

Price Index



Series 17

Special Features / Options



Upon request: Cleanroom Class 1 (ISO class 3) tested by the Dryden Engineering Company, CA



Flammability Class VDE 0304 IIC UL94 HB



Low-noise

Assembly Tips



"Zipper-fast" opening and closing

Usage Guidelines



- If fast, zipper-like accessibility to cables is required
- If connection options are required (Quicksnap, Quickfix)
- If interior separation is required
- If quiet operation is required



- If individual links must open as opposed to 'zipping' open
%o Series B17 E2 Mini
- If torsion occurs
%o Series E16 E-Z Chain

Features & Benefits

- 1 Interior separation possible
- 2 Small pitch for low-noise, smooth operation
- 3 'Zipper-fast' opening and closing
- 4 For high acceleration
- 5 Zipper lids can be separated and joined at each link
- 6 Mounting bracket with integrated strain relief



Order Example: Complete Energy Chain®

Please indicate chain length or number of links. Example:

3.28 ft (1 m) 17-2-063-0



Energy Chain®

With 2 separators 172 assembled every 2nd link



Interior Separation

1 Set 117-2-12PZ



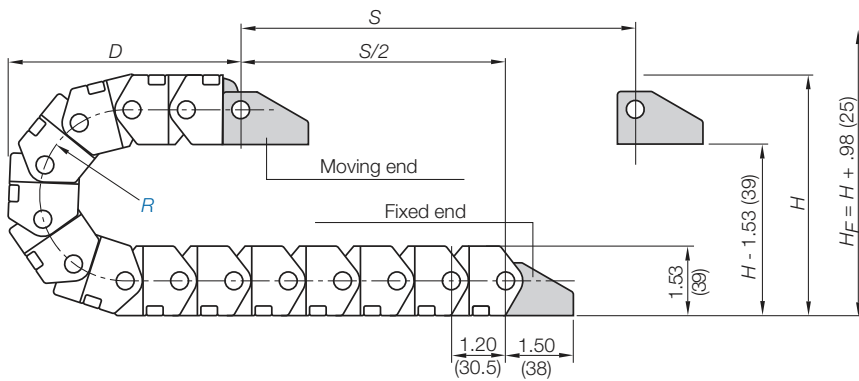
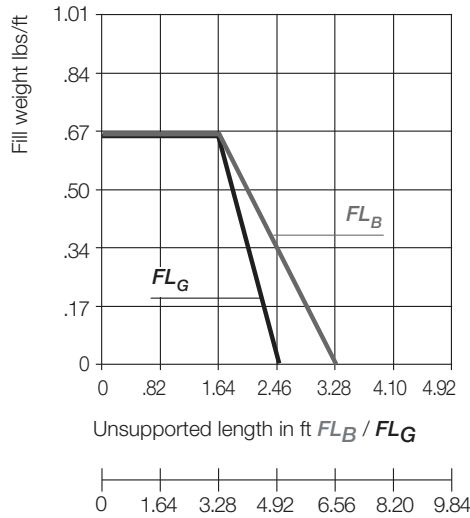
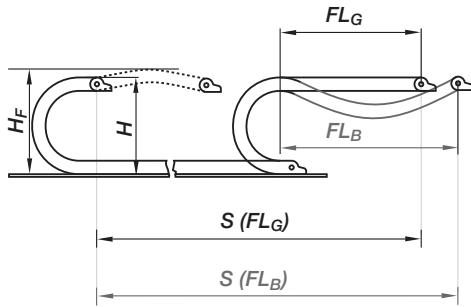
Mounting Bracket

Energy Chain System® Zipper Series 17

Installation Dimensions

Short travel, unsupported length

- FL_B = unsupported with permitted sag
 - FL_G = unsupported with straight upper run
- Further information % Design, Chapter 1



The required clearance height: $H_F = H + .98$ in. (25 mm) (with 1.01 lbs/ft (1.5 kg/m) fill weight). Please consult igus® if space is particularly restricted.

R	2.48 (063)	2.95 (075)	3.94 (100)	4.92 (125)
H	6.50 (165)	7.44 (189)	9.41 (239)	11.38 (289)
D	4.53 (115)	5.12 (130)	6.10 (155)	7.09 (180)
K	10.83 (275)	12.01 (305)	15.55 (395)	18.70 (475)

Short Travels - Unsupported



Unsupported Energy Chains® feature positive camber over short travels. This must be accounted for when specifying the clearance height. Please refer to **Installation dimensions** for further details.

Legend

- S = Length of travel
- R = Bending radius
- H = Nominal clearance height
- D = Overlength Energy Chain® radius in final position
- $K = \pi \cdot R + \text{safety buffer}$
- H_F = Required clearance height

Pitch per link = 1.20" (30.5 mm)

Links per ft (m) = 10.06 (33)

For center mount applications:

Chain length = $\frac{S}{2} + K$



Speed / acceleration FL_G	max. 6.56 ft/s (20 m/s) / max. 656 ft/s ² (200 m/s ²)
Speed / acceleration FL_B	max. 9.84 ft/s (3 m/s) / max. 19.69 ft/s ² (6 m/s ²)
Gliding speed / acceleration (maximum)	max. 32.8 ft/s (10 m/s) / max. 164 ft/s ² (50 m/s ²)
Material - permitted temperature	igumid G / -40°F (-40°C) up to +248°F (+120° C)
Flammability Class, igumid G	VDE 0304 IIC UL94 HB

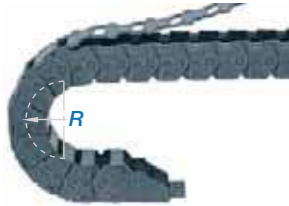
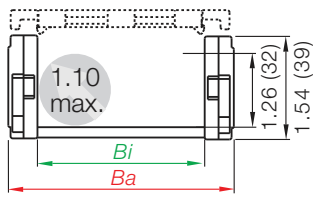
Technical Data



Details of material properties
 % Chapter 1

STANDARD

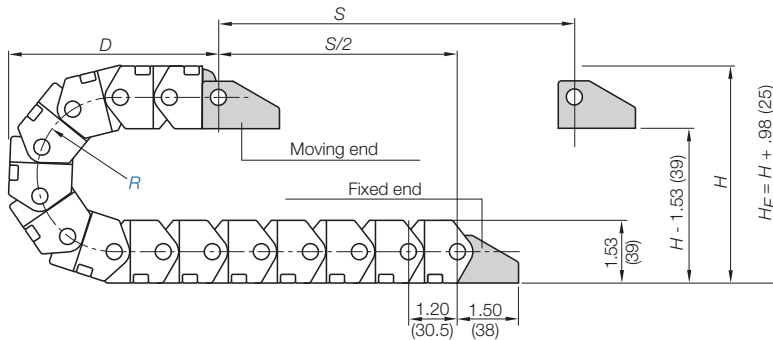
Series 17 - Zip-open along the outer radius - Standard



Part Number Structure



Color - Black
Bending radius
Width
Series



Supplement part number with required radius. Example: 17-1-**038**-0
Pitch: 1.20 in. (30.5 mm) per link links/ft (m) = 10.06 (33)

Part Number	<i>Bi</i> in. (mm)	<i>Ba</i> in. (mm)	Weight lbs/ft (kg/m)
17-1- <input type="text"/> -0	.59 (15)	1.02 (26)	≈ 0.35 (0.52)
17-2- <input type="text"/> -0	.98 (25)	1.42 (36)	≈ 0.40 (0.59)
17-3- <input type="text"/> -0	1.50 (38)	1.93 (49)	≈ 0.44 (0.65)
17-4- <input type="text"/> -0	1.97 (50)	2.40 (61)	≈ 0.47 (0.70)
17-5- <input type="text"/> -0	2.48 (63)	2.99 (76)	≈ 0.56 (0.83)
17-6- <input type="text"/> -0	3.15 (80)	3.70 (94)	≈ 0.62 (0.92)
17-7- <input type="text"/> -0	3.94 (100)	4.45 (113)	≈ 0.71 (1.06)

Choose from the radii below for all of the above sizes

Radius (mm) Example: 17-1-**038**-0

	063	075	100	125
R	2.48 (063)	2.95 (075)	3.94 (100)	4.92 (125)
H	6.50 (165)	7.44 (189)	9.41 (239)	11.38 (289)
D	4.53 (115)	5.12 (130)	6.10 (155)	7.09 (180)
K	10.83 (275)	12.01 (305)	15.55 (395)	18.70 (475)

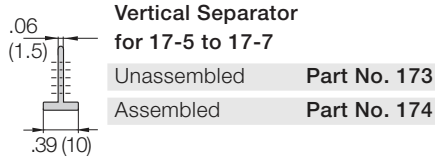
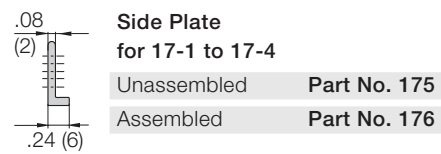
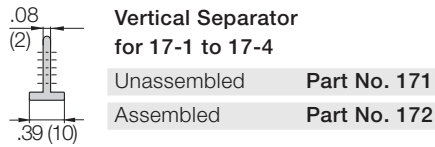
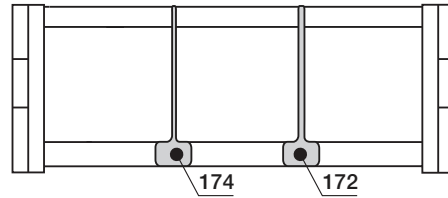
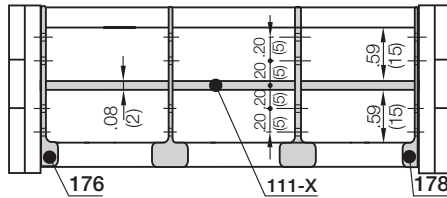
0=Standard color black. For other colors see Chapter 1

Energy Chain System® Zipper Series 17 Interior Separation



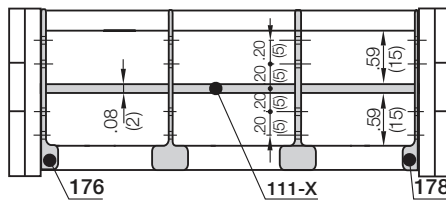
Option 1: Vertical separators

Vertical separators are used if only a vertical subdivision of the Energy Chain® interior is required. A slotted separator is used for this subdivision. This separator can also be used with full-width shelves for a continuous horizontal subdivision. By standard, vertical separators are assembled every other Energy Chain® link.

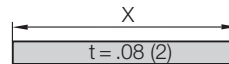


Option 2: Full-width shelf

Interior separation with continuous horizontal subdivision is practical is using a large number of thin cables with similar or identical diameters.

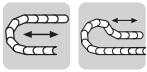


Width X in. (mm)	Part No. Unassembled	Part No. Assembled
.59 (015)	110-15	111-15
.98 (025)	110-25	111-25
1.50 (038)	110-38	111-38
1.97 (050)	110-50	111-50
2.48 (063)	110-63	111-63
3.15 (080)	110-80	111-80
3.94 (100)	110-100	111-100



PDF: www.igus.com/e-chain-pdfs
 Specs/CAD/RFQ: www.igus.com/e-chains
 RoHS info: www.igus.com/RoHS



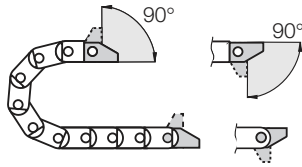


Standard

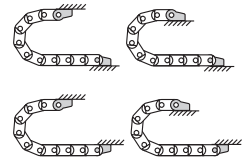
Option 1: pivoting

- One-piece mounting bracket
- Corrosion resistant
- Available pre-assembled
- Inner and outer attachment possible
- With our without strain relief tiwrap plates

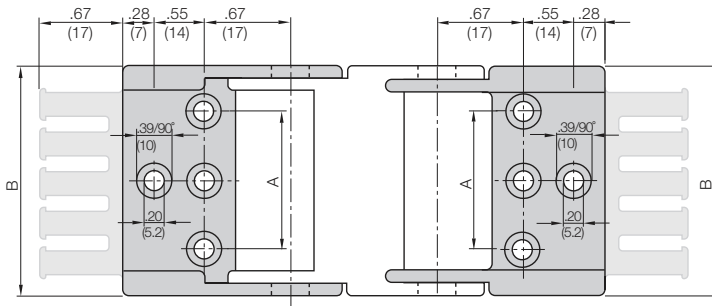
Moving end
117...1P(Z)



Fixed end
117...2P(Z)

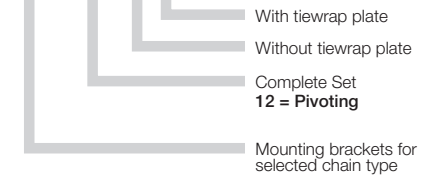


Possible installation configurations -



Part Number Structure

117-1- 12 P PZ



Full set, for both ends:

117-1-12-PZ Full set, each part with pin/bore + tiwrap plate

Single-part order:

117-1-1-PZ Mounting bracket with bore + tiwrap plate

117-1-2-PZ Mounting bracket with pin + tiwrap plate

For Chain Type	Part No. Full set with Tiwrap Plate	Part No. Full Set without Tiwrap Plate	Number of Teeth	Dimension A in. (mm)	Dimensions B in. (mm)
17-1	117-1-12PZ	117-1-12P	2	— —	1.00 (25.5)
17-2	117-2-12PZ	117-2-12P	3	.47 (12)	1.40 (35.5)
17-3	117-3-12PZ	117-3-12P	4	.98 (25)	1.91 (48.5)
17-4	117-4-12PZ	117-4-12P	5	1.46 (37)	2.38 (60.5)
17-5	117-5-12PZ	117-5-12P	6	1.89 (48)	2.99 (76.0)
17-6	117-6-12PZ	117-6-12P	8	2.56 (65)	3.66 (93.0)
17-7	117-7-12PZ	117-7-12P	10	3.35 (85)	4.45 (113.0)

