

## Overview



Return belt driven pulley provides rotation for shaft-driven speed sensors. 4.5 inch size is self-cleaning.

## Benefits

- Heavy-duty design for high belt tension
- Self-cleaning 114 mm (4.5 inch) diameter option
- Steel drum 152 mm (6 inch) diameter option
- Steel drum 152 mm (6 inch) with 6 mm (1/4 inch) rubber lagged option
- Spherical self-aligning pillow block bearings
- Fast installation, easy maintenance

## Application

Milltronics bend pulleys provide constant belt contact for use with Siemens speed sensors. Designed for use in rugged operating environments common to mining, aggregates, cement, minerals, and other process industries. They ensure concentric speed sensor rotation to reduce pre-mature bearing failure. The use of a bend pulley driven speed sensor ensures no modification is required on any existing conveyor shaft. Options include stainless steel construction, epoxy painting, polymer bearings, self-cleaning style, and lagged style.

## Bend pulleys

## Selection and ordering data

Bend pulleys, 4.5/6 inch design Return belt driven pulley provides rotation for shaft-driven speed sensors. Available in 4.5 inch or 6 inch diameter.		Article No. 7MH7170- ● ● ● ● 0				
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.						
<b>Size</b>						
4.5 inch diameter self cleaning <sup>1)</sup>					1	
6 inch diameter					2	
<b>Belt width and 'A' dimension</b>						
18 inch, A = 23.6 ... 29.5 inches (600 ... 749 mm)				A		
24 inch, A = 29.6 ... 35.5 inches (750 ... 901 mm)				B		
30 inch, A = 35.6 ... 41.5 inches (902 ... 1 054 mm)				C		
36 inch, A = 41.6 ... 47.5 inches (1 055 ... 1 206 mm)				E		
42 inch, A = 48 ... 53.5 inches (1 219 ... 1 359 mm)				G		
48 inch, A = 55 ... 59.5 inches (1 397 ... 1 511 mm)				H		
54 inch, A = 61 ... 65.5 inches (1 549 ... 1 663 mm)				K		
60 inch, A = 67 ... 71.5 inches (1 701 ... 1 816 mm)				L		
66 inch, A = 73 ... 77.5 inches (1 854 ... 1 968 mm)				M		
500 mm, A = 25.6 ... 29 inches (650 ... 740 mm)				N		
650 mm, A = 31.6 ... 35 inches (800 ... 890 mm)				P		
800 mm, A = 37.7 ... 41 inches (956 ... 1 040 mm)				Q		
800 mm, A = 41.1 ... 43 inches (1 041 ... 1 090 mm)				R		
1 000 mm, A = 46.8 ... 51.3 inches (1 189 ... 1 304 mm)				S		
1 200 mm, A = 54.6 ... 59.2 inches (1 387 ... 1 504 mm)				T		
1 400 mm, A = 62.6 ... 67.1 inches (1 590 ... 1 704 mm)				U		
1 450 mm, A = 64.5 ... 69.0 inches (1 638 ... 1 754 mm)				V		
1 600 mm, A = 70.4 ... 74.9 inches (1 788 ... 1 904 mm)				W		
<b>Finish</b>						
Standard, C5-M rated polyester painted mild steel <sup>2)</sup>				A		
316 (1.4401) stainless steel <sup>3)</sup>				B		
316 (1.4401) stainless steel <sup>4)</sup>				C		
Epoxy painted <sup>5)</sup>				D		
Epoxy painted, with corrosion resistant bearings <sup>5)</sup>				E		
<b>Bearings</b>						
Imperial size					0	
Metric size					1	
No bearings					2	
<b>Operating instructions</b>						
All literature is available to download for free, in a range of languages, at <a href="http://www.siemens.com/weighing/documentation">http://www.siemens.com/weighing/documentation</a>						

<sup>1)</sup> Available with belt width and "A" dimension options A ... H and N ... T only.

<sup>2)</sup> Not painted with 4.5 inch diameter model.

<sup>3)</sup> 316 (1.4401) stainless steel shaft on 4.5 inch diameter models only.

<sup>4)</sup> With corrosion resistant bearings, 316 (1.4401) stainless steel shaft on 4.5 inch diameter models only.

<sup>5)</sup> For 6 inch diameter models only.

Bend pulleys, 6.5 inch design Return belt driven pulley provides rotation for shaft-driven speed sensors. Available in 6.5 inch diameter.		Article No. 7MH7171- ● ● ● ● 0				
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.						
<b>Size</b>						
6 inch diameter with 1/4 inch lagging					3	
<b>Belt width and 'A' dimension</b>						
18 inch, A = 23.6 ... 29.5 inches (600 ... 749 mm), 20 inch, A = 29 inch (737 mm)				A		
24 inch, A = 29.6 ... 35.5 inches (750 ... 901 mm)				B		
30 inch, A = 35.6 ... 41.5 inches (902 ... 1 054 mm)				C		
36 inch, A = 41.6 ... 47.5 inches (1 055 ... 1 206 mm)				E		
42 inch, A = 48 ... 53.5 inches (1 219 ... 1 359 mm)				G		
48 inch, A = 55 ... 59.5 inches (1 397 ... 1 511 mm)				H		
54 inch, A = 61 ... 65.5 inches (1 549 ... 1 663 mm)				K		
60 inch, A = 67 ... 71.5 inches (1 701 ... 1 816 mm)				L		

## Selection and ordering data (continued)

<b>Bend pulleys, 6.5 inch design</b>		<b>Article No.</b>				
<b>Return belt driven pulley provides rotation for shaft-driven speed sensors. Available in 6.5 inch diameter.</b>		7	M	H	7	1
			●	●	●	●
						0
66 inch, A = 73 ... 77.5 inches (1 854 ... 1 968 mm)						M
500 mm, A = 25.6 ... 29 inches (650 ... 740 mm)						N
650 mm, A = 31.6 ... 35 inches (800 ... 890 mm)						P
800 mm, A = 37.7 ... 41 inches (956 ... 1 040 mm)						Q
800 mm, A = 41.1 ... 43 inches (1 041 ... 1 090 mm)						R
1 000 mm, A = 46.8 ... 51.3 inches (1 189 ... 1 304 mm)						S
1 200 mm, A = 54.6 ... 59.2 inches (1 387 ... 1 504 mm)						T
1 400 mm, A = 62.6 ... 67.1 inches (1 590 ... 1 704 mm)						U
1 450 mm, A = 64.5 ... 69.0 inches (1 638 ... 1 754 mm)						V
1 600 mm, A = 70.4 ... 74.9 inches (1 788 ... 1 904 mm)						W
<b>Finish</b>						
Standard, C5-M rated polyester painted mild steel						A
316 (1.4401) stainless steel						B
316 (1.4401) stainless steel with corrosion resistant bearings						C
<b>Bearings</b>						
Imperial size						0
Metric size						1
No bearings						2
<b>Operating instructions</b>						
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<b>Bend pulleys, 8 inch design</b>		<b>Article No.</b>				
<b>Return belt driven pulley provides rotation for shaft-driven speed sensors. Available in 8 inch diameter.</b>		7	M	H	7	1
			●	●	●	●
						0
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.						
<b>Size</b>						
8 inch diameter						4
<b>Belt width and 'A' dimension</b>						
48 inch, A = 55 ... 59.5 inches (1 397 ... 1 511 mm)						A
54 inch, A = 61 ... 65.5 inches (1 549 ... 1 663 mm)						B
60 inch, A = 67 ... 71.5 inches (1 701 ... 1 816 mm)						C
66 inch, A = 73 ... 77.5 inches (1 854 ... 1 968 mm)						E
72 inch, A = 79 ... 83.5 inch (2 007 ... 2 121 mm)						G
78 inch, A = 85 ... 89.5 inches (2 159 ... 2 273 mm)						H
84 inch, A = 91 ... 95.5 inches (2 311 ... 2 426 mm)						J
90 inch, A = 97 ... 101.5 inches (2 464 ... 2 578 mm)						K
96 inch, A = 103 ... 107.5 inches (2 616 ... 2 731 mm)						L
1 200 mm, A = 54.6 ... 59.2 inches (1 387 ... 1 504 mm)						M
1 400 mm, A = 62.6 ... 67.1 inches (1 590 ... 1 704 mm)						N
1 450 mm, A = 64.5 ... 69.0 inches (1 638 ... 1 754 mm)						P
1 600 mm, A = 70.4 ... 74.9 inches (1 788 ... 1 904 mm)						Q
1 800 mm, A = 78.3 ... 82.8 inches (1 989 ... 2 104 mm)						R
2 000 mm, A = 86.2 ... 90.7 inches (2 190 ... 2 304 mm)						S
2 200 mm, A = 94.1 ... 98.6 inches (2 390 ... 2 504 mm)						T
2 400 mm, A = 101.9 ... 106.4 inches (2 588 ... 2 704 mm)						U
2 500 mm, A = 105.9 ... 110.4 inches (2 690 ... 2 804 mm)						V
<b>Finish</b>						
Standard, C5-M rated polyester painted mild steel						A
316 (1.4401) stainless steel						B
316 (1.4401) stainless steel with corrosion resistant bearings						C
Epoxy painted						D
Epoxy painted with corrosion resistant bearings						E
<b>Bearings</b>						
Imperial size						0
Metric size						1

## Bend pulleys

## Selection and ordering data (continued)

		Article No.				
<b>Bend pulleys, 8 inch design</b> Return belt driven pulley provides rotation for shaft-driven speed sensors. Available in 8 inch diameter.		7MH7187-	●	●	●	● 0
No bearings						2
<b>Operating instructions</b> All literature is available to download for free, in a range of languages, at <a href="http://www.siemens.com/weighing/documentation">http://www.siemens.com/weighing/documentation</a>						

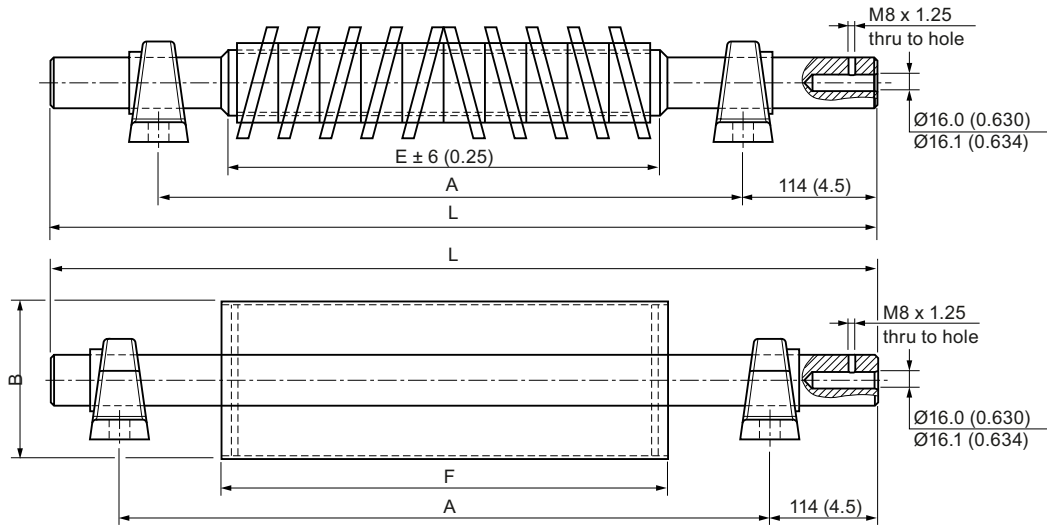
		Article No.				
<b>Bend pulleys, 8.5 inch design</b> Return belt driven pulley provides rotation for shaft-driven speed sensors. Available in 8.5 inch diameter.		7MH718-	●	●	●	● 0
Click on the Article No. for the online configuration in the PIA Life Cycle Portal.						
<b>Size</b> 8 inch diameter with ¼ inch lagging			5			
<b>Belt width and 'A' dimension</b>						
48 inch, A = 55 ... 59.5 inches (1 397 ... 1 511 mm)				A		
54 inch, A = 61 ... 65.5 inches (1 549 ... 1 663 mm)				B		
60 inch, A = 67 ... 71.5 inches (1 701 ... 1 816 mm)				C		
66 inch, A = 73 ... 77.5 inches (1 854 ... 1 968 mm)				E		
72 inch, A = 79 ... 83.5 inches (2 007 ... 2 121 mm)				G		
78 inch, A = 85 ... 89.5 inches (2 159 ... 2 273 mm)				H		
84 inch, A = 91 ... 95.5 inches (2 311 ... 2 426 mm)				J		
90 inch, A = 97 ... 101.5 inches (2 464 ... 2 578 mm)				K		
96 inch, A = 103 ... 107.5 inches (2 616 ... 2 731 mm)				L		
1 200 mm, A = 54.6 ... 59.2 inches (1 387 ... 1 504 mm)				M		
1 400 mm, A = 62.6 ... 67.1 inches (1 590 ... 1 704 mm)				N		
1 450 mm, A = 64.5 ... 69.0 inches (1 638 ... 1 754 mm)				P		
1 600 mm, A = 70.4 ... 74.9 inches (1 788 ... 1 904 mm)				Q		
1 800 mm, A = 78.3 ... 82.8 inches (1 989 ... 2 104 mm)				R		
2 000 mm, A = 86.2 ... 90.7 inches (2 190 ... 2 304 mm)				S		
2 200 mm, A = 94.1 ... 98.6 inches (2 390 ... 2 504 mm)				T		
2 400 mm, A = 101.9 ... 106.4 inches (2 588 ... 2 704 mm)				U		
2 500 mm, A = 105.9 ... 110.4 inches (2 690 ... 2 804 mm)				V		
<b>Finish</b>						
Standard, C5-M rated polyester painted mild steel					A	
316 (1.4401) stainless steel					B	
316 (1.4401) stainless steel with corrosion resistant bearings					C	
<b>Bearings</b>						
Imperial size						0
Metric size						1
No bearings						2
<b>Operating instructions</b> All literature is available to download for free, in a range of languages, at <a href="http://www.siemens.com/weighing/documentation">http://www.siemens.com/weighing/documentation</a>						

## Technical specifications

Bend pulleys	
Typical application	Mining, aggregates, cement, minerals, and other process industries
<b>Medium conditions</b>	
Operating temperature	-40 ... +110 °C (-40 ... +230 °F)
Shaft material	Mild steel 316 (1.44) stainless steel, option
<b>Pulleys</b>	
Self-cleaning rubber disc style	114 mm (4.5 inch) diameter
Steel drum	152 mm (6 inch) diameter
Steel drum	152 mm (6 inch) diameter with 6 mm (¼ inch) rubber lagged option
<b>Bearings</b>	<ul style="list-style-type: none"> <li>• Heavy-duty self-aligning pillow block bearings, standard</li> <li>• Polymer self-aligning pillow block bearings option</li> </ul>
<b>Belt speed</b>	
Self-cleaning	1.79 m/s (350 fpm) max.
Drum	3 m/s (600 fpm)
Approvals	CE, UKCA, RCM, EAC, KC

## Bend pulleys

## Dimensional drawings



Version	B
Standard	Ø152 (6.0) or 203 (8.0)
Lagged	Ø165 (6.5) or 216 (8.50)

Belt size	E	A	L	F
18 inch, 20 inch	18 inches (460 mm), 20 inches (508 mm)	27 inches (686 mm). 23.6 ... 29.5 inches (600 ... 749 mm)	34.5 inches (876 mm)	20 inches (508 mm)
24 inch	24 inches (601 mm)	29.6 ... 35.5 inches (750 ... 901 mm)	40.5 inches (1 029 mm)	26 inches (660 mm)
30 inch	30 inches (762 mm)	35.6 ... 41.5 inches (902 ... 1 054 mm)	46.5 inches (1 181 mm)	32 inches (812 mm)
36 inch	36 inches (915 mm)	41.6 ... 47.5 inches (1 055 ... 1 206 mm)	52.5 inches (1 334 mm)	38 inches (965 mm)
42 inch	42 inches (1 066 mm)	48 ... 53.5 inches (1 219 ... 1 359 mm)	58.5 inches (1 486 mm)	44 inches (1 118 mm)
48 inch	48 inches (1 220 mm)	55 ... 59.5 inches (1 397 ... 1 511 mm)	64.5 inches (1 638 mm)	51 inches (1 296 mm)
54 inch		61 ... 65.5 inches (1 549 ... 1 663 mm)	70.5 inches (1 791 mm)	57 inches (1 448 mm)
60 inch		67 ... 71.5 inches (1 701 ... 1 816 mm)	76.5 inches (1 943 mm)	63 inches (1 600 mm)
66 inch		73 ... 77.5 inches (1 854 ... 1 968 mm)	82.5 inches (2 096 mm)	69 inches (1 752 mm)
72 inch		79 ... 83.5 inches (2 007 ... 2 121 mm)	88.5 inches (2 248 mm)	75 inches (1 905 mm)
78 inch		85 ... 89.5 inches (2 159 ... 2 273 mm)	94.4 inches (2 400 mm)	81 inches (2 057 mm)
84 inch		91 ... 95.5 inches (2 311 ... 2 426 mm)	100.5 inches (2 553 mm)	87 inches (2 210 mm)
90 inch		97 ... 101.5 inches (2 464 ... 2 578 mm)	106.5 inches (2 705 mm)	93 inches (2 362 mm)
96 inch		103 ... 107.5 inches (2 616 ... 2 731 mm)	112.5 inches (2 858 mm)	99 inches (2 515 mm)
500 mm	500 mm (19.7 inches)	650 ... 740 mm (25.6 ... 29 inches)	34.8 inches (884 mm)	551 mm (21.7 inches)

## Dimensional drawings (continued)

Belt size	E	A	L	F
650 mm	650 mm (25.5 inches)	800 ... 890 mm (31.6 ... 35 inches)	40.7 inches (1 034 mm)	701 mm (27.6 inches)
800 mm	800 mm (31.5 inches)	956 ... 1 040 mm (37.7 ... 41 inches)	46.6 inches (1 184 mm)	851 mm (33.5 inches)
800 mm	800 mm (31.5 inches)	1 041 ... 1 090 mm (41.1 ... 43 inches)	48.6 inches (1 234 mm)	851 mm (33.5 inches)
1 000 mm	1 000 mm (39.4 inches)	1 189 ... 1 304 mm (46.8 ... 51.3 inches)	56.3 inches (1 430 mm)	1 052 mm (41.4 inches)
1 200 mm	1 200 mm (47.2 inches)	1 387 ... 1 504 mm (54.6 ... 59.2 inches)	64.2 inches (1 630 mm)	1 275 mm (50.2 inches)
1 400 mm		1 590 ... 1 704 mm (62.6 ... 67.1 inches)	72.0 inches (1 830 mm)	1 476 mm (58.1 inches)
1 450 mm		1 638 ... 1 754 mm (64.5 ... 69.0 inches)	74.0 inches (1 880 mm)	1 527 mm (60.1 inches)
1 600 mm		1 788 ... 1 904 mm (70.4 ... 74.9 inches)	79.9 inches (2 030 mm)	1 676 mm (66 inches)
1 800 mm		1 989 ... 2 104 mm (78.3 ... 82.8 inches)	87.8 inches (2 230 mm)	1 875 mm (73.8 inches)
2 000 mm		2 190 ... 2 304 mm (86.2 ... 90.7 inches)	95.7 inches (2 430 mm)	2 075 mm (81.7 inches)
2 200 mm		2 390 ... 2 504 mm (94.1 ... 98.6 inches)	103.5 inches (2 630 mm)	2 275 mm (89.6 inches)
2 400 mm		2 588 ... 2 704 mm (101.9 ... 106.4 inches)	111.9 inches (2 830 mm)	2 475 mm (97.4 inch)
2 500 mm		2 690 ... 2 804 mm (105.9 ... 110.4 inches)	115.4 inches (2 930 mm)	2 575 mm (101.4 inches)

Bend Pulleys, dimensions in mm (inch)