

Belt Weighing

Accessories

Bend pulleys

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 (¼ 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.

Technical specifications

Milltronics bend pulleys	
Typical application	Mining, aggregates, cement, minerals, and other process industries
Medium conditions	
Operating temperature	-40 ... +110 °C (-40 ... +230 °F)
Shaft material	
	Mild steel 316 (1.44) stainless steel, option
Pulleys	
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
Bearings	
	<ul style="list-style-type: none"> • Heavy-duty self-aligning pillow block bearings, standard • Polymer self-aligning pillow block bearings option
Belt speed	
Self-cleaning	1.79 m/s (350 fpm) max.
Drum	3 m/s (600 fpm)
Approvals	
	CE, RCM, EAC, KCC

Selection and ordering data

Article No.

Bend pulleys, 4.5/6 inch design

7MH7170-

Return belt driven pulley provides rotation for shaft-driven speed sensors. Available in 4.5 inch or 6 inch diameter.

Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

Size

4.5 inch diameter self cleaning¹⁾

1

6 inch diameter

2

Belt width and 'A' dimension

18 inch, A=27 ... 29.5 inch (686 ... 749 mm),
20 inch, A=29 inch (737 mm)

A

24 inch, A=33 ... 35.5 inch (838 ... 901 mm)

B

30 inch, A=39 ... 41.5 inch (991 ... 1 054 mm)

C

36 inch, A=45 ... 47.5 inch (1 143 ... 1 206 mm)

E

42 inch, A=51 inch (1 295 mm)

G

48 inch, A=57 ... 59.5 inch (1 448 ... 1 511 mm)

H

54 inch, A=63 ... 65.5 inch (1 600 ... 1 663 mm)

K

60 inch, A=69 ... 71.5 inch (1 753 ... 1 816 mm)

L

66 inch, A=75 ... 77.5 inch (1 905 ... 1 968 mm)

M

500 mm, A=29 ... 31.5 inch (740 ... 800 mm)

N

650 mm, A=35 ... 37.6 inch (890 ... 954 mm)

P

800 mm, A=41 ... 43.5 inch (1 040 ... 1 104 mm)

Q

800 mm, A=43 ... 45.4 inch (1 090 ... 1 154 mm)

R

1 000 mm, A=48.8 ... 51.3 inch (1 240 ... 1 304 mm)

S

1 200 mm, A=56.6 ... 59.2 inch (1 440 ... 1 504 mm)

T

1 400 mm, A=64.6 ... 67.1 inch (1 640 ... 1 704 mm)

U

1 450 mm, A=66.5 ... 69.0 inch (1 690 ... 1 754 mm)

V

1 600 mm, A=72.4 ... 74.9 inch (1 840 ... 1 904 mm)

W

Finish

Standard, C5-M rated polyester painted mild steel²⁾

A

316 (1.4401) stainless steel³⁾

B

316 (1.4401) stainless steel⁴⁾

C

Epoxy painted⁵⁾

D

Epoxy painted, with corrosion resistant bearings⁵⁾

E

Bearings

Imperial size

0

Metric size

1

No bearings

2

Operating instructions

All literature is available to download for free, in a range of languages, at <https://www.siemens.com/weighing/documentation>

Article No.

Bend pulleys, 6.5 inch design

7MH7171-

Return belt driven pulley provides rotation for shaft-driven speed sensors. Available in 6.5 inch diameter.

Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

Size

6 inch diameter with 1/4 inch lagging

3

Belt width and 'A' dimension

18 inch, A=27 ... 29.5 inch (686 ... 749 mm),
20 inch, A=29 inch (737 mm)

A

24 inch, A=33 ... 35.5 inch (838 ... 901 mm)

B

30 inch, A=39 ... 41.5 inch (991 ... 1 054 mm)

C

36 inch, A=45 ... 47.5 inch (1 143 ... 1 206 mm)

E

42 inch, A=51 ... 53.5 inch (1 295 ... 1 358 mm)

G

48 inch, A=57 ... 59.5 inch (1 448 ... 1 511 mm)

H

54 inch, A=63 ... 65.5 inch (1 600 ... 1 663 mm)

K

60 inch, A=69 ... 71.5 inch (1 753 ... 1 816 mm)

L

66 inch, A=75 ... 77.5 inch (1 905 ... 1 968 mm)

M

500 mm, A=29 ... 31.5 inch (740 ... 800 mm)

N

650 mm, A=35 ... 37.6 inch (890 ... 954 mm)

P

800 mm, A=41 ... 43.5 inch (1 040 ... 1 104 mm)

Q

800 mm, A=43 ... 45.4 inch (1 090 ... 1 154 mm)

R

1 000 mm, A=48.8 ... 51.3 inch (1 240 ... 1 304 mm)

S

1 200 mm, A=56.6 ... 59.2 inch (1 440 ... 1 504 mm)

T

1 400 mm, A=64.6 ... 67.1 inch (1 640 ... 1 704 mm)

U

1 450 mm, A=66.5 ... 69.0 inch (1 690 ... 1 754 mm)

V

1 600 mm, A=72.4 ... 74.9 inch (1 840 ... 1 904 mm)

W

Finish

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

Bearings

Imperial size

0

Metric size

1

No bearings

2

Operating instructions

All literature is available to download for free, in a range of languages, at <https://www.siemens.com/weighing/documentation>

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

²⁾ Not painted with 4.5 inch diameter model.

³⁾ 316 (1.4401) stainless steel shaft on 4.5 inch diameter models only.

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

⁵⁾ For 6 inch diameter models only.

Belt Weighing Accessories

Bend pulleys

Selection and ordering data

Bend pulleys, 8 inch design

Return belt driven pulley provides rotation for shaft-driven speed sensors. Available in 8 inch diameter.

➤ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

Size

8 inch diameter

Belt width and 'A' dimension

48 inch, A=57 ... 59.5 inch (1 447.8 ... 1 511 mm)
 54 inch, A=63 ... 65.5 inch (1 600.2 ... 1 663 mm)
 60 inch, A=69 ... 71.5 inch (1 752.6 ... 1 816 mm)
 66 inch, A=75 ... 77.5 inch (1 905 ... 1 968 mm)
 72 inch, A=81 ... 83.5 inch (2 057 ... 2 121 mm)
 78 inch, A=87 ... 89.5 inch (2 210 ... 2 273 mm)
 84 inch, A=93 ... 95.5 inch (2 362 ... 2 426 mm)
 90 inch, A=99 ... 101.5 inch (2 515 ... 2 578 mm)
 96 inch, A=105 ... 107.5 inch (2 667 ... 2 731 mm)
 1 200 mm, A=56.6 ... 59.2 inch (1 440 ... 1 504 mm)
 1 400 mm, A=64.6 ... 67.1 inch (1 640 ... 1 704 mm)
 1 450 mm, A=66.5 ... 69.0 inch (1 690 ... 1 754 mm)
 1 600 mm, A=72.4 ... 74.9 inch (1 840 ... 1 904 mm)
 1 800 mm, A=80.3 ... 82.8 inch (2 040 ... 2 104 mm)
 2 000 mm, A=88.2 ... 90.7 inch (2 240 ... 2 304 mm)
 2 200 mm, A=96.1 ... 98.6 inch (2 440 ... 2 504 mm)
 2 400 mm, A=103.9 ... 106.4 inch (2 640 ... 2 704 mm)
 2 500 mm, A=107.9 ... 110.4 inch (2 740 ... 2 804 mm)

Finish

Standard, C5-M rated polyester painted mild steel
 316 (1.4401) stainless steel
 316 (1.4401) stainless steel with corrosion resistant bearings
 Epoxy painted
 Epoxy painted with corrosion resistant bearings

Bearings

Imperial size
 Metric size
 No bearings

Operating instructions

All literature is available to download for free, in a range of languages, at <https://www.siemens.com/weighing/documentation>

Article No.

➤ 7MH7187-

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Bend pulleys, 8.5 inch design

Return belt driven pulley provides rotation for shaft-driven speed sensors. Available in 8.5 inch diameter.

➤ Click on the Article No. for the online configuration in the PIA Life Cycle Portal.

Size

8 inch diameter with ¼ inch lagging

Belt width and 'A' dimension

48 inch, A=57 ... 59.5 inch (1 447.8 ... 1 511 mm)
 54 inch, A=63 ... 65.5 inch (1 600.2 ... 1 663 mm)
 60 inch, A=69 ... 71.5 inch (1 752.6 ... 1 816 mm)
 66 inch, A=75 ... 77.5 inch (1 905 ... 1 968 mm)
 72 inch, A=81 ... 83.5 inch (2 057 ... 2 121 mm)
 78 inch, A=87 ... 89.5 inch (2 210 ... 2 273 mm)
 84 inch, A=93 ... 95.5 inch (2 362 ... 2 426 mm)
 90 inch, A=99 ... 101.5 inch (2 515 ... 2 578 mm)
 96 inch, A=105 ... 107.5 inch (2 667 ... 2 731 mm)
 1 200 mm, A=56.6 ... 59.2 inch (1 440 ... 1 504 mm)
 1 400 mm, A=64.6 ... 67.1 inch (1 640 ... 1 704 mm)
 1 450 mm, A=66.5 ... 69.0 inch (1 690 ... 1 754 mm)
 1 600 mm, A=72.4 ... 74.9 inch (1 840 ... 1 904 mm)
 1 800 mm, A=80.3 ... 82.8 inch (2 040 ... 2 104 mm)
 2 000 mm, A=88.2 ... 90.7 inch (2 240 ... 2 304 mm)
 2 200 mm, A=96.1 ... 98.6 inch (2 440 ... 2 504 mm)
 2 400 mm, A=103.9 ... 106.4 inch (2 640 ... 2 704 mm)
 2 500 mm, A=107.9 ... 110.4 inch (2 740 ... 2 804 mm)

Finish

Standard, C5-M rated polyester painted mild steel
 316 (1.4401) stainless steel
 316 (1.4401) stainless steel with corrosion resistant bearings

Bearings

Imperial size
 Metric size
 No bearings

Operating instructions

All literature is available to download for free, in a range of languages, at <https://www.siemens.com/weighing/documentation>

Article No.

➤ 7MH7188-

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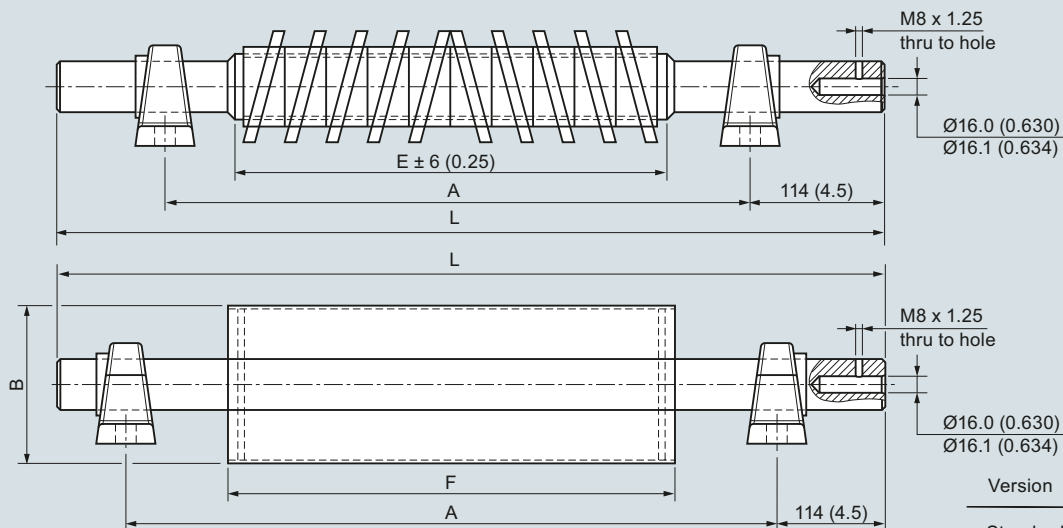
B

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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 inch (460 mm), 20 inch (508 mm)	27 inch (686 mm), 29 inch (737 mm)	34.5 inch (876 mm)	20 inch (508 mm)
24 inch	24 inch (610 mm)	33 inch (838 mm)	40.5 inch (1 029 mm)	26 inch (660 mm)
30 inch	30 inch (762 mm)	39 inch (991 mm)	46.5 inch (1 181 mm)	32 inch (812 mm)
36 inch	36 inch (915 mm)	45 inch (1 143 mm)	52.5 inch (1 334 mm)	38 inch (965 mm)
42 inch	42 inch (1 066 mm)	51 inch (1 295 mm)	58.5 inch (1 486 mm)	44 inch (1 118 mm)
48 inch	48 inch (1 220 mm)	57 inch (1 448 mm)	64.5 inch (1 638 mm)	51 inch (1 296 mm)
54 inch	54 inch (1 371 mm)	63 inch (1 600 mm)	70.5 inch (1 791 mm)	57 inch (1 448 mm)
60 inch	60 inch (1 524 mm)	69 inch (1 753 mm)	76.5 inch (1 943 mm)	63 inch (1 600 mm)
66 inch	66 inch (1 676 mm)	75 inch (1 905 mm)	82.5 inch (2 096 mm)	69 inch (1 752 mm)
72 inch	72 inch (1 828 mm)	81 inch (2 057 mm)	88.5 inch (2 250 mm)	75 inch (1 905 mm)
78 inch	78 inch (1 981 mm)	87 inch (2 210 mm)	94.4 inch (2 400 mm)	81 inch (2 057 mm)
84 inch	84 inch (2 133 mm)	93 inch (2 362 mm)	100.5 inch (2 553 mm)	87 inch (2 210 mm)
90 inch	90 inch (2 286 mm)	99 inch (2 515 mm)	106.5 inch (2 705 mm)	93 inch (2 362 mm)
96 inch	96 inch (2 438 mm)	105 inch (2 667 mm)	112.5 inch (2 858 mm)	99 inch (2 515 mm)
500 mm	500 mm (19.7 inch)	737 mm (29 inch)	34.8 inch (884 mm)	551 mm (21.7 inch)
650 mm	650 mm (25.6 inch)	890 mm (35 inch)	40.7 inch (1 034 mm)	701 mm (27.6 inch)
800 mm	800 mm (31.5 inch)	1 040 mm (41 inch)	46.6 inch (1 184 mm)	851 mm (33.5 inch)
800 mm	800 mm (31.5 inch)	1 090 mm (43 inch)	48.6 inch (1 234 mm)	851 mm (33.5 inch)
1 000 mm	1 000 mm (39.4 inch)	1 240 mm (48.8 inch)	56.3 inch (1 430 mm)	1 052 mm (41.4 inch)
1 200 mm	1 200 mm (47.2 inch)	1 540 mm (60.6 inch)	64.2 inch (1630 mm)	1 275 mm (50.2 inch)
1 400 mm	1 400 mm (55.1 inch)	1 650 mm (65 inch)	72.0 inch (1 830 mm)	1 476 mm (58.1 inch)
1 450 mm	1 450 mm (57.1 inch)	1 702 mm (67 inch)	74.0 inch (1 880 mm)	1 527 mm (60.1 inch)
1 600 mm	1 600 mm (63.0 inch)	1 940 mm (76.4 inch)	79.9 inch (2 030 mm)	1 676 mm (66 inch)
1 800 mm	1 800 mm (70.7 inch)	80.3 inch (2 040 mm)	87.8 inch (2 230 mm)	73.8 inch (1 875 mm)
2 000 mm	2 000 mm (78.7 inch)	88.2 inch (2 240 mm)	95.7 inch (2 430 mm)	81.7 inch (2 075 mm)
2 200 mm	2 200 mm (86.6 inch)	96.1 inch (2 440 mm)	103.5 inch (2 630 mm)	89.6 inch (2 275 mm)
2 400 mm	2 400 mm (94.5 inch)	103.9 inch (2 640 mm)	111.9 inch (2 830 mm)	97.4 inch (2 475 mm)
2 500 mm	2 500 mm (94.2 inch)	107.9 inch (2 740 mm)	115.4 inch (2 930 mm)	101.4 inch (2 575 mm)

Bend pulley, dimensions in mm (inch)