



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



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



When to use the Series E200/Z200:

- 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 2400/2450/2480/2500
E2/000, page 5.102
- If single-extrusion crossbars are required
 - ▶ Series 2400/2450/2480/2500
E2/000, page 5.102

- 1 Large pins for long service life
- 2 Limited torsion tolerance
- 3 "E" Series features split crossbar along the outer radius
- 4 "Z" Series features split crossbar along the inner radius
- 5 Cable-friendly interior
- 6 Mounting bracket with integrated strain relief
- 7 Dirt-repellent exterior
- 8 Very easy to fill - cables only have to be pushed in
- 9 The patented push-button principle holds the links together
- 10 1- or 2-chamber system available



Order example complete E-Chain®

Please indicate chain-lengths or number of links **Example: 1 m or 22 links**

1 m E200.05.100.0



E-Chain®

1 set 2050.34.PZB

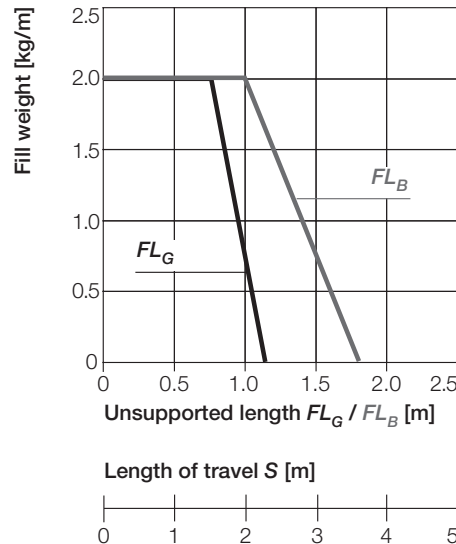
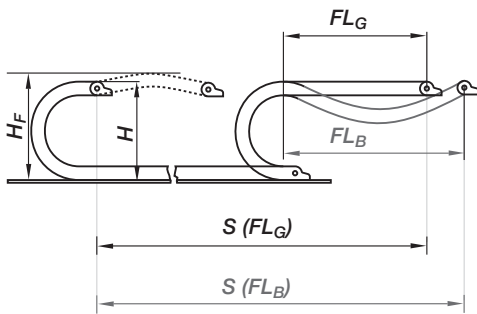


Mounting bracket



Unsupported length

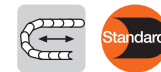
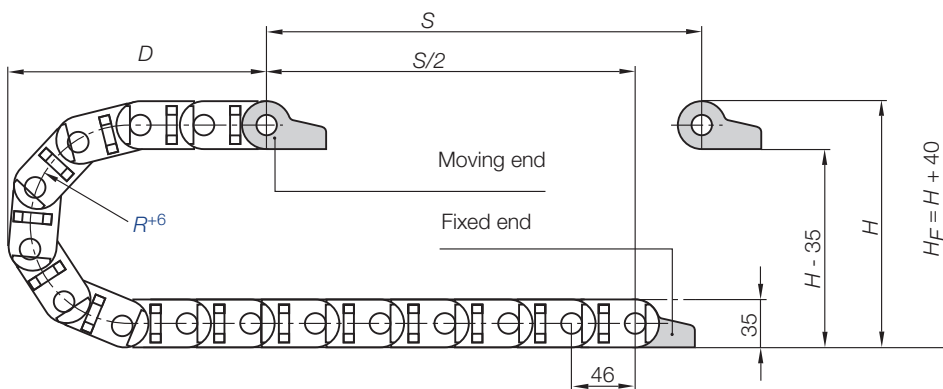
FL_G = with straight upper run
 FL_B = with permitted sag
 Further information ► Design, page 1.12



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

Other installation methods

- Vertical, hanging ≤ 10 m
- Vertical, standing $\leq 1,5$ m
- Side mounted, un supp. $\leq 0,5$ m
- Rotary requires further calculation
- Unsupported length of upper run = upon request



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 = 46 mm/link Links/m = 22 (1.012 mm) Chain length = $S/2 + K$

R	055	075	100	150	200
$H + 4$	145	185	235	335	435
D	125	150	170	220	270
K	276	346	414	578	742

The required clearance height:
 $H_F = H + 40$ mm
 (with 2,5 kg/m fill weight)

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

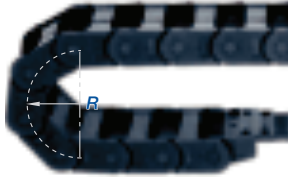
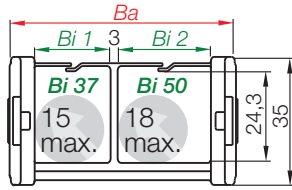
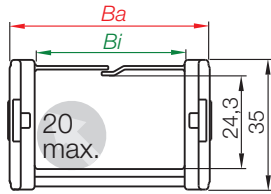
24,3

Easy Chain®
 Inner height: 24,3 mm

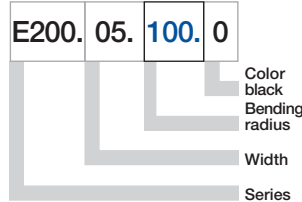
Phone +49- (0) 22 03-96 49-800
 Fax +49- (0) 22 03-96 49-222



► page 3.5



Part No. structure



Series E200 - split crossbar along the outer radius

Part No.	Bi [mm]	Ba [mm]	R [mm]	Bending radii	Weight [kg/m]
E200.05. <input type="text"/> .0	57	74,4	<input type="text"/> 055	<input type="text"/> 075 <input type="text"/> 100 <input type="text"/> 150 <input type="text"/> 200	≈ 0,70

Ba: pin dimension approx. 0,1 - 0,3 mm wider!

Supplement Part No. with required radius. Example: E200.05. 100.0

0 = standard color, other colors ▶ page 1.39 · Pitch = 46 mm/link - Links/m = 22

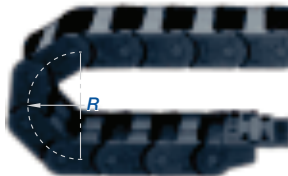
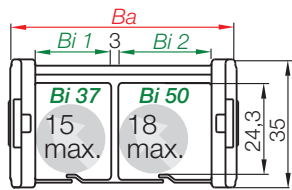
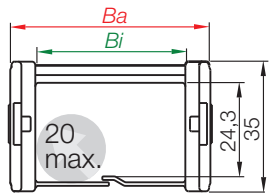
Series E200 - split crossbar along the outer radius with 2-chamber system

Part No.	Bi [mm]	Ba [mm]	R [mm]	Bending radii	Weight [kg/m]
E200.2/35. <input type="text"/> .0	37	94,4	<input type="text"/> 055	<input type="text"/> 075 <input type="text"/> 100 <input type="text"/> 150 <input type="text"/> 200	≈ 0,79
E200.2/50. <input type="text"/> .0	50	120,4	<input type="text"/> 055	<input type="text"/> 075 <input type="text"/> 100 <input type="text"/> 150 <input type="text"/> 200	≈ 0,82

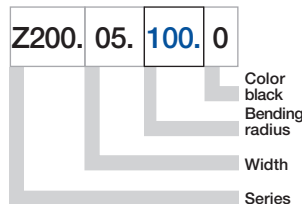
Ba: pin dimension approx. 0,1 - 0,3 mm wider!

Supplement Part No. with required radius. Example: E200.2/50. 100.0

0 = standard color, other colors ▶ page 1.39 · Pitch = 46 mm/link - Links/m = 22



Part No. structure



Series Z200 - split crossbar along the inner radius

Part No.	Bi [mm]	Ba [mm]	R [mm]	Bending radii	Weight [kg/m]
Z200.05. <input type="text"/> .0	57	74,4	<input type="text"/> 055	<input type="text"/> 075 <input type="text"/> 100 <input type="text"/> 150 <input type="text"/> 200	≈ 0,70

Ba: pin dimension approx. 0,1 - 0,3 mm wider!

Supplement Part No. with required radius. Example: Z200.05. 100.0

0 = standard color, other colors ▶ page 1.39 · Pitch = 46 mm/link - Links/m = 22

Series Z200 - split crossbar along the inner radius with 2-chamber system

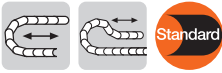
Part No.	Bi [mm]	Ba [mm]	R [mm]	Bending radii	Weight [kg/m]
Z200.2/35. <input type="text"/> .0	37	94,4	<input type="text"/> 055	<input type="text"/> 075 <input type="text"/> 100 <input type="text"/> 150 <input type="text"/> 200	≈ 0,79
Z200.2/50. <input type="text"/> .0	50	120,4	<input type="text"/> 055	<input type="text"/> 075 <input type="text"/> 100 <input type="text"/> 150 <input type="text"/> 200	≈ 0,82

Ba: pin dimension approx. 0,1 - 0,3 mm wider!

Supplement Part No. with required radius. Example: Z200.2/50. 100.0

0 = standard color, other colors ▶ page 1.39 · Pitch = 46 mm/link - Links/m = 22

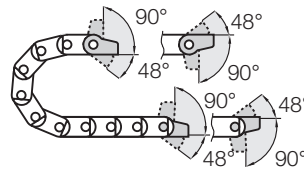




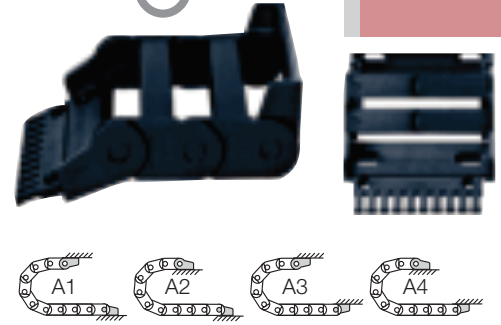
The Standard - option polymer - pivoting

- Recommended for unsupported and gliding applications
- Well suited for tight installation conditions
- Strain relief with detachable tiwrap plates
- Variable traverse angle for flexible assembly
- The twistability of the E-Chain® and the option to assemble the mounting brackets on the fixed end and/or the moving end, enable various installation options

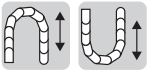
Moving end with bore
(outer link) 2...3PZ(B)



2...4PZ(B) Fixed end
with pin (inner link)



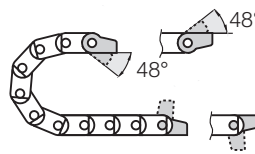
Possible installation conditions for assembled mounting brackets ▶ Order example "preassembled" below



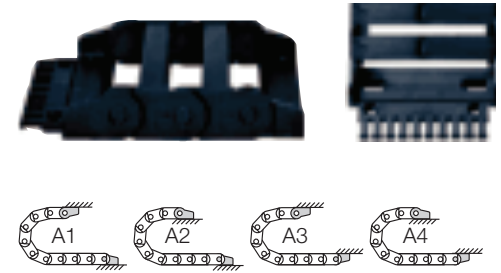
Option polymer - locking

- Recommended for unsupported and gliding applications
- Furthermore:
- At very high speed and/or acceleration
 - If space is limited for height (the H_F measurement)
 - The twistability of the E-Chain® and the option to assemble the mounting brackets on the fixed end and/or the moving end, enable various installation options

Moving end with bore
(outer link) 2...1PZ(B)



2...2PZ(B) Fixed end
with pin (inner link)



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

2...3PZ(B) Standard! (pivoting)

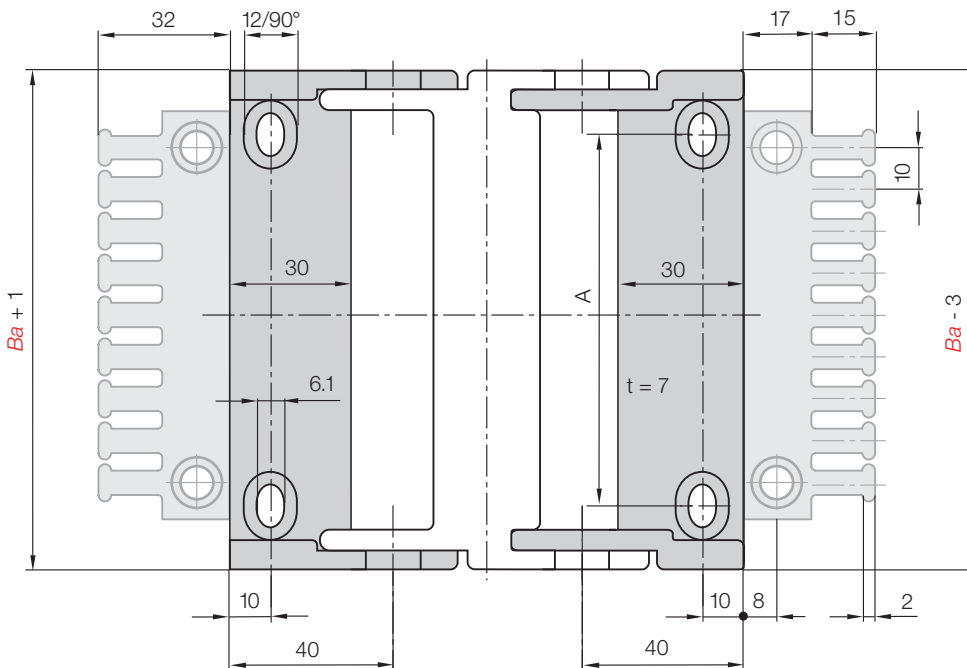
2...1PZ(B) (locking)

Moving end

Standard! (pivoting) 2...4PZ(B)

(locking) 2...2PZ(B)

Fixed end



For E-Chain®	Part No. full set with tiwrap plate	Part No. tiwrap plate + 10 cable tiwraps	Part No. full set without tiwrap plate	Number of teeth	Dim. A [mm]
E200·Z200.05 ▶	2050. [] PZB	2050. [] PZBK1	2050. [] PZ	6	44
E200·Z200.2/35 ▶	2070. [] PZB	2070. [] PZBK1	2070. [] PZ	8	64
E200·Z200.2/50 ▶	2100. [] PZB	2100. [] PZBK1	2100. [] PZ	10	90

Please add the Part No. with the requested index - 34 for the pivoting configuration

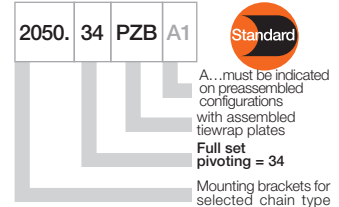
e.g. 2050. [34] PZB or 12 for the locking configuration e.g. 2050. [12] PZB

For the preassembled mode please add the index [A1] ... [A4] e.g. 2050. [34] PZB [A1]

Dimensions and order configurations

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

Part No. structure (pivoting)



Full set, for both ends:

2050. 34 PZB +tiwrap plate

Single-part order:

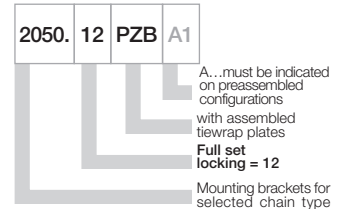
2050. 3 PZB +tiwrap plate

Mounting bracket with bore

2050. 4 PZB +tiwrap plate

Mounting bracket with pin

Part No. structure (locking)



Full set, for both ends:

2050. 12 PZB +tiwrap plate

Single-part order:

2050. 1 PZB +tiwrap plate

Mounting bracket with bore

2050. 2 PZB +tiwrap plate

Mounting bracket with pin





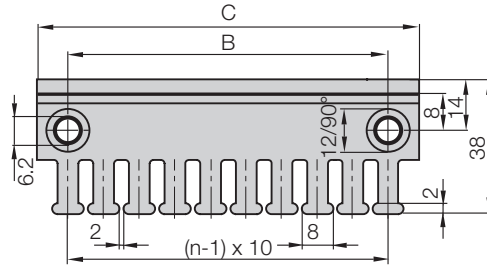
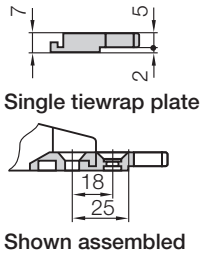
Strain relief for polymer mounting brackets (pivoting or locking)

The strain relief tiewrap plates can be directly snapped onto the mounting bracket. After bolting the mounting brackets to the machine, the strain relief tiewrap plates are also firmly connected to the base. They do not need to be bolted on separately. Cable tiewraps secured the tiewrap plate "teeth" and the cable provide proper strain relief and save time. **Details ► chapter 10**



Tiewrap plate as individual part

As individual component screwed on or can be plugged in the mounting brackets. **Details ► chapter 10**



Tiewrap plate	No. of teeth <i>n</i>	Dim. C [mm]	Dim. B [mm]
2020.ZB	3	30	15
2030.ZB	4	40	20
2040.ZB	5	50	30
2050.ZB	6	60	40
2070.ZB	8	80	60
2090.ZB = (2030.ZB + 2040.ZB)	9	90	-
2100.ZB	10	100	80
2125.ZB = (2050.ZB + 2050.ZB)	12	120	-



Cable tiewraps as individual part

Cable tiewraps 100 pieces/bag	Width x length	Max. Ø	Tensile strength
CFB.001	4,8 x 150 mm	36 mm	222 N



"Double" strain relief

If an E-Chain® is harnessed with a very large number of cables, strain relief may be necessary at two levels. Our **2050.Z** strain relief system was developed for this purpose. It can be placed in any position along the E-Chain®. As required, the **2050.Z** strain relief system is simply clamped onto the crossbar of the chain link. No additional installation elements are needed. **Details ► chapter 10**

Part No.	Width strain relief [mm]	No. of teeth
2050.Z	60	6



Other strain relief elements - optional ► chapter 10