



Price index



IPA Qualification Certificate:
Air Cleanless Class ISO Class 2
(at v = 1 m/s) upon request



UL94-V2
classifications



Torsional
motion possible



IPA Qualification Certificate: ESD
Classification Level 1 (for Series
E14.3.038). Special equipment:
Electrically conductive ESD/ATEX
version upon request



Just push the cables with your thumb
into the E-Chain® - and it's ready



When to use the Series E14/Z14:

- If filling is required without opening and closing lids
- If price is an issue
- If quiet operation is required



When not to use it:

- For applications with very high loads and long unsupported travel lengths
 - ▶ Series B15 E2 mini, page 5.70
- "Z" Series is unsuitable for gliding applications
 - ▶ Series B15 E2 mini, page 5.70

- ① Limited torsion tolerance
- ② Very easy to fill - ideal for harnessed cable assemblies
- ③ The patented push-button principle holds the links together
- ④ Small pitch for low-noise, smooth operation
- ⑤ Cable-friendly interior
- ⑥ "E" Series features split crossbar along the outer radius
- ⑦ "Z" Series features split crossbar along the inner radius
- ⑧ Integrated strain relief option



Order example complete E-Chain®

Please indicate chain-lengths or number of links Example: 1 m or 33 links

1 m E14.3.038.0



E-Chain®

1 set 114.3.12PZ



Mounting bracket

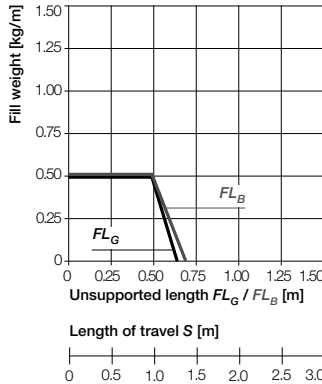
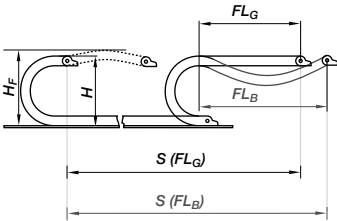


Unsupported length

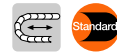
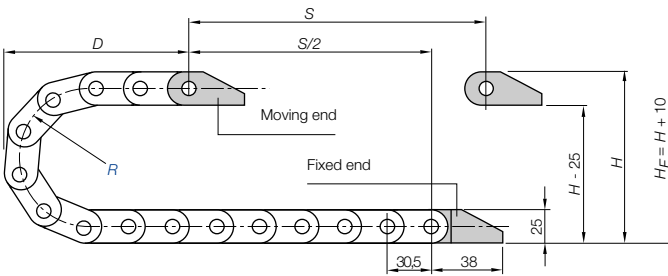
FL_G = with straight upper run

FL_B = with permitted sag

Further information ► **Design, page 1.12**



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



Short travels - unsupported

Unsupported E-Chains® feature positive camber over short travels. This must be accounted for when specifying the clearance height H_F . Please consult igus® if space is particularly restricted.

Pitch = 30,5 mm/link Links/m = 33 (1.006,5 mm) Chain length = $S/2 + K$

| R | 028 | 038 | 048 | 075 | 100 | 125 |
|---|-----|-----|-----|-----|-----|-----|
| H | 82 | 102 | 122 | 177 | 227 | 277 |
| D | 71 | 81 | 91 | 120 | 145 | 170 |
| K | 150 | 185 | 215 | 300 | 375 | 455 |

The required clearance height:
 $H_F = H + 10$ mm
(with 0,2 kg/m fill weight)



Easy Chain®
Inner height: 19 mm

Phone +49- (0) 22 03-96 49-800
Fax +49- (0) 22 03-96 49-222



| | |
|--|---------------------------------|
| Speed / acceleration FL_G | max. 20 [m/s] / max. 200 [m/s²] |
| Speed / acceleration FL_B | max. 3 [m/s] / max. 6 [m/s²] |
| Gliding speed / acceleration (maximum) | max. 3 [m/s] / max. 10 [m/s²] |
| Material (E-Chain®)- permitted temperature °C | igumid NB / -40° up to +80° C |
| Material (mounting brackets)* - permitted temperature °C | igumid G / -40° up to +120° C |
| Flammability class (E-Chain®), igumid NB | VDE 0304 IIC UL94 V2 |
| Flammability class (mounting brackets), igumid G* | VDE 0304 IIC UL94 HB |

*Available in igumid NB upon request, please consult igus® for delivery time

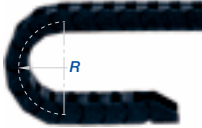
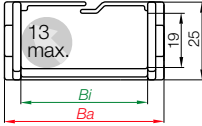
Technical Data



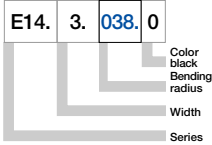
Details of material properties
► page 1.38



► page 3.5



Part No. structure



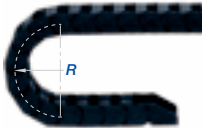
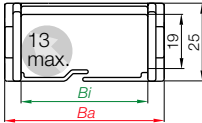
Series E14 - split crossbar along the outer radius

| Part No. | Bi [mm] | Ba [mm] | R [mm] | Bending radii | | | | | Weight [kg/m] |
|---------------|---------|---------|--------|---------------|-----|-----|-----|-----|---------------|
| E14.1. [] .0 | 15 | 27 | 028 | 038 | 048 | 075 | 100 | 125 | ≈ 0,31 |
| E14.2. [] .0 | 25 | 37 | 028 | 038 | 048 | 075 | 100 | 125 | ≈ 0,32 |
| E14.3. [] .0 | 38 | 50 | 028 | 038 | 048 | 075 | 100 | 125 | ≈ 0,40 |
| E14.4. [] .0 | 50 | 62 | 028 | 038 | 048 | 075 | 100 | 125 | ≈ 0,44 |

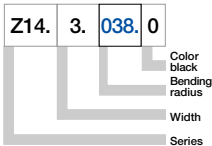
Ba: pin dimension approx. 0,3 - 0,5 mm wider!

Supplement Part No. with required radius. Example: E14.3. [038].0

0 = standard color, other colors ▶ page 1.39 - Pitch = 30,5 mm/link - Links/m = 33



Part No. structure



Series Z14 - split crossbar along the inner radius

| Part No. | Bi [mm] | Ba [mm] | R [mm] | Bending radii | | | | | Weight [kg/m] |
|---------------|---------|---------|--------|---------------|-----|-----|-----|-----|---------------|
| Z14.1. [] .0 | 15 | 27 | 028 | 038 | 048 | 075 | 100 | 125 | ≈ 0,31 |
| Z14.2. [] .0 | 25 | 37 | 028 | 038 | 048 | 075 | 100 | 125 | ≈ 0,32 |
| Z14.3. [] .0 | 38 | 50 | 028 | 038 | 048 | 075 | 100 | 125 | ≈ 0,40 |
| Z14.4. [] .0 | 50 | 62 | 028 | 038 | 048 | 075 | 100 | 125 | ≈ 0,44 |

Ba: pin dimension approx. 0,3 - 0,5 mm wider!

Supplement Part No. with required radius. Example: Z14.3. [038].0

0 = standard color, other colors ▶ page 1.39 - Pitch = 30,5 mm/link - Links/m = 33

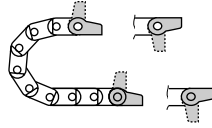




Polymer, one-piece

- One-piece mounting bracket
- Corrosion-resistant
- Available preassembled
- Inner and outer attachment possible
- Available with integrated strain relief tiwrap plates

Moving end with bore
(outer link) 114...1P(Z)



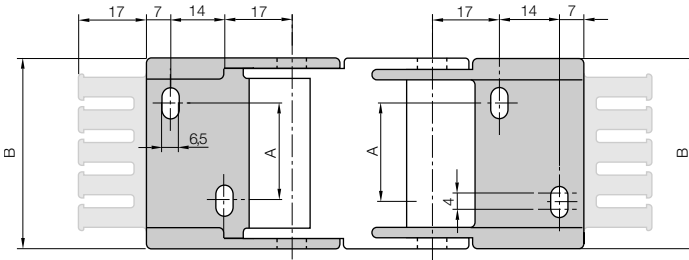
114...2P(Z) Fixed end
with pin (inner link)



Possible installation conditions for assembled mounting brackets ▶ Order example "preassembled" below

114...1P(Z)
Moving end

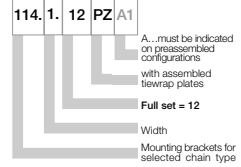
114...2P(Z)
Fixed end



Dimensions and order configurations

Strain relief is possible on the moving end and/or the fixed end.

Part No. structure



Full set, for both ends:

114.1.12 PZ +tiwrap plate

Single-part order:

114.1.1 PZ +tiwrap plate

Mounting bracket with bore

114.1.2 PZ +tiwrap plate

Mounting bracket with pin

| For E-Chain® | Part No. full set with tiwrap plate | Part No. full set without tiwrap plate | Number of teeth | Dim. A [mm] | Dim. B [mm] |
|--------------|-------------------------------------|--|-----------------|-------------|-------------|
| E14-Z14.1. ▶ | 114.1.12PZ | 114.1.12P | 2 | - | 26,3 |
| E14-Z14.2. ▶ | 114.2.12PZ | 114.2.12P | 3 | 10 | 36,3 |
| E14-Z14.3. ▶ | 114.3.12PZ | 114.3.12P | 4 | 23 | 49,3 |
| E14-Z14.4. ▶ | 114.4.12PZ | 114.4.12P | 5 | 35 | 62,3 |

Please add the Part No. with the requested index - e.g. 114.1.12

For the preassembled mode please add the index A1...A4 e.g. 114.1.12PZA1



Quicksnap - the complete, detachable mounting unit, available upon request



Quickfix - mounting bracket with dowel, available upon request

Additional Features

