

340  
350



# Energy Chain System® E2 Medium Series 340/350



## Price Index



Series 340/350

## Special Features / Options



Flammability Class  
VDE 0304 IIC UL94 HB

## Assembly Tips



Easy to assemble and disassemble

## Other Installation Methods

Vertical, hanging ≤ 262 ft (80 m)

Vertical, standing ≤ 9.84 ft (3 m)

Side-mounted, un\_supp. ≤ 3.28 ft (1 m)

Rotary requires further calculation

## Usage Guidelines



- If snap-open accessibility along the inner or outer radius is required
- If Intergrated strain relief at the connection point is required
- If modular interior separation is required
- For travels up to 492 ft (150 m)
- For long service life



- If maximum stability is required  
➤ **Series 380, E4/100**
- If chip protection is required  
➤ **Series R68 or R167/R168, E2 Tubes**
- If the application is very simple  
➤ **Series E/Z 300, E-Z Chain**

## Features & Benefits

- 1 Lateral glide surfaces for side mounted operation
- 2 Double stop dog for long unsupported length
- 3 Integrated strain relief possible
- 4 Dirt-repellent, contoured exterior
- 5 Series 340 snap-open along the inner radius can be combined with Series 350 snap-open along the outer radius
- 6 Cable-friendly smooth interior
- 7 Large pins for long service life
- 8 Available with extender crossbars for large hoses



## Order Example: Complete Energy Chain®

Please indicate chain length or number of links. Example:

16.4 ft (5 m) **350-150-100-0**

**Energy Chain®**

With 2 separators **311** assembled every 2nd link

**Interior Separation**

1 Set **3150-34PZB**

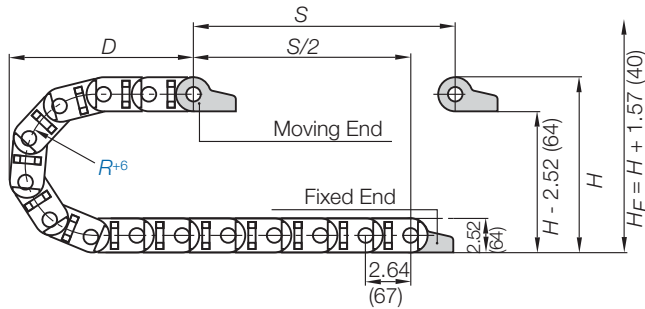
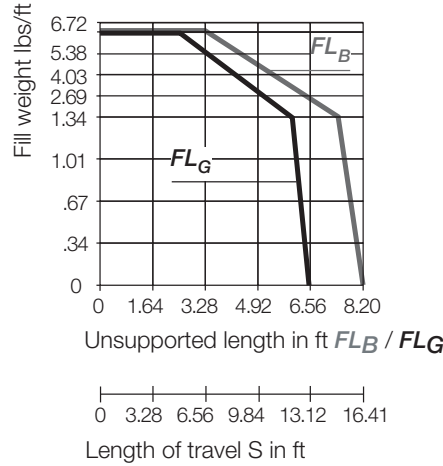
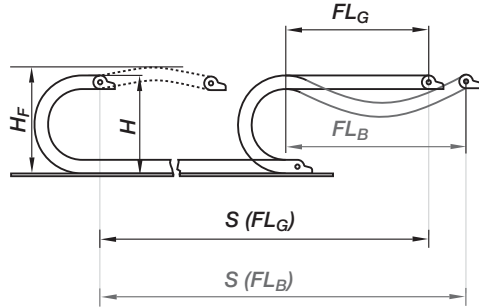
**Mounting Bracket**

4.89

# Energy Chain System® E2 Medium Series 340/350 Installation Dimensions

## Short travel, unsupported length

- $FL_B$  = unsupported with permitted sag
  - $FL_G$  = unsupported with straight upper run
- Further information ► Design, Chapter 1



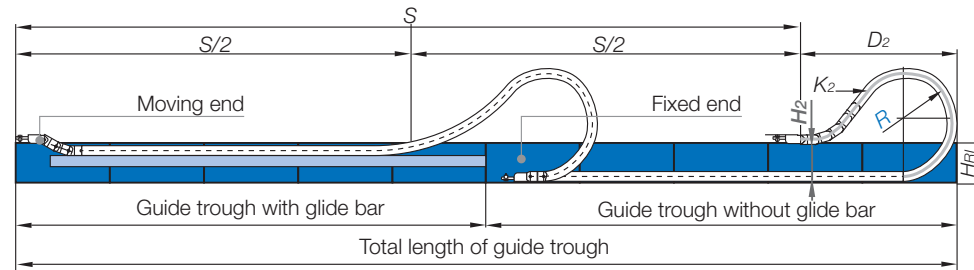
Pitch per link = 2.64" (67 mm)  
Links per ft (m) = 4.57 (15)  
For center mount applications:  
Chain length =  $\frac{S}{2} + K$

The required clearance height:  $H_F = H + 1.57$  in. (40 mm) (with 1.68 lbs/ft (2.5 kg/m) fill weight).  
Please consult igus® if space is particularly restricted.

| R        | 2.95 (075)  | 3.94 (100)  | 4.92 (125)  | 5.91 (150)  | 7.87 (200)  | 9.84 (250)   | 11.81 (300)  |
|----------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| $H^{+5}$ | 8.46 (215)  | 10.43 (265) | 12.40 (315) | 14.37 (365) | 18.31 (465) | 22.24 (565)  | 26.18 (665)  |
| D        | 5.91 (150)  | 7.87 (200)  | 8.86 (225)  | 9.84 (250)  | 11.81 (300) | 13.78 (350)  | 15.75 (400)  |
| K        | 15.75 (400) | 19.69 (500) | 25.59 (650) | 28.54 (725) | 34.45 (875) | 41.34 (1050) | 48.23 (1225) |

## For long travels with lowered mounting height

Long travel lengths from 32.8 ft. (10 m) to max. 492 ft. (150 m)



In case of travels between 13 ft. (4m) and 32.8 ft. (10m) we recommend a longer unsupported length.

| R          | 2.95 (075) | 3.94 (100) | 4.92 (125)  | 5.91 (150)   | 7.87 (200)   | 9.84 (250)   | 11.81 (300)  |
|------------|------------|------------|-------------|--------------|--------------|--------------|--------------|
| $H_2^{+5}$ | -          | -          | 7.32 (186)  | 7.32 (186)   | 7.32 (186)   | 7.32 (186)   | 7.32 (186)   |
| $D_2$      | -          | -          | 18.70 (475) | 22.44 (570)  | 30.71 (780)  | 39.76 (1010) | 45.28 (1150) |
| $K_2$      | -          | -          | 31.65 (804) | 39.57 (1005) | 52.76 (1340) | 65.94 (1675) | 76.50 (1943) |

|  |  |
|--|--|
| Speed / acceleration $FL_G$            | max. 65.6 ft/s (20 m/s) / max. 656 ft/s <sup>2</sup> (200 m/s <sup>2</sup> ) |
| Speed / acceleration $FL_B$            | max. 9.84 ft/s (3 m/s) / max. 19.69 ft/s <sup>2</sup> (6 m/s <sup>2</sup> )  |
| Gliding speed / acceleration (maximum) | max. 32.81 ft/s (10 m/s) / max. 164 ft/s <sup>2</sup> (50 m/s <sup>2</sup> ) |
| Material - permitted temperature       | igumid G / -40°F (-40°C) up to +248°F (+120° C)                              |
| Flammability Class, igumid G           | VDE 0304 IIC UL94 HB   |

igus®

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## Short Travels - Unsupported



Unsupported Energy 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 Energy Chain® radius in final position
- $K = \pi \cdot R + \text{safety buffer}$
- $H_F$  = Required clearance height
- HRI = Trough inner height
- $H_2$  = \*Mounting height
- $D_2$  = Over length - long travels, gliding
- $K_2$  = \*Add-on
- \*If the mounting bracket location is set lower

PDF: [www.igus.com/e-chain-pdfs](http://www.igus.com/e-chain-pdfs)  
Specs/CAD/RFQ: [www.igus.com/e-chains](http://www.igus.com/e-chains)  
RoHS info: [www.igus.com/RoHS](http://www.igus.com/RoHS)

## Long Travels - Gliding



If the unsupported length is exceeded, the Energy Chain®/Tube must glide on itself. This requires a guide trough.  
Design, Chapter 1

## Technical Data

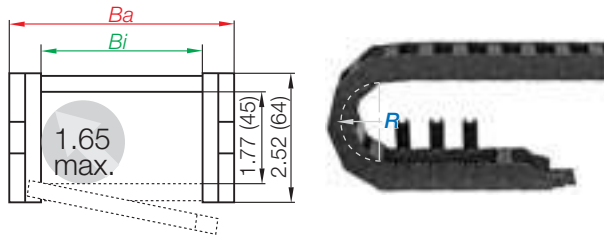


Details of material properties

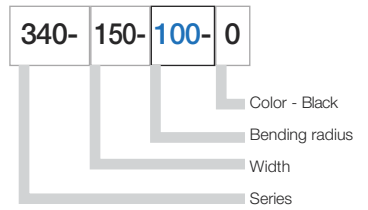
► Chapter 1

4.90

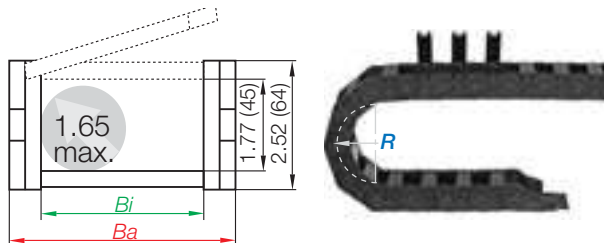
Series 340 - Snap-open along the inner radius



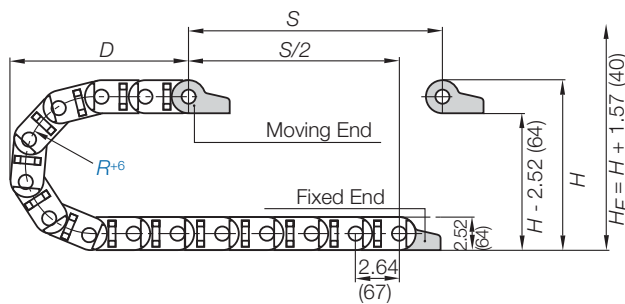
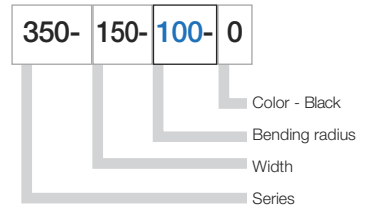
Part Number Structure



Series 350 - Snap open E2 along the outer radius



Part Number Structure



Supplement part number with required radius. Example: 350-150-100-0  
Pitch: 2.64 in. (67 mm) per link links/ft (m) = 4.57 (15)

| Part Number            |                        |                             | <i>Bi</i>  | <i>Ba</i>   | Weight         |
|------------------------|------------------------|-----------------------------|------------|-------------|----------------|
| Snap-open Inner Radius | Snap-open Outer Radius |                             | in. (mm)   | in. (mm)    | lbs/ft (kg/m)  |
| 340-050-               | 350-050-               | <input type="checkbox"/> -0 | 1.97 (50)  | 2.76 (70)   | ≈ 1.08 (1.603) |
| 340-075-               | 350-075-               | <input type="checkbox"/> -0 | 2.95 (75)  | 3.74 (95)   | ≈ 1.19 (1.778) |
| 340-100-               | 350-100-               | <input type="checkbox"/> -0 | 3.94 (100) | 4.72 (120)  | ≈ 1.29 (1.925) |
| 340-115-               | 350-115-               | <input type="checkbox"/> -0 | 4.53 (115) | 5.31 (135)  | ≈ 1.33 (1.985) |
| 340-125-               | 350-125-               | <input type="checkbox"/> -0 | 4.92 (125) | 5.71 (145)  | ≈ 1.36 (2.025) |
| 340-150-               | 350-150-               | <input type="checkbox"/> -0 | 5.91 (150) | 6.69 (170)  | ≈ 1.45 (2.165) |
| 340-175-               | 350-175-               | <input type="checkbox"/> -0 | 6.89 (175) | 7.68 (195)  | ≈ 1.53 (2.278) |
| 340-200-               | 350-200-               | <input type="checkbox"/> -0 | 7.87 (200) | 8.66 (220)  | ≈ 1.65 (2.448) |
| 340-225-               | 350-225-               | <input type="checkbox"/> -0 | 8.86 (225) | 9.65 (245)  | ≈ 1.74 (2.587) |
| 340-250-               | 350-250-               | <input type="checkbox"/> -0 | 9.84 (250) | 10.63 (270) | ≈ 1.83 (2.725) |

Choose from the radii below for all of the above sizes

Radius (mm) Example: 350-150-100-0

|     | 075         | 100         | 125         | 150         | 200         | 250          | 300          |
|-----|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| R   | 2.95 (75)   | 3.94 (100)  | 4.92 (125)  | 5.91 (150)  | 7.87 (200)  | 9.84 (250)   | 11.81 (300)  |
| H+5 | 8.46 (215)  | 10.43 (265) | 12.40 (315) | 14.37 (365) | 18.31 (465) | 22.24 (565)  | 26.18 (665)  |
| D   | 5.91 (150)  | 7.87 (200)  | 8.86 (225)  | 9.84 (250)  | 11.81 (300) | 13.78 (350)  | 15.75 (400)  |
| K   | 15.75 (400) | 19.69 (500) | 25.59 (650) | 28.54 (725) | 34.45 (875) | 41.34 (1050) | 48.23 (1225) |

# Energy Chain System® E2 Medium Series 340/350 Extender Crossbars



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The extender crossbars were developed specifically for applications in which a large diameter hose must be guided carefully. It is intended for hoses with a maximum outer diameter of 4.53 (115 mm). The extender crossbar can be placed along either the outer (Series 350) or inner (Series 340) radius. In most applications, the inner radius is preferred. However, the chain cannot glide on itself in this case. If gliding operation is required, the crossbars are assembled along the outer radius and a special guide trough is required. The extender crossbar can either be attached to the side links directly or can be used in combination with two standard snap-open crossbars.

If the extender crossbars are attached along the outer radius, the side of the chain must be supported so that the crossbars do not come in contact with the running surface. We are happy to assist with the design and assembly of this type of system. This design is also suitable for gliding applications. We are also happy to assist with guide trough requirements.

## Extender crossbar: Series 340

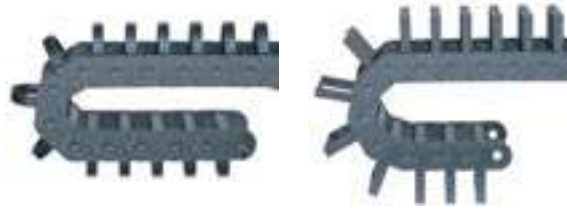


340-150...

340-175...

| Series  | max. Hose Ø in. (mm) | Bending Radii in. (mm)             |
|---------|----------------------|------------------------------------|
| 340-150 | 3.54 (90)            | 5.91 (150), 7.87 (200), 9.84 (250) |
| 340-175 | 4.53 (115)           | 7.87 (200), 9.84 (250)             |

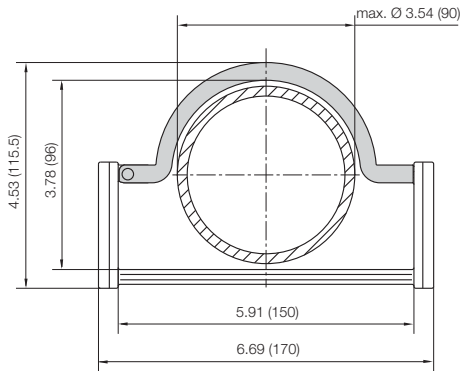
## Extender crossbar: Series 350



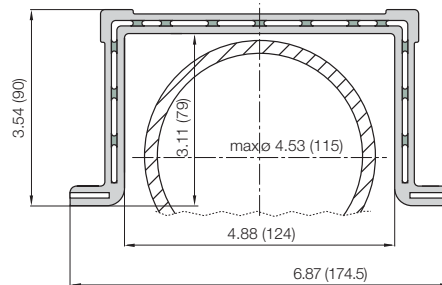
350-150...

350-175...

| Series  | max. Hose Ø in. (mm) | Bending Radii in. (mm)  |
|---------|----------------------|---|
| 350-150 | 3.54 (90)            | 2.95 (75), 3.94 (100), 4.92 (125), 5.91 (150), 7.87 (200), 9.84 (250) |
| 350-175 | 4.53 (115)           | 2.95 (75), 3.94 (100), 4.92 (125), 5.91 (150), 7.87 (200), 9.84 (250) |



Part No. (round extender crossbar)  
3500-150-D090

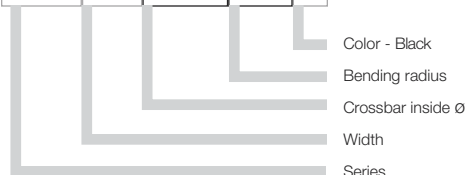


Part No. (square extender crossbar)  
3500-175-D115\*

\*This product also available in round design - order **Part No. 3500-175-RD115**

### Part Number Structure for Energy Chain® with Extender Crossbars

350- 150- D090- 175- 0



### Assembly

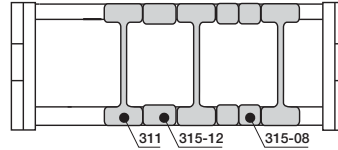
As with all Series 340/350 crossbars, the extender crossbars are opened using a screwdriver.

PDF: [www.igus.com/e-chain-pdfs](http://www.igus.com/e-chain-pdfs)  
Specs/CAD/RFQ: [www.igus.com/e-chains](http://www.igus.com/e-chains)  
RoHS info: [www.igus.com/RoHS](http://www.igus.com/RoHS)

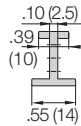


### Option 1: Vertical separators and spacers

Vertical separators are used if a vertical subdivision of the Energy Chain® interior is required. By standard, vertical separators are assembled every other Energy Chain® link.



Vertical separator 301



#### Vertical Separator

|             |              |
|-------------|--------------|
| Unassembled | Part No. 301 |
| Assembled   | Part No. 311 |

- **Standard separator 301 for Energy Chains®**  
This separator is used for general subdivision of Energy Chain®.

Spacers 305-XX



#### Spacer

|             |                 |
|-------------|-----------------|
| Unassembled | Part No. 305-XX |
| Assembled   | Part No. 315-XX |

XX = width of the spacer

- **NOTE ON SPACERS**

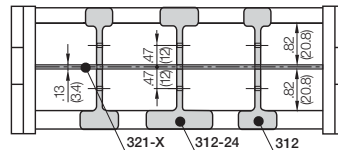
Vertical separators are adjustable, but can be fixed in position by means of a spacer. Spacers are most often necessary for side mounted applications. The available inner height is reduced by .08" (2mm) **per spacer** (for example if one spacer is placed on either side of the separator, the overall inner height is reduced by .16" (4mm)). To avoid this, place the spacers on the **outside** of the opening crossbar (**not for long travels**).

Spacers available in the following sizes:

| Part No. Unassembled | Part No. Assembled | in.   | (mm) |
|----------------------|--------------------|-------|------|
| 305-08               | 315-08             | .31"  | (8)  |
| 305-12               | 315-12             | ..47" | (12) |

### Option 2: Full-width shelf

This option is available for the snap-open Series 340/350 chains. It is ideal for use in applications involving many thin cables with similar or identical diameters. This shelf slides into place and spans the entire width of the chain.



Slotted vertical separator 302

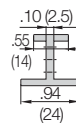


#### Slotted Separator

|             |              |
|-------------|--------------|
| Unassembled | Part No. 302 |
| Assembled   | Part No. 312 |

- **Slotted separator 302 for Energy Chains®**  
This component is used to form the basic pattern of a shelf system.

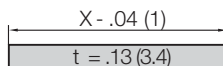
Slotted vertical separator 302-24



#### Slotted Separator

|             |                 |
|-------------|-----------------|
| Unassembled | Part No. 302-24 |
| Assembled   | Part No. 312-24 |

- **Slotted separator 302-24 for Energy Chains®**  
This separator features a wide base. It can be used in side mounted applications.



| Width X in. (mm) | Part No. Unassembled | Part No. Assembled | Width X in. (mm) | Part No. Unassembled | Part No. Assembled |
|------------------|----------------------|--------------------|------------------|----------------------|--------------------|
| 1.97 (50)        | 320-050              | 321-050            | 5.91 (150)       | 320-150              | 321-150            |
| 2.95 (75)        | 320-075              | 321-075            | 6.89 (175)       | 320-175              | 321-175            |
| 3.94 (100)       | 320-100              | 321-100            | 7.87 (200)       | 320-200              | 321-200            |
| 4.53 (115)       | 320-115              | 321-115            | 8.86 (225)       | 320-225              | 321-225            |
| 4.92 (125)       | 320-125              | 321-125            | 9.84 (250)       | 320-250              | 321-250            |



# Energy Chain System® E2 Medium

## Series 340/350

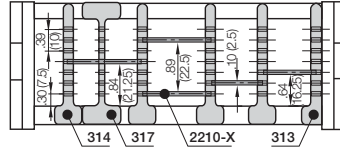
### Interior Separation



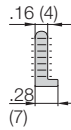
340  
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#### Option 3: Shelves

This option is available for the Series 340/350 snap-open chains. It is ideal for use in applications involving many cables with different diameters. This option allows for variable compartment heights and widths across the chain width, but can also be used for level separation across the entire width.



Side plate  
303



#### Side plate

Unassembled **Part No. 303**

Assembled **Part No. 313**

- **Slotted separator 303 for Energy Chains®**

This component is used to form the basic pattern of a shelf system.

Vertical separator  
304



#### Slotted Separator

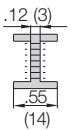
Unassembled **Part No. 304**

Assembled **Part No. 314**

- **Slotted separator 304 for Energy Chains®**

This component is used to form the basic pattern of a shelf system.

Open slotted separator  
307



#### Slotted separator, open

Unassembled **Part No. 307**

Assembled **Part No. 317**

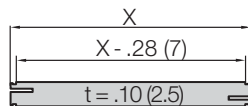
- **Open slotted separator 307 for Energy Chains®**

This separator can be retrofitted into an existing interior separation system without removing the shelves, as long as these shelves fit into the 5 middle slots only.

#### Shelves 2200-XX

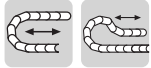
These components form the basic pattern of a shelf system. Shelves of various widths can be arranged at 5 different heights in .20" (5mm) increments

| Width X<br>in. (mm) | Part No.    |           |
|---------------------|-------------|-----------|
|                     | Unassembled | Assembled |
| .71 (18)            | 2200-18     | 2210-18   |
| .91 (23)            | 2200-23     | 2210-23   |
| 1.10 (28)           | 2200-28     | 2210-28   |
| 1.30 (33)           | 2200-33     | 2210-33   |
| 1.50 (38)           | 2200-38     | 2210-38   |
| 1.69 (43)           | 2200-43     | 2210-43   |
| 1.89 (48)           | 2200-48     | 2210-48   |
| 2.28 (58)           | 2200-58     | 2210-58   |
| 2.68 (68)           | 2200-68     | 2210-68   |
| 2.87 (73)           | 2200-73     | 2210-73   |
| 3.46 (88)           | 2200-88     | 2210-88   |
| 3.90 (99)           | 2200-99     | 2210-99   |
| 4.88 (124)          | 2200-124    | 2210-124  |



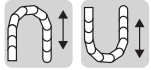
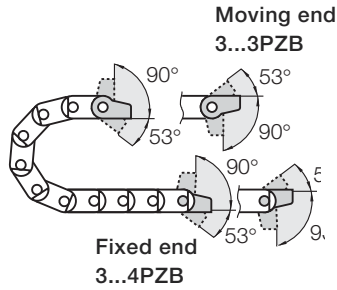
PDF: [www.igus.com/e-chain-pdfs](http://www.igus.com/e-chain-pdfs)  
 Specs/CAD/RFQ: [www.igus.com/e-chains](http://www.igus.com/e-chains)  
 RoHS info: [www.igus.com/RoHS](http://www.igus.com/RoHS)





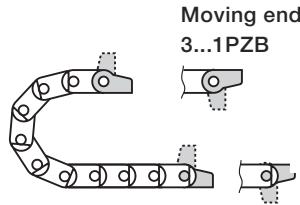
### Option 1: pivoting

- Short and long travels
- Space-restricted conditions
- Corrosion resistant



### Option 2: locking

- Vertical hanging/standing travels
- Extreme accelerations
- Corrosion resistant



### Part Number Structure

3075- 34 PZ B K1

- With 10 cable tieswraps
- With tiwrap plates
- Mounting brackets only
- Complete Set  
34 = Pivoting  
12 = Locking
- Mounting brackets for selected chain type

### Full set, for both ends:

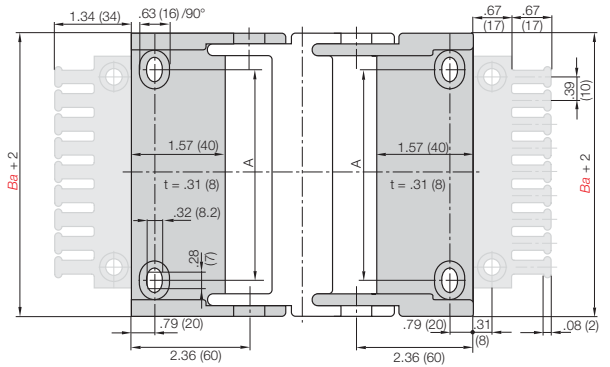
3075- 34 PZB Full set, each part with pin/bore + tiwrap plate

### Single-part order:

3075- 3 PZB Mounting bracket with bore + tiwrap plate

3075- 4 PZB Mounting bracket with pin + tiwrap plate

Fixed end  
3...2PZB



Part No. Full Set (pivoting)  
Series 340, 350:  
3075-34PZ

Part No. Full Set (pivoting)  
With Tiwrap Plates  
Series 340, 350:  
3075-34PZB

Part No. Full Set (pivoting)  
With Tiwrap Plates + 10 cable ties  
Series 340, 350:  
3075-34PZBK1

| For Chain Type | Part No. Mounting Bracket Full Set | Part No. Full Set with Tiwrap Plate | Part No. Full Set with Tiwrap Plate + 10 Cable Ties | Dimension A in. (mm) |
|----------------|------------------------------------|-------------------------------------|---|----------------------|
| 340/350-050    | 3050- <input type="checkbox"/> PZ  | 3050- <input type="checkbox"/> PZB  | 3050- <input type="checkbox"/> PZBK1                | 1.10 (28)            |
| 340/350-075    | 3075- <input type="checkbox"/> PZ  | 3075- <input type="checkbox"/> PZB  | 3075- <input type="checkbox"/> PZBK1                | 2.09 (53)            |
| 340/350-100    | 3100- <input type="checkbox"/> PZ  | 3100- <input type="checkbox"/> PZB  | 3100- <input type="checkbox"/> PZBK1                | 3.07 (78)            |
| 340/350-115    | 3115- <input type="checkbox"/> PZ  | 3115- <input type="checkbox"/> PZB  | 3115- <input type="checkbox"/> PZBK1                | 3.66 (93)            |
| 340/350-125    | 3125- <input type="checkbox"/> PZ  | 3125- <input type="checkbox"/> PZB  | 3125- <input type="checkbox"/> PZBK1                | 4.06 (103)           |
| 340/350-150    | 3150- <input type="checkbox"/> PZ  | 3150- <input type="checkbox"/> PZB  | 3150- <input type="checkbox"/> PZBK1                | 5.04 (128)           |
| 340/350-175    | 3175- <input type="checkbox"/> PZ  | 3175- <input type="checkbox"/> PZB  | 3175- <input type="checkbox"/> PZBK1                | 6.02 (153)           |
| 340/350-200    | 3200- <input type="checkbox"/> PZ  | 3200- <input type="checkbox"/> PZB  | 3200- <input type="checkbox"/> PZBK1                | 7.01 (178)           |
| 340/350-225    | 3225- <input type="checkbox"/> PZ  | 3225- <input type="checkbox"/> PZB  | 3225- <input type="checkbox"/> PZBK1                | 7.99 (203)           |
| 340/350-250    | 3250- <input type="checkbox"/> PZ  | 3250- <input type="checkbox"/> PZB  | 3250- <input type="checkbox"/> PZBK1                | 8.98 (228)           |

34 or 12  
34 For pivoting brackets choose  
12 For locking brackets choose  
Example: 3075- 34 PZB

### Cable tiwrap as individual parts



| Cable tiwraps  | Width x Length in. (mm) | Maximum Ø in. (mm) | Tensile Strength lbs (N) |
|----------------|-------------------------|--------------------|--------------------------|
| 100 pieces/bag |                         |                    |                          |
| CFB-001        | .19 x 5.91 (4.8 x 150)  | 1.42 (36)          | 50 (222)                 |

# Energy Chain System® E2 Medium

## Series 340/350

### Mounting Brackets - KMA

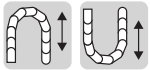
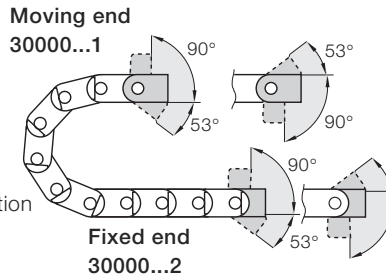


340  
350



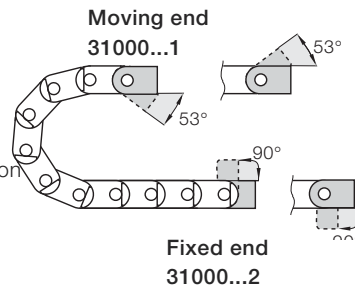
#### Option 1: pivoting

- Short and long travels
- Optional integrated profile rail for strain relief
- Bolted connection outside of chain cross section
- Space-restricted conditions
- Corrosion resistant
- Universal use

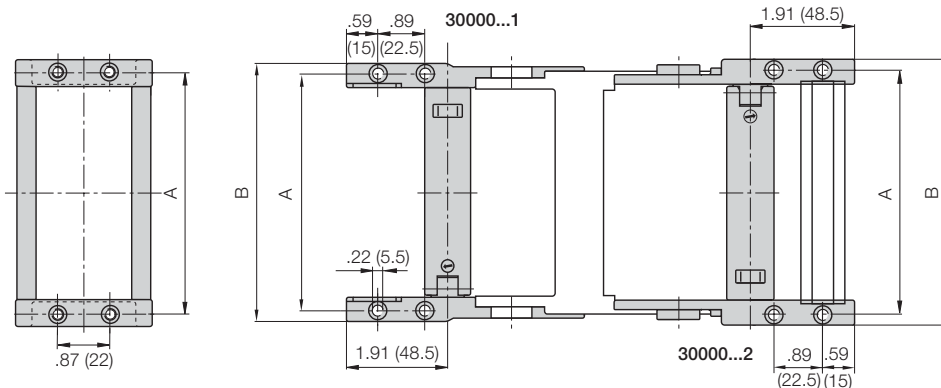
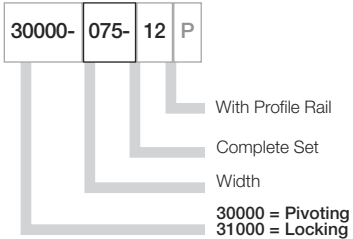


#### Option 2: locking

- Short and long travels
- Optional integrated profile rail for strain relief
- Bolted connection outside of chain cross section
- Extreme accelerations
- Corrosion resistant
- Universal use



#### Part Number Structure



#### Full set, for both ends:

30000-075-12 Full set, each part with pin/bore

#### Single-part order:

30000-075-1 Mounting bracket with bore

30000-075-2 Mounting bracket with pin

Part number examples are shown for pivoting brackets. For locking brackets change part number to 31000

Part No. Full Set (pivoting)

Series 340/350:

30000-Width-12

Part No. Full Set (pivoting)

with profile rail

Series 340/350:

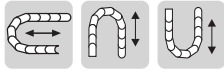
30000-Width-12P

| Width | Part No. Full Set |         | With Profile Rail | Dimension A |       | Dimension B |       |       |
|-------|-------------------|---------|-------------------|-------------|-------|-------------|-------|-------|
|       | Pivoting          | Locking |                   | in.         | (mm)  | in.         | (mm)  |       |
| -050  | 30000             | 31000   | -050-12           | P           | 2.48  | (63)        | 2.91  | (74)  |
| -075  | 30000             | 31000   | -075-12           | P           | 3.46  | (88)        | 3.90  | (99)  |
| -100  | 30000             | 31000   | -100-12           | P           | 4.45  | (113)       | 4.88  | (124) |
| -115  | 30000             | 31000   | -115-12           | P           | 5.04  | (128)       | 5.47  | (139) |
| -125  | 30000             | 31000   | -125-12           | P           | 5.43  | (138)       | 5.87  | (149) |
| -150  | 30000             | 31000   | -150-12           | P           | 6.42  | (163)       | 6.85  | (174) |
| -175  | 30000             | 31000   | -175-12           | P           | 7.40  | (188)       | 7.83  | (199) |
| -200  | 30000             | 31000   | -200-12           | P           | 8.39  | (213)       | 8.82  | (224) |
| -225  | 30000             | 31000   | -225-12           | P           | 9.37  | (238)       | 9.80  | (249) |
| -250  | 30000             | 31000   | -250-12           | P           | 10.35 | (263)       | 10.79 | (274) |

PDF: [www.igus.com/e-chain-pdfs](http://www.igus.com/e-chain-pdfs)  
 Specs/CAD/RFQ: [www.igus.com/e-chains](http://www.igus.com/e-chains)  
 RoHS info: [www.igus.com/RoHS](http://www.igus.com/RoHS)

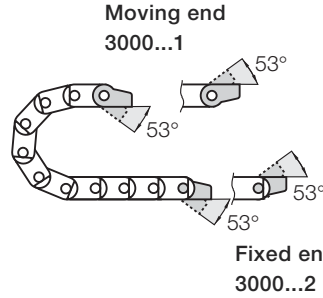




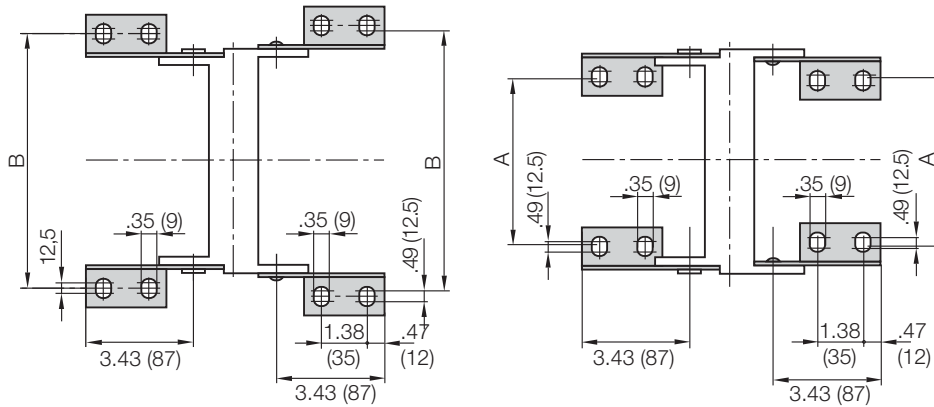


**Option 1: Steel**

- Pivoting connections
- One part (two-piece) for all chain widths
- Electrically conductive
- Bolted connection outside of chain cross-section possible



Possible installation configurations -



| Chain Type  | Part No.<br>Full Set | Dimension A |       | Dimension B |       | Dimension C |       |
|-------------|----------------------|-------------|-------|-------------|-------|-------------|-------|
|             |                      | in.         | (mm)  | in.         | (mm)  | in.         | (mm)  |
| 340/350-050 | <b>3000-12</b>       | -           | -     | 3.39        | (86)  | 3.82        | (97)  |
| 340/350-075 | <b>3000-12</b>       | 2.09        | (53)  | 4.37        | (111) | 4.80        | (122) |
| 340/350-100 | <b>3000-12</b>       | 3.07        | (78)  | 5.35        | (136) | 5.79        | (147) |
| 340/350-115 | <b>3000-12</b>       | 3.66        | (93)  | 5.94        | (151) | 6.38        | (162) |
| 340/350-125 | <b>3000-12</b>       | 4.06        | (103) | 6.34        | (161) | 6.77        | (172) |
| 340/350-150 | <b>3000-12</b>       | 5.04        | (128) | 7.32        | (186) | 7.76        | (197) |
| 340/350-175 | <b>3000-12</b>       | 6.02        | (153) | 8.35        | (212) | 8.82        | (224) |
| 340/350-200 | <b>3000-12</b>       | 7.01        | (178) | 9.29        | (236) | 9.72        | (247) |
| 340/350-225 | <b>3000-12</b>       | 7.99        | (203) | 10.28       | (261) | 10.71       | (272) |
| 340/350-250 | <b>3000-12</b>       | 8.98        | (228) | 11.26       | (286) | 11.69       | (297) |

**Part No. Mounting Brackets Full Set**  
4 parts, 2 with pin, 2 with bore  
Series 340/350:  
**3000-12**

**Part No. Mounting Bracket Moving End**  
2 parts, 1 left & 1 right  
Series 340/350:  
**3000-1**

**Part No. Mounting Bracket Fixed End**  
2 parts, 1 left & 1 right  
Series 340/350:  
**3000-2**

# Energy Chain System® E2 Medium

## Series 340/350

### Strain Relief



340  
350

#### Chainfix clamps for the profile rail



igus® Chainfix strain relief elements are available in either steel or stainless steel. They can be adjusted with a hexagon socket and are available in single, double and triple configurations.

| Part No. Single Clamp |           | Part No. Double Clamp |           | Part No. Triple Clamp |           | Cable ø     |           |
|-----------------------|-----------|-----------------------|-----------|-----------------------|-----------|-------------|-----------|
| Steel                 | Stainless | Steel                 | Stainless | Steel                 | Stainless | in.         | (mm)      |
| CFX12-1               | CFX12-1E  | CFX12-2               | CFX12-2E  | CFX12-3               | –         | .24 - .47   | (06 - 12) |
| CFX14-1               | CFX14-1E  | CFX14-2               | CFX14-2E  | CFX14-3               | –         | .47 - .55   | (12 - 14) |
| CFX16-1               | CFX16-1E  | CFX16-2               | CFX16-2E  | CFX16-3               | –         | .55 - .63   | (14 - 16) |
| CFX18-1               | CFX18-1E  | CFX18-2               | CFX18-2E  | CFX18-3               | –         | .63 - .71   | (16 - 18) |
| CFX20-1               | CFX20-1E  | CFX20-2               | CFX20-2E  | CFX20-3               | –         | .71 - .79   | (18 - 20) |
| CFX22-1               | CFX22-1E  | CFX22-2               | CFX22-2E  | CFX22-3               | –         | .79 - .87   | (20 - 22) |
| CFX26-1               | CFX26-1E  | CFX26-2               | CFX26-2E  | –                     | –         | .87 - 1.02  | (22 - 26) |
| CFX30-1               | CFX30-1E  | CFX30-2               | CFX30-2E  | –                     | –         | 1.02 - 1.18 | (26 - 30) |
| CFX34-1               | CFX34-1E  | CFX34-2               | CFX34-2E  | –                     | –         | 1.18 - 1.34 | (30 - 34) |
| CFX38-1               | CFX38-1E  | –                     | –         | –                     | –         | 1.34 - 1.50 | (34 - 38) |
| CFX42-1               | CFX42-1E  | –                     | –         | –                     | –         | 1.50 - 1.65 | (38 - 42) |

For more information please refer to strain relief section of Chapter 10

#### Chainfix Clip

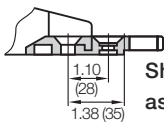


#### Modular snap-on strain relief device

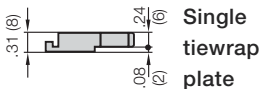
Chainfix clip is available for cable diameters ranging from .16" (4mm) to .94" (24 mm). It is suitable for assembly on KMA mounting brackets, clip-on strain relief for crossbars as well as profile rails. Quick assembly without the use of tools. **For more information please refer to strain relief section of Chapter 10**

| Cable ø         | Part No. Clamp | Part No. Bottom |
|-----------------|----------------|-----------------|
| .16-.31 (04-08) | CFC-08-M       | CFC-08-C        |
| .31-.47 (08-12) | CFC-12-M       | CFC-12-C        |
| .47-.63 (12-16) | CFC-16-M       | CFC-16-C        |
| .63-.79 (16-20) | CFC-20-M       | CFC-20-C        |
| .79-.94 (20-24) | CFC-24-M       | CFC-24-C        |

#### Tiewrap Plates



Shown assembled

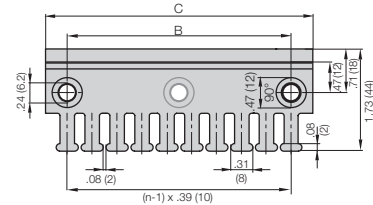


Single tiewrap plate

#### Option 1: Tiewrap plates as an individual part

Available as an individual component, can be fixed onto a mounting bracket with the use of a profile rail.

| Tiewrap Plate | n Number of Teeth | C Overall Width in. (mm) | B Bore Width in. (mm) | Center Bore |
|---------------|-------------------|--------------------------|-----------------------|-------------|
| 3050-ZB       | 5                 | 1.97 (50)                | 1.18 (30)             | no          |
| 3075-ZB       | 7                 | 2.95 (75)                | 2.16 (55)             | no          |
| 3100-ZB       | 10                | 3.94 (100)               | 3.15 (80)             | no          |
| 3115-ZB       | 11                | 4.53 (115)               | 3.74 (95)             | no          |
| 3125-ZB       | 12                | 4.92 (125)               | 4.13 (105)            | no          |
| 3150-ZB       | 15                | 5.91 (150)               | 5.12 (130)            | no          |
| 3175-ZB       | 17                | 6.89 (175)               | 6.10 (155)            | no          |
| 3200-ZB       | 20                | 7.87 (200)               | 7.09 (180)            | yes         |
| 3225-ZB       | 22                | 8.86 (225)               | 8.07 (205)            | yes         |
| 3250-ZB       | 25                | 9.84 (250)               | 9.06 (230)            | yes         |



For more information please refer to strain relief section of Chapter 10

#### Option 2: Clip-on Tiewrap plates

Available as a clip-on tiewrap plate without the use of bolts They are inserted and removed with a screwdriver used as a lever. Clip-on tiewrap plates are also available as an attachment to the opening crossbars.

| Part No. | Number of Teeth | Width of Strain Relief in. (mm) |
|----------|-----------------|---------------------------------|
| 3050-ZC  | 5               | 1.97 (50)                       |
| 3075-ZC  | 7               | 2.95 (75)                       |

For more information please refer to strain relief section of Chapter 10

#### Option 3: Clip-on Tiewrap plates for opening crossbars

Clip-on tiewrap plates are also available as an attachment to opening crossbars. They can be positioned at any point along the Energy Chain®.

For more information please refer to strain relief section of Chapter 10

| Part No.             | No of Teeth | Width of Strain Relief in. (mm) |
|----------------------|-------------|---------------------------------|
| For Fixed Crossbar   |             |                                 |
| 3050-Z               | 5           | 1.97 (50)                       |
| 3075-Z               | 7           | 2.91 (74)                       |
| For Opening Crossbar |             |                                 |
| 3035-ZS              | 3           | 1.38 (35)                       |
| 3050-ZS              | 5           | 1.97 (50)                       |
| 3075-ZS              | 7           | 2.95 (75)                       |

PDF: [www.igus.com/e-chain-pdfs](http://www.igus.com/e-chain-pdfs)  
Specs/CAD/RFQ: [www.igus.com/e-chains](http://www.igus.com/e-chains)  
RoHS info: [www.igus.com/RoHS](http://www.igus.com/RoHS)



Guide troughs are used with applications where the upper run of the Energy Chain® glides on the lower run. If using igus® steel guide troughs, the following components are required:

- Full travel length of guide trough  
**Part Number 93-30**
- 1/2 travel length of glide bars  
**Part number 93-01**
- Installation sets as end connectors  
**Part Number 93-50 -XX**

-XX indicates the length of the profile rail on which the guide trough is mounted. The values and part numbers are specified in the table on the left. The standard length of the trough components and glide bars is 6.56 ft (2 m.) The required overall length of the guide trough directly correlates to the length of travel.

**Example:**

Length of travel 164 ft (50 m)  
Center mounted

**Required guide troughs:**

164 ft (50 m) guide trough  
82 ft (25 m) glide bar  
= 25 sections of 6.56 ft (2 m) guide trough

**Part No. 93-30**

= 13 sections of 6.56 ft (2 m) glide bar

**Part No. 93-01**

**Required number of installation sets:**

= Number of guide trough components + 1

= 25 + 1 = 26

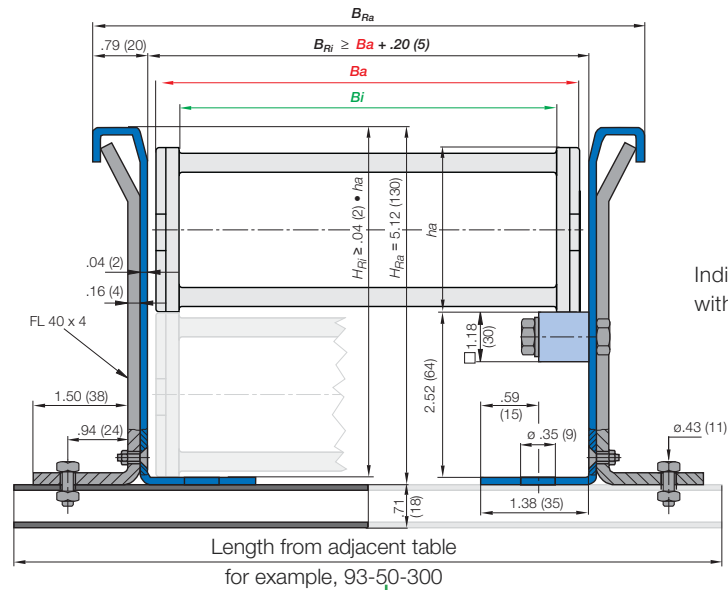
Part number of the installation sets

Example: 93-50-300 for 15.75" (400 mm) long profile rail.



Width of Crossbar  
350-075-200-0

|      | $B_{Ri}$    | Installation Part No. |
|------|-------------|-----------------------|
| -050 | 2.95 (75)   | 93-50-150             |
| -075 | 3.94 (100)  | 93-50-200             |
| -100 | 4.92 (125)  | 93-50-250             |
| -115 | 5.51 (140)  | 93-50-250             |
| -125 | 5.91 (150)  | 93-50-300             |
| -150 | 6.89 (175)  | 93-50-300             |
| -175 | 7.87 (200)  | 93-50-300             |
| -200 | 8.86 (225)  | 93-50-350             |
| -225 | 9.84 (250)  | 93-50-350             |
| -250 | 10.83 (275) | 93-50-400             |



- Guide trough
- Glide bars
- Installation set "Basic"
- Profile rail

Individual attachment without profile rail

\* Specialized guide trough available upon request