



Price Index



10 Widths
6 Bending Radii



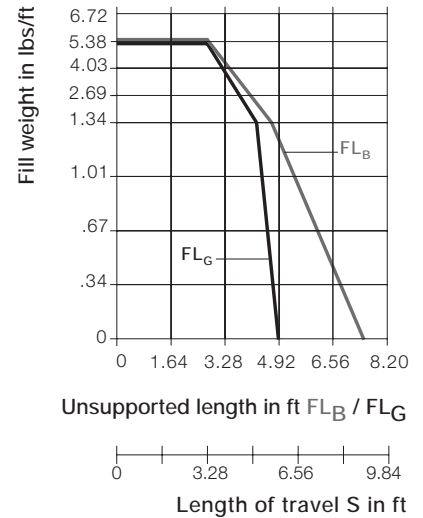
Interior separation possible



4 options for mounting brackets

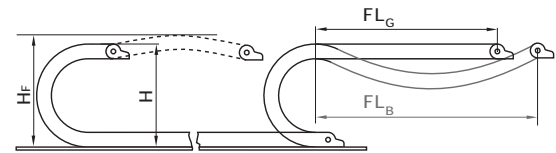


Quickflange available upon request



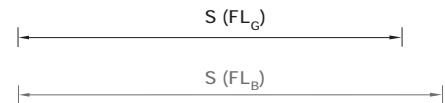
Unsupported length

- FL_B = unsupported with permitted sag
- FL_G = unsupported with straight upper run



Product Range

| | |
|--------------------------------|--|
| Inner Widths (Bi) inches (mm): | 1.57 (40), 1.97 (50), 2.95 (75), 3.46 (88), 3.94 (100), 4.92 (125), 5.31 (135), 5.91 (150), 6.89 (175), 7.87 (200) |
| Bending Radii (R) inches (mm): | 3.94 (100), 4.92 (125), 5.91 (150), 6.89 (175), 7.87 (200), 9.84 (250) |
| Pitch: | 1.81 (46 mm)/links = 6.71 links/ft (22 links/m) 39.8 (1012 mm) |



When to use the Series R157/R158:

- If hinged, snap-open accessibility along inner or outer radius is required
- If a low-cost, lightweight Energy Tube for many types of applications is required
- If flush mounting is required
- If chip-repellent features are required



When not to use the Series R157/R158:

- If snap-open accessibility along both radii is required
 - ▶ System E4/100, Series R770, Chapter 6
- If particularly quiet operation is required
 - ▶ Series R58, Chapter 5

Click Here for Specs & CAD Files

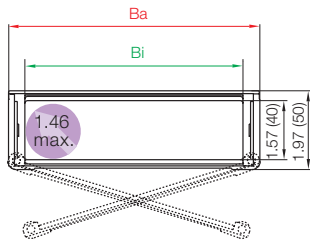
Series R157/R158 "E2 Tubes"



R157
R158

Series R157 Energy Tube

(hinged, snap-open along both sides of the inner radius)



**Click Here for
Specs &
CAD Files**

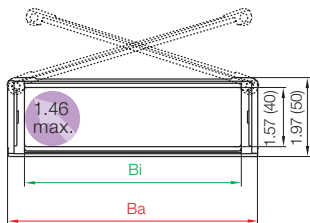
| Part No. | Bi | Ba |
|-----------|------------|------------|
| 157-040* | 1.57 (040) | 2.20 (056) |
| 157-050 | 1.97 (050) | 2.60 (066) |
| 157-075 | 2.95 (075) | 3.58 (091) |
| 157-088 | 3.46 (088) | 4.09 (104) |
| 157-090** | 3.46 (088) | 4.09 (104) |
| 157-100 | 3.94 (100) | 4.57 (116) |
| 157-125 | 4.92 (125) | 5.55 (141) |
| 157-135 | 5.31 (135) | 5.91 (150) |
| 157-150 | 5.91 (150) | 6.54 (166) |
| 157-175 | 6.89 (175) | 7.52 (191) |
| 157-200 | 7.87 (200) | 8.50 (216) |

Bending Radii
for ALL Widths
3.94 (100)
4.92 (125)
5.91 (150)
6.89 (175)
7.87 (200)
9.84 (250)

Supplement part number with required radius
for example, 157-100-100-0

Series R158 Energy Tube

(hinged, snap-open along both sides of the outer radius)



| Part No. | Bi | Ba |
|-----------|------------|------------|
| 158-040* | 1.57 (040) | 2.20 (056) |
| 158-050 | 1.97 (050) | 2.60 (066) |
| 158-075 | 2.95 (075) | 3.58 (091) |
| 158-088 | 3.46 (088) | 4.09 (104) |
| 158-090** | 3.46 (088) | 4.09 (104) |
| 158-100 | 3.94 (100) | 4.57 (116) |
| 158-125 | 4.92 (125) | 5.55 (141) |
| 158-135 | 5.31 (135) | 5.91 (150) |
| 158-150 | 5.91 (150) | 6.54 (166) |
| 158-175 | 6.89 (175) | 7.52 (191) |
| 158-200 | 7.87 (200) | 8.50 (216) |

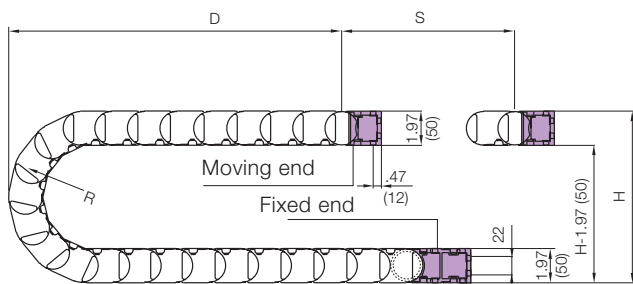
Bending Radii
for ALL Widths
3.94 (100)
4.92 (125)
5.91 (150)
6.89 (175)
7.87 (200)
9.84 (250)

Supplement part number with required radius
for example, 118-100-100-0

* Removable lid only, not hinged

** Same dimensions as 158-088 - removable lids only

Installation Dimensions



Pitch: = 1.81 (46 mm) per link
Links per ft (m): = 6.71 (22)
Tube length: = $\frac{S}{2} + K$

| R | 3.94 (100) | 4.92 (125) | 5.91 (150) |
|----|-------------|-------------|-------------|
| H* | 9.84 (250) | 11.81 (300) | 13.78 (350) |
| D | 6.89 (175) | 7.87 (200) | 8.86 (225) |
| K | 16.14 (410) | 19.09 (485) | 22.24 (565) |

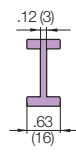
| R | 6.89 (175) | 7.87 (200) | 9.84 (250) |
|----|-------------|-------------|-------------|
| H* | 15.75 (400) | 17.72 (450) | 21.65 (550) |
| D | 9.84 (250) | 10.83 (275) | 12.80 (325) |
| K | 25.39 (645) | 28.54 (725) | 34.65 (880) |

*The required clearance height is HF = H + 1.57 (40 mm) with .67 lbs/ft (1kg/m) fill weight. Please consult igus® if space is particularly restricted.

Interior Separation

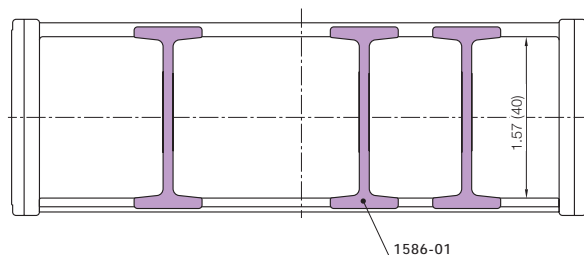
Option 1: vertical separators

Vertical separators are used to divide the interior of the Energy Tube. They most commonly perform the tasks of distributing the carrier's fill weight evenly and keeping dissimilar cables/hoses apart. Separators are removable and adjustable for a variety of chamber widths.

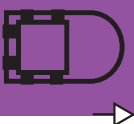


Separators

Unassembled Part No. 1585-01
Assembled Part No. 1586-01



PDF: www.igus.com/echainpdf.asp
Specs/CAD/RFO: www.igus.com/echain.asp
RoHS info: www.igus.com/RoHS.asp



Mounting Brackets

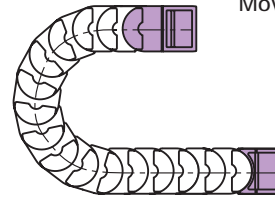
Option 1 Extended, locking

- Extended, locking
- Easy to install
- Flush mounting at both ends of the chain
- Mounting points on all sides
- Corrosion-resistant



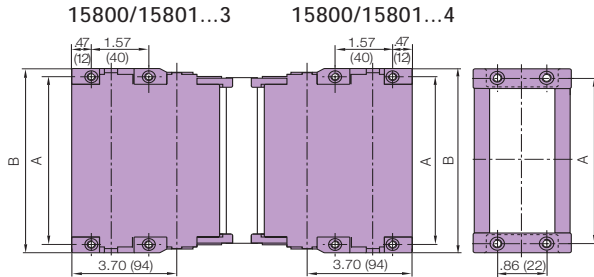
15800/15801...3
Moving end

Depending on
radius



15800/15801...4
Fixed end

Quickflange avail-
able upon request



| Tube Type | Part No. Full set | Dimension A | | Dimensions B | |
|-------------|----------------------|-------------|-------|--------------|-------|
| | | in. | (mm) | in. | (mm) |
| 157/158-040 | 15801-040-34 | 1.97 | (50) | 2.40 | (61) |
| 157/158-050 | 15800-050-34 | 2.40 | (60) | 2.80 | (71) |
| 157/158-075 | 15800-075-34 | 3.35 | (85) | 3.78 | (96) |
| 157/158-088 | 15800-088-34 | 3.86 | (98) | 4.29 | (109) |
| 157/158-090 | 15801-090-34 | 3.94 | (100) | 4.37 | (111) |
| 157/158-100 | 15800-100-34 | 4.33 | (110) | 4.76 | (121) |
| 157/158-125 | 15800-125-34 | 5.31 | (135) | 5.75 | (146) |
| 157/158-135 | 15800-135-34 | 5.71 | (145) | 6.14 | (156) |
| 157/158-150 | 15800-150-34 | 6.30 | (160) | 6.73 | (171) |
| 157/158-175 | 15800-175-34 | 7.28 | (185) | 7.72 | (196) |
| 157/158-200 | 15800-200-34 | 8.27 | (210) | 8.70 | (221) |

15800/15801...34 = Full set, each part with pin/bore
15800/15801...3 = Mounting bracket with bore
15800/15801...4 = Mounting bracket with pin

The following parts are required for attachment of the mounting brackets:

- Socket head cap bolt M5* DIN 912-8.8
8 pieces/set
- Washer 5.3 DIN 125-ST
8 pieces/set
- Hexagon nut M5 DIN 934-8
8 pieces/set

* The length of the socket head cap bolt is dependent on the thickness of the attachment base.

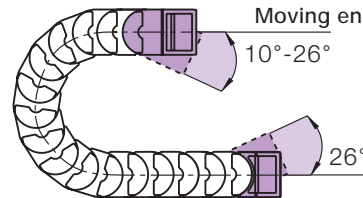
Option 2: Extended, pivoting

- Extended, pivoting
- Easy to install
- Universal use
- Corrosion-resistant
- Long travels with lowered mounting height possible



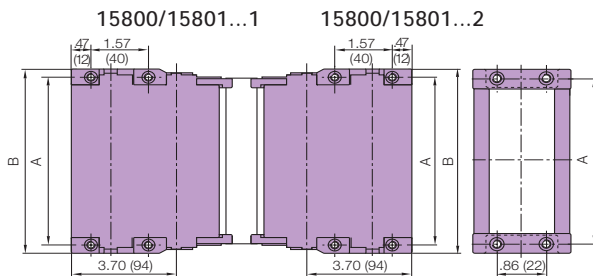
15800/158051...1
Moving end

10°-26°



26°

15800/15801...2
Fixed end



15800/15801...12 = Full set, each part with pin/bore
15800/15801...1 = Mounting bracket with bore
15800/15801...2 = Mounting bracket with pin

| Tube Type | Part No. Full set | Dimension A | | Dimensions B | |
|-------------|----------------------|-------------|-------|--------------|-------|
| | | in. | (mm) | in. | (mm) |
| 157/158-040 | 15801-040-12 | 1.97 | (50) | 2.40 | (61) |
| 157/158-050 | 15800-050-12 | 2.45 | (60) | 2.80 | (71) |
| 157/158-075 | 15800-075-12 | 3.35 | (85) | 3.78 | (96) |
| 157/158-088 | 15800-088-12 | 3.86 | (98) | 4.29 | (109) |
| 157/158-090 | 15801-090-12 | 3.94 | (100) | 4.37 | (111) |
| 157/158-100 | 15800-100-12 | 4.33 | (110) | 4.76 | (121) |
| 157/158-125 | 15800-125-12 | 5.31 | (135) | 5.75 | (146) |
| 157/158-135 | 15800-135-12 | 5.71 | (145) | 6.14 | (156) |
| 157/158-150 | 15800-150-12 | 6.30 | (160) | 6.73 | (171) |
| 157/158-175 | 15800-175-12 | 7.28 | (185) | 7.72 | (196) |
| 157/158-200 | 15800-200-12 | 8.27 | (210) | 8.70 | (221) |

The following parts are required for attachment of the mounting brackets:

- Socket head cap bolt M5* DIN 912-8.8
8 pieces/set
- Washer 5.3 DIN 125-ST
8 pieces/set
- Hexagon nut M5 DIN 934-8
8 pieces/set

* The length of the socket head cap bolt is dependent on the thickness of the attachment base.

Series R157/R158 "E2 Tubes"

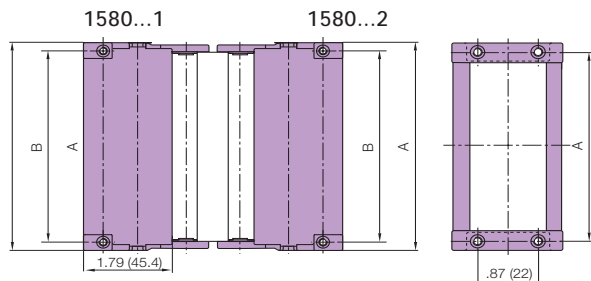
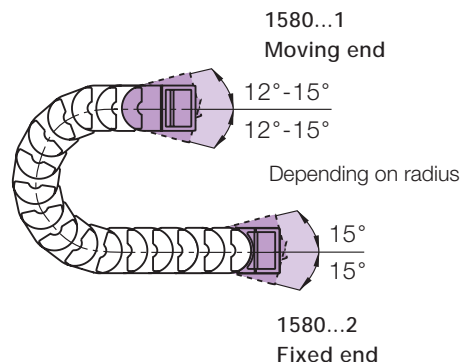


R157
R158

Mounting Brackets

Option 3: polymer, pivoting

- Abbreviated, pivoting
- Universal use
- Locked connection to the Energy Tube
- Corrosion-resistant
- Long travels with lowered mounting height possible



| Tube Type | Part No. Full set | Dimension A in. (mm) | Dimensions B in. (mm) |
|-------------|----------------------|-------------------------|--------------------------|
| 157/158-040 | 1580-040-12 | 1.97 (50) | 2.40 (61) |
| 157/158-050 | 1580-050-12 | 2.40 (60) | 2.80 (71) |
| 157/158-075 | 1580-075-12 | 3.35 (85) | 3.78 (96) |
| 157/158-088 | 1580-088-12 | 3.86 (98) | 4.29 (109) |
| 157/158-090 | 1580-090-12 | 3.94 (100) | 4.37 (111) |
| 157/158-100 | 1580-100-12 | 4.33 (110) | 4.76 (121) |
| 157/158-125 | 1580-125-12 | 5.31 (135) | 5.75 (146) |
| 157/158-135 | 1580-135-12 | 5.71 (145) | 6.14 (156) |
| 157/158-150 | 1580-150-12 | 6.30 (160) | 6.73 (171) |
| 157/158-175 | 1580-175-12 | 7.28 (185) | 7.72 (196) |
| 157/158-200 | 1580-200-12 | 8.27 (210) | 8.70 (221) |

1580...12 = Full set, each part with pin/bore
 1580...1 = Mounting bracket with bore
 1580...2 = Mounting bracket with pin

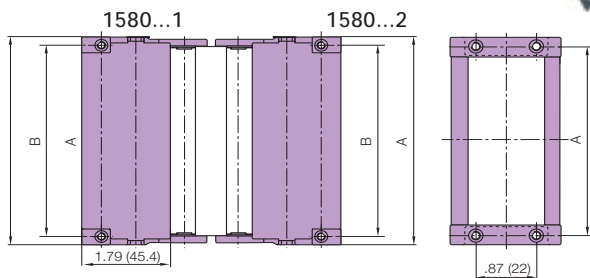
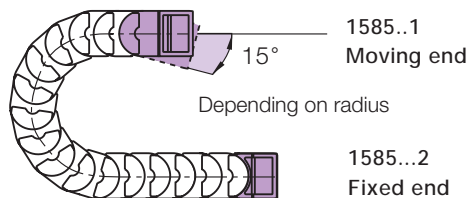
The following parts are required for attachment of the mounting brackets:

- Socket head cap bolt M5* DIN 912-8.8
4/8 pieces/set
- Washer 5.3 DIN 125-ST
8/16 pieces/set
- Hexagon nut M5 DIN 934-8
4/8 pieces/set

* The length of the socket head cap bolt is dependent on the thickness of the attachment base.

Option 4: polymer, locking

- Abbreviated, locking
- Flush mounting at both ends of the Chain
- Flush mounting, turned 90° at fixed end option
- Corrosion-resistant



| Tube Type | Part No. Full set | Dimension A in. (mm) | Dimensions B in. (mm) |
|-------------|----------------------|-------------------------|--------------------------|
| 157/158-040 | 1585-040-12 | 1.97 (50) | 2.40 (61) |
| 157/158-050 | 1585-050-12 | 2.40 (60) | 2.80 (71) |
| 157/158-075 | 1585-075-12 | 3.35 (85) | 3.78 (96) |
| 157/158-088 | 1585-088-12 | 3.86 (98) | 4.29 (109) |
| 157/158-090 | 1585-090-12 | 3.94 (100) | 4.37 (111) |
| 157/158-100 | 1585-100-12 | 4.33 (110) | 4.76 (121) |
| 157/158-125 | 1585-125-12 | 5.31 (135) | 5.75 (146) |
| 157/158-135 | 1585-135-12 | 5.71 (145) | 6.14 (156) |
| 157/158-150 | 1585-150-12 | 6.30 (160) | 6.73 (171) |
| 157/158-175 | 1585-175-12 | 7.28 (185) | 7.72 (196) |
| 157/158-200 | 1585-200-12 | 8.27 (210) | 8.70 (221) |

1585...12 = Full set, each part with pin/bore
 1585...1 = Mounting bracket with bore
 1585...2 = Mounting bracket with pin

The following parts are required for attachment of the mounting brackets:

- Socket head cap bolt M5* DIN 912-8.8
4/8 pieces/set
- Washer 5.3 DIN 125-ST
8/16 pieces/set
- Hexagon nut M5 DIN 934-8
4/8 pieces/set

* The length of the socket head cap bolt is dependent on the thickness of the attachment base.

**Click Here for
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CAD Files**

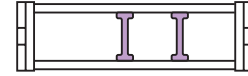
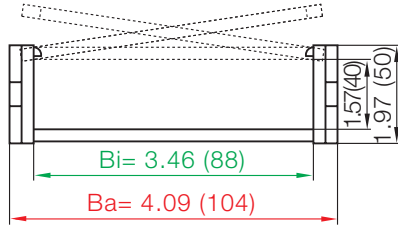
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 Specs/CAD/RFO: www.igus.com/echain.asp
 RoHS info: www.igus.com/RoHS.asp



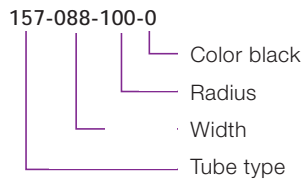
upon request

Order example

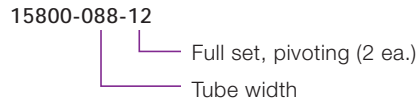
157-088...



1. Tube selection:



2. Mounting brackets:



3. Interior separation:

2 vertical separators (Part number 1585-01) or assembled every other link (Part number 1586-01).
Alternative interior separation configuration according to design layout possible.

For 16.4 ft (5 m) tube, color black, with pivoting mounting bracket:
16.4 ft (5 m) 157-088-100-0 and 15800-088-12



4. Other technical data on guide troughs available upon request



Technical data

| Tube Type | Weight Per Link | | Weight | |
|-------------|-----------------|---------|----------|----------|
| | (oz.) | (g) | (lbs/ft) | (kg/m) |
| 157/158-040 | 1.93 | (≈ 55) | 0.81 | (≈ 1.21) |
| 157/158-050 | 2.07 | (≈ 59) | 0.87 | (≈ 1.30) |
| 157/158-075 | 2.38 | (≈ 68) | 1.01 | (≈ 1.50) |
| 157/158-088 | 2.49 | (≈ 71) | 1.06 | (≈ 1.57) |
| 157/158-090 | 2.59 | (≈ 74) | 1.10 | (≈ 1.63) |
| 157/158-100 | 2.73 | (≈ 78) | 1.15 | (≈ 1.71) |
| 157/158-125 | 3.05 | (≈ 87) | 1.29 | (≈ 1.92) |
| 157/158-135 | 3.33 | (≈ 95) | 1.41 | (≈ 2.10) |
| 157/158-150 | 3.40 | (≈ 97) | 1.43 | (≈ 2.13) |
| 157/158-175 | 3.71 | (≈ 106) | 1.57 | (≈ 2.34) |
| 157/158-200 | 4.20 | (≈ 120) | 1.71 | (≈ 2.55) |

| | |
|-----------------------|---------------------------|
| Material | igumid G |
| Permitted temperature | -40°/+266°F (-40°/+130°C) |
| Gliding speed max. | 4.92ft/s (1.5 m/s) |
| Unsupported V max. | 32.8 ft/s (10 m/s) |
| Flammability class | VDE 0304 IIC UL94 1H |

- Details of material properties
- ▶ Design, Chapter 1