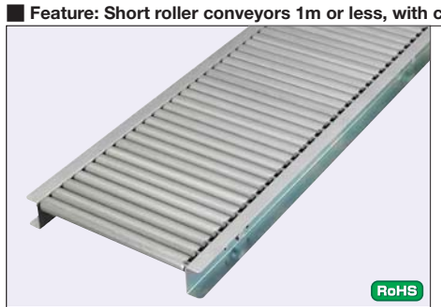
Roller Conveyor Length Configurable Type

-Roller Diameter 28mm Type-

CAD Data

■ Feature: Short roller conveyors 1m or less, with configurable width and length.

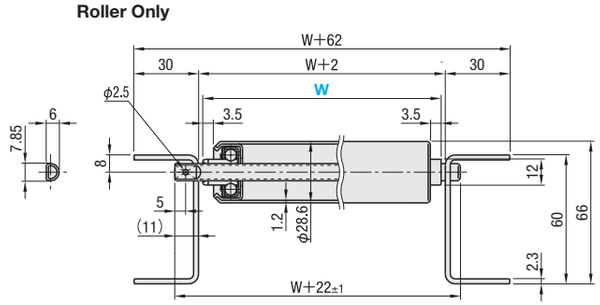


Roller Pitch		(1) Roller (HRO28)		Bearing	(2)Frame	
P=30	P=50	M Material	S Surface Treatment	M Material	M Material	S Surface Treatment
ROCOM	ROCOG	Steel	Trivalent Chromate	Steel	Steel	* ZAM Plating

Roller Pitch		R Pin		Frame Coupling Support		Screw · Nut	
P=30	P=50	M Material	S Surface Treatment	M Material	S Surface Treatment	M Material	S Surface Treatment
ROCOM	ROCOG	Steel	Trivalent Chromate	Steel	Trivalent Chromate	Steel	Trivalent Chromate

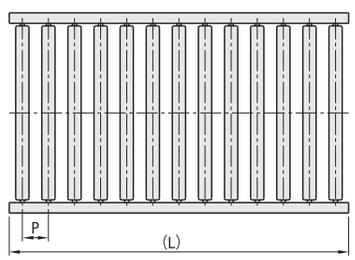
* ZAM Plating (Fused Plating of Zinc Aluminum Magnesium Type)

Roller Only



ROCOM
ROCOG

Roller Conveyor



For Frame Side Views, P.1055

Part Number		(L)		€ Unit Price Qty. 1 ~ 5									
Type	Rollers Quantity	ROCOM P=30	ROCOG P=50	ROCOM(P=30)					ROCOG(P=50)				
				W113	W213	W313	W413	W513	W113	W213	W313	W413	W513
ROCOM ROCOG	7	(230)	(350)										
	8	(260)	(400)										
	9	(290)	(450)										
	10	(300)	(500)										
	11	(330)	(550)										
	12	(360)	(600)										
	13	(390)	(650)										
	14	(430)	(700)										
	15	(460)	(750)										
	16	(490)	(800)										
	17	(530)	(850)										
	18	(560)	(900)										
	19	(590)	(950)										
	20	(600)	-										
	21	(630)	-										
	22	(660)	-										
	23	(690)	-										
	24	(730)	-										
	25	(760)	-										
	26	(790)	-										
	27	(830)	-										
	28	(860)	-										
	29	(890)	-										
	30	(900)	-										
	31	(930)	-										
	32	(960)	-										

For orders larger than indicated quantity, please request a quotation.

Order Example

Part Number	-	W
ROCOM20	-	413
ROCOG16	-	213

Days to Ship: 10 Days

Roller Conveyor Length Configurable Type

-Roller Diameter 38mm Type-

CAD Data

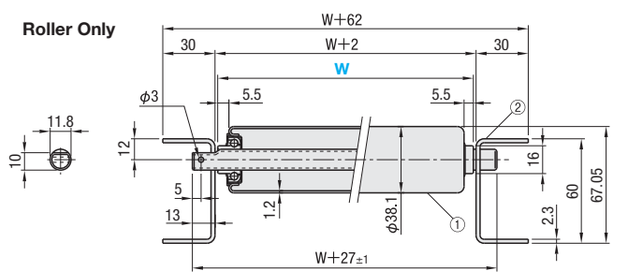
■ Feature: Short roller conveyors 1m or less, with configurable width and length.

Roller Pitch			(1) Roller (HRO38)		Bearing	(2) Frame	
P=50	P=75	P=100	M Material	S Surface Treatment	M Material	M Material	S Surface Treatment
ROCOE	ROCOH	ROCOJ	Steel	Trivalent Chromate	Steel	Steel	* ZAM Plating

Roller Pitch			R Pin		For frame connections Bracket		Screw · Nut	
P=50	P=75	P=100	M Material	S Surface Treatment	M Material	S Surface Treatment	M Material	S Surface Treatment
ROCOE	ROCOH	ROCOJ	Steel	Trivalent Chromate	Steel	Trivalent Chromate	Steel	Trivalent Chromate

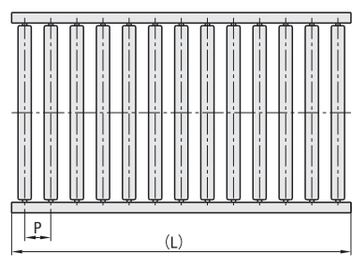
*Holes for Roller Shafts are provided at 50mm pitch on ROCOJ frames.
* ZAM Plating (Fused Plating of Zinc Aluminum Magnesium Type)

Roller Only



ROCOE
ROCOH
ROCOJ

Roller Conveyor



For Frame Side Views, P.1055

Part Number		(L)			€ Unit Price Qty. 1 ~ 5														
Type	Rollers Quantity	ROCOE P=50	ROCOH P=75	ROCOJ P=100	ROCOE(P=50)					ROCOH(P=75)					ROCOJ(P=100)				
					W113	W213	W313	W413	W513	W113	W213	W313	W413	W513	W113	W213	W313	W413	W513
ROCOE ROCOH ROCOJ	4	(200)	(300)	(350)															
	5	(250)	(375)	(450)															
	6	(300)	(475)	(550)															
	7	(350)	(500)	(650)															
	8	(400)	(575)	(750)															
	9	(450)	(675)	(850)															
	10	(500)	(775)	-															
	11	(550)	(800)	-															
	12	(600)	(875)	-															
	13	(650)	(975)	-															
	14	(700)	-	-															
	15	(750)	-	-															
	16	(800)	-	-															
	17	(850)	-	-															
	18	(900)	-	-															
	19	(950)	-	-															

For orders larger than indicated quantity, please request a quotation.

Order Example

Part Number	-	W
ROCOE8	-	313
ROCOJ6	-	113

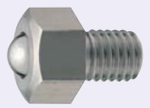
Days to Ship: 10 Days

Ball Roller

-Milled Stainless Steel Type-

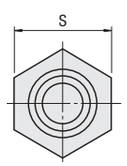
CAD Data

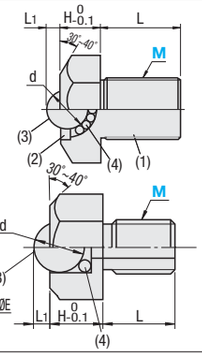
■Hex Head Stud Type



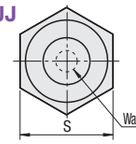
RoHS

BCHL
BCHLJ

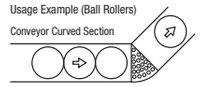




BCHLJJ



Example



Type	Material (1) Body	(2) Spacer	(3) Main Ball	(4) Sub Balls
BCHL	1.4301/ X5CrNi18 -10	1.4301/ X5CrNi18-10	1.4125/X105 CrMo17 HRC55~	1.4125/ X105CrMo17 HRC55~
BCHLJ			Polyacetal Balls	
BCHLJJ	Polyacetal	-		

Part Number Type	M	L	L1	H	d	S	Allowable Load N (kgf) BCHL	BCHLJ	€ Unit Price
BCHL (Stainless Steel Balls)	6	8	1.2	6	4.76	10	14 (1.4)	7 (0.7)	
	8	10	1.5	7	5.56	13	41 (4.2)	27 (2.8)	
	10	12	2.5	10	8.73	17	55 (5.6)	34 (3.5)	
	12	15	3.5	11	10.32	19	62 (6.3)	55 (5.6)	
BCHLJ (Polyacetal Balls)	16	20	5.3	15	15.87	24	343 (35)	69 (7)	
	20	25	6.3	18	19.05	30	412 (42)	82 (8.4)	

Part Number Type	M	L	L1	H	d	S	E	Allowable Load N (kgf)	€ Unit Price
BCHLJJ (Plastic Body)	5	6	1.5	5	4.76	8	1.5	2 (0.2)	
	6	8	1.7	6	5.56	10	2.5	4 (0.4)	
	8	10	2.8	8	8.73	13	3	7 (0.7)	
	10	12	3.5	10	10.32	17	3.5	11 (1.1)	

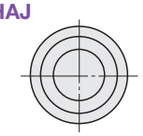
BCHLJJ is not suitable for high-speed transfer.

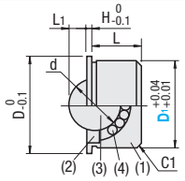
■Press-Fit Type

■Insertion / Adhesive Type

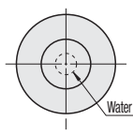
RoHS

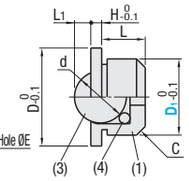
BCHA
BCHAJ





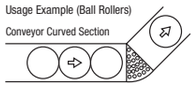
BCHJJ





H7 is recommended for mounting holes.

Example



Adhesive attaching recommended.
(Do not press fit. It may cause ball malfunction.)

Type	Material (1) Body	(2) Spacer	(3) Main Ball	(4) Sub Balls
BCHA	1.4301/ X5CrNi18 -10	1.4301/ X5CrNi18 -10	1.4125/X105CrMo17 HRC55~	1.4125/ X105CrMo17 HRC55~
BCHAJ			Polyacetal Balls	
BCHJJ	Polyacetal	-		

Part Number Type	D1	D	L	H	L1	d	Allowable Load N (kgf) BCHA	BCHAJ	€ Unit Price
BCHA (Stainless Steel Balls)	9	11	5	1	1.2	4.76	14 (1.4)	7 (0.7)	
	11	13	6		1.5	5.56	41 (4.2)	27 (2.8)	
	15	17	9		2.5	8.73	55 (5.6)	34 (3.5)	
BCHAJ (Polyacetal Balls)	18	20	10		3.5	10.32	62 (6.3)	55 (5.6)	
	24	26	14	1.5	5.3	15.87	343 (35)	69 (7)	
	30	32	17	2	6.3	19.05	412 (42)	82 (8.4)	

Part Number Type	D1	D	L	H	L1	d	E	C	Allowable Load N (kgf)	€ Unit Price
BCHJJ (Plastic Body)	7	9	4	1	1.5	4.76	1.5	0.8	2 (0.2)	
	9	11	5			5.56	2.5	1	4 (0.4)	
	13	15	7		2.8	8.73	3.0		7 (0.7)	
	15	17	8		3.5	10.32	3.5		11 (1.1)	
	20	22	11.5	1.5	5.2	15.87	5.3		14 (1.4)	
	24	26	15		6.6	19.05	6.4		21 (2.1)	

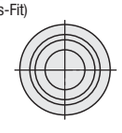
BCHJJ is not suitable for high-speed transfer.

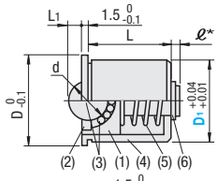
■Plunger Type (Press-Fit)

(Male Thread)

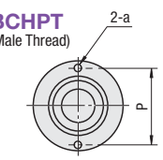
RoHS

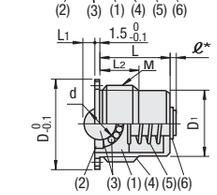
BCHP
(Press-Fit)





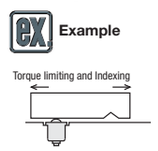
BCHPT
(Male Thread)





* Allows objects to slide within the ball stroke.
H7 is recommended for mounting holes.

Example



* Allows objects to slide within the ball stroke.
For tightening, wrenches for ball rollers are required.
Refer to Alteration BR on the next page.

Type	Material (1) Body	(2) Spacer	(3) Ball	(4) Casing	(5) Springs	(6)Retaining Ring
BCHP BCHPT	1.4301/ X5CrNi18 -10	1.4301/ X5CrNi18 -10	1.4125/ X105CrMo17 HRC55~	1.4301/ X5CrNi18 -10	1.4568/ X7CrNiAl17 -7	1.4301/ X5CrNi18 -10

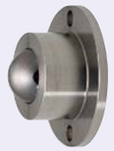
Part Number Type	D1	D	L	H	ℓ	Load (N) min.	max.	€ Unit Price
BCHP	14	16	14	1.5	1.5	23	30	
	18	20	17	2.5	2	24	38	
	22	24	21.5	3.5		24	55	

Part Number Type	Nominal	M (Fine Thread)	D	D1	L	L1	L2	a	d	P	ℓ	Load (N) min.	max.	€ Unit Price
BCHPT	16	16x1.5	19	13.5	14	1.5	9	2	5.56	15.4	1.5	23	30	
	20	20x1.5	24	16.5	17	2.5	10	2	8.73	18.5	2	24	38	
	24	24x1.5	28	20.5	21.5	3.5	12	2.5	10.32	24		24	55	

kgf=Nx0.101972

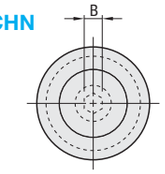
■Lock Nut Type

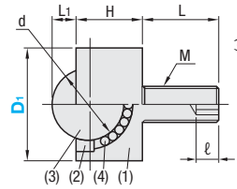
■Flange Mounting Type

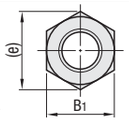


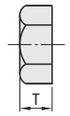
RoHS

BCHN





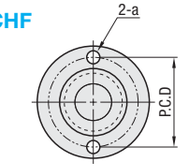


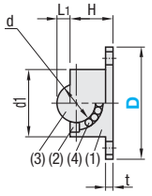


■Nut Dimensions

M	B1	(e)	T
M6	10	11.5	5
M8	13	15	6.5
M10	17	19.6	8

BCHF





Type	Material (1) Body	(2) Spacer	(3) Main Ball	(4) Sub Balls
BCHN BCHF	1.4301/X5CrNi18-10		1.4125/X105CrMo17 HRC55~	

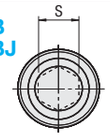
Part Number Type	D1	L1	H	M	L	d	B	(ℓ)	Allowable Load N (kgf)	€ Unit Price
BCHN	12	1.5	6.5	6	15	5.56	3	3.5	41 (4.2)	
	16	2.5	9.5			8.73			55 (5.6)	
	19	3.5	11.5	8	20	10.32	4	5	62 (6.3)	
	25	5.3	14.7			15.87			343 (35)	
	31	6.3	18.7	10	25	19.05	5	6	412 (42)	

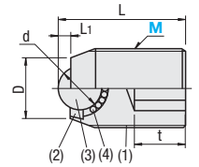
Part Number Type	D	D1	L1	H	t	P.C.D	a	d	Allowable Load N (kgf)	€ Unit Price
BCHF	27	15	2.5	9.5	2	21	3.5	8.73	55 (5.6)	
	30	18	3.5	11.5	2	24	3.5	10.32	62 (6.3)	
	39	24	5.3	14.7	3	31.5	4.5	15.87	343 (35)	
	48	30	6.3	18.7	4	39	5.5	19.05	412 (42)	

■Set Screw Type

RoHS

BCSB
BCSBJ





Size M8 main balls are swaged in place without a spacer (2).

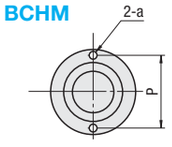
Type	Material (1) Body	(2) Spacer	(3) Main Ball	(4) Sub Balls
BCSB	1.4567/ X3CrNiCu 18-9-4	1.4301/ X5CrNi18 -10	1.4125/ X105CrMo17 HRC55~	1.4125/ X105CrMo17 HRC55~
BCSBJ			Polyacetal Balls	

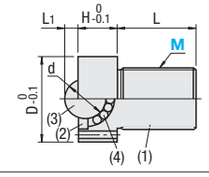
Part Number Type	M	L	L1	D	d	S	t	Allowable Load N (kgf) BCSB	BCSBJ	€ Unit Price
BCSB (Stainless Steel Balls) BCSBJ (Polyacetal Balls)	8	14	1.3	5	4.76	4	5	5 (0.5)	1 (0.1)	
	10	16	1.2	7	4.76	5	6	14 (1.4)	7 (0.7)	
	12	20	1.5	8	5.56	6	8	41 (4.2)	27 (2.8)	
	16	25	2.5	12	8.73	8	10	55 (5.6)	34 (3.5)	
	20	30	3.5	15	10.32	10	12	62 (6.3)	55 (5.6)	

■Round Head Stud Type

RoHS

BCHM





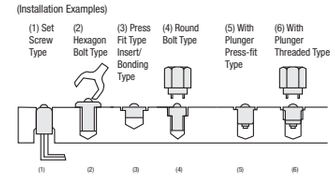
For tightening, wrenches for ball rollers are required.
(Refer to Alteration BR)

Type	Material (1) Body	(2) Spacer	(3) Main Ball	(4) Sub Balls
BCHM	1.4301/ X5CrNi18 -10	1.4301/ X5CrNi18 -10	1.4125/ X105CrMo17 HRC55~	1.4125/ X105CrMo17 HRC55~

Part Number Type	M	L	L1	H	D	d	a	P	Allowable Load N (kgf)	€ Unit Price
BCHM (Stainless Steel Balls)	10	12	2.5	10	18.5	8.73	2	15.4	55 (5.6)	
	12	15	3.5	11	22	10.32		18.5	62 (6.3)	
	16	20	5.3	15	27	15.87	2.5	24	343 (35)	
	20	25	6.3	18	33	19.05		29.6	412 (42)	

Example

(Installation Examples)



Order Example

Part Number
BCHP18

Alterations

Part Number - (BR)
BCHPT20 - BR

8 Days

Days to Ship

6 Days

2 Days

P. 87

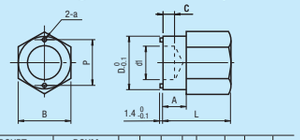
Price

■Volume Discount (Round down to one Cent.) P. 87

Quantity	1~49	50~74	75~99	100~199
Rate	€ Unit Price	5%	10%	18%

For orders larger than indicated quantity, please request a quotation.

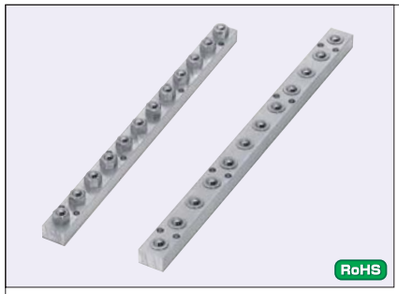
Alteration	Code	Spec.	Price Adder
Special Wrench Included	BR	Includes a special wrench. For BCHPT and BCHM only.	5,00



Nominal	BCHPT Applicable (Nom.)	BCHM Applicable (M)	L	A	B	C	D	D1	P	a
10	16	For M10	25	8	19	3	18.5	10	15.4	2
12	20	For M12	30	10	24	4	22	12	18.5	
16	24	For M16	35	12	27	6	27	17	24	2.5
20	-	For M20	40	14	30	7	33	20	29.6	

Ball Roller Units

CAD Data



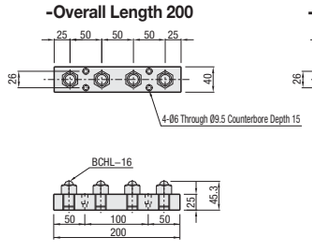
Type	Ball Roller		Material				
			Ball Roller				Frame
	Shape	Part Number (Please see P.1059)	Bearing	Spacer	Main Ball	Sub Balls	
BUHL	Hex Head Stud Type	BCHL16	1.4301/ X5CrNi18-10	1.4301/ X5CrNi18-10	1.4125/ X105CrMo17 HRC55~	1.4125/ X105CrMo17 HRC55~	EN AW-6063/ AlMg0,7Si (Clear Anodized)
BUHA	Press-Fit Type	BCHA24					

For details of the Ball Rollers, P.1059

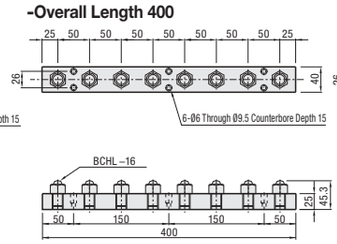
Hex Head Stud Type

BUHL
(Stainless Steel Balls)

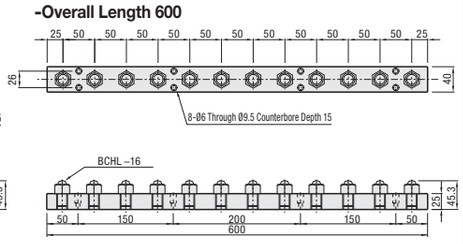
-Overall Length 200



-Overall Length 400



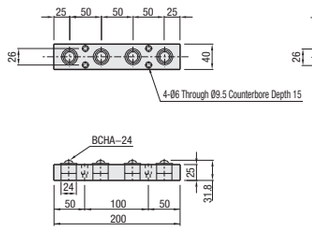
-Overall Length 600



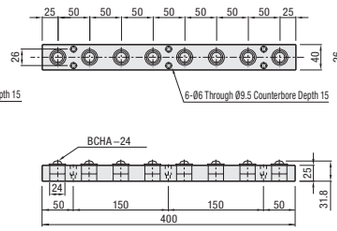
Press-Fit Type

BUHA
(Stainless Steel Balls)

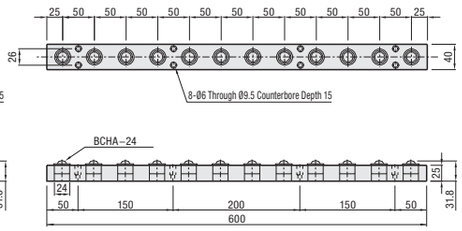
-Overall Length 200



-Overall Length 400



-Overall Length 600



Part Number		No. of Rollers	€ Unit Price	
Type	Full Length		BUHL	BUHA
Hex Head Stud Type **BUHL**(Stainless Steel Balls)	200	4		
	400	8		
Press-Fit Type **BUHA**(Stainless Steel Balls)	600	12		

Allowable Load per Ball Roller

Type	Allowable Load N (kgf)
BUHL BUHA	343 (35)

Order Example — Part Number: BUHL200

Days to Ship — 6 Days P.87

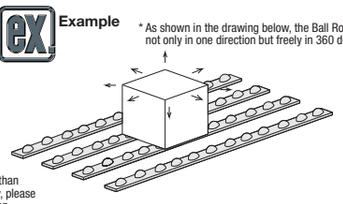
Price

Volume Discount (Round down to one Cent.) P.87

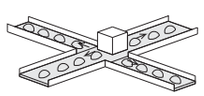
Quantity	1~9	10~19	20~29
Rate	€ Unit Price	5%	10%

For orders larger than indicated quantity, please request a quotation.

Example



* As shown in the drawing below, the Ball Roller Units transfer carried objects not only in one direction but freely in 360 degree directions.



Ball Roller

-Milled Steel Type / Steel Press Formed Type-

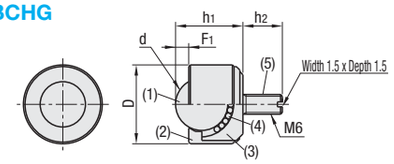
Reduced Delivery Time

Price Reduction Up to 65%

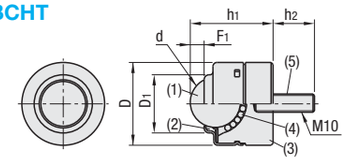
CAD Data

Milled Male Thread Stud Type

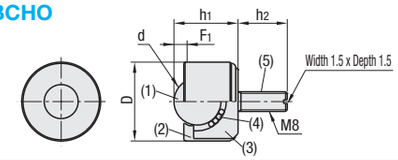
BCHG



BCHT



BCHO



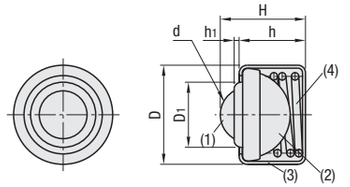
Type	Material				
	(1) Main Ball	(2) Spacer	(3) Ball Roller	(4) Sub Balls	(5) Male Thread Section
BCHG	1.3505/ 100Cr6	1.0038/ S235JR equivalent	1.7242/ 16CrMo4	1.3505/ 100Cr6	1.7242/ 16CrMo4
BCHO					
BCHT		JIS SPPC equivalent			1.7220/34CrMo4

Part Number		D	D1	d	h1	h2	F1	Allowable Load N (kgf)	€ Unit Price
Type	No.								
BCHG	24	24	-	15.875	20.5	12	4	196.1 (20)	
BCHO	32	32	-	19.05	26	20	4	490.3 (50)	
BCHT	42	42	31.3	25.40	42	21	7.4	784.5 (80)	

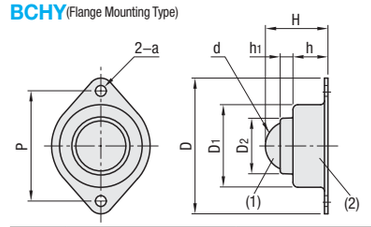
Press Fit Type

Press Formed Flange Mounting Type

BCHW(Press-Fit)



BCHY(Flange Mounting Type)

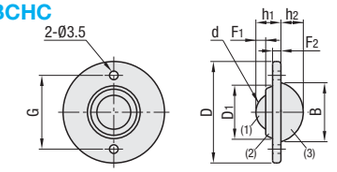


Type	Material			
	(1) Main Ball	(2) Body	(3) Frame	(4) Spring
BCHW	1.3505/100Cr6	1.0330/ DC01	JIS SPCE	JIS SPW-A
BCHY	JIS SWRM12		-	-

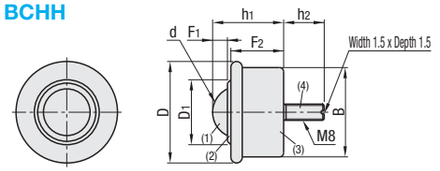
Part Number		D	D1	D2	d	H	h	h1	a	P	Spring Ball Movement	Allowable Load N (kgf)	€ Unit Price
Type	No.												
BCHW	20	20	13	-	11.113	17.2	13.4	2.8	-	-	1.8	49 (5Kg)	
	26	25.8	17.5	-	15.875	23.6	17.5	3.7	-	-	2	78 (8Kg)	
BCHY	69	69	42	29.5	25.40	31	17	7.5	5.5	56	-	294 (30Kg)	

Press Formed - Screw Mounted · Male Thread Stud Type

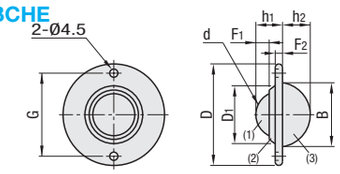
BCHC



BCHH



BCHE



Type	Material			
	(1) Main Ball	(2) Spacer	(3) Ball Roller	(4) Male Thread Section
BCHC	1.3505/100Cr6	1.0330/ DC01	1.4301/ X5CrNi18-10	-
BCHE				
BCHH			1.0330/DC01 equivalent	1.0038/S235JR equivalent

Part Number		D	D1	d	G	B	h1	h2	F1	F2	Allowable Load N (kgf)	€ Unit Price
Type	No.											
BCHC	40	41.3	22	15.875	30	24	10.2	9.1	4	3.4	78.5 (8)	
BCHE	55	55.5	32.5	25.40	45.5	36	14.6	15.2	7.3	4	294.2 (30)	
BCHH	50	50	32	25.40	-	44	35	20	7.3	26	294.2 (30)	

Order Example — Part Number: BCHW 20

Days to Ship — 6 Days P.87

Price

Volume Discount (Round down to one Cent.) P.87

Quantity	1~9	10~50
Rate	€ Unit Price	5%

For orders larger than indicated quantity, please request a quotation.

Abrasion Resisting Polymer Guide Rails

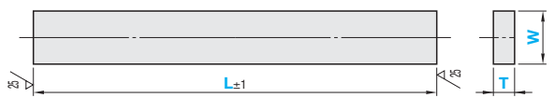
Reduced Delivery Time

Price Reduction 3%

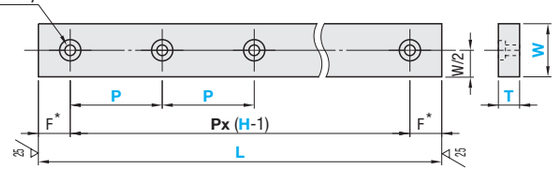
CAD Data

RoHS

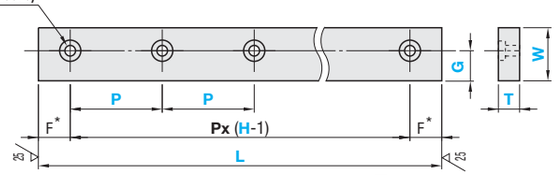
Without Holes
NLBA



With Counterbored Holes
NLBB *Z,ZN(Counterbore)



Counterbore Type / Hole Position Configurable Type
NLBBF *Z,ZN(Counterbore)



*F= $\frac{L-P(H-1)}{2}$

Thermal Expansion Factor: 1.7x10-4/°C

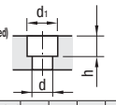
M Material: Ultra High-Molecular-Weight Polyethylene

Without Holes

Part Number Type	T	W Selection	L 1mm Increment
NLBA	3	10 15 20 25	100~1800
	5	15 20 25 30 35	
	8	20 25 30 35 40	
	10	20 25 30 35 40	
	15	25 30 35 40	
	20	30 35 40	

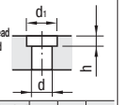
*** Details of Hole Machining**

Z (Counterbored)



Screw Nominal Diameter	3	4	5	6	8
d	3.5	4.5	5.5	6.5	9
d1	6.5	8	9.5	11	14
h	3.5	4.5	5.5	6.5	9

ZN (Ultra Low Head Counterbored Hole)



Screw Nominal Diameter	4	5	6
d	4.5	5.5	6.5
d1	9	10	11
h	2	2.5	2.5

ZN is applicable to extra low hexagon head cap screws CBSS and CBSTS . P2-190

With Counterbored Holes

Part Number Type	T	W Selection	L 1mm Increment	H (No. of Holes)	P 1mm Increment	Screw Hole Nominal Diameter Configurable Z	ZN
NLBB	3	10 15 20 25	100~1200	2~10	P≥20	-	4
	5	15 20 25 30 35				-	4 5 6
	8	20 25 30 35 40				3 4 5	4 5 6
	10	20 25 30 35 40				4 5 6	5 6
	15	25 30 35 40				4 5 6 8	-
	20	30 35 40				4 5 6 8	-

(L-P(H-1))/2≥d1/2+2

Counterbore Type / Hole Position Configurable Type

Part Number Type	T	W Selection	L 1mm Increment	H (No. of Holes)	P 1mm Increment	G 1mm Increment	Screw Hole Nominal Diameter Configurable Z	ZN
NLBBF	3	10 15 20 25	100~1200	2~10	P≥20	7~20 d1/2+1≤G≤W/2	-	4
	5	15 20 25 30 35					-	4 5 6
	8	20 25 30 35 40					3 4 5	4 5 6
	10	20 25 30 35 40					4 5 6	5 6
	15	25 30 35 40					4 5 6 8	-
	20	30 35 40					4 5 6 8	-

(L-P(H-1))/2≥d1/2+2

Order Example

Part Number	W	L	H	P	G	Screw Nominal Diameter
NLBA5	25	1200				
NLBB8	20	500	H4	P115		Z5
NLBBF10	25	1100	H4	P115	G12	Z5

Days to Ship

■Without Holes
8 Days — Express A 2,00 EUR/piece P.88
A Express Charge of 5,40 EUR for 3 or more identical pieces.

■With Holes
8 Days

Price

■Volume Discount (Round down to one Cent.) P.87

Quantity	1~9	10~14	15~19	20~49
Rate	€ Unit Price	5%	10%	18%

■Body price
For orders larger than indicated quantity, please request a quotation.

For Hole Machined Type, hole machining charges must be added to the body price.
(Price Calculation Example) NLBB8-20-500-H4-P115-Z5
(Body Price) + (Hole Machining Charge) = (Product Price)
34,70 + 8,00 = 42,70 EUR

Part Number Type	T	W	€ Body Price NLBA / NLBB / NLBBF L100~200	L201~400	L401~600	L601~900	L901~1200	NLBA L1201~1500	L1501~1800
NLBA NLBB NLBBF	3	10							
		15							
		20							
		25							
	5	15							
		20							
		25							
		30							
		35							
	8	20							
		25							
		30							
		35							
		40							
	10	20							
		25							
		30							
		35							
		40							
	15	25							
		30							
		35							
		40							
	20	30							
		35							
		40							

■Hole Machining Charge (Body Price+)

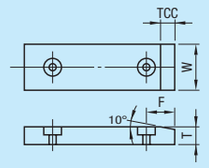
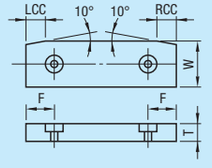
Hole Machining No. of Holes (H)	NLBB NLBBF (Counterbored)
2	
3	
4	
5	
6	
7	
8	
9	
10	

Volume Discount is not applicable to hole machining charges.

Alterations

Part Number - W - L - H - P - G - Screw Nominal Diameter - (TCC / LCC / RCC)
NLBB8 - 20 - 500 - H4 - P115 - Z5 - TCC5
NLBBF15 - 30 - 1000 - H4 - P110 - G7 - Z5 - TCC5

10 Days

Alterations	Corner Cut (End Upper Face)	Corner Cut (Ends Side Faces)	
Spec.	 Selection TCC5 TCC10 TCC<F-d1/2-2	 Selection LCC5 LCC10 RCC5 RCC10 LCC(RCC)<F-d1/2	
Code	TCC	LCC	RCC
Price Adder	2,00	2,00	2,00

■Features of Ultra High-Molecular-Weight Polyethylene
(1) Abrasion Resistance Approx. 6 times stronger than that of fluororesin.
Approx. 5 times stronger than that of nylon resin.
Approx. 6 times stronger than that of polyurethane.
(2) Self-lubricating tribological property is the same as that of fluororesin.
(3) Passed standard test No. 20 of Health and Welfare Ministry.

■Characteristic Values (Reference Values)

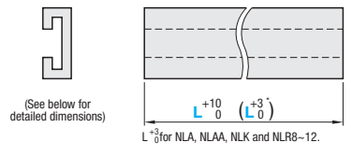
Item	Unit	Ultra High-Molecular-Weight Polyethylene	Nylon 6	Fluorine Resin
Specific Gravity	-	0.94	1.08	2.2
Tensile Strength	MPa	44	64	25
Elongation	%	450	210	300
Hardness	Rockwell R Scale	40	95	32
Impact Strength	Izot Notch kJ/m	>137	13	16
Thermal Expansion Coefficient	10^{-4}/°C	1.7	0.8	1.0
Heat Resistance Temperature	°C	80	80~120	260~278
Moisture Absorption Ratio	%	<0.01	1.5	<0.01
Dielectric Constant	-	2.3	4.0	2.1
Breakdown Voltage	kV/mm	50	20	20
Strong Acid Resistance	-	◎	X	◎
Alkali Resistance	-	◎	○	◎
Organic Solvent Resistance	-	◎	○	◎

CAD Data

Thermal Expansion Factor: 1.7x10^{-4}/°C

Standard Type
NLA
NLAA
NLK
NL8 · 10 · 12
NLL3 · 5
NLV3 · 5 · 6 · 10

Antistatic Type
NLEL3
NLEV3

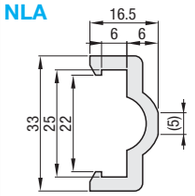


L +3 0 for NLA, NLAA, NLK and NLR8~12.

Antistatic properties may be reduced when wet.

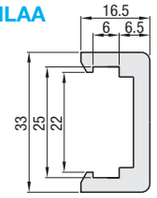
M Material: Ultra High-Molecular-Weight Polyethylene

NLA



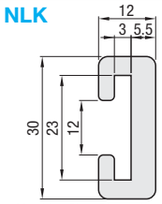
(Matching Plate Dimension 25x6)

NLAA



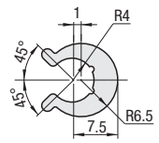
(Matching Plate Dimension 25x6)

NLK



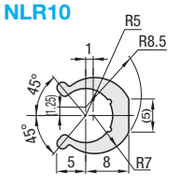
(Matching Plate Dimension 22x3)

NLR8



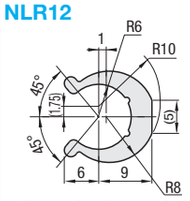
(Matching Pole Dimension Ø8)

NLR10



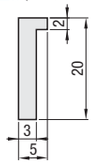
(Matching Pole Dimension Ø10)

NLR12

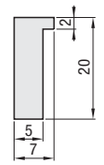


(Matching Pole Dimension Ø12)

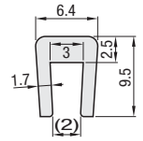
NLL3
NLEL3 (Antistatic Type)



NLL5

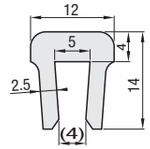


NLV3
NLEV3 (Antistatic Type)



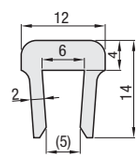
(Matching Plate Thickness 3)

NLV5



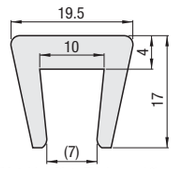
(Matching Plate Thickness 5)

NLV6



(Matching Plate Thickness 6)

NLV10

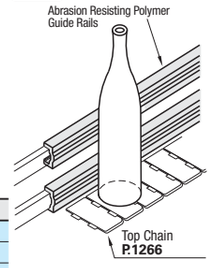


(Matching Plate Thickness 10)

Caution: NLL_, NLE_3, NLV_ are delivered in rolls and must be stretched before use.

Polymer Guide Rails should be installed by directly press fitting or by screws. When screws are to be used for mounting, take in consideration for the material's large thermal expansion coefficient. The supporting metal structure should fill end-to end.

Example



Type	L 1mm Increment	€ Unit Price/m Qty.1-20
NLA	50~1800	
NLAA		
NLK		
NLR8		
NLR10		
NLR12		
NLL3	50~9900	
NLL5		
NLV3		
NLV5		
NLV6		
NLV10		
NLEL3		
NLEV3		

For orders larger than indicated quantity, please request a quotation.

Characteristic Values

Item		Increment	Antistatic Type
Specific Gravity		-	0.94
Tensile Strength		MPa	30.3
Breaking Elongation		%	526.3
Compression Strength	5% deformed	MPa	18.2
	10% deformed	MPa	23.5
Compressive Elasticity Modulus		MPa	714.9
Bending Strength		MPa	21.0
Flexural Modulus		MPa	729.3
Izot Impact Strength	(Notched)	J/m	Does not break
Rockwell Hardness		R Scale	46.8
Deflection Temperature Under Load	4.6kgf/cm^2	°C	119.4
	18.6kgf/cm^2	°C	47.9
Linear Expansion Coefficient	-30 ~ 30	×10^{-5}/°C	14.2
Specific Volume Resistivity	500V	Ωcm	4.44x10^9
Heat Resistance Temperature		°C	80
Strong Acid Resistance		-	00
Alkali Resistance		-	00
Organic Solvent Resistance		-	00

Not guaranteed values. Refer to P.1064 for Standard Type.

Order Example

Part Number	-	L
NLA	-	800

Price

€ Unit Price/m x Specified Full Length = Unit Sales Price
Ex: NLA-800
34,50 x 0.8m = 27,60 EUR (Round down to ten Cent)

Days to Ship

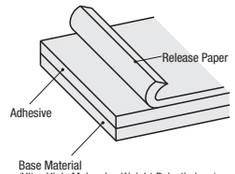
8 Days | Express A | 2,00 EUR/piece | P.88

A Express Charge of 5,40 EUR for 3 or more identical pieces.

CAD Data

Slide Tapes

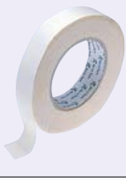
NLTP



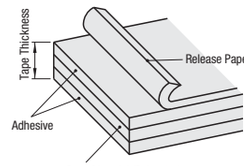
Heat Resistance Temperature -30 ~ 80°C Color: Milky White

Part Number	Base Material Thickness	Tape Width	Tape Length	€ Unit Price Qty. 1 ~ 4	Volume Discount Qty. 5 ~ 19
NLTP 1320	0.13	20	40m		
NLTP 1330		30			
NLTP 1340		40			
NLTP 1350		50			
NLTP 5020	0.5	20	20m		
NLTP 5030		30			
NLTP 5040		40			
NLTP 5050		50			

Strong Double-Sided Tapes



RMT



Heat Resistance Temperature -40 ~ 70°C

Part Number	Tape Thickness	Tape Width	Tape Length	€ Unit Price Qty. 1 ~ 4	Volume Discount Qty. 5 ~ 19
RMT3310	0.33	10	20m		
RMT3315		15			
RMT3320		20			
RMT3325		25			
RMT3330		30			
RMT3335		35			
RMT3340		40			

For orders larger than indicated quantity, please request a quotation.

Order Example

Part Number
NLTP1320

Days to Ship

8 Days

Express A | 2,00 EUR/piece | P.88

A Express Charge of 5,40 EUR for 3 or more identical pieces.

Cautions on the usage of tapes
(1) Remove contamination including dust, grease and water.
(2) Some materials have low adherence properties..
(3) NLTP attached 1 or 2 days prior to assembly will have higher bonding strength.
(4) RMT bonds well to ultra high-molecular-weight polyethylene (UHMW).

Dynamic Friction Coefficient (Reference Value)

	Dry	Water Lubricated
Ultra High-Molecular-Weight Polyethylene	0.07~0.22	0.05~0.10
Nylon 6	0.15~0.40	0.14~0.19
Nylon 66	0.15~0.40	0.14~0.19
Fluorine Resin	0.04~0.25	0.04~0.08
Polyacetal	0.15~0.35	0.10~0.20

Referential Adhesive Strength (NLTP) (Unit: N/20mm Width)

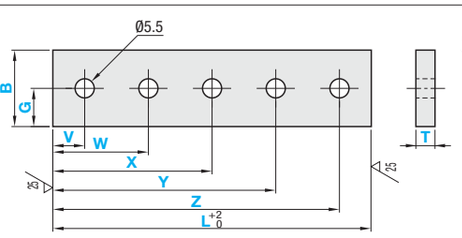
Taped Subject	Base Material Thickness 0.13	Base Material Thickness 0.5
1.4301	9.8	8.8
Polyvinyl Chloride Resin	18.6	18.6

(Test Method) 180°Peeling Test Temperature 23°C Peeling Speed 300mm/min

Referential Adhesive Strength (RMT)

Taped Subject	
1.4301	21.6N

Type	M Material	S Surface Treatment
SGL	1.0038/ S235JR	(Black)
SGLM		Electroless Nickel Plating



Part Number Type	H (No. of Holes)	B Selection	T Selection	L 1mm Increment	G · V · W · X · Y · Z 0.5mm Increment
SGL SGLM	N(No Hole) 2H 3H 4H 5H	22 25 32 38	3 5 6 10	50~1000	5~995

When selecting N, hole machining is not available.

N (No Hole Machining) Type Body Price (The unit price of SGLM is base plate (No Hole Machining) unit price added price below.

Type	B	L 1mm Increment	€ Body Price T 3	T 5	T 6	T 10	€ Body Price SGLM Added Price (SGL+)
SGL	22	50~200					
		201~400					
		401~600					
		601~800					
		801~1000					
	25	50~200					
		201~400					
		401~600					
		601~800					
		801~1000					
	32	50~200					
		201~400					
		401~600					
		601~800					
		801~1000					
	38	50~200					
		201~400					
		401~600					
		601~800					
		801~1000					

Order Example

Part Number												
Type	H (No. of Holes)	-	B	-	T	-	L	-	G	-	V	-	W	-	X	-	Y	-	Z
SGL	N	-	22	-	3	-	300												
SGLM	5H	-	25	-	5	-	800	-	G14	-	V15	-	W265	-	X480	-	Y600	-	Z785

Days to Ship

10 Days

Price

Volume Discount (Round down to one Cent.) P.87

Quantity	1~19	20~34	35~49	50~99
Rate	€ Unit Price	5%	10%	18%

For orders larger than indicated quantity, please request a quotation.

Hole Machining Charge

Hole Machining Type	Hole Machining Charge
2H	
3H	
4H	
5H	

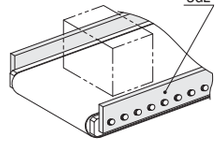
The price of the Hole Machining Type is the unit price plus the hole machining charge.

(Ex.) Part Number - B - T - L - G - V - W
SGL2H - 25 - 5 - 50 - G13 - V15 - W35

(€ Unit Price) 7,00 EUR + (Hole Machining Charge) 3,00 EUR = Total Price 10,00 EUR

Qty. discount rate is not applicable to hole machining charge.

Example

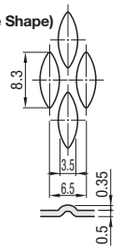


Stainless Steel Sliding Plates / Product Chute Thin Plate

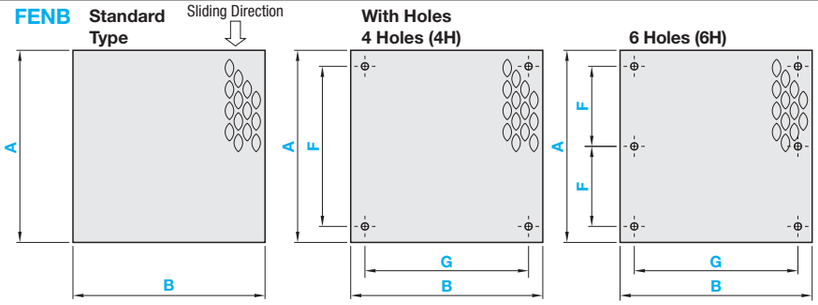
■Stainless Steel Sliding Plates

RoHS

(Surface Shape)



FENB Standard Type



Ⓥ4-hole: A-(F+N)≥10, B-(G+N)≥10
Ⓥ6-hole: A-(2F+N)≥10, B-(G+N)≥10

Hole Machining Details

N (Through Hole)

Screw Nominal Diameter	3	4	5	6	8	10
d	4	5	6	7	9	11

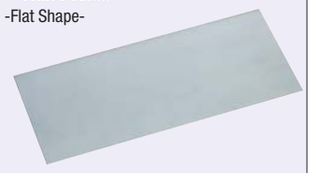
■Features
- Products slide smoothly even when sufficient shoot angle cannot be provided.
- Prevents oil absorption.
- Ⓥ Sliding surface is the convex side.

Ⓜ Material: 1.4301/X5CrNi18-10

■Product Chute Thin Plates

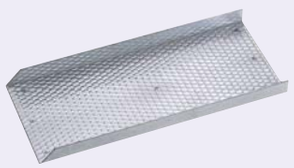
RoHS

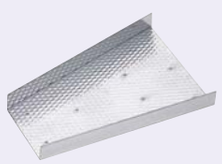
-Flat Shape-



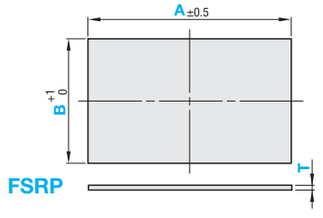
-Folded-

-Sliding Plate Welded and Folded-

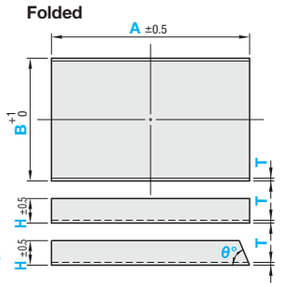




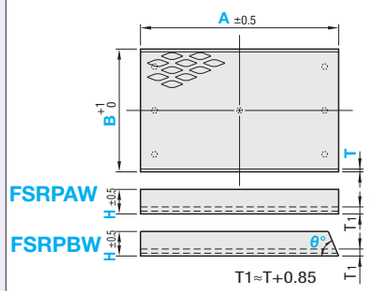
Flat Shape



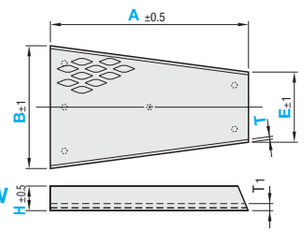
Folded



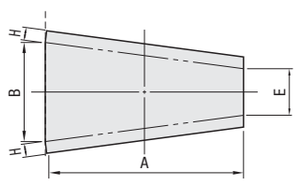
Sliding Plate Welded and Folded



Sliding Plate Welded and Folded (Funnel Shape)



Funnel Developed View



Ⓥ Protective film applied on polished surface before shipping
Ⓥ Welded Sliding Plate Type has a spot-welded stainless steel sliding plate (FENB) on the upper side of the bottom surface. Spot-welded locations and quantity vary depending on the unit size.

Ⓜ Material: 1.4301/X5CrNi18-10 (One Side Polished)

■Stainless Steel Sliding Plates ■Standard Type

Part Number	1mm Increment A	1mm Increment B	€ Unit Price
FENB	50~200	50~249	
		250~399	
		400~599	
		600~800	
	201~400	50~249	
		250~399	
		400~599	
		600~800	
	401~600	50~249	
		250~399	
		400~599	
		600~800	
	601~800	50~249	
		250~399	
		400~599	
		600~800	

■With Holes

Part Number Type	Part Number Nominal	1mm Increment A	1mm Increment B	1mm Increment F	1mm Increment G	Nominal Screw Diameter N (Through Hole)
FENB	4H	50~800	50~800	40~790	40~790	3
	6H					4
						5
						6
						8
						10

Ⓥ For Hole Machined Type, hole machining charges must be added to Standard Type unit price.

(Ex.) Part Number - A - B - F - G - Screw Nominal Dia.
FENB4H - 600 - 400 - F580 - G380 - N8

(Standard Type € Unit Price) + (Hole Machining Charge) = With Holes
+ 6,00 = 110,20 EUR

Order Example

Part Number	-	A	-	B	-	F	-	G	-	N
FENB	-	100	-	300						
FENB4H	-	600	-	400	-	F580	-	G380	-	N8

Days to Ship 8 Days

Price (euros)

■Volume Discount (Ⓥ Round down to one Cent.) P.87

Quantity	1~9	10~29
Rate	€ Unit Price	5%

Ⓥ For orders larger than indicated quantity, please request a quotation.

■Hole Machining Charge

Type	4H	6H
Price	6,00 EUR	9,00 EUR

■Product Chute Thin Plates

Part Number Type	T	1mm Increment A	B	E	H	θ°
Flat Shape FSRP	0.8	50~100	50~500	E<B	10~80 Ⓥ H≤B/2 Ⓥ H≤E/2	30
		101~200				45
Folded FSRPA FSRPB	1.0	201~300	50~800			60
		301~400				
		401~500				
Sliding Plate Welded and Folded FSRPAW FSRPBW FSRPVW	1.5	501~600				
		601~700				
		701~800				

Ⓥ E is available for FSRPVW only. Ⓥ θ° is available for FSRPB and FSRPBW only.
Ⓥ FSRP is available for T, A, B dimension only.

Order Example

Part Number	-	A	-	B	-	E	-	H	-	θ
FSRP0.8	-	300	-	200						
FSRPB1.5	-	300	-	200			-	30	-	30
FSRPVW1.0	-	300	-	200	-	120	-	45		

Days to Ship

-FSRP / FSRPA / FSRPB
8 Days

-FSRPAW / FSRPBW / FSRPVW
10 Days

Express B 5,00 EUR/piece P.88

Ⓥ A Express Charge of 13,50 EUR for 3 or more identical pieces.

Price (euros)

■Volume Discount (Ⓥ Round down to one Cent.) P.87

Quantity	1~9	10~29
Rate	€ Unit Price	5%

Ⓥ For orders larger than indicated quantity, please request a quotation.

Flat / Folded

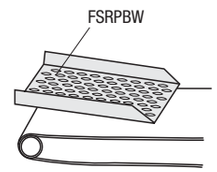
A	B	FSRP € Unit Price T0.8	FSRP T1.0	FSRP T1.5	FSRPA € Unit Price T0.8	FSRPA T1.0	FSRPA T1.5	FSRPB € Unit Price T0.8	FSRPB T1.0	FSRPB T1.5
50~100	50~299									
	300~500									
101~200	50~299									
	300~500									
201~300	50~299									
	300~599									
	600~800									
301~400	50~299									
	300~599									
	600~800									
401~500	50~299									
	300~599									
	600~800									
501~600	50~299									
	300~599									
	600~800									
601~700	50~299									
	300~599									
	600~800									
701~800	50~299									
	300~599									
	600~800									

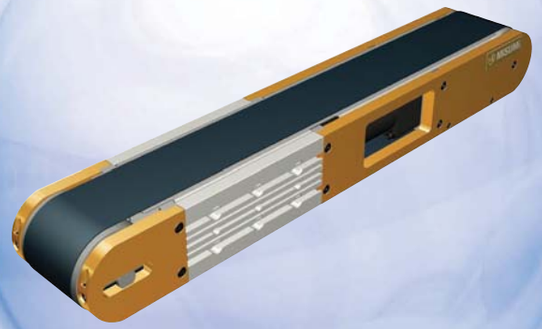
Sliding Plate Welded and Folded

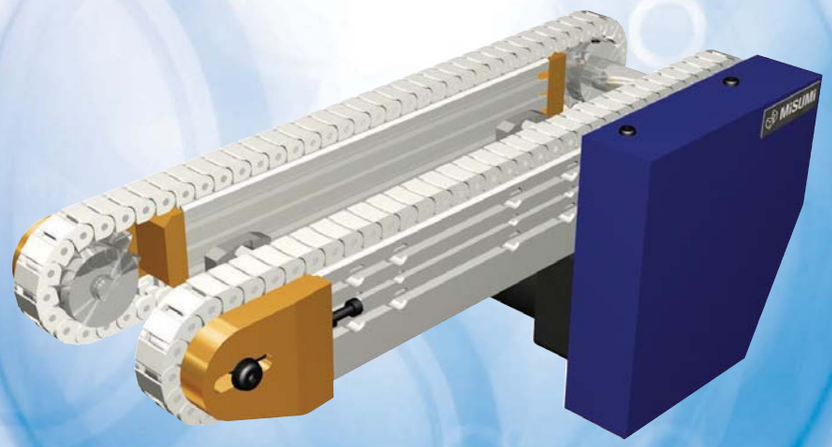
A	B	FSRPAW € Unit Price T0.8	FSRPAW T1.0	FSRPAW T1.5	FSRPBW € Unit Price T0.8	FSRPBW T1.0	FSRPBW T1.5	FSRPVW € Unit Price T0.8	FSRPVW T1.0	FSRPVW T1.5
50~100	50~299									
	300~500									
101~200	50~299									
	300~500									
201~300	50~299									
	300~599									
	600~800									
301~400	50~299									
	300~599									
	600~800									
401~500	50~299									
	300~599									
	600~800									
501~600	50~299									
	300~599									
	600~800									
601~700	50~299									
	300~599									
	600~800									
701~800	50~299									
	300~599									
	600~800									

Example

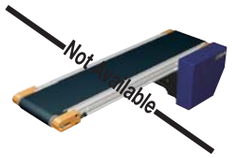
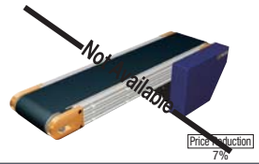
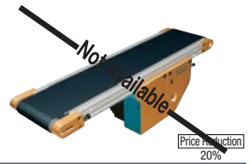
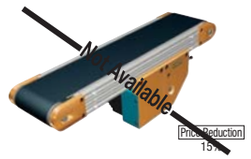
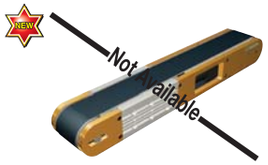
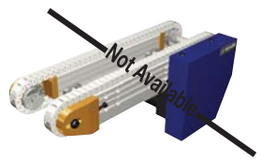
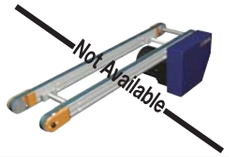
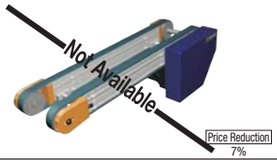
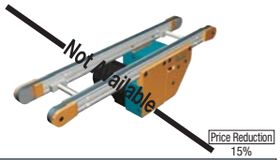
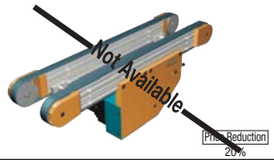
Relay to the conveyor







Conveyors

Conveyors			
			
Product Name	Flat Belt Conveyor -Single Track Head Drive, 2-Groove Frame Type-	-Single Track Head Drive, 3-Groove Frame Type-	-Single Track Center Drive, 2-Groove Frame Type-
Page	1073	1074	1075
			
-Single Track Center Drive, 3-Groove Frame Type-	-Single Track Built-in Motor Drive, 2-Groove Frame Type-	-Plastic Chain Conveyor -Dual Track Head Drive, 3-Groove Frame Type-	
1076	1077	1078	
			
Timing Belt Conveyor -Dual Track Head Drive, 2-Groove Frame Type-	-Dual Track Head Drive, 3-Groove Frame Type-	-Dual Track Center Drive, 2-Groove Frame Type-	
1079	1080	1081	
			
-Dual Track Center Drive, 3-Groove Frame Type-	Conveyor Guide Rails	Guide Rail Brackets	
1082	1083	1083	
			
Conveyor Support Stands			
1083			

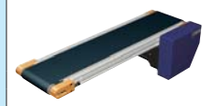
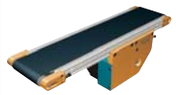
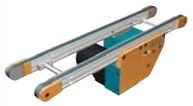
Miniature Conveyor Guide

■Overview · Features

Belt conveyors suitable for use in automated machinery.

Feature 1: Space-saving design; one of the most compact conveyors in the market **with the size of 30mm in width x 200mm in length.**
Feature 2: Lightweight but rigid by the use of extruded aluminum sections for frame sections.
Anodizing is applied and corrosion-resistant.
Feature 3: Design of frame slots allows accessories to be installed easily.
Feature 4: Min. **1 day shipping** and quick delivery

■Product List

Number of Tracks	Belt	Driving Position: Head Drive Tension adjustment is easy because the non-driven tail roller also acts as a tension roller. It is reasonably priced and uses a smaller number of parts.	Center Drive Belt tension can be adjusted at the center drive section. Overall length does not change after tension adjustment. Drive section is easily movable within the adjustment range.	Built-in Drive The built-in motor between frames has resulted in space savings.
Single Track Broader carrying surface can convey various shapes of work pieces.	**Flat Belt** Flat belt is selectable from two types according to your purpose. ■Selectable Flat Belts Use / Type / Color / Page General Purpose / HBLT (W) / White / P.1073 For Sliding / SHBLT (W) / White / P.1073	 P.1073 · 1074	 P.1075 · 1076	 P.1077
Dual Track Clearance between tracks allows installation of stoppers and sensors. Two tracks are synchronously driven by the use of timing belts and plastic chains.	**Timing Belt** Double-sided fabric coated belts (Type: LTBRA **P.1203**) are suitable for accumulating conveyance. *CVSTP uses LTBR(**P.1204**).	 P.1079 · 1080	 P.1081 · 1082	
	Plastic Chains Engineering plastic chains(Type: CHEEP **P.1265**) are used.	 P.1078		

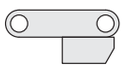
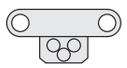
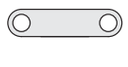
■How to select

Select miniature conveyors by following the steps below.

Step(1) Select a type and the number of tracks for conveyance.

Selectable	
Single Track (Flat Belt)	Dual Track (Timing Belt / Plastic Chain)
 Broader carrying surface can convey various shapes of work pieces.	 Clearance between tracks allows installation of stoppers and sensors. Two tracks are synchronously driven by the use of timing belts and engineering plastic chains.

Step(2) Select a driving position.

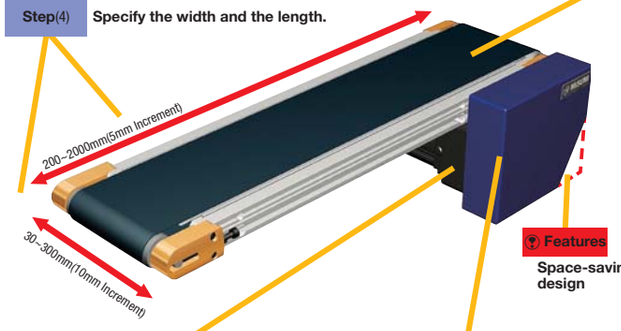
Selectable		
Head Drive	Center Drive	Built-in Drive
 The non-driven tail roller also acts as a tension roller. It is reasonably priced, and uses a smaller number of parts.	 Belt tension can be adjusted at the center drive section. Overall length does not change after tension adjustment. Drive section is easily movable within the adjustment range.	 The built-in motor between frames has resulted in space savings.

Step(3) Select a motor.

Selectable	
Induction Motor	Variable Speed Motor
Motor with constant speed. Suitable for the continuous one-way operation. Also usable for the intermittent operation with relatively-long intervals.	Variable Speed Motor. Comes with a control box with which conveyance speed can be adjusted. Control box is not fixed on the conveyor and can be installed for your purpose.

Panasonic motors and Oriental motors are selectable.

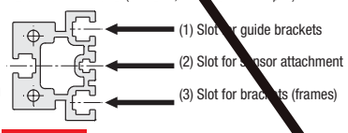
Step(4) Specify the width and the length.



Features Space-saving design

Features Easy attachment of accessories

*Ex. Frame for CVSB (Flat Belt, Pulley Diameter ϕ50)



Features General purpose hexagon nuts can be used for frame slots.

■Part No. List of Motor · Gear Head Makers

Motor Output	Motor Type	Motor Voltage	Panasonic Motors: MISUMI Part No.	Panasonic Motors: Motor Part No.	Panasonic Motors: Gear Head Part No. (MISUMI Part No.) *_ includes a reduction ratio.	Conveyor Type
6W	Induction Motor (**P.999**)	Single-Phase100V	**PACMS60-W6-V100**	M61X6G4L	**MX6G_BA (PACMGX60-_)**	
		Single-Phase 200V	**PACMS60-W6-V200**	M61X6G4Y		
	Variable Speed Motor (**P.1001**)	Single-Phase100V	**PACMV-U60-W6-V100**	MUSN606GL		
		Single-Phase 200V	**PACMV-U60-W6-V200**	MUSN606GY		
25W	Induction Motor (**P.999**)	Single-Phase100V	**PACMS80-W25-V100**	M81X25G4L	**MX8G_B (PACMGX80-_)**	
		Single-Phase 200V	**PACMS80-W25-V200**	M81X25G4Y		
		Three-phase 200V	**PACMT80-W25-V200**	M8MX25G4Y		
	Variable Speed Motor (**P.1001**)	Single-Phase100V	**PACMV-U80-W25-V100**	MUSN825GL		
		Single-Phase 200V	**PACMV-U80-W25-V200**	MUSN825GY		
40W	Induction Motor (**P.999**)	Single-Phase100V	**PACMS90-W40-V100**	M91X40G4L	**MX9G_B (PACMGX90-_)**	
		Single-Phase 200V	**PACMS90-W40-V200**	M91X40G4Y		
		Three-phase 200V	**PACMT90-W40-V200**	M9MX40G4Y		
	Variable Speed Motor (**P.1001**)	Single-Phase100V	**PACMV-U90-W40-V100**	MUSN940GL		
		Single-Phase 200V	**PACMV-U90-W40-V200**	MUSN940GY		

(*Above specifications should be applied only in Japan.)

■Belt Replacement · Chain Replacement

Please note the followings when replacing belts.

(1)Minimum pulley diameter of belts / No. of Plastic Chains
There is a limit on minimum pulley diameter (bending diameter) of belts.Please refer to belts on **P.1087** and timing belts on **P.1923** and confirm the pulley diameter of the selected miniature conveyor. For plastic chains, select the right plastic chain suitable for No. 40 sprocket (No. of teeth: 14).

(2)Calculations of Belt and Plastic Lengths
Calculate and confirm the belt length by referring to the table below.

(3)Direction of Conveyance
Please note that some belts have a specified direction of conveyance.

■Formula of Belt Length

Type of Belt	Number of Tracks	Driving Position	Pulley Dia.	Type	Page	Formula	Unit	Note
Flat Belt	Single Track	Head	30		**P.1073**	(2L+97)/1.005	mm	
			50		**P.1074**	(2L+160)/1.005	mm	
Flat Belt	Single Track	Middle	30		**P.1075**	(2L+270)/1.005	mm	
			50		**P.1076**	(2L+333)/1.005	mm	
Flat Belt	Single Track	Built-in	70		**P.1077**	(2L+270)/1.005	mm	
Plastic Chains	Dual Track	Middle	50		**P.1078**	(2L+179)/12.7+1	Links	
Timing Belt	Dual Track	Head	30		**P.1079**	(2L+100)/5	Teeth	Round down to one Cent.
			50		**P.1080**	(2L+180)/10	Teeth	Round off to one yen.
Timing Belt	Dual Track	Middle	30		**P.1081**	(2L+260)/5	Teeth	Round down to one Cent.
			50		**P.1082**	(2L+420)/10	Teeth	Round off to one yen.

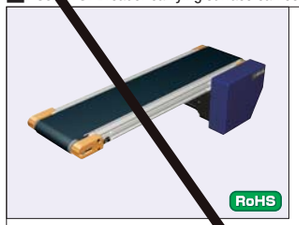
NEW

Miniature Conveyor System

-Flat Belt Single Track Head Drive, 2-Groove Frame Type (Pulley Dia. 30mm)-

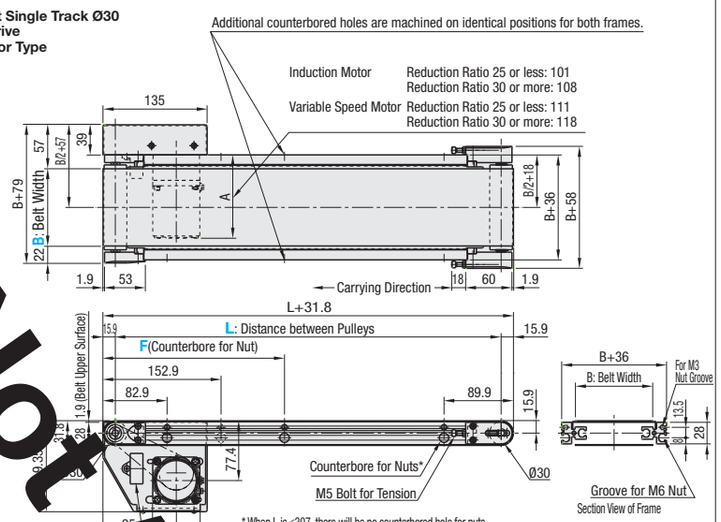
CAD Data

Feature: Broader carrying surface can convey various shapes of work pieces. Low price can be realized by the simple structure of the system.

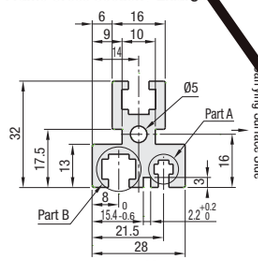


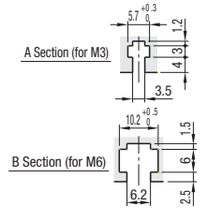
RoHS

Flat Belt Single Track Ø30 Head Drive 6W Motor Type



Frame Cross Section / Enlarged





Compatible with JIS standard hexagon nuts.

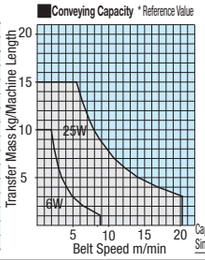
25W Motor Type

Gear Head Ratio

*May decrease depending on load condition.

Gear Head Reduction Ratio	Belt Speed (m/sec) 50Hz	60Hz
12.5	0.327	0.411
15	0.272	0.343
18	0.227	0.286
25	0.163	0.206
30	0.136	0.171
36	0.113	0.143
50	0.082	0.103
60	0.068	0.086
75	0.054	0.069
90	0.045	0.057
100	0.041	0.051
120	0.034	0.043
150	0.027	0.034
180	0.023	0.029

Conveying Capacity * Reference Value



	Frame	Motor Cover	Pulley Holder
M Material	A6N01SS-T5	1.0330/DC01	EN AW-5052/AlMg2,5
S Surface treatment	Anodized	Coating	Gold Anodized

For alterations to motors reversed, please refer to **P.1084**

Part Number	B 10mm Increment	L 5mm Increment	Motor Selection: Output (W)	Voltage (V)	Specification	Gear Head Ratio	Belt Specification	F (Additional Counterbored Holes) 5mm Increment
	30~300	200~2000	6 25	TA115(Single-Phase) SA220(Three-Phase) * SA230(Three-Phase) *	IM (Induction Motor) SCM (Variable Speed Motor)	12.5 15 18 25 30 36 50 60 75 90 100 120 150 180	H(General Purpose) S(For Sliding)	170<F<L-110 * Additional counterbored holes will not be machined unless specified.

Motor voltage of SA220 / SA230 (three-phase) is selectable only for Induction Motors (IM) with an output of 25W. For motor details such as circuit diagrams, please refer to Pages following **P.997**. For details of flat belts, please refer to **P.1086**

Rotating direction of the belt is the same as motor rotating direction when gear ratio is 25 or less, and the opposite when gear ratio is 30 or more. Please adjust wiring so that the direction of conveyance will always be the direction as specified in the drawings.

Part Number	B	€ Body Price Qty. 1 ~2																	
		Min.L~ 300	L305~ 400	L405~ 500	L505~ 600	L605~ 700	L705~ 800	L805~ 900	L905~ 1000	L1005~ 1100	L1105~ 1200	L1205~ 1300	L1305~ 1400	L1405~ 1500	L1505~ 1600	L1605~ 1700	L1705~ 1800	L1805~ 1900	L1905~ 2000
	30~50																		
	60~100																		
	110~150																		
	160~200																		
	210~250																		
	260~300																		

For an Induction Motor (**IM**), a body price equals a unit price. For orders larger than indicated quantity, please request a quotation for Days to Ship and Price.

When Variable Speed Motor (**SCM**) is selected, the unit price will be body price + optional motor price.

Example) CVSA-60-1200-25-TA115-SCM-15-H-300 ➡

Body Price	+	Optional Motor price specification	=	€ Unit Price
881,00 EUR	+	60,00 EUR	=	941,00 EUR

Optional Motor Price (€ Unit Price +)	
SCM	

Order Example

Part Number	B	L	Motor: Output	Voltage	Specification	Gear Head Reduction Ratio	Belt Specification	F
-	60	660	6	TA115	IM	36	H	300

Alterations P.1084

Days to Ship 13 Days

NEW

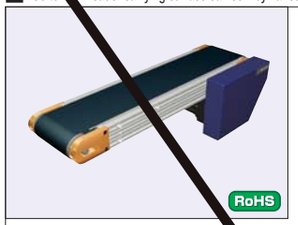
Miniature Conveyor System

-Flat Belt Single Track Head Drive, 3-Groove Frame Type (Pulley Dia. 50mm)-

Price Reduction 7%

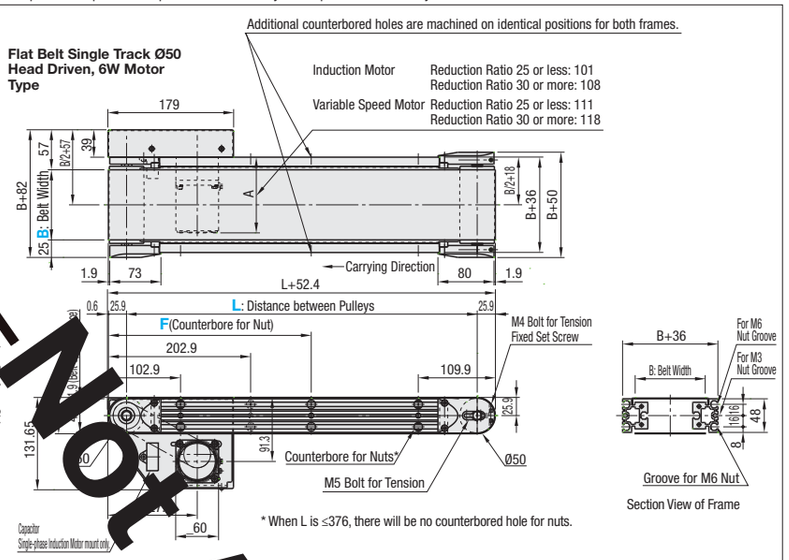
CAD Data

Feature: Broader carrying surface can convey various shapes of work pieces. Low price can be realized by the simple structure of the system. Three rows of frame slot facilitate installation of accessories.

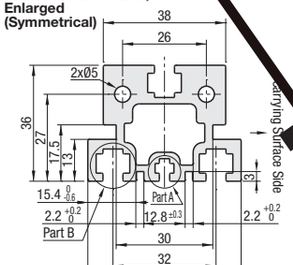


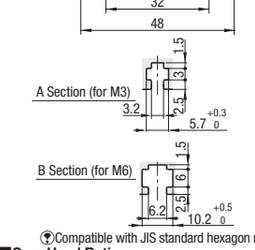
RoHS

Flat Belt Single Track Ø50 Head Driven, 6W Motor Type



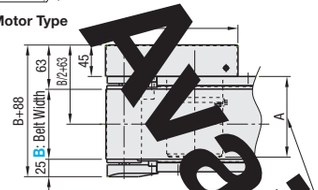
Frame Cross Section, Enlarged (Symmetrical)



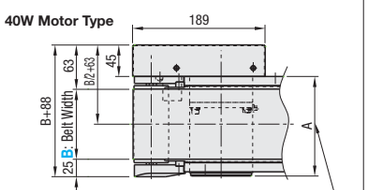


Compatible with JIS standard hexagon nuts.

25W Motor Type



40W Motor Type

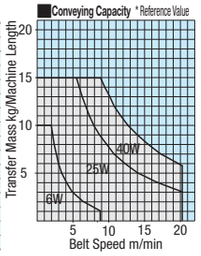


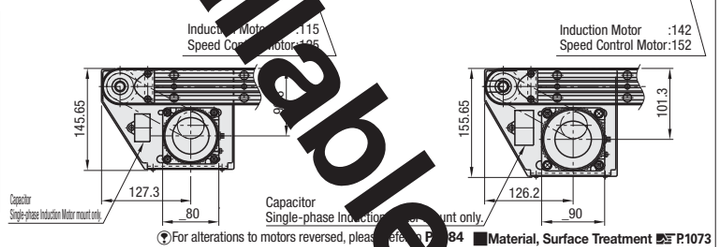
Gear Head Ratio

*May decrease depending on load condition.

Gear Head Reduction Ratio	Belt Speed (m/sec) 50Hz	60Hz
12.5	0.268	0.338
15	0.223	0.281
18	0.186	0.234
25	0.134	0.169
30	0.112	0.141
36	0.093	0.117
50	0.067	0.084
60	0.056	0.070
75	0.045	0.056
90	0.037	0.047
100	0.033	0.042
120	0.028	0.035
150	0.022	0.028
180	0.019	0.023

Conveying Capacity * Reference Value





For alterations to motors reversed, please refer to **P.1084** Material, Surface Treatment **P.1073**

Part Number	B 10mm Increment	L 5mm Increment	Motor Selection: Output (W)	Voltage (V)	Specification	Gear Head Ratio	Belt Specification	F (Additional Counterbored Holes) 5mm Increment
	40~300	220~2000	6 25 40	TA115(Single-Phase) SA220(Three-Phase) * SA230(Three-Phase) *	IM (Induction Motor) SCM (Variable Speed Motor)	12.5 15 18 25 30 36 50 60 75 90 100 120 150 180	H(General Purpose) S(For Sliding)	220<F<L-130 * Additional counterbored holes will not be machined unless specified.

Motor voltage of SA220 / SA230 (three-phase) is selectable only for Induction Motors (IM) with an output of 25W and 40W. For motor details such as circuit diagrams, please refer to Pages following **P.997**. For details of flat belts, please refer to **P.1086**

Rotating direction of the belt is the same as motor rotating direction when gear ratio is 30 or more. Please adjust wiring so that the direction of conveyance will always be the direction as specified in the drawings.

Part Number	B	€ Body Price Qty. 1 ~2																	
		Min.L~ 300	L305~ 400	L405~ 500	L505~ 600	L605~ 700	L705~ 800	L805~ 900	L905~ 1000	L1005~ 1100	L1105~ 1200	L1205~ 1300	L1305~ 1400	L1405~ 1500	L1505~ 1600	L1605~ 1700	L1705~ 1800	L1805~ 1900	L1905~ 2000
	40~50																		
	60~100																		
	110~150																		
	160~200																		
	210~250																		
	260~300																		

For an Induction Motor (**IM**), a body price equals a standard unit price.

For orders larger than indicated quantity, please request a quotation for Days to Ship and Price.

When Variable Speed Motor (**SCM**) is selected, the unit price will be body price + optional motor price.

Example) CVSB-60-1200-25-TA115-SCM-15-H-300 ➡

Body Price	+	Optional Motor price specification	=	€ Unit Price
955,00 EUR	+	60,00 EUR	=	1015,00 EUR

Optional Motor Price (€ Unit Price +)	
SCM	

Order Example

Part Number	B	L	Motor: Output	Voltage	Specification	Gear Head Reduction Ratio	Belt Specification	F
-	60	1200	25	SA230	IM	50	H	400

Alterations P.1084

Days to Ship 13 Days

NEW

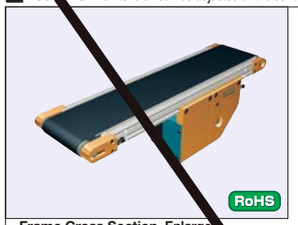
Miniature Conveyor System

-Flat Belt Single Track Center Drive, 2-Groove Frame Type (Pulley Dia. 30mm)-

Price Reduction 20%

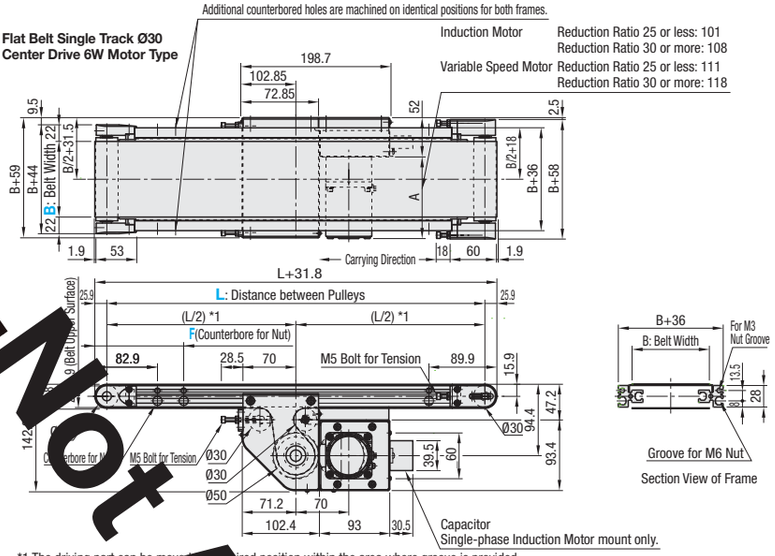
CAD Data

■**Feature:** Belt tension can be adjusted at the center drive section. Overall length does not change after tension adjustment. Drive section position can be easily adjusted with this flat belt conveyor system.



RoHS

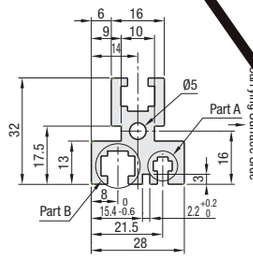
Flat Belt Single Track Ø30 Center Drive 6W Motor Type

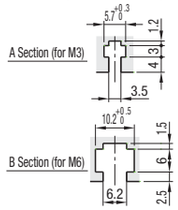


*1 The driving part can be moved to a desired position within the area where groove is provided on the aluminum frame.

*2 When L is ≤447, there will be counterbored hole for nuts.

Frame Cross Section, Enlarged

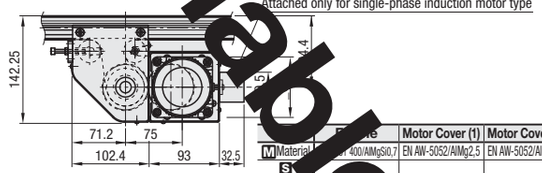




Compatible with JIS standard hexagon nuts.

25W Motor Type

Capacitor
Attached only for single-phase induction motor type

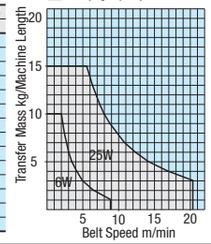


Gear Head Ratio

*May decrease depending on load condition.

Gear Head Reduction Ratio	Belt Speed (m/sec) 50Hz	60Hz
12.5	0.268	0.338
15	0.223	0.281
18	0.186	0.234
25	0.134	0.169
30	0.112	0.141
36	0.093	0.117
50	0.067	0.084
60	0.056	0.070
75	0.045	0.056
90	0.037	0.047
100	0.033	0.042
120	0.028	0.035
150	0.022	0.028
180	0.019	0.023

Conveying Capacity * Reference Value



For roller edge alterations, P.1084

	Material	Motor Cover (1)	Motor Cover (2)	Pulley Holder
M	EN AW-6060/AlMgSi0.7	EN AW-5052/AlMg2.5	EN AW-5052/AlMg2.5	EN AW-5052/AlMg2.5
S	Surface Treatment	Gold Anodized	Blue Anodized	Gold Anodized

Part Number	B 10mm Increment	L 5mm Increment	Motor Selection: Output (W)	Voltage (V)	Specification	Gear Head Ratio	Belt Specification	F (Additional Counterbored Holes) 5mm Increment
	30~300	305~2000	6 25	TA115(Single-Phase) SA220(Three-Phase) * SA230(Three-Phase) *	IM (Induction Motor) SCM (Variable Speed Motor)	12.5 15 18 25 30 36 50 60 75 90 100 120 150 180	H(General Purpose) S(For Sliding)	100<F<L-110 * Additional counterbored holes will not be machined unless specified.

Motor voltage of SA220 / SA230 (three-phase) is selectable only for Induction Motors (IM) with an output of 25W. For motor details such as circuit diagrams, please refer to Pages following **P.997**. For details of flat belts, please refer to **P.1086**

Rotating direction of the belt is the same as motor rotating direction when gear ratio is 25 or less, and the opposite when gear ratio is 30 or more. Please adjust wiring so that the direction of conveyance will be always the direction as specified in the drawings.

Part Number	B	€ Body Price Qty. 1 ~2 Min.L~400	405~500	505~600	605~700	705~800	805~900	905~1000	1005~1100	1105~1200	1205~1300	1305~1400	1405~1500	1505~1600	1605~1700	1705~1800	1805~1900	1905~2000
	30~50																	
	60~100																	
	110~150																	
	160~200																	
	210~250																	
	260~300																	

For an Induction Motor (**IM**), a body price equals a unit price.

When Variable Speed Motor (**SCM**) is selected, the unit price will be body price + optional motor price.

For orders larger than indicated quantity, please request a quotation for Days to Ship and Price.

Example) CVSN-60-1200-25-TA115-SCM-15-S-300 ➡

Body Price	+	Optional Motor price specification	=	€ Unit Price
1115,00 EUR	+	60,00 EUR	=	1175,00 EUR

Optional Motor Price (€ Unit Price +)	
SCM	

Order Example Part Number - B - L - Motor (Output - Voltage - Specification - Gear Head Reduction Ratio) - Belt Specification - F

- 90 - 1440 - 25 - TA115 - IM - 50 - H - 600

Alterations P.1084

Days to Ship 13 Days

NEW

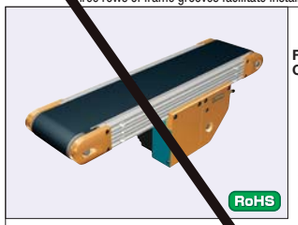
Miniature Conveyor System

-Flat Belt Single Track Center Drive, 3-Groove Frame Type (Pulley Dia. 50mm)-

Price Reduction 15%

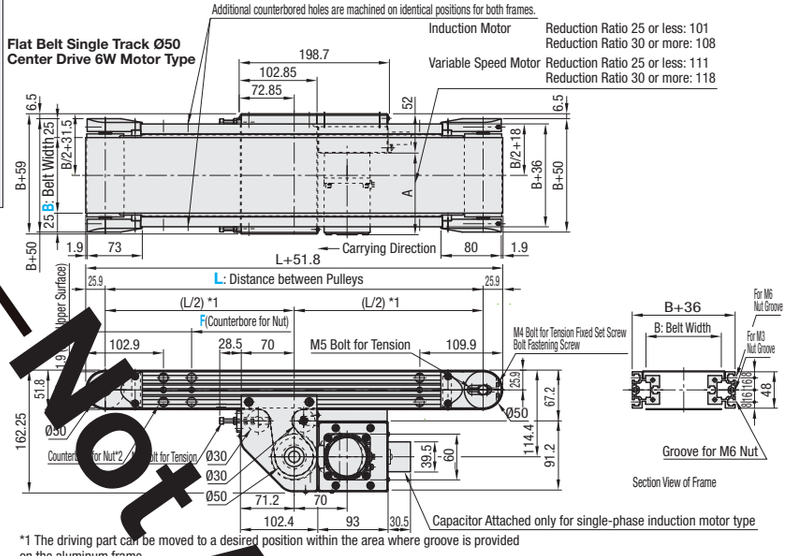
CAD Data

■Feature: Belt tension can be adjusted at the center drive section. Overall length does not change after tension adjustment. Drive section position can be easily adjusted with this flat belt conveyor system. Three rows of frame grooves facilitate installation of accessories.



RoHS

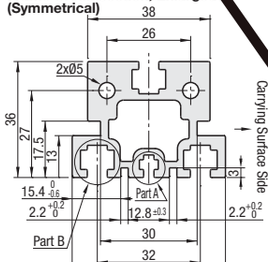
Flat Belt Single Track Ø50 Center Drive 6W Motor Type

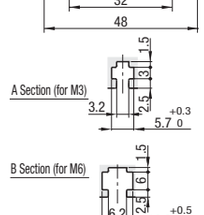


*1 The driving part can be moved to a desired position within the area where groove is provided on the aluminum frame.

*2 When L is ≤471, there will be counterbored hole for nuts.

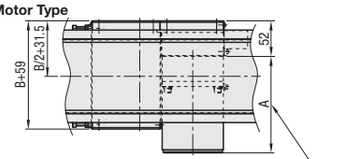
Frame Cross Section, Enlarged (Symmetrical)





Compatible with JIS standard hexagon nuts.

25W Motor Type **40W Motor Type**

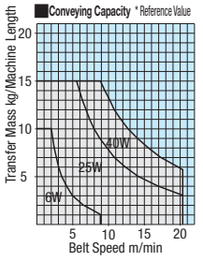


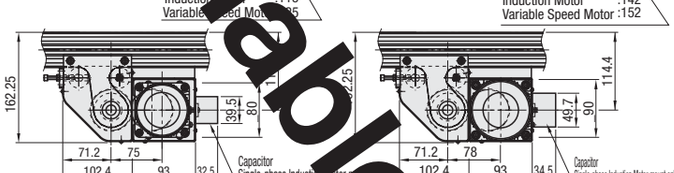
Gear Head Ratio

*May decrease depending on load condition.

Gear Head Reduction Ratio	Belt Speed (m/sec) 50Hz	60Hz
12.5	0.268	0.338
15	0.223	0.281
18	0.186	0.234
25	0.134	0.169
30	0.112	0.141
36	0.093	0.117
50	0.067	0.084
60	0.056	0.070
75	0.045	0.056
90	0.037	0.047
100	0.033	0.042
120	0.028	0.035
150	0.022	0.028
180	0.019	0.023

Conveying Capacity * Reference Value





For roller edge alterations, P.1084

Material, Surface Treatment P.1075

Part Number	B 10mm Increment	L 5mm Increment	Motor Selection: Output (W)	Voltage (V)	Specification	Gear Head Ratio	Belt Specification	F (Additional Counterbored Holes) 5mm Increment
	40~300	300~2000	6 25 40	TA115(Single-Phase) SA220(Three-Phase) * SA230(Three-Phase) *	IM (Induction Motor) SCM (Variable Speed Motor)	12.5 15 18 25 30 36 50 60 75 90 100 120 150 180	H(General Purpose) S(For Sliding)	120 <F<L-130 * Additional counterbored holes will not be machined unless specified.

Motor voltage of SA220 / SA230 (three-phase) is selectable only for Induction Motors (IM) with an output of 25W and 40W. For motor details such as circuit diagrams, please refer to Pages following **P.997**. For details of flat belts, please refer to **P.1086**

Rotating direction of the belt is the same as motor rotating direction when gear ratio is 25 or less, and the opposite when gear ratio is 30 or more. Please adjust wiring so that the direction of conveyance will be always the direction as specified in the drawings.

Part Number	B	Body Price Qty. 1 ~2 Min.L~400	405~500	505~600	605~700	705~800	805~900	905~1000	1005~1100	1105~1200	1205~1300	1305~1400	1405~1500	1505~1600	1605~1700	1705~1800	1805~1900	1905~2000
	40~50																	
	60~100																	
	110~150																	
	160~200																	
	210~250																	
	260~300																	

For an Induction Motor (**IM**), a body price equals a unit price.

When Variable Speed Motor (**SCM**) is selected, the unit price will be body price + optional motor price.

For orders larger than indicated quantity, please request a quotation for Days to Ship and Price.

Example) CVSP-60-1200-25-TA115-SCM-15-S-300 ➡

Body Price	+	Optional Motor price specification	=	€ Unit Price
1207,00 EUR	+	150,00 EUR	=	1357,00 EUR

Optional Motor Price (€ Unit Price +)	
SCM	

Order Example Part Number - B - L - Motor (Output - Voltage - Specification - Gear Head Reduction Ratio) - Belt Specification - F

- 120 - 1350 - 40 - TA115 - SCM - 50 - H - 600

Alterations P.1084

Days to Ship 13 Days

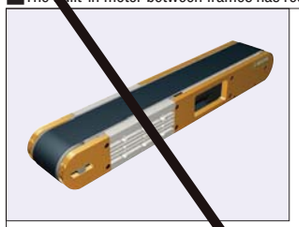
NEW

Miniature Conveyor System

-Flat Belt Single Track Built-in Motor, 2-Groove Frame Type (Pulley Dia. 70mm)-

CAD Data

■The built-in motor between frames has reduced machine height by about half.

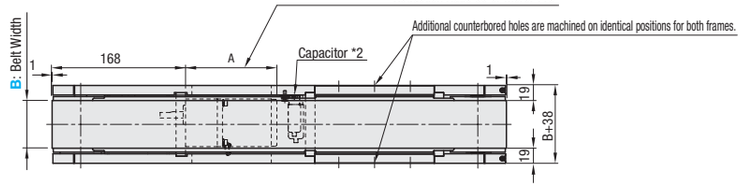


Flat Belt Single Track Ø70

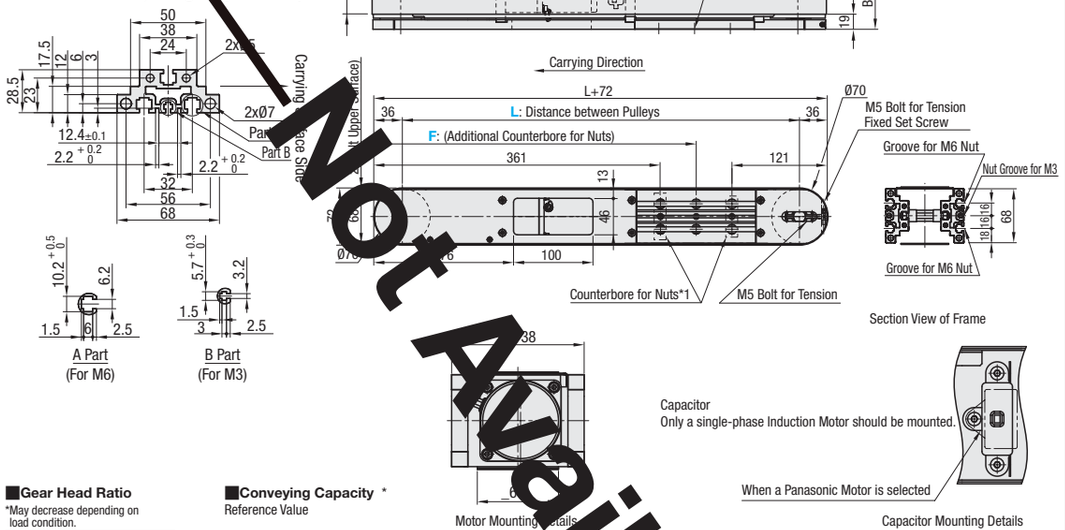
Motor Driven 6W Motor Type

Induction Motor — Reduction Ratio 25 or less: 101; Reduction Ratio 30 or more: 108

Variable Speed Motor — Reduction Ratio 25 or less: 111; Reduction Ratio 30 or more: 118



Frame Cross Section, Enlarged (symmetrical)



* 1 When L is ≤817, there will be a counterbored hole for the nuts.

* 2 Single-phase induction motor only

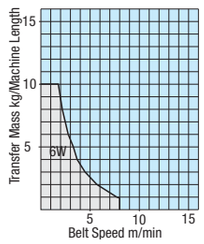
■**Gear Head Ratio**

*May decrease depending on load condition.

Gear Head Reduction Ratio	Belt Speed (m/sec) 50Hz	60Hz
15	0.367	-
18	0.305	0.367
25	0.220	0.263
30	0.183	0.220
36	0.153	0.183
50	0.110	0.132
60	0.092	0.110
75	0.073	0.088
90	0.062	0.073
100	0.055	0.067
120	0.045	0.055
150	0.037	0.043
180	0.030	0.037

■**Conveying Capacity** *

Reference Value



	Frame	Pulley Holder
M Material	AC-51 400/AlMgSi0,7SS-T5	EN AW-5052/AlMg2,5
S Surface Treatment	Anodized	Gold Anodized

Part Number	B Selectable	L 5mm Increment	Motor Selection: Output (W)	Voltage (V)	Specification	Gear Head Ratio	Belt Specification	F (Additional Counterbored Holes) 5mm Increment
	60 100 150	415~2000	6	TA115 (Single-Phase)	IM (Induction Motor) SCM (Variable Speed Motor)	15 18 25 30 36 50 60 75 90 100 120 150 180	H(General Purpose) S(For Sliding)	380<F<L-100 * Additional counterbored holes will not be machined unless specified.

Rotating direction of the belt is the same as motor rotating direction when gear ratio is 25 or less, and the opposite when gear ratio is 30 or more. Please adjust wiring so that the direction of conveyance will be always the direction as specified in the drawings. For motor details such as circuit diagrams, please refer to Pages following **P.997** * For details of V belts, please refer to **P.1086**

Part Number	B	Body Price Qty. 1 ~2: Min.L~450	455~500	505~600	605~700	705~800	805~900	905~1000	1005~1100	1105~1200	1205~1300	1305~1400	1405~1500	1505~1600	1605~1700	1705~1800	1805~1900	1905~2000
	60																	
	100																	
	150																	

For an Induction Motor (**IM**), a body price equals a unit price.

When Variable Speed Motor (**SCM**) is selected, the unit price will be body price + optional motor price.

For orders larger than indicated quantity, please request a quotation for Days to Ship and Price.

Example) CVSMA-60-1200-6-TA115-SCM-15-H-400 ➡

Body Price	+	Optional Motor Price specification	=	€ Unit Price
871,00 EUR	+	60,00 EUR	=	931,00 EUR

Optional Motor Price (€ Unit Price +)

Order Example: Part Number - B - L - Motor (Output - Voltage - Specification - Gear Head Reduction Ratio) - Belt Specification - F

- 60 - 660 - 6 - TA115 - IM - 36 - H - 400

Alterations P.1084

Days to Ship: 13 Days

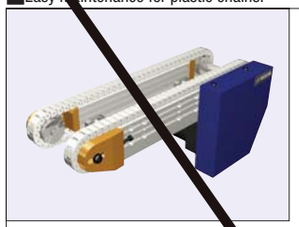
NEW

Miniature Conveyor System

-Plastic Chain Dual Track Head Drive, 3-Groove Frame Type (Sprocket Dia. 57mm) -

CAD Data

■Easy maintenance for plastic chains.

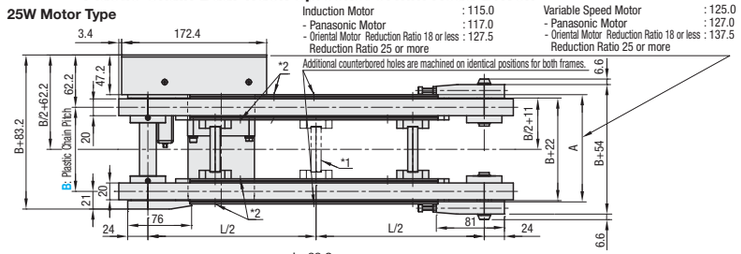


Plastic Chain Dual Track Sprocket 57mm Head Driven

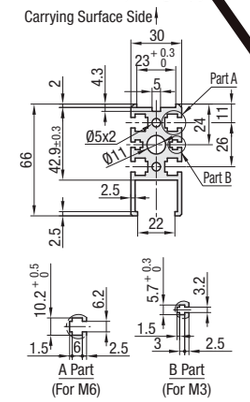
25W Motor Type

Induction Motor — Reduction Ratio 18 or less: 115.0; Reduction Ratio 25 or more: 117.0
- Panasonic Motor
- Oriental Motor Reduction Ratio 18 or less: 127.5; Reduction Ratio 25 or more

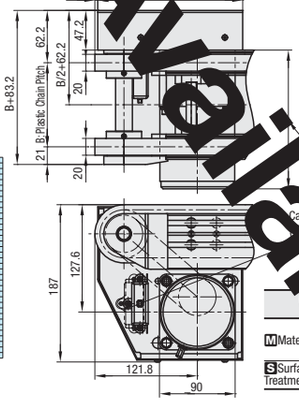
Variable Speed Motor — Reduction Ratio 18 or less: 125.0; Reduction Ratio 25 or more: 127.0
- Panasonic Motor
- Oriental Motor Reduction Ratio 18 or less: 137.5; Reduction Ratio 25 or more



Frame Cross Section , Enlarged (symmetrical)



40W Motor Type



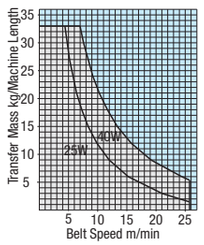
■**Gear Head Ratio**

*May decrease depending on load condition.

Gear Head Reduction Ratio	Belt Speed (m/sec) 50Hz	60Hz
12.5	0.358	0.430
15	0.298	0.358
18	0.248	0.298
25	0.180	0.215
30	0.150	0.180
36	0.125	0.150
50	0.090	0.108
60	0.075	0.090
75	0.060	0.072
90	0.050	0.060
100	0.045	0.053
120	0.037	0.045
150	0.030	0.037
180	0.025	0.030

■**Conveying Capacity** *

Reference Value



*Plastic chains and sprockets are 40B series.

	Frame	Motor Cover	Sprocket	Pulley Holder	Plastic Chains
M Material	EN AC-51 400/AlMgSi0,7SS-T5	1.0330/DC01	1.1191/C45E (High-frequency Hardening Teeth Tip)	EN AW-5052/AlMg2,5	Polyacetal
S Surface Treatment	Anodized	Coating	-	Gold Anodized	-

Part Number	B 10mm Increment	L 5mm Increment	Motor Selection: Output (W)	Voltage (V)	Specification	Gear Head Ratio	F (Additional Counterbored Holes) 5mm Increment
	80~300	300~3000	25 40	TA115(Single-Phase) SA220(Three-Phase) * SA230(Three-Phase) *	IM (Induction Motor) SCM (Variable Speed Motor)	12.5 15 18 25 30 36 50 60 75 90 100 120 150 180	205<F<L-105 Additional counterbored holes will not be machined unless specified.

Motor voltage of SA220 / SA230 (three-phase) is selectable only for Induction Motors (IM). * For details of plastic chains (CHEEP), please refer to **P.1265**

Rotating direction of the belt is the same as motor rotating direction when gear ratio is 25 or less, and the opposite when gear ratio is 30 or more. Please adjust wiring so that the direction of conveyance will be always the direction as specified in the drawings. For motor details such as circuit diagrams, refer to Pages following **P.997**.

Part Number	B	Body Price Qty. 1 ~2: Min.L~400	455~500	505~600	605~700	705~800	805~900	905~1000	1005~1100	1105~1200	1205~1300	1305~1400	1405~1500	1505~1600	1605~1700	1705~1800	1805~1900	1905~2000	2005~2500	2605~2700	2705~2800	2805~2900	2905~3000
	80~100																					
	110~200																					
	210~300																					

For an Induction Motor (**IM**), a body price equals a unit price.

When Variable Speed Motor (**SCM**) is selected, the unit price will be body price + optional motor price.

For orders larger than indicated quantity, please request a quotation for Days to Ship and Price.

Example) CVSPA-80-1200-25-TA115-SCM-15-300 ➡

Body Price	+	Optional Motor Price specification	=	€ Unit Price
€		60,00 EUR	=	1444,00 EUR

Optional Motor Price (€ Unit Price +)

Order Example: Part Number - B - L - Motor (Output - Voltage - Specification - Gear Head Reduction Ratio) - F

- 100 - 750 - 25 - TA115 - IM - 90 - 300

Alterations P.1084

Days to Ship: 15 Days

NEW

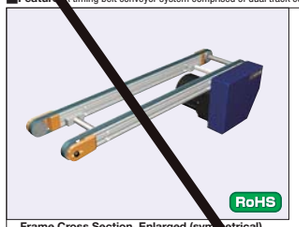
Miniature Conveyor System

-Timing Belt Dual Track Head Drive, 2-Groove Frame Type (Pulley Dia. 30mm)-

Reduced Delivery Time

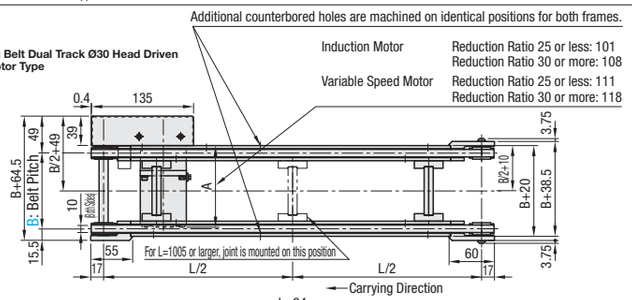
CAD Data

■**Feature:** A timing belt conveyor system comprised of dual track conveyors, between which a stopper or a sensor can be installed.

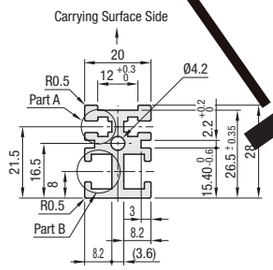


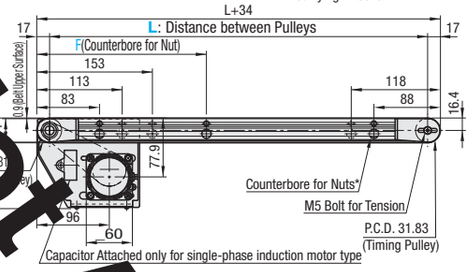
RoHS

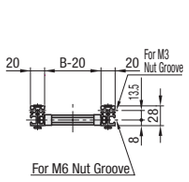
Timing Belt Dual Track Ø30 Head Driven 6W Motor Type

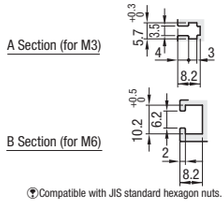


Frame Cross Section, Enlarged (symmetrical)



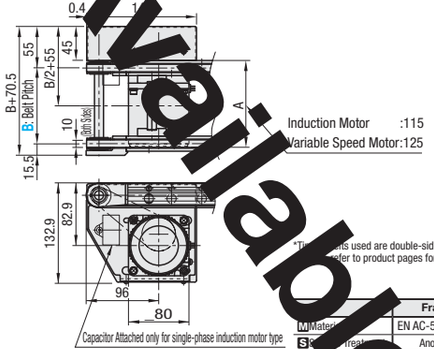






Compatible with JIS standard hexagon nuts.

25W Motor Type

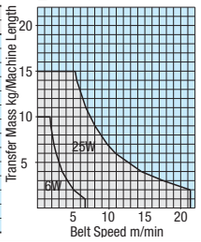


■**Gear Head Ratio**

*May decrease depending on load condition.

Gear Head Reduction Ratio	Belt Speed (m/sec) 50Hz	60Hz
12.5	0.545	0.687
15	0.454	0.573
18	0.379	0.477
25	0.273	0.344
30	0.227	0.286
36	0.189	0.239
50	0.136	0.172
60	0.114	0.143
75	0.091	0.115
90	0.076	0.095
100	0.068	0.086
120	0.057	0.072
150	0.045	0.057
180	0.038	0.048

■**Conveying Capacity** * Reference Value



*Timing Belts used are double-sided fabric coated T5 Type (**P.1203** LTBRA-T5100~)
Please refer to product pages for details.

	Frame	Motor Cover	Pulley Holder
Material	EN AC-51 400-TS	1.0330/DC01	EN AW-5052/AlMg2,5
Surface Treatment	Anodized	Coating	Gold Anodized

For alterations of motor reversed, please refer to **P.1084**

Part Number	B 10mm Increment	L 5mm Increment	Motor Selection: Output (W)	Voltage (V)	Specification	Gear Head Ratio	F (Additional Counterbored Holes) 5mm Increment
	80~300	255~2000	6 25	TA115(Single-Phase) SA220(Three-Phase)* SA230(Three-Phase) *	IM (Induction Motor) SCM (Variable Speed Motor)	12.5 15 18 25 30 36 50 60 75 90 100 120 150 180	170<F<L-130 * Additional counterbored holes will not be machined unless specified.

Motor voltage of SA220 / SA230 (three-phase) is selectable only for Induction Motors (IM) with an output of 25W. For motor details such as circuit diagrams, refer to Pages following **P.997**.
Rotating direction of the belt is the same as motor rotating direction when gear ratio is 25 or less, and the opposite when gear ratio is 30 or more.
Please adjust wiring so that the direction of conveyance will be always the direction as specified in the drawings.

Part Number	B	Body Price Qty. 1 ~2: Min.L~300	L305~400	L405~500	L505~600	L605~700	L705~800	L805~900	L905~1000	L1005~1100	L1105~1200	L1205~1300	L1305~1400	L1405~1500	L1505~1600	L1605~1700	L1705~1800	L1805~1900	L1905~2000
	80~100																		
	110~150																		
	160~200																		
	210~250																		
	260~300																		

For an Induction Motor (**IM**), a body price equals a unit price.
When Variable Speed Motor (**SCM**) is selected, the unit price will be body price + optional motor price.
For orders larger than indicated quantity, please request a quotation for Days to Ship and Price.

Example) CVSTA-80-1200-25-TA115-SCM-15-300 ➡

Body Price	+	Optional Motor Price specification	=	€ Unit Price
1085,00 EUR	+	60,00 EUR	=	1145,00 EUR

Optional Motor Price (€ Unit Price +)	

Order Example: Part Number - B - L - Motor (Output - Voltage - Specification - Gear Head Reduction Ratio) - F
- 80 - 1360 - 6 - TA115 - IM - 50 - 300

Alterations ☞P.1084

Days to Ship: 13 Days

NEW

Miniature Conveyor System

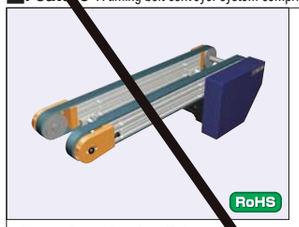
-Timing Belt Dual Track Head Drive, 3-Groove Frame Type (Pulley Dia. 50mm)-

Reduced Delivery Time

Price Reduction 7%

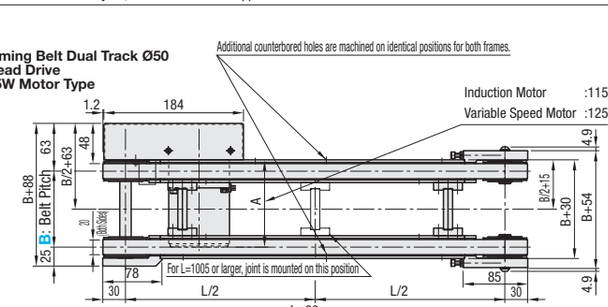
CAD Data

■**Feature:** A timing belt conveyor system comprised of dual track conveyors, between which a stopper or a sensor can be installed. Three rows of frame slot facilitate installation of accessories.

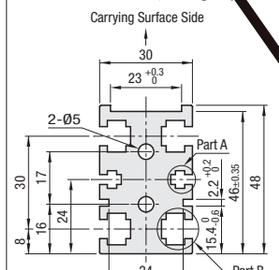


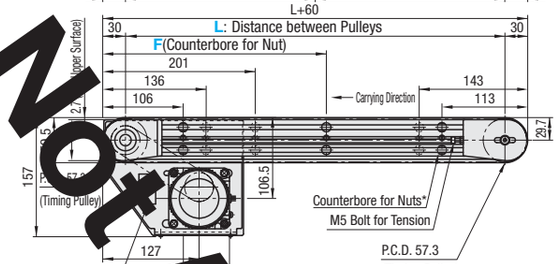
RoHS

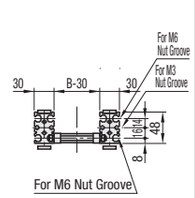
Timing Belt Dual Track Ø50 Head Drive 25W Motor Type



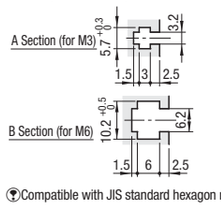
Frame Cross Section, Enlarged (symmetrical)





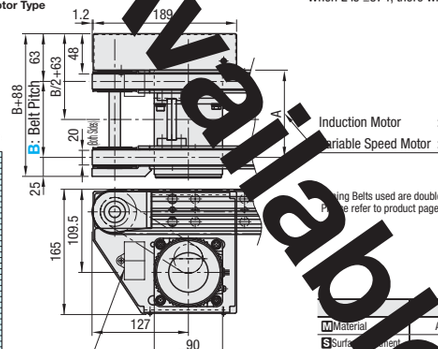


* When L is ≤374, there will be no counterbored hole for nuts.



Compatible with JIS standard hexagon nuts.

40W Motor Type

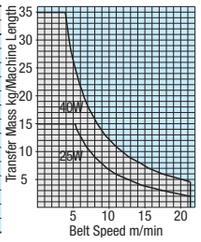


■**Gear Head Ratio**

*May decrease depending on load condition.

Gear Head Reduction Ratio	Belt Speed (m/sec) 50Hz	60Hz
12.5	0.278	0.344
15	0.231	0.287
18	0.193	0.239
25	0.139	0.172
30	0.116	0.143
36	0.096	0.120
50	0.069	0.086
60	0.058	0.072
75	0.046	0.057
90	0.039	0.048
100	0.035	0.043
120	0.029	0.036
150	0.023	0.029
180	0.019	0.024

■**Conveying Capacity** * Reference Value



*Timing Belts used are double-sided fabric coated T10 Type (**P.1203** LTBRA-T10200~)
Please refer to product pages for details.

	Frame	Motor Cover	Pulley Holder
Material	A6N01SS-T5	1.0330/DC01	EN AW-5052/AlMg2,5
Surface Treatment	Anodized	Coating	Gold Anodized

For alterations of motors reversed, please refer to **P.1084**

Part Number	B 10mm Increment	L 5mm Increment	Motor Selection: Output (W)	Voltage (V)	Specification	Gear Head Ratio	F (Additional Counterbored Holes) 5mm Increment
	80~300	265~2000	25 40	TA115(Single-Phase) SA220(Three-Phase)* SA230(Three-Phase) *	IM (Induction Motor) SCM (Variable Speed Motor)	12.5 15 18 25 30 36 50 60 75 90 100 120 150 180	220<F<L-160 * Additional counterbored holes will not be machined unless specified.

Rotating direction of the belt is the same as motor rotating direction when gear ratio is 25 or less, and the opposite when gear ratio is 30 or more. Please adjust wiring so that the direction of conveyance will be always the direction as specified in the drawings.
For motor details such as circuit diagrams, refer to Pages following **P.997**. Motor voltage of SA220 / SA230 (three-phase) is selectable only for Induction Motors (IM).

Part Number	B	Body Price Qty. 1 ~2: Min.L~300	L305~400	L405~500	L505~600	L605~700	L705~800	L805~900	L905~1000	L1005~1100	L1105~1200	L1205~1300	L1305~1400	L1405~1500	L1505~1600	L1605~1700	L1705~1800	L1805~1900	L1905~2000
	80~100																		
	110~150																		
	160~200																		
	210~250																		
	260~300																		

For an Induction Motor (**IM**), a body price equals a unit price.
When Variable Speed Motor (**SCM**) is selected, the unit price will be body price + optional motor price.
For orders larger than indicated quantity, please request a quotation for Days to Ship and Price.

Example) CVSTB-80-1200-25-TA115-SCM-15-300 ➡

Body Price	+	Optional Motor Price specification	=	€ Unit Price
1271,00 EUR	+	60,00 EUR	=	1331,00 EUR

Optional Motor Price (€ Unit Price +)	

Order Example: Part Number - B - L - Motor (Output - Voltage - Specification - Gear Head Reduction Ratio) - F
- 160 - 880 - 25 - TA115 - IM - 120 - 300

Alterations ☞P.1084

Days to Ship: 13 Days

NEW

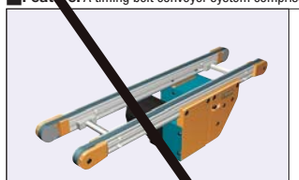
Miniature Conveyor System

-Timing Belt Dual Track Center Drive, 2-Groove Frame Type (Pulley Dia. 30mm)-

Price Reduction 15%

CAD Data

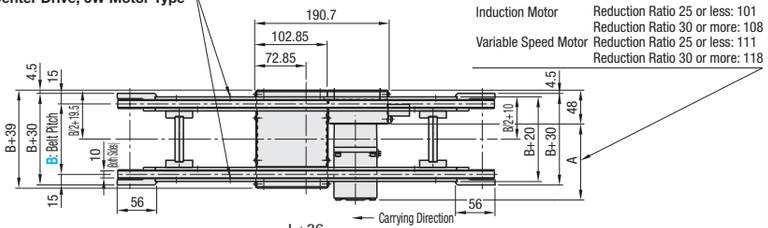
■Feature: A timing belt conveyor system comprised of dual track conveyors, between which a stopper or a sensor can be installed. Driving section is adjustable to desired positions.



RoHS

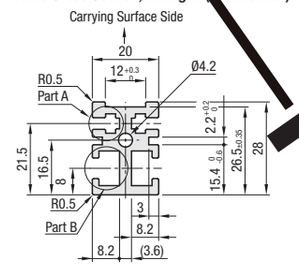
Timing Belt Dual Track Ø30 Center Drive, 6W Motor Type

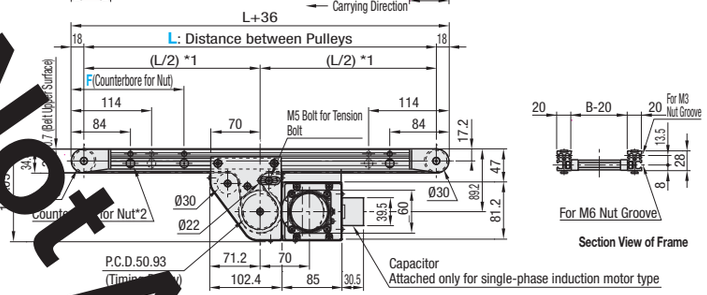
Additional counterbored holes are machined on identical positions for both frames.



Induction Motor Reduction Ratio 25 or less: 101
Reduction Ratio 30 or more: 108
Variable Speed Motor Reduction Ratio 25 or less: 111
Reduction Ratio 30 or more: 118

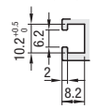
Frame Cross Section, Enlarged (Symmetrical)





A Section (for M3)

B Section (for M6)



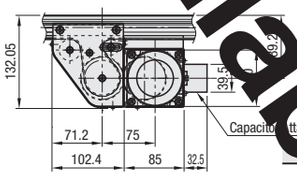
*1 The driving part can be moved to a desired position within the area where groove is provided on the aluminum frame.

*2 When L is ≤407, there will be no counterbored hole for nuts.

Compatible with JIS standard hexagon nuts.

25W Motor Type

Induction Motor :115
Variable Speed Motor :125



Capacitor Attached only for single-phase induction motor type

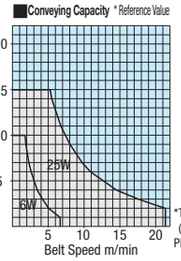
*Timing Belts used are double-sided fabric coated T5 Type (LTBRA-T5100~**P.1203**).
Please refer to product pages for details.

■**Gear Head Ratio**

*May decrease depending on load condition.

Gear Head Reduction Ratio	Belt Speed (m/sec) 50Hz	60Hz
12.5	0.273	0.344
15	0.227	0.286
18	0.189	0.239
25	0.136	0.172
30	0.114	0.143
36	0.095	0.119
50	0.068	0.086
60	0.057	0.072
75	0.045	0.057
90	0.038	0.048
100	0.034	0.043
120	0.028	0.036
150	0.023	0.029
180	0.019	0.024

■**Conveying Capacity** * Reference Value



Material / Surface Treatment	Frame	Motor Cover (1)	Motor Cover (2)	Pulley Holder
Material	EN AW-6060-T5	EN AW-5052/ AlMg2,5		EN AW-5052/ AlMg2,5
Surface Treatment	Anodized	Gold Anodized	Blue Anodized	Gold Anodized

Part Number	B 10mm Increment	L 5mm Increment	Motor Selection: Output (W)	Voltage (V)	Specification	Gear Head Ratio	F (Additional Counterbored Holes) 5mm Increment
	80~300	265~2000	6 25	TA115(Single-Phase) SA220(Three-Phase)* SA230(Three-Phase) *	IM (Induction Motor) SCM (Variable Speed Motor)	12.5 15 18 25 30 36 50 60 75 90 100 120 150 180	130 <F< L-130 * Additional counterbored holes will not be machined unless specified.

Motor voltage of SA220 / SA230 (three-phase) is selectable only for Induction Motors (IM) with an output of 25W. For motor details such as circuit diagrams, refer to pages following **P.997**.
Rotating direction of the belt is the same as motor rotating direction when gear ratio is 25 or less, and the opposite when gear ratio is 30 or more. Please adjust wiring so that the direction of conveyance will be always the direction as specified in the drawings.

Part Number	B	€ Body Price Qty. 1 ~2 Min.L~300	L305~400	L405~500	L505~600	L605~700	L705~800	L805~900	L905~1000	L1005~1100	L1105~1200	L1205~1300	L1305~1400	L1405~1500	L1505~1600	L1605~1700	L1705~1800	L1805~1900	L1905~2000
	80~100																		
	110~150																		
	160~200																		
	210~250																		
	260~300																		

For an Induction Motor (**IM**), a body price equals a unit price.
When Variable Speed Motor (**SCM**) is selected, the unit price will be body price + optional motor price.
For orders larger than indicated quantity, please request a quotation for Days to Ship and Price.

Example) CVSTN-80-1200-25-TA115-SCM-15-300 ➡

Body Price	+	Optional Motor price specification	=	€ Unit Price
1319,00 EUR	+	60,00 EUR	=	1379,00 EUR

Optional Motor Price (€ Unit Price +)	

Order Example

Part Number	-	B	-	L	-	Output	-	Motor: Voltage	-	Motor: Specification	-	Motor: Gear Head Reduction Ratio	-	F
	-	90	-	980	-	6	-	TA115	-	SCM	-	15	-	450

Days to Ship 15 Days

Alterations P.1084

NEW

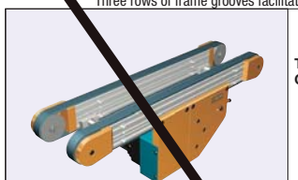
Miniature Conveyor System

-Timing Belt Dual Track Center Drive, 3-Groove Frame Type (Pulley Dia. 50mm)-

Price Reduction 20%

CAD Data

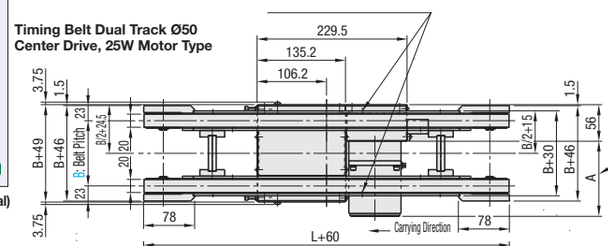
■Feature: A timing belt conveyor system comprised of dual track conveyors, between which a stopper or a sensor can be installed. Driving section is adjustable to desired positions. Three rows of frame grooves facilitate installation of accessories.



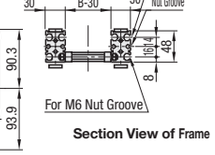
RoHS

Additional counterbored holes will be machined on identical positions for both frames.

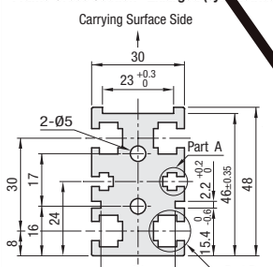
Timing Belt Dual Track Ø50 Center Drive, 25W Motor Type



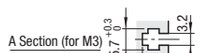
Induction Motor :115
Variable Speed Motor :125



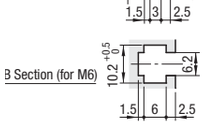
Frame Cross Section · Enlarged (symmetrical)



A Section (for M3)



B Section (for M6)



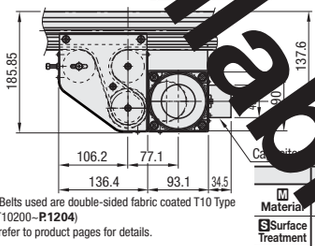
Compatible with JIS standard hexagon nuts.

40W Motor Type

*1 The driving part can be moved to a desired position within the area where groove is provided on the aluminum frame.

*2 When L is ≤487, there will be no counterbored hole for nuts.

Induction Motor :142
Variable Speed Motor :152



Capacitor Attached only for single-phase induction motor type

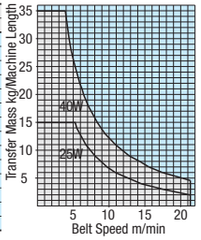
*Timing Belts used are double-sided fabric coated T10 Type (LTBR-T10200~**P.1204**)
Please refer to product pages for details.

■**Gear Head Ratio**

*May decrease depending on load condition.

Gear Head Reduction Ratio	Belt Speed (m/sec) 50Hz	60Hz
12.5	0.278	0.344
15	0.231	0.287
18	0.193	0.239
25	0.139	0.172
30	0.116	0.143
36	0.096	0.120
50	0.069	0.086
60	0.058	0.072
75	0.046	0.057
90	0.039	0.048
100	0.035	0.043
120	0.029	0.036
150	0.023	0.029
180	0.019	0.024

■**Conveying Capacity** * Reference Value



Material / Surface Treatment	Frame	Motor Cover (1)	Motor Cover (2)	Pulley Holder
Material	EN AW-6060-T5	EN AW-5052		EN AW-5052
Surface Treatment	Anodized	Gold Anodized	Blue Anodized	Gold Anodized

Part Number	B 10mm Increment	L 5mm Increment	Motor Selection: Output (W)	Voltage (V)	Specification	Gear Head Ratio	F (Additional Counterbored Holes) 5mm Increment
	80~300	325~2000	25 40	TA115(Single-Phase) SA220(Three-Phase)* SA230(Three-Phase) *	IM (Induction Motor) SCM (Variable Speed Motor)	12.5 15 18 25 30 36 50 60 75 90 100 120 150 180	150 <F< L-150 * Additional counterbored holes will not be machined unless specified.

Rotating direction of the belt is the same as motor rotating direction when gear ratio is 25 or less, and the opposite when gear ratio is 30 or more. Please adjust wiring so that the direction of conveyance will be always the direction as specified in the drawings. For motor details such as circuit diagrams, refer to Pages following **P.997**. Motor voltage of SA220 / SA230 (three-phase) is selectable only for Induction Motors (IM).

Part Number	B	€ Body Price Qty. 1 ~2 Min.L~400	L405~500	L505~600	L605~700	L705~800	L805~900	L905~1000	L1005~1100	L1105~1200	L1205~1300	L1305~1400	L1405~1500	L1505~1600	L1605~1700	L1705~1800	L1805~1900	L1905~2000
	80~100																	
	110~150																	
	160~200																	
	210~250																	
	260~300																	

For an Induction Motor (**IM**), a body price equals a unit price.
When Variable Speed Motor (**SCM**) is selected, the unit price will be body price + optional motor price.
For orders larger than indicated quantity, please request a quotation for Days to Ship and Price.

Example) CVSTP-80-1200-25-TA115-SCM-15-300 ➡

Body Price	+	Optional Motor price specification	=	€ Unit Price
1524,00 EUR	+	60,00 EUR	=	1584,00 EUR

Optional Motor Price (€ Unit Price +)	
SCM	

Order Example

Part Number	-	B	-	L	-	Output	-	Motor: Voltage	-	Motor: Specification	-	Motor: Gear Head Reduction Ratio	-	F
	-	130	-	660	-	25	-	SA230	-	IM	-	15	-	500

Days to Ship 15 Days

Alterations P.1084

Miniature Conveyor Guide Rails / Guide Rail Brackets / Conveyor Support Stands

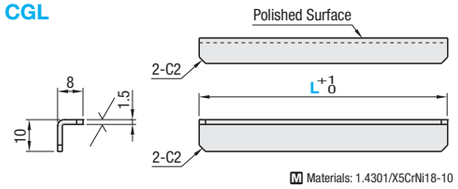
Price Reduction 20%

CAD Data

Conveyor Guide Rails

RoHS

CGL



Part Number	L 5mm Increment	€ Unit Price Qty. 1 ~ 10
CGL	150~300	
	305~500	
	505~750	
	755~1000	

For orders larger than indicated quantity, please request a quotation.

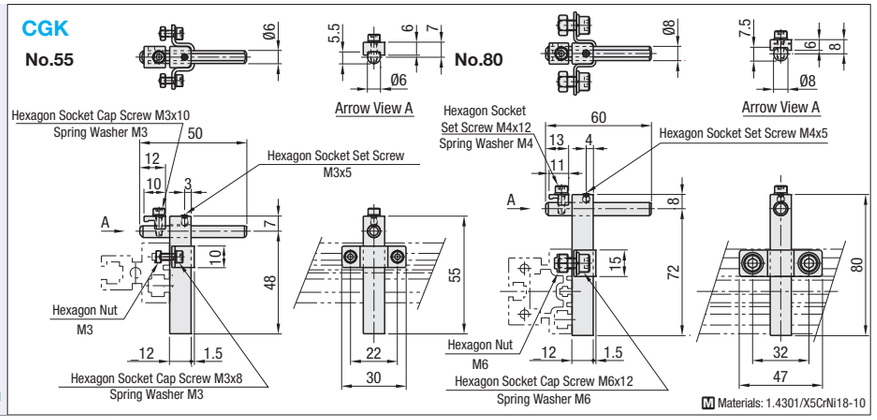
Order Example: Part Number CGL - L 380

Days to Ship: 10 Days

Conveyor Guide Rail Brackets -Standard Type-

RoHS

CGK



Part Number Type	No.	€ Unit Price Qty. 1 ~10
CGK	55	
	80	

For orders larger than indicated quantity, please request a quotation.

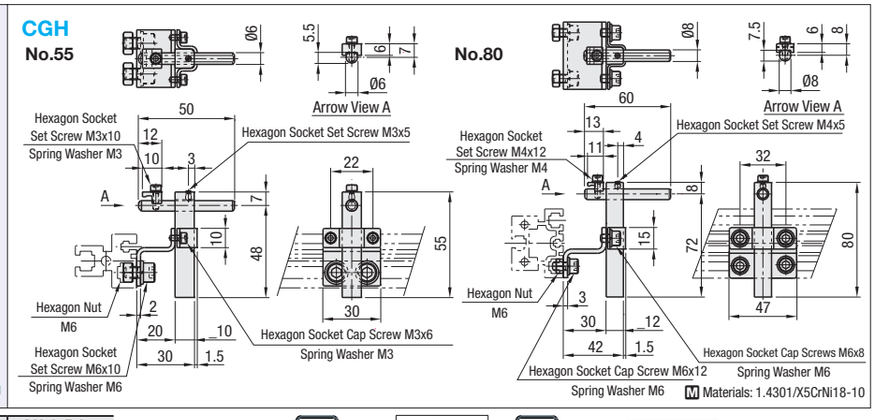
Order Example: Part Number CGK80

Days to Ship: 10 Days

Conveyor Guide Rail Brackets -Offset Type-

RoHS

CGH



Part Number Type	No.	€ Unit Price Qty. 1 ~10
CGH	55	
	80	

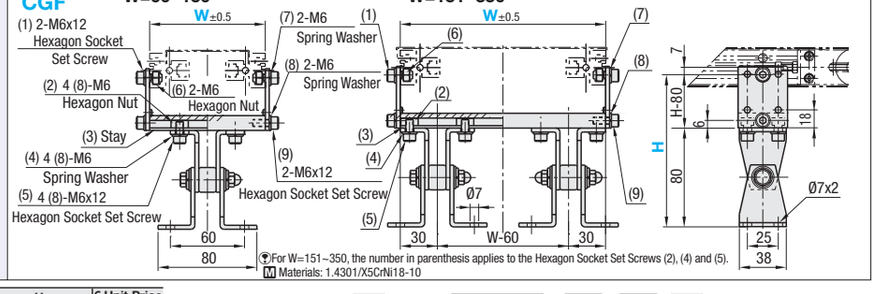
For orders larger than indicated quantity, please request a quotation.

Order Example: Part Number CGH55

Days to Ship: 10 Days

Conveyor Support Stands

CGF



Part Number	W 1mm Increment	H 1mm Increment	€ Unit Price Qty. 1 ~10
CGF	60~350	120~160	

For orders larger than indicated quantity, please request a quotation.

Order Example: Part Number CGF - W 220 - H 120

Days to Ship: 10 Days

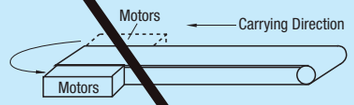
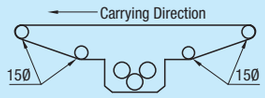
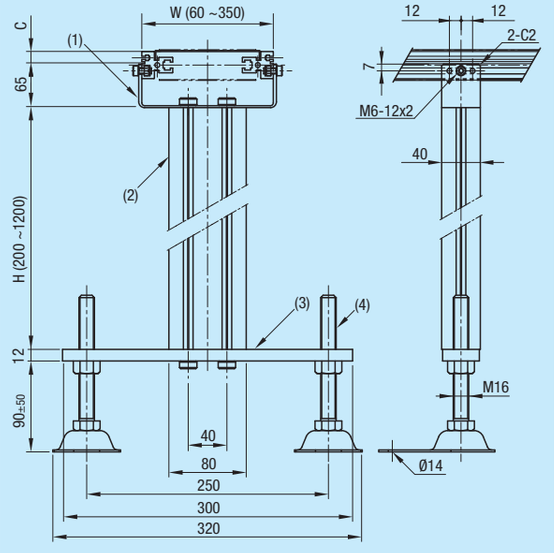
Miniature Conveyor Alterations

-Motor Reversed / One-side · Both-sides Roller Edges / Stands (Legs)-

CAD Data

Alterations: Part Number - B - L - Motor (Output - Voltage - Specification) - Gear Head Reduction Ratio - Belt Specification - F - (MK · HR · MR · WR · LE · LW)

- 100 - 750 - 25 - TA115 - IM - 90 - 300 - LE-W60-H500
- 120 - 1350 - 40 - TA115 - SCM - 50 - S - 600 - HR

Alterations	Code	Spec	Price Adder
Motor Position Reversed 	MK	Motor position can be changed. Ordering Code MK 17 Days Only the Head Drive Type can be specified. ⊗CVSPA not applicable Applicable Part Numbers: CVSA · CVSB · CVSTA · CVSTB	60,00
One-side Roller Edge 	HR MR	One end of the conveyor can be changed to a roller edge. Ordering Code HR MR 19 Days Only the Center Drive Type can be specified. Only a 25W motor can be selected. Applicable Part Numbers: CVSN · CVSP Selectable from L Dimension 350 or more. ⊗B(Belt Width) 200mm or more can not be selected.	150,00
Both-sides Roller Edge 	WR	One end of the conveyor can be changed to a roller edge. Ordering Code WR 19 Days Only the Center Drive Type can be specified. Only a 25W motor can be selected. Applicable Part Numbers: CVSN · CVSP Selectable from L Dimension 350 or more. ⊗B(Belt Width) 200mm or more can not be selected.	300,00
Conveyor Stand(1 Leg /2 Legs) 	LE LW	Stand will be added to the conveyor. LE: One conveyor mounting stand will be added. LW: Two conveyor mounting stands will be added. Ordering Code LE-W60-H500 LW-W60-H650 W Dimension is configurable in 1mm increment. H Dimension is configurable in 10mm increment. Same as the standard days to ship.	

	H200 ~500	H501 ~700	H701 ~1000	H1001 ~1200
LE	127,00	139,00	150,00	167,00
LW	254,00	279,00	300,00	334,00

Part Number	C	W
	13	B+39
		B+23
	33	B+39
		B+33
	26	B+25

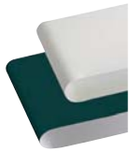
* B refers to belt width.

Material / Surface Treatment	(1) Bracket	(2) Aluminum Frame	(3) Backing Plate	(4) Adjusting Bolt
Material	1.4301/ X5CrNi18-10	Aluminum (EN AC-51400/ ALMGSI0,7SS-T5)	1.4301/X5CrNi18-10	Steel (1.0038/S235JR)
Surface Treatment	2B	Clear Anodize	-	Trivalent Chromate

Not Available

Flat Belts / Round Belts / Pulleys / Idlers

Flat Belts, Round Belts Pulleys, Idlers



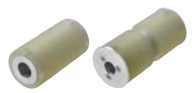
Product Name	Flat Belts	-With Meandering Prevention Crosspiece-	Pulleys for Flat Belts -Width T=6~32-
Page	1087	1088	1089

Idlers for Flat Belts -Width T=6~32-	Pulleys for Flat Belts -Width L=25~100-	Idlers for Flat Belts -Width L=25~100-
1090	1091	1092

Addition

Pulleys for Flat Belts Economy Type -Width L=110~500-	Idlers for Flat Belts Economy Type -Width L=110~500-	Pulleys for Flat Belts -Width L=110~500-
1093	1094	1095

Addition



Idlers for Flat Belts -Width L=110~500-	Pulleys for Flat Belts with Urethane-Width L=25~100-	Pulleys for Flat Belts with Urethane Economy Type-Width L=110~500-
1096	1097	1098

Addition

Price Reduced
Up to 36%

Shaft Pulleys for Flat Belts-Width L=25~100-	Idlers for Flat Belts -Width L=38~90-	Idlers for Flat Belts-Width L=100~300-	Polyurethane Round Belts
1099	1100	1100	1101

Addition

Price Reduced
Up to 37%

Polyurethane Round Belts -Seamless Type-	Pulleys for Round Belts–Set Screw / Trapezoid Groove–	-Set Screw / U Groove-	-Clamping / Trapezoidal Groove-	–Clamping / U Groove–
1102	1103	1103	1104	1104

Idlers for Round Belts–Narrow–	–Wide–	Pulleys for Round Belts–Double Grooves–	Idlers for Round Belts–Double Grooves–
1105	1106	1107	1108

Flat Belts / Round Belts / Pulleys / Idlers
–Overview–

■Flat Belts

Seven types of MISUMI flat belts are available: General Purpose, Sliding, Inclination, Electronic Parts Conveyer, Food Conveyer, Heat-Resisting and Oil-Resisting.
Belt Width Configurable Type and meandering prevention Crosspiece Type are also available.

[Flat Belts List by Appearance and Features]

		General Purpose	Sliding	Inclined transfer		Food Conveyer	Heat-Resisting	Oil-Resisting
Appearance (Lower swatches are Meandering Prevention Crosspiece Type.)								
				-	-	-	-	
Friction Coefficient (Reference Value) Against polished steel	Front	0.2	0.1	1.7	0.2	0.2	1.5	0.3
	Back	0.1	0.1	0.1	0.1	0.15	0.1	0.1
Operation Temperature		-10~80					-40~180	5~60
Features		Conveyor flat belt for most general purposes.	Belt surface has a small friction coefficient. Suitable for accumulating conveyance.	Belt surface has a large friction coefficient. Inclined transfer is possible.	Provided with antistatic finish. Suitable for conveyance of static-sensitive electronic components.	Satisfies No. 370 Notification concerning Food Sanitation Laws, and standardized protections against bacterium, mould and fray (ear part fray).	Heat-resistant belt up to 180°C in continuous use. Suitable for conveyance of work with heat.	Oil-resistant vinyl chloride and urethane are used for belt surface. Suitable for conveyance of work with cutting fluids, etc..

·Characteristics of DHBLT (For Electronic Part Conveyor)

Item		Unit	DHBLT
Electrical Resistance of Surface		Ω	104~105
Triboelectrical Voltage	*Test Condition A	V	10~20
	*Test Condition B		5~10

*Test Conditions
A: Belt speed: 220m/min, temperature 21±0.5°C, humidity: 70±1%
B: Belt speed: 20m/min, temperature 18±0.5°C, humidity: 50±1%
Listed values are not guaranteed values but an example set of measured values.

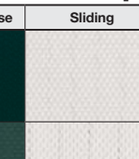
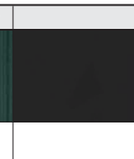
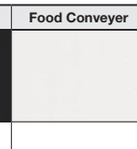
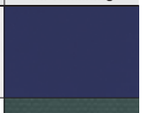
· Conveyance belt for food has the function compliant with HACCP.
*HACCP ·····Hazard Analysis (and) Critical Control Point
A technology developed by National Aeronautics and Space Administration (NASA) for sanitary control of space foods, which is applied to sanitary control in food industries and restaurants.

· Storage Cautions
- Avoid direct sunlight.
- Store in a place with no rain fall.
- Store in a place with humidity of less than 80%, temperature of 0°~40°.
- Do not store in stacks and avoid bending during storage.
- Do not put them directly on the ground.
- Avoid contact with oil and chemicals.

■ Pulleys and Idlers for Flat Belts

MISUMI pulleys and idlers for flat belts are offered in a wide variety of shapes and sizes.
You can choose the most suitable product for your needs, such as meandering and slip prevention.

[Pulleys / Idlers for Flat Belts List by Type]

	Belt Width (mm)		Outer Dia. (mm)	Standard Type: Straight Type	Standard Type: Crown Type	Standard Type: Crosspiece Groove Straight	Urethane Lined Type	Economy Type	Shaft Type
									
				General straight shape. Flanged type also selectable.	Shape with crown for meandering prevention. Flanged type also available.	Shape with groove for meandering prevention. Compatible with belt with crosspiece.	Urethane lining is applied (partially press-fitted) to prevent slip of the belt and the pulley.	Economical product with thin pipe.	Integrated with shaft. Contributes to reduction of number of parts.
Pulley	Width Selectable	6~32	15~50	P.1089	P.1089	-	P.1089	-	-
	Width Configurable	25~100	15~80	-	P.1091	P.1091	P.1097	-	P.1099
		110~500	15~80	-	P.1095	P.1095	P.1098	P.1093	-
Idler	Width Selectable	6~32	15~50	P.1090	P.1090	-	-	-	-
	Width Configurable	25~100	15~80	P.1092	P.1092	P.1092	-	-	-
		110~500	15~80	P.1096	P.1096	P.1096	-	P.1094	-

■ Round Belts

Five types of MISUMI round belts are available: Standard Type, High Tension Type, Conductive Type, Seamless Type and Hollow Rope Type.
Also, Weld Jointed or Open End are selectable for Standard Type and High Tension Type.

Features of Round Belts

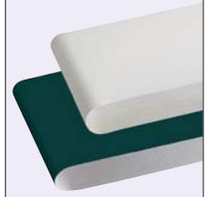
Suitable for conveying lightweight objects. Flexible on designs such as multi-shafts transmission or right angle transmission.
High elasticity and hardness, and excels in abrasion resistance, oil resistance and weather resistance.
Not applicable to aromatic compounds (toluene, benzene, naphthalene, etc.). Avoid using or storing in humid conditions.

Features of each type ☞P.1101-1102

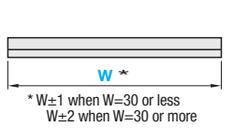
Flat Belts

CAD Data

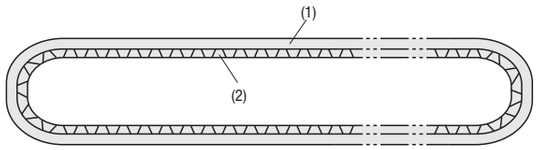
Flat Belts RoHS



Type		Usage	Material		Color Tone	Thickness mm	Weight kg/m²	Allowable Stress kg/cm	Min. Pulley Diameter Ømm	Knife Edge	Continuous Use Temperature °C	Friction Coefficient (Ref. against polished steel)	
Width Selectable	Width Configurable		(1) Front	(2) Back								Front	Back
HBLT	HBLTW	Gen. Purpose	Polyurethane	Polyester	Green	0.9	1	4	25	5R	-10~80	0.2	0.1
SHBLT	-	Sliding	Polyester		White	0.5	0.5	4	25	3R		0.1	0.1
LHBLT	-	Inclined Apps.	Soft Polyurethane		Green	1.5	1.6	4	30	-		1.7	0.1
DHBLT	-	Electronic Parts Conveyer	Conductive Polyurethane		Black	0.6	0.7	3	25	3R	-10~80	0.2	0.1
FHBLT	-	Food Conveyer	Polyurethane		White	0.8	0.9	3.5	20	3R		0.2	0.15
HHBLT	-	Heat-Resisting	Silicon Rubber		White	1.3	1.4	5	75	-	-40~180	1.5	0.1
OHBLT	-	Oil-Resisting	Oil-resistant chloroethene		Navy	1.0	1.1	4	25	-	5~60	0.3	0.1



* W±1 when W=30 or less
W±2 when W=30 or more



Characteristics of belts **P.1086**

Belts Width Selectable Type

Part Number Type	Belt Width W (mm)	Circumference L (m) 0.01m Increment	€ Price / m HBLT	SHBLT	LHBLT	DHBLT	FHBLT	HHBLT	OHBLT	Joint Machining Charge (Body € Price +) HBLT / SHBLT / LHBLT / DHBLT / FHBLT / OHBLT	HHBLT
DHBLT	5	0.50~3.00									
HBLT DHBLT SHBLT FHBLT LHBLT OHBLT	10	0.50~20.00									
	15										
	20										
HBLT FHBLT SHBLT OHBLT LHBLT	25										
	30										
	35										
	40										
HBLT SHBLT LHBLT FHBLT HHBLT OHBLT	50	0.80~20.00									
	60										
	75										
	80										
	90										
	100										
	125										
	150										
	200										
	250										
	300										

Flat belts are weld-joined before shipping.
Connecting section may be thicker by approx. 0.3mm for HBLT(HBLTW), SHBLT, LHBLT, DHBLT, FHBLT, 0.4mm for OHBLT and 0.6mm for HHBLT.

Belt Width Configurable Type

Part Number Type	Belt Width W (mm) 10mm Increment	Circumference L (m) 0.01m Increment	€ Price / m HBLTW	Joint Machining Charge (Body € Price +)
HBLTW	110~200	0.80~20.00		
	210~300			
	310~400			
	410~500			

Flat belts are weld joined before shipping. The connected portion may become approx. 0.3mm thicker.

Order Example

Part Number		-	Circumference L (m)
Type	Belt Width		
DHBLT	15	-	14.50
HBLTW	350	-	4.23

Days to Ship

-HBLT / SHBLT / LHBLT / DHBLT / FHBLT / HBLTW

10 Days — Express B — 3,00 EUR/ piece — P.88

A Express Charge of 8,10 EUR for 3 or more identical pieces.

-HHBLT / OHBLT

10 Days — ⊗Express Serviceis not available.

Price

Volume Discount (Round down to one Cent.) P.87

Qty.	1~4	5~12	13~19	20~49
Rate	€ Unit Price	5%	10%	18%

Quantity discount rate is not applicable to belt jointing charges.
Price Calculation Example (Round down to ten Cent.)
For orders larger than indicated quantity, please request a quotation.
DHBLT15-14.50
(Length m) x (Body Price/m) + (Belt Jointing Charge) = Product Price
14.50 X 7,20 EUR + 16,30 EUR =120,70 EUR

Minimum Pulley Dia. and Driving Pulley Dia.

Identify the relevant pulley diameters by reading the width and length of the belt from the table below, and determine the smaller value as "minimum pulley diameter" and larger value as "drive pulley diameter".

[Table 1] Minimum Pulley Diameter Selection Table (Belt Width)

Belt Width (mm)	Min. Pulley Diameter HBLT SHBLT DHBLT FHBLT OHBLT	LHBLT	HHBLT
Less than 100	25	30	75
100~190	50	55	75
200~400	50	55	100
410~500	75	80	100

[Table 2] Minimum Pulley Diameter Selection Table (Belt Length)

Belt Length (m)	Min. Pulley Diameter HBLT SHBLT DHBLT FHBLT OHBLT	LHBLT	HHBLT
Less than 1.00	25	30	75
1.01~1.99	50	55	75
2.00~4.00	50	55	100
4.01~7.00	75	80	100
7.01~10.00	100	105	125
10.01~20.00	100	105	150

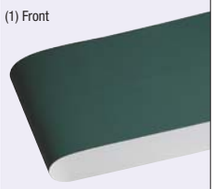
(Ex.) When the width is 150mm and length is 5.00mm
Select from Width: 50…Small Value…
Min. Pulley Diameter
Select from Length: 75…Large Value…
Min. Driving Pulley Diameter

Flat Belts
-With Meandering Prevention Crosspiece-

Features: Suitable for ensuring the running straightness and strength against lateral forces.

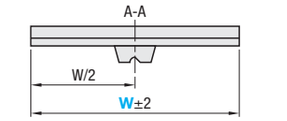
Flat Belts RoHS
-With Prevention Crosspiece-

(1) Front

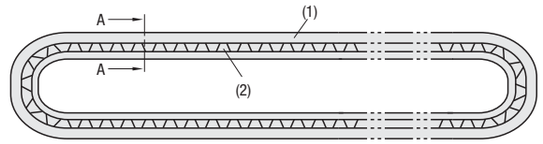


(2) Back

Type	Usage	Material (1) Front	Material (2) Back	Color Tone	Thick-ness mm	Weight kg/m²	Allowable Stress kg/cm	Min. Pulley Diameter Ømm	Continuous Use Temperature °C	Friction Coefficient (Ref. against polished steel) Front	Back
HBLTDS	Gen. Purpose	Polyurethane	Polyester	Green	1.4	1.5	8	40	-30~80	0.8	0.2
SHBLTDS	Sliding	Polyester		White	1.3	1.1		40		0.2	0.2
OHBLTDS	Oil-Resisting	Oil-resistant Urethane		Green	1.4	1.5		25		0.8	0.2



Crosspiece Shape	Pulley / Idler Relief Dimensions
10, 5, R1, 7.8	14, 5, 11.8



Characteristics of belts **P.1086**

With Prevention Crosspiece

Part Number Type	Belt Width W 10mm Increment	Circumference L (m) 0.01m Increment	€ Price / m HBLTDS	SHBLTDS	OHBLTDS	Joint Machining Charge (Body € Price +)
HBLTDS SHBLTDS OHBLTDS	50~90	1.00~20.00 (L≥Wx4)				
	100~190					
	200~290					
	300~400					
	410~500					

Order Example

Part Number		-	Circum-ference L
Type	Belt Width		(m)
HBLTDS	350	-	4.50

Days to Ship 10 Days

Price

Volume Discount (Round down to one Cent.) P.87

Qty.	1~4	5~7	8~10
Rate	€ Unit Price	5%	10%

For orders larger than indicated quantity, please request a quotation.
Price Calculation Example (Round down to ten Cent.)
HBLTDS350-4.50
(Length m) x (Body Price/m) + (Belt Jointing Charge) = Product Price
4.50 X 130,50 EUR + 44,00 EUR =631,20 EUR
Quantity discount rate is not applicable to belt jointing charges.

Resistance against Chemicals and Oils

Chemical Name	Gen. Purpose HBLT HBLTW HBLTDS	Sliding SHBLT SHBLTDS	Inclined Apps. LHBLT	Electronic Parts Conveyer DHBLT	Food Conveyer FHBLT	Heat-Resisting HHBLT	Oil-Resisting OHBLT OHBLTDS
Isopropyl Alcohol	○	Δ(○)	○	○	○	○	Δ(○)
Ethanol	○	○	○	○	○	○	○
Potassium Chloride	○	○	○	○	○	○	○
Calcium Chloride	○	○	○	○	○	○	○
Hydrochloric Acid (Gas)	X	X	X	X	X	○	Δ
Hydrochloric Acid (5% or less)	○	○	○	○	○	○	○
Hydrochloric Acid (5~36%)	X	X	X	X	X	○	○
Caustic Soda	Δ(X)	○(X)	Δ	Δ	Δ	○	○ (X)
Solution of Caustic Soda (50%)	Δ(X)	X	Δ	Δ	Δ	X	○ (X)
Volatile Oil	○	○	○	○	○	Δ	○
Strong Alkali	Δ(X)	X	Δ	Δ	Δ	Δ	Δ
Strong Acid	X	X	X	X	X	○	Δ
Light Oil	○	Δ	○	○	○	Δ	Δ(○)
Ethyl Acetate	X	X	X	X	X	Δ	X
Sodium Hypochlorite (Undiluted Solution)	Δ(X)	Δ(X)	Δ	Δ	Δ	○	○ (X)
Sodium Hypochlorite (600ppm)	○ (X)	○ (X)	○	○	○	○	○ (X)
Weak Alkali	○	○	○	○	○	○	○
Weak Acid	○	○	○	○	○	○	○
Soap	○	○	○	○	○	○	○
Machining Oil	Δ	Δ	Δ	Δ	Δ	X	○
Diesel Oil	○	Δ	○	○	○	X	○
Toluene	Δ	X	Δ	Δ	Δ	X	X
Naphthalene	Δ(X)	Δ(X)	Δ	Δ	Δ	X	Δ
Paraffin Oil	○	○	○	○	○	○	○
Phenol	Δ(X)	Δ(X)	Δ	Δ	Δ	Δ	Δ(X)
Antirust Oil	Δ	Δ	Δ	Δ	Δ	X	○
Machine Oil	Δ	Δ	Δ	Δ	Δ	X	○
Methanol	○	○	○	○	○	○	○
Sulfuric Acid (10%)	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Sulfuric Acid (50%)	Δ	Δ	Δ	Δ	Δ	Δ	Δ(X)
Sulfuric Acid (70%)	X	X	X	X	X	Δ	X
Sulfuric Acid (98%)	X	X	X	X	X	X	X

Resistance against Foods

Foods	Gen. Purpose HBLT HBLTW HBLTDS	Sliding SHBLT SHBLTDS	Inclined Apps. LHBLT	Electronic Parts Conveyer DHBLT	Food Conveyer FHBLT	Heat-Resisting HHBLT	Oil-Resisting OHBLT OHBLTDS
Yeast	○	○	○	○	○	○	○
Tea Leaves	○	○	○	○	○	○	○
Olive Oil	○	○	○	○	○	Δ	○
Fruits	○	○	○	○	○	○	○
Cashew Nuts	X	X	X	X	X	X	X
Cream	○	○	○	○	○	○	○
Spices	○	○	○	○	○	○	○
Grains	○	○	○	○	○	○	○
Coffee Beans	○	○	○	○	○	○	○
Flour	○	○	○	○	○	○	○
Rice Grains	○	○	○	○	○	○	○
Fish	○	○	○	○	○	Δ	○
Sugar	○	○	○	○	○	○	○
Salt	○	○	○	○	○	○	○
Salt Water	○	○	○	○	○	○	○
Fat	○	○	○	○	○	X	○
Cooking Oil	○	○	○	○	○	Δ	○
Syrup	○	○	○	○	○	○	○
Soy Sauce	○	○	○	○	○	Δ	○
Vinegar	○	○	○	○	○	Δ	○ (X)
Sauce	○	○	○	○	○	Δ	Δ
Molasses	○	○	○	○	○	○	○
Meat	○	○	○	○	○	Δ	○
Butter	○	○	○	○	○	Δ	○
Bread	○	○	○	○	○	○	○
Peanut Oil	○	○	○	○	○	X	○
Beer	○	○	○	○	○	○	○
Margarine	○	○	○	○	○	Δ	○
Mayonnaise	○	○	○	○	○	Δ	○
Water	○	○	○	○	○	○	○ (X)
Lard	○	○	○	○	○	Δ	○

○ Not affected at all, Δ Slightly Affected, x Severely Affected The symbols in ( ) are for Crosspiece Groove Type.

The above table shows adequacy in the condition where materials including chemicals and oil are loaded on belt surface and carried in room temperature. Actual conditions may differ in cases where belts are completely submerged in materials or used in higher temperature than room temperature.

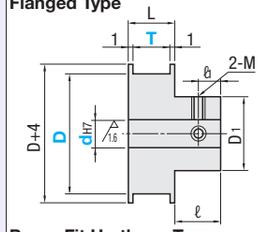
Pulleys for Flat Belts- Width T=6~32-

-Flanged / Crowned / Press-Fit Urethane-

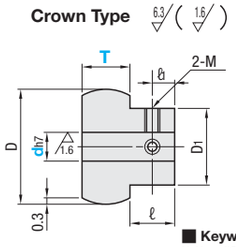
CAD Data

Type			Material	Nylon 6 (Glass Fiber 30%) Lining
Flanged	Crowned	Press-Fit Urethane		
HBPG	HBPCG	-	1.1191/C45E	Black Oxide
HBPM	HBPCM			Electroless Nickel Plating
HBPA	HBPCA		EN AW-2017/AlCu4MgSi	White Alumite
HBPS	HBPCS		1.4301/X5CrNi18-10	-
-	-	HBPUS		Urethane Shore A70

Flanged Type

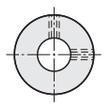


Crown Type 6.3 (1.6)

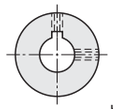


Shaft Hole Specifications

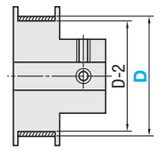
Round Hole + Tap **P**



New JIS Keyway Hole + Tap **N**



Press-Fit Urethane Type

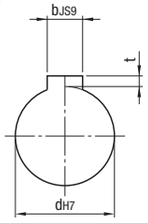


Urethane shore A70 (blue) is press-fit on the roller face. D dimension does not change. Urethane Thickness 1mm

■ **Keyway Dimension**

N: New JIS (B1301) Keyway Dimension

Nominal	dH7		bJS9		t	Tolerance
N8	8	+0.015 0	3	±0.0125	1.4	+0.1 0
N10	10					
NK10	10		4	±0.0150	1.8	
N12	12	+0.018 0	5		2.3	
N15	15					
N20	20	+0.021 0	6		2.8	
N30	30		8	±0.0180	3.3	+0.2 0
N40	40	+0.025 0	12	±0.0215		



Part Number Type	d	dH7 P (Round Hole + Tap)	dH7 N (Keyway + Tap) Selected	T Selectable	D1	ℓ	ℓ1	M	L
Flanged Type HBPG HBPM HBPA HBPS Crown Type HBPCG HBPCM HBPCA HBPCS Press-Fit Urethane Type HBPUS	15	5 6	-	6* 11 16 21 27 32	12	8	4	3	T+2
	18	5 6 8	-		16				
	20	5 6 8	8						
	28	6 8 10	8		20				
	30	6 8 10 12	8 10 12						
	35	8 10 12	10 12						
	40	8 10 12	10 12						
	45	10 12	10 12		30	12	6	5	
	50	10 12	10 12						
	60	10 12 15	10 12 15						
	80	15 20 30	15 20 30		50	16	8	8	
	100	20 30 40	20 30 40		60				

⊗* T=6 is not available for Crowned Type. Select NK10 when Keyway + Tap with shaft hole diameter 10 and keyway width 4.0mm (height 1.8mm) is requested.

Order Example

Part Number	-	P	-	N	-	T
HBPM30	-	P6			-	11
HBPCG35			-	NK10	-	32

Price

■ **Volume Discount** (Round down to one Cent.) P87

Qty.	1~9	10~14	15~19	20~49
Rate	€ Unit Price	5%	10%	18%

For orders larger than indicated quantity, please request a quotation.

Days to Ship

·HBPG / HBPM / HBPA / HBPS / HBPCG / HBPCM / HBPCA / HBPCS: **8 Days**

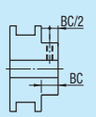
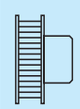
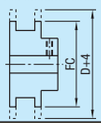
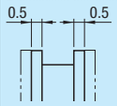
·HBPUS: **10 Days**

d	€ Unit Price								
	Flanged Type				Crown Type				Press-Fit Urethane Type
	HBPG	HBPM	HBPA	HBPS	HBPCG	HBPCM	HBPCA	HBPCS	HBPUS
15									
18									
20									
28									
30									
35									
40									
45									
50									
60									
80									
100									

Alterations

Part Number	-	P / N	-	T	-	(BC / HRC / FC / TC)
HBPM18	-	P8	-	11	-	BC6.5

10 Days

Alterations	Boss Cut	Knurl Flat Thread	Flange Cut	Flange Thickness
Code	BC	HRC	FC	TC
Spec.	Cuts the boss length in 0.5mm increment. M+3≤BC≤ℓ  Order Code BC6.5	Machines knurling flat pattern on the roller section.  Applicable to HBPG, HBPM, HBPA and HBPS.	Lowers flange by cutting. FC: 0.5mm Increment  D≤FC<D+4 Order Code FC42 ⊗Not applicable to Crowned Type.	Machines flange thickness by 0.5mm. L dimension becomes 1mm shorter.  ⊗Not applicable to Crowned Type.
Price Adder	5,00	3,00	3,00	3,00

Idlers for Flat Belts- Width T=6~32-

-Flanged / Crowned-

CAD Data

Type		Material	Surface Treatment Nylon 6 (Glass Fiber 30%)	Material Bearing	Accessories
Flanged	Crowned				
HBG	HBGC	1.1191/C45E	Black Oxide	Steel	Retaining Ring (1.4301/ X5CrNi18-10)
HBGM	HBGCM		Electroless Nickel Plating		
HBGA	HBGCA	EN AW-2017/AlCu4MgSi	White Alumite		
HBGS	HBGCS	1.4301/X5CrNi18-10	-	Stainless Steel	
HBGP	-	Polyacetal	-	Steel	

* Bearing Precision JISB1514 Class 0

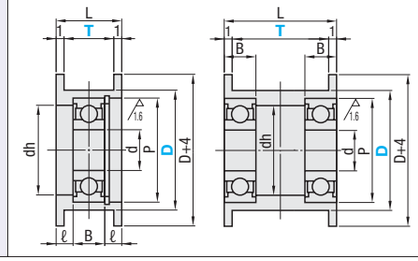
Bearings are press-fitted.

6.3 (1.6)

Flanged Type

T=6, 11

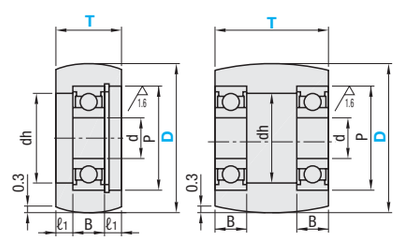
T=16, 21, 27, 32



Crown Type

T=11

T=16, 21, 27, 32



Part Number Type	d	T	P	dh	ℓ	ℓ1	L	Bearing No.	Bearing d	Bearing B	€ Unit Price Flanged Type HBG	HBGM	HBGA	HBGS	HBGP	Crown Type HBGC	HBGCM	HBGCA	HBGCS
Flanged Type HBG HBGM HBGA HBGS HBGP (Applicable to * only) Crown Type HBGC HBGCM HBGCA HBGCS	15	*1 6	11	9	2	-	8	694ZZx1	4	4					⊗	⊗	⊗	⊗	⊗
	20		16	13	1.5			625ZZx1	5	5									
	20		16	13	4	3	13	625ZZx1	5	5					⊗				
	*25	11	19	16	3.5	2.5		626ZZx1	6	6									
	*30			17				698ZZx1	8										
	15	16	11	9	-	-	18	685ZZx2	5	5					⊗				
	20		16	13				625ZZx2											
	25		19	16				626ZZx2	6	6									
	*30			17				698ZZx2	8										
	35		26 (22)	23 (17)				6000ZZx2 (6900ZZX2)*2	10	8 (6)					⊗				
	*40																		
	15	21	11	9	-	-	23	685ZZx2	5	5					⊗				
	20		16	14				688ZZx2	8	6									
	25		19	17				698ZZx2											
	*30							698ZZx2											
	35		26	23				6000ZZx2	10	8					⊗				
	*40																		
	*50		28	25				6001ZZx2	12	8									
	15	27	11	9	-	-	29	685ZZx2	5	5					⊗				
	20		16	14				688ZZx2	8	6									
	25		19	17				698ZZx2											
	30							698ZZx2											
	40		26	23				6000ZZx2	10	8					⊗				
	50		28	25				6001ZZx2	12										
	15	32	11	9	-	-	34	685ZZx2	5	5					⊗				
	20		16	14				688ZZx2	8	6									
	25		19	17				698ZZx2											
	30																		
	40		26	23				6000ZZx2	10	8					⊗				
	50		28	25				6001ZZx2	12										

For Detailed Bearing Dimensions, refer to ☞P.897-907. HBGP is only applicable to sizes marked with *. ⊗*1 T=6 is not available for Crowned Type.

*2 Values in ( ) are Bearing Dimensions when T=16 and D=35 or 40 for Crowned Type.

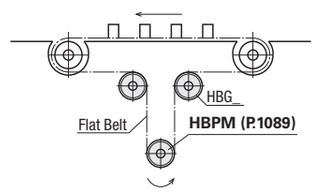
Order Example

Part Number	-	T
HBG15	-	6
HBGCS50	-	21

Days to Ship

8 Days

Example



Price

■ **Volume Discount** (Round down to one Cent.) P87

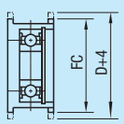
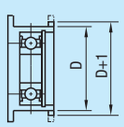
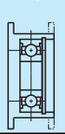
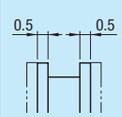
Qty.	1~9	10~14	15~19	20~49
Rate	€ Unit Price	5%	10%	18%

For orders larger than indicated quantity, please request a quotation.

Alterations

Part Number	-	T	-	(FC / KLC / KFC / TC)
HBG15	-	6	-	KFC

10 Days

Alterations	Flange Cut	One Side Low Flange	One Flange Type	Flange Thickness
Code	FC	KLC	KFC	TC
Spec.	Lowers flange by cutting. FC: 0.5mm Increment  D≤FC<D+4 Order Code FC30.5 ⊗Not applicable to Crowned Type.	 Lowers a flange on one side. ⊗Not applicable to Crowned Type.	Cuts off the flange on the right side of the drawing.  ⊗Not applicable to Crowned Type.	Machines flange thickness by 0.5mm. L dimension becomes 1mm shorter.  ⊗Not applicable to HBGP.
Price Adder	3,00	2,00	2,00	3,00

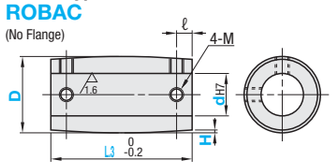
Pulleys for Flat Belts- Width L=25~100-

-Crowned / Crosspiece Groove Straight-

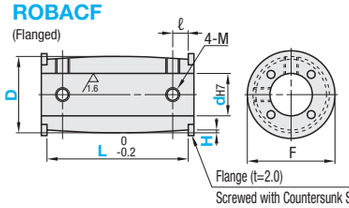
CAD Data

Crown Type

ROBAC
(No Flange)

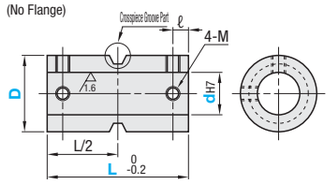


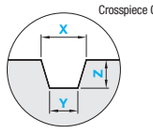
ROBACF
(Flanged)



Crosspiece Groove Straight

ROBAM
(No Flange)



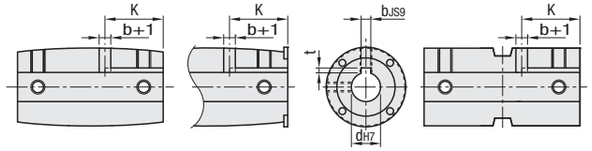


M Materials: EN AW-5052/AlMg2,5
S Surface Treatment: White Alumite

New JIS (B1301) Keyway Dimension

Nominal		dH7		bJS9		t	Tolerance
N8	8	+0.015 0	3	±0.0125	1.4		
N10	10						
NK10	10		4	±0.0150	1.8	+0.1 0	
N12	12	+0.018 0					
N15	15		5		2.3		
N20	20	+0.021 0	6		2.8		
N25	25		8	±0.0180	3.3	+0.2 0	
N30	30						

Shape of Keyway



For Crosspiece Groove Straight type, key length is shorter under the following conditions in order to avoid causing interference with through holes made by keyway machining.When L/2-X/2≤K ≤L/2+X/2,
K=L/2-(X/2+(b+1)/2+1)

Part Number		dH7		Specify in 1mm Increment	Crowned Type Only Selectable	Only Crosspiece Groove Straight Type Specify in 0.1mm Increment			Key Length	M		ℓ	F
Type	d	Round Hole + Tap	Keyway Hole + Tap	L	H	X	Y	Z	K	Round Hole + Tap	Keyway Hole + Tap		
Crown Type ROBAC ROBACF / Crosspiece Groove Straight ROBAM (Crosspiece Groove Straight Type is only available in D dimension 30 or larger.)	15	8	N8	Crown Type 25~100 / Crosspiece Groove Straight 50~100 / (When Keyway is selected at D=60 or 80 for Crosspiece Groove Straight Type 60~100)	0.3 / 0.5	-	-	-	25	M4	M3	3.5	-
	20	8	N8						25				-
		10	N10 / NK10										
	25	8	N8						25				26
		10	N10 / NK10										
	30	8	N8			7.0~15.0	5.0~12.0	4.0~7.0	25				31
		10	N10 / NK10										
		12	N12						30				
	35	10	N10 / NK10						25				36
		12	N12						30		M4		
		15	N15								M3		
	40	12	N12						30		M4		41
		15	N15								M5		
		20	N20								M4		
	50	15	N15						30	M5	M5	4	51
		20	N20								M5		
		25	N25								M5		
	60	20	N20						30	M6	M6	4.5	61
		25	N25										
		30	N30										
	80	25	N25						30	M8	M6	6	81
		30	N30										
		35	-						-		-		

When L≤36(N8, N10, NK10) or L≤43(N12, N15, N20) or L≤45(N25, N30), K=L (No Flanged) or K=L+4 (Flanged).
Only D=25 or more are available for Flanged Type, D=30 or more are available for Flanged Type with Keyways.

Order Example

■Crown Type: Part Number - d - L - H
ROBAC30 - NK10 - L62 - H0.3

■with Crosspiece Groove Straight Type: Part Number - d - L - X - Y - Z
ROBAM40 - 15 - L82 - X7.8 - Y6.0 - Z5.0

Days to Ship: 10 Days
Express B 5,00 EUR/ piece P. 88
A Express Charge of 13,50 EUR for 3 or more identical pieces.

Price

■Volume Discount (Round down to one Cent.) P. 87

Qty.	1~9	10~14	15~19
Rate	€ Unit Price	5%	10%

For orders larger than indicated quantity, please request a quotation.

When keyway is specified, unit price is (body price + keyway machining charge).
Calculation Example: ROBAC30-N12-L80-H0.3
23,20 EUR (body price) + 3,30 EUR (keyway machining charge) = 26,50 EUR (unit price)

d	€ Body Price								Keyway Machining Charge (€ Unit Price+)
	Crown Type						Crosspiece Groove Straight		
	ROBAC			ROBACF			ROBAM		
	L25~50	L51~75	L76~100	L25~50	L51~75	L76~100	L50~75	L76~100	
15									
20									
25									
30									
35									
40									
50									
60									
80									

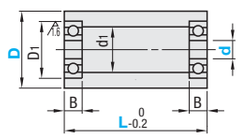
Idlers for Flat Belts- Width L=25~100-

-Straight / Crosspiece Groove Straight / Crowned-

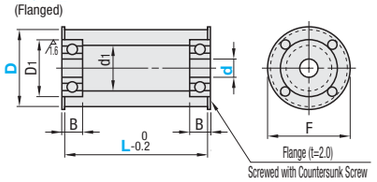
CAD Data

Straight Type

ROFAN
(No Flange)

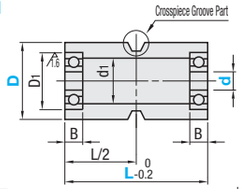


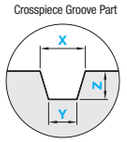
ROFAF
(Flanged)



Crosspiece Groove Straight

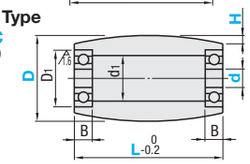
ROFAM
(No Flange)





Crown Type

ROFAC
(No Flange)



M Materials: EN AW-5052/AlMg2,5
S Surface Treatment: White Alumite
* Bearing Precision JISB1514 Class 0
Bearings are press-fitted.

Part Number		d	Specify in 1mm Increment	Only Crosspiece Groove Straight Type Specify in 0.1mm Increment			Crowned Type Only Selectable	d1	Bearing Dimension			F
Type	d		L	X	Y	Z	H		No.	D1	B	
Straight Type ROFAN ROFAF / Crosspiece Groove Straight ROFAM / Crown Type ROFAC (Crosspiece Groove Straight Type is only available in D dimension 35 or larger.)	15	(5)	Straight Type Crown Type 25~100 / Crosspiece Groove Straight 50~100 / (L≥Bx2+2)	-	-	-	0.3 / 0.5	7	B675ZZ	8	2.5	-
		(6)						9	B676ZZ	10	3	
	20	(6)						10	B686ZZ	13	5	-
		(8)						10	B678ZZ	12	3.5	
	25	6						10	B696ZZ	15	5	26
		(8)							B688ZZ	16		
	30	8						15	B698ZZ	19	6	31
		(10)							B6900ZZ	22		
		(12)							B6901ZZ	24		
	35	10				4.0~6.0		17	B6900ZZ	22	6	36
		12							B6901ZZ	24		
		(15)							B6902ZZ	28	7	
	40	8				4.0~7.0		17	B628ZZ	24	8	41
		10							B6000ZZ	26		
		12							B6901ZZ	24	6	
		15							B6902ZZ	28	7	
		(20)				4.0~6.0		22	B6804ZZ	32	7	
	50	10				4.0~7.0		17	B6200ZZ	30	9	51
		12						22	B6001ZZ	28	8	
		15		7.0~15.0	5.0~12.0			17	B6902ZZ	28	7	
		20						27	B6904ZZ	37	9	
		(25)							B6905ZZ	42		
	60	12						22	B6201ZZ	32	10	61
		15							B6002ZZ		9	
		20							B6904ZZ	37		
		25						32	B6905ZZ	42	9	
		30							B6906ZZ	47		
	80	25						41	B6205ZZ	52	15	81
		30							B6006ZZ		13	
		35							B6907ZZ	55	10	

Sizes in ( ) for d are only applicable to No Flange Type. For Detailed Bearing Dimensions, refer to P.897-907

Order Example

■Straight Type: Part Number - d - L
ROFAN30 - 10 - L52

■with Crosspiece Groove Straight Type: Part Number - d - L - X - Y - Z
ROFAM40 - 12 - L82 - X7.8 - Y6.0 - Z5.0

■Crown Type: Part Number - d - L - H
ROFAC60 - 20 - L75 - H0.5

Days to Ship: 10 Days
Express B 5,00 EUR/ piece P. 88
A Express Charge of 13,50 EUR for 3 or more identical pieces.

Price

■Volume Discount (Round down to one Cent.) P. 87

Qty.	1~9	10~14	15~19
Rate	€ Unit Price	5%	10%

For orders larger than indicated quantity, please request a quotation.

d	€ Unit Price											
	Straight Type						Crosspiece Groove Straight		Crown Type			
	ROFAN			ROFAF			ROFAM		ROFAC			
	L25~50	L51~75	L76~100	L25~50	L51~75	L76~100	L50~75	L76~100	L25~50	L50~75	L76~100	
15												
20												
25												
30												
35												
40												
50												
60												
80												

Economy Pulleys for Flat Belts-Width L=110~500-

-Crowned / Crosspiece Groove Straight-

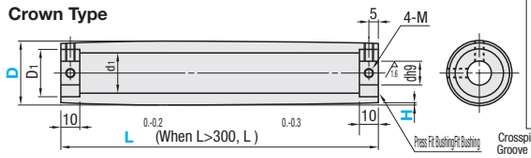
CAD Data

Feature: Use of thin pipes has realized price reduction by average 32%.

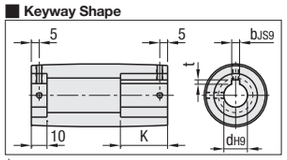
Type		Material	Nylon 6 (Glass Fiber 30%)
Crowned	Crosspiece Groove Straight Type is only available in D dimension 30 or larger.		
RBWAC	RBWAM	EN AW-5056/AlMg5 · EN AW-6063/ AlMg0,7Si (Crowned Type D38 or larger)	-
RBWWC	RBWWM		White Alumite

6.3 (1.6)

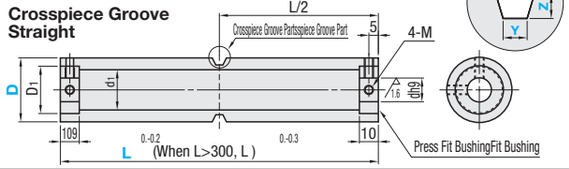
Crown Type



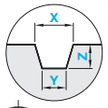
Keyway Shape



Crosspiece Groove Straight



Crosspiece Groove Part



New JIS (B1301) Keyway Dimension

Nominal	dH9		bJS9		t Tolerance	
N8	8	+0.036 0	3	±0.0125	1.4	+0.1 0
N10	10					
NK10	10		4	±0.0150	1.8	
N12	12	+0.043 0				
N15	15		5		2.3	
N20	20	+0.052 0	6		2.8	
N25	25		8	±0.0180	3.3	+0.2 0
N30	30					
N35	35	+0.062 0	10			
N40	40		12	±0.0215	3.8	
N50	50		14			

■ **Crowned Type**

Part Number Type	d	dH9 Round Hole + Tap	dH9 Keyway Hole + Tap	10mm Increment L	H Selection L=110~300	H Selection L=310~500	Key Length K	d1	D1	M
Crown Type RBWAC RBWWC	18	8	-	110~500	0.3	0.5	-	10	12	M3
	28	8	N8				25	20	22	M3
		10	N10 / NK10				30			
		12	N12				-			M4
	38	12	N12				30	30	32	M3
		15	N15							M4
		20	N20							M5
		25	-				-			M6
	48	15	N15				30	40	42	M4
		20	N20							M5
		25	N25		0.5	1.0				M6
		30	N30							
	58	20	N20					50	52	M5
		25	N25							M6
		30	N30							
		35	N35							M8
	78	25	N25					70	72	M6
		30	N30							
		35	N35							M8
		40	N40							
		50	N50							

■ **Crosspiece Groove Straight Type**

Part Number Type	d	dH9 Round Hole + Tap	dH9 Keyway Hole + Tap	10mm Increment L	Specify in 0.1mm Increment X	Y	Z	Key Length K	d1	D1	M
Crosspiece Groove Straight RBWAM RBWWM	38	12	N12	110~500	7.0~15.0	5.0~12.0	4.0~6.0	30	20	22	M3
		15	-					-			M4
	48	15	N15					30	30	32	M4
		20	N20								M5
		25	-					-			M6
	58	20	N20					30	40	42	M5
		25	N25								M6
		30	N30								
		35	-					-			M8
	78	25	N25					30	60	62	M6
		30	N30								
		35	N35								M8
		40	N40								
		50	N50								

Order Example

	Part Number	-	d	-	L	-	H	-	X	-	Y	-	Z
(Crowned)	RBWAC28	-	10	-	350	-	H0.5						
(Crosspiece Groove Straight)	RBWWM58	-	N25	-	250			-	X14.0	-	Y11.8	-	Z5.0

Days to Ship 10 Days

Express B 5,00 EUR/ piece P88

(?)A Express Charge of 13,50 EUR for 3 or more identical pieces.

Price

■ **Volume Discount** (?)Round down to one Cent.) P87

Qty.	1~9	10~14	15~19
Rate	€ Unit Price	5%	10%

(?)For orders larger than indicated quantity, please request a quotation.

(?)When keyway is specified, unit price is (body price + keyway machining charge).
(?)Price Calculation Example: RBWAC38-N15-250-H0.5
35,60 EUR (body price) + 6,90 EUR (keyway machining charge) = 42,50 EUR (unit price)

d	€ Body Price Crown Type RBWAC L110~150	L160~200	L210~250	L260~300	L310~350	L360~400	L410~450	L460~500	RBWWC L110~150	L160~200	L210~250	L260~300	L310~350	L360~400	L410~450	L460~500	Keyway Machining Charge (€ Unit Price+)
18																	
28																	
38																	
48																	
58																	
78																	

d	€ Body Price Crosspiece Groove Straight RBWAM L110~150	L160~200	L210~250	L260~300	L310~350	L360~400	L410~450	L460~500	RBWWM L110~150	L160~200	L210~250	L260~300	L310~350	L360~400	L410~450	L460~500	Keyway Machining Charge (€ Unit Price+)
38																	
48																	
58																	
78																	

Economy Idlers for Flat Belts-Width L=110~500-

-Straight Type / Crowned Type / Crosspiece Groove Straight Type-

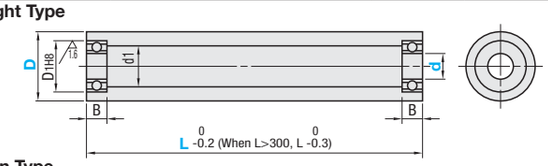
CAD Data

Feature: Use of thin pipes has realized price reduction by average 34%.

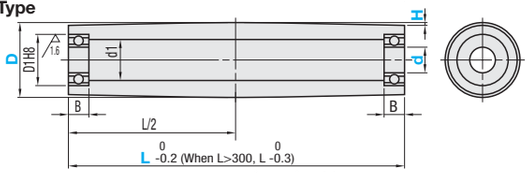
Type			Material	Nylon 6 (Glass Fiber 30%)
Straight	Crowned	Crosspiece Groove Straight Type is only available in D dimension 30 or larger.		
RFWAS	RFWAC	RFWAM	Aluminum Alloy	-
RFWWS	RFWWC	RFWWM		White Alumite

6.3 (1.6)

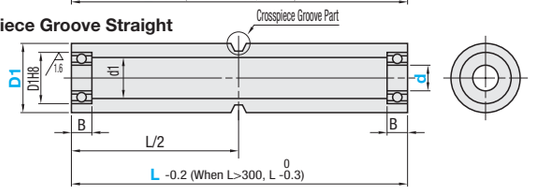
Straight Type



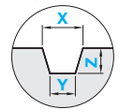
Crown Type



Crosspiece Groove Straight



Crosspiece Groove Part



(?) Bearings can be detached. Temporarily attached with tape for shipping.

* Bearing Precision JISB1514 Class 0

■ **Straight Type / Crowned Type**

Part Number Type	d	d	10mm Increment L	H Selectable	d1	Bearing Dimension No.	D1	B
Straight Type RFWAS RFWWS Crown Type RFWAC RFWWC	18	8	110~500	0.3 0.5	10	678ZZ	12	3.5
	28	8			20	608ZZ	22	7
		10				6900ZZ	22	6
	38	15			30	6002ZZ	32	9
		20				6804ZZ	32	7
	48	15			30	6202ZZ	35	11
		20				6904ZZ	37	9
		25			40	6905ZZ	42	9
		30				6806ZZ	42	7
	58	20			40	6204ZZ	47	14
		25				6005ZZ	47	12
		30				6906ZZ	47	9
		40			50	6808ZZ	52	7
	78	30			60	6306ZZ	72	19
		35				6207ZZ	72	17

■ **Crosspiece Groove Straight**

Part Number Type	d	d	10mm Increment L	Specify in 0.1mm Increment X	Y	Z	d1	Bearing Dimension No.	D1	B
with Crosspiece Groove Straight Type RFWAM RFWWM	38	12	110~500	7.0~15.0	5.0~12.0	4.0~6.0	20	6001ZZ	28	8
		15						6002ZZ	32	9
	48	15					30	6002ZZ	32	9
		20						6904ZZ	37	9
		25						6905ZZ	42	9
	58	20					40	6204ZZ	47	14
		25						6905ZZ	42	9
		30						6906ZZ	47	9
		35					60	6306ZZ	72	19
	78	30						6207ZZ	72	17
		40						6008ZZ	68	15

Order Example

	Part Number	-	d	-	L	-	H	-	X	-	Y	-	Z
(Straight)	RFWWS28	-	8	-	200								
(Crowned)	RFWAC28	-	10	-	350	-	H0.5						
(Crosspiece Groove Straight)	RFWWM58	-	20	-	250			-	X14.0	-	Y11.8	-	Z5.0

Days to Ship 10 Days

Express B 5,00 EUR/ piece P88

(?)A Express Charge of 13,50 EUR for 3 or more identical pieces.

Price

■ **Volume Discount** (?)Round down to one Cent.) P87

Qty.	1~9	10~14	15~19
Rate	€ Unit Price	5%	10%

(?)For orders larger than indicated quantity, please request a quotation.

d	€ Unit Price Straight Type RFWAS L110~150	L160~200	L210~250	L260~300	L310~350	L360~400	L410~450	L460~500	RFWWS L110~150	L160~200	L210~250	L260~300	L310~350	L360~400	L410~450	L460~500
18																
28																
38																
48																
58																
78																

d	€ Unit Price Crown Type RFWAC L110~150	L160~200	L210~250	L260~300	L310~350	L360~400	L410~450	L460~500	RFWWC L110~150	L160~200	L210~250	L260~300	L310~350	L360~400	L410~450	L460~500
18																
28																
38																
48																
58																
78																

d	€ Unit Price Crosspiece Groove Straight RFWAM L110~150	L160~200	L210~250	L260~300	L310~350	L360~400	L410~450	L460~500	RFWWM L110~150	L160~200	L210~250	L260~300	L310~350	L360~400	L410~450	L460~500
38																
48																
58																
78																

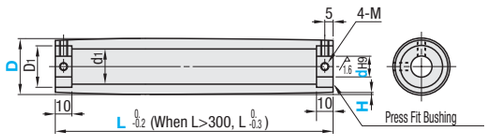
Pulleys for Flat Belts -Width L=110~500-

-Crowned / Crosspiece Groove Straight-

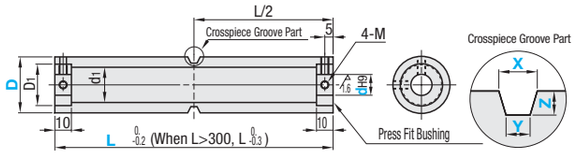
CAD Data

Type		M Material	S Nylon 6 (Glass Fiber 30%)
Crown Type	Crosspiece Groove Straight		
ROBAWC	ROBAWM	EN AW-5052/AlMg2,5	White Alumite
ROBMWC	ROBMWM	1.0480/H240LA	Electroless Nickel Plating
ROBSWC	ROBSWM	1.4301/X5CrNi18-10	-

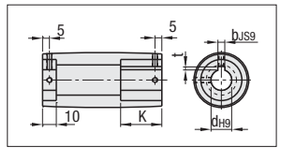
Crown Type
ROBAWC · ROBMWC · ROBSWC



Crosspiece Groove Straight
ROBAWM · ROBMWM · ROBSWM



■ Keyway Shape



■New JIS (B1301) Keyway Dimensions

Nominal		dH9		bJS9		t Tolerance	
N8	8	+0.036 0	3	±0.0125	1.4	+0.1 0	
N10	10						
NK10	10		4	±0.0150	1.8		
N12	12	+0.043 0	5		2.3		
N15	15		6		2.8		
N20	20	+0.052 0	8	±0.0180	3.3	+0.2 0	
N25	25						
N30	30						
N35	35	+0.062 0	10				

Part Number			dH9		10mm Increment	H Selection		Specify in 0.1mm Increment			K	d1			D1	M	
Type	d		Round Hole + Tap	Keyway Hole + Tap	L	L=110~300	L=310~500	X	Y	Z	Key Length	Aluminum (EN AW-5052/AlMg2,5)	Steel (1.0480/H240LA)	Stainless Steel (1.4301/X5CrNi18-10)		Round Hole + Tap	Keyway Hole + Tap
Crown Type ROBAWC ROBMWC ROBSWC	30		8	N8	110~500	0.3	0.5	-	-	-	25	15	15.8	18	22	M4	M3
			10	N10 / NK10							30						
			12	N12													
	35		10	N10							25	17	18.1	18	27	M4	M3
			12	N12							30						
			15	N15													
Crosspiece Groove Straight ROBAWM ROBMWM ROBSWM	40		12	N12						4.0~7.0		17	18.7	20	33	M4	M3
			15	N15													M4
			20	N20						4.0~6.0		22	22.7	22			M5
	50		15	N15				7.0~15.0	5.0~12.0		30	17	30	28	40	M5	M4
			20	N20								22					M5
			25	N25								27					M6
ⓟCrosspiece groove straight type is available with D dimension 40 or larger.	(60)		20	N20						4.0~7.0		22	-	-	45	M6	M5
			25	N25								32					M6
			30	N30													
	(80)		25	N25								41	-	-	55	M8	M6
			30	N30													
			35	N35													M8

ⓟWhen D=(60) or (80), only available in Aluminum (EN AW-5052/AlMg2,5).

Order Example

■Crown Type

Part Number	-	d	-	L	-	H
ROBAWC30	-	10	-	L350	-	H1.0
ROBMWC35	-	N10	-	L300	-	H0.5
ROBSWC50	-	N15	-	L400	-	H0.5

■with Crosspiece Groove Straight Type

Part Number	-	d	-	L	-	X	-	Y	-	Z
ROBAWM60	-	25	-	L250	-	X14.0	-	Y11.8	-	Z5.0
ROBMWM50	-	20	-	L350	-	X13.0	-	Y11.5	-	Z6.0
ROBSWM50	-	25	-	L400	-	X12.0	-	Y10.0	-	Z6.0

Days to Ship

10 Days

Express B 5,00 EUR/ piece

P. 88

ⓟA Express Charge of 13,50 EUR for 3 or more identical pieces.

Price

■Volume Discount (ⓟRound down to one Cent.) P. 87

Qty.	1~9	10~14	15~19
Rate	€ Unit Price	5%	10%

ⓟFor orders larger than indicated quantity, please request a quotation.

ⓟWhen keyway is specified, unit price is (body price + keyway machining charge).
ⓟCalculation Example: ROBAWC40-N15-H0.5
66,10 EUR (body price) + 4,30 EUR (keyway machining charge) = 70,40 EUR (unit price)

d	€ Unit Price Crown Type																		Keyway Machining Charge (€ Unit Price+)
	ROBAWC Aluminum (EN AW-5052/AlMg2,5)								ROBMWC Steel (1.0480/H240LA)								ROBSWC Stainless Steel (1.4301/X5CrNi18-10)							
	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500	
30																									
35																									
40																									
50																									
60																									
80																									

d	€ Unit Price Crosspiece Groove Straight																		Keyway Machining Charge (€ Unit Price+)
	ROBAWM Aluminum (EN AW-5052/AlMg2,5)								ROBMWM Steel (1.0480/H240LA)								ROBSWM Stainless Steel (1.4301/X5CrNi18-10)							
	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500	
40																									
50																									
60																									
80																									

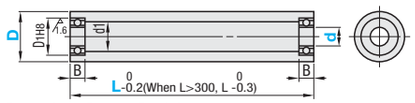
Idlers for Flat Belts -Width L=110~500-

-Straight Type / Crowned Type / Crosspiece Groove Straight Type-

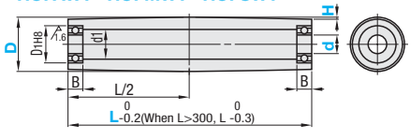
CAD Data

Type			M Material	S Surface Treatment Nylon 6 (Glass Fiber 30%)
Straight Type	Crown Type	Crosspiece Groove Straight		
ROFAWC	ROFAWT	ROFAWM	EN AW-5052/AlMg2,5	White Alumite
ROFMWC	ROFMWT	ROFMWM	1.0480/H240LA	Electroless Nickel Plating
ROFSWC	ROFSWT	ROFSWM	1.4301/X5CrNi18-10	-

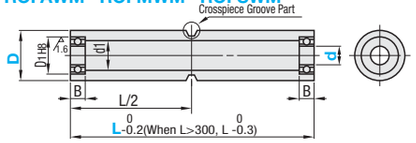
Straight Type
ROFAWC · ROFMWC · ROFSWC

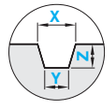


Crown Type
ROFAWT · ROFMWT · ROFSWT



Crosspiece Groove Straight
ROFAWM · ROFMWM · ROFSWM





ⓟBearings are removable.
Temporarily attached with tape for shipping.

Type	d	d	Specify in 10mm Increment L	H Selectable	Specify in 0.1mm Increment X	Y	Z	d1 Aluminum (EN AW-5052/AlMg2,5)	Steel (1.0480/H240LA)	Stainless Steel (1.4301/X5CrNi18-10)	Bearing Dimension No.	D1	B
Straight Type ROFAWC ROFMWC ROFSWC	30	8	110~500	0.3	-	-	-	15	-	-	B698ZZ	19	6
		8A*						-	15.8	18	B608ZZ	22	7
		10						15			B6900ZZ	22	6
		12									B6901ZZ	24	
	35	10						17	18.1	18	B6900ZZ	22	6
		12									B6901ZZ	24	
		15						22			B6902ZZ	28	7
Crown Type ROFAWT ROFMWT ROFSWT	40	8						17	18.7	20	B628ZZ	24	8
		10									B6000ZZ	26	
		12					4.0~7.0				B6901ZZ	24	6
		15									B6902ZZ	28	
		20					4.0~6.0	22	22.7	22	B6804ZZ	32	7
Crosspiece Groove Straight ROFAWM ROFMWM ROFSWM	50	10			7.0~15.0	5.0~12.0	4.0~7.0	17	24	22	B6200ZZ	30	9
		12						22			B6001ZZ	28	8
		15						17			B6902ZZ	28	7
		20						22			B6804ZZ	32	7
		25						27	30	28	B6905ZZ	42	9
	(60)	12						22	-	-	B6201ZZ	32	10
		15									B6002ZZ	32	
		20									B6904ZZ	37	9
		25						32			B6905ZZ	42	
		30									B6906ZZ	47	
	(80)	25						41	-	-	B6205ZZ	52	15
		30									B6006ZZ	55	13
		35									B6907ZZ	55	10

ⓟ* When D=30 and d=8A, only available in Steel or Stainless Steel. ⓟWhen D=(60) or (80), only available in Aluminum (EN AW-5052/AlMg2,5).

Order Example

(Straight) ROFAWC40 - 8 - L200
(Crowned) ROFAWT30 - 10 - L350 - H0.5
(Crosspiece Groove Straight) ROFSWM50 - 20 - L250 - X14.0 - Y11.8 - Z5.0

Days to Ship

10 Days

Express B 5,00 EUR/ piece

P. 88

ⓟA Express Charge of 13,50 EUR for 3 or more identical pieces.

Price

■Volume Discount (ⓟRound down to one Cent.) P. 87

Qty.	1~9	10~14	15~19
Rate	€ Unit Price	5%	10%

ⓟFor orders larger than indicated quantity, please request a quotation.

d	€ Unit Price Straight Type																							
	ROFAWC Aluminum (EN AW-5052/AlMg2,5)								ROFMWC Steel (1.0480/H240LA)								ROFSWC Stainless Steel (1.4301/X5CrNi18-10)							
	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500
30																								
35																								
40																								
50																								
60																								
80																								

d	€ Unit Price Crown Type																							
	ROFAWT Aluminum (EN AW-5052/AlMg2,5)								ROFMWT Steel (1.0480/H240LA)								ROFSWT Stainless Steel (1.4301/X5CrNi18-10)							
	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	450	L460 ~500	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500
30																								
35																								
40																								
50																								
60																								
80																								

d	€ Unit Price Crosspiece Groove Straight																							
	ROFAWM Aluminum (EN AW-5052/AlMg2,5)								ROFMWM Steel (1.0480/H240LA)								ROFSWM Stainless Steel (1.4301/X5CrNi18-10)							
	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500	L110 ~150	L160 ~200	L210 ~250	L260 ~300	L310 ~350	L360 ~400	L410 ~450	L460 ~500
40																								
50																								
60																								
80																								

Pulleys for Flat Belts with Urethane- Width L=25~100-

-Crowned / Crosspiece Groove Straight-

CAD Data

■Feature: Urethane lining is applied on the surface to increase friction resistance, for the prevention of slip between belt and pulley.

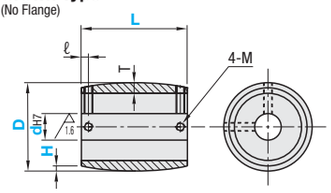
Type				Material		Hardness
Crowned		Crosspiece Groove Straight Type is only available in D dimension 30 or larger.				
No Flange	Flanged	No Flange	Flanged	Core	Lining	
RWCUN	RWCUF	RWMUN	RWMUF	EN AW-5052/AlMg2,5	Urethane (Natural Color)	Shore A90
RWCGN	RWCGF	RWMGN	RWMGF			Shore A70

Urethane is baked on the outer circumference of the core material.

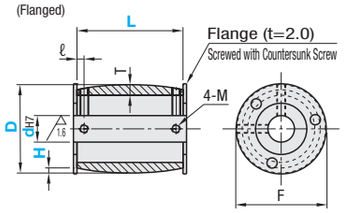
L3 / (-0.2 /)

Crown Type

(No Flange)

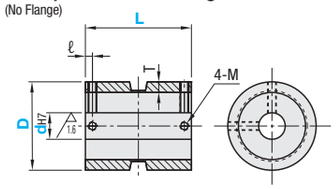


(Flanged)

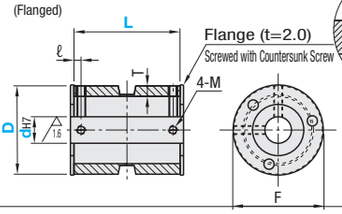


Crosspiece Groove Straight

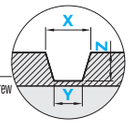
(No Flange)



(Flanged)



Crosspiece Groove Part



Part Number Type	d	dH7	Specify in 1mm Increment L	H Selection Crowned Type Only	Specify in 1mm Increment X	Y	Z	T	M	ℓ	F
Crown Type (No Flange) RWCUN RWCGN (Flanged) RWCUF RWCGF	15	8	Crown Type 25~100	0.3 0.5	-	-	-	2	M4	4.5	-
	20	8						2			-
		10									
	25	8						3			-
		10									
	30	*8						3			31
		*10									-
		12									
	35	*10						3			36
		*12									
		*15									
Crosspiece Groove Straight (No Flange) RWMUN RWMGN (Flanged) RWMUF RWMGF	40	*12	Crosspiece Groove Straight 50~100		7~15	5~12	4~5	6	M4	4.5	41
		*15									-
		20									
	50	*15						6	M5	5	51
		*20									
		*25									
Crosspiece Groove Straight Type is available in D dimension 40 or larger.	60	*20					4~7	8	M6	5.5	61
		*25									
		*30									
	80	*25						8	M8	7	81
		*30									
		*35									

Flanged Type is available with d dimensions marked with *. Urethane may discolor with time passing, but there is no effect on properties.

Order Example

■Crown Type

Part Number	-	d	-	L	-	H
RWCUN30	-	10	-	62	-	H0.3

■with Crosspiece Groove Straight Type

Part Number	-	d	-	L	-	X	-	Y	-	Z
RWMGF40	-	15	-	82	-	X7	-	Y6	-	Z5

Days to Ship 10 Days

Price

■Volume Discount (Round down to one Cent.) P.87

Qty.	1~4	5~10
Rate	€ Unit Price	5%

For orders larger than indicated quantity, please request a quotation.

d	€ Unit Price Crowned Type Shore A90 RWCUN L25~50	RWCUN L51~75	RWCUN L76~100	RWCUF L25~50	RWCUF L51~75	RWCUF L76~100	Crowned Type Shore A70 RWCGN L25~50	RWCGN L51~75	RWCGN L76~100	RWCGF L25~50	RWCGF L51~75	RWCGF L76~100
15												
20												
25												
30												
35												
40												
50												
60												
80												

d	€ Unit Price Crosspiece Groove Straight Type Shore A90 RWMUN L50~75	RWMUN L76~100	RWMUF L50~75	RWMUF L76~100	Crosspiece Groove Straight Type Shore A70 RWMGN L50~75	RWMGN L76~100	RWMGF L50~75	RWMGF L76~100
40								
50								
60								
80								

Pulleys for Flat Belts Economy Type with Urethane-Width L=110~500-

-Crowned / Crosspiece Groove Straight-

CAD Data

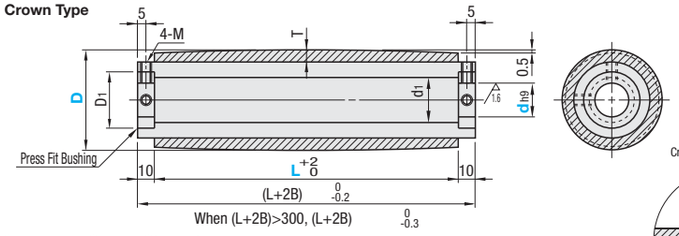
■ Feature: Use of thin pipes has realized price reduction by average 39%.

Type		Material		Hardness
Crowned	Crosspiece Groove Straight Type is only available in D dimension 30 or larger.	Core	Lining	
RWBCU	RWBMU	EN AW-6063/AlMg0,7Si	Urethane (Natural Color)	Shore A90
RWBCG	RWBMG			Shore A70

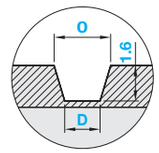
Urethane is baked on the outer circumference of the core material.

L3 / (-0.2 /)

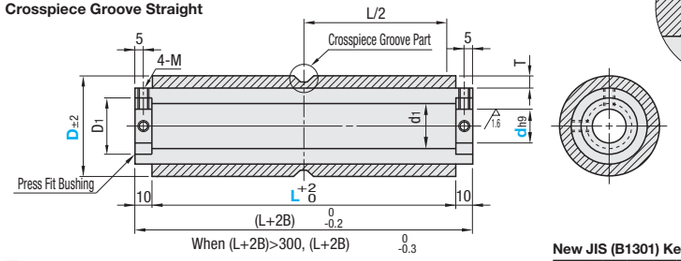
Crown Type



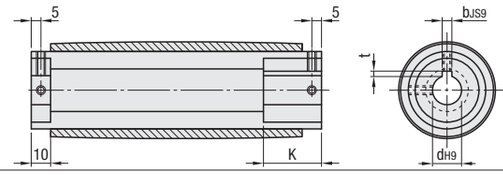
Crosspiece Groove Part



Crosspiece Groove Straight



■Keyway Shape



New JIS (B1301) Keyway Dimension

Nominal	dH9		bJS9		t Tolerance	
N10	10	+0.036 0	3	±0.0125	1.4	+0.1 0
NK10	10					
N12	12	+0.043 0	4	±0.0150	1.8	
N20	20		6		2.8	
N25	25	+0.052 0	8	±0.0180	3.3	+0.2 0
N30	30					
N35	35	+0.062 0	10			

Part Number Type	d	dH9 Round Hole + Tap	dH9 Keyway Hole + Tap	10mm Increment L	Specify in 1mm Increment X	Y	Z	Urethane Thickness T	Key Length K	d1	D1	M
Crown Type RWBCU RWBCG	28	8	-	110~500	-	-	-	5	-	10	12	M3
	38	12	N12					5	25	20	22	
		15	-						-			
	48	*10	*N10 /*NK10		7~15	7~12	4~7	10	25	20	22	
		*15	-						-			
Crosspiece Groove Straight RWBMU RWBMG		20	N20		-	-	-	5	30	30	32	M5
		25	-						-			
	58	*20	*N20		7~15	7~12	4~7	10	30	30	32	
		*25	-						-			
Crosspiece Groove Straight Type Crosspiece Groove Straight Type is available with d dimensions marked with *.	78	*25	*N25					10	30	50	52	M6
		*30	*N30									
		*35	*N35									

Urethane may discolor with time passing, but there is no effect on properties.

Order Example

■ Crown Type

Part Number	-	d	-	L
RWBCU58	-	N20	-	320

■with Crosspiece Groove Straight Type

Part Number	-	d	-	L	-	X	-	Y	-	Z
RWBMG48	-	15	-	120	-	X8	-	Y7	-	Z5

Days to Ship 13 Days

Price

■Volume Discount (Round down to one Cent.) P.87

Qty.	1~4	5~9	10~15
Rate	€ Unit Price	5%	10%

For orders larger than indicated quantity, please request a quotation.

When keyway is specified, unit price is (body price + keyway machining charge).
Price Calculation Example: RWBCU48-N10-250
79,00 EUR (body price) + 6,90 EUR (keyway machining charge) = 85,90 EUR (unit price)

d	€ Body Price Crown Type RWBCU L110~150	RWBCU L160~200	RWBCU L210~250	RWBCU L260~300	RWBCU L310~350	RWBCU L360~400	RWBCU L410~450	RWBCU L460~500	RWBCG L110~150	RWBCG L160~200	RWBCG L210~250	RWBCG L260~300	RWBCG L310~350	RWBCG L360~400	RWBCG L410~450	RWBCG L460~500	Keyway Machining Charge (€ Unit Price+)
28																	
38																	
48																	
58																	
78																	

d	€ Body Price Crosspiece Groove Straight RWBMU L110~150	RWBMU L160~200	RWBMU L210~250	RWBMU L260~300	RWBMU L310~350	RWBMU L360~400	RWBMU L410~450	RWBMU L460~500	RWBMG L110~150	RWBMG L160~200	RWBMG L210~250	RWBMG L260~300	RWBMG L310~350	RWBMG L360~400	RWBMG L410~450	RWBMG L460~500	Keyway Machining Charge (€ Unit Price+)
48																	
58																	
78																	

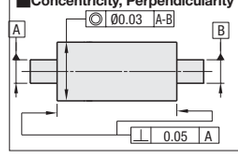
Shaft Pulleys for Round Belts- Width L=25~100-

-Straight Type / Crowned Type / Crosspiece Groove Straight Type-

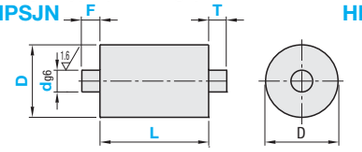
CAD Data

Feature: Flat belt pulleys with integrated shafts. Contributes to reduction of number of parts.

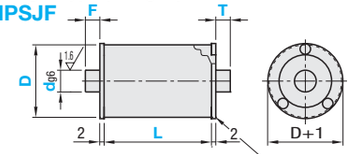
■Concentricity, Perpendicularity



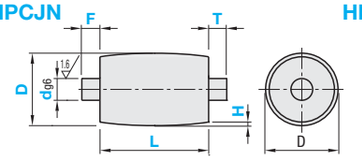
Straight Type (No Flange) **HPSJN**



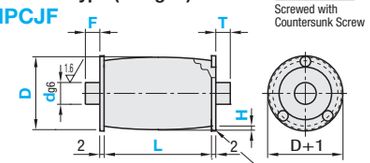
Straight Type (Flanged) **HPSJF**



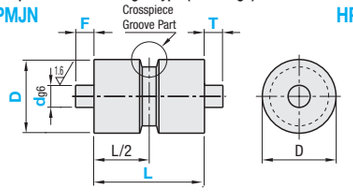
Crowned Type (No Flange) **HPCJN**



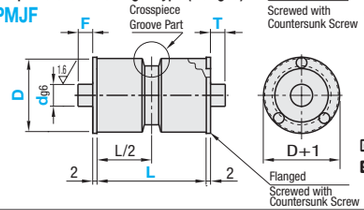
Crowned Type (Flanged) **HPCJF**



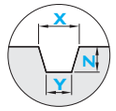
Crosspiece Groove Straight Type (No Flange) **HPMJN**



Crosspiece Groove Straight Type (Flanged) **HPMJF**



Crosspiece Groove Part



M Material: 1.1191/C45E

S Surface Treatment: Nylon 6 (Glass Fiber 30%) Electroless Nickel Plating

Part Number Type	d	d_{g6}	Specify in 1mm Increment L	Specify in 1mm Increment F / T	Only for Crowned Type H	Only for Crosspiece Groove Straight Type X	Y	Specify in 0.1mm Increment Z
Straight Type HPSJN HPSJF Crown Type HPCJN HPCJF Crosspiece Groove Straight HPMJN HPMJF	20	6	Straight Type Crown Type 25~100 Crosspiece Groove Straight 50~100	4≤F, T≤60 F, T≤dx5 (For Crowned Type, when D=50~80, 8≤F and T≤60.)	0.3 0.5	7.0~15.0	5.0~12.0	4.0~5.0 4.0~7.0
		8						
	30	8						
		10						
		12						
	35	10						
		12						
		15						
	40	12						
		15						
		20						
	50	15						
		20						
		25						
	60	20						
		25						
		30						
	80	25						
		30						
		35						

Order Example

	Part Number	-	d	-	L	-	F	-	T	-	H	-	X	-	Y	-	Z
(Straight)	HPSJN40	-	15	-	52	-	F50	-	T10								
(Crowned)	HPCJF60	-	20	-	75	-	F25	-	T40	-	H0.5						
(Crosspiece Groove Straight)	HPMJN30	-	12	-	76	-	F15	-	T50			-	X14.0	-	Y11.8	-	Z5.0

10 Days | Express B | 5,00 EUR/ piece | P. 88

(A Express Charge of 13,50 EUR for 3 or more identical pieces.)

■Volume Discount (Round down to one Cent.) P. 87

Qty.	1~9	10~14	15~19
Rate	€ Unit Price	5%	10%

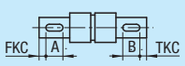
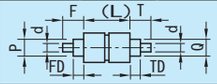
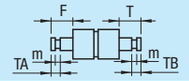
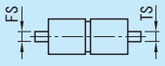
(For orders larger than indicated quantity, please request a quotation.

d	€ Unit Price															
	Straight Type						Crown Type						Crosspiece Groove Straight			
	HPSJN			HPSJF			HPCJN			HPCJF			HPMJN		HPMJF	
	L25~50	L51~75	L76~100	L25~50	L51~75	L76~100	L25~50	L51~75	L76~100	L25~50	L51~75	L76~100	L50~75	L76~100	L50~75	L76~100
20																
30																
35																
40																
50																
60																
80																

Alterations

Part Number - d - L - F - T - X - Y - Z - (FKC / TKC / FD / TD / TA / TB / FS / TS)

HPMJN30 - 12 - L76 - F50 - T15 - X14.0 - Y11.8 - Z5.0 - FKC5-A15

Alterations	Keyway Machining	Step Machining	Retaining Ring Groove	Shaft Dia Change
				
Code	FKC / TKC	FD / TD	TA / TB	FS / TS
Spec.	Adds a Keyway on Shaft F or T. FKC, TKC, A, B = 1mm Increment Order Code FKC5-A10 (TKC0-B10) (FKC=0 or 2≤FKC (TKC=0 or 2≤TKC (FKC+A≤F-2 (TKC+B≤T-2 (For details of keyways, refer to P.734 (FKC: Combination with FD or TA is not available. (TKC: Combination with TD or TB is not available. (Combination of FKC and TKC is not available.	Adds a Step on Shaft F or T. FD, TD, P, Q = 1mm Increment Order Code FD5-P8 (TD5-Q8) (FD≤F-2 (TD≤T-2 (No Flange: d<P(Q)<D-2 (Flanged Flanged: d<P(Q)<D-12	Adds a Retaining Ring Groove (Retaining ring is not included. TA, TB = 1mm Increment Order Code TA5 (TB5) (4≤TA≤F-2 (When FD is specified: 4≤TA≤F-FD-2) (4≤TB≤T-2 (When TD is specified: 4≤TB≤T-TD-2) (For dimensions of Retaining Ring Groove, refer to P.734	Changes Shaft Diameter (d). FS, TS = 1mm Increment Order Code FS17 (TS17) d / FS (TS) Specification Range: 20 6~18; 30 8~28; 35 10~33; 40 12~38; 50 15~48; 60 20~58; 80 25~78
Price Adder	FKC: 4,00 TKC: 4,00	FD: 3,00 TD: 3,00	TA: 4,00 TB: 4,00	FS: 3,00 TS: 3,00

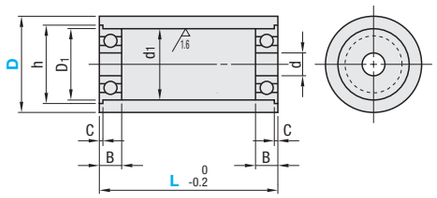
Idlers for Flat Belts

-Width L=38~90 / L=100~300-

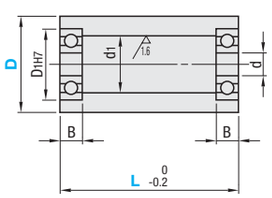
CAD Data

■Width L38~90

Type	M Material	S Surface Treatment Nylon 6 (Glass Fiber 30%)	M Material Bearing
ROFB	1.1191/C45E	Black Oxide	Steel
ROFM		Electroless Nickel Plating	
ROFA	EN AW-5052/AlMg2,5	White Alumite	
ROFS	1.4301/X5CrNi18-10	-	Stainless Steel



D=30A / 40A



* Bearing Precision JISB1514 Class 0

Part Number Type	d	L Selectable							d	d1	Bearing Dimension No.	D1	B	C	h
ROFB ROFM ROFA ROFS	20	38	45	50					6	15	FL696ZZx2	15	5	1.2	17
	25	38	45	50	60					17	FL606ZZx2	17	6		19
	30	38	45	50	60	70									
	30A	38	45	50	60	70					B698ZZx2	19		-	-
	35	38	45	50	60	70	85	90	8	22	FL608ZZx2	22	7	1.5	25
	40	38	45	50	60	70	85	90							
	40A	38	45	50	60	70	85	90	10		B6000ZZx2	26	8	-	-

(For Detailed Bearing Dimensions, refer to P.907-911

Order Example

Part Number	-	L
ROFM25	-	50

Days to Ship

-ROFS: **8 Days**

-ROFB / ROFM / ROFA: **10 Days**

Express B | 5,00 EUR/ piece | P. 88

(A Express Charge of 13,50 EUR for 3 or more identical pieces.)

Price

■Volume Discount (Round down to one Cent.) P. 87

Qty.	1~9	10~14	15~19	20~49
Rate	€ Unit Price	5%	10%	18%

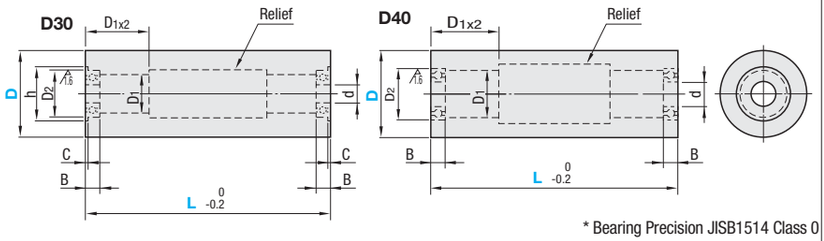
(For orders larger than indicated quantity, please request a quotation.

d	€ Unit Price											
	ROFB			ROFM			ROFA			ROFS		
	L38~50	L60 / 70	L85 / 90	L38~50	L60 / 70	L85 / 90	L38~50	L60 / 70	L85 / 90	L38~50	L60 / 70	L85 / 90
20												
25												
30												
30A												
35												
40												
40A												

■Width L100~300

ROFWB (1.1191/C45E + Black Oxide)

ROFAWB (EN AW-5052/AlMg2,5 + White Alumite)



* Bearing Precision JISB1514 Class 0

Part Number Type	d	L Configurable 10mm Increment	d	D1	Bearing Dimension No.	D2	B	C	h	€ Unit Price ROFWB L100~150	ROFWB L160~200	ROFWB L210~250	ROFWB L260~300	ROFAWB L100~150	ROFAWB L160~200	ROFAWB L210~250	ROFAWB L260~300
ROFWB ROFAWB	30	100~300	8	10	FL678ZZ	12	3.5	0.8	13.6								
	40		12	18	B6801ZZ	21	5	-	-								

Order Example

Part Number	-	L
ROFWB40	-	150

Days to Ship

10 Days

Express B | 5,00 EUR/ piece | P. 88

(A Express Charge of 13,50 EUR for 3 or more identical pieces.)

Price

■Volume Discount (Round down to one Cent.) P. 87

Qty.	1~10	11~19
Rate	€ Unit Price	5%

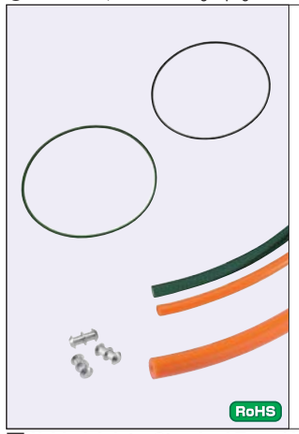
(For orders larger than indicated quantity, please request a quotation.

Polyurethane Round Belts
-Welded Joints / Open End / Hollow Rope Type-

Price Reduction Up to 36%

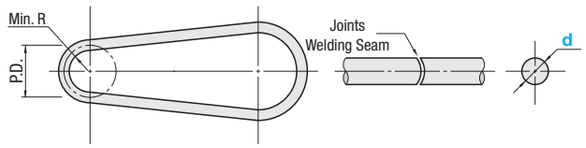
CAD Data

For Features, refer to the right page.



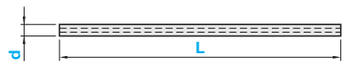
Type		Type	Color	Material	Heat Resistant Temperature
Welding Joints	Open End Type				
MBT	MBT-N	Standard Type	Orange	Polyurethane	80°C
MBTH	MBTH-N	High Tension Type	Green		80°C
MBTD	-	Conductive Type	Black		50°C
-	MBQ	Hollow Rope Type	Orange		80°C

Welding Joints



Open End Type

Hollow Rope Type



Welded Joints Standard Type / High Tension Type / Conductive Type

Part Number Type	d	L (Belt Length) Specify in 1mm Increment	€ Unit Price Min. L ~ 500	L501~1000	L1001~2000	L2001~3000	L3001~4000	L4001~5000	L5001~6000
Standard Type MBT	2	100~2000							
	3	100~3000							
	4	100~4000							
	5	135~5000							
	6	140~6000							
	8	190~6000							
	10	250~6000							
High Tension Type MBTH	2	100~2000							
	3	100~3000							
	4	100~4000							
	5	135~5000							
	6	140~6000							
	8	190~6000							
	10	250~6000							
Conductive Type MBTD	3	200~3000							
	4	200~4000							
	5	200~5000							

Open End Type

Part Number Type	d	L (Belt Length) 1m Increment	€ Unit Price/m MBT-N	MBTH-N
Standard Type MBT-N / High Tension Type MBTH-N	1.5	10~20		
	2			
	2.5			
	3			
	3.5			
	4			
	5			
	6			
	7			
	8			
	9			
	10			
	12			
	15			

Hollow Rope Type

Part Number Type	d	L 1m Increment	€ Unit Price/m	Applicable Metal Joint
MBQ	5	1 ~ 20		MBQC5
	6			MBQC6

Metal Joints for Hollow Ropes

Part Number Type	d	Material	€ Unit Price per Package (10 Pcs. per Package)
MBQC	5	EN AW-5052/AlMg2,5	
	6		

Order Example

Part Number	-	L
MBT5	-	150
MBTH-N6	-	12
MBQ6	-	5
MBQC5		

Price

Volume Discount (Round down to one Cent.) P.87

Qty.	1~19	20~34	35~49	50~100
Rate	€ Unit Price	5%	10%	18%

For orders larger than indicated quantity, please request a quotation.
Please request a quotation for 30 or more pieces of MBTD, for 11 or more pieces of MBT-N and MBTH-N.

Features

·Welded Joints (Standard Type / High Tension Type / Conductive Type): MBT·MBTH·MBTD

Round belt of rope shape is cut into any specified length and made endless with heat welding.
Though connecting section may look thicker, appropriate diameter can be obtained when tension is being applied during operation.
MBT and MBTH both satisfy the Food Hygienic Regulations.
MBTD is a Round Belt with conductive material (Carbon) kneaded. Usable under various conditions affected by static electricity

·Open End Type (Standard Type / High Tension Type): MBT-N·MBTH-N

Cut by meter sections only. Endless jointing is not applied.
MBT-N and MBTH-N both satisfy the Food Hygienic Regulations.

·Hollow Rope Type: MBQ

The cross section is hollow in the center, and no endless jointing is applied before shipping.
Simple and reliable endless connection is possible by cutting the belt in any length and inserting a dedicated metal jointing parts MBQC.
Satisfies the food and hygiene standard in accordance to the Notice No. 434 of Japanese Ministry of Health and Welfare.

(How to Connect)
Cut the round belt in the length of 5% shorter than the calculated or actual measured length with a knife at a right angle. Hold the dedicated metal joint MBQC by using a pair of pliers.
Insert the metal joint up to the center of the hollow belt end.
To help the insertion in a cold season, warm the belt by immersing in warm water of 40°C for 1~2minutes.
Ensure not to damage the edge of the metal joint.
Insert the metal joint into the other side of the belt.

Days to Ship

-MBQ / MBQC

8 Days

Express A 5,00 EUR/ piece P.88

A Express Charge of 13,50 EUR for 3 or more identical pieces.

-MBT / MBTH / MBTD / MBT-N / MBTH-N

10 Days

Express B 2,00 EUR/ piece P.88

A Express Charge of 5,40 EUR for 3 or more identical pieces.

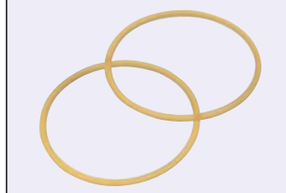
Polyurethane Round Belts
-Seamless Type-

Price Reduction Up to 37%

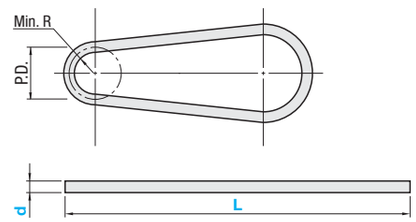
Reduced Delivery Time

CAD Data

Features: Belt has no joint as it is made endless by molding.



Type	Type	Color	Material	Heat Resistant Temperature
MBN	Seamless Type	Natural Color	Polyurethane	70°C



Seamless Type

Part Number Type	d	Belt Length L (mm)	€ Unit Price
MBN	2	100	
		125	
		140	
		160	
		170	
		180	
		190	
		200	
		239	
		250	
	3	150	
		160	
		170	
		180	
		200	
		213	
		223	
		236	
		250	
		260	
		290	
		305	
		330	
		390	

Part Number Type	d	Belt Length L (mm)	€ Unit Price
MBN	4	200	
		225	
		250	
		258	
		275	
		290	
		305	
		390	
	5	225	
		250	
		275	
		290	
		305	
		330	
		348	
		380	
		440	
		460	

Order Example

Part Number	-	L
MBN2	-	100

Days to Ship: 6 Days P.87

Price

Volume Discount (Round down to one Cent.) P.87

Qty.	1~19	20~34	35~49	50~100
Rate	€ Unit Price	5%	10%	18%

For orders larger than indicated quantity, please request a quotation.

Features of Polyurethane Round Belts

-Minimum P.D. of Pulleys (mm)

d	Cross Section Area mm²	Minimum P.D. of Pulleys MBT / MBN	MBTH	MBTD	MBQ
2	3.14	15	20	-	-
3	7.07	20	30	30 (40)*	-
4	12.57	30	40	40 (50)*	-
5	19.63	40	50	50 (60)*	40
6	28.27	50	60	-	50
8	50.24	70	80	-	-
10	78.5	90, 95	100	-	-

*Values in ( ) are the min. P.D. when using by turning 90°.

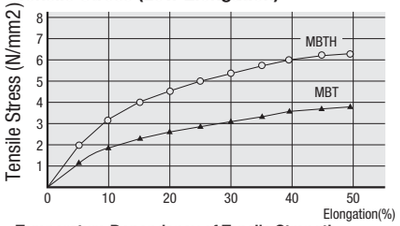
-Tensile Strength (N)–Shows the tensile strength (N) when belt is extended (elongation:%).-

d	MBT 5%	MBTH 5%	MBTD 8%	MBN 8%	MBQ 5%
2	1.9	2.8	-	1.274	-
3	4.1	6.2	13.0	2.940	-
4	7.4	11.1	22.0	5.292	-
5	12.5	18.7	33.0	8.232	24.5
6	16.6	24.9	-	-	44.1
8	29.4	44.1	-	-	-
10	46.2	69.3	-	-	-

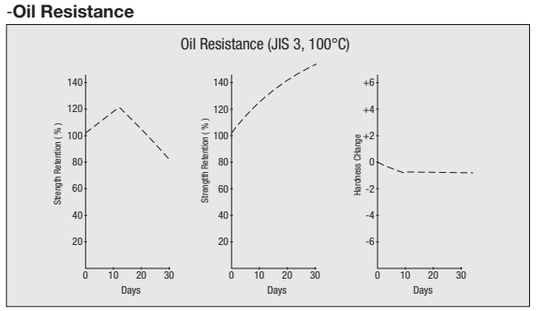
-Physical Properties kgf=Nx0.101972

Item	Test Method	Unit	MBT	MBTH	MBN
Specific Gravity	-	-	1.22	1.22	1.26
Hardness	JIS K 6301	JIS A	88	92	72
5% Modulus		N/mm²	1.2	2.0	0.44
10%			1.8	3.1	0.88
100%			6.3	8.8	6.0
300%			16.9	14.7	9.0
Tensile Strength			24.5 or more	32.4 or more	30 or more
Tensile Elongation at Breakage		%	400 or more	400 or more	600 or more
Tear Strength		kN/m²	88	93	90 or more

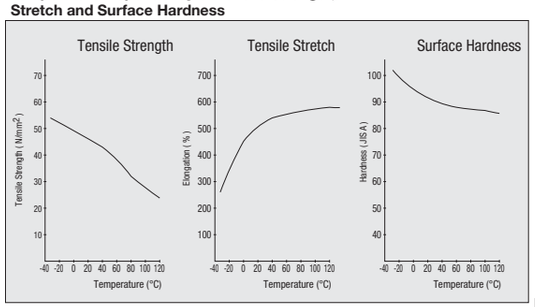
-Tensile Stress (Low Elongation)



-Oil Resistance



-Temperature Dependency of Tensile Strength, Stretch and Surface Hardness



Pulleys for Round Belts
- Set Screw Type-

Reduced Delivery Time

CAD Data

RoHS

Part Number

Not RoHS compliant

Trapezoid Groove		U Groove		Material	Surface Treatment Nylon 6 (Glass Fiber 30%)
A Shape	B Shape	A Shape	B Shape		
MBRDF	MBRD	MBRF	MBR	1.1191/C45E	Black Oxide
MBRDFM	MBRDM	MBRFM	MBRM		Electroless Nickel Plating
-	MBRDS	-	MBRS	1.4301/X5CrNi18-10	-
MBRDFA	MBRDA	MBRFA	MBRA	EN AW-5052/AlMg2,5	White Alumite

Shaft Hole Specifications

N New JIS Keyway Hole + Tap

H Round Hole | P Round Hole+Tap | C Old JIS Keyway Hole + Tap

Trapezoid Groove

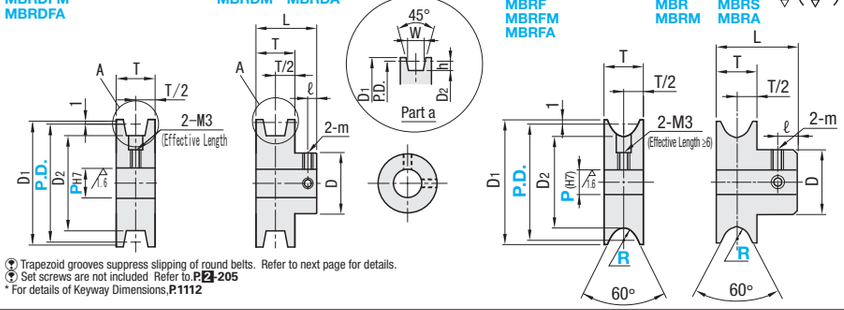
AShape
MBRDF
MBRDFM
MBRDFA

BShape (With Hub)
MBRD MBRDS
MBRDM MBRDA

U Groove

AShape
MBRF
MBRFM
MBRFA

BShape (With Hub)
MBR MBRS
MBRM MBRA



Trapezoid grooves suppress slipping of round belts. Refer to next page for details.
Set screws are not included Refer to P.2-205
* For details of Keyway Dimensions, P.1112

Part Number Type	P.D.	Belt Radius Trapezoid	R U Groove	Shaft Bore Specifications, Inner Diameter: Specify in 1mm Increment H / P (H7)	Shaft Bore Specifications, Inner Diameter: Specify in 1mm Increment N (New JIS)	Shaft Bore Specifications, Inner Diameter: Selectable C (Old JIS)	D1	D2	h	W	T	L	ℓ	d	m	Applicable Belt Diameter	€ Unit Price MBRDF MBRF	MBRDFM MBRFM	MBRDFA MBRFA	MBRD MBR	MBRDM MBRM	MBRDS MBRS	MBRDA MBRA
Trapezoid Groove AShape MBRDF MBRDFM MBRDFA BShape MBRD MBRDM MBRDS MBRDA	*15	1		4~7	-	-	17	13	1	2.2	5	11	3	12	M3	2							
	*20			4~12	8 / 10		22	18						16									
	*30						32	28						20									
	*40						42	38															
	20	1.5		4~12	8 / 10	-	22	17	1.5	3.3	10	16	3	16	M3	3							
	30						32	27						20									
	40			5~12			42	37															
	45			5~20	8~20 (8~15)	10	47	42				20	5	25	M4								
	60						62	57															
	18	2		5~12	8 / 10	-	20	14	2	4.4	10	16	3	16	M3	4							
	23						25	19						20									
	28						30	24															
	30						32	26															
	40						42	36															
	45			5~20	8~20 (8~15)	10	47	41				20	5	25	M4								
	48						50	44															
	60						62	56															
	80						82	76															
U Groove AShape MBRF MBRFM MBRFA BShape MBR MBRM MBRS MBRA	28	2.5		5~12	8 / 10	-	30	23	2.5	5.5	10	16	3	20	M3	5							
	40			5~20	8~20 (8~15)	10	42	35				20	5	25	M4								
	48						50	43															
	50						52	45															
	60						62	55															
	75						77	70															
	80						82	75															
	28	3		5~12	8 / 10	-	30	22	3	6.6	10	16	3	20	M3	6							
	38						40	32															
	48			5~20	8~20 (8~15)	10	50	42				20	5	25	M4								
	50						52	44															
	58						60	52															
	60						62	54															
	75						77	69															
	80						82	74															
	95						97	89															
	100						102	94															
	50	4		5~20	8~20	10 12 15	52	42	4	8.8	12	24	6	30	M4 (M5) *1	8							
	60						62	52															
	80						82	72															
	100						102	92															
	120						122	112															
	60	5		5~20	8~20	10 12 15	62	50	5	11	15	27	6	30	M4 (M5) *1	10							
	80						82	70															
	100						102	90															
	120						122	110															
	140						142	130															

Shaft Hole Dia. 6.35 is available for Shaft Hole Specification H-P, . Values in ( ) are for B shape.
Shaft Hole Dia. 9 is not available for Shaft Hole specification N.
Sizes marked with * are only for B shape. BShape *1: When shaft diameter is 15mm or more, set screw size is M5.

Order Example

Part Number	Belt Radius	R	Shaft Bore Specifications, Inner Dia.
MBRDF30	1.5	-	H5
MBR60	- 2	-	N12

Days to Ship 8 Days — Express A 2,00 EUR/ piece — P. 88

A Express Charge of 5,40 EUR for 3 or more identical pieces.
Express Serviceis now available for MBRFA and MBRDFA.

Price

Volume Discount (Round down to one Cent.) P. 87

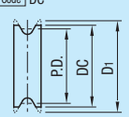
Qty.	1~9	10~14	15~19	20~30
Rate	€ Unit Price	5%	10%	18%

For orders larger than indicated quantity, please request a quotation.

Alterations

Part Number	Belt Radius	R	Shaft Bore Specifications, Inner Dia.	(DC)
MBRD40	1.5	-	H6	DC

Alteration	Outer Diameter Cut
Code	DC
Spec.	Reduces D1 diameter by cutting. Order Code DC



Applicable Belt Diameter	DC
2	PD+0.8
3	PD+1.2
4	PD+1.6
5	PD+1.8

Applicable to corresponding belt dia. 2, 3, 4 and 5 only.
Surface treatment may not be applied to the machined area.

Price Adder	3,00

Pulleys for Round Belts
- Clamping Type -

CAD Data

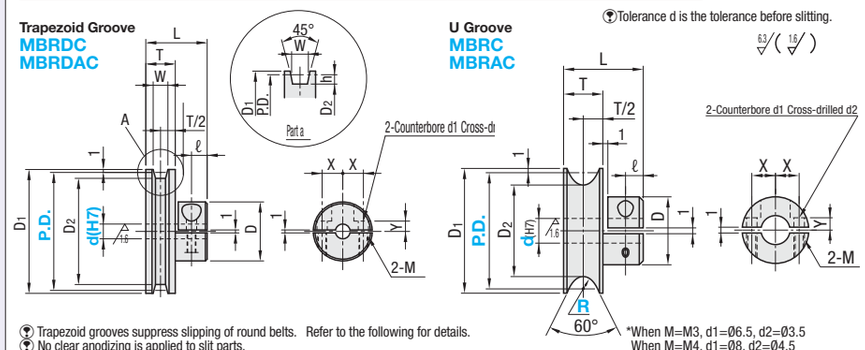
RoHS

Type Trapezoid Groove	Type U Groove	Material	Surface Treatment Nylon 6 (Glass Fiber 30%)	Accessories
MBRDC	MBRC	1.1191/C45E	Black Oxide	Hexagon Socket Head Cap Screw (x2) 1.7220/34CrMo4
MBRDAC	MBRAC	EN AW-5052/AlMg2,5	White Alumite	Hexagon Socket Head Cap Screws (x2) Stainless Steel

Tolerance d is the tolerance before slitting.

Trapezoid Groove MBRDC MBRDAC

U Groove MBRC MBRAC



Trapezoid grooves suppress slipping of round belts. Refer to the following for details.
No clear anodizing is applied to slit parts.

*When M=M3, d1=Ø6.5, d2=Ø3.5
When M=M4, d1=Ø8, d2=Ø4.5

Part Number Type	P.D.	Belt Radius Trapezoid	R U Groove	d (H7)	d	D1	D2	h	W	L	T	ℓ	X	Y	M	Applicable Belt Diameter	€ Unit Price MBRDC MBRC	MBRDAC MBRAC
Trapezoid Groove MBRDC MBRDAC U Groove MBRC MBRAC	20	1		4 5	16	22	18	1	2.2	11	5	2.5	5	3	M3	2		
	30			4 5 6 6.35 8	20	32	28						7	3.5				
	40					42	38											
	30	1.5		5 6 6.35 8	20	32	27	1.5	3.3	16	10	2.5	7	3.5	M3	3		
	40					42	37											
	45			5 6 6.35 8 10 11 12	25	47	42			20		4.5	9	4.5	M4			
	60					62	57											
	23	2		5 6 6.35 8	20	25	19	2	4.4	16	10	2.5	7	3.5	M3	4		
	28					30	24											
	30					32	26											
	40					42	36											
	45			5 6 6.35 8 10 11 12	25	47	41			20		4.5	9	4.5	M4			
	48					50	44											
	60					62	56											
	80					82	76											
	28	2.5		5 6 6.35 8	20	30	23	2.5	5.5	16	10	2.5	7	3.5	M3	5		
	40					42	35											
	48					50	43											
	50			5 6 6.35 8 10 11 12	25	52	45			20		4.5	9	4.5	M4			
	60					62	55											
	75					77	70											
	80					82	75											
	28	3		5 6 6.35 8	20	30	22	3	6.6	16	10	2.5	7	3.5	M3	6		
	38			5 6 6.35		40	32						6.5					
	48			5 6 6.35 8 10 11 12	25	50	42			20		4.5	9	4.5	M4			
	50					52	44											
	58					60	52											
	60					62	54											
	75					77	69											
	95					97	89											
	100					102	94											

Order Example

Part Number	Belt Radius	R	d
MBRDC30	2	-	5
MBRC60		- 2.5 -	6

Days to Ship 8 Days — Express A 2,00 EUR/ piece — P. 88

A Express Charge of 5,40 EUR for 3 or more identical pieces.

Price

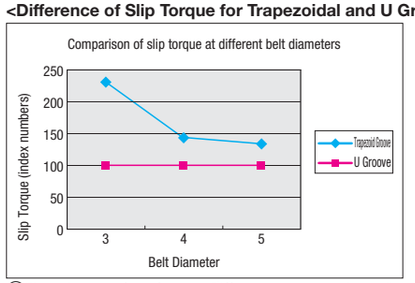
Volume Discount (Round down to one Cent.) P. 87

Qty.	1~9	10~14	15~19	20~30
Rate	€ Unit Price	5%	10%	18%

For orders larger than indicated quantity, please request a quotation.

Alterations Left page

<Difference of Slip Torque for Trapezoidal and U Grooves> *Index numbers as compared with values for U groove as base value (100)

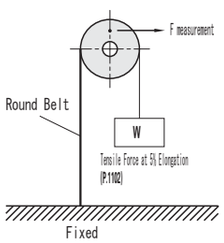


Test Conditions
- Size: P.D.60
- Material: EN AW-5052/AlMg2,5 Aluminum Alloy, Surface Treatment: Black Oxide
- Belt: MBT3, 4, 5 (Refer to) P.1101

Trapezoid Groove Shape

U Groove Shape

Slip torque is improved with a trapezoidal grooved pulley, as it contacts belts with 3 surfaces, while U-grooved pulley contact belts with one surface.



The values are for reference. Difference may vary depending on operating environment.