

Price Index



Series E2-10

Special Features / Options



IPA Qualification Certificate:
Cleanroom test upon request



ESD Classification:
Electrically conductive ESD/
ATEX version upon request



Flammability Class
VDE 0304 IIC UL94 HB

Assembly Tips



Easy to assemble and disassemble

Usage Guidelines



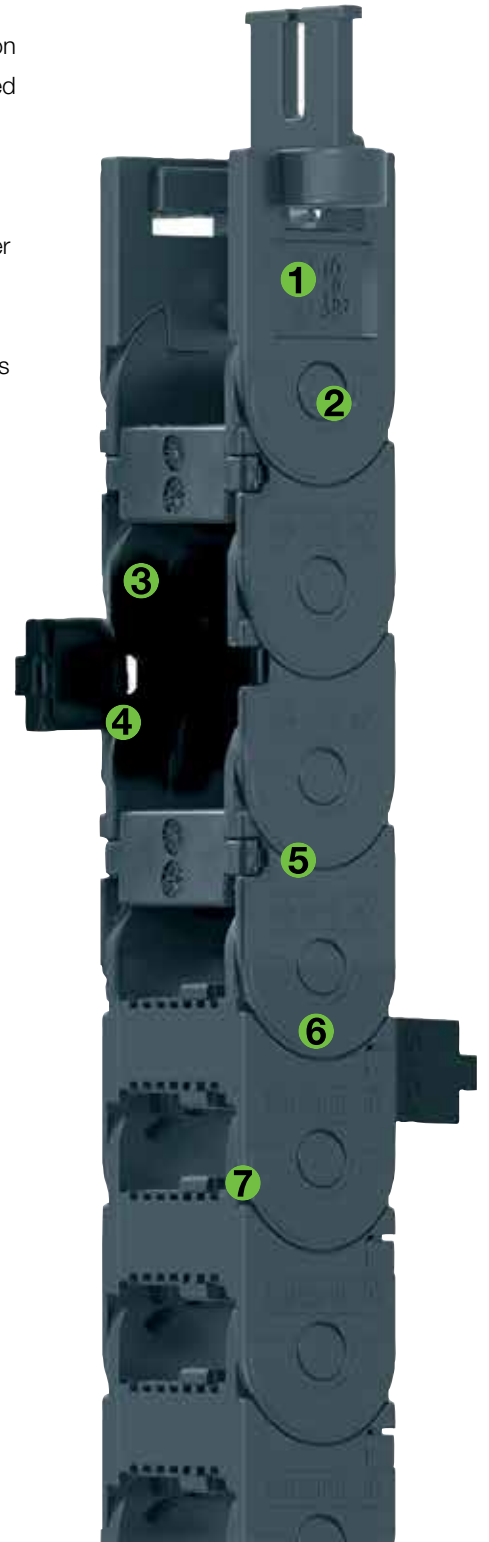
- When long unsupported lengths and high additional loads are required with a small e-chain®
- For smooth, quiet operation due to small pitch
- If a large modular system in various designs is desired



- If a closed Energy Tube is required
➤ Series R07 “Zipper”
- If torsional rigidity is very important
➤ Series E2C-10 E2 Micro

Features & Benefits

- 1 Universal mounting bracket with strain relief option
- 2 Large, assembly friendly pins for long unsupported lengths
- 3 Very smooth contours ensure the best possible cable life
- 4 Non snap-open or snap-open in the inner or outer radius
- 5 Lightweight, low price
- 6 Square stop-dog system for large additional loads
- 7 Brake feature reduces noise



Order Example: Complete e-chain®

Please indicate chain length or number of links. Example:

3.28 ft (1 m) E2-10-20-038-0

e-chain®

1 Set E2-100-20-34PZ

Mounting Bracket

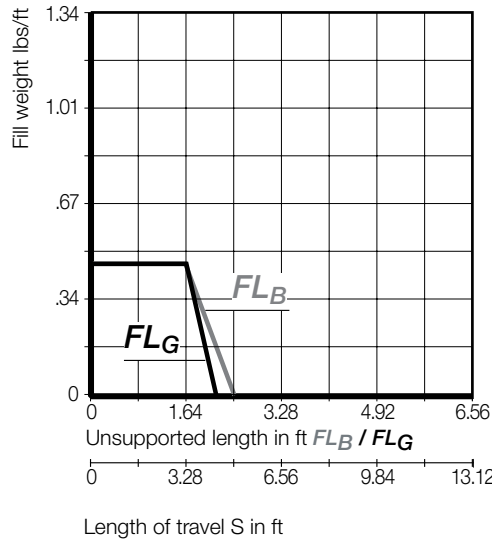
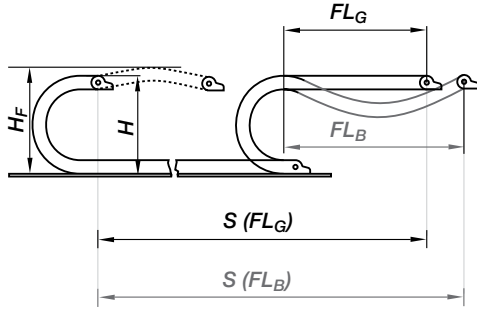
e-chain system® E2 Micro Series E2-10/E2i-10/E2C-10 Installation Dimensions



E2-10
E2i-10
E2C-10

Short travel, unsupported length

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



Short Travels - Unsupported

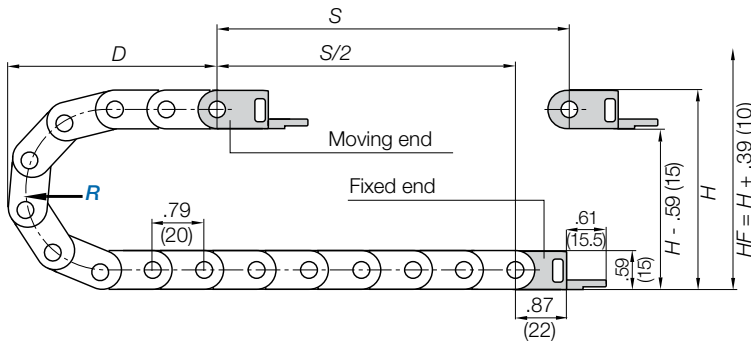


Unsupported e-chains® feature positive camber over short travels. This must be accounted for when specifying the clearance height. Please refer to **Installation dimensions** for further details.

Legend

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

*If the mounting bracket location is set lower



Pitch per link = .79" (20 mm)
Links per ft (m) = 15.24 (50)
For center mount applications:
Chain length = $\frac{S}{2} + K$

The required clearance height: $H_F = H + .39 \text{ in. (10 mm)}$ (with .13 lbs/ft (0.2 kg/m) fill weight). Please consult igus® if space is particularly restricted.

| R | .71 (018) | 1.10 (028) | 1.50 (038) |
|---|------------|------------|------------|
| H | 2.01 (51) | 2.80 (71) | 3.58 (91) |
| D | 2.20 (56) | 2.60 (66) | 2.99 (76) |
| K | 3.94 (100) | 5.12 (130) | 6.30 (160) |

| | |
|--|--|
| Speed / acceleration FL_G | max. 65.6 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. 9.84 ft/s (3 m/s) / max. 32.8 ft/s ² (10 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



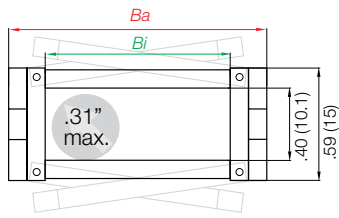
Details of material properties

► Chapter 1



PDF: igus.com/e-chain-pdfs
Product information: igus.com/e-chains





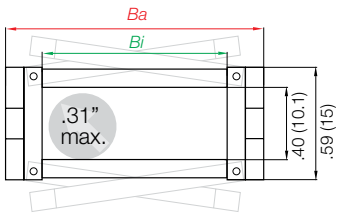
Series E2-10 - Snap-open along the outer radius from both sides



Part Number Structure



Color - Black
Bending radius
Width
Series



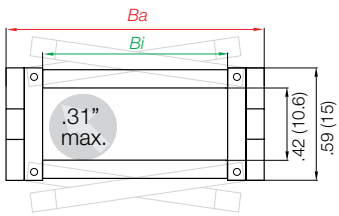
Series E2i-10 - Snap-open along the inner radius from both sides



Part Number Structure



Color - Black
Bending radius
Width
Series



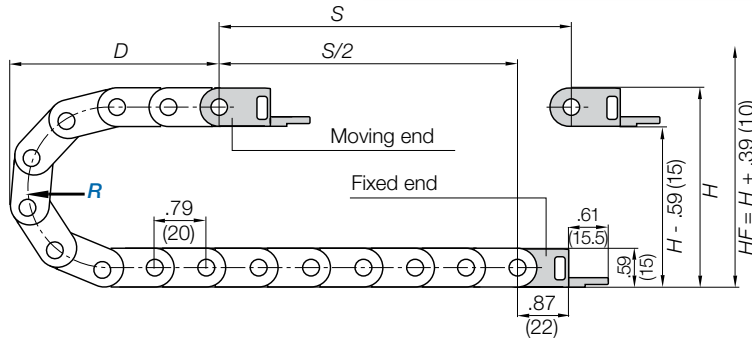
Series E2C-10 - One-piece, non snap-open



Part Number Structure



Color - Black
Bending radius
Width
Series



Supplement part number with required radius. Example: E2-10-20-038-0

Pitch: .79 in. (20 mm) per link links/ft (m) = 15.24 (50)

| Snap-open along outer radius | Snap-open along inner radius | One-piece non snap-open | Bi in. (mm) | Ba in. (mm) | Weight | | | |
|------------------------------|------------------------------|-------------------------|----------------|----------------|------------------------|-------------------------|-------------------------|----------------|
| | | | | | E2-10 lbs/ft (kg/m) | E2i-10 lbs/ft (kg/m) | E2C-10 lbs/ft (kg/m) | |
| E2-10-06- | E2i-10-06- | E2C-10-06- | 0 | .28 (6) | .53 (13.4) | ≈ 0.087 (0.13) | ≈ 0.087 (0.13) | ≈ 0.094 (0.14) |
| E2-10-10- | E2i-10-10- | E2C-10-10- | 0 | .39 (10) | .69 (17.4) | ≈ 0.094 (0.14) | ≈ 0.094 (0.14) | ≈ 0.094 (0.14) |
| E2-10-16- | E2i-10-16- | E2C-10-16- | 0 | .63 (16) | .92 (23.4) | ≈ 0.107 (0.16) | ≈ 0.107 (0.16) | ≈ 0.107 (0.16) |
| E2-10-20- | E2i-10-20- | E2C-10-20- | 0 | .79 (20) | 1.08 (27.4) | ≈ 0.114 (0.17) | ≈ 0.114 (0.17) | ≈ 0.114 (0.17) |
| E2-10-30- | E2i-10-30- | E2C-10-30- | 0 | 1.18 (30) | 1.47 (37.4) | ≈ 0.128 (0.19) | ≈ 0.128 (0.19) | ≈ 0.134 (0.20) |
| E2-10-40- | E2i-10-40- | E2C-10-40- | 0 | 1.57 (40) | 1.87 (47.4) | ≈ 0.148 (0.22) | ≈ 0.148 (0.22) | ≈ 0.154 (0.23) |
| E2-10-50- | E2i-10-50- | E2C-10-50- | 0 | 1.97 (50) | 2.26 (57.4) | ≈ 0.168 (0.25) | ≈ 0.168 (0.25) | ≈ 0.168 (0.25) |

Choose from the radii below for all of the above sizes

Radius (mm) Example: E2-10-20-038-0

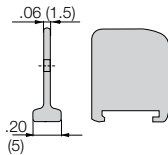
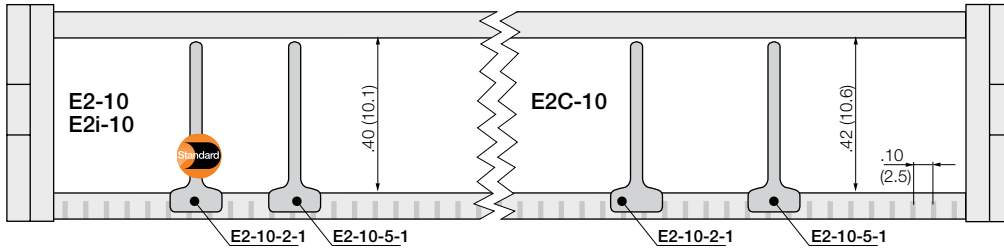
0=Standard color black.
For other colors see Chapter 1

| | 018 | 028 | 038 |
|---|------------|------------|------------|
| R | .71 (018) | 1.10 (028) | 1.50 (038) |
| H | 2.01 (51) | 2.80 (71) | 3.58 (91) |
| D | 2.20 (56) | 2.60 (66) | 2.99 (76) |
| K | 3.94 (100) | 5.12 (130) | 6.30 (160) |

e-chain system® E2 Micro
 Series E2-10/E2i-10/E2C-10
 Interior Separation



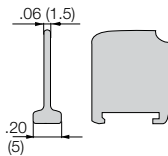
E2-10
 E2i-10
 E2C-10



Separator

| | |
|-------------|--------------------|
| Unassembled | Part No. E2-10-2 |
| Assembled | Part No. E2-10-2-1 |

- Separator E2-10-2 Standard - for all applications**
 For a simple vertical subdivision on e-chains®. Separators can be arranged anywhere in the Energy cross section.



**Notch separator
 For notch crossbar**

| | |
|-------------|--------------------|
| Unassembled | Part No. E2-10-5 |
| Assembled | Part No. E2-10-5-1 |

- Notch separator E2-10-5 Locks safely in .10" (2.5 mm) increments**
 For exact positioning in e-chains®. Recommended for side-mounted applications.

PDF: igus.com/e-chain-pdfs
 Product information: igus.com/e-chains



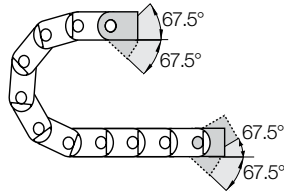


Polymer, one-piece

- One-piece mounting bracket
- Corrosion resistant
- Available preassembled
- Inner and outer attachment possible
- Available with or without strain relief tiwrap plates

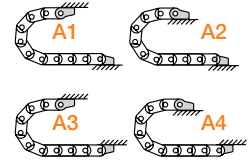
Moving end

- E2-100-...-3PZ two side pivoting
- E2-100-...-5PZ one side* pivoting
- E2-100-...-1PZ locking



Fixed end

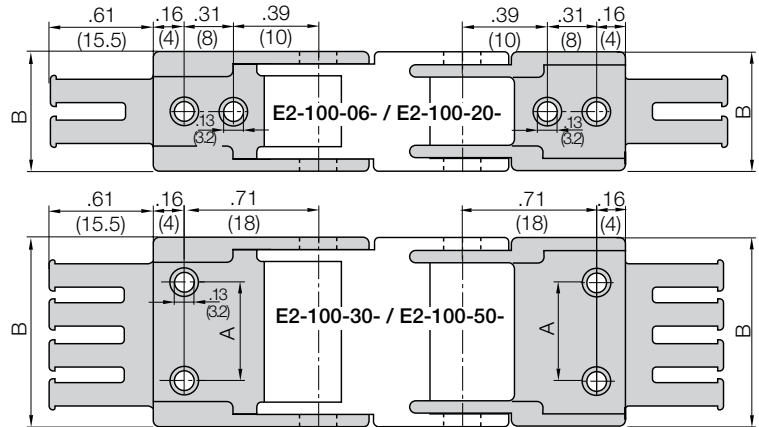
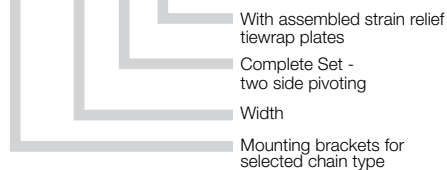
- E2-100-...-4PZ two side pivoting
- E2-100-...-6PZ one side* pivoting
- E2-100-...-2PZ locking



Possible installation configurations -

Part Number Structure

E2-100- 20- 34 PZ



Full set, for both ends:

E2-100- [20-] [34] Full set, each part with pin/bore

Single-part order:

- E2-100- [20-] [3] Mounting bracket with bore
- E2-100- [20-] [4] Mounting bracket with pin

E2-100-06-12 - E2-100-20-12: Center bores only
E2-100-30-12 - E2-100-50-12: Outer bores only

| Chain Width | Part No. full set with tiwrap plate two side pivoting | Part No. full set with tiwrap plate one side* pivoting | Part No. full set with tiwrap plate locking | Dimension A in. (mm) | Dimension B in. (mm) | Number of Teeth |
|-------------|---|--|---|----------------------|----------------------|-----------------|
| -06 | E2-100-06-34PZ | E2-100-06-56PZ | E2-100-06-12PZ | — | .53 (13.4) | 1 |
| -10 | E2-100-10-34PZ | E2-100-10-56PZ | E2-100-10-12PZ | — | .69 (17.4) | 1 |
| -16 | E2-100-16-34PZ | E2-100-16-56PZ | E2-100-16-12PZ | — | .92 (23.4) | 2 |
| -20 | E2-100-20-34PZ | E2-100-20-56PZ | E2-100-20-12PZ | — | 1.08 (27.4) | 2 |
| -30 | E2-100-30-34PZ | E2-100-30-56PZ | E2-100-30-12PZ | .87 (22) | 1.47 (37.4) | 3 |
| -40 | E2-100-40-34PZ | E2-100-40-56PZ | E2-100-40-12PZ | 1.26 (32) | 1.87 (47.4) | 4 |
| -50 | E2-100-50-34PZ | E2-100-50-56PZ | E2-100-50-12PZ | 1.65 (42) | 2.26 (57.4) | 5 |

*One-side pivoting: Pivot angle = Bending radius.

One side pivoting only to the inner radius - whether mounted to A1 or A4

Additional Accessories



Quick flange- the quick flange can be clipped-in laterally in all mounting brackets. Housing for hexagonal nut or M3 socket head screws M3.

Single:

Part no. E2-150-QF

Includes mounting bracket:

Part No. E2-100-20-34PZQF

