



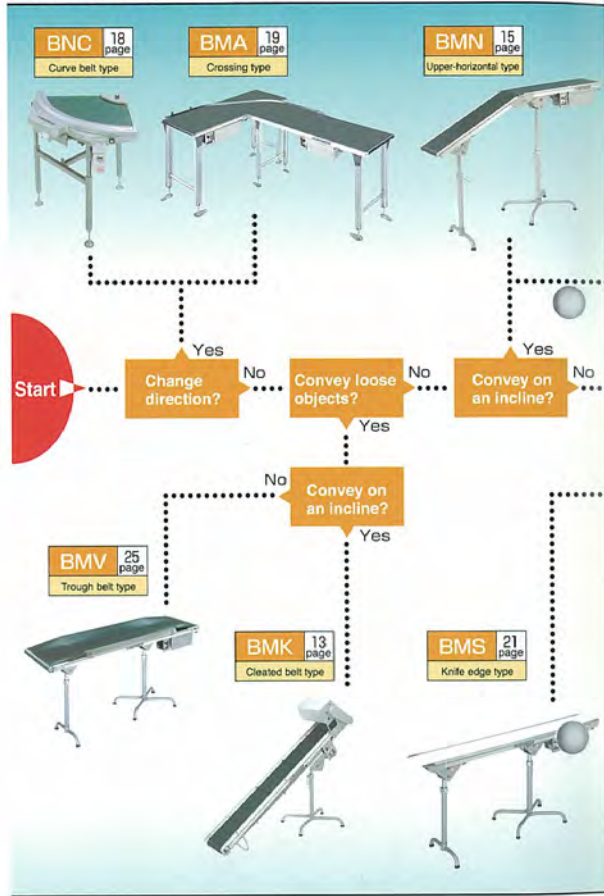
BELCON MINI CONVEYOR SERIES

Belcon Mini Series

Sturdy performance in a simple body.

The best-selling portable belt-conveyor; its efficient design based on an aluminum frame will withstand continuous operation with a newly developed motor rated for 20,000 hours.

Model selection chart



Function

● Smooth transfer



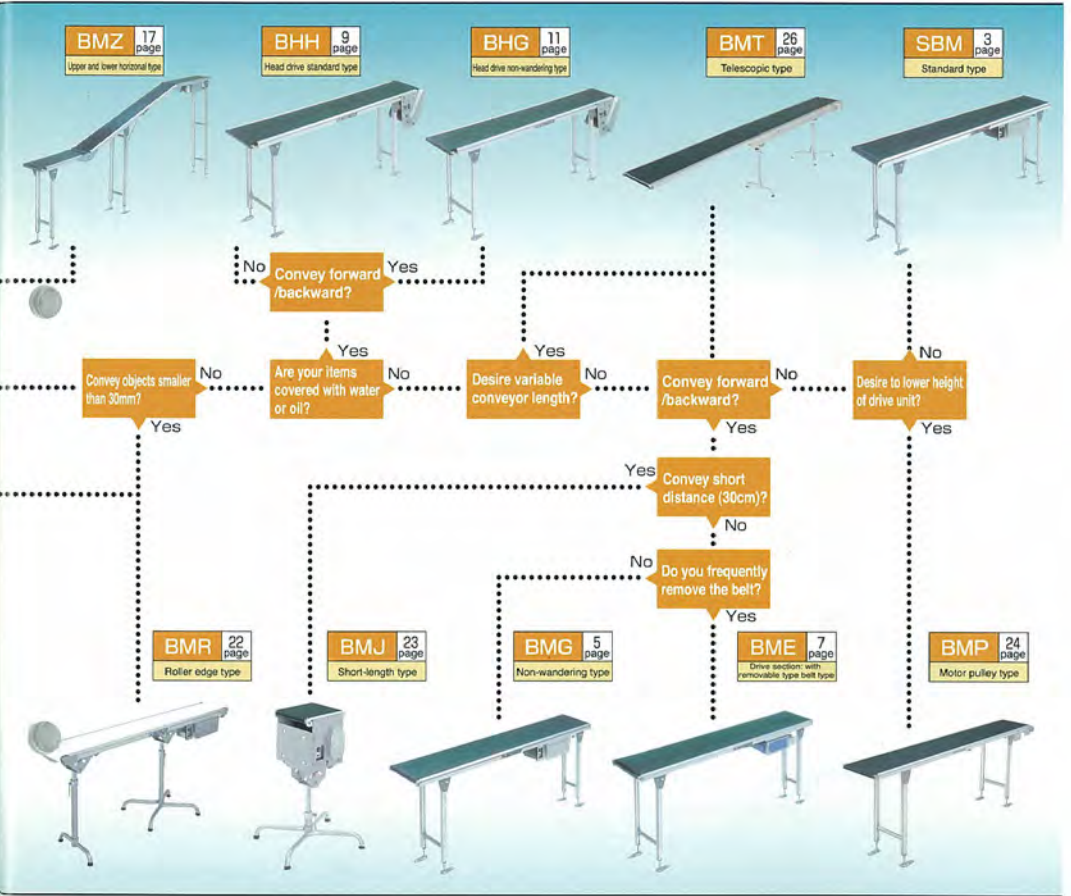
● Freely movable drive and operation sections



● Standard transfer direction is forward



With a head drive (standard specifications), the standard transfer direction is forward (as indicated by the arrow).



● Simple belt tracking adjustment mechanism



Tracking is adjusted by operating the grip at the drive section.



Fine tracking adjustment is done at the tail section.

● Simple attachment mounting mechanism



Attachments are mounted using the slit in the aluminum frame.

SBM/Standard type

For standard light conveyance

After considering the diversity of customer's applications, we are offering a wide range of best types, belt widths, conveyor lengths, drive speed and other product specifications. Choose the model best suited to your situation without any compromise.

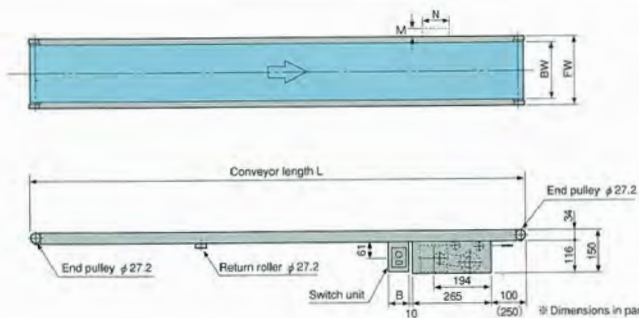


In the cases listed below, BMG/non-wandering type (P5) should be specified.

- ① If wide belt, short conveyor length (conveyor length \leq belt width $\times 2.5$).
- ② If operation calls for frequent forward/reverse switching.
- ③ If using in such a way that "wandering" occurs easily.
- ④ If maintenance and inspection are difficult.

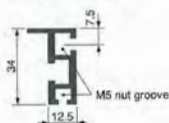
- Support is optional.
- The photograph specifications are: 200mm belt width \times 1500mm conveyor length.

Unit: mm



② Dimensions in parentheses are for when a fixed support is mounted.

Frame cross section



② Frame cross section Design patent registered

● Switch unit Dimensions (B dimension)

	Switch unit	B dimension
Single phase	Fixed speed	70
	Variable speed	70
Triple phase	Fixed speed	80
	Variable speed	110

● Motor Projection Dimensions (M dimension of diagram above) in the case of 50~200BW, motor projects.

Motor Projection Dimensions (Belt width (BW)) Motor Capacity	M dimension					N dimension Common
	50	75	100	150	200	
25W	Fixed speed	68.5	43.5	18.5	—	80
	Variable speed	78.5	53.5	28.5	—	
40W	Fixed speed	95.5	70.5	45.5	—	90
	Variable speed	105.5	80.5	55.5	5.5	
60W	Fixed speed	139.5	114.5	89.5	39.5	90
	Variable speed	169.5	144.5	119.5	69.5	

Model selection

Conveyance capacity graph

Allowable handled weight: MAX 10kg/m



- Notes
- The above graph shows conveyance capacity with a horizontal, distribute load. (standard belt, 1 ply)
 - With variable speed specifications, conveyance capacity drops to 40% of the graph value when transfer speed is 1/3 of the maximum speed.
 - For belt widths of 50 and 75mm, weight limits for carried objects are shown on the right.

Belt width (cm)	50	75
Allowable handled weight (kg/conveyor)	13.3	20

Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Variable speed (m/min)	
		Fixed speed (m/min)	Speed (50/60Hz)
1/120	3	2.5/3.0	0.8~2.3/0.9~2.7
1/100	3.5	3.0/3.5	0.9~2.7/1.1~3.3
1/90	4	3.5/4.0	1.0~3.0/1.2~3.6
1/60	5.5	4.5/5.5	1.5~4.5/1.8~5.5
1/50	6.5	5.5/6.5	1.8~5.5/2.2~6.5
1/36	9.5	8.0/9.5	2.5~7.5/3.0~9.0
1/30	11	9.0/11.0	3.0~9.0/3.5~11.0
1/25	14	12.0/14.0	3.5~11.0/4.5~13.5
1/18	19	16.0/19.0	5.0~15.0/6.0~18.0

Model Example

SBM 20 C 100 A 5.5 X 025

- Nominal belt width 20cm
- Conveyor length 100cm
- Motor capacity 25W (25W: 025, 40W: 04, 60W: 06)
- Power AC100V single phase (AC 100V single phase: X, AC 200V single phase: Y, AC 200V triple phase: Z)
- Speed symbol
- Variable speed (Fixed speed: N, Variable speed: A)
- Drive unit position Head: H
- Position of dimensional drawing and photograph on the left.
- Center: C
- Applied when specifying the position and dimensions of the drive.

Table of standard motor output settings

Conveyor length (m)	Belt width (mm)		
	50~300	400·500	600
0.6~4	25W	40W	60W
4.1~8	40W	60W	
8.1~12		60W	

Note: If a motor with higher output is to be used due to operating conditions, select the motor output using the conveying capability graph on the left.

Speed reduction rate (1/R)	Speed symbol	Variable speed (m/min)	
		Fixed speed (m/min)	Speed (50/60Hz)
1/15	23	18.5/22.5	6.0~18.0/7.0~21.0
1/12.5	27	22.5/27.0	7.0~21.0/8.5~26.0
1/10	34	26.0/33.5	9.0~27.0/11.0~33.0
1/9	38	31.5/38.0	10.0~30.0/12.0~36.0
1/7.5	45	37.5/45.0	12.0~36.0/14.5~43.5

- Notes
- The table gives speeds with no load. The speed varies about $\pm 10\%$ due loading.
 - The values in blue are semi-standard speeds.
 - The variable speed range is 3:1.
 - At AC100V and 200V (single phase), the speed is changed using a speed controller.
 - Speed for AC200V (triple-phase) is controlled by an inverter system with a single-phase in and triple-phase out. When applying 200V (triple-phase) power, one of the phases will be cancelled at the input.

Specifications

Unit: mm

Nominal belt width BW	50	75	100	150	200	250	300	400	500	600
Actual belt width	47	72	97	147	197	247	297	397	497	597
Frame width FW	85	110	135	185	235	285	335	435	535	635
Conveyor length L	600~1,000, 1,500, 2,000, 2,500, 3,000, 3,500, 4,000, 4,500, 5,000, 6,000, 7,000, 8,000, ~12,000									
Drive unit height	150									
Frame	Aluminium construction (Frame height: 34)									
Standard belt	Resin belt for food (1-ply) ※For speeds of 30m/min or greater, we recommend the optional low noise resin belt for food.									
Capacity	See the Conveyance Capacity Graph									
Drive type	Center drive									
Motor capacity	25W, 40W, 60W									
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)									

- The maximum conveyor length for a 50mm or 75mm belt width is 6,000mm. Also the minimum conveyor length for a 300 to 600mm belt width is the belt width $\times 2.5$.
- For a conveyor length of 8,100mm or more, an intermediate take-up unit is attached.
- When the length exceeds 4,000mm, the belt will be delivered in sections.

※Colored letters indicate semi-standard specifications.

BMG/Non-wandering type

For stable conveyance under stringent conditions

This new design uses a guide-belt system to eliminate belt wandering. In addition, a wide variety of belt specifications, lengths, reversible direction requirements, and other severe conditions are designed for, resulting in a high-precision material handling system.

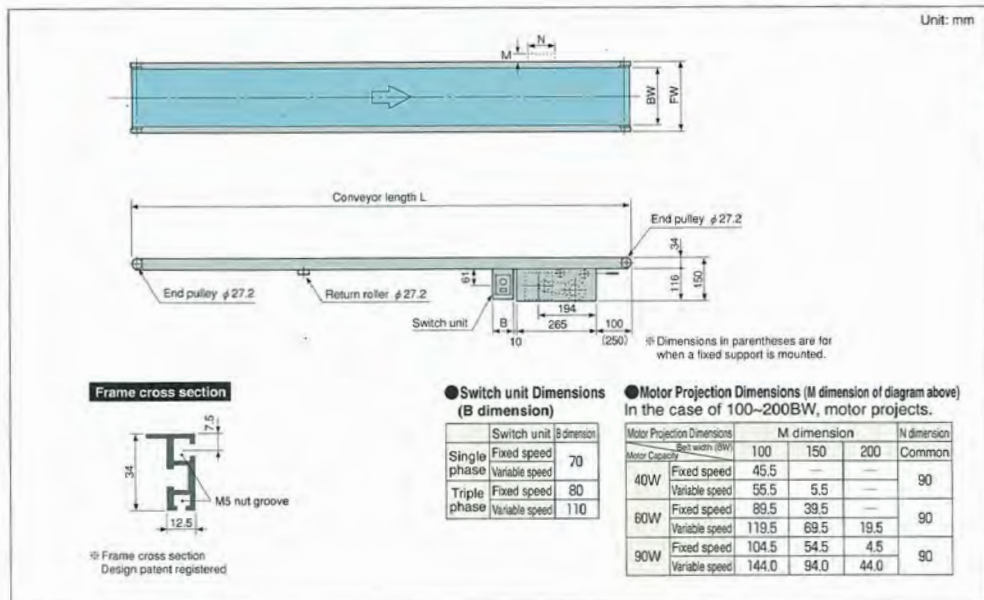


● Guide belt



A guide is mounted on the back of the belt to keep the belt from slipping to the side.

- Support is optional.
- The photograph specifications are: 200mm belt width × 1500mm conveyor length.



Model selection

Conveyance capacity graph

Allowable handled weight: MAX 10kg/m



- Notes ① The above graph shows conveyance capacity with a horizontal, distribute load. (standard belt, 1 ply)
② With variable speed specifications, conveyance capacity drops to 40% of the graph value when transfer speed is 1/3 of the maximum speed.

Model Example

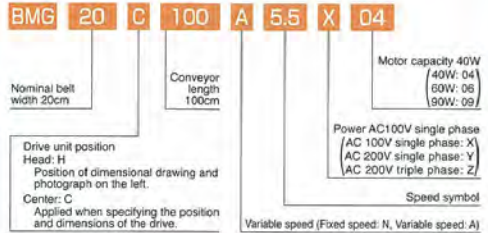


Table of standard motor output settings

Conveyor length (m)	Belt width (mm)	100~300	400·500	600
		0.6~4	40W	
4.1~8				60W

Note: If a motor with higher output is to be used due to operating conditions, select the motor output using the conveying capability graph on the left.

Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)	Variable speed (m/min)
		Speed (50/60Hz)	Speed (50/60Hz)
1/120	3	2.5/3.0	0.8~2.3/0.9~2.7
1/100	3.5	3.0/3.5	0.9~2.7/1.1~3.3
1/90	4	3.5/4.0	1.0~3.0/1.2~3.6
1/60	5.5	4.5/5.5	1.5~4.5/1.8~5.5
1/50	6.5	5.5/6.5	1.8~5.5/2.2~6.5
1/36	9.5	8.0/9.5	2.5~7.5/3.0~9.0
1/30	11	9.0/11.0	3.0~9.0/3.5~11.0
1/25	14	12.0/14.0	3.5~11.0/4.5~13.5
1/18	19	16.0/19.0	5.0~15.0/6.0~18.0

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)	Variable speed (m/min)
		Speed (50/60Hz)	Speed (50/60Hz)
1/15	23	18.5/22.5	6.0~18.0/7.0~21.0
1/12.5	27	22.5/27.0	7.0~21.0/8.5~26.0
1/10	34	28.0/33.5	9.0~27.0/11.0~33.0
1/9	38	31.5/38.0	10.0~30.0/12.0~36.0
1/7.5	45	37.5/45.0	12.0~36.0/14.5~43.5

- Notes ① The table gives speeds with no load. The speed varies about ±10% due loading.
② The values in blue are semi-standard speeds.
③ The variable speed range is 3:1.
④ Motor: 40W/60W out; speed is controlled by a speed-controller system for AC 100/200V (single-phase).
⑤ Motor: 90W out; speed is controlled by an inverter system for AC200V (triple-phase) with a single-phase in (power input) and triple-phase out (motor output). When applying 200V (triple-phase) power, one of the phases will be cancelled at the input.

Specifications

Unit: mm

Nominal belt width BW	100 150 200 250 300 400 500 600
Actual belt width	97 147 197 247 297 397 497 597
Frame width FW	135 185 235 285 335 435 535 635
Conveyor length L	600~, 1,000, 1,500, 2,000, 2,500, 3,000, 3,500, 4,000, 4,500, 5,000, 6,000, 7,000, 8,000
Drive unit height	150
Frame	Aluminium construction (Frame height: 34)
Standard belt	Low noise resin guide belt for food (1-ply)
Capacity	See the Conveyance Capacity Graph
Drive type	Center drive
Motor capacity	40W, 60W, 90W
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)

- The standard switch specifications are for 1 direction operation. If forward and reverse is desired, the exclusive use forward/reverse switch must be specified.
- When the length exceeds 4,000mm, the belt will be delivered in sections.

BME/Drive section: with removable type belt

Powerful drive and easy maintenance

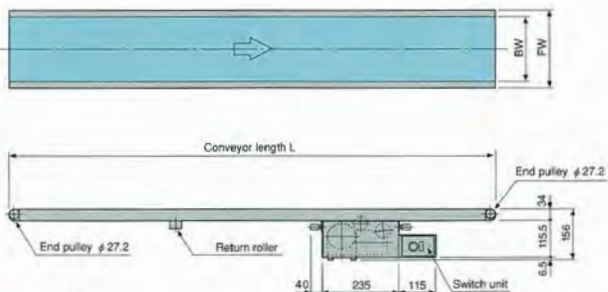
With the newly developed "friction drive method", the drive power will be efficiently transferred to the belt. And, easy removal of the belt and drive provides you super-easy maintenance.



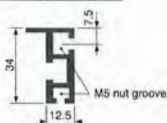
Easy removal of the drive.

- Support is optional.
- The photograph specifications are: 200mm belt width X 1500mm conveyor length.

Unit: mm



Frame cross section

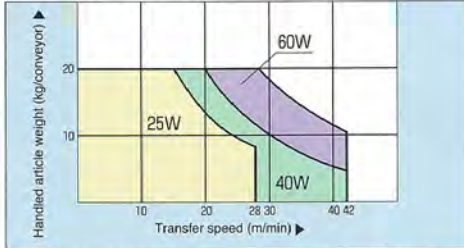


Ⓜ Frame cross section
Design patent registered

Model selection

Conveyance capacity graph

Allowable handled weight: MAX 10kg/m



- Notes
- The above graph shows conveyance capacity with a horizontal, distribute load. (standard belt, 1 ply)
 - With variable speed specifications, conveyance capacity drops to 40% of the graph value when transfer speed is 1/3 of the maximum speed.

Model Example

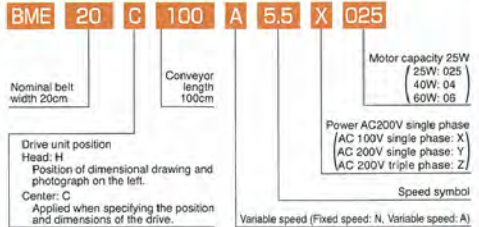


Table of standard motor output settings

Conveyor length (m)	Belt width (mm)	200~300	400・500	600
		0.35~4	25W	40W
4.1~6			40W	60W

Note: If a motor with higher output is to be used due to operating conditions, select the motor output using the conveying capability graph on the left.

Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)		Variable speed (m/min)	
		Speed (50/60Hz)	Speed (50/60Hz)	Speed (50/60Hz)	Speed (50/60Hz)
1/120	3.5	3.0/3.5	1.0~3.0/1.2~3.5		
1/100	4.5	3.5/4.5	1.2~3.5/1.5~4.5		
1/80	5.5	4.5/5.5	1.5~4.5/1.8~5.5		
1/60	7	6.0/7.0	2.0~6.0/2.3~7.0		
1/50	8.5	7.0/8.5	2.3~7.0/2.8~8.5		
1/40	11	9.0/11.0	3.0~9.0/3.6~11.0		
1/30	14.5	12.0/14.5	4.0~12.0/4.8~14.5		
1/25	17	14.0/17.0	4.6~14.0/5.6~17.0		

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)		Variable speed (m/min)	
		Speed (50/60Hz)	Speed (50/60Hz)	Speed (50/60Hz)	Speed (50/60Hz)
1/20	21.5	18.0/21.5	6.0~18.0/7.1~21.5		
1/15	28	23.5/28.0	7.8~23.5/9.3~28.0		
1/10	42	35.0/42.0	11.6~35.0/14.0~42.0		

- Notes
- The table gives speeds with no load. The speed varies about ±10% due to loading.
 - The values in blue are semi-standard speeds.
 - The variable speed range is 3:1.
 - Speed variation by an inverter system: single-phase input and triple-phase output. When applying 200V (triple-phase) power, one of the phases will be cancelled at the input.
 - Speed Code 7.0 or higher will be applied for 60W output.

Specifications

Unit: mm

Nominal belt width BW	200	250	300	400	500	600
Actual belt width	197	247	297	397	497	597
Frame width FW	235	285	335	435	535	635
Conveyor length L	350~, 1,000, 1,500, 2,000, 2,500, 3,000, 3,500, 4,000, 4,500, 5,000, 6,000					
Drive unit height	156					
Frame	Aluminium construction (Frame height: 34)					
Standard belt	Resin guide belt for food (1-ply)					
Capacity	See the Conveyance Capacity Graph					
Drive type	Friction drive					
Motor capacity	25W, 40W, 60W					
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)					

- Oil, power and water on the surface of an item can decrease conveyance efficiency.
- Any belt exceeding 4,000mm will have a width 10mm narrower than the nominal width.
- Any belt exceeding 4,000mm will be delivered in sections.
- A 60W motor for single-phase 100V or 200V will be available only with variable speed.

※ Colored letters indicate semi-standard specifications.

BHH/Head drive standad type

Smooth conveying of special objects

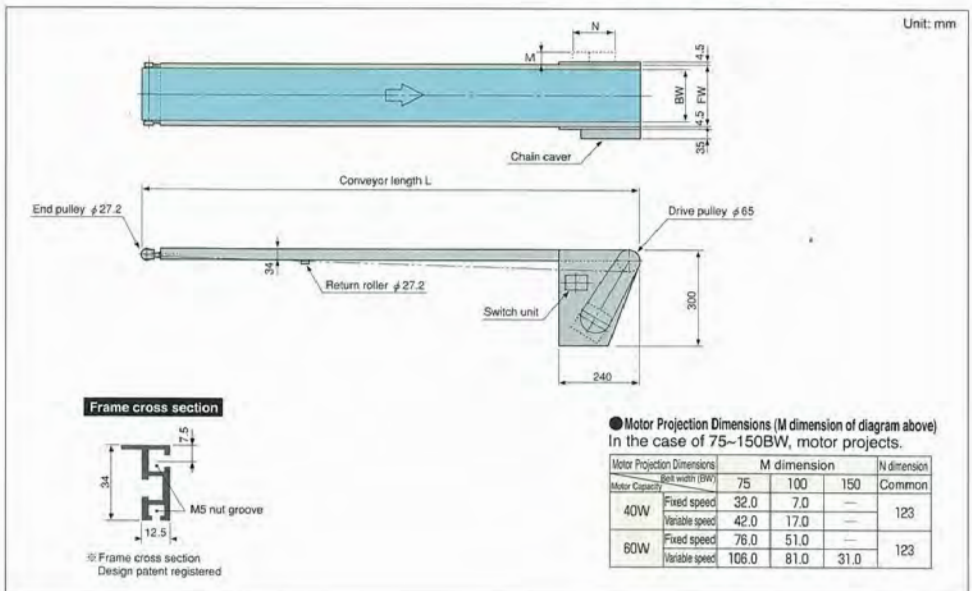
The head-drive conveyor has measures to prevent objects from getting dirty, and is easy to maintain. It can smoothly convey objects that become dirty easily.



In the cases listed below, BHG/non-wandering type (P11) should be specified.

- ① If wide belt, short conveyor length (conveyor length \leq belt width $\times 2.5$).
- ② If using in such a way that "wandering" occurs easily.
- ③ If maintenance and inspection are difficult.

- Support is optional.
- The photograph specifications are: 200mm belt width \times 1500mm conveyor length.



Model selection

Conveyance capacity graph

Allowable handled weight: MAX 10kg/m



- Notes
- The above graph shows conveyance capacity with a horizontal, distribute load. (standard belt, 1 ply)
 - With variable speed specifications, conveyance capacity drops to 40% of the graph value when transfer speed is 1/3 of the maximum speed.
 - For a 75mm belt width, the conveyor should be used within the weight limit of 20kg/unit.

Model Example

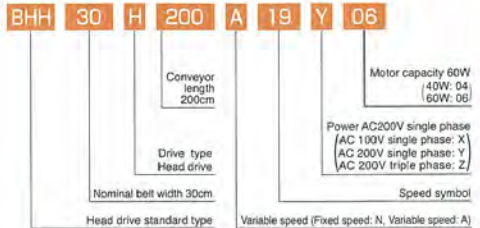


Table of standard motor output settings

Conveyor length (m)	Belt width (mm)	
	75~500	600
1~4	40W	60W
4.1~8		

Note: If a motor with higher output is to be used due to operating conditions, select the motor output using the conveying capacity graph on the left.

Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)	Variable speed (m/min)
		Speed (50/60Hz)	Speed (50/60Hz)
1/90	3	2.5/3.0	0.8~2.4/0.9~2.9
1/75	3.5	3.0/3.5	1.0~2.9/1.2~3.5
1/60	4.5	3.5/4.5	1.2~3.6/1.5~4.4
1/50	5.5	4.5/5.5	1.5~4.4/1.7~5.3
1/36	8	6.5/8.0	2.0~6.1/2.4~7.3
1/30	9.5	8.0/9.5	2.4~7.3/2.9~8.7
1/25	11	9.0/11.0	2.9~8.8/3.5~10.5
1/20	14	12.0/14.0	3.6~11.0/4.4~13.1
1/18	16	13.0/16.0	4.0~12.5/5.0~15.0

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)	Variable speed (m/min)
		Speed (50/60Hz)	Speed (50/60Hz)
1/15	19	16.0/19.0	4.9~14.6/5.9~17.6
1/12.5	23	18.5/22.5	5.9~17.6/7.0~21.1
1/10	28	23.0/28.0	7.4~22.0/8.8~26.5
1/9	31	25.5/31.0	8.2~24.5/9.8~29.4
1/7.5	38	31.0/37.5	9.8~29.4/11.8~35.3
1/6	47	39.0/47.0	12.2~36.6/14.7~44.0

- Notes
- The table gives speeds with no load. The speed varies about $\pm 10\%$ due loading.
 - The values in blue are semi-standard speeds.
 - The variable speed range is 3:1.
 - At AC100V and 200V (single phase), the speed is changed using a speed controller.
 - Speed for AC200V (triple-phase) is controlled by an inverter system with a single-phase in and triple-phase out. When applying 200V (triple-phase) power, one of the phases will be cancelled at the input.

Specifications

Unit: mm

Nominal belt width BW	75	100	150	200	250	300	400	500	600
Actual belt width	72	97	147	197	247	297	397	497	597
Frame width FW	110	135	185	235	285	335	435	535	635
Conveyor length L	1,000, 1,500, 2,000, 2,500, 3,000, 3,500, 4,000, 4,500, 5,000, 6,000, 7,000, 8,000								
Drive unit height	300								
Frame	Aluminium construction (Frame height: 34)								
Standard belt	Resin belt for food (1-ply) ※For speeds of 30m/min or greater, we recommend the optional low noise resin belt for food.								
Capacity	See the Conveyance Capacity Graph								
Drive type	Head drive								
Motor capacity	40W, 60W								
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)								

- The actual belt width is about 3mm less than the belt width given above, and for a conveyor length of 4,100mm or more it is 20mm less.
- The maximum conveyor length for a 75mm belt width is 6,000mm. Also the minimum conveyor length for a 500 to 600mm belt width is the belt width $\times 2.5$.

※ Colored letters indicate semi-standard specifications.

BHG/Head drive non-wandering type

Reliable conveying of special objects

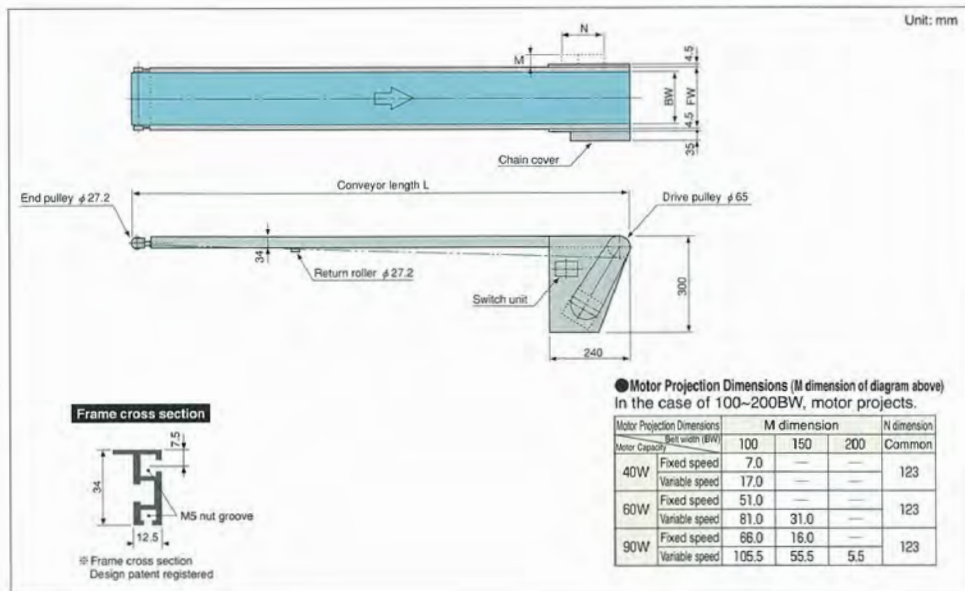
The head-drive conveyor has measures to prevent objects from getting dirty, and is easy to maintain. A guide belt is is used so reliable conveying is possible.



● Guide belt

A guide is mounted on the back of the belt to keep the belt from slipping to the side.

- Support is optional.
- The photograph specifications are: 200mm belt width × 1500mm conveyor length.



Model selection

Conveyance capacity graph

Allowable handled weight: MAX 10kg/m



- Notes ① The above graph shows conveyance capacity with a horizontal, distribute load. (standard belt, 1 ply)
② With variable speed specifications, conveyance capacity drops to 40% of the graph value when transfer speed is 1/3 of the maximum speed.

Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)	Variable speed (m/min)
		Speed (50/60Hz)	Speed (50/60Hz)
1/90	3	2.5/3.0	0.8~2.4/0.9~2.9
1/75	3.5	3.0/3.5	1.0~2.9/1.2~3.5
1/60	4.5	3.5/4.5	1.2~3.6/1.5~4.4
1/50	5.5	4.5/5.5	1.5~4.4/1.7~5.3
1/36	8	6.5/8.0	2.0~6.1/2.4~7.3
1/30	9.5	8.0/9.5	2.4~7.3/2.9~8.7
1/25	11	9.0/11.0	2.9~8.8/3.5~10.5
1/20	14	12.0/14.0	3.6~11.0/4.4~13.1
1/18	16	13.0/16.0	4.0~12.5/5.0~15.0

Model Example

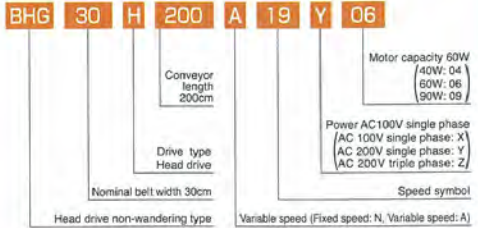


Table of standard motor output settings

Conveyor length (m)	Belt width (mm)	100~300	400 · 500	600
	1~4		40W	
4.1~8		60W		

Note: If a motor with higher output is to be used due to operating conditions, select the motor output using the conveying capability graph on the left.

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)	Variable speed (m/min)
		Speed (50/60Hz)	Speed (50/60Hz)
1/15	19	16.0/19.0	4.9~14.6/5.9~17.6
1/12.5	23	18.5/22.5	5.9~17.6/7.0~21.1
1/10	28	23.0/28.0	7.4~22.0/8.8~26.5
1/9	31	25.5/31.0	8.2~24.5/9.8~29.4
1/7.5	38	31.0/37.5	9.8~29.4/11.8~35.3
1/6	47	39.0/47.0	12.2~36.6/14.7~44.0

- Notes ① The table gives speeds with no load. The speed varies about $\pm 10\%$ due loading.
② The values in blue are semi-standard speeds.
③ The variable speed range is 3:1.
④ Motor: 40W/60W out; speed is controlled by a speed-controller system for AC 100/200V (single-phase).
⑤ Motor: 90W out; speed is controlled by an inverter system for AC200V (triple-phase) with a single-phase in (power input) and triple-phase out (motor output). When applying 200V (triple-phase) power, one of the phases will be cancelled at the input.

Specifications

Unit: mm

Nominal belt width BW	100	150	200	250	300	400	500	600
Actual belt width	97	147	197	247	297	397	497	597
Frame width FW	135	185	235	285	335	435	535	635
Conveyor length L	1,000, 1,500, 2,000, 2,500, 3,000, 3,500, 4,000, 4,500, 5,000, 6,000, 7,000, 8,000							
Drive unit height	300							
Frame	Aluminium construction (Frame height: 34)							
Standard belt	Low noise resin guide belt for food (1-ply)							
Capacity	See the Conveyance Capacity Graph							
Drive type	Head drive							
Motor capacity	40W, 60W, 90W							
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)							

* When the length exceeds 4,000mm, the belt will be delivered in sections.

※ Colored letters indicate semi-standard specifications.

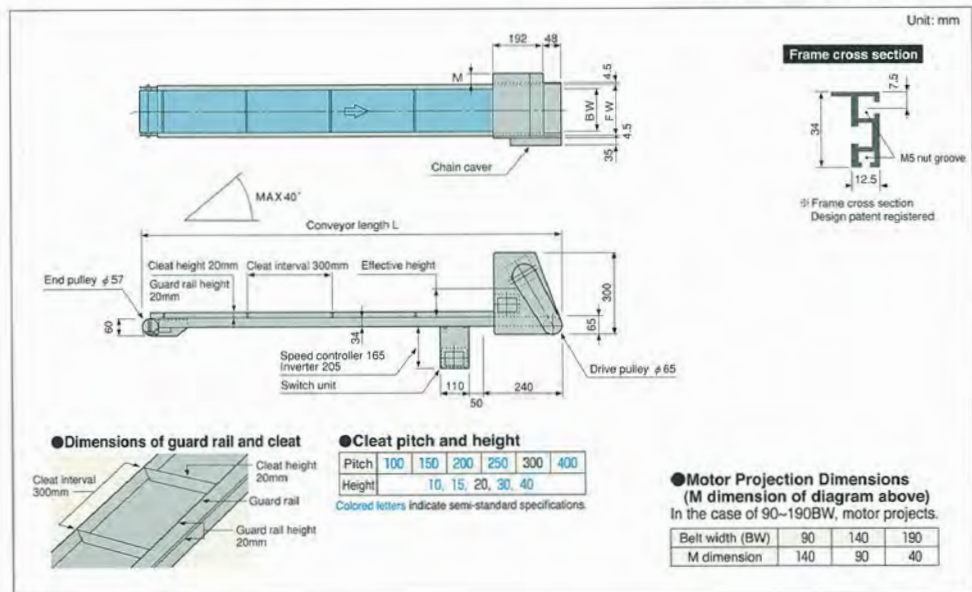
BMK/Cleated belt type

For steeply inclined conveyance

The conveyor has 20mm high cross pieces and guide, making it possible to reliably convey objects on an incline. The drive unit is located on top so there is no interference with other equipment.



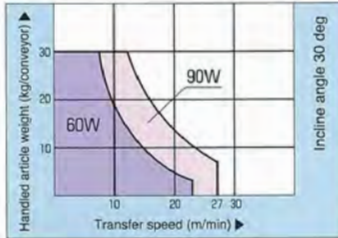
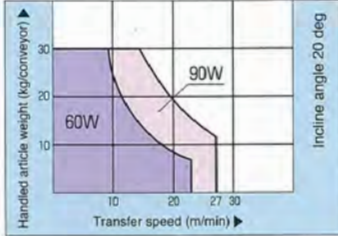
- Support is optional.
- The photograph specifications are: 190mm belt width × 1500mm conveyor length.



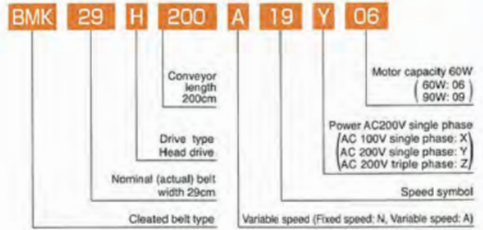
Model selection

Conveyance capacity graph

Allowable handled weight: MAX 10kg/m



Model Example



Notes

- The graph on the left shows the conveying capacity for constant speed and dispersed load.
- For variable speed, if the conveyor speed becomes less than 1/3 the maximum speed, the weight of the objects should be 40% less than at maximum speed.
- The standard motor output setting is 60W, however if a higher rank motor is used due to the operating conditions, select 90W on the graph on the left.

Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)		Variable speed (m/min)	
		Speed (50/60Hz)	Speed (50/60Hz)	Speed (50/60Hz)	Speed (50/60Hz)
1/90	3	2.5/3.0	0.8~2.4/0.9~2.9		
1/75	3.5	3.0/3.5	1.0~2.9/1.2~3.5		
1/60	4.5	3.5/4.5	1.2~3.6/1.5~4.4		
1/50	5.5	4.5/5.5	1.5~4.4/1.7~5.3		
1/36	8	6.5/8.0	2.0~6.1/2.4~7.3		
1/30	9.5	8.0/9.5	2.4~7.3/2.9~8.7		
1/25	11	9.0/11.0	2.9~8.8/3.5~10.5		
1/20	14	12.0/14.0	3.6~11.0/4.4~13.1		

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)		Variable speed (m/min)	
		Speed (50/60Hz)	Speed (50/60Hz)	Speed (50/60Hz)	Speed (50/60Hz)
1/18	16	13.0/16.0	4.0~12.5/5.0~15.0		
1/15	19	16.0/19.0	4.9~14.6/5.9~17.6		
1/12.5	23	18.5/22.5	5.9~17.6/7.0~21.1		
1/10	28	23.0/28.0	7.4~22.0/8.8~26.5		

- Notes
- The table gives speeds with no load. The speed varies about $\pm 10\%$ due loading.
 - The values in blue are semi-standard speeds.
 - The variable speed range is 3:1.
 - Motor: 60W out; speed is controlled by a speed-controller system for AC100/200 (single-phase).
 - Motor: 90W out; speed is controlled by an inverter system for AC200V (triple-phase) with a single-phase in (power input) and triple-phase out (motor output). When applying 200V (triple-phase) power, one of the phases will be cancelled at the input.

Specifications

Unit: mm

Nominal (actual) belt width BW	90	140	190	240	290	390	490	590
Frame width FW	135	185	235	285	335	435	535	635
Conveyor length L	1,000, 1,500, 2,000, 2,500, 3,000, 3,500, 4,000							
Drive unit height	300							
Frame	Aluminium construction (Frame height: 34) with aluminium guard rails							
Standard belt	Resin cleated belt for food (2-ply)							
Capacity	See the Conveyance Capacity Graph							
Drive type	Head drive							
Motor capacity	60W, 90W							
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)							

* The minimum conveyor length for a 490 or 590mm belt width is the belt width $\times 2.5$.

BMN/Upper-horizontal type

For smooth, inclined conveyance

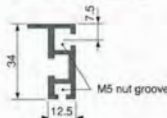
Model BMN adopts a sharply inclined belt. Horizontal section is installed at upper-side and smooth transfer is available from inclined section to horizontal section.



- Support is optional.
- The photograph specifications are: 150mm belt width × 1500mm conveyor length.

Frame cross section

Unit: mm



• Frame cross section
Design patent registered

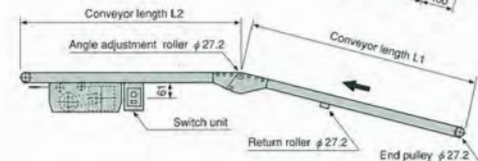
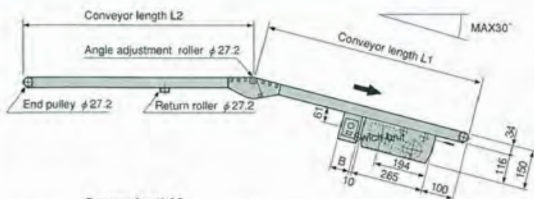
- For an upward incline, the drive unit is installed on the top L2.
- When drive unit is installed at the upper-horizontal L2=Min 800
- When drive unit is installed at the inclined L2=Min 500
- Conveyor length L=L1+L2

Switch unit Dimensions (B dimension)

Switch unit	B dimension
Single Fixed speed	70
Single Variable speed	70
Triple Fixed speed	80
Triple Variable speed	110

Motor Projection Dimensions (M dimension of diagram above) In the case of 100~200BW, motor projects.

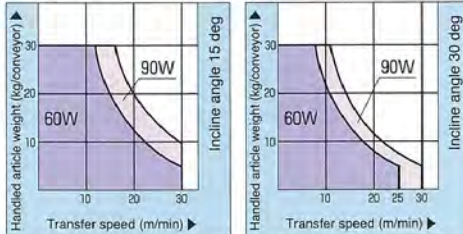
Motor Projection Dimensions	M dimension			N dimension	
Motor Capacity	Back width (BW)	100	150	200	Common
40W	Fixed speed	45.5	—	—	90
	Variable speed	55.5	—	—	
60W	Fixed speed	89.5	39.5	—	90
	Variable speed	119.5	69.5	19.5	



Model selection

Conveyance capacity graph

Allowable handled weight: MAX 10kg/m



- Notes ① The above graph shows conveyance capacity with a horizontal, distribute load, (standard belt, 1 ply)
② With variable speed specifications, conveyance capacity drops to 40% of the graph value when transfer speed is 1/3 of the maximum speed.

Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)		Variable speed (m/min)	
		Speed (50/60Hz)		Speed (50/60Hz)	
1/120	3	2.5/3.0		0.8~2.3/0.9~2.7	
1/100	3.5	3.0/3.5		0.9~2.7/1.1~3.3	
1/90	4	3.5/4.0		1.0~3.0/1.2~3.6	
1/80	5.5	4.5/5.5		1.5~4.5/1.8~5.5	
1/50	6.5	5.5/6.5		1.8~5.5/2.2~6.5	
1/36	9.5	8.0/9.5		2.5~7.5/3.0~9.0	
1/30	11	9.0/11.0		3.0~9.0/3.5~11.0	
1/25	14	12.0/14.0		3.5~11.0/4.5~13.5	
1/18	19	16.0/19.0		5.0~15.0/6.0~18.0	

Model Example

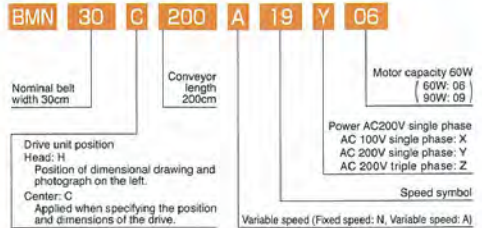


Table of standard motor output settings

Conveyor length (m)	Belt width (mm)		
	100~300	400·500	600
1.5~3	60W		90W
3.1~6			

Note: If a motor with higher output is to be used due to operating conditions, select the motor output using the conveying capability graph on the left.

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)		Variable speed (m/min)	
		Speed (50/60Hz)		Speed (50/60Hz)	
1/15	23	18.0/22.5		6.0~18.0/7.0~21.0	
1/12.5	27	22.5/27.0		7.0~21.0/8.5~26.0	

- Notes ① The table gives speeds with no load. The speed varies about $\pm 10\%$ due loading.
② The values in blue are semi-standard speeds.
③ The variable speed range is 3:1.
④ Motor: 60W out; speed is controlled by a speed-controller system for AC100/200V (single-phase).
⑤ Motor: 90W out; speed is controlled by an inverter system for AC200V (triple-phase) with a single-phase in (power input) and triple-phase out (motor output). When applying 200V (triple-phase) power, one of the phases will be cancelled at the input.

Specifications

Unit: mm

Nominal belt width BW	100	150	200	250	300	400	500	600
Actual belt width	97	147	197	247	297	397	497	597
Frame width FW	135	185	235	285	335	435	535	635
Conveyor length L	1,500, 2,000, 2,500, 3,000, ~6,000							
Drive unit height	150							
Frame	Aluminium construction (Frame height: 34)							
Standard belt	Angled resin guide belt (1-ply)							
Capacity	See the Conveyance Capacity Graph							
Drive type	Center drive							
Motor capacity	60W, 90W							
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)							

* When the length exceeds 4,000mm, the belt will be delivered in sections.

* Colored letters indicate semi-standard specifications.

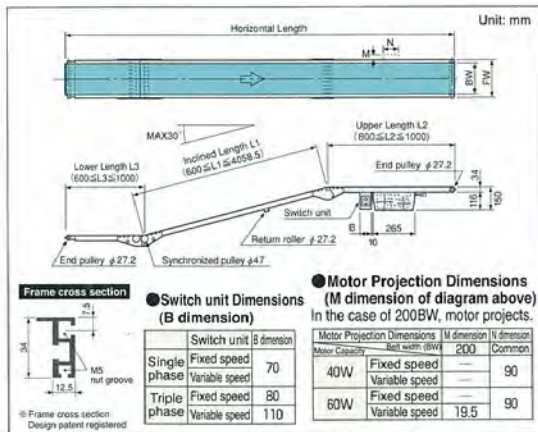
BMZ/Upper and lower horizontal type

For smooth, inclined conveyance

A rough-top belt is used to reduce transferred article slippage, and the system can be set with a maximum inclination angle of 30 deg.



- Support is optional.
- The photograph specifications are: 200mm belt width × 2000mm conveyor length.



Specifications

Unit: mm

	200	250	300	400	500	600
Nominal belt width BW	200	250	300	400	500	600
Actual belt width	197	247	297	397	497	597
Frame width FW	235	285	335	435	535	635
Conveyor length L	2,000~5,000 (L1+L2+L3)					
Drive unit height	150					
Frame	Aluminium construction (Frame height: 34)					
Standard belt	Inclined : Angled resin guide belt (1-ply) Feeder : Resin guide belt (1-ply)					
Capacity	See the Conveyance Capacity Graph					
Drive type	Center drive					
Motor capacity	60W, 90W					
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)					

- When the length exceeds 4,000mm, the belt will be delivered in sections.
- Conveyance capacity is dependent on speed and inclined angle.
- Please consult with us when using at an inclination angle of 20 deg. or more.

※Colored letters indicate semi-standard specifications.

Model selection

Model Example

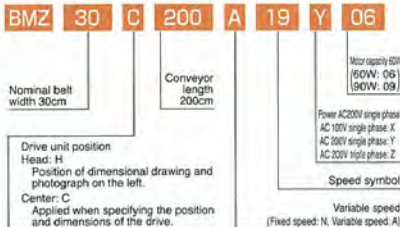
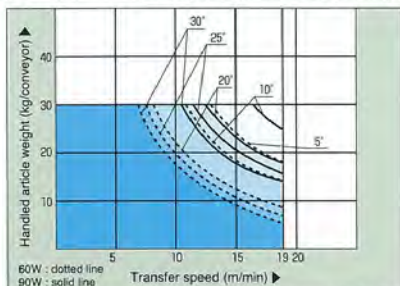


Table of standard motor output settings

Belt width (mm)	200~300	400~500
Motor capacity	60W	90W

Conveyance capacity graph

Allowable handled weight: MAX 10kg/m



- Notes
- The above graph shows conveyance capacity with a horizontal, distribute load. (standard belt, 1 ply)
 - With variable speed specifications, conveyance capacity drops to 40% of the graph value when transfer speed is 1/3 of the maximum speed.

Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)		Variable speed (m/min)	
		Speed (50/60Hz)	Speed (50/60Hz)	Speed (50/60Hz)	Speed (50/60Hz)
1/120	3	2.5/3.0	0.8~2.3/0.9~2.7		
1/100	3.5	3.0/3.5	0.9~2.7/1.1~3.3		
1/90	4	3.5/4.0	1.0~3.0/1.2~3.6		
1/80	5.5	4.5/5.5	1.5~4.5/1.8~5.5		
1/50	8.5	5.5/6.5	1.8~5.5/2.2~6.5		
1/36	9.5	8.0/9.5	2.5~7.5/3.0~9.0		
1/30	11	9.0/11.0	3.0~9.0/3.5~11.0		
1/25	14	12.0/14.0	3.5~11.0/4.5~13.5		
1/18	19	16.0/19.0	5.0~15.0/6.0~18.0		

- Notes
- The table gives speeds with no load. The speed varies about ±10% due loading.
 - The values in blue are semi-standard speeds.
 - The variable speed range is 3:1.
 - Motor: 60W out: speed is controlled by a speed-controller system for AC100/200V (single-phase).
 - Motor: 90W out: speed is controlled by an inverter system for AC200V (triple-phase) with a single-phase in (power input) and triple-phase out (motor output). When applying 200V (triple-phase) power, one of the phases will be cancelled at the input.

BNC/Curve belt type

Belt conveyor for a curve

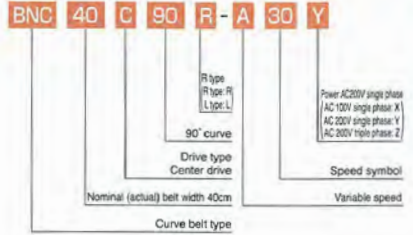
These curve belt conveyors enable 90° redirection in a minimal space.



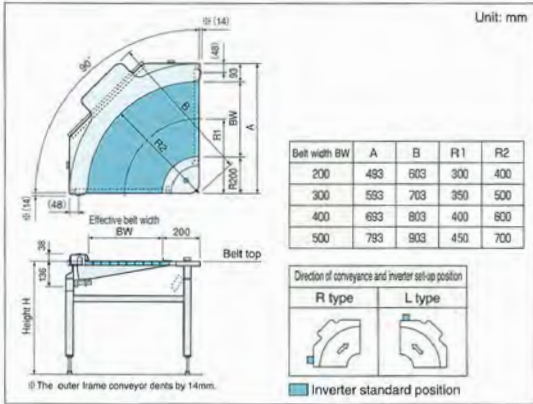
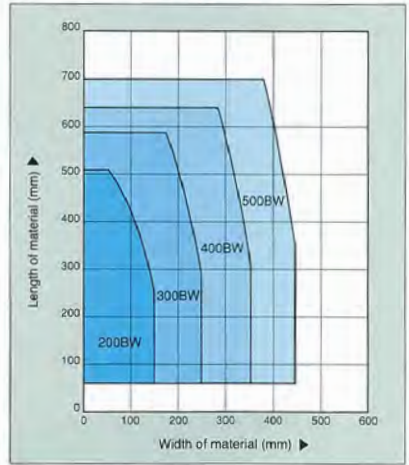
- Equipped with adjustable support legs (±30mm).
- The unit shown in the photo is 300mm×90°.

Model selection

Model Example



Belt width Selection Chart



Specifications

Unit: mm

Nominal (actual) belt width BW	200, 300, 400, 500
Inside radius	200
Curve angle	90°
Drive unit height	150
Frame	Steel (Only the belt supporting frame is made out of stainless steel.)
Standard belt	Resin belt for food (1-ply) (Option: Anti-bacterial, anti-fungal specifications, White)
Capacity	10kg/unit with variable speed (with a leveled load)
Drive type	Belt circumferential friction drive
Motor capacity	90W
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)

* During use, do not allow oil or transferred material waste to get on the drive pulley section.

Ⓜ Colored letters indicate semi-standard specifications.

Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Variable speed (m/min)
		Speed (50/60Hz)
1/25	10	1.7~10.0
1/10	30	5.0~30.0

Notes ① The table gives speeds with no load. The speed varies about ±10% due loading.

② The values in blue are semi-standard speeds.

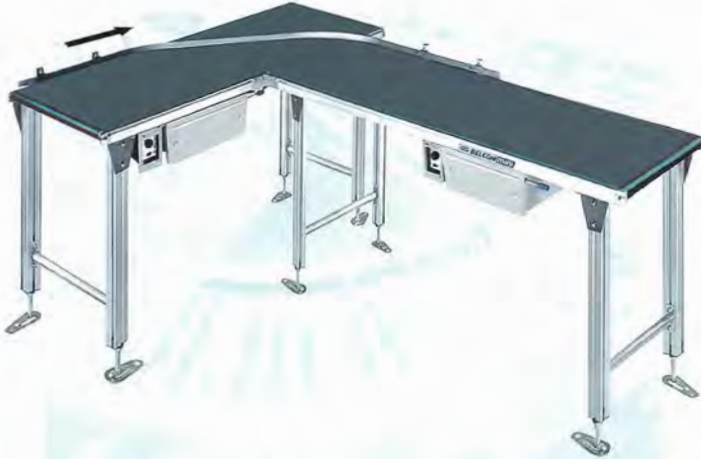
③ The value indicated above is the speed at the center of belt.

④ Inverter controlled variable speed is standard.

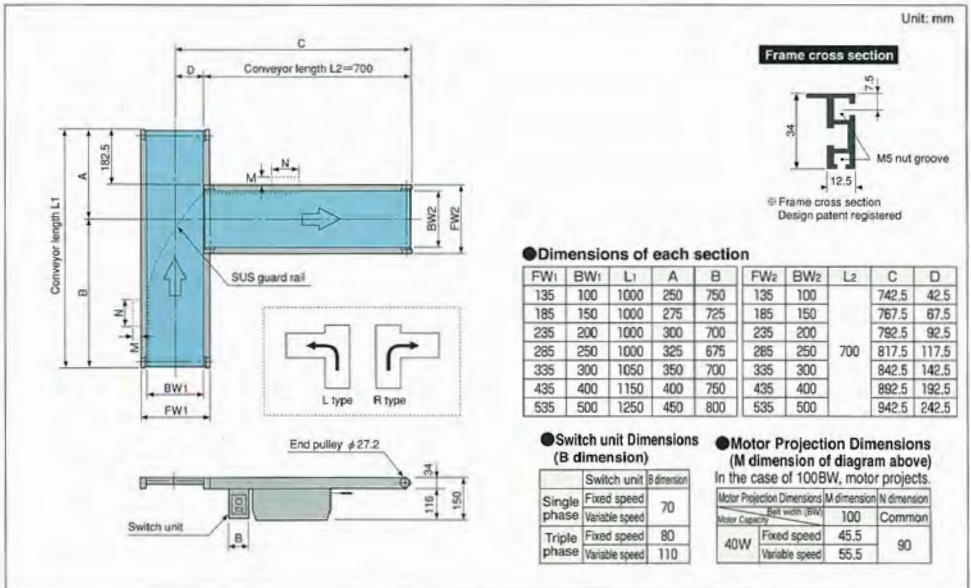
BMA/Crossing Type

For orthogonal conveyance of small articles

The flow direction of small materials can be changed up to 90 degrees by placing conveyors rectangularly.



- Support is optional.
- The photograph specifications are: 300mm belt width.

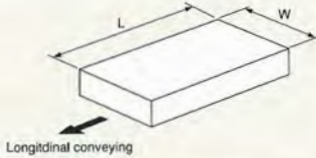


Model selection

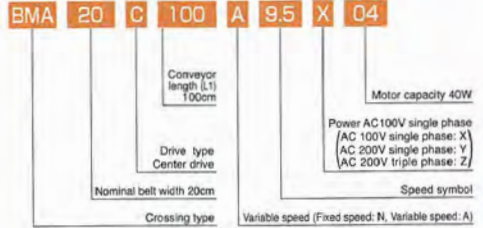
Attitude of materials

Longitudinal conveying is standard. $W \leq 0.75L$.
Under the following conditions, the conveying direction may not be stable.

- $W \geq L$
- Low speed conveying (5.5/6.5m/min.)
- Light weight materials of 1kg or less
- Different speed between upstream and downstream
- For items conveyed continuously one after another



Model Example



Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)	Variable speed (m/min)
		Speed (50/60Hz)	Speed (50/60Hz)
1/50	6.5	5.5/6.5	1.8~5.5/2.2~6.5
1/36	9.5	8.0/9.5	2.5~7.5/3.0~9.0
1/30	11	9.0/11.0	3.0~9.0/3.5~11.0
1/25	14	12.0/14.0	3.5~11.0/4.5~13.5

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)	Variable speed (m/min)
		Speed (50/60Hz)	Speed (50/60Hz)
1/18	19	16.0/19.0	5.0~15.0/6.0~18.0
1/15	23	18.5/22.5	6.0~18.0/7.0~21.0
1/12.5	27	22.5/27.0	7.0~21.0/8.5~26.0

Notes ① The table gives speeds with no load. The speed varies about $\pm 10\%$ due loading. ② The values in blue are semi-standard speeds. ③ The variable speed range is 3:1.
④ At AC100V and 200V (single phase), the speed is changed using a speed controller. ⑤ Variable speed for AC200V (triple-phase) is controlled by an inverter system with a single-phase input and triple-phase output. When applying 200V (triple-phase) power, one of the phases will be cancelled at the input.

Specifications

Unit: mm

Nominal belt width BW	100	150	200	250	300	400	500
Actual belt width	97	147	197	247	297	397	497
Frame width FW	135	185	235	285	335	435	535
Conveyor length L	See the table on the left.						
Drive unit height	150						
Frame	Aluminium construction (Frame height: 34) With SUS guide						
Standard belt	Resin smooth guide belt for food (1-ply)						
Capacity	5kg/piece at crossing section						
Drive type	Center drive						
Motor capacity	40W×2						
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)						

※ Colored letters indicate semi-standard specifications.

BMS/Knife edge type

For smooth transfer conveance of small articles

In order to smoothly convey the objects, each end of the conveyor had a radius of 3mm. It can be used for conveying objects as small as 20mm.



- Support is optional.
- The photograph specifications are: 180mm belt width × 1500mm conveyor length.
- The standard belt is white.

Model selection

Model Example

BMS 28 C 150 A 19 Y O6

Nominal (actual) belt width 28cm

Conveyor length 150cm

Motor capacity 60W (60W: O6, 90W: O9)

Power AC200V (single phase)
AC100V (single phase ×)
AC200V (single phase ×)
VAC 200V (triple phase ×)

Speed symbol

Variable speed (Fixed speed: N, Variable speed: A)

Drive unit position
Head: H
Position of dimensional drawing and photograph on the left.
Center: C
Applied when specifying the position and dimensions of the drive.

Table of standard motor output settings

Belt width (mm)	80~380	480 · 580
Motor capacity	60W	90W

● End section of knife edge

● Handled article transfer

Materials having lengths up to approximately 20mm are transferable to another conveyor.

Unit: mm

Conveyor length L

Return roller φ 27.2

Switch unit

Frame cross section

MS nut groove 12.5

Frame cross section Design patent registered

● Switch unit Dimensions (B dimension)

Switch unit B dimension	70
Single phase Fixed speed	70
Single phase Variable speed	70
Triple phase Fixed speed	80
Triple phase Variable speed	110

● Motor Projection Dimensions (M dimension of diagram above) In the case of 80~180BW, motor projects.

Motor Capacity	M dimension	N dimension		
Motor Projection dimensions	80	130	180	Common
60W	Fixed speed	89.5	39.5	90
	Variable speed	119.5	69.5	
90W	Fixed speed	104.5	54.5	90
	Variable speed	144.0	94.0	

⊕ Dimensions in parentheses are for when a fixed support is mounted.

Specifications

Unit: mm

Nominal (actual) belt width BW	80	130	180	230	280	380	480	580
Frame width FW	135	185	235	285	335	435	535	635
Conveyor length L	1,000, 1,500, 2,000, 2,500, 3,000, 3,500, 4,000							
Drive unit height	150							
Frame	Aluminium construction (Frame height: 34)							
Standard belt	Resin white belt for food (1-ply)							
Capacity	10kg/overall length (At horizontal, constant speed, both end knife edge), dispersed weight							
Drive type	Center drive							
Motor capacity	60W, 90W							
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)							

- The minimum conveyor length for a 480 or 580mm belt width is the belt width × 2.5.
- A type with a knife edge on only one end is also available.

Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)	Variable speed (m/min)
		Speed (50/60Hz)	Speed (50/60Hz)
1/120	3	2.5/3.0	0.8~2.3/0.9~2.7
1/100	3.5	3.0/3.5	0.9~2.7/1.1~3.3
1/90	4	3.5/4.0	1.0~3.0/1.2~3.6
1/60	5.5	4.5/5.5	1.5~4.5/1.8~5.5
1/50	6.5	5.5/6.5	1.8~5.5/2.2~6.5
1/36	9.5	8.0/9.5	2.5~7.5/3.0~9.0
1/30	11	9.0/11.0	3.0~9.0/3.5~11.0
1/25	14	12.0/14.0	3.5~11.0/4.5~13.5
1/18	19	16.0/19.0	5.0~15.0/6.0~18.0

- Notes (1) The table gives speeds with no load. The speed varies about ±10% due loading.
 (2) The values in blue are semi-standard speeds.
 (3) The variable speed range is 3:1.
 (4) Motor 60W (out speed) is controlled by a speed-controller system for AC100/200V (single-phase).
 (5) Motor 90W (out speed) is controlled by an inverter system for AC200V (triple-phase) with a single-phase (in power input) and triple-phase out (motor output). When applying 200V (triple-phase) power, one of the phases will be cancelled at the input.

⊕ Colored letters indicate semi-standard specifications.

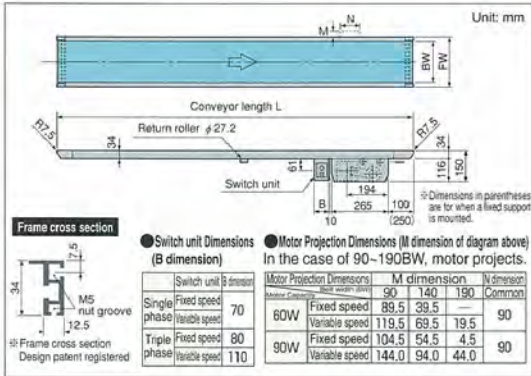
BMR/Roller edge type

Reliable conveying

This conveyor has rollers with a radius of 7.5mm on both ends. It uses a guide belt in order to make reliable conveying possible.



- Support is optional.
- The photograph specifications are: 190mm belt width × 1500mm conveyor length.
- The standard belt is white.



Specifications

Unit: mm

Nominal (actual) belt width BW	90	140	190	240	290	390	490	590
Frame width FW	135	185	235	285	335	435	535	635
Conveyor length L	1,000, 1,500, 2,000, 2,500, 3,000, 3,500, 4,000							
Drive unit height	150							
Frame	Aluminium construction (Frame height: 34)							
Standard belt	Resin white belt for food (1-ply)							
Capacity	10kg/overall length (At horizontal, constant speed, both end roller edge), dispersed weight							
Drive type	Center drive							
Motor capacity	60W, 90W							
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)							

• A type with a roller edge on only one end is also available.

③ Colored letters indicate semi-standard specifications.

Model selection

Model Example

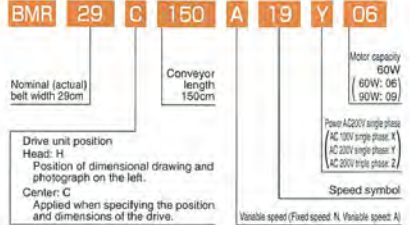
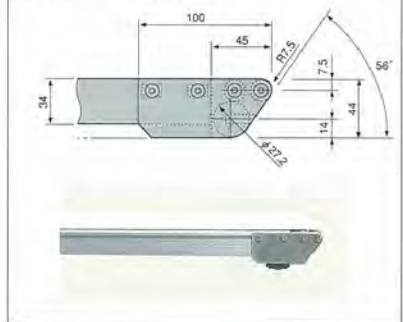


Table of standard motor output settings

Belt width (mm)	90~390	490~590
Motor capacity	60W	90W

End section of roller edge



Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)	Variable speed (m/min)
		Speed (50/60Hz)	Speed (50/60Hz)
1/120	3	2.5/3.0	0.8~2.3/0.9~2.7
1/100	3.5	3.0/3.5	0.9~2.7/1.1~3.3
1/90	4	3.5/4.0	1.0~3.0/1.2~3.6
1/80	5.5	4.5/5.5	1.5~4.5/1.8~5.5
1/50	6.5	5.5/6.5	1.8~5.5/2.2~6.5
1/36	9.5	8.0/9.5	2.5~7.5/3.0~9.0
1/30	11	9.0/11.0	3.0~9.0/3.5~11.0
1/25	14	12.0/14.0	3.5~11.0/4.5~13.5
1/18	19	16.0/19.0	5.0~15.0/6.0~18.0

- Notes ① The table gives speeds with no load. The speed varies about $\pm 10\%$ due loading.
 ② The values in blue are semi-standard speeds.
 ③ The variable speed range is 3:1.
 ④ Motor: 60W out, speed is controlled by a speed-controller system for AC100/200V (single-phase).
 ⑤ Motor: 90W out, speed is controlled by an inverter system for AC200V (triple-phase) with a single-phase in (power input) and triple-phase out (motor output). When applying 200V (triple-phase) power, one of the phases will be cancelled at the input.

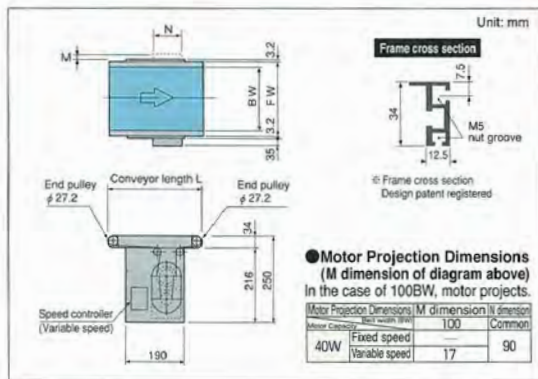
BMJ/Short-length type

For conveying when there is only a short distance between processes

This type has the shortest conveyor length at 250mm. It is ideal for conveying between processes. It uses a guide belt to make reliable conveying possible.



- Support is optional.
- The photograph specifications are: 200mm belt width × 250mm conveyor length.



Specifications

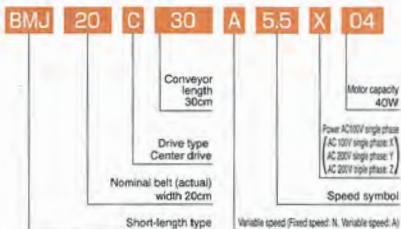
Unit: mm

Nominal (actual) belt width BW	100	150	200	250	300	400	500
Frame width FW	135	185	235	285	335	435	535
Conveyor length L	250~600						
Drive unit height	250						
Frame	Aluminium construction (Frame height: 34)						
Standard belt	Low-noise resin guide belt for food (1-ply)						
Capacity	10kg/overall length (At horizontal, constant speed, dispersed weight)						
Drive type	Center drive						
Motor capacity	40W						
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)						

* The minimum conveyor length for a belt width of 250 to 500mm is equal to the belt width.

Model selection

Model Example



Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)		Variable speed (m/min)	
		Speed (50/60Hz)		Speed (50/60Hz)	
1/90	3	2.5/3.0	0.8~2.4/0.9~2.9		
1/75	3.5	3.0/3.5	1.0~2.9/1.2~3.5		
1/60	4.5	3.5/4.5	1.2~3.6/1.5~4.4		
1/50	5.5	4.5/5.5	1.5~4.4/1.7~5.3		
1/36	8	6.5/8.0	2.0~6.1/2.4~7.3		
1/30	9.5	8.0/9.5	2.4~7.3/2.9~8.7		
1/25	11	9.0/11.0	2.9~8.8/3.5~10.5		
1/20	14	12.0/14.0	3.6~11.0/4.4~13.1		
1/18	16	13.0/16.0	4.0~12.5/5.0~15.0		
1/15	19	16.0/19.0	4.9~14.6/5.9~17.6		
1/12.5	23	18.5/22.5	5.9~17.6/7.0~21.1		
1/10	28	23.0/28.5	7.4~22.0/8.8~26.5		
1/9	31	25.5/31.0	8.2~24.5/9.8~29.4		
1/7.5	38	31.0/37.5	9.8~29.4/11.8~35.3		
1/6	47	39.0/47.0	12.2~36.6/14.7~44.0		

Notes: ① The table gives speeds with no load. The speed varies about ± 10% due loading.

② The values in blue are semi-standard speeds.

③ The variable speed range is 3:1.

④ At AC100V and 200V (single phase), the speed is changed using a speed controller.

⑤ Speed for AC200V (triple-phase) is controlled by an inverter system with a single-phase in and triple-phase out. When applying 200V (triple-phase) power, one of the phases will be cancelled at input.

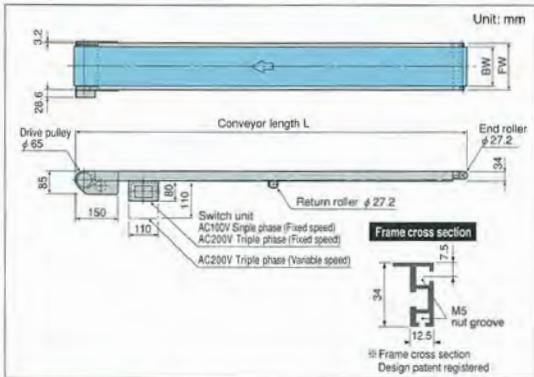
BMP/Motor pulley type

For compact and light-weight conveying

This compact type is driven by a motor and pulley. It uses a guide belt so there is no shifting to the side.



- Support is optional.
- The photograph specifications are: 300mm belt width x 2000mm conveyor length.



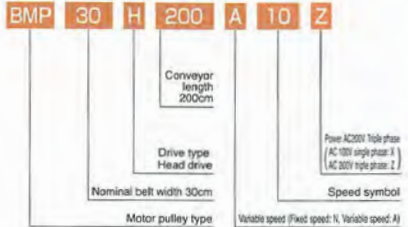
Specifications

	Unit: mm					
Nominal belt width BW	200	250	300	400	500	600
Actual belt width	197	247	297	397	497	597
Frame width FW	235	285	335	435	535	635
Conveyor length L	500, 1,000, 1,500, 2,000, 2,500, 3,000 <small>⑤ See the Conveyance Capacity table</small>					
Drive unit height	85					
Frame	Aluminium construction (Frame height: 34)					
Standard belt	Resin belt for food (1-ply)					
Capacity	See the Conveyance Capacity table					
Drive type	Head drive					
Motor input (50/60Hz)	27/28W			40/35W, 59/55W		
Power	AC100V (Single phase)			AC200V (Triple phase)		

⑤ Colored letters indicate semi-standard specifications.

Model selection

Model Example



Motor pulley



This conveyor uses an impedance-protection-type inner motor, making possible to prevent the motor from bumping even when the motor is restrained while the power is ON. However, if the motor is restrained for a long time, it could shorten the life of the motor.

⑥ If the motor pulley stops, always turn the power OFF.

Conveyance capacity table

Power	Belt width (mm)	Conveyor length (mm)	Capacity (kg/overall length)
AC100V(Single phase) input 27/28W	200, 250, 300	500, 1,000, 1,500	5kg
AC200V(Triple phase) input 40/35W	200, 250, 300	500, 1,000, 1,500, 2,000	10kg
AC200V(Triple phase) input 59/55W (High motor capacity type)	250, 300, 400 500, 600	500, 1,000, 1,500, 2,000, 2,500, 3,000,	

Conveyor speed table

Power	Speed symbol	Fixed speed (m/min)	Variable speed (m/min)
		Speed (50/60Hz)	Speed (50/60Hz)
AC100V(Single phase) input 27/28W	6.5	5.4/6.5	—
	8	6.6/8.0	
	10	8.3/10.0	
AC200V(Triple phase) input 40/35W	6.5	5.4/6.5	2.7~5.4/3.2~6.5
	8	6.6/8.0	3.3~6.6/4.0~8.0
	10	8.3/10.0	4.2~8.3/5.0~10.0
AC200V(Triple phase) input 59/55W (High motor capacity type)	13	10.8/13.0	5.4~10.8/6.5~13.0
	20	16.6/20.0	8.3~16.6/10.0~20.0
	25	20.8/25.0	10.4~20.8/12.5~25.0

Notes ① The table gives speeds with no load. The speed varies about $\pm 10\%$ due loading.

② The values in blue are semi-standard speeds.

③ Speed for AC200V (triple-phase) is controlled by an inverter system with a single-phase in and triple-phase out. When applying 200V (triple-phase) power, one of the phases will be cancelled at input. The variable speed range is 2:1.

BMV/Trough belt type

For reliable conveyance of loose articles

The conveyor frame has dented belt center so that unstable or disconnected materials are transferred surely. Only head drive type is available.



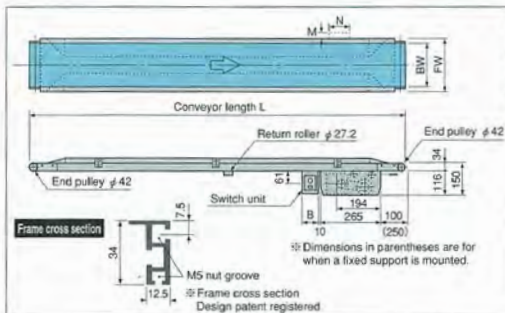
- Support is optional.
- The photograph specifications are: 290mm belt width × 1500mm conveyor length.

Model selection

Model Example

BMV 29 C 200 A 5.5 X 06

- Nominal (actual) belt width 29cm
- Conveyor length 200cm
- Motor capacity 60W
- Drive unit position Head: H
- Position of dimensional drawing and photograph on the left.
- Center: C
- Applied when specifying the position and dimensions of the Drive.
- Speed symbol X
- Variable speed (Fixed speed: N, Variable speed: A)
- Power AC100V single phase / AC100V single phase 1 / AC200V single phase 1 / AC200V triple phase 2

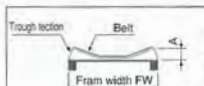


Motor Projection Dimensions (M dimension of diagram above) in the case of 190BW, motor projects.

Motor Capacity	Fixed speed	Variable speed	Common
60W	19.0	19.5	90

Switch unit Dimensions (B dimension)

Switch unit	B dimension
Single phase Fixed speed	70
Single phase Variable speed	80
Triple phase Fixed speed	80
Triple phase Variable speed	110



Dimension A

Frame width (FW)	235	335	435	535	635
A	23	30	40	48	48

Specifications

	190	290	390	490	590
Nominal (actual) belt width BW	190	290	390	490	590
Frame width FW	235	335	435	535	635
Conveyor length L	1,000, 1,500, 2,000, 2,500, 3,000, 4,000, 5,000, 6,000				
Drive unit height	150				
Frame	Aluminium construction (Frame height: 34)				
Standard belt	Resin belt for food (1-ply)				
Capacity	15kg/plate (At horizontal, constant speed, dispersed weight)				
Drive type	Center drive				
Motor capacity	60W				
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase)				

- The minimum conveyor length for a 490 or 590mm belt width is the belt width × 2.5.
- When the length exceeds 4,000mm, the belt will be delivered in sections.

Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Speed (50/60Hz)	
		Fixed speed (m/min)	Variable speed (m/min)
1/120	3	2.5/3.0	0.8~2.3/0.9~2.7
1/100	3.5	3.0/3.5	0.9~2.7/1.1~3.3
1/90	4	3.5/4.0	1.0~3.0/1.2~3.6
1/60	5.5	4.5/5.5	1.5~4.5/1.8~5.5
1/50	6.5	5.5/6.5	1.8~5.5/2.2~6.5
1/36	9.5	8.0/9.5	2.5~7.5/3.0~9.0
1/30	11	9.0/11.0	3.0~9.0/3.5~11.0
1/25	14	12.0/14.0	3.5~11.0/4.5~13.5
1/18	19	16.0/19.0	5.0~15.0/6.0~18.0
1/15	23	18.5/22.5	6.0~18.0/7.0~21.0
1/12.5	27	22.5/27.0	7.0~21.0/8.5~26.0

- Notes ① The table gives speeds with no load. The speed varies about ±10% due to loading.
 ② The values in blue are semi-standard speeds.
 ③ The variable speed range is 3:1.
 ④ At AC100V and 200V (single phase), the speed is changed using a speed controller.
 ⑤ Speed for AC200V (triple-phase) is controlled by an inverter system with a single-phase in and triple-phase out. When applying 200V (triple-phase) power, one of the phases will be cancelled at input.

⊕ Colored letters indicate semi-standard specifications.

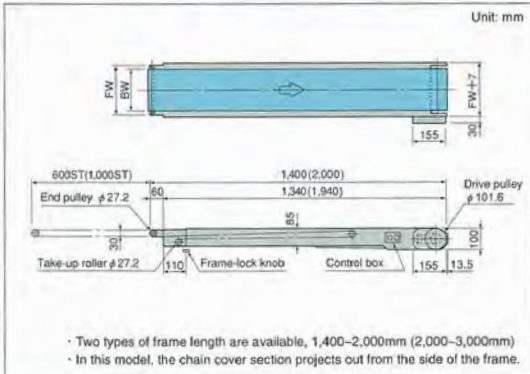
BMT/Telescopic type

For freely telescoping conveyance

Can be extended or contracted freely according to work requirements. This model can also be flexibly adapted to layout changes of mechanical equipment etc.



- Support is optional.
- The photograph specifications are: 200mm belt width X 1400~2000mm conveyor length.



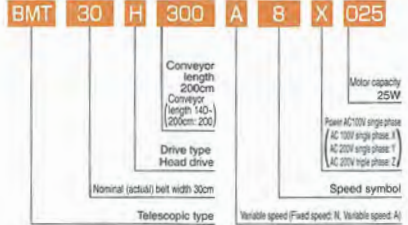
Specifications

Unit: mm

Nominal (actual) belt width BW	100	150	200	250	300
Frame width FW	150	200	250	300	350
Conveyor length L	1,400~2,000, 2,000~3,000				
Drive unit height	100				
Frame	Aluminium construction (Frame height: 85 Telescopic frame height: 30)				
Standard belt	Resin belt for food (1-ply)				
Capacity	15kg/overall length (At horizontal, constant speed, dispersed weight)				
Drive type	Head drive				
Motor capacity	25W				
Power	AC100V (Single phase) AC200V (Single phase) AC200V (Triple phase) Fixed speed				

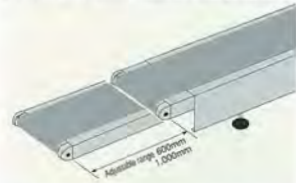
Model selection

Model Example



Wide conveyor length adjustable range (600mm and 1,000mm)

Two models with 600mm and 1,000mm adjustment ranges are available; 1,400 to 2,000mm (adjustable range 600mm) and 2,000 to 3,000mm (adjustable range 1,000mm).



Slide operation is done manually



As shown in the above photograph, the conveyor can be easily pulled out by hand when the fastening knob is loosened. After setting to the desired frame length, fasten the telescoping frame by firmly tightening the fastening knob.

Conveyor speed table

Speed reduction rate (1/R)	Speed symbol	Fixed speed (m/min)		Variable speed (m/min)	
		Speed (50/60Hz)	Speed (50/60Hz)	Speed (50/60Hz)	Speed (50/60Hz)
1/100	2	2.4/2.9	0.8~2.4/0.9~2.9		
1/90	3	2.7/3.3	0.9~2.7/1.0~3.3		
1/80	5	4.1/4.9	1.3~4.1/1.5~4.9		
1/50	6	4.9/5.8	1.6~4.9/1.9~5.8		
1/36	8	6.8/8.1	2.0~6.8/2.5~8.1		
1/30	10	8.1/9.7	2.5~8.1/3.0~9.7		
1/18	16	13.5/16.1	4.0~13.5/5.0~16.1		

Notes ① The table gives speeds with no load. The speed varies about $\pm 10\%$ due loading.

② The values in blue are semi-standard speeds.

③ The variable speed range is 3:1.

④ At AC100V and 200V (single phase), the speed is changed using a speed controller.

⊗ Colored letters indicate semi-standard specifications.

Belt

List of Belts

	Applicable model	Type	Shape	Model No.	Core	
					Material	Ply
Standard belt	SBM, BHH, BMV, BMT	Resin belt for food	Flat belt	BA 1	Polyester	1
	BME	Resin guide belt for food	Guide belt	BA2	Polyester	1
	BMG, BHG, BMJ, BMP	Low noise resin guide belt for food	Guide belt	MB2	Polyester	1
	BMS	Resin belt for food	Flat belt	GA3	Polyester	1
	BMR	Resin guide belt for food	Guide belt	GA4	Polyester	1
	BMK	Resin cleated belt for food	Cleated belt	BN 1	Polyester	2
	BMN, BMZ	Angled resin guide belt	Guide belt	MD2	Polyester	1
	BMA	Smooth guide belt	Guide belt	ME2	Polyester	1
	BNC	Resin belt for food (curved)	Flat belt	NJ 1	Polyester	1
Option belt	SBM, BHH, BMT	High-performance, charge-resistant belt	Flat belt	MC1	Polyester	1
	BMG, BHG, BMJ, BMP		Guide belt	MC2		
	SBM, BHH, BMT	Angled resin belt	Flat belt	BD 1	Polyester	1
	SBM, BHH, BMT	Angled resin belt	Flat belt	MD 1	Polyester	1
	SBM, BHH, BMT	Angled resin belt	Flat belt	GD 1	Polyester	1
	BMG, BHG, BMJ, BMP		Guide belt	GD 2		
	SBM, BHH, BMT	Smooth belt	Flat belt	ME 1	Polyester	1
	BMG, BHG, BMJ, BMP		Guide belt	ME 2		
	SBM, BHH, BMT	Smooth belt	Flat belt	ME 3	Polyester	1
	BMG, BHG, BMJ, BMA, BMP		Guide belt	ME 4		
	SBM, BHH, BMT	Smooth belt	Flat belt	BE 1	Polyester	1
	BMG, BHG, BMJ, BMA, BMP		Guide belt	BE 2		
	SBM, BHH, BMT	Smooth belt	Flat belt	HE 1	Polyester	2
	BMG, BHG, BMJ, BMP		Guide belt	HE 2		
	SBM, BHH, BMT	Heat-resistant belt	Flat belt	FH 1	Polyester	1
	SBM, BHH, BMT	Heat-resistant belt	Flat belt	GH 1	Polyester	1
	BMG, BHG, BMJ, BMP		Guide belt	GH 2		
SBM, BHH, BMT	Oil resistant belt	Flat belt	BF 1	Polyester	1	
BMG, BHG, BMJ, BMP		Guide belt	BF 2			

Equations for calculating belt length

Type	Equations for calculating belt length (mm)
SBM	Conveyor length × 2 + 215
BMG	Conveyor length × 2 + 215
BME	Conveyor length × 2 + 35
BHH	Conveyor length × 2 + 60
BHG	Conveyor length × 2 + 60
BMK	Conveyor length × 2 + 80
BMN	Conveyor length (L ₁ + L ₂) × 2 + 215

Type	Equations for calculating belt length (mm)
BMZ	(Inclined) L = 2 × (L ₁ + L ₂) + 280
	(Feeder) L = 2 × C + 127 ※ C = Lower length - 75
BMA	Conveyor length × 2 + 215
BMS	Conveyor length × 2 + 230
BMR	Conveyor length × 2 + 240
BMJ	Conveyor length × 2 + 230
BMP	Conveyor length × 2 + 60

Surface		Total thickness (mm)	※Operating temperature	Conveying food	Charge resistant	Oil resistant	Notes
Material	Color						
Polyurethane	Green	0.7	-10~80°C	○	○	×	White available
Polyurethane	Green	0.7	-10~80°C	○	○	×	White available
Polyurethane	Green	0.7	-30~80°C	○	○	×	White available
Polyurethane	White	1.1	-30~100°C	○	○	×	
Polyurethane	White	1.1	-30~100°C	○	○	×	
Polyurethane	Green	1.1	-10~80°C	○	○	×	
Polyurethane	Green	1.3	-30~80°C	○	○	×	White available
Polyester	Green	0.6	-30~80°C	○	○	×	
Polyurethane	Green	1.0	-30~80°C	○	△	×	White available Be aware of static electricity
Polyurethane	Black	0.7	-30~80°C	×	⊙	×	Surface resistance: 1×10 ⁹ Ω
Polyurethane	Green	1.0	-10~80°C	○	○	×	Inclination angle: Within 15 degrees
Polyurethane	Green	1.3	-30~80°C	○	○	×	
Polyurethane	Green	1.5	-30~100°C	×	○	×	
Polyester	Green	0.6	-30~80°C	○	○	×	
Polyester	White	0.6	-30~80°C	○	○	×	
Polyester	White	0.7	-10~80°C	○	○	×	
Cotton	White	1.8	-30~100°C	○	×	×	Anti-abrasion type (For printed materials, cosmetic boxes, etc.)
Silicon	White	0.7	-20~150°C	○	×	×	
Non-woven fabric	Gray	1.6	-30~120°C	×	⊙	×	
Vinyl chloride	Blue	1.0	5~60°C	×	○	○	

※The operating temperature is not the temperature of the conveyor environment.

※The optional belt may affect the belt due to the operating conditions, such as temperature, chemicals, oil, etc.

Type	Equations for calculating belt length (mm)
BMV	Conveyor length × 2 + 245
BMT	Conveyor length 1,400~2,000=4,685 Conveyor length 2,000~3,000=6,675

Option

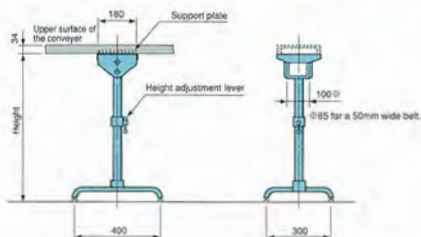
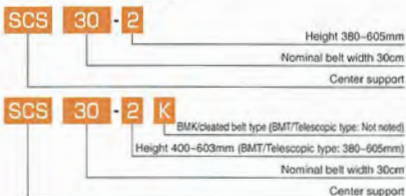
Supports

Center support (steel) Corresponds to 300BW or less

Type	Height mm	BMT		BMK	
		Type	Height mm	Type	Height mm
SCS-1	280~405	CS-1	280~405	CS-1K	300~403
SCS-2	380~605	CS-2	380~605	CS-2K	400~603
SCS-3	550~945	CS-3	550~945	CS-3K	595~990
SCS-4	800~1445	CS-4	800~1445	CS-4K	845~1490

Notes: Up to 1500mm long belt can be applied when only one support is attached.

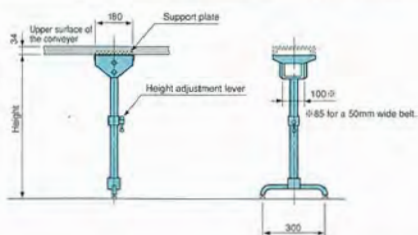
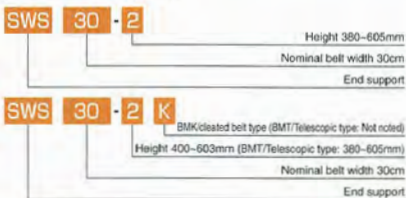
Model Example



End support (steel) Corresponds to 300BW or less

Type	Height mm	BMT		BMK	
		Type	Height mm	Type	Height mm
SWS-1	280~405	WS-1	280~405	WS-1K	300~403
SWS-2	380~605	WS-2	380~605	WS-2K	400~603
SWS-3	550~945	WS-3	550~945	WS-3K	595~990
SWS-4	800~1445	WS-4	800~1445	WS-4K	845~1490

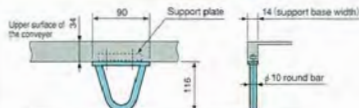
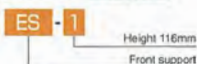
Model Example



Front support (steel)

Type	Height mm	BMK	
		Type	Height mm
ES-1	116	ES-2	130

Model Example

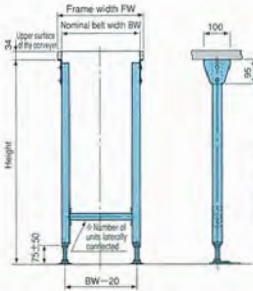


● Fixed support (Straight type, Aluminium)



SBM, BMG, BHH, BHG, BMN, BMA, BMS, BMR, BMJ, BMP, BMV					
Type	Height mm	Type	Height mm	Type	Height mm
BSH-3.5	300~400	BSH-7.5	700~ 800	BSH-11.5	1,100~1,200
// -4	350~450	// -8	750~ 850	// -12	1,150~1,250
// -4.5	400~500	// -8.5	800~ 900	// -12.5	1,200~1,300
// -5	450~550	// -9	850~ 950	// -13	1,250~1,350
// -5.5	500~600	// -9.5	900~1,000	// -13.5	1,300~1,400
// -6	550~650	// -10	950~1,050	// -14	1,350~1,450
// -6.5	600~700	// -10.5	1,000~1,100	// -14.5	1,400~1,500
// -7	650~750	// -11	1,050~1,150	// -15.5	1,450~1,550

Note: corresponds with 200 to 600 BW, corresponds with 400 to 600 BW.



BW	Height	Number of units laterally connected
200~600	311 < Height ≤ 900	1
	600 < Height ≤ 1000	2
	1000 < Height ≤ 1500	3

Model Example

BSH 30 - 7 - S F

Fixed support
(F: Fixed support
(C: Supports with casters)
Straight type
Height 650~750mm
Nominal belt width 30cm
Fixed support

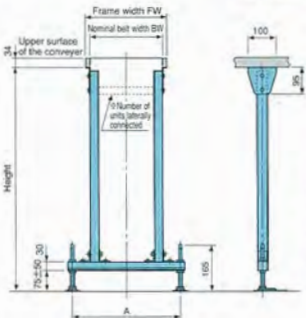
☞ Refer to pg. 31 for supports with casters.

● Fixed support (Skirt type, Aluminium)



SBM, BMG, BHH, BHG, BMN, BMA, BMS, BMR, BMJ, BMP, BMV					
Type	Height mm	Type	Height mm	Type	Height mm
BSH-2.5	200~300	BSH-8.5	800~ 900	BSH-12	1,150~1,250
// -3	250~350	// -9	850~ 950	// -12.5	1,200~1,300
// -6	550~650	// -9.5	900~1,000	// -13	1,250~1,350
// -6.5	600~700	// -10	950~1,050	// -13.5	1,300~1,400
// -7	650~750	// -10.5	1,000~1,100	// -14	1,350~1,450
// -7.5	700~800	// -11	1,050~1,150	// -14.5	1,400~1,500
// -8	750~850	// -11.5	1,100~1,200	// -15	1,450~1,550

Note: corresponds with 200 to 600 BW, corresponds with 200 to 250 BW, corresponds with 200 or 300 BW.



BW	Height	A dimension	Number of units laterally connected
200~600	211 < Height ≤ 311	BW+60	—
200~250	600 < Height ≤ 800	BW+30	—
200~300	800 < Height ≤ 1000	BW+130	1
	1000 < Height ≤ 1500	BW+130	2

Model Example

BSH 20 - 7 - W F

Fixed support
(F: Fixed support
(C: Supports with casters)
Skirt type
Height 650~750mm
Nominal belt width 20cm
Fixed support

☞ Refer to pg. 31 for supports with casters.

Option

Supports

Fixed support (skirt type, steel)



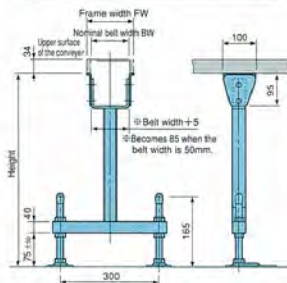
SBM, BMG, BHH, BHG, BMN, BMA, BMS, BMR, BMJ Corresponds to 150BW or less

Type	Height mm	Type	Height mm
SHS-3	250~300	SHS-9.5	900~1,000
// -3.5	300~400	// -10	950~1,050
// -4	350~450	// -10.5	1,000~1,100
// -4.5	400~500	// -11	1,050~1,150
// -5	450~550	// -11.5	1,100~1,200
// -5.5	500~600	// -12	1,150~1,250
// -6	550~650	// -12.5	1,200~1,300
// -6.5	600~700	// -13	1,250~1,350
// -7	650~750	// -13.5	1,300~1,400
// -7.5	700~800	// -14	1,350~1,450
// -8	750~850	// -14.5	1,400~1,500
// -8.5	800~900	// -15	1,450~1,550
// -9	850~950		

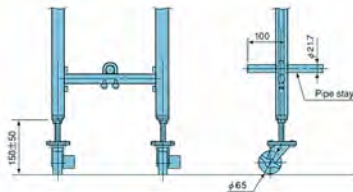
Model Example

SHS 15 - 5

Height 450~550mm
Nominal belt width 15cm
Fixed support



Supports with casters



Notes:

- Supports with casters have 65mm diameter casters attached to stationary, aluminum supports (BSH supports).
- The maximum height of supports with casters is 1,000mm. Consult this company if the height must be greater than 1,000mm.

Number of installed supports (optional equipment)

Fixed support

Length (m)	Center drive · Head drive	Length (m)	Center drive · Head drive
$0.6 \leq L \leq 2$	2	$5 < L \leq 8$	5
$2 < L \leq 4$	3	$8 < L \leq 9$	6
$4 < L \leq 5$	4	$9 < L \leq 12$	7

· Supports are installed at a maximum pitch of 2m.

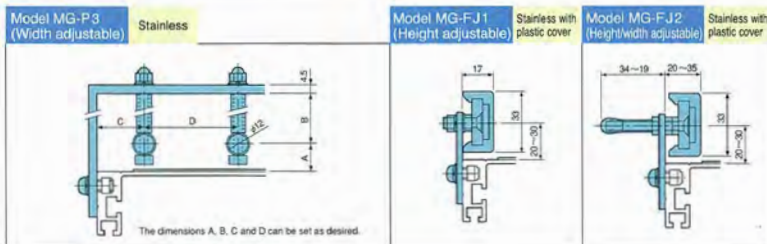
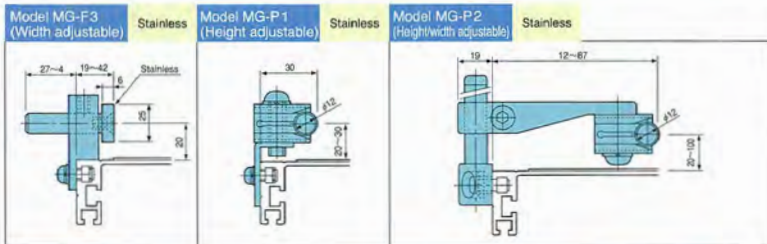
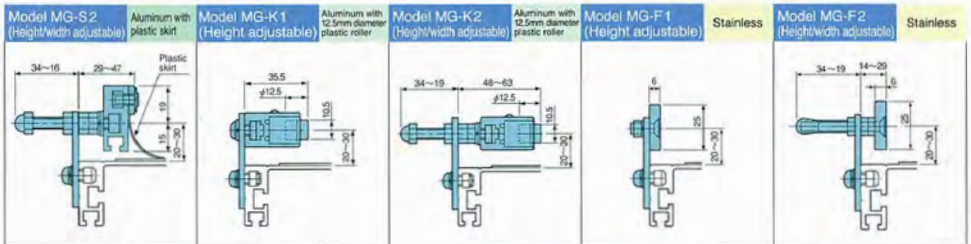
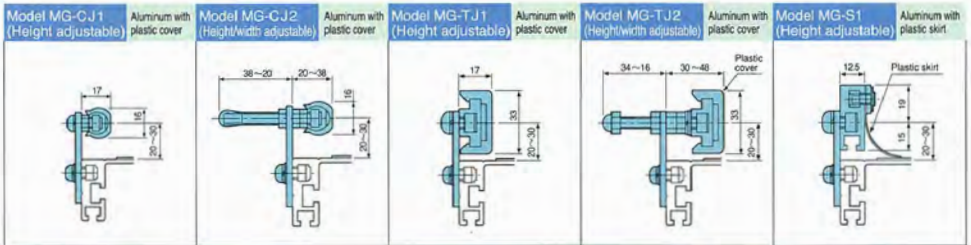
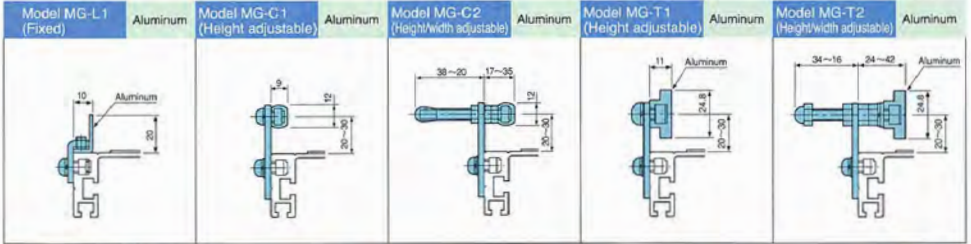
Center · End support

Length (m)	Center drive · Head drive		Length (m)	Center drive · Head drive	
	Center support	End support		Center support	End support
$0.6 \leq L \leq 2$	1	0	$5 < L \leq 8$	2	3
$2 < L \leq 3$	1	1	$8 < L \leq 9$	2	4
$3 < L \leq 4$	2	1	$9 < L \leq 12$	2	5
$4 < L \leq 5$	2	2			

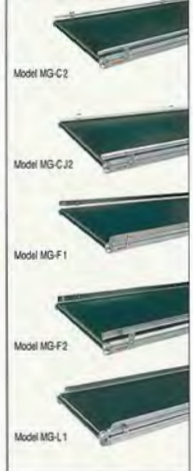
· Center supports can also be used as end supports.

Guide

Unit: mm



Example of guide installation



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