



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 E300/Z300:

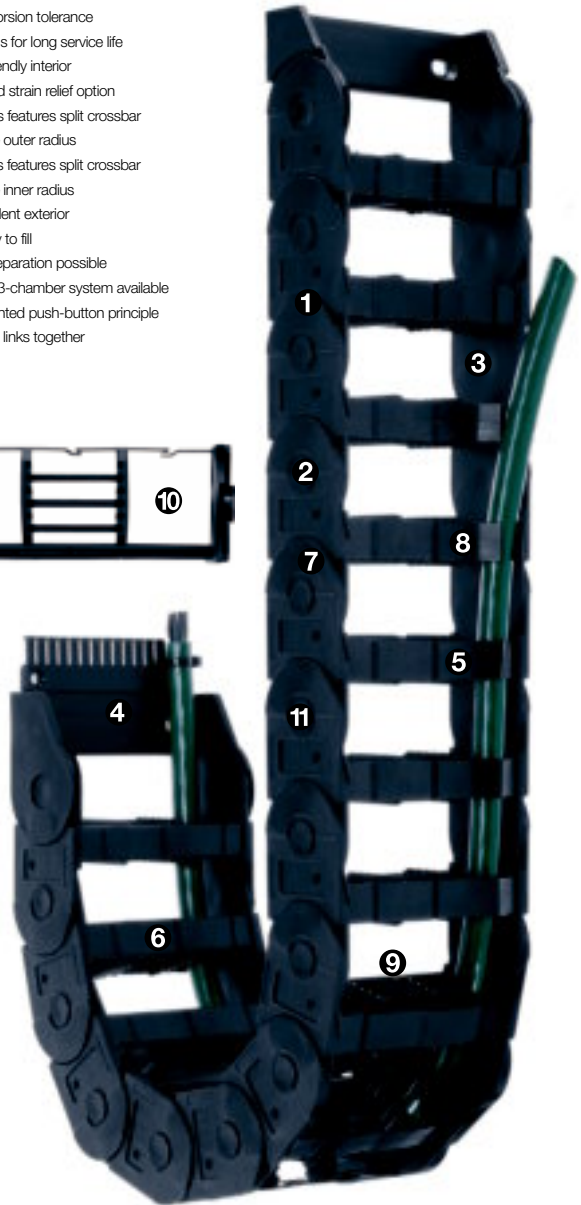
- If filling is required without opening and closing lids
- If price is an issue
- If quiet operation is required



When not to use it:

- For applications with very high loads and long unsupported travel lengths
- Series 3400/3450/3480/3500
E2/000, page 5.126

- 1 Limited torsion tolerance
- 2 Large pins for long service life
- 3 Cable-friendly interior
- 4 Integrated strain relief option
- 5 "E" Series features split crossbar along the outer radius
- 6 "Z" Series features split crossbar along the inner radius
- 7 Dirt-repellent exterior
- 8 Very easy to fill
- 9 Interior separation possible
- 10 1-, 2- or 3-chamber system available
- 11 The patented push-button principle holds the links together



Order example complete E-Chain®

Please indicate chain-lengths or number of links Example: 1 m or 15 Links

1 m E300.075.100.0

E-Chain®

1 set 3075.34.PZB

Mounting bracket

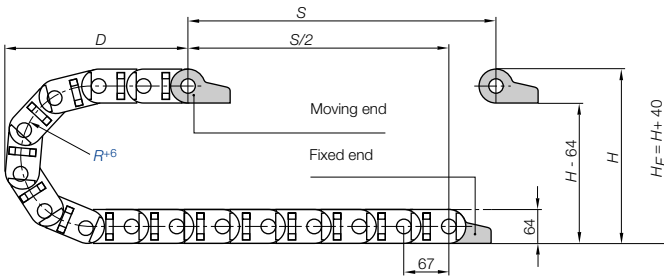
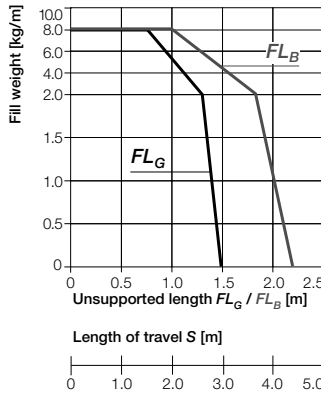
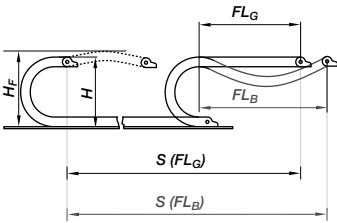


Unsupported length

FL_G = with straight upper run

FL_B = with permitted sag

Further information ► **Design, page 1.12**



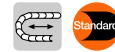
Pitch = 67 mm/link Links/m = 15 (1.005 mm) Chain length = $S/2 + K$

| R | 075 | 100 | 125 | 150 | 200 | 250 | 300 |
|------|-----|-----|-----|-----|-----|------|------|
| H +5 | 215 | 265 | 315 | 365 | 465 | 565 | 665 |
| D | 150 | 200 | 225 | 250 | 300 | 350 | 400 |
| K | 400 | 500 | 650 | 725 | 875 | 1050 | 1225 |

- 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 ≤ 1,5 m
- Side mounted, unSUPP. ≤ 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.

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 | 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

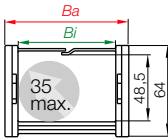


Easy Chain®
Inner height: 48,5 mm

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



► page 3.5



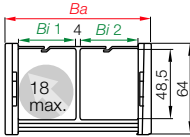
Series E300 - split crossbar along the outer radius

| Part No. | Bi [mm] | Ba [mm] | R [mm] | Bending radii | Weight [kg/m] |
|-----------------------------------|---------|---------|--------|-------------------------|---------------|
| E300.075. <input type="text"/> .0 | 75 | 95 | 075 | 100 125 150 200 250 300 | ≈ 1,60 |

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

Supplement Part No. with required radius. Example: E300.075. 100,0

0 = standard color, other colors ► page 1.39 · Pitch = 67 mm/link - Links/m = 15



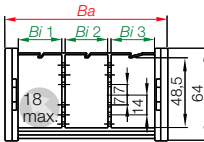
Series E300 - split crossbar along the outer radius with 2-chamber system

| Part No. | Bi [mm] | Ba [mm] | R [mm] | Bending radii | Weight [kg/m] |
|------------------------------------|---------|---------|--------|-------------------------|---------------|
| E300.2/45. <input type="text"/> .0 | 48/48 | 120 | 075 | 100 125 150 200 250 300 | ≈ 1,78 |

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

Supplement Part No. with required radius. Example: E300.2/45. 100,0

0 = standard color, other colors ► page 1.39 · Pitch = 67 mm/link - Links/m = 15



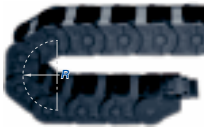
Series E300 - split crossbar along the outer radius with 3-chamber system

| Part No. | Bi [mm] | Ba [mm] | R [mm] | Bending radii | Weight [kg/m] |
|------------------------------------|----------|---------|--------|-------------------------|---------------|
| E300.3/45. <input type="text"/> .0 | 47/46/47 | 170 | 075 | 100 125 150 200 250 300 | ≈ 1,92 |

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

Supplement Part No. with required radius. Example: E300.3/45. 100,0

0 = standard color, other colors ► page 1.39 · Pitch = 1 m = 15 Links



Part No. structure

E300.075. 100. 0



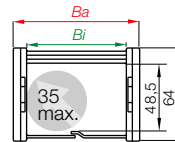
Series Z300 - split crossbar along the inner radius

| Part No. | Bi [mm] | Ba [mm] | R [mm] | Bending radii | Weight [kg/m] |
|--------------|---------|---------|--------|-------------------------|---------------|
| Z300.075.□.0 | 75 | 95 | 075 | 100 125 150 200 250 300 | ≈ 1,60 |

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

Supplement Part No. with required radius. Example: Z300.075.100.0

0 = standard color, other colors ► page 1.39 · Pitch = 67 mm/link · Links/m = 15



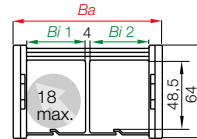
Series Z300 - split crossbar along the inner radius with 2-chamber system

| Part No. | Bi [mm] | Ba [mm] | R [mm] | Bending radii | Weight [kg/m] |
|---------------|---------|---------|--------|-------------------------|---------------|
| Z300.2/45.□.0 | 48/48 | 120 | 075 | 100 125 150 200 250 300 | ≈ 1,78 |

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

Supplement Part No. with required radius. Example: Z300.2/45.100.0

0 = standard color, other colors ► page 1.39 · Pitch = 67 mm/link · Links/m = 15



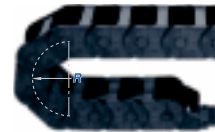
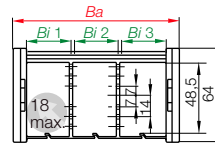
Series Z300 - split crossbar along the inner radius with 3-chamber system

| Part No. | Bi [mm] | Ba [mm] | R [mm] | Bending radii | Weight [kg/m] |
|---------------|----------|---------|--------|-------------------------|---------------|
| Z300.3/45.□.0 | 47/46/47 | 170 | 075 | 100 125 150 200 250 300 | ≈ 1,92 |

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

Supplement Part No. with required radius. Example: Z300.3/45.100.0

0 = standard color, other colors ► page 1.39 · Pitch = 67 mm/link · Links/m = 15



Part No. structure

Z300.075.100.0



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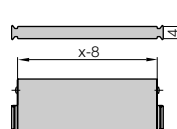
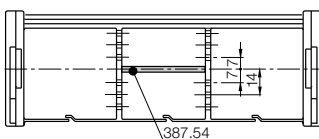
Easy Chain® | Series E300·Z300 | Accessories | Interior Separation

Optional shelving for E300.3/45 · Z300.3/45

- Shelving enables subdivision of the inner space of the E-Chain® Series E300.3/45 and Z300.3/45. Shelves are only used when a horizontal subdivision is required.
- In standard configurations, shelves are installed in every other link.

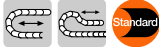
Shelves

| | |
|-------------|--------|
| unassembled | 386.54 |
| assembled | 387.54 |





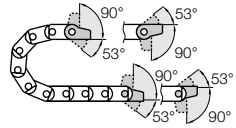
Possible installation conditions for assembled mounting brackets ▶ Order example "preassembled" below



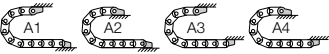
The Standard - option polymer - pivoting

- 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

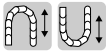
Moving end with bore
(outer link) 3...3PZ(B)



3...4PZ(B) Fixed end
with pin (inner link)



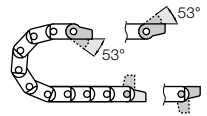
Possible installation conditions for assembled mounting brackets ▶ Order example "preassembled" below



Option polymer - locking

- Recommended for unsupported and gliding applications
- 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) 3...1PZ(B)

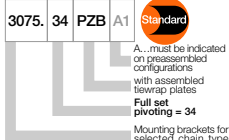


3...2PZ(B) Fixed end
with pin (inner link)

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:

3075. 34 PZB +tiwrap plate

Single-part order:

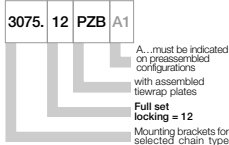
3075. 3 PZB +tiwrap plate

Mounting bracket with bore

3075. 4 PZB +tiwrap plate

Mounting bracket with pin

Part No. structure (locking)



Full set, for both ends:

3075. 12 PZB +tiwrap plate

Single-part order:

3075. 1 PZB +tiwrap plate

Mounting bracket with bore

3075. 2 PZB +tiwrap plate

Mounting bracket with pin

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

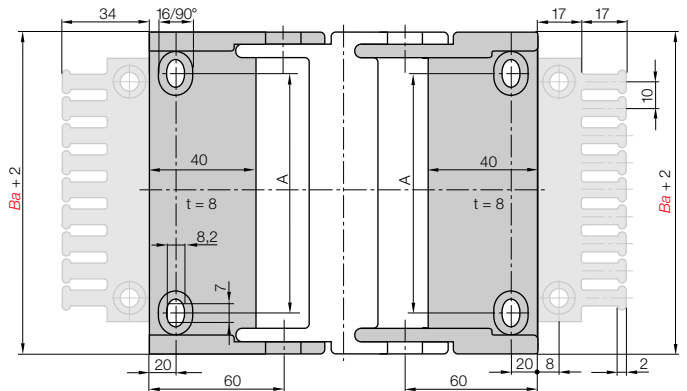
3...1PZ(B) (locking)

Moving end

Standard! (pivoting) 3...4PZ(B)

(locking) 3...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] |
|------------------|-------------------------------------|--|--|-----------------|-------------|
| E300/Z300.075 ▶ | 3075. [] PZB | 3075. [] PZBK1 | 3075. [] PZ | 7 | 53 |
| E300/Z300.2/45 ▶ | 3100. [] PZB | 3100. [] PZBK1 | 3100. [] PZ | 10 | 78 |
| E300/Z300.3/45 ▶ | 3150. [] PZB | 3150. [] PZBK1 | 3150. [] PZ | 15 | 128 |

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

e.g. 3075. [34] PZB or 12 for the locking configuration e.g. 3075. [12] PZB

For the preassembled mode please add the index [A1] ... [A4] e.g. 3075. [34] PZB [A1]

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**

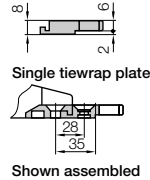
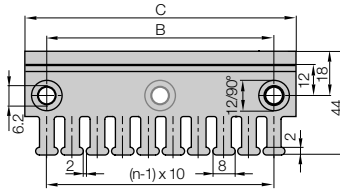


| Tiewrap plate | No. of teeth n | Dim. C [mm] | Dim. B [mm] | Center bore |
|---------------|----------------|-------------|-------------|-------------|
| 3050.ZB | 5 | 50 | 30 | - |
| 3075.ZB | 7 | 75 | 55 | - |
| 3100.ZB | 10 | 100 | 80 | - |
| 3115.ZB | 11 | 115 | 95 | - |
| 3125.ZB | 12 | 125 | 105 | - |
| 3150.ZB | 15 | 150 | 130 | - |
| 3175.ZB | 17 | 175 | 155 | - |
| 3200.ZB | 20 | 200 | 180 | + |
| 3225.ZB | 22 | 225 | 205 | + |
| 3250.ZB | 25 | 250 | 230 | + |

(- = no / + = yes)

Tiewrap plate as individual part

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



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 |



Other strain relief elements - optional ▶ chapter 10

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▶ chapter 10



▶ page 3.5