

# PM500VE SERIE

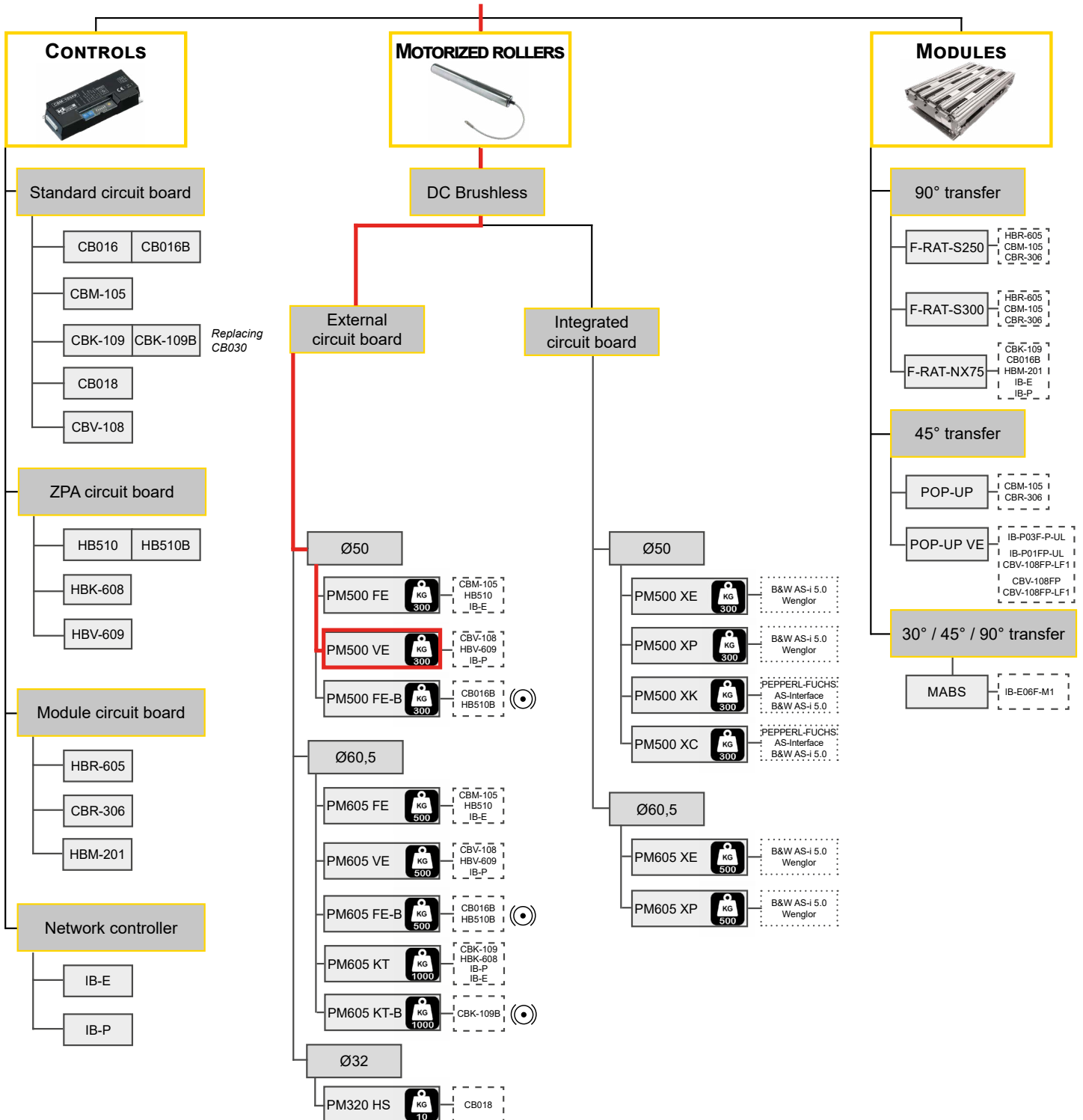
TECHNICAL DOCUMENTATION

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# 1 - PRESENTATION OF THE POWER MOLLER® PRODUCT RANGE

## POWER MOLLER® solutions



Corresponding circuit board    
 Compatible module / sensor    
 Max load to be conveyed    
 Mechanical brake version

## 2 - PRESENTATION OF THE SERIES











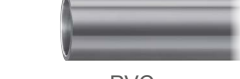

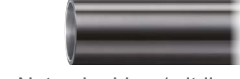
The motorized roller PM500VE with brushless technology used with CBV-108, HBV-609 or IB-P circuit board. It is designed for conveying light and medium loads for order preparation, distribution, and for assembly lines. This circuit board is separated from the gear-motor in order to optimize the performance, durability of the roller and to offer diverse functions such as pulse signals, acceleration/deceleration, optional position holder...



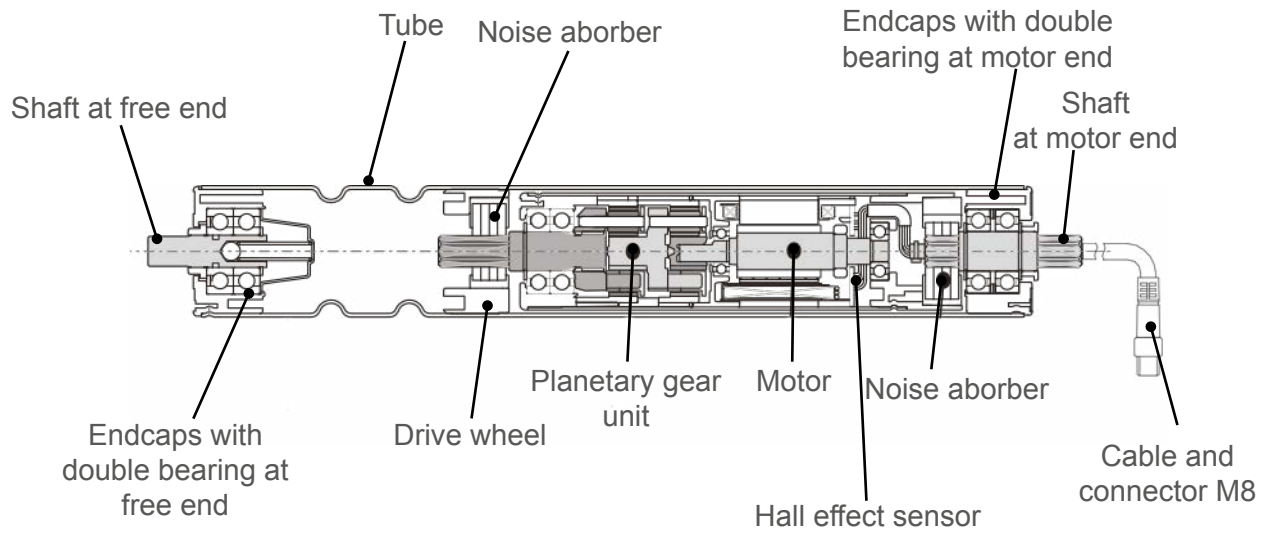
### General characteristics

ELECTROMECHANICAL	Direct current and brushless	24 VDC (+/- 10 %) – ripple ratio < 10 %			
	Insulation class	E			
	Operation at 40°C	Continuous	100%		
		Intermittent	1800 starts / hour maxi Minimum duty cycle = 1 s ON / 1 s OFF ED = ON / (ON+OFF) ≤ 50 %		
	Brake	Dynamic braking			
	Cable length and type	300 mm with M8-5P connector			
	Protection index	IP54 (IP65 or cold room, contact us)			
	Protection	Thermal protection (>95°C for circuit board, >110°C for motor) Protection against induced voltage			
	Environment	0 / +40 °C - no condensation - or corrosive or explosive atmosphere - Vibrations < 0,5 G			
	Sound level	≈ 52 dB nominal 1 metre away			
CONTROL	Speed code	17	25	60	90
	Reduction ratio	1/44,97	1/26,67	1/12,65	1/7,5
	Circuit board functions	See the characteristics of CBV-108, HBV-609 and IB-P			

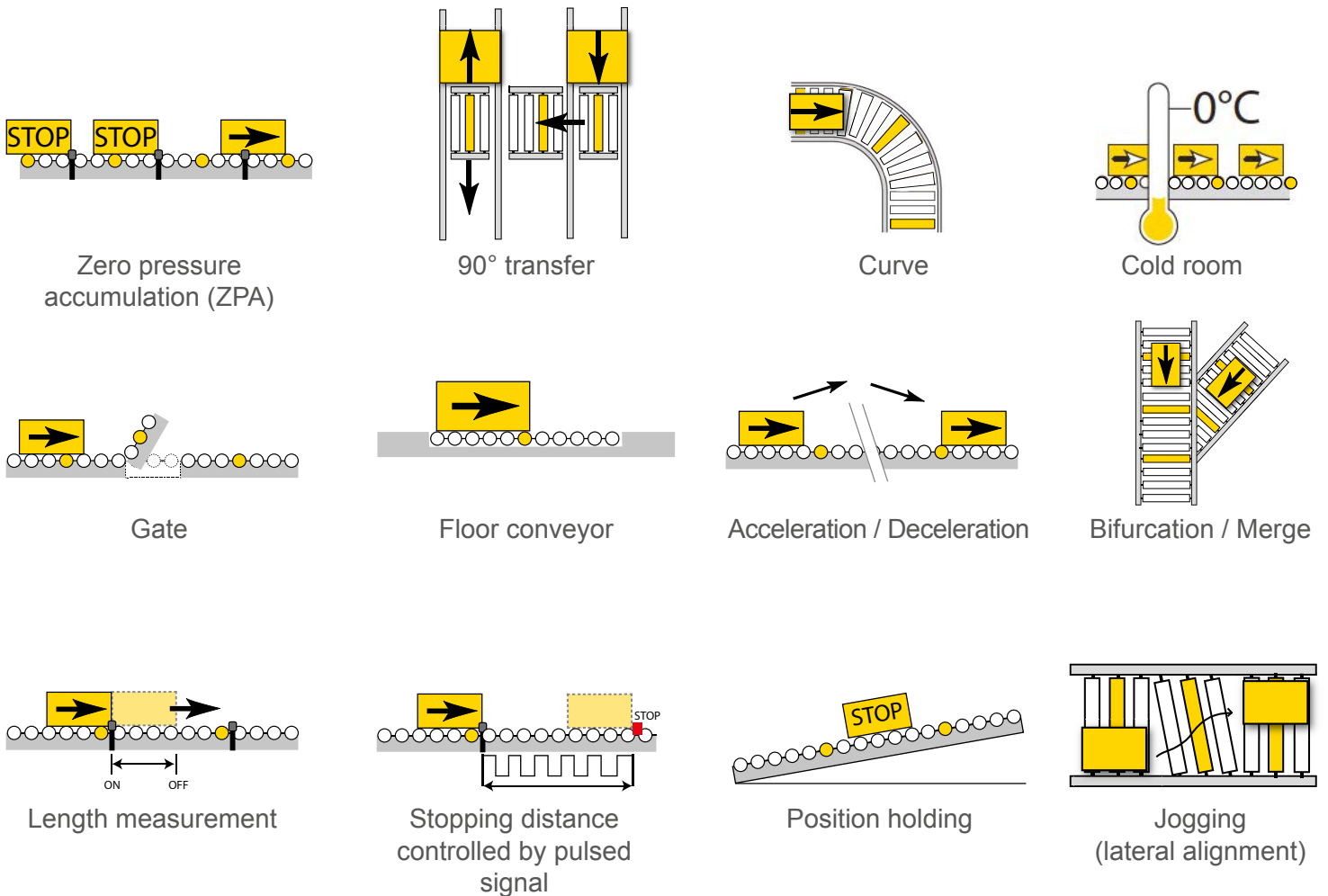
 The PM500VE drive roller is designed exclusively for indoor use.

<b>Shaft and flange motor side :</b>	 Plain hexagonal  Threaded hexagonal	<ul style="list-style-type: none"> <li>• Plain hexagonal 11.1 mm shaft or M12 threaded</li> <li>• Heat-treated and phosphated steel shaft</li> <li>• Zamac (zinc, aluminium and magnesium alloy) endcaps</li> </ul>
<b>Shaft and flange free side :</b>	 Hexagonal spring loaded  Set screw	<ul style="list-style-type: none"> <li>• Smooth hexagonal 11.1mm shaft with spring, 12 mm M8 threaded flat metal strip</li> <li>• Heat-treated and phosphated steel shaft</li> <li>• Zamac (zinc, aluminium and magnesium alloy) flange</li> </ul>
<b>Tube :</b>	 Zinc plated steel  Stainless steel	<ul style="list-style-type: none"> <li>• Tube in precision cold drawn steel, ST37-2 quality, outer diam. 50 mm</li> <li>• Zinc-coated or stainless steel (304L)</li> </ul>
<b>Pulleys :</b>	 Ribbed  Grooves :	Pulleys for : <ul style="list-style-type: none"> <li>• Ribbed belts, 8 teeth, Zamac (zinc, aluminium and magnesium alloy)</li> <li>• Round belts, diam. 4 or 5 mm with hexagonal shaft with spring or M8 threaded shaft</li> </ul>
<b>Grooves :</b>	 Grooves :	<ul style="list-style-type: none"> <li>• Grooves in different positions from 33 to 300 mm from the edge of the tube</li> <li>• Depth 5,8mm</li> <li>• For round belts Ø 4 or 5 mm</li> </ul>
<b>Sleeve :</b>	 Tapered  PVC	<ul style="list-style-type: none"> <li>• Conical plastic sleeve (PP) for inner radius (Ri) 800 or 850 mm</li> <li>• Grey PVC sleeve thickness 2 or 3 mm (~68 ShA), Black anti-static in option</li> </ul>
<b>Lagging :</b>	 Polyurethane  Natural rubber / nitrile	<ul style="list-style-type: none"> <li>• Polymerized polyurethane coating, thickness 3 mm, 90 ShA, grey</li> <li>• Natural hot vulcanized rubber coating, thickness 3 mm 60~65 ShA</li> </ul>

**Structure and description**



**Applications**



## Characteristics depending on CBV-108 circuit board

CHARACTERISTICS		SPEED CODE 17	SPEED CODE 25	SPEED CODE 60	SPEED CODE 90	
ELECTROMECHANICAL	Motor	Direct current and brushless 24 VDC				
	Absorbed power (W)	nominal	52 - 82			
		start-up	96			
	Tangential force (N)	nominal	142,7 - 216,9	96,1 - 146,2	45,6 - 69,3	30,7 - 46,7
		start-up	331,5	223,5	105,9	72
	Operation	Continuous or intermittent 1800 starts/h max. Minimum duty cycle : 1s ON / 1s OFF				
	Brake	Dynamic braking				
	Speed (m/min)	no load	2,2 - 17,4	3,7 - 29,3	7,7 - 61,7	13,0 - 104,1
	Protection index (motorized roller)	IP54, 65, cold room version ( <i>Contact us for other index</i> )				
	Length	285 to 1200 mm	260 to 1200 mm	260 to 1200 mm	230 to 1200 mm	
Static load max.	300 - 1200 mm = 65 - 15 kg per roller					

## Characteristics depending on HBV-609 circuit board

CHARACTERISTICS		SPEED CODE 17	SPEED CODE 25	SPEED CODE 60	SPEED CODE 90	
ELECTROMECHANICAL	Motor	Direct current and brushless 24 VDC				
	Absorbed power (W)	nominal	30 - 68			
		start-up	96			
	Tangential force (N)	nominal	109,5 - 127,7	86,1 - 73,8	35 - 40,8	23,6 - 27,5
		start-up	331,5	223,5	105,9	71,4
	Operation	Continuous or intermittent 1800 starts/h max. Minimum duty cycle : 1s ON / 1s OFF				
	Brake	Dynamic braking				
	Speed (m/min)	no load	4,3 - 17,4	7,3 - 29,9	15,4 - 61,7	26 - 104,1
	Protection index (motorized roller)	IP54, 65, cold room version ( <i>Contact us for other index</i> )				
	Length	285 to 1200 mm	260 to 1200 mm	260 to 1200 mm	230 to 1200 mm	
Static load max.	300 - 1200 mm = 65 - 15 kg per roller					

## Characteristics depending on IB-P 01 circuit board

CHARACTERISTICS		SPEED CODE 17	SPEED CODE 25	SPEED CODE 60	SPEED CODE 90	
ELECTROMECHANICAL	Motor	Direct current and brushless 24 VDC				
	Absorbed power (W)	nominal	28 - 73			
		start-up	96			
	Tangential force (N)	nominal	124,7 - 152,1	84,1 - 102,5	39,9 - 48,6	26,9 - 32,8
		start-up	331,5	223,5	105,9	71,4
	Operation	Continuous or intermittent 1800 starts/h max. Minimum duty cycle : 1s ON / 1s OFF				
	Brake	Dynamic braking / Servo lock				
	Speed (m/min)	no load	2,2 - 17,4	3,7 - 29,3	7,7 - 61,7	13,0 - 104,1
	Protection index (motorized roller)	IP54, 65, cold room version ( <i>Contact us for other index</i> )				
	Length	285 to 1200 mm	260 to 1200 mm	260 to 1200 mm	230 to 1200 mm	
Static load max.	300 - 1200 mm = 65 - 15 kg per roller					

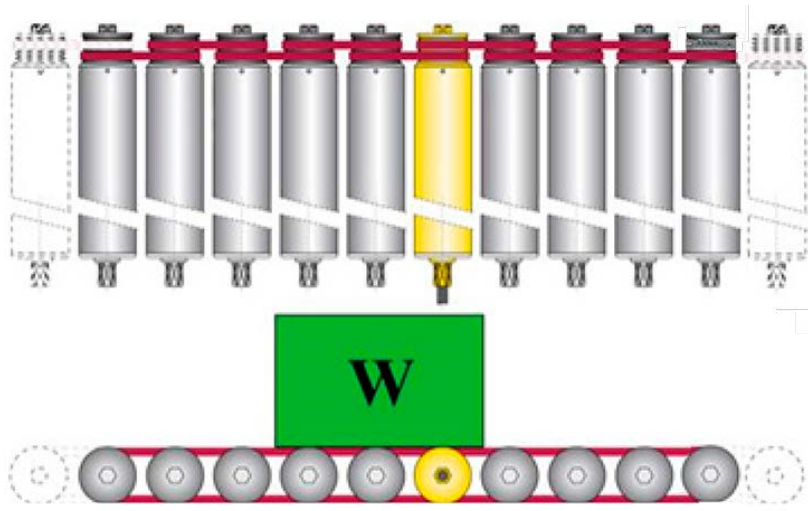
## Characteristics depending on IB-P 03 circuit board

CHARACTERISTICS		SPEED CODE 17	SPEED CODE 25	SPEED CODE 60	SPEED CODE 90	
ELECTROMECHANICAL	Motor	Direct current and brushless 24 VDC				
	Absorbed power (W)	nominal	31 - 70			
		start-up	96			
	Tangential force (N)	nominal	115,6 - 158,2	77,9 - 106,6	36,9 - 50,5	24,9 - 34,1
		start-up	331,5	223,5	105,9	71,4
	Operation	Continuous or intermittent 1800 starts/h max. Minimum duty cycle : 1s ON / 1s OFF				
	Brake	Dynamic braking / Servo lock				
	Speed (m/min)	no load	2,2 - 17,4	3,7 - 29,3	7,7 - 61,7	13,0 - 104,1
	Protection index (motorized roller)	IP54, 65, cold room version ( <i>Contact us for other index</i> )				
	Length	285 to 1200 mm	260 to 1200 mm	260 to 1200 mm	230 to 1200 mm	
Static load max.	300 - 1200 mm = 65 - 15 kg per roller					

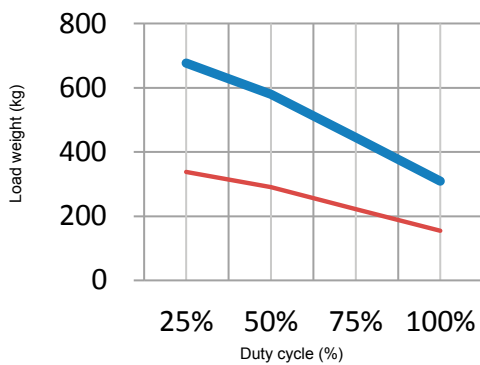


### 3 - TRANSFER CAPACITY

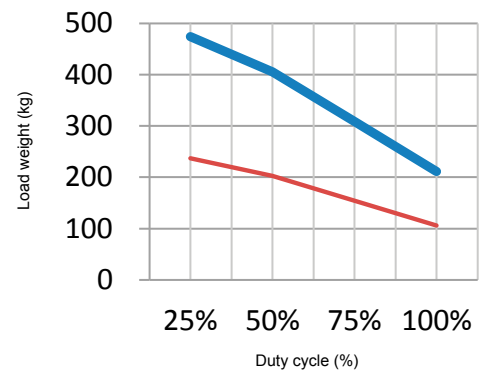
#### Ribbed belt drive



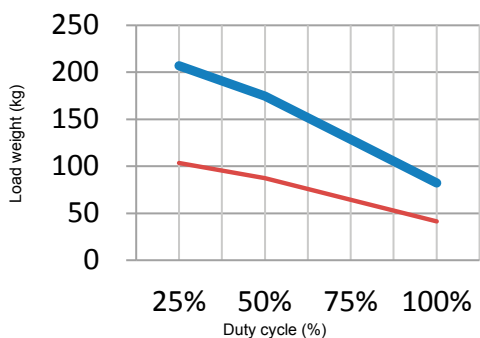
PM500VE 17m/min



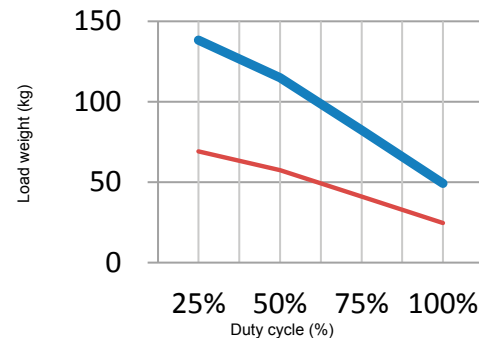
PM500VE 25m/min



PM500VE 60m/min



PM500VE 90m/min

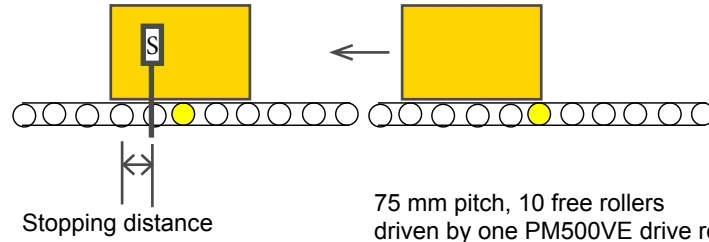


**!** These curves are given as a guide. Transfer capacity depends on the nature and quality of the transported load, the belt tension, the quality of the bearings, the nature of the sleeves, the ambient temperature...

Due to the maximum static load of the PM500VE which is 300 kg max, note that practically the PM500VE can't convey more than 300 kg.

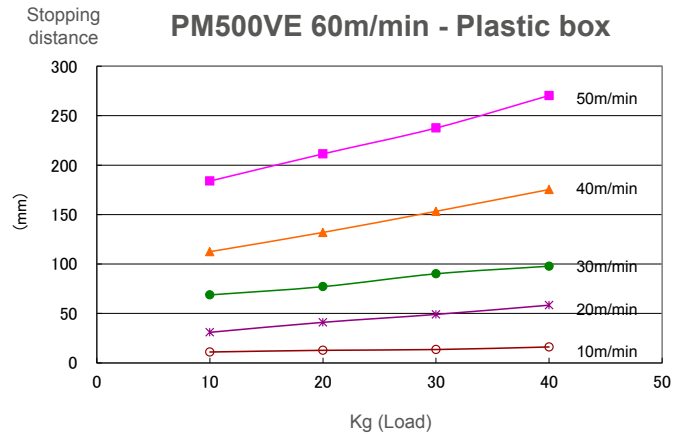
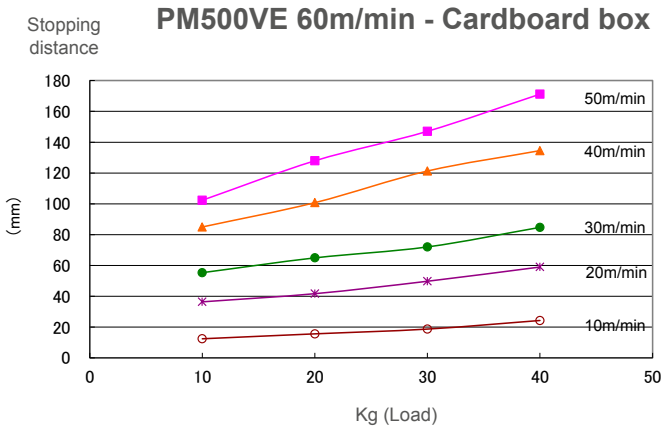
- Load to transport
  - Plastic box ( $\mu = 0,03$ )
  - Cardboard box ( $\mu = 0,06$ )
- 9 slave rollers driven by 1 motorized roller
- Ambient temperature of 30 °C

Stopping distance according to the weight and type of load being conveyed

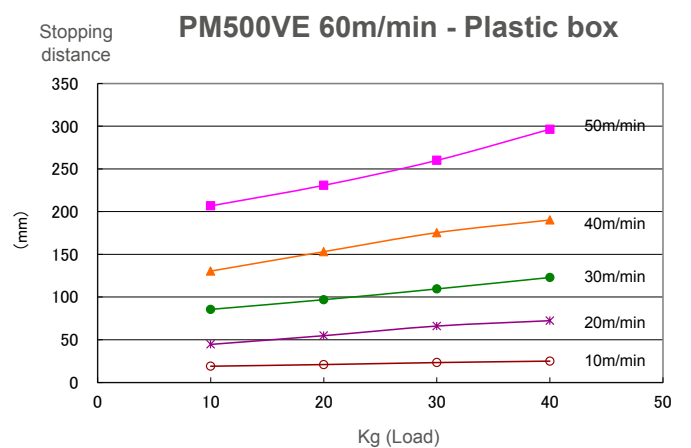
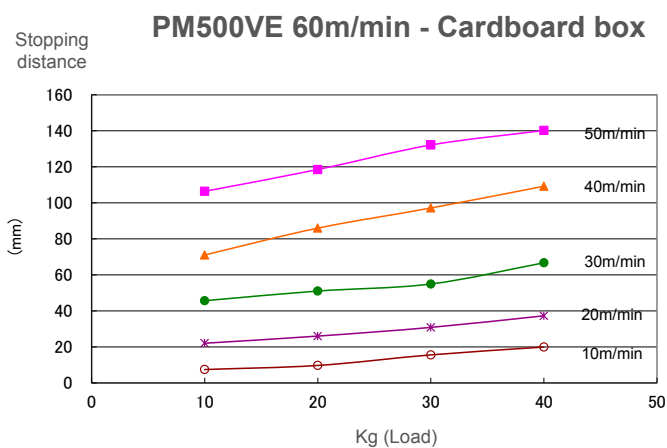


75 mm pitch, 10 free rollers  
driven by one PM500VE drive roller - 60 m/min  
Cardboard box : W : 380mm x L : 560 mm  
Plastic box : W : 390mm x L : 590 mm

DRIVEN BY ROUND BELTS  $\varnothing 5$ MM

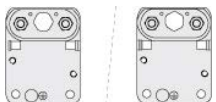
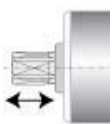



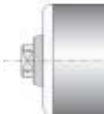
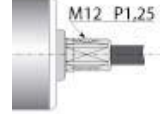
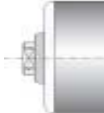

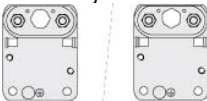
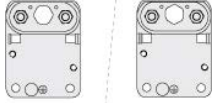
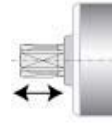

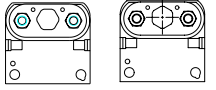
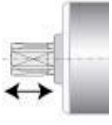





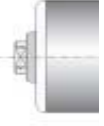

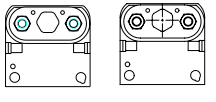
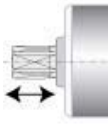

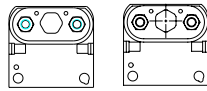


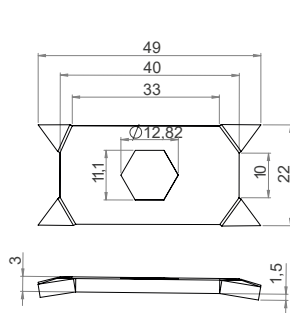
DRIVEN BY RIBBED BELTS



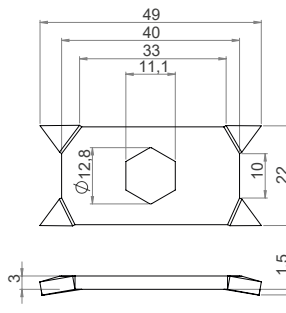
The items in this document are indicative.

## 4 - PRESENTATION OF THE DIFFERENT FIXING OPTIONS

FREE SIDE FIXING		MOTOR SIDE FIXING	
 <p><b>Ref : A-071-G / A-081-G</b> <i>(optional)</i></p>			<p><b>Threaded hexagonal shaft M12</b></p> 
 <p><b>Screw M8 x 14</b> <b>Ref : SP-M8-14</b> <i>(obligatory)</i></p>			<p><b>Ref : AM-FE-F / AM-FE-A</b> <i>(obligatory)</i></p>
			<p><b>Hexagonal plain shaft 11,1mm</b></p> 
 <p><b>Ref : A-071-G / A-081-G</b> <i>(optional)</i></p>			<p><b>Ref : A-071-G / A-081-G</b> <i>(obligatory)</i></p>
 <p><b>Ref : C-071 / C-081</b> <i>(optional)</i></p>			<p><b>Threaded hexagonal shaft M12</b></p> 
 <p><b>Screw M8 x 14</b> <b>Ref : SP-M8-14</b> <i>(obligatory)</i></p>			<p><b>Ref : AM-FE-F / AM-FE-A</b> <i>(obligatory)</i></p>
			<p><b>Hexagonal plain shaft 11,1mm</b></p>
 <p><b>Ref : C-071 / C-081</b> <i>(optional)</i></p>			 <p><b>Ref : C-071 / C-081</b> <i>(obligatory)</i></p>

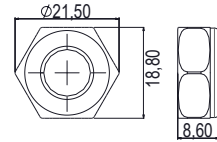


**Ref : P-0B1**



**Ref : P-0C1**

**Ref : FEY02**

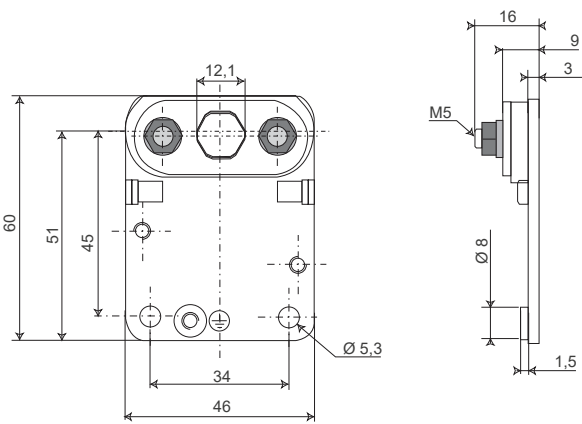


**Note :**  
Nut ref. FEY02 should be used with the claw plate ref. P-0B1 or P-0C1.

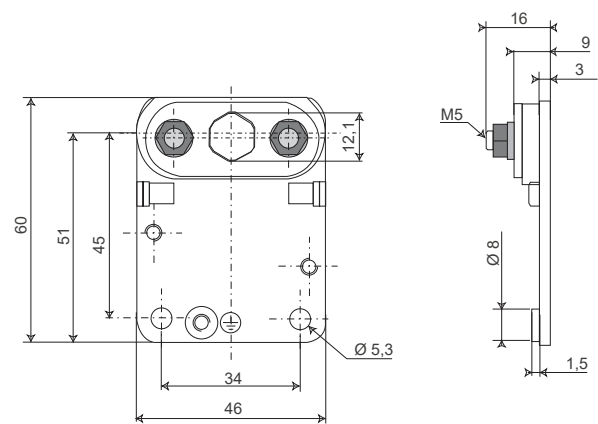
P-0B1 + FEY02

P-0C1 + FEY02

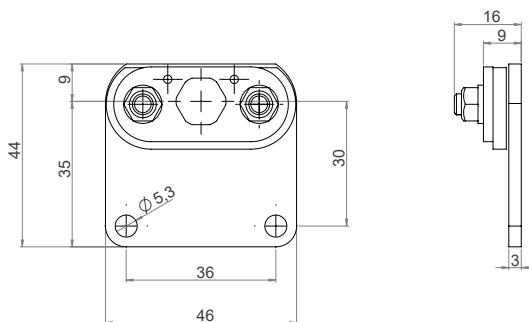
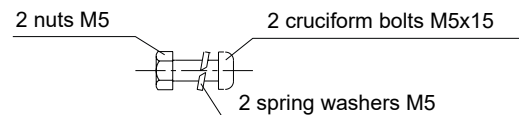
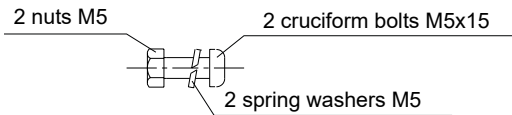
**!** The fixing type is not suitable for the aluminum frame. Consult us.



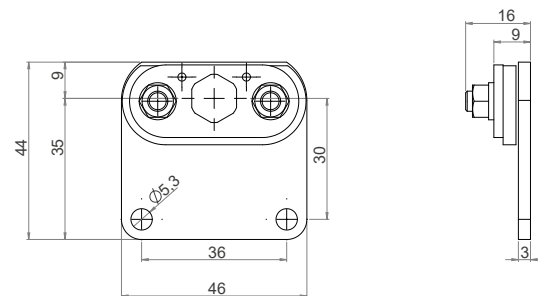
**Ref : A-071-G**



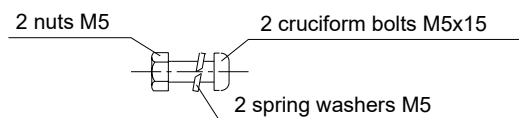
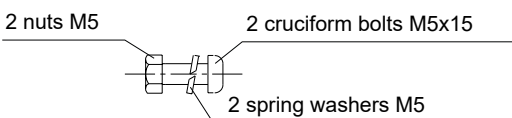
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**Ref : C-071**



**Ref : C-081**

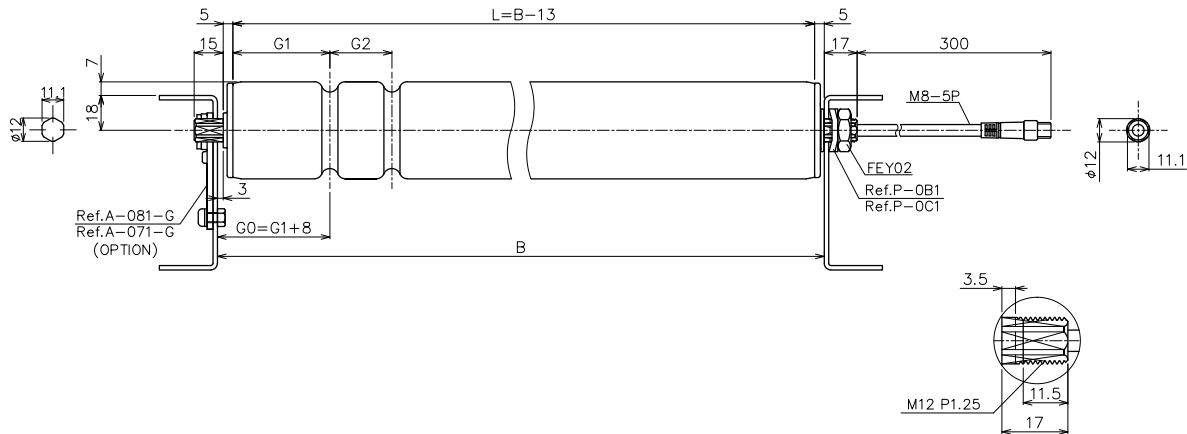


**!** The plate, screw, nut and washer are made of galvanized steel.

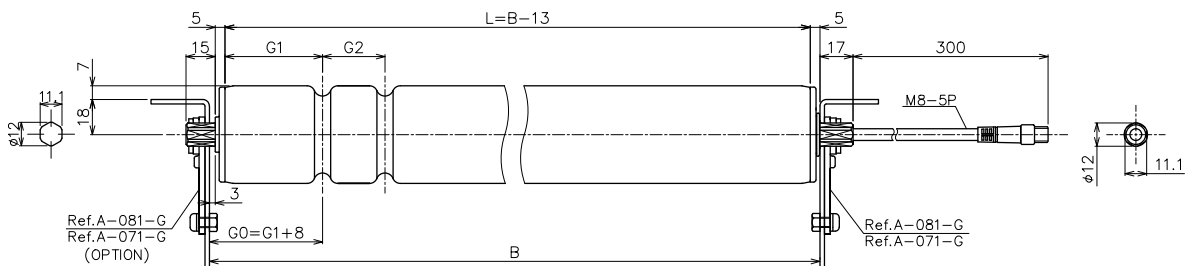
## 5 - DIMENSIONAL CHARACTERISTICS

### Grooved tube - Hexagonal shaft with spring on free end

**PM500VE** - Hexagonal threaded shaft motor side and hexagonal spring loaded shaft on free end



**PM500VE** - Hexagonal plain shaft motor side and hexagonal spring loaded shaft on free end



Dimensions PM500VE

#### STEEL TUBE

Speed code	Dimension (B)	Tube length (L)	Grooves for steel tube Depth = 5,8mm			
	mini ≤ B ≤ max	mini ≤ L ≤ max	G0 mini	G1 mini	G2 mini	G1+G2 max
17	283+G1+G2 ≤ B ≤ 1213	270+G1+G2 ≤ L ≤ 1200	≥ 41	≥ 33	≥ 22	≤ 300
25 / 60	253+G1+G2 ≤ B ≤ 1213	240+G1+G2 ≤ L ≤ 1200				
90	223+G1+G2 ≤ B ≤ 1213	210+G1+G2 ≤ L ≤ 1200				

#### STAINLESS STEEL TUBE

Speed code	Dimension (B)	Tube length (L)	Grooves for stainless steel tube* Depth = 5,2mm			
	mini ≤ B ≤ max	mini ≤ L ≤ max	G0 mini	G1 mini	G2 mini	G1 + G2 max
17	283+G1+G2 ≤ B ≤ 1213	270+G1+G2 ≤ L ≤ 1200	≥ 41	≥ 33	≥ 30	≤ 300
25 / 60	253+G1+G2 ≤ B ≤ 1213	240+G1+G2 ≤ L ≤ 1200				
90	223+G1+G2 ≤ B ≤ 1213	210+G1+G2 ≤ L ≤ 1200				

⚠ For a single groove G2=0.

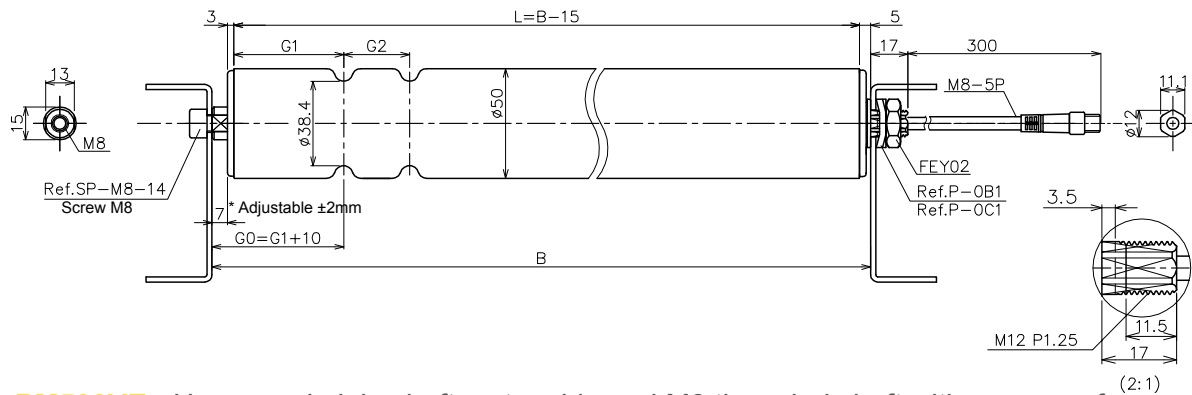
⚠ \*Stainless steel tube : For IP54 version

#### WEIGHT / STATIC LOAD / AXIAL FORCE

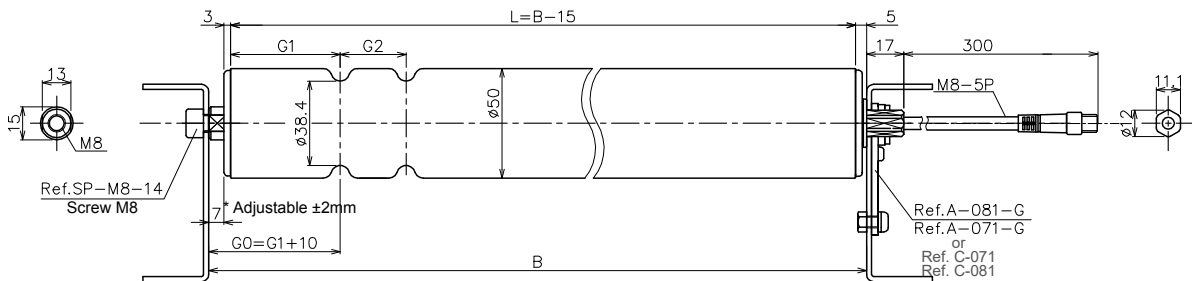
Tube length		300	400	500	600	700	800	900	1000	1100	1200
Weight (Kg)	17 m/min	2,6	2,8	2,9	3,1	3,3	3,4	3,6	3,7	3,9	4,1
	25-60m/min	2,4	2,6	2,7	2,9	3,1	3,2	3,4	3,6	3,7	3,9
	90m/min	2,1	2,3	2,4	2,6	2,8	2,9	3,1	3,3	3,4	3,6
Static load max (Kg)		65	55	45	35	30	25	20	20	15	10
Axial force max (N)		290									

## Grooved tube - M8 threaded shaft with screw on free end

**PM500VE** - Hexagonal threaded shaft motor side and M8 threaded shaft with screw on free end



**PM500VE** - Hexagonal plain shaft motor side and M8 threaded shaft with screw on free end



Dimensions PM500VE

### STEEL TUBE

Speed code	Dimension (B)	Tube length (L)	Grooves for steel tube Depth = 5,8mm			
	mini ≤ B ≤ max	mini ≤ L ≤ max	G0 mini	G1 mini	G2 mini	G1 + G2 max
17	285+G1+G2 ≤ B ≤ 1215	270+G1+G2 ≤ L ≤ 1200				
25 / 60	255+G1+G2 ≤ B ≤ 1215	240+G1+G2 ≤ L ≤ 1200	≥ 43	≥ 33	≥ 22	≤ 300
90	225+G1+G2 ≤ B ≤ 1215	210+G1+G2 ≤ L ≤ 1200				

### STAINLESS STEEL TUBE

Speed code	Dimension (B)	Tube length (L)	Grooves for stainless steel tube* Depth = 5,2mm			
	mini ≤ B ≤ max	mini ≤ L ≤ max	G0 mini	G1 mini	G2 mini	G1 + G2 max
17	285+G1+G2 ≤ B ≤ 1215	270+G1+G2 ≤ L ≤ 1200				
25 / 60	255+G1+G2 ≤ B ≤ 1215	240+G1+G2 ≤ L ≤ 1200	≥ 43	≥ 33	≥ 30	≤ 300
90	225+G1+G2 ≤ B ≤ 1215	210+G1+G2 ≤ L ≤ 1200				

⚠ For a single groove G2=0.

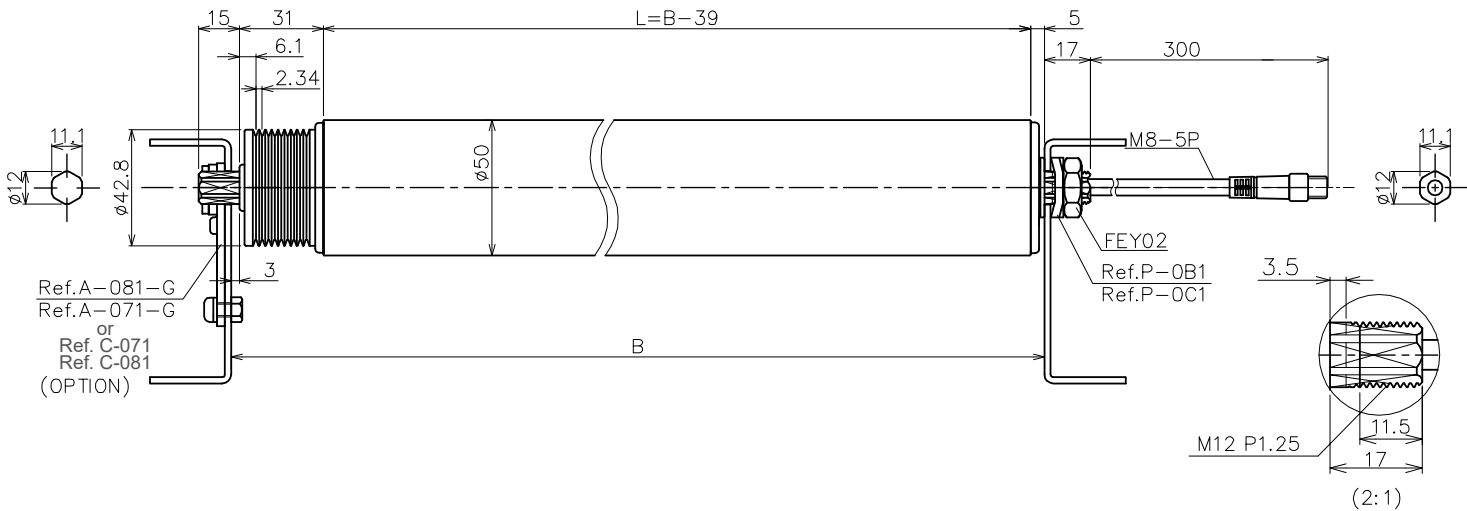
⚠ \*Stainless steel tube : For IP54 version

### WEIGHT / STATIC LOAD / AXIAL FORCE

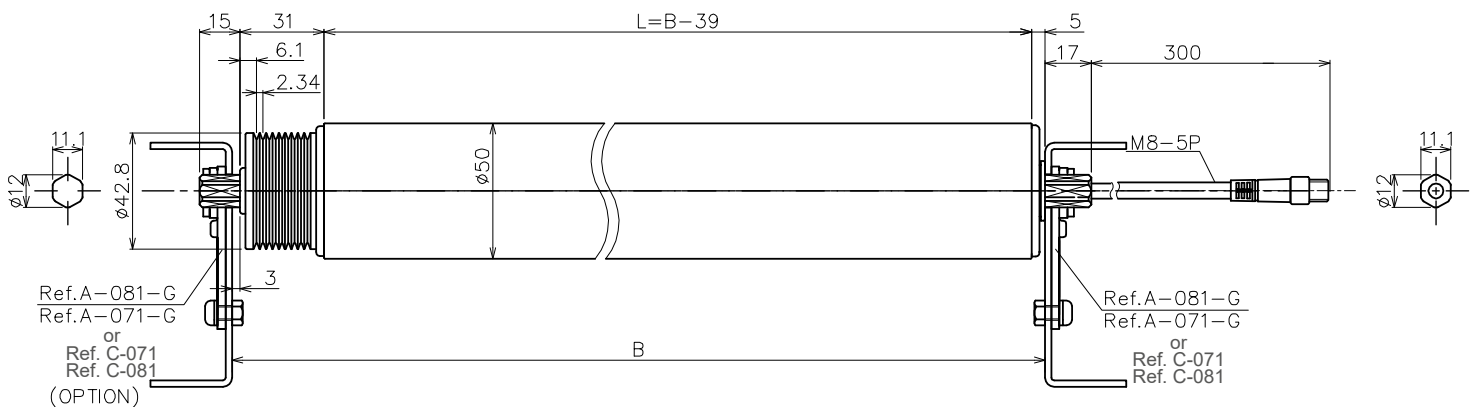
Tube length		300	400	500	600	700	800	900	1000	1100	1200
Weight (Kg)	15 m/min	2,6	2,8	2,9	3,1	3,2	3,4	3,6	3,7	3,9	4,1
	25-60m/min	2,4	2,6	2,7	2,9	3,1	3,2	3,4	3,6	3,7	3,9
	90m/min	2,1	2,3	2,4	2,6	2,8	2,9	3,1	3,3	3,4	3,6
Static load max (Kg)		65	55	45	35	30	25	20	20	15	10
Axial force max (N)		290									

## Roller with pulley for ribbed belt - Hexagonal shaft with spring on free end

**PM500VE** - Hexagonal threaded shaft motor side and hexagonal spring loaded shaft on free end



**PM500VE** - Hexagonal plain shaft motor side and hexagonal spring loaded shaft on free end



**Dimensions PM500VE**

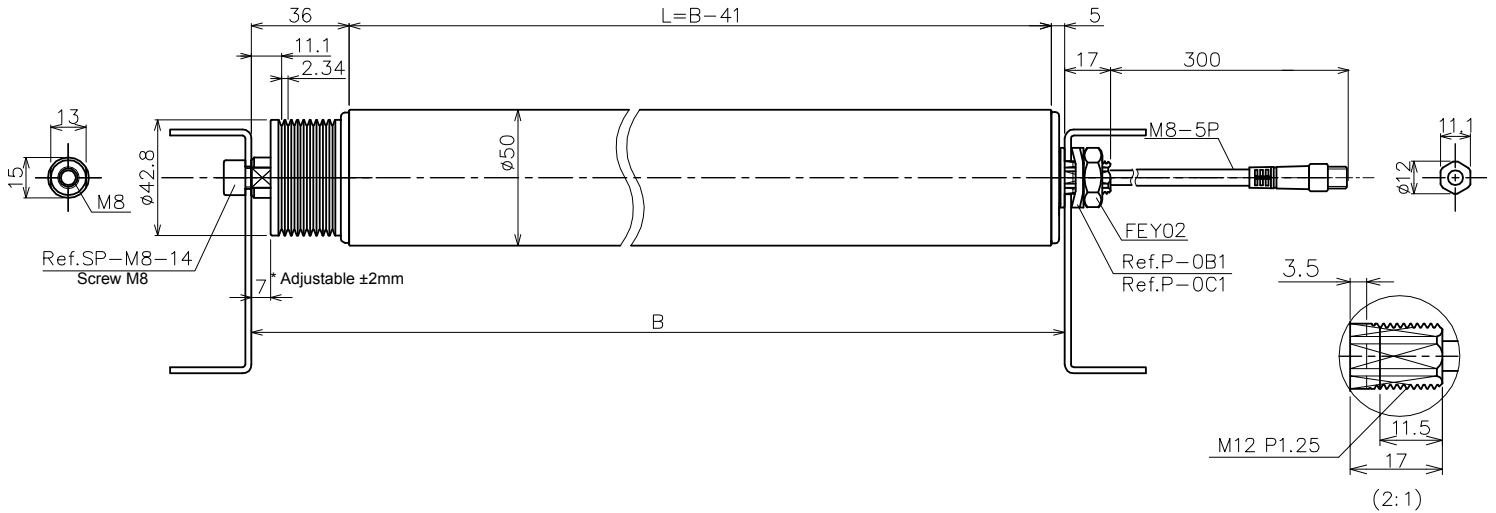
Speed code	Dimension (B)	Tube length (L)
	mini ≤ B ≤ max	mini ≤ L ≤ max
17	334 ≤ B ≤ 1239	295 ≤ L ≤ 1200
25 / 60	309 ≤ B ≤ 1239	270 ≤ L ≤ 1200
90	279 ≤ B ≤ 1239	240 ≤ L ≤ 1200

### WEIGHT / STATIC LOAD / AXIAL FORCE

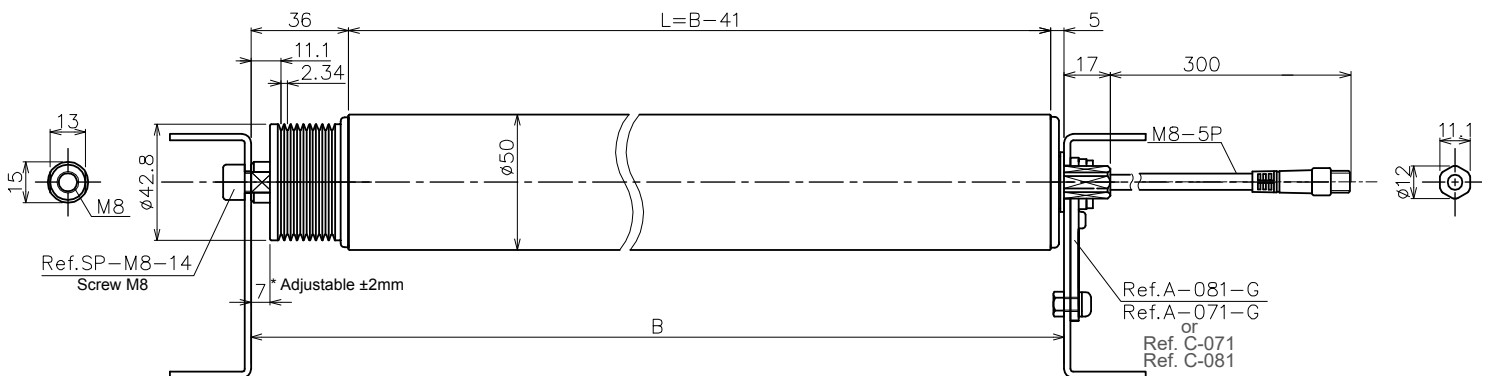
Tube length		300	400	500	600	700	800	900	1000	1100	1200
Weight (Kg)	17 m/min	2,8	2,9	3,1	3,2	3,4	3,6	3,7	3,9	4,1	4,2
	25 / 60 m/min	2,6	2,7	2,9	3,1	3,2	3,4	3,6	3,7	3,9	4,0
	90 m/min	2,3	2,4	2,6	2,8	2,9	3,1	3,2	3,4	3,6	3,7
Static load max (Kg)		65	55	45	35	30	25	20	20	15	10
Axial force max (N)		290									

## Roller with pulley for ribbed belt - M8 threaded shaft with screw on free end

PM500VE - Hexagonal threaded shaft motor side and M8 threaded shaft with screw on free end



PM500VE - Hexagonal plain shaft motor side and M8 threaded shaft with screw on free end



### Dimensions PM500VE

Speed code	Dimension (B)	Tube length (L)
	mini ≤ B ≤ max	mini ≤ L ≤ max
17	326 ≤ B ≤ 1241	285 ≤ L ≤ 1200
25 / 60	301 ≤ B ≤ 1241	260 ≤ L ≤ 1200
90	271 ≤ B ≤ 1241	230 ≤ L ≤ 1200

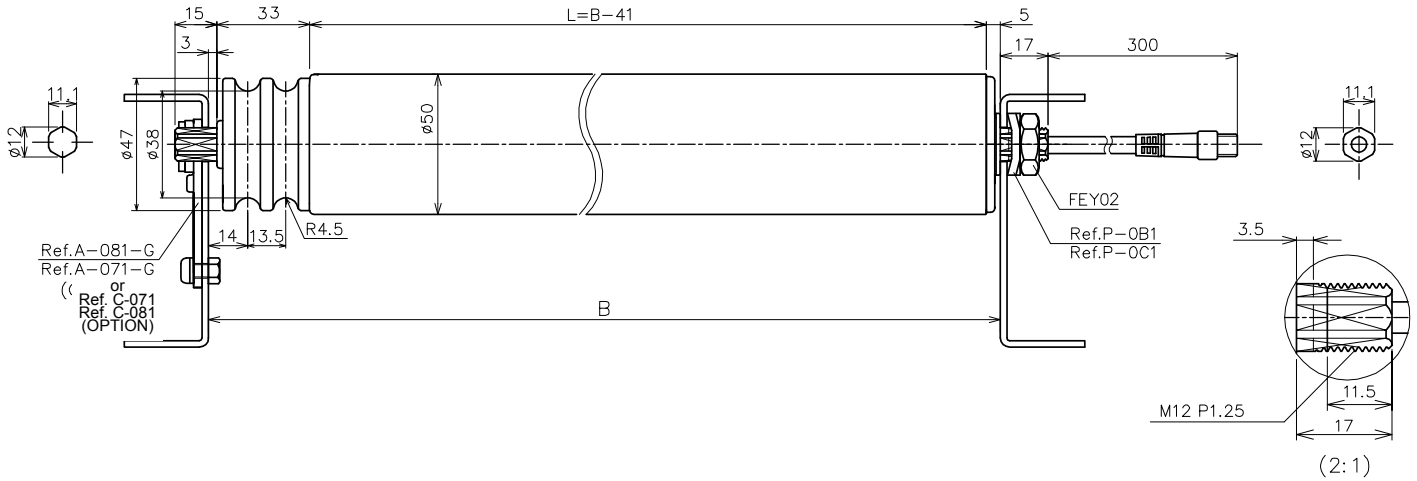
### WEIGHT / STATIC LOAD / AXIAL FORCE

Tube length		300	400	500	600	700	800	900	1000	1100	1200
Weight (Kg)	17 m/min	2,7	2,8	3,0	3,2	3,3	3,5	3,7	3,8	4,0	4,2
	25 / 60 m/min	2,5	2,7	2,8	3,0	3,2	3,3	3,5	3,7	3,8	4,0
	90 m/min	2,2	2,4	2,5	2,7	2,8	3,0	3,2	3,3	3,5	3,7
Static load max (Kg)		65	55	45	35	30	25	20	20	15	10
Axial force max (N)		290									

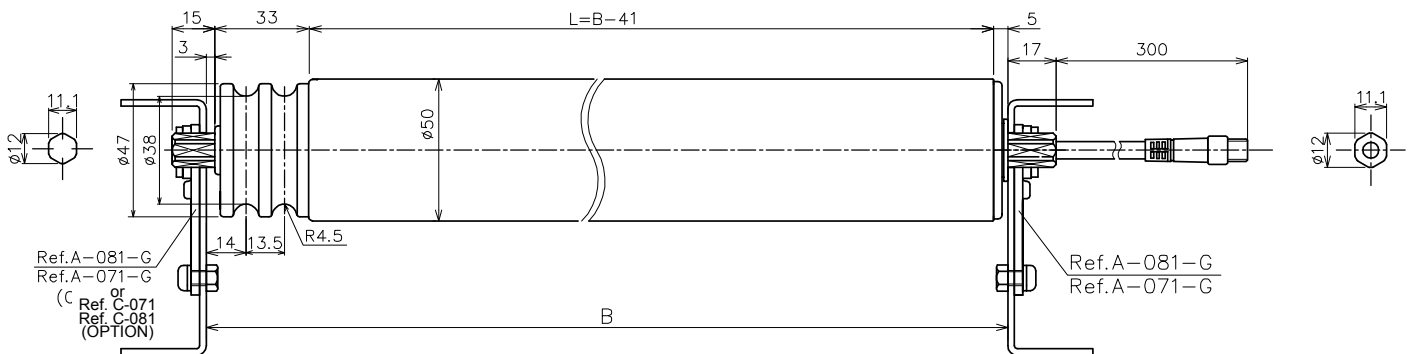


**Roller with pulley for round belt - Hexagonal shaft with spring on free end**

**PM500VE** - Hexagonal threaded shaft motor side and hexagonal spring loaded shaft on free end



**PM500VE** - Hexagonal plain shaft motor side and hexagonal spring loaded shaft on free end



**Dimensions PM500VE**

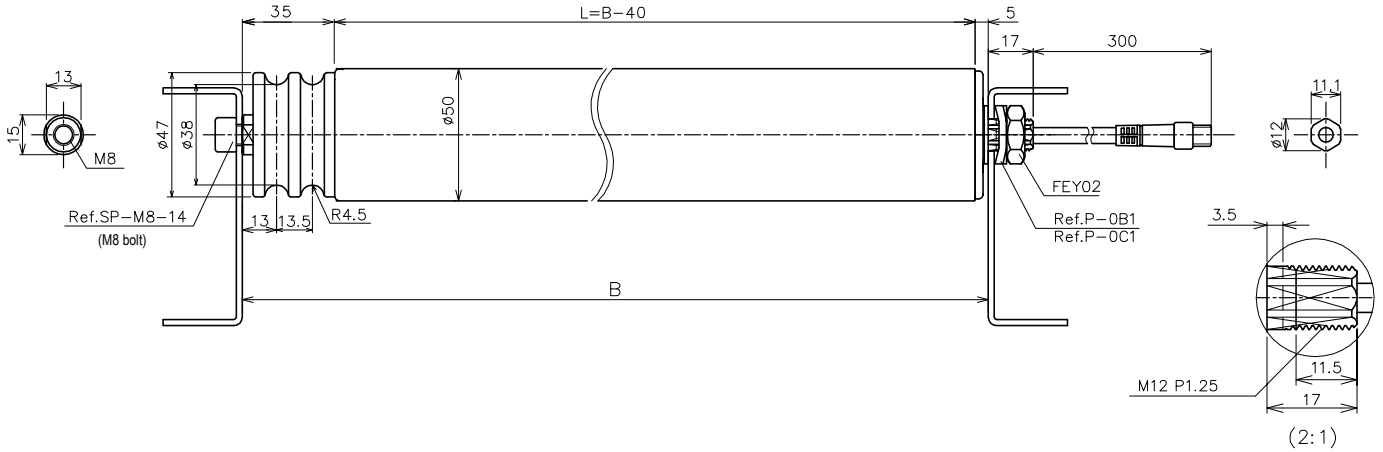
Speed code	Dimension (B)	Tube length (L)
	mini ≤ B ≤ max	mini ≤ L ≤ max
17	356 ≤ B ≤ 1241	315 ≤ L ≤ 1200
25 / 60	336 ≤ B ≤ 1241	295 ≤ L ≤ 1200
90	316 ≤ B ≤ 1241	275 ≤ L ≤ 1200

**WEIGHT / STATIC LOAD / AXIAL FORCE**

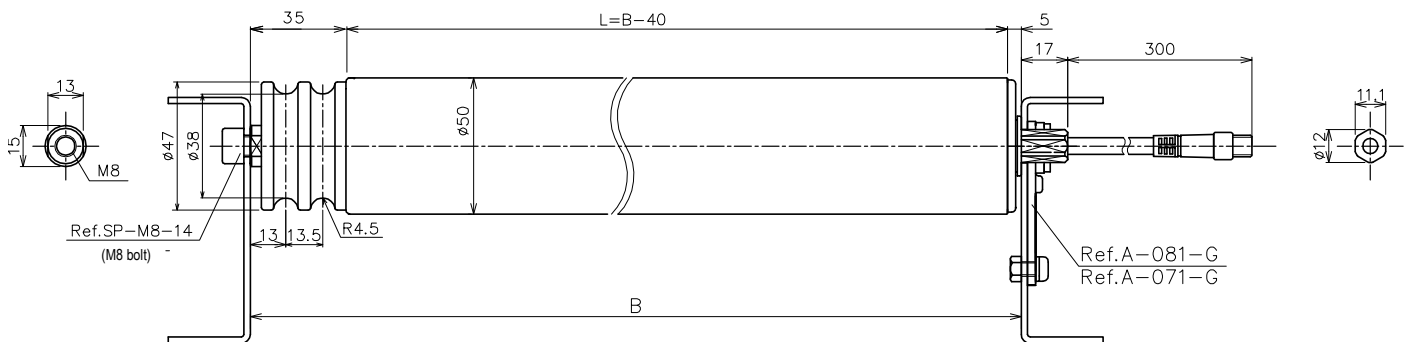
Tube length		300	400	500	600	700	800	900	1000	1100	1200
Weight (Kg)	17 m/min	2,8	2,9	3,1	3,2	3,4	3,6	3,7	3,9	4,1	4,2
	25 / 60 m/min	2,6	2,7	2,9	3,1	3,2	3,4	3,6	3,7	3,9	4,0
	90 m/min	2,3	2,4	2,6	2,8	2,9	3,1	3,2	3,4	3,6	3,7
Static load max (Kg)		65	55	45	35	30	25	20	20	15	10
Axial force max (N)		290									

**Roller with pulley for round belt - M8 threaded shaft with screw on free end**

**PM500VE** - Hexagonal threaded shaft motor side and M8 threaded shaft with screw on free end



**PM500VE** - Hexagonal plain shaft motor side and M8 threaded shaft with screw on free end



**Dimensions PM500VE**

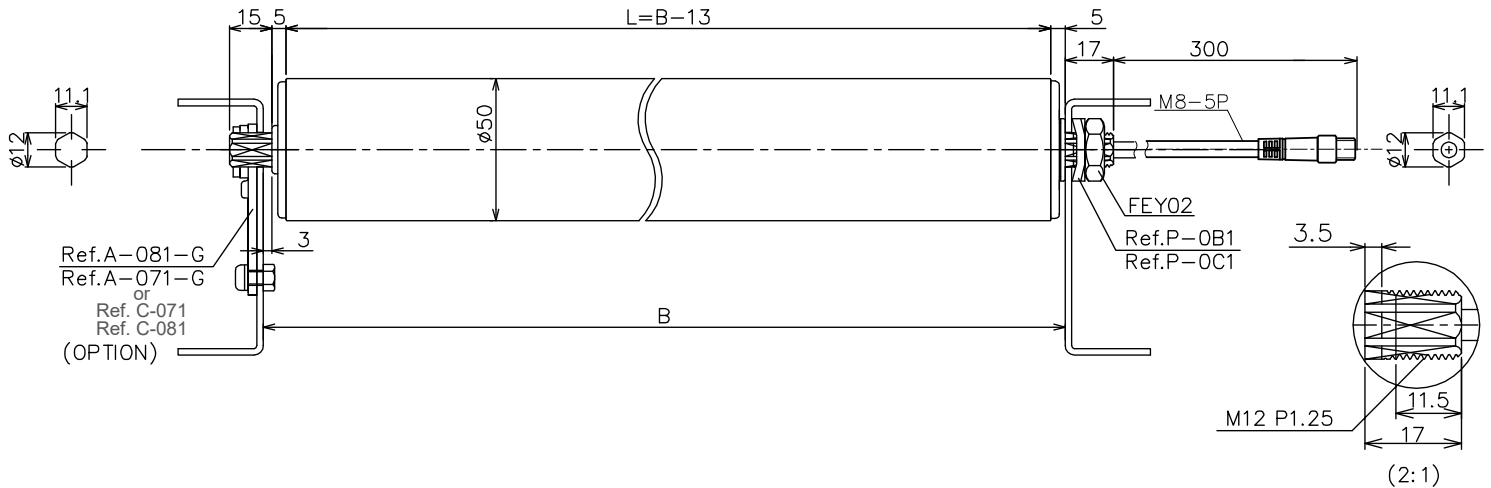
Speed code	Dimension (B)	Tube length (L)
	mini ≤ B ≤ max	mini ≤ L ≤ max
17	345 ≤ B ≤ 1240	305 ≤ L ≤ 1200
25 / 60	325 ≤ B ≤ 1240	285 ≤ L ≤ 1200
90	305 ≤ B ≤ 1240	265 ≤ L ≤ 1200

**WEIGHT / STATIC LOAD / AXIAL FORCE**

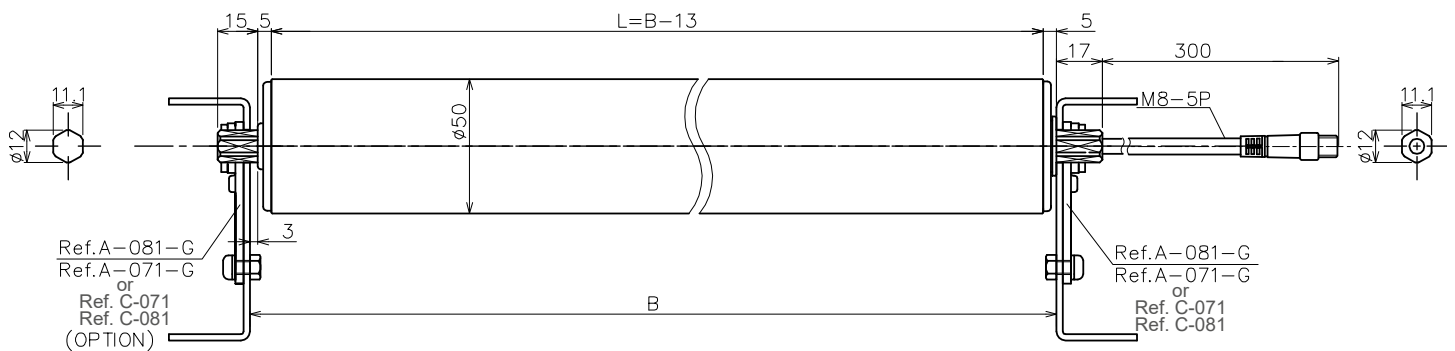
Tube length		300	400	500	600	700	800	900	1000	1100	1200
Weight (Kg)	17 m/min	2,8	2,9	3,1	3,2	3,4	3,6	3,7	3,9	4,1	4,2
	25 / 60 m/min	2,6	2,7	2,9	3,1	3,2	3,4	3,6	3,7	3,9	4,0
	90 m/min	2,3	2,4	2,6	2,8	2,9	3,1	3,2	3,4	3,6	3,7
Static load max (Kg)		65	55	45	35	30	25	20	20	15	10
Axial force max (N)		290									

## Roller without drive - Hexagonal shaft with spring on free end

**PM500VE** - Hexagonal threaded shaft motor side and hexagonal spring loaded shaft on free end



**PM500VE** - Hexagonal plain shaft motor side and hexagonal spring loaded shaft on free end



**Dimensions PM500VE**

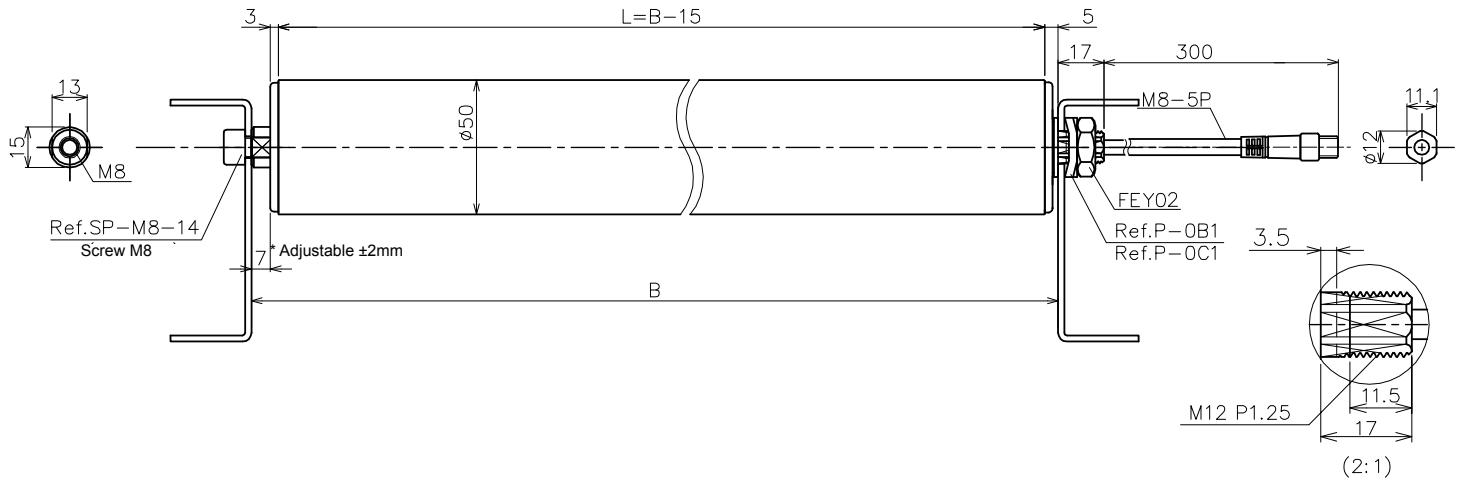
Speed code	Dimension (B)	Tube length (L)
	mini ≤ B ≤ max	mini ≤ L ≤ max
17	308 ≤ B ≤ 1213	295 ≤ L ≤ 1200
25 / 60	283 ≤ B ≤ 1213	270 ≤ L ≤ 1200
90	253 ≤ B ≤ 1213	240 ≤ L ≤ 1200

### WEIGHT / STATIC LOAD / AXIAL FORCE

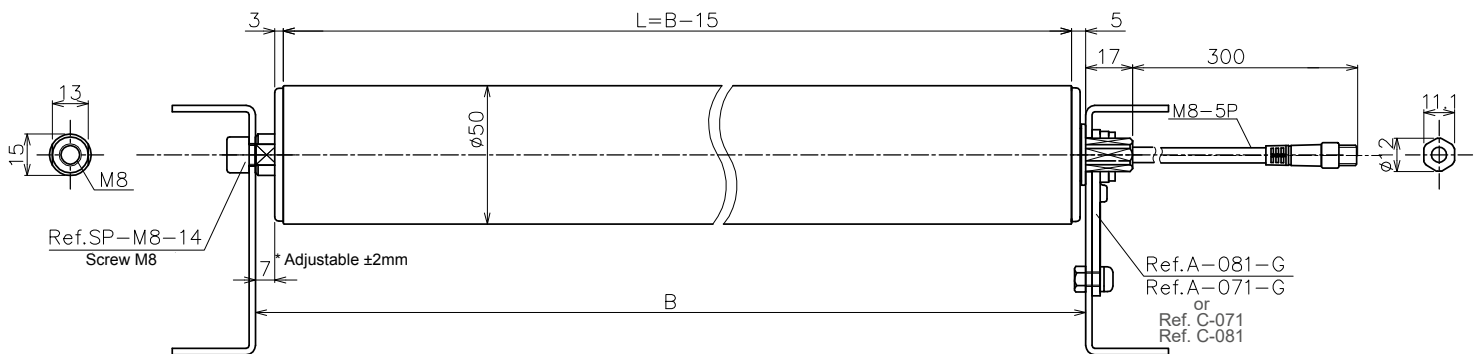
Tube length		300	400	500	600	700	800	900	1000	1100	1200
Weight (Kg)	17 m/min	2,6	2,8	2,9	3,1	3,3	3,4	3,6	3,7	3,9	4,1
	25 / 60 m/min	2,4	2,6	2,7	2,9	3,1	3,2	3,4	3,6	3,7	3,9
	90 m/min	2,1	2,3	2,4	2,6	2,8	2,9	3,1	3,3	3,4	3,6
Static load max (Kg)		65	55	45	35	30	25	20	20	15	10
Axial force max (N)		290									

## Roller without drive - M8 threaded shaft with screw on free end

**PM500VE** - Hexagonal threaded shaft motor side and M8 threaded shaft with screw on free end



**PM500VE** - Hexagonal plain shaft motor side and M8 threaded shaft with screw on free end



**Dimensions PM500VE**

Speed code	Dimension (B)	Tube length (L)
	mini ≤ B ≤ max	mini ≤ L ≤ max
17	300 ≤ B ≤ 1215	285 ≤ L ≤ 1200
25 / 60	275 ≤ B ≤ 1215	260 ≤ L ≤ 1200
90	245 ≤ B ≤ 1215	230 ≤ L ≤ 1200

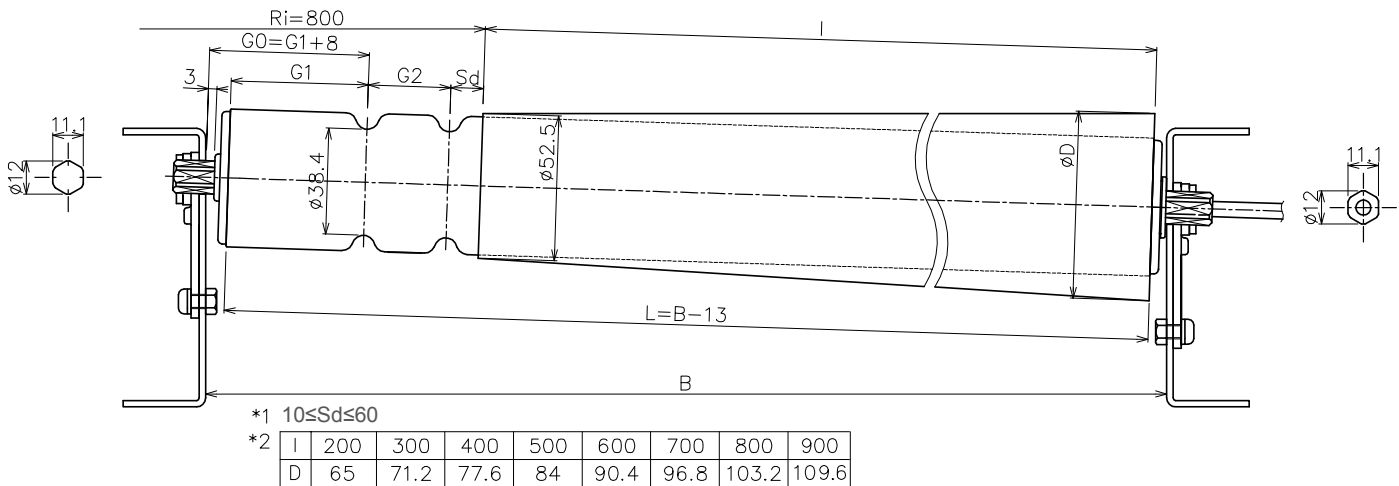
## WEIGHT / STATIC LOAD / AXIAL FORCE

Tube length		300	400	500	600	700	800	900	1000	1100	1200
Weight (Kg)	17 m/min	2,6	2,8	2,9	3,1	3,2	3,4	3,6	3,7	3,9	4,1
	25 / 60 m/min	2,4	2,6	2,7	2,9	3,1	3,2	3,4	3,6	3,7	3,9
	90 m/min	2,1	2,3	2,4	2,6	2,8	2,9	3,1	3,3	3,4	3,6
Static load max (Kg)		65	55	45	35	30	25	20	20	15	10
Axial force max (N)		290									

## 6 - DIMENSIONAL CHARACTERISTICS - CURVES

### Conical roller with grooved tube - Ri = 800mm

PM500VE - Hexagonal plain shaft motor side and hexagonal spring loaded shaft on free end



### Dimensions PM500VE - Inner radius of curvature (Ri) : 800 mm

#### STEEL TUBE

Speed code	Dimension (B)	Tube length (L)	Grooves for steel tube Depth = 5,8mm				Tapered sleeve length (I) (I)
	mini ≤ B ≤ max	mini ≤ L ≤ max	G0 mini	G1 mini	G2 mini	G1 + G2 max	
17	283+G1+G2 ≤ B ≤ 1213	270+G1+G2 ≤ L ≤ 1200					200, 300, 400, 500, 600, 700, 800, 900
25 / 60	253+G1+G2 ≤ B ≤ 1213	240+G1+G2 ≤ L ≤ 1200	≥ 41	≥ 33	≥ 22	≤ 300	
90	223+G1+G2 ≤ B ≤ 1213	210+G1+G2 ≤ L ≤ 1200					

#### STAINLESS STEEL TUBE

Speed code	Dimension (B)	Tube length (L)	Grooves for stainless steel tube* Depth = 5,2mm				Tapered sleeve length (I) (I)
	mini ≤ B ≤ max	mini ≤ L ≤ max	G0 mini	G1 mini	G2 mini	G1 + G2 max	
17	283+G1+G2 ≤ B ≤ 1213	270+G1+G2 ≤ L ≤ 1200					200, 300, 400, 500, 600, 700, 800, 900
25 / 60	253+G1+G2 ≤ B ≤ 1213	240+G1+G2 ≤ L ≤ 1200	≥ 41	≥ 33	≥ 30	≤ 300	
90	223+G1+G2 ≤ B ≤ 1213	210+G1+G2 ≤ L ≤ 1200					

⚠ For a single groove G2=0.

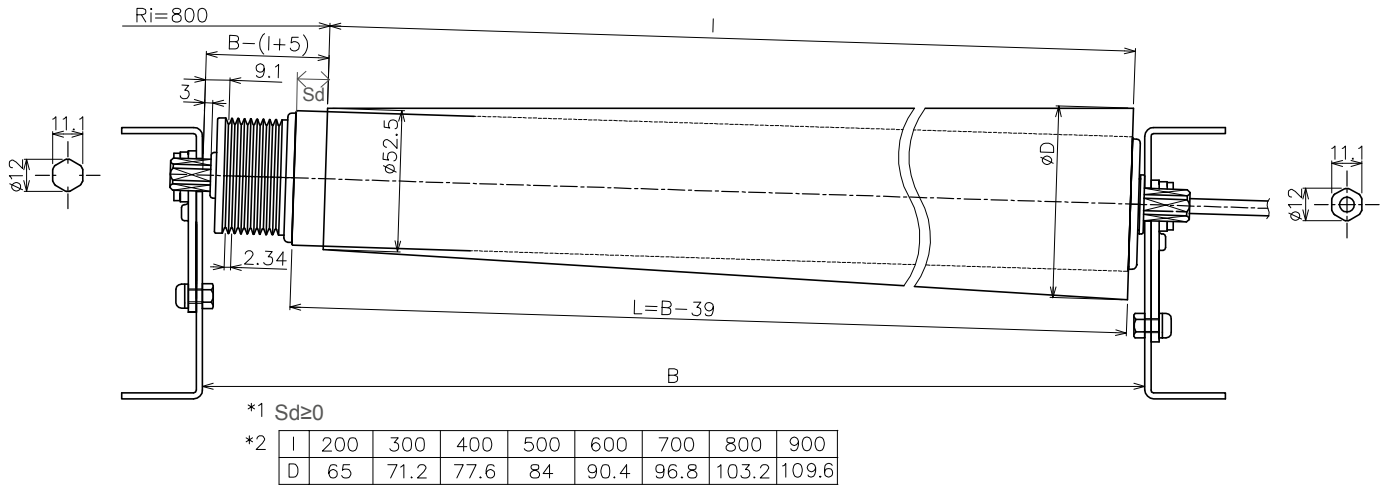
⚠ \*Stainless steel tube : For IP54 version

#### ADDITIONNAL WEIGHT

Sleeve length (mm)	200	300	400	500	600	700	800	900
Additional weight (Kg)	0,1	0,2	0,3	0,4	0,5	0,6	0,8	0,9
Max load to be conveyed (Kg)	50							

Conical roller with pulley for ribbed belt - Ri = 800mm

PM500VE - Hexagonal plain shaft motor side and hexagonal spring loaded shaft on free end



Dimensions PM500VE - Inner radius of curvature (Ri) : 800 mm

Speed code	Dimension (B)	Tube length (L)	Tapered sleeve length (l) (l)
	mini ≤ B ≤ max		
17	334 ≤ B ≤ 1213	295 ≤ L ≤ 1200	200, 300, 400, 500, 600, 700, 800, 900
25 / 60	309 ≤ B ≤ 1213	270 ≤ L ≤ 1200	
90	279 ≤ B ≤ 1213	240 ≤ L ≤ 1200	

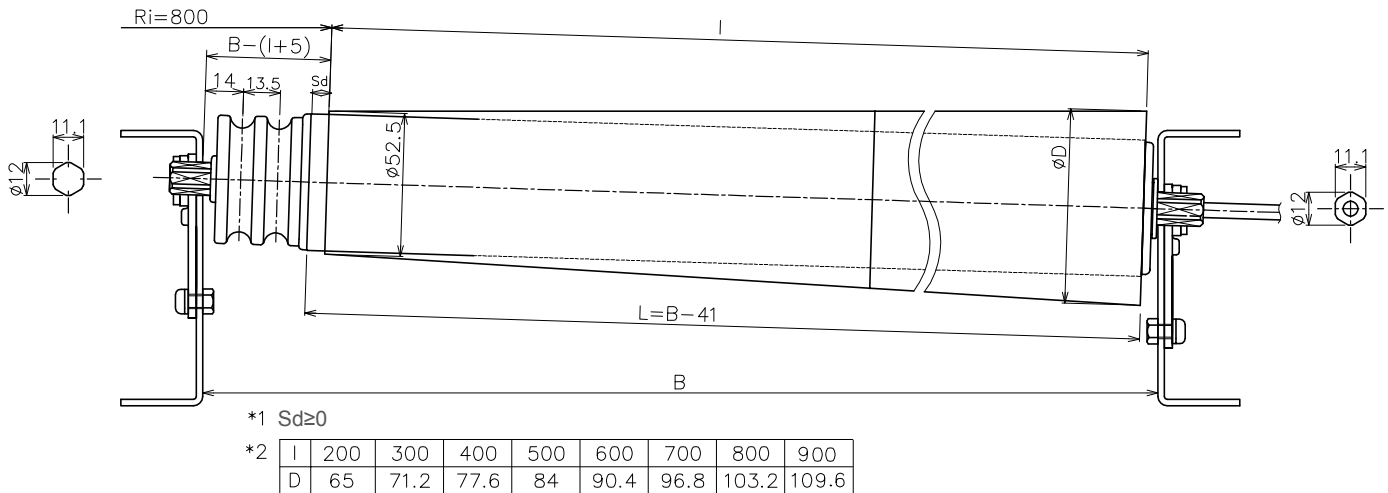
ADDITIONNAL WEIGHT

Sleeve length	200	300	400	500	600	700	800	900
Additional weight (Kg)	0,1	0,2	0,3	0,4	0,5	0,6	0,8	0,9
Max load to be convoyed (Kg)	50							

- ⚠ For the curve, it is advisable to:
- do not exceed 5° between the rollers
  - use a 3 rib belt to ensure stability on the pulley

Conical roller with pulley for round belt - Ri = 800mm

PM500VE - Hexagonal plain shaft motor side and hexagonal spring loaded shaft on free end



Dimensions PM500VE - Inner radius of curvature (Ri) : 800 mm

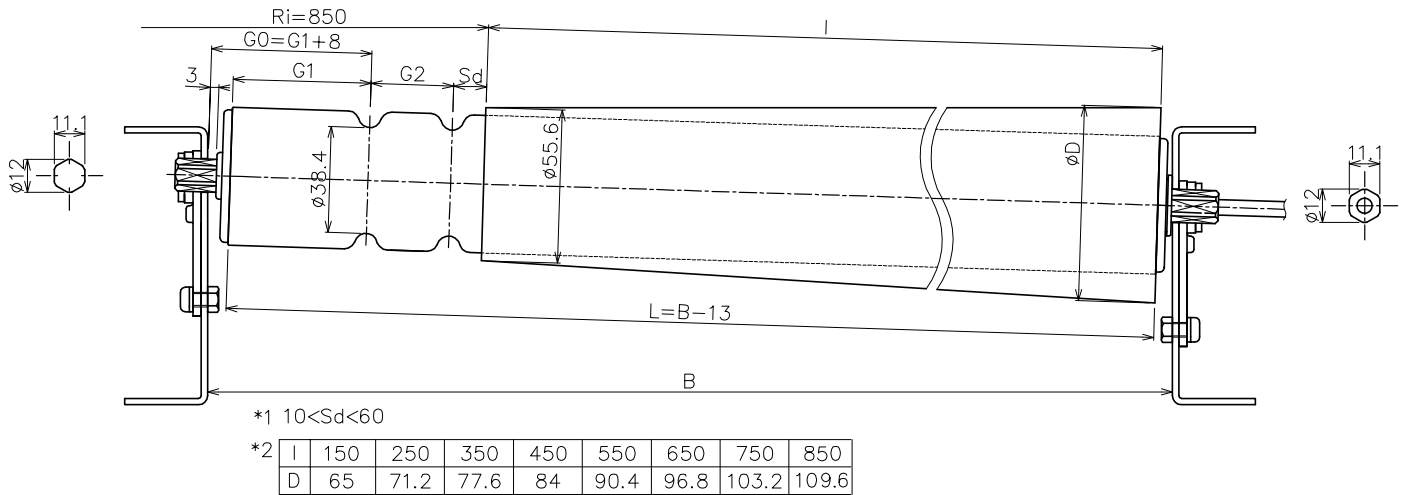
Speed code	Dimension (B)	Tube length (L)	Tapered sleeve length (l) (l)
	mini ≤ B ≤ max		
17	356 ≤ B ≤ 1241	315 ≤ L ≤ 1200	200, 300, 400, 500, 600, 700, 800, 900
25 / 60	336 ≤ B ≤ 1241	295 ≤ L ≤ 1200	
90	316 ≤ B ≤ 1241	275 ≤ L ≤ 1200	

ADDITIONAL WEIGHT

Sleeve length	200	300	400	500	600	700	800	900
Additional weight (Kg)	0,1	0,2	0,3	0,4	0,5	0,6	0,8	0,9
Max load to be conveyed (Kg)	50							

## Conical roller with grooved tube - Ri = 850mm

PM500VE - Hexagonal plain shaft motor side and hexagonal spring loaded shaft on free end



### Dimensions PM500VE - Inner radius of curvature (Ri) : 850 mm

#### STEEL TUBE

Speed code	Dimension (B)	Tube length (L)	Grooves for steel tube R=5,8mm				Tapered sleeve length (I) (I)
	mini ≤ B ≤ max	mini ≤ L ≤ max	G0 mini	G1 mini	G2 mini	G1 + G2 max	
17	283+G1+G2 ≤ B ≤ 1213	270+G1+G2 ≤ L ≤ 1200					
25 / 60	253+G1+G2 ≤ B ≤ 1213	240+G1+G2 ≤ L ≤ 1200	≥ 41	≥ 33	≥ 22	≤ 300	150, 250, 350, 450, 550, 650, 750, 850
90	223+G1+G2 ≤ B ≤ 1213	210+G1+G2 ≤ L ≤ 1200					

#### STAINLESS STEEL TUBE

Speed code	Dimension (B)	Tube length (L)	Grooves for stainless steel tube* R=5,2mm				Tapered sleeve length (I) (I)
	mini ≤ B ≤ max	mini ≤ L ≤ max	G0 mini	G1 mini	G2 mini	G1 + G2 max	
17	283+G1+G2 ≤ B ≤ 1213	270+G1+G2 ≤ L ≤ 1200					
25 / 60	253+G1+G2 ≤ B ≤ 1213	240+G1+G2 ≤ L ≤ 1200	≥ 41	≥ 33	≥ 30	≤ 300	150, 250, 350, 450, 550, 650, 750, 850
90	223+G1+G2 ≤ B ≤ 1213	210+G1+G2 ≤ L ≤ 1200					

⚠ For a single groove G2=0.

⚠ \*Stainless steel tube : For IP54 version

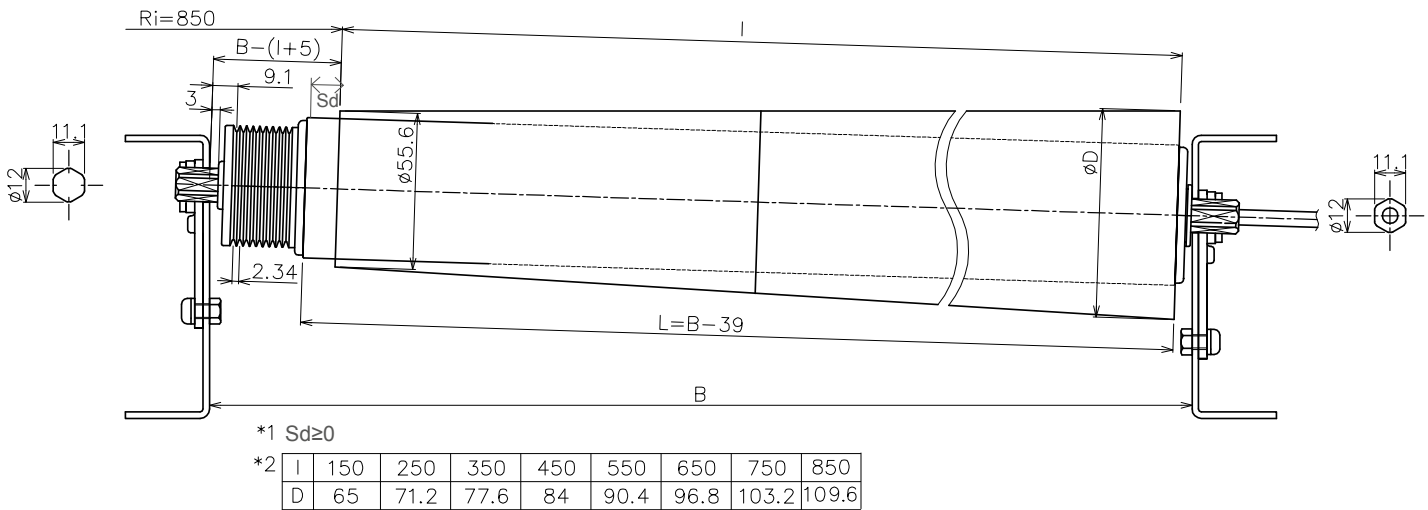
#### ADDITIONAL WEIGHT

Sleeve length	150	250	350	450	550	650	750	850
Additional weight (Kg)	0,1	0,2	0,2	0,3	0,5	0,6	0,7	0,9
Max load to be conveyed (Kg)	50							



## Conical roller with pulley for ribbed belt - Ri = 850mm

**PM500VE** - Hexagonal plain shaft motor side and hexagonal spring loaded shaft on free end



### Dimensions PM500VE - Inner radius of curvature (Ri) : 850 mm

Speed code	Dimension (B)	Tube length (L)	Tapered sleeve length (l)
	mini ≤ B ≤ max	mini ≤ L ≤ max	
17	334 ≤ B ≤ 1239	295 ≤ L ≤ 1200	150, 250, 350, 450, 550, 650, 750, 850
25 / 60	309 ≤ B ≤ 1239	270 ≤ L ≤ 1200	
90	279 ≤ B ≤ 1239	240 ≤ L ≤ 1200	

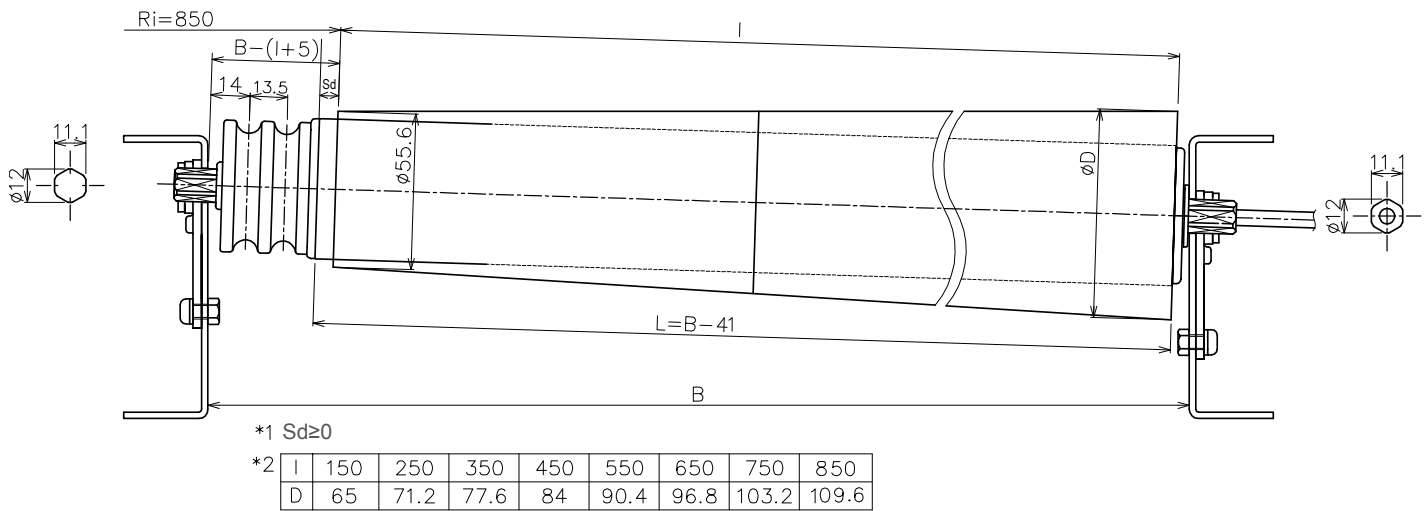
### ADDITIONAL WEIGHT

Sleeve length	150	250	350	450	550	650	750	850
Additional weight (Kg)	0,1	0,2	0,2	0,3	0,5	0,6	0,7	0,9
Max load to be conveyed (Kg)	50							

- ⚠ For the curve, it is advisable to:
- do not exceed 5 ° between the rollers
  - use a 3 rib belt to ensure stability on the pulley

Conical roller with pulley for round belt - Ri = 850mm

PM500VE - Hexagonal plain shaft motor side and hexagonal spring loaded shaft on free end



Dimensions PM500VE - Inner radius of curvature (Ri) : 850 mm

Speed code	Dimension (B)	Tube length (L)	Tapered sleeve length (l)
	mini ≤ B ≤ max	mini ≤ L ≤ max	
17	356 ≤ B ≤ 1241	315 ≤ L ≤ 1200	150, 250, 350, 450, 550, 650, 750, 850
25 / 60	336 ≤ B ≤ 1241	295 ≤ L ≤ 1200	
90	316 ≤ B ≤ 1241	275 ≤ L ≤ 1200	

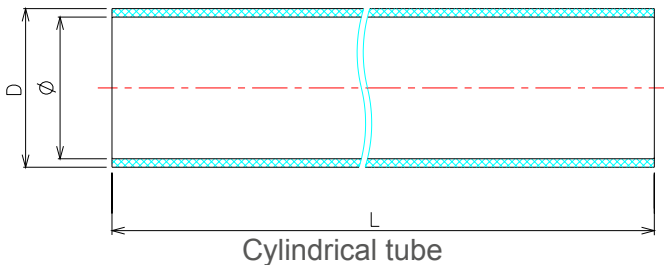
ADDITIONAL WEIGHT

Sleeve length	150	250	350	450	550	650	750	850
Additional weight (Kg)	0,1	0,2	0,2	0,3	0,5	0,6	0,7	0,9
Max load to be conveyed (Kg)	50							

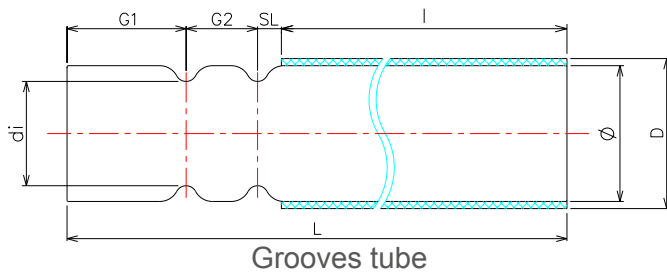
## 7 - DIMENSIONAL CHARACTERISTICS - MISCELLANEOUS

### PVC sleeve

For conveying a fragile load or to lower the sound level.  
Sleeved by compressed air.  
Antistatic option.



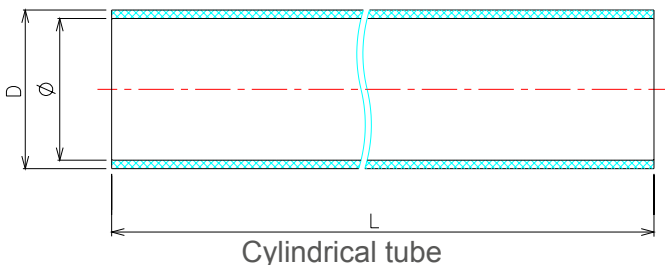
Thickness (mm)	L (mm)	Ø (mm)	D (mm) (±1mm)	Hardness
2	≤1200	50	54	~68 shore A
3			56	



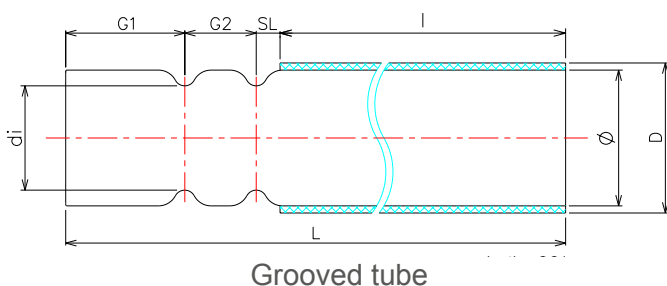
Thickness (mm)	L (mm)	Ø (mm)	D (mm) (±1mm)	SL (mm)
2	≤1200	50	54	10
3			56	

### Coated in natural rubber, nitrile rubber and polyurethane

Material	Characteristics	Hardness (ShA)	Thickness (mm)
Natural rubber	It improves the adherence of the products conveyed and reduces noise. Do not use in contact with hydrocarbon, oil or grease.	60~65	3
Nitrile rubber	Exceptional resistance in the presence of hydrocarbon, oil and grease.		
Polyurethane	High resistance to abrasion, tearing and oil.	90	



L (mm)	Ø (mm)	D (mm)
≤1000	50	56

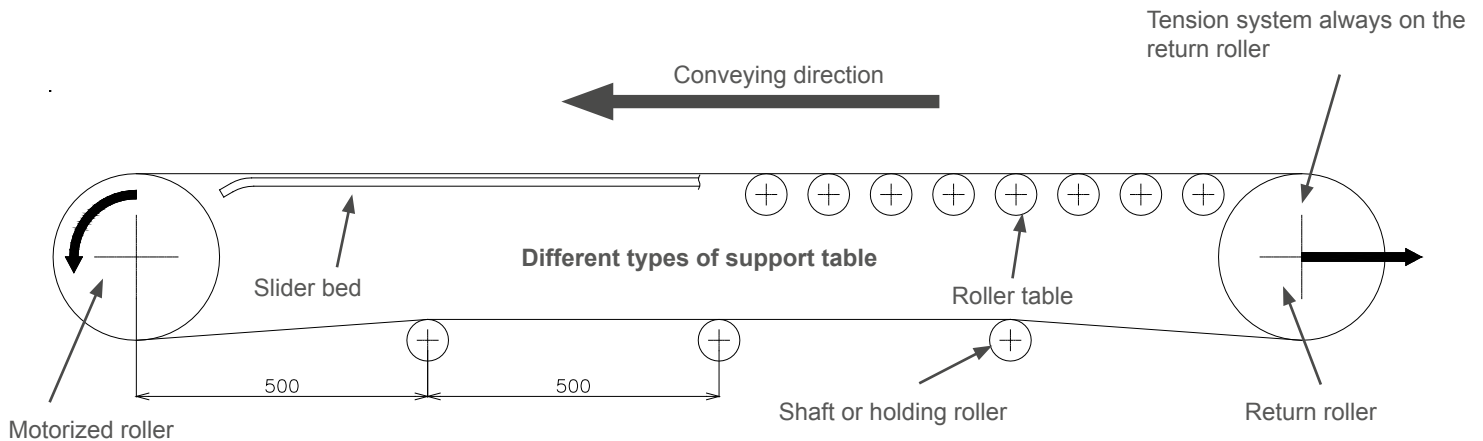


L (mm)	Ø (mm)	D (mm)	SL (mm)
≤1000	50	56	10

## 8 - BELT CONVEYOR APPLICATION

### Condition of use and recommendation

The PM500VE motorized roller allows to create a conveyor with very small dimensions to convey light loads, provided that the hereafter conditions are followed :



- Belt thickness recommended  $\leq 1\text{mm}$
- Belt weight  $\leq 1,4\text{kg/m}^2$
- Belt tension to be applied:  $10\text{N} \leq T \leq 200\text{N}$

$$T = (\text{Weight of total load on the conveyor} + \text{Weight of belt}) \times \mu \times 1,25 \times 9,81$$

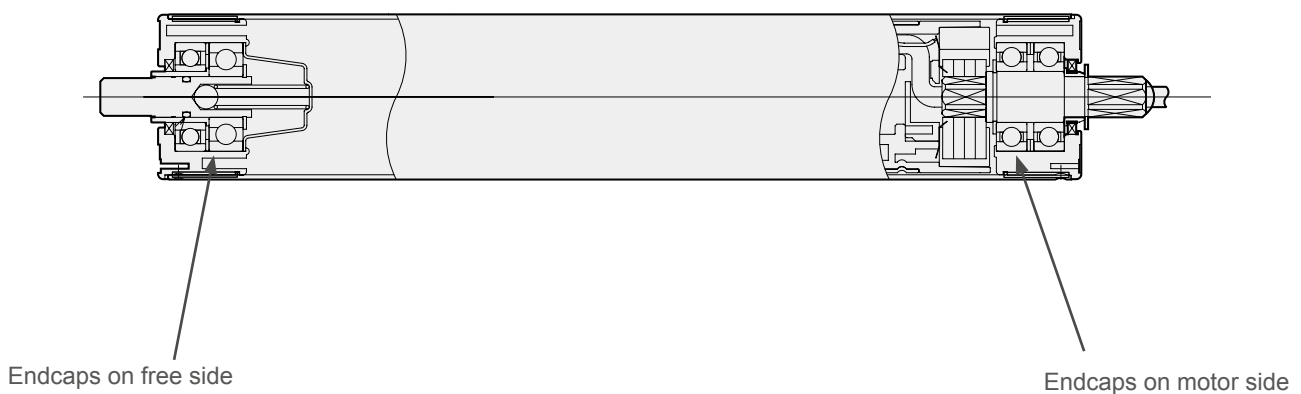
$\mu$  = Coefficient of friction between support table and belt ( $0,2 \leq \mu \leq 0,5$ )

- Conveyor max dimensions :
  - Length (L)  $\leq 2000\text{mm}$  (depending on speed code)
  - Width (W)  $\leq 800\text{mm}$  (depending on speed code)
- Mount the motorized roller downstream of the conveying direction and the return roller upstream.

**!** The above data for belt conveyor applications are provided for information only and cannot be guaranteed. We recommend testing applications before starting operations. KT series MDR is recommended for belt conveyors.

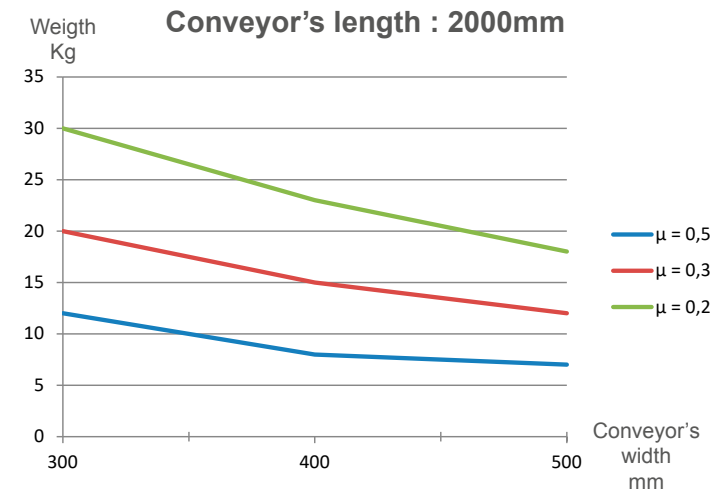
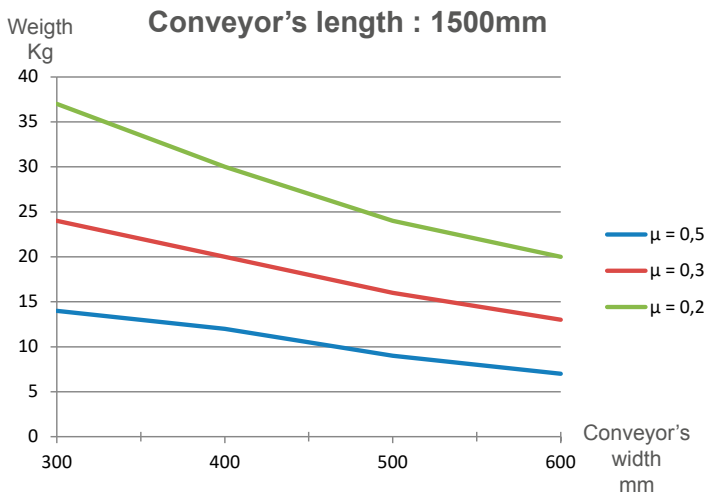
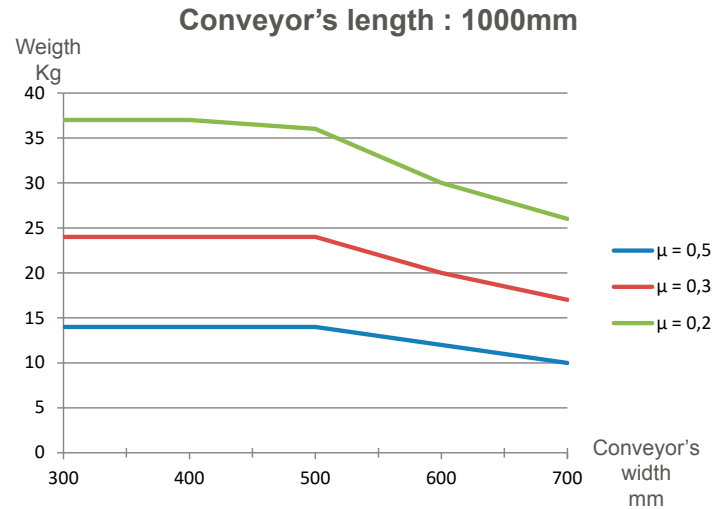
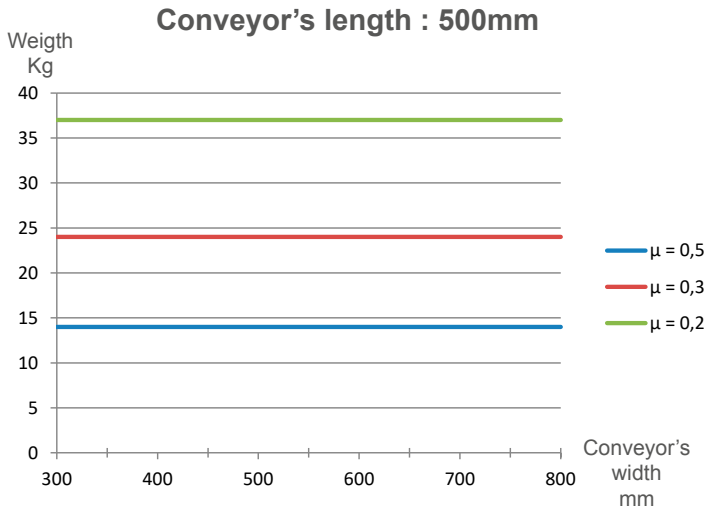
### Structure

To resist to the belt tension, reinforced endcaps, with two precision ball bearings are mounted on the roller.



## Transfer capacity

### SPEED CODE 17



#### • Operation:

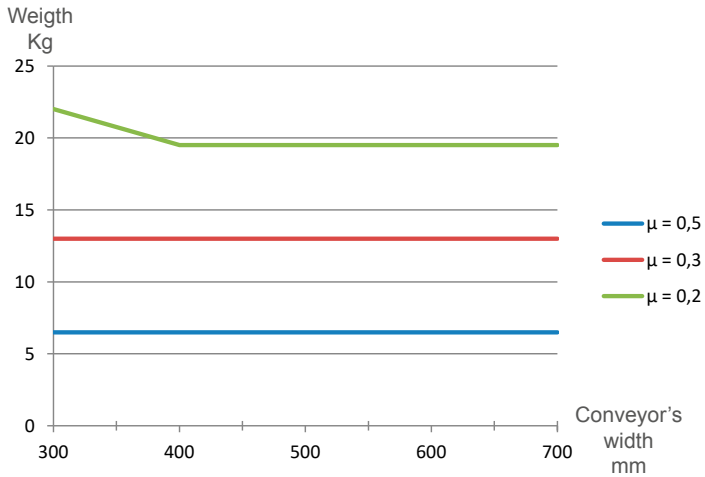
- Intermittent : Minimum duty cycle= 2s ON / 2s OFF  
ED = ON/(ON+OFF) ≤ 50%  
900 starts/H max
- Continuous: 100%

#### • Belt performance : 70%

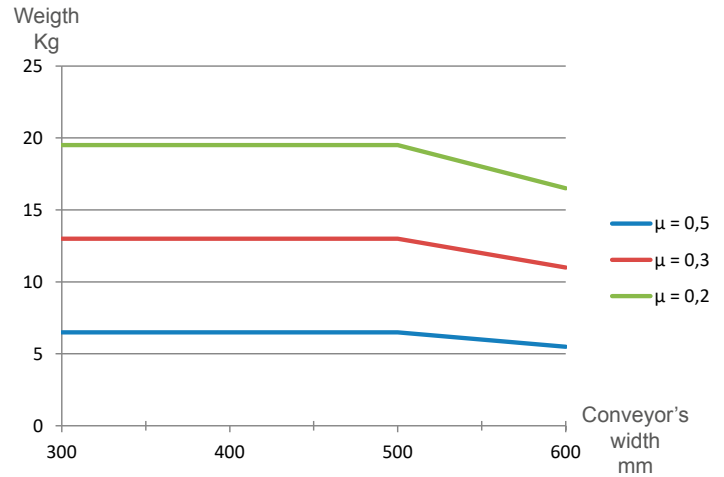
*These curves are given as a guide. Transfer capacity depends on the nature and quality of the transported load, the belt tension, the quality of the bearings, the nature of the sleeves, the ambient temperature...*

## SPEED CODE 25

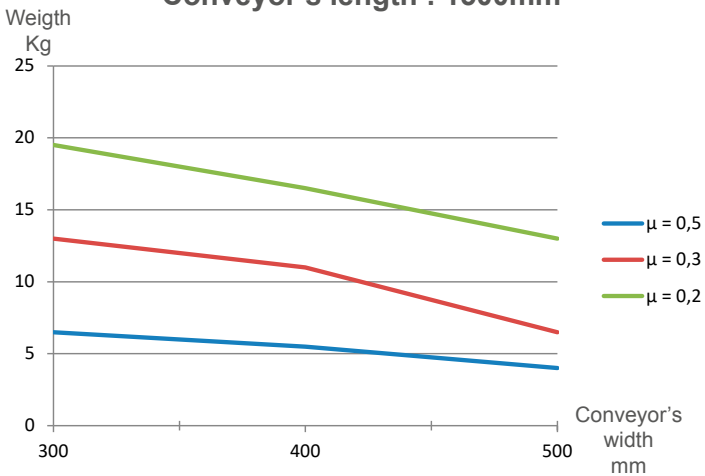
Conveyor's length : 500mm



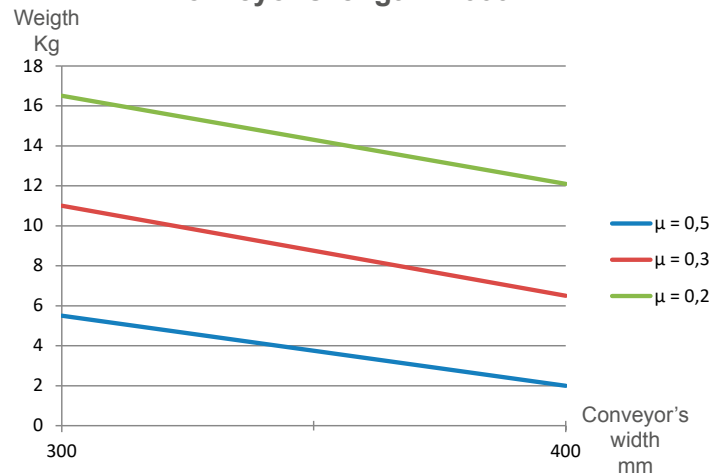
Conveyor's length : 1000mm



Conveyor's length : 1500mm



Conveyor's length : 2000mm



• Operation:

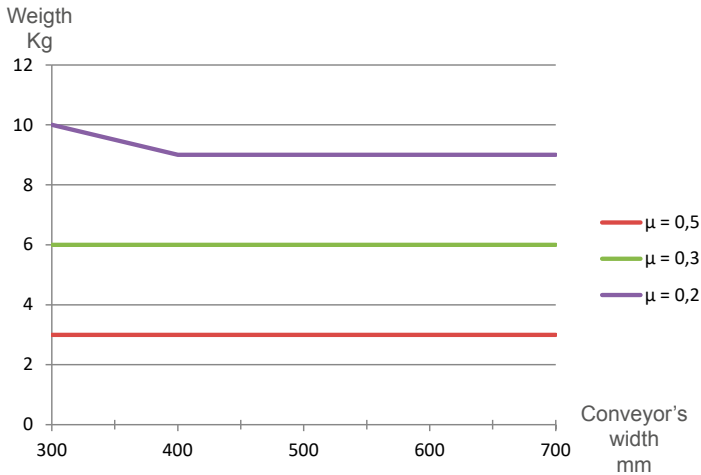
- Intermittent : Minimum duty cycle= 2s ON / 2s OFF  
ED = ON/(ON+OFF) ≤ 50%  
900 starts/H max
- Continuous: 100%

• Belt performance : 70%

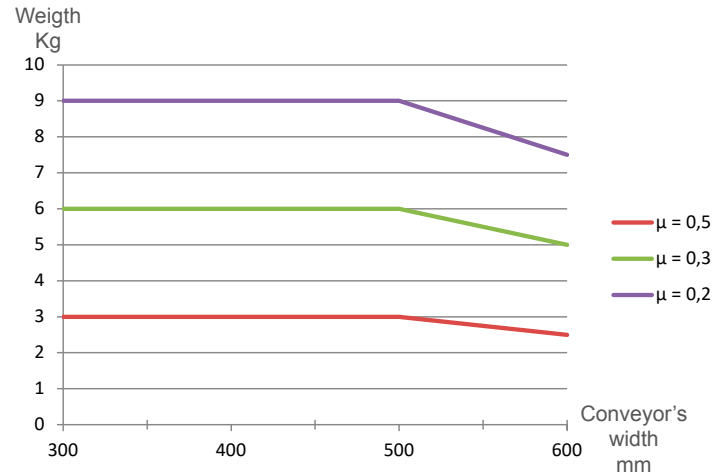
*These curves are given as a guide. Transfer capacity depends on the nature and quality of the transported load, the belt tension, the quality of the bearings, the nature of the sleeves, the ambient temperature...*

### SPEED CODE 60

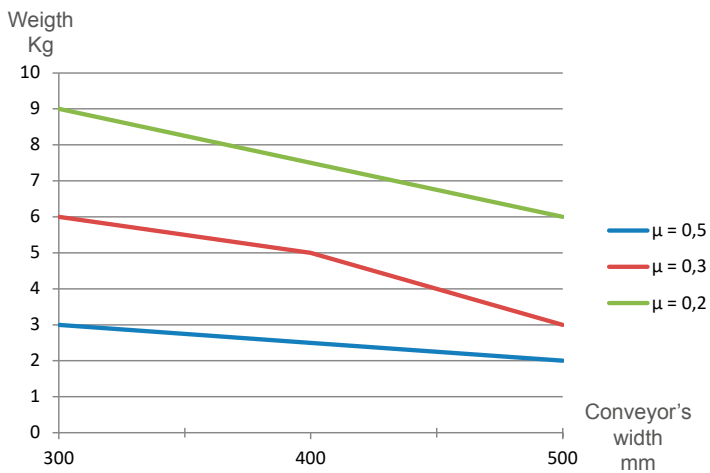
Conveyor's length : 500mm



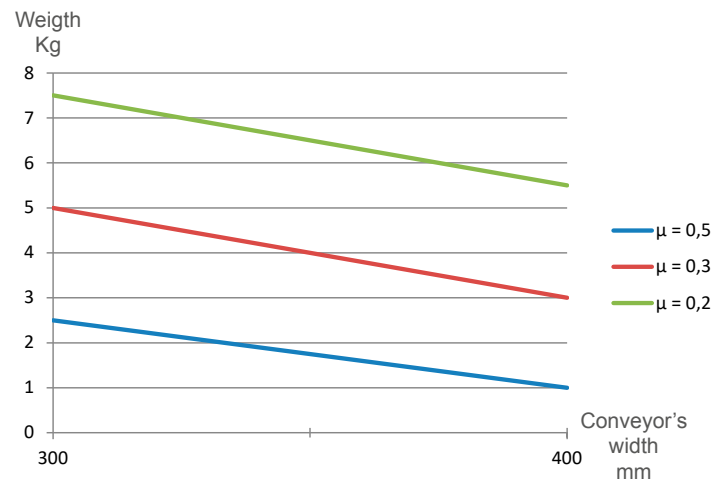
Conveyor's length : 1000mm



Conveyor's length : 1500mm



Conveyor's length : 2000mm



• Operation:

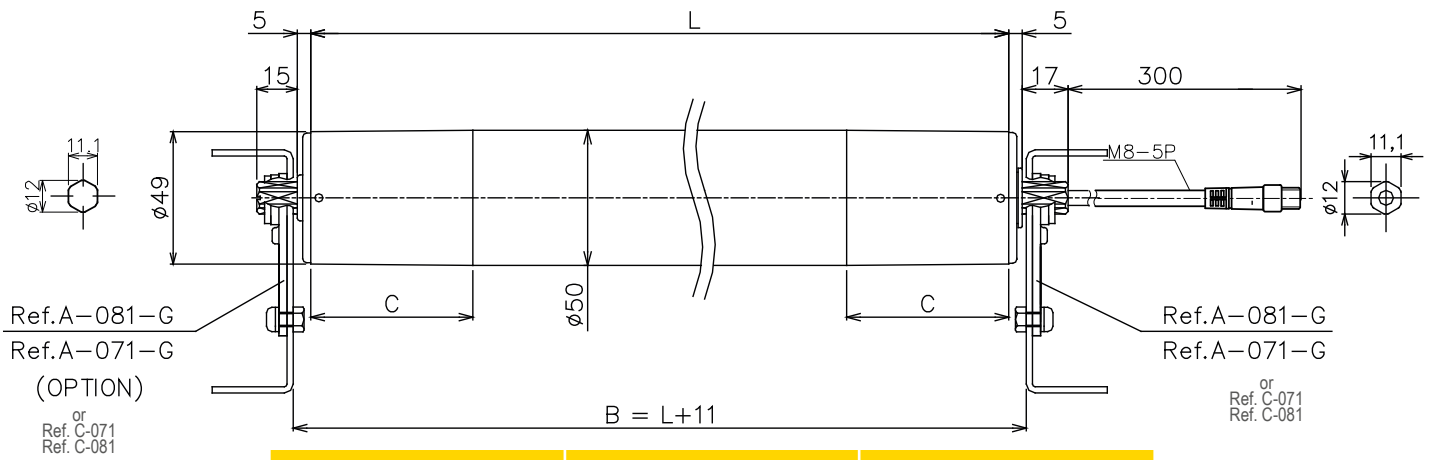
- Intermittent : Minimum duty cycle= 2s ON / 2s OFF  
ED = ON/(ON+OFF)≤50%  
900 starts/H max
- Continuous: 100%

• Belt performance : 70%

*These curves are given as a guide. Transfer capacity depends on the nature and quality of the transported load, the belt tension, the quality of the bearings, the nature of the sleeves, the ambient temperature...*

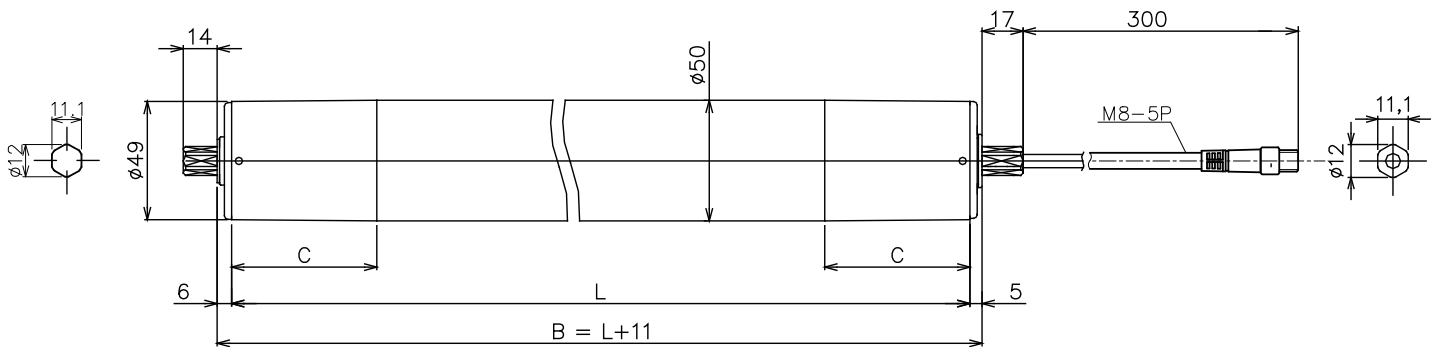
## Dimensional characteristics and weight

### Hexagonal plain shaft on motor side and hexagonal shaft with spring on free end



Speed code	Dimension (B)	Tube length (L)
	mini ≤ B ≤ max	mini ≤ L ≤ max
17	311 ≤ B ≤ 811	300 ≤ L ≤ 800
25 / 60	286 ≤ B ≤ 811	275 ≤ L ≤ 800

### Hexagonal plain shaft on motor side and hexagonal shaft fixed on free end



Speed code	Dimension (B)	Tube length (L)
	mini ≤ B ≤ max	mini ≤ L ≤ max
17	291 ≤ B ≤ 811	280 ≤ L ≤ 800
25 / 60	271 ≤ B ≤ 811	260 ≤ L ≤ 800

### WEIGHT / STATIC LOAD / AXIAL FORCE

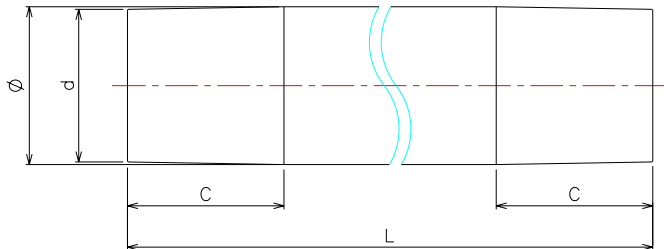
Tube length		300	400	500	600	700	800
Weight (Kg)	17 m/min	2,7	2,9	3,0	3,2	3,4	3,5
	25 m/min	2,5	2,7	2,8	3,0	3,2	3,3
	60 m/min	2,5	2,7	2,9	3,0	3,2	3,4
Static load max (Kg)		65	55	45	35	30	25
Axial force max (N)		290					



## Tube specification

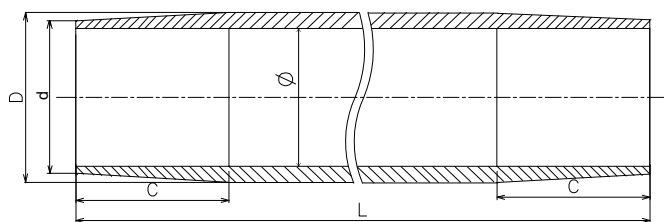
Various machining, coating and sleeves are available to insure a proper centering and a good adherence.

### Tube machined crowned, zinc coated or stainless steel



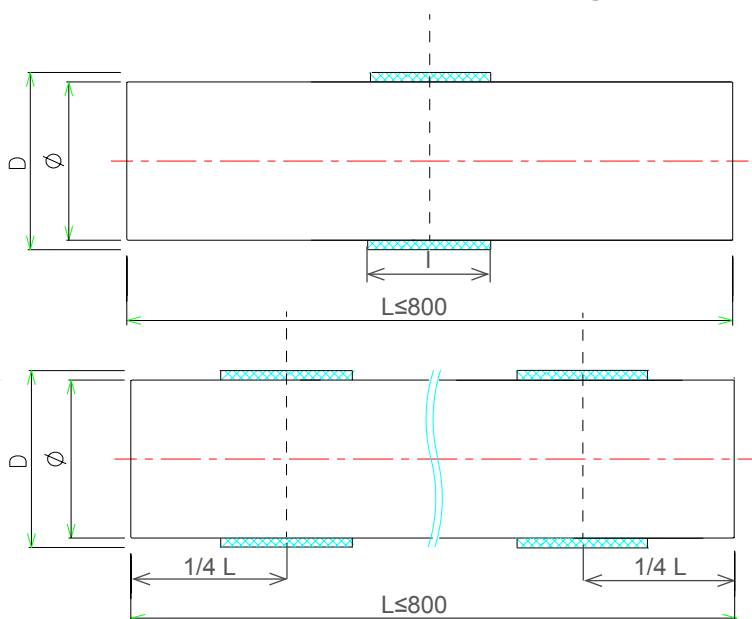
L (mm)	C (mm)	Ø (mm)	d (mm)
<600	60	50	49
600≤800	120		

### Tube machined crowned with natural rubber coating / polyurethane, in steel or stainless steel. 3mm Thickness



L (mm)	C (mm)	Ø (mm)	d (mm)	D (mm)
<600	60	50	55	56
600≤800	120			

### Tube with centering sleeve, zinc coated or stainless steel.



Thickness (mm)	L (mm)	Ø (mm)	D (mm)	l (mm)
3	≤800	50	52	50

## 9 - MOUNTING ON THE FRAMES

### Mounting plate for plain 11.1 mm hexagonal shaft - FLAT ON TOP

Conveyor with hole  $\varnothing 12,3\text{mm}$   or hexagonal 11,2mm 

	Plate reference
Zinc plated steel	A-071-G
Stainless steel	Z-071-D

**!** Tightening torque  
\*1 - 6-10 Nm  
\*2 - 3.5 Nm

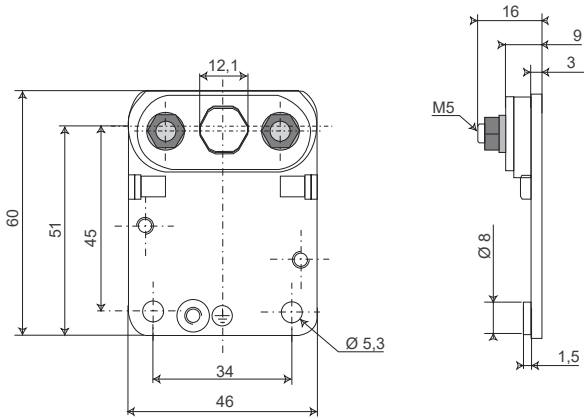
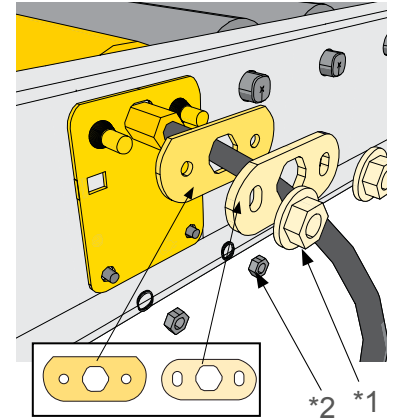
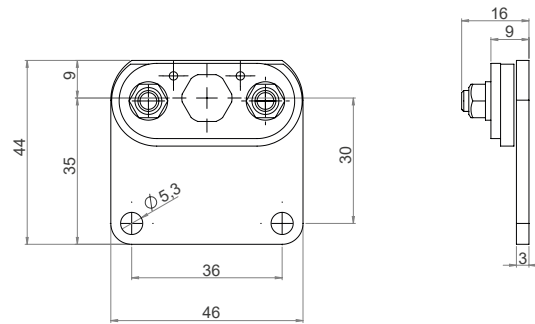


	Plate reference
Zinc plated steel	C-071



### Mounting plate for plain 11.1 mm hexagonal shaft - ANGLE ON TOP

Conveyor with hole  $\varnothing 12,3\text{mm}$   or hexagonal 11,2mm 

	Plate reference
Zinc plated steel	A-081-G
Stainless steel	Z-081-D

**!** Tightening torque  
\*1 - 6-10 Nm  
\*2 - 3.5 Nm

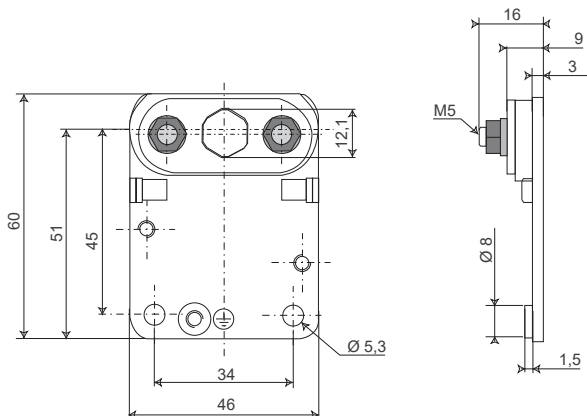
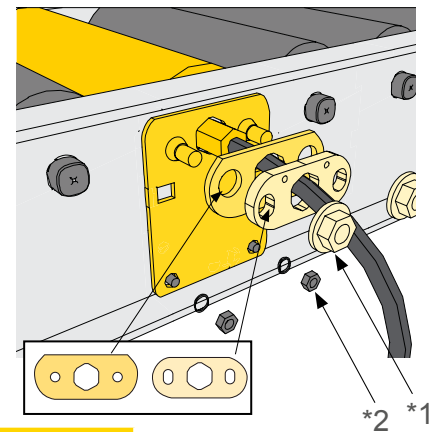
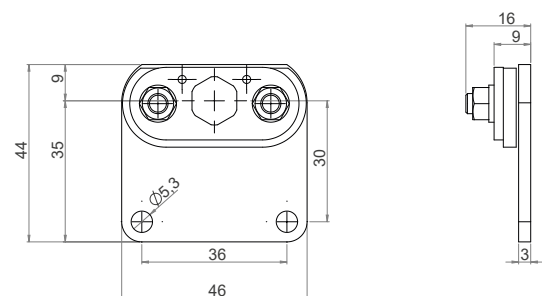
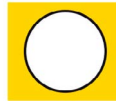


	Plate reference
Zinc plated steel	C-081
Stainless steel	C-081-D

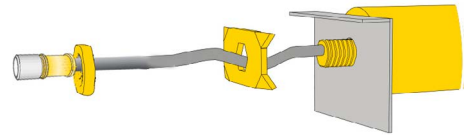
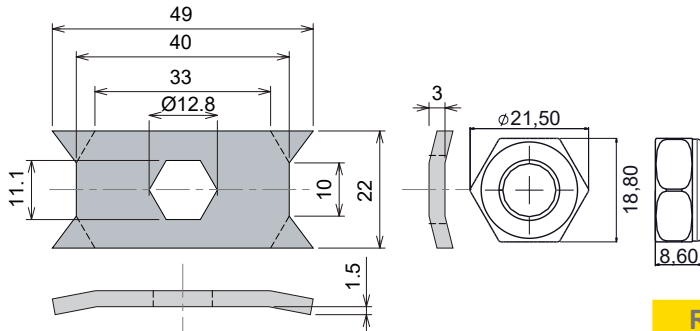
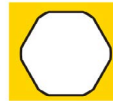


### Mounting plate for threaded hexagonal shaft - FLAT ON TOP

Conveyor with hole  $\varnothing 12,3\text{mm}$



or hexagonal 11,2mm

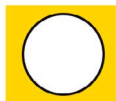


Reference	Claw plate	Washer	Nut
AM-FE-F	P-0B1	FSY02	FEY-02

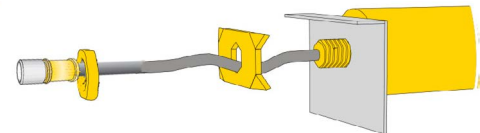
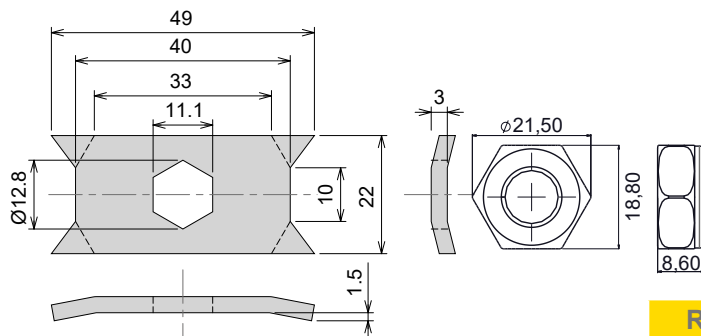
Tightening torque : 30 Nm  $\pm 10\%$

### Mounting plate for threaded hexagonal shaft - ANGLE ON TOP

Conveyor with hole  $\varnothing 12,3\text{mm}$



or hexagonal 11,2mm



Reference	Claw plate	Washer	Nut
AM-FE-A	P-0C1	FSY02	FEY-02

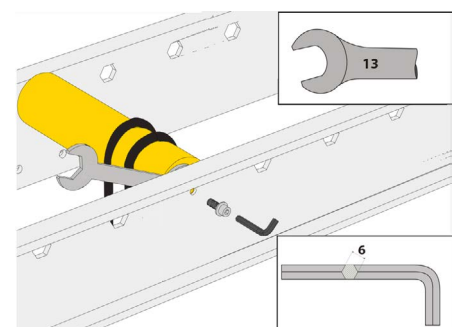
Tightening torque : 30 Nm  $\pm 10\%$

### M8 threaded fixed shaft

Conveyor with holes  $\varnothing 8,4\text{mm}$



$\varnothing 8,4\text{ mm}$

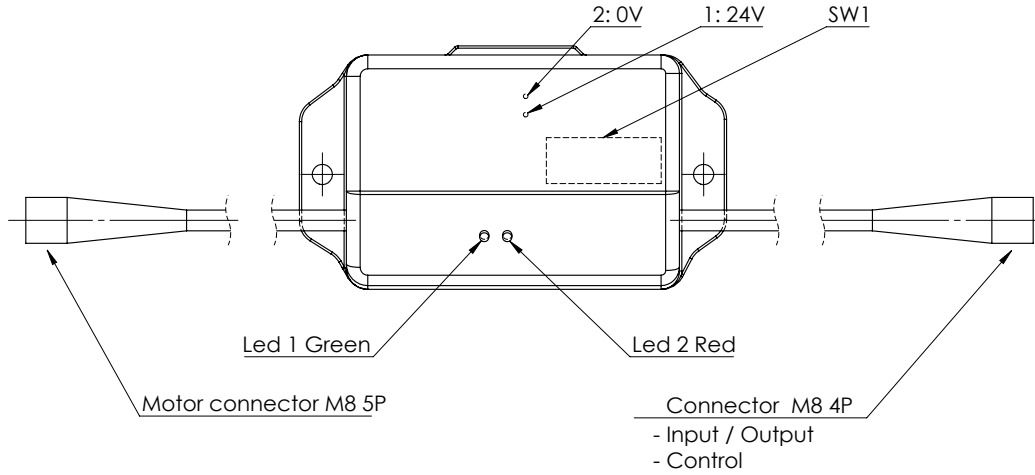


Tightening torque : 30 Nm  $\pm 10\%$

Reference	Screw
	SP-M8-14

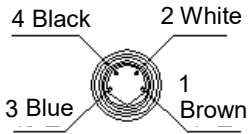
## ▶ 10 - WIRING

■ With CBV-108 circuit board



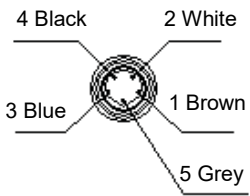
⚠ Refer to the CBV-108 technical documentation.

### M8-4P - Control connector



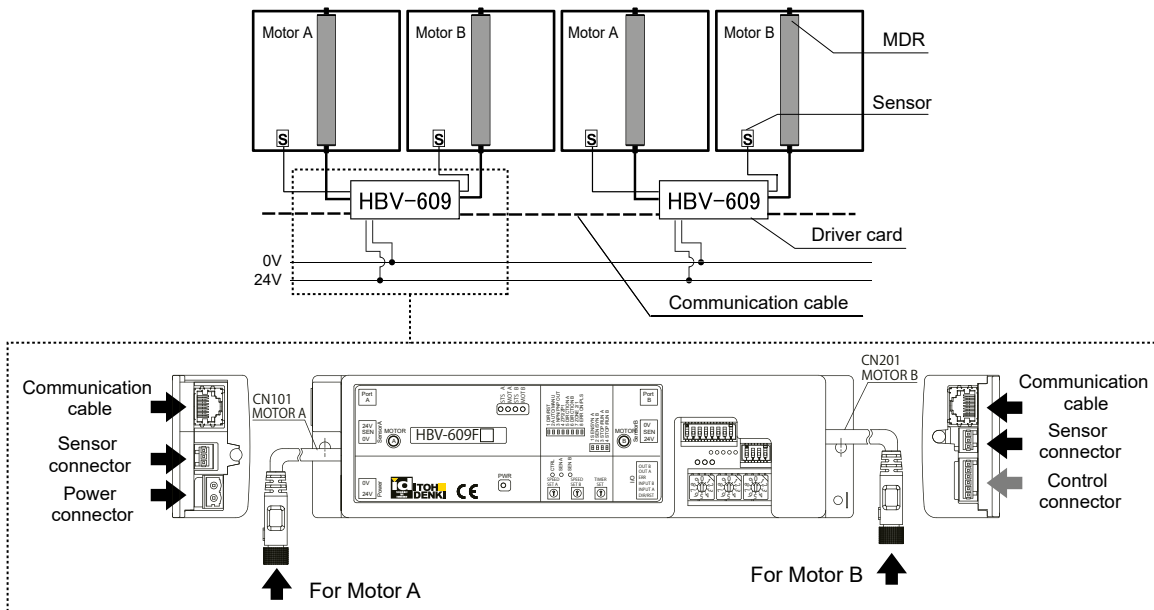
N°	Color	Driver side	Description
1	Brown	RUN / STOP	INPUT 24VDC (PNP) / 0VDC (NPN)
2	White	Direction	INPUT 24VDC (PNP) / 0VDC (NPN)
3	Blue	Analogic voltage for external speed	INPUT 0 V~10VDC
4	Black	Status	OUTPUT PNP Open collector (max25mADC) NPN Open collector (max25mADC)

### M8-5P - Motor connector



N°	Color	Use
1	Brown	Motor Phase U
2	White	Motor Phase V
3	Blue	Hall signal (Analog)
4	Black	Motor Phase W
5	Grey	+12V

With HBV-609 circuit board



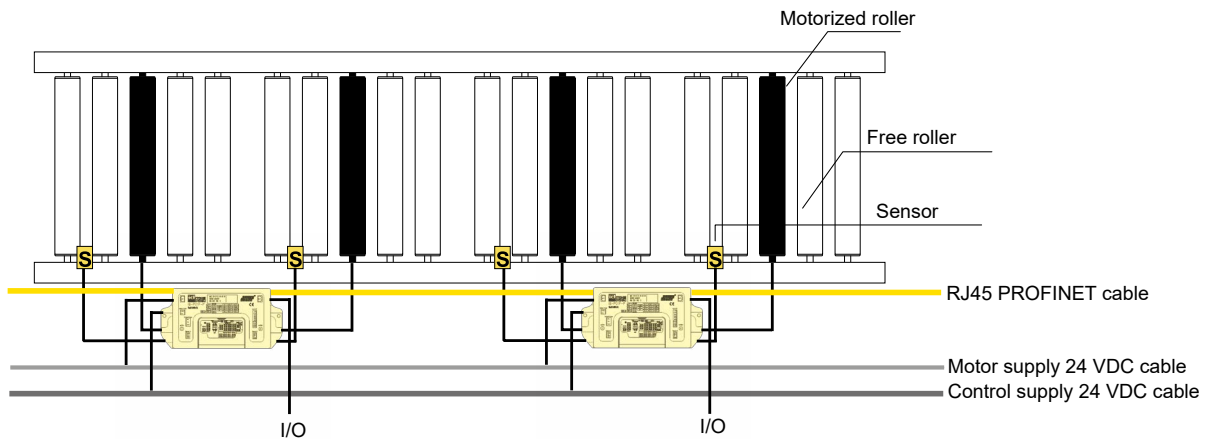
Refer to the HBV-609 technical documentation.

With IB-P01 circuit board

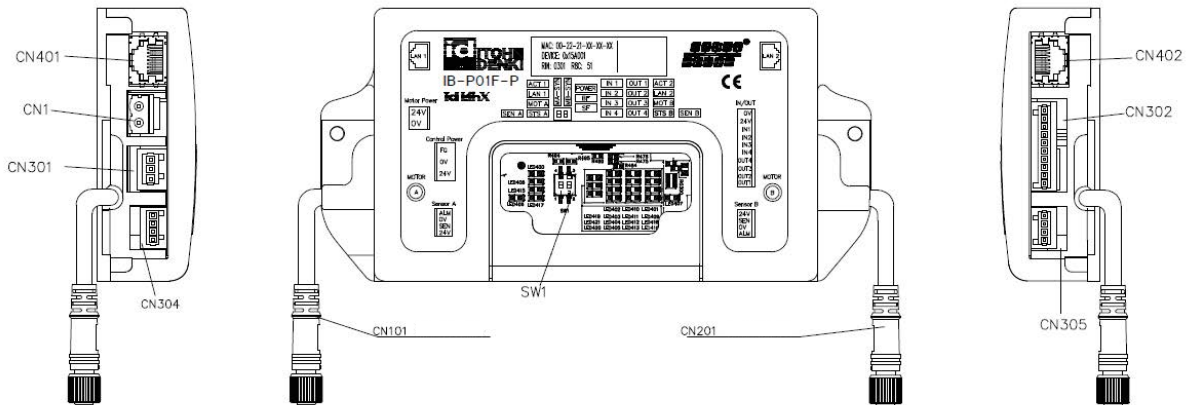
- 2 motorized rollers can be connected to each IB-P01 controller.
- 24VDC power supplies for motor power and control are separate.

• Application example with IB-P01F-P

 Refer to the IB-P01 technical documentation.



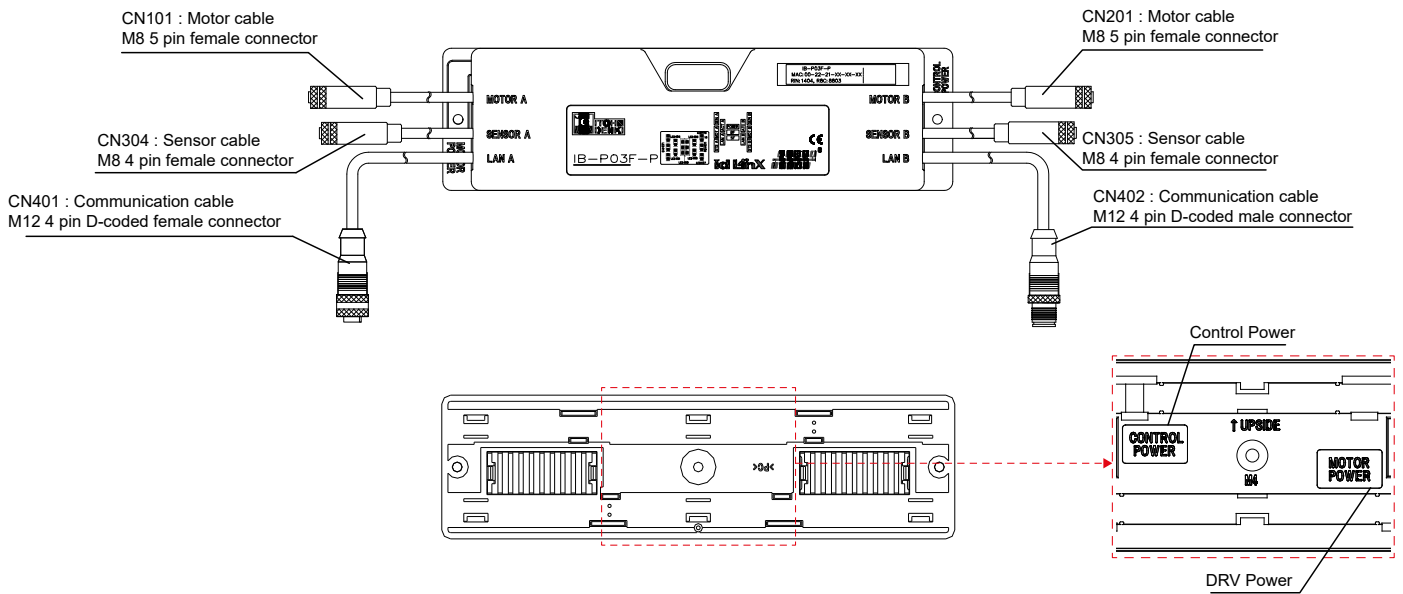
IB-P01F-P controller



Connectors	Connector controller side	Connector cable side
Motor supply	CN1	231-532 / 001-000 (WAGO)
Control supply	CN301	734-163 (WAGO)
Sensors	CN304, CN305	733-364 (WAGO)
Input / Output (I/O)	CN302	733-370 (WAGO)
Ethernet	CN401, CN402	TM11R-5M2-88
Motorized rollers	CN303, CN304	M8 5P (Female)

■ With IB-P03 circuit board

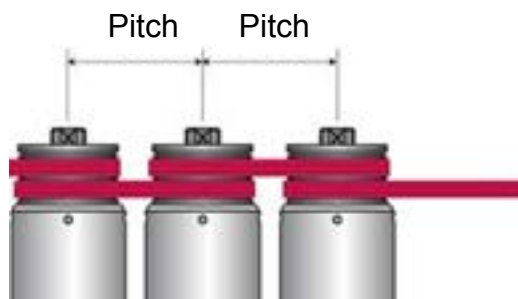
- 2 motorized rollers can be connected to each IB-P03 controller.
- 24VDC power supplies for motor power and control are separate.



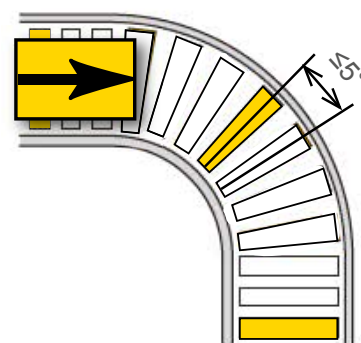
Refer to the IB-P03 technical documentation.

## 11 - ACCESSORIES

### Ribbed belts



Pitch between the rollers (mm) For pulley Ø43mm	Number of teeth	
	2	3
53-56	Ref. 2PJ246-43	Ref. 3PJ246-43
60-63	Ref. 2PJ256-43	Ref. 3PJ256-43
64-65	Ref. 2PJ265-43	Ref. 3PJ265-43
66-67	Ref. 2PJ270-43	Ref. 3PJ270-43
71-72	Ref. 2PJ282-43	Ref. 3PJ282-43
73-75	Ref. 2PJ286-43	Ref. 3PJ286-43
76-78	Ref. 2PJ290-43	Ref. 3PJ290-43
80-84	Ref. 2PJ302-43	Ref. 3PJ302-43
87-91	Ref. 2PJ314-43	Ref. 3PJ314-43
92-95	Ref. 2PJ316-43	Ref. 3PJ316-43
97-101	Ref. 2PJ336-43	Ref. 3PJ336-43
103-107	Ref. 2PJ346-43	Ref. 3PJ346-43
115-118	Ref. 2PJ372-43	Ref. 3PJ372-43
119-121	Ref. 2PJ376-43	Ref. 3PJ376-43
123-128	Ref. 2PJ388-43	Ref. 3PJ388-43
129-134	Ref. 2PJ416-43	Ref. 3PJ416-43
142-147	Ref. 2PJ436-43	Ref. 3PJ436-43
150-156	Ref. 2PJ442-43	Ref. 3PJ442-43
157-161	Ref. 2PJ456-43	Ref. 3PJ456-43
170-176	Ref. 2PJ486-43	Ref. 3PJ486-43
196-202	Ref. 2PJ536-43	Ref. 3PJ536-43
208-215	Ref. 2PJ570-43	Ref. 3PJ570-43



**!** For the curve, it is advisable to:

- do not exceed 5 ° between the rollers
- use a 3 rib belt to ensure stability on the pulley

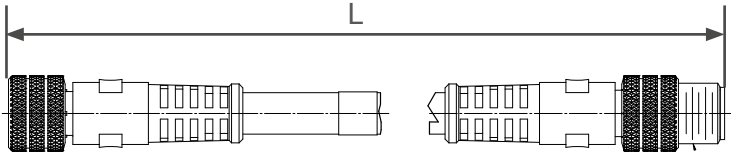
**!** Do not use in the presence of:

- Projection, oil mist
- Projection, fog, water vapor at all times
- Abrasive dust such as sand, etc...



## Extension cables

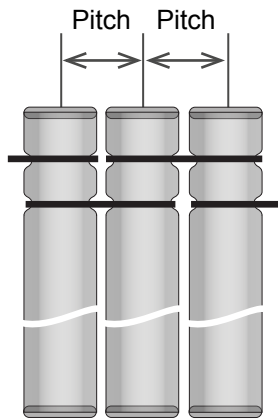
Extension cable with connector M8x5 pins – Male / Female



Length (L)	Extension cable reference
1m	445030B41M010
2m	445030B41M020

- Total length of cable including cable on MDR must not be longer than 3000mm.
- Do not use multiple extension cables per MDR.

## Rounded belts



Pitch between the rollers	Belt reference
75mm	POLYCORD-R5-256
100mm	POLYCORD-R5-302

- Belt diameter : 5mm
- Belt tension : 8%
- Material : Thermoplastic polyurethane (TPU)

For grooves with an inner diameter of 38.4mm.

## 24 VDC power supply



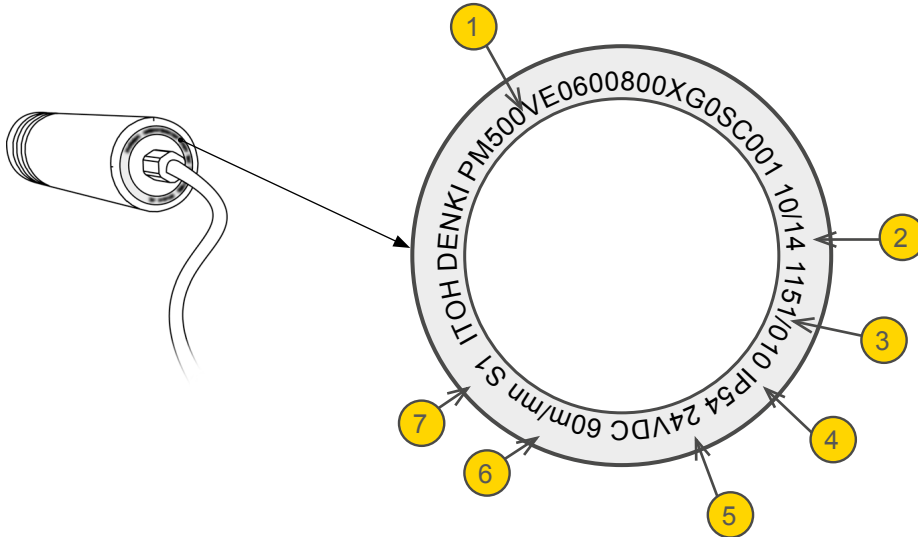
Reference	Input	Output	Power	Start-up boost
CT-10-241	380~480V 3 ph	24V-10A	240W	120%
QT-20-241		24V-20A	480W	150%
QT-40-241		24V-40A	960W	150%

- Very weak inrush current.
- Accepts excess current of 120 to 150% at start-up (according to model)

## 12 - PRODUCT IDENTIFICATION

### Round label

Power Moller® rollers come with a round label affixed to the endcaps at the motor end. The following information are shown on the label :



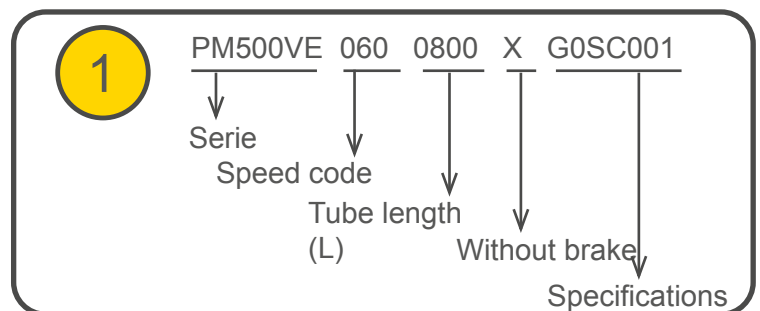
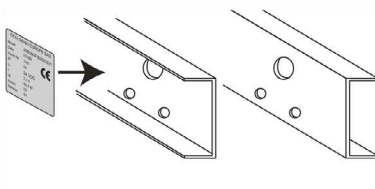
- 1 Product reference number
- 2 Month and year of shipment
- 3 Serial number
- 4 Protection index
- 5 Power supply
- 6 Speed
- 7 Operation

### Square label

Power Moller® rollers come with a square self-adhesive label that must be affixed to the conveyor, to facilitate any future maintenance. The following information are shown on the label :

ITOH DENKI EUROPE SAS	
Model	PM500VE0600800XG0SC001
Date	10/14
Serial Nr	1151/010
IP	54
V	24 VDC
I	2,7 A
W	64,8 W
m/min	60
Service	S1

- 1 Product reference number
- 2 Month and year of shipment
- 3 Serial number
- 4 Protection index
- 5 Power supply
- 6 Nominal current
- 7 Absorbed power
- 8 Speed
- 9 Operation



## ▶ ANNEX 1

### INCORPORATION DECLARATION IN ACCORDANCE WITH THE **EC MACHINERY DIRECTIVE 2006/42/EC, ANNEX II B**

#### The manufacturer :

ITOH DENKI CO., Ltd  
1146-2 Asazuma-Cho, Kasai, Hyogo 679-0105 Japan

#### Distributed in Europe by :

ITOH DENKI Europe SAS  
490 avenue des Jourdiés - PAE les Jourdiés - BP 323  
74807 St Pierre en Faucigny Cedex - France

#### hereby declares that the product series :

**PM500VE** MOTORIZED ROLLER

is an incomplete machine as defined in the EC Machinery Directive and therefore does not fully meet the requirements of this Directive. Commissioning is prohibited until the whole machine/system in which it is incorporated is declared to be in compliance with the EC Machinery Directive.

The health and safety requirements of Annex I have been applied. The special technical documents in accordance with Annex VII have been drawn up (and, if appropriate, submitted to the competent authorities).

#### Person authorized to compile the technical documentation :

ITOH DENKI CO., Ltd  
Toshiyuki TACHIBANA  
1146-2 Asazuma-Cho, Kasai, Hyogo 679-0105 Japan

ITOH DENKI EUROPE SAS  
Masayuki SHIMODA  
490 Avenue des Jourdiés, 74800 St Pierre en Faucigny - France

#### EC Directives applied :

- Machinery Directive 2006/42/EC
- European EMC Directive 2014/30/EC
- European RoHS Directive 2011/65/EU

ITOH DENKI EUROPE SAS, undertakes to forward, following a duly motivated request from the national authorities, the relevant information concerning the quasi-machine.

Saint Pierre en Faucigny, 19 July 2021  
T. AKASHI, General Director





**Technology for tomorrow**



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## **ITOH DENKI EUROPE S.A.S.**

490 Av. des Jourdiés - P.A.E. les Jourdiés

74800 St Pierre en Faucigny - France

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[www.itoh-denki.com](http://www.itoh-denki.com)