

● ● ● Price index



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



**UL94-V2**  
classifications



**Torsional**  
motion possible



**Special equipment:**  
Electrically conductive ESD/ATEX  
version upon request



**Low-noise**  
due small pitch



Just push the cables into the e-chain®  
with your thumb - 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 5.112**
- "Z" Series is unsuitable for gliding applications
  - ▶ **Series B15 E2 mini, page 5.112**

- 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**

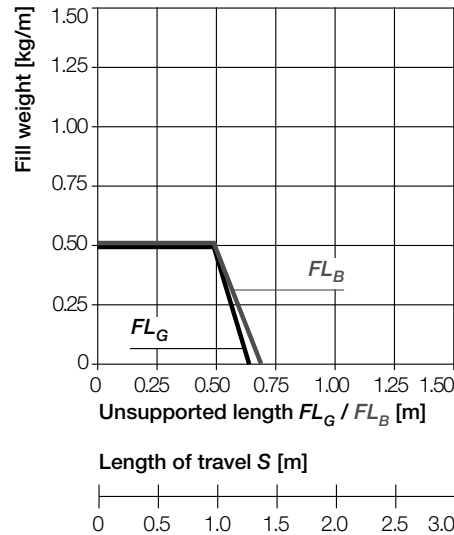
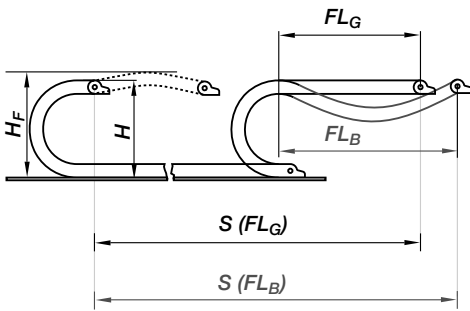


### Unsupported length

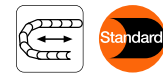
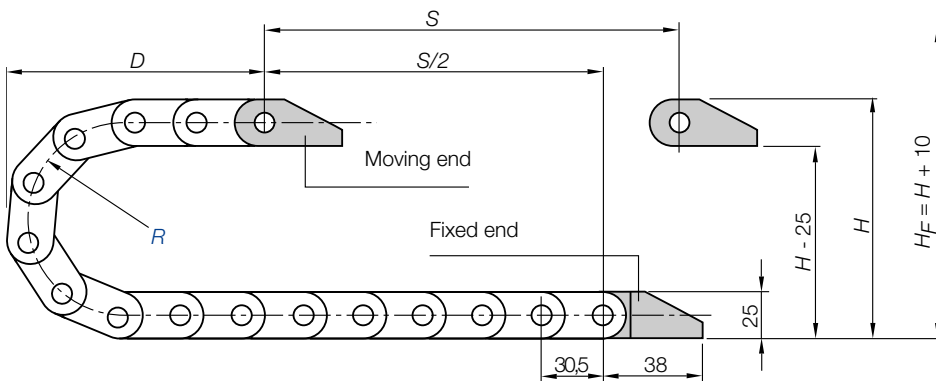
$FL_G$  = with straight upper run

$FL_B$  = 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	81	101	121	175	225	275
D	86	96	106	133	158	183
K	150	185	215	300	380	455

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

Speed / acceleration $FL_G$	max. 20 [m/s] / max. 200 [m/s <sup>2</sup> ]
Speed / acceleration $FL_B$	max. 3 [m/s] / max. 6 [m/s <sup>2</sup> ]
Gliding speed / acceleration (maximum)	max. 3 [m/s] / max. 10 [m/s <sup>2</sup> ]
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

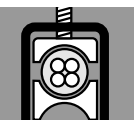


Details of material properties  
► page 1.38

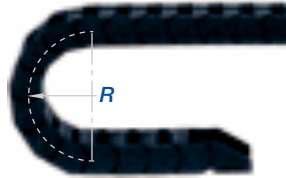
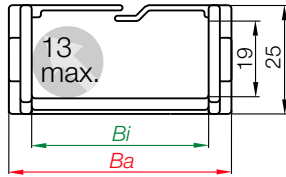


easy chain®  
Inner height: 19 mm

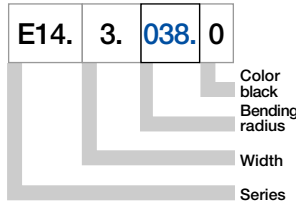
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► page 3.5



Part No. structure



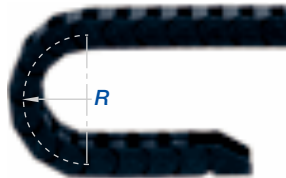
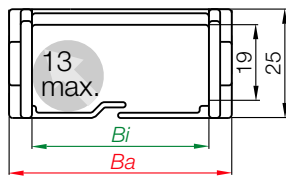
Series E14 - split crossbar along the outer radius

Part No.	<i>Bi</i> [mm]	<i>Ba</i> [mm]	<i>R</i> [mm]	Bending radii						Weight [kg/m]
E14.1. <input type="text"/> .0	15	27	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	≈ 0,31
E14.2. <input type="text"/> .0	25	37	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	≈ 0,32
E14.3. <input type="text"/> .0	38	50	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	≈ 0,40
E14.4. <input type="text"/> .0	50	62	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	≈ 0,44

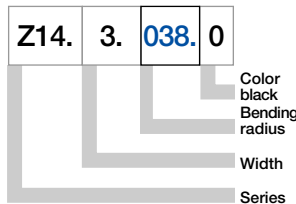
*Ba*: pin dimension approx. 0,3 - 0,5 mm wider!

Supplement Part No. with required radius. Example: E14.3..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.	<i>Bi</i> [mm]	<i>Ba</i> [mm]	<i>R</i> [mm]	Bending radii						Weight [kg/m]
Z14.1. <input type="text"/> .0	15	27	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	≈ 0,31
Z14.2. <input type="text"/> .0	25	37	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	≈ 0,32
Z14.3. <input type="text"/> .0	38	50	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	≈ 0,40
Z14.4. <input type="text"/> .0	50	62	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	≈ 0,44

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

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

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

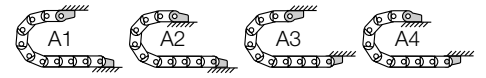
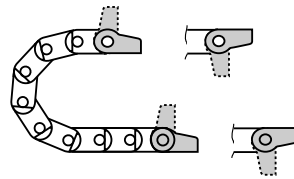




**Polymer, one-piece**

- 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)

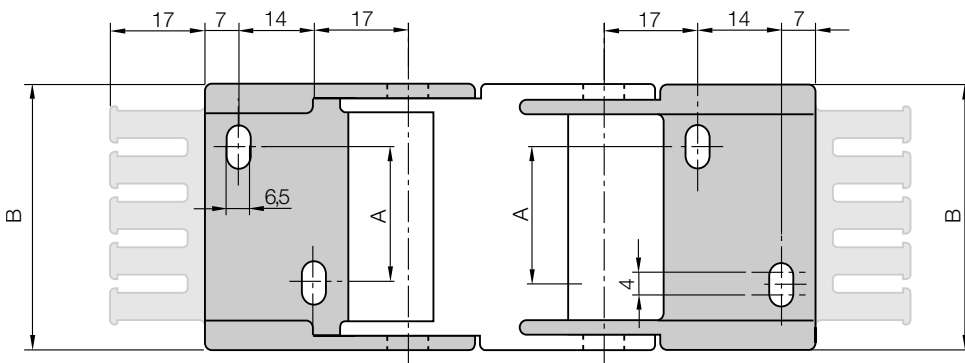


114...2P(Z) Fixed end  
with pin (inner link)

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

114...1P(Z)  
Moving end

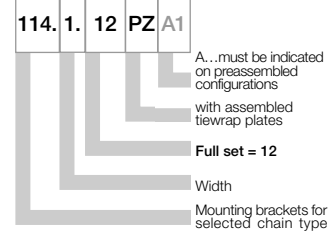
114...2P(Z)  
Fixed end



**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:

114.1.12PZ + tiwrap plate

Single-part order:

114.1.1PZ + tiwrap plate

Mounting bracket with bore

114.1.2PZ + 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. 114.1.12PZ A1

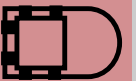


**Quicksnap** - the complete, detachable mounting unit, available upon request



**Quickfix** - mounting bracket with dowel, available upon request

**Additional Features**



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