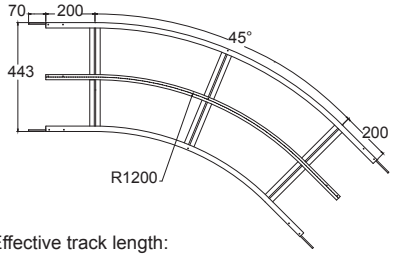


Effective track length:
R1200: 1.03m 1-way (2.06m 2-way)

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
DR2 BP 30R1200 BT	1200 mm	8.9 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

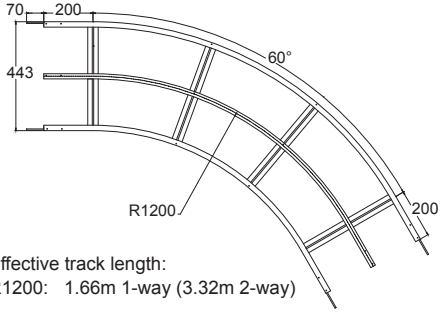


Effective track length:
R1200: 1.35m 1-way (2.70m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
DR2 BP 45R1200 BT	1200 mm	10.5 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

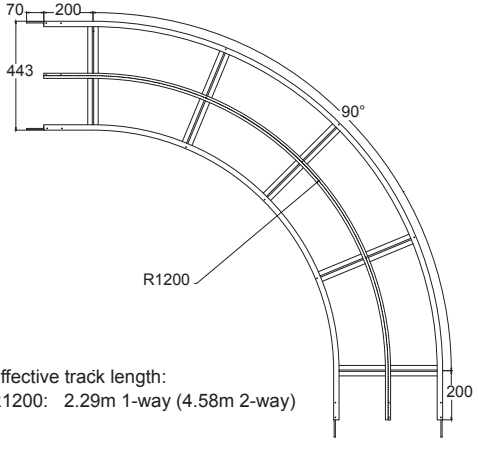


Effective track length:
R1200: 1.66m 1-way (3.32m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
DR2 BP 60R1200 BT	1200 mm	13.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.



Effective track length:
R1200: 2.29m 1-way (4.58m 2-way)

Horizontal Plain Bend, 90°

Item Code	Radius (R)	Weight	Supply
DR2 BP 90R1200 BT	1200 mm	16.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

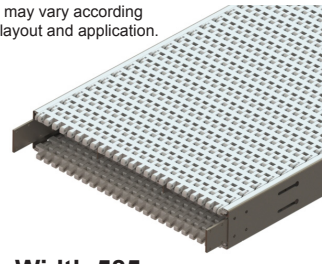
MODU DF2
CONVEYOR SERIES



Technical Characteristics

Chain Width	585 mm
Chain Pitch	45.0 mm
Chain Weight	7.1 kg/m
Chain Working Tension (Max) With Bend Without Bend	 2100 N 2200 N
Max Product Weight* *Horizontal Transport* *Vertical Transport*	 30.0 kg 15.0 kg
Total Load*	400 kg
Working Temperature*	-10°C to 60°C
Max Conveyor Length*	30 m
Max speed*	50 m/min
Drive Unit Capacity	2200 N
Item Width*	<700 mm

* Actual limit may vary according to conveyor layout and application.



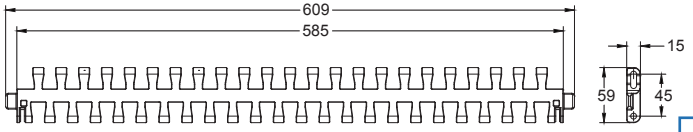
Chain Width 585 mm

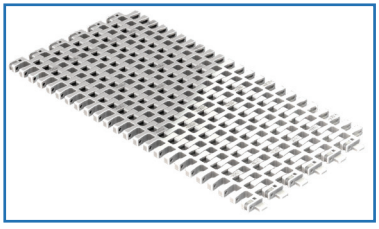
Contents

Belt MF2 302
Belt Accessories MF2 303
Drive Units DF2 304
Idler Unit DF2 304
Conveyor Beam DF2 305
Accessories DF2 305
Horizontal Plain Bend DF2 306
Belt Elongation Section DF2 307
Bottom Tab (BT) Belt DF2 308
Conveyor Beam (BT) DF2 308
Accessories DF2 308
Drive Units (BT) DF2 309
Idler Unit (BT) DF2 309
Horizontal Plain Bend (BT) DF2 310

Belt MF2

Plastic Plain Curve Belt

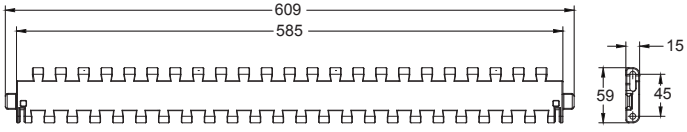


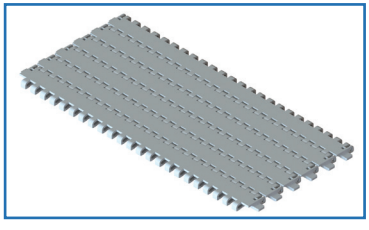


- 8.5mm belt gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

Item Code	Material	Color	Weight	Supply
MF2 CP 5	POM	White	35.4 kg/roll	5m/roll
MF2 CP 5 P	PP	White	24.8 kg/roll	5m/roll

Plastic Plain Straight Belt

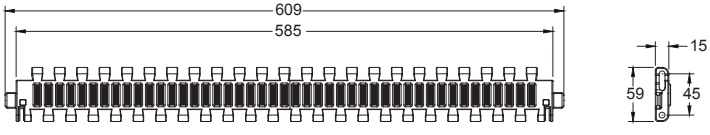


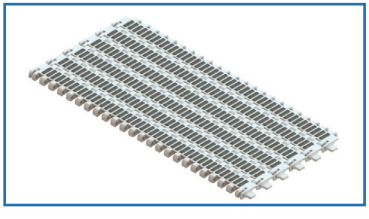


- 0mm belt gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

Item Code	Material	Color	Weight	Supply
MF2 CP 5 ZG	POM	White	38.2 kg/roll	5m/roll
MF2 CP 5 ZG P	PP	White	26.7 kg/roll	5m/roll

Friction Belt



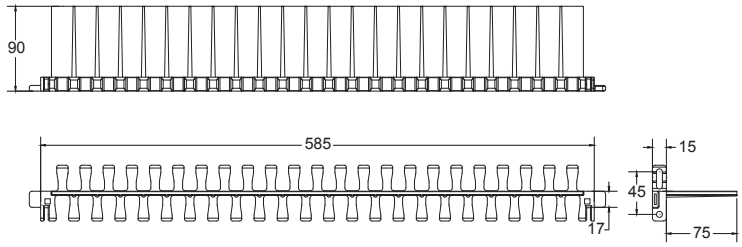


- Suitable for conveyor configuration with incline/decline up to 25˚.
- Friction material : TPE (grey).
- Straight running only (0mm gap)
- Accumulation not possible.

Item Code	Material	Color	Weight	Supply
MF2 CF 5 ZG	PP	White	39.2 kg/roll	5m/roll

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Plastic Cleated Link

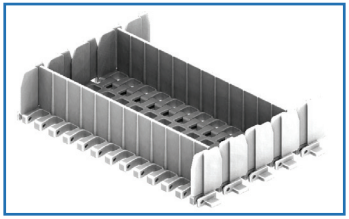


- Required for vertical or steeply inclined /declined conveyor.
- Accumulation not possible.
- Supply in pieces without side guide.

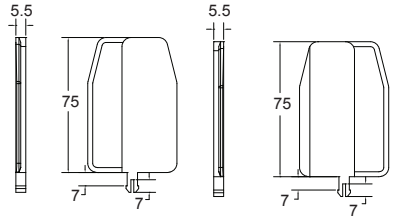
*P
Please specify pitch between cleat for ordering
(eg. MF2 CC 3x75 3P ; 3P = Every 3rd link to be cleated).

Item Code	Material	Color	Weight	Supply
MF2 CC 3x75 *P	POM	White	** kg/pc	1 pc

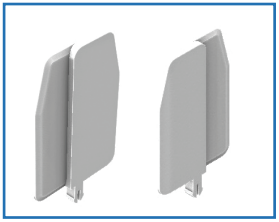
* Non-standard height are available upon request but cleat material will be different.



* Side guide cleats are optional



Side Guard L-R



Item Code	Material	Color	Weight	Supply
MT2 CLP G-75	POM	White	1.7 kg	50 set/pkt

Belt Accessories MF2

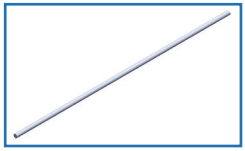
Lubricant For Belt



Silicone-based lubricant, 400ml

Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Belt Pin



Item Code	Material	Weight	Supply
MF2 PC	POM	0.16 kg	10 pcs / pkt

Belt Lock



Item Code	Material	Color	Weight	Supply
MT2 BL	POM	White	0.07 kg	10 pcs / pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units DF2

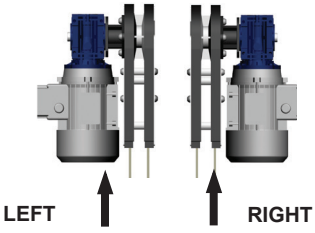
Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Transtechno)
T40 = CMRV 040
T50 = CMRV 050

Gearmotor position: L or R
D: Front Drive

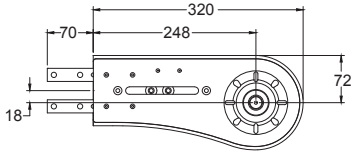
DF2 DD L S37
Front direct drive unit, motor on left side for 0.55kW SEW geared motor,

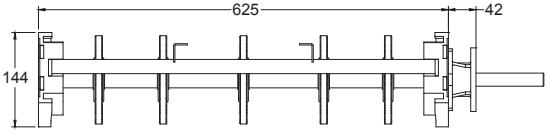
Motor Orientation Guideline



Example. Code for Basic unit;
DF2 DD R S47 => Front drive unit, motor on right side for SEW SA47 gearmotor.

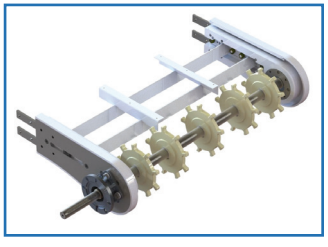
Front Drive Unit



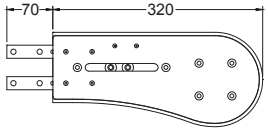


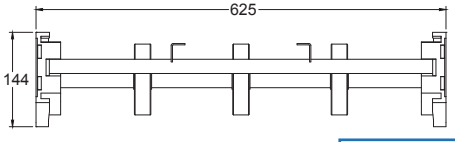
- Effective track length: 0.8m
- Traction force: 2200N
- Connecting strip and M8 hex screw included.
- Built in with CIS

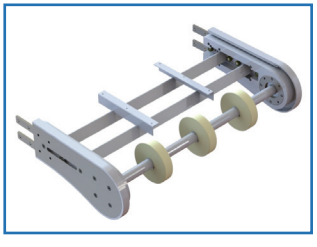
Item Code	Description	Weight	Supply
DF2 DD R/L S/T	Basic drive unit	12.0 kg	1 unit



Idler Unit DF2







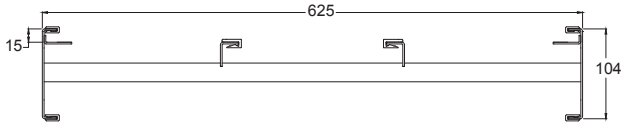
- Effective track length: 0.8m
- Connecting strip and M8 hex screw included.
- Built in with CIS

Item Code	Description	Weight	Supply
DF2 IE 320	Basic idler unit	11.3 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Conveyor Beam DF2



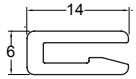


Item Code	Weight	Supply
DF2 CB 2.4	21.0kg	2.4m / beam
DF2 CB L	**L kg	L / beam

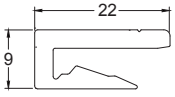
- Available length:
L = between 100, 200mm up 1200mm
- eg: for 500mm beam, part number is DF2 CB 0.5
- if beam required is 1.5m, then L = 1.2m + 0.3m
(order part number = DF2 CB 1.2 & DF2 CB 0.3)

Accessories DF2

Slide Rail

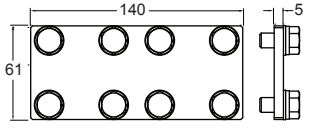


Item Code	Material	Color	Weight	Supply
MS SR 25	HDPE	Semi-Transparent White	1.2 kg	25m/roll
MS SR 25A	Anti-Static	Grey	1.2 kg	25m/roll



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

Connecting Strip



Item Code	Weight	Supply
DA CS 61x140	4.0 kg	10 pcs/pkt

Item Code	Weight	Supply
DA CS 20x140	1.1 kg	10 pcs/pkt

- M8 set screw included

Screw



Item Code	Weight	Supply
MA RS 6.5	0.02 kg	50 pcs/pkt

Rivet



Item Code	Weight	Supply
MA RR 3	0.02 kg	50 pcs/pkt

Slide Rail Assembling Tool

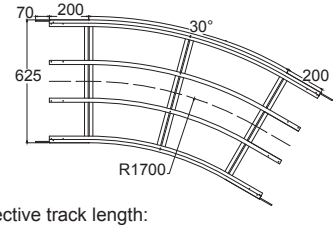


Item Code	Weight	Supply
MT2 SRA	0.4 kg	1 unit

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Horizontal Plain Bend DF2

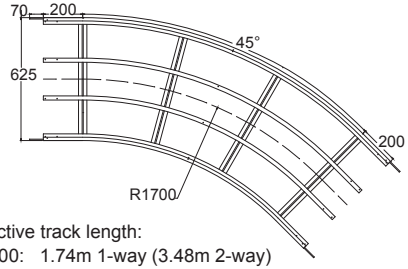


Effective track length:
R1700: 1.29m 1-way (2.58m 2-way)

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
DF2 BP 30R1700	1700 mm	11.5 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

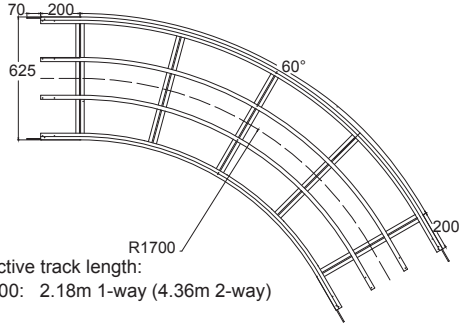


Effective track length:
R1700: 1.74m 1-way (3.48m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
DF2 BP 45R1700	1700 mm	15.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

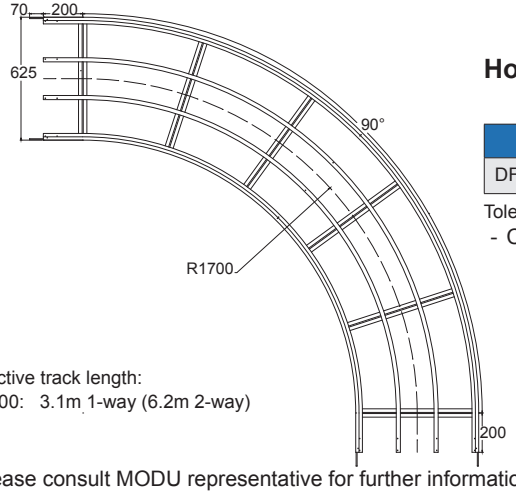


Effective track length:
R1700: 2.18m 1-way (4.36m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
DF2 BP 60R1700	1700 mm	19.0 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.



Effective track length:
R1700: 3.1m 1-way (6.2m 2-way)

Horizontal Plain Bend, 90°

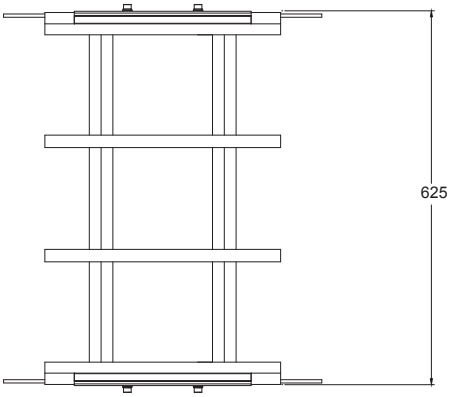
Item Code	Radius (R)	Weight	Supply
DF2 BP 90R1700	1700 mm	25.1 kg	1 unit

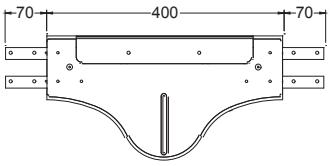
Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

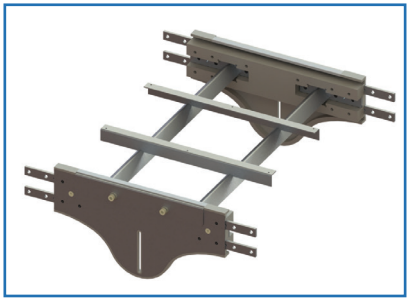
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Belt Elongation Section DF2







- To be used with zero gap belt
- Slide rail, connecting strip and M8 hex screw included.

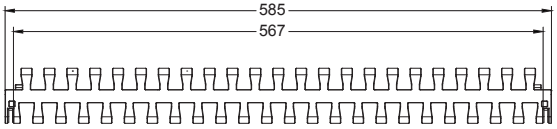
Item Code	Weight	Supply
DF2 CSS 400	9.3 kg	1 unit

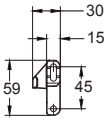
Please consult MODU representative for further information and assistance.

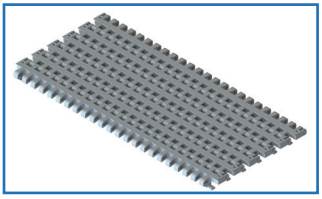
Units: Dimension (mm)

Bottom Tab (BT) Belt DF2

Plastic Plain Curve Belt (Bottom Tab)



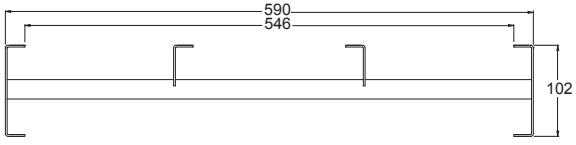




- 8.5mm belt gap.
- Suitable for conveyor configuration with incline/decline up to 7˚.
- Accumulation possible.

Item Code	Material	Color	Weight	Supply
MF2 CP 5 BT	POM	White	35.4kg/roll	5m/roll
MF2 CP 5 BT PP	PP	White	24.8kg/roll	5m/roll

Conveyor Beam (BT) DF2



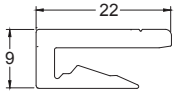


Item Code	Weight	Supply
DF2 CB 2.4 BT	21.0 kg	2.4m / beam

- Available length:
L = between 100, 200mm up 1200mm
- eg: for 500mm beam, part number is DF2 CB 0.5 BT
- if beam required is 1.5m, then L = 1.2m + 0.3m
(order part number = DF2 CB 1.2 BT & DF2 CB 0.3 BT)

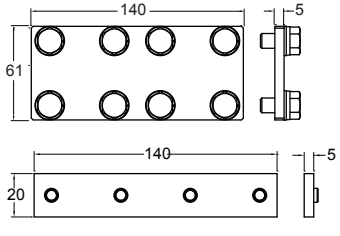
Accessories DF2

Slide Rail



Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

Connecting Strip



Item Code	Weight	Supply
DA CS 61x140	4.0 kg	10 pcs/pkt

Item Code	Weight	Supply
DA CS 20x140	1.1 kg	10 pcs/pkt

- M8 set screw included

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Drive Units (BT) DF2

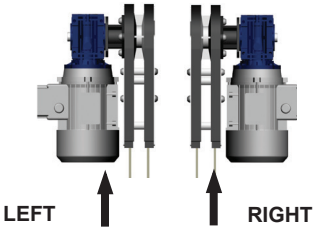
Gearmotor size (SEW)
S20 = WA20
S30 = WA 30
S37 = SA37
S47 = SA47

Gearmotor type (Motovario / Transtechno)
T40 = NMRV 040 / CMRV 040
T50 = NMRV 050 / CMRV 050

Gearmotor position: L or R
D: Front Drive

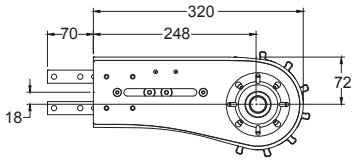
DF2 DD L S37 BT
Front direct drive unit, motor on left side for 0.55kW SEW geared motor, for Bottom Tab belt

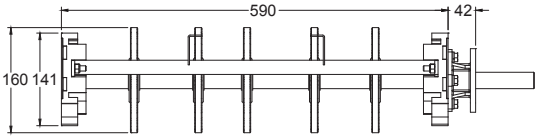
Motor Orientation Guideline



Example. Code for Basic unit;
DF2 DD R S47 BT => Front drive unit for bottom tab chain, motor on right side for SEW SA47 gearmotor.

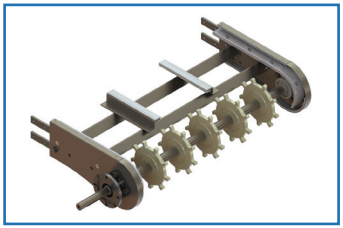
Front Drive Unit



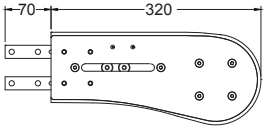


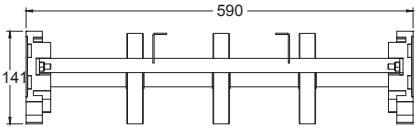
- Effective track length: 0.8m
- Traction force: 1900N
- Connecting strip and M8 hex screw included.
- Built in with CIS

Item Code	Description	Weight	Supply
DF2 DD R/L S/T BT	Basic drive unit	12.0 kg	1 unit



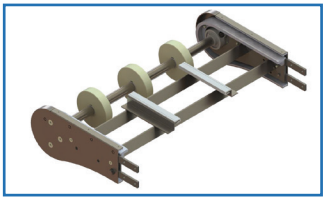
Idler Unit (BT) DF2





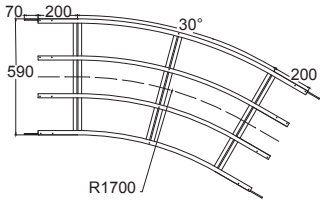
- Effective track length: 0.8m
- Connecting strip and M8 hex screw included.
- Built in with CIS

Item Code	Description	Weight	Supply
DF2 IE 320 BT	Basic drive unit	11.3 kg	1 unit



Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Horizontal Plain Bend (BT) DF2

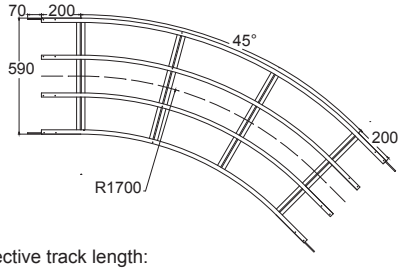


Effective track length:
R1700: 1.29m 1-way (2.58m 2-way)

Horizontal Plain Bend, 30°

Item Code	Radius (R)	Weight	Supply
DF2 BP 30R1700 BT	1700 mm	11.5 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

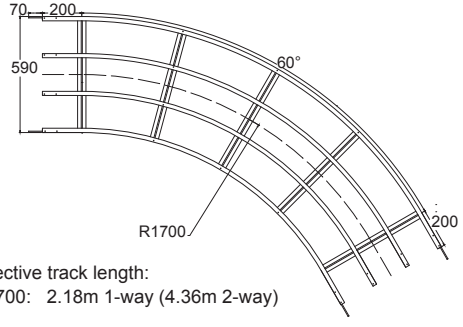


Effective track length:
R1700: 1.74m 1-way (3.48m 2-way)

Horizontal Plain Bend, 45°

Item Code	Radius (R)	Weight	Supply
DF2 BP 45R1700 BT	1700 mm	15.2 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

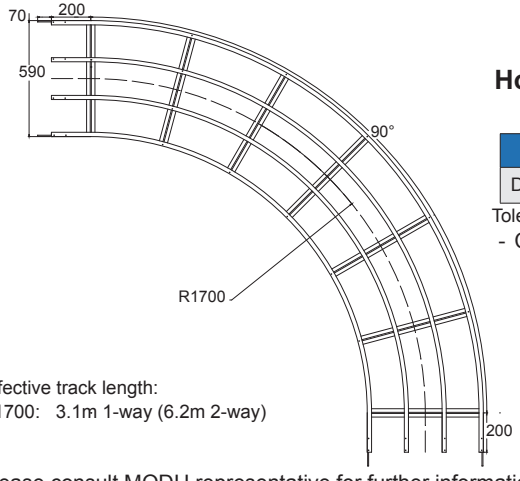


Effective track length:
R1700: 2.18m 1-way (4.36m 2-way)

Horizontal Plain Bend, 60°

Item Code	Radius (R)	Weight	Supply
DF2 BP 60R1700 BT	1700 mm	19.0 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.



Effective track length:
R1700: 3.1m 1-way (6.2m 2-way)

Horizontal Plain Bend, 90°

Item Code	Radius (R)	Weight	Supply
DF2 BP 90R1700 BT	1700 mm	25.1 kg	1 unit

Tolerance: ± 2° & Radius: ± 10mm
- Connecting strip and M8 hex screw included.

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

MODU SS CONVEYOR GUIDE (DG)

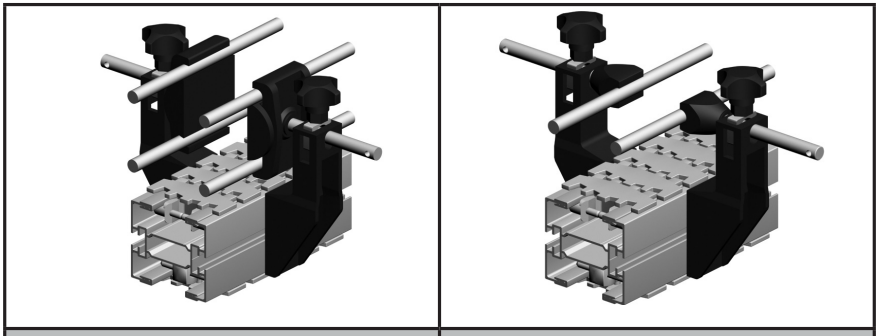


Contents

Side Guide Configuration DG 312
Side Guide Bracket DG 313

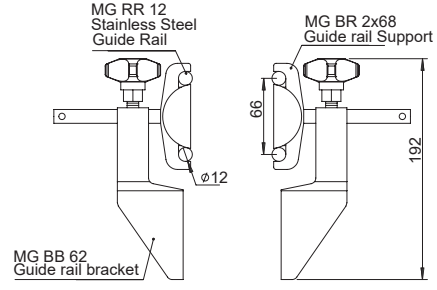
Side Guide Configuration DG

Guide Assembly



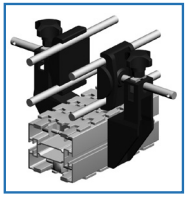
Type 1	Type 2

Guide Assembly - Type 1

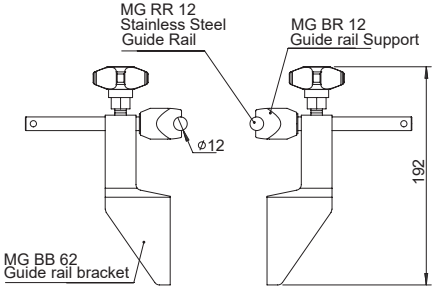


Supply:
- Items are supplied individually.

Series	Max Width	Item Code
DS3	55	DS3 G1
DSM3	75	DM3 G1
DL2	135	DL2 G1
DX2	215	DX2 G1
DT2	349	DT2 G1
DR2	470	DR2 G1
DF2	615	DF2 G1

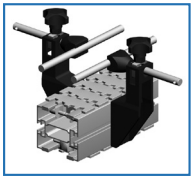


Guide Assembly - Type 2



Supply:
- Items are supplied individually.

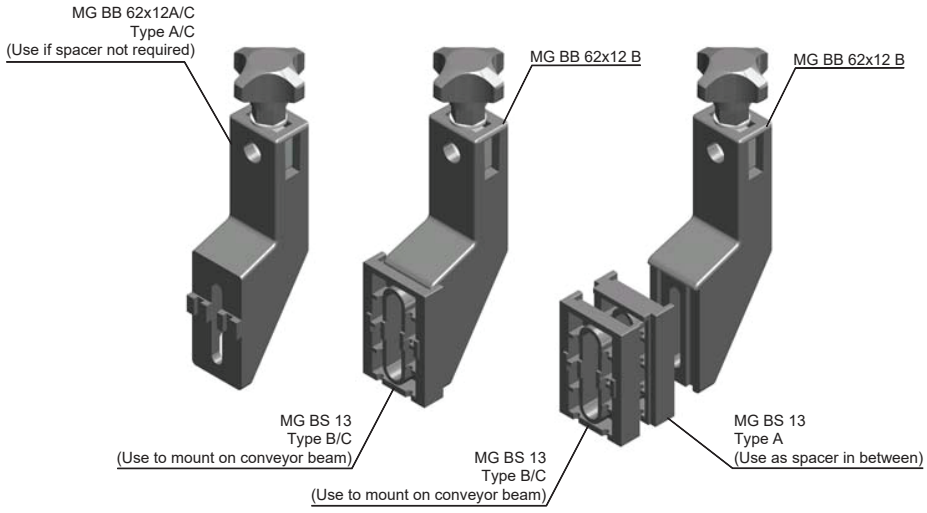
Series	Max Width	Item Code
DS3	60	DS3 G2
DSM3	80	DM3 G2
DL2	140	DL2 G2
DX2	220	DX2 G2
DT2	354	DT2 G2
DR2	475	DR2 G2
DF2	620	DF2 G2



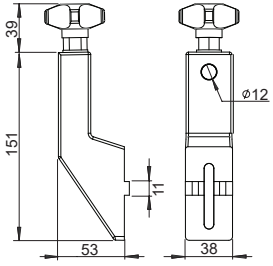
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Side Guide Bracket DG

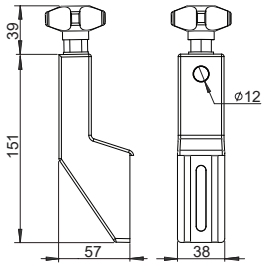


Guide Rail Bracket Type A/C



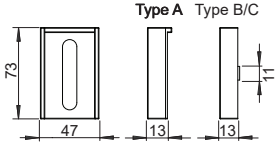
Item Code	Weight	Supply
MG BB 62x12 A/C	0.25 kg	1 pc

Guide Rail Bracket Type B



Item Code	Weight	Supply
MG BB 62x12 B	0.25 kg	1 pc

Spacer Type A/B/C



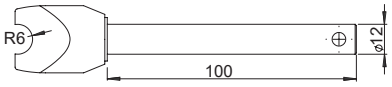
- Type A use to increase width by n x 13mm (where n=no. of spacer use)
- Type B for DS3, DM3, DL2, DX2, DT2, DR2, DF2
- Type C for MP, DS2

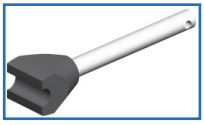
Item Code	Weight	Supply
MG BS 13 A/B/C	0.04 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Guide Rail Support

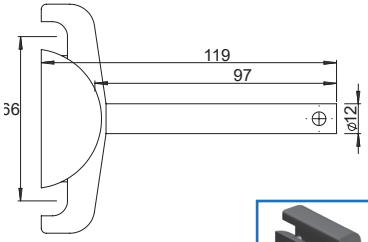


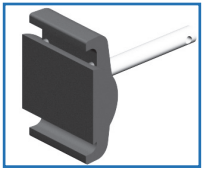


- Single clamp for 12mm diameter shaft.

Item Code	Weight	Supply
MG BR 36x20	0.5 kg	1 pc

Guide Rail Support

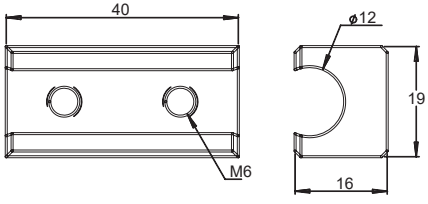


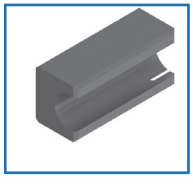


- Double clamp for 12mm diameter shaft.

Item Code	Weight	Supply
MG BR 2x68	0.2 kg	1 pc

Guide Rail Connector

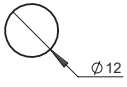


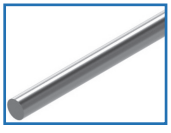


- Set screw included

Item Code	Weight	Supply
DG BB 12	0.2 kg	1 pc

Stainless Steel Guide Rail





Item Code	Weight	Supply
MG RR 12	2.7 kg	3m

End Cap, Ø12mm



- To be used with MG RR 12

Item Code	Weight	Supply
MG EC 12	0.02 kg	10 pcs/pkt

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

MODU SS SUPPORT STRUCTURE (DB)



Contents

Support Structure Configuration DB 316
Brackets DB 317
Components DB 318

Support Structure Configuration DB



Material:
- Foot plate in stainless steel AISI 303.
- Beam support bracket in stainless steel AISI 303.
- Ornamental pipe in stainless steel AISI 303.

Supply:
- Items are supplied individually.

Type 1 (DB1) - Unipod



Material:
- Foot cap in stainless steel AISI 303.
- Two-point foot in Polyamide, glass fibre reinforced, PA 6 GF30%.
- Beam support bracket in stainless steel AISI 303.
- Ornamental pipe in stainless steel AISI 303.

Supply:
- tems are supplied individually.

Type 2 (DB2) - Bipod



Material:
- Foot cap in stainless steel AISI 303.
- Three-point foot in Polyamide, glass fibre reinforced, PA 6 GF30%.
- Beam support bracket in stainless steel AISI 303.
- Ornamental pipe in stainless steel AISI 303.

Supply:
- tems are supplied individually.

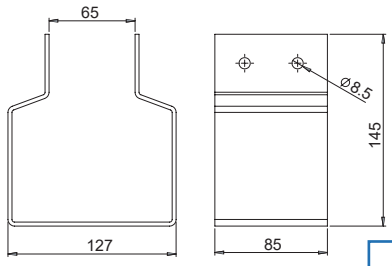
Type32 (DB3) - Tripod

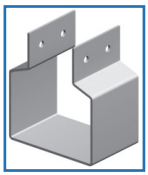
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Brackets DB

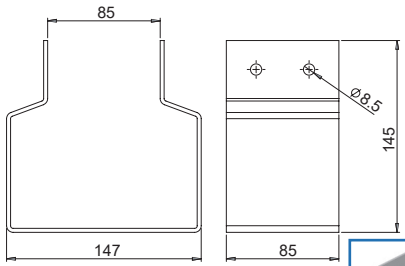
DS3 Beam Support Bracket

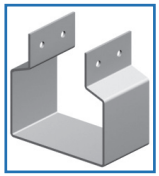




Item Code	Weight	Supply
DS2 BS 100	0.9 kg	1 pc

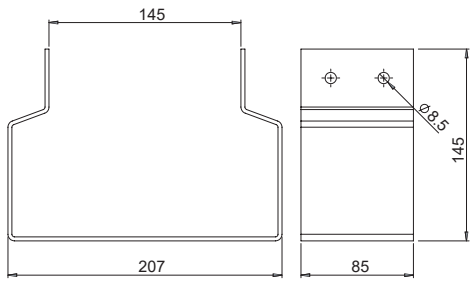
DM3 Beam Support Bracket

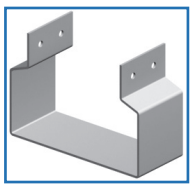




Item Code	Weight	Supply
DM3 BS 100	0.9 kg	1 pc

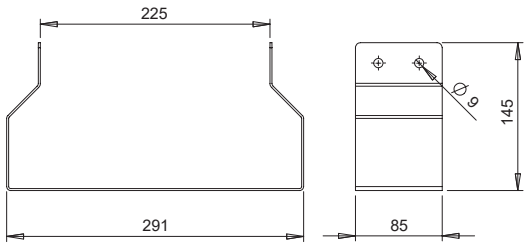
DL2 Beam Support Bracket





Item Code	Weight	Supply
DL2 BS 100	1.1 kg	1 pc

DX2 Beam Support Bracket





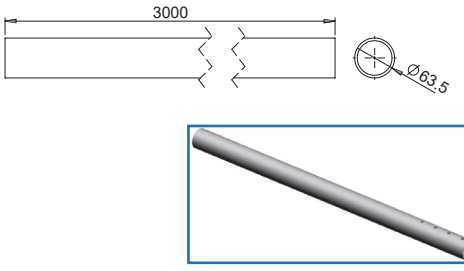
Item Code	Weight	Supply
DX2 BS 100	1.4 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

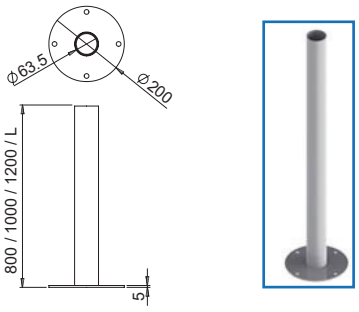
Components DB

Ornamental Pipe



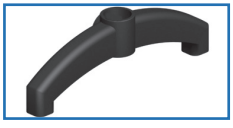
Item Code	Weight	Supply
DB BT 3	16.6 kg	3m

Foot Base



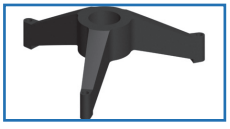
Item Code	Weight	Supply
DB FF L	** kg	1 pc

Polyamide Foot, 2-point



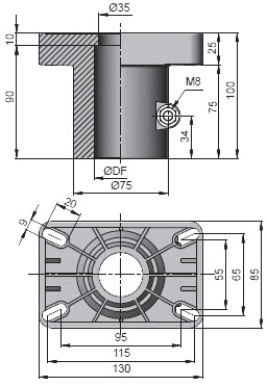
Item Code	Weight	Supply
DB FB	2.4 kg	1 pc

Polyamide Foot, 3-point



Item Code	Weight	Supply
DB FT	3.6 kg	1 pc

Support Head

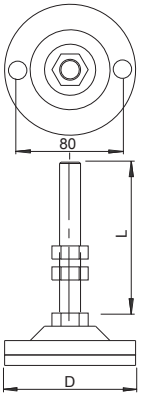


Item Code	Weight	Supply
DB HS	0.3 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

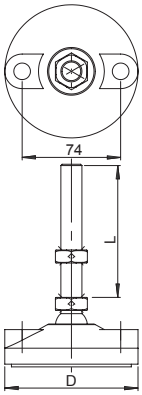
Adjusting Foot Cap, M16





Item Code (DxL)	Material	Weight	Supply
DB FP 60x100	Stainless Steel	0.7 kg	1 pc
DB FP 100x100	Stainless Steel	0.8 kg	1 pc
DB FP 100x150	Stainless Steel	0.8 kg	1 pc

Adjusting Foot Cap, M16



Plastic Base

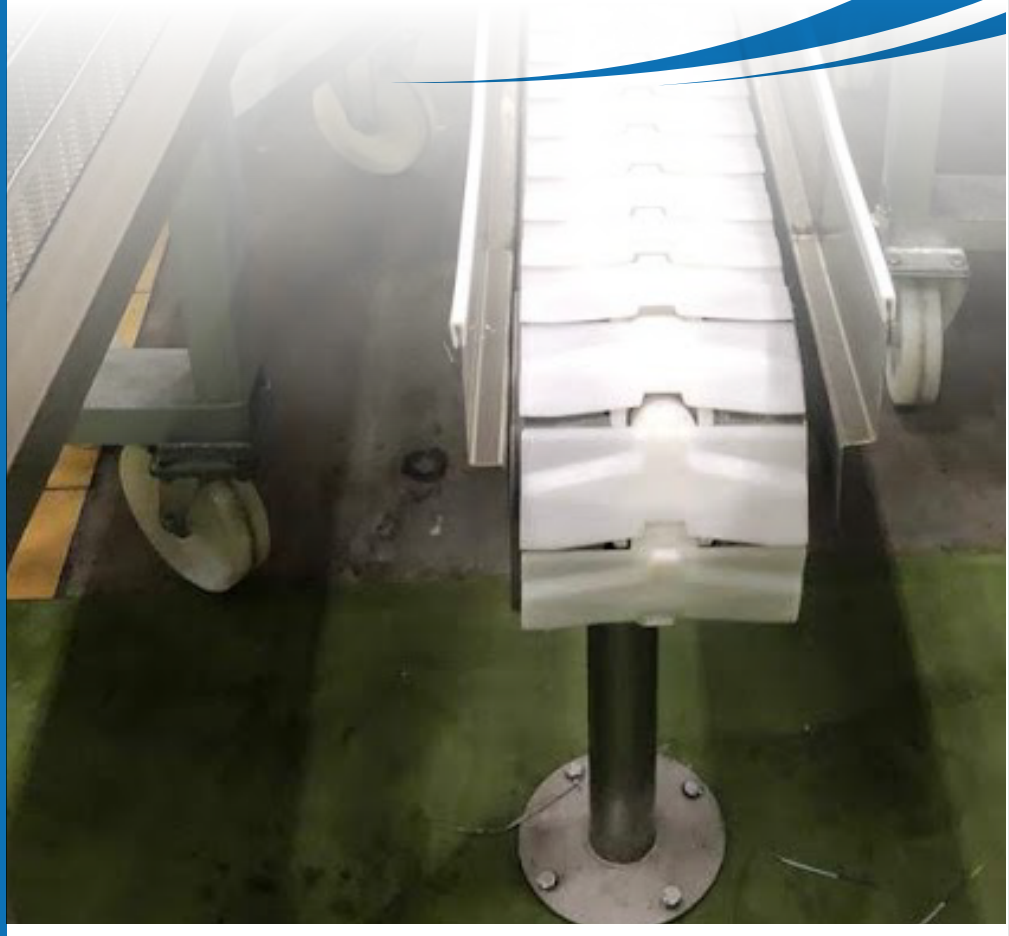


Item Code (DxL)	Material	Weight	Supply
MB FP 60x100	Zinc Plated	0.4 kg	1 pc
MB FP 100x100	Zinc Plated	0.4 kg	1 pc
MB FP 100x150	Zinc Plated	0.4 kg	1 pc
MB FP 60x100S	SUS	0.5 kg	1 pc
MB FP 100x100S	SUS	0.5 kg	1 pc
MB FP 100x150S	SUS	0.5 kg	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

MODU ACCESSORIES (DA)

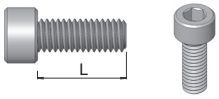


Contents

Fasteners DA..... 322
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Sensor Brackets MA..... 328
Lubricant..... 328

Fasteners DA

Cap Screw, M6 & M8



Material: Stainless Steel

Item Code	Description	Weight	Supply
DA BC M6x16	M6 x 16mm	0.6 kg	100 pcs/pkt
DA BC M8x16	M8 x 16mm	1.2 kg	100 pcs/pkt
DA BC M8x20	M8 x 20mm	1.3 kg	100 pcs/pkt

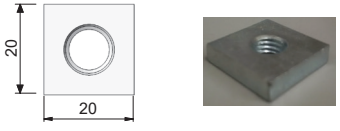
Lock Nut, M6, M8 & M10



Material: Stainless Steel

Item Code	Weight	Supply
DA NL 6	0.6 kg	200 pcs/pkt
DA NL 8	1.2 kg	200 pcs/pkt
DA NL 10	1.2 kg	200 pcs/pkt

Square Nut, M6 & M8



Material: Stainless Steel

Item Code	Weight	Supply
DA NS 6	1.4 kg	100 pcs/pkt
DA NS 8	1.3 kg	100 pcs/pkt

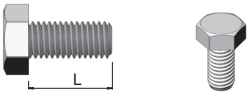
Locking Washer



Locking washer for friction and gripper pad

Item Code	Weight	Supply
MA WL 5	0.01 kg	50 pcs/pkt

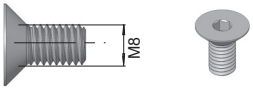
Hex Head Bolt, M6, M8 & M10



Material: Stainless Steel

Item Code	Description	Weight	Supply
DA BH M6x16	M6 x 16mm	0.6 kg	100 pcs/pkt
DA BH M6x20	M6 x 20mm	0.8 kg	100 pcs/pkt
DA BH M8x16	M8 x 16mm	1.2 kg	100 pcs/pkt
DA BH M8x20	M8 x 20mm	1.3 kg	100 pcs/pkt
DA BH M8x25	M8 x 25mm	1.3 kg	100 pcs/pkt
DA BH M8x40	M8 x 40mm	2.2 kg	100 pcs/pkt
DA BH M10x20	M10 x 20mm	2.3 kg	100 pcs/pkt

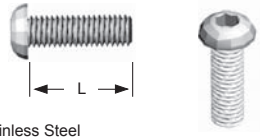
Countersunk Screw



Material: Stainless Steel

Item Code	Description	Weight	Supply
DA SC M8x16	M8 x 16mm	0.7 kg	100 pcs/pkt
DA SC M8x20	M8 x 20mm	1.0 kg	100 pcs/pkt

Button Head Bolt



Material: Stainless Steel

Item Code	Description	Weight	Supply
DA BB M6x10	M6 x 10mm	1.0 kg	100 pcs/pkt
DA BB M6x12	M6 x 12mm	1.1 kg	100 pcs/pkt
DA BB M6x16	M6 x 16mm	1.3 kg	100 pcs/pkt
DA BB M8x16	M8 x 16mm	1.4 kg	100 pcs/pkt
DA BB M8x20	M8 x 20mm	1.5 kg	100 pcs/pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Flat Washer, M6, M8 & M10



- Stainless steel

Item Code	Weight	Supply
DA WF 6	0.25 kg	200 pcs/pkt
DA WF 8	0.48 kg	200 pcs/pkt
DA WF 10	0.80 kg	200 pcs/pkt

Screw



Item Code	Weight	Supply
MA RS 6.5	0.02 kg	50 pcs/pkt

Rivet



Material: Brass Nickel plated (3mm)

Item Code	Weight	Supply
MA RR 3	0.02 kg	50 pcs/pkt

Floor Anchor Bolt



Material: Stainless Steel

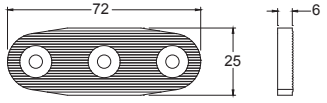
Item Code	Weight	Supply
DA BF M10	2.5 kg	50 pcs/pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Chain Top Replacements MA

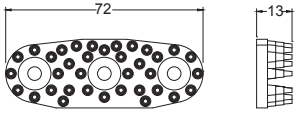
Friction Pad, MM3





Item Code	Material	Color	Weight	Supply
MM3 FP 83	TPE	Grey	0.01 kg	10 pcs/pkt

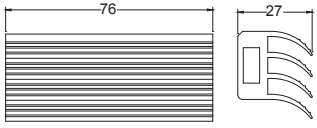
Finger Gripper Pad, MM3

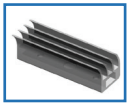




Item Code	Material	Color	Weight	Supply
MM3 GP 83F	TPU	Grey	0.09 kg	10 pcs/pkt

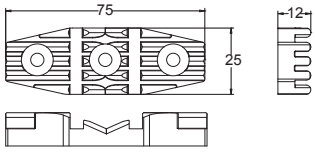
Wedge Gripper, MM3

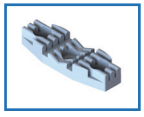




Item Code	Material	Color	Weight	Supply
MM3 GP 83W	TPU	Grey	0.2 kg	10 pcs/pkt

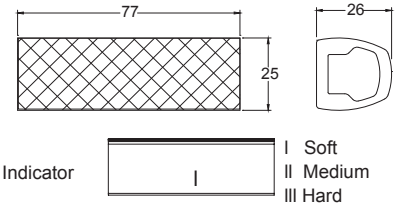
Friction Silicone Pad, MM3



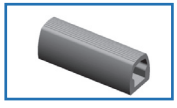


Item Code	Material	Color	Weight	Supply
MM3 FP 83S	Silicone	Grey	0.3 kg	10 pcs/pkt

Gripper Box, MM3

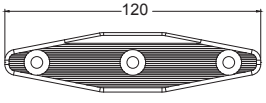


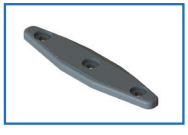
- Box material : TPE (Grey).



Item Code	Hardness	Weight	Supply
MM3 GP 83 BS	Soft - 50A	0.2 kg	10 pcs/pkt
MM3 GP 83 BM	Medium - 60A	0.2 kg	10 pcs/pkt
MM3 GP 83 BH	Hard - 73A	0.2 kg	10 pcs/pkt

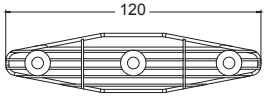
Friction Pad, ML2

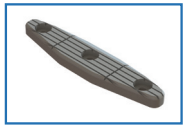




Item Code	Material	Color	Weight	Supply
ML2 FP 140	TPE	Grey	0.01 kg	10 pcs/pkt

Friction Silicone Pad, ML2





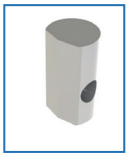
Item Code	Material	Color	Weight	Supply
ML2 FP 140S	Silicone	Grey	0.5 kg	10 pcs/pkt

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

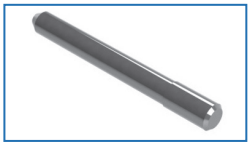
Chain Accessories MA

Chain Pivot



Item Code	Weight	Supply
MS3 PV	0.01 kg	10 pcs / pkt
MM3 PV	0.03 kg	10 pcs / pkt
ML2 PV	0.07 kg	10 pcs / pkt

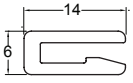
Stainless Steel Pin



Item Code	Weight	Supply
MP PN M4x20	0.01 kg	10 pcs / pkt
MS3 PN M4x37	0.01 kg	10 pcs / pkt
MM3 PN M6x53	0.07 kg	10 pcs / pkt
ML2 PN M8x73	0.11 kg	10 pcs / pkt

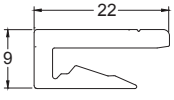
Beam Accessories MA

Slide Rail



- For DS3, DM3 & Plastic Belt Series

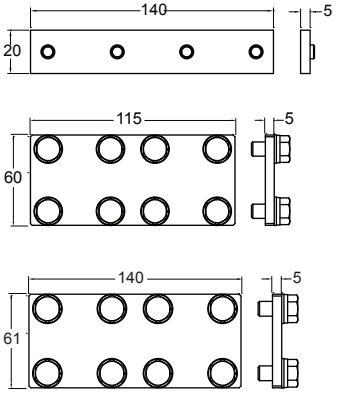
Item Code	Material	Color	Weight	Supply
MS SR 25	HDPE	Semi-Transparent White	1.2 kg	25m/roll
MS SR 25A	Anti-Static	Grey	1.2 kg	25m/roll



- For DL2, DX2 & Plastic Belt Series

Item Code	Material	Color	Weight	Supply
MA2 SR 25	HDPE	Semi-Transparent White	2.8 kg	25m/roll
MA2 SR 25A	Anti-Static	Grey	2.8 kg	25m/roll

Connecting Strip



- For DS3, DM3 & DL2

Item Code	Weight	Supply
DA CS 20x140	1.1 kg	10 pcs/pkt

- DX2 Conveyor

Item Code	Weight	Supply
DA CS 5x50.8x115	3.0 kg	10 pcs/pkt

- For Plastic Belt Series

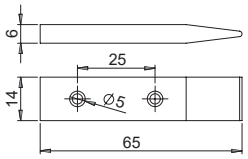
Item Code	Weight	Supply
DA CS 61x140	4.0 kg	10 pcs/pkt

- M8 set screw included

Please consult MODU representative for further information and assistance.

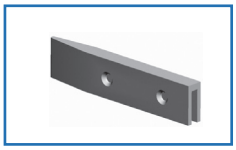
Units: Dimension (mm)

Guide Rail End Cap



- MA RC 6x65 - MS3 & MM3 only
- MA RC 10x65 - ML2 only
- To be used for wheel bend

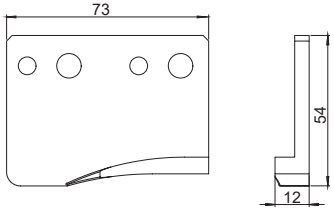
Item Code	Weight	Supply
MA RC 6x65	0.03 kg	1 pc
MA RC 10x65	0.05 kg	1 pc



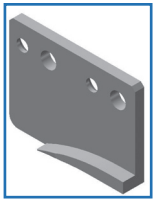
*Supplied without holes

Return Chain Guide MA

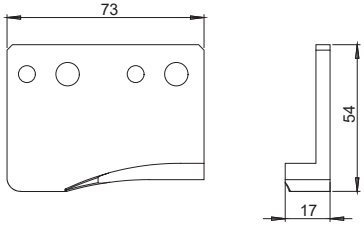
DS3 Return Chain Guide



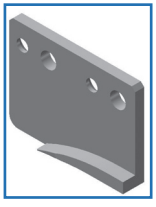
Item Code	Weight	Supply
MS3 RG	0.05 kg	1 pc



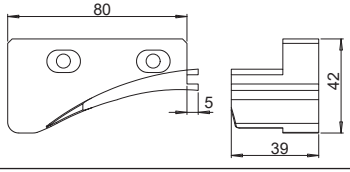
DM3 Return Chain Guide



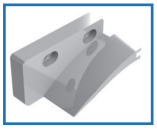
Item Code	Weight	Supply
MM3 RG	0.05 kg	1 pc



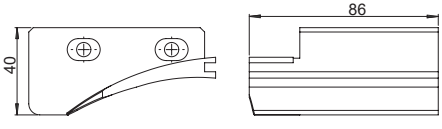
ML2 Return Chain Guide



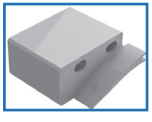
Item Code	Weight	Supply
ML2 RG	0.03 kg	1 pc



MX2 Return Chain Guide



Item Code	Weight	Supply
MX2 RG	0.06 kg	1 pc

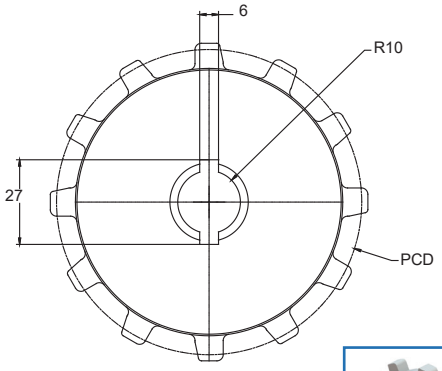


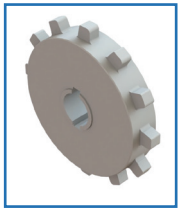
Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Chain Accessories MA

MP Drive Sprocket

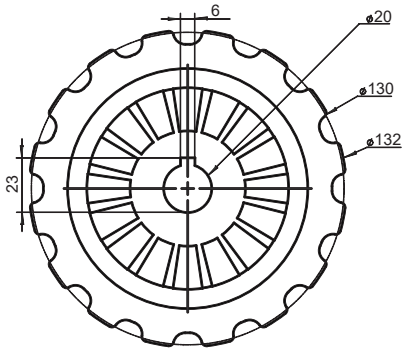




Description:
- PCD: 97mm
- Teeth: 12

Item Code	Weight	Supply
MP DS 97	0.12 kg	1 pc

MS3 / DS3 Drive Sprocket

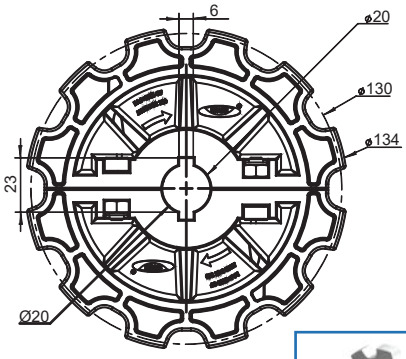




Description:
- PCD: 130mm
- Teeth: 16

Item Code	Weight	Supply
MS3 DS 130	0.2 kg	1 pc

MM3 / DM3 Drive Sprocket



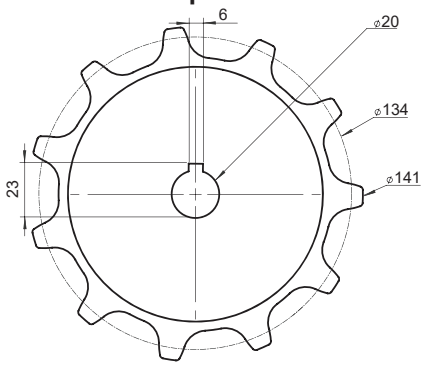


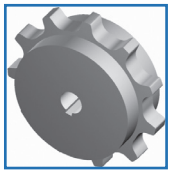
Description:
- PCD: 97mm
- Teeth: 12

2 Pcs injection mold

Item Code	Weight	Supply
MM3 DS130	0.5 kg	1 pc

ML / DL Drive Sprocket



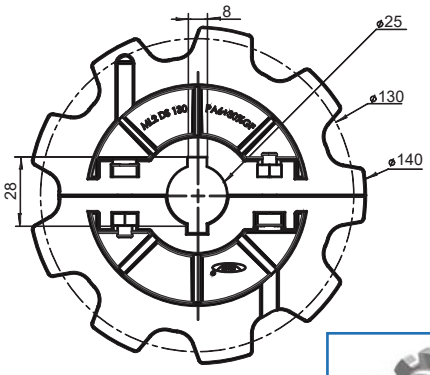


Description:
- PCD: 134mm
- Teeth: 11

Item Code	Weight	Supply
ML DS 134	0.2 kg	1 pc

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

DL2 / DX2 Drive Sprocket

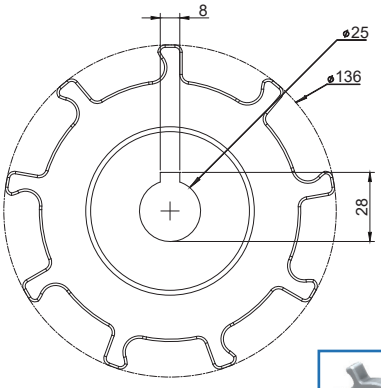




Description:
- PCD: 130mm
- Teeth: 9
- For DL2 and DX2 drive
- 2 Pcs injection mold

Item Code	Weight	Supply
ML2 DS 130	0.97 kg	1 pc

DT2 / DR2 & DF2 Drive Sprocket



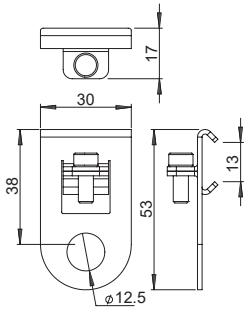


Description:
- PCD: 136mm
- Teeth: 9

Item Code	Weight	Supply
MT2 DS 146	0.2 kg	1 pc

Sensor Brackets MA

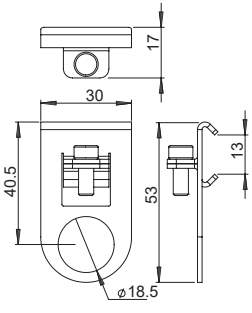
Ø12mm Proximity Sensor



- Guide rail mount sensor bracket

Item Code	Weight	Supply
MA BA 12	0.03 kg	1 pc

Ø18mm Proximity Sensor



- Guide rail mount sensor bracket

Item Code	Weight	Supply
MA BA 18	0.03 kg	1 pc

Lubricant

Lubricant For Chain



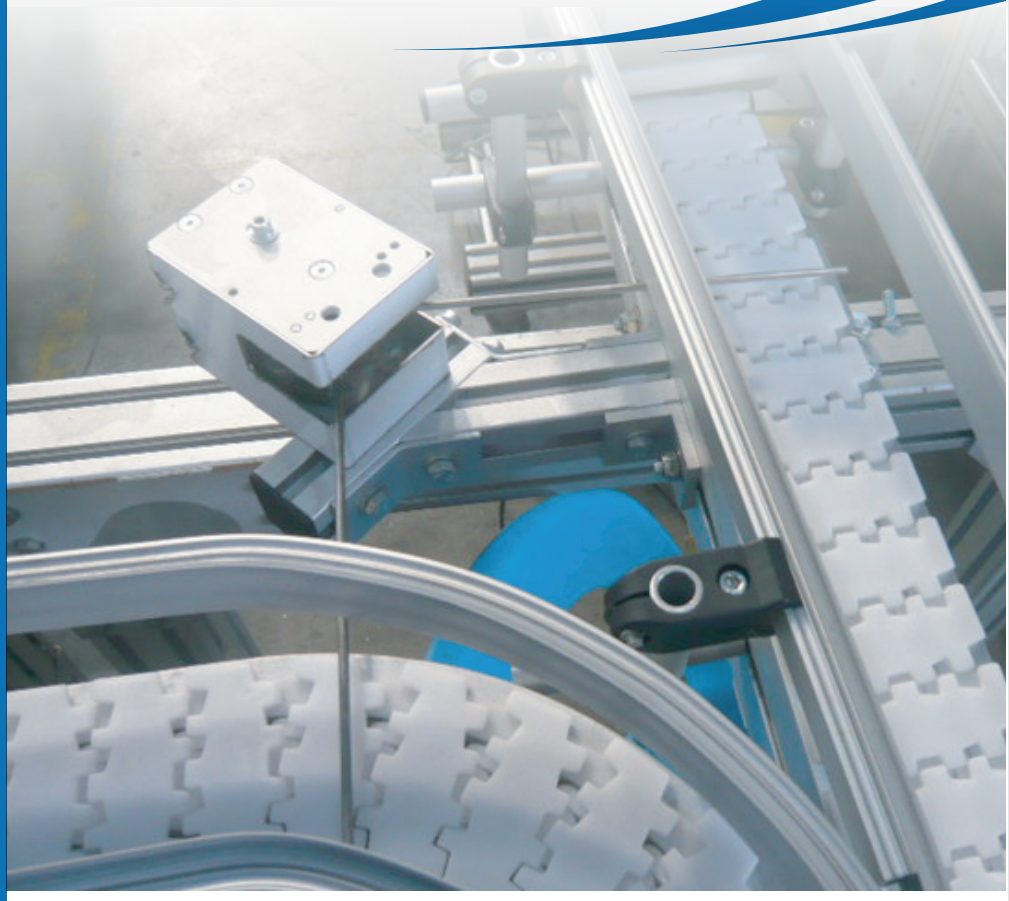
Silicone-based lubricant, 400ml

Item Code	Weight	Supply
MA SL	0.35 kg/can	1 can

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

SPECIAL DEVICES (SD)



Contents

Traffic Controller SD 330
Centering Device 333
Automated Side Guide Adjustment..... 334

Traffic Controller SD

Perpendicular Mechanical Traffic Controller

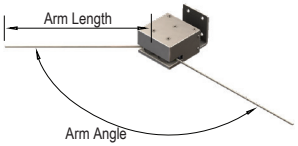
Application:
- Product flow control / merging

Applicable Series:
- All MODU series

Standard Arm Length:
- 300mm, 350mm & 400mm

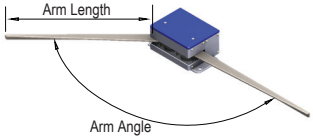
Standard Arm Angle:
- 180°, 90°, 135° L/R

***Light-weight**



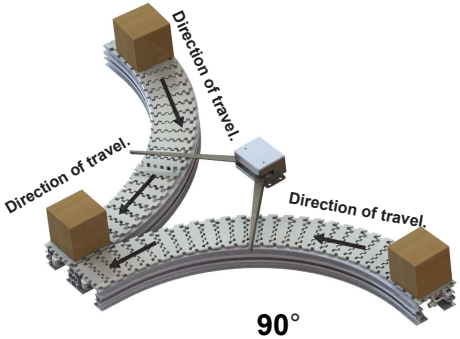
Applicable for single product weight of 0.5kg and maximum product accumulation up to 2kg.

***Medium-weight**

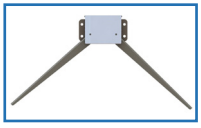


Applicable for single product weight of 2kg and maximum product accumulation up to 70kg.

90° Configuration



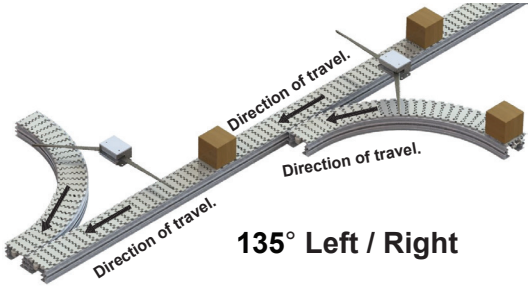
90°



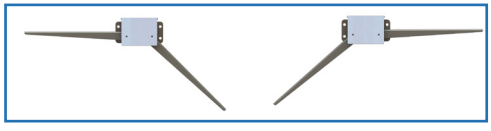
Item Code	Description	Supply
SD PPTC A90 L L300	Light-weight	1 unit
SD PPTC A90 M L300	Medium-weight	1 unit

Please specify arm length,angle and type weight when placing an order

135° L / R Configuration



135° Left / Right

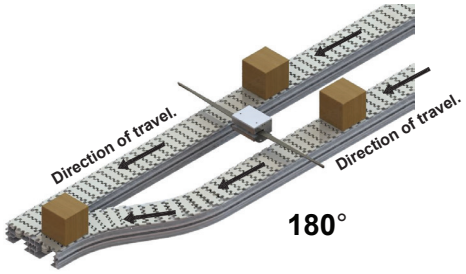


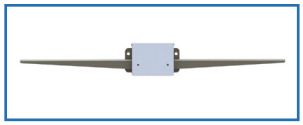
Item Code	Description	Supply
SD PPTC A135-L L L300	Left - Light-weight	1 unit
SD PPTC A135-R L L300	Right - Light-weight	1 unit
SD PPTC A135-L L M300	Left - Medium-weight	1 unit
SD PPTC A135-R L M300	Right - Medium-weight	1 unit

Please specify arm length,angle and type weight when placing an order

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

180° Configuration





Item Code	Description	Supply
SD PPTC A180 L L300	Light-weight	1 unit
SD PPTC A180 R L300	Medium-weight	1 unit

Please specify arm length,angle and type weight when placing an order

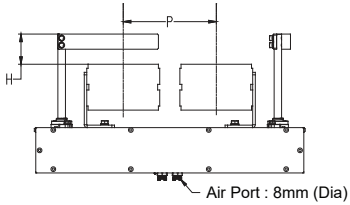
Perpendicular Traffic Controller Selection

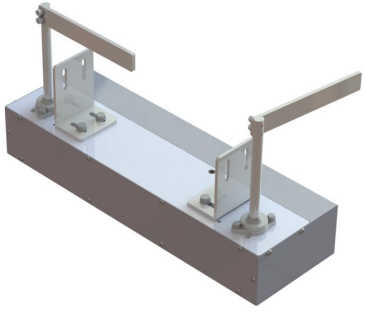
	Spring Type	Conveyor Speed (m/min)						
		10	15	20	25	30	35	40
Light Duty	Type A (AWA3-30)	25g x 16	25g x 15	25g x 13	25g x 12	25gx 10	25g x 9	25g x 8
	Type B (AWA6-30)	100g x 31	100g x 29	100g x 27	100g x 26	100g x 25	100g x 24	100g x 22
	Type B (AWA6-30)	500g x 7	500g x 6	500g x 5	500g x 4	500g x 4	500g x 3	500g x 2
	Type B (AWA6-30)	1500g x 3	1500g x 2	1500g x 2	1500gx2	N/A	N/A	N/A
Medium Duty	Type A (1826)	2kg x 50	2kg x 45	2kg x 40	2kg x 37	2kg x 34	2kg x 30	2kg x 20
	Type A (1826)	4kg x 20	4kg x 17	4kg x 15	4kg x 13	4kg x 11	4kg x 9	4kg x 8
	Type A (1826)	6kg x 11	6kg x 10	6kg x 9	6kg x 8	6kg x 7	6kg x 6	6kg x 5
	Type A (1826)	8kg x 7	8kg x 6	8kg x 6	8kg x 4	8kg x 3	8kg x 3	8kg x 2
	Type A (1826)	10kg x 6	10kg x 5	10kg x 5	10kg x 3	10kg x 3	10kg x 2	10kg x 2
Medium Duty	Type B (1824)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Type B (1824)	4kg x 25	4kg x 22	4kg x 20	4kg x 18	4kg x 15	4kg x 14	4kg x 13
	Type B (1824)	6kg x 15	6kg x 13	6kg x 12	6kg x 11	6kg x 10	6kg x 10	6kg x 9
	Type B (1824)	8kg x 11	8kg x 10	8kg x 9	8kg x 8	8kg x 7	8kg x 6	8kg x 5
	Type B (1824)	10kg x 8	10kg x 8	10kg x 7	10kg x 6	10kg x 5	10kg x 4	10kg x 3

- * (Single product weight) x (Number off maximum allowable product accumulation)
- * Single product weight = Minimum product weight to PASS through each arm
- * Maximum allowable accumulation is not a bundle impact on arm, it is single product impact each time

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Parallel Pneumatic Traffic Controller





Application:
- Product flow control / merging

Standard Arm Height (H):
- 100mm , 150mm & 200mm

Applicable Series:
- All MODU series

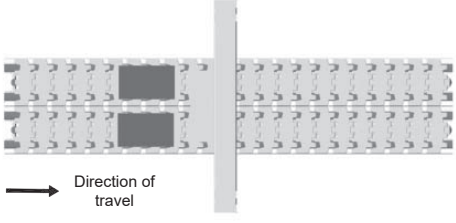
Item Code	Supply
SD PRPTC MS3/MM3/ML2/MX2 H50/H100/H150	1 unit

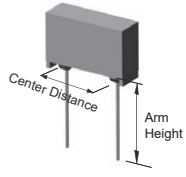
Example: SD PRPTC MM3 H150
(Arm height: 150mm, conveyor series: MM3)

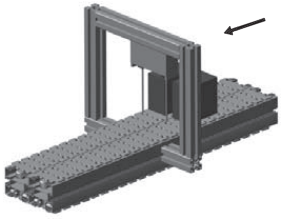
	MS3	MM3	ML2	MX2
P (mm)	105	85-125	145-185	225-265
Allowable Product Weight (kg)	0.2-2.0	0.2-2.0	0.5-3.0	0.5-8.0
Allowable Product Width (mm)	40-60	60-80	100-140	150-220
Max. Product Weight (Accumulation) (kg)	10	10	20	30
Recommended Conveyor Speed (m/min)	10-30	10-30	10-30	10-30
Air port Size (mm)	Ø8	Ø8	Ø8	Ø8
Compressed Air Requirement (Bar)	5-6	5-6	5-6	5-6

Customized configuration available upon request

Verticle Mechanical Traffic Controller







Application:
- Product flow control / merging

Standard Arm Height:
- 100mm , 150mm & 200mm

Standard Center Distance:
- 65mm, 85mm, 145mm & 225mm

Applicable Series:
- All MODU series

Allowable total product load of 500 g

Item Code	Supply
SD VTC H100/150/200 C65/85/145/225	1 unit

Example: SD VTC H100 C145
(Arm height: 100mm; Center distance: 145mm)

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Customized configuration available upon reque

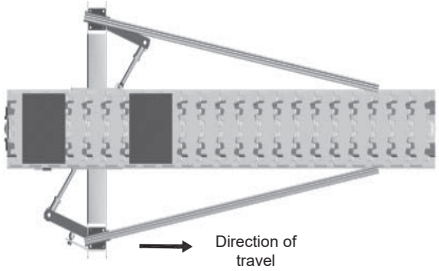
Centering Device

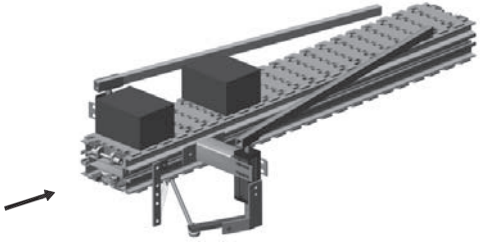
Application:
- Helps to position products at the center of the conveyor.

Standard Arm Height:
- 100mm , 150mm &200mm

Applicable Series:
- All MODU series







Series	Item Code	Supply
MS3	SD MS3 CD H 100/150/200	1 unit
MM3	SD MM3 CD H 100/150/200	1 unit
ML2	SD ML2 CD H 100/150/200	1 unit
MX2	SD MX2 CD H 100/150/200	1 unit

Example: SD MS3 CD H200
(Arm height: 200mm; conveyor series: MS3

Please consult MODU representative for further information and assistance.

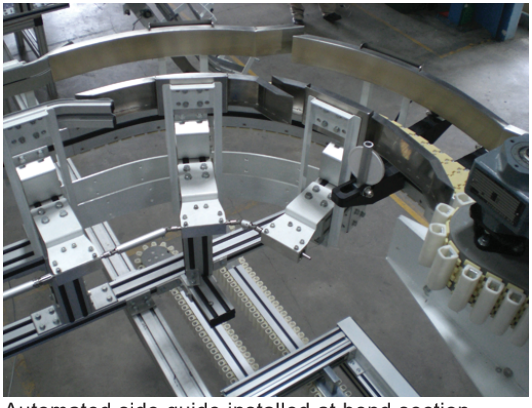
Units: Dimension (mm)

Automated Side Guide Adjustment

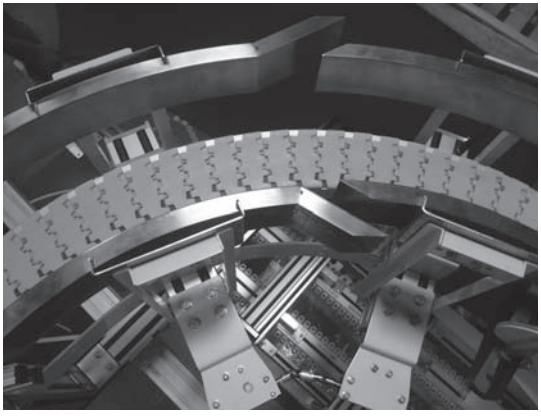
Automated side guide adjustment can be configured with up to five different setting to accommodate different product sizes. The automated adjustment process usually takes less than a minute, and manual adjustment can also be done without affecting the auto configured settings. The Automated side guide system is applicable to the straight and bend sections.



Automated side guide installed at straight section



Automated side guide installed at bend section



Automated side guide installed at bend section



Automated side guide installed at straight section

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

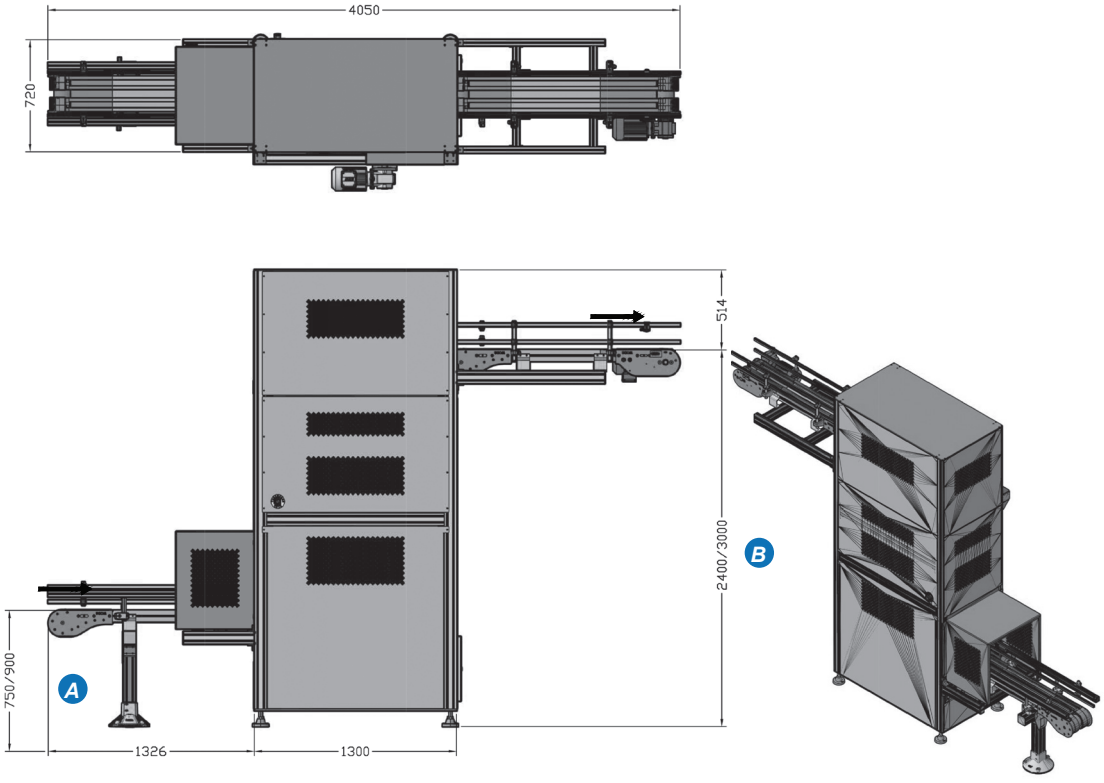
SPECIAL EQUIPMENT (SE)



Contents

Continuous Flow Elevator & Lowerator 336
Gripper Conveyor System 338
Spiral Conveyor System 339

Continuous Flow Elevator & Lowerator



Please specify variable (A) & (B), when placing an order.

MODU System Continuous Flow Elevator / Lowerator is commonly used to convey food and beverage cases, bagged products, trays, and other similar items. It is designed for high speed and large payload capacity. MODU System Continuous Flow Elevators / Lowerator free up floor space in case/carton palletizing lines, warehousing, or in work-in-progress storage applications by transferring products to an overhead conveyor section. This machine is idle to create aisleways, clearance for forklifts, transfer product between floors and etc.



Specifications:

Power:	230VAC or 415VAC, 3-Phase
Compressed Air:	5bar
Payload:	4.5kg - 30kg
Min Infeed Height:	550mm
Outfeed Height:	2400mm or variable
Throughput:	up to 20 cases/min
	(depend on product & application)

Please consult MODU representative for further information and assistance. Units: Dimension (mm)

Features

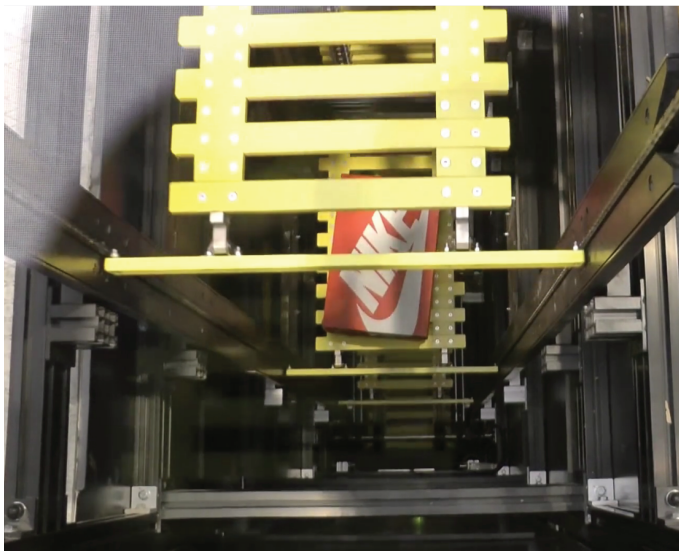
- Available in multiple heights, capacities and payload sizes.
- Continuous-flow elevating—no reciprocating action.
- Easy maintenance access panels.
- Universal mounts for any type of infeed and discharge conveyor.
- aluminum frame and also available in stainless steel.
- Comprehensive guarding.
- Powered infeed and discharge rollers.

Order Guideline

- Standard infeed height: 750 & 900mm
- Standard outfeed height: 2400 & 3000mm
- Standard lifting capacity: 20 cases/min
- Maximum product size: 400x400x400 mm

Part No.	Specification	
	Infeed Height	Outfeed Height
SE CFC 7524	750	2400
SE CFC 7530	750	3000
SE CFC 9024	900	2400
SE CFC 9030	900	3000



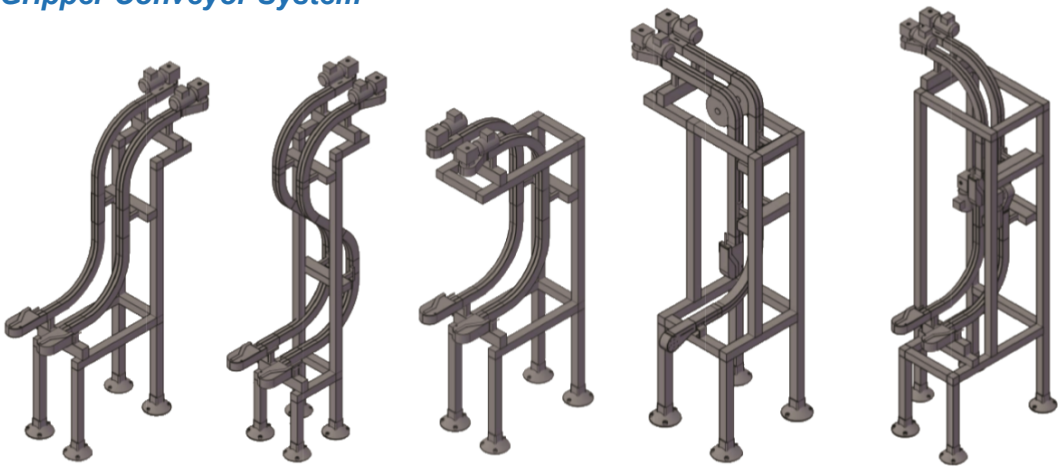




Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

Gripper Conveyor System



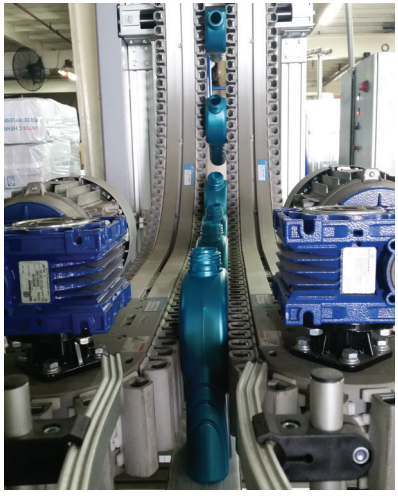
S-Flow (Type 1) | S-Flow (Type 2) | C-Flow | Simple Gripper Upender | Gripper Upender

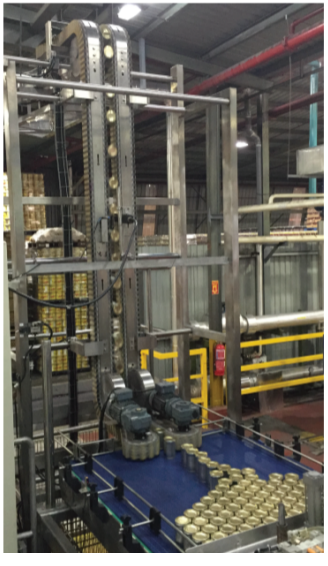
Features

- Save floor space and conveyor length
- Maximize space utilization by creating cooling buffer at ceiling level.
- Easy integrate with other application such as blower, filling, packaging lines
- Flexible and lightweight - easy to install and match with site arrangement layout.
- High capacity vertical transport
- Quick change over time by incorporating adjustable crank system and digital adjustment readout.
- Smooth handling of products.

Basic Functions

1. Product Elevation
2. Product De-Puck
3. Product Reverting
4. Creating Passage Way
5. Inverter Air Rinser
6. Change Orientation





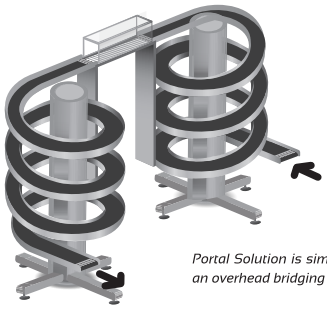


Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

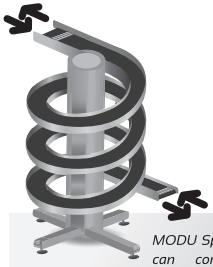
Spiral Conveyor System

FAST DELIVERY
INNOVATIVE DESIGN
EXCELLENT QUALITY
LOW MAINTENANCE
ECONOMICAL OWNERSHIP



PORTAL

Portal Solution is simple! Two spirals, one on either side, with an overhead bridging conveyor element suspended in between.



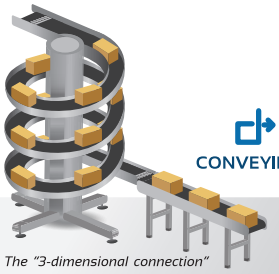
ELEVATION

MODU Spiral Conveyors can convey cartons, cases, trays, totes and all sorts of packaged goods up or down in a continuous flow. MODU's propriety slat-style belts are designed with rolling friction without any sliding movements on wear strips. This facilitates small footprint, high speed, low noise, low maintenance and long life.



BUFFERING

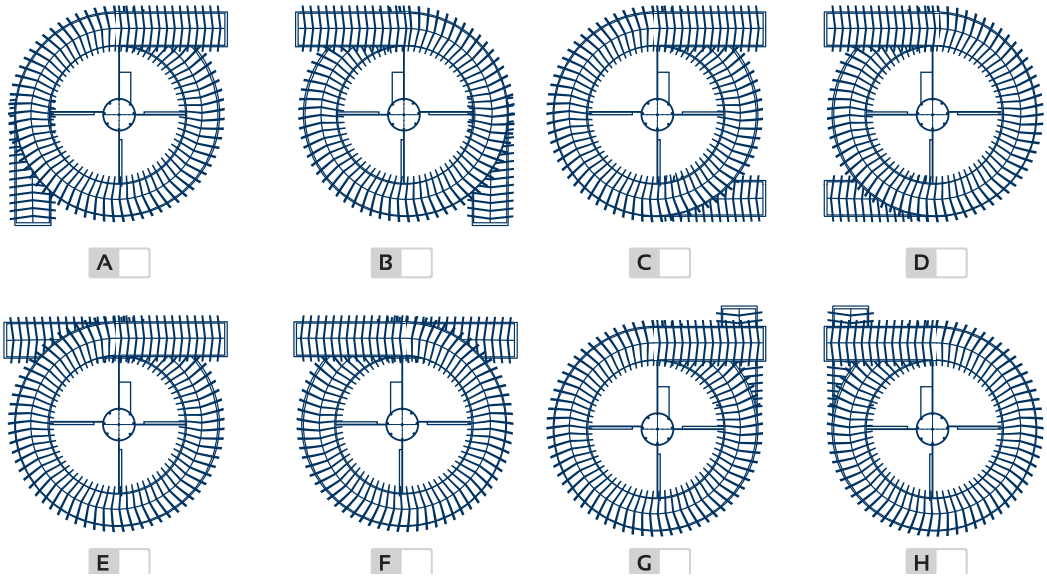
MODU Mass Flow Spiral Conveyor is specially configured to elevate or store mass flows of containers such as cans or items of glass.



CONVEYING

The "3-dimensional connection" concept features compact and continuous elevation, coupled with the ability to reach flexibly with just one conveyor throughout a building complex horizontally, making it suitable for the most complicated layouts.

Available Configuration



Please consult MODU representative for further information and assistance.

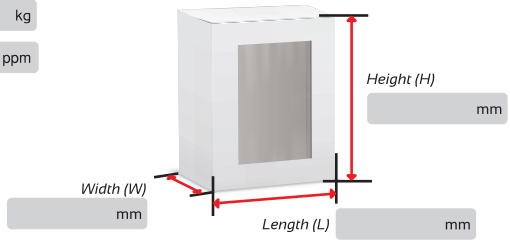
Units: Dimension (mm)

Product Details

Weight kg

Capacity ppm

Ordering Guideline



Product Height Range	Proposed Side Guide Height
0-99 mm	25
100-199 mm	50
200-299 mm	75
300-399 mm	100
400-499 mm	125
500-599 mm	150

Proposed side guide height

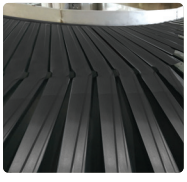
The height of the side guide is determined based on the product height. The table above shows an example of the product height and its proposed side guide height.

Leading Direction L W

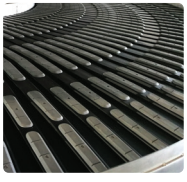
Contact Materials

[Hard Plastic] [Carton] [Metal] [Soft Paper] [Soft Plastic] [Glass] [Wood]

Belt Type



Plain

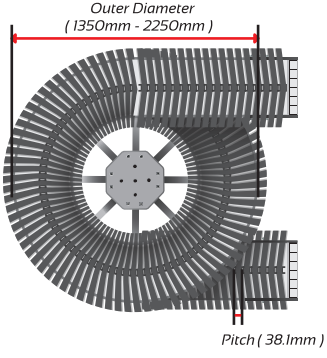


Friction

Width	Outer Diameter (OD)	Chain Type	Pitch	Allowable Load	Allowable Speed	Operating Temperature
155 mm	1350 mm	Plain (P) Friction (F)	38.1 mm	40 kg/m	50 m/min	10°C - 60°C
220 mm	1500 mm					
400 mm	1850 mm					
600 mm	2250 mm					

Spiral Direction

Upwards Downwards



Belt Width



Application

Operating Temperature °C *(10°C - 60°C)*

Voltage Current value V Hz

Maximum Speed m/min *(max 50 m/min)*

Specify Brand of Motor

No Specific Specific *Please Specify*

Speed Adjustable m/min - m/min

In Standard Build As

Aluminium center column

Stainless steel conveyor frame

Limitation

Allowable height of 6 meters

Allowable layers of 8

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

TOOLS (TL)



Tools

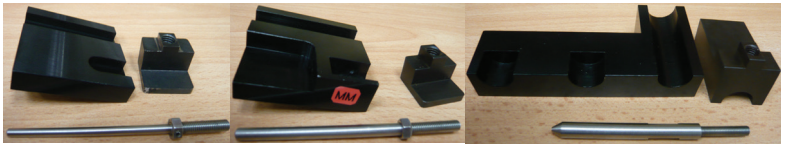
Chain Pin Insertion Tool



Chain pin insertion tool shown without attachment & specific drive pin

Item Code	Supply
TR CP 1	1 pc

Attachment for chains tools



Series	Item Code	Supply
MS3	MS3 AC	1 pc
MM3	MM3 AC	1 pc
ML2 / DL2	ML2 AC	1 pc

Sliderail Assembly Tools



Series	Item Code	Supply
MP	MP SRA	1 pc
MS3 / DS3	MS3 SRA	1 pc
MM3 / DS3	MM3 SRA	1 pc
ML2 / DL2 MX2 / DX2	MX2 SRA	1 pc

Mounting Tool For Slide Rail



For MT2, MR2 & MF2 Series

Item Code	Supply
MT2 SRA	1 pc

Please consult MODU representative for further information and assistance.

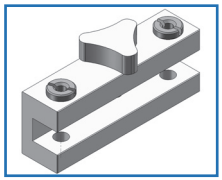
Units: Dimension (mm)

Sliderail Cutter



Item Code	Supply
MA SC	1 pc

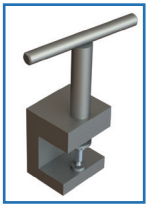
Sliderail Drill Fixture



Item Code	Supply
MA SRF	1 pc

Rivet Crimping

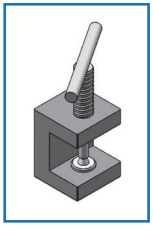
For MP Series



Item Code	Supply
MA RC MP	1 pc

Rivet Crimping

For MS3 & MM3 Series



Item Code	Supply
MA RC	1 pc

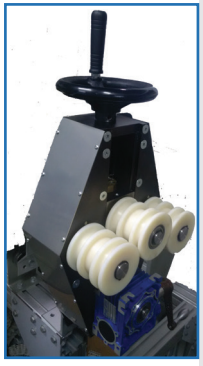
Aluminum Extrusion Cutting Blade



- Ø355mm , 108 teeth

Item Code	Supply
TR CB	1 pc

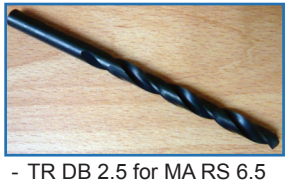
Guide Rail Bender



- Suitable for MG RR 12,
  MG RR 3x18 & MG RR 3x20

Item Code	Supply
TR GB	1 pc

Drill Bit



- TR DB 2.5 for MA RS 6.5
- TR DB 3.2 for MS RR 3 and DA RB 3.2x9

Item Code	Supply
TR DB 2.5	1 pc
TR DB 3.2	1 pc

Please consult MODU representative for further information and assistance.

Units: Dimension (mm)

INSTALLATION MANUAL (IM)



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Introduction

About This Installation Manual

The purpose of this installation manual is to help users with basic experience to assemble a MODU System conveyor.

Every chapter includes instructions and photos showing how to assemble the different parts. Photos in this manual includes parts from MM3 series, but instructions are applicable to MP, MS3, ML2 and MX2 series unless specified

Preparation for Installation

1. Study the assembly drawing
2. Gather the necessary tools.
3. Ensure all the materials and components needed are available to assemble the conveyor.
4. Check all materials and components with part list.
5. Check if the floor at the installation site is even so all feet can be properly attached.

General Tools

To assemble a conveyor, you will need the tools listed below.



1. Hand tools
    a. Box wrench, 10, 13, 17 and 19 mm
    b. Allen keys set (metric series)
    c. Tap and tap wrench (M6 and M8)
    d. Countersunk bit
    e. Measuring tape
    f. Files
    g. Socket wrench
    h. Screw drivers
    i. Pliers
    j. Pen knife
    k. Soft paced hammer
    l. Clamp (for chain installation)
    m. Level

2. Power tools
    a. Miter saw with cutter for aluminium
    b. Hand drill

3. Fasteners

Standard Fasteners
M6 = Washer, Counter sunk, Cap screw, Nut, Lock Nut.

M8 = Washer, Counter-sunk, Cap screw, Nut, Lock Nut



Connecting Strip
Used for joining conveyor beams. Use Allen key and set screws for attaching the connecting strip to the beam



Square Nut
Slot into T-slot of MODU conveyor and support beam



T-bolt
Used when attaching support brackets, guide rails and dip trays to the conveyor beam.



Cutting MODU System Beams

Beam lengths – if you have ordered 3m or 6m beams (3m is standard length), they will need to be cut into suitable lengths before assembly. Please refer to the drawings.

- Saw requirements:
  Miiter saw is recommended for aluminium beam. The saw should have the ability of cutting the largest profile in a single cutting action.

- Working site:
  you should use a designated area for cutting beams in order to keep the assembly area clean.

- Quality of cut:
  if burrs are found after cutting, they must be removed prior to assembly. Ensure the cuts are straight for a good assembly.

- Safety:
  all safety precautions issued by the cutting saw manufacturer should be followed at all times.

Assembly

The basic MODU conveyor structure consists of four (4) component groups:

a. Conveyor beams, Drive Units, Idler Units and Bends
b. Conveyor Guide
c. Structure System
d. Conveyor Accessories

The first step in the assembly process is to assemble the support structure which consists of feet, support beams and beam connectors. Most conveyor support designs are based on vertical support beams combined with horizontal support beams.

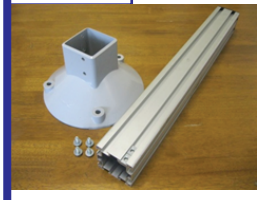
Important!
Ensure that the conveyor is supported at regular intervals not exceeding 3m.

Foot and Support Structure Installation

The first step in the assembly process is to assemble the support structure, which consists of feet, support beams and beam support brackets. There are a variety of feet and beam support brackets available. Select the one that suits your application.

Foot Installation

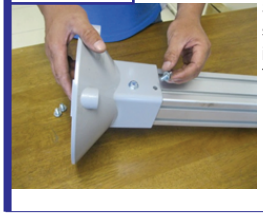
Step 1



Insert hex head screws and washers into the holes on the side of the foot.

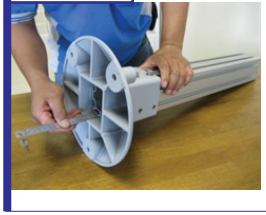
Use the screws to fasten foot connecting strips or square nut to the inner side of the foot.

Step 2



Slide the connecting strips or square nuts into the structural beam T-slots.

Step 3



Raise the beam from the bottom of the foot approximately 30mm, to allow for height adjustment later in the assembly.

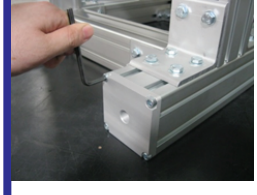
Step 4



Tighten the screws using a wrench.

Foot Cap Installation

Step 1



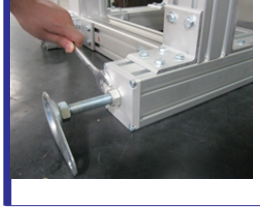
Thread the holes using 6mm tap.
Attach the support bracket to the beam by inserting 4 socket head cap screws into the holes on the support bracket.
Tighten the screws using an Allen key.

Step 2



Screw the foot cap onto the support bracket.

Step 3



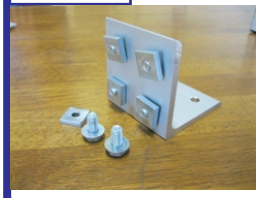
Tighten the nut using the wrench.

Connecting Structural Beams

There are a variety of support brackets available. Select the one that suits your application. The support brackets can be connected to the structural beams in various ways.

Angle Bracket Installation

Step 1



Insert the required number of square nuts into the structural beam T-slot. Mount the angle bracket using screws and washers.

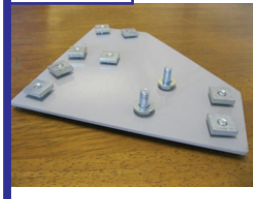
Step 2



Mount the angle bracket to the beam in the same manner. Tighten all screws.

Connecting Plate Installation

Step 1



Insert the required number of square nuts into the structural beam T-Slot.

Step 2



Mount the connecting plate to the beam using screws and washer.

Mounting Conveyor Beam Support Bracket

Step 1



Attach screws, square nuts and washers to the support bracket before mounting. Slide the square nuts of one support bracket into the support beam T-slot. Tighten the screws. Ensure the support bracket is aligned to the beam.

Step 2



Insert the square nuts of the second support bracket into the support beam T-slot. Slide the bracket down so that it does not protrude above the support beam.

Step 3



Use a soft hammer or mallet to clip end cap on to the support beam.

Step 4



Mount the first support bracket to the conveyor beam. Bring the second bracket up and insert the T-bolts into the conveyor beam's T-slot. Tighten the nuts.

Conveyor Beam Installation

Conveyor beams are mounted onto the support structure using support brackets. There are a variety of conveyor beam support brackets. The support brackets can be connected to the structural beams in various ways.

.

Step 1



Connect two conveyor beam ends by inserting connecting strips into the beam's T-slots. Use two connecting strips per beam joint.

Step 2



Connecting strip should be able to slide in and out of the beam's T-slot without the interference from the set srews.

Step 3



Tighten the set screws using an Allen key.

Note!

Assemble the entire conveyor beam structure in same way. If the conveyor beam is too long to mount onto the support structure in one continuous length, asemble shorter lengths and connect them to each other.

Drive Units and Idler Ends

This section shows the method to mount drive units and idler ends to the beam. All drives and idler comes with connecting strips. Attach them to the conveyor beam using an Allen key.

Remember!
Conveyor chains should always be pulled, not pushed by the drive unit.

Step 1



Release the four set screws that are inserted into the drive unit connecting strips. Insert the connecting strips into the T-slot of the beam you want attach to the end drive unit. Make sure that the set screws do not prevent the connecting strips from sliding into place.

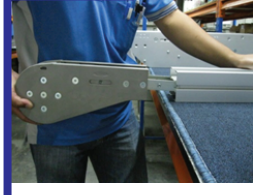
Step 2



Tighten the set screws using an allen key.

Idler End Unit Installation

Step 1



Insert the idler unit connecting strips into the T- slots of the beam end and tighten it.

Step 2



Tighten the set screws using an allen key.

Slide Rail Installation

The slide rail is attached to the sides of the conveyor beam to reduce chain friction where the chain would otherwise be in direct contact with the beam profile. It is very important that the slide rail is installed properly, so that the chain can run without disruption.

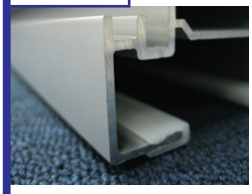
When the conveyor is to be mounted overhead, it is easier to mount the slide rail onto the conveyor by placing the conveyor beam on the floor. If you choose to do so, leave an extra length of approximately 300mm longer than the beam.

Step 1



Start the slide rail assembly at an idler end unit. Separate the top and bottom flange of the slide rail at the end and press into place.

Step 2



Make sure the slide rail is mounted and snaps onto the beam. Ensure that the longer flange of the slide rail is facing the inner of the beam.

Step 3



Use the slide rail assembly tool to press the slide rail into place.

Step 4



Ensure the slide rails are mounted underneath and on the upper side of the beam except for top running chain application.

Joining slide rails

Note!
Try to mount the slide rail using as many continuous lengths as possible, except for conditions stated below:

- If chemicals used on the chain affects the slide rail composition, it is recommended to shorten the slide rail by approximately 2m to 3m.
- At high load areas, it is important to cut the slide rail and allow for elongation. Cutting is required at wheel bends, idler unit and drive units. This prevents the slide rail from stretching and entering into the drive unit, which will jam the chain.
- Since the force is higher on the slide rail, never join slide rails in plain bends or vertical bends. Instead, place the joint before the bends.
- Avoid joining slide rail at the conveyor beam joints.

Step 1



Cut both slide rail ends at a 45° angle. Cut the tip of the new slide rail in the direction of travel.

Step 2



Allow a space of approximately 10mm between two slide rail ends.

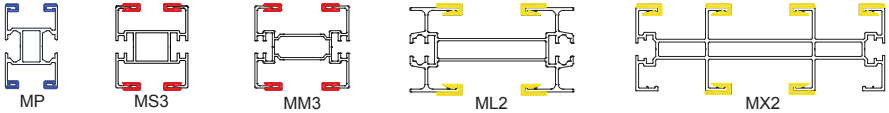
Step 3



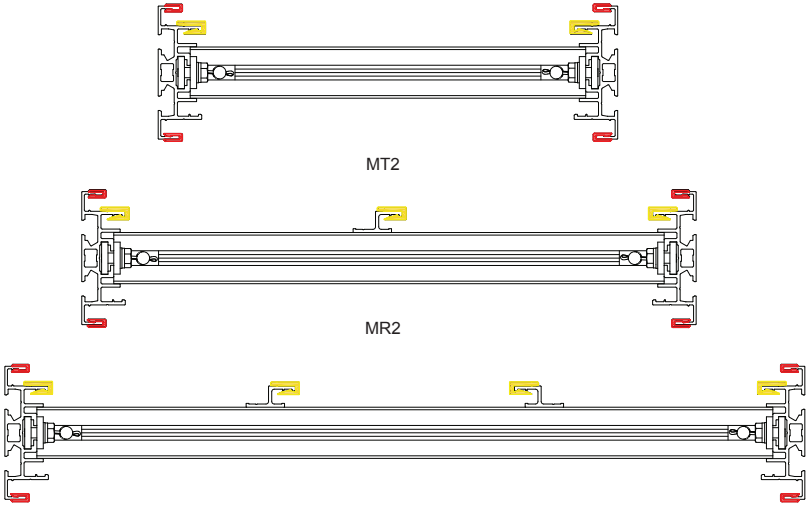
Do not place two slide rail joints opposite each other. Ensure that there is a minimum distance of 100mm between them.

It is very important to assemble the slide rails correctly to ensure smooth conveyor operation.

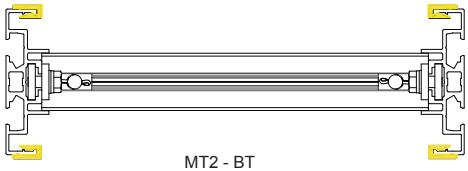
Plastic Chain: X-X cross sectional view for aluminium frame conveyor



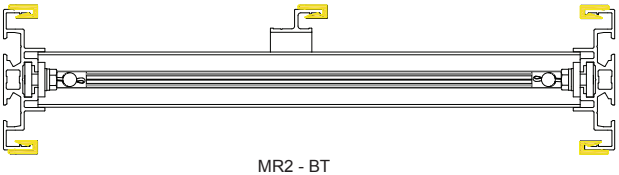
Plastic Belt: X-X cross sectional view for aluminium frame conveyor



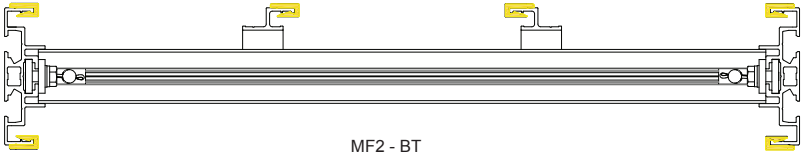
Plastic Belt: X-X cross sectional view for bottom tap chain of aluminium frame conveyor



MT2 - BT

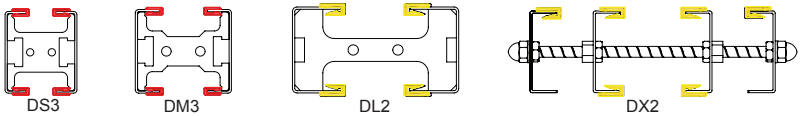


MR2 - BT



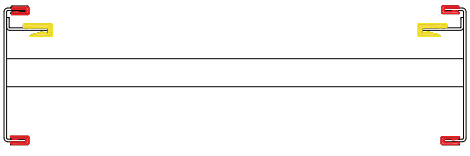
MF2 - BT

Plastic Chain: X-X cross sectional view for stainless steel frame conveyor

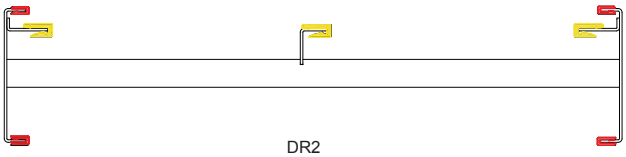


DS3 DM3 DL2 DX2

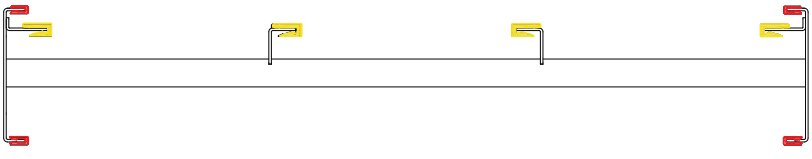
Plastic Belt: X-X cross sectional view for stainless steel frame conveyor



DT2

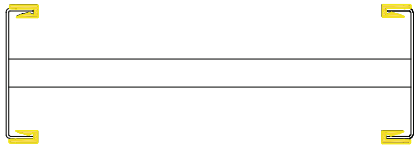


DR2

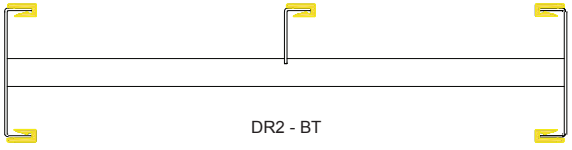


DF2

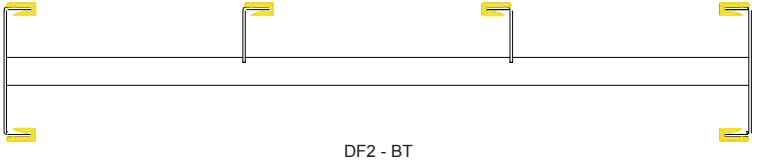
Plastic Belt: X-X cross sectional view for bottom tap chain of stainless steel frame conveyor



DT2 - BT

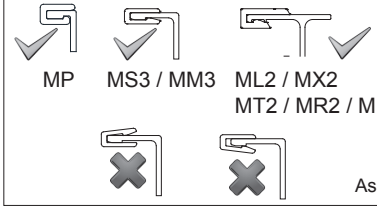


DR2 - BT

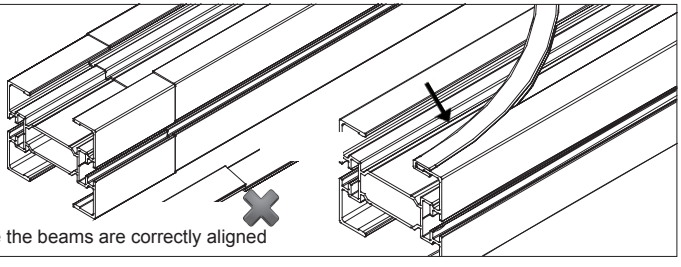


DF2 - BT

Slide rail orientation

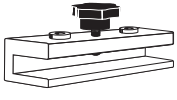


MP MS3 / MM3 ML2 / MX2 MT2 / MR2 / MF2

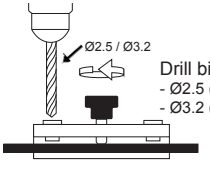


Assure the beams are correctly aligned

Slide rail assembly tools

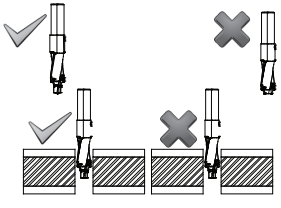


Drill fixture (MA SRF)

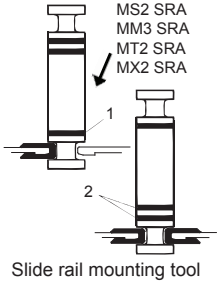


Drill bit
- Ø2.5 (TR DB 2.5)
- Ø3.2 (TR DB 3.2)

The distance between rivets should be 50 mm.

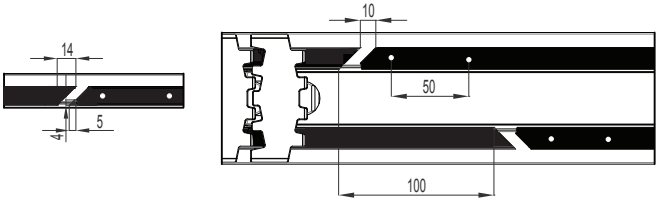


Use a high quality drill bit to avoid forming a shoulder, preferably one which is intended for drilling aluminium.



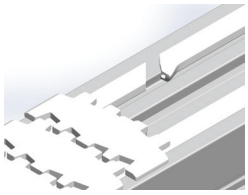
Slide rail mounting tool

Correct configuration of joints



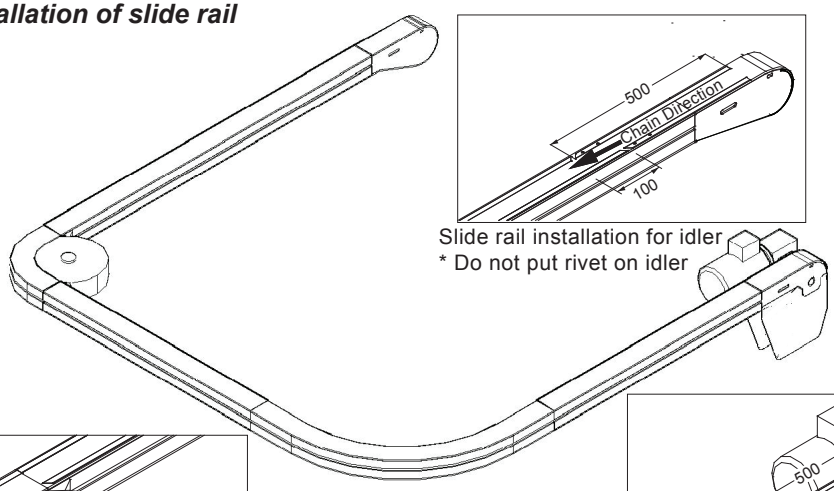
Check that there is a gap between the slide rails and that the joints are correctly fitted.

Deformed joints

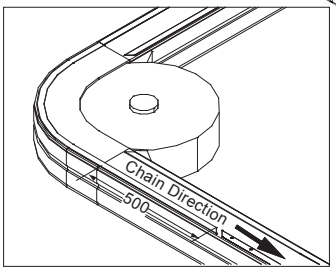


Check that the slide rail has not been broken off. Replace the slide rail if necessary

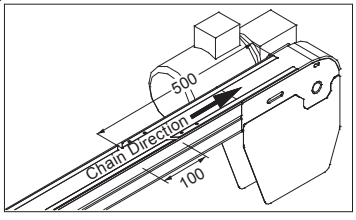
Installation of slide rail



Slide rail installation for idler
* Do not put rivet on idler

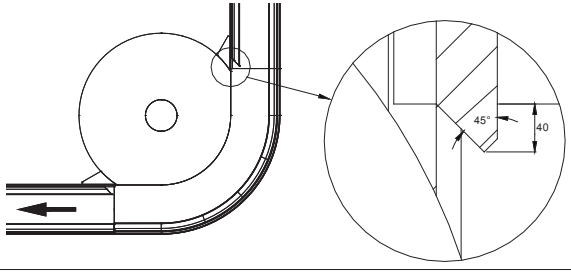


Slide rail installation for wheel bend



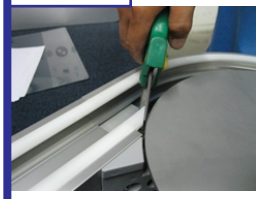
Slide rail installation for drive unit
* Do not put rivet on drive unit

Slide rail Installation for Wheel Bend



Installing slide rail in wheel bends

Step 1



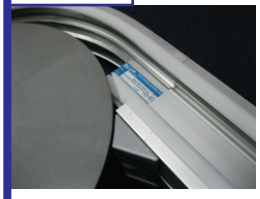
Cut the slide rail end in a 45° angle.

Step 2



The slide rail must be longer than the conveyor beam. There should be a 10mm distance between the slide rail and the wheel.
Ensure that the ends of the slide rail are straight.

Step 3



Cut the slide rail slightly longer than the conveyor beam at a 45° angle. There should be a 2mm distance between the slide rail and the wheel.

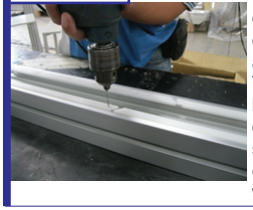
Step 4



In the outer bend, ensure that the slide rail is connected well to the conveyor beam profile.

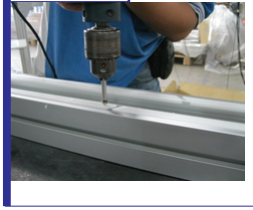
Fixing slide rail by using rivets (for MP, MS3 and MM3)

Step 1



Drill two holes near the start of each slide rail section. Use the drill fixture to ensure clean-cut and correct location of the holes. The holes must be at the beginning edge of the joint, in the direction of travel, to hold the slide rail in place when the conveyor is in use. Use a well-sharpened drill bit.

Step 2



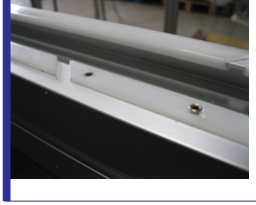
Use a countersunk tool to deburr and drill holes. Ensure no metal fillings are left underneath the slide rail.

Step 3



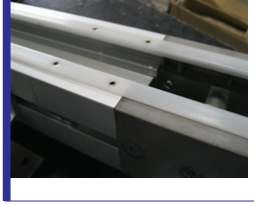
Insert rivets in the holes. Use rivet crimping tools to crimp the rivets.

Step 4



Check that the rivets do not protrude over the surface of the slide rail. Check both top and bottom surface of slide rail for protruding metal.

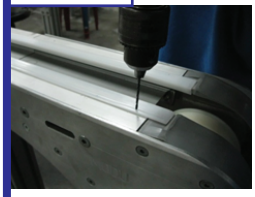
Step 5



Keep a distance of approximately 30mm between rivets and idler unit should there be a need to remove the idler end after assembly.

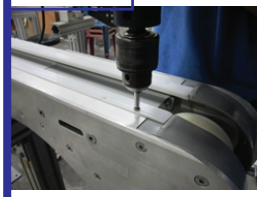
Fixing slide rail by using screws (for ML2 and MX2)

Step 1



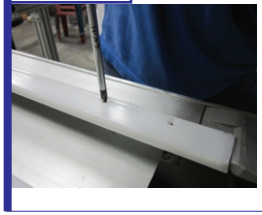
Drill two holes near the beginning of each slide rail section. Use the drill fixture to ensure clean-cut holes and correct location of the holes. The holes must be at the beginning edge of the joint piece, in the direction of travel, to hole the slide rail in place when the conveyor in use. Use a well-sharpened drill bit.

Step 2



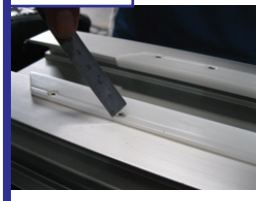
Use a countersink to deburr and countersink the holes. Also make sure no metal fillings left underneath the slide rail.

Step 3



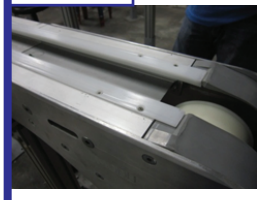
Insert screws in the holes, using screw bit and hand drill to tighten the screws.

Step 4



Check that the screws do not protrude over the surface of slide rail. Check both top and underneath surface of slide rail for protruding metal.

Step 5



Keep a distance of approximately 30mm between rivets and idler unit. This is in case the idler end has to be removed after conveyor system assembly.

Chain

When all beams and slide rails are in place, it is time to assemble and mount the chain onto the conveyor system.

Joining chain ends

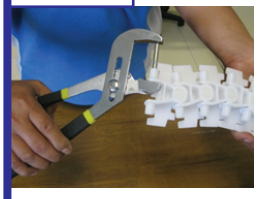
Take the chains apart
- Line the chain insertion tool up with the pin.
- Press the trigger until the pin pops out.
- Pull the pin out and chain apart

Step 1



Insert the plastic pivot.

Step 2



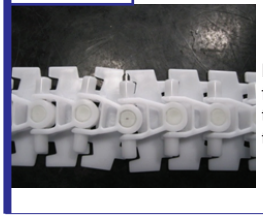
Insert the steel pin halfway, using a pair of pliers. Use new steel pins and plastic pivots when joining chain ends.

Step 3



Allign the chain tool with the pin. Slowly press the trigger until the pin is inserted.

Step 4



Ensure that the chain is flexible in the joint and the pin is not out to the other side.

Mounting the Chain at Drive Unit

Step 1



Insert the chain into the underside of the drive unit. Ensure that the chain is moving in the right direction, as indicated by the arrow on the side of all chain links.

Step 2



Feed the chain along the conveyor by pulling it through the idler unit and back to the drive unit.

Step 3



Join the chain end.

Step 4



Stretch the chain and remove links if necessary so that the chain slacks slightly at the drive unit. Connect the chain ends.

Length adjustment of the conveyor chain

- Legth adjustment of the chain is carried out at the drive unit.
- Remove the safety cover at the drive unit.
- The chain should be tensioned by pulling the conveyor chain. Clamp the chain to hold chain on the beam profile. The clamp should be placed on edges of the drive unit to avoid damaging to the aluminium profile.
- Remove chain slack links using chain insertion tool.
- Join the chain again by using a new steel pin and plastic pivot.
- Remove the chain clamp

Conveyor Guides System

Conveyor guides or guide rails system are used to guide products being conveyed and also to prevent them from falling off the conveyor.

Guide rails are supported by guide rail brackets attached to the sides of the conveyor beam. Follow the mounting instruction for the type of bracket used in your application.

Brackets should be placed approximately 500mm to 1000mm apart depending on type of product and if accumulation occurs or not. If brackets are spaced at greater distances than 1000mm, there is possibility that guide rails will become deformed due to excessive force.

Step 1



Insert square nut into T-slot of the beam. Fasten a guide rail bracket using hex head screw and washer.

Step 2



Attach a guide rail tube and guide rail support to the bracket. Tighten the nut or hand knob.

Step 3



Attach the guide rail to the guide rail support. Tighten the screw.

Note!

Spacers can be added to increase side guide width. Use long bolts when mounting the bracket support and distance spacer to the conveyor beam. The length of the bolts depends on the number of spacers added.

Mounting of Guide Rails Bracket (Polyamide)

Step 1



Insert square nut into T-slot of the beam. Insert set screw to the square nut.

Step 2



Tighten the distance tube to the set screw.

Step 3



Attached the guide rail bracket to the distance tube. Tighten the screw.

Attached the guide rail to the guide rail support.
Tighten the screw.

Step 4



The length of the distance tube can be added to increase side guide width.

Step 1



Connecting sleeves are fastened to the guide rail ends with set screws and an allen key.
Place the connecting sleeves on the outer side of the guide rail.

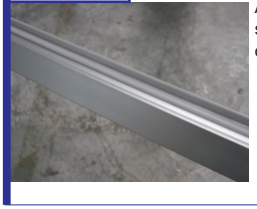
Mounting of Guide Rail Bracket (Aluminium Distance Tube)

Step 1



To prevent products from being scratched, a plastic guide rail cover can be snapped onto the inside of the guide rail.

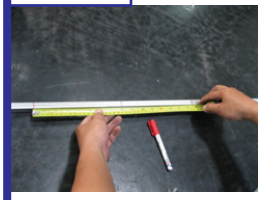
Step 2



All cover joints must be smooth, so that products do not get caught or damaged.

Connecting Guide Rails

Step 1



Mark the length of the rail to be bent. Leave an approximately 200mm straight section at each end.

Step 2



Place the rail horizontally between the top wheel and the lower wheel.
Start bending from the centre of the required radius.

Step 3



Operate the crank to run the rail back and forth while lowering the upper wheel step by step until the desired radius and angle is achieved.

Note!

To calculate the length of guide rail to be bent, use the formula below,

$$L = (2\pi \times r \times \alpha)/360$$

Where, L = length of bend, r = radius, α = bend angle

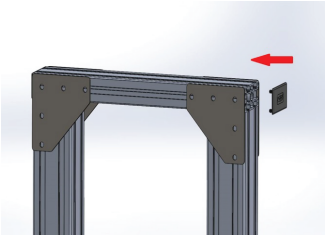
If multiple bends with the same radius are to be made, the final position of the upper wheel is indicated to ensure subsequent rails are of the correct radius.
It is possible to bend angles up to 180° with minimum radius of 100mm.

Plastic Belt Conveyor Installation

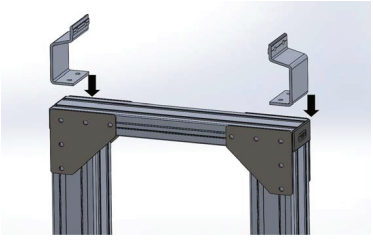
Mounting Conveyor Beam Support Bracket

Tool – box wrench and soft hammer

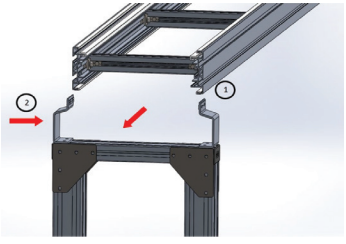
1. Insert the end cap on both sides of the beam using the soft hammer.
2. Place the support bracket. Do not tighten the screws.
3. Mount the first support bracket to the conveyor beam. Pull the second bracket up and mount the second support bracket to the conveyor beam. Tighten the screws.



(a)



(b)



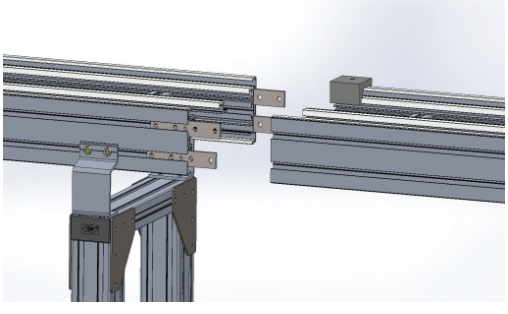
(c)

Assembling Conveyor Beams

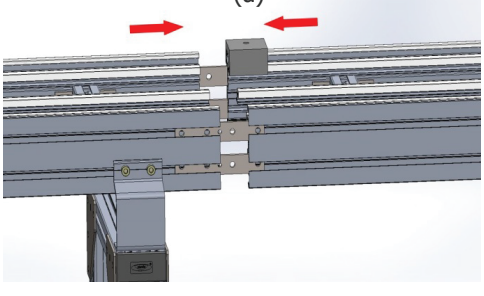
Tool – Allen key

1. Connect two conveyor beam ends by inserting connecting strips into the beam T-slots. Use two connecting strips per beam joint.
2. Make sure that the set screws do not prevent the connection from sliding into place.
3. Tighten the set screws using Allen key.





(a)



(b)

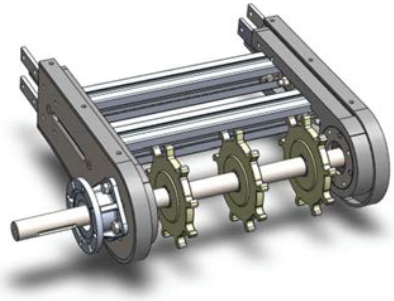


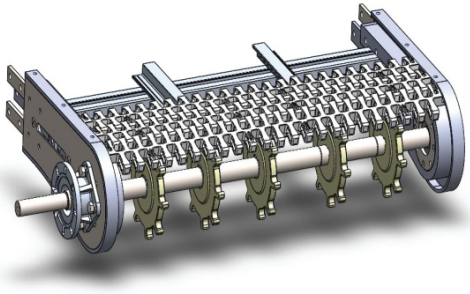
(c)

Mounting of Drive Unit

This section shows method to mount drive units and idler ends to the frame structure. All drive and idler comes with connecting strips. Attached them to the conveyor beam using an allen key and set screws that are included.

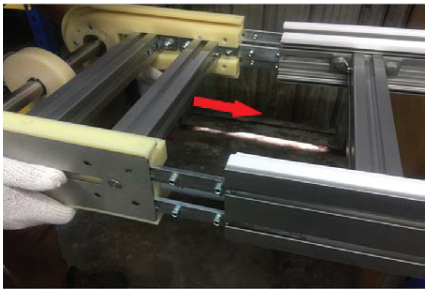
Remember!
Conveyor belt should always be pulled, not pushed by the drive unit.





Tool – Allen key

1. Release the set screws that comes together with the drive unit connecting strips. Insert the connecting strips into the T-slot of the beam. Make sure that the set screws is not preventing the connecting strips from sliding in and out of the T-slot.
2. Tighten the set screws using an allen key.

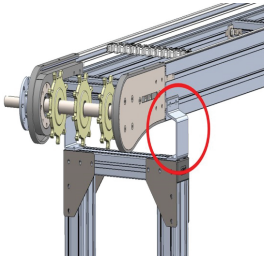


(a)



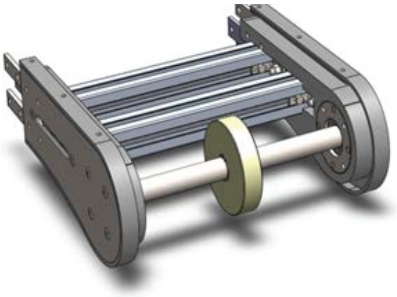
(b)

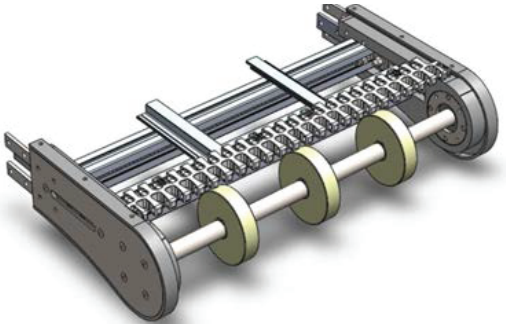
Note!
Below mounting instructions are applicable for all type of drive units. Drive units are to be mounted with support leg as shown.





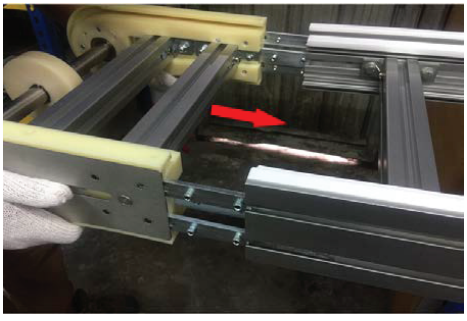
Mounting of Idler End





Tool – allen key

1. Insert the idler unit connecting strips into the T-slot of the conveyor beam.
2. Secure the idler end to the beam by tightening the set screws with an allen key.



(a)



(b)

Installation of Slide Rail

The slide rail is attached to the sides of the conveyor beam to reduce belt friction where the belt would otherwise be in direct contact with the beam profile. It is very important that the slide rail is installed properly, so that the belt can run without disruption. MT2, MR2 and MF2 series has two types of slide rails both at upper and topmost of the beam. Upper section to use MS3 and MM3 type of slide rail profile and the topmost section to use ML2 and MX2 type of slide rail profile. This is important because each slide rail needs to be fitted properly.

When the conveyor is to be mounted overhead, it is easier to mount the slide rail onto the conveyor by placing the conveyor beam on the floor. If you choose to do so, leave an extra length of approximately 300mm longer than the beam.

Tools – slide rail assembly, slide rail cutter and clinching tool.

1. Start the slide rail assembly from the idler end unit. Separate the top and bottom flange of the slide rail and press into place.
2. Make sure that you mount the slide rail so that it snaps onto the beam. Wrong slide rail orientation will not lock alike, so check which flange should be on top.
3. Use the slide rail assembly tool to press the slide rail into place.

4. Do not forget to mount the slide rail underneath and on top of the beam.
5. Mount the center slide rail to the center of the beam spacer according to the drawing dimensions. Drill holes at the center of the beam. Place square nut into the beam T-slot and screw it together.
6. Tighten the screw of the center slide rail and press it together using tools. Cut the excess slide rail leaving only small gap at the end of the slide.

(a)





(b)

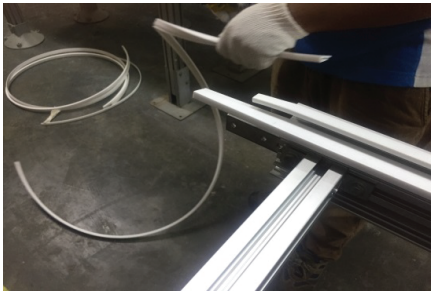




(c)



(d)

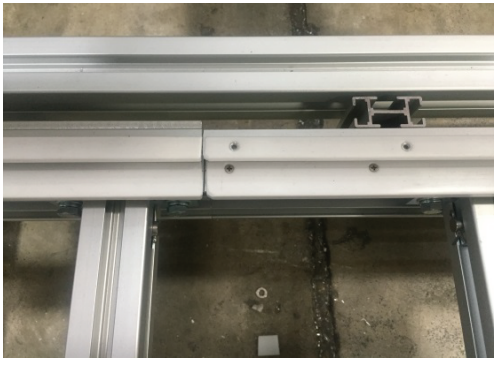


(e)

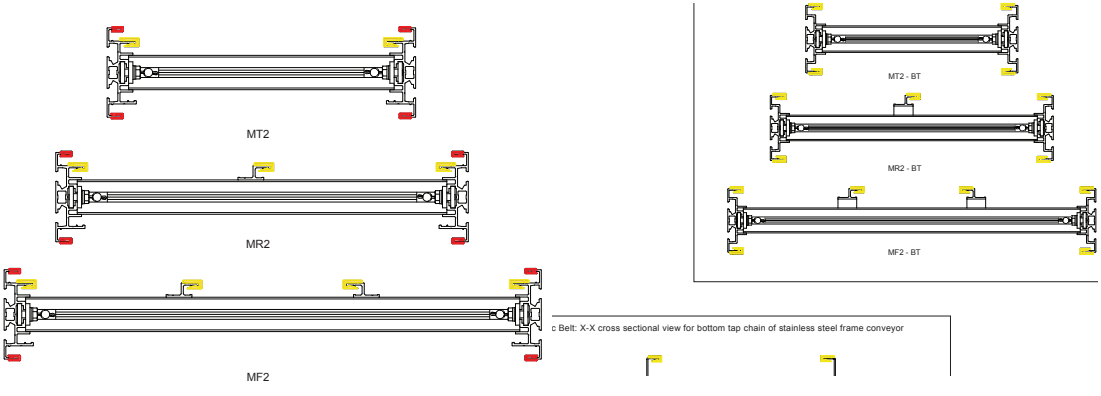


(f)



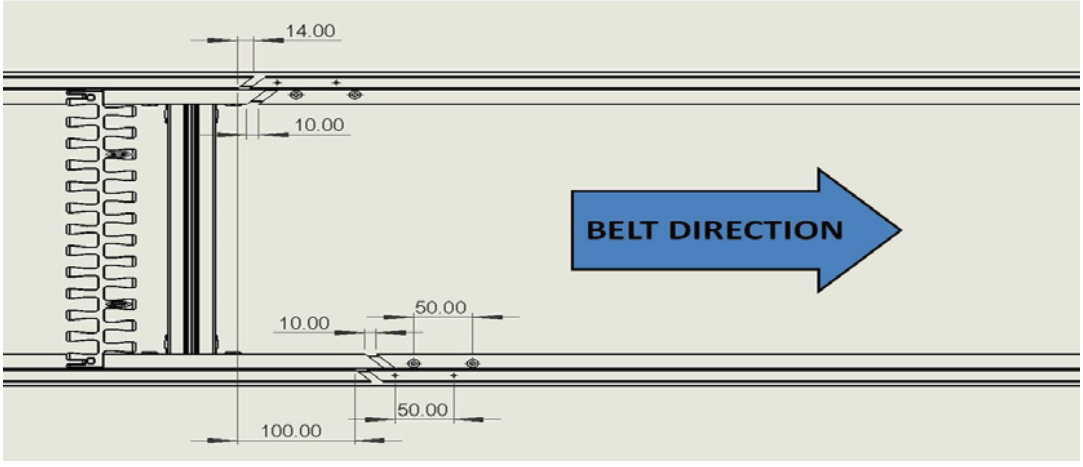


Important!
Below shows the cross section view of conveyor beam.



Joining of Slide Rails

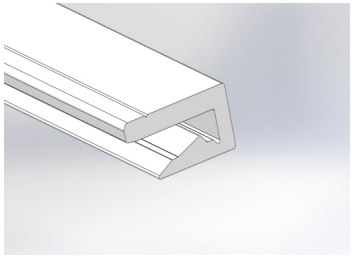
The joints on the slide rails must have a distance of 100mm between them. The joints should be laid out as in the picture with gap of approximately 10mm between the rails.

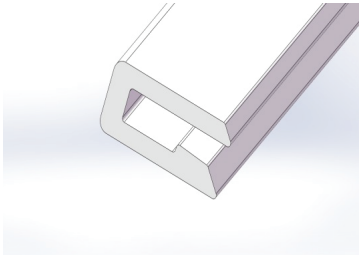


Tool – slide rail cutter

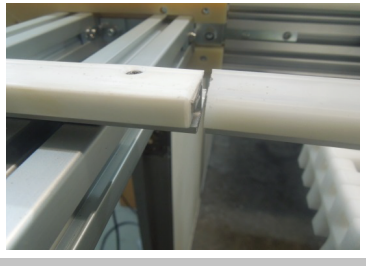
1. There are two types of slide rails to be installed at the upper and topmost of the beam. Cut both slide rail ends in 45º angle. The beginning of the new slide rail section in the direction of travel must be trimmed at a small angle. Follow the same method with the topmost section of beam's slide rails. Allow a space of approximately 10mm between the two slide rail ends.
2. Do not place two slide rail joints opposite each other. Ensure that there is a distance of at least 100mm between them so the belt runs smoothly. (this does not apply to slide rail that begins by an idler end or after drive unit where joints are always parallel).

(a)





(b)



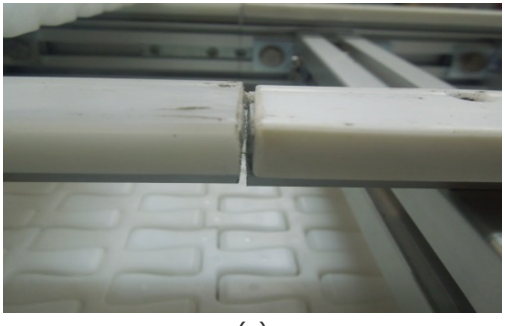
Note!
Try to mount the slide rail using as many continuous lengths as possible, except for conditions stated below:

- If chemicals used on the chain affects the slide rail composition, it is recommended to shorten the slide rail by approximately 2m to 3m.
- At high load areas, it is important to cut the slide rail and allow for elongation. Cutting is required at wheel bends, idler unit and drive units. This prevents the slide rail from stretching and entering into the drive unit, which will jam the chain.
- Since the force is higher on the slide rail, never join slide rails in plain bends or vertical bends. Instead, place the joint before the bends.
- Avoid joining slide rail at the conveyor beam joints.

Joining of Center Slide Rails

Tools – slide rail cutter and clinching tool

1. Cut the center slide rails end at small 45° angle. The beginning of the new slide rail section In the direction of the travel to be trimmed in a small angle.
2. Join the center slide rail just before the support bracket according to the belt direction.



(a)



(b)

Installation of Slide Rails Using Screws

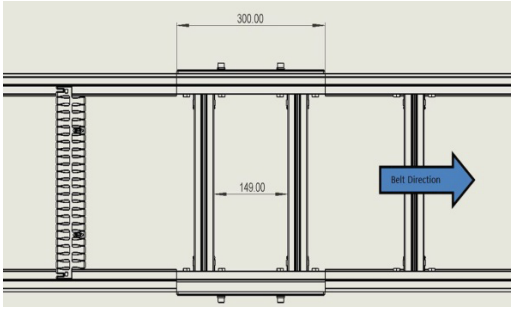
Tools – hand drill, slide rail drill fixture, drill bit (TR DB 2.5) and screw bit

1. Drill two holes near the beginning of each center slide rail. Use the drill fixture to ensure clean-cut holes. The holes must be at the beginning edge of the joint piece, in the direction of travel, to hole the slide rail in place when the conveyor is in use. Use a well-sharpened drill bit.
2. Use a countersunk to de-burr and countersunk the holes. Ensure that there are no metal fillings are left underneath the slide rail.
3. Insert screws in the holes and tighten the screws.
4. Check that the screws do not protrude over the surface of slide rail.

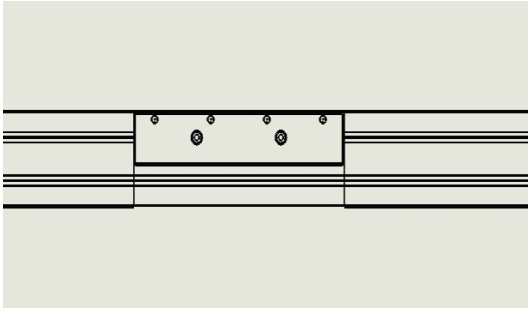
Installation of Chain Installation Section (CIS) into the Beam

Chain Installation Section (CIS) is to help belt slides in and out of a conveyor.

CIS has no specific area or position to install. It is usually installed in between beams or before a plain bend. refer to the pictures below for installation guidelines.



TOP VIEW: CIS



SIDE VIEW: CIS

Tool – allen key

1. Release the set screws at the connecting strips. Insert the connecting strips into the beam's T-slot. Ensure that the set screws is not preventing the connecting strips from sliding in and out.
2. Tighten the set screws using an allen key.



Installation of Plastic Belt

The belts are delivered in five meter rolls. Belts are generally easy to install and have very minimum maintenance.

The belts are long connecting chains that are assembled together unit by unit.

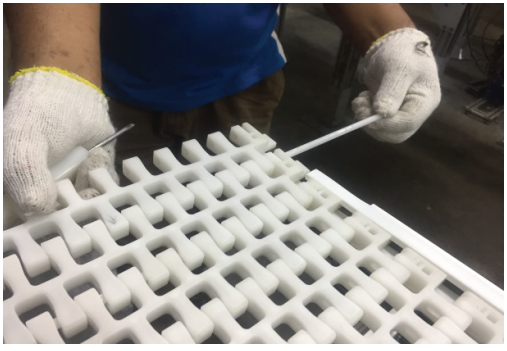
Joining Belt Ends & Removing Belt

Accessories – belt rods and lock pin are supplied with belt

1. Press the lock onto one end until it “snaps”. Join the belt by using the locks.
2. Insert the rod and press the lock at the open end to join the belts.
3. To remove the belts, use the screw driver to push the lock pins until it snaps.
4. Remove the rod by pushing on one end.



(a)



(b)



(c)

Mounting the Belt

Tool – pin puncher and hammer

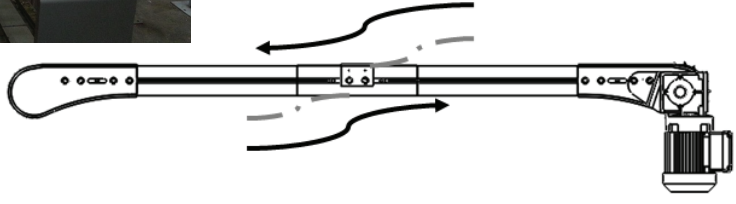
1. Inserting the belt from the top: insert the front of the belt in the direction towards the drive. (Follow the belts direction)
2. Inserting the belt from the bottom: insert the front of the belt in the direction opposite the drive.
3. Insert the belt and push it forward.
4. To assemble the sections, bring together the links on the two belts and insert the rod.
5. Press the lock into the belt until it “snaps” in place.
6. Continue joining the belts. When all the belts are installed, there should be a slack of 200-300mm.
7. It is important the belt fits in the sprockets to ensure smooth operation of the covneyor.

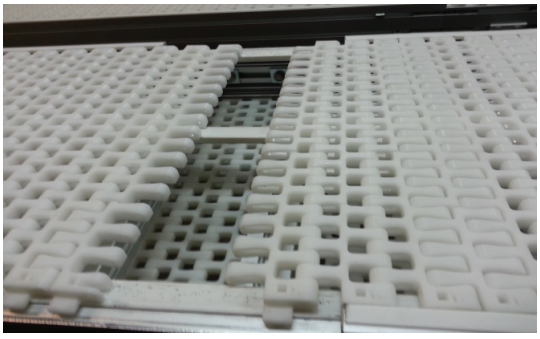
(a)



(b)







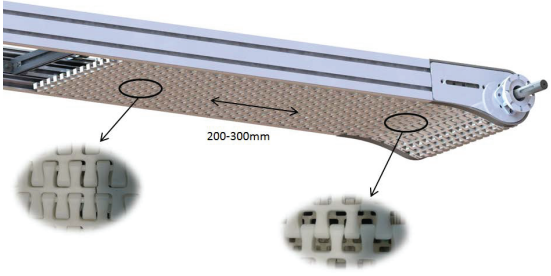
(c)



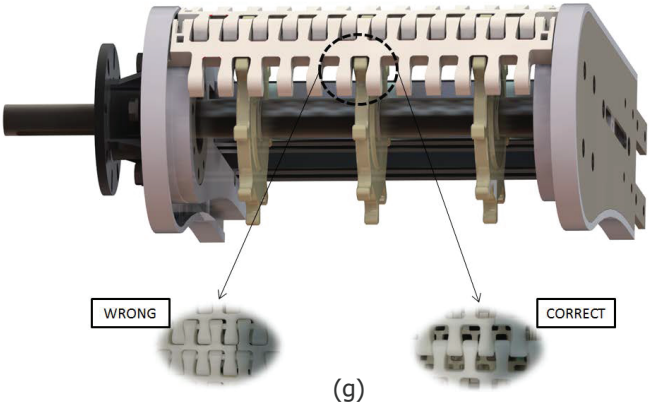
(d)



(e)



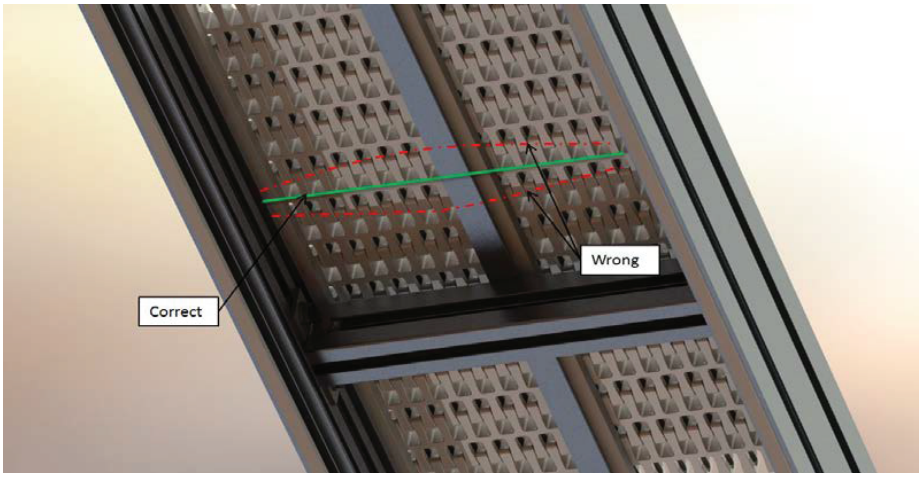
(f)



(g)







(h)

Length Adjustment of the Conveyor Belt

1. Adjustment of the conveyor belt is carried out at the belt installation section or belt elongation section.
2. Unscrew the screws and remove the cover on both sides of the belt installation section or belt elongation section.
3. Remove all slack links from the conveyor belt by following the procedure of joining belt ends and removing belt section.

Final Preparation

Plug beam ends
Ensure that end caps have been fitted to all aluminium profile ends. The beam profile should be deburred before fixing end caps. It may be necessary to tap the cap into position using a soft-face hammer.

Anchor feet to the floor
After all components have been assembled, it is necessary to anchor the conveyor feet to the floor. Use floor anchor bolt (MA BF M10) to anchor the feet.

If the feet is not anchored to the floor, instability of the conveyor may result in a dangerous operating environment and may damage the conveyor components.

Other preparation
- If necessary, adjust the height of the structural beams.
- Ensure that the installation is stable and all screws have been tightened.
- Use a plummet and/or water-level to ensure that the construction is not askew.
- Ensure that all electrical equipment and power supply are properly connected.
- Ensure that the conveyor is running in the correct direction before starting the conveyor!
- Never run the conveyor with the slip clutch is tight until you have ensured that the running direction is correct.
- Tighten the slip clutch to a suitable friction.
- Make sure that the transmission cover is attached to the drive unit.
- In pallet installations, ensure that all pneumatic equipment is properly connected. Remember that conveyor chains should always be pulled, not pushed by the drive unit.

Start-up and Testing

Safety considerations
To eliminate the risk of accidents, it is important to be aware of certain areas of the conveyor where special caution is required during installation, operation and maintenance. Safety devices need to be installed at some high danger areas to ensure personal safety.

- All pinch, shear points and other exposed moving parts that present a hazard are safeguarded.
- Cleated conveyor chains are more susceptible of creating pinch and shear points than plain chain.
- When two or more pieces of equipment are interfaced, special attention must be given to the interfaced area to ensure proper safeguarding.
- For overhead equipment, incline, decline and vertical conveyors, guards must be provided products falling hazzard

Safeguarding can be achieved by:

Location – locating the hazardous area keep out of reach of the personnel involved.
Guards – mechanical barriers preventing entry into the hazardous area or protecting against falling goods.
Control devices – machine control preventing or interrupting hazardous conditions.
Warnings – instructions, warning labels, sound or light signals are used to alert hazardous conditions.

Start-up

Lubrication
The conveyor chain is lubricant free. However, for some specific application where the operating environment is of high wear and tear, regular lubrication of the slide rail/conveyor chain will result in lower coefficient of friction resulting in longer product life and reducing cost. Use a silicon-based lubricant.

Wear

The number of wear on a conveyor depends on factors such as running time, load/contact pressure, speed, product accumulation, sharp/rough product, chemicals, contamination, temperature and plain bend.

Try to minimize the running time for the conveyor by stopping it when there is no transport.
Multiple horizontal and vertical plain bends in a conveyor will often result in increasing wear. Also, the contact surface between chain and slide rail is small and the chain pull is acting towards the slide rail in the bends.

Run in period

Two or three days are usually sufficient as a run in period. During this time, the conveyor should be cleaned to remove dust.

Remove the chain and wipe it with warm water (around 50°C), use soap if necessary.

After cleaning, re-install the chain.

Chain elongation

During the run in period, regular checks should be made to the elongation of the conveyor chain. This is especially important if the conveyor is transporting high loads or is of long overall length.

Regular inspections of the chain elongation are important. The chain should be shortened after run in time of 40 hours.

Troubleshooting Guidelines

Symptom	Cause	Solution
Jerky running	Damaged or badly fitted slide rail	Inspect and replace as necessary
	Worn transmission parts	Check/replace transmission chain, chain drive sprocket
	Wrongly adjusted slip clutch	Check and adjust slip clutch
	Conveyor chain is too tight/loose	Tension conveyor chain correctly
	Dirty conveyor	Clean conveyor chain and slide rail. Lubricate with silicone based lubricant
Noise	Worn or damaged bearings in drive unit	Check/replace drive unit
	Damaged/badly fitted slide rail	Check the free running of the chain, especially in slide rail joints
	Excessive conveyor speed	Lower speed. Check actual load against recommended loading
	Incorrect conveyor chain tension	Tension conveyor chain correctly
Motor overheating on drive unit	Overloaded conveyor	Remove products from conveyor and test run Check actual conveyor load against recommended loading
	Gearbox leaking oil	Check output shaft seal and area around motor/gearbox interface
	Dirty conveyor	Clean the chain and slide rail
Abnormal wear on plastic parts	Overloaded conveyor	Remove products from conveyor and test run Check the free running of the conveyor chain Check actual conveyor load against recommended loading
	Ambient temperature too high	Check against recommended temperature for conveyor
	Chemicals in the environment are affecting plastic parts	Check in MODU System catalogue (section TR) for listing of incompatible chemicals
	Damage due to ingress of contaminate	Clean the system
	Particles, swarf etc	Remove source of contamination
Drive unit is running, conveyor chain is not	Wrongly adjusted slip clutch	Check adjustment of slip clutch.
	Friction disc in slip clutch are worn or contaminated	Check and replace if necessary
	Transmission products are not fitted	Check and fit

MAINTENANCE MANUAL (MM)



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General

This maintenance manual allows the users to maintain the conveyor in a proper manner which will ensure the safe maintenance, smooth operation and maximum life span of the system.

It is important to understand the operation manual before operating and performing maintenance on the system.

This documentation is not to be reproduced without written permission from the manufacturer.

Safety Precautions



DO NOT ATTEMPT MAINTENANCE ON ANY CONVEYOR WHILE IT IS IN OPERATION.

Before Maintenance

- Maintenance works should only be performed after all electricity supply is switched off. All motor switches must be switched off and locked in the off position.
- Pneumatic air must be disconnected and any pressure accumulation must be released.
- Never perform maintenance tasks on a conveyor while it is in opereration, unless required. If that is so, allow only trained maintenance personnel to work on the conveyor.
- Remove all products from the conveyor system.

During Maintenance

- Do not wear loose clothing while performing maintenance on operating equipment.
- Be aware of hazardous conditions, such as sharp edges and protruding parts.
- When using hoists, cables or other mechanical equipment to perform maintenance. Use the equipment with care in order not to damage the conveyor components.
- Keep area clean. Clean up lubricants and other materials before starting conveyor.
- Personnels must be equip with Personal Protective Equipment (PPE) such as safety glass, safety shoe, safety helmet and etc when performing maintenance task.

After Maintenance

- Before starting any conveyor ensure that maintenance equipment and foreign objects are cleared.
- Notify all personnels before starting up the conveyor.
- Only authorized personnel should be permitted to start any conveyor following maintenance or emergency shut-off.

System Maintenance

Introduction
This manual is designed to provide assistance for planned maintenance schedule.

Maintenance of the MODU's conveyor systems shall only be done by trained personnel who are familiar with MODU System products. If in doubt, please consult MODU System's representative.

Non MODU System Product
Products that are not manufactured by MODU System, its maintenance shall be carried out accordance with their respective manufacturer's instructions.

Warning
Do not climb onto any MODU's conveyor systems.

Maintenance Instructions

Introduction
This maintenance manual contains maintenance guide for MODU System standard component as listed in MODU System Product Catalogue. For non MODU System components such as motors, sensors, pneumatic components, control systems etc., the manufacturer maintenance instructions apply. This manual does not include maintenance instruction for equipments which customer has chosen and specified for fitting to the installation.

Recommended Spare Parts List
Recommended spare parts list is shown in Appendix A. User of MODU's conveyor system shall keep at least a complete set of recommended spare parts.

If there is a demand for spare parts, please contact MODU System's representative.

Maintenance Schedule and Inspection Guidelines
A suggested maintenance schedule and inspection guidelines are shown in the next page.

Warranty Claim
MODU System conveyors are covered by warranty as agreed within the trading term and/or Order Acknowledgement.

Maintenance Guides

Maintenance Schedule
MODU System conveyors are designed to run 24 hours a day, 7 days a week, with minimal maintenance. For non MODU System components such as geared motors, sensors, pneumatic components, control systems etc., the manufacturer maintenance instructions apply.

Table below shows MODU System conveyor maintenance schedule.

No	Section	General checks	No of operating hours / time interval
1	Drive Unit	Check sprocket, chain return guide, chain guards and lubrication.	First 50, 250 and 500 hours. Then every 500 hours.
2	Idler End	Check chain guides and chain guards.	Every 1000 hours.
3	Chain	Clean.	Every day.
		Check wear or crack.	Every 2000 hours.
		Check tension.	First 40 and 200 hours. Then every 1600 hours.
4	Slide Rails	Check slide rails at horizontal and vertical bends.	Every 200 hours.
		Check and clean slide rails of the conveyor system.	Every 1500 hours.
6	Safety Features	Check for function as required.	At least once a year.

Troubleshooting Guidelines

During conveyor operation, periodic inspection of the conveyor system is required to prevent of any breakdowns and failures. MODU System conveyors should be inspected while the system is running as well as when it is shut down.

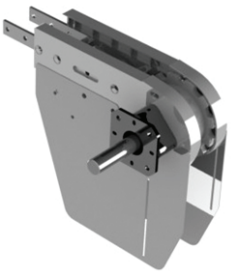
Table below shows troubleshooting guidelines.

Symptom	Cause	Solution
Jerky running	Damaged or badly fitted slide rail.	Inspect and replace as necessary.
	Conveyor chain is too tight/loose.	Tension conveyor chain correctly.
	Dirty conveyor.	Clean conveyor chain and slide rail. Lubricate with silicone based lubricant.
Noise	Worn or damaged bearings in drive unit.	Check/replace drive unit.
	Damaged/badly fitted slide rail.	Check the free running of the chain, especially in slide rail joints.
	Excessive conveyor speed.	Lower speed. Check actual load against recommended loading.
	Incorrect conveyor chain tension.	Tension conveyor chain correctly.
Motor overheating on drive unit	Overloaded conveyor.	Remove products from conveyor and test run. Check actual conveyor load against recommended loading.
	Gearbox leaking oil.	Check output shaft seal and area around motor/gearbox interface.
	Dirty conveyor.	Clean the chain and slide rail.

Abnormal wear on plastic parts	Overloaded conveyor.	Remove products from conveyor and test run. Check the free running of the conveyor chain. Check actual conveyor load against recommended loading.
	Ambient temperature too high.	Check against recommended temperature for conveyor.
	Chemicals in the environment are affecting plastic parts.	Check in MODU System catalogue (section TR) for listing of incompatible chemicals.
	Damage due to ingress of contaminate	Clean the system.
	Particles, swarf etc.	Remove source of contamination.
Drive unit is running, conveyor chain is not	Friction disc in slip clutch are worn or contaminated.	Check and replace if necessary.
	Transmission products are not fitted.	Check and fit.

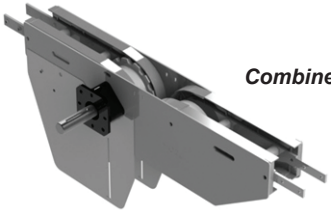
Introduction to Drive Units

There are five different types of drive unit, namely Front Drive Unit, Combined Drive Unit, Suspended Drive Unit, Catenary Drive Unit and Intermediate Drive Unit.



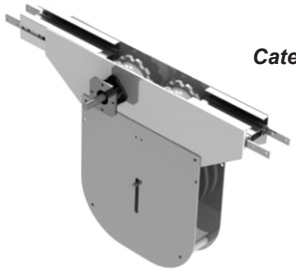
Front Drive Unit

Front Drive Unit with return chain, located at the “pulling” end of the conveyor. This drive unit is applicable for all conveyor series.



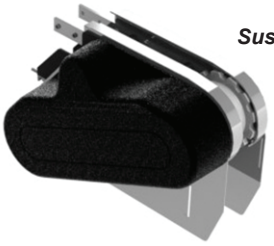
Combined Drive Unit

Combined Drive Unit with return chain, located at an intermediate position along the conveyor. This drive unit is applicable for all conveyor series.



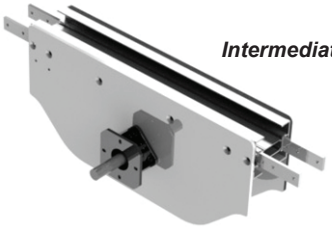
Catenary Drive Unit

Catenary Drive Unit without return chain, located at an intermediate position along the conveyor. This drive unit is applicable for MM3 only.



Suspended Drive Unit

Suspended Drive Unit with return chain, located at the “pulling” end of the conveyor. This drive unit is applicable for MS3, MM3 and ML2 only.



Intermediate Drive Unit

Intermediate Drive Unit with return chain, located at an intermediate position along the conveyor. This drive unit is applicable for MS3, MM3 and ML2 only.

Inspection of Drive Units

Roller Chain or Timing Belt Transmission

The roller chain or timing belt transmission should be check and lubricated after 50, 250 and 500 hours of operation, and then every 500 hours.

If the roller chain or timing belt transmissions are not fitted with a tensioner it should be checked. The roller chain should be lubricated.

If the transmissions are fitted with a chain tensioner, lubrication of roller chain should only be carried out at the stated interval. The condition of the chains must be checked at the same time.

(Note: The discs in the slip clutch must be kept free from oil and grease.)

Geared Motor

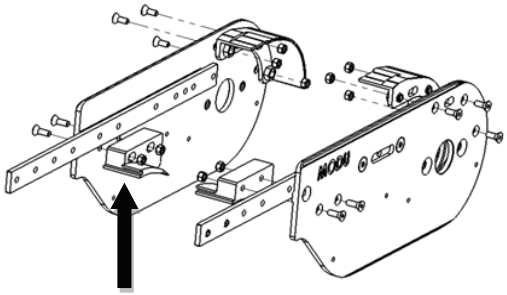
The geared motor should be checked in accordance with the instructions from the relevant supplier.
Guides for the Conveyor Chain. The purpose of the guide for the conveyor chain is to guide the return chain correctly into the drive unit.

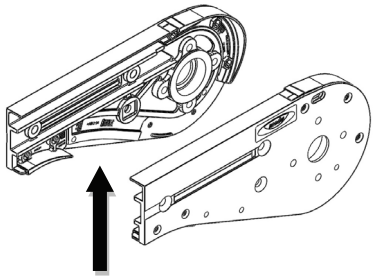
Fully guided drive unit do not have guides. Hence, no slack is allowed at the drive unit since the conveyor chain is being controlled all the time. Special attention must be given to chain elongation in conveyor of this configuration.

Example : Gripper Conveyor.

The pictures below shows two (2) type of chain guides.

General Check on Drive Unit

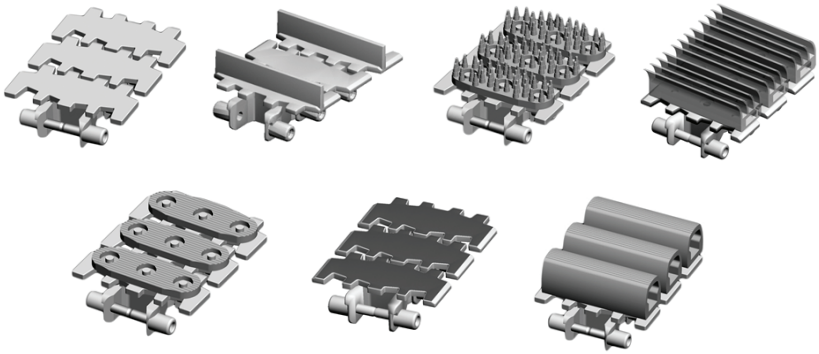




Carry out a general inspection of the drive unit:

Inspection of Conveyor Chains

The most common types of conveyor chains are shown below:



Caution!
Only warm water (50°C), with soap if necessary, may be used for cleaning conveyor chain.

Checking the Tension of Conveyor Chain

The chain is made of elastic material. The chain eventually stretches as the material creeps. The extent of the stretch depends on the traction force in the chain. The stretch shows itself as slack on the return side of drive unit.

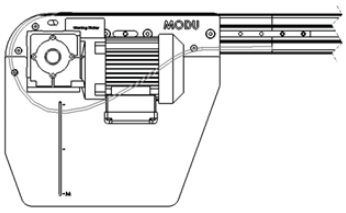
The tension of the chain should be checked after 40 and 200 hours of operation and every 1600 hours thereafter.

During operation, there will be some slack in the conveyor chain. The amount of slack acceptable depends on the length of the conveyor chain. The slack in chain can be checked at the drive unit.

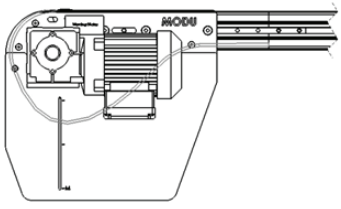
Important!
The chain should be pre-tensioned while the conveyor is stationary. However, the chain should not be too tight. There should be a considerable slack on the chain when the conveyor is stationary. This can, however, vary depending on the total length of the chain. If there is too much slack, there will be excessive wear on the chain guides and the chain.

If the slack on the conveyor chain is high, it must be shortened by removing the necessary number of chain links.

If the conveyor is a fully guided drive unit, the elongation of the chain has to be monitored even more carefully, to ensure a trouble free operation.



The conveyor chain does not need to show any slack when the conveyor chain is stationary



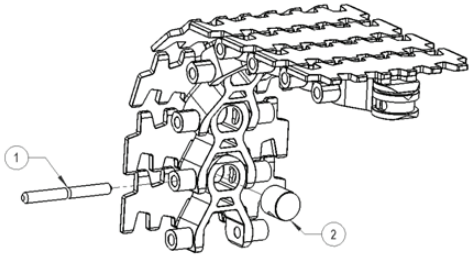
The conveyor chain must show some slack during operation

Shortening Conveyor Chain

The most suitable place to shorten the chain is at the drive unit.

Instructions

- Make the conveyor chain accessible at certain overhead locations.
- Remove the steel pin (1) from the pivot (2). Use the pin insertion tool.
- Remove the necessary number of links.
  (Note: With cleated or friction chains, pay attention to the divisions between links.)
- Join the chain together with a new pivot.
  (Note: the old pivot should not be re-used. When the chain is divided, a new pivot must always be fitted.)
- Insert the steel pin using the pin insertion tool.
- After inserting the steel pin, check that it is centered and that the chain easily bends in the fitted link.



Chain Joint Components

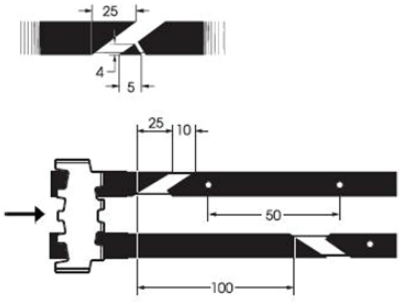
Inspection of Slide Rails

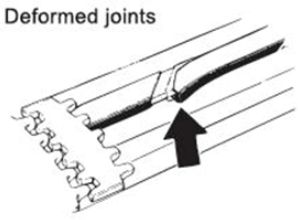
Checking Slide Rail
The condition of the slide rails is fundamental to the functioning of the installation. It is therefore essential that these are in good condition.

Checking the Slide Rail with the Conveyor Chain in Place
The slide rail must be checked every 200 hours. Check on the stationary conveyor with the chain in place.

- Check the fastening points on the slide rail.
- Check the joints on the slide rail. Below shows correct configuration of joints.
- Check that there is a gap between the slide rails and that the joints are correctly fitted.
- Check that the joints are not deformed.
- Check that the slide rail has not been broken off.

Replace the slide rail if necessary.





Checking the Slide Rail with the Conveyor Chain Removed
At least once a year or every 2000 hours. The chain should be removed from the beam and the slide rail. Check for wear and fastening.

Plain bend should be checked every 500 hours as they are subjected to higher loads.

- Carry out the same checks as mentioned above.
- Check the slide rail for wear and tear.
- Check in the inner slide rail of the plain bends.
- Check the slide rails for scratches and notches.
- Replace the slide rail and fasteners if necessary.
- Wash the conveyor chain.

Conveyor Beams, Idler Ends and Bends
The conveyor beams themselves does not require regular inspections. Be observant for damage arising from external factors, warping or deformation. Deformation can cause the conveyor chain to jam, resulting in uneven running.

Idler ends and wheel bends does not normally require special inspections, but they should be checked when the slide rails are inspected.

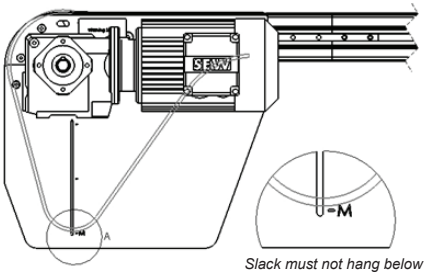
Large radius plain bends may have inner support rails fitted to the beam. Ensure that these rails (if fitted) are not worn, paying attention to the “lead-in” area.

Inspection of Safety Features

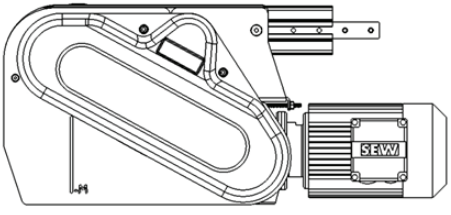
Protective and Safety Features

Safety features should be checked at regular intervals.

- Check the chain guard for roller chain or timing belt transmission. The guard must always be in place when the conveyor is running.
- Check the protective cover on the cleated chain conveyor return chain.
- Drive units have a slack indicator. Check that the chain slack and ensure that it does not hang below the “M” mark on drive safety cover.
- There may be other types of guards which are specific to your installation and these must also be inspected.



Slack must not hang below “M” mark



Chain guard for roller chain or timing belt

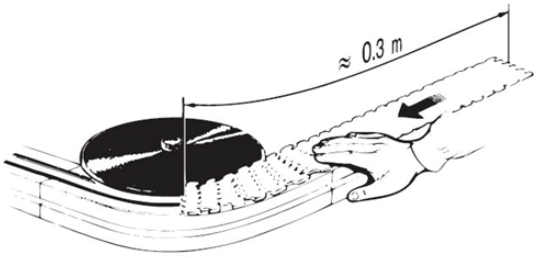
Replacement of Worn Conveyor Chain

Removal of Conveyor Chain

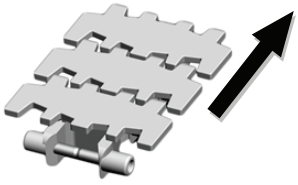
- Ensure that the power to the drive motor is disconnected.
- Disengage the motor; there are various methods depending on the type of drive unit.
- Split the chain by removing the steel pin from the pivot. Use the special tool for insertion or removal (see Shortening Conveyor Chain section).
- Pull out the chain.

Fitting the Conveyor Chain

- Run a sample, approximately 0.3m of conveyor chain through the installation in the direction of the conveyor. Check that the chain moves easily and correctly through the bends and idler ends.
- Put the new conveyor chain in place. Check that the chain direction corresponds to the conveyor direction.



Checking of Conveyor Chain Space



Conveyor Chain Direction

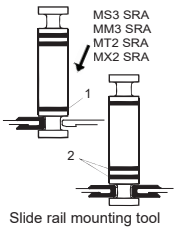
Replacement of Worn Slide Rails

Replacing Slide Rails

It is very important the assemble slide rail correctly to ensure smooth system operation.

Follow the illustrated instruction on the following pages carefully. Observe the following points:

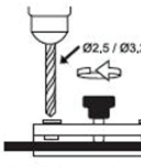
- Slide rail cutter – single cut pliers are suitable tools for cutting the slide rails.
- Use slide rail mounting tools.
- Use drill fixture.
- Use a high quality drill bit to avoid forming a shoulder, preferably one which is intended for drilling aluminium.



Slide rail mounting tool



Drill fixture (MA SRF)



The distance bet
anchor points mu

When fitting the slide rails with rivets, refer below:

- The joints on the slide rails must have a distance of 100mm between them. The joints should be laid out as in the picture with gap of approximately 10mm between the rails.
- Joints may not be positioned in bends, or in the transition between two sections of beams.
- The slide rails should normally be approximately 5m long on a straight conveyor beam. In a bend, the maximum length of slide rail should be 3m.
- The joints should be positioned a minimum of 500mm before an idler end unit, drive unit or vertical bend. The slide rail must overlap the recess in the idler end and drive unit.

- The inner slide rail after a wheel bend must be cut at a 45° angle.

Note:
Check final slide rails visually, as well as running a section of conveyor chain through the installation.

Another method of installing slide rail is using screw, applicable for ML2 and MX2 series. Please see following pages for fitting instructions.

Slide Rail Fixing Instructions

Fixing Slide Rail to the Conveyor Beam

The beginning of each slide rail section must be fixed to the beam, since the chain will cause the slide rail to be pushed forward. Slide rail which moves into a wheel bend or a drive unit can block the chain completely.

There are two different methods for fixing slide rail to the conveyor beam:
- Using rivets (MA RR 3), this is applicable for MP, MS3 and MM3 series only.
- Using screws (MA RS 6.5), this is applicable for ML2 and MX2 series only.

Method 1 – Using Rivets, Applicable for MP, MS3 & MM3 Series Only

Step 1



Drill through holes on the slide rail.

Step 2



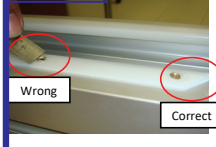
Countersunk on slide rail.

Step 3



Insert rivets into the holes, using rivet crimping tool (MA RC)

Step 4



Check that the rivets do not protrude over the surface of slide rail. Check both top and bottom surface of slide rail for protruding metal.

Step 5



Complete slde rail fitting.

Method 2 – Using Screws, Applicable for ML2 and MX2 Series Only

Step 1



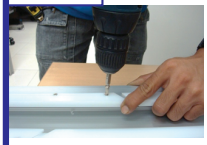
Drill through holes on slide rail.

Step 2



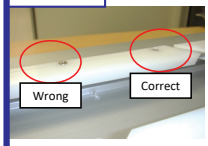
Countersunk on slide rail.

Step 3



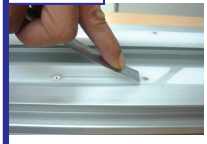
Apply screws into the holes.

Step 4



Check the for protruding screws over the surface of slide rail. Check both top and bottom surface of slide rail for protruding metal.

Step 5



Complete slde rail fitting.

NOTES

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NOTES

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