e-chain system® E2 Micro
Series E2-15/E2i-15/E2C-15

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 on 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) E2-15-20-038-0
e-chain®

1 Set E2-150-20-34PZ
Mounting Bracket

Usage Guidelines
• When large 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 R09 “Zipper”
• If filling without opening lids is required ➤ Series 08 E-Z Chain

Price Index
Series E2-15

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
Series 06 shown for demonstration purposes only

ipa qualification certificate
e-chain system® E2 Micro
Series E2-15/E2i-15/E2C-15
Installation Dimensions

Short travel, unsupported length
- FLB = unsupported with permitted sag
- FLG = unsupported with straight upper run
Further information ➤ Design, Chapter 1

The required clearance height: \( H_{R} = H + .59 \text{ in. (15 mm)} \) (with .20 lbs/ft (0.3 kg/m) fill weight.
Please consult igus® if space is particularly restricted.

<table>
<thead>
<tr>
<th>R</th>
<th>1.10 (028)</th>
<th>1.50 (038)</th>
<th>1.89 (048)</th>
<th>2.95 (075)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>2.95 (75)</td>
<td>3.74 (95)</td>
<td>4.53 (115)</td>
<td>6.65 (169)</td>
</tr>
<tr>
<td>D</td>
<td>2.68 (68)</td>
<td>3.07 (78)</td>
<td>3.46 (88)</td>
<td>4.53 (115)</td>
</tr>
<tr>
<td>K</td>
<td>5.12 (130)</td>
<td>6.30 (160)</td>
<td>7.68 (195)</td>
<td>11.02 (280)</td>
</tr>
</tbody>
</table>

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

Speed / acceleration FLG: max. 65.6 ft/s (20 m/s) / max. 656 ft/s² (200 m/s²)
Speed / acceleration FLB: max. 9.84 ft/s (3 m/s) / max. 19.69 ft/s² (6 m/s²)
Girling speed / acceleration (maximum): max. 9.84 ft/s (3 m/s) / max. 32.8 ft/s² (10 m/s²)
Material - permitted temperature: i gumid G / -40°F (-40°C) up to +248°F (+120°C)
Flammability Class, i gumid G: VDE 0304 IIIC UL94 HB

Unsuppored 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 = \( \pi R + \text{safety buffer} \)
- HF = Required clearance height

Technical Data
Details of material properties ➤ Chapter 1
## e-chain system® E2 Micro
### Series E2-15/E2i-15/E2C-15

### Series E2-15 - Snap-open along the outer radius from both sides
![Diagram of E2-15 series](image)

**Part Number Structure**
- **E2-15-**
- 20-
- 038-
- 0

**Dimensions**
- Bi: \(0.39 \text{ (10)} \)
- Bb: \(0.69 \text{ (17.4)} \)
- Weight: \(0.120 \text{ (0.18)} \)

### Series E2i-15 - Snap-open along the inner radius from both sides
![Diagram of E2i-15 series](image)

**Part Number Structure**
- **E2i-15-**
- 20-
- 038-
- 0

**Dimensions**
- Bi: \(0.39 \text{ (10)} \)
- Bb: \(0.69 \text{ (17.4)} \)
- Weight: \(0.120 \text{ (0.18)} \)

### Series E2C-15 - One-piece, non snap-open
![Diagram of E2C-15 series](image)

**Part Number Structure**
- **E2C-15-**
- 20-
- 038-
- 0

**Dimensions**
- Bi: \(0.39 \text{ (10)} \)
- Bb: \(0.69 \text{ (17.4)} \)
- Weight: \(0.120 \text{ (0.18)} \)

### Supplement part number with required radius
- Example: E2-15-20-038-0

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

### Table: Snap-open E2-15/-i-15/-C-15

<table>
<thead>
<tr>
<th>E2-15 Series</th>
<th>E2i-15 Series</th>
<th>E2C-15 Series</th>
<th>Bi (in. mm)</th>
<th>Ba (in. mm)</th>
<th>Weight (lbs/ft kg/m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E2-15-10</td>
<td>E2i-15-10</td>
<td>E2C-15-10</td>
<td>0</td>
<td>0.39 (10)</td>
<td>0.120 (0.18)</td>
</tr>
<tr>
<td>E2-15-13</td>
<td>E2i-15-13</td>
<td>E2C-15-13</td>
<td>0</td>
<td>0.51 (13)</td>
<td>0.128 (0.19)</td>
</tr>
<tr>
<td>E2-15-16</td>
<td>E2i-15-16</td>
<td>E2C-15-16</td>
<td>0</td>
<td>0.63 (16)</td>
<td>0.134 (0.20)</td>
</tr>
<tr>
<td>E2-15-20</td>
<td>E2i-15-20</td>
<td>E2C-15-20</td>
<td>0</td>
<td>0.79 (20)</td>
<td>0.141 (0.21)</td>
</tr>
<tr>
<td>E2-15-30</td>
<td>E2i-15-30</td>
<td>E2C-15-30</td>
<td>0</td>
<td>1.18 (30)</td>
<td>0.161 (0.24)</td>
</tr>
<tr>
<td>E2-15-40</td>
<td>E2i-15-40</td>
<td>E2C-15-40</td>
<td>0</td>
<td>1.57 (40)</td>
<td>0.175 (0.26)</td>
</tr>
<tr>
<td>E2-15-50</td>
<td>E2i-15-50</td>
<td>E2C-15-50</td>
<td>0</td>
<td>1.97 (50)</td>
<td>0.195 (0.29)</td>
</tr>
</tbody>
</table>

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

### Moving end
- Moving end: \(79 (20)\)
- Fixed end: \(61 (15.5)\)

### Notes
- Radius 075 is only available for the E2C-15-40
e-chain system® E2 Micro
Series E2-15/E2i-15/E2C-15
Interior Separation

Separator
- Unassembled Part No. E2-15-2
- Assembled Part No. E2-15-2-1

Notch separator for notch crossbar
- Unassembled Part No. E2-15-5
- Assembled Part No. E2-15-5-1

Full width shelf
- Unassembled Part No. 110-X
- Assembled Part No. 111-X

Separator E2-15-2
Standard - for all applications
For a simple vertical subdivision on e-chains®. Separators can be arranged anywhere in the Energy cross section.

Notch separator E2-15-5
Locks safely in .10" (2.5 mm) increments
For exact positioning in e-chains®. Recommended for side-mounted applications.

Full width shelf 110-X
This component is used in applications with many thin cables with similar diameters.

<table>
<thead>
<tr>
<th>Width X in. (mm)</th>
<th>Part No. Unassembled</th>
<th>Part No. Assembled</th>
</tr>
</thead>
<tbody>
<tr>
<td>.39 (10)</td>
<td>110-10</td>
<td>111-10</td>
</tr>
<tr>
<td>.51 (13)</td>
<td>110-13</td>
<td>111-13</td>
</tr>
<tr>
<td>.63 (16)</td>
<td>110-16</td>
<td>111-16</td>
</tr>
<tr>
<td>.79 (20)</td>
<td>110-20</td>
<td>111-20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Width X in. (mm)</th>
<th>Part No. Unassembled</th>
<th>Part No. Assembled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.18 (30)</td>
<td>110-30</td>
<td>111-30</td>
</tr>
<tr>
<td>1.57 (40)</td>
<td>110-40</td>
<td>111-40</td>
</tr>
<tr>
<td>1.97 (50)</td>
<td>110-50</td>
<td>111-50</td>
</tr>
</tbody>
</table>
Polymer, one-piece
- One-piece mounting bracket
- Corrosion resistant
- Available preassembled
- Inner and outer attachment possible
- Available with or without strain relief tiewrap plates

Moving end
E2-150-...-3PZ two side pivoting
E2-150-...-5PZ one side* pivoting
E2-150-...-1PZ locking

Fixed end
E2-150-...-4PZ two side pivoting
E2-150-...-6PZ one side* pivoting
E2-150-...-2PZ locking

Part Number Structure
E2-150- 20- 34 PZ

With assembled strain relief tiewrap plates
Complete Set - two side pivoting
Width
Mounting brackets for selected chain type

Full set, for both ends:
E2-150- 20- 34 PZ

Single-part order:
E2-150- 20- 3 Mounting bracket with bore
E2-150- 20- 4 Mounting bracket with pin

Chain Width Part No. full set with tiewrap plate two side pivoting Part No. full set with tiewrap plate one side* pivoting Part No. full set with tiewrap plate locking Dimension A in. (mm) Dimension B in. (mm) Number of Teeth

-10 E2-150-10-34PZ E2-150-10-56PZ E2-150-10-12PZ 0.70 (17.8) 1
-13 E2-150-13-34PZ E2-150-13-56PZ E2-150-13-12PZ 0.82 (20.8) 1
-16 E2-150-16-34PZ E2-150-16-56PZ E2-150-16-12PZ 0.94 (23.8) 2
-20 E2-150-20-34PZ E2-150-20-56PZ E2-150-20-12PZ 1.09 (27.8) 2
-30 E2-150-30-34PZ E2-150-30-56PZ E2-150-30-12PZ 0.87 (22) 1.49 (37.8) 3
-40 E2-150-40-34PZ E2-150-40-56PZ E2-150-40-12PZ 1.26 (32) 1.88 (47.8) 4
-50 E2-150-50-34PZ E2-150-50-56PZ E2-150-50-12PZ 1.65 (42) 2.27 (57.8) 5

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

One side pivoting only to the inner radius

Additional Accessories

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

Single:
Part no. E2-150-QF
Includes mounting bracket:
Part No. E2-150-20-34PZQF