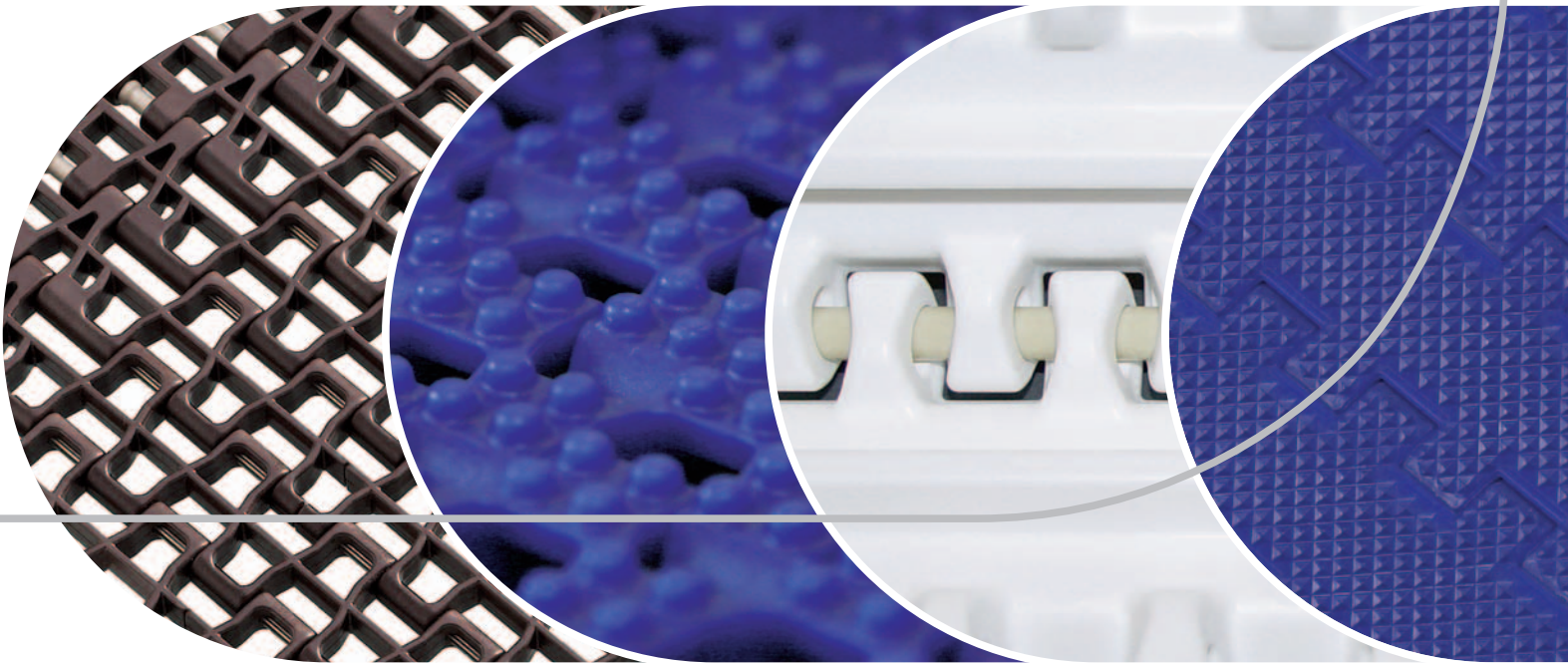




# Engineering Guidelines HabasitLINK® – Plastic Modular Belts

Habasit – Solutions in motion

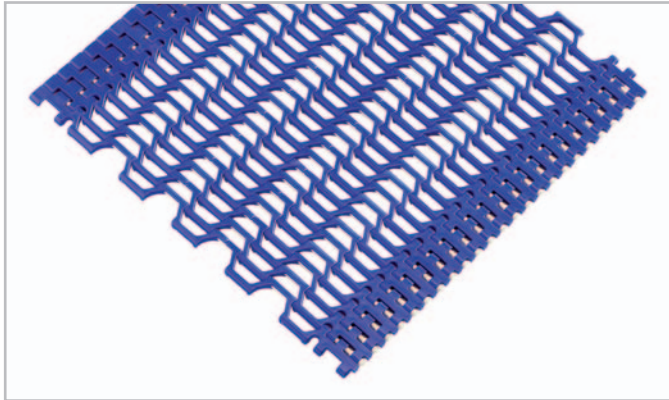


# Introduction

## Product Line – Overview Series M1100/M1200

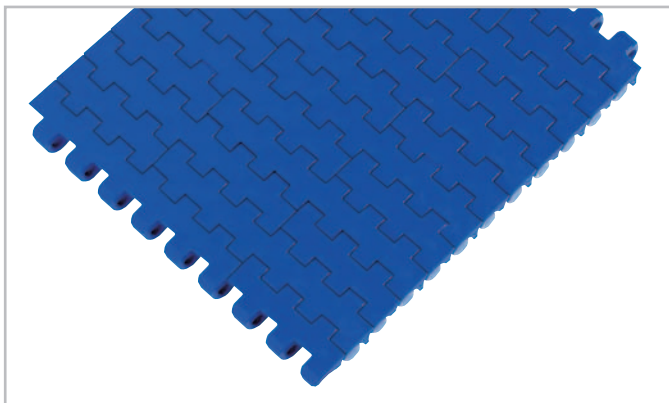


Edition 2007 - 17



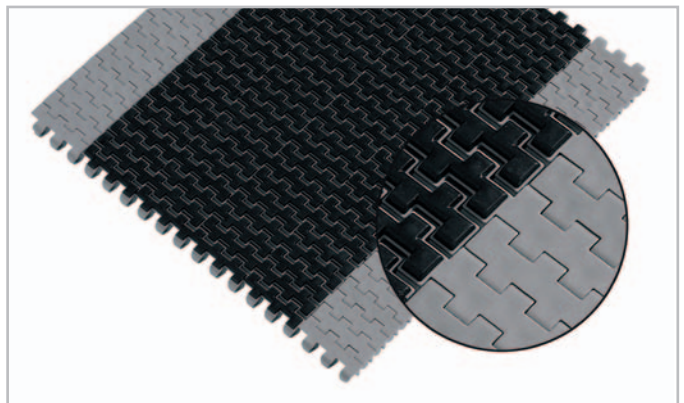
### M1185 Flush Grid

Pitch 12.7 mm (0.5"), 50% open area,  
imperial belt width



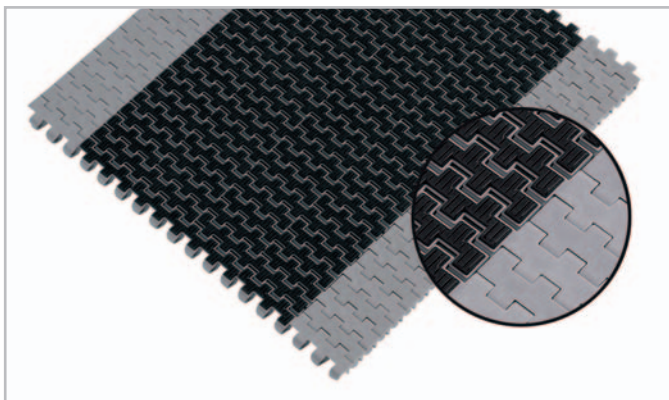
### M1220 Flat Top

Pitch 12.7 mm (0.5"), 0% open area



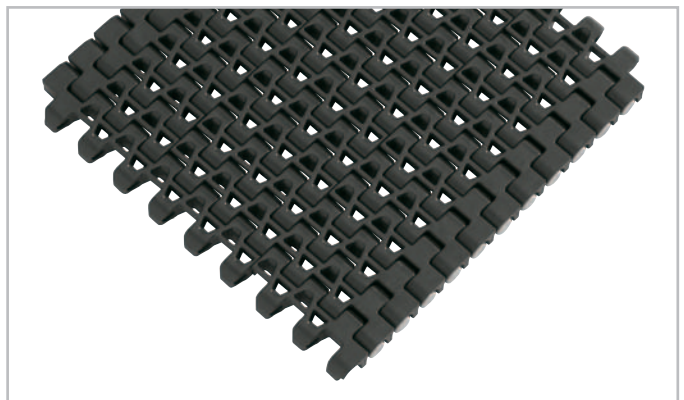
### M1220 GripTop

Pitch 12.7 mm (0.5"), 0% open area



### M1220 HighGrip-L

Pitch 12.7 mm (0.5"), 0% open area



### M1230 Flush Grid

Pitch 12.7 mm (0.5"), 18% open area

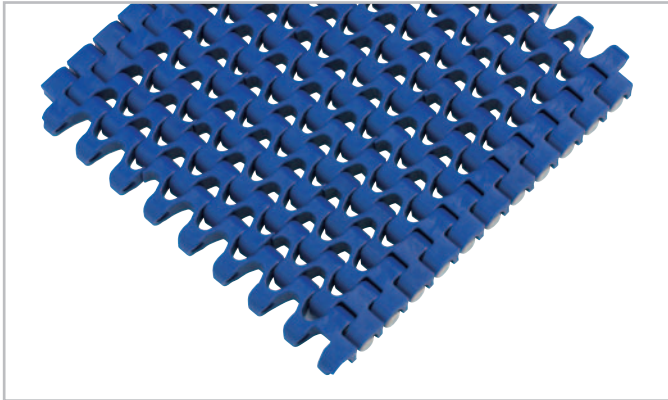


# Introduction

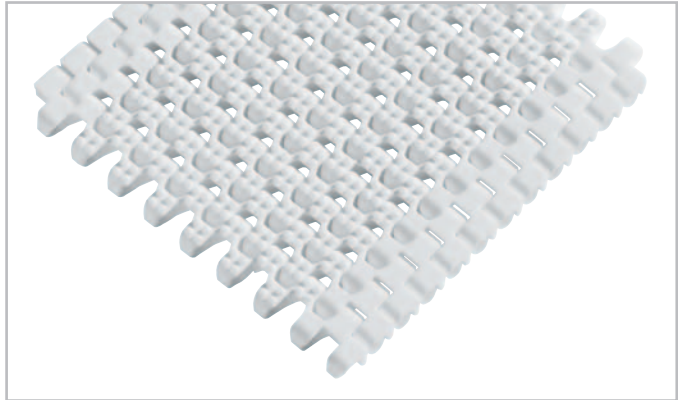
## Product Line – Overview Series M1200/M2400



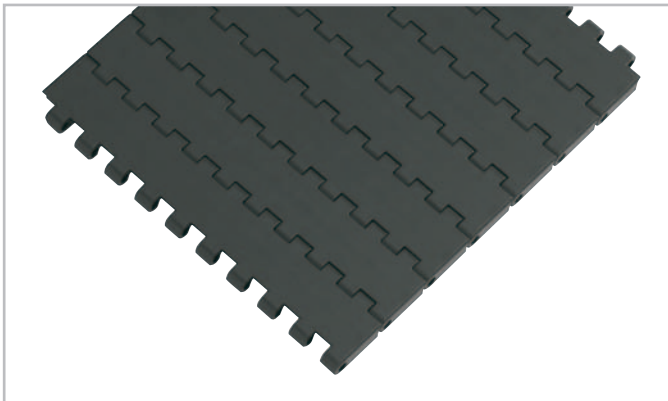
Edition 2007 - 18

**M1233 Flush Grid**

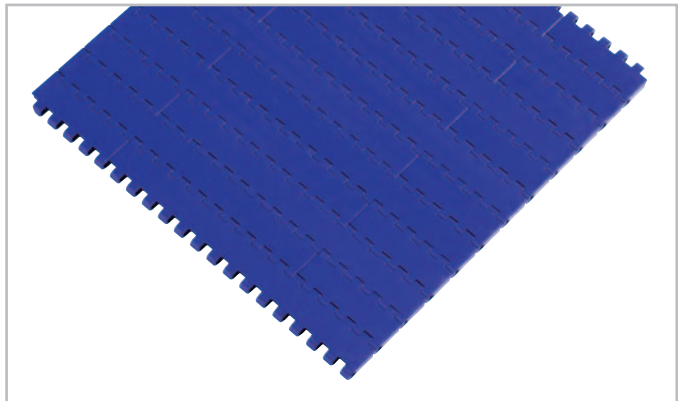
Pitch 12.7 mm (0.5"), 25% open area

**M1234 Nub Top Flush Grid**

Pitch 12.7 mm (0.5"), 18% open area

**M2420 Flat Top**

Pitch 25.4 mm (1"), 0% open area

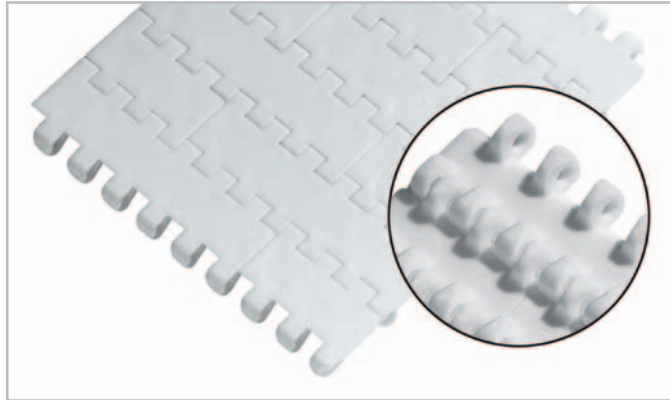
**M2470 FlatTop**Pitch 25.4 mm (1"), 0% open area,  
imperial belt width

# Introduction

## Product Line – Overview Series M2500

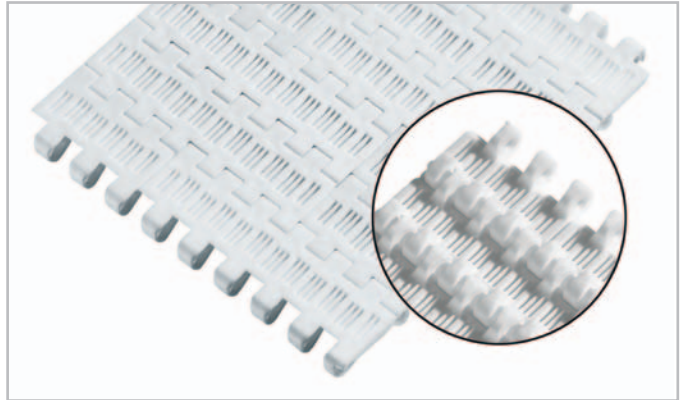


Edition 2007 - 19



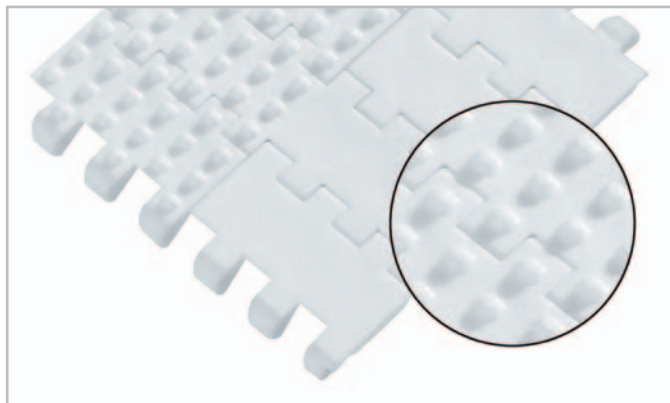
### M2510 Flat Top

Pitch 25.6 mm (1"), 0% open area



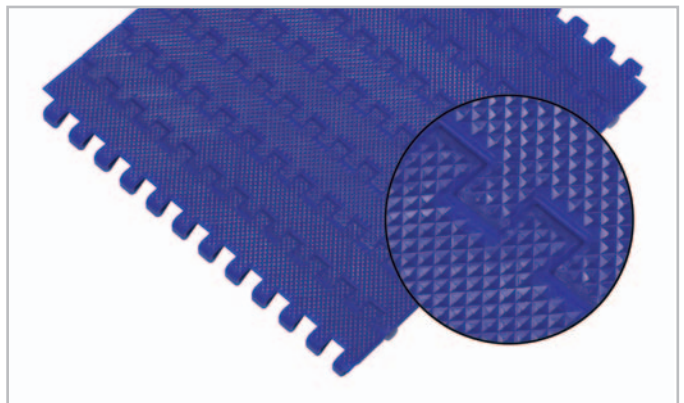
### M2511 Mesh Top

Pitch 25.6 mm (1"), 16% open area



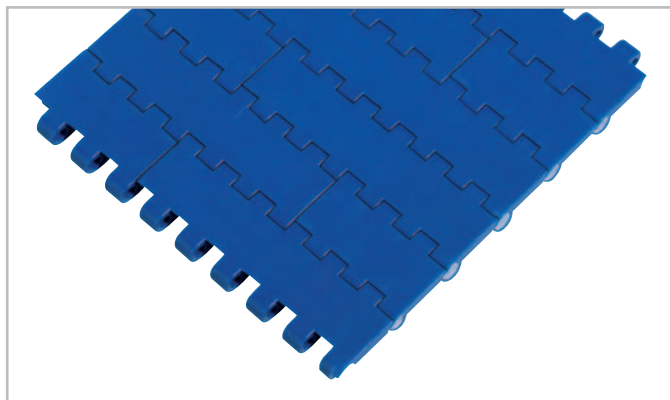
### M2514 Nub Top

Pitch 25.6 mm (1"), 0% open area



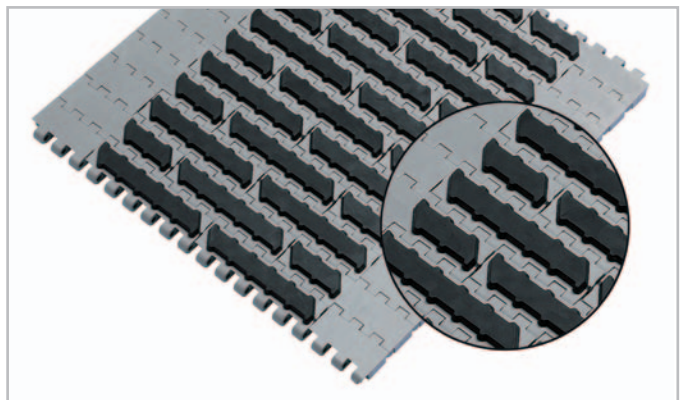
### M2516 Diamond Top

Pitch 25.6 mm (1"), 0% open area



### M2520 Flat Top

Pitch 25.4 mm (1"), 0% open area



### M2520 GripTop

Pitch 25.4 mm (1"), 0% open area

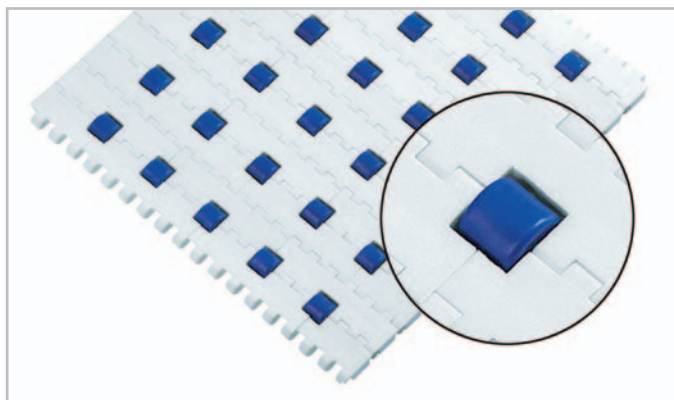


# Introduction

## Product Line – Overview Series M2500

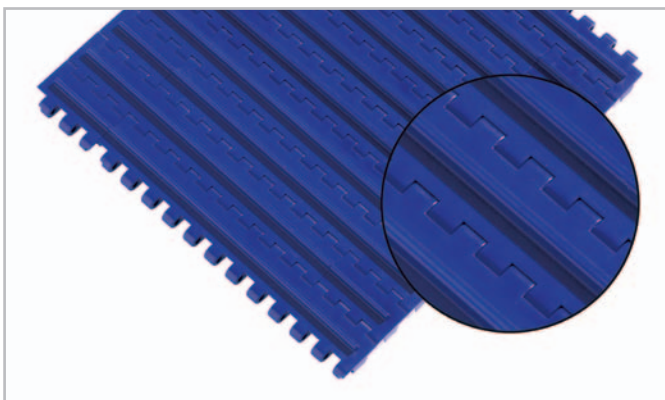


Edition 2007 - 20



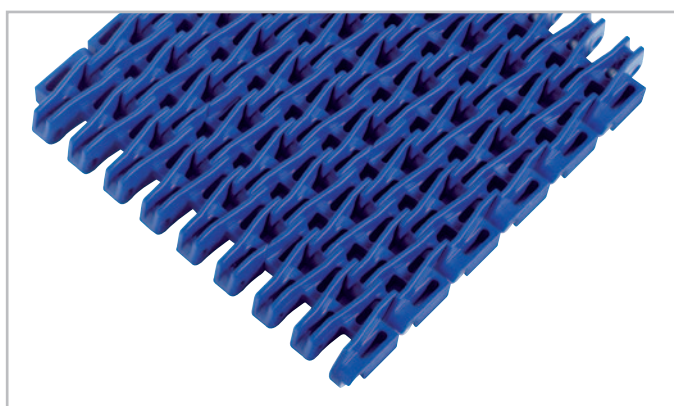
### M2520 Roller Top

Pitch 25.4 mm (1"), nearly 0% open area



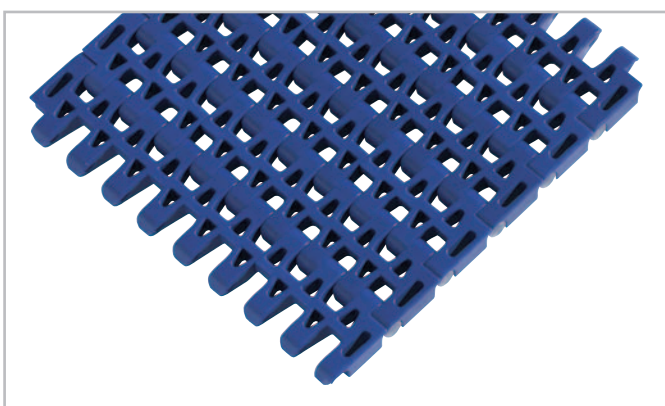
### M2527 Minirib

Pitch 25.4 mm (1"), nearly 0% open area



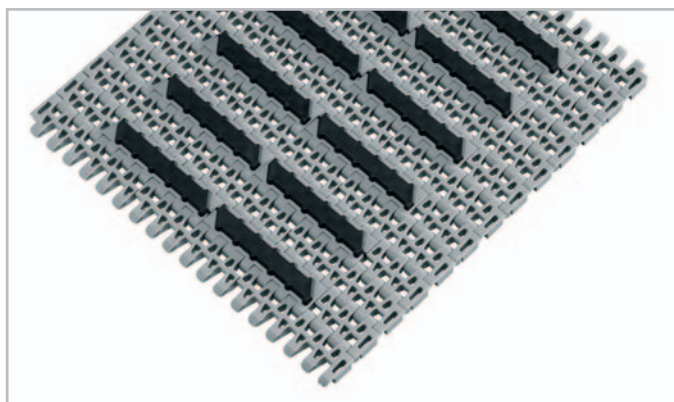
### M2531 Raised Rib

Pitch 25.4 mm (1"), 35% open area



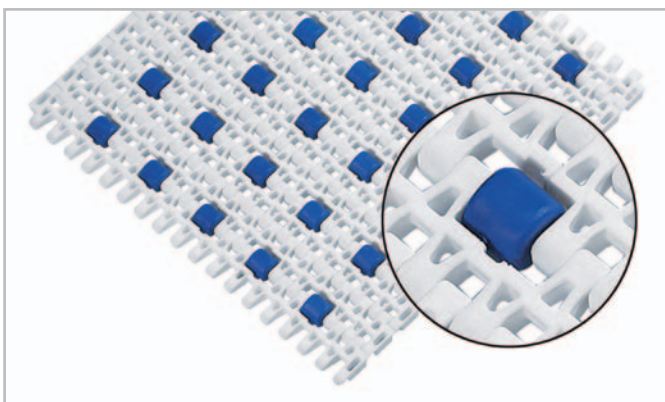
### M2533 Flush Grid

Pitch 25.4 mm (1"), 35% open area



### M2533 GripTop

Pitch 25.4 mm (1"), open area dependent on GripTop pattern



### M2533 Roller Top

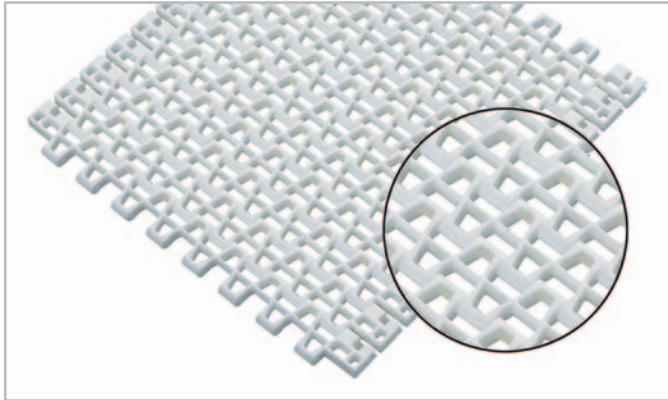
Pitch 25.4 mm (1"), 35% open area

# Introduction

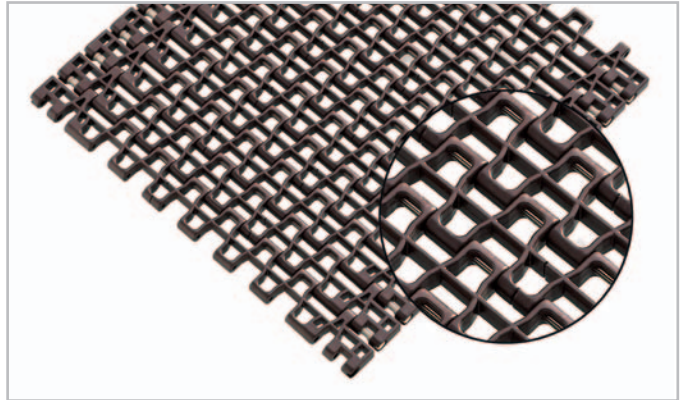
## Product Line – Overview Series M2500



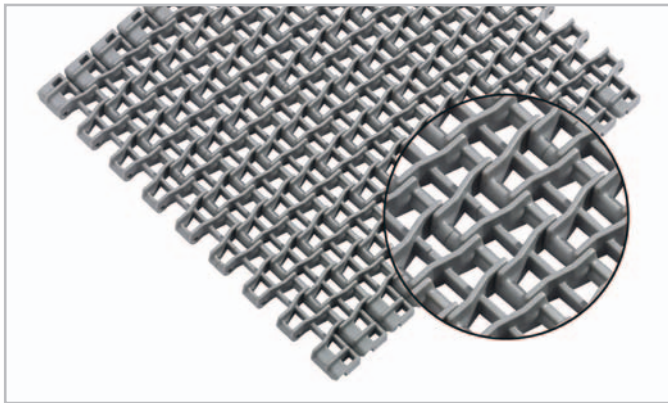
Edition 2007 - 21

**M2585-P0 Flush Grid (plastic rod)**

Pitch 25.7 mm (1"), 48% open area,  
imperial belt width

**M2585-S0 Flush Grid (steel rod)**

Pitch 25.7 mm (1"), 54% open area,  
imperial belt width

**M2586 Raised Rib**

Pitch 25.7 mm (1"), 48% open area,  
imperial belt width

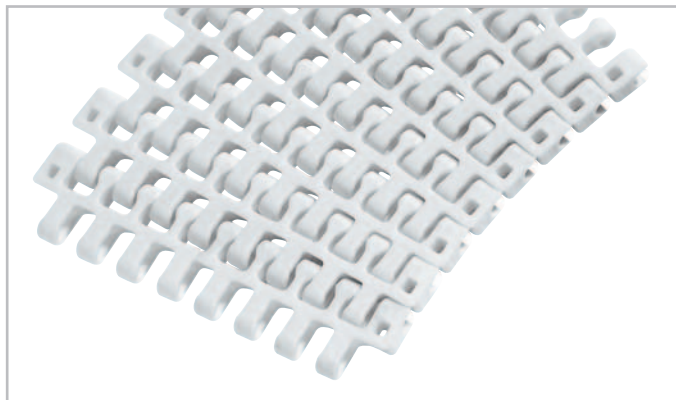


# Introduction

## Product Line – Overview Series M2500 Radius

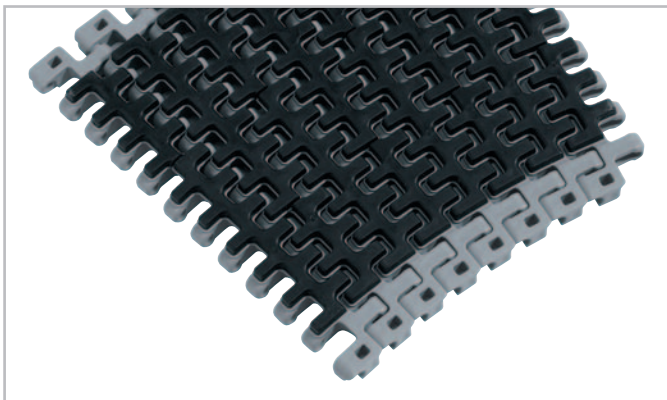


Edition 2007 - 22



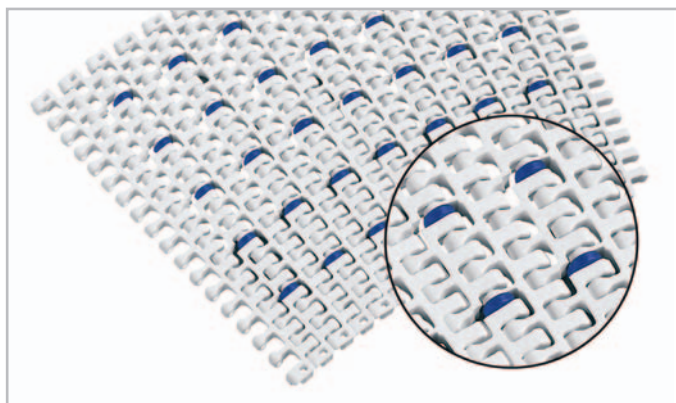
**M2540 Radius Flush Grid**

Pitch 25.6 mm (1"), 35% open area



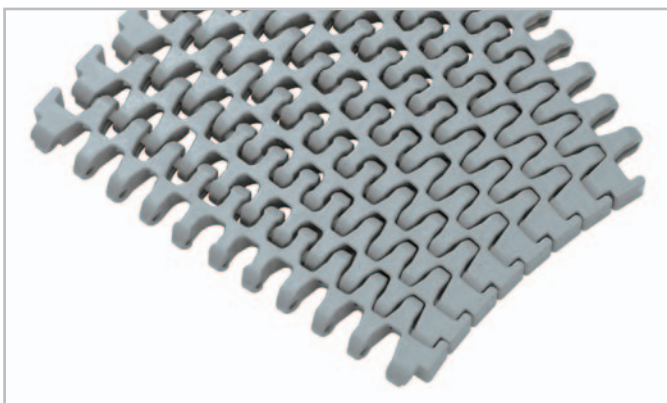
**M2540 Radius GripTop**

Pitch 25.6 mm (1"), 20% open area



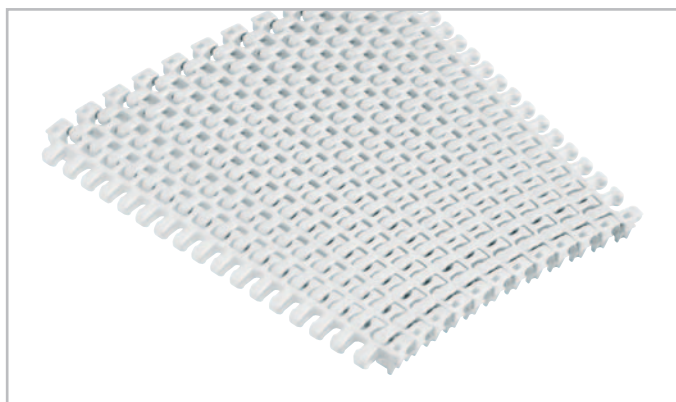
**M2540 Roller Top**

Pitch 25.6 mm (1"), 35% open area



**M2543 Tight Radius**

Pitch 25.8 mm (1"), 35% open area



**M2540 Radius Flush Grid MTW**

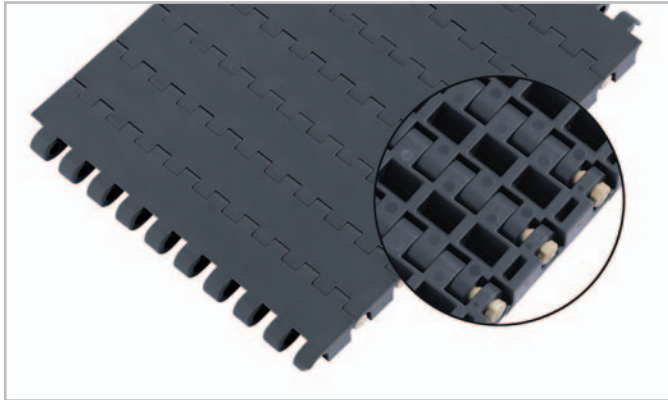
Pitch 25.6 mm (1"), 35% open area,  
imperial belt width

# Introduction

## Product Line – Overview Series M2600

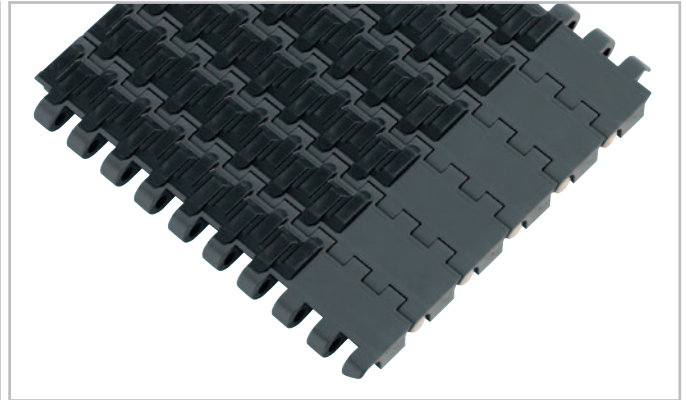


Edition 2007 - 23



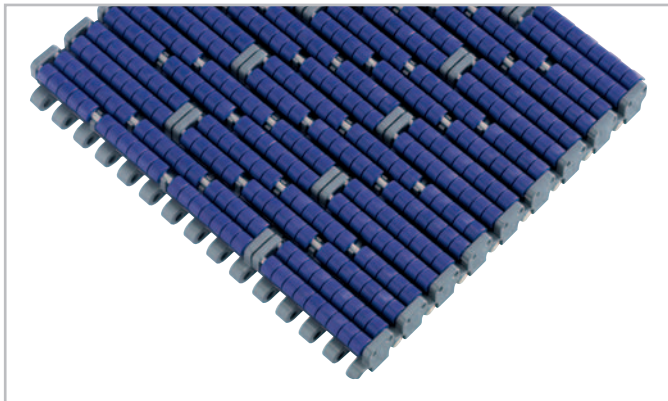
**M2620 Flat Top Heavy Duty**

Pitch 25.4 mm (1"), 0% open area



**M2620 GripTop**

Pitch 25.4 mm (1"), 0% open area



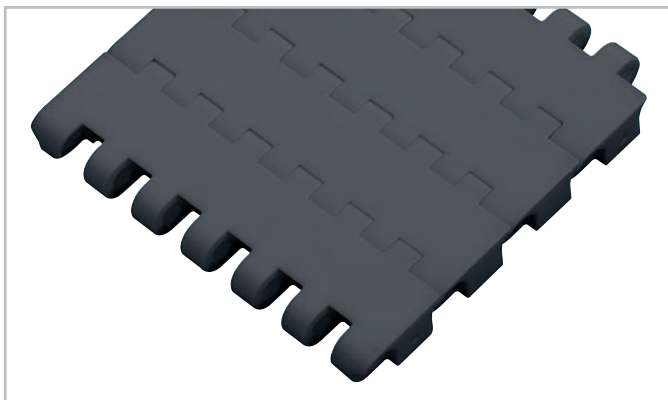
**M2620 Roller Top - LBP**

Pitch 25.4 mm (1"), 0% open area



**M2623 Non Slip**

Pitch 25.4 mm (1"), 0% open area



**M2670 Flat Top Heavy Duty MTW**

Pitch 25.4 mm (1"), 0% open area,  
imperial belt width



# Introduction

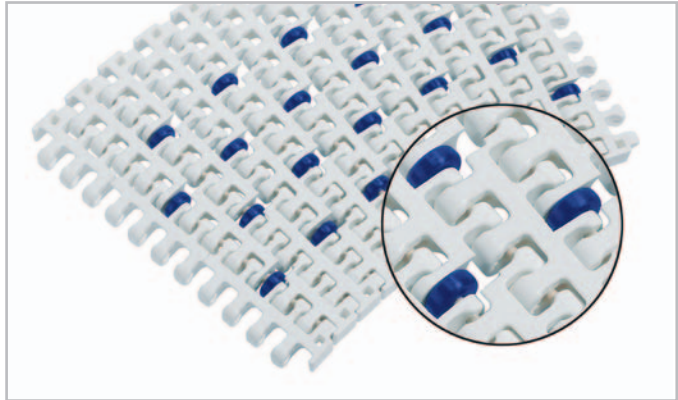
## Product Line – Overview Series M3800 Radius



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**M3840 Radius Flush Grid**

Pitch 38.2 mm (1.5"), 31% open area

**M3840 Roller Top**

Pitch 38.2 mm (1.5"), 31% open area

**M3843 Tight Radius**

Pitch 38.2 mm (1.5"), 37% open area

**M3843 Tight Radius GripTop**

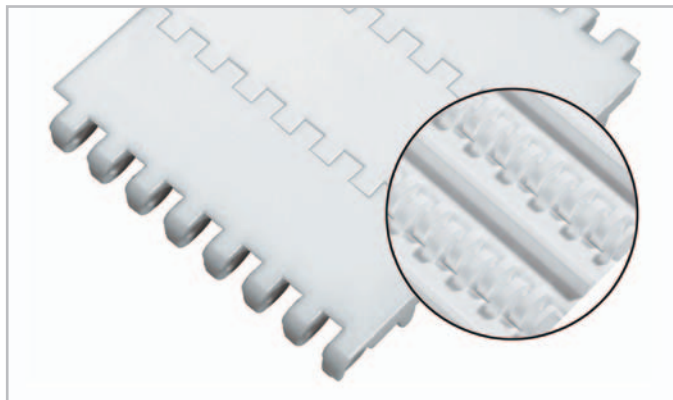
Pitch 38.2 mm (1.5"), 25% open area

# Introduction

## Product Line – Overview Series M5000

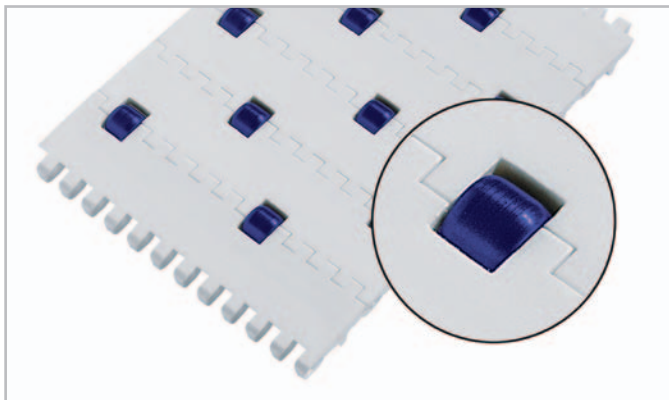


Edition 2007 - 25



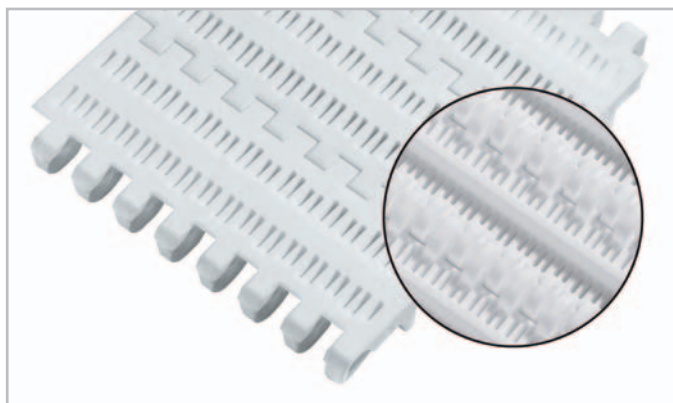
### **M5010 Flat Top**

Pitch 50.8 mm (2"), 0% open area



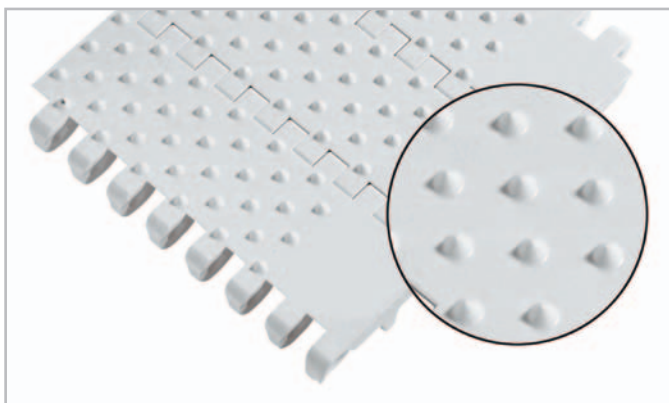
### **M5010 Roller Top**

Pitch 50.8 mm (2"), nearly 0% open area



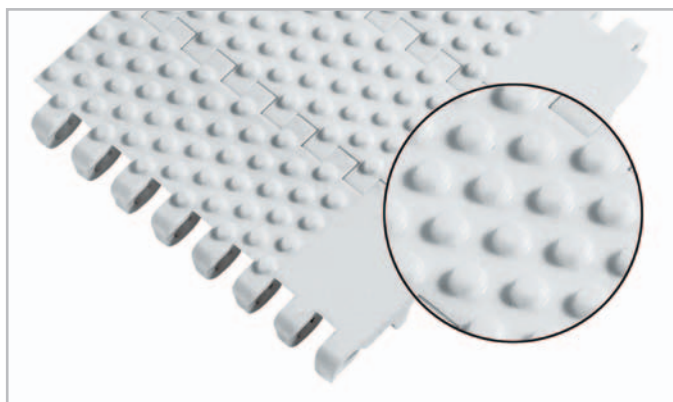
### **M5011 Perforated Flat Top**

Pitch 50.8 mm (2"), 18% open area



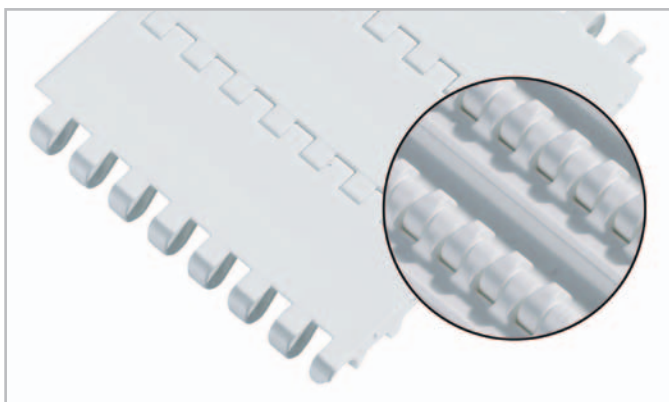
### **M5013 Cone Top**

Pitch 50.8 mm (2"), 0% open area



### **M5014 Nub Top**

Pitch 50.8 mm (2"), 0% open area



### **M5015 Flat Top**

Pitch 50.8 mm (2"), 0% open area

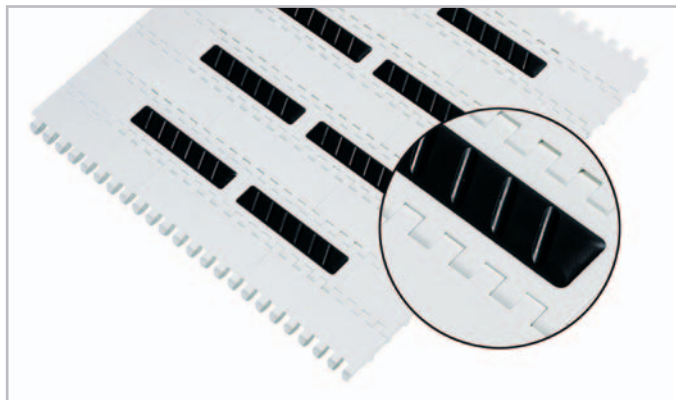


# Introduction

## Product Line – Overview Series M5000

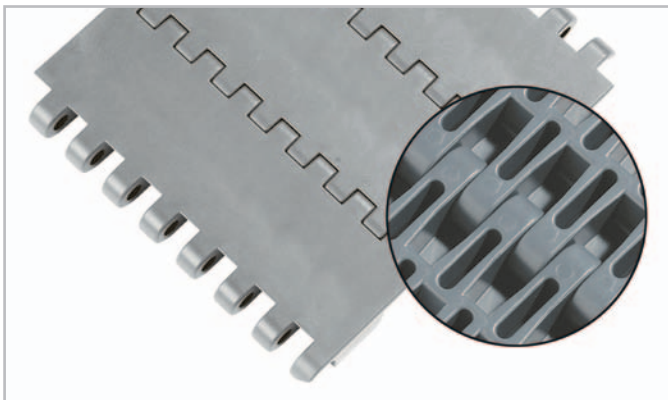


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### M5015 GripTop

Pitch 50.8 mm (2"), 0% open area



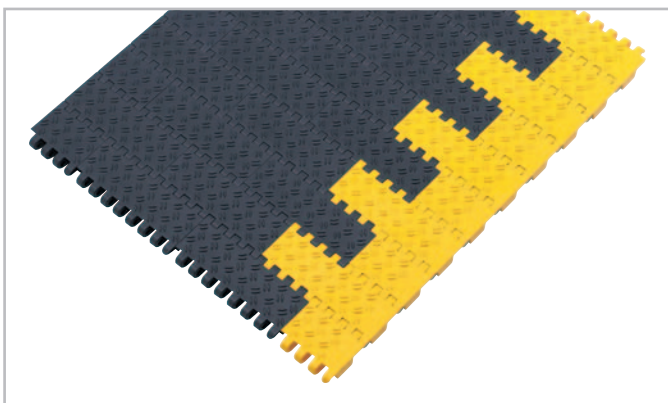
### M5020 Flat Top Heavy Duty

Pitch 50.8 mm (2"), 0% open area



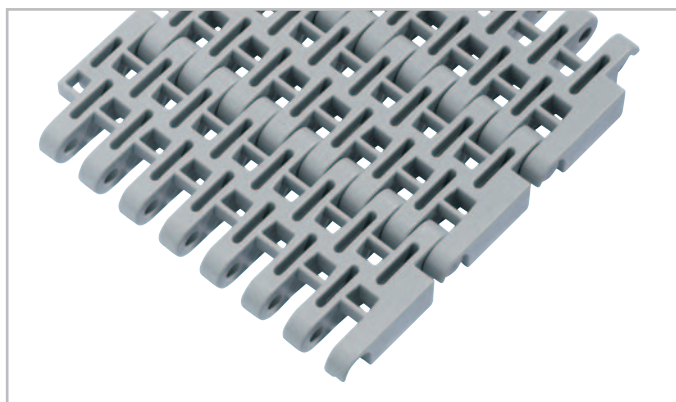
### M5021 Perforated Flat Top

Pitch 50.8 mm (2"), 25% open area



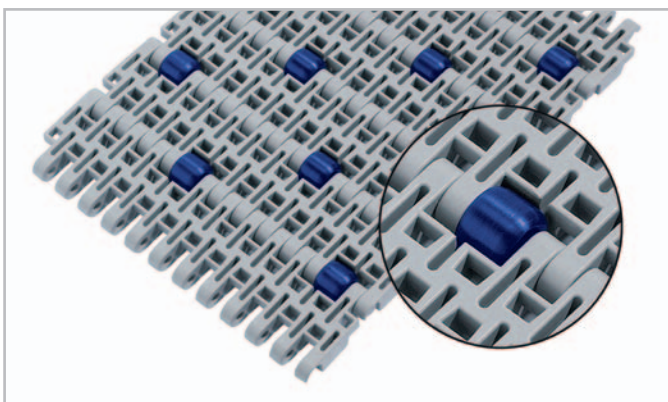
### M5023 Non Slip

Pitch 50.8 mm (2"), 0% open area



### M5032 Flush Grid Heavy Duty

Pitch 50.8 mm (2"), 34% open area



### M5032 Roller Top

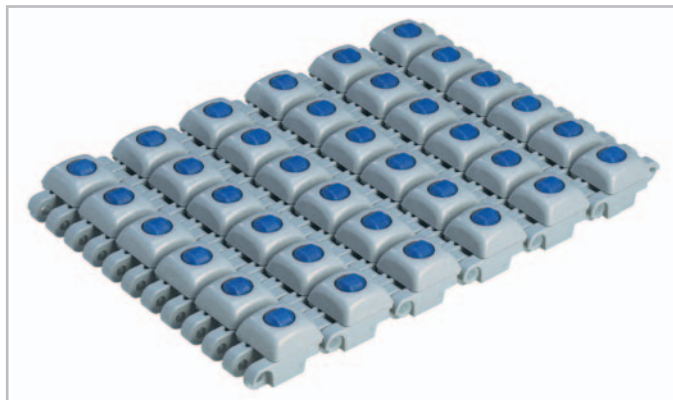
Pitch 50.8 mm (2"), 34% open area

# Introduction

## Product Line – Overview Series M5000/M5100

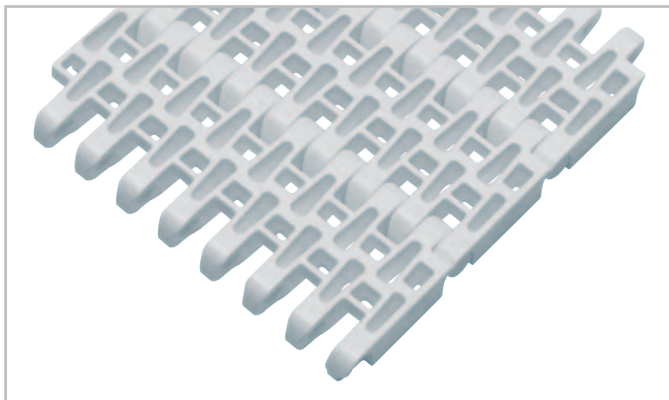


Edition 2007 - 27



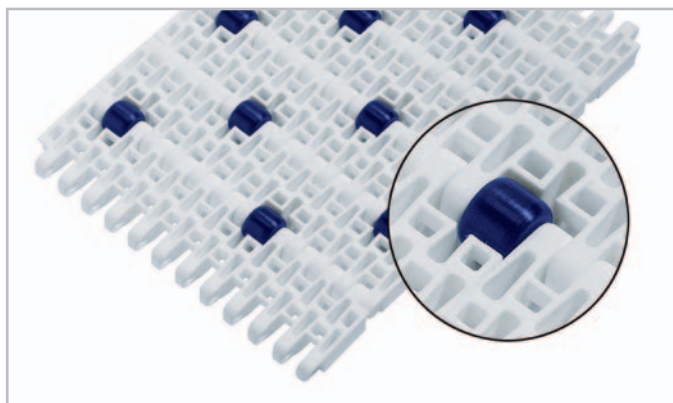
**M5032 Roller Top - 0° / 45° / 90°**

Pitch 50.8 mm (2"), open area dependent on roller



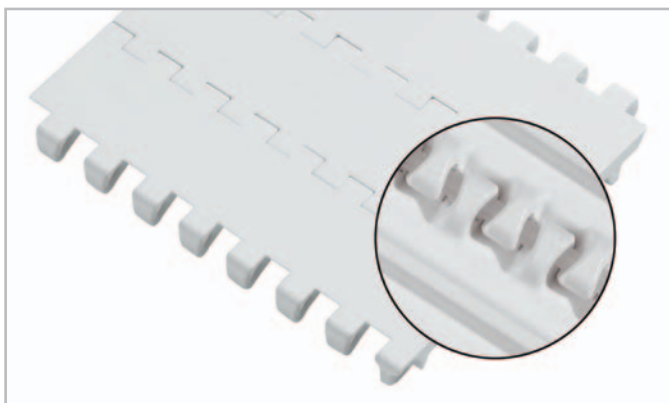
**M5033 Flush Grid**

Pitch 50.8 mm (2"), 37% open area



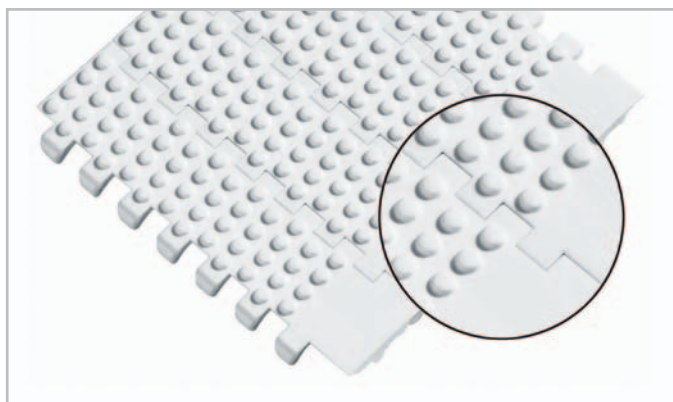
**M5033 Roller Top**

Pitch 50.8 mm (2"), 37% open area



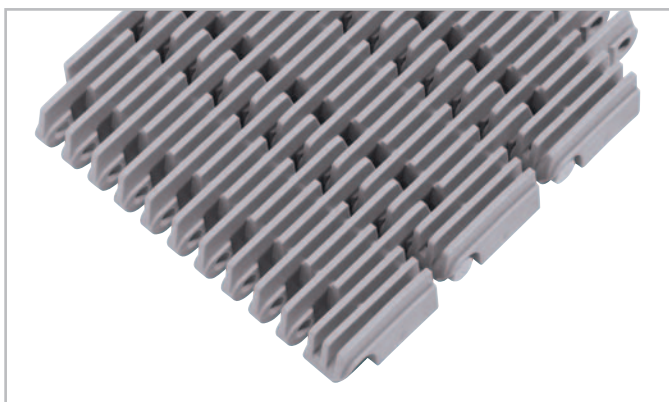
**M5060 Flat Top**

Pitch 50.8 mm (2"), 0% open area,  
imperial belt width



**M5064 Nub Top**

Pitch 50.8 mm (2"), 0% open area,  
imperial belt width



**M5131 Raised Rib**

Pitch 50.8 mm (2"), 36% open area,  
imperial belt width

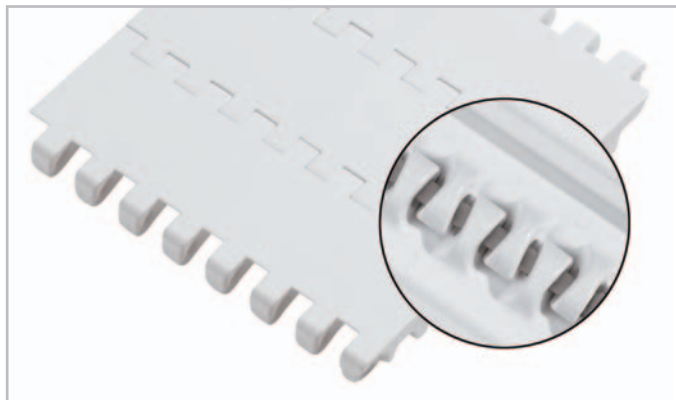


# Introduction

## Product Line – Overview Series M6300/M6400



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**M6360 Flat Top**

Pitch 63.5 mm (2.5"), 0% open area,  
imperial belt width

**M6420 Flat Top Heavy Duty**

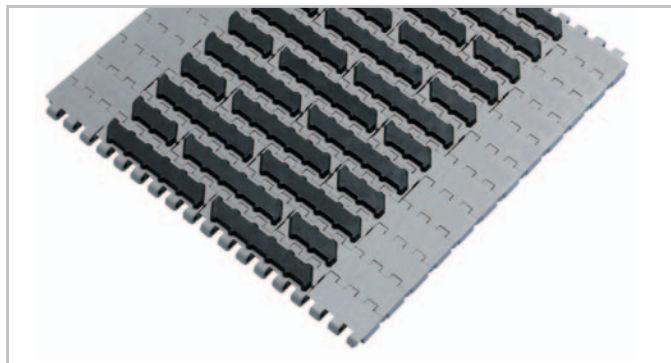
Pitch 63.5 mm (2.5"), 0% open area,  
imperial belt width

# Introduction

## Available GripTop Configurations

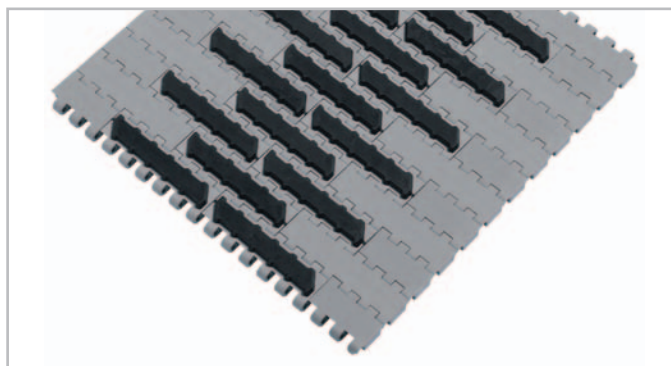
### GripTop ULTRA with straight indent

All belt modules except the edge modules are provided with rubber top over the whole width. The standard indent is described in the table below.



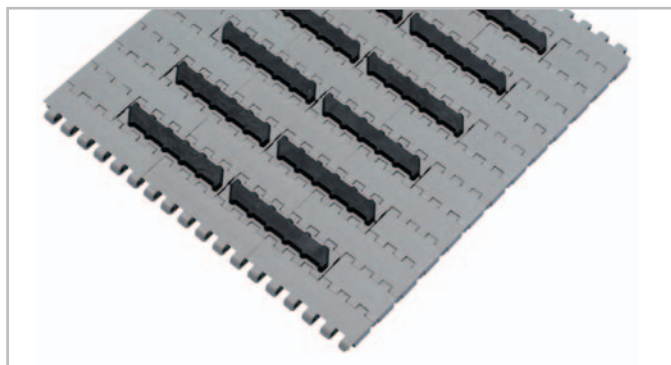
### GripTop with staggered indent

The belt is composed of rubber top modules with alternating widths on every second row. The standard indent is described in the table below.



### GripTop alternating

It is possible to have a configuration with alternating GripTop rows. The distance between the GripTop rows corresponds to the belt pitch. The standard indent is described in the table below.



Belt Type	Standard Indent mm (inch)
M1200	50 mm (2")
M2520	50 mm (2")
M2540	21 mm (0.83")
M2600	42 mm (1.65")
M3800	30 mm (1.18")
M5000	75 mm (3")



# Introduction

## Rod retaining systems



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### Snap Fit

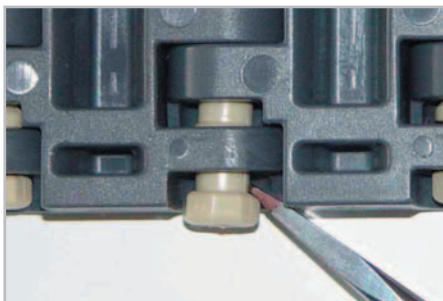
Snap fit rod retaining is used for a large range of Habasit Modular belts. The rod head is round.

It allows the rods to be inserted with the help of a hammer. It can be extracted using a punch and a hammer from the opposite side (secure the module edge to avoid link breakage) or using a special extraction tool available from Habasit or a narrow side cutter.



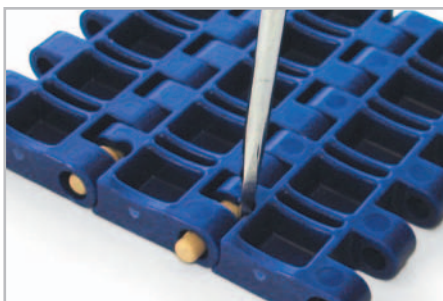
### Smart Fit (standard, with rod head)

Smart fit retaining is used for many new product designs. The rod head is orthogonally shaped. It allows an even more comfortable assembly and disassembly by use of a simple screwdriver.



### Smart Fit headless

For specific strong belt edge design headless smart fit rods are used. Disassembly from bottom side by use of simple screwdriver or with a punch and a hammer from the opposite side.

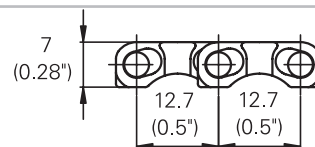
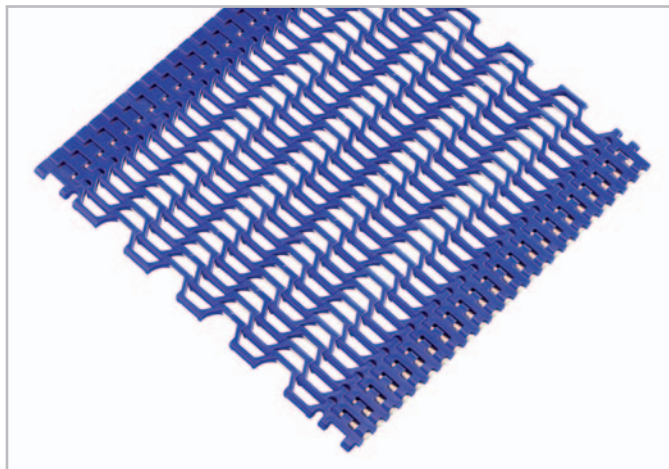


# Product Data Series M1100

## M1185 Flush Grid 0.5"

### Description

- Imperial belt width
- 50% open area; 82% open contact area; largest opening 8x21 mm (0.3"x0.83")
- Open hinge
- Food approved materials
- Rod diameter 3.6 mm (0.14")
- Smart fit rod retention
- Double row bidirectional sprocket
- Suitable for Ø 12.7 mm (0.5") nosebar



### Belt data

Belt material		PP		POM		POM +DE	PA	PA +US
Rod material		PP	POM	PA	PBT	PA		
Nominal tensile strength	N/m	2600	3100	4400	4250	4400	4400	4400
F <sub>N</sub> straight run	lb/ft	178	212	301	291	301	301	301
Temperature range	°C	5 - 105	5 - 90	-40 - 90	-40 - 90	-40 - 90	-46 - 130	-46 - 116
	°F	40 - 220	40 - 195	-40 - 195	-40 - 195	-40 - 195	-50 - 266	-50 - 240
Temperature maximum (short-term)	°C						160	135
	°F						320	275
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	2.5	2.8	3.6	3.6	3.6	3.1	3.1
	lb/sqft	0.51	0.57	0.75	0.75	0.75	0.64	0.64

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
12	0.5	50	2	75	3	150	6

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	203	254	305	356	406	457	508	559	610	660	711	762	813	864	etc.
inch (nom.)	8	10	12	14	16	18	20	22	24	26	28	30	32	24	etc.

**Standard belt widths** in increments of 50.8 mm (2"). Non-standard widths are offered in increments of 12.7 mm (0.5"). Smallest possible width 177.8 mm (7").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M1100

## Sprocket Series M1100



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M = Modular belts

Belt pitch

S = sprocket one-piece; Z = split sprocket

Number of teeth

Shaft size

Shaft type: Q = square shaft; R = round

Material: 8 = PA; 6 = POM

**M 11 S 17 25 Q 8**

### Sprocket availability

Type	Number of teeth	Diameter of pitch $\varnothing d_p$		$A_1$		Hub width $B_L$		Square bore Q		Ø Round bore R		Standard material
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
S-C1	12	49.8	2.0	21.4	0.84	25	0.98	-	1	25	1	PA
S-C1	14	58.0	2.3	25.5	1.00	25	0.98	-	1	25	$\frac{3}{4} / 1$	PA
S-C1	17	70.2	2.8	31.6	1.24	25	0.98	-	-	25	$\frac{3}{4} / 1$	PA
S-C1	19	78.4	3.1	35.7	1.41	25	0.98	-	-	-	1	PA
S-C1	24	98.8	3.9	45.9	1.80	25	0.98	40	1.5	25	1	PA
S-C1	36	148.0	5.8	69.5	2.74	25	0.98	40 / 60	1.5 / 2.5	-	1	PA

S-C1: machined sprockets. Other sprocket and hub sizes on request.

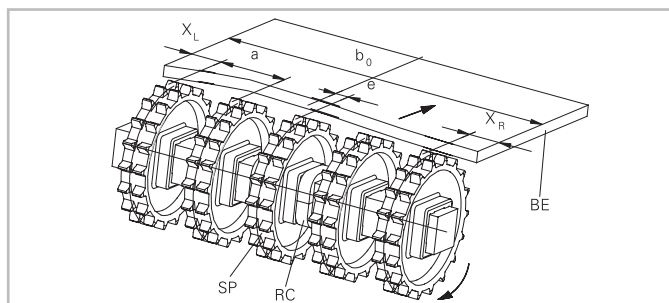
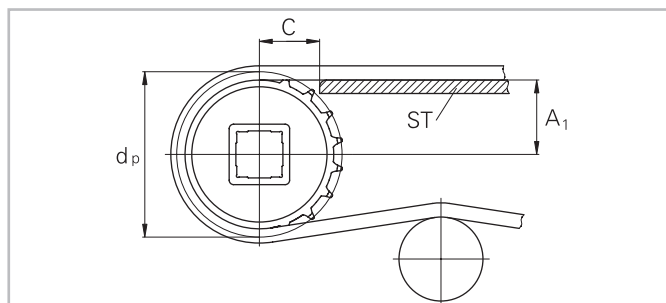
**Key ways** for round bore shape follow European standards for metric sizes and US standards for imperial sizes. For detailed dimensions see table in the Design Guide.

**Other materials** available on request.



Sprocket one-piece (solid)

### Sprocket arrangement

**BE** Belt**RC** Retainer**SP** Sprocket**b<sub>0</sub>** Belt width

The distance **C** between the sprocket axis and the slider support **ST** is minimal 14 mm (0.55").

### Wearstrips

Between driving shaft and idling sprockets or rollers the belt is carried by a slider support furnished with longitudinal wear strips (SL) from UHMW Polyethylene or other suitable material.

### Sprocket positioning

For correct positioning of the center sprocket divide the belt width by the link increment. The rounded result will be an even or an odd number. These numbers are the criteria for offset or no offset, see table.

Belt type	Sprocket spacing a		Sprocket edge distance (minimal)		Criteria for center sprocket position	Result of formula (rounded)	Offset e	Remarks
	minimal	maximal	X <sub>L</sub>	X <sub>R</sub>				
	mm inch	mm inch	mm inch	mm inch	mm inch		mm inch	Offset to which side
M1185	50.8 2	101.6 4	63.5 2.5	63.5 2.5	n.a.	n.a.	12.7 0.5	right or left side for all belt widths



# Product Data Series M1100

## Sprocket Series M1100



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### Numbers of sprockets and wearstrips for M1185

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch		Carryway (top)	Returnway (bottom)
203	8	2	3	2
254	10	2	3	2
305	12	2	3	2
356	14	3	4	3
406	16	3	4	3
457	18	3	4	3
508	20	5	5	3
559	22	5	5	3
610	24	5	5	3
660	26	5	6	4
711	28	7	6	4
762	30	7	6	4
813	32	7	7	4
864	34	9	7	4
914	36	9	7	4
965	38	9	8	5
1'016	40	9	8	5
1'067	42	11	8	5
1'118	44	11	9	5
1'168	46	11	9	5
1'219	48	11	9	5
1'270	50	13	10	6
1'321	52	13	10	6
1'372	54	13	10	6
1'422	56	15	11	6
1'473	58	15	11	6
1'524	60	15	11	6
1'575	62	15	12	7
1'626	64	17	12	7

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

# Product Data Series M1200

## M1220 Flat Top 0.5"

20

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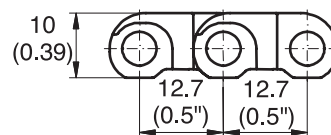
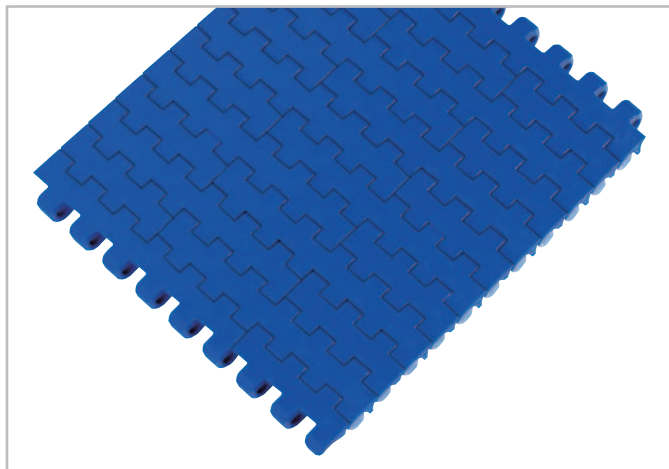
Edition 2007 - 55

### Description

- "Nosebar transfer", recommended diameter 18 mm (0.71"); 16 mm (0.63") possible
- 0% open area
- Food approved materials
- Easy to clean, open hinge
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Available accessories

- Flights
- Sideguards
- GripTop modules



### Belt data

Belt material		PP	PE	POM	
Rod material		PP	PE	PP	PA
Nominal tensile strength	N/m	11000	6000	16000	18000
F <sub>N</sub> straight run	lb/ft	754	411	1096	1233
Temperature range	°C	5 - 105	-70 - 65	5 - 90	-40 - 90
	°F	40 - 220	-94 - 150	40 - 195	-40 - 195
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	5.8	6.2	8.7	8.7
	lb/sqft	1.20	1.27	1.78	1.78

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
18	0.7	50	2	75	3	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	etc.
inch (nom.)	2	4	6	8	10	12	14	16	18	20	22	24	26	28	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66"). Smallest possible width 83.4 mm (3.25"). Non-bricklaid belts 50 mm (2") and 100 mm (4") wide.

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M1200

## M1220 GripTop 0.5"



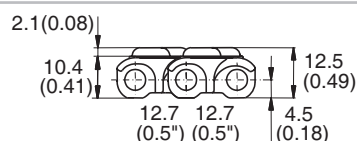
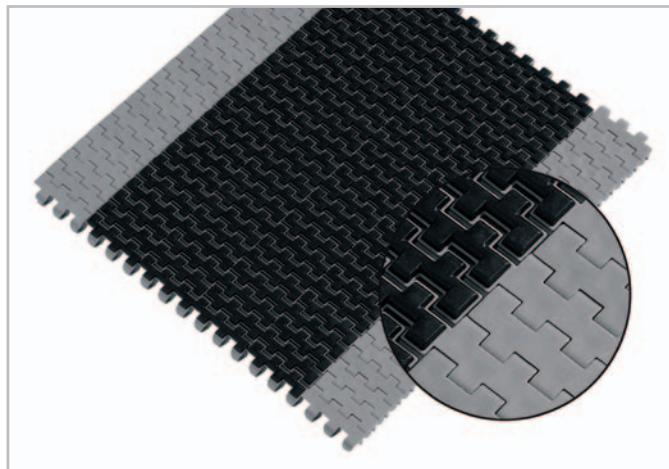
Edition 2007 - 56

### Description

- "Nosebar transfer", recommended diameter 18 mm (0.71"); 16 mm (0.63") possible
- 0% open area
- Open hinge
- Indent 50 mm (2")
- Abrasion resistant GripTop, high friction
- Food approved materials
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Available accessories

- Flights



### Belt data

Belt material		PP	
GripTop material		TPE	
Rod material		PP	POM
Nominal tensile strength	N/m	9000	9000
F <sub>N</sub> straight run	lb/ft	617	617
Temperature range	°C	5 - 60	5 - 60
	°F	40 - 140	40 - 140
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	6.5	6.5
	lb/sqft	1.33	1.33

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
18	0.7	50	2	75	3	150	6

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	etc.
inch (nom.)	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M1200

## M1220 HighGrip-L 0.5"



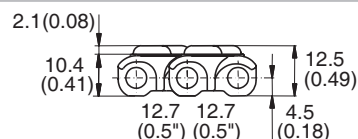
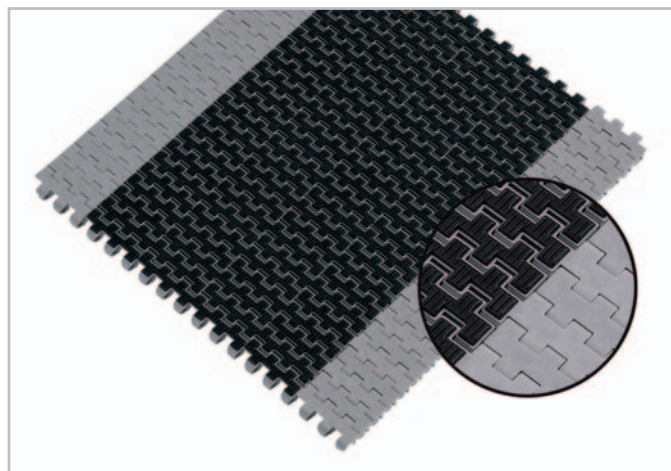
Edition 2007 - 57

### Description

- "Nosebar transfer", recommended diameter 18 mm (0.71"); 16 mm (0.63") possible
- 0% open area
- Open hinge
- Indent 50 mm (2")
- GripTop with grooved surface for high friction and less grip reduction by dirt and dust
- Food approved materials
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Available accessories

- Flights



### Belt data

Belt material		PP	
GripTop material		TPE	
Rod material		PP	POM
Nominal tensile strength	N/m	9000	9000
F' <sub>N</sub> straight run	lb/ft	617	617
Temperature range	°C	5 - 60	5 - 60
	°F	40 - 140	40 - 140
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	6.5	6.5
	lb/sqft	1.33	1.33

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
18	0.7	50	2	75	3	150	6

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	etc.
inch (nom.)	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M1200

## M1230 Flush Grid 0.5"



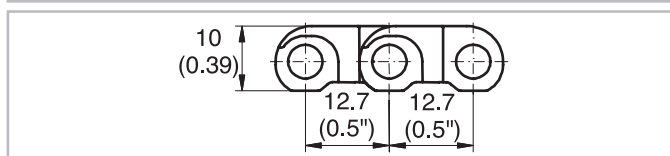
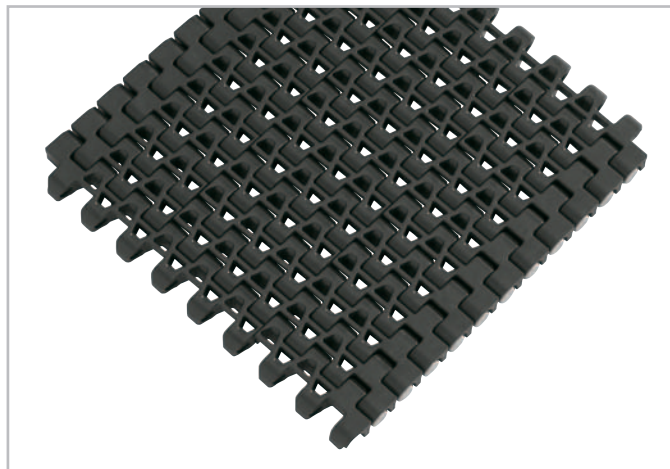
Edition 2007 - 58

### Description

- "Nosebar transfer", recommended diameter 18 mm (0.71"); 16 mm (0.63") possible
- 18% open area; 70% open contact area; largest opening 5x3.3 mm (0.2"x0.13")
- Stiff 0.5" Flush Grid design
- Open hinge
- Food approved materials
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Available accessories

- GripTop modules



### Belt data

Belt material		PP	PE	POM	
Rod material		PP	PE	PP	PA
Nominal tensile strength	N/m	11000	7000	16000	18000
$F'_N$ straight run	lb/ft	753	480	1096	1233
Temperature range	°C	5 - 105	-70 - 65	5 - 90	-40 - 90
	°F	40 - 220	-94 - 150	40 - 195	-40 - 195
Belt weight $m_b$	kg/m <sup>2</sup>	5.4	5.7	7.8	7.8
	lb/sqft	1.11	1.17	1.60	1.60

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
18	0.7	50	2	75	3	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$

mm (nom.)	150	200	250	300	350	400	450	500	550	600	650	700	750	800	etc.
inch (nom.)	6	8	10	12	14	16	18	20	22	24	26	28	30	32	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66"). Smallest possible width 83.4 mm (3.25").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M1200

## M1233 Flush Grid 0.5"

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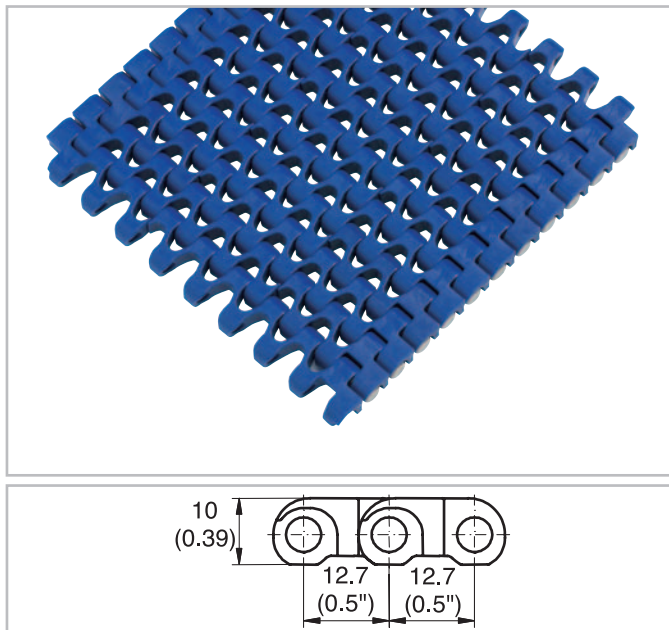
Edition 2007 - 59

### Description

- "Nosebar transfer", recommended diameter 18 mm (0.71"); 16 mm (0.63") possible
- 25% open area; 70% open contact area; largest opening 5x6 mm (0.2"x0.25")
- Food approved materials
- Open hinge
- Superior cleanability
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Available accessories

- Flights
- GripTop modules



### Belt data

Belt material		PP	PE	POM			PA +US	PA
Rod material		PP	PE		PP	PA		
Nominal tensile strength	N/m	11000	7000	8000	16000	18000	17000	17000
F <sub>N</sub> straight run	lb/ft	750	480	548	1096	1233	1165	1165
Temperature range	°C	5 - 105	-70 - 65	-40 - 65	5 - 90	-40 - 90	-46 - 116	-46 - 130
	°F	40 - 220	-94 - 150	-40 - 150	40 - 195	-40 - 195	-50 - 240	-50 - 266
Temperature maximum (short-term)	°C						135	160
	°F						275	320
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	5.2	5.4	7.2	7.2	7.2	6.7	6.7
	lb/sqft	1.07	1.11	1.48	1.48	1.48	1.37	1.37

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
18	0.7	50	2	75	3	150	6	250	6

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	150	200	250	300	350	400	450	500	550	600	650	700	750	800	etc.
inch (nom.)	6	8	10	12	14	16	18	20	22	24	26	28	30	32	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66"). Smallest possible width 83.4 mm (3.25").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M1200

## M1234 Nub Top Flush Grid 0.5"



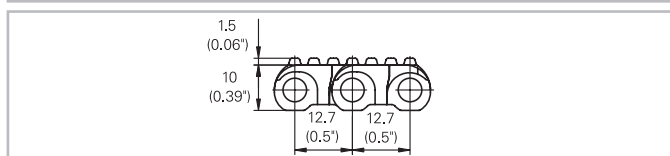
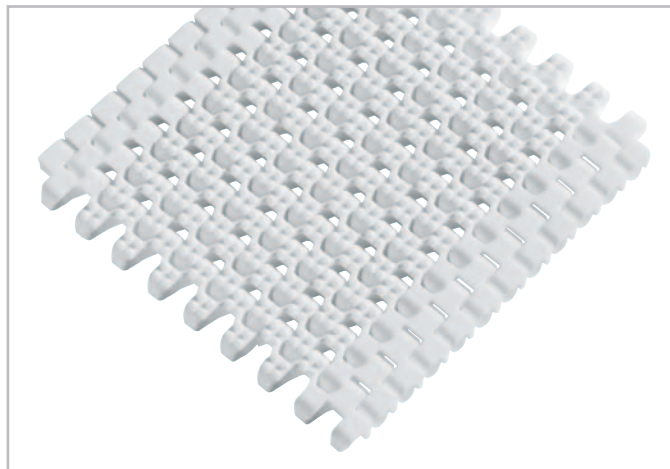
Edition 2007 - 60

### Description

- "Nosebar transfer" recommended diameter 18mm (0.71"); 16mm (0.63") possible
- 18 % open area; largest opening 2.55 x6 mm (0.1"x0.25")
- Open hinge
- Indent (nub-free edge) 25mm (1")
- Food approved materials
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Available accessories

- Flights



### Belt data

Belt material		PP	PE	POM	
Rod material		PP	PE	PP	PA
Nominal tensile strength	N/m	11000	7000	16000	18000
$F'_N$ straight run	lb/ft	753	480	1096	1233
Temperature range	°C	5 - 105	-70 - 65	5 - 90	-40 - 90
	°F	40 - 220	-94 - 150	40 - 195	-40 - 195
Belt weight $m_b$	kg/m <sup>2</sup>	5.6	5.9	8.2	8.2
	lb/sqft	1.15	1.21	1.68	1.68

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
18	0.7	50	2	75	3	150	6

### Standard range of belt widths $b_0$

mm (nom.)	150	200	250	300	350	400	450	500	550	600	650	700	750	800	etc.
inch (nom.)	6	8	10	12	14	16	18	20	22	24	26	28	30	32	etc.

Real belt widths are in most cases 0.1 % to 0.3 % smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66"). Smallest possible width 150 mm (6").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M1200

## Flights and Sideguards Series M1200

26

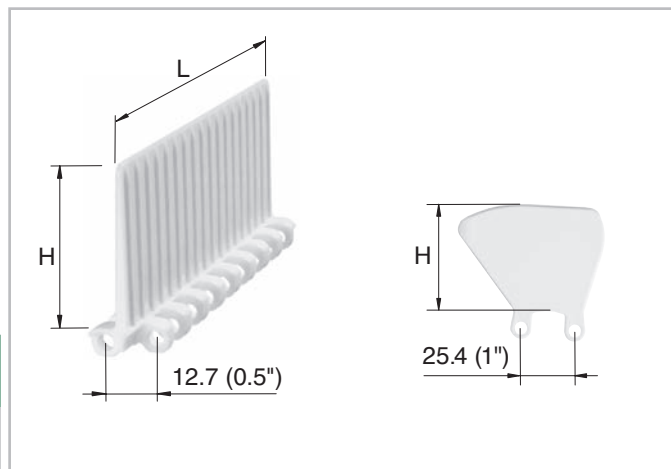
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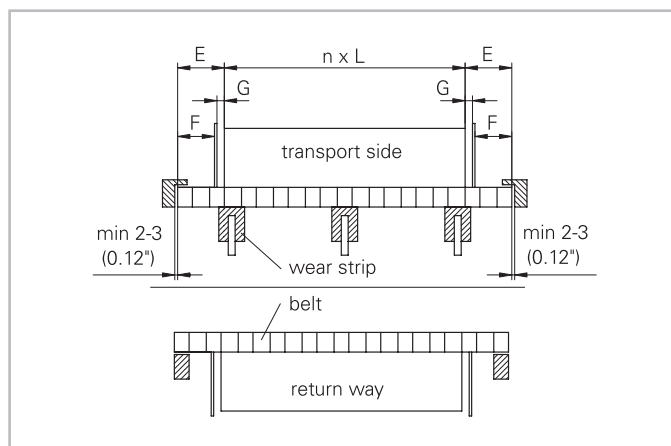
HabasitLINK® Modular Belts are available with flights to convey products on inclined planes. The flight modules are injection-molded one-piece designs that, when assembled, become an integral part of the belt. Flight modules are available with ribs on one side ("no-cling") for improved release of wet or sticky food products and can also be cut to non-standard heights. The flights fit all series M1200 belts except M1230, side guards for M1220 only.

	Flights straight		Sideguards
	height H	length L	height H
mm	50	150	50
inch	2	6	2



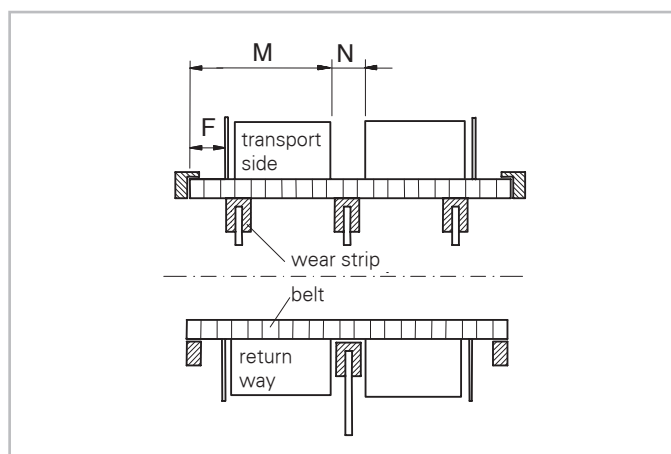
### Indents (E)

The flight indent E is the distance between the edge of the belt and the edge of the flight. It is required for adequate support of the belt on its return way and hold down during back-bending applications (elevators). On short conveyors or with special support structure, the flights may also be applied over the full belt width (E = 0).



### Notch (N)

The notch N is a gap in each row of flights, longitudinally aligned to allow the support of belts wider than 600 mm (24") on its return way or in back-bending applications. The notch width (N) and the distance (M) from belt edge is a multiple of the link increment 16.67 mm (0.66"). For M1200 series the minimum notch width is 33.3 mm (1.31").



### Installation of flights and sideguards; indents

The sideguards have a pitch of 25.4 mm (1"), that is twice of the module pitch. Therefore only one link per module needs to be cut for the sideguard installation. This special solution provides higher strength. The smallest applicable sprocket size is M12S15 (15 teeth). The distance  $E_1$  between the flight end and the hold down- and support-shoes/wearstrips should not be smaller than 5 mm (0.2"). For further details see

Assembly Guide

[rodasuin@rodasuin.com](mailto:rodasuin@rodasuin.com)

[www.rodasuin.com](http://www.rodasuin.com)

Tlf: 34 95 435 73 02



# Product Data Series M1200

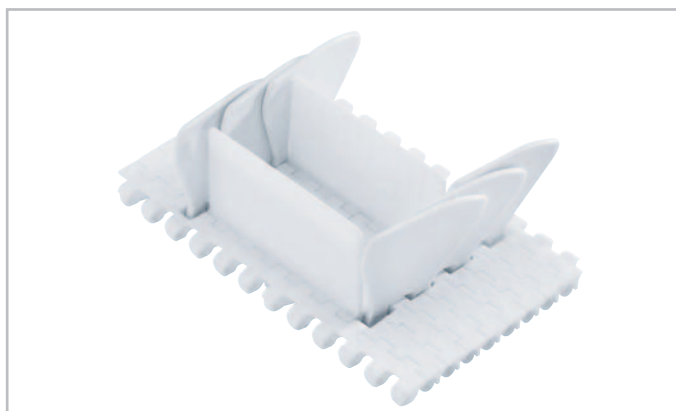


Flights and Sideguards Series M1200

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	Possible flight indents E									
	Flight only		Flight + Sideguard with gap (G ~8 mm (0.3"))				Flight + Sideguard without gap (G ~2 mm (0.08"))			
	E		E		F		E		F	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Flight over full belt width	0	0	–	–	–	–	–	–	–	–
Module cutting necessary	33	1.3	–	–	–	–	33	1.3	25	1
Standard, no module cutting	50	2	50	2	33	1.3	50	2	41	1.6
Module cutting necessary	66	2.6	66	2.6	50	2	66	2.6	58	2.3
Module cutting necessary	83	3.2	83	3.2	66	2.6	83	3.2	75	3
Standard, no module cutting	100	4	100	4	83	3.2	100	4	93	3.7

Special instructions for preparation and assembly to be followed, see Assembly Guidelines.



M1220G05/F05

Double pitch sideguard, fixed every second module row

# Product Data Series M1200

## Sprocket Series M1200

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M = Modular belts
Belt pitch
S = sprocket one-piece; Z = split sprocket
Number of teeth
Shaft size
Shaft type: Q = square shaft; R = round
Material: 6 = POM; 8 = PA

**M 12 S 24 25 Q 6**

### Sprocket availability

Type	Number of teeth	Diameter of pitch Ø d <sub>p</sub>		A <sub>1</sub>		Hub width B <sub>L</sub>		Square bore Q		Ø Round bore R		Standard material
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
S	10	41.2	1.6	16.1	0.63	30	1.18	-	-	20	3/4	POM
S	15	62.4	2.5	26.7	1.05	30	1.18	25	1	25	1 / 1 3/16	POM
S	24	99.2	3.9	45.1	1.78	30	1.18	25 / 40	1 / 1.5	25	1	POM
S	28	116.5	4.6	53.8	2.12	30	1.18	25 / 40	1 / 1.5	25	1	POM
S	36	149.8	5.9	70.4	2.77	30	1.18	40 / 50 / 60	1.5 / 2.5	-	-	POM
Z	24	99.2	3.9	45.1	1.78	40	1.57	50	-	-	-	POM

S, Z: molded sprockets. Other sprocket and hub sizes on request.

**Key ways** for round bore shape follow European standards for metric sizes and US standards for imperial sizes. For detailed dimensions see table in the Design Guide.

**Other materials** available on request.



Sprocket one-piece ("open window")



Split sprocket

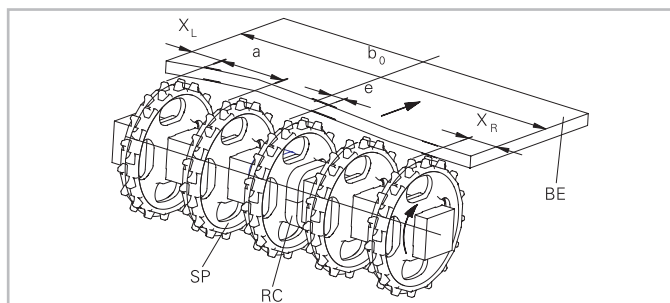
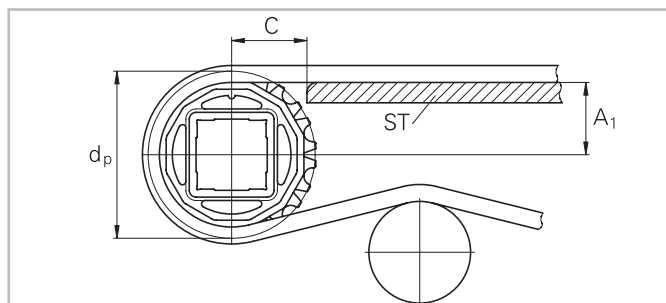
# Product Data Series M1200

Sprocket Series M1200



Edition 2007 - 64

## Sprocket arrangement

**BE** Belt**RC** Retainer**SP** Sprocket**b<sub>0</sub>** Belt width

The distance **C** between the sprocket axis and the slider support **ST** is minimal 14 mm (0.55").

## Wearstrips

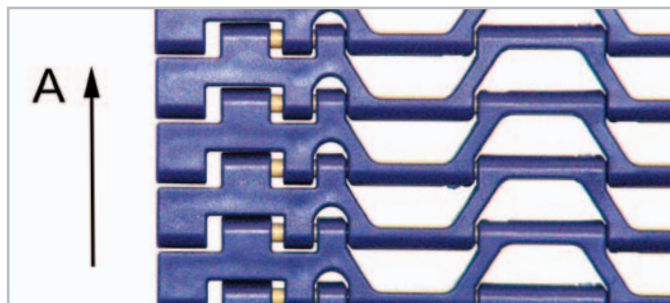
Between driving shaft and idling sprockets or rollers the belt is carried by a slider support furnished with longitudinal wearstrips (ST) from UHMW Polyethylene or other suitable material.

## Sprocket positioning

For correct positioning of the center sprocket divide the belt width by the link increment. The rounded result will be an even or an odd number. These numbers are the criteria for offset or no offset, see table.

Belt type	Sprocket spacing a		Sprocket edge distance (minimal)		Criteria for center sprocket position	Result of formula (rounded)	Offset e	Remarks
	minimal	maximal	X <sub>L</sub> mm inch	X <sub>R</sub> mm inch				
	mm inch	mm inch						
					mm inch		mm inch	Offset to which side
M1185*	50.8 2	101.6 4	50.8 2	50.8 2	n.a.	n.a.	0 0	in running direction A only
M1200	50 2	100 4	25 1	25 1	n.a.	n.a.	0 0	no offset for all belt widths

\* For POM and PA belts a maximal admissible load 70% is recommended.





# Product Data Series M1200

## Sprocket Series M1200

DISTRIBUIDOR OFICIAL.



Edition 2007 - 65

### Numbers of sprockets and wearstrips for series M1200

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch	min. number	Carryway (top)	Returnway (bottom)
150	6	2	2	2
200	8	2	2	2
250	10	3	3	2
300	12	3	3	2
350	14	3	4	3
400	16	3	4	3
450	18	5	5	3
500	20	5	5	3
550	22	5	6	4
600	24	5	6	4
700	28	7	7	4
800	32	7	7	4
900	36	9	8	5
1000	40	9	8	5
1100	43	11	9	5
1200	47	11	9	5
1300	51	13	10	6
1400	55	13	10	6
1600	63	15	11	6
1800	71	17	12	7
2000	79	19	13	7

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

# Product Data Series M1200

Sprocket Series M1200



Edition 2007 - 66

## Numbers of sprockets and wearstrips for M1185

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch		Carryway (top)	Returnway (bottom)
203	8	2	3	2
254	10	2	3	2
305	12	2	3	2
356	14	3	4	3
406	16	3	4	3
457	18	3	4	3
508	20	5	5	3
559	22	5	5	3
610	24	5	5	3
660	26	5	6	4
711	28	7	6	4
762	30	7	6	4
813	32	7	7	4
864	34	9	7	4
914	36	9	7	4
965	38	9	8	5
1'016	40	9	8	5
1'067	42	11	8	5
1'118	44	11	9	5
1'168	46	11	9	5
1'219	48	11	9	5
1'270	50	13	10	6
1'321	52	13	10	6
1'372	54	13	10	6
1'422	56	15	11	6
1'473	58	15	11	6
1'524	60	15	11	6
1'575	62	15	12	7
1'626	64	17	12	7

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

# Product Data Series M2400

## M2420 Flat Top 1"

DISTRIBUIDOR OFICIAL.



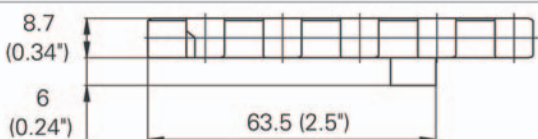
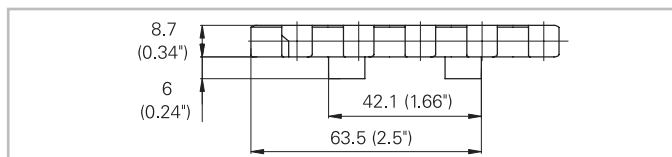
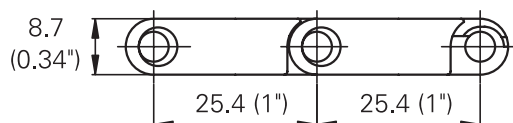
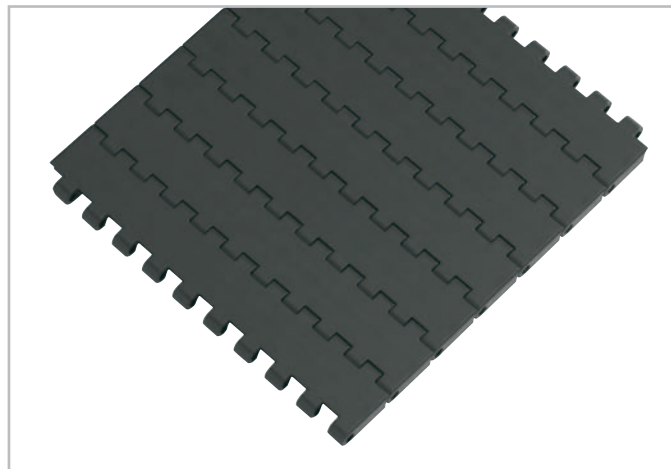
Edition 2007 - 67

### Description

- 8.7 mm (0.34") thick
- 0% open area
- Closed hinge
- Rod diameter 4.5 mm (0.18")
- Headless Smart fit rod retention
- Strong closed edges
- Lug teeth sprockets

### Available accessories

- Tab modules with 1 or 2 tabs
- Code: -T1 single Tab / -T2 double tab



### Belt data

Belt material		PP		POM	
Rod material		PP	POM	PBT	PA
Nominal tensile strength	N/m	13200	16900	20100	28800
F <sub>N</sub> ' straight run	lb/ft	904	1158	1370	1973
Temperature range	°C	5 - 105	5 - 90	-40 - 90	-40 - 90
	°F	40 - 220	40 - 195	-40 - 195	-40 - 195
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	5.3	5.3	8.1	8.1
	lb/sqft	1.09	1.09	1.65	1.65

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	85	170	255	340	425	510	595	680	765	850	935	1020	1105	etc.
inch (nom.)	3.35	6.69	10.04	13.39	16.73	20.08	23.43	26.77	30.12	33.46	36.81	40.16	43.50	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.



# Product Data Series M2400

M2420 Flat Top 1"



Edition 2007 - 68

**Standard belt widths** in increments of 85 mm (3.35"). Non-standard widths are offered in increments of 17 mm (0.67"). Smallest possible width 85 mm (3.35").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2400

## M2470 Flat Top 1"

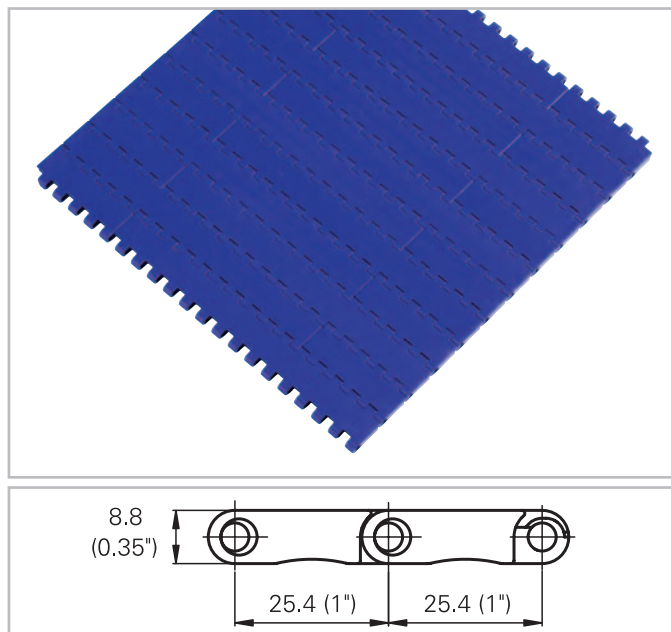
DISTRIBUIDOR OFICIAL.



Edition 2007 - 69

### Description

- Imperial belt width
- 8.8 mm (0.35") thick
- 0% open area
- Closed hinge
- Rod diameter 4.5 mm (0.18")
- Headless Smart fit rod retention
- Strong closed edges
- Beveled edges for smooth side transfer
- Lug teeth sprockets
- Optimized for 50 mm (2") idle rollers



### Belt data

Belt material		POM
Rod material		PA
Nominal tensile strength	N/m	30000
$F'_N$ straight run	lb/ft	2055
Temperature range	°C	-40 - 90
	°F	-40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	8.7
	lb/sqft	1.79

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6

### Standard range of belt widths $b_0$

mm (nom.)	76	152	229	305	381	457	533	610	686	762	838	914	991	etc.
inch (nom.)	3	6	9	12	15	18	21	24	27	30	33	36	39	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 76 mm (3"). Non-standard widths are offered in increments of 15.2 mm (0.6"). Smallest possible width 76 mm (3").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2400

## Sprocket Series M2400



Edition 2007 - 70

M = Modular belts

Belt pitch

S = sprocket one-piece; Z = split sprocket

Number of teeth

Shaft size

Shaft type: Q = square shaft; R = round

Material: 6 = POM; 8 = PA

**M 24 S 12 40 Q 8**

### Sprocket availability

Type	Number of teeth	Diameter of pitch $\varnothing d_p$		$A_1$		Hub width $B_L$		Square bore Q		Ø Round bore R		Standard material
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
S	12	98.9	3.9	45.1	1.78	25	0.98	40	1.5	30	1	PA
S	18	147.4	5.8	69.4	2.73	25	0.98	40 / 60	1.5 / 2.5	-	-	PA
S-C1	12	98.9	3.9	45.1	1.78	25	0.98	-	-	40	1.5	PA
S-C1	15	123.1	4.9	57.2	2.25	25	0.98	60	-	-	-	PA
S-C1	18	147.4	5.8	69.4	2.73	25	0.98	-	-	30 / 40 / 50	1 / 1.5	PA
S-C1	20	163.7	6.4	77.5	3.05	25	0.98	-	-	40 / 50	1.5	PA

S: molded sprockets; S-C1: machined sprockets. Other sprocket and hub sizes on request.

**Key ways** for round bore shape follow European standards for metric sizes and US standards for imperial sizes. For detailed dimensions see table in the Design Guide.

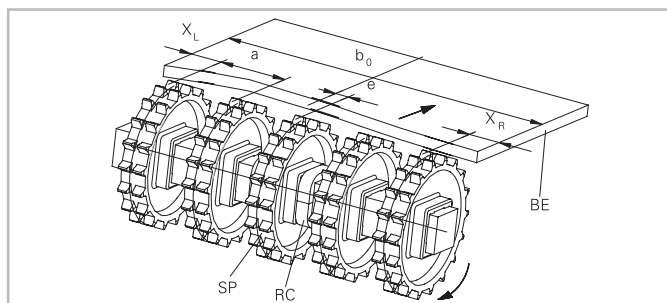
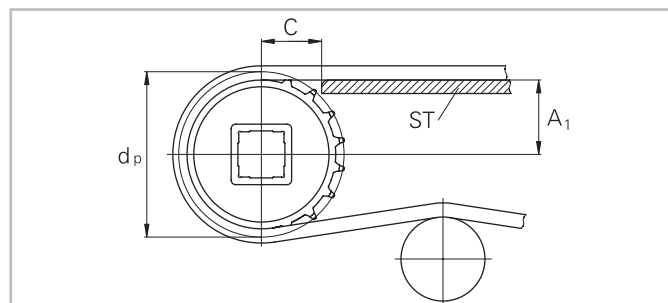
**Other materials** available on request.



Sprocket one-piece (solid)



### Sprocket arrangement

**BE** Belt**RC** Retainer**SP** Sprocket**b<sub>0</sub>** Belt width

The distance **C** between the sprocket axis and the slider support **ST** is minimal 28 mm (1.1").

### Wearstrips

Between driving shaft and idling sprockets or rollers the belt is carried by a slider support furnished with longitudinal wear strips (SL) from UHMW Polyethylene or other suitable material.

### Sprocket positioning

For correct positioning of the center sprocket divide the belt width by the link increment. The rounded result will be an even or an odd number. These numbers are the criteria for offset or no offset, see table.

Belt type	Sprocket spacing a		Sprocket edge distance (minimal)		Criteria for center sprocket position	Result of formula (rounded)	Offset e	Remarks	
	minimal	maximal	X <sub>L</sub> mm <i>inch</i>	X <sub>R</sub> mm <i>inch</i>					
	mm <i>inch</i>	mm <i>inch</i>					mm <i>inch</i>		
M2420	51 2	170 6.7	42.5 1.67	42.5 1.67	b <sub>0</sub> / 17 b <sub>0</sub> / 0.67	even number (2, 4, 6 ...)	8.5 0.33	right or left side	
						odd number (3, 5, 7 ...)	0 0	no offset	
M2470	50.8 2	152.4 6	23 0.9	23 0.9	b <sub>0</sub> / 15.24 b <sub>0</sub> / 0.6	even number (2, 4, 6 ...)	7.6 0.29	right or left side	
						odd number (3, 5, 7 ...)	0 0	no offset	

# Product Data Series M2400

## Sprocket Series M2400



Edition 2007 - 72

### Numbers of sprockets and wearstrips for M2420

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch	min. number	Carryway (top)	Returnway (bottom)
85	3.3	1	2	2
170	6.7	2	2	2
255	10.0	2	3	2
340	13.4	2	3	2
425	16.7	3	4	3
510	20.1	3	4	3
595	23.4	4	5	3
680	26.8	4	5	3
765	30.1	5	6	4
850	33.5	5	6	4
935	36.8	6	7	4
1'020	40.2	6	7	4
1'105	43.5	7	8	5
1'190	46.9	7	8	5
1'275	50.2	8	9	5
1'360	53.5	8	9	5
1'445	56.9	9	10	6
1'530	60.2	9	10	6
1'615	63.6	10	11	6
1'700	66.9	10	11	6
1'785	70.3	11	12	7
1'870	73.6	11	12	7
1'955	77.0	12	13	7
2'040	80.3	12	13	7

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

# Product Data Series M2400

Sprocket Series M2400



Edition 2007 - 73

## Numbers of sprockets and wearstrips for M2470

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch	min. number	Carryway (top)	Returnway (bottom)
76	3.0	1	2	2
152	6.0	2	3	2
229	9.0	2	3	2
305	12.0	2	4	2
381	15.0	3	4	3
457	18.0	3	5	3
533	21.0	3	5	3
610	24.0	3	6	3
686	27.0	5	6	4
762	30.0	5	7	4
838	33.0	5	7	4
914	36.0	5	8	4
991	39.0	7	8	5
1'067	42.0	7	9	5
1'143	45.0	7	9	5
1'219	48.0	7	10	5
1'295	51.0	9	10	6
1'372	54.0	9	11	6
1'448	57.0	9	11	6
1'524	60.0	9	12	6
1'600	63.0	11	12	7
1'676	66.0	11	13	7
1'753	69.0	11	13	7
1'829	72.0	11	14	7
1'905	75.0	13	14	8
1'981	78.0	13	15	8
2'057	81.0	13	15	8

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

# Product Data Series M2500

## M2510 Flat Top 1"



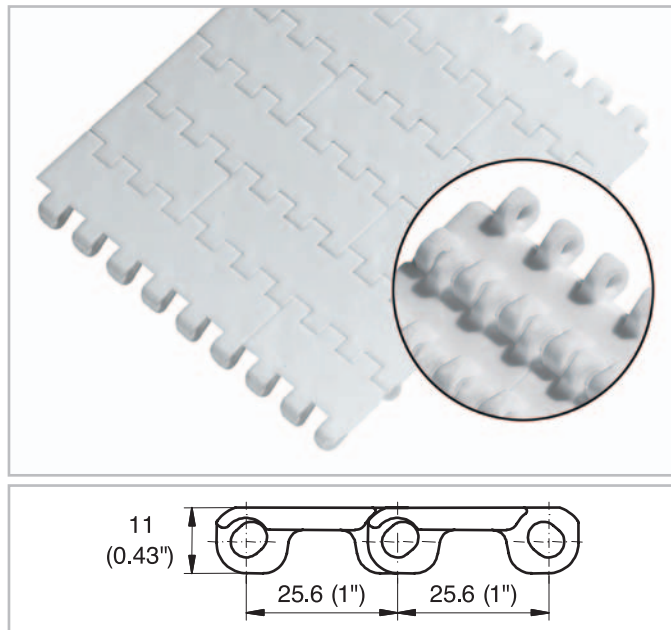
Edition 2007 - 75

### Description

- 0% open area
- Dynamic open hinge, easy to clean
- Food approved materials
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Available accessories

- Flights and Scoops
- Sideguards
- Hold down devices



### Belt data

Belt material		PP	PE	POM	
Rod material		PP	PE	PP	PA
Nominal tensile strength	N/m	14000	8000	16000	21900
$F'_N$ straight run	lb/ft	959	548	1096	1500
Temperature range	°C	5 - 105	-70 - 65	5 - 90	-40 - 90
	°F	40 - 220	-94 - 150	40 - 195	-40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	4.9	5.2	7.3	7.3
	lb/sqft	1.00	1.05	1.49	1.49

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$

mm (nom.)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	etc.
inch (nom.)	2	4	6	8	10	12	14	16	18	20	22	24	26	28	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66"). Smallest possible width 83.4 mm (3.25"). Non-bricklaid belts 50 mm (2") and 100 mm (4") wide.

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M2500

## M2511 Mesh Top 1"



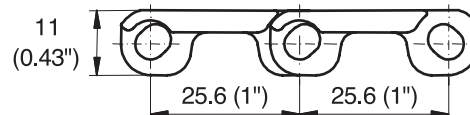
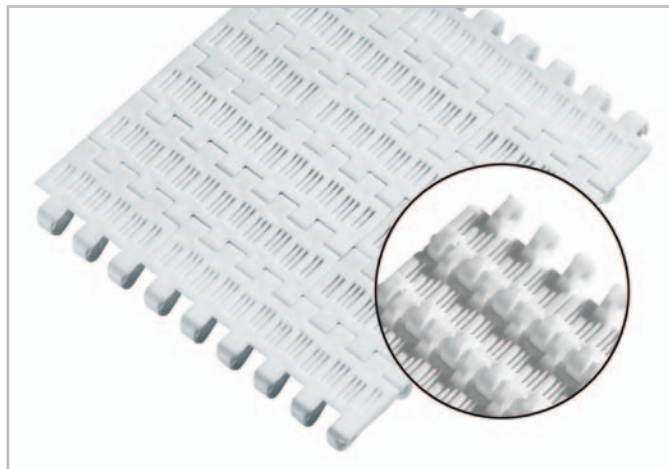
Edition 2007 - 76

### Description

- 16% open area; largest opening 1.2x10 mm (0.05"x0.4")
- Dynamic open hinge, easy to clean
- Food approved materials
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Available accessories

- Flights and Scoops
- Sideguards
- Hold down devices



### Belt data

Belt material		PP	PE	POM	
Rod material		PP	PE	PP	PA
Nominal tensile strength	N/m	11000	7000	15000	18000
$F'_N$ straight run	lb/ft	753	479	1027	1233
Temperature range	°C	5 - 105	-70 - 65	5 - 90	-40 - 90
	°F	40 - 220	-94 - 150	40 - 195	-40 - 195
Belt weight $m_b$	kg/m <sup>2</sup>	4.5	4.7	6.5	6.5
	lb/sqft	0.92	0.96	1.33	1.33

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$

mm (nom.)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	etc.
inch (nom.)	2	4	6	8	10	12	14	16	18	20	22	24	26	28	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66"). Smallest possible width 83.4 mm (3.25"). Non-bricklaid belts 50 mm (2") and 100 mm (4") wide.

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2500

## M2514 Nub Top 1"



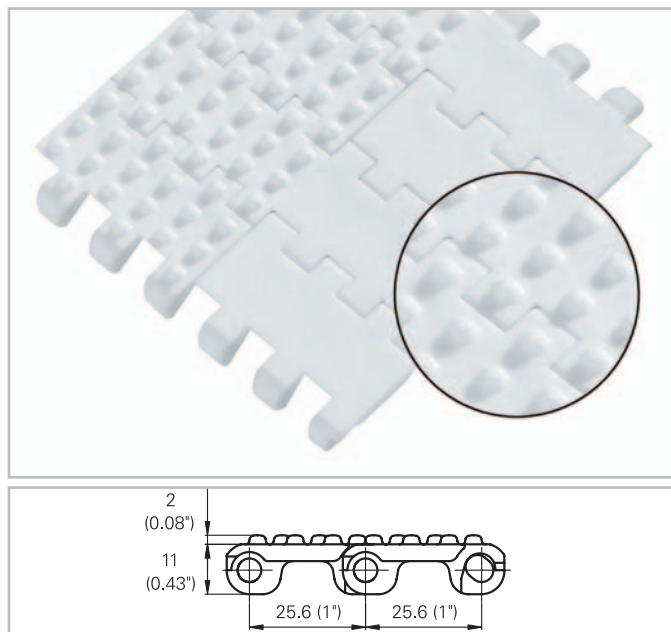
Edition 2007 - 77

### Description

- 0% open area
- Non-adhesive due to reduced contact surface
- Open hinge, easy to clean
- Standard indent 50 mm (2")
- Rod diameter 5 mm (0.2")
- "Open window" sprockets
- Food approved materials

### Available accessories

- Flights and Scoops
- Sideguards
- Hold down devices



### Belt data

Belt material		PP	PE	POM	
Rod material		PP	PE	PA	
Nominal tensile strength	N/m	14000	8000	7000	21900
$F'_N$ straight run	lb/ft	959	548	479	1500
Temperature range	°C	5 - 105	-70 - 65	-40 - 65	-40 - 90
	°F	40 - 220	-94 - 150	-40 - 150	-40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	5.1	5.4	7.7	7.7
	lb/sqft	1.05	1.11	1.57	1.57

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$

mm (nom.)	200	250	300	350	400	450	500	550	600	650	etc.
inch (nom.)	8	10	12	14	16	18	20	22	24	26	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2500

## M2516 Diamond Top 1"



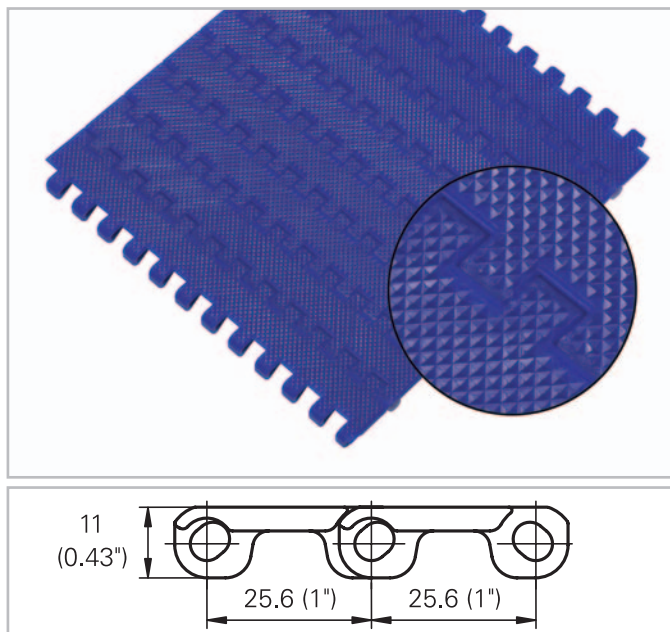
Edition 2007 - 78

### Description

- 0% open area
- Non-adhesive due to reduced contact surface
- Dynamic open hinge, easy to clean
- Rod diameter 5 mm (0.2")
- "Open window" sprockets
- Food approved materials
- Optional staggered indent 50/100mm (2"/4")

### Available accessories

- Sideguards
- Flights and Scoops
- Hold down devices



### Belt data

Belt material		PP	PE	POM	
Rod material		PP	PE	PA	
Nominal tensile strength	N/m	14000	8000	8000	21900
F <sub>N</sub> straight run	lb/ft	959	548	548	1500
Temperature range	°C	5 - 105	-70 - 65	-40 - 65	-40 - 90
	°F	40 - 220	-94 - 150	-40 - 150	-40 - 195
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	4.9	5.2	7.5	7.5
	lb/sqft	1.01	1.06	1.53	1.53

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	etc.
inch (nom.)	2	4	6	8	10	12	14	16	18	20	22	24	26	28	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths:** Non-bricklaid belts 200 mm (8") wide. Non-standard widths are offered in increments of 16.66 mm (0.66").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2500

## M2520 Flat Top 1"



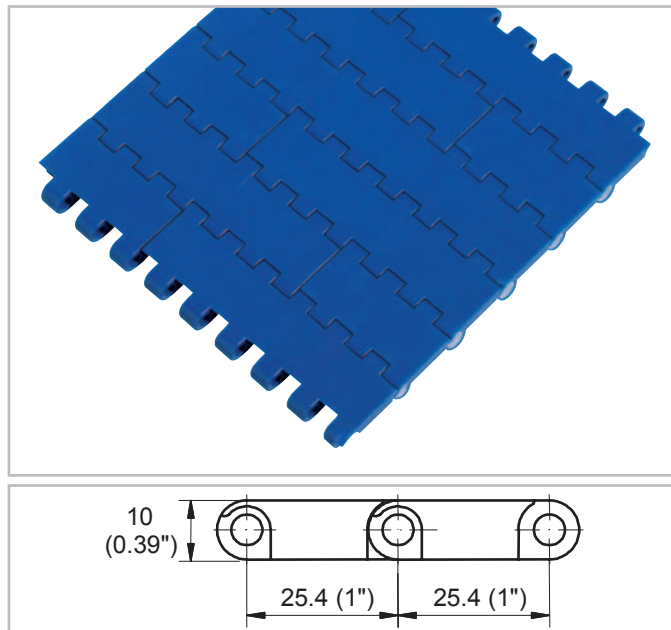
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### Description

- 0% open area
- High lateral stiffness
- Food approved materials
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Available accessories

- Flights and Scoops
- Sideguards
- Hold down devices
- GripTop modules



### Belt data

Belt material		PP		PE	POM	
Rod material		PP	POM	PE	PP	PA
Nominal tensile strength	N/m	18000	18000	9000	21500	32000
F <sub>N</sub> straight run	lb/ft	1233	1233	616	1473	2192
Temperature range	°C	5 - 105	5 - 90	-70 - 65	5 - 90	-40 - 90
	°F	40 - 220	40 - 195	-94 - 150	40 - 195	-40 - 195
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	5.5	5.5	5.8	8.4	8.4
	lb/sqft	1.13	1.13	1.19	1.71	1.71

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	etc.
inch (nom.)	2	4	6	8	10	12	14	16	18	20	22	24	26	28	etc.

Real belt widths are in most cases 0.1% to 0.3% wider.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66"). Smallest possible width 83.4 mm (3.25"). Non-bricklaid belts 50 mm (2") and 100 mm (4") wide.

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M2500

M2520 Flat Top 1"



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## Belt data for special belt materials

Belt material		PBT +FR		PA +GF	ST	PA +HT
Rod material		PP	PA	ST		
Sprocket material <sup>(1)</sup>		Standard		ST		
Belt width		Standard		see table		
Flammability classification UL 94 <sup>(2)</sup>		V0		HB	V0	HB
Flammability classification ISO 340 <sup>(2)</sup>		yes		no		no
Nominal tensile strength	N/m	16000	15000	24000	12000	24000
F' <sub>N</sub> straight run	lb/ft	1027	959	1644	822	1644
Temperature range	°C	5 - 105	-40 - 130	0 - 145	0 - 200	0 - 170
	°F	40 - 220	-40 - 266	32 - 293	32 - 392	32 - 338
Temperature maximum (short-term)	°C		150	175	240	200
	°F		302	347	464	392
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	8.9	8.9	9.0	10.8	9.0
	lb/sqft	1.82	1.82	1.85	2.21	1.85

## Belt width for Polyamide +GF, Polyamide +HT and Super High Temperature material (ST)

mm (nom.)	50.8	101.7	152.5	203.3	254.2	305.0	355.8	406.7	457.5	508.3	559.2	610.0	etc.
inch (nom.)	2.00	4.00	6.00	8.00	10.01	12.01	14.01	16.01	18.01	20.01	22.02	24.02	etc.

# Product Data Series M2500

## M2520 GripTop 1"



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### Description

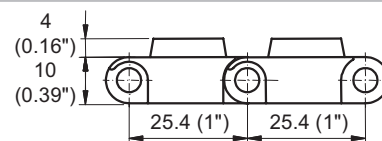
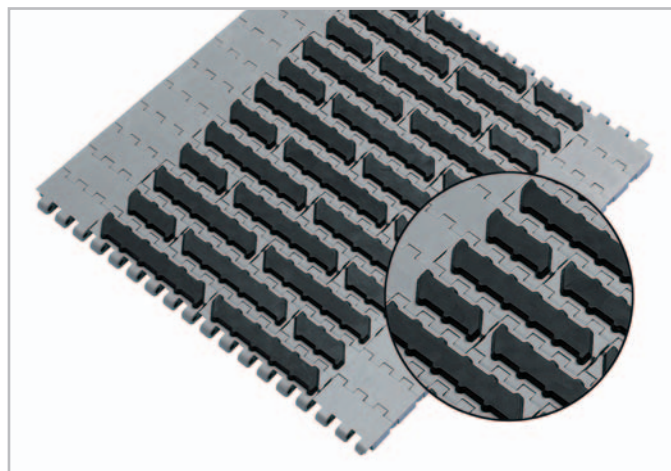
- 0% open area
- Food approved materials
- Abrasion resistant GripTop, high friction
- Rubber hardness: 50 shore A
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Proposed pattern

- Indent 50 mm (2")
- Fully covered by GripTop or in rows of any distance in multiples of 25.4 mm (1")

### Available accessories

- Flights
- Hold down devices



### Belt data

Belt material		PP		POM		PBT +FR
GripTop material		TPE				
Rod material		PP	POM	PP	PA	
Nominal tensile strength	N/m	14000	18000	18000	26000	16000
F <sub>N</sub> straight run	lb/ft	959	1233	1233	1781	1027
Temperature range	°C	5 - 60	5 - 60	5 - 60	-40 - 60	-40 - 60
	°F	40 - 140	40 - 140	40 - 140	-40 - 140	-40 - 266
Belt weight m <sub>B</sub>	kg/m²	8.7	8.7	11.4	11.4	14.2
	lb/sqft	1.74	1.74	2.34	2.34	2.9

The PBT +FR belt fulfills UL 94 V0 and ISO 340.

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	150	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	etc.
inch (nom.)	6	8	12	16	20	24	28	32	36	40	43	47	51	55	59	etc.

Real belt widths are in most cases 0.1% to 0.3% wider.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2500

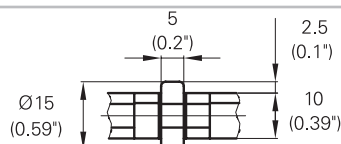
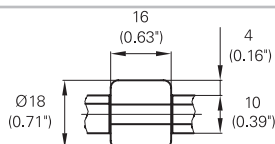
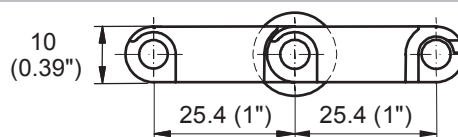
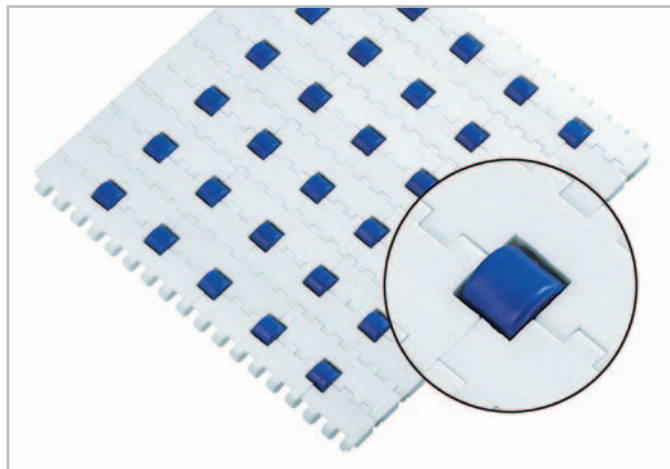
## M2520 Roller Top 1"



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### Description

- Roller lateral spacing see table belt data
- Rollers row spacing 50.8 mm (2")
- Roller dimensions  $\varnothing$  15 mm, 5 mm wide ( $\varnothing$  0.59" / 0.2") or  $\varnothing$  18 mm, 16 mm wide ( $\varnothing$  0.71" / 0.63")
- For low back pressure, wearstrips are placed between rollers
- For product driven application wearstrips are placed directly under the rollers
- High lateral stiffness
- Food approved materials
- Rod diameter 5 mm (0.2")



### Belt data

Belt material		POM		
Rod material		PA		
Roller material		POM		
Roller lateral spacing per row	mm / inch	66 / 2.6	50 / 2	50 / 2
Roller offset next row	mm / inch	33 / 1.3	0 / 0	0 / 0
Roller dimension diameter / width	mm inch	$\varnothing$ 15 / 5 $\varnothing$ 0.59 / 0.2	$\varnothing$ 15 / 5 $\varnothing$ 0.59 / 0.2	$\varnothing$ 18 / 16 $\varnothing$ 0.71 / 0.63
Nominal tensile strength $F'_N$ straight run	N/m lb/ft	24000 1644	26000 1781	21500 1473
Temperature range	°C °F	-40 - 90 -40 - 195	-40 - 90 -40 - 195	-40 - 90 -40 - 195
Belt weight $m_b$	kg/m <sup>2</sup> lb/sqft	8.4 1.72	8.4 1.72	8.4 1.72

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6

# Product Data Series M2500

M2520 Roller Top 1"



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## Standard range of belt widths $b_0$ and free edge

Belt width (mm) (nom.)	150	200	250	300	350	400	450	500	550	600	650	700	750	800	etc.
Belt width (inch) (nom.)	6	8	10	12	14	16	18	20	22	24	26	28	30	32	etc.
Roller lateral spacing per row 66 mm / offset next row with rollers 33 mm (roller Ø 15 / 5)															
Free edge (mm)	21.5/ 21.5	21.5/ 38.5	21.5/ 21.5	21.5/ 38.5	21.5/ 21.5	21.5/ 38.5	21.5/ 21.5	21.5/ 38.5	21.5/ 21.5	21.5/ 38.5	21.5/ 21.5	21.5/ 38.5	21.5/ 21.5	21.5/ 38.5	etc.
Free edge (inch)	0.8/ 0.8	0.8/ 1.5	0.8/ 0.8	0.8/ 1.5	0.8/ 0.8	0.8/ 1.5	0.8/ 0.8	0.8/ 1.5	0.8/ 0.8	0.8/ 1.5	0.8/ 0.8	0.8/ 1.5	0.8/ 0.8	0.8/ 1.5	etc.
Sprockets	3	5	6	8	9	11	12	14	15	17	18	20	21	23	etc.
Rollers (4 rows)	4	5	7	8	10	11	13	14	16	17	19	20	22	23	etc.
Roller lateral spacing per row 50 mm / offset next row with rollers 0 mm (roller Ø 15 / 5)															
Free edge (mm)	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	etc.
Free edge (inch)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	etc.
Sprockets	3	4	5	6	7	8	9	10	11	12	13	14	15	16	etc.
Rollers (4 rows)	4	6	8	10	12	14	16	18	20	22	24	26	28	30	etc.
Roller lateral spacing per row 50 mm / offset next row with rollers 0 mm (roller Ø 18 / 16)															
Free edge (mm)	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	etc.
Free edge (inch)	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	etc.
Sprockets	3	4	5	6	7	8	9	10	11	12	13	14	15	16	etc.
Rollers (4 rows)	4	6	8	10	12	14	16	18	20	22	24	26	28	30	etc.

Real belt widths are in most cases 0.1% to 0.3% wider.

**Standard belt widths** in increments of 50 mm (2"). Smallest possible width 200 mm (7.9").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M2500

## M2527 Minirib 1"



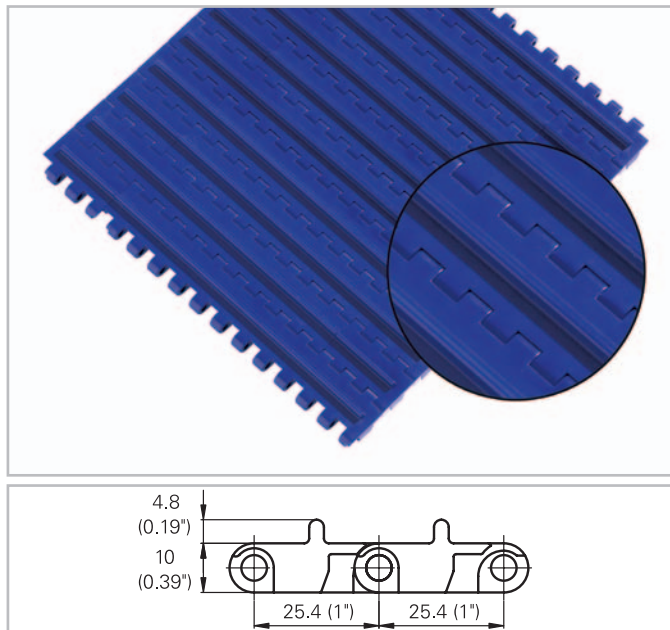
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### Description

- 0% open area
- High lateral stiffness
- Minirib 4.8 mm (0.19") height, indent 6.3 mm (0.25")
- Food approved materials
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Available accessories

- Hold down devices
- Flights
- GripTop modules



### Belt data

Belt material		PP	POM
Rod material		PP	PA
Nominal tensile strength	N/m	18000	32000
$F'_N$ straight run	lb/ft	1233	2192
Temperature range	°C	5 - 105	-40 - 90
	°F	40 - 220	-40 - 195
Belt weight $m_b$	kg/m <sup>2</sup>	6.9	10.4
	lb/sqft	1.41	2.13

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$

mm (nom.)	250	350	450	550	650	750	850	950	etc.
inch (nom.)	10	14	18	22	26	30	34	38	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 100 mm (4"). Non-standard widths are offered in increments of 16.66 mm (0.66"). Smallest possible width 150 mm (6").

**For material selection** refer to detailed material properties pages 10-16 and for colors see table page 30.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2500

## M2533 Flush Grid 1"



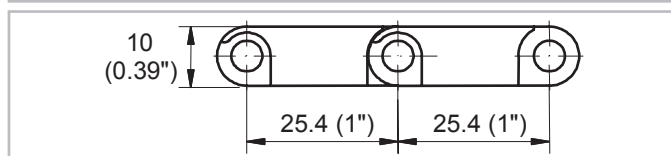
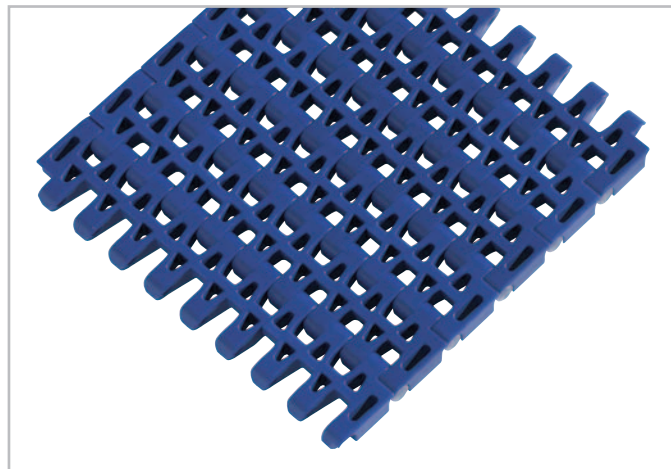
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### Description

- 35% open area; 60% open contact area; largest opening 5.5x7 mm (0.22"x0.28")
- Excellent for cooling and draining
- Open hinge
- Food approved materials
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Available accessories

- Flights
- Sideguards
- Hold down devices
- GripTop modules



### Belt data

Belt material		PP	PE	POM		PA +US	PA
Rod material		PP	PE	PP	PA		
Nominal tensile strength	N/m	14000	8000	18000	24700	20000	20000
F <sub>N</sub> straight run	lb/ft	959	548	1233	1692	1370	1370
Temperature range	°C	5 - 105	-70 - 65	5 - 90	-40 - 90	-46 - 116	-46 - 130
	°F	40 - 220	-94 - 150	40 - 195	-40 - 195	-50 - 240	-50 - 266
Temperature maximum (short-term)	°C					135	160
	°F					275	320
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	4.6	5.1	7.1	7.1	5.6	5.6
	lb/sqft	0.94	1.04	1.45	1.45	1.15	1.15

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	150	200	250	300	350	400	450	500	550	600	650	700	750	800	etc.
inch (nom.)	6	8	10	12	14	16	18	20	22	24	26	28	30	32	etc.

Real belt widths are in most cases 0.1 % to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66"). Smallest possible width 83.4 mm (3.25").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2500

M2533 Flush Grid 1"



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## Belt data for special belt materials

Belt material		PBT +FR		PP +FR		PA +GF	PA +HT	ST
Rod material		PP	PA	PP	PA	ST		
Sprocket material <sup>(1)</sup>		Standard				ST		
Belt width		Standard				see table		
Flammability classification UL 94 <sup>(2)</sup>		V0				HB		V0
Flammability classification ISO 340 <sup>(2)</sup>		yes		no				yes
Nominal tensile strength	N/m	14000	15000	9000	9000	20000	20000	10000
F' <sub>N</sub> straight run	lb/ft	959	1027	617	617	1370	1370	685
Temperature range	°C	5 - 105	-40 - 130	5 - 105	5 - 105	0 - 145	0 - 170	0 - 200
	°F	40 - 220	-40 - 266	40 - 220	40 - 220	32 - 293	32 - 338	32 - 392
Temperature maximum (short-term)	°C		150			175	200	240
	°F		302			347	392	464
Belt weight m <sub>B</sub>	kg/m²	7.6	7.6	5.6	5.6	7.7	7.7	8.7
	lb/sqft	1.56	1.56	1.15	1.15	1.54	1.54	1.78

<sup>(1)</sup> In most cases standard sprockets are suitable. Depending on the application requirements it may be necessary to select a different sprocket material like Polyamide, Polyurethane or Polypropylene. For Polyamide +HT, Polyamide +GF and Super High Temperature belt materials it is recommended to use sprockets of the Super High Temperature material.

<sup>(2)</sup> Flammability classification UL 94 and ISO 340 see Glossary pages 253 and 254.

## Belt width for Polyamide +GF, Polyamide +HT and Super High Temperature material

mm (nom.)	50.5	101.0	151.5	202.0	252.5	303.0	353.5	404.0	454.5	505.0	555.5	606.0	etc.
inch (nom.)	1.99	3.98	5.96	7.95	9.94	11.93	13.92	15.90	17.89	19.88	21.87	23.86	etc.

Real belt widths are in most cases 0.1 % to 0.3 % smaller.

## Dimension change due to moisture

For Polyamide the dimension change due to moisture adsorption needs to be considered. For detailed information refer to the Calculation Guide (page 238).

## Dimension change due to temperature

For detailed information and correct calculation of length and width at varying temperature refer to the Calculation Guide (page 237).

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2500

## M2533 GripTop 1"



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### Description

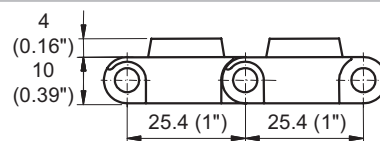
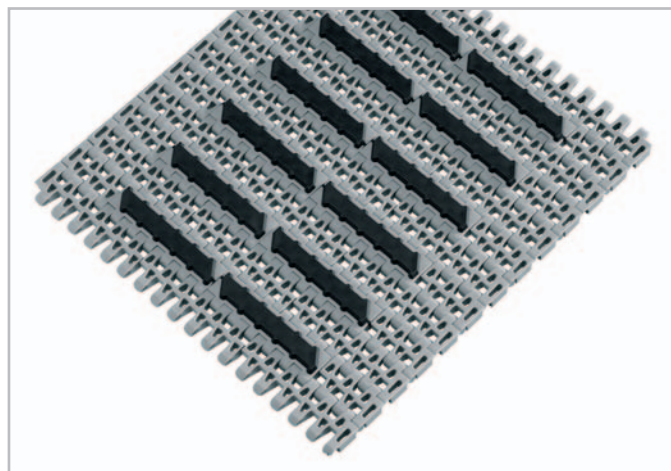
- Open area dependent on percentage of GripTop modules installed, as illustrated approx. 20%
- Food approved materials
- Abrasion resistant GripTop, high friction
- Rubber hardness: 50 shore A
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Proposed pattern

- Indent 50 mm (2")
- GripTop rows every 2nd, 4th, 6th module row (multiples of 50.8 mm (2"))

### Available accessories

- Flights
- Hold down devices



### Belt data

Belt material		PP				POM	
GripTop material		TPE					
Rod material		PP	POM	PP	POM	PP	PA
Nominal tensile strength	N/m	14000	14000	14000	14000	18000	22000
F <sub>N</sub> straight run	lb/ft	959	959	959	959	1233	1507
Temperature range	°C	5 - 60	5 - 60	5 - 60	5 - 60	5 - 60	-40 - 60
	°F	40 - 140	40 - 140	40 - 140	40 - 140	40 - 140	-40 - 140
Belt weight m <sub>B</sub>	kg/m²	6.5	6.5	6.5	6.5	9.3	9.3
	lb/sqft	1.34	1.34	1.34	1.34	1.91	1.91

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	etc.
inch (nom.)	8	12	16	20	24	28	32	36	40	43	47	51	55	59	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66"), minimum indent 33.3 mm (1.5").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M2500

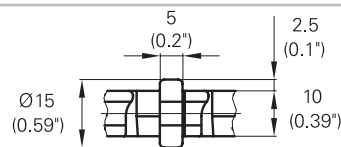
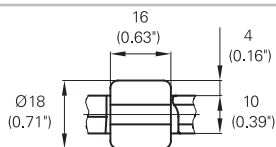
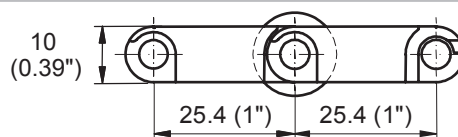
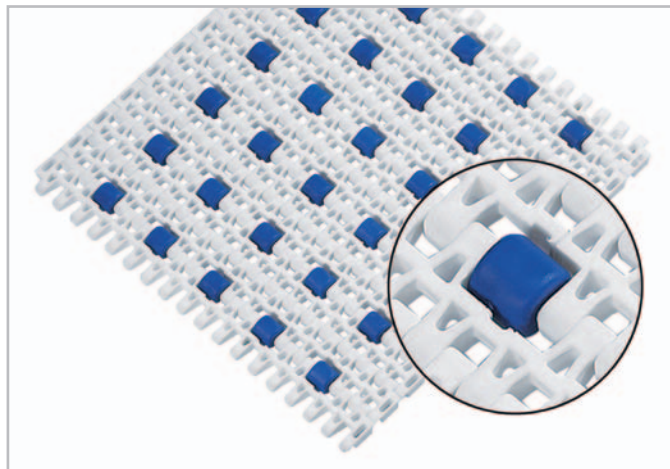
## M2533 Roller Top 1"



Edition 2007 - 88

### Description

- 35 % open area; largest opening 5.5x14 mm (0.22"x0.55")
- Roller lateral spacing see table belt data
- Rollers row spacing 50.8 mm (2")
- Roller dimensions Ø 15 mm, 5 mm wide (Ø 0.59" / 0.2") or Ø 18 mm, 16 mm wide (Ø 0.71" / 0.63")
- For low back pressure, wearstrips are placed between rollers
- For product driven application wearstrips are placed directly under the rollers
- Excellent for cooling and draining
- Open hinge
- Food approved materials
- Rod diameter 5 mm (0.2")



### Belt data

Belt material		POM		
Rod material		PA		
Roller material		POM		
Roller lateral spacing per row	mm / inch	66 / 2.6	50 / 2	50 / 2
Roller offset next row	mm / inch	33 / 1.3	0 / 0	0 / 0
Roller dimension diameter / width	mm inch	Ø 15 / 5 Ø 0.59 / 0.2	Ø 15 / 5 Ø 0.59 / 0.2	Ø 18 / 16 Ø 0.71 / 0.63
Nominal tensile strength $F'_N$ straight run	N/m lb/ft	18500 1267	20500 1404	16400 1123
Temperature range	°C °F	-40 - 90 -40 - 195	-40 - 90 -40 - 195	-40 - 90 -40 - 195
Belt weight $m_b$	kg/m <sup>2</sup> lb/sqft	7.1 1.45	7.1 1.45	7.1 1.45

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6

## Product Data Series M2500

M2533 Roller Top 1"



Edition 2007 - 89

**Standard range of belt widths  $b_0$  and free edge**

Belt width (mm) (nom.)	150	200	250	300	350	400	450	500	550	600	650	700	750	800	etc.
Belt width (inch) (nom.)	6	8	10	12	14	16	18	20	22	24	26	28	30	32	etc.
Roller lateral spacing per row 66 mm / offset next row with rollers 33 mm (roller Ø 15 / 5)															
Free edge (mm)	21.5/ 21.5	21.5/ 38.5	21.5/ 21.5	21.5/ 38.5	21.5/ 21.5	21.5/ 38.5	21.5/ 21.5	21.5/ 38.5	21.5/ 21.5	21.5/ 38.5	21.5/ 21.5	21.5/ 38.5	21.5/ 21.5	21.5/ 38.5	etc.
Free edge (inch)	0.8/ 0.8	0.8/ 1.5	0.8/ 0.8	0.8/ 1.5	0.8/ 0.8	0.8/ 1.5	0.8/ 0.8	0.8/ 1.5	0.8/ 0.8	0.8/ 1.5	0.8/ 0.8	0.8/ 1.5	0.8/ 0.8	0.8/ 1.5	etc.
Sprockets	3	5	6	8	9	11	12	14	15	17	18	20	21	23	etc.
Rollers (4 rows)	4	5	7	8	10	11	13	14	16	17	19	20	22	23	etc.
Roller lateral spacing per row 50 mm / offset next row with rollers 0 mm (roller Ø 15 / 5)															
Free edge (mm)	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	47.5	etc.
Free edge (inch)	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	etc.
Sprockets	3	4	5	6	7	8	9	10	11	12	13	14	15	16	etc.
Rollers (4 rows)	4	6	8	10	12	14	16	18	20	22	24	26	28	30	etc.
Roller lateral spacing per row 50 mm / offset next row with rollers 0 mm (roller Ø 18 / 16)															
Free edge (mm)	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	etc.
Free edge (inch)	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	etc.
Sprockets	3	4	5	6	7	8	9	10	11	12	13	14	15	16	etc.
Rollers (4 rows)	4	6	8	10	12	14	16	18	20	22	24	26	28	30	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Smallest possible width 200 mm (7.9").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2500

## M2585 Flush Grid 1"



Edition 2007 - 90

### Description

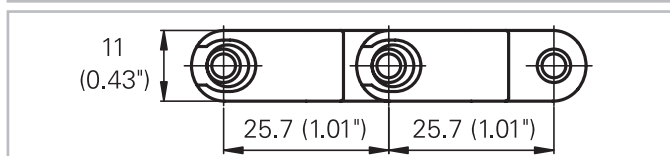
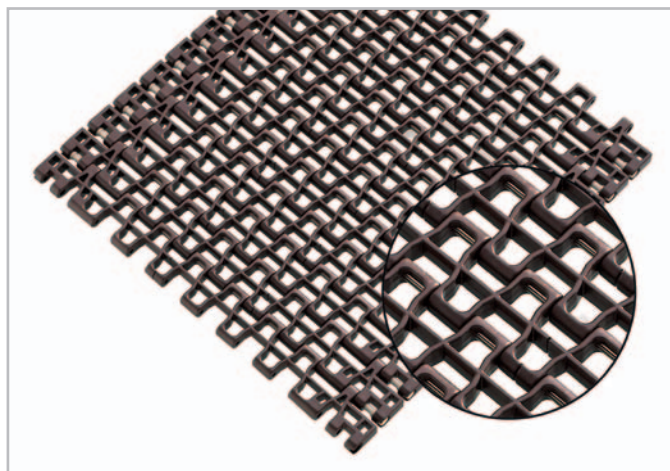
- Imperial belt width
- Excellent for cooling and draining
- Open hinge
- Superior cleanability
- Food approved materials
- Smart fit rod retention

Version -P0:

- Plastic rod Ø 5mm (0.2") (general applications)
- 48% open area; 88% open contact area; largest openings 10x12 mm (0.4"x0.5") and 4x17 mm (0.15"x0.67")

Version -S0:

- Plastic rodlets with steel floaters Ø 3.5mm (0.14") (high temperature applications)
- 54% open area; 91% open contact area; largest openings 10x12 mm (0.4"x0.5") and 4x17 mm (0.15"x0.67")



### Belt data for version -P0 (plastic rod)

Belt material		PP		POM	
Rod material		PP	POM	PA	PBT
Nominal tensile strength	N/m	9500	11000	15500	10300
F <sub>N</sub> straight run	lb/ft	651	754	1062	705
Temperature range	°C	5 - 105	5 - 90	-40 - 90	-40 - 90
	°F	40 - 220	40 - 195	-40 - 195	-40 - 195
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	4.2	4.2	6.4	6.4
	lb/sqft	0.85	0.85	1.31	1.31

Plastic rod diameter Ø 5 mm (0.2")

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	305	508	711	914	1117	1319	1522	1725	1928	etc.
inch (nom.)	12	20	28	36	44	52	60	68	76	etc.

**Standard belt widths** in increments of 203.2 mm (8"). Non-standard widths are offered in increments of 33.8 mm (1.3"). Smallest possible width 203.2 mm (8").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

## Belt data for version -S0 (plastic rodlets, steel floaters)

Belt material		PA +GF	PA +HT	ST
Rod material		ST / Steel		
Nominal tensile strength $F'_N$ straight run	N/m lb/ft	20000 1370	22000 1507	10000 685
Temperature range	°C °F	0 - 145 32 - 293	0 - 170 32 - 338	0 - 200 32 - 392
Temperature maximum (short-term)	°C °F	175 347	200 392	240 464
Belt weight $m_B$	kg/m <sup>2</sup> lb/sqft	8.0 1.64	8.0 1.64	9.2 1.88

Plastic rodlets Ø 5 mm (0.2") and steel floaters Ø 3.5 mm (0.14")

## Standard range of belt widths $b_0$

mm (nom.)	305	508	711	914	1117	1319	1522	1725	1928	etc.
inch (nom.)	12	20	28	36	44	52	60	68	76	etc.

**Standard belt widths** in increments of 203.2 mm (8"). Non-standard widths are offered in increments of 33.8 mm (1.3"). Smallest possible width 203.2 mm (8").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M2500

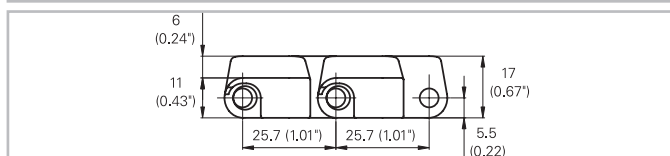
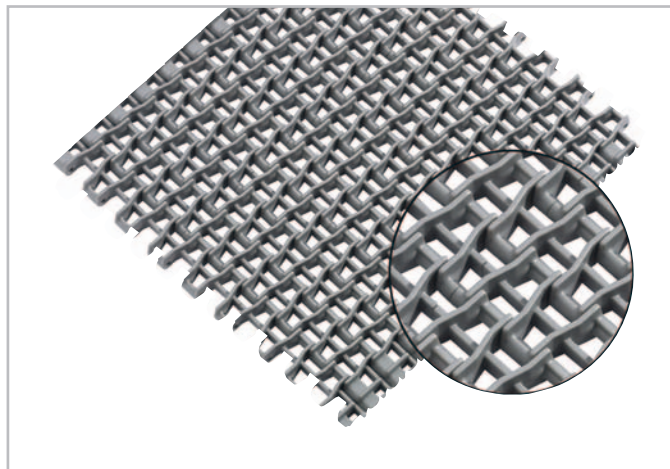
## M2586 Raised Rib 1"



Edition 2007 - 92

### Description

- Imperial belt width
- 47% open area; 70% open contact area; largest opening 10x12 mm (0.40"x0.50") and 4x17 mm (0.15"x0.67")
- Excellent for cooling and draining
- Open hinge
- Superior cleanability
- Food approved materials
- Rod diameter 5 mm (0.2")
- "Open window" sprockets



### Belt data

Belt material		PP
Rod material		PP
Nominal tensile strength	N/m	10000
F <sub>N</sub> straight run	lb/ft	685
Temperature range	°C	5 - 105
	°F	40 - 220
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	6.2
	lb/sqft	1.27

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	305	508	711	914	1117	1319	1522	1725	1928	etc.
inch (nom.)	12	20	28	36	44	52	60	68	76	etc.

**Standard belt widths** in increments of 203.2 mm (8"). Non-standard widths are offered in increments of 33.8 mm (1.3"). Smallest possible width 203.2 mm (8").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2500

## Flights and Sideguards Series M2500



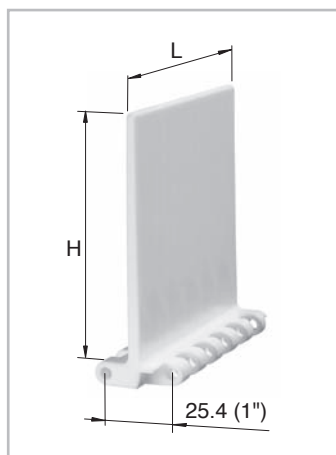
Edition 2007 - 93

HabasiLINK® Modular Belts are available with flights to convey products on inclined planes. The flight modules are injection molded one-piece designs that, when assembled, become an integral part of the belt.

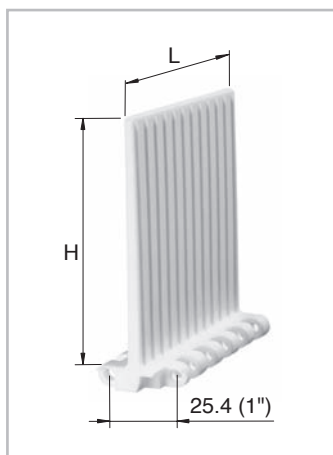
Flight modules are available with ribs on one side ("no-cling") for improved release of wet or sticky food products and can also be cut to non-standard heights.

	Flat Top flights straight open hinge (USDA)		Flat Top flights straight closed hinge		Flat Top flights bent (Scoop) open hinge (USDA)		Flush Grid flight corrugated open hinge (USDA)		Sideguards	
Code flight sideguard	M2510Fxx*		M2520Fxx*		M2510B07		M2533F07 M253JF07		M2520Gxx*	M252RGxx* M252LGxx*
Applicable for belt type	M2510 M2511		M2520 M2533		M2510 M2511		M2533		all 1" belts except M2531	
	height H	length L	height H	length L	height H	length L	height H	length L	height H	
mm	25	100	25	100	–	–	–	–	25	–
inch	1	4	1	4	–	–	–	–	1	–
mm	50	100	50	100	–	–	–	–	50	–
inch	2	4	2	4	–	–	–	–	2	–
mm	75	100	75	100	75	150	75	100	–	75
inch	3	4	3	4	3	6	3	4	–	3
mm	–	–	100	100	–	–	–	–	–	100
inch	–	–	4	4	–	–	–	–	–	4

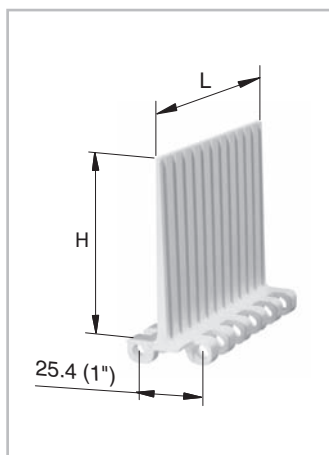
\*Code xx = height of flight: 25 mm = 02 50 mm = 05 75 mm = 07 100 mm = 10



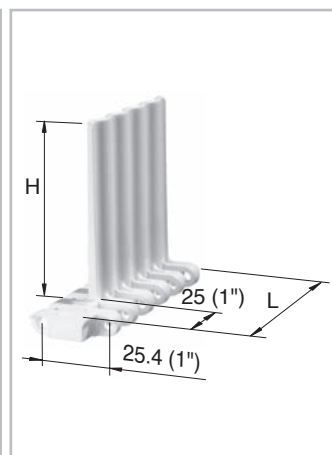
M2520Fxx  
smooth side



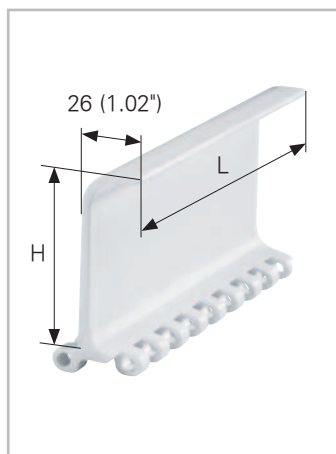
M2520Fxx  
"no-cling" side (ribs)



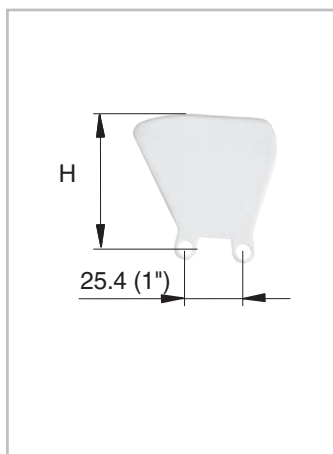
M2510Fxx  
open hinge; "no-cling" side



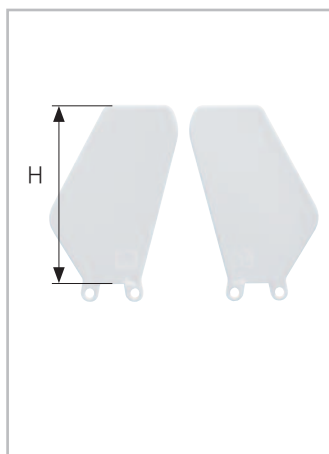
M253JF07, open hinge;  
indent flight, corrugated



M2510B07, Scoop  
open hinge  
rodasuino@rodasuino.com



M2520G05



M252RG/FG10

# Product Data Series M2500

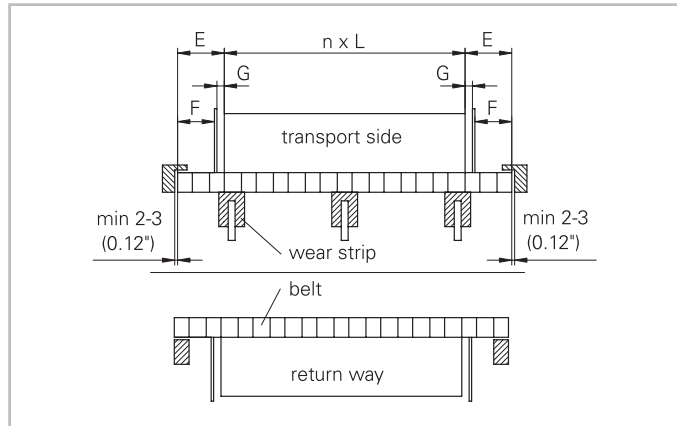
Flights and Sideguards Series M2500



Edition 2007 - 94

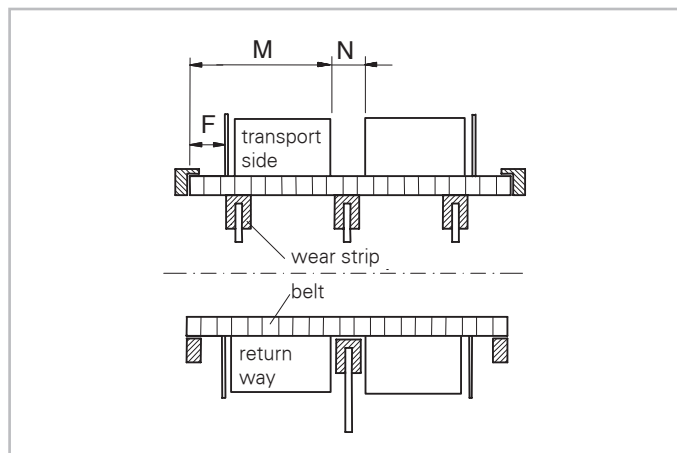
## Indents (E)

The flight indent  $E$  is the distance between the edge of the belt and the edge of flight, and  $F$  is the distance between belt edge and sideguard. It is required for adequate support of the belt on its return way and hold down during back-bending applications (elevators). On short conveyors or with special support structure, the flights may also be applied over the full belt width ( $E = 0$ ). (For the Flush Grid, flights edge modules with indents are available (fixed indent see illustration).)



## Notch (N)

The notch  $N$  is a gap in each row of flights, longitudinally aligned to allow the support of belts wider 600 mm (24") on its return way or in back-bending applications. The notch width ( $N$ ) and the distance  $M$  from belt edge is a multiple of the link increment 16.67 mm (0.66"). For M2500 series the minimum notch width is 33.3 mm (1.31").



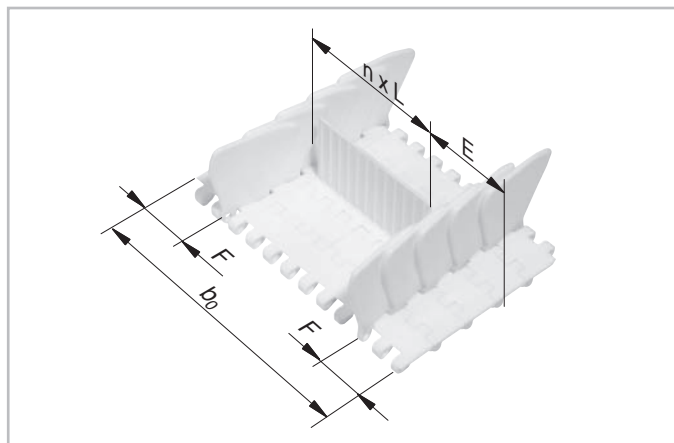
### Installation of flights and sideguards; indents

(For radius belts please refer to the specific data sheets.)

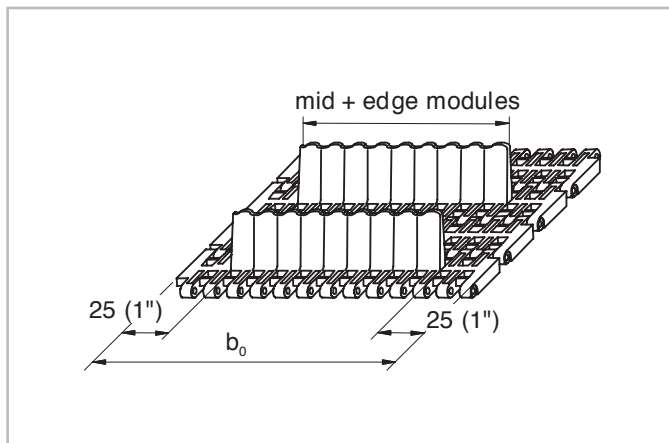
The sideguards are usually installed with a gap (G) between the sideguards and the flights. It is also possible to install the sideguards with a minimum gap

between flight and sideguard of approx. 2 mm (0.08"). There is a certain risk for rubbing and abrasion between the flights and the sideguards. The distance  $E_1$  between the sideguards and the hold down- and support-shoes/wearstrips should not be smaller than 5 mm (0.2"). For further details see Assembly Guide.

	Flight only		Possible flight indents E (not for M2533F05 edge flight)						Flight + Sideguard without gap (G ~2 mm (0.08"))			
	E		Flight + Sideguard with gap (G ~8 mm (0.3"))		F		E		F		inch	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Flight over full belt width	0	0	—	—	—	—	—	—	—	—	—	—
Module cutting necessary	33	1.3	33	1.3	16	0.65	33	1.3	25	1		
Standard, no module cutting	50	2	50	2	33	1.3	50	2	41	1.6		
Module cutting necessary	66	2.6	66	2.6	50	2	66	2.6	58	2.3		
Module cutting necessary	83	3.2	83	3.2	66	2.6	83	3.2	75	3		
Standard, no module cutting	100	4	100	4	83	3.2	100	4	93	3.7		



M2510 with flights M2510F05 and Sideguards M2520G05 (top view)



Flush Grid flight M2533F07 + M253JF07



M2510 with flights M2510F05 and Sideguards M2520G05 (bottom view)



# Product Data Series M2500

## M2531 Raised Rib 1"



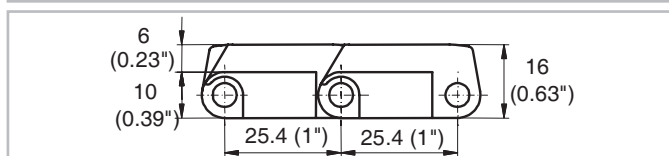
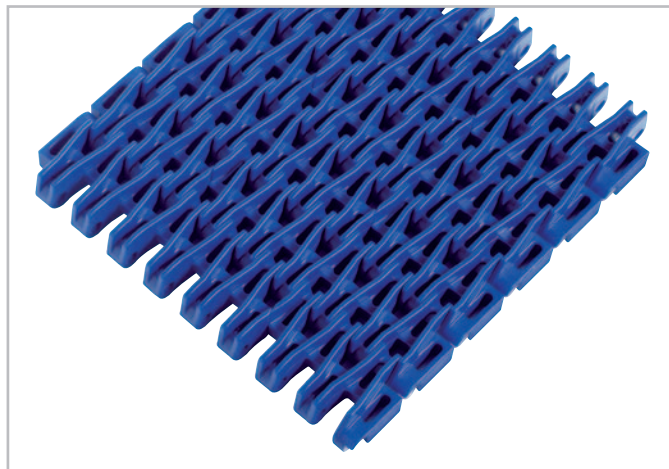
Edition 2007 - 96

### Description

- 35% open area; 75% open contact area; largest opening 5.5x7 mm (0.22"x0.28")
- Excellent for cooling and draining
- Food approved materials
- Rod diameter 5 mm (0.2")

### Available accessories

- Combs (finger transfer plates)



### Belt data

Belt material		PP		POM	
Rod material		PP		PA	
Nominal tensile strength	N/m	16000	19000	27000	
$F'_N$ straight run	lb/ft	1096	1300	1850	
Temperature range	°C	5 - 105	5 - 90	-40 - 90	
	°F	40 - 220	40 - 195	-40 - 195	
Belt weight $m_B$	kg/m <sup>2</sup>	6.8	10.4	10.4	
	lb/sqft	1.40	2.13	2.13	

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6

### Standard range of belt widths $b_0$

mm (nom.)	150	200	250	300	350	400	450	500	550	600	650	700	750	800	etc.
inch (nom.)	6	8	10	12	14	16	18	20	22	24	26	28	30	32	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66"). Smallest possible width 83.4 mm (3.25").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2500

## Data of Combs for M2531

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DISTRIBUIDOR OFICIAL.



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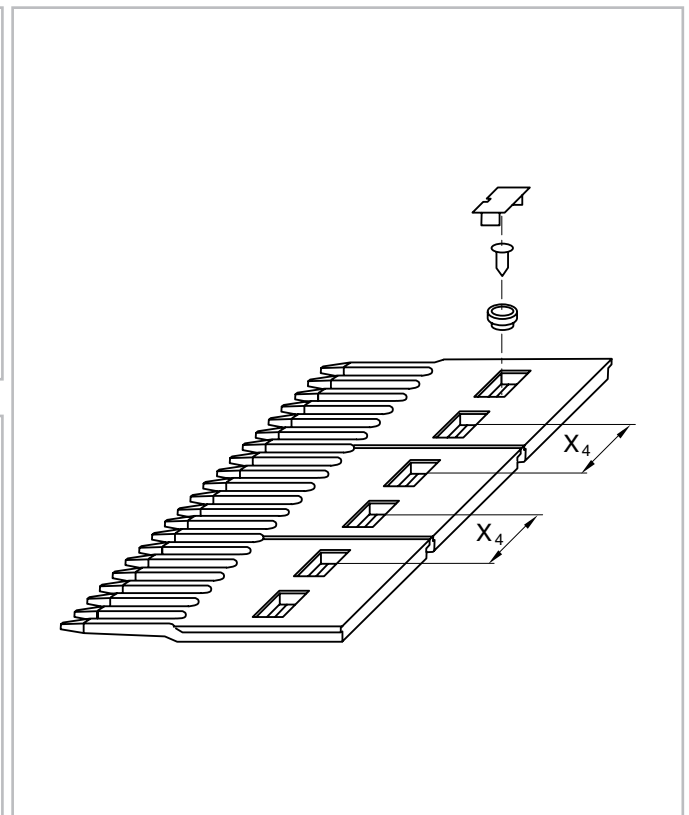
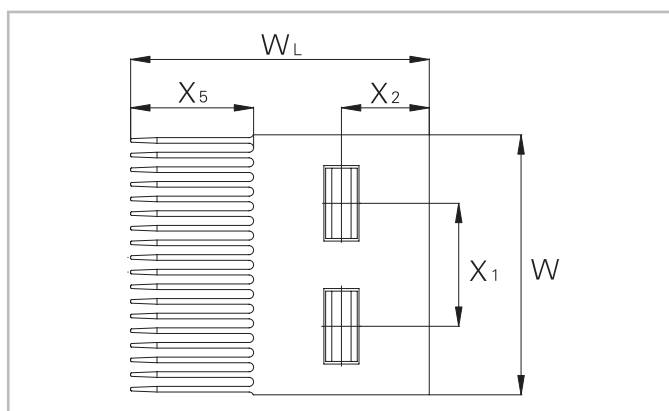
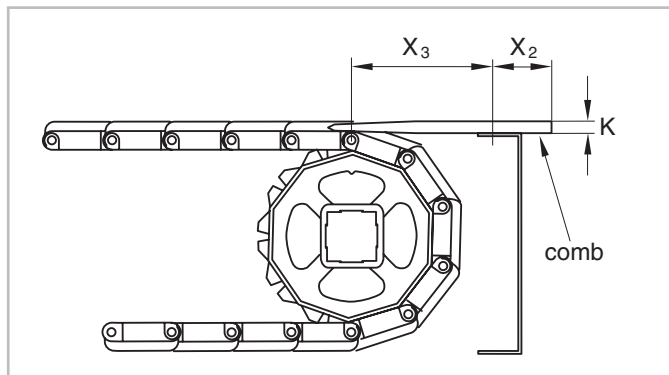
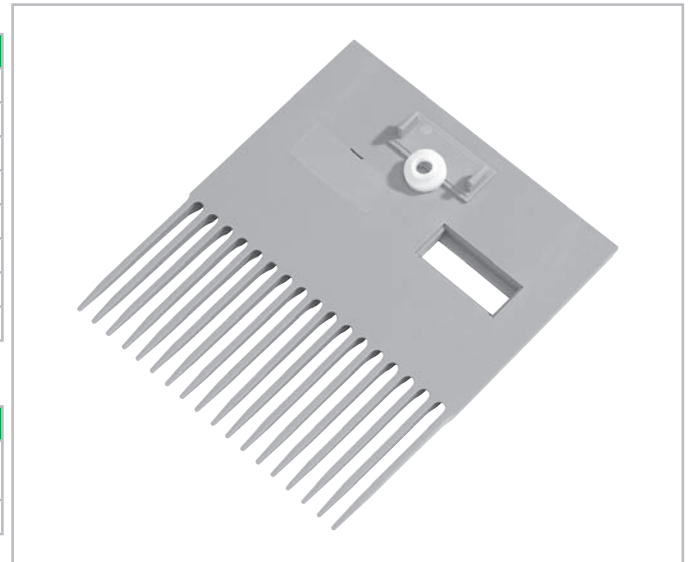
### Installation data

Dimensions	mm	inch
W	148	5.8
W <sub>L</sub>	170	7.5
X <sub>1</sub>	70	2.75
X <sub>2</sub>	50	2
X <sub>3</sub>	80 – 90	3.2 – 3.5
X <sub>4</sub>	80	3.2
X <sub>5</sub>	70	2.75
K	10	0.4

(Finger transfer plates)

Material	Acetal dry (wet)
Temperature °C	-40 – 90 (-40 – 60)
range °F	-40 – 195 (-40 – 140)
Color	grey

Other materials on request.



### Note

The combs are fixed using a special bushing that allows lateral movement. This allows the combs to adapt their position to the lateral displacement of the belt, caused by thermal expansion. For belt widths up to 300 mm (12"), the plates can be firmly fixed (2 plates max.).

# Product Data Series M2500

## M2540 Radius Flush Grid 1"



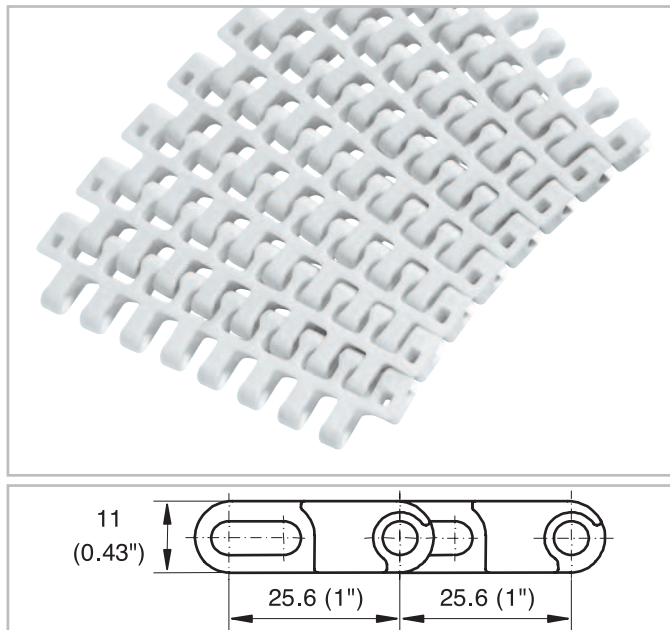
Edition 2007 - 98

### Description

- For radius and straight conveying (collapse factor 2.2)
- 35% open area; 53% open contact area; largest opening 6x12.5 mm (0.24"x0.49")
- Excellent for cooling and draining
- Easy to clean
- Food approved materials
- Rod diameter 5 mm (0.2")

### Available accessories

- Flights
- Sideguards
- Hold down devices
- GripTop modules
- Lane divider



### Belt data

Belt material		PP		POM	PA +US	PA
Rod material		POM	PA			
Nominal tensile strength	N/m	19000	19000	27000	25000	25000
$F'_N$ straight run	lb/ft	1300	1300	1850	1713	1713
Nominal tensile strength	N	1000	1000	1500	1300	1300
$F_N$ in curve <sup>(1)</sup>	lbf	225	225	338	293	293
Temperature range	°C	5 - 90	5 - 105	-40 - 90	-46 - 116	-46 - 130
	°F	40 - 195	40 - 220	-40 - 195	-50 - 240	-50 - 266
Temperature maximum (short-term)	°C				135	160
	°F				275	320
Belt weight $m_B$	kg/m <sup>2</sup>	4.7	4.7	7.0	6.0	6.0
	lb/sqft	0.96	0.96	1.44	1.23	1.23

<sup>(1)</sup> For  $b_0 > 300$  mm (12") higher values admissible. Refer to LINK-SeleCalc

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

## Product Data Series M2500

M2540 Radius Flush Grid 1"



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**Standard range of belt widths  $b_0$  and collapse factor  $Q$  ( $R_{min} = Q \times b_0$ )**

Belt width mm (nom.)	200	250	300	350	400	450	500	550	600	650	700	750	800	850
Belt width inch (nom.)	8	10	12	14	16	18	20	22	24	26	28	30	32	34
Coll. fact. Q	2.03	2.07	2.10	2.12	2.14	2.15	2.16	2.17	2.18	2.18	2.19	2.19	2.19	2.20
Belt width mm (nom.)	900	950	1000	1050	1100	1150	1200							
Belt width inch (nom.)	36	38	40	42	43	45	47							
Coll. fact. Q	2.20	2.20	2.21	2.21	2.21	2.21	2.21							

Belt widths larger than 1200 mm (48") are not recommended; *please contact Habasit*.  
Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66"). Smallest possible width 83.4 mm (3.25").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M2500

## M2540 Radius Flush Grid 1" MTW



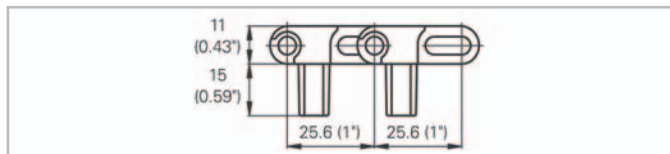
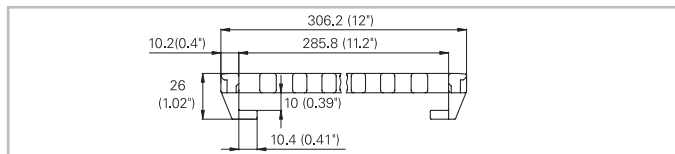
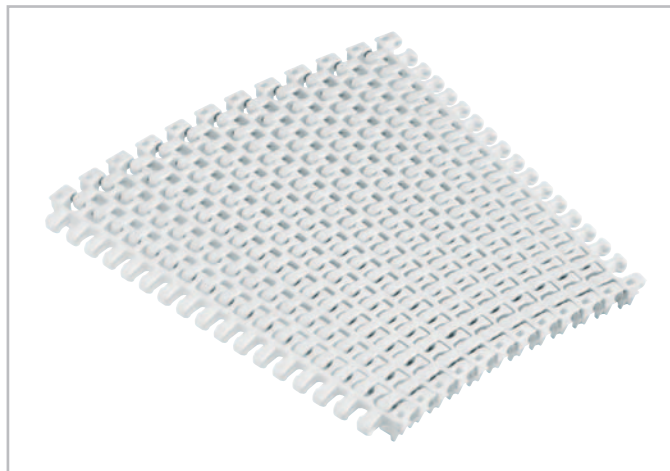
Edition 2007 - 100

### Description

- Mold to width radius belt 12" (306 mm) wide, for radius and straight conveying
- Collapse factor 2.1
- Hold down device on both edges
- 35% open area; 53% open contact area; largest opening 6x12.5 mm (0.24"x0.49")
- Excellent for cooling and draining
- Easy to clean
- Food approved materials
- Rod diameter 5 mm (0.2")
- Open window sprockets

### Available accessories

- Flights
- Sideguards



### Belt data

Belt material		PP		POM
Rod material		POM	PA	
Nominal tensile strength	N	5810	5810	8260
$F_N$ straight run	lb	1307	1307	1858
Nominal tensile strength	N	1000	1000	1500
$F_N$ in curve <sup>(1)</sup>	lbf	225	225	338
Temperature range	°C	5 - 90	5 - 105	-40 - 90
	°F	40 - 195	40 - 220	-40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	4.7	4.7	7.0
	lb/sqft	0.96	0.96	1.44

<sup>(1)</sup> The indicated nominal tensile strength refers to 12" (306 mm) belt width. For  $b_0 > 12"$  higher values admissible, please contact your Habasit representative.

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
50	2	100	4	40	1.6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$ and collapse factor $Q$ ( $R_{min} = Q \times b_0$ )

Belt width mm (nom.)	206	256	306	356	406	456	506	556	606
Belt width inch (nom.)	8	10	12	14	16	18	20	22	24
Collapse factor Q	2.03	2.07	2.10	2.12	2.14	2.15	2.16	2.17	2.18

Real belt widths are in most cases 0.1 % to 0.3 % smaller.

# Product Data Series M2500

## M2540 Radius GripTop 1"



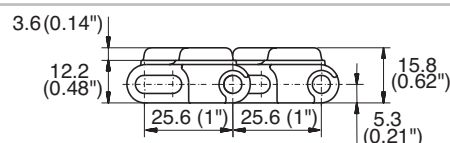
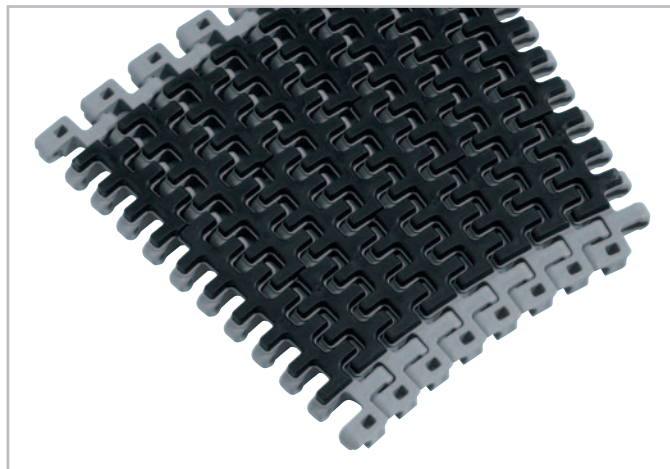
Edition 2007 - 102

### Description

- For radius and straight conveying, with inclines (collapse factor 2.2)
- 20% open area; largest opening 5x7.5 mm (0.2"x0.3")
- Indent 21 mm (0.83")
- Abrasion resistant GripTop, high friction
- Food approved materials
- Rod diameter 5 mm (0.2")
- "Open window" sprockets

### Accessories

- Clip-on sideguards



### Belt data

Belt material		PP	
GripTop material		TPE	
Rod material		POM	PA
Nominal tensile strength	N/m	19000	19000
$F'_N$ straight run	lb/ft	1300	1300
Nominal tensile strength	N	1000	1000
$F_N$ in curve <sup>(1)</sup>	lbf	225	225
Temperature range	°C	5 - 60	5 - 60
	°F	40 - 140	40 - 140
Belt weight $m_b$	kg/m <sup>2</sup>	6.4	6.4
	lb/sqft	1.31	1.31

<sup>(1)</sup> For  $b_0 > 300$  mm (12") higher values admissible. Refer to LINK-SeleCalc

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

## Product Data Series M2500

M2540 Radius GripTop 1"



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**Standard range of belt widths  $b_0$  and collapse factor  $Q$  ( $R_{min} = Q \times b_0$ )**

Belt width mm (nom.)	200	250	300	350	400	450	500	550	600	650	700	750	800	850
Belt width inch (nom.)	8	10	12	14	16	18	20	22	24	26	28	30	32	34
Coll. fact. $Q$	2.03	2.07	2.10	2.12	2.14	2.15	2.16	2.17	2.18	2.18	2.19	2.19	2.19	2.20
Belt width mm (nom.)	900	950	1000	1050	1100	1150	1200							
Belt width inch (nom.)	36	38	40	42	43	45	47							
Coll. fact. $Q$	2.20	2.20	2.21	2.21	2.21	2.21	2.21							

Belt widths larger 1200 mm (48") not recommended; *please contact Habasit.*

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66"). Smallest possible width 150 mm (5.9").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2500

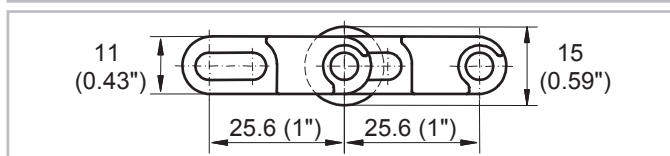
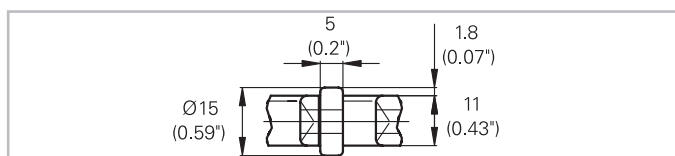
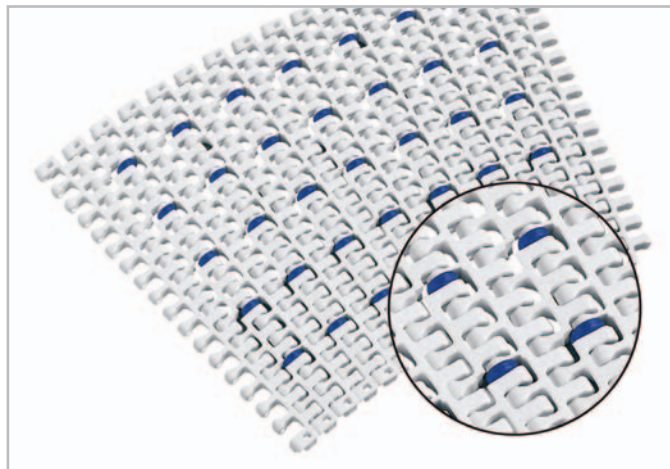
## M2540 Roller Top 1"



Edition 2007 - 104

### Description

- For radius and straight conveying
- Collapse factor 2.2 (unchanged)
- 35 % open area; largest opening 6x12.5 mm (0.24"x0.49")
- Roller lateral spacing 50 mm (2")
- Minimum free edge 42 mm (1.6")
- Rollers row spacing 50.8 mm (2")
- For low back pressure, wearstrips are placed between rollers
- For product driven application wearstrips are placed directly under the rollers
- Excellent for cooling and draining
- Food approved materials
- Rod diameter 5 mm (0.2")



### Belt data

Belt material		POM
Rod material		PA
Roller material		POM
Roller lateral spacing per row	mm / inch	50 / 2
Roller dimension diameter / width	mm inch	Ø 15 / 5 Ø 0.59 / 0.2
Nominal tensile strength $F'_N$ straight run	N/m lb/ft	22000 1507
Nominal tensile strength $F_N$ in curve <sup>(1)</sup>	N lbf	1200 270
Temperature range	°C °F	-40 - 90 -40 - 195
Belt weight $m_b$	kg/m <sup>2</sup> lb/sqft	7.0 1.44

<sup>(1)</sup> For  $b_0 > 300$  mm (12") higher values admissible. Refer to LINK-SeleCalc

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6

# Product Data Series M2500

M2540 Roller Top 1"



Edition 2007 - 105

## Standard range of belt widths $b_0$ , free edge and collapse factor $Q$ ( $R_{min} = Q \times b_0$ )

Belt width mm (nom.)	200	250	300	350	400	450	500	550	600	650	700	750	800	850	etc.
Belt width inch (nom.)	8	10	12	14	16	18	20	22	24	26	28	30	32	34	etc.
Coll.fact. Q	2.03	2.07	2.10	2.12	2.14	2.15	2.16	2.17	2.18	2.18	2.19	2.19	2.19	2.20	etc.
Free edge mm	42/52	42/52	42/52	42/52	42/52	42/52	42/52	42/52	42/52	42/52	42/52	42/52	42/52	42/52	etc.
Free edge inch	1.7/2	1.7/2	1.7/2	1.7/2	1.7/2	1.7/2	1.7/2	1.7/2	1.7/2	1.7/2	1.7/2	1.7/2	1.7/2	1.7/2	etc.
Sprocket offset mm	29.1	4.2	29.1	4.2	29.1	4.2	29.1	4.2	29.1	4.2	29.1	4.2	29.1	4.2	etc.
Sprocket offset inch	1.1	0.2	1.1	0.2	1.1	0.2	1.1	0.2	1.1	0.2	1.1	0.2	1.1	0.2	etc.
Sprockets	4	5	6	7	8	9	10	11	12	13	14	15	16	17	etc.
Rollers (2 rows)	3	4	5	6	7	8	9	10	11	12	13	14	15	16	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Smallest possible width 200 mm (7.9").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M2500

## Hold Down Modules for M2540



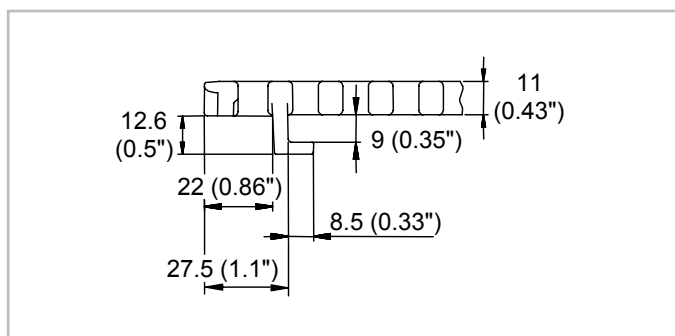
Edition 2007 - 106

To avoid the belt flipping over or slipping off the inner guide rail in the curve, hold down guides are normally used. They are however not suitable if the conveyed goods are larger than the belt width or if side transfer over the belt edge is required. For these cases special modules equipped with hold down tabs (hook modules) are available for both belt edges.

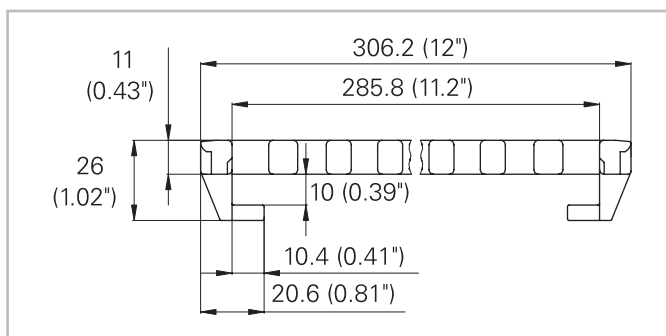
### Hold down edge modules

#### M2540Hxx\* and M2540 MTW

Hold down tabs are used for all applications where the products must be able to move over the belt edge. The use of hold down modules is also mandatory when applying sideguards.



M2540Hxx



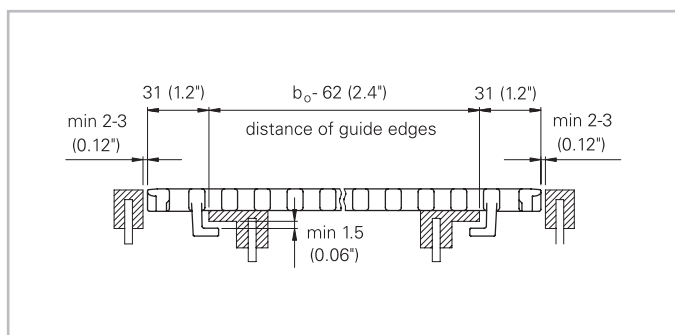
M2540 MTW

### Installation

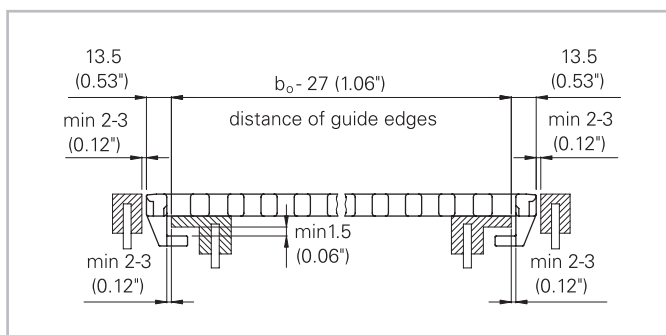
Make sure to keep clearance between guides, sprockets and hold down devices. They are meant to act as lift-off safety devices and not as guides! They will, if in contact with the guides, wear off quickly and may increase the tension in the belt.

For these reasons the conveyor needs to be designed with the appropriate accuracy.

Minimum belt width 150 mm (6") (2 Sprockets) for use of hold down edge modules and 250 mm for hold down middle modules.



M2540Hxx

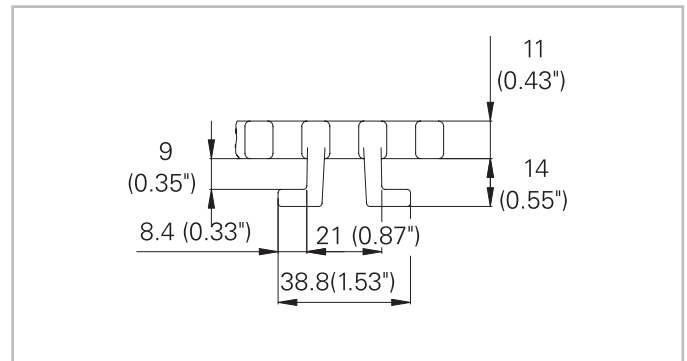


M2540 MTW

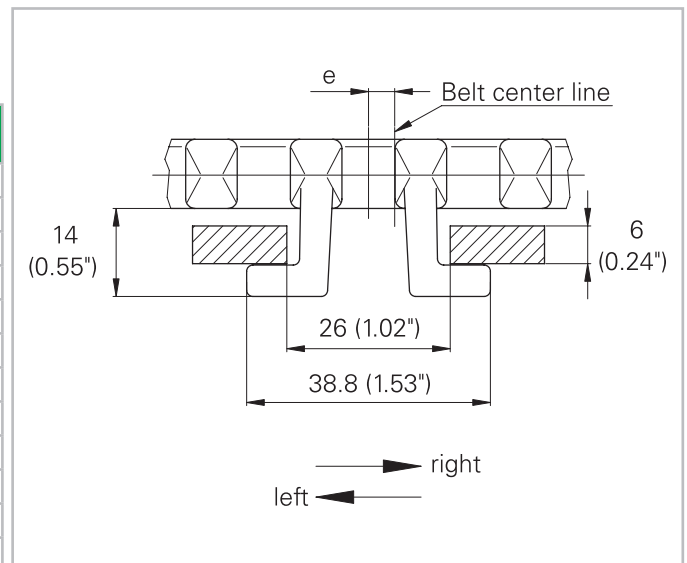
### Hold down middle module (M2540V00)

For elevators with back-bending (Z-conveyors) hold down devices are needed to keep the belt down when it is changing from horizontal to inclined direction. For wide belts (e. g. > 600 mm (23.5") wide) slider shoes on the belt edge are often not sufficient to keep it on the track. In such cases hold down devices on the bottom side of the belt are used every second row to guide it through the back-bending curve. For belt width 300 mm + n \* 100 mm the hook is placed in the belt center. For belt width 250 mm + n \* 100 mm the hook has an offset of 25 mm left or right to the belt center. Please see Table below. The indicated offset refers to the belt pattern according to the assembly guide.

Belt width	Offset e	running direction A	running direction B
300	0	—	—
350	25	to the left	to the right
400	0	—	—
450	25	to the left	to the right
500	0	—	—
550	25	to the left	to the right
600	0	—	—
650	25	to the left	to the right
700	0	—	—
750	25	to the left	to the right
800	0	—	—
850	25	to the left	to the right
900	0	—	—



M2540V00



M2540V00

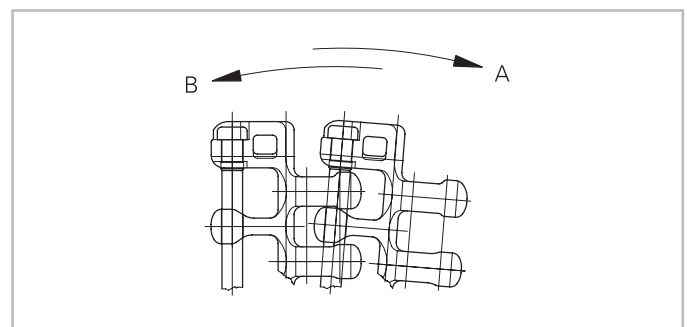
### Sprocket sizes

The combination sprocket/shaft size has to be selected in such a way to avoid collision of the hold down tabs with the shaft. Minimum sprocket sizes: M25S1002Q, M25S1030R, M25S1240Q.

### Note

The hold down tabs are not recommended to be used for radial guidance. They can be worn away too quickly. Also, they should not be used to hang-up the belt on its return way.

Further design indications see Design Guide Radius Belts and Slider Support Systems.



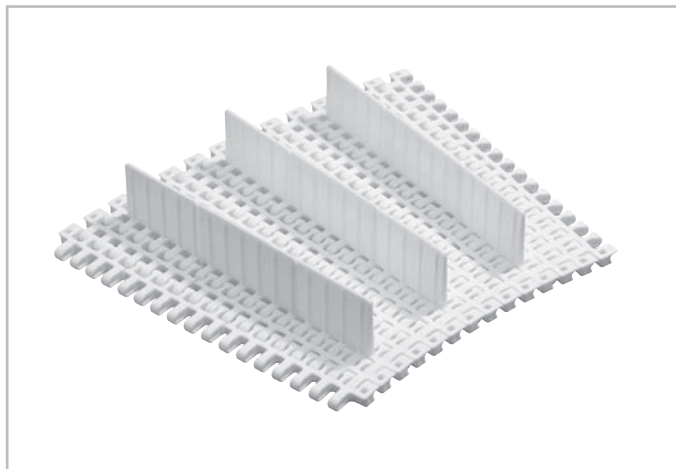
\* available edge module length same as with standard edge module

# Product Data Series M2500

## Flights and Sideguards M2540



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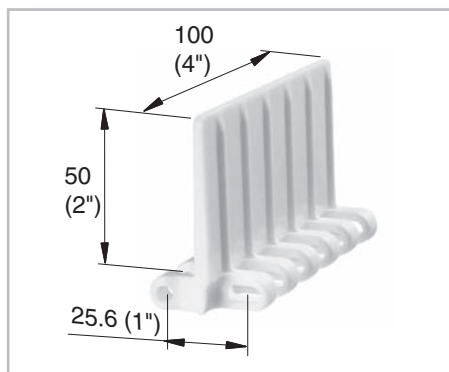


M2540 with middle and edge flights

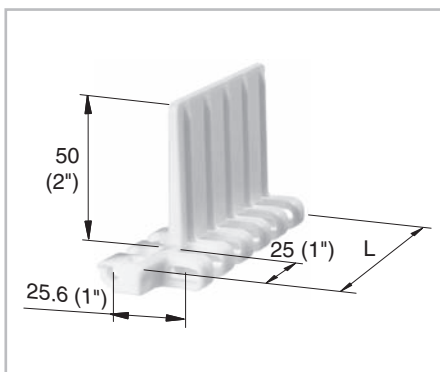


M2540 with sideguards and lane divider

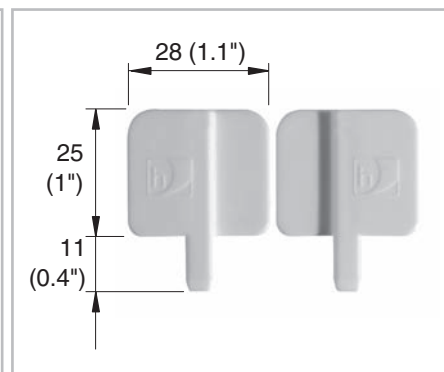
Flights are available in 50mm (2") height, sideguards and lane dividers in 25mm (1") height, see illustrations below. Flights are available with ribs on one side for better release of wet or sticky food products ("no-cling"). They can be cut to specific width and height if required. The collapse factor remains unchanged.



**Middle flight**  
M2540F05



**Edge flight**  
M254RF05 (right side)  
M254LF05 (left side)



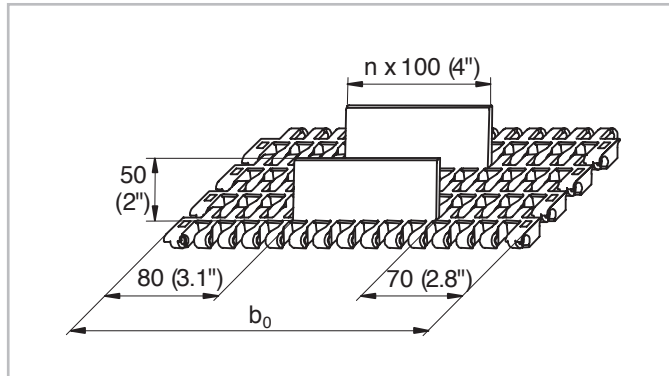
**Sideguards**  
M254RG02 (right side)  
M254LG02 (left side)

### Standard range of belt widths $b_0$ for belts with flights

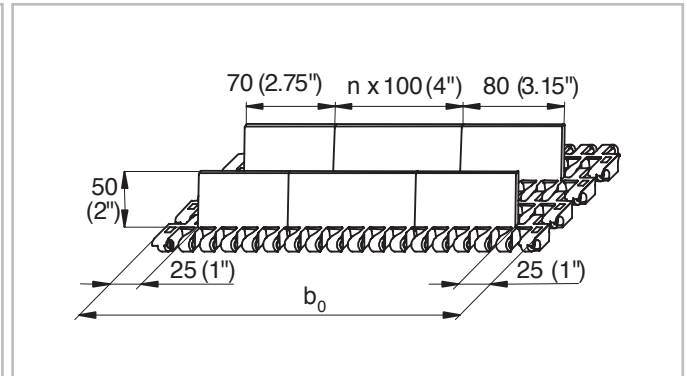
mm	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	etc.
inch (nom.)	8	12	16	20	24	28	32	36	40	44	48	52	56	60	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

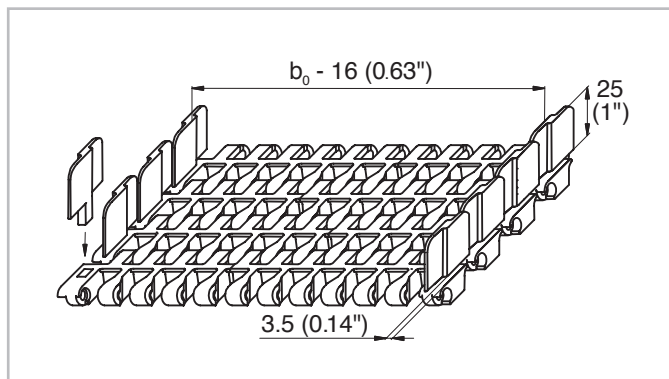
### Assembly conceptions for M2540 Radius Belt Flights and Sideguards



Middle flights only



Middle and edge flights



Sideguards only (clip-on version)

### Standard indents

The combination of flights and sideguards is possible, but not recommended. With sideguards hold down modules must be used. On the return way the belt has to be supported either on the flights or between flights and sideguards (gap only 15 mm (0.6'') wide). Do not support or guide the belt on the hold down tabs.

	left belt edge (running direction)	right belt edge (running direction)
Middle flights only (no indent flights)	70 mm (2.8'')	80 mm (3.1'')
Middle flights and indent flights	25 mm (1'')	25 mm (1'')
Sideguards	3.5 mm (0.14'')	3.5 mm (0.14'')

# Product Data Series M2500

## M2543 Tight Radius 1"



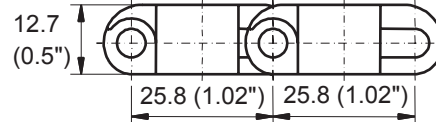
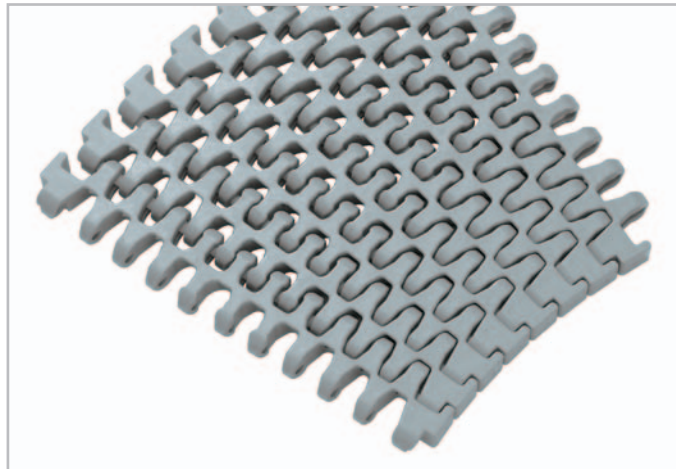
Edition 2007 - 110

### Description

- For radius and straight conveying, ideal for applications with limited space (collapse factor 1.6)
- 35% open area; 57% open contact area; largest opening 7.5x10 mm (0.3"x0.4")
- Excellent for cooling and draining
- Easy to clean
- Food approved materials
- Rod diameter 5 mm (0.2")

### Contact Habasit for accessories

- Flights
- GripTop modules
- Lane divider



### Belt data

Belt material		PP		POM
Rod material		POM	PA	POM
Nominal tensile strength	N/m	14000	14000	20000
$F'_N$ straight run	lb/ft	959	959	1370
Nominal tensile strength	N	400	400	800
$F_N$ in curve <sup>(1)</sup>	lbf	90	90	180
Temperature range	°C	5 - 90	5 - 105	-40 - 90
	°F	40 - 195	40 - 220	-40 - 195
Belt weight $m_b$	kg/m <sup>2</sup>	5.5	5.5	7.6
	lb/sqft	1.13	1.13	1.56

<sup>(1)</sup> For  $b_0 > 600$  mm (23.6") higher values admissible. Refer to LINK-SeleCalc

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6

### Standard range of belt widths $b_0$ and collapse factor $Q$ ( $R_{min} = Q \times b_0$ )

Belt width mm (nom.)	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950
	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38
Coll. fact. Q	1.43	1.47	1.50	1.52	1.54	1.55	1.56	1.57	1.59	1.61	1.63	1.64	1.65	1.67	1.67
Belt width mm (nom.)	1000	1050	1100	1150	1200										
Belt width inch (nom.)	40	42	43	45	47										
Coll. fact. Q	1.68	1.69	1.70	1.71	1.71										

Belt widths larger than 1200 mm (48") are not recommended. The collapse factor for belts assembled with accessories may be different. *Please contact Habasit.*

Real belt widths are in most cases 0.1% to 0.3% smaller.



# Product Data Series M2500

M2543 Tight Radius 1"



Edition 2007 - 111

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 16.66 mm (0.66"). Smallest possible width 200 mm (7.9").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 30 or contact your Habasit representative.

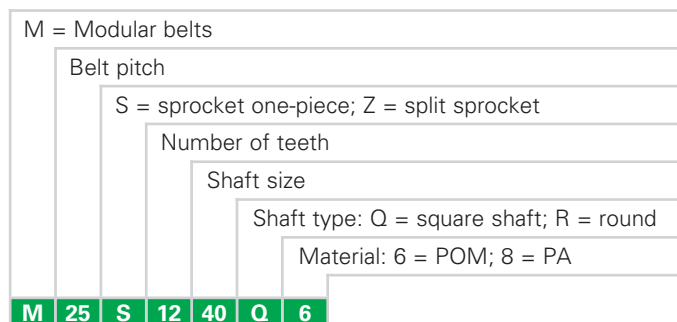
**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2500

## Sprocket Series M2500



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### Sprocket availability

Type	Number of teeth	Diameter of pitch $\varnothing d_p$		$A_1$		Hub width $B_L$		Square bore Q		$\varnothing$ Round bore R		Standard material
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
S	7	59.4	2.3	24.7	0.97	20	0.79	-	1	-	-	POM
S	8	66.7	2.6	28.3	1.12	30	1.18	25	-	30	$1 / 1 \frac{3}{16}$	POM
S	10	82.5	3.3	36.3	1.43	30	1.18	40	$1 / 1.5$	30	$1 / 1 \frac{3}{16}$	POM
S	12	98.6	3.9	44.3	1.74	30	1.18	40	$1 / 1.5$	30 / 40	$1 / 1 \frac{3}{16}$	POM
S	15	122.7	4.8	56.4	2.22	30	1.18	60	-	-	-	POM
S	16	130.8	5.2	60.4	2.38	30	1.18	40	1.5	-	-	POM
S	18	146.9	5.8	68.4	2.69	30	1.18	40 / 60	$1.5 / 2.5$	30	$1 / 1 \frac{3}{16}$	POM
S	20	163.0	6.4	76.5	3.01	30	1.18	40 / 60	$1.5 / 2.5$	30	$1 / 1 \frac{3}{16}$	POM
Z	12	98.6	3.9	44.3	1.74	45	1.77	40	1.5	-	-	POM
Z	18	146.9	5.8	68.4	2.69	45	1.77	40 / 60	$1.5 / 2.5$	-	-	POM
Z	20	163.0	6.4	76.5	3.01	45	1.77	40	1.5	-	-	POM

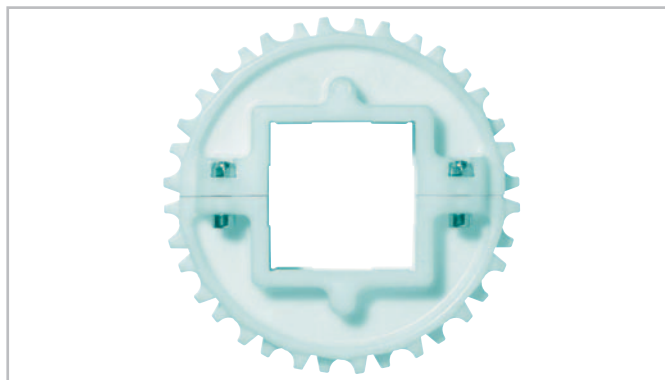
S, Z: molded sprockets. Other sprocket and hub sizes on request.

**Key ways** for round bore shape follow European standards for metric sizes and US standards for imperial sizes. For detailed dimensions see table in the Design Guide.

**Other materials** available on request.

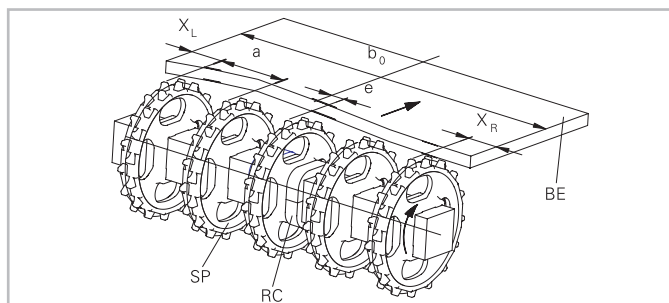
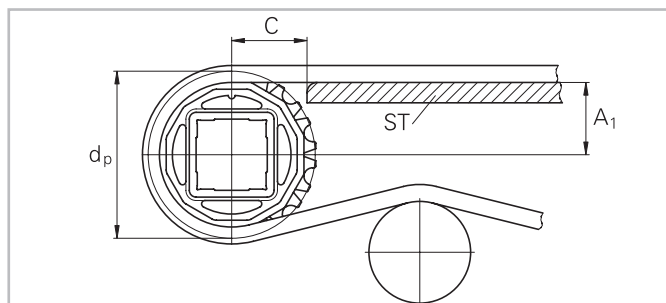


Sprocket one-piece ("open window")



Split sprocket

### Sprocket arrangement

**BE** Belt**RC** Retainer**SP** Sprocket**b<sub>0</sub>** Belt width

The distance **C** between the sprocket axis and the slider support **ST** is minimal 28 mm (1.1").

### Wearstrips

Between driving shaft and idling sprockets or rollers the belt is carried by a slider support furnished with longitudinal wearstrips (ST) from UHMW Polyethylene or other suitable material.

# Product Data Series M2500

## Sprocket Series M2500



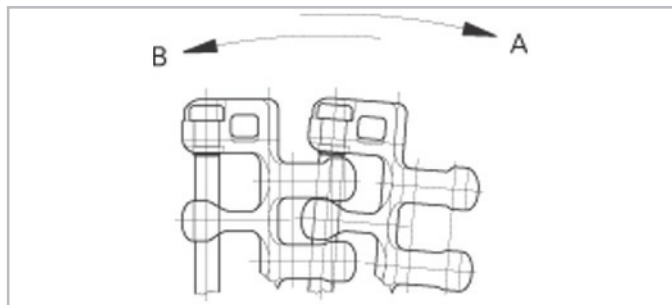
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### Sprocket positioning

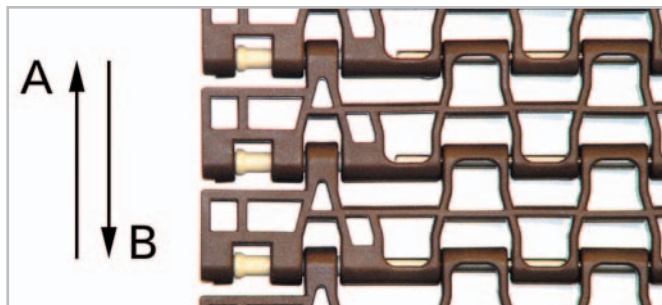
For correct positioning of the center sprocket divide the belt width by the link increment. The rounded result will be even or an odd number. These numbers are the criteria for offset or no offset, see table:

Belt type	Sprocket spacing a		Sprocket edge distance (minimal) *		Criteria for center sprocket position	Result of formula (rounded)	Offset e	Remarks
	minimal	maximal	$X_L$	$X_R$				
	mm inch	mm inch	mm inch	mm inch	mm inch		mm inch	Offset to which side
Series M2500 except M2540/43 except M2585/86	50 2	100 4	25 1	25 1	$b_0 / 16.66$ $b_0 / 0.66$	even number (2, 4, 6 ...)	8.3 0.33	right or left side
						odd number (3, 5, 7 ...)	0 0	no offset
M2540	50 2	117 4.6	21 0.8	29 1.15	$b_0 / 16.66$ $b_0 / 0.66$	even number (2, 4, 6 ...)	4.2 0.17	right in running direction A left in running direction B
						odd number (3, 5, 7 ...)	4.2 0.17	left in running direction A right in running direction B
M2540 with hold down tabs	50 2	117 4.6	54 2.13	62 2.44	$b_0 / 16.66$ $b_0 / 0.66$	even number (2, 4, 6 ...)	4.2 0.17	right in running direction A left in running direction B
						odd number (3, 5, 7 ...)	4.2 0.17	left in running direction A right in running direction B
M2540 MTW mold to width and bricklaid	50 2	117 4.6	41 1.6	49 1.93	$b_0 / 16.66$ $b_0 / 0.66$	even number (2, 4, 6 ...)	4.2 0.17	right in running direction A left in running direction B
						odd number (3, 5, 7 ...)	4.2 0.17	left in running direction A right in running direction B
M2543	50 2	117 4.6	26 1	35 1.38	$b_0 / 16.66$ $b_0 / 0.66$	even number (2, 4, 6 ...)	4.2 0.17	right in running direction A left in running direction B
						odd number (3, 5, 7 ...)	4.2 0.17	left in running direction A right in running direction B
M2585-P0 M2586	67 2.66	135 5.3	42 1.65	59 2.32	$b_0 / 33.8$ $b_0 / 1.33$	even number (2, 4, 6 ...)	8.3 0.33	right in running direction A left in running direction B
						odd number (3, 5, 7 ...)	8.3 0.33	left in running direction A right in running direction B
M2585-S0	67 2.66	135 5.3	76 3	59 2.32	$b_0 / 33.8$ $b_0 / 1.33$	even number (2, 4, 6 ...)	8.3 0.33	right in running direction A left in running direction B
						odd number (3, 5, 7 ...)	8.3 0.33	left in running direction A right in running direction B

\*  $X_L$  and  $X_R$  are related to the running direction A and inverse for running direction B.



M2450, left edge  $X_L$  (M2543 similar)



M2585-S0, left edge  $X_L$  (M2585-P0, M2586 similar)

# Product Data Series M2500

## Sprocket Series M2500



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### Number of sprockets and wearstrips for straight running belts

(excluding M2585 / 86: see separate table)

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch	min. number	Carryway (top)	Returnway (bottom)
150	6	2	2	2
200	8	2	2	2
250	10	3	3	2
300	12	3	3	2
350	14	3	4	3
400	16	3	4	3
450	18	5	4	3
500	20	5	5	3
550	22	5	5	3
600	24	5	5	3
700	28	7	6	4
800	32	7	7	4
900	36	9	7	4
1000	40	9	8	5
1100	43	11	8	5
1200	47	11	9	5
1300	51	13	10	6
1400	55	13	10	6
1600	63	15	11	6
1800	71	17	12	7
2000	79	19	13	7

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.



# Product Data Series M2500

Sprocket Series M2500



Edition 2007 - 116

## Number of sprockets and wearstrips for radius belts N2540, M2543

Standard belt width (nominal)		Number of sprockets per shaft min. number	Number of wearstrips	
mm	inch		Carryway (top)	Returnway (bottom)
150	6	2	2	2
200	8	2	2	2
250	10	2	3	2
300	12	3	3	2
350	14	3	3	3
400	16	3	3	3
450	18	3	3	3
500	20	3	4	3
550	22	5	4	3
600	24	5	4	3
700	28	5	5	4
800	32	7	5	4
900	36	7	5	4
1000	40	9	6	5
1100	43	9	6	5
1200	47	9	7	5

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

## Number of sprockets and wearstrips for radius belts M2540 and M2543 with hold down tabs

Standard belt width (nominal)		Number of sprockets per shaft min. number	Number of wearstrips	
mm	inch		Carryway (top)	Returnway (bottom)
150	6	1	2	2
200	8	2	2	2
250	10	2	3	2
300	12	2	3	2
350	14	3	3	3
400	16	3	3	3
450	18	3	3	3
500	20	3	4	3
550	22	3	4	3
600	24	5	4	3
700	28	5	5	4
800	32	5	5	4
900	36	7	5	4
1000	40	9	6	5
1100	43	9	6	5
1200	47	9	7	5

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

## Number of sprockets and wearstrips for radius belts M2540 Radius Flush Grid 1" MTW (mold to width and bricklaid)

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch		Carryway (top)	Returnway (bottom)
206	8.11	2	2	2
256	10.08	2	3	2
306*	12.05	3	3	2
406	16	3	3	3
506	19.9	5	4	3
606	23.85	5	4	3

\* The belt width 306 mm (12.05") is a non-cut standard mold to width belt. All other belt widths are cut sizes.

## Number of sprockets and wearstrips for M2585, M2586

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch		Carryway (top)	Returnway (bottom)
305	12	2	2	2
508	20	3	3	2
711	28	5	4	2
914	36	7	6	3
1117	44	7	8	3
1319	52	9	10	4
1522	60	11	10	4
1725	68	13	12	7
1928	76	13	12	7
2131	84	15	13	8
2333	92	17	16	8
2536	100	19	18	9

The number of sprockets depends on the belt load and may be different for driving and idling shafts. For calculation of correct sprocket number please use LINK-SeleCalc.

# Product Data Series M2500

## Sprocket Series M2500-C2 (M2585/86)



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M = Modular belts

Belt pitch

S = sprocket one-piece; Z = split sprocket

Number of teeth

Shaft size

Shaft type: Q = square shaft; R = round

Material: 6 = POM; 8 = PA

**M 25 S 12 40 Q 6**

### Sprocket availability

Type	Number of teeth	Diameter of pitch $\varnothing d_p$		$A_1$		Hub width $B_L$		Square bore Q		Ø Round bore R		Standard material
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
S-C2	7	59.6	2.4	24.3	0.96	25	0.98	-	1	-	-	PA
S-C2	8	67.7	2.7	28.4	1.12	25	0.98	25	-	30	$1 / 1 \frac{3}{16}$	PA
S-C2	10	83.8	3.3	36.4	1.43	25	0.98	40	$1 / 1.5$	30	$1 / 1 \frac{3}{16}$	PA
S-C2	12	100.0	3.9	44.5	1.75	25	0.98	40	$1 / 1.5$	30 / 40	$1 / 1 \frac{3}{16}$	PA
S-C2	15	124.5	4.9	56.8	2.24	25	0.98	60	2.5	-	-	PA
S-C2	16	132.8	5.2	60.9	2.40	25	0.98	40	1.5	-	-	PA
S-C2	18	149.1	5.9	69.1	2.72	25	0.98	40 / 60	$1.5 / 2.5$	30	$1 / 1 \frac{3}{8}$	PA
S-C2	20	165.5	6.5	77.3	3.04	25	0.98	40 / 60	$1.5 / 2.5$	30	$1 / 1 \frac{3}{8}$	PA

S-C2: machined sprockets. Other sprocket and hub sizes on request.

**Key ways** for round bore shape follow European standards for metric sizes and US standards for imperial sizes. For detailed dimensions see table in the Design Guide.

**Other materials** available on request.



Sprocket one-piece (solid)

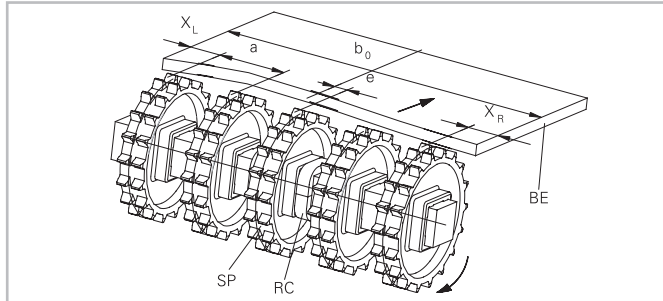
# Product Data Series M2500

Sprocket Series M2500-C2 (M2585/86)

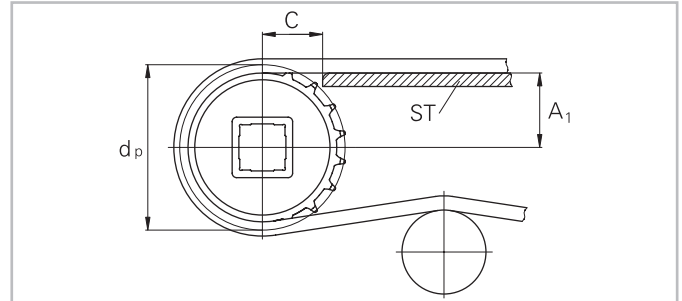


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## Sprocket arrangement



**BE** Belt  
**RC** Retainer  
**SP** Sprocket  
**b<sub>0</sub>** Belt width



The distance **C** between the sprocket axis and the slider support **ST** is minimal 28 mm (1.1").

## Wearstrips

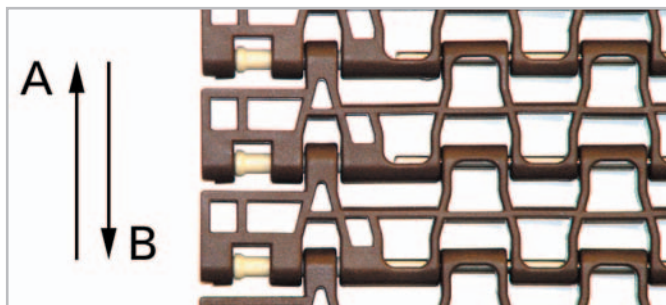
Between driving shaft and idling sprockets or rollers the belt is carried by a slider support furnished with longitudinal wearstrips (ST) from UHMW Polyethylene or other suitable material.

## Sprocket positioning

For correct positioning of the center sprocket divide the belt width by the link increment. The rounded result will be an even or an odd number. These numbers are the criteria for offset or no offset, see table.

Belt type	Sprocket spacing a		Sprocket edge distance (minimal) *		Criteria for center sprocket position	Result of formula (rounded)	Offset e	Remarks
	minimal mm inch	maximal mm inch	$X_L$	$X_R$				
M2585-P0 M2586	33.8 1.33	101.5 4	42 1.65	42 1.65	$b_0 / 33.8$ $b_0 / 1.33$	even number (2, 4, 6 ...)	8.5 0.33	right in running direction A left in running direction B
						odd number (3, 5, 7 ...)	8.5 0.33	left in running direction A right in running direction B
M2585-S0	33.8 1.33	101.5 4	59 2.32	59 2.32	$b_0 / 33.8$ $b_0 / 1.33$	even number (2, 4, 6 ...)	8.5 0.33	right in running direction A left in running direction B
						odd number (3, 5, 7 ...)	8.5 0.33	left in running direction A right in running direction B

\*  $X_L$  and  $X_R$  are related to the running direction A and inverse for the running direction B.



M2585-S0, left edge  $X_L$  (M2585-P0, M2586 similar)

# Product Data Series M2500

## Sprocket Series M2500-C2 (M2585/86)



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### Number of sprockets and wearstrips for M2585, M2586

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch		Carryway (top)	Returnway (bottom)
305	12	2	2	2
508	20	3	3	2
711	28	5	4	2
914	36	7	6	3
1117	44	7	8	3
1319	52	9	10	4
1522	60	11	10	4
1725	68	13	12	7
1928	76	13	12	7
2131	84	15	13	8
2333	92	17	16	8
2536	100	19	18	9

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.



# Product Data Series M2600

## M2620 Flat Top Heavy Duty 1"



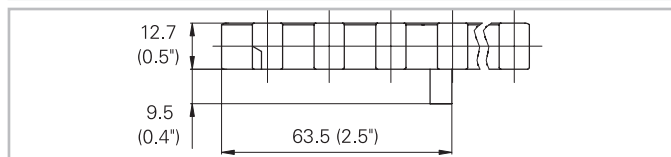
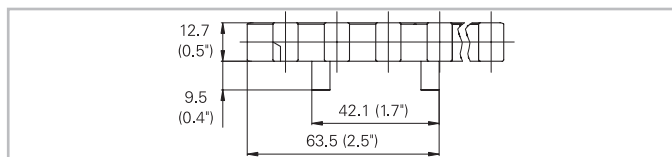
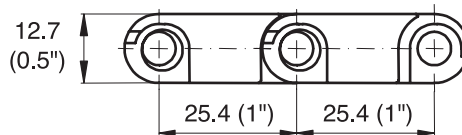
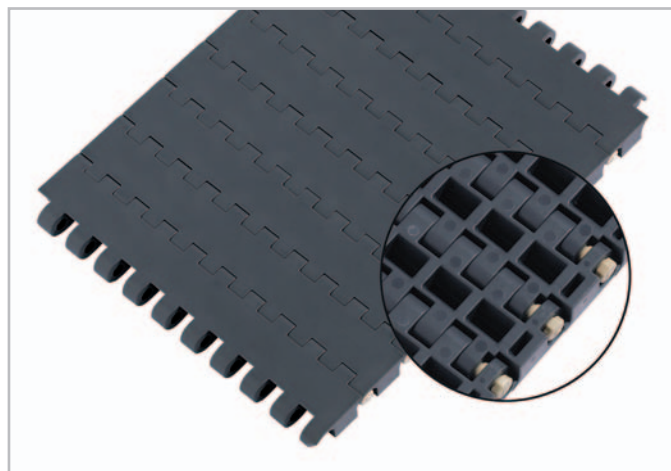
Edition 2007 - 121

### Description

- Heavy duty belt
- 12.7 mm (0.5") thick
- High strength and stiffness
- 0% open area
- Closed hinge
- Rod diameter 6 mm (0.22")
- Smart fit rod retention
- Double row solid and split sprockets

### Available accessories

- Tab modules with 1 or 2 tabs
- Code: -T1 single tab / -T2 double tab



### Belt data

Belt material		PP		POM		PA	PBT +FR
Rod material		PP	PA	PBT		PA	
Nominal tensile strength	N/m	24000	26500	45000	35000	45000	23000
F <sub>N</sub> ' straight run	lb/ft	1644	1815	3083	2397	3083	1575
Temperature range	°C	5 - 105	5 - 105	-40 - 90	-40 - 90	-46 - 130	-40 - 130
	°F	40 - 220	40 - 220	-40 - 195	-40 - 195	-50 - 266	-40 - 266
Temperature maximum (short-term)	°C					160	150
	°F					320	302
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	9.1	9.1	14.0	14.0	11.7	14.5
	lb/sqft	1.87	1.87	2.88	2.88	2.40	2.98

PA belt fulfills UL 94 V2 and ISO 340.

PBT +FR belt fulfills UL 94 V0 and ISO 340.

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	85	170	255	340	425	510	595	680	765	850	935	1020	1105	etc.
inch (nom.)	3.35	6.69	10.04	13.39	16.73	20.08	23.43	26.77	30.12	33.46	36.81	40.16	43.50	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

# Product Data Series M2600

M2620 Flat Top Heavy Duty 1"



Edition 2007 - 122

**Standard belt widths** in increments of 85 mm (3.35"). Non-standard widths are offered in increments of 17 mm (0.67"). Smallest possible width 85 mm (3.35").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2600

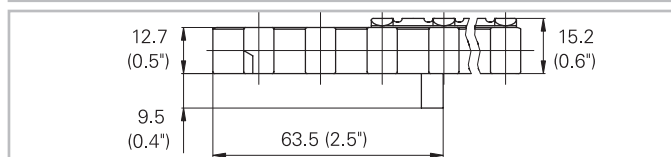
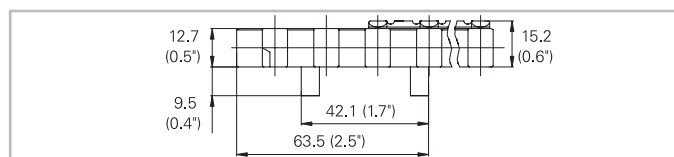
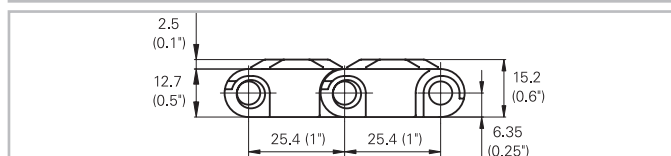
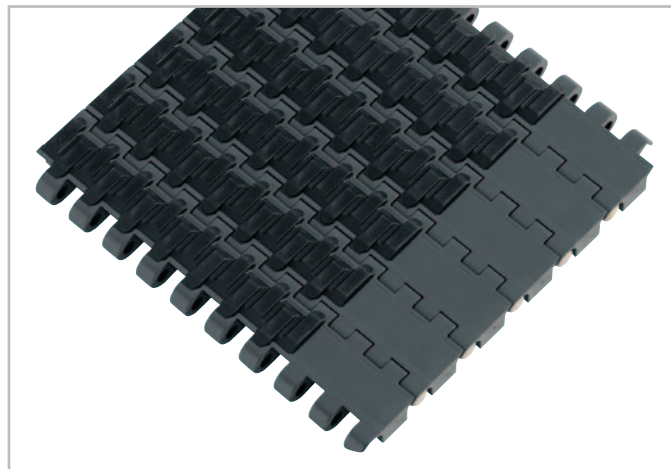
## M2620 GripTop 1"

### Description

- Heavy duty belt
- High strength and stiffness
- 0% open area
- Abrasion resistant GripTop, high friction
- Closed hinge
- Rod diameter 6 mm (0.22")
- Smart fit rod retention
- Double row solid and split sprockets

### Available pattern

- Fully covered by GripTop or in rows of any distance in multiples of 25.4 mm (1")
- With indent 43 mm (1.7") or without indent
- Tab modules with and without indent
- Code: -T1 single tab / -T2 double tab



### Belt data

Belt material		PP		POM
GripTop material		TPE		
Rod material		PP	POM	PA
Nominal tensile strength	N/m	23000	24000	33000
F <sub>N</sub> straight run	lb/ft	1575	1644	2260
Temperature range	°C	5 - 60	5 - 60	-40 - 60
	°F	40 - 140	40 - 140	-40 - 140
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	10.0	10.0	14.4
	lb/sqft	2.05	2.05	2.95

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	85	170	255	340	425	510	595	680	765	850	935	1020	1105	etc.
inch (nom.)	3.35	6.69	10.04	13.39	16.73	20.08	23.43	26.77	30.12	33.46	36.81	40.16	43.50	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

# Product Data Series M2600

M2620 GripTop 1"



Edition 2007 - 124

**Standard belt widths** in increments of 85 mm (3.35"). Non-standard widths are offered in increments of 17 mm (0.67"). Smallest possible width 85 mm (3.35").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2600

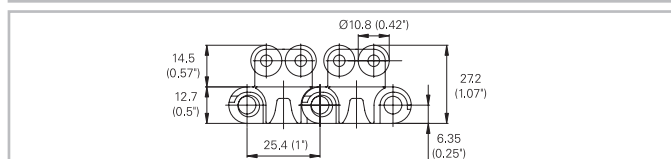
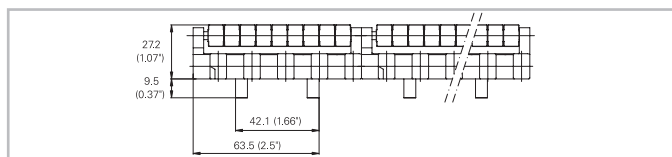
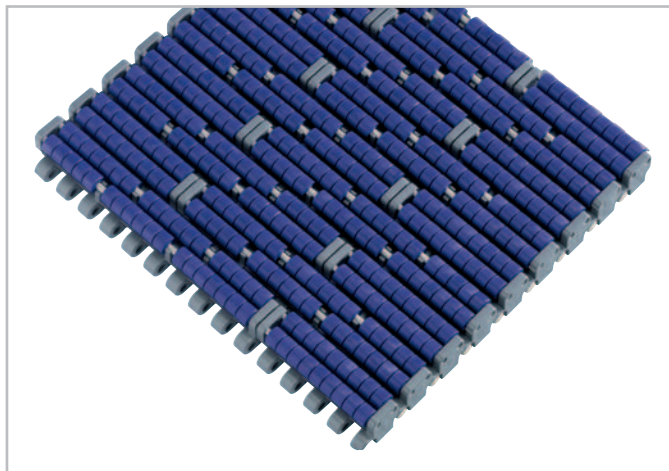
## M2620 Roller Top - LBP 1"



Edition 2007 - 125

### Description

- 0% open area
- Low noise accumulation rollers
- Strong link design
- Rod diameter: 6 mm (0.22")
- Smart fit rod retaining system
- Food approved materials
- Back bending radius: 200 mm



### Belt data

Belt material		POM	
Rod material		PBT	PA
Nominal tensile strength	N/m	35000	45000
$F'_N$ straight run	lb/ft	2397	3082
Temperature range	°C	-40 - 90	-40 - 90
	°F	-40 - 195	-40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	29.3	29.3
	lb/sqft	6.0	6.0

Diameter of idling rollers (minimum)	
mm	inch
40	1.6

### Standard range of belt widths $b_0$

mm (nom.)	85	170	255	340	425	510	595	680	765	850	935	1020	1105	etc.
inch (nom.)	3.35	6.69	10.04	13.39	16.73	20.08	23.43	26.77	30.12	33.46	36.81	40.16	43.50	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 85 mm (3.35"). Smallest possible width 85 mm (3.35").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M2600

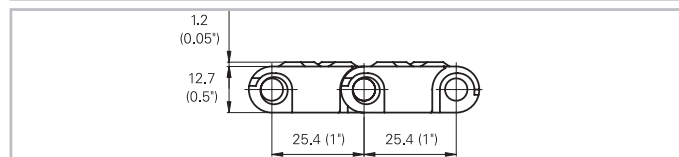
## M2623 Non Slip 1"



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### Description

- 0% open area
- Closed hinge
- Safe Non Slip profile for people mover applications
- Rod diameter 6 mm (0.22")
- Smart fit rod retention
- Antistatic standard belt material
- Electro conductive materials available
- Also available with pattern free indent 85 mm (3.35")



### Belt data

Belt material		PP	PP +AS	POM	POM +AS
Rod material		PA			
Nominal tensile strength	N/m	26500	23850	45000	40500
$F'_N$ straight run	lb/ft	1815	2398	3083	2774
Temperature range	°C	5 - 105	5 - 105	-40 - 90	-40 - 90
	°F	40 - 220	40 - 220	-40 - 195	-40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	9.3	9.3	14.4	14.4
	lb/sqft	1.91	1.91	2.94	2.94

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
40	1.6	50	2	100	4	150	6

### Standard range of belt widths $b_0$

mm (nom.)	85	170	255	340	425	510	595	680	765	850	935	1020	1105	etc.
inch (nom.)	3.35	6.69	10.04	13.39	16.73	20.08	23.43	26.77	30.12	33.46	36.81	40.16	43.50	etc.

Real belt widths are in most cases 0.1 % to 0.3 % smaller.

**Standard belt widths** in increments of 85 mm (3.35"). Non-standard widths are offered in increments of 17 mm (0.67"). Smallest possible width 85 mm (3.35").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2600

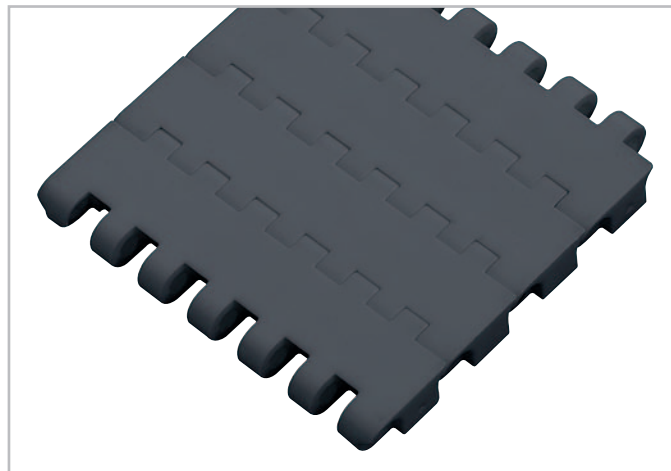
## M2670 Flat Top Heavy Duty 1" MTW



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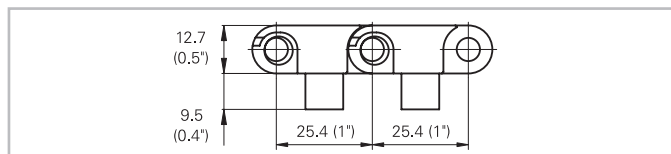
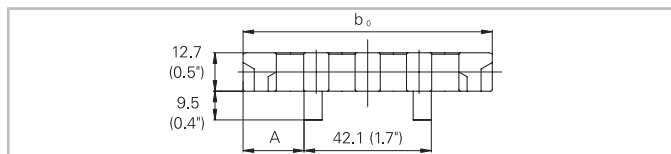
### Description

- Mold to width heavy duty belt
- Imperial widths
- 12.7 mm (0.5") thick
- High strength and stiffness
- 0% open area
- Closed hinge
- Rod diameter 6 mm (0.22")
- Smart fit rod retention
- Double row solid and split sprockets
- Two versions:
  - M2670Kxx (modules without tabs),
  - M2670Kxx-T20 (modules with 2 tabs)



### Available accessories

- For standard guiding profiles, refer to the HabiPLAST® brochure



### Belt data

	Nominal belt width $b_0$		A		Belt material	Rod material	Nominal tensile strength $F_N$ straight run		Belt weight $m_B$	
	mm	inch	mm	inch			N	lb	kg/m	lb/ft
M2670K03-T20	82.6	3.25	20.1	0.8	POM	PA	3200	720	1.16	0.78
M2670K03-T20	82.6	3.25	20.1	0.8	POM	PBT	2200	495	1.16	0.78
M2670K03-T20	82.6	3.25	20.1	0.8	PP	PA	1800	405	0.81	0.54
M2670K03-T20	82.6	3.25	20.1	0.8	PP	POM	1800	405	0.81	0.54
M2670K03-T20	82.6	3.25	20.1	0.8	PP	PP	1700	383	0.81	0.54
M2670K04-T20	114.3	4.5	36.0	1.4	POM	PA	4500	1013	1.62	1.09
M2670K04-T20	114.3	4.5	36.0	1.4	POM	PBT	3400	765	3.62	1.09
M2670K04-T20	114.3	4.5	36.0	1.4	PP	PA	2600	585	1.13	0.76
M2670K04-T20	114.3	4.5	36.0	1.4	PP	POM	2600	585	1.13	0.76
M2670K04-T20	114.3	4.5	36.0	1.4	PP	PP	2300	518	1.13	0.76
M2670K06-T20	152.4	6.0	55.1	2.2	POM	PA	6100	1372	2.21	1.49
M2670K06-T20	152.4	6.0	55.1	2.2	POM	PBT	4600	1035	2.21	1.49
M2670K06-T20	152.4	6.0	55.1	2.2	PP	PA	3800	855	1.54	1.03
M2670K06-T20	152.4	6.0	55.1	2.2	PP	POM	3800	855	1.54	1.03
M2670K06-T20	152.4	6.0	55.1	2.2	PP	PP	3200	720	1.54	1.03
M2670K07-T20	190.5	7.5	74.1	2.9	POM	PA	8000	1800	2.67	1.79
M2670K07-T20	190.5	7.5	74.1	2.9	POM	PBT	5700	1283	2.67	1.79
M2670K07-T20	190.5	7.5	74.1	2.9	PP	PA	5000	1125	1.86	1.25
M2670K07-T20	190.5	7.5	74.1	2.9	PP	POM	5000	1125	1.86	1.25
M2670K07-T20	190.5	7.5	74.1	2.9	PP	PP	4800	1080	1.86	1.25

The belt weights are indicated for belts with tabs, the weight of belts without tabs are lower by circa 0.05 kg/m (0.03 lb/ft).

Real belt widths are in most cases 0.1% to 0.3% smaller.

# Product Data Series M2600

M2670 Flat Top Heavy Duty 1" MTW



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Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)	
mm	inch	mm	inch
40	1.6	50	2

## Temperature range

Module material	Rod material	Temperature range	
POM	PA	-40 °C to +90 °C	-40 °F to +195 °F
POM	PBT	-40 °C to +90 °C	-40 °F to +195 °F
PP	PA	+5 °C to +105 °C	+40 °F to +220 °F
PP	POM	+5 °C to +90 °C	+40 °F to +195 °F
PP	PP	+5 °C to +105 °C	+40 °F to +220 °F

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M2600

## Sprocket Series M2600

M = Modular belts
Belt pitch
S = sprocket one-piece; Z = split sprocket
Number of teeth
Shaft size (diameter)
Shaft type: Q = square shaft; R = round
Material: 8 = PA; 6 = POM

M	26	S	18	40	Q	8
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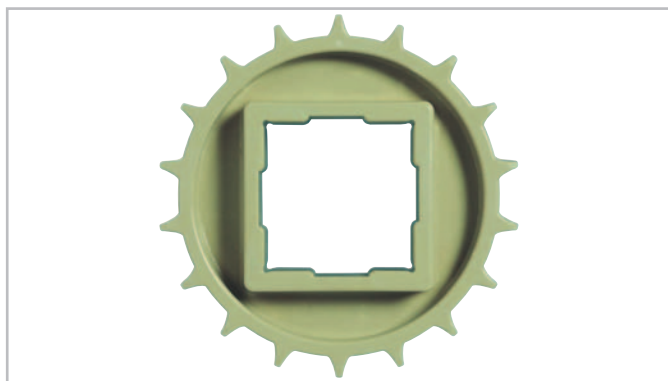
### Sprocket availability

Type	Number of teeth	Diameter of pitch $\varnothing d_p$		$A_1$		Hub width $B_L$		Square bore Q		$\varnothing$ Round bore R		Standard material
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
S	18	147.7	5.8	67.5	2.66	40	1.57	60	2.5	-	-	PA
S-C1	12	99.1	3.9	43.2	1.70	28.5	1.12	40	1.5	30 / 40	1 / 1.5	PA
S-C1	16	131.5	5.2	59.4	2.34	28.5	1.12	40	1.5	30 / 40	1 / 1.5	PA
S-C1	18	147.7	5.8	67.5	2.66	28.5	1.12	40	1.5	30 / 40	1 / 1.5	PA
S-C1	21	172.1	6.8	79.7	3.14	28.5	1.12	40 / 60	1.5 / 2.5	30 / 40	1 / 1.5	PA
Z	18	147.7	5.8	67.5	2.66	50	1.97	40	1.5	-	-	PA
Z-C1	12	99.1	3.9	43.2	1.70	28.5	1.12	25	1	25	1	PA
Z-C1	16	131.5	5.2	59.4	2.34	28.5	1.12	40	1.5	30 / 40	1 / 1.5	PA
Z-C1	18	147.7	5.8	67.5	2.66	28.5	1.12	60	2.5	30 / 40	1 / 1.5	PA
Z-C1	21	172.1	6.8	79.7	3.14	28.5	1.12	40 / 60	1.5 / 2.5	30 / 40	1 / 1.5	PA

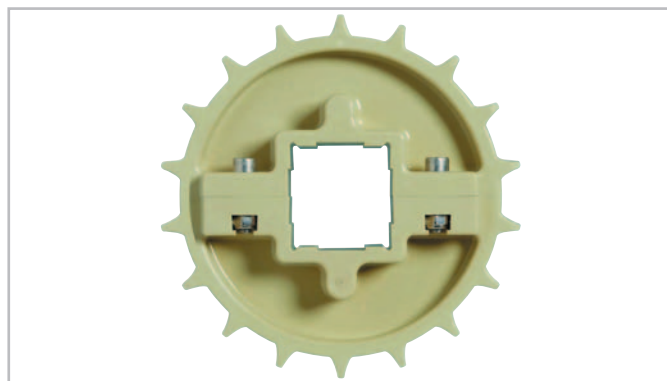
S, Z: molded sprockets; S-C1, Z-C1: machined sprockets. Other sprocket and hub sizes on request.

**Key ways** for round bore shape follow European standards for metric sizes and US standards for imperial sizes. For detailed dimensions see table in the Design Guide.

**Other materials** available on request.



Sprocket one-piece (solid)



Split sprocket

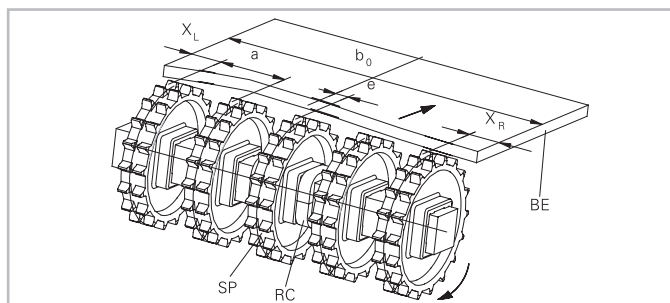
# Product Data Series M2600

Sprocket Series M2600

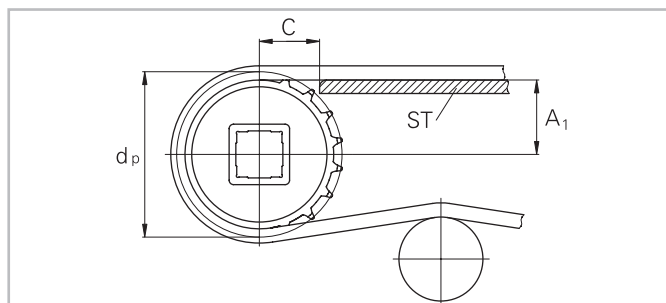


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## Sprocket arrangement



**BE** Belt  
**RC** Retainer  
**SP** Sprocket  
**b<sub>0</sub>** Belt width



The distance **C** between the sprocket axis and the slider support **ST** is minimal 28 mm (1.1").

## Wearstrips

Between driving shaft and idling sprockets or rollers the belt is carried by a slider support furnished with longitudinal wear strips (SL) from UHMW Polyethylene or other suitable material.

## Sprocket positioning

For correct positioning of the center sprocket divide the belt width by the link increment. The rounded result will be an even or an odd number. These numbers are the criteria for offset or no offset, see table.

Belt type	Sprocket spacing a		Sprocket edge distance (minimal)		Criteria for center sprocket position	Result of formula (rounded)	Offset e	Remarks
	minimal	maximal	X <sub>L</sub> mm inch	X <sub>R</sub> mm inch				
	mm inch	mm inch			mm inch	mm inch	mm inch	mm inch
M2620	85 3.35	170 6.7	42.5 1.67	42.5 1.67	b <sub>0</sub> / 17 b <sub>0</sub> / 0.67	even number (2, 4, 6 ...)	8.5 0.33	right or left side
						odd number (3, 5, 7 ...)	0 0	no offset
M2670K03	n.a.	n.a.	41.5 1.63	41.5 1.63	n.a.	n.a.	n.a.	fixed number of sprockets in dedicated position
						n.a.	n.a.	fixed number of sprockets in dedicated position
M2670K04	n.a.	n.a.	57 2.24	57 2.24	n.a.	n.a.	n.a.	fixed number of sprockets in dedicated position
						n.a.	n.a.	fixed number of sprockets in dedicated position
M2670K06	n.a.	n.a.	25.1 0.99	25.1 0.99	n.a.	n.a.	n.a.	fixed number of sprockets in dedicated position
						n.a.	n.a.	fixed number of sprockets in dedicated position
M2670K07	n.a.	n.a.	27.2 1.07	27.2 1.07	n.a.	n.a.	n.a.	fixed number of sprockets in dedicated position
						n.a.	n.a.	fixed number of sprockets in dedicated position



# Product Data Series M2600

## Sprocket Series M2600



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### Numbers of sprockets and wearstrips for M2620

Standard belt width (nominal)		Number of sprockets per shaft		Number of wearstrips	
mm	inch	min. number		Carryway (top)	Returnway (bottom)
85	3.3	1 *		2	2
170	6.7	2		2	2
255	10.0	2		2	2
340	13.4	2		2	2
425	16.7	3		3	3
510	20.1	3		3	3
595	23.4	4		4	3
680	26.8	4		4	3
765	30.1	5		5	4
850	33.5	5		5	4
935	36.8	6		6	4
1'105	43.5	7		7	5
1'190	46.9	7		7	5
1'275	50.2	8		8	5
1'360	53.5	8		8	5
1'445	56.9	9		9	6
1'530	60.2	9		9	6
1'615	63.6	10		10	6
1'700	66.9	10		10	6
1'785	70.3	11		11	7
1'870	73.6	11		11	7
1'955	77.0	12		12	7
2'040	80.3	12		12	7

The number of sprockets depends on the belt load and may be different for driving and idling shafts. For calculation of correct sprocket number please use LINK-SeleCalc.

(\*) Note: 2 sprockets are possible when using machined sprockets (width 28.5 mm)

### Numbers of sprockets and wearstrips for M2670 MTW (M2670Kxx)

Standard belt width (nominal)		Number of sprockets per shaft		Number of wearstrips	
mm	inch	idler	drive	Carryway (top)	Returnway (bottom)
82.6	3.25	1	1	2	2
114.3	4.5	1	1	2	2
152.4	6.0	2	3	2	2
190.5	7.5	2	3	2	2

# Product Data Series M3800

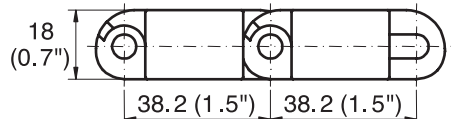
## M3840 Radius Flush Grid 1.5"

### Description

- For radius and straight conveying (collapse factor 2.2)
- 31% open area; 50% open contact area; largest opening 7x19 mm (0.27"x0.75")
- Excellent for cooling and draining
- Open hinge
- Easy to clean
- Food approved materials
- Rod diameter 6 mm (0.24")

### Available accessories

- Flights
- Sideguards
- Hold down devices
- GripTop modules
- Lane divider



### Belt data

Belt material		PP		POM
Rod material		POM	PA	POM
Nominal tensile strength	N/m	23000	23000	32000
$F'_N$ straight run	lb/ft	1575	1575	2192
Nominal tensile strength	N	2000	2000	2400
$F_N$ in curve <sup>(1)</sup>	lbf	450	450	540
Temperature range	°C	5 - 90	5 - 105	-40 - 90
	°F	40 - 195	40 - 220	-40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	8.0	8.0	11.8
	lb/sqft	1.64	1.64	2.42

<sup>(1)</sup> For  $b_0 > 450$  mm (18") higher values admissible. Refer to LINK-SeleCalc

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
60	2.4	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

# Product Data Series M3800

M3840 Radius Flush Grid 1.5"



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## Standard range of belt widths $b_0$ and collapse factor $Q$ ( $R_{min} = Q \times b_0$ )

Belt width mm (nom.)	200	250	300	350	400	450	500	550	600	650	700	750	800	850
Belt width inch (nom.)	8	10	12	14	16	18	20	22	24	26	28	30	32	34
Coll.fact. Q	1.85	1.92	1.96	1.99	2.02	2.03	2.05	2.06	2.07	2.08	2.09	2.09	2.10	2.10
Belt width mm (nom.)	900	950	1000	1050	1100	1150	1200	etc.						
Belt width inch (nom.)	36	38	40	42	44	46	48	etc.						
Coll.fact. Q	2.11	2.11	2.11	2.12	2.12	2.12	2.13	etc.						

Belt widths larger than 1200 mm (48") are not recommended; *please contact Habasit.*

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 25 mm (1"). Smallest possible width 175 mm (7").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M3800

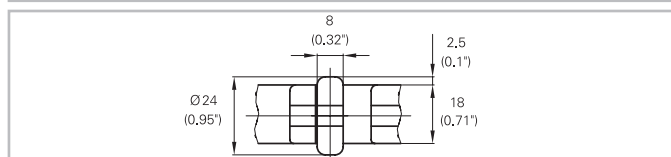
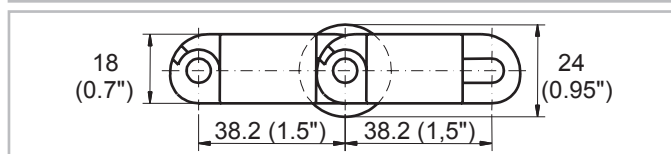
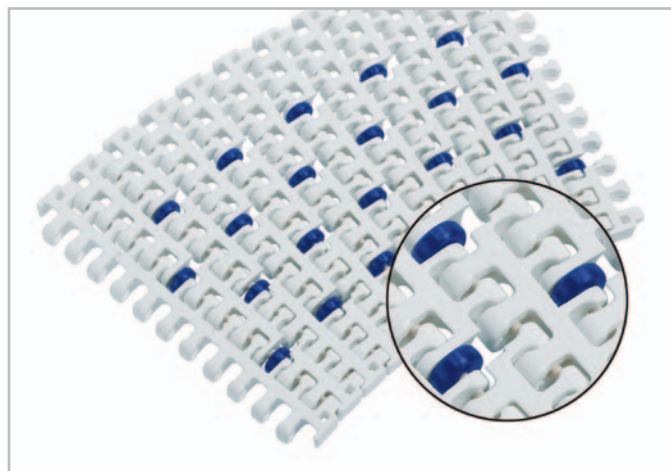
## M3840 Roller Top 1.5"



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### Description

- For radius and straight conveying
- 31% open area; largest opening 7x19 mm (0.27"x0.75")
- Roller lateral spacing see table belt data
- Free edge 60 mm (2.4")
- Rollers row spacing 38.2 mm (1.5")
- For low back pressure, wearstrips placed between rollers
- For product driven application wearstrips are placed directly under the rollers
- Excellent for cooling and draining
- Open hinge
- Food approved materials
- Rod diameter 6 mm (0.24")



### Belt data

Belt material		POM
Rod material		PA
Roller material		POM
Roller lateral spacing per row	mm / inch	100 / 4
Roller offset next row	mm / inch	50 / 2
Roller dimension diameter / width	mm inch	Ø 24 / 8 Ø 0.94 / 0.31
Nominal tensile strength $F'_N$ straight run	N/m lb/ft	25000 1712
Nominal tensile strength $F_N$ in curve <sup>(1)</sup>	N lbf	2000 450
Temperature range	°C °F	-40 - 90 -40 - 195
Belt weight $m_B$	kg/m <sup>2</sup> lb/sqft	11.8 2.42

<sup>(1)</sup> For  $b_0 > 450$  mm (18") higher values admissible. Refer to LINK-SeleCalc

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
60	2.4	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

# Product Data Series M3800

M3840 Roller Top 1.5"



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## Standard range of belt widths $b_o$ , free edge and collapse factor $Q$ ( $R_{min} = Q \times b_o$ )

Belt width mm (nom.)	250	300	350	400	450	500	550	600	650	700	750	800	850	etc.
Belt width inch (nom.)	10	12	14	16	18	20	22	24	26	28	30	32	34	etc.
Coll. factor Q	1.98	2.12	2.22	2.30	2.36	2.41	2.44	2.48	2.50	2.53	2.55	2.56	2.58	etc.
Free edge mm (nom.)	64/77	64/77	64/77	64/77	64/77	64/77	64/77	64/77	64/77	64/77	64/77	64/77	64/77	etc.
Free edge inch	2.5/3	2.5/3	2.5/3	2.5/3	2.5/3	2.5/3	2.5/3	2.5/3	2.5/3	2.5/3	2.5/3	2.5/3	2.5/3	etc.
Sprocket offset mm	18.8	-6.3	18.8	-6.3	18.8	-6.3	18.8	-6.3	18.8	-6.3	18.8	-6.3	18.8	etc.
Sprocket offset inch	0.7	-0.3	0.7	-0.3	0.7	-0.3	0.7	-0.3	0.7	-0.3	0.7	-0.3	0.7	etc.
Sprockets	4	5	6	7	8	9	10	11	12	13	14	15	16	etc.
Rollers (2 rows)	3	4	5	6	7	8	9	10	11	12	13	14	15	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Smallest possible width 250 mm (9.84").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M3800<sup>99</sup> Hold Down Tabs for M3840

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To avoid the belt flipping over or slipping off the inner guide rail in the curve, hold down guides are normally used. They are however not suitable if the conveyed goods are larger than the belt width or if side transfer over the belt edge is required. For these cases special modules equipped with hold down tabs (hook modules) are available for both belt edges.

## Hold down modules (M3840H)

Hold down tabs are used for all applications where the products must be able to move over the belt edge. The use of hold down modules is also mandatory when applying sideguards.

## Installation

Make sure to keep clearance between guides and hold down tabs. They are meant to act as lift-off safety devices and not as guides! They will, if in contact with the guides, wear off quickly and may increase the tension in the belt.

For these reasons the conveyor needs to be designed with the appropriate accuracy.

Minimum belt width 175 mm (7") (2 sprockets).

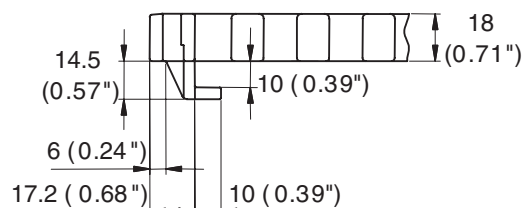
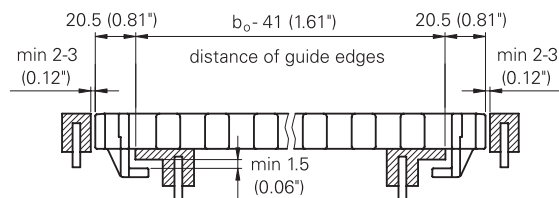
## Sprocket sizes

The combination sprocket/shaft size has to be selected in such a way to avoid collision of the hold down tabs with the shaft. Minimum sprocket sizes: M38S1240Q, M38S1260Q

## Note

The hold down tabs are not recommended to be used for radial guidance. They can be worn away too quickly. They should not be used to hang-up the belt on its return way.

Further design indications see Design Guide Radius Belts and Slider Support Systems.

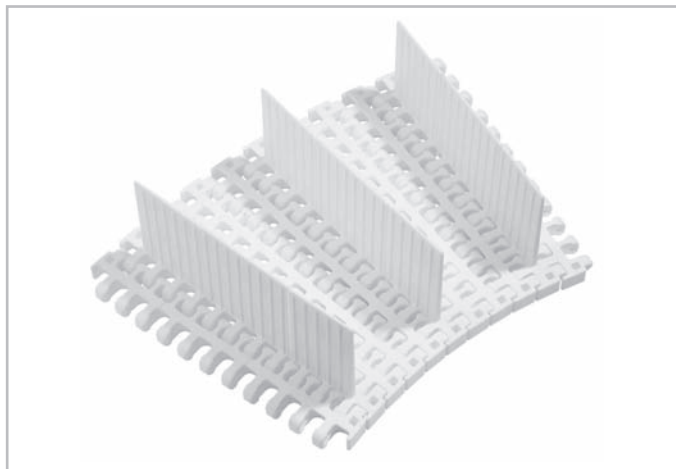


# Product Data Series M3800

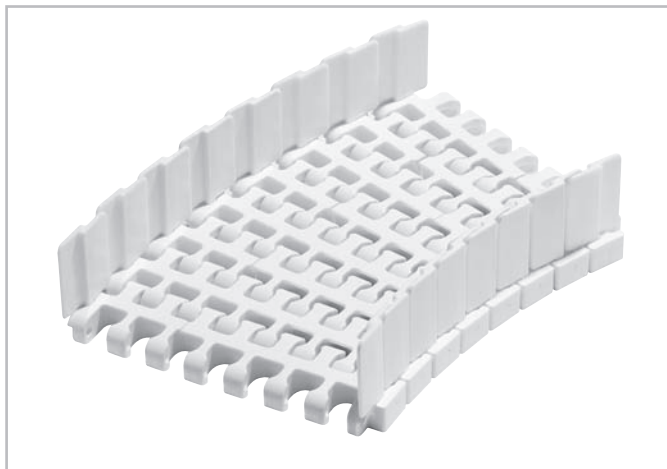
## Flights and Sideguards M3840



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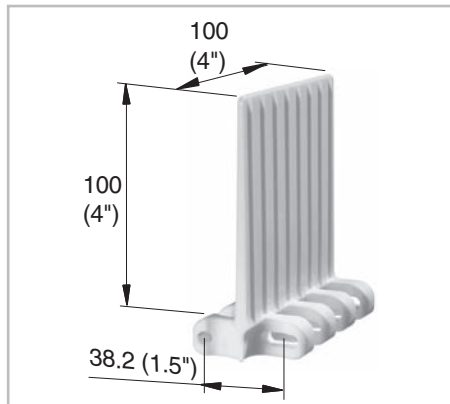


M3840 with flights

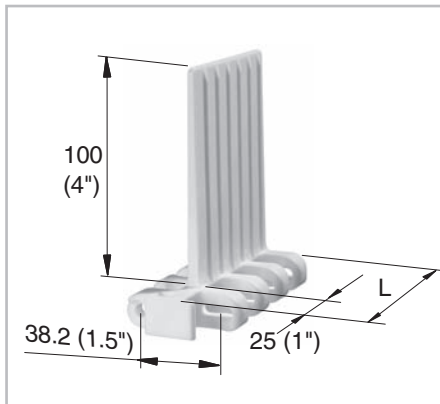


M3840 with sideguards

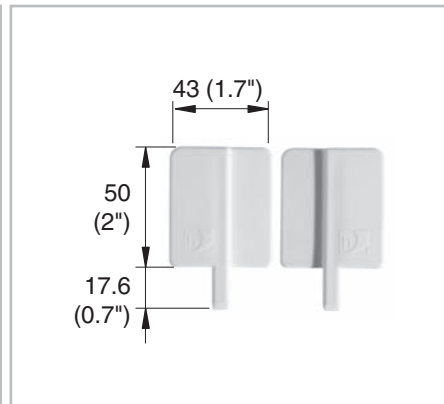
Flights are available in 100mm (4") height, sideguards in 50mm (2") height, see illustrations below. Flights are available with ribs on one side for better release of wet or sticky food products ("no-cling"). They can be cut to specific width and height if required. The collapse factor remains unchanged.



**Middle flight**  
M3840F10



**Edge flight**  
M384RF10 (right side)  
M384LF10 (left side)  
The total length L of the right and left type add to 200 mm (8")



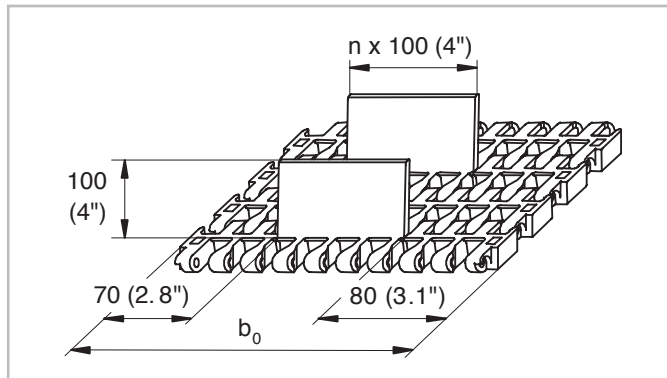
**Sideguards**  
M384RG05 (right side)  
M384LG05 (left side)  
left and right version can be put on the opposite edge, (no functional problems) but they cannot be mixed.

### Standard range of belt widths for belts with flights b<sub>0</sub>

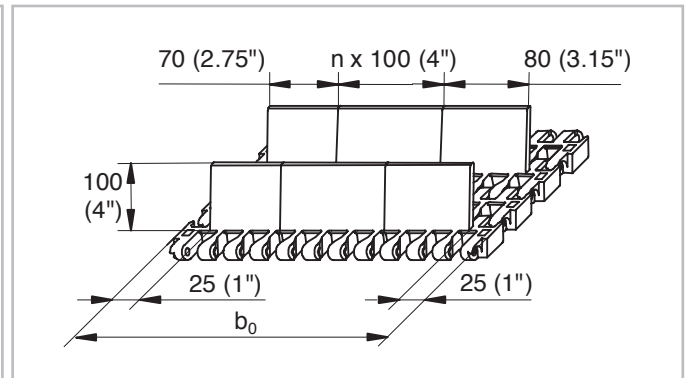
mm	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	etc.
inch (nom.)	8	12	16	20	24	28	32	36	40	44	48	52	56	60	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

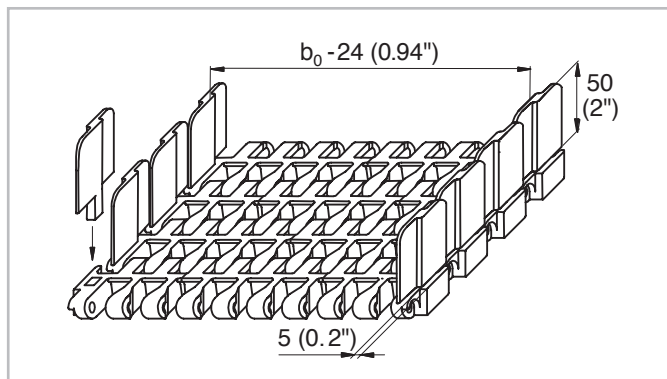
### Assembly conceptions for M3840 Radius Belt Flights and Sideguards



Middle flights only



Middle and edge flights



Sideguards only (clip-on version)

### Standard indents

The combination of flights and sideguards is possible, but not recommended. With sideguards, hold down modules must be used. On the return way the belt has to be supported either on the flights or between flights and sideguards (gap only 15 mm (0.6") wide). Do not support or guide the belt on the hold down tabs.

	left belt edge (running direction)	right belt edge (running direction)
Middle flights only (no indent flights)	70 mm (2.8")	80 mm (3.1")
Middle flights and indent flights	25 mm (1")	25 mm (1")
Sideguards	5 mm (0.2")	5 mm (0.2")

# Product Data Series M3800

## M3843 Tight Radius 1.5"



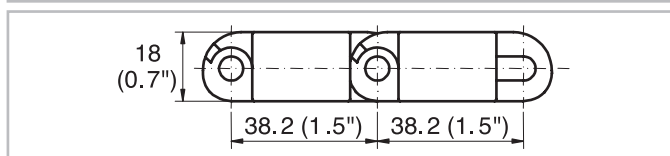
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### Description

- For radius and straight conveying, ideal for applications with limited space (collapse factor 1.6)
- 37% open area; 50% open contact area; largest opening 9x18 mm (0.35"x0.7")
- Excellent for cooling and draining
- Easy to clean
- Food approved materials
- Rod diameter 6 mm (0.24")
- "Open window" sprockets

### Available accessories

- Flights: Minimum indent 105 / 95 mm (4.1" / 3.7")
- Sideguards
- Hold down modules



### Belt data

Belt material		PP		POM
Rod material		POM	PA	POM
Nominal tensile strength	N/m	20000	20000	29000
$F'_N$ straight run	lb/ft	1370	1370	1986
Nominal tensile strength	N	1800	1800	2250
$F_N$ in curve <sup>(1)</sup>	lbf	405	405	506
Temperature range	°C	5 - 90	5 - 105	-40 - 90
	°F	40 - 195	40 - 220	-40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	8.0	8.0	11.8
	lb/sqft	1.64	1.64	2.42

<sup>(1)</sup> For  $b_0 > 600$  mm (23.6") higher values admissible. Refer to LINK-SeleCalc

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
60	2.4	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

## Product Data Series M3800

M3843 Tight Radius 1.5"



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**Standard range of belt widths  $b_0$  and collapse factor  $Q$  ( $R_{min} = Q \times b_0$ )**

Belt width mm (nom.)	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950
Belt width inch (nom.)	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38
Coll.fact. Q	1.50	1.53	1.55	1.57	1.59	1.60	1.61	1.62	1.64	1.68	1.71	1.74	1.77	1.79	1.81
Belt width mm (nom.)	1000	1050	1100	1150	1200										
Belt width inch (nom.)	40	42	44	46	48										
Coll.fact. Q	1.83	1.85	1.86	1.88	1.89										

Belt widths larger 1200 mm (48") not recommended; *please contact your Habasit representative.*  
 Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 25 mm (1"). Smallest possible width 175 mm (7").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M3800

## M3843 Tight Radius GripTop 1.5"



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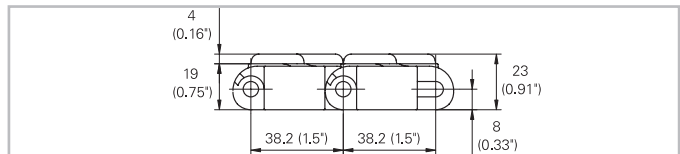
### Description

- For radius and straight conveying, ideal for applications with limited space, with inclines (collapse factor 1.6)
- 31% open area; 50% open contact area; largest opening 7x19 mm (0.27"x0.75")
- Indent 30 mm (1.18")
- Abrasion resistant GripTop, high friction
- Food approved materials
- Rod diameter 6 mm (0.24")
- Steel rods every 4th row when fully covered with rubber
- "Open window" sprockets



### Accessories

- Flights M3840: minimum indent 105 / 95 mm (4.1" / 3.7")
- Sideguards
- Hold down modules



### Belt data

Belt material		PP		POM
GripTop material		TPE		
Rod material		POM / Steel	PA / Steel	
Nominal tensile strength	N/m	20000	20000	29000
F <sub>N</sub> ' straight run	lb/ft	1370	1370	1986
Nominal tensile strength	N	1800	1800	2250
F <sub>N</sub> in curve <sup>(1)</sup>	lbf	405	405	506
Temperature range	°C	5 - 60	5 - 60	-40 - 60
	°F	40 - 140	40 - 140	-40 - 140
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	8.9	8.9	12.7
	lb/sqft	1.83	1.83	2.60

<sup>(1)</sup> For b<sub>0</sub> > 600 mm (23.6") higher admissible values are admissible.

**Stainless steel rods** are needed in every 4th row if GripTop modules are applied every row (fully covered with rubber).

Use GripTop modules in every second row and M3840 middle modules in the intermediate rows to achieve a sufficient lateral stiffness without using steel rods (in this case the belt weight is around 10% less than the value indicated in the table).

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
60	2.4	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

## Product Data Series M3800

M3843 Tight Radius GripTop 1.5"



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**Standard range of belt widths  $b_0$  and collapse factor  $Q$  ( $R_{min} = Q \times b_0$ )**

Belt width mm (nom.)	250	300	350	400	450	500	550	600	650	700	750	800	850	900
Belt width inch (nom.)	10	12	14	16	18	20	22	24	26	28	30	32	34	36
Coll.fact. Q	1.50	1.53	1.55	1.57	1.59	1.60	1.61	1.62	1.64	1.68	1.71	1.74	1.77	1.79
Belt width mm (nom.)	950	1000	1050	1100	1150	1200								
Belt width inch (nom.)	38	40	42	44	46	48								
Coll.fact. Q	1.81	1.83	1.85	1.86	1.88	1.89								

Belt widths larger 1200 mm (48") not recommended; *please contact your Habasit representative.*  
 Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 50 mm (2"). Non-standard widths are offered in increments of 25 mm (1"). Smallest possible width 175 mm (7").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

## Product Data Series M3800

## Hold Down Tabs and Side Tabs for M38



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To avoid the belt flipping over or slipping off the inner guide rail in the curve, hold down guides are normally used. They are however not suitable if the conveyed goods are larger than the belt width or if side transfer over the belt edge is required. For these cases special modules equipped with hold down tabs (hook modules) or side tabs are available for both belt edges.

**Hold down modules (M3843H00)**

Hold down tabs are used for all applications where the products must be able to move over the belt edge.

**Side tabs (M3843V00)**

Side tabs can be used instead of hold down tabs for all applications where the products must be able to move over the belt edge.

**Installation**

Both hold down tabs and side tabs are snapped into the square hole provided at the outermost link of the edge modules. If ordered accordingly, M3843 belts are already furnished with these hold down tabs when delivered.

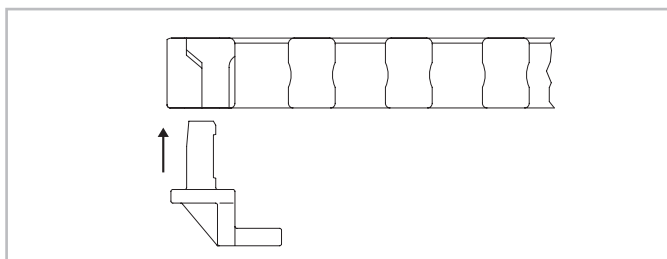
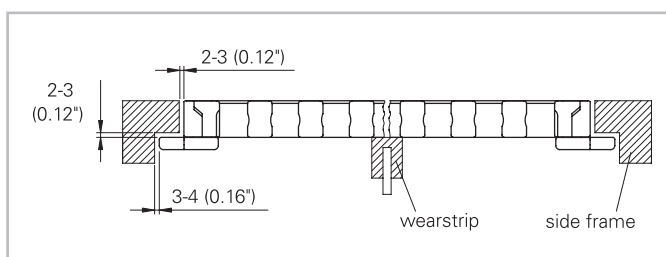
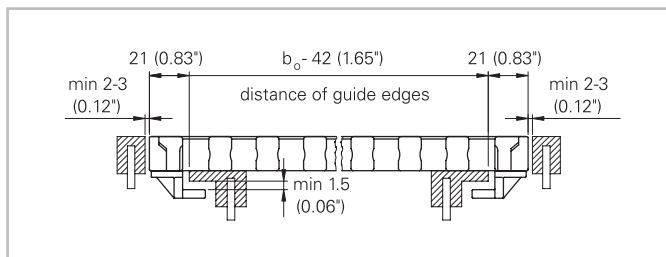
When installing on the conveyor frame, make sure to keep clearance between guides and tabs. They are meant to act as lift-off safety devices and not as guides! They will, if in contact with the guides, wear off quickly and may increase the tension in the belt. For these reasons the conveyor needs to be designed with the appropriate accuracy. Minimum belt width 175 mm (7") (2 sprockets).

**Sprocket sizes**

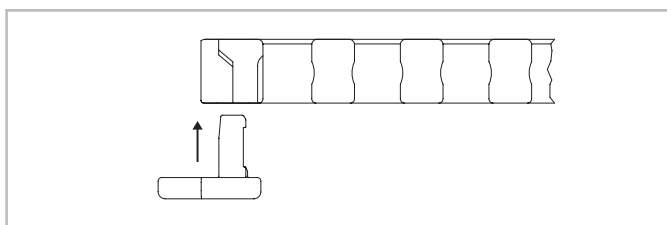
The combination sprocket/shaft size has to be selected in such a way to avoid collision of the hold down tabs with the shaft. Minimum sprocket sizes: M38S1240Q, M38S1260Q

**Note**

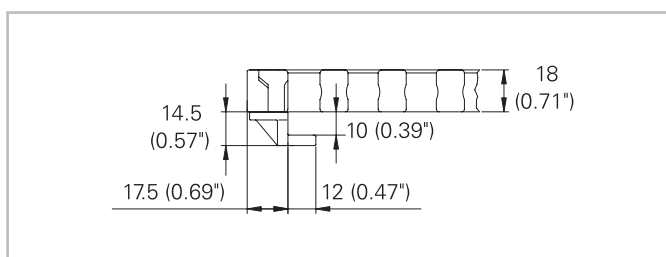
The hold down tabs are not recommended to be used for radial guidance. They can be worn away too quickly. Neither hold down tabs nor side tabs should be used to hang-up the belt on its return way. Further design indications see Design Guide Radius Belts and Slider Support Systems.



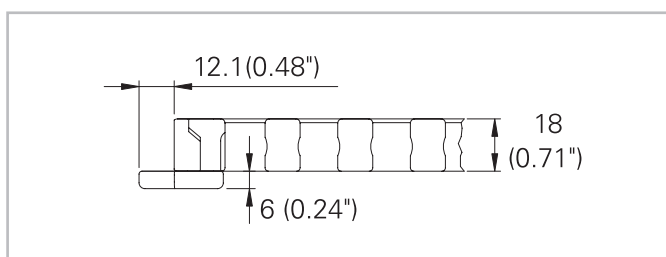
M3843H00



M3843V00



M3843H00



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Product Data Series M3800  
Sideguards M3843

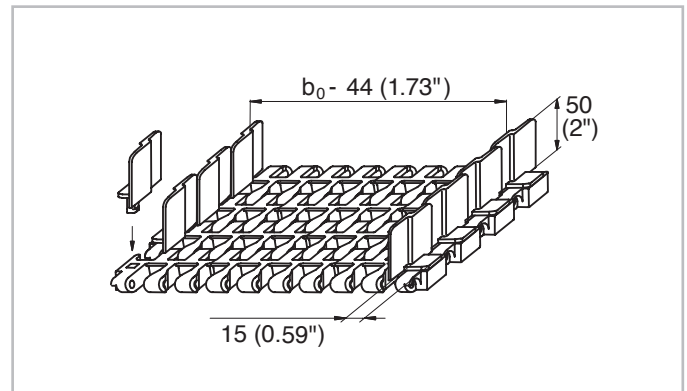
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Sideguards are available in 50 mm height only.

The snap-on sideguards for M3843 cannot be used in combination with snap-on hold down tabs (hooks or side tabs). To avoid the belt in the curve to flip over or slip off the inner guide rail, hold down guides can be applied.



M3843 with sideguards

# Product Data Series M3800

## Sprocket Series M3800



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M = Modular belts										
Belt pitch										
S = sprocket one-piece; Z = split sprocket										
Number of teeth										
Shaft size										
Shaft type: Q = square shaft; R = round										
Material: 6 = POM; 8 = PA										
M	38	S	12	40	Q	6				

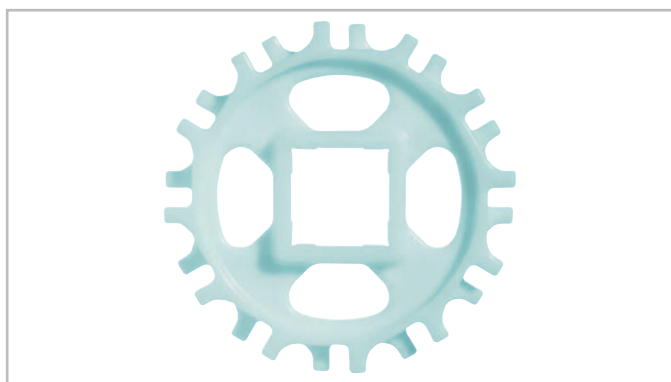
### Sprocket availability

Type	Number of teeth	Diameter of pitch $\varnothing d_p$		$A_1$		Hub width $B_L$		Square bore Q		Standard material
		mm	inch	mm	inch	mm	inch	mm	inch	
S	8	101.9	4.0	42.0	1.65	30	1.18	40	1.5	POM
S	12	150.0	5.9	66.0	2.60	30	1.18	40 / 60	1.5 / 2.5	POM
S	16	198.2	7.8	90.1	3.55	30	1.18	40 / 60	1.5 / 2.5	POM

S: molded sprockets. Other sprocket and hub sizes on request.

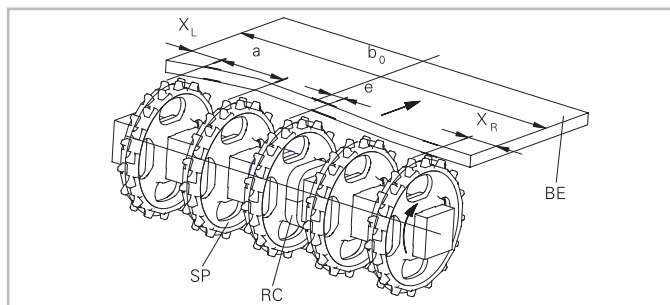
**Key ways** for round bore shape follow European standards for metric sizes and US standards for imperial sizes. For detailed dimensions see table in the Design Guide.

**Other materials** available on request.

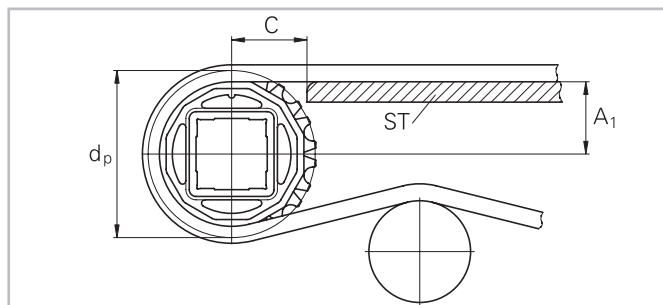


Sprocket one-piece ("open window")

### Sprocket arrangement



**BE** Belt  
**RC** Retainer  
**SP** Sprocket  
**b<sub>0</sub>** Belt width



The distance **C** between the sprocket axis and the slider support **ST** is minimal 41 mm (1.6").

# Product Data Series M3800

Sprocket Series M3800



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## Wearstrips

Between driving shaft and idling sprockets or rollers the belt is carried by a slider support furnished with longitudinal wear strips from UHMW Polyethylene or other suitable material.

## Sprocket positioning

For correct positioning of the center sprocket divide the belt width by the link increment. The rounded result will be an even or an odd number. These numbers are the criteria for offset or no offset, see table.

Belt type	Sprocket spacing a		Sprocket edge distance (minimal) *		Criteria for center sprocket position	Result of formula (rounded)	Offset e	Remarks
	minimal	maximal	$X_L$	$X_R$				
	mm inch	mm inch	mm inch	mm inch	mm inch		mm inch	Offset to which side
M3840 M3843	50 2	125 5	44 1.73	31 1.22	$b_0 / 25$ $b_0 / 0.98$	even number (2, 4, 6 ...)	6.3 2.48	left in running direction A right in running direction B
						odd number (3, 5, 7 ...)	6.3 2.48	right in running direction A left in running direction B
M3840 M3843 with hold down tabs	50 2	125 5	68 2.68	55 2.17	$b_0 / 25$ $b_0 / 0.98$	even number (2, 4, 6 ...)	6.3 2.48	left in running direction A right in running direction B
						odd number (3, 5, 7 ...)	6.3 2.48	right in running direction A left in running direction B

\*  $X_L$  and  $X_R$  are related to the running direction A and inverse for running direction B.



# Product Data Series M3800

Sprocket Series M3800



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## Numbers of sprockets and wearstrips for M3840, M3843 without hold down tabs

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch		Carryway (top)	Returnway (bottom)
200	8	2	2	2
250	10	2	2	2
300	12	2	2	2
350	14	3	2	2
400	16	3	3	3
450	18	3	3	3
500	20	3	3	3
550	22	3	3	3
600	24	5	4	3
650	26	5	4	3
700	28	5	4	3
750	30	5	4	3
800	32	5	5	4
850	34	7	5	4
900	36	7	5	4
950	38	7	5	3
1'000	40	7	6	5
1'050	42	7	6	5
1'100	44	9	6	5
1'150	46	9	6	5
1'200	48	9	7	6
1'250	50	9	7	6

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

# Product Data Series M3800

Sprocket Series M3800



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## Numbers of sprockets and wearstrips for M3840, M3843 with hold down tabs

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch	min. number	Carryway (top)	Returnway (bottom)
200	8	2	2	2
250	10	2	2	2
300	12	2	2	2
350	14	3	2	2
400	16	3	3	3
450	18	3	3	3
500	20	3	3	3
550	22	3	3	3
600	24	5	4	3
650	26	5	4	3
700	28	5	4	3
750	30	5	4	3
800	32	5	5	4
850	34	7	5	4
900	36	7	5	4
950	38	7	5	3
1'000	40	7	6	5
1'050	42	7	6	5
1'100	44	9	6	5
1'150	46	9	6	5
1'200	48	9	7	6
1'250	50	9	7	6

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

# Product Data Series M5000

## M5010 Flat Top 2"



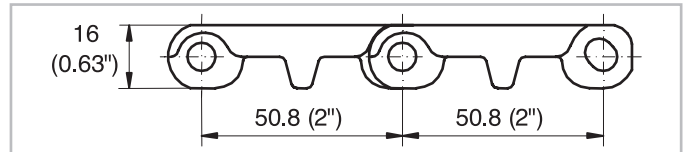
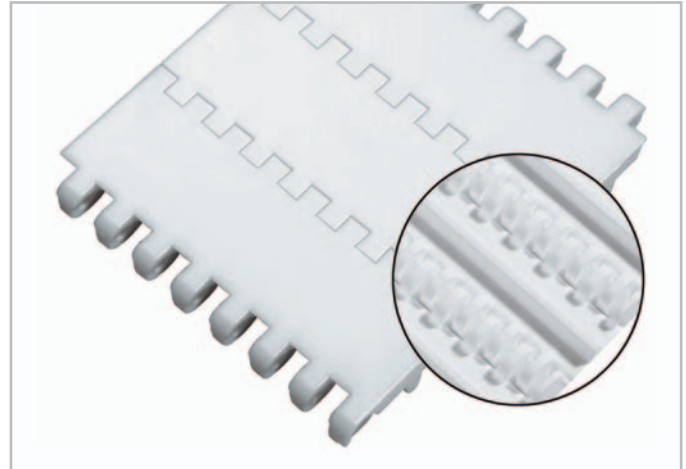
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### Description

- 0% open area
- Solid plate
- Open hinge, easy to clean
- Food approved materials
- Rod diameter 7 mm (0.27")

### Available accessories

- Flights and scoops
- Sideguards
- Hold down devices
- GripTop modules



### Belt data

Belt material		PP		PE		POM	
Rod material		PP	PA	PE	PA	PE	PA
Nominal tensile strength	N/m	18000	18000	10000	10000	18000	30000
F' <sub>N</sub> straight run	lb/ft	1233	1233	685	685	1233	2055
Temperature range	°C	5 - 105	5 - 105	-70 - 65	-46 - 65	-40 - 65	-40 - 90
	°F	40 - 220	40 - 220	-94 - 150	-50 - 150	-40 - 150	-40 - 195
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	9.0	9.0	9.4	9.4	13.5	13.5
	lb/sqft	1.85	1.85	1.93	1.93	2.77	2.77

Belt material		POM +IM	
Rod material		PE	
Nominal tensile strength	N/m	18000	18000
F' <sub>N</sub> straight run	lb/ft	1233	1233
Temperature range	°C	-40 - 65	-40 - 90
	°F	-40 - 150	-40 - 195
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	13.5	13.5
	lb/sqft	2.77	2.77

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	75	150	225	300	375	450	525	600	675	750	825	900	975	1050	etc.
inch (nom.)	3	6	9	12	15	18	21	24	27	30	33	36	39	42	etc.

Real belt widths are in most cases 0.1 % to 0.3% smaller.

# Product Data Series M5000

M5010 Flat Top 2"



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**Standard belt widths** in increments of 18.75 mm (0.74"). Smallest possible width 37.5 mm (1.48"). Non-brick-layed belts 37.5 mm (1.48"), 56.25 mm (2.21"), 75 mm (3"), 150 mm (6"), 225 mm (9") and 600 mm (24") wide.

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5000

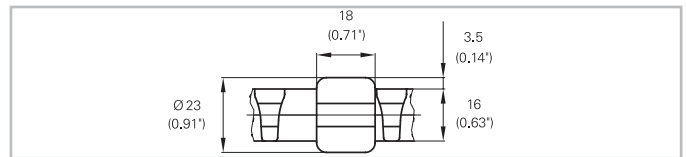
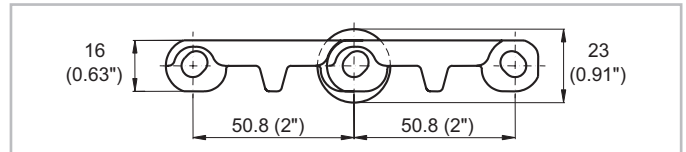
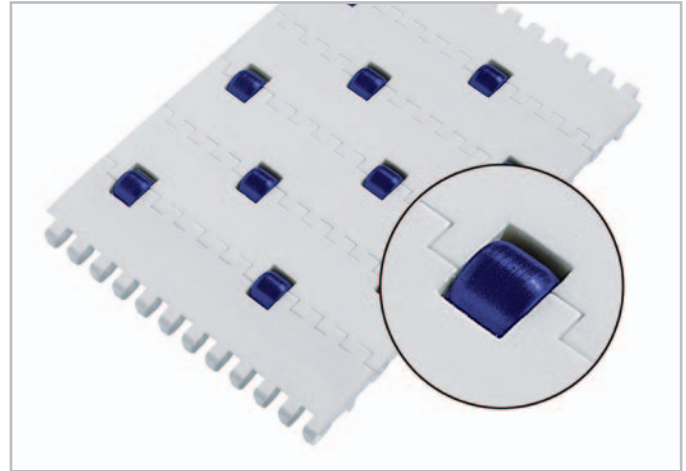
## M5010 Roller Top 2"



Edition 2007 - 153

### Description

- Largest opening 19x2 mm (0.7"x0.08")
- Roller lateral spacing see table belt data
- Rollers row spacing 50.8 mm (2")
- For low back pressure, wearstrips are placed between rollers
- For product driven application wearstrips are placed directly under the rollers
- Open hinge
- Food approved materials
- Rod diameter 7 mm (0.27")



### Belt data

Belt material		POM			
Rod material		PA			
Roller material		POM			
Roller lateral spacing per row	mm / inch	56 / 2.2	75 / 3	112 / 4.4	150 / 6
Roller offset next row	mm / inch	0 / 0	0 / 0	56 / 2.2	75 / 3
Roller dimension diameter / width	mm inch	Ø 23 / 18 Ø 0.91 / 0.71	Ø 23 / 18 Ø 0.91 / 0.71	Ø 23 / 18 Ø 0.91 / 0.71	Ø 23 / 18 Ø 0.91 / 0.71
Nominal tensile strength $F'_N$ straight run	N/m lb/ft	20000 1370	21000 1438	22000 1507	22500 1541
Temperature range	°C °F	-40 - 90 -40 - 195	-40 - 90 -40 - 195	-40 - 90 -40 - 195	-40 - 90 -40 - 195
Belt weight $m_B$	kg/m <sup>2</sup> lb/sqft	13.5 2.77	13.5 2.77	13.5 2.77	13.5 2.77

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

# Product Data Series M5000

M5010 Roller Top 2"



Edition 2007 - 154

## Standard range of belt widths $b_0$ and free edge

Belt width (mm) (nom.)	225	300	375	450	525	600	675	750	825	900	975	1050	etc.
Belt width (inch) (nom.)	9	12	15	18	21	24	27	30	33	36	39	42	etc.
Roller lateral spacing per row 112.5 mm / offset next row 56.25 mm													
Free edge (mm)	19/19	19/37	19/55	19/19	19/37	19/55	19/19	19/37	19/55	19/19	19/37	19/55	etc.
Free edge (inch)	0.7/0.7	0.7/1.5	0.7/2.2	0.7/0.7	0.7/1.5	0.7/2.2	0.7/0.7	0.7/1.5	0.7/2.2	0.7/0.7	0.7/1.5	0.7/2.2	etc.
Sprocket offset (mm)	0	18.75	-18.75	0	18.75	-18.75	0	18.75	-18.75	0	18.75	-18.75	etc.
Sprocket offset (inch)	0	0.74	-0.74	0	0.74	-0.74	0	0.74	-0.74	0	0.74	-0.74	etc.
Sprockets	3	4	6	7	8	10	11	12	14	15	16	18	etc.
Rollers (2 rows)	4	5	6	8	9	10	12	13	14	16	17	18	etc.
Roller lateral spacing per row 150 mm / offset next row 75 mm													
Free edge (mm)	28	28	28	28	28	28	28	28	28	28	28	28	etc.
Free edge (inch)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	etc.
Sprocket offset (mm)	37.5	0	37.5	0	37.5	0	37.5	0	37.5	0	37.5	0	etc.
Sprocket offset (inch)	1.5	0	1.5	0	1.5	0	1.5	0	1.5	0	1.5	0	etc.
Sprockets	2	3	4	5	6	7	8	9	10	11	12	13	etc.
Rollers (2 rows)	3	4	5	6	7	8	9	10	11	12	13	14	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 75 mm (3"). Smallest possible width 225 mm (9").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M5000

## M5011 Perforated Flat Top 2"



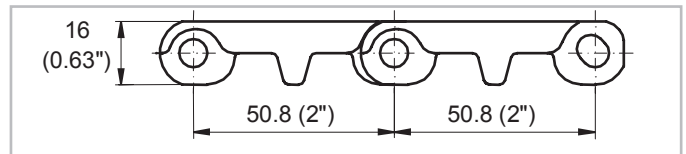
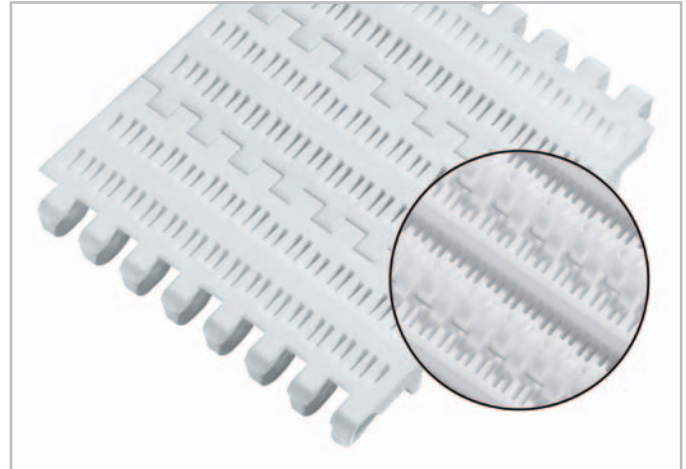
Edition 2007 - 155

### Description

- 18% open area; largest opening 2x10 mm (0.08"x0.4")
- Solid plate
- Open hinge, easy to clean
- Food approved materials
- Rod diameter 7 mm (0.27")

### Available accessories

- Flights and scoops
- Sideguards
- Hold down devices
- GripTop modules



### Belt data

Belt material		PP		PE		POM	
Rod material		PP	PA	PE	PA	PE	PA
Nominal tensile strength	N/m	18000	18000	10000	10000	18000	18000
F' <sub>N</sub> straight run	lb/ft	1233	1233	685	685	1233	1233
Temperature range	°C	5 - 105	5 - 105	-70 - 65	-46 - 65	-40 - 65	-40 - 90
	°F	40 - 220	40 - 220	-94 - 150	-50 - 150	-40 - 150	-40 - 195
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	7.8	7.8	8.3	8.3	12.0	12.0
	lb/sqft	1.60	1.60	1.70	1.70	2.46	2.46

Belt material		POM +IM	
Rod material		PA	
Nominal tensile strength	N/m	30000	30000
F' <sub>N</sub> straight run	lb/ft	2055	2055
Temperature range	°C	-40 - 90	-40 - 65
	°F	-40 - 195	-40 - 150
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	12.0	12.0
	lb/sqft	2.46	2.46

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	75	150	225	300	375	450	525	600	675	750	825	900	975	1050	etc.
inch (nom.)	3	6	9	12	15	18	21	24	27	30	33	36	39	42	etc.

Real belt widths are in most cases 0.1 % to 0.3% smaller.

# Product Data Series M5000

M5011 Perforated Flat Top 2"



Edition 2007 - 156

**Standard belt widths** in increments of 75 mm (3"). Non-standard widths are offered in increments of 18.75 mm (0.74"). Smallest possible width 112.5 mm (4.42"). Non-bricklaid belts 75 mm (3") and 150 mm (6") wide.

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5000

## M5013 Cone Top 2"



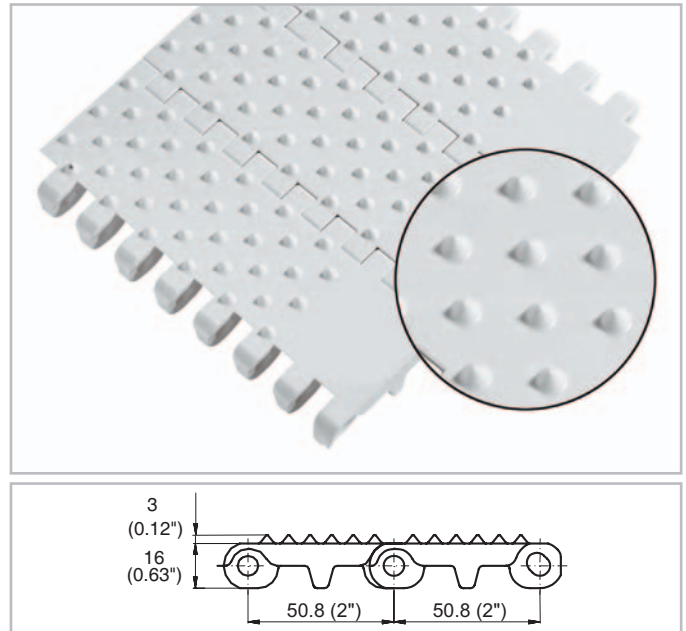
Edition 2007 - 157

### Description

- 0% open area
- Solid plate
- Belt with extra grip, exact positioning
- Standard indent 37.5 mm (1.5")
- Open hinge, easy to clean
- Rod diameter 7 mm (0.27")
- Food approved materials

### Available accessories

- Flights and scoops
- Sideguards
- Hold down devices



### Belt data

Belt material		PP		POM	
Rod material		PP	PA	PE	PA
Nominal tensile strength	N/m	18000	18000	18000	30000
$F'_N$ straight run	lb/ft	1233	1233	1233	2055
Temperature range	°C	5 - 105	5 - 105	-40 - 65	-40 - 90
	°F	40 - 220	40 - 220	-40 - 150	-40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	9.1	9.1	13.7	13.7
	lb/sqft	1.87	1.87	2.81	2.81

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$

mm (nom.)	225	300	375	450	525	600	675	750	825	900	975	1050	1125	1200	etc.
inch (nom.)	9	12	15	18	21	24	27	30	33	36	39	42	45	48	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 75 mm (3"). Non-standard widths are offered in increments of 18.75 mm (0.74"). Smallest possible width 112.5 mm (4.42").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5000

## M5014 Nub Top 2"



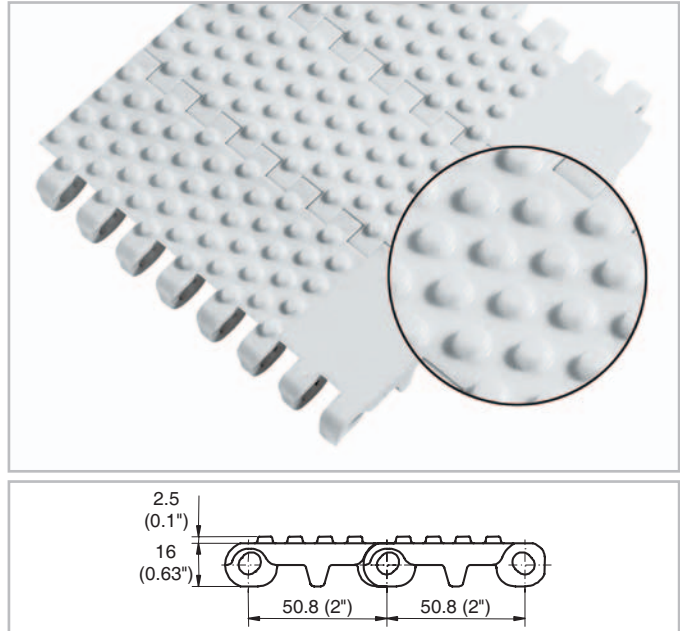
Edition 2007 - 158

### Description

- 0% open area
- Solid plate
- Non-adhesive because of less contact surface
- Open hinge, easy to clean
- Standard indent 37.5 mm (1.5")
- Rod diameter 7 mm (0.27")
- Food approved materials

### Available accessories

- Flights and scoops
- Sideguards
- Hold down devices



### Belt data

Belt material		PP		PE		POM	
Rod material		PP	PA	PE	PA	PE	PA
Nominal tensile strength	N/m	18000	18000	10000	10000	18000	30000
$F'_N$ straight run	lb/ft	1233	1233	685	685	1233	2055
Temperature range	°C	5 - 105	5 - 105	-70 - 65	-46 - 65	-40 - 65	-40 - 90
	°F	40 - 220	40 - 220	-94 - 150	-50 - 150	-40 - 150	-40 - 195
Belt weight $m_b$	kg/m <sup>2</sup>	9.2	9.2	9.6	9.6	13.9	13.9
	lb/sqft	1.89	1.89	1.97	1.97	2.85	2.85

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$

mm (nom.)	225	300	375	450	525	600	675	750	825	900	975	1050	1125	1200	etc.
inch (nom.)	9	12	15	18	21	24	27	30	33	36	39	42	45	48	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 75 mm (3"). Non-standard widths are offered in increments of 18.75 mm (0.74"). Smallest possible width 112.5 mm (4.42").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5000

## M5015 Flat Top 2"



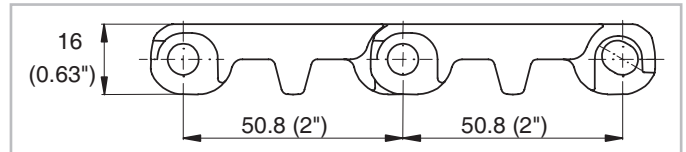
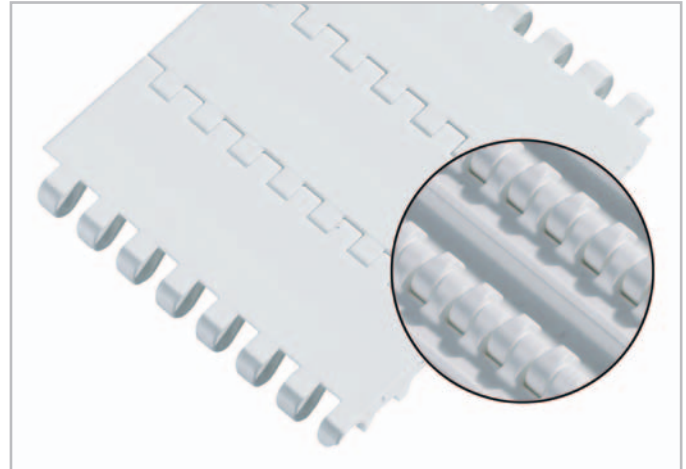
Edition 2007 - 159

### Description

- 0% open area
- Solid plate
- Dynamic hinge gap for easy release of debris and ice
- Strong link design, for ski lift applications as well as for food and material handling
- Rod diameter 7 mm (0.27")
- Food approved materials

### Available accessories

- Center hold down device
- Flights and scoops
- Sideguards
- GripTop modules



### Belt data

Belt material		PP			PE	POM	
Rod material		PP	POM	PA	PE	PBT	PA
Nominal tensile strength	N/m	29000	31000	31000	18000	38000	53000
$F'_N$ straight run	lb/ft	1987	2124	2124	1233	2603	3631
Temperature range	°C	5 - 105	5 - 90	5 - 105	-70 - 65	-40 - 90	-40 - 90
	°F	40 - 220	40 - 195	40 - 220	-94 - 150	-40 - 195	-40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	9.9	9.9	9.9	10.4	14.9	14.9
	lb/sqft	2.03	2.03	2.03	2.13	3.05	3.05

Belt material		POM +UV	
Rod material		PA	PBT
Nominal tensile strength	N/m	42400	30400
$F'_N$ straight run	lb/ft	2904	2082
Temperature range	°C	-40 - 90	-40 - 90
	°F	-40 - 195	-40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	14.9	14.9
	lb/sqft	3.05	3.05

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$

mm (nom.)	75	150	225	300	375	450	525	600	675	750	825	900	975	etc.
Zoll (nom.)	3	6	9	12	15	18	21	24	27	30	33	36	39	etc.

Real belt widths are in most cases 0.1 % to 0.3% smaller.

# Product Data Series M5000

M5015 Flat Top 2"



Edition 2007 - 160

**Standard belt widths** in increments of 75 mm (3"). Non-standard widths are offered in increments of 18.75 mm (0.74"). Non-bricklaid belts 75 mm (3") and 150 mm (6").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M5000

## M5015 GripTop 2"



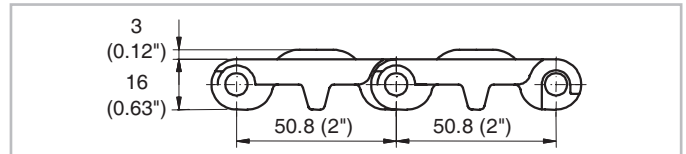
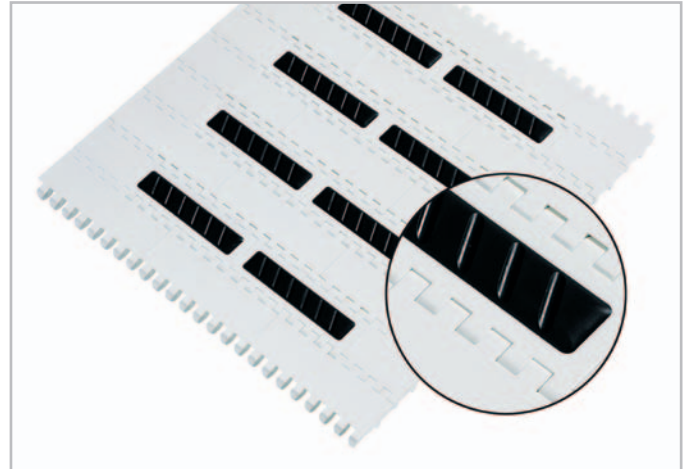
Edition 2007 - 161

### Description

- 0% open area
- Solid plate
- Dynamic hinge gap for easy release of debris and ice
- Strong link design, for ski lift applications as well as material handling
- Food approved materials
- Rod diameter 7 mm (0.27")

### Available accessories

- Center hold down device
- Sideguards



### Belt data

Belt material		PP			POM		POM +UV
GripTop material		TPE					TPU +UV
Rod material		PP	POM	PA	PBT	PA	PBT
Nominal tensile strength	N/m	29000	31000	31000	38000	53000	30400
F' <sub>N</sub> straight run	lb/ft	1987	2124	2124	2603	3631	2082
Temperature range	°C	5 - 60	5 - 60	5 - 60	-40 - 60	-40 - 60	-30 - 50
	°F	40 - 140	40 - 140	40 - 140	-40 - 140	-40 - 140	-22 - 120
Belt weight m <sub>B</sub>	kg/m²	9.9	9.9	9.9	14.9	14.9	14.9
	lb/sqft	2.03	2.03	2.03	3.05	3.05	3.05

Belt material		POM +UV					
GripTop material		TPU +UV					
Rod material		PA					
Nominal tensile strength	N/m	42400					
F' <sub>N</sub> straight run	lb/ft	2904					
Temperature range	°C	-30 - 50					
	°F	-22 - 120					
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	14.9					
	lb/sqft	3.05					

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	300	375	450	525	600	675	750	825	900	975	1050	1125	1200	etc.
inch (nom.)	12	15	18	21	24	27	30	33	36	39	42	45	48	etc.

Real belt widths are in most cases 0.1 % to 0.3 % smaller.

# Product Data Series M5000

M5015 GripTop 2"



Edition 2007 - 162

**Standard belt widths** in increments of 75 mm (3"). Non-standard widths are offered in increments of 18.75 mm (0.74"). Smallest possible width 225 mm (9"). Non-bricklaid belts without indent 150 mm (6") wide.

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5000

## M5020 Flat Top Heavy Duty 2"



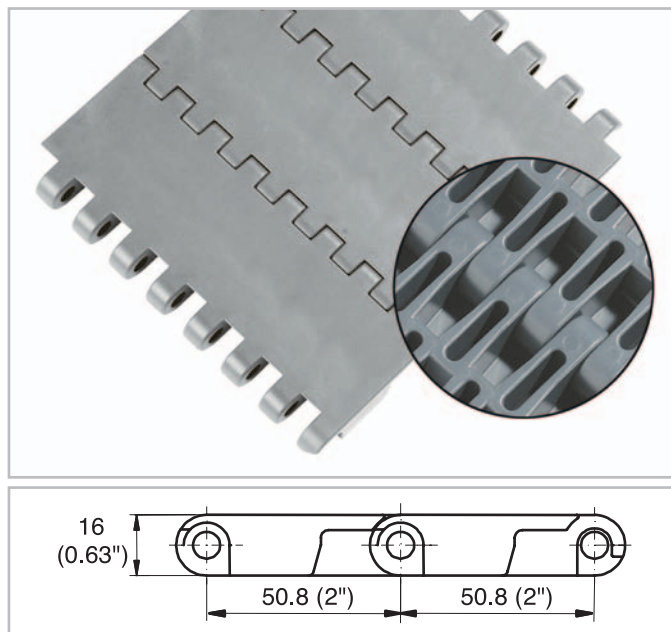
Edition 2007 - 163

### Description

- 0% open area
- Extremely stiff
- Closed hinge
- Food approved materials
- Rod diameter 7 mm (0.27")

### Available accessories

- Flights and scoops
- Sideguards
- Hold down devices
- GripTop modules



### Belt data

Belt material		PP	PE	POM	
Rod material		PP	PE	PP	PA
Nominal tensile strength	N/m	34000	24000	35000	60000
$F'_N$ straight run	lb/ft	2329	1644	2398	4110
Temperature range	°C	5 - 105	-70 - 65	5 - 90	-40 - 90
	°F	40 - 220	-94 - 150	40 - 195	-40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	8.7	9.3	13.5	13.5
	lb/sqft	1.78	1.90	2.77	2.77

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$

mm (nom.)	225	300	375	450	525	600	675	750	825	900	975	1050	1125	1200	etc.
inch (nom.)	9	12	15	18	21	24	27	30	33	36	39	42	45	48	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 75 mm (3"). Non-standard widths are offered in increments of 18.75 mm (0.74"). Non-bricklaid belts 75 mm (3") and 150 mm (6").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5000

## M5021 Perforated Flat Top 2"



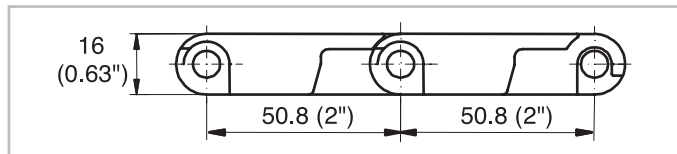
Edition 2007 - 164

### Description

- 25% open area, 25% open contact area, largest opening 3x19.5 mm (0.11"x0.77")
- Closed hinge
- Rod diameter 7 mm (0.27")
- "Open window" sprockets
- Food approved materials

### Available accessories

- Flights straight and scoops (flight bent)
- Sideguards
- Hold down devices
- GripTop modules



### Belt data

Belt material		PP	PE
Rod material		PP	PE
Nominal tensile strength	N/m	30000	20000
$F'_N$ straight run	lb/ft	2056	1370
Temperature range	°C	5 - 105	-70 - 65
	°F	40 - 220	-94 - 150
Belt weight $m_b$	kg/m <sup>2</sup>	8.4	8.8
	lb/sqft	1.72	1.80

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$

mm (nom.)	75	150	225	300	375	450	525	600	675	750	825	900	975	etc.
inch (nom.)	3	6	9	12	15	18	21	24	27	30	33	36	39	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 75 mm (3"). Non-standard widths are offered in increments of 18.75 mm (0.74"). Smallest possible width 112.5 mm (4.42"). Non-bricklaid belts 75 mm (3") and 150 mm (6") wide.

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5000

## M5023 Non Slip 2"



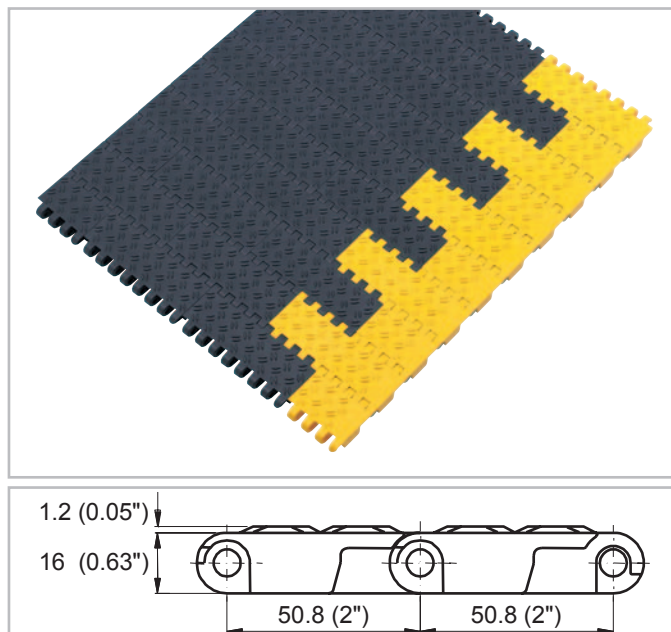
Edition 2007 - 165

### Description

- 0% open area
- Extremely stiff
- Closed hinge
- Safe Non Slip profile for people mover applications
- Rod diameter 7 mm (0.27")
- Standard belt material is antistatic
- Conductive materials available
- Also available with pattern free indent 19 mm (0.75")

### Available accessories

- Hold down devices



### Belt data

Belt material		PP +AS		POM +AS	
Rod material		PA		PP	
Nominal tensile strength	N/m	35000		33000	
F'N straight run	lb/ft	2398		2261	
Temperature range	°C	5 - 105		5 - 90	
	°F	40 - 220		40 - 195	
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	9.0		13.8	
	lb/sqft	1.85		2.83	

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	225	300	375	450	525	600	675	750	825	900	975	1050	1125	1200	etc.
inch (nom.)	9	12	15	18	21	24	27	30	33	36	39	42	45	48	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 75 mm (3"). Non-standard widths are offered in increments of 18.75 mm (0.74"). Non-bricklaid belts 75 mm (3") and 150 mm (6").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5000

## M5032 Flush Grid Heavy Duty 2"



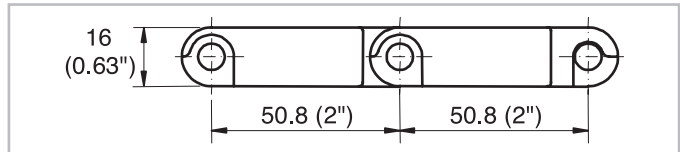
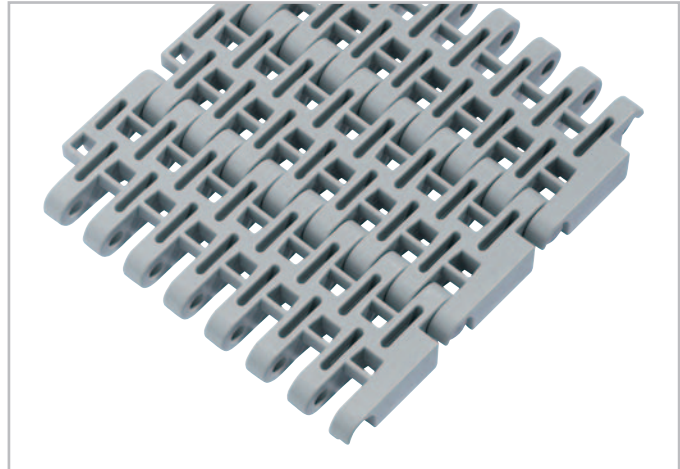
Edition 2007 - 166

### Description

- Strong design
- 34% open area; 60% open contact area; largest opening 6.4x8.5 mm (0.25"x0.33")
- Excellent for flushing and draining
- Closed hinge
- Food approved materials
- Rod diameter 7 mm (0.27")

### Available accessories

- Flights and scoops
- Sideguards
- Hold down devices
- GripTop modules



### Belt data

Belt material		PP		PE	POM	
Rod material		PP	POM	PE	PP	PA
Nominal tensile strength	N/m	36000	38000	24000	36000	55000
F <sub>N</sub> straight run	lb/ft	2466	2603	1644	2466	3768
Temperature range	°C	5 - 105	5 - 90	-70 - 65	5 - 90	-40 - 90
	°F	40 - 220	40 - 195	-94 - 150	40 - 195	-40 - 195
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	8.0	8.0	8.3	12.0	12.0
	lb/sqft	1.64	1.64	1.70	2.46	2.46

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	4	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	225	300	375	450	525	600	675	750	825	900	975	1050	1125	1200	etc.
inch (nom.)	9	12	15	18	21	24	27	30	33	36	39	42	45	48	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 75 mm (3"). Non-standard widths are offered in increments of 18.75 mm (0.74"). Smallest possible width 112.5 mm (4.42").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M5000

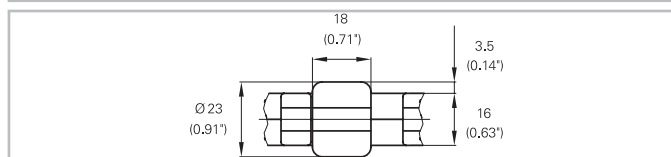
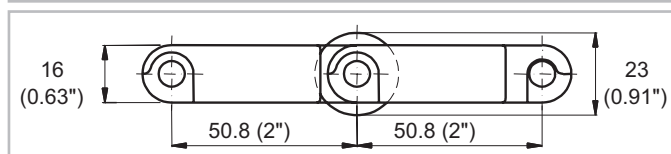
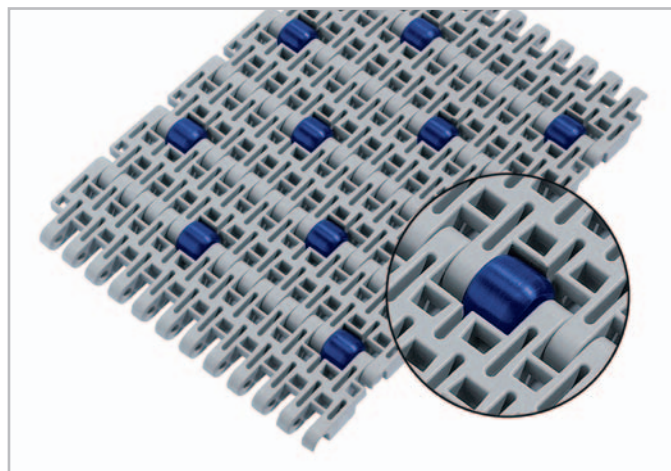
## M5032 Roller Top Heavy Duty 2"



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### Description

- Strong design
- 33 % open area; largest opening 6.4x8.5 mm (0.25"x0.33")
- Rollers row spacing 50.8 mm (2")
- For low back pressure, wearstrips are placed between rollers
- For product driven application wearstrips are placed directly under the rollers
- Excellent for flushing and draining
- Closed hinge
- Food approved materials
- Rod diameter 7 mm (0.27")



### Belt data

Belt material		PP				POM	
Rod material		PP		PA			
Roller material		POM					
Roller lateral spacing per row	mm / <i>inch</i>	112 / 4.4	150 / 6	112 / 4.4	150 / 6	112 / 4.4	150 / 6
Roller offset next row	mm / <i>inch</i>	56 / 2.2	75 / 3	56 / 2.2	75 / 3	56 / 2.2	75 / 3
Roller dimension diameter / width	mm <i>inch</i>	Ø 23 / 18 <i>Ø 0.91 / 0.71</i>	Ø 23 / 18 <i>Ø 0.91 / 0.71</i>	Ø 23 / 18 <i>Ø 0.91 / 0.71</i>	Ø 23 / 18 <i>Ø 0.91 / 0.71</i>	Ø 23 / 18 <i>Ø 0.91 / 0.71</i>	Ø 23 / 18 <i>Ø 0.91 / 0.71</i>
Nominal tensile strength F' <sub>N</sub> straight run	N/m <i>lb/ft</i>	24000 <i>1644</i>	27000 <i>1850</i>	25000 <i>1712</i>	28000 <i>1918</i>	36000 <i>2446</i>	41000 <i>2809</i>
Temperature range	°C °F	5 - 90 40 - 195	5 - 90 40 - 195	5 - 90 40 - 195	5 - 90 40 - 195	-40 - 90 -40 - 195	-40 - 90 -40 - 195
Belt weight m <sub>B</sub>	kg/m² <i>lb/sqft</i>	8.0 <i>1.64</i>	8.0 <i>1.64</i>	8.0 <i>1.64</i>	8.0 <i>1.64</i>	12.0 <i>2.46</i>	12.0 <i>2.46</i>

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

# Product Data Series M5000

M5032 Roller Top Heavy Duty 2"



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## Standard range of belt widths $b_0$ and free edge

Belt width (mm) (nom.)	225	300	375	450	525	600	675	750	825	900	975	1050	etc.
Belt width (inch) (nom.)	9	12	15	18	21	24	27	30	33	36	39	42	etc.
Roller lateral spacing per row 112.5 mm / offset next row 56.25 mm													
Free edge (mm)	19/19	19/37	19/55	19/19	19/37	19/55	19/19	19/37	19/55	19/19	19/37	19/55	etc.
Free edge (inch)	0.7/0.7	0.7/1.5	0.7/2.2	0.7/0.7	0.7/1.5	0.7/2.2	0.7/0.7	0.7/1.5	0.7/2.2	0.7/0.7	0.7/1.5	0.7/2.2	etc.
Sprocket offset (mm)	0	18.75	-18.75	0	18.75	-18.75	0	18.75	-18.75	0	18.75	-18.75	etc.
Sprocket offset (inch)	0	0.74	-0.74	0	0.74	-0.74	0	0.74	-0.74	0	0.74	-0.74	etc.
Sprockets	3	4	6	7	8	10	11	12	14	15	16	18	etc.
Rollers (2 rows)	4	5	6	8	9	10	12	13	14	16	17	18	etc.
Roller lateral spacing per row 150 mm / offset next row 75 mm													
Free edge (mm)	28	28	28	28	28	28	28	28	28	28	28	28	etc.
Free edge (inch)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	etc.
Sprocket offset (mm)	37.5	0	37.5	0	37.5	0	37.5	0	37.5	0	37.5	0	etc.
Sprocket offset (inch)	1.5	0	1.5	0	1.5	0	1.5	0	1.5	0	1.5	0	etc.
Sprockets	2	3	4	5	6	7	8	9	10	11	12	13	etc.
Rollers (2 rows)	3	4	5	6	7	8	9	10	11	12	13	14	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 75 mm (3"). Smallest possible width 225 mm (9").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5000

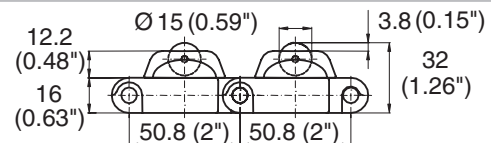
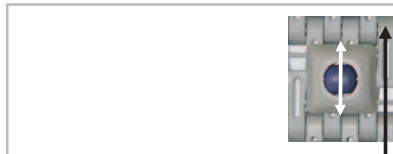
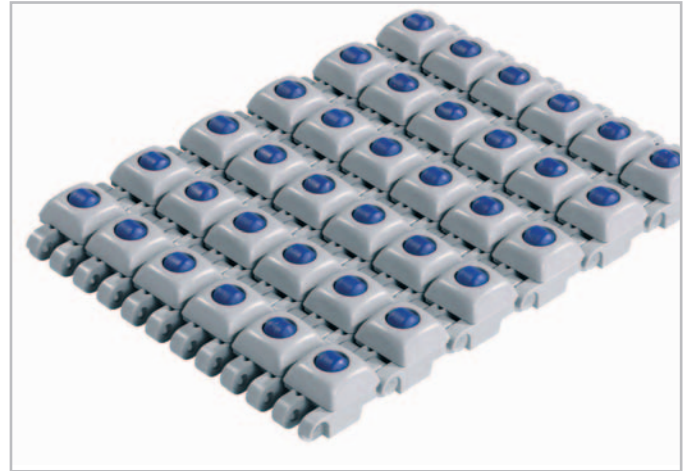
## M5032 Roller Top - 0° 2"



Edition 2007 - 169

### Description

- Rollers oriented in longitudinal direction for low back pressure applications and product accumulation
- Low friction POM roller on solid steel pin
- Strong design, with strong retaining of the roller
- Roller protected against overload or impact
- Min. roller distance longitudinal every 50.8 mm (2") possible
- Min. roller distance transversal every 37.5 mm (1.5") possible
- Customized roller pattern possible
- Replacement of single rollers possible
- Closed hinge
- Rod diameter 7 mm (0.27")



### Belt data

Belt material		PP	
Rod material		PP	POM
Roller material		POM	
Nominal tensile strength	N/m	36000	38000
$F'_N$ straight run	lb/ft	2466	2603
Temperature range	°C	5 - 90	5 - 90
	°F	40 - 195	40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	17.7	17.7
	lb/sqft	3.63	3.63

Belt weight  $m_B$ , 50% rollers: 12.9 kg/m<sup>2</sup>; 2.65 lb/sqft

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$

mm (nom.)	225	300	375	450	525	600	675	750	825	900	975	1050	1125	1200	etc.
inch (nom.)	9	12	15	18	21	24	27	30	33	36	39	42	45	48	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 75 mm (3"). Non-standard widths are offered in increments of 18.75 mm (0.74"). Smallest possible width 112.5 mm (4.42").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5000

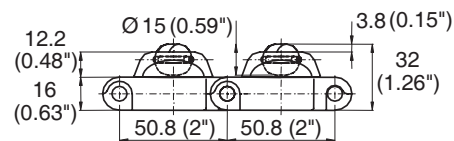
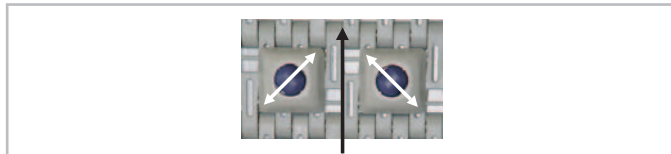
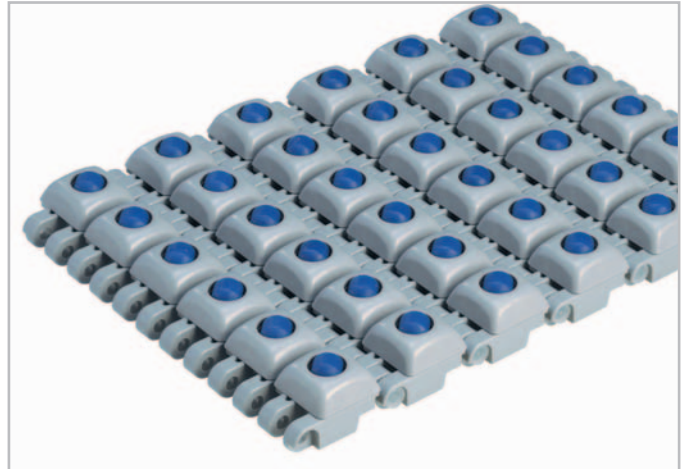
## M5032 Roller Top - 45° 2"



Edition 2007 - 170

### Description

- Rollers oriented in 45° to the belt running direction
- Low friction POM roller on solid steel pin
- Strong design, with strong retaining of the roller
- Roller protected against overload or impact
- Min. roller distance longitudinal every 50.8 mm (2") possible
- Min. roller distance transversal every 37.5 mm (1.5") possible
- Customized roller pattern possible
- Replacement of single rollers possible
- Closed hinge
- Rod diameter 7 mm (0.27")



### Belt data

Belt material		PP	
Rod material		PP	POM
Roller material		POM	
Nominal tensile strength	N/m	36000	38000
$F'_N$ straight run	lb/ft	2466	2603
Temperature range	°C	5 - 90	5 - 90
	°F	40 - 195	40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	17.7	17.7
	lb/sqft	3.63	3.63

Belt weight  $m_B$ , 50% rollers: 12.9 kg/m<sup>2</sup>; 2.65 lb/sqft

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$

mm (nom.)	225	300	375	450	525	600	675	750	825	900	975	1050	1125	1200	etc.
inch (nom.)	9	12	15	18	21	24	27	30	33	36	39	42	45	48	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 75 mm (3"). Non-standard widths are offered in increments of 18.75 mm (0.74"). Smallest possible width 112.5 mm (4.42").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5000

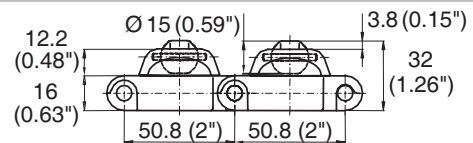
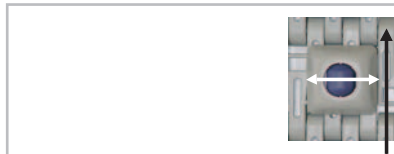
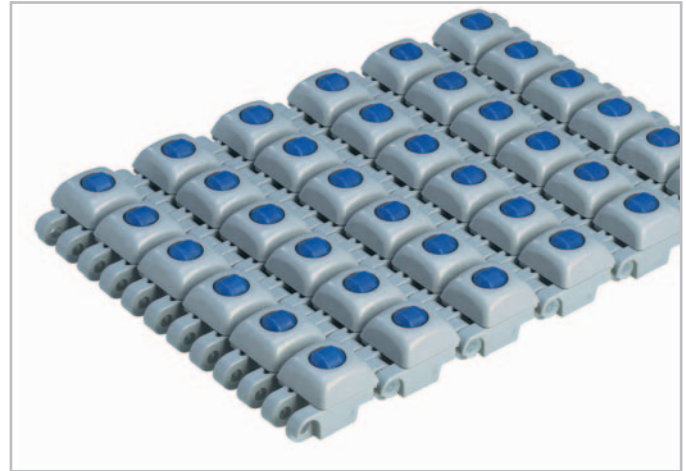
## M5032 Roller Top - 90° 2"



Edition 2007 - 171

### Description

- Rollers oriented in lateral direction for easy transverse movements and side transfers
- Low friction POM roller on solid steel pin
- Strong design, with strong retaining of the roller
- Roller protected against overload or impact
- Min. roller distance longitudinal every 50.8 mm (2") possible
- Min. roller distance transversal every 37.5 mm (1.5") possible
- Customized roller pattern possible
- Replacement of single rollers possible
- Closed hinge
- Rod diameter 7 mm (0.27")



### Belt data

Belt material		PP	
Rod material		PP	POM
Roller material		POM	
Nominal tensile strength	N/m	36000	38000
$F'_N$ straight run	lb/ft	2466	2603
Temperature range	°C	5 - 90	5 - 90
	°F	40 - 195	40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	17.7	17.7
	lb/sqft	3.63	3.63

Belt weight  $m_B$ , 50% rollers: 12.9 kg/m<sup>2</sup>; 2.65 lb/sqft

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths $b_0$

mm (nom.)	225	300	375	450	525	600	675	750	825	900	975	1050	1125	1200	etc.
inch (nom.)	9	12	15	18	21	24	27	30	33	36	39	42	45	48	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 75 mm (3"). Non-standard widths are offered in increments of 18.75 mm (0.74"). Smallest possible width 112.5 mm (4.42").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M5000

## M5033 Flush Grid 2"



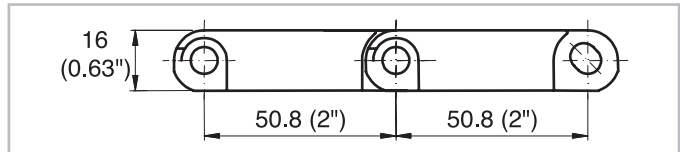
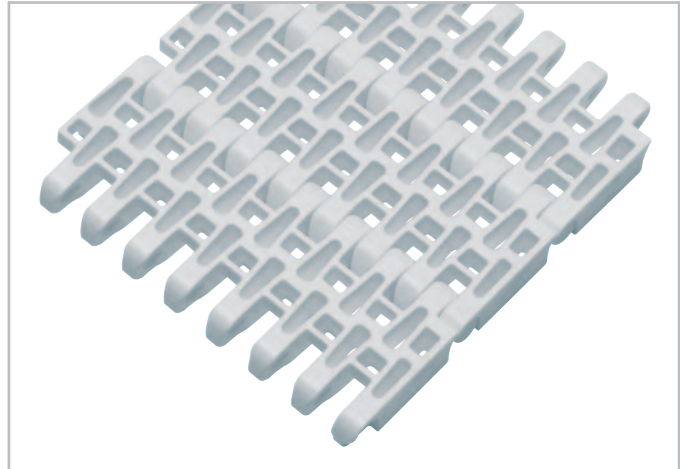
Edition 2007 - 172

### Description

- 37% open area; 55% open contact area; largest opening 6.0x8.5 mm (0.24"x0.33")
- Excellent for cooling and draining
- Open hinge
- Easy to clean
- Food approved materials
- Rod diameter 7 mm (0.27")

### Available accessories

- Flights and scoops
- Sideguards
- Hold down devices
- GripTop modules



### Belt data

Belt material		PP	PE	POM	
Rod material		PP	PE	PP	PA
Nominal tensile strength	N/m	26000	18000	30000	35000
F <sub>N</sub> straight run	lb/ft	1781	1233	2055	2397
Temperature range	°C	5 - 105	-70 - 65	5 - 90	-40 - 90
	°F	40 - 220	-94 - 150	40 - 195	-40 - 195
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	6.8	7.2	10.2	10.2
	lb/sqft	1.39	1.48	2.09	2.09

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)		Backbending radius for elevators with sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	225	300	375	450	525	600	675	750	825	900	975	1050	1125	1200	etc.
inch (nom.)	9	12	15	18	21	24	27	30	33	36	39	42	45	48	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 75 mm (3"). Non-standard widths are offered in increments of 18.75 mm (0.74"). Smallest possible width 112.5 mm (4.42").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



# Product Data Series M5000

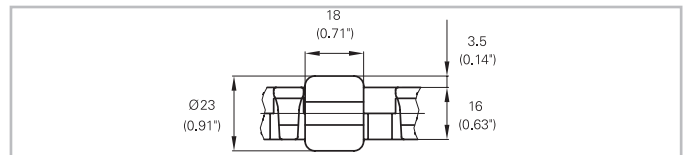
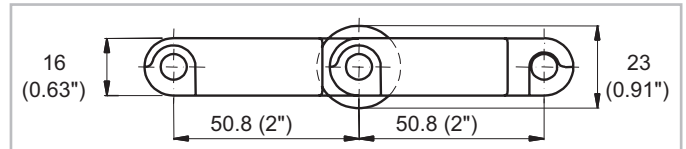
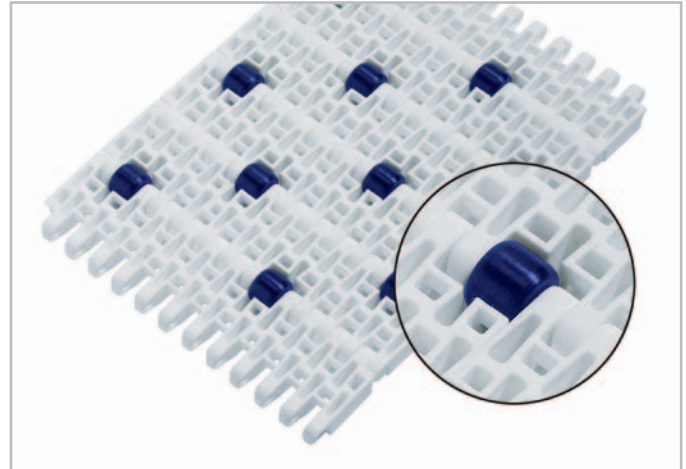
## M5033 Roller Top 2"



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### Description

- 37 % open area; largest opening 6.0x8.5 mm (0.24"x0.33")
- Roller lateral spacing see table belt data
- Rollers row spacing 50.8 mm (2")
- For low back pressure, wearstrips are placed between rollers
- For product driven application wearstrips are placed directly under the rollers
- Excellent for flushing and draining
- Open hinge
- Food approved materials
- Rod diameter 7 mm (0.27")



### Belt data

Belt material		PP				POM	
Rod material		PP		PA			
Roller material		POM					
Roller lateral spacing per row	mm / inch	112 / 4.4	150 / 6	112 / 4.4	150 / 6	112 / 4.4	150 / 6
Roller offset next row	mm / inch	56 / 2.2	75 / 3	56 / 2.2	75 / 3	56 / 2.2	75 / 3
Roller dimension diameter / width	mm inch	Ø 23 / 18 Ø 0.91 / 0.71	Ø 23/ 18 Ø 0.91 / 0.71	Ø 23 / 18 Ø 0.91 / 0.71	Ø 23 / 18 Ø 0.91 / 0.71	Ø 23 / 18 Ø 0.91 / 0.71	Ø 23 / 18 Ø 0.91 / 0.71
Nominal tensile strength F' <sub>N</sub> straight run	N/m lb/ft	17000 1165	19000 1300	17000 1165	19000 1300	20000 1370	22000 1507
Temperature range	°C °F	5 - 90 40 - 195	5 - 90 40 - 195	5 - 90 40 - 195	5 - 90 40 - 195	-40 - 90 -40 - 195	-40 - 90 -40 - 195
Belt weight m <sub>B</sub>	kg/m² lb/sqft	6.8 1.39	6.8 1.39	6.8 1.39	6.8 1.39	10.2 2.09	10.2 2.09

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

# Product Data Series M5000

M5033 Roller Top 2"



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## Standard range of belt widths $b_0$ and free edge

Belt width (mm) (nom.)	225	300	375	450	525	600	675	750	825	900	975	1050	etc.
Belt width (inch) (nom.)	9	12	15	18	21	24	27	30	33	36	39	42	etc.
Roller lateral spacing per row 112.5 mm / offset next row 56.25 mm													
Free edge (mm)	19/19	19/37	19/55	19/19	19/37	19/55	19/19	19/37	19/55	19/19	19/37	19/55	etc.
Free edge (inch)	0.7/0.7	0.7/1.5	0.7/2.2	0.7/0.7	0.7/1.5	0.7/2.2	0.7/0.7	0.7/1.5	0.7/2.2	0.7/0.7	0.7/1.5	0.7/2.2	etc.
Sprocket offset (mm)	0	18.75	-18.75	0	18.75	-18.75	0	18.75	-18.75	0	18.75	-18.75	etc.
Sprocket offset (inch)	0	0.74	-0.74	0	0.74	-0.74	0	0.74	-0.74	0	0.74	-0.74	etc.
Sprockets	3	4	6	7	8	10	11	12	14	15	16	18	etc.
Rollers (2 rows)	4	5	6	8	9	10	12	13	14	16	17	18	etc.
Roller lateral spacing per row 150 mm / offset next row 75 mm													
Free edge (mm)	28	28	28	28	28	28	28	28	28	28	28	28	etc.
Free edge (inch)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	etc.
Sprocket offset (mm)	37.5	0	37.5	0	37.5	0	37.5	0	37.5	0	37.5	0	etc.
Sprocket offset (inch)	1.5	0	1.5	0	1.5	0	1.5	0	1.5	0	1.5	0	etc.
Sprockets	2	3	4	5	6	7	8	9	10	11	12	13	etc.
Rollers (2 rows)	3	4	5	6	7	8	9	10	11	12	13	14	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 75 mm (3"). Smallest possible width 225 mm (9").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5000

## M5060 Flat Top 2"



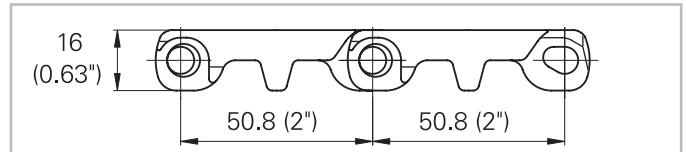
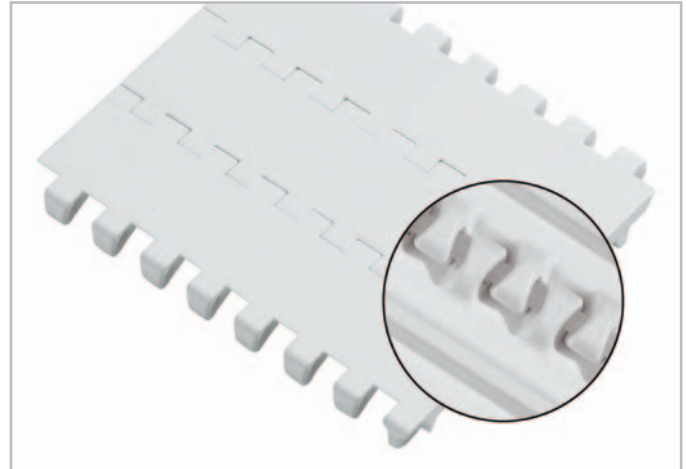
Edition 2007 - 175

### Description

- 0% open area
- Solid plate
- Imperial belt width
- Dynamic open hinge, easy to clean
- Strong link design (1" link-pitch)
- Rod diameter 7 mm (0.27")
- Smart-fit rod retention
- Food approved materials

### Available accessories

- Flights



### Belt data

Belt material		PP		PE	
Rod material		PP	PA	PE	PA
Nominal tensile strength	N/m	18000	22000	8000	10000
F' <sub>N</sub> straight run	lb/ft	1233	1507	548	685
Temperature range	°C	5 - 105	5 - 105	-70 - 65	-46 - 65
	°F	40 - 220	40 - 220	-94 - 150	-50 - 150
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	8.8	8.8	9.1	9.1
	lb/sqft	1.8	1.8	1.86	1.86

Belt material		POM		POM +IM	
Rod material		PE	PA	PE	PA
Nominal tensile strength	N/m	14000	30000	14000	30000
F' <sub>N</sub> straight run	lb/ft	959	2055	959	2055
Temperature range	°C	-40 - 65	-40 - 90	-40 - 65	-40 - 90
	°F	-40 - 150	-40 - 195	-40 - 150	-40 - 195
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	13.1	13.4	13.4	13.4
	lb/sqft	2.68	2.75	2.75	2.75

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	101	203	304	406	508	609	711	813	914	1016	1117	1219	1321	etc.
inch (nom.)	4.0	8.0	12.0	16.0	20.0	24.0	28.0	32.0	36.0	40.0	44.0	48.0	52.0	etc.

Real belt widths are in most cases 0.1 % to 0.3% smaller.

# Product Data Series M5000

M5060 Flat Top 2"



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**Standard belt widths** in increments 4.0" (101 mm). Non-standard widths are offered in increments of 1.0" (25.4 mm) Smallest possible width 4.0" (101 mm).

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5000

## M5064 Nub Top 2"



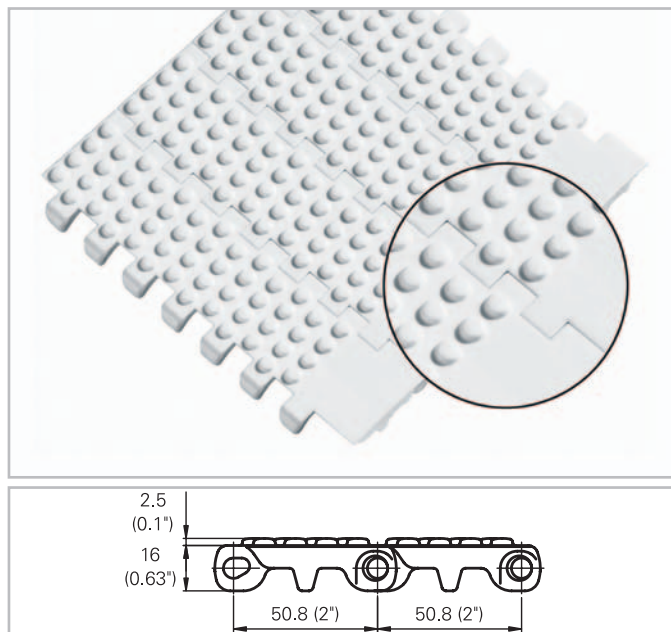
Edition 2007 - 177

### Description

- 0% open area
- Solid plate
- Imperial belt width
- Dynamic open hinge, easy to clean
- Strong link design (1" link-pitch)
- Rod diameter 7 mm (0.27")
- Indent 39.5 mm (1.56')
- Smart-fit rod retention
- Reinforced edge link
- Food approved materials

### Available accessories

- Flight straight with ribs (without nubs)



### Belt data

Belt material		PP		PE	POM
Rod material		PP	PA	PE	
Nominal tensile strength	N/m	18000	22000	8000	14000
F' <sub>N</sub> straight run	lb/ft	1233	1507	548	959
Temperature range	°C	5 - 105	5 - 105	-70 - 65	-40 - 65
	°F	40 - 220	40 - 220	-94 - 150	-40 - 150
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	8.8	8.8	9.1	13.1
	lb/sqft	1.8	1.8	1.86	2.68

Belt material		POM	POM +IM		PE
Rod material		PA	PE	PA	
Nominal tensile strength	N/m	30000	14000	30000	10000
F' <sub>N</sub> straight run	lb/ft	2055	959	2055	685
Temperature range	°C	-40 - 90	-40 - 65	-40 - 90	-46 - 65
	°F	-40 - 195	-40 - 150	-40 - 195	-50 - 150
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	13.1	13.1	13.4	9.1
	lb/sqft	2.68	2.68	2.75	1.86

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without side-guards or hold down devices (minimum)		Backbending radius for elevators with side-guards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6	250	10

Use the largest possible backbending radius for elevators with side guards or hold down devices.

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	304	406	508	609	711	813	914	1016	1117	1219	1321	1219	etc.
inch (nom.)	1.5	3	4.5	6	7.5	9	10.5	12	13.5	15	16.5	18	etc.

Real belt widths are in most cases 0.1 % to 0.3 % smaller.

# Product Data Series M5000

M5064 Nub Top 2"



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**Standard belt widths** in increments 4.0" (101 mm). Non-standard widths are offered in increments of 1.0" (25.4 mm) Smallest possible width 4.0" (101 mm), but widths smaller than 12" (304 mm) ist without indent.

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).



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# Product Data Series M5000

## Flights and Sideguards Series M5000

DISTRIBUIDOR OFICIAL.



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HabasitLINK® Modular belts are available with flights to convey products on inclined planes. The flight modules are injection molded one-piece designs that when installed, become an integral part of the belt. Flight modules are available with ribs on one side ("no-cling") for improved release of wet or sticky food products and can also be cut to non-standard heights.

### Code:

xx = height of flight  
 25 mm = 02  
 50 mm = 05  
 75 mm = 07  
 100 mm = 10  
 150 mm = 15

Note: All flights have open hinge design (USDA).  
 M5010Fxx, smooth side

### Flights M5000 (except M5060) with link increment 18.75mm (0.74"); metric belt widths

	Flights straight		Flights straight		Flights corrugated		Flights bent (Scoop)		Bucket Flights		Sideguards	
Code flight side-guard	M5010Fxx		M5014Fxx		M5033Fxx		M5010Bxx		M5010Yxx		M5010Gxx	
	(xx= height)		(xx= height)		(xx= height)		(xx= height)		(xx= height)		M501RGxx	
	(xx= height)		(xx= height)		(xx= height)		(xx= height)		(xx= height)		(xx= height)	
height H length L	H	L	H	L	H	L	H	L	H	L	H	
mm	25	150	—	—	—	—	—	—	—	—	—	—
inch	1	6	—	—	—	—	—	—	—	—	—	—
mm	50	150	—	—	—	—	—	—	—	—	50	—
inch	2	6	—	—	—	—	—	—	—	—	2	—
mm	75	150	—	—	—	—	75	150	—	—	75	—
inch	3	6	—	—	—	—	3	6	—	—	3	—
mm	100	150	100	150	100	150	100	150	100	150	100	—
inch	4	6	4	6	4	6	4	6	4	6	4	—
mm	150	150	—	—	—	—	150	150	—	—	—	150
inch	6	6	—	—	—	—	6	6	—	—	—	6
mm	100	225	—	—	—	—	—	—	—	—	100	—
inch	4	9	—	—	—	—	—	—	—	—	4	—

### Flights M5060 with link increment 25.4mm (1"); imperial belt widths

	Flights straight		Flights straight with indent			Flights bent (Scoop)	
Code flight side-guard	M5060Fxx		M506RFxx/LFxx			M5060Bxx	
	(xx= height)		(xx=height, L=left side, R= right side)			(xx= height)	
	height H	length L	height H	length L	indent E	height H	length L
mm	50.8	152	50.8	152	31.7	—	—
inch	2	6	2	6	1.25	—	—
mm	101.6	152	101.6	152	31.7	101.6	150
inch	4	6	4	6	1.25	4	6
mm	152	152	—	—	—	—	—
inch	6	6	—	—	—	—	—
mm	152	609	—	—	—	—	—
inch	6	24	—	—	—	—	—

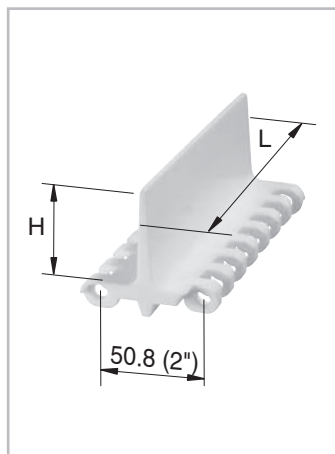
All flight and scoops can be cut to lower height (min. 25mm) for high impact applications.

# Product Data Series M5000

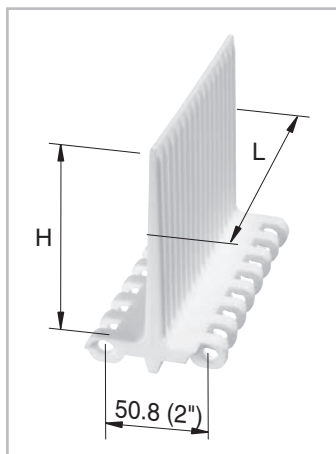
Flights and Sideguards Series M5000



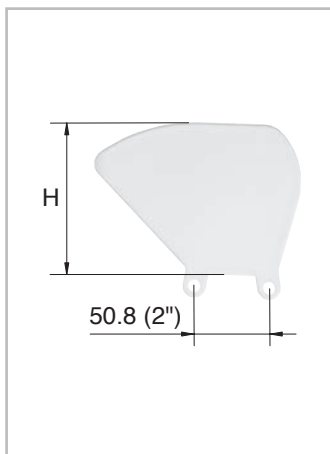
Edition 2007 - 180



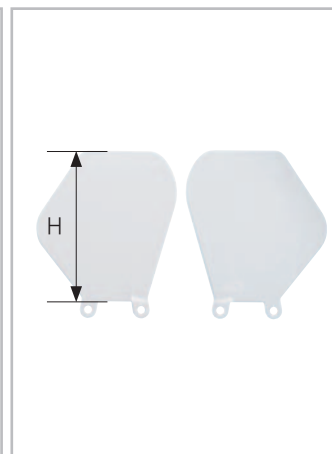
M5010Fxx smooth side



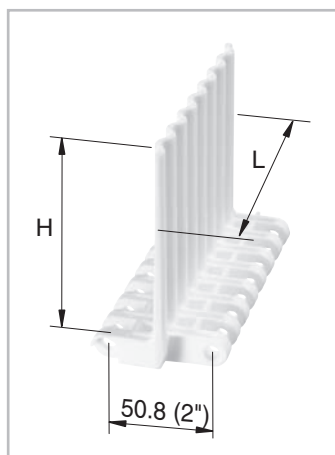
M5010Fxx „non-cling“ side



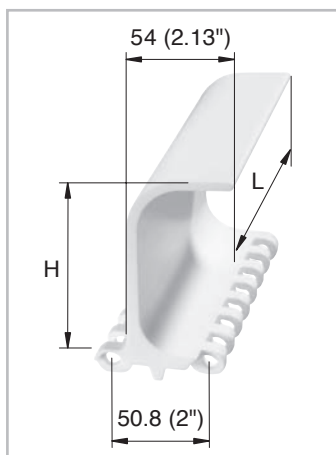
M5010Gxx



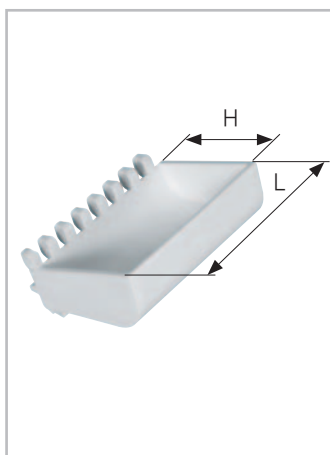
M501RGxx / LG



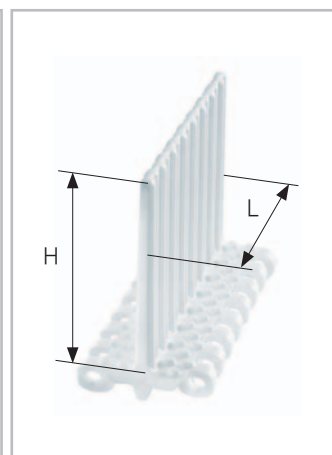
M5033F10



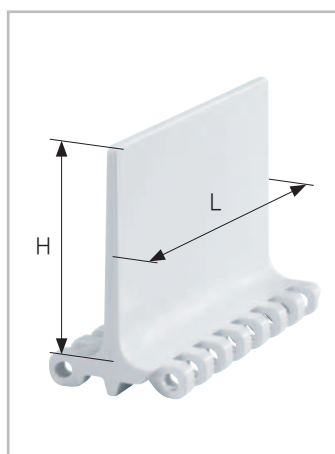
M5010Bxx



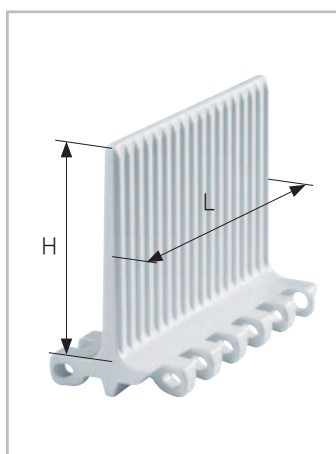
M5010Y10



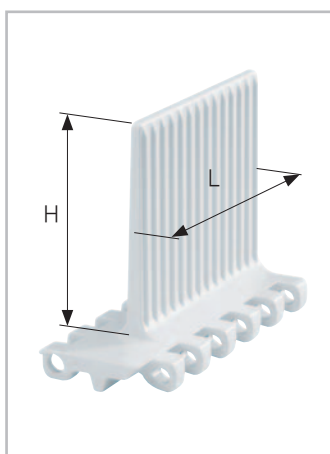
M5014F10



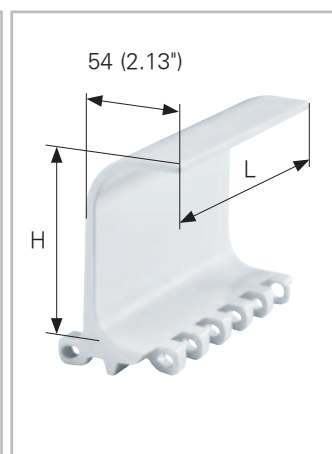
M5015F10



M5060Fxx



M506RFxx indent flight



M5060B10

### Compatibility of 2" flights and belt types

In general all 2" flights may be used in combination with all 2" belts. For some combinations the nominal tensile strengths of the belt will be reduced to the strength of the flight.

Please see the table below.

### Flights and Sideguards M5000 Series (except M5060)

	Flight	M5010Fxx, M5010Bxx M5010Pxx, M5014F10			M5033Fxx			M5015Fxx			
	Belt material	PP	POM		PP	POM		PP		POM	
	Rod material	PP/POM	PP	PA	PP/POM	PP/POM	PA	PP	POM	PP	PA
<b>Nominal tensile strength</b>  N/m lb/ft	M5010	18'000	22'000	30'000	18'000	22'000	30'000	18'000	18'000	22'000	30'000
	M5011	1'233	1'507	2'055	1'233	1'507	2'055	1'233	1'233	1'507	2'055
	M5013										
	M5014										
	M5015							29'000 1'986	31'000 2'123	31'000 2'123	53'000 3'630
	M5020	18'000	22'000	30'000	26'000	30'000	35'000	29'000	31'000	31'000	53'000
	M5023	1'233	1'507	2'055	1'781	2'055	2'397	1'986	2'123	2'123	3'630
	M5032										
	M5033	18'000 1'233						26'000 1'781	26'000 1'781	30'000 2'055	35'000 2'397
	M5131 M50xx Roller Top	not applicable									

For M5060 belt types only M5060Fxx flight can be used. A combination with other flight series is not possible.

# Product Data Series M5000

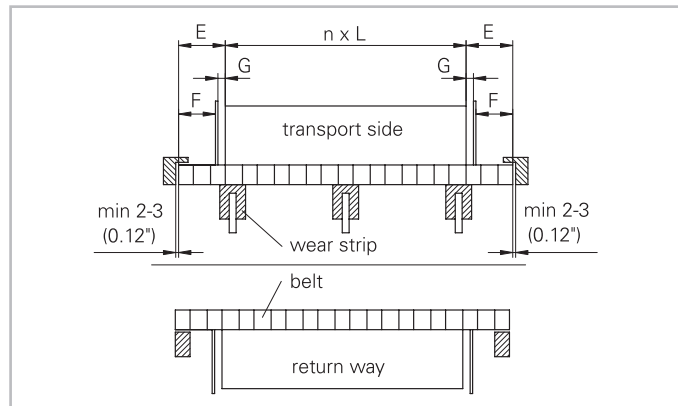
## Flights and Sideguards Series M5000



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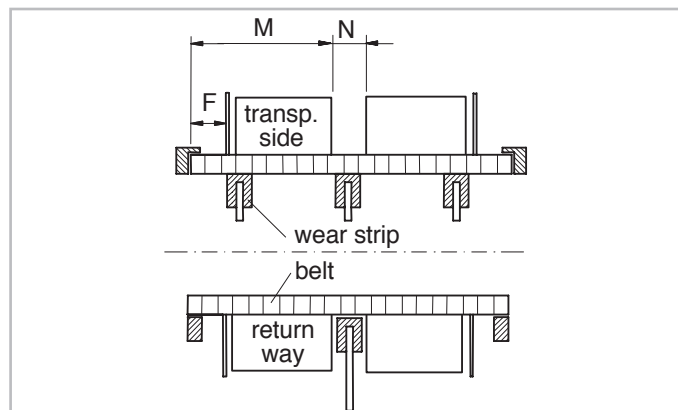
### Indents (E)

The flight indent  $E$  is the distance between the edge of the belt and the edge of flight, and  $F$  is the distance between belt edge and sideguard. It is required for adequate support of the belt on its return way and hold down during back-bending applications (elevators). On short conveyors or with special support structure, the flights may also be applied over the full belt width ( $E = 0$ ).



### Notch (N)

The notch  $N$  is a gap in each row of flights, longitudinally aligned to allow the support of belts wider 600 mm (24") on its return way or in back-bending applications. The notch width ( $N$ ) and the distance ( $M$ ) from belt edge is a multiple of the link increment 18.75 mm (0.74") or 25.4 mm (1") for M5060 series. For metric M5000 series the minimum notch width is 37.5 mm (1.48") and for M5060 50.8mm (2").



# Product Data Series M5000

## Flights and Sideguards Series M5000



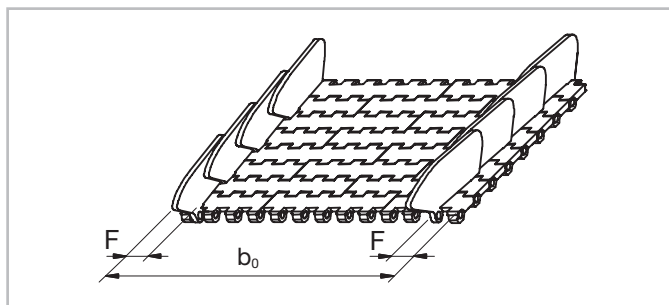
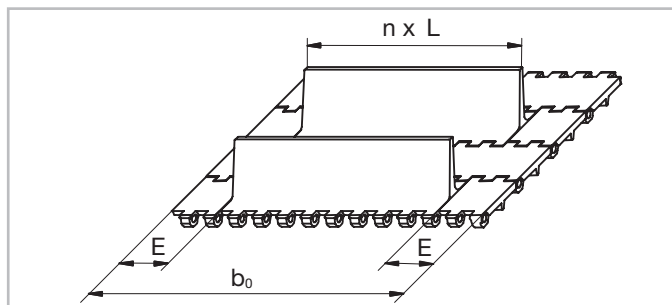
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### Installation of flights and sideguards; indents

The sideguards are usually installed with a gap (G) between the sideguards and the flights. It is also possible to install the sideguards with a minimum gap between flight and sideguards of approx. 2 mm

(0.08"). There is a certain risk for rubbing and abrasion between the flights and the sideguards. The distance  $E_1$  between the sideguards and the hold down- and support-shoes/wearstrips should not be smaller than 5 mm (0.2").

	Possible flight indents E									
	Flight only		Flight + Sideguard with gap (G ~ 8 mm (0.31"))				Flight + Sideguard without gap (G ~ 2 mm (0.08"))			
	E		E		F		E		F	
M5000 except M5060	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
Flight over full belt width	0	0	–	–	–	–	–	–	–	–
Module cutting necessary	37.5	1.47	37.5	1.47	18	0.47	37.5	1.47	28	1.1
Module cutting necessary	56	2.2	56	2.2	37	1.47	56	2.2	46	1.83
Standard, no module cutting	75	3	75	3	56	2.2	75	3	66	2.6
Module cutting necessary	112	4.4	112	4.4	93	3.7	112	4.4	103	4.1
Module cutting necessary	131	5.2	131	5.2	112	4.4	131	5.2	122	4.8
M5060										
Flight over full belt width	0	0	–	–	–	–	–	–	–	–
Module cutting necessary	50.8	2	50.8	2	34.2	1.35	–	–	–	–
Module cutting necessary	76.2	3	76.2	3	59.6	2.35	–	–	–	–
Standard, no module cutting	101.6	4	101.6	4	85	3.35	–	–	–	–
Module cutting necessary	127	5	127	5	110.4	4.35	–	–	–	–
Module cutting necessary	152.4	6	152.4	6	135.8	5.35	–	–	–	–
Flight with molded indent	33	1.3	–	–	–	–	–	–	–	–



# Product Data Series M5000

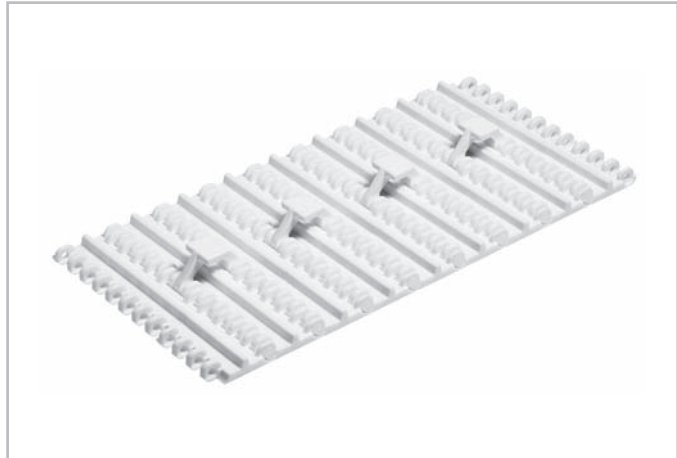
## Hold Down Devices for 2" Belts



Edition 2007 - 184

For elevators with back-bending (Z-conveyors) **hold down devices** are used to keep the belt down when it is changing from horizontal to inclined direction. For wide belts (e. g. > 800 mm (31.5") wide) slider shoes on the belt edge are often not sufficient to keep it on the track. In such cases hold down devices on the bottom side of the belt are used to guide it through the back-bending curve.

**Compatibility:** The hold down device can be put into any M5000 HabasitLINK® modular belt. The modules are inserted into the prepared position, one module every second row. As long as link steps are respected, any position over the belt width is possible.



### M5000V01

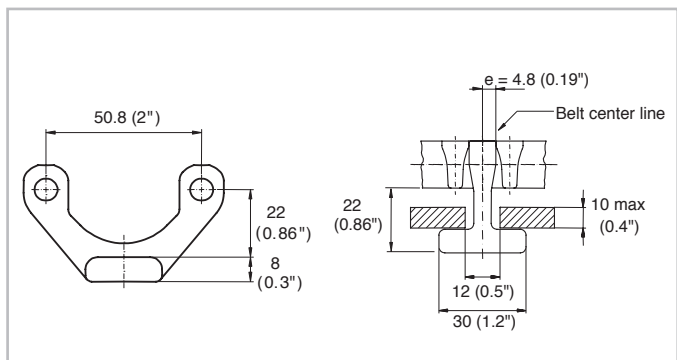
For a center positioning consider an offset "e" of 4,8 mm. Allow the necessary distance for the sprocket engagement!

**Back-bending radius R:** min. 250 mm (10")

**Sprockets:** minimum size M50S0840Q (8teeth) and M50S1060Q (10 teeth)

**Standard materials:** POM white  
other materials possible on request.

**Compatible belts series:** M5010, M5020, M5030



### M5060V05

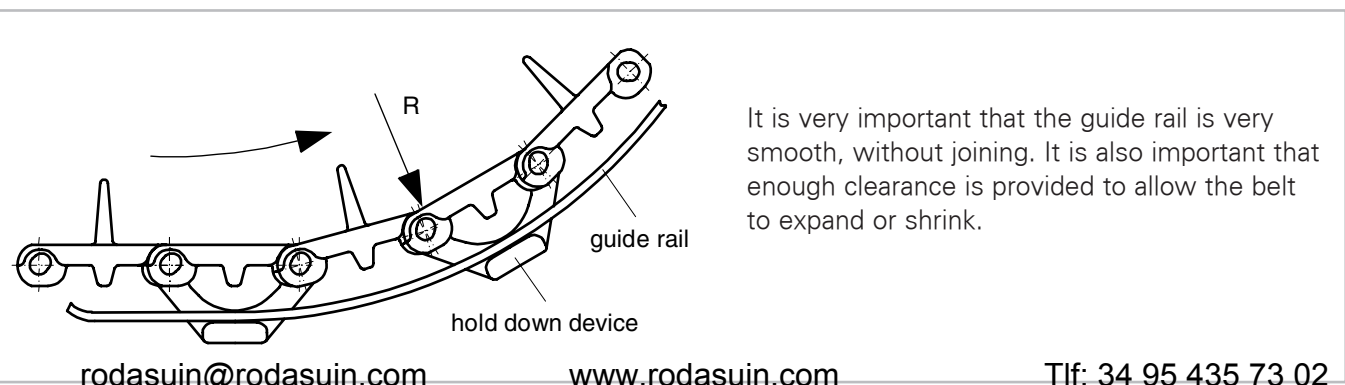
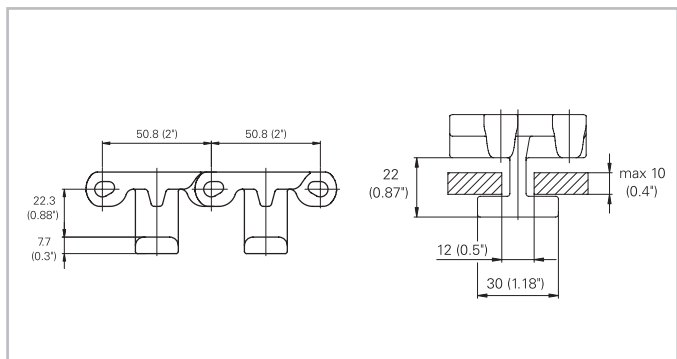
The tab module M5060V05 is designed as 2" mid module to be brick layed as a regular module. The length of two link indents give stability to the tab. This module can not be used as edge module.

**Back-bending radius R:** min. 250 mm (10")

**Sprockets:** minimum size 8 teeth (M50S08)

**Standard materials:** POM white other materials possible on request.

**Compatible belts series:** only M5060



It is very important that the guide rail is very smooth, without joining. It is also important that enough clearance is provided to allow the belt to expand or shrink.



# Product Data Series M5000

## Sprocket Series M5000



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M = Modular belts						
Belt pitch						
S = sprocket one-piece; Z = split sprocket						
Number of teeth						
Shaft size						
Shaft type: Q = square shaft; R = round						
Material: 6 = POM; 8 = PA						
M	50	S	10	40	Q	6

### Sprocket availability

Type	Number of teeth	Diameter of pitch $\varnothing d_p$		$A_1$		Hub width $B_L$		Square bore Q		$\varnothing$ Round bore R		Standard material
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
S	6	102.1	4.0	43.0	1.70	40	1.57	40	1.5	-	-	POM
S	8	133.4	5.3	58.7	2.31	40	1.57	40 / 60	1.5	-	-	POM
S	10	165.2	6.5	74.6	2.94	40	1.57	40 / 60	1.5 / 2.5	-	-	POM
S	12	197.2	7.8	90.6	3.57	40	1.57	40 / 60	1.5 / 2.5 / 3.5	-	-	POM
S	16	261.5	10.3	122.7	4.83	40	1.57	40 / 60 / 90	1.5 / 2.5 / 3.5	-	-	POM
Z-B	12	197.2	7.8	90.6	3.57	40	1.57	40 / 60 / 90	1.5 / 2.5 / 3.5	40 / 50 / 60	1.5 / 2 / 2.5	PA
Z-B	16	261.5	10.3	122.7	4.83	40	1.57	40 / 60 / 90 / 120	1.5 / 2.5 / 3.5 / 4.75	40 / 50 / 60	1.5 / 2 / 2.5	PA

S: molded sprockets; Z-B: molded sprockets with machined bore (hollow-hub).

Other sprocket and hub sizes on request.

**Key ways** for round bore shape follow European standards for metric sizes and US standards for imperial sizes. For detailed dimensions see table in the Design Guide.

**Other materials** available on request.



Sprocket one-piece



Split sprocket

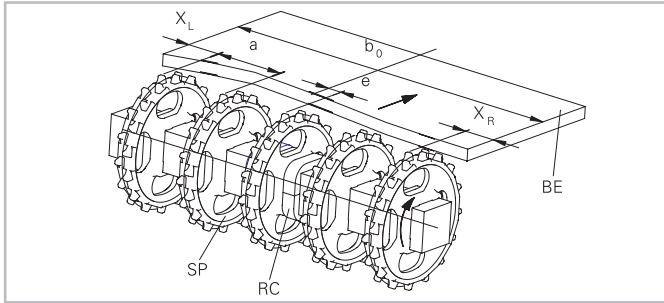
# Product Data Series M5000

Sprocket Series M5000

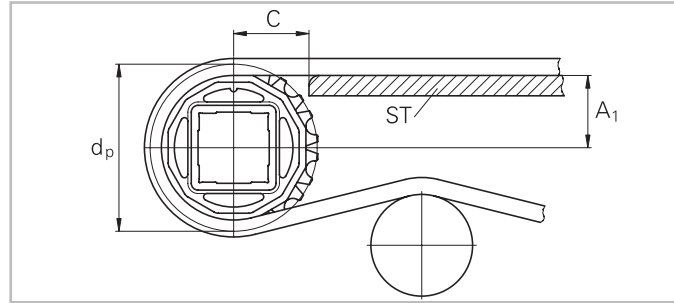


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## Sprocket arrangement



**BE** Belt  
**RC** Retainer  
**SP** Sprocket  
**b<sub>0</sub>** Belt width



The distance **C** between the sprocket axis and the slider support **ST** is minimal 53 mm (2.1").

## Wearstrips

Between driving shaft and idling sprockets or rollers the belt is carried by a slider support furnished with longitudinal wear strips from UHMW Polyethylene or other suitable material.

## Sprocket positioning

For correct positioning of the center sprocket divide the belt width by the link increment. The rounded result will be an even or an odd number. These numbers are the criteria for offset or no offset, see table.

Belt type	Sprocket spacing a		Sprocket edge distance (minimal)		Criteria for center sprocket position	Result of formula (rounded)	Offset e	Remarks
	minimal	maximal	X <sub>L</sub> mm inch	X <sub>R</sub> mm inch				
	mm inch	mm inch			mm inch	mm inch	mm inch	Offset to which side
M5010 M5011 M5013 M5014	56.25 2.2	150 6	37.5 1.48	37.5 1.48	b <sub>0</sub> / 18.75 b <sub>0</sub> / 0.74	even number (2, 4, 6 ...)	0 0	no offset
						odd number (3, 5, 7 ...)	9.4 0.37	right or left side
M5015 M502x M503x	56.25 2.2	150 6	37.5 1.48	37.5 1.48	b <sub>0</sub> / 18.75 b <sub>0</sub> / 0.74	even number (2, 4, 6 ...)	0 0	no offset
						odd number (3, 5, 7 ...)	9.4 0.37	right or left side
M5060	50.8 2	152.4 6	25.4 1	25.4 1	b <sub>0</sub> / 25.4 b <sub>0</sub> / 1	even number (2, 4, 6 ...)	0 0	no offset
						odd number (3, 5, 7 ...)	12.7 0.5	right or left side
M5064	50.8 2	152.4 6	50.8 2	50.8 2	b <sub>0</sub> / 25.4 b <sub>0</sub> / 1	even number (2, 4, 6 ...)	0 0	no offset
						odd number (3, 5, 7 ...)	12.7 0.5	right or left side

# Product Data Series M5000

## Sprocket Series M5000



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### Numbers of sprockets and wearstrips for M501x, M502x, M503x

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch	min. number	Carryway (top)	Returnway (bottom)
150	6	2	2	2
225	9	2	2	2
300	12	2	3	2
375	15	3	3	3
450	18	3	3	3
525	21	3	4	3
600	24	3	4	3
675	27	5	5	3
750	30	5	5	4
825	33	5	6	4
900	36	5	6	4
975	39	7	7	5
1'050	42	7	7	5
1'125	45	7	7	5
1'200	48	7	8	5
1'500	59	9	8	6
1'800	70	11	9	6
2'100	83	13	10	7
2'400	95	15	11	8
2'700	106	17	12	9
3'000	118	19	13	10

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

# Product Data Series M5000

Sprocket Series M5000



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## Numbers of sprockets and wearstrips for M5060, M5064

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch		Carryway (top)	Returnway (bottom)
102	4	2	2	2
203	8	2	2	2
305	12	2	3	2
406	16	3	3	3
508	20	3	3	3
610	24	3	4	3
711	28	5	4	3
813	32	5	5	3
914	36	5	5	4
1'016	40	7	6	4
1'118	44	7	6	4
1'219	48	7	7	5
1'422	56	9	7	5
1'626	64	11	7	5
1'829	72	11	8	5
2'032	80	13	8	6
2'235	88	15	9	6
2'438	96	15	10	7
2'642	104	17	11	8
2'845	112	19	12	9
3'048	120	19	13	10

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

## Product Data Series M5100

## M5131 Raised Rib 2"



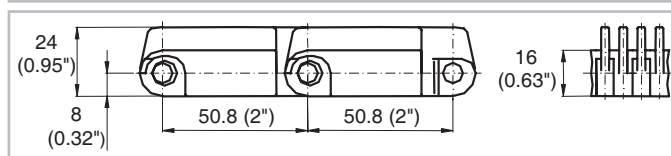
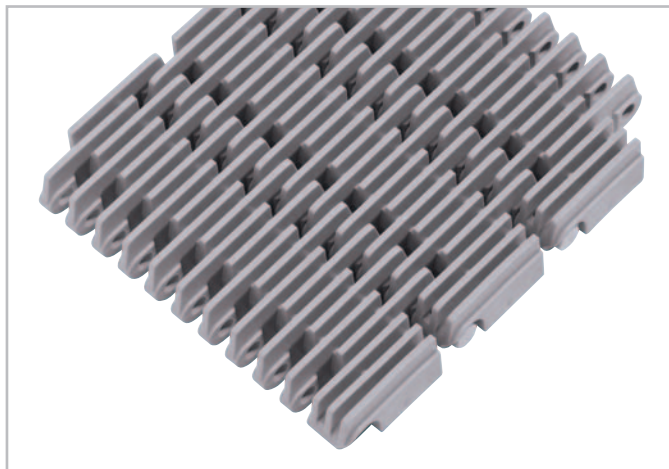
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**Description**

- Imperial belt width
- 36% open area; 67% open contact area, largest opening 17.5x3.55 mm (0.69"x0.14")
- Easy to clean
- Straight ribs 2.8 mm thick
- Rod diameter 7 mm (0.27")
- Smart fit rod retention
- Strong edges
- Lug teeth sprockets
- Food approved materials

**Available accessories**

- Combs (finger transfer plates) long and short

**Belt data**

Belt material		PP	PP +GR
Rod material		PP	
Nominal tensile strength	N/m	32000	20000
$F'_N$ straight run	lb/ft	2192	1370
Temperature range	°C	5 - 105	5 - 105
	°F	40 - 220	40 - 220
Belt weight $m_B$	kg/m <sup>2</sup>	9.9	13.6
	lb/sqft	2.03	2.79

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
90	3.5	100	4	150	6	150	6

**Standard range of belt widths  $b_0$** 

mm (nom.)	229	305	381	457	533	610	686	762	838	914	991	1067	1143	etc.
inch (nom.)	9	12	15	18	21	24	27	30	33	36	39	42	45	etc.

PP: Real belt widths are in most cases 0.1% to 0.3% smaller.

PP+GR: Real belt widths are 0.25% wider.

**Standard belt widths** in increments of 76.2 mm (3"). Non-standard widths are offered in increments of 38.1 mm (1.5").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M5100

## Data of Combs for M5131

### Long tooth comb M5131C15

Installation data

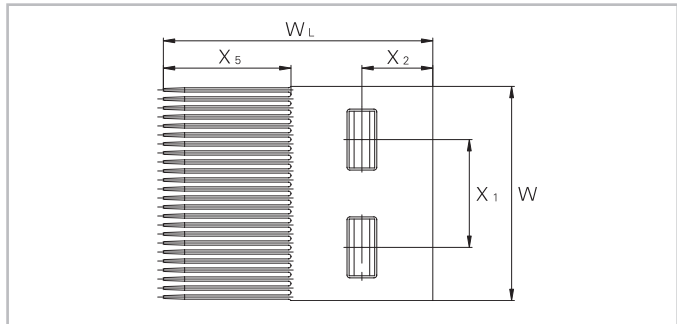
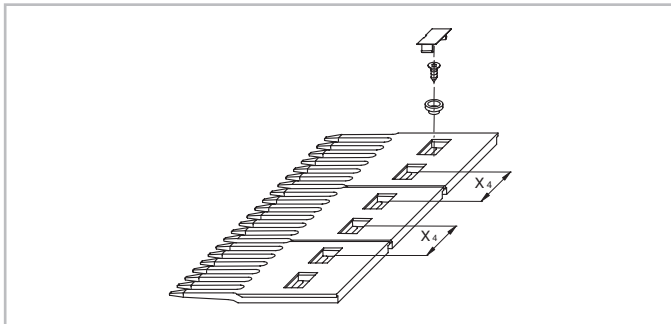
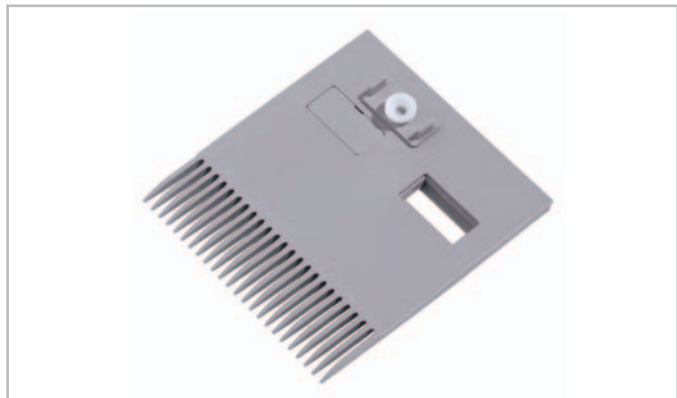
Dimensions	mm	inch
W	151	5.9
W <sub>L</sub>	190	7.5
X <sub>1</sub>	76	3.0
X <sub>2</sub>	50	2.0
X <sub>3</sub>	100 – 110	3.9 – 4.3
X <sub>4</sub>	76	3.0
X <sub>5</sub>	90	3.5
K	12	0.5
Y	d <sub>p</sub> /2+4	d <sub>p</sub> /2+0.2



### Short tooth comb M5131C16

Installation data

Dimensions	mm	inch
W	151	5.9
W <sub>L</sub>	165	6.5
X <sub>1</sub>	76	3.0
X <sub>2</sub>	50	2.0
X <sub>3</sub>	100	3.9
X <sub>4</sub>	76	3.0
X <sub>5</sub>	40	1.6
K	12	0.5
Y	d <sub>p</sub> /2+4	d <sub>p</sub> /2+0.2



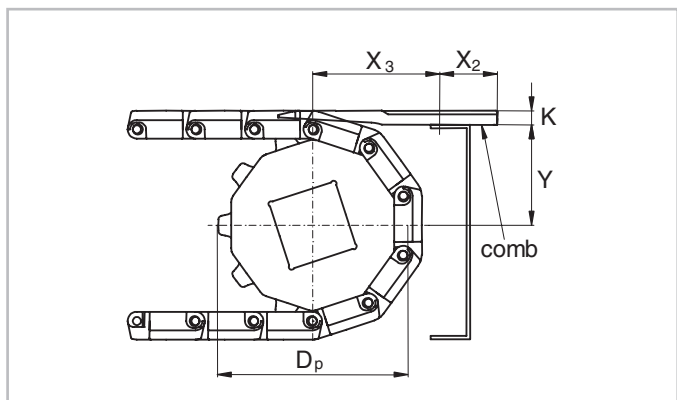
### Material data

Material	Acetal dry (wet)
Temperature °C	-40 – 90 (-40 – 60)
range °F	-40 – 195 (-40 – 140)
Color	grey

Other materials on request.

### Note

The combs are fixed using a special distance bushing that allows lateral movement. This allows the combs to adapt their position to the lateral displacement of the belt, caused by thermal expansion. For belt widths up to 300 mm (12"), the plates can be firmly fixed (2 plates max.). The fixation of the comb support should be adjustable to allow fine tuning.





# Product Data Series M5100

## Sprocket Series M5100



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M = Modular belts						
Belt pitch						
S = sprocket one-piece; Z = split sprocket						
Number of teeth						
Shaft size						
Shaft type: Q = square shaft; R = round						
Material: 6 = POM; 8 = PA						
M	51	S	12	60	Q	6

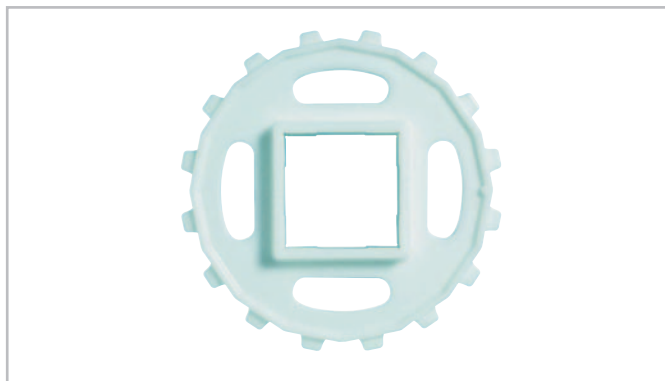
### Sprocket availability

Type	Number of teeth	Diameter of pitch Ø d <sub>p</sub>		A <sub>1</sub>		Hub width B <sub>L</sub>		Square bore Q		Ø Round bore R		Standard material
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
S	16	261.5	10.3	122.8	4.83	45	1.77	90	3.5	-	-	POM
S-C1	10	165.2	6.5	74.6	2.94	30	1.18	40 / 60 / 65	1.5 / 2.5	40 / 50 / 60	1.5 / 2.5	POM
S-C1	12	197.2	7.8	90.6	3.57	30	1.18	40 / 60 / 65	1.5 / 2.5	40 / 65	1.5 / 2.5	POM
S-C1	13	213.2	8.4	98.6	3.88	30	1.18	40 / 60 / 65 / 90	1.5 / 2.5	40 / 65 / 90	1.5 / 2.5	POM
S-C1	16	261.5	10.3	122.8	4.83	40	1.57	60 / 65 / 90 / 120	1.5 / 2.5 / 3.5	60 / 90	1.5 / 2.5	POM

S: molded sprockets; S-C1: machined sprockets. Other sprocket and hub sizes on request.

**Key ways** for round bore shape follow European standards for metric sizes and US standards for imperial sizes. For detailed dimensions see table in the Design Guide.

**Other materials** available on request.



Sprocket one-piece ("open window")



Sprocket one-piece (solid)

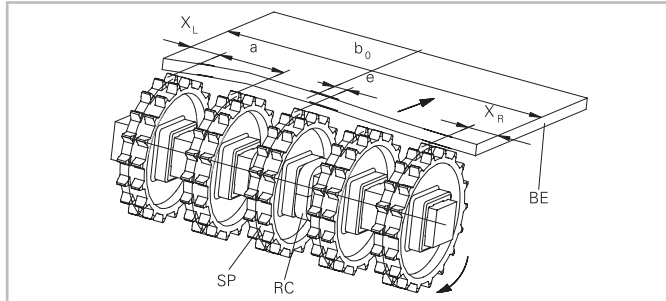
# Product Data Series M5100

Sprocket Series M5100

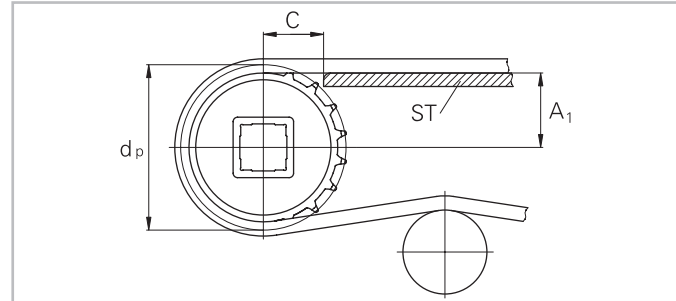


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## Sprocket arrangement



**BE** Belt  
**RC** Retainer  
**SP** Sprocket  
**b<sub>0</sub>** Belt width



The distance **C** between the sprocket axis and the slider support **ST** is minimal 53 mm (2.1").

## Wearstrips

Between driving shaft and idling sprockets or rollers the belt is carried by a slider support furnished with longitudinal wear strips from UHMW Polyethylene or other suitable material.

## Sprocket positioning

For correct positioning of the center sprocket divide the belt width by the link increment. The rounded result will be an even or an odd number. These numbers are the criteria for offset or no offset, see table.

Belt type	Sprocket spacing a		Sprocket edge distance (minimal)		Criteria for center sprocket position	Result of formula (rounded)	Offset e	Remarks
	minimal	maximal	$X_L$	$X_R$				
	mm inch	mm inch	mm inch	mm inch	mm inch		mm inch	Offset to which side
M5131	58.2 2.29	152.4 6	28 1.1	28 1.1	$b_0 / 38.1$ $b_0 / 1.5$	even number (2, 4, 6 ...)	9.53 0	right or left side
						odd number (3, 5, 7 ...)	9.53 0	right or left side

# Product Data Series M5100

## Sprocket Series M5100



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### Numbers of sprockets and wearstrips

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch	min. number	Carryway (top)	Returnway (bottom)
229	9	2	2	2
305	12	2	2	2
381	15	3	3	3
457	18	3	3	3
533	21	3	3	3
610	24	3	4	3
686	27	5	4	3
762	30	5	4	4
838	33	5	5	4
914	36	5	5	4
991	39	7	5	4
1'067	42	7	6	4
1'143	45	7	6	5
1'219	48	7	7	5
1'295	51	9	7	5
1'372	54	9	7	5
1'448	57	9	7	5
1'524	60	9	8	6
1'600	63	11	8	6
1'676	66	11	8	6
1'753	69	11	8	6
1'829	72	11	9	6
1'905	75	13	9	7
1'981	78	13	9	7
2'057	81	13	9	7
2'134	84	13	10	7
2'210	87	15	10	7
2'286	90	15	10	8
2'515	99	17	11	8
2'743	108	17	12	9
2'972	117	19	12	9
3'200	126	21	13	10
3'429	135	23	14	11
3'658	144	23	15	11
3'810	150	25	15	12

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

# Product Data Series M6300

## M6360 Flat Top 2.5"



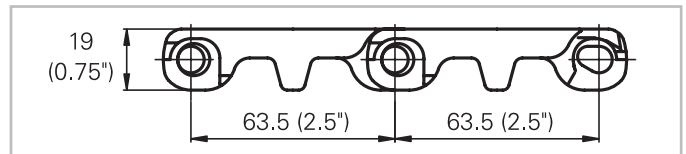
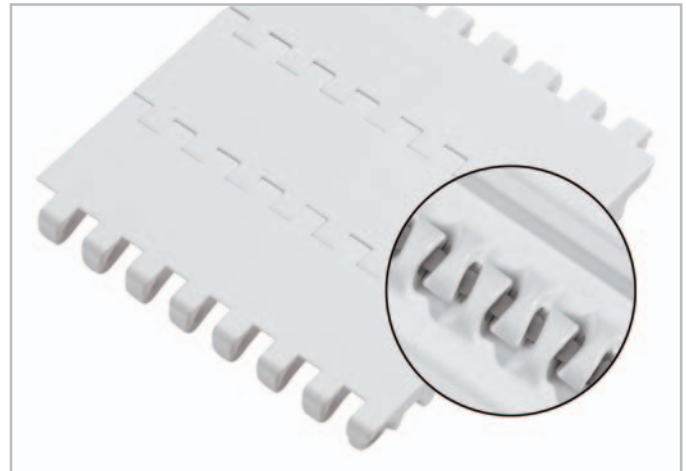
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### Description

- 0% open area
- Solid plate
- Imperial belt width
- Dynamic open hinge, easy to clean
- Strong link design (1" link-pitch)
- Rod diameter 8 mm (0.32")
- Smart fit rod retention
- Food approved materials

### Available accessories

- Flights



### Belt data

Belt material		PP	PE	POM	POM +IM
Rod material		PP	PE	PE	
Nominal tensile strength	N/m	24000	14000	19000	19000
F <sub>N</sub> straight run	lb/ft	1644	959	1301	1301
Temperature range	°C	5 - 105	-70 - 65	-40 - 65	-40 - 65
	°F	40 - 220	-94 - 150	-40 - 150	-40 - 150
Belt weight m <sub>B</sub>	kg/m <sup>2</sup>	10.7	11.4	16.5	16.5
	lb/sqft	2.19	2.34	3.38	3.38

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
100	4	100	4	150	6	150	6

### Standard range of belt widths b<sub>0</sub>

mm (nom.)	101	203	304	406	508	609	711	813	914	1016	1117	1219	1321	etc.
inch (nom.)	4.0	8.0	12.0	16.0	20.0	24.0	28.0	32.0	36.0	40.0	44.0	48.0	52.0	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments 4.0" (101 mm). Non-standard widths are offered in increments of 1.0" (25.4 mm) Smallest possible width 4.0" (101 mm).

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M6300

## Flights Series M6300



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HabasisLINK® Modular belts are available with flights to convey products on inclined planes. The flight modules are injection molded one-piece designs that when installed, become an integral part of the belt. Flight modules for this belt series are available with flat surface only (smooth on both sides)

**Code:** xx = height of flight:

50 mm = 05

100 mm = 10

150 mm = 15

Note: All flights have open hinge design (USDA).

Flights straight		
Code flight sideguard	M6360Fxx (xx= height)	
	height H	length L
mm	50.8	152
inch	2	6
mm	101	101
inch	4	4
mm	152	152
inch	6	6

All flights can be cut to lower height (min. 25mm) for high impact applications

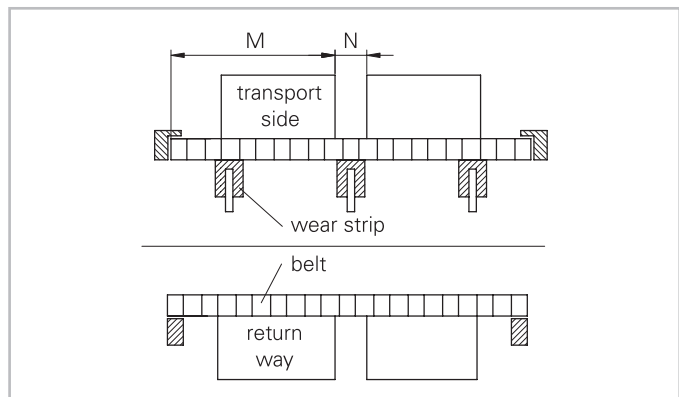
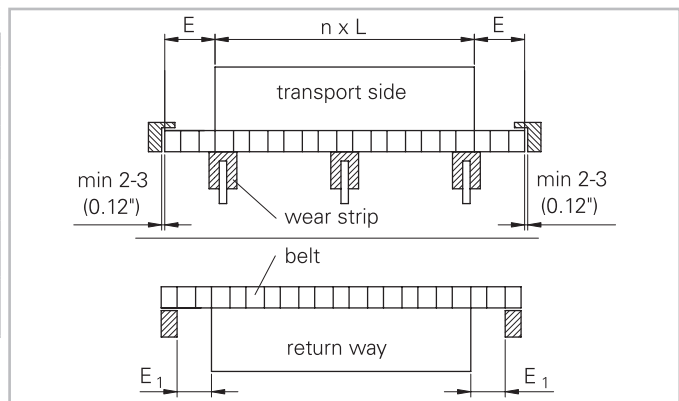
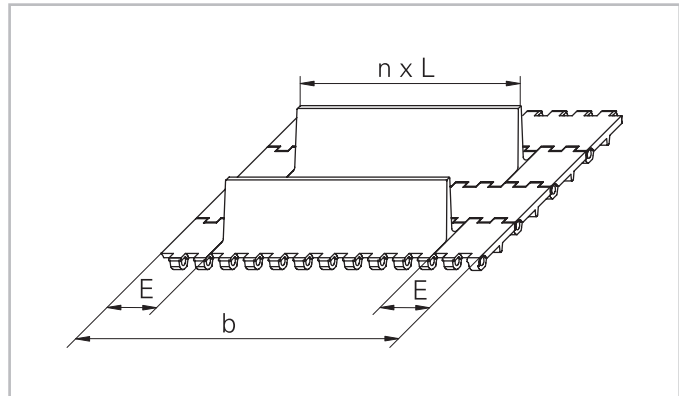
### Indents (E)

The flight indent E is the distance between the edge of the belt and the edge of flight. It is required for adequate support of the belt on its return way and hold down during back-bending applications (elevators). On short conveyors or with special support structure, the flights may also be applied over the full belt width (E = 0).

Indents are possible in widths as multiples of 1" (25.4mm), min 2" (50.8mm)

### Notch (N)

The notch N is a gap in each row of flights, longitudinally aligned to allow the support of belts wider 600 mm (24") on its return way or in back-bending applications. The notch width (N) and the distance (M) from belt edge is a multiple of the link increment 25.4 mm (1"). For M6300 series the minimum notch width is 50.8 mm (2").



# Product Data Series M6300

## Sprocket Series M6300



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M = Modular belts										
Belt pitch										
S = sprocket one-piece; Z = split sprocket										
Number of teeth										
Shaft size										
Shaft type: Q = square shaft; R = round										
Material: 6 = POM; 8 = PA										
M	63	S	13	60	Q	6				

### Sprocket availability

Type	Number of teeth	Diameter of pitch $\varnothing d_p$		$A_1$		Hub width $B_L$		Square bore Q		Standard material
		mm	inch	mm	inch	mm	inch	mm	inch	
S	6	127.0	5.0	54.0	2.13	40	1.57	40	1.5	POM
S	8	165.9	6.5	73.5	2.90	40	1.57	40 / 60	1.5 / 2.5	POM
S	10	205.5	8.1	93.5	3.67	40	1.57	40 / 60	1.5 / 2.5	POM
S	13	265.3	10.5	123.5	4.85	40	1.57	60	2.5	POM

S: molded sprockets. Other sprocket and hub sizes on request.

**Key ways** for round bore shape follow European standards for metric sizes and US standards for imperial sizes. For detailed dimensions see table in the Design Guide.

**Other materials** available on request.

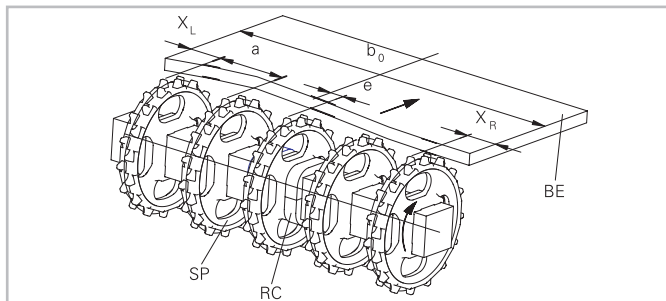


Sprocket one-piece ("open window")

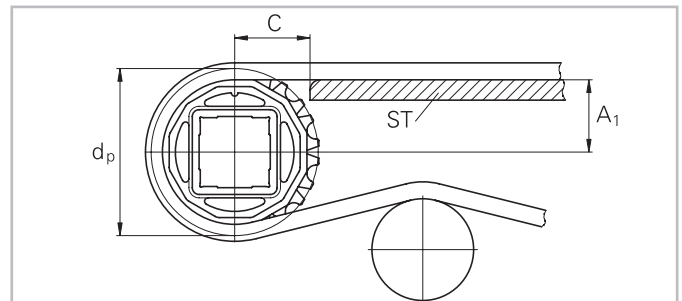


Sprocket one-piece (solid)

### Sprocket arrangement



BE Belt  
RC Retainer  
SP Sprocket  
 $b_0$  Belt width



The distance **C** between the sprocket axis and the slider support **ST** is minimal 66 mm (2.6").



# Product Data Series M6300

## Sprocket Series M6300



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### Wearstrips

Between driving shaft and idling sprockets or rollers the belt is carried by a slider support furnished with longitudinal wear strips from UHMW Polyethylene or other suitable material.

### Sprocket positioning

For correct positioning of the center sprocket divide the belt width by the link increment. The rounded result will be an even or an odd number. These numbers are the criteria for offset or no offset, see table.

Belt type	Sprocket spacing a		Sprocket edge distance (minimal)		Criteria for center sprocket position	Result of formula (rounded)	Offset e	Remarks
	minimal	maximal	$X_L$	$X_R$				
	mm inch	mm inch	mm inch	mm inch	mm inch		mm inch	Offset to which side
M6360	50.8 2	152.4 6	38 1.5	38 1.5	$b_0 / 25.4$ $b_0 / 1$	even number (2, 4, 6 ...)	12.7 0.5	right or left side
						odd number (3, 5, 7 ...)	0 0	no offset

### Numbers of sprockets and wearstrips

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch	min. number	Carryway (top)	Returnway (bottom)
102	4	1	2	2
203	8	2	2	2
305	12	2	3	2
406	16	3	3	3
508	20	3	3	3
610	24	3	4	3
711	28	5	4	3
813	32	5	5	3
914	36	5	5	4
1'016	40	7	6	4
1'118	44	7	6	4
1'219	48	7	7	5
1'321	52	9	7	5
1'422	56	9	7	5
1'524	60	9	8	5
1'626	64	11	8	6
1'727	68	11	8	6
1'829	72	11	9	6
1'930	76	13	9	6
2'032	80	13	9	7
2'134	84	13	10	7
2'235	88	15	10	7
2'337	92	15	10	7
2'438	96	15	11	8
2'540	100	17	11	8

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

# Product Data Series M6400

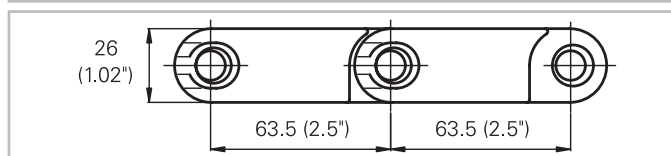
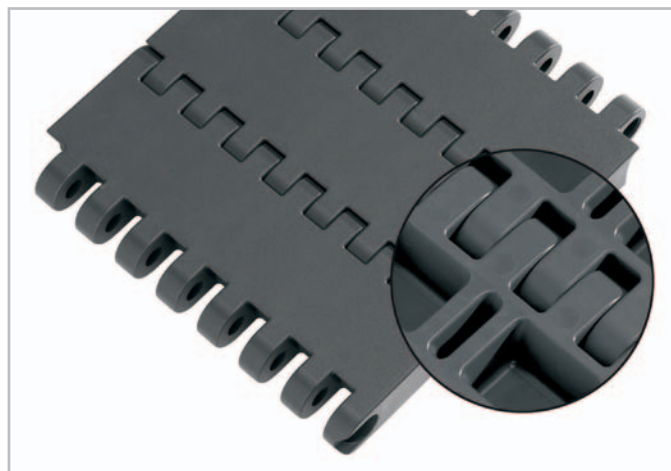
## M6420 Flat Top Heavy Duty 2.5"



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### Description

- Heavy duty belt
- 26 mm (1") thick
- Extremely strong and stiff
- 0% open area
- Closed hinge
- Rod diameter 10 mm (0.39")
- Smart fit rod retention
- Rough surface
- Antistatic materials available
- Lug teeth solid sprockets



### Belt data

Belt material		POM		POM +AS	
Rod material		PA	Stainless Steel	PA	Stainless Steel
Nominal tensile strength	N/m	100000	100000	100000	100000
$F'_N$ straight run	lb/ft	6854	6854	6854	6854
Temperature range	°C	-40 - 90	-40 - 90	-40 - 90	-40 - 90
	°F	-40 - 195	-40 - 195	-40 - 195	-40 - 195
Belt weight $m_B$	kg/m <sup>2</sup>	26.8	34.8	26.8	34.8
	lb/sqft	5.49	7.14	5.49	7.14

The coefficient of friction belt to goods varies depending on the type of material and surface. Please contact your Habasit representative.

Diameter of idling rollers (minimum)		Diameter of support rollers (minimum)		Diameter for gravity take-up and center drive rollers (minimum)		Backbending radius for elevators without sideguards or hold down devices (minimum)	
mm	inch	mm	inch	mm	inch	mm	inch
100	4	100	4	150	6	150	6

### Standard range of belt widths $b_0$

mm (nom.)	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	etc.
inch (nom.)	3.9	7.9	11.8	15.7	19.7	23.6	27.6	31.5	35.4	39.4	43.3	47.2	51.2	etc.

Real belt widths are in most cases 0.1% to 0.3% smaller.

**Standard belt widths** in increments of 100 mm (3.9"). Non-standard widths are offered in increments of 50 mm (2"). Non-bricklaid belts 100 mm (3.9") and 200 mm (7.9").

**For detailed material properties** refer to pages 10 - 14 and for colors see table page 31 or contact your Habasit representative.

**The nominal tensile strength** is valid for 23 °C (73 °F). The admissible tensile force depends on the operating temperature near the drive sprockets. Within the temperature range allowed, the admissible tensile force may vary from 100% to 20% of the nominal tensile strength. For detailed information and correct calculation of effective tensile force refer to the Calculation Guide (page 225).

# Product Data Series M6400

## Sprocket Series M6400



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M = Modular belts

Belt pitch

S = sprocket one-piece; Z = split sprocket

Number of teeth

Shaft size

Shaft type: Q = square shaft; R = round

Material: 6 = POM; 8 = PA

**M 63 S 13 60 Q 6**

### Sprocket availability

Type	Number of teeth	Diameter of pitch $\varnothing d_p$		$A_1$		Hub width $B_L$		Square bore Q		Ø Round bore R		Standard material
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
S-C1	10	206.4	8.1	90.2	3.55	27	1.06	40 / 60 / 90	1.5 / 2.5 / 3.5	30 / 40 / 60	1 / 1.5 / 2.5	PA
S-C1	12	246.4	9.7	110.2	4.34	27	1.06	40 / 60 / 90	1.5 / 2.5 / 3.5	30 / 40 / 60	1 / 1.5 / 2.5	PA
S-C1	13	266.4	10.5	120.2	4.73	27	1.06	40 / 60 / 90	1.5 / 2.5 / 3.5	30 / 40 / 60	1 / 1.5 / 2.5	PA
S-C1	15	306.7	12.1	140.4	5.53	27	1.06	40 / 60 / 90 / 120	1.5 / 2.5 / 3.5 / 4.5	30 / 40 / 60 / 90	1 / 1.5 / 2.5	PA
S-C1	20	407.6	16.1	190.8	7.51	27	1.06	40 / 60 / 90 / 120	1.5 / 2.5 / 3.5 / 4.5	30 / 40 / 60 / 90	1 / 1.5 / 2.5	PA

S-C1: machined sprockets. Other sprocket and hub sizes on request.

**Key ways** for round bore shape follow European standards for metric sizes and US standards for imperial sizes. For detailed dimensions see table in the Design Guide.

**Other materials** available on request.



Sprocket one-piece (solid)

For a 100 mm wide belt double-row sprockets are recommended.

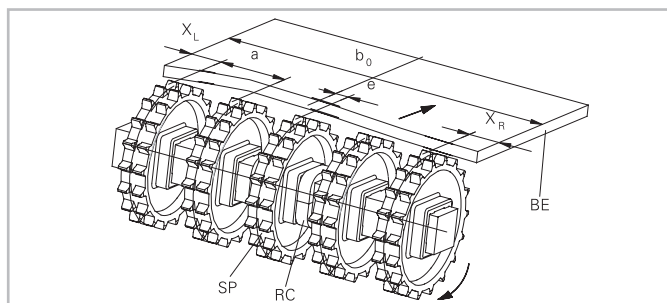
# Product Data Series M6400

Sprocket Series M6400



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## Sprocket arrangement

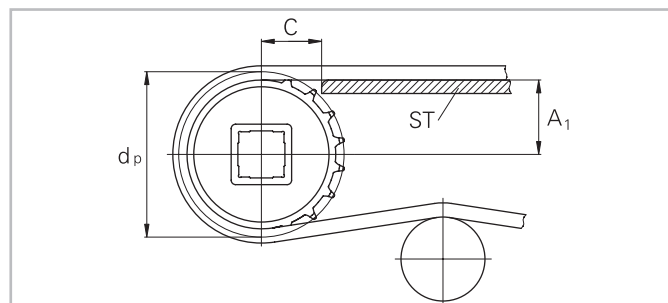


**BE** Belt

**RC** Retainer

**SP** Sprocket

**b<sub>0</sub>** Belt width



The distance **C** between the sprocket axis and the slider support **ST** is minimal 66 mm (2.6").

## Wearstrips

Between driving shaft and idling sprockets or rollers the belt is carried by a slider support furnished with longitudinal wear strips from UHMW Polyethylene or other suitable material.

## Sprocket positioning

For correct positioning of the center sprocket divide the belt width by the link increment. The rounded result will be an even or an odd number. These numbers are the criteria for offset or no offset, see table.

Belt type	Sprocket spacing a		Sprocket edge distance (minimal)		Criteria for center sprocket position	Result of formula (rounded)	Offset e	Remarks
	minimal	maximal	$X_L$	$X_R$				
	mm inch	mm inch	mm inch	mm inch	mm inch		mm inch	
M6420	50 2	150 6	25 1	25 1	$b_0 / 50$ $b_0 / 1.97$	even number (2, 4, 6 ...)	25 1	Offset to which side right or left side
						odd number (3, 5, 7 ...)	0 0	no offset

# Product Data Series M6400

## Sprocket Series M6400



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### Numbers of sprockets and wearstrips

Standard belt width (nominal)		Number of sprockets per shaft	Number of wearstrips	
mm	inch		Carryway (top)	Returnway (bottom)
100	4	1	2	2
200	8	2	2	2
300	12	2	3	3
400	16	3	3	3
500	20	3	4	3
600	24	3	4	3
700	28	5	5	4
800	32	5	5	4
900	36	5	6	5
1'000	40	7	6	5
1'100	43	7	7	5
1'200	47	7	7	5
1'300	51	9	8	6
1'400	55	9	8	6
1'500	59	9	9	7
1'600	63	11	9	7
1'700	67	11	10	7
1'800	71	11	10	7
1'900	75	13	11	8
2'000	79	13	11	8
2'100	83	13	12	9
2'200	87	15	12	9
2'300	91	15	13	10
2'400	94	15	13	10
2'500	98	17	14	10
2'600	102	17	14	10
2'700	106	17	15	11
2'800	110	19	15	11
2'900	114	19	16	12
3'000	118	19	16	12

The number of sprockets depends on the belt load and may be different for driving and idling shafts.  
For calculation of correct sprocket number please use LINK-SeleCalc.

