

mk Modular Belt Conveyors



Contents mk Modular Belt Conveyors



MBF-P 2040.02

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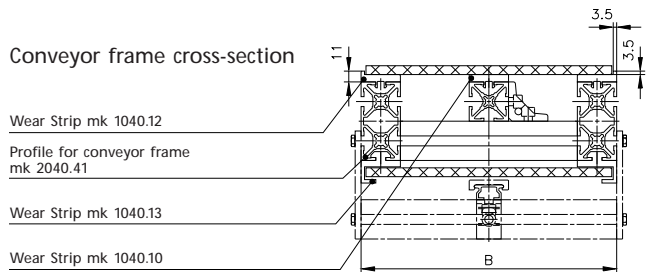


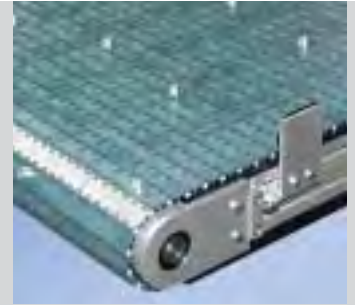
Modular Belt Conveyors Application Examples

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Modular Belt Conveyors

MBF-P 2040.02





Conveyor System MBF-P 2040.02 with modular belting and cleanly integrated drive assemblies distinguishes itself with high load capacities even at narrow belt widths. The belting is positively driven and cannot deviate from its direction of travel. As a result,

parts may be discharged off the side of the conveyor. The belting material is very low friction and extremely resistant to wear. With the selection of belting materials, this conveyor system has applications in the food industry, does well in higher temperature envi-

ronments and has good chemical resistance. Belt accessories include sidewalls and lateral cleats. Maintenance operations such as belt tensioning or replacement of individual links are quick and simple.

Modular Belt Conveyors

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Drive Version AC



Drive Version AS



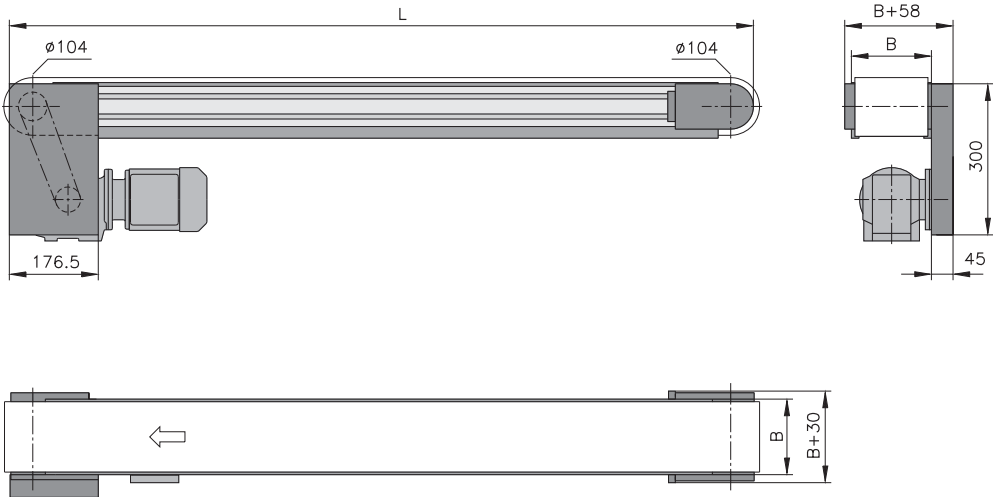
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MBF-P 2040.02 AC

Modular Belt Conveyors with Head Drive

B20.40.801



Features:

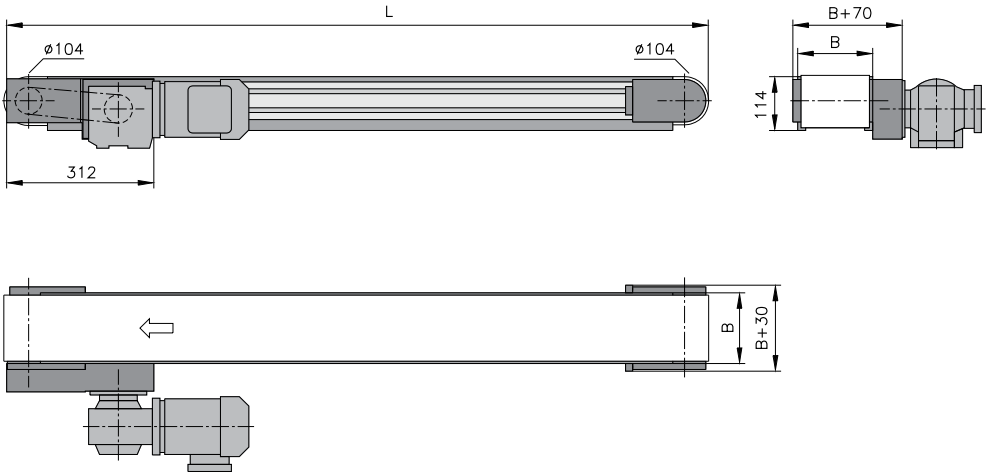
mk offers a variety of motor options for Drive Version AC which are sized and selected for each application's specific speed and load requirements. The molded drive sprockets positively engage with the underside of the belt and ensure proper grip and tracking. The compact frame design simplifies integration of the conveyor into new or existing equipment. Use of cleated belts is possible with this drive version.

	Dimensions – Technical Information	Notes
Conveyor length L	between 475 - 10000 mm	any increment possible
Conveyor width B	210 to 1010 mm (in 50 mm increments)	others on request
Modular Belt width	B-10 mm	see page 113
Drive Location	right, left	
Drive and Speed	to 30 m/min (100 ft/min)	see page 112
Stands and Side Rails		see page 262
Load Capacity max.	150 kg (330 lbs)	higher on request

MBF-P 2040.02 AS

Modular Belt Conveyors with Outside Head Drive

B20.40.802



Features:

Drive Version AS features motor placement on the outside of the conveyor frame. This is often used in situations where the conveyor frame must be as unobstructed as possible, or where the motor must remain clean. The overall height of the conveyor is held to an absolute minimum. The molded drive sprockets positively engage with the underside of the belt and ensure proper grip and tracking. Use of cleated belts is possible with this drive version.

	Dimensions – Technical Information	Notes
Conveyor length L	between 610 - 10000 mm	any increment possible
Conveyor width B	210 to 1010 mm (in 50 mm increments)	others on request
Modular Belt width	B-10 mm	see page 113
Drive Location	right, left	
Drive and Speed	to 30 m/min (100 ft/min)	see page 112
Stands and Side Rails		see page 262
Load Capacity max.	150 kg (330 lbs)	higher on request

MBF-P 2040.02

Motor Information

Motor selection

As a standard, mk offers a variety of motors. Although the selection varies by country with respect to local voltage standards and safety regulations, international availability is a key requirement. Typically, we supply inverter-duty right-angle gearmotors for heavy-duty requirements and parallel shaft gearmotors for lower speed and load applications. All motors are readily available from mk.

Motor voltage

As a standard, mk provides motors which comply with the normal, expected electrical requirements of the country where they are manufactured. International motors are also available for conveyors designed for export.

Motor power

Motors are sized to each individual conveyor style, size and performance requirements. The typical range is between 0.09 KW and 0.55 KW (1/8 hp and 3/4 hp).

Speeds

The maximum belt speed for MBF-P 2041 conveyors is approximately 30m/min (100 ft/min). This is dependant on the total load, the type of transport with respect to indexing or accumulation, and the conveyor length.

Speed Control

Frequency inverters with a variable speed range of 1:7 are available for AC motors. DC motors offer speed controls with a 1:10 range.

Rating

All standard motors are built to IP 54 (IP = International Protection) standards, whereby higher standards are available on request.

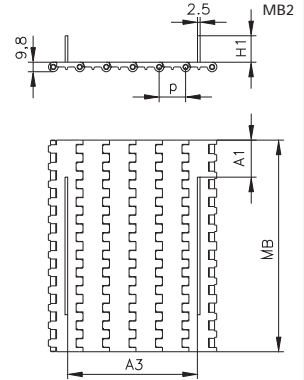
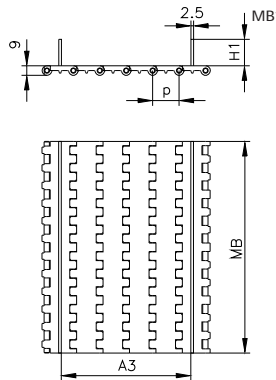
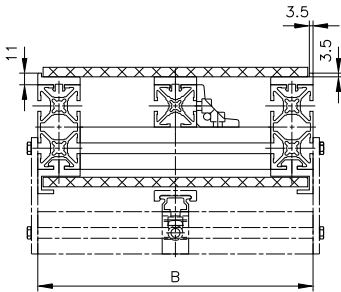
Additional notes

The motors are primarily designed for continuous duty. Operating motors at very low frequency (below 70% of normal) may require additional cooling. Motors with encoders, clutches, brakes, thermal overload protection or indexing capabilities are also available.

MBF-P 2040.02

Modular Belts

Per customer request, mk offers two types of modular belting with different pitches.



Belt type	MB1	MB2
MB	200 - 1000 mm	194 - 992 mm
Cleat Height, H1	25, 50 mm (or none)	25, 51, 76 (or none)
Cleat Spacing, A3	25 mm increments	27.2 mm increments
Color	white, green	white, blue
Pitch, P	25 mm	27.2 mm
Belt Thickness	9 mm	9.8 mm
Min. Cleat Edge Clearance, A1	0 mm	18 mm
Material	PE, PP, POM	PE, PP, POM
FDA/USDA Suitability	partial	partial
Technical Properties	PP + 5 - + 105° C PE - 70 - + 65° C POM - 45 - + 90° C high wear resistance low friction	PP + 1 - + 104° C PE - 46 - + 66° C POM - 46 - + 93° C high wear resistance low friction

Modular Belt Conveyors

Application Examples



Short MBF-P 2040.02 with drive version AS



MBF-P 2040.02 with special side rail, belt with 10% open area



MBF-P 2040.02 with side flights and cleats



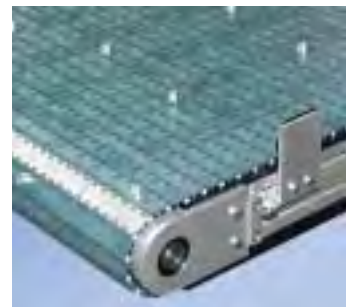
MBF-P 2040.02 with belting suitable for food



MBF-P 2040.02
drive version AS



MBF-P 2040.02
drive version AC



MBF-P 2040.02 with cleats
for loosening and transporting
smaller products