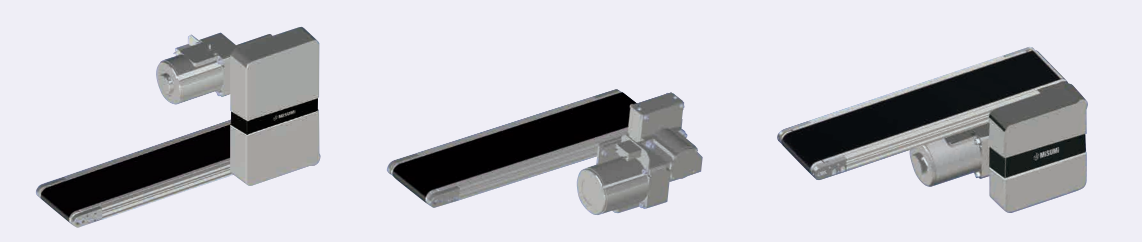
Flat Belt Conveyors - Motor Mounting Position Selectable

Head Drive, 2-Groove Frame (Pulley Dia. 30mm)

CE Compliant
* The above compliance applies only for Single-phase 230V Motors.

■Features: The motor mounting position is selectable from top mounting, bottom mounting, or side mounting. Adoption of orthogonal shaft gear head solves the mounting space issue.

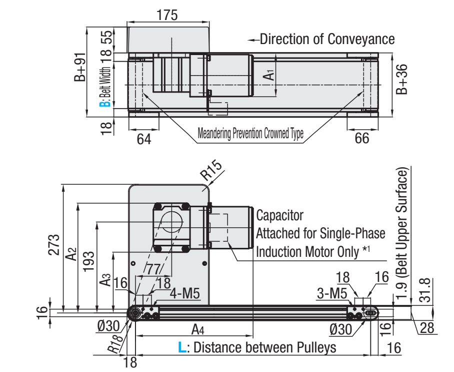


CVMA

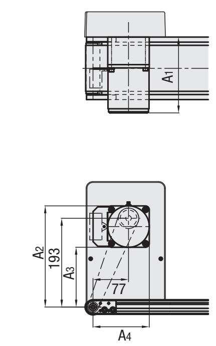
	Frame	Motor Cover	Pulley Holder
M Material	Aluminum	Aluminum	Aluminum
S Surface Treatment	Clear Anodize	Paint	Paint

Top Mount Type (TM)

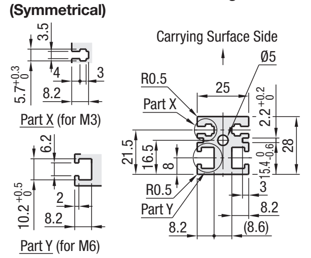
Motor mounting position specifications for TM1, TM2, and TM3



Motor mounting position specifications for TM5



Frame Cross Section and Enlarged View (Symmetrical)



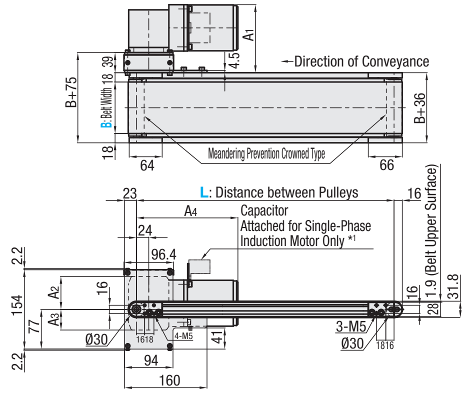
Compatible with JIS standard hex nuts.
* Each slot has four (4) nuts inserted.
When counterbores for inserting nuts are required, so specify in form of alteration ordering.
* Capacitor is included with single-phase induction motors only.
Capacitor mounting position can be arranged by the customer.

The dimensions in the diagram is for Belt Specifications H (0.9mm THK.).
Note that belt thickness varies by Belt Specifications.
For Belt Specifications, see P.1313~.

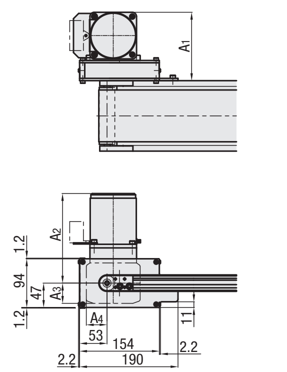
For relevant dimensions depending on motor mounting direction, and motor type, see P.1273.

Side Mount Type (SM)

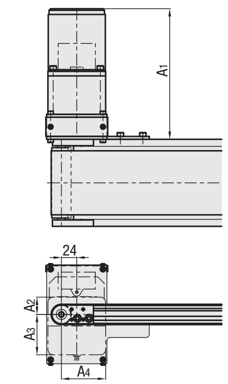
Motor mounting position specifications for SM1 and SM3



Motor mounting position specifications for SM2 and SM4

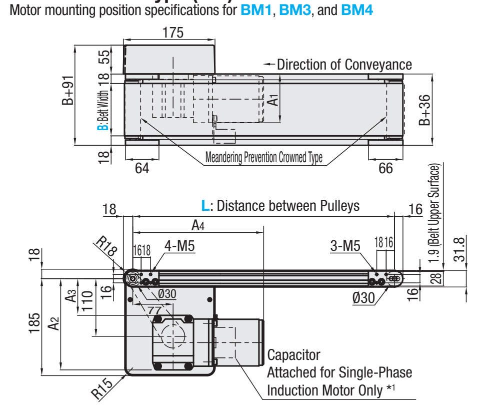


Motor mounting position specifications for SM5

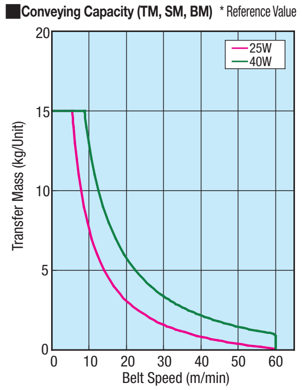


Bottom Mount Type (BM)

Motor mounting position specifications for BM1, BM3, and BM4



■Conveying Capacity (TM, SM, BM) * Reference Value



■Gearhead Reduction Ratio

* May decrease depending on load condition.

Gearhead Reduction Ratio	Belt Speed (m/min) TM, BM 50Hz	Belt Speed (m/min) TM, BM 60Hz	Belt Speed (m/min) SM 50Hz	Belt Speed (m/min) SM 60Hz
5	56.4	67.7	28.2	33.8
7.5	37.6	45.1	18.8	22.6
9	31.3	37.6	15.7	18.8
12.5	22.6	27.1	11.3	13.5
15	18.8	22.6	9.4	11.3
18	15.7	18.8	7.8	9.4
25	11.3	13.5	5.6	6.8
30	9.4	11.3	4.7	5.6
36	7.8	9.4	3.9	4.7
50	5.6	6.8	2.8	3.4
60	4.7	5.6	2.4	2.8
75	3.8	4.5	1.9	2.3
90	3.1	3.8	1.6	1.9
100	2.8	3.4	1.4	1.7
120	2.4	2.8	1.2	1.4
150	1.9	2.3	0.9	1.1
180	1.6	1.9	0.8	0.9

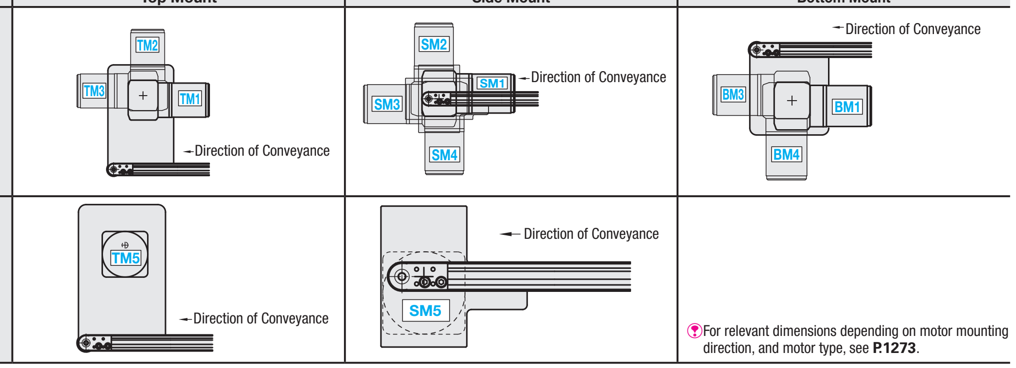
On some operating environments, conveyance failure may occur.

Part Number: Type	Part Number: Motor Mounting Position	B 10mm Increment	L 5mm Increment	Motor: Output (W)	Motor: Voltage (V)	Motor: Specification	Motor: Gearhead Reduction Ratio	Belt Specification	Motor Manufacturer Selection (The prices vary by manufacturer.)
CVMA	TM1 SM1 BM1 TM2 SM2 TM3 SM3 BM3 SM4 BM4 TM5 SM5 *For details, see Motor Mounting Position Selection Table.	50~300	200~2000	25 40	T100 (Single-phase) T200 (Single-phase)	IM (Induction Motor) SCM (Variable Speed Motor)	5 7.5 9 12.5 15 18 25 30 36 50 60 75 90 100 120 150 180	H (General Specifications, Green) W (General Specifications, White) G (For Sliding, Green) S (For Sliding, White) D (For Electronic Parts Transfer, Black) F (For Food Transfer, White) O (Oil Resistant, Navy Blue) N (Non-adhesive, White) J (No Belt) * For other belt specifications, see Belt Selection Tablet below.	A (Panasonic Motor) B (Oriental Motor) * SCM (Variable Speed Motor) is not selectable for A. When output is 25, Panasonic Motor is not applicable.
					S200 (3-phase)	IM (Induction Motor)			

Connect the motor so that the belt rotates in the direction of conveyance. For connection diagram, and details of motor and inverter, see P.1301~.
A worm gear is used for orthogonal shaft gear head. Note, therefore, that the motor cannot be rotated from the belt side for maintenance work, etc.
Purple Color Type of Belt is the Catalog Standard-Altered product. For details, see P.1313~.

■Motor Mounting Position Selection Table

Gearhead	Motor Mounting Position: Top Mount	Motor Mounting Position: Side Mount	Motor Mounting Position: Bottom Mount
Orthogonal Shaft	TM1, TM2, TM3	SM1, SM2, SM3, SM4	BM1, BM3, BM4
Parallel Shaft	TM5	SM5	



For relevant dimensions depending on motor mounting direction, and motor type, see P.1273.

■Belt Selection Table

Belt Specification	Standard Belt (Body Price Only)	Optional Belt 1	Optional Belt 2	No Belt
General Purpose	H (Green), W (White), HG (Green)	-	HY (Yellow Green), HBN (Sky Blue)	J (No Belt)
For Sliding	G (Green), S (White)	-	-	
For Inclined Transfer	LG (Green), LW (White)	-	-	
Grip Type	-	GG (Green), GW (White)	GSN (Green)	
Oil Resistant	O (Navy Blue), OH (Green), OG (Green)	OW (White)	ON (White)	
Non-adhesive	N (White), NS (White)	NB (Sky Blue), NBG (Lime Green), HH (Green), HW (White)	NWN (White), NSN (Sky Blue), NGN (Lime Green), HBG (Green), HBW (White), BW (White)	
For Food Transfer	F (White)	KW (White), KSB (Sky Blue), PHB (Sky Blue)	PHN (Sky Blue), PWN (White), KWN (White)	
For Electronic Parts Transfer	D (Black), DS (Black)	-	DG (Black)	

For flat belt details, see P.1313.
Since only the transporting surface side is designed to be oil resistant, Oil Resistant Types are not useable on environments where it is very likely that oil adheres to the back face.

Part Number	B	Body Price 1~10 pc(s). L200~300	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
CVMATM□ CVMABM□	50~100																		
	110~150	-																	
	160~200	-	-	-															
	210~250	-	-	-	-	-													
	260~300	-	-	-	-	-	-												
CVMASM□	50~100																		
	110~150	-																	
	160~200	-	-	-															
	210~250	-	-	-	-	-													
	260~300	-	-	-	-	-	-												

For orders larger than indicated quantity, please check with WOS.

Motor Spec. Price	Motor Output	Specification	A (Panasonic Motor)	B (Oriental Motor)
	25W 40W	IM		
		SCM	-	

Gearhead Spec. Price	Mounting Position	A (Panasonic Motor)	B (Oriental Motor)
	TM5, SM5		
	TM1~3 SM1~4 BM1~4		

Belt Spec. Price	Standard Belt	Optional Belt 1	Optional Belt 2	No Belt

Ordering Example

Part Number: TYPE	Motor Mounting Position	-	B	-	L	-	Motor: Output	-	Voltage	-	Specification	-	Gearhead Reduction Ratio	-	Belt Specification	-	Motor Manufacturer Selection
CVMA	TM1	-	100	-	1000	-	25	-	T100	-	IM	-	25	-	H	-	A

Alterations

Motor Position Reversed
Additional Counterbores
Motor Cover with Window
Brackets for Speed Controller Included
Post-Assembly Insertion Nuts Included
Motor with Terminal Box
Stands (Legs)

For details of Alterations, see P.1298~.