



260



# E2 micro

## Smallest inner heights and bend radii



### Advantages of the E2 micro series:

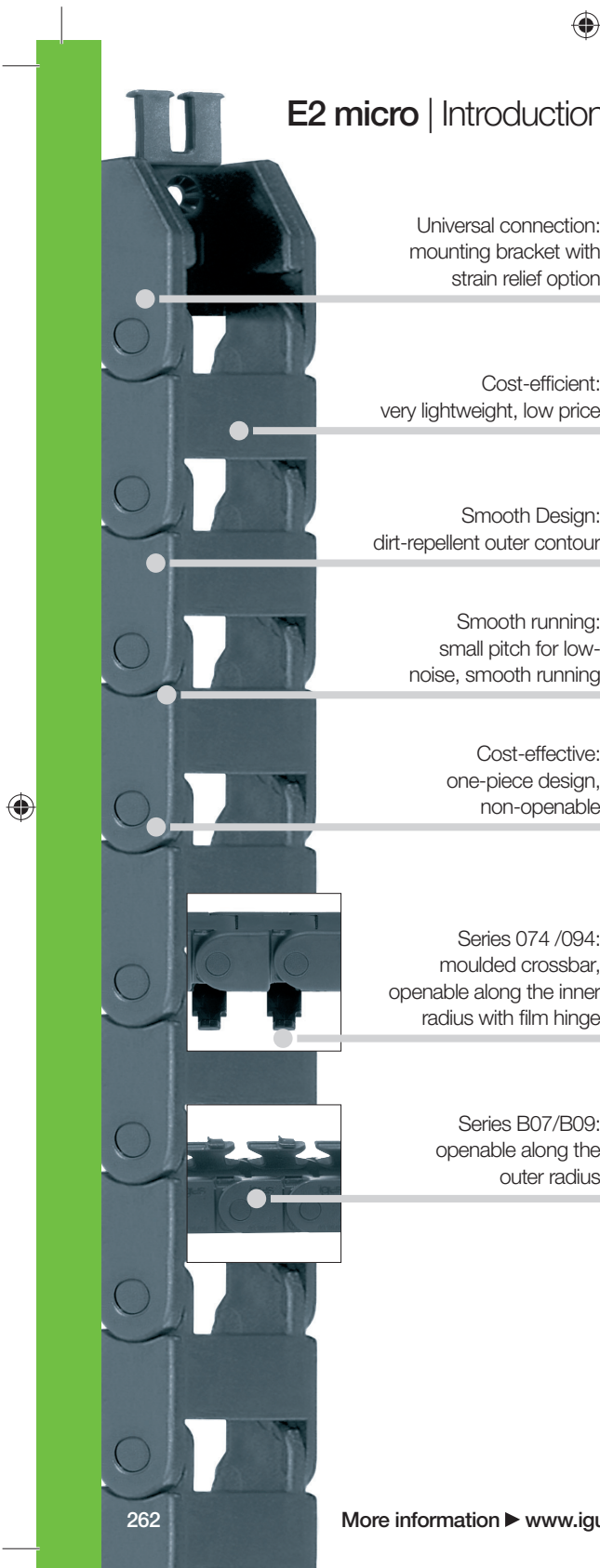
- For the smallest applications
- Lightweight and cost-effective
- Quiet operation due to small pitch
- Ideal for applications with low inertia
- Variety of options - E2 micro as non-openable or openable along the inner or outer radius



### When to use another e-chain® series:

- When openable crossbars are required
  - ▶ E2.1 micro, page 320
  - ▶ zipper, page 226
- When easy filling with connectorised cables is required
  - ▶ easy chain®, page 198

## E2 micro | Introduction | Advantages



Universal connection:  
mounting bracket with  
strain relief option

Cost-efficient:  
very lightweight, low price

Smooth Design:  
dirt-repellent outer contour

Smooth running:  
small pitch for low-  
noise, smooth running

Cost-effective:  
one-piece design,  
non-openable

Series 074 /094:  
moulded crossbar,  
openable along the inner  
radius with film hinge

Series B07/B09:  
openable along the  
outer radius

## Smallest inner heights and bend radii - E2 micro

E2 micro e-chains® are very small, one- and two-piece (B07/B09) e-chains® with low weight, making them ideal for highly dynamic applications. E2 micro e-chains® are optimal for the smallest installation spaces, and are available in many versions. igus® also offers a range of accessories and fixation options. Upgrades of the openable versions are available for many types; different types are interchangeable and can therefore be used as, spare parts for existing applications, for example.

### Typical industries and applications

● Models (micro e-chain®) ● Automatic doors  
● Vehicles ● Measuring machines ● Electronic engineering  
● Handling ● Pick und place robots ● General machinery, etc.



Cleanroom test  
upon request



UL94-V2 classification - for series  
03, 074, 094 (UL94-V0 upon request)



iF product design award  
1989 igus® series 05

262

More information ► [www.igus.eu/E2micro](http://www.igus.eu/E2micro)

igus

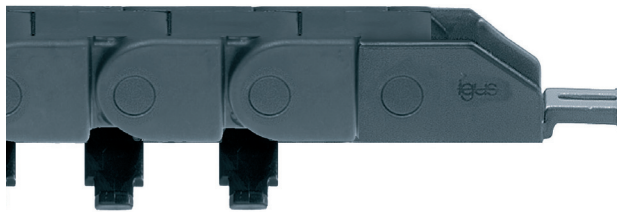
## E2 micro | Selection table

Series	Inner height <i>hi</i> [mm]	Inner width <i>Bi</i> [mm]	Outer width <i>Ba</i> [mm]	Outer height <i>ha</i> [mm]	Bend radius <i>R</i> [mm]	Unsupported length ≤ [m]	Page
--------	--------------------------------	-------------------------------	-------------------------------	--------------------------------	------------------------------	--------------------------	------



**E2 micro - one-piece design**  
non-openable

03	5	5 - 10	8.70 - 13.7	8	010 - 028	0.40	266
04	7	7 - 30	12 - 35	10	015 - 048	0.50	268
05	10	6 - 64	10 - 68	12	018 - 038	0.55	270
045	10.3	6 - 64	12 - 70	12.5	018 - 083	0.50	272
06 <sup>1)</sup>	10.5	6 - 64	12.5 - 71	15	018 - 038	0.60	276
08 <sup>2)</sup>	15	10 - 50	18.2 58.2	19.3	025 - 048	1.00	286



**E2 micro - one-piece design**  
openable along the inner radius with film hinge

074	11.5	10 - 20	16.3 - 26.3	15	018 - 038	0.55	278
094	15.6	10 - 30	18.2 - 38.2	19.3	028 - 048	1.00	280



**E2 micro - two-piece design**  
openable along the outer radius

B07 <sup>3)</sup>	10.3	16 - 40	22.5 - 47	15	018 - 038	0.55	274
B09 <sup>4)</sup>	14.3	16 - 40	24.2 - 48.2	19.3	028 - 048	1.00	282

For new designs we recommend E2.1 system, series: 1) E2C.10, 2) E2C.15, 3) E2.10, 4) E2.15 ▶ From page 320



**Available from stock. Ready to ship in 24 - 48hrs.\***

\*The delivery times indicated correspond to the average time until the ordered goods are dispatched.


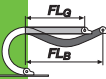


**igus** 3D CAD, service life calculation, configurators and more ▶ [www.igus.eu/E2micro](http://www.igus.eu/E2micro)

263








## E2 micro | Technical data | Overview

### Technical data

	Speed gliding / acceleration gliding	$\leq 3$ [m/s] / $\leq 10$ [m/s <sup>2</sup> ]
	Speed $FL_G$ / acceleration $FL_G$	$\leq 20$ [m/s] / $\leq 200$ [m/s <sup>2</sup> ]
	Speed $FL_B$ / acceleration $FL_B$	$\leq 3$ [m/s] / $\leq 6$ [m/s <sup>2</sup> ]
	Material - permitted temperature °C, igumid G	-40°C / +120°C
	Material - permitted temperature °C, igumid NB (only series 03, 074, 094)	-40°C / +80°C
	Material lower part - permitted temperature °C, igumid G (only series B07, B09)	-40°C / +120°C
	Material crossbar - permitted temperature °C, igumid NB (only series B07, B09)	-40°C / +80°C
	Flammability class	igumid G = VDE 0304 IIC UL94-HB / igumid NB = VDE 0304 IIC UL94-V2

■  $FL_G$  = unsupported with straight upper run ■  $FL_B$  = unsupported with permitted sag

### Installation types, maximum travels

Series	 Unsupported	 Vertical hanging	 Vertical standing	 Side mounted unsupported	 Rotary	 Zig-zag
03	$\leq 0.80\text{m}$	upon request	upon request	upon request	with rework	upon request
04	$\leq 1.00\text{m}$	upon request	upon request	upon request	with rework	upon request
05	$\leq 1.10\text{m}$	upon request	upon request	upon request	with rework	upon request
045	$\leq 1.00\text{m}$	upon request	upon request	upon request	with rework	upon request
B07 <sup>3)</sup>	$\leq 1.10\text{m}$	upon request	upon request	upon request	with rework	upon request
06 <sup>1)</sup>	$\leq 1.20\text{m}$	upon request	upon request	upon request	with rework	upon request
074	$\leq 1.10\text{m}$	upon request	upon request	upon request	with rework	upon request
094	$\leq 2.00\text{m}$	upon request	upon request	upon request	with rework	upon request
B09 <sup>4)</sup>	$\leq 2.00\text{m}$	upon request	upon request	upon request	with rework	upon request
08 <sup>2)</sup>	$\leq 2.00\text{m}$	upon request	upon request	upon request	with rework	upon request








For new designs we recommend E2.1 system, series: 1) E2C.10, 2) E2C.15, 3) E2.10, 4) E2.15 ▶ From page 320

264 More information ▶ [www.igus.eu/E2micro](http://www.igus.eu/E2micro)

**igus**


## E2 micro | Options and order keys

### Options with order keys | Examples based on series 08

 <b>Standard</b>	<i>NC version - (No Camber) without pretension</i>	<i>Reverse Bend Radius (RBR) for circular movements</i>	<i>ESD - electrically conductive material</i>
Part No. Standard	Part No. NC version	Part No. RBR	Part No. igumid ESD
			
 <b>08.50.R.0</b>	<b>08.50.R.0.NC</b>	<b>08.50.R1/R2.0</b>	<b>08.50.R.0.ESD</b>
 <b>Ready to ship* in 24 - 48 hrs.</b>	<b>Delivery time* 2-5 business days</b>	<b>Delivery time* several series from stock</b>	<b>Delivery time* 10 business days</b>

\*The delivery times indicated correspond to the average time until the ordered goods are dispatched.

### Order example | Order key and colour examples | Examples based on series 08

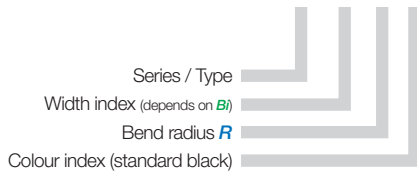
 **Order example for complete e-chain® (1.0m), colour black, with mounting brackets and interior separation:**

<b>e-chain® (1.0m)</b>	Please indicate e-chain® length or number of links: 1.0m or 50 links	<b>08.50.038.0</b>
<b>+ Mounting brackets</b>	1 set (with tiwrap plates)	<b>080.50.12PZ</b>
<b>Interior separation</b>	with 2 separators assembled every 2 <sup>nd</sup> link	<b>2 x B09.2.1</b>
<b>Order text:</b>	<b>1 m 08.50.038.0 + 080.50.12PZ + 2 x B09.2.1</b>	








#### **Order key**

One-piece, non-openable

**08.50.038.0**



#### **Order index for colour options**

Colour	Order index	Colour	Order index
 <b>Black</b>	Standard .0	 <b>Orange</b>	Special colour .2
 <b>Silver-grey</b>	Special colour .31	 <b>Yellow</b>	Special colour .4
 <b>White</b>	Special colour .1	 <b>Light grey</b>	Special colour .14
 <b>Grey-white</b>	Special colour .1S		

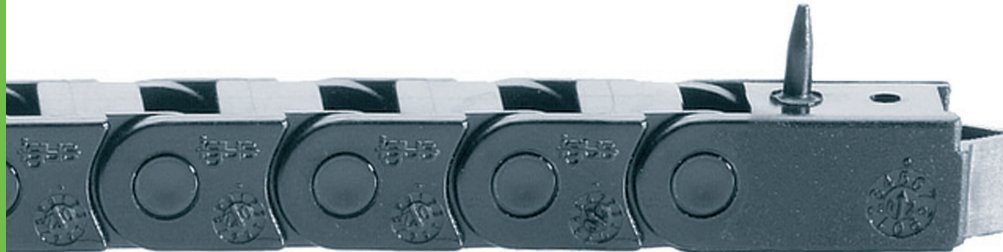
**Black e-chains® available from stock.**  
 Above special colours upon request.

03

## E2 micro | Series 03 | Product range

### Smallest applications

5

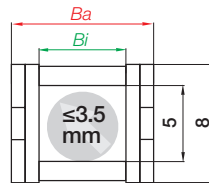
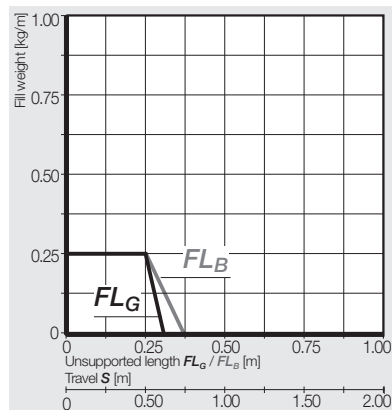


### e-chains® | Series 03 | One-piece, non-openable

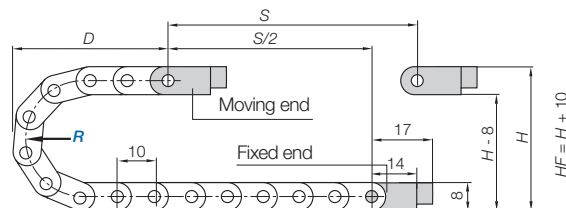
Part No.	<i>Bi</i>	<i>Ba</i>	<i>R</i> Available bend radii	Weight
e-chains®	[mm]	[mm]	[mm]	[kg/m]
03.05 .R.0	5	8.7	010   012   015   018   028	≈ 0.04
03.07 .R.0	7	10.7	010   012   015   018   028	≈ 0.05
03.10 .R.0	10	13.7	010   012   015   018   028	≈ 0.06

Complete Part No. with required radius (*R*). Example: 03.05.028.0

### Installation dimensions



Inner height [mm]	5
Pitch [mm/link]	10
Links/m	100
corresponds to [mm]	1,000
e-chain® length	$L_K = S/2 + K$



<i>R</i>	010	012	015	018	028
<i>H</i>	28	32	38	44	64
<i>D</i>	29	31	34	37	47
<i>K</i>	55	60	70	80	110

The required clearance height:  $H_F = H + 10\text{mm}$  (with 0.1kg/m fill weight)

266 More information ► [www.igus.eu/03](http://www.igus.eu/03)





04

## E2 micro | Series 04 | Product range

### Lightweight

7

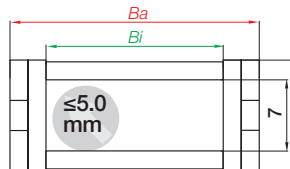
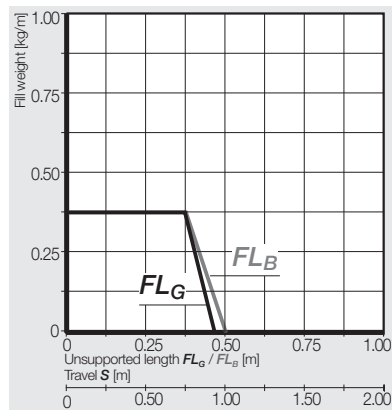


### e-chains® | Series 04 | One-piece, non-openable

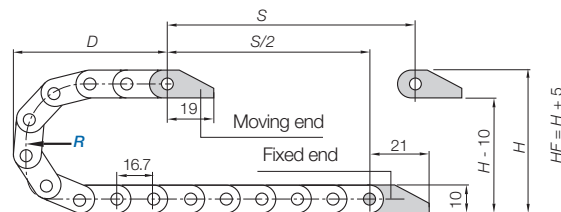
Part No.	<i>Bi</i>	<i>Ba</i>	<i>R</i> Available bend radii	Weight
e-chains®	[mm]	[mm]	[mm]	[kg/m]
04.07 .R.0	7	12	015   018   028   038   048	≈ 0.07
04.10 .R.0	10	15	015   018   028   038   048	≈ 0.08
04.16 .R.0	16	21	015   018   028   038   048	≈ 0.09
04.20 .R.0	20	25	015   018   028   038   048	≈ 0.10
04.30 .R.0	30	35	015   018   028   038   048	≈ 0.11

Complete Part No. with required radius (*R*). Example: 04.10.028.0

### Installation dimensions



Inner height [mm]	7
Pitch [mm/link]	16.7
Links/m	60
corresponds to [mm]	1,002
e-chain® length	$L_K = S/2 + K$



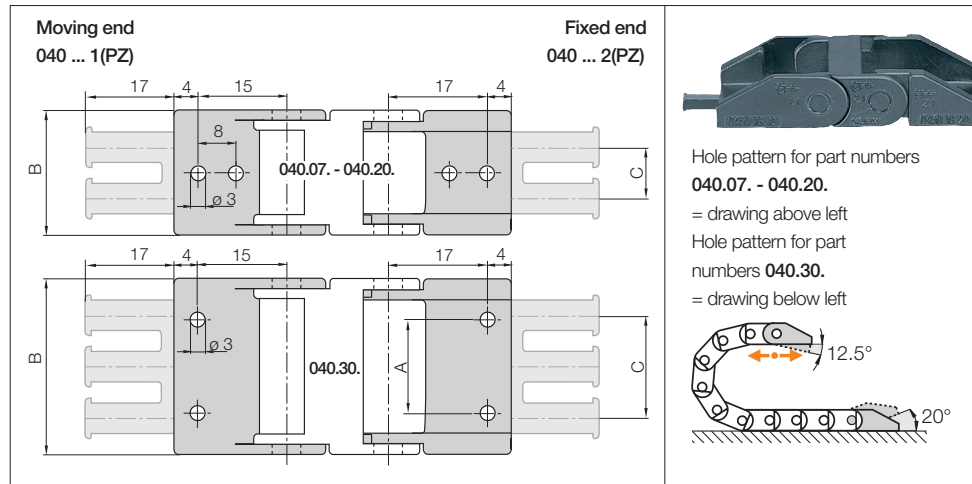
<i>R</i>	015	018	028	038	048
<i>H</i>	40	46	66	86	106
<i>D</i>	45	48	58	68	78
<i>K</i>	85	90	125	155	185

The required clearance height:  $H_F = H + 5\text{mm}$  (with 0.1kg/m fill weight)

268 More information ► [www.igus.eu/04](http://www.igus.eu/04)

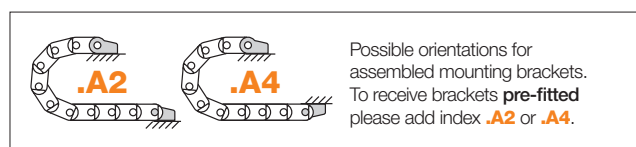
## E2 micro | Series 04 | Accessories

## Mounting brackets, polymer one-piece | Pivoting



Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	C [mm]	Number of teeth
07. ▶	040.07.12PZ	040.07.12	-	12	-	1
10. ▶	040.10.12PZ	040.10.12	-	15	-	1
16. ▶	040.16.12PZ	040.16.12	-	21	10	2
20. ▶	040.20.12PZ	040.20.12	-	25	10	2
30. ▶	040.30.12PZ	040.30.12	22	35	20	3

Material mounting bracket - igumid G, temperature: -40° up to +120°C, VDE 0304 IIC UL94-HB



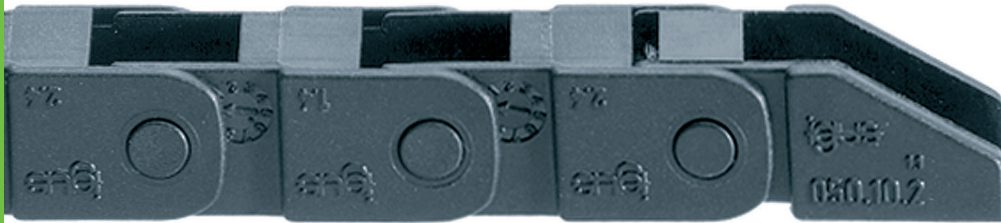
**040.07.12PZ.A2** Order example  
 .A... to indicate option with brackets pre-fitted  
 With integrated strain relief tiewrap plates  
 Full set  
 Series

05

## E2 micro | Series 05 | Product range

Low weight, high dynamics, cost-effective

10

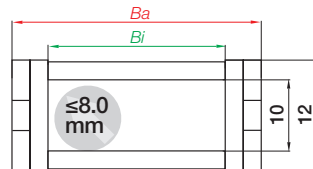
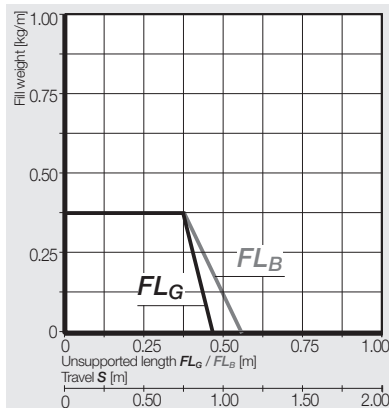


## e-chains® | Series 05 | One-piece, non-openable

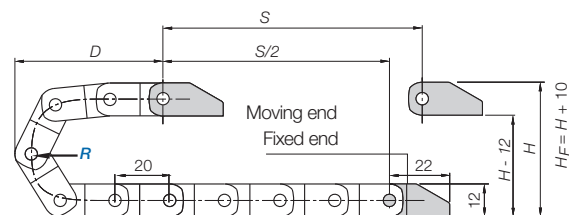
Part No. e-chains®	<i>Bi</i> [mm]	<i>Ba</i> [mm]	<i>R</i> Available bend radii [mm]	Weight [kg/m]
05.06 .R.0	6	10	018   028   038	≈ 0.06
05.10 .R.0	10	14	018   028   038	≈ 0.07
05.16 .R.0	16	20	018   028   038	≈ 0.07
05.20 .R.0	20	24	018   028   038	≈ 0.08
05.30 .R.0	30	34	018   028   038	≈ 0.09
05.64 .R.0	64	68	018   028   038	≈ 0.19

Complete Part No. with required radius (*R*). Example: 05.10.028.0

## Installation dimensions



Inner height [mm]	10
Pitch [mm/link]	20
Links/m	50
corresponds to [mm]	1,000
e-chain® length $L_K = S/2 + K$	



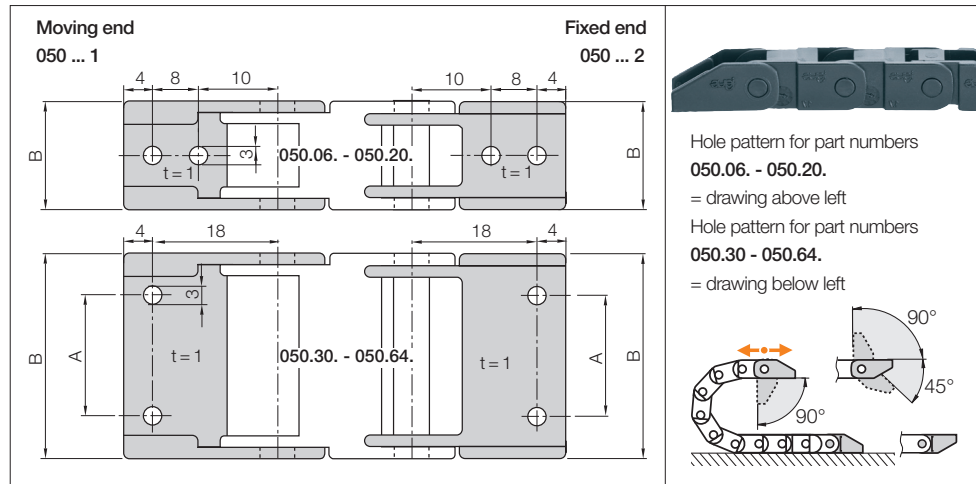
<i>R</i>	018	028	038
<i>H</i>	48	68	88
<i>D</i>	54	64	74
<i>K</i>	100	130	160

The required clearance height:  $H_F = H + 10\text{mm}$  (with 0.2kg/m fill weight)270 More information ► [www.igus.eu/05](http://www.igus.eu/05)

igus

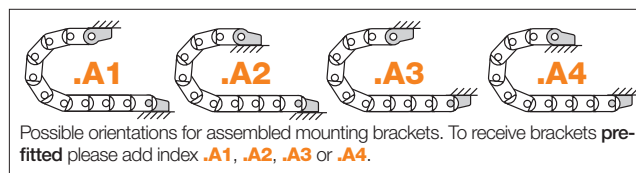
## E2 micro | Series 05 | Accessories

### Mounting brackets, polymer one-piece | One end pivoting



Width index	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
06. ▶	<b>050.06.12</b>	-	10.7	-
10. ▶	<b>050.10.12</b>	-	14.7	-
16. ▶	<b>050.16.12</b>	-	20.7	-
20. ▶	<b>050.20.12</b>	-	24.7	-
30. ▶	<b>050.30.12</b>	22	34.7	-
64. ▶	<b>050.64.12</b>	56	68.7	-

Material mounting bracket - igumid G, temperature: -40° up to +120°C, VDE 0304 IIC UL94-HB



**050.10.12.A2**





045

## E2 micro | Series 045 | Product range

Small pitch, smooth running

10.3



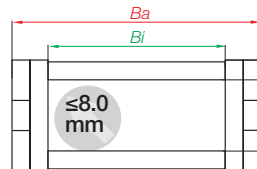
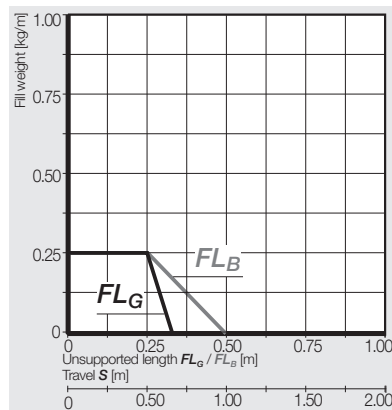
## e-chains® | Series 045 | One-piece, non-openable

Part No.	<i>Bi</i>	<i>Ba</i>	<i>R</i> Available bend radii	Weight
e-chains®	[mm]	[mm]	[mm]	[kg/m]
045.06 .R.0	6	12	018   028   038   083*	≈ 0.09
045.10 .R.0	10	16	018   028   038   083*	≈ 0.10
045.16 .R.0	16	22	018   028   038   083*	≈ 0.11
045.20 .R.0	20	26	018   028   038   083	≈ 0.13
045.30 .R.0	30	36	018   028   038   083*	≈ 0.16
045.64 .R.0	64	70	018   028   038   083*	≈ 0.19

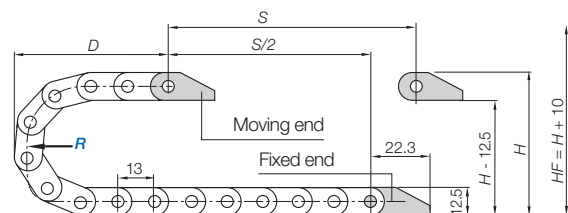
\*Radius 083 only for Part No. 045.20. For other widths available upon request. Please consult igus® for delivery time.

Complete Part No. with required radius (*R*). Example: 045.10.028.0

## Installation dimensions



Inner height [mm]	10.3
Pitch [mm/link]	13
Links/m	77
corresponds to [mm]	1,001
e-chain® length	$L_K = S/2 + K$



<i>R</i>	018	028	038	083
<i>H</i>	48.5	68.5	88.5	178.5
<i>D</i>	44	54	64	109
<i>K</i>	85	115	150	290

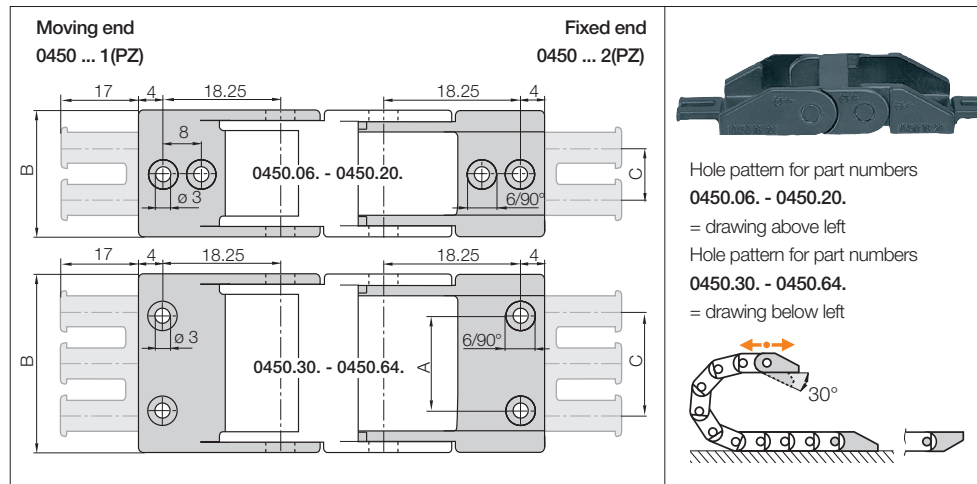
The required clearance height:  $H_F = H + 10\text{mm}$  (with 0.2kg/m fill weight)

Radli for several widths available upon request (please see product range table above)

272 More information ► [www.igus.eu/045](http://www.igus.eu/045)

## E2 micro | Series 045 | Accessories

Mounting brackets, polymer one-piece | One end pivoting

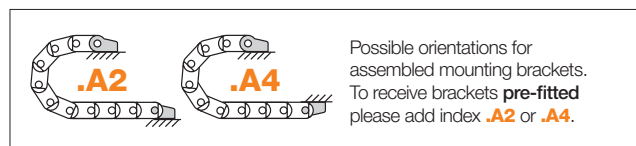


Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	C [mm]	Number of teeth
06. ▶	0450.06.12PZ	0450.06.12	-	12	-	1
10. ▶	0450.10.12PZ	0450.10.12	-	16	-	1
16. ▶	0450.16.12PZ	0450.16.12	-	22	10	2
20. ▶	0450.20.12PZ	0450.20.12	-	26	10	2
30. ▶	0450.30.12PZ	0450.30.12	22	36	20	3
64. ▶	0450.64.12PZ	0450.64.12	56	70	50	6

Material mounting bracket - igumid G, temperature: -40° up to +120°C, VDE 0304 IIC UL94-HB

Mounting bracket with strain relief tiewrap plate has reductions of  $\varnothing 3\text{mm}$  /  $\varnothing 6\text{mm}$  90°

Mounting bracket without strain relief tiewrap plate only has holes of  $\varnothing 3\text{mm}$



B07

## E2 micro | Series B07 | Product range

Openable along the outer radius, cost-effective

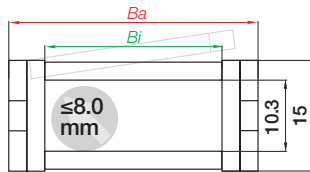
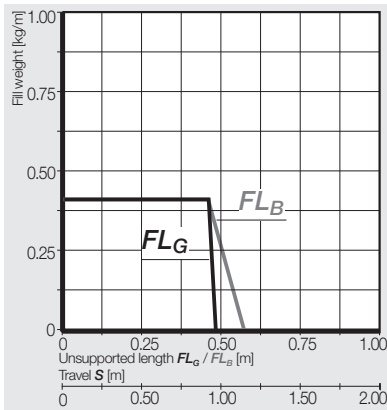


### e-chains® | Series B07 | Openable along the outer radius, from one side

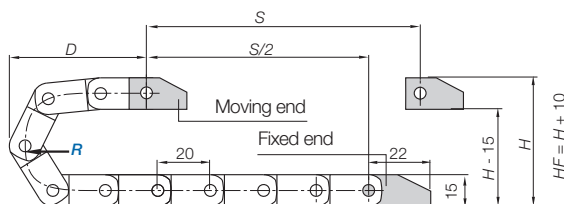
Part No.	<i>Bi</i>	<i>Ba</i>	<i>R</i> Available bend radii	Weight
e-chains®	[mm]	[mm]	[mm]	[kg/m]
B07.16.R.0	16	22.5	018   028   038	≈ 0.16
B07.20.R.0	20	27	018   028   038	≈ 0.17
B07.30.R.0	30	37	018   028   038	≈ 0.20
B07.40.R.0	40	47	018   028   038	≈ 0.23

For new designs we recommend E2.1 system, series E2.10 ▶ From page 326  
 Complete Part No. with required radius (*R*). Example: B07.40.038.0

### Installation dimensions



Inner height [mm]	10.3
Pitch [mm/link]	20
Links/m	50
corresponds to [mm]	1,000
e-chain® length	$L_K = S/2 + K$



<i>R</i>	018	028	038
<i>H</i>	51	71	91
<i>D</i>	56	66	76
<i>K</i>	100	130	160

The required clearance height:  $H_F = H + 10\text{mm}$  (with 0.2kg/m fill weight)

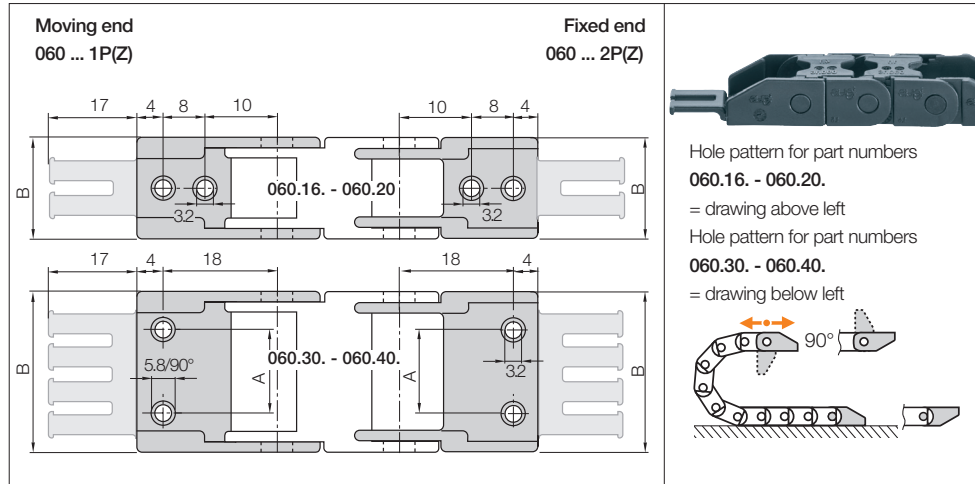
274 More information ▶ [www.igus.eu/B07](http://www.igus.eu/B07)



# E2 micro | Series B07 | Accessories

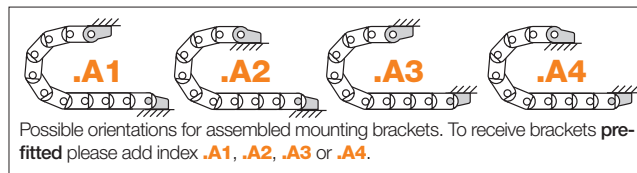
## Mounting brackets, polymer one-piece | Locking

B07



Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
16. ▶	060.16. 12PZ	060.16. 12P	-	22.5	2
20. ▶	060.20. 12PZ	060.20. 12P	-	27.0	2
30. ▶	060.30. 12PZ	060.30. 12P	22	37.0	3
40. ▶	060.40. 12PZ	060.40. 12P	32	47.0	4

Material mounting bracket - igumid G, temperature: -40° up to +120°C, VDE 0304 IIC UL94-HB



**060.40.12PZ.A1** Order example  
 .A... to indicate option with brackets pre-fitted  
 With integrated strain relief tiewrap plates  
 Full set  
 Series





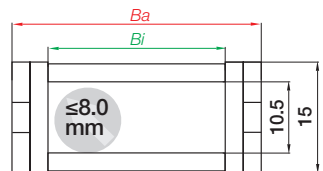
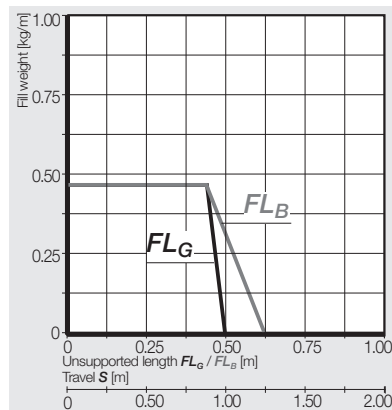
## e-chains® | Series 06 | One-piece, non-openable

Part No. e-chains®	<i>Bi</i> [mm]	<i>Ba</i> [mm]	<i>R</i> Available bend radii [mm]	Weight [kg/m]
06.06.R.0	6	12.5	018   028   038	≈ 0.13
06.10.R.0	10	16.5	018   028   038	≈ 0.14
06.16.R.0	16	22.5	018   028   038	≈ 0.16
06.20.R.0	20	27	018   028   038	≈ 0.17
06.30.R.0	30	37	018   028   038	≈ 0.20
06.40.R.0	40	47	018   028   038	≈ 0.23
06.50.R.0	50	57	018   028   038	≈ 0.26
06.64.R.0	64	71	018   028   038	≈ 0.30

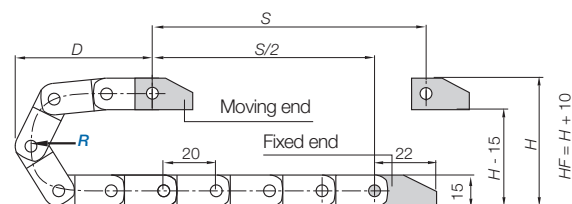
For new designs we recommend E2.1 system, series E2C.10 ► From page 326

Complete Part No. with required radius (*R*). Example: 06.10.028.0

## Installation dimensions



Inner height [mm]	10.5
Pitch [mm/link]	20
Links/m	50
corresponds to [mm]	1,000
e-chain® length	$L_K = S/2 + K$



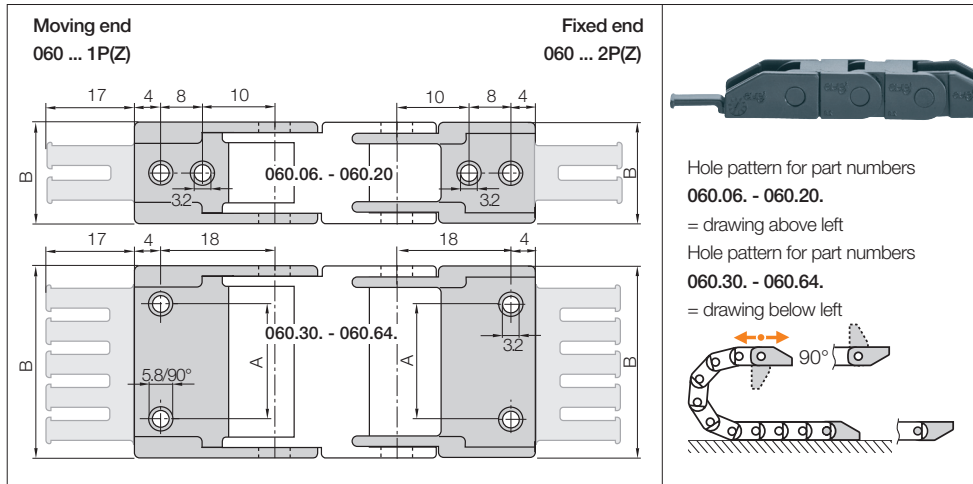
<i>R</i>	018	028	038
<i>H</i>	51	71	91
<i>D</i>	56	66	76
<i>K</i>	100	130	160

The required clearance height:  $H_F = H + 10\text{mm}$  (with 0.2kg/m fill weight)

276 More information ► [www.igus.eu/06](http://www.igus.eu/06)

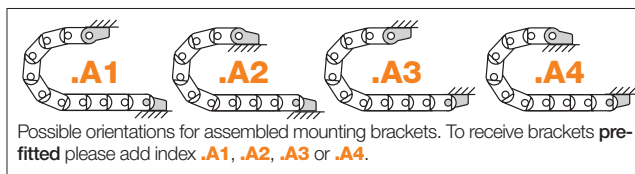
## E2 micro | Series 06 | Accessories

### Mounting brackets, polymer one-piece | Locking



Width index	Part No. full set with tie-wrap plates	Part No. full set without tie-wrap plates	A [mm]	B [mm]	Number of teeth
06. ▶	060.06. 12PZ	060.06. 12P	–	12.5	1
10. ▶	060.10. 12PZ	060.10. 12P	–	16.5	1
16. ▶	060.16. 12PZ	060.16. 12P	–	22.5	2
20. ▶	060.20. 12PZ	060.20. 12P	–	27.0	2
30. ▶	060.30. 12PZ	060.30. 12P	22	37.0	3
40. ▶	060.40. 12PZ	060.40. 12P	32	47.0	4
50. ▶	060.50. 12PZ	060.50. 12P	42	57.0	5
64. ▶	060.64. 12PZ	060.64. 12P	56	71.0	6

Material mounting bracket - igumid G, temperature: -40° up to +120°C, VDE 0304 IIC UL94-HB



**060.10.12PZ.A1** Order example  
 .A... to indicate option with brackets pre-fitted  
 With integrated strain relief tie-wrap plates  
 Full set  
 Series

074

## E2 micro | Series 074 | Product range

Openable along the inner radius, cost-effective

11,5



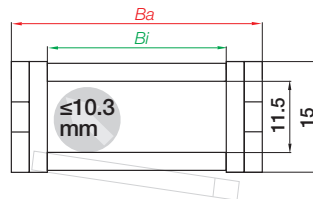
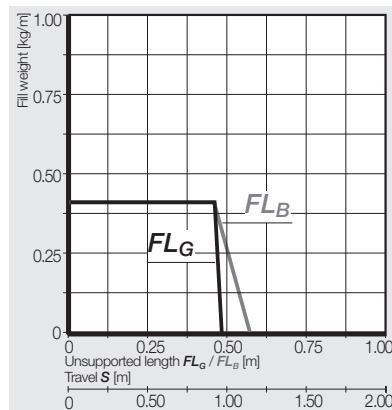
e-chains® | Series 074 | Openable along the inner radius from one side with film hinge

Part No.	<i>Bi</i>	<i>Ba</i>	<i>R</i> Available bend radii	Weight
e-chains®	[mm]	[mm]	[mm]	[kg/m]
074. 06 . <i>R</i> .0	06	12.3	018   028   038	≈ 0.14
074. 10 . <i>R</i> .0	10	16.3	018   028   038	≈ 0.15
074. 16 . <i>R</i> .0	16	22.3	018   028   038	≈ 0.16
074. 20 . <i>R</i> .0	20	26.3	018   028   038	≈ 0.17
074. 30 . <i>R</i> .0**	30	36.3	018   028   038	≈ 0.20
074. 40 . <i>R</i> .0**	40	46.3	018   028   038	≈ 0.23

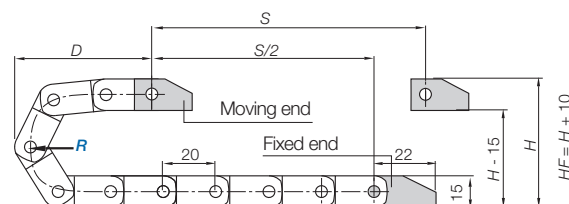
\*\*Width available upon request. Please consult igus® for delivery time.

Complete Part No. with required radius (*R*). Example: 074.10.018.0

## Installation dimensions



Inner height [mm]	11.5
Pitch [mm/link]	20
Links/m	50
corresponds to [mm]	1,000
e-chain® length $L_K = S/2 + K$	



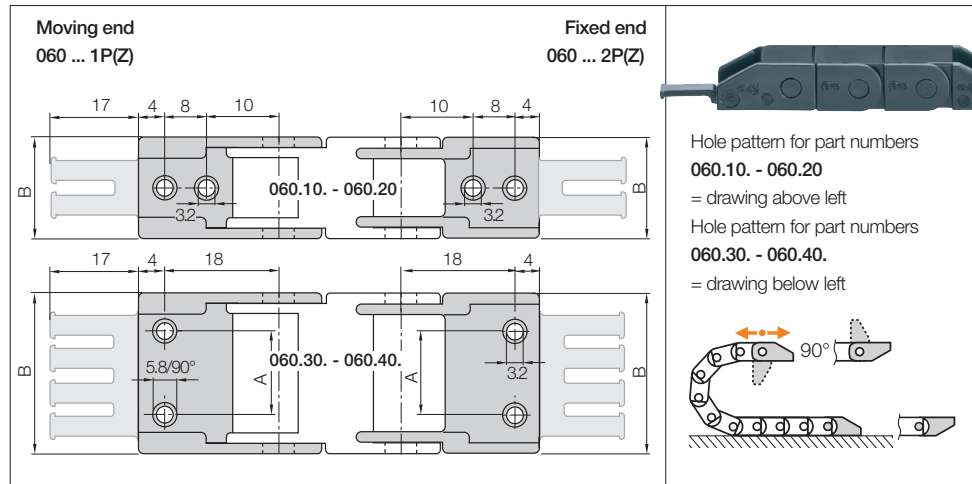
<i>R</i>	018	028	038
<i>H</i>	51	71	91
<i>D</i>	56	66	76
<i>K</i>	100	130	160

The required clearance height:  $H_F = H + 10\text{mm}$  (with 0.2kg/m fill weight)278 More information ► [www.igus.eu/074](http://www.igus.eu/074)

igus

## E2 micro | Series 074 | Accessories

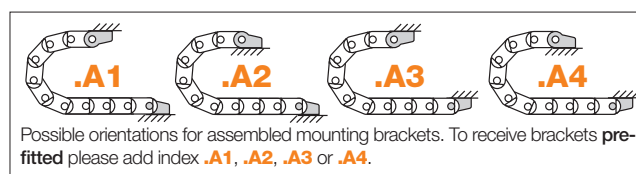
Mounting brackets, polymer one-piece | Locking



Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
06. ▶	060.06. 12PZ	060.06. 12P	–	12.5	1
10. ▶	060.10. 12PZ	060.10. 12P	–	16.5	1
16. ▶	060.16. 12PZ	060.16. 12P	–	22.5	2
20. ▶	060.20. 12PZ	060.20. 12P	–	27	2
30. ▶	060.30. 12PZ**	060.30. 12P**	22	37	3
40. ▶	060.40. 12PZ**	060.40. 12P**	32	47	4

\*\*Width available upon request. Please consult igus® for delivery time.

Material mounting bracket - igumid G, temperature: -40° up to +120°C, VDE 0304 IIC UL94-HB



**060.10.12PZ.A1** Order example  
 .A... to indicate option with brackets pre-fitted  
 With integrated strain relief tiewrap plates  
 Full set  
 Series

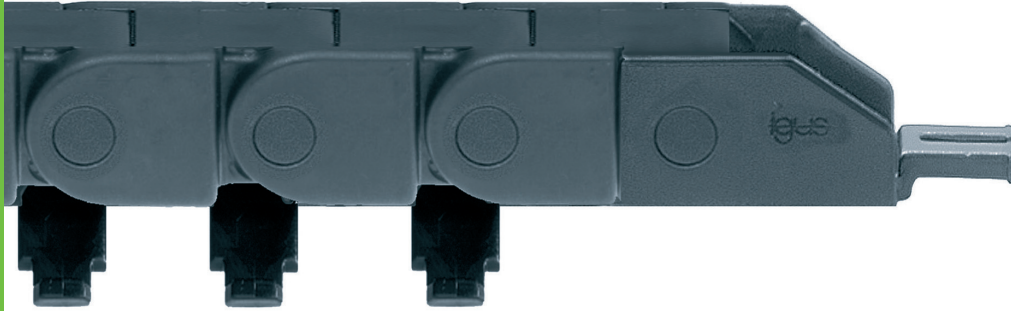


094

## E2 micro | Series 094 | Product range

Openable along the inner radius, cost-effective

156



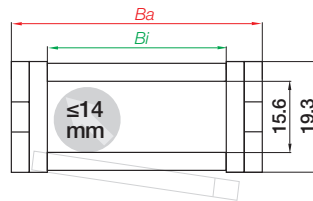
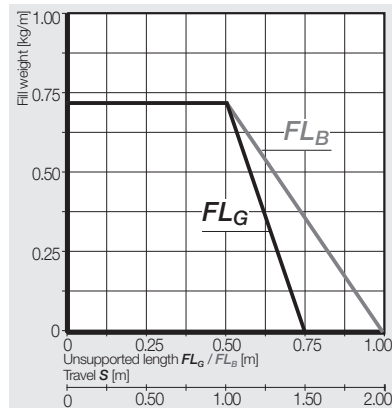
e-chains® | Series 094 | Openable along the inner radius from one side with film hinge

Part No.	<i>Bi</i>	<i>Ba</i>	<i>R</i> Available bend radii	Weight
e-chains®	[mm]	[mm]	[mm]	[kg/m]
094.10.R.0	10	18.2	028   038   048	≈ 0.23
094.16.R.0	16	24.2	028   038   048	≈ 0.24
094.20.R.0	20	28.2	028   038   048	≈ 0.25
094.30.R.0	30	38.2	028   038   048	≈ 0.28
094.40.R.0**	40	48.2	028   038   048	≈ 0.31

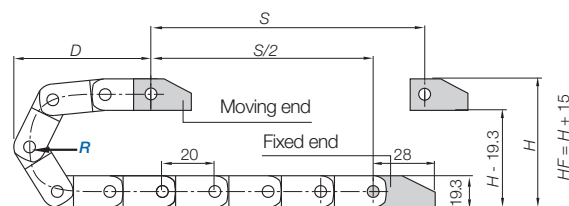
\*\*Width available upon request. Please consult igus® for delivery time.

Complete Part No. with required radius (*R*). Example: 094.10.028.0

## Installation dimensions



Inner height [mm]	15.6
Pitch [mm/link]	20
Links/m	50
corresponds to [mm]	1,000
e-chain® length $L_K = S/2 + K$	



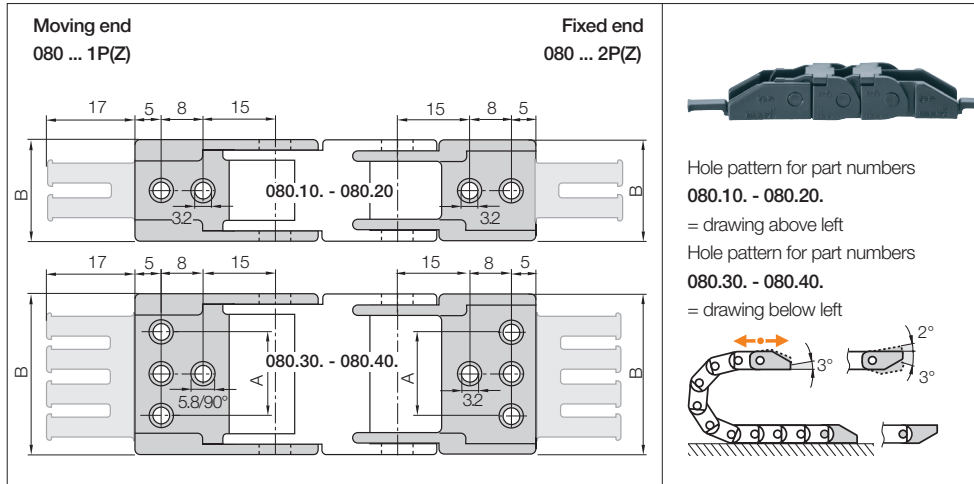
<i>R</i>	028	038	048
<i>H</i>	75	95	115
<i>D</i>	68	78	88
<i>K</i>	130	160	195

The required clearance height:  $H_F = H + 15\text{mm}$  (with 0.3kg/m fill weight)280 More information ► [www.igus.eu/094](http://www.igus.eu/094)

igus

## E2 micro | Series 094 | Accessories

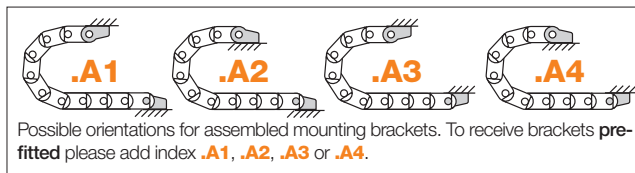
### Mounting brackets, polymer one-piece | Locking



Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
10. ▶	080.10. 12PZ	080.10. 12P	-	18.2	1
16. ▶	080.16. 12PZ	080.16. 12P	-	24.2	2
20. ▶	080.20. 12PZ	080.20. 12P	-	28.2	2
30. ▶	080.30. 12PZ	080.30. 12P	22	38.2	3
40. ▶	080.40. 12PZ**	080.40. 12P**	32	48.2	4

\*\*Width available upon request. Please consult igus® for delivery time.

Material mounting bracket - igumid G, temperature: -40° up to +120°C, VDE 0304 IIC UL94-HB



080.10.12PZ.A1 Order example

.A... to indicate option with brackets pre-fitted

With integrated strain relief tiewrap plates

Full set

Series

B09

## E2 micro | Series B09 | Product range

Openable along the outer radius, cost-effective

14.3

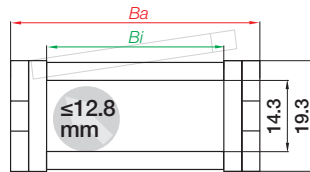
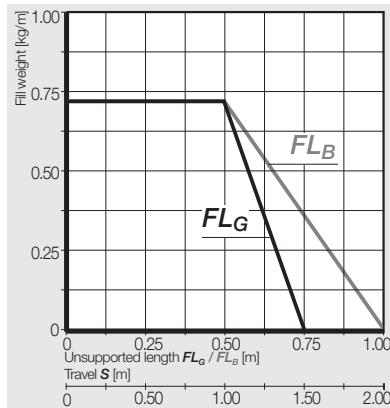


### e-chains® | Series B09 | Openable along the outer radius, from one side

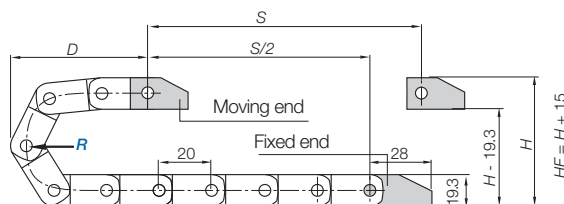
Part No.	<i>Bi</i>	<i>Ba</i>	<i>R</i> Available bend radii	Weight
e-chains®	[mm]	[mm]	[mm]	[kg/m]
B09.16. <i>R</i> .0	16	24.2	028   038   048	≈ 0.24
B09.20. <i>R</i> .0	20	28.2	028   038   048	≈ 0.25
B09.30. <i>R</i> .0	30	38.2	028   038   048	≈ 0.28
B09.40. <i>R</i> .0	40	48.2	028   038   048	≈ 0.31

For new designs we recommend E2.1 system, series E2.15 ▶ From page 330  
 Complete Part No. with required radius (*R*). Example: B09.40.038.0

### Installation dimensions



Inner height [mm]	14.3
Pitch [mm/link]	20
Links/m	50
corresponds to [mm]	1,000
e-chain® length	$L_K = S/2 + K$



<i>R</i>	028	038	048
<i>H</i>	75	95	115
<i>D</i>	68	78	88
<i>K</i>	130	160	195

The required clearance height:  $H_F = H + 15\text{mm}$  (with 0.3kg/m fill weight)

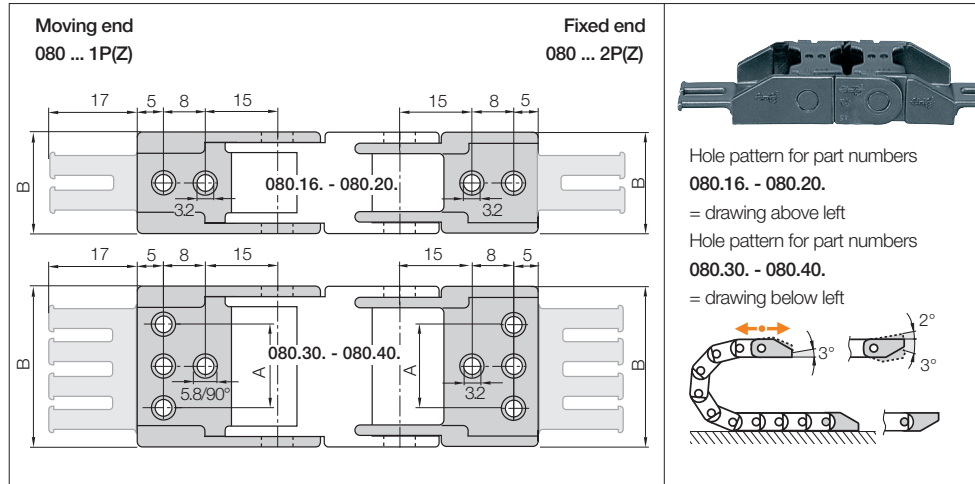
282 More information ▶ [www.igus.eu/B09](http://www.igus.eu/B09)



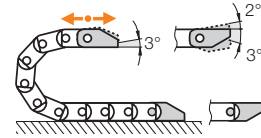
## E2 micro | Series B09 | Accessories

### Mounting brackets, polymer one-piece | Locking

B09

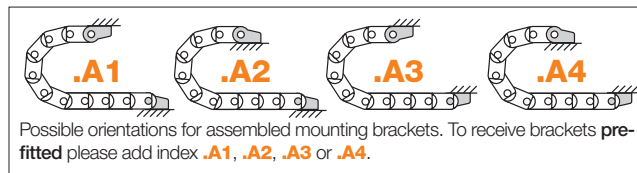


Hole pattern for part numbers  
**080.16. - 080.20.**  
= drawing above left  
Hole pattern for part numbers  
**080.30. - 080.40.**  
= drawing below left



Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
16. ▶	080.16. 12PZ	080.16. 12P	-	24.2	2
20. ▶	080.20. 12PZ	080.20. 12P	-	28.2	2
30. ▶	080.30. 12PZ	080.30. 12P	22	38.2	3
40. ▶	080.40. 12PZ	080.40. 12P	32	48.2	4

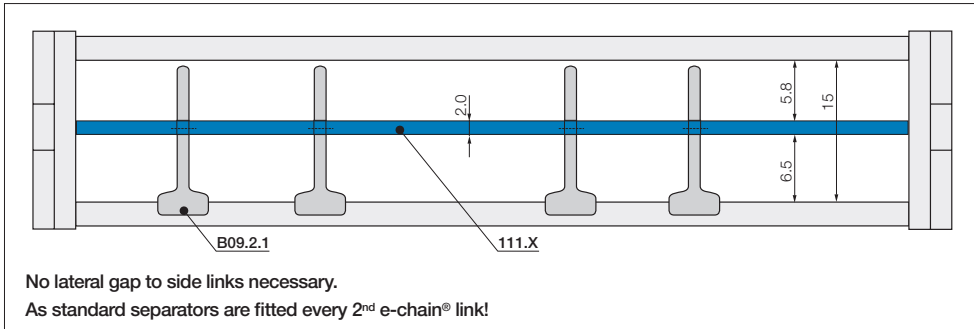
Material mounting bracket - igumid G, temperature: -40° up to +120°C, VDE 0304 IIC UL94-HB



**080.40.12PZ.A1** Order example  
.A... to indicate option with brackets pre-fitted  
With integrated strain relief tiewrap plates  
Full set  
Series

## E2 micro | Series B09 | Accessories

### Interior separation



		<b>Slotted separator</b> unassembled <b>B09.2</b> assembled <b>B09.2.1</b>
--	--	--

**Slotted separator**  
 For easy vertical separation. The slot allows basic vertical/horizontal shelving arrangements.

		<b>Full-width shelf for e-chains®</b> unassembled <b>110.X</b> assembled <b>111.X</b>
--	--	---

**Full-width shelf**  
 This option is for applications with many small cables with similar diameters. For full width separation.

Full-width shelves Width = X [mm]	X [mm] unassembled		X [mm] assembled		X [mm] unassembled		X [mm] assembled		
		010	110.10	111.10	020	110.20	111.20	050	110.50
	013	110.13	111.13	030	110.30	111.30			
	016	110.16	111.16	040	110.40	111.40			

## E2 micro | Application example

B09



E2 micro e-chain® space-saving, zig-zag design in a mobile OP table



## e-chains® | Series 08 | One-piece, non-openable

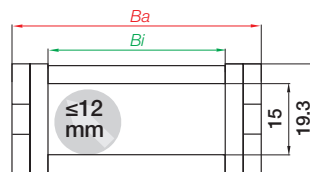
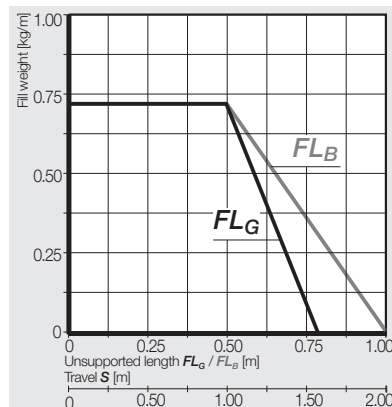
Part No.	<i>Bi</i>	<i>Ba</i>	<i>R</i> Available bend radii	Weight
e-chains®	[mm]	[mm]	[mm]	[kg/m]
08.10.R.0	10	18.2	025   028   038   048	≈ 0.21
08.13.R.0	13	21.2	025*   028   038   048*	≈ 0.23
08.16.R.0	16	24.2	025*   028   038   048	≈ 0.24
08.20.R.0	20	28.2	025   028   038   048	≈ 0.25
08.30.R.0	30	38.2	025*   028   038   048	≈ 0.28
08.40.R.0	40	48.2	025*   028   038   048	≈ 0.31
08.50.R.0	50	58.2	025*   028   038   048	≈ 0.37

\*Radius available upon request. Please consult igus® for delivery time.

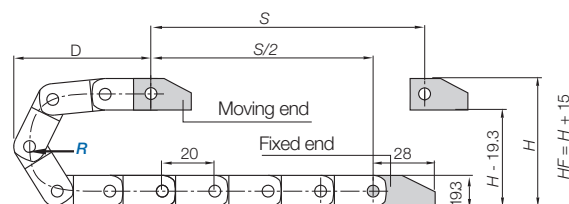
For new designs we recommend E2.1 system, series E2C.15 ▶ From page 330

Complete Part No. with required radius (*R*). Example: 08.50.038.0

## Installation dimensions



Inner height [mm]	15
Pitch [mm/link]	20
Links/m	50
corresponds to [mm]	1,000
e-chain® length $L_K = S/2 + K$	



<i>R</i>	025	028	038	048
<i>H</i>	69	75	95	115
<i>D</i>	65	68	78	88
<i>K</i>	120	130	160	195

The required clearance height:  $H_F = H + 15\text{mm}$  (with 0,3kg/m fill weight)

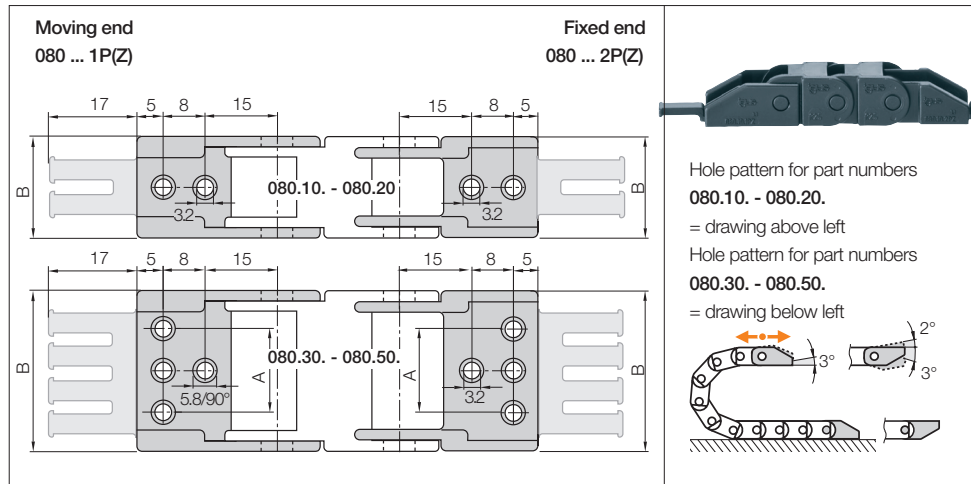
Radii for several widths available upon request (please see product range table above)

286 More information ▶ [www.igus.eu/08](http://www.igus.eu/08)



## E2 micro | Series 08 | Accessories

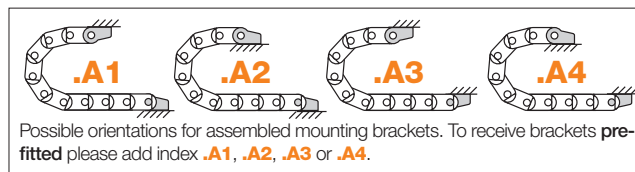
### Mounting brackets, polymer one-piece | Locking



Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
10. ▶	080.10. 12PZ	080.10. 12P	-	18.2	1
13. ▶	080.13. 12PZ**	080.13. 12P	-	21.2	-
16. ▶	080.16. 12PZ	080.16. 12P	-	24.2	2
20. ▶	080.20. 12PZ	080.20. 12P	-	28.2	2
30. ▶	080.30. 12PZ	080.30. 12P	22	38.2	3
40. ▶	080.40. 12PZ	080.40. 12P	32	48.2	4
50. ▶	080.50. 12PZ	080.50. 12P	42	58.2	5

\*\*Width available upon request. Please consult igus® for delivery time.

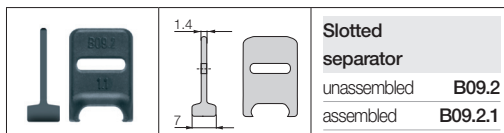
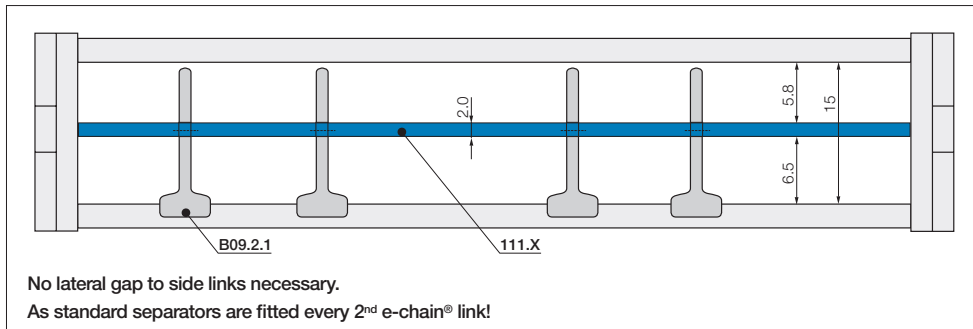
Material mounting bracket - igumid G, temperature: -40° up to +120°C, VDE 0304 IIC UL94-HB



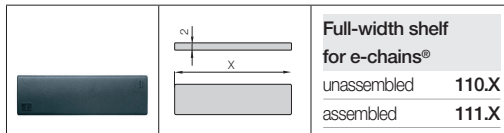
**080.50.12PZ.A1** Order example

- .A...** to indicate option with brackets pre-fitted
- With integrated strain relief tiewrap plates
- Full set
- Series

## Interior separation

**Slotted separator**

For easy vertical separation. The slot allows basic vertical/horizontal shelving arrangements.

**Full-width shelf**

This option is for applications with many small cables with similar diameters. For full width separation.

**Full-width shelves**  
Width = X [mm]

X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
010	110.10	111.10	020	110.20	111.20	050	110.50	111.50
013	110.13	111.13	030	110.30	111.30			
016	110.16	111.16	040	110.40	111.40			

## E2 micro | Application example

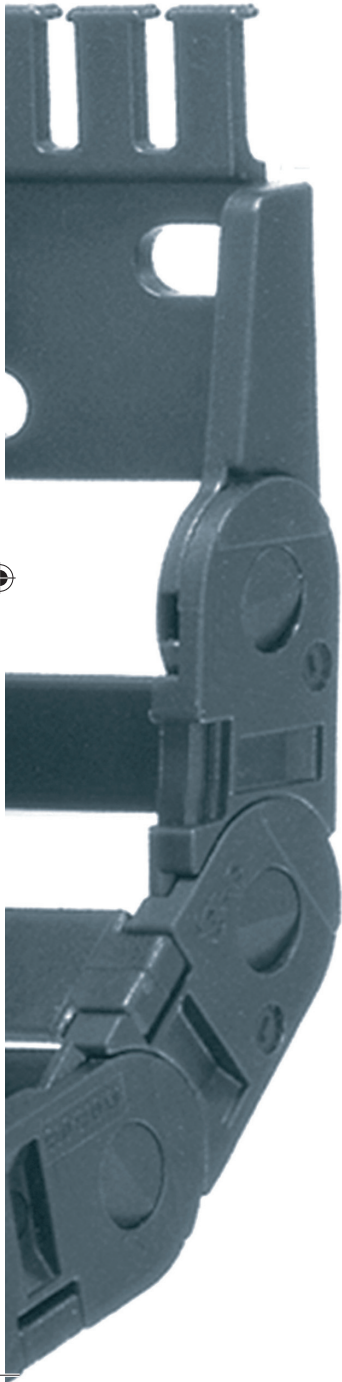
08



Series 03 - extremely small installation space on a paint-spraying machine



290



# E2 mini

## Small and medium sizes



### Advantages of the E2 mini series:

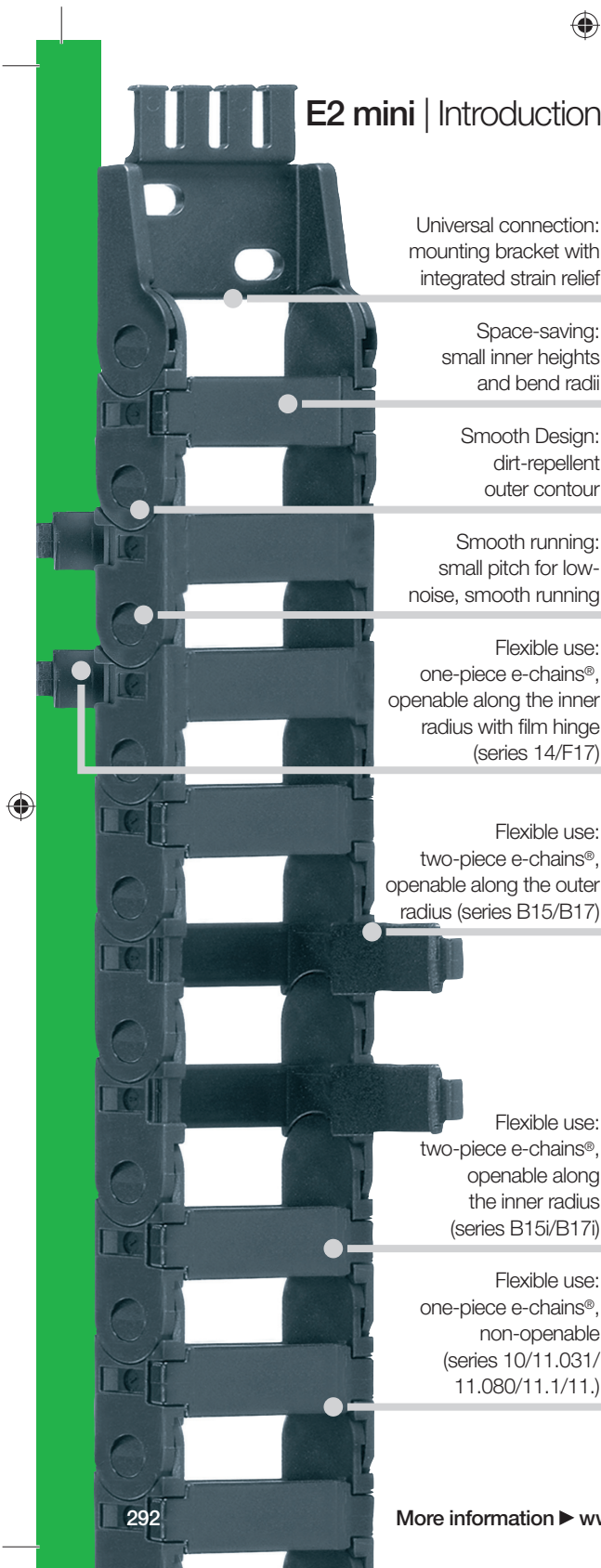
- If a small, but extremely strong e-chain® is required
- Quiet operation due to small pitch
- For highly dynamic applications
- Variety of options - E2 mini as non-openable or openable along the inner or outer radius



### When to use another e-chain® series:

- When openable crossbars are required
  - ▶ E2.1 micro, page 320
  - ▶ zipper, page 226
- When easy filling with connectorised cables is required
  - ▶ easy chain®, page 198





Universal connection:  
mounting bracket with  
integrated strain relief

Space-saving:  
small inner heights  
and bend radii

Smooth Design:  
dirt-repellent  
outer contour

Smooth running:  
small pitch for low-  
noise, smooth running

Flexible use:  
one-piece e-chains®,  
openable along the inner  
radius with film hinge  
(series 14/F17)

Flexible use:  
two-piece e-chains®,  
openable along the outer  
radius (series B15/B17)

Flexible use:  
two-piece e-chains®,  
openable along  
the inner radius  
(series B15i/B17i)

Flexible use:  
one-piece e-chains®,  
non-openable  
(series 10/11.031/  
11.080/11.1/11.)

292

More information ► [www.igus.eu/E2mini](http://www.igus.eu/E2mini)

## Small and medium sizes - E2 mini

E2 mini are small one- or two-piece e-chains®, recommended for highly dynamic applications. igus® also offers a range of accessories and fixation options. Upgrades to openable versions are available for many types. Different types are interchangeable and can also serve as replacements.

### Typical industries and applications

- Construction machinery ● Handling ● Furniture
- Packaging machines ● Textile machines ● Vehicle applications ● Woodworking machines
- Glass machines ● Automation ● General machinery, etc.



UL94-V2 classification - for series 14 and F17 (UL94-V0 upon request)



Electrically conductive ESD e-chains® upon request

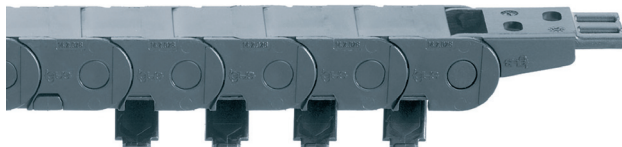
## E2 mini | Selection table

Series	Inner height <i>hi</i> [mm]	Inner width <i>Bi</i> [mm]	Outer width <i>Ba</i> [mm]	Outer height <i>ha</i> [mm]	Bend radius <i>R</i> [mm]	Unsupported length ≤ [m]	Page
--------	--------------------------------	-------------------------------	-------------------------------	--------------------------------	------------------------------	--------------------------	------



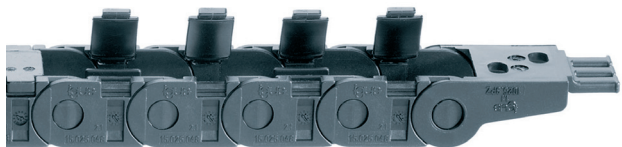
**E2 mini - one-piece e-chains®**  
non-openable

10	18	15 - 100	26 - 113	23	028 - 180	1.20	296
11.031	23	31	41.2	28	045 - 070	≈1.35	300
11.080	28	80	93	33.4	038 - 065	1.50	302
11.1/11.2	41	15 - 25	25.5 - 35.5	46	040 - 100	≈1.35	304



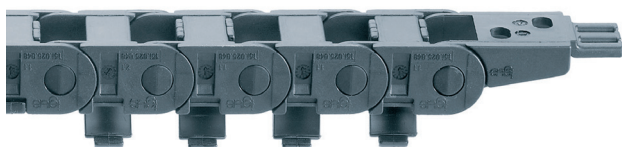
**E2 mini - one-piece e-chains®**  
openable along the inner radius with film hinge

14	20	15 - 50	26 - 61	25	028 - 125	0.65	306
F17	32	15	26	39	048	1.20	316



**E2 mini - two-piece e-chains®**  
openable along the outer radius

B15	17	15 - 100	26 - 113	23	038 - 180	1.20	308
B17	32	15 - 100	25.5 - 113	39	048 - 125*	1.00	312



**E2 mini - two-piece e-chains®**  
openable along the inner radius

B15i	17	15 - 100	26 - 113	23	038 - 180	1.20	308
B17i	32	25 - 63	35.5 - 76	39	048 - 125*	1.00	312

\*Radii for several widths available upon request (please see product range table).



Available from stock. Ready to ship in 24 - 48hrs.\*

\*The delivery times indicated correspond to the average time until the ordered goods are dispatched.


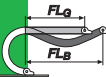


**igus** 3D CAD, service life calculation, configurators and more ► [www.igus.eu/E2mini](http://www.igus.eu/E2mini)

293







## E2 mini | Technical data | Overview

### Technical data

	Speed gliding / acceleration gliding	$\leq 3$ [m/s] / $\leq 10$ [m/s <sup>2</sup> ]
	Speed $FL_G$ / acceleration $FL_G$	$\leq 20$ [m/s] / $\leq 200$ [m/s <sup>2</sup> ]
	Speed $FL_B$ / acceleration $FL_B$	$\leq 3$ [m/s] / $\leq 6$ [m/s <sup>2</sup> ]
	Material - permitted temperature °C, igumid G	-40°C / +120°C
	Material - permitted temperature °C, igumid NB (only Series 14)	-40°C / +80°C
	Material lower part - permitted temperature °C, igumid G (only Series B15/B15i, B17/B17i, F17)	-40°C / +120°C
	Material crossbar - permitted temperature °C, igumid NB (only Series B15/B15i, B17/B17i, F17)	-40°C / +80°C
	Flammability class	<b>igumid G = VDE 0304 IIC UL94-HB / igumid NB = VDE 0304 IIC UL94-V2</b>

■  $FL_G$  = unsupported with straight upper run ■  $FL_B$  = unsupported with permitted sag

### Installation types, maximum travels









Series	 Unsupported	 Vertical hanging	 Vertical standing	 Side mounted unsupported	 Rotary	 Zig-zag
10	$\leq 2.40$ m	upon request	upon request	upon request	with rework	upon request
11.031	$\leq 2.70$ m	upon request	upon request	upon request	—	upon request
11.080	$\leq 3.00$ m	upon request	upon request	upon request	—	upon request
11.1/11.2	$\leq 2.70$ m	upon request	upon request	upon request	with rework	upon request
14	$\leq 1.30$ m	upon request	upon request	upon request	with rework	upon request
B15i / B15	$\leq 2.40$ m	upon request	upon request	upon request	with rework	upon request
B17i / B17	$\leq 2.00$ m	upon request	upon request	upon request	with rework	upon request
F17	$\leq 2.40$ m	upon request	upon request	upon request	with rework	upon request

294 More information ► [www.igus.eu/E2mini](http://www.igus.eu/E2mini)

**igus**


## E2 mini | Options and order keys

### Options with order keys | Examples based on series B15

 <b>Standard</b>	<i>NC version - (No Camber) without pretension</i>	<i>Reverse Bend Radius (RBR) for circular movements</i>	<i>Unsupported lengths +25% possible</i>	<i>ESD - electrically conductive material</i>
<b>Part No. Standard</b>	<b>Part No. NC version</b>	<b>Part No. RBR</b>	<b>Part No. XXL material</b>	<b>Part No. igumid ESD</b>
				
 <b>B15.025.R.0</b>	<b>B15.025.R.0.NC</b>	<b>B15.025.R1/R2.0</b>	<b>B15.025.R.0.XXL</b>	<b>B15.025.R.0.ESD</b>
 <b>Ready to ship*</b> in 24 - 48 hrs.	<b>Delivery time*</b> 2-5 business days	<b>Delivery time*</b> several series from stock	<b>Delivery time*</b> 5 business days	<b>Delivery time*</b> 10 business days

\*The delivery times indicated correspond to the average time until the ordered goods are dispatched.




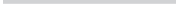
### Order example | Order key and colour examples | Examples based on series B15

 **Order example for complete e-chain® (1.0m), colour black, with mounting brackets and interior separation:**








<b>e-chain® (1.0m)</b>	Please indicate e-chain® length or number of links: 1.0m or 33 links	<b>B15.025.038.0</b>
<b>+ Mounting brackets</b>	1 set (with tiwrap plates)	<b>1025.34PZ</b>
<b>Interior separation</b>	with 2 separators assembled every 2 <sup>nd</sup> link	<b>2 x 154</b>
<b>Order text:</b>	<b>1 m B15.025.038.0 + 1025.34PZ + 2 x 154</b>	



#### Order key

openable along the outer radius	<b>B15.025.038.0</b>
openable along the inner radius	<b>B15i.025.038.0</b>
Series / Type	
Width index (depends on B)	
Bend radius R	
Colour index (standard black)	

#### Order index for colour options

Colour	Order index	Colour	Order index
 <b>Black</b>	Standard .0	 <b>Orange</b>	Special colour .2
 <b>Silver-grey</b>	Special colour .31	 <b>Yellow</b>	Special colour .4
 <b>White</b>	Special colour .1	 <b>Light grey</b>	Special colour .14
 <b>Grey-white</b>	Special colour .1S		

**Black e-chains® available from stock.**  
Above special colours upon request.



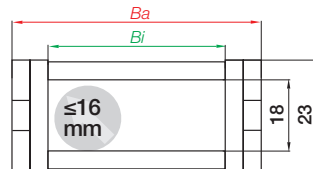
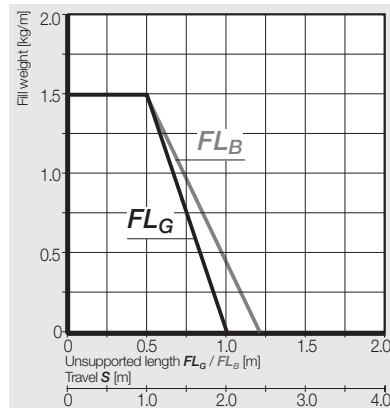
## e-chains® | Series 10 | One-piece, non-openable

Part No.	<i>Bi</i>	<i>Ba</i>	<i>R</i> Available bend radii	Weight
e-chains®	[mm]	[mm]	[mm]	[kg/m]
10.015. <i>R</i> .0	15	26	028   038   048   075   100   110   125   145   180	≈ 0.35
10.025. <i>R</i> .0	25	36	028   038   048   075   100   110   125   145   180	≈ 0.40
10.038. <i>R</i> .0	38	49	028   038   048   075   100   110   125   145   180	≈ 0.46
10.050. <i>R</i> .0	50	61	028   038   048   075   100   110   125   145   180	≈ 0.52
10.5 . <i>R</i> .0	63	76	028   038   048   075   100   110   125   145   180	≈ 0.63
10.6 . <i>R</i> .0	80	94	028   038   048   075   100   110   125   145   180	≈ 0.70
10.7 . <i>R</i> .0	100	113	028   038   048   075   100   110   125   145   180	≈ 0.76

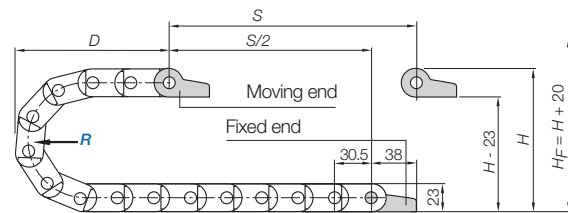
Before using this series on long travels please consult igus®.

Complete Part No. with required radius (*R*). Example: 10.025.038.0

## Installation dimensions



Inner height [mm]	18
Pitch [mm/link]	30.5
Links/m	33
corresponds to [mm]	1,006.5
e-chain® length	$L_K = S/2 + K$



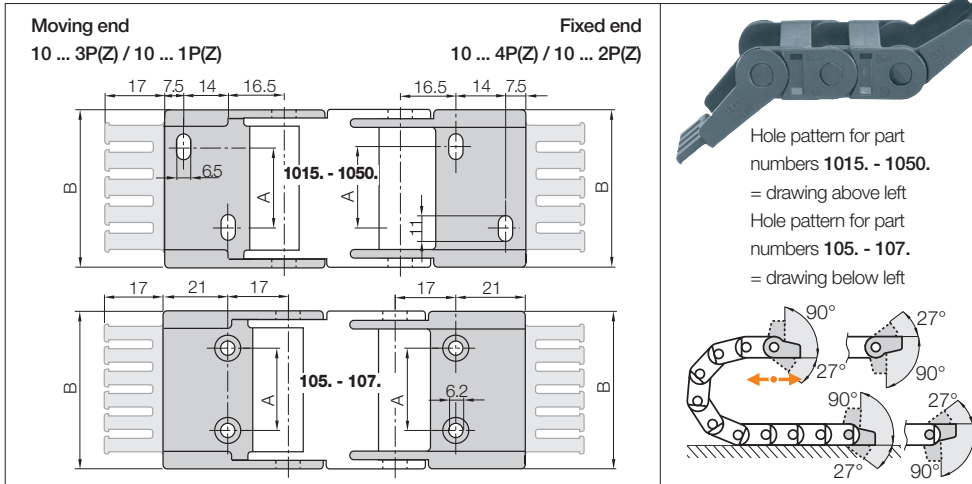
<i>R</i>	028	038	048	075	100	110	125	145	180
<i>H</i>	79	99	119	173	223	243	273	313	383
<i>D</i>	85	95	105	132	157	167	182	202	237
<i>K</i>	150	185	215	300	380	410	455	520	630

The required clearance height:  $H_F = H + 20\text{mm}$  (with 0.5kg/m fill weight)

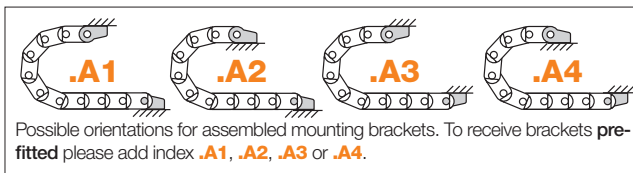
296 More information ► [www.igus.eu/10](http://www.igus.eu/10)

# E2 mini | Series 10 | Accessories

Mounting brackets, polymer one-piece | Pivoting | Locking

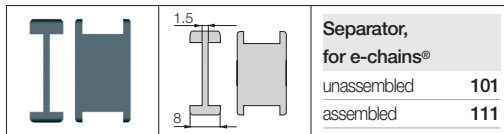
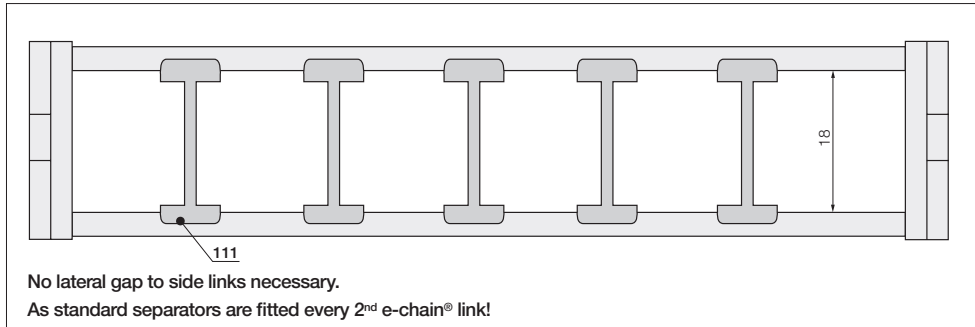


Width index	Part No. full set pivoting	Part No. full set locking		A [mm]	B [mm]	Number of teeth	
		with tiewrap plates	without tiewrap plate				with tiewrap plates
015. ▶	1015.34PZ	1015.34P	1015.12PZ	1015.12P	–	25.5	2
025. ▶	1025.34PZ	1025.34P	1025.12PZ	1025.12P	10	35.5	3
038. ▶	1038.34PZ	1038.34P	1038.12PZ	1038.12P	23	48.5	4
050. ▶	1050.34PZ	1050.34P	1050.12PZ	1050.12P	35	60.5	5
5. ▶	105. 34PZ	105. 34P	105. 12PZ	105. 12P	48	75.0	6
6. ▶	106. 34PZ	106. 34P	106. 12PZ	106. 12P	65	92.0	8
7. ▶	107. 34PZ	107. 34P	107. 12PZ	107. 12P	85	112	10



**1025.34PZ.A1** Order example  
 .A... to indicate option with brackets pre-fitted  
 With integrated strain relief tiewrap plates  
 Full set  
 Series

## Interior separation



## Separator

For easy vertical separation in e-chains®. Separators can be arranged in any position in the e-chain® cross-section. Interior separation is not possible for series 10.015.R.0.

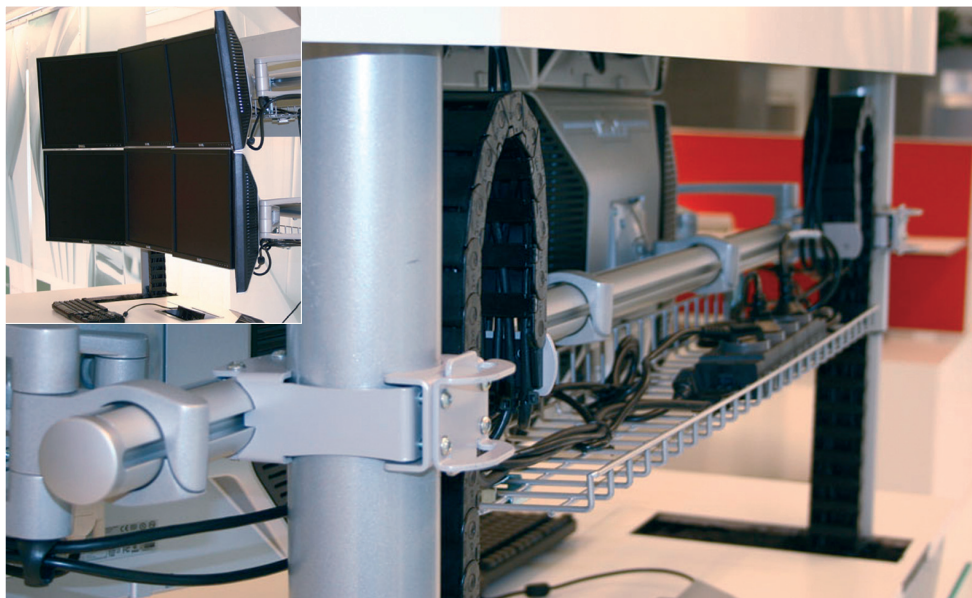
## Options | With moulded-in vertical separation

Part No. e-chains®	<i>B<sub>i</sub></i> [mm]	<i>B<sub>a</sub></i> [mm]	<i>R</i> Available bend radii [mm]	Chamber design	A [mm]	B [mm]	Weight [kg/m]
10.038.R.0.S	38	49	075		10	15	≈ 0.79
10.050.R.0.S	50	61	075		13	21	≈ 0.85

Complete Part No. with required radius (*R*). Example: 10.038.075.0.S or 10.050.075.0.S

## E2 mini | Application example

10



Cost-effective cable guidance with E2 mini in a moving monitor application

11.031

## E2 mini | Series 11.031 | Product range

Large inner height, asymmetric design

23

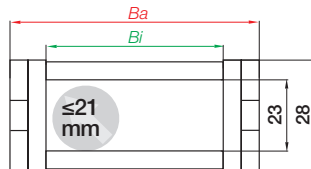
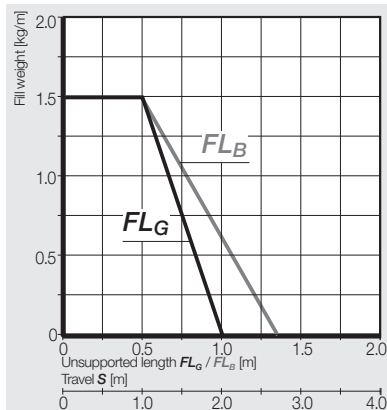


### e-chains® | Series 11.031 | One-piece, non-openable

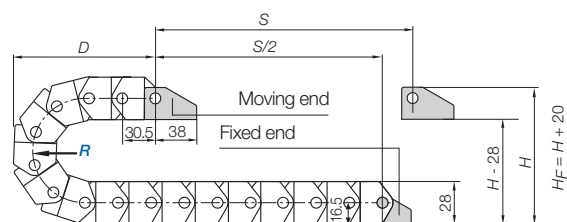
Part No.	<i>Bi</i>	<i>Ba</i>	<i>R</i> Available bend radii	Weight
e-chains®	[mm]	[mm]	[mm]	[kg/m]
11.031.R.0	31	41.2	045   070	≈ 0.43

Complete Part No. with required radius (*R*). Example: 11.031.045.0

### Installation dimensions



Inner height [mm]	23
Pitch [mm/link]	30.5
Links/m	33
corresponds to [mm]	1,006.5
e-chain® length $L_K = S/2 + K$	



<i>R</i>	045	070
<i>H</i>	123	173
<i>D</i>	107	132
<i>K</i>	205	285

The required clearance height:  $H_F = H + 20\text{mm}$  (with 0.5kg/m fill weight)

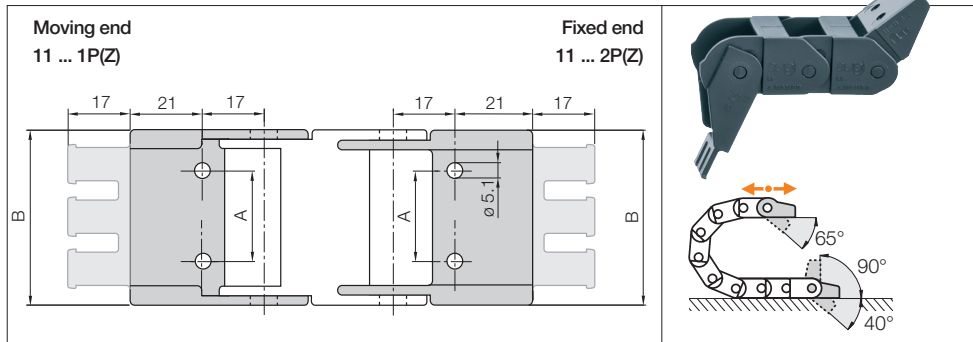
300 More information ► [www.igus.eu/11.031](http://www.igus.eu/11.031)



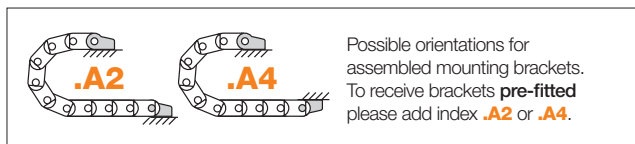
## E2 mini | Series 11.031 | Accessories

Mounting brackets, polymer one-piece | Pivoting

11.031



Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
031. ▶	11.031.12PZ	11.031.12P	16	42	3



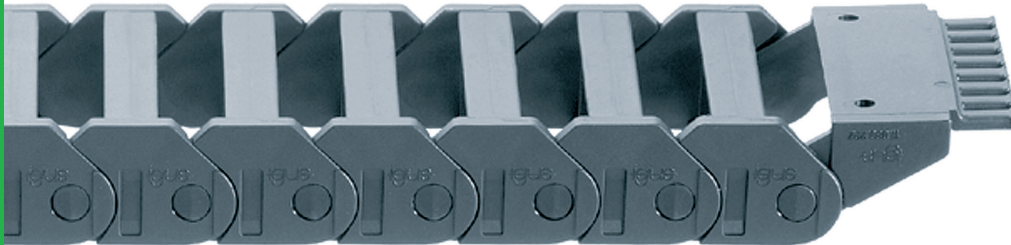
**11.031.12PZ.A2** Order example  
 .A...to indicate option with brackets pre-fitted  
 With integrated strain relief tiewrap plates  
 Full set  
 Series

11.080

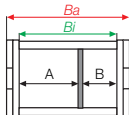
## E2 mini | Series 11.080 | Product range

Large inner height, asymmetric design

28

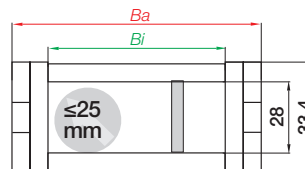
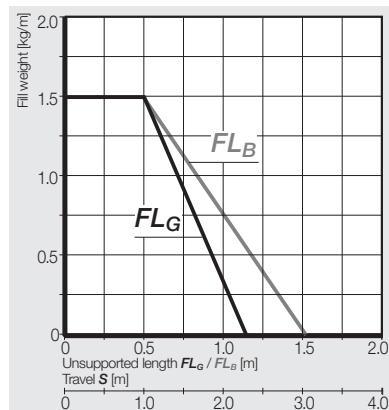


e-chains® | Series 11.080 | Non-openable. With moulded-in vertical separation

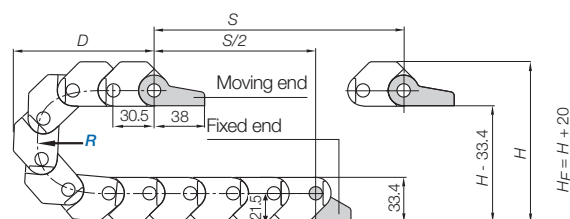
Part No.	<i>Bi</i>	<i>Ba</i>	<i>R</i> Available bend radii	Chamber design	A	B	Weight
e-chains®	[mm]	[mm]	[mm]		[mm]	[mm]	[kg/m]
11.080. <i>R</i> .0	80	93	038   065		46	32	≈ 0.73

Complete Part No. with required radius (*R*). Example: 11.080.038.0

## Installation dimensions



Inner height [mm]	28
Pitch [mm/link]	30.5
Links/m	33
corresponds to [mm]	1,006.5
e-chain® length $L_K = S/2 + K$	



<i>R</i>	038	065
<i>H</i>	119	173
<i>D</i>	105	132
<i>K</i>	185	270

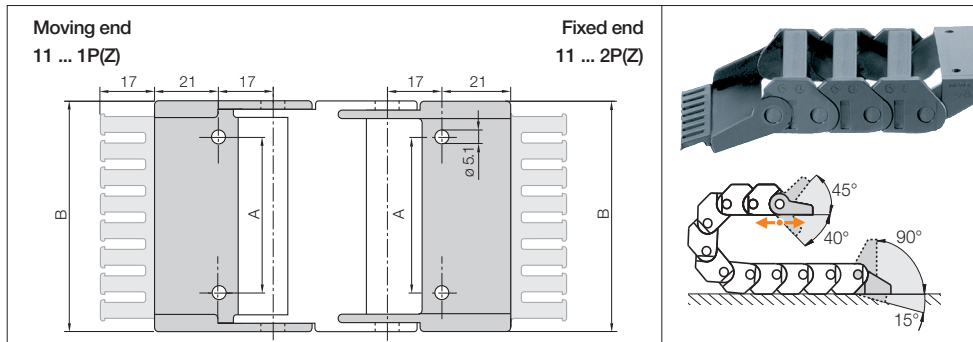
The required clearance height:  $H_F = H + 20\text{mm}$  (with 0.5kg/m fill weight)302 More information ► [www.igus.eu/11.080](http://www.igus.eu/11.080)

igus

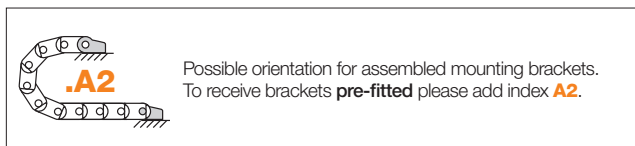
# E2 mini | Series 11.080 | Accessories

## Mounting brackets, polymer one-piece | Pivoting

11.080



Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
080. ▶	11.080.12PZ	11.080.12P	65	93	8



**11.080.12PZ.A2** Order example  
 .A...to indicate option with brackets pre-fitted  
 With integrated strain relief tiewrap plates  
 Full set  
 Series

11.1  
11.2

## E2 mini | Series 11.1 11.2 | Product range

Very large inner height, small outer width, asymmetric design

41

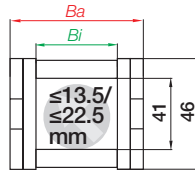
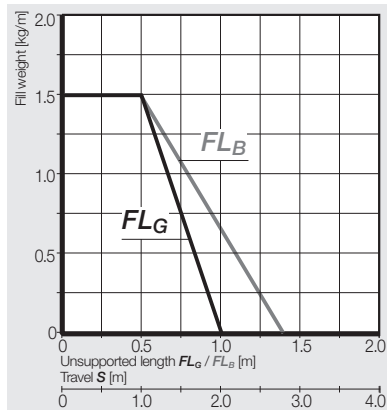


### e-chains® | Series 11.1 11.2 | One-piece, non-openable

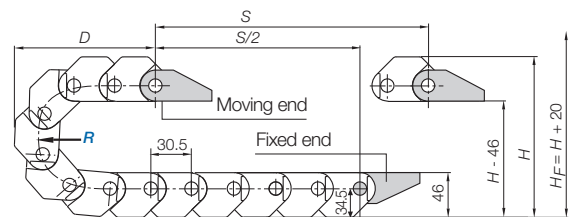
Part No.	<i>Bi</i>	<i>Ba</i>	<i>R</i> Available bend radii	Weight
e-chains®	[mm]	[mm]	[mm]	[kg/m]
11.1 . <i>R</i> .0	15	25.5	040   063   075   100	≈ 0.50
11.2 . <i>R</i> .0	25	35.5	040   063   075   100	≈ 0.53

Complete Part No. with required radius (*R*). Example: 11.1.040.0

### Installation dimensions



Inner height [mm]	41
Pitch [mm/link]	30.5
Links/m	33
corresponds to [mm]	1,006.5
e-chain® length	$L_K = S/2 + K$



<i>R</i>	040	063	075	100
<i>H</i>	149	195	219	269
<i>D</i>	120	143	155	180
<i>K</i>	190	260	300	380

The required clearance height:  $H_F = H + 20\text{mm}$  (with 0.5kg/m fill weight)

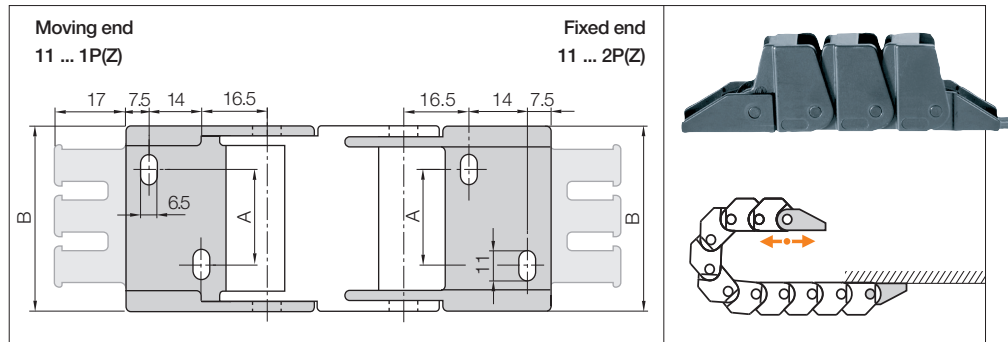
304 More information ► [www.igus.eu/11.1](http://www.igus.eu/11.1)



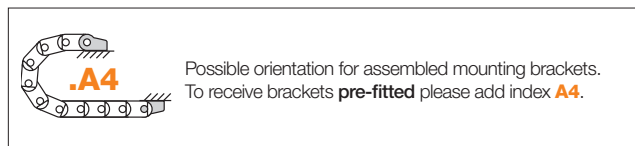
## E2 mini | Series 11.1 11.2 | Accessories

### Mounting brackets, polymer one-piece | Locking

11.1  
11.2



Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
1. ▶	101.12PZ	101.12P	–	26	2
2. ▶	102.12PZ	102.12P	10	36	3

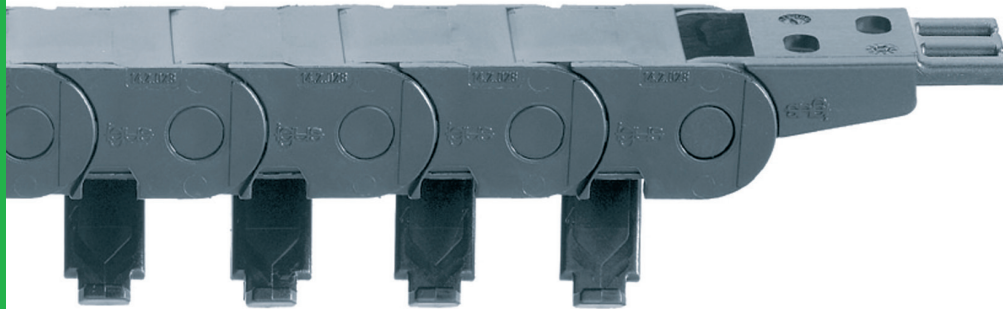


**101.12PZ.A4** Order example  
 .A...to indicate option with brackets pre-fitted  
 With integrated strain relief tiewrap plates  
 Full set  
 Series

## E2 mini | Series 14 | Product range

Openable along the inner radius, enclosed outer radius

20

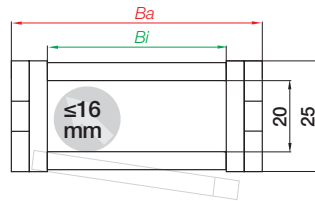
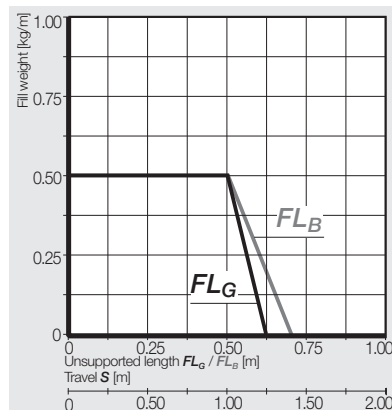


e-chains® | Series 14 | Openable along the inner radius from one side with film hinge

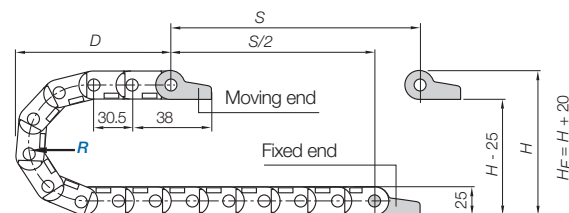
Part No.	<i>Bi</i>	<i>Ba</i>	<i>R</i> Available bend radii	Weight
e-chains®	[mm]	[mm]	[mm]	[kg/m]
14.1 . <i>R</i> .0	15	26	028   038   048   075   100   125	≈ 0.31
14.2 . <i>R</i> .0	25	36	028   038   048   075   100   125	≈ 0.32
14.3 . <i>R</i> .0	38	49	028   038   048   075   100   125	≈ 0.40
14.4 . <i>R</i> .0	50	61	028   038   048   075   100   125	≈ 0.41

Complete Part No. with required radius (*R*). Example: 14.2.038.0

## Installation dimensions



Inner height [mm]	20
Pitch [mm/link]	30.5
Links/m	33
corresponds to [mm]	1,006.5
e-chain® length $L_K = S/2 + K$	



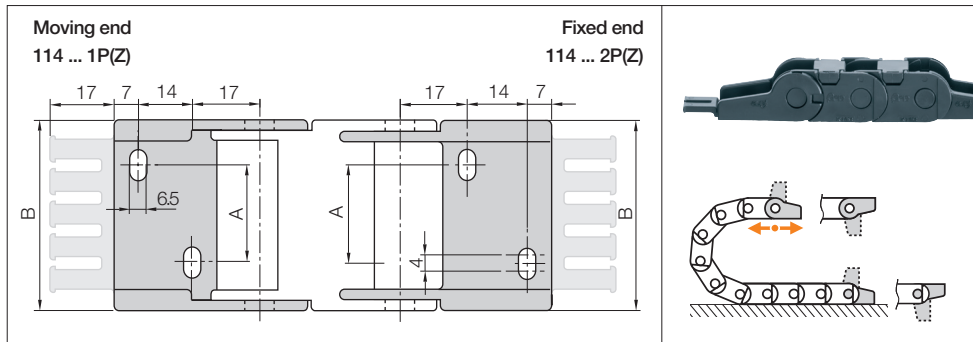
<i>R</i>	028	038	048	075	100	125
<i>H</i>	81	101	121	175	225	275
<i>D</i>	86	96	106	133	158	183
<i>K</i>	150	185	215	300	380	455


The required clearance height:  $H_F = H + 20\text{mm}$  (with 0.5kg/m fill weight)306 More information ► [www.igus.eu/14](http://www.igus.eu/14)

igus

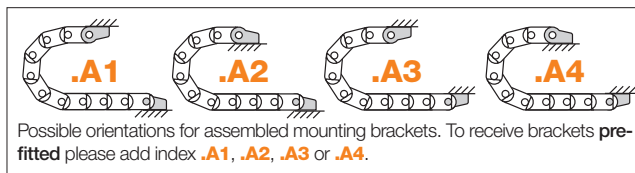
## E2 mini | Series 14 | Accessories

### Mounting brackets, polymer one-piece | Locking



Width index	 Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
1. ▶	114.1.12PZ	114.1.12P	–	26.3	2
2. ▶	114.2.12PZ	114.2.12P	10	36.3	3
3. ▶	114.3.12PZ	114.3.12P	23	49.3	4
4. ▶	114.4.12PZ	114.4.12P	35	61.3	5

Material mounting bracket - igumid G, temperature: -40° up to +120°C, VDE 0304 IIC UL94-HB



114.2.12PZ.**A1**

#### Order example

**.A...** to indicate option with brackets pre-fitted

With integrated strain relief tiewrap plates

Full set

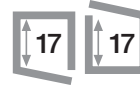
Series



B15i  
B15

## E2 mini | Series B15i B15 | Product range

Openable along the inner or outer radius



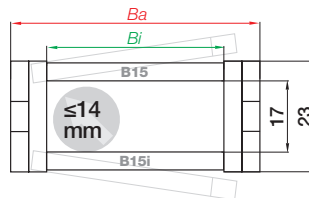
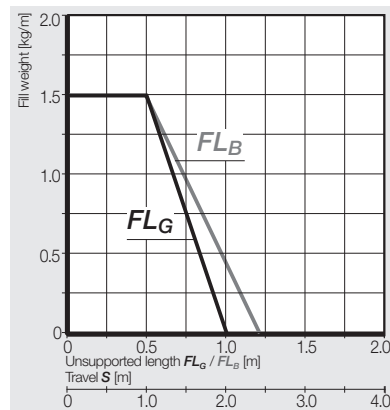
e-chains® | Series B15i | Openable along the inner radius, from one side  
 e-chains® | Series B15 | Openable along the outer radius, from one side

Part No. e-chains® openable along the inner radius	Part No. e-chains® openable along the outer radius	Bi [mm]	Ba [mm]	R Available bend radii [mm]	Weight [kg/m]
B15i.015.R.0	B15.015.R.0	15	26	038   048   075   100   110   125   145   180	≈ 0.35
B15i.025.R.0	B15.025.R.0	25	36	038   048   075   100   110   125   145   180	≈ 0.40
B15i.038.R.0	B15.038.R.0	38	49	038   048   075   100   110   125   145   180	≈ 0.46
B15i.050.R.0	B15.050.R.0	50	61	038   048   075   100   110   125   145   180	≈ 0.52
B15i.5.R.0	B15.5.R.0	63	76	038   048   075   100   110   125   145   180	≈ 0.63
B15i.6.R.0	B15.6.R.0	80	94	038   048   075   100   110   125   145   180	≈ 0.70
B15i.7.R.0	B15.7.R.0	100	113	038   048   075   100   110   125   145   180	≈ 0.76

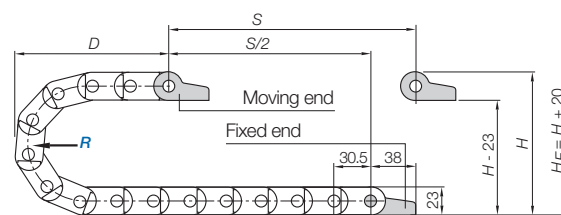
Before using this series on long travels please consult igus®.

Complete Part No. with required radius (R). Example: B15.025.038.0

### Installation dimensions



Inner height [mm]	17
Pitch [mm/link]	30.5
Links/m	33
corresponds to [mm]	1,006.5
e-chain® length $L_K = S/2 + K$	



R	038	048	075	100	110	125	145	180
H	99	119	173	223	243	273	313	383
D	95	105	132	157	167	182	202	237
K	185	215	300	380	410	455	520	630

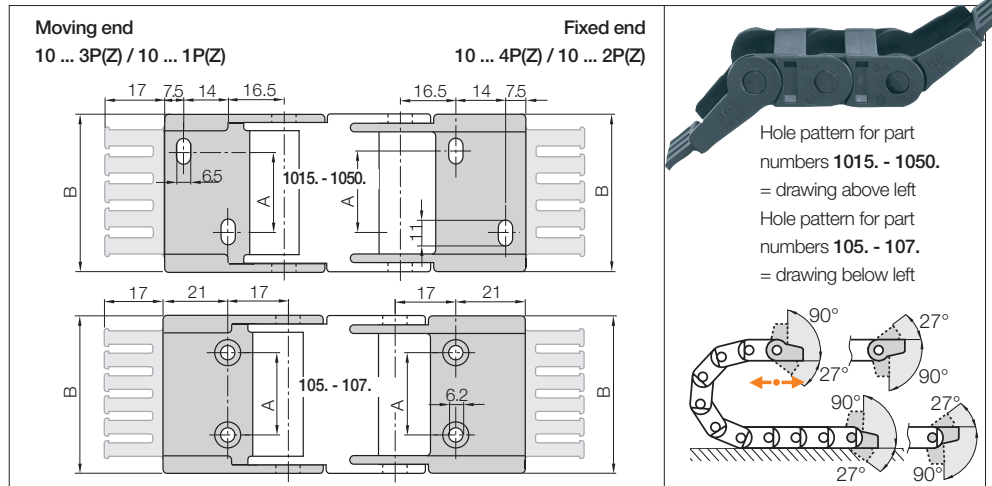
The required clearance height:  $H_F = H + 20$ mm (with 0.5kg/m fill weight)

308 More information ► [www.igus.eu/B15i](http://www.igus.eu/B15i) ► [www.igus.eu/B15](http://www.igus.eu/B15)

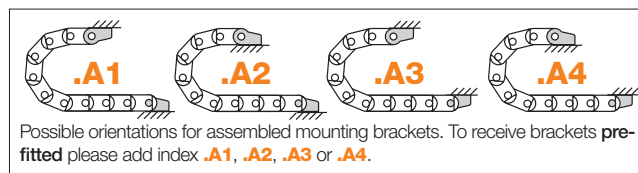


# E2 mini | Series B15i B15 | Accessories

Mounting brackets, polymer one-piece | Pivoting | Locking



Width index	Part No. full set <b>pivoting</b>		Part No. full set <b>locking</b>		A [mm]	B [mm]	Number of teeth
	with tiewrap plates	without tiewrap plate	with tiewrap plates	without tiewrap plate			
015. ▶	1015.34PZ	1015.34P	1015.12PZ	1015.12P	–	25.5	2
025. ▶	1025.34PZ	1025.34P	1025.12PZ	1025.12P	10	35.5	3
038. ▶	1038.34PZ	1038.34P	1038.12PZ	1038.12P	23	48.5	4
050. ▶	1050.34PZ	1050.34P	1050.12PZ	1050.12P	35	60.5	5
5. ▶	105. 34PZ	105. 34P	105. 12PZ	105. 12P	48	75.0	6
6. ▶	106. 34PZ	106. 34P	106. 12PZ	106. 12P	65	92.0	8
7. ▶	107. 34PZ	107. 34P	107. 12PZ	107. 12P	85	112.0	10

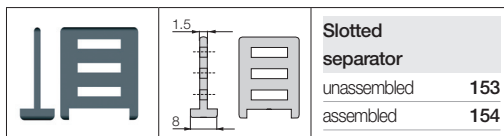
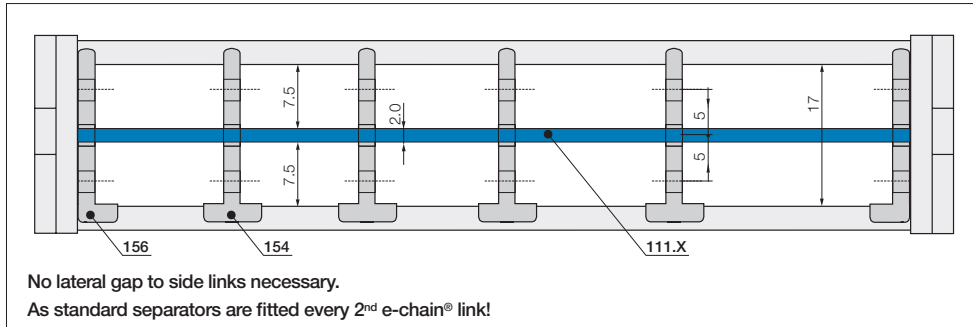


**1025.34PZ.A1** Order example  
 .A... to indicate option with brackets pre-fitted  
 With integrated strain relief tiewrap plates  
 Full set  
 Series

B15i  
B15

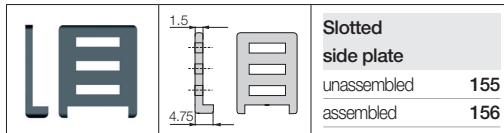
## E2 mini | Series B15i B15 | Accessories

### Interior separation



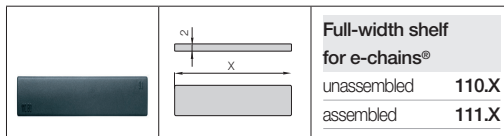
#### Slotted separator

For easy vertical separation. The slot allows basic vertical/horizontal shelving arrangements.



#### Slotted side plate

Allows modular shelving right up to the side links. No clearance required!



#### Full-width shelf

This option is for applications with many small cables with similar diameters. For full width separation.

#### Full-width shelves

Width = X (mm)

X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
015	110.15	111.15	050	110.50	111.50	100	110.100	111.100
025	110.25	111.25	063	110.63	111.63			
038	110.38	111.38	080	110.80	111.80			

310 More information ► [www.igus.eu/B15i](http://www.igus.eu/B15i) ► [www.igus.eu/B15](http://www.igus.eu/B15)

igus

## E2 mini | Series B15i·B15 | Application example

B15i  
B15



E2 mini is a space-saving, reliable cable guide, here supplying power to lift doors

B17i  
B17

## E2 mini | Series B17i B17 | Product range

Openable along the inner or outer radius



e-chains® | Series B17i | Openable along the inner radius, from one side  
 e-chains® | Series B17 | Openable along the outer radius, from one side

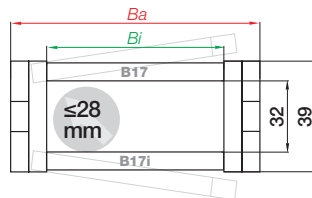
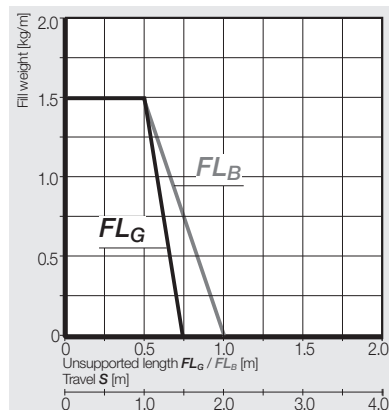
Part No. e-chains® openable along the inner radius	Part No. e-chains® openable along the outer radius	Bi [mm]	Ba [mm]	R Available bend radii [mm]	Weight [kg/m]
B17i.1 .R.0**	B17.1 .R.0	15	25.5	048 <sup>1)</sup>   063   075   100   125	≈ 0.52
B17i.2 .R.0	B17.2 .R.0	25	35.5	048   063 <sup>1)</sup>   075 <sup>1)</sup>   100 <sup>1)</sup>   125 <sup>1)</sup>	≈ 0.59
B17i.3 .R.0	B17.3 .R.0	38	48.5	048   063   075   100   125	≈ 0.65
B17i.4 .R.0	B17.4 .R.0	50	60.5	048   063 <sup>1)</sup>   075   100 <sup>1)</sup>   125	≈ 0.70
B17i.5 .R.0	B17.5 .R.0	63	76	048   063   075   100   125	≈ 0.83
B17i.6 .R.0**	B17.6 .R.0	80	93	048   063   075   100   125	≈ 0.92
B17i.7 .R.0**	B17.7 .R.0	100	113	048 <sup>1)</sup>   063   075   100   125	≈ 1.06

\*\*Width available upon request. Please consult igus® for delivery time.

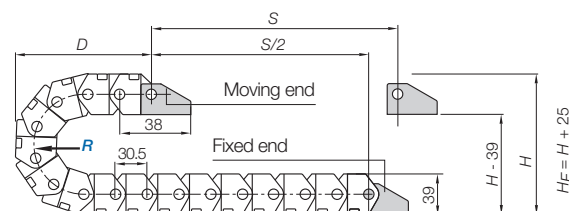
1) Radius **only** for series B17. For series B17i available upon request. Delivery time upon request

Complete Part No. with required radius (R). Example: **B17.2.048.0**

### Installation dimensions



Inner height [mm]	32
Pitch [mm/link]	30.5
Links/m	33
corresponds to [mm]	1,006.5
e-chain® length $L_K = S/2 + K$	



R	048	063	075	100	125
H	135	165	189	239	289
D	113	128	140	165	190
K	215	260	300	380	455

The required clearance height:  $H_F = H + 25\text{mm}$  (with 1.5kg/m fill weight)

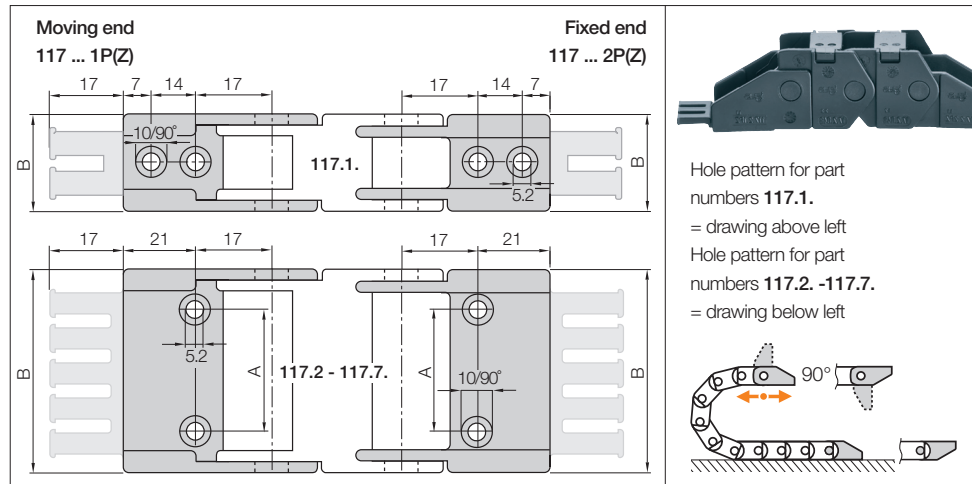
Radii for several widths available upon request (please see product range table above).

312 More information ► [www.igus.eu/B17i](http://www.igus.eu/B17i) ► [www.igus.eu/B17](http://www.igus.eu/B17)



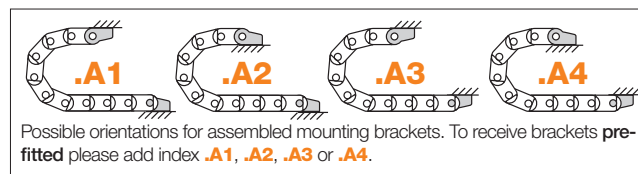
## E2 mini | Series B17i B17 | Accessories

Mounting brackets, polymer one-piece | Locking



Hole pattern for part numbers **117.1.**  
= drawing above left  
Hole pattern for part numbers **117.2. -117.7.**  
= drawing below left

Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
1. ▶	117.1.12PZ	117.1.12P	-	25.5	2
2. ▶	117.2.12PZ	117.2.12P	12	35.5	3
3. ▶	117.3.12PZ	117.3.12P	25	48.5	4
4. ▶	117.4.12PZ	117.4.12P	37	60.5	5
5. ▶	117.5.12PZ	117.5.12P	48	76.0	6
6. ▶	117.6.12PZ	117.6.12P	65	93.0	8
7. ▶	117.7.12PZ	117.7.12P	85	113	10

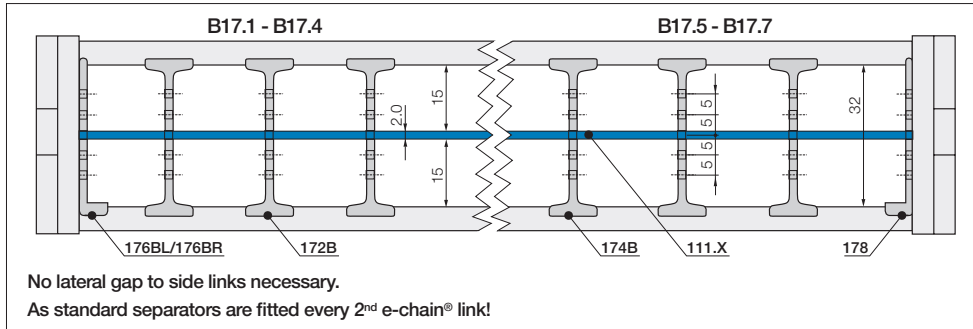


**117.2.12PZ.A1** Order example  
 .A... to indicate option with brackets pre-fitted  
 With integrated strain relief tiewrap plates  
 Full set  
 Series

B17i  
B17

## E2 mini | Series B17i B17 | Accessories

### Interior separation



		<b>Slotted separator</b> unassembled <b>171B</b> assembled <b>172B</b>
--	--	--

#### For width index B17.1 up to B17.4 Slotted separator

For easy vertical separation. The slot allows basic vertical/horizontal shelving arrangements.

		<b>Slotted side plate, links</b> unassembled <b>175BL</b> assembled <b>176BL</b>
--	--	--

#### Slotted side plate, left

Allows modular shelving right up to the side links. No clearance required!

		<b>Slotted side plate, right</b> unassembled <b>175BR</b> assembled <b>176BR</b>
--	--	--

#### Slotted side plate, right

Allows modular shelving right up to the side links. No clearance required!

		<b>Slotted separator</b> unassembled <b>173B</b> assembled <b>174B</b>
--	--	--

#### For width index B17.5 up to B17.7 Slotted separator

For easy vertical separation. The slot allows basic vertical/horizontal shelving arrangements.

		<b>Slotted side plate</b> unassembled <b>177</b> assembled <b>178</b>
--	--	---

#### Slotted side plate

Allows modular shelving right up to the side links. No clearance required!

		<b>Full-width shelf for e-chains®</b> unassembled <b>110.X</b> assembled <b>111.X</b>
--	--	---

#### For all widths Full-width shelf

This option is for applications with many small cables with similar diameters. For full width separation.

Full-width shelves Width = X [mm]	X [mm] unassembled assembled		X [mm] unassembled assembled		X [mm] unassembled assembled			
	015	110.15	111.15	050	110.50	111.50	100	110.100
025	110.25	111.25	063	110.63	111.63			
038	110.38	111.38	080	110.80	111.80			

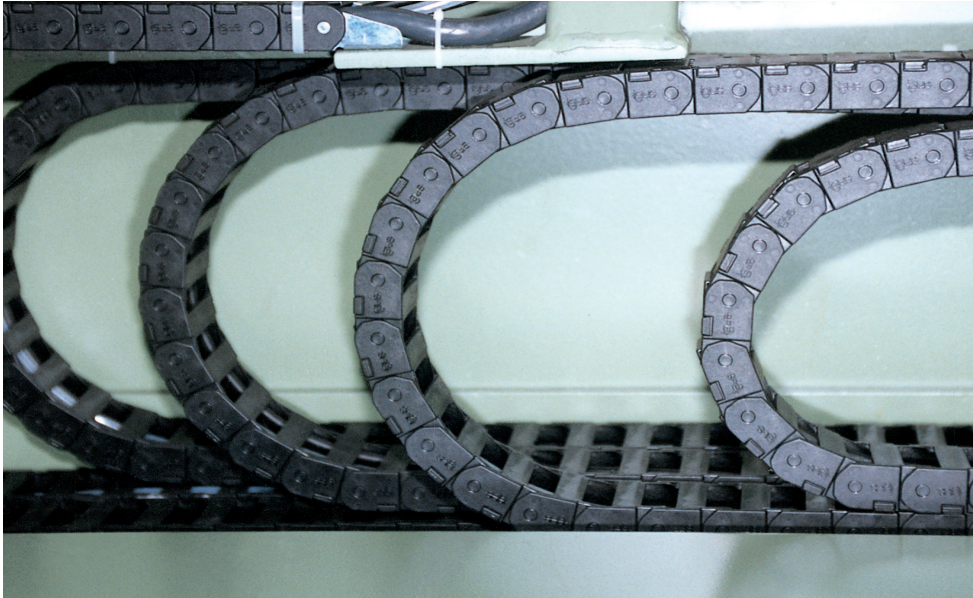
314 More information ► [www.igus.eu/B17i](http://www.igus.eu/B17i) ► [www.igus.eu/B17](http://www.igus.eu/B17)





## E2 mini | Application example

B17i  
B17



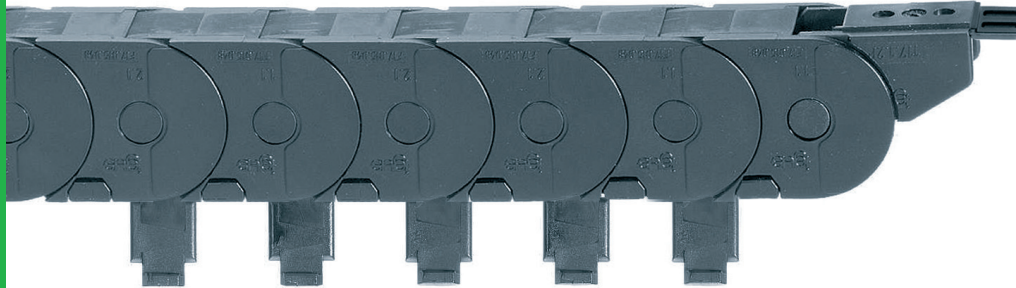
Five E2 mini chains installed above one another and side by side. The bend radii are exactly matched to each other



F17

## E2 mini | Series F17 | Product range

Large inner height, small outer width, enclosed outer radius



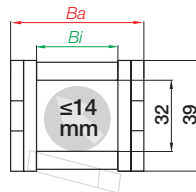
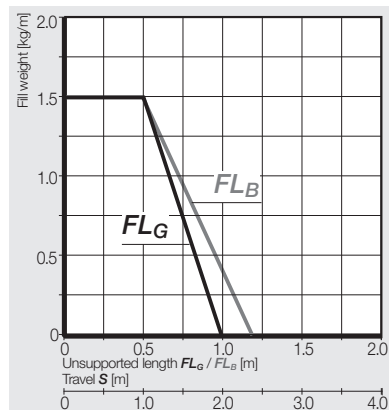
e-chains® | Series F17 | Openable along the inner radius from one side with film hinge

Part No.	Bi	Ba	R Available bend radii	Weight
e-chains®	[mm]	[mm]	[mm]	[kg/m]
F17.015.R.0	15	26	048   063*   075   100*   125*	≈ 0.52

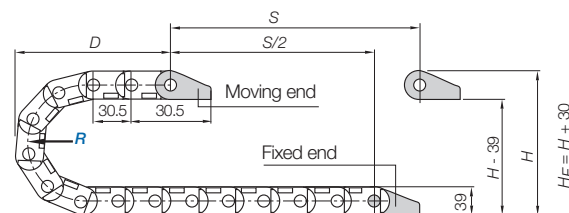
\*Radius available upon request. Please consult igus® for delivery time.

Complete Part No. with required radius (R). Example: F17.015.048.0

### Installation dimensions



Inner height [mm]	32
Pitch [mm/link]	30.5
Links/m	33
corresponds to [mm]	1,006.5
e-chain® length $L_K = S/2 + K$	



R	048	063*	075	100*	125*
H	135	165	189	239	289
D	113	128	140	165	190
K	215	260	300	380	455

The required clearance height:  $H_F = H + 30\text{mm}$  (with 0.5kg/m fill weight)

\*Radius available upon request. Please consult igus® for delivery time.

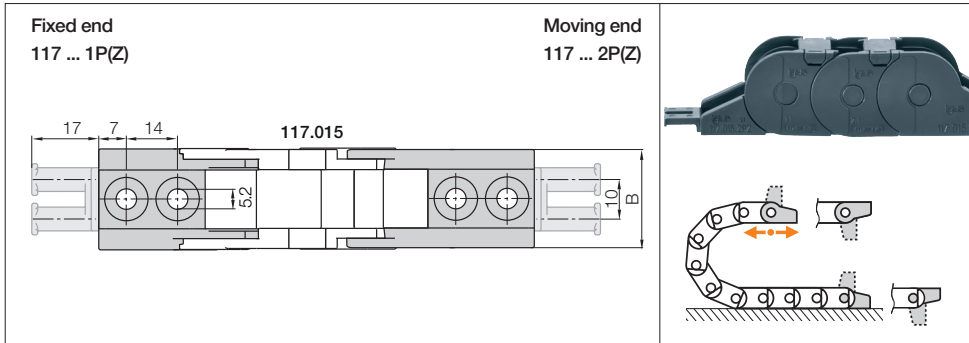
316 More information ► [www.igus.eu/F17](http://www.igus.eu/F17)



# E2 mini | Series F17 | Accessories

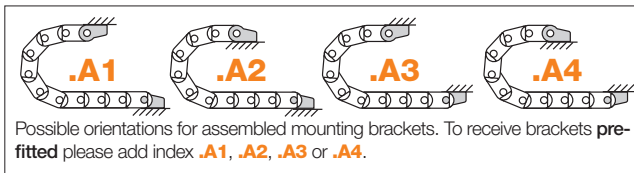
## Mounting brackets, polymer one-piece | Locking

F17



Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
015. ▶	117.015.12PZ	117.015.12P	-	27.7	2

Material mounting bracket - igumid G, temperature: -40° up to +120°C, VDE 0304 IIC UL94-HB



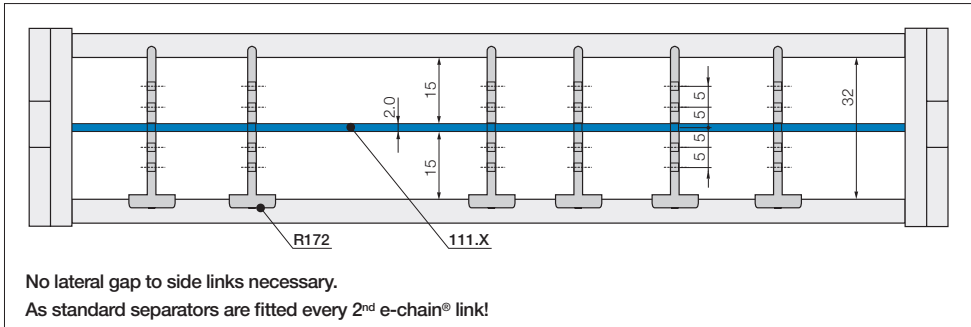
**117.015.12PZ.A1** Order example

- .A... to indicate option with brackets pre-fitted
- With integrated strain relief tiewrap plates
- Full set
- Series

F17

## E2 mini | Series F17 | Accessories

### Interior separation



		<b>Slotted separator</b> unassembled <b>R171</b> assembled <b>R172</b>
--	--	--

#### Slotted separator

Vertical separation in e-tubes. The slot allows basic vertical/horizontal shelving arrangements.

		<b>Full-width shelf for e-chains®</b> unassembled <b>110.X</b> assembled <b>111.X</b>
--	--	---

#### Full-width shelf

This option is for applications with many small cables with similar diameters. For full width separation.

#### Full-width shelves

Width = X [mm]

X [mm]	unassembled	assembled
015	110.15	111.15

318 More information ► [www.igus.eu/F17](http://www.igus.eu/F17)

igus

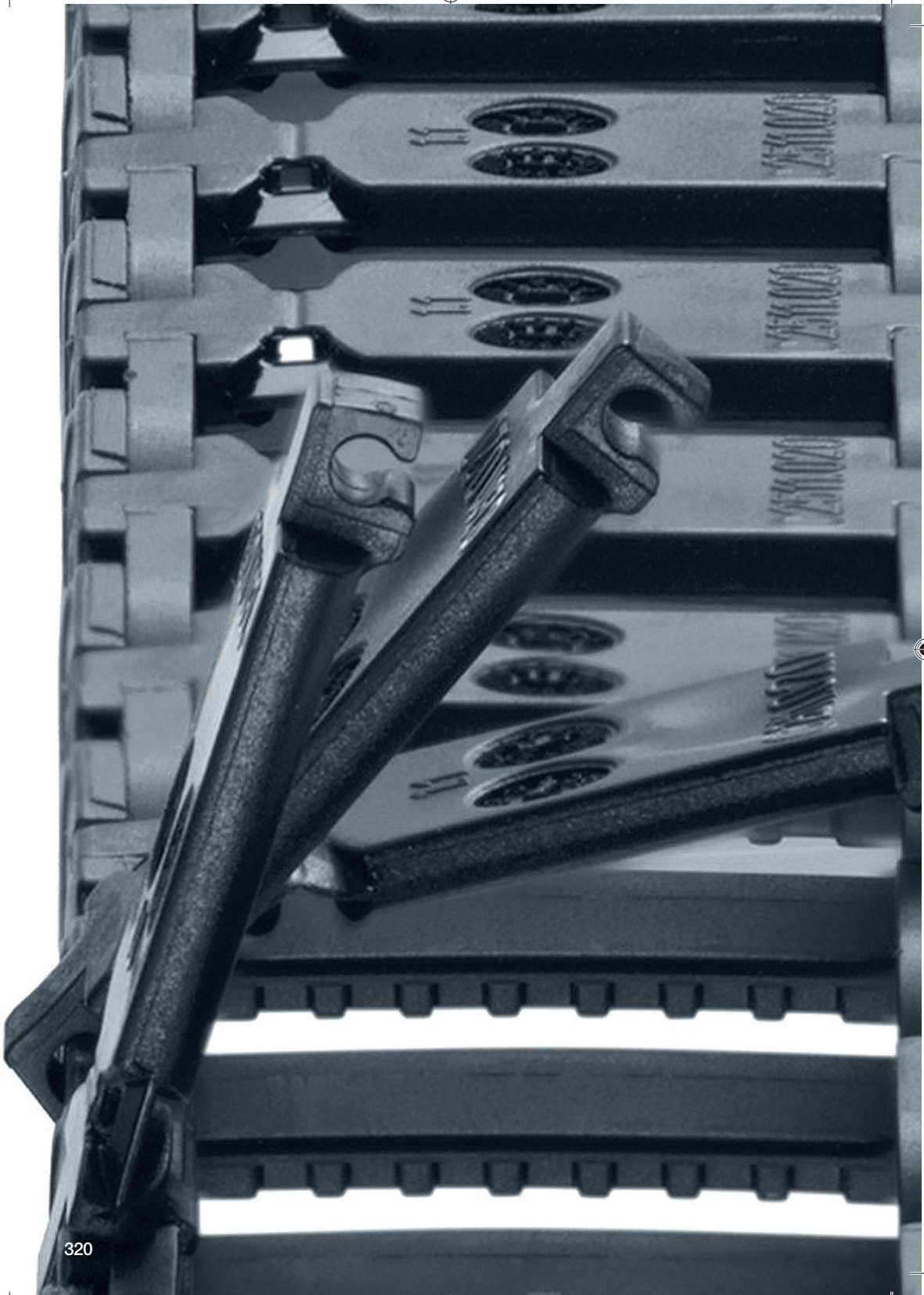
## E2 mini | Application example

F17

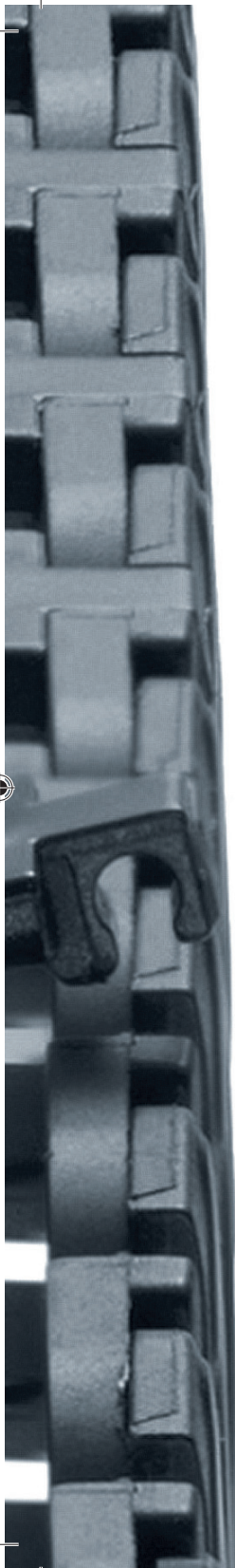


E2 mini e-chain® with Reverse Bend Radius *RBR*





320



# E2.1 micro

## the new "small" E2 micro standard



### Advantage of the E2.1 micro series:

- More useable installation space\*
- 25% more unsupported length\*
- 100% more fill weight\*
- 10% weight saving\*
- Chain opener for opening long sections of chain quickly.  
Provided free of charge with the first delivery
- Cable friendly interior separation range
- Openable from both sides (left or right)
- Available in 2 sizes, from stock
- Version with electrically conductive ESD material, tested with over 10 million cycles for the most demanding applications

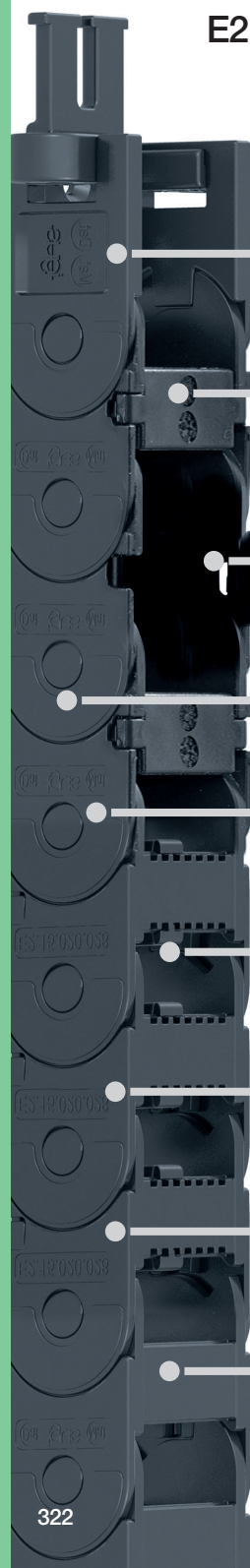
\* in comparison to equivalent igus® series



### When to use another e-chain® series:

- When a quicker fitting of cables is required
  - ▶ **easy chain®**, page 308
- When an e-chain® that is suitable for cleanrooms is needed
  - ▶ **E3 system**, page 732
- When an openable e-chain® is not necessary
  - ▶ **E2 micro**, page 260

## E2.1 micro | Introduction | Advantages



Universal connection:  
mounting bracket with strain  
relief and quickflange option

Cable-friendly:  
very smooth contours ensure  
the longest cable life

Variety of options:  
non-openable or  
openable along the  
inner or outer radius

Strong:  
large, assembly-  
friendly pins

Cost-effective:  
lightweight and low-priced

Lockable interior separation:  
recommended for side-  
mounted applications

Quiet operation:  
integrated brake  
reduces noise

Smooth Design:  
dirt-repellent outer contour

Tough:  
square stop-dog system  
for large fill weights

322

More information ► [www.igus.eu/E2.1micro](http://www.igus.eu/E2.1micro)

## The new "small" E2 micro standard - E2.1

E2.1 micro e-chains® are very small, one- and two-piece e-chains® with low weight, making them ideal for highly dynamic applications. E2.1 micro e-chains® are optimal for smallest installation spaces, and are available in many versions. They feature a strong stop-dog system for up to 25% longer unsupported travels as well as 100% higher fill weights (compared to similar igus® types). They are lightweight, robust and easy to open. An e-chain® opener is included in order to open the e-chain® in one go. Many accessories like interior separation and fixation options are also available.

### Typical industries and applications

● Models (micro e-chain®) ● Automatic doors  
● Vehicles ● Measuring machines ● Electronic  
engineering ● Handling ● Pick und place  
robots ● General machinery, etc.



UL94-V0 classification  
upon request



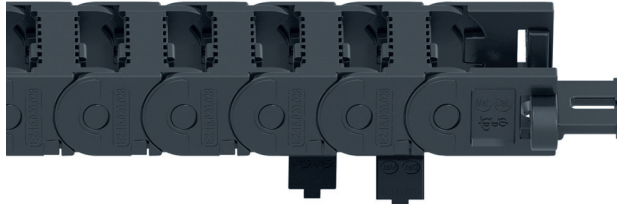
Electrically conductive ESD e-chains® -  
several series available from stock




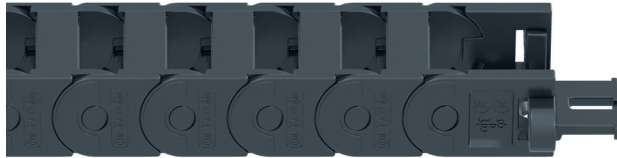
For a quick and easy opening, an e-chain® opener  
is included with every first order of openable E2.1  
micro from igus®



## E2.1 micro | Selection table

Series	Inner height <i>hi</i> [mm]	Inner width <i>Bi</i> [mm]	Outer width <i>Ba</i> [mm]	Outer height <i>ha</i> [mm]	Bend radius <i>R</i> [mm]	Unsupported length ≤ [m]	Page
 <p><b>E2.1 micro - two-piece design</b> openable along the inner radius</p>							
E2i.10	10.1	6 - 50	13.4 - 57.4	15	018 - 038	0.75	326
E2i.15	14.4	10 - 50	17.8 - 57.8	19.3	028 - 075	1.30	330

 <p><b>E2.1 micro - two-piece design</b> openable along the outer radius</p>							
E2.10	10.1	6 - 50	13.4 - 57.4	15	018 - 038	0.75	326
E2.15	14.4	10 - 50	17.8 - 57.8	19.3	028 - 075	1.30	330

 <p><b>E2.1 micro - one-piece design</b> non-openable</p>							
E2C.10	10.6	6 - 50	13.4 - 57.4	15	018 - 038	0.75	326
E2C.15	14.9	10 - 50	17.8 - 57.8	19.3	028 - 075	1.30	330




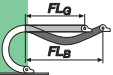


Available from stock. Ready to ship in 24 - 48hrs.\*

\*The delivery times indicated correspond to the average time until the ordered goods are dispatched.









## E2.1 micro | Technical data | Overview

### Technical data

	Speed gliding / acceleration gliding	$\leq 10$ [m/s] / $\leq 50$ [m/s <sup>2</sup> ]
	Speed $FL_G$ / acceleration $FL_G$	$\leq 20$ [m/s] / $\leq 200$ [m/s <sup>2</sup> ]
	Speed $FL_B$ / acceleration $FL_B$	$\leq 3$ [m/s] / $\leq 6$ [m/s <sup>2</sup> ]
	Material - permitted temperature °C, igumid G	-40°C / +120°C
	Flammability class, igumid G	VDE 0304 IIC UL94-HB

$FL_G$  = unsupported with straight upper run  $FL_B$  = unsupported with permitted sag

### Installation types, maximum travels

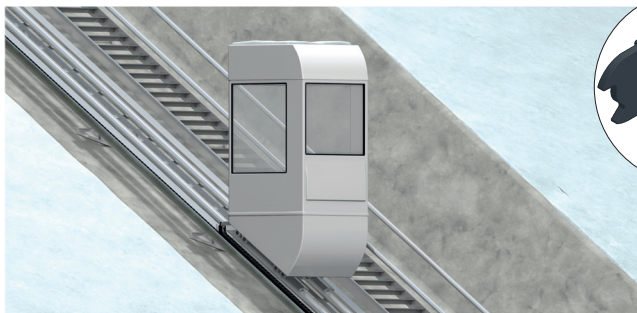
Series	 Unsupported	 Vertical hanging	 Vertical standing	 Side mounted unsupported	 Rotary	 Zig-zag
E2i.10/E2.10/E2C.10	$\leq 1.50$ m	upon request	upon request	upon request	with rework	upon request
E2i.15/E2.15/E2C.15	$\leq 2.60$ m	upon request	upon request	upon request	with rework	upon request

### E2.1 micro special | ice-chain **New**

#### ice-chain - outdoors at low temperatures

- In order to prevent e-chains® from freezing at very low temperature in an inclined lift, two "nubs" have been injection-moulded onto the e-chain®.
- Closed link for maximum holding strength
- High strength for large unsupported lengths

More information ► [www.igus.eu/icechain](http://www.igus.eu/icechain)









When the e-chain® rarely moves and temperatures are very low, injection-moulded nubs prevent the igus® ice-chain from freezing to the running surface

324 More information ► [www.igus.eu/E2.1micro](http://www.igus.eu/E2.1micro)

**igus**


## E2.1 micro | Options and order keys

### Options with order keys | Examples based on series E2.10

 <b>Standard</b>	<i>NC version - (No Camber) without pretension</i>	<i>Reverse Bend Radius (RBR) for circular movements</i>	<i>ESD - electrically conductive material</i>
<b>Part No. Standard</b>  <b>E2i.10.20.R.0</b> e-chain® openable along the inner radius	<b>Part No. NC version</b>  <b>E2i.10.20.R.0.NC</b> e-chain® openable along the inner radius	<b>Part No. RBR</b>  <b>E2i.10.20.R1/R2.0</b> e-chain® openable along the inner radius	<b>Part No. igumid ESD</b>  <b>E2i.10.20.R.0.ESD</b> e-chain® openable along the inner radius
<b>E2.10.20.R.0</b> e-chain® openable along the outer radius	<b>E2.10.20.R.0.NC</b> e-chain® openable along the outer radius	<b>E2.10.20.R1/R2.0</b> e-chain® openable along the outer radius	<b>E2.10.20.R.0.ESD</b> e-chain® openable along the outer radius
<b>E2C.10.20.R.0</b> One-piece, non-openable	<b>E2C.10.20.R.0.NC</b> One-piece, non-openable	<b>E2C.10.20.R1/R2.0</b> One-piece, non-openable	<b>E2C.10.20.R.0.ESD</b> One-piece, non-openable
 <b>Ready to ship* in 24 - 48 hrs.</b>	<b>Delivery time* 2-5 business days</b>	<b>Delivery time* several series from stock</b>	<b>Delivery time* several series from stock</b>





\*The delivery times indicated correspond to the average time until the ordered goods are dispatched.

### Order example | Order key and colour examples | Examples based on series E2.10








 **Order example for complete e-chain® (1.0m), colour black, with mounting brackets and interior separation:**

<b>e-chain® (1.0m)</b>	Please indicate e-chain® length or number of links: 1.0m or 50 links	<b>E2.10.20.18.0</b>
<b>+ Mounting brackets</b>	1 set (with tiwrap plates)	<b>E2.100.20.34PZ</b>
<b>Interior separation</b>	with 2 separators assembled every 2 <sup>nd</sup> link	<b>E2.10.2.1</b>
<b>Order text:</b>	<b>1 m E2.10.20.18.0 + E2.100.20.34PZ + 2 x E2.10.2.1</b>	

### Order key

Openable along the inner radius	<b>E2i. 10.20.18.0</b>
Openable along the outer radius	<b>E2. 10.20.18.0</b>
One-piece, non-openable	<b>E2C. 10.20.18.0</b>
Series / Type	
Width index (depends on B)	
Bend radius R	
Colour index (standard black)	

### Order index for colour options

Colour	Order index	Colour	Order index
 <b>Black</b>	Standard .0	 <b>Orange</b>	Special colour .2
 <b>Silver-grey</b>	Special colour .31	 <b>Yellow</b>	Special colour .4
 <b>White</b>	Special colour .1	 <b>Light grey</b>	Special colour .14
 <b>Grey-white</b>	Special colour .1S		

**Black e-chains® available from stock.**  
Above special colours upon request.

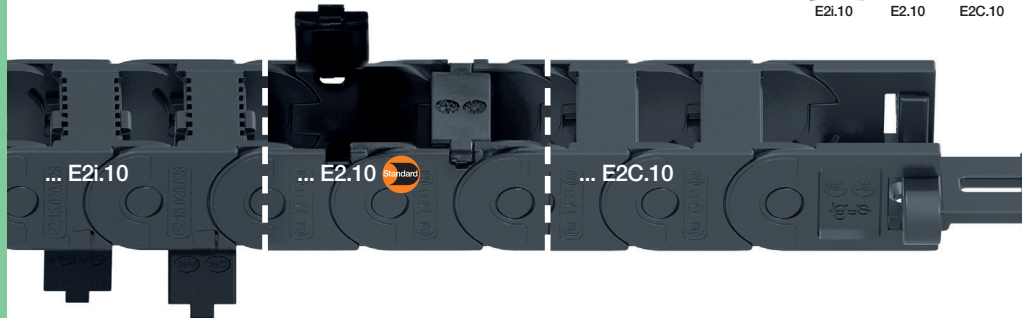
 3D CAD, service life calculation, configurators and more ► [www.igus.eu/E2.1micro](http://www.igus.eu/E2.1micro)




325

E2.10  
E2i.10  
E2C.10

## E2.1 micro | Series E2.10 | Product range

Next generation, strong, low noise, fast opening



-  e-chains® | Series E2i.10 | Openable along the inner radius, from both sides
-  e-chains® | Series E2.10 | Openable along the outer radius, from both sides
-  e-chains® | Series E2C.10 | One-piece, non-openable

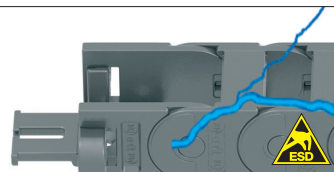
Part No. e-chains® openable along the inner radius	Part No. e-chains® openable along the outer radius	Part No. e-chains® one-piece, non- openable	<i>B<sub>i</sub></i> [mm]	<i>B<sub>a</sub></i> [mm]	<i>R</i> Available bend radii [mm]	E2i.10 [kg/m]	E2.10 [kg/m]	E2C.10 [kg/m]
E2i.10.06.R.0	E2.10.06.R.0	E2C.10.06.R.0	6	13.4	018   028   038	≈ 0.13	≈ 0.13	≈ 0.14
E2i.10.10.R.0	E2.10.10.R.0	E2C.10.10.R.0	10	17.4	018   028   038	≈ 0.14	≈ 0.14	≈ 0.14
E2i.10.16.R.0	E2.10.16.R.0	E2C.10.16.R.0 <sup>1)</sup>	16	23.4	018   028   038	≈ 0.16	≈ 0.16	≈ 0.16
E2i.10.20.R.0	E2.10.20.R.0	E2C.10.20.R.0 <sup>1)</sup>	20	27.4	018   028   038	≈ 0.17	≈ 0.17	≈ 0.17
E2i.10.30.R.0	E2.10.30.R.0	E2C.10.30.R.0 <sup>1)</sup>	30	37.4	018   028   038	≈ 0.19	≈ 0.19	≈ 0.20
E2i.10.40.R.0	E2.10.40.R.0	E2C.10.40.R.0	40	47.4	018   028   038	≈ 0.22	≈ 0.22	≈ 0.23
E2i.10.50.R.0	E2.10.50.R.0	E2C.10.50.R.0	50	57.4	018   028   038	≈ 0.25	≈ 0.25	≈ 0.25

1)  Available as ESD version from stock

Complete Part No. with required radius (*R*). Example: E2.10.20.038.0

### ESD - many sizes from stock

- Standardised product made from igumid ESD
  - ESD material tested with over 10 million cycles for the toughest requirements
  - Short delivery times including mounting brackets and interior separation; 24hrs, from stock
- More information ► [www.igus.eu/esd](http://www.igus.eu/esd)



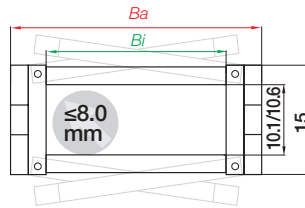
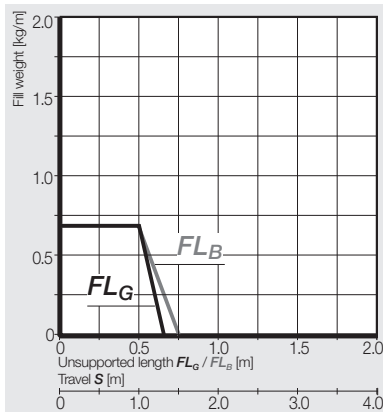
326 More information ► [www.igus.eu/E2i.10](http://www.igus.eu/E2i.10) ► [www.igus.eu/E2.10](http://www.igus.eu/E2.10) ► [www.igus.eu/E2C.10](http://www.igus.eu/E2C.10)



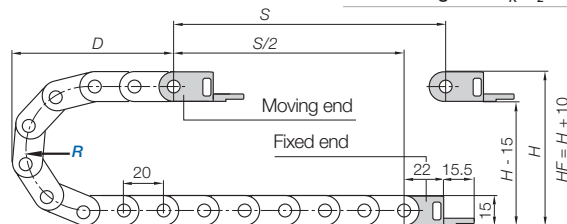
## E2.1 micro | Series E2.10 | Installation dimensions

Unsupported applications | Short travels

E2.10  
E2i.10  
E2C.10



E2i.10	Inner height [mm]	10.1
E2.10	Inner height [mm]	10.1
E2C.10	Inner height [mm]	10.6
	Pitch [mm/link]	20
	Links/m	50
	corresponds to [mm]	1,000
	e-chain® length	$L_K = S/2 + K$

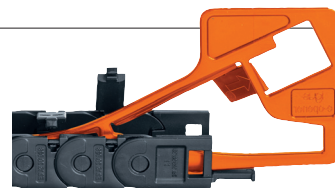


<b>R</b>	<b>018</b>	<b>028</b>	<b>038</b>
<b>H</b>	51	71	91
<b>D</b>	56	66	76
<b>K</b>	100	130	160

The required clearance height:  $H_f = H + 10\text{mm}$  (with 0.2kg/m fill weight)

### Reduce assembly time - E2.1 micro e-chain® opener

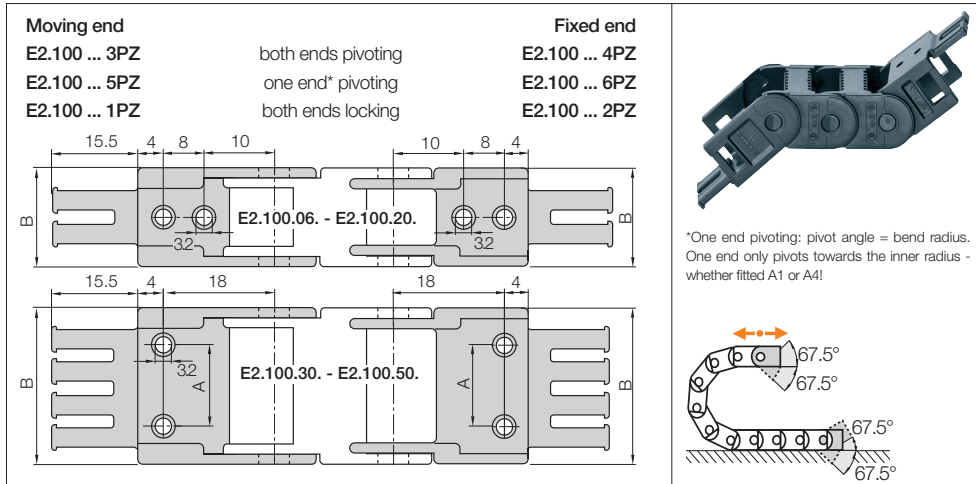
- For a quick and easy opening, an e-chain® opener is included with every first order of openable E2.1 micro from igus®
  - Reduce opening times from 33 to 2 seconds
  - Open a long chain section in one go
- More information ► [www.igus.eu/E2.1open](http://www.igus.eu/E2.1open)



E2.10  
E2i.10  
E2C.10

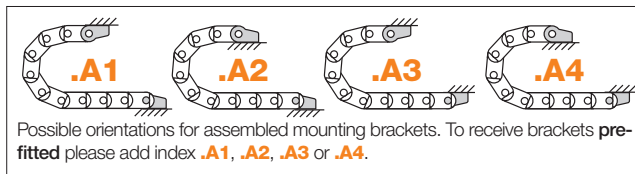
## E2.1 micro | Series E2.10 | Accessories

Mounting brackets, polymer one-piece | Pivoting | Locking



\*One end pivoting: pivot angle = bend radius.  
One end only pivots towards the inner radius -  
whether fitted A1 or A4!

Width index	Standard	Part No. full set	Part No. full set	Part No. full set	A [mm]	B [mm]	Number of teeth
		with tiewrap plates both ends pivoting	with tiewrap plates one end* pivoting	with tiewrap plates both ends locking			
06. ▶		E2.100.06.34PZ	E2.100.06.56PZ	E2.100.06.12PZ	-	13.4	1
10. ▶		E2.100.10.34PZ	E2.100.10.56PZ	E2.100.10.12PZ	-	17.4	1
16. ▶		E2.100.16.34PZ	E2.100.16.56PZ	E2.100.16.12PZ	-	23.4	2
20. ▶		E2.100.20.34PZ	E2.100.20.56PZ	E2.100.20.12PZ	-	27.4	2
30. ▶		E2.100.30.34PZ	E2.100.30.56PZ	E2.100.30.12PZ	22	37.4	3
40. ▶		E2.100.40.34PZ	E2.100.40.56PZ	E2.100.40.12PZ	32	47.4	4
50. ▶		E2.100.50.34PZ	E2.100.50.56PZ	E2.100.50.12PZ	42	57.4	5

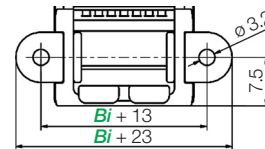


**E2.100.20.34PZ.A1** Order example  
.A... to indicate option with brackets pre-fitted  
With integrated strain relief tiewrap plates  
Full set  
Width index  
Series

### Additional features



The quickflange can be clipped-in to all mounting brackets. Contains a housing for hexagonal nut and socket cap bolt M3. **Single Part No.:** E2.150.QF or **Part No. incl. mounting bracket:** E2.100.20.34PZQF

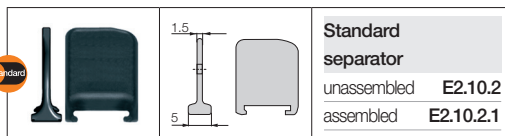
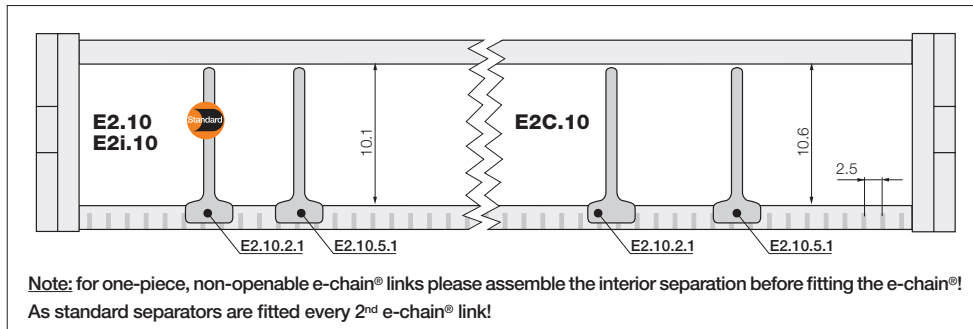


328 More information ▶ [www.igus.eu/E2i.10](http://www.igus.eu/E2i.10) ▶ [www.igus.eu/E2.10](http://www.igus.eu/E2.10) ▶ [www.igus.eu/E2C.10](http://www.igus.eu/E2C.10)



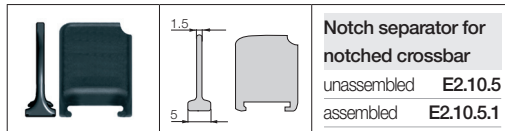
## E2.1 micro | Series E2.10 | Accessories

Interior separation | Increase cable service life



### Standard - for any application

For easy vertical separation in e-chains®. Separators can be arranged in any position in the e-chain® cross-section. Without notches, freely movable.



### Locks securely in preset increments

Notch separator for exact positioning in e-chains®. Recommended for side-mounted applications.

**75% less wear**

- igus® separators increase the service life of the cables by a factor of 4
- Separators with a rounded design for less cable wear and abrasion
- Optimised for easier and faster assembly

More information ► [www.igus.eu/E2.1open](http://www.igus.eu/E2.1open)

**Interior separation assembly tool for the E2.1 micro**

- Easy fitting of separators and shelves
- Significant assembly time reduction
- Grip and tool tip can be ordered separately and are easy to change

More information ► [www.igus.eu/E2.1open](http://www.igus.eu/E2.1open)

E2i.15  
E2.15  
E2C.15

## E2.1 micro | Series E2.15 | Product range

Next generation, strong, low noise, fast opening



- e-chains® | Series E2i.15 | Openable along the inner radius, from both sides
- e-chains® | Series E2.15 | Openable along the outer radius, from both sides
- e-chains® | Series E2C.15 | One-piece, non-openable

Part No. e-chains® openable along the inner radius	Part No. e-chains® openable along the outer radius	Part No. e-chains® one-piece, non- openable	<i>Bi</i> [mm]	<i>Ba</i> [mm]	<i>R</i> Available bend radii [mm]	E2i.15 [kg/m]	E2.15 [kg/m]	E2C.15 [kg/m]
E2i.15.10.R.0	E2.15.10.R.0	E2C.15.10.R.0	10	17.8	028   038   048   -	≈ 0.18	≈ 0.18	≈ 0.19
E2i.15.13.R.0	E2.15.13.R.0	E2C.15.13.R.0	13	20.8	028   038   048   -	≈ 0.19	≈ 0.19	≈ 0.20
E2i.15.16.R.0	E2.15.16.R.0	E2C.15.16.R.0 <sup>1)</sup>	16	23.8	028   038   048   -	≈ 0.20	≈ 0.20	≈ 0.20
E2i.15.20.R.0	E2.15.20.R.0	E2C.15.20.R.0 <sup>1)</sup>	20	27.8	028   038   048   -	≈ 0.21	≈ 0.21	≈ 0.21
E2i.15.30.R.0	E2.15.30.R.0	E2C.15.30.R.0 <sup>1)</sup>	30	37.8	028   038   048   -	≈ 0.24	≈ 0.24	≈ 0.24
E2i.15.40.R.0	E2.15.40.R.0	E2C.15.40.R.0	40	47.8	028   038   048   075*	≈ 0.26	≈ 0.26	≈ 0.26
E2i.15.50.R.0	E2.15.50.R.0	E2C.15.50.R.0	50	57.8	028   038   048   -	≈ 0.29	≈ 0.29	≈ 0.29

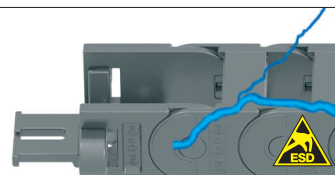
\*Radius 075 only for series E2C.15.40

1) ▲ Available as ESD version from stock

Complete Part No. with required radius (*R*). Example: E2.15.20.038.0

### ESD - many sizes from stock

- Standardised product made from igumid ESD
  - ESD material tested with over 10 million cycles for the toughest requirements
  - Short delivery times including mounting brackets and interior separation; 24hrs, from stock
- More information ► [www.igus.eu/esd](http://www.igus.eu/esd)



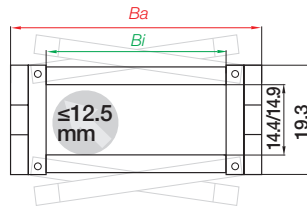
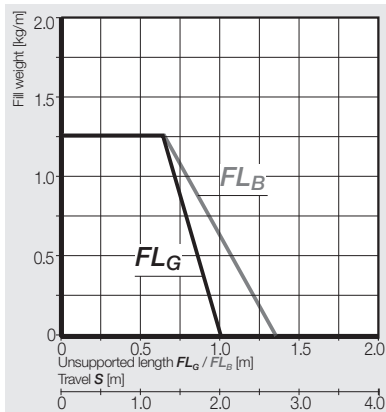
330 More information ► [www.igus.eu/E2i.15](http://www.igus.eu/E2i.15) ► [www.igus.eu/E2.15](http://www.igus.eu/E2.15) ► [www.igus.eu/E2C.15](http://www.igus.eu/E2C.15)



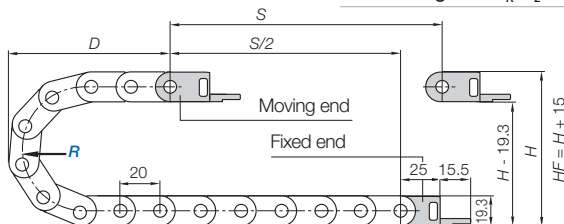
## E2.1 micro | Series E2.15 | Installation dimensions

Unsupported applications | Short travels

E2i.15  
E2.15  
E2C.15



E2i.15	Inner height [mm]	14.4
E2.15	Inner height [mm]	14.4
E2C.15	Inner height [mm]	14.9
	Pitch [mm/link]	20
	Links/m	50
	corresponds to [mm]	1,000
	e-chain® length	$L_K = S/2 + K$



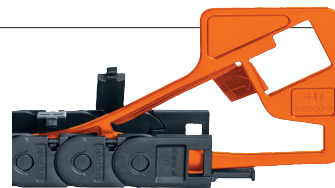
R	028	038	048	075*
H	75	95	115	169
D	68	78	88	115
K	130	160	195	280

The required clearance height:  $H_f = H + 15\text{mm}$  (with 0.3kg/m fill weight)

\*Radius 075 only for series E2C.15.40

### Reduce assembly time - E2.1 micro e-chain® opener

- For a quick and easy opening, an e-chain® opener is included with every first order of openable E2.1 micro from igus®
  - Reduce opening times from 33 to 2 seconds
  - Open a long chain section in one go
- More information ► [www.igus.eu/E2.1open](http://www.igus.eu/E2.1open)

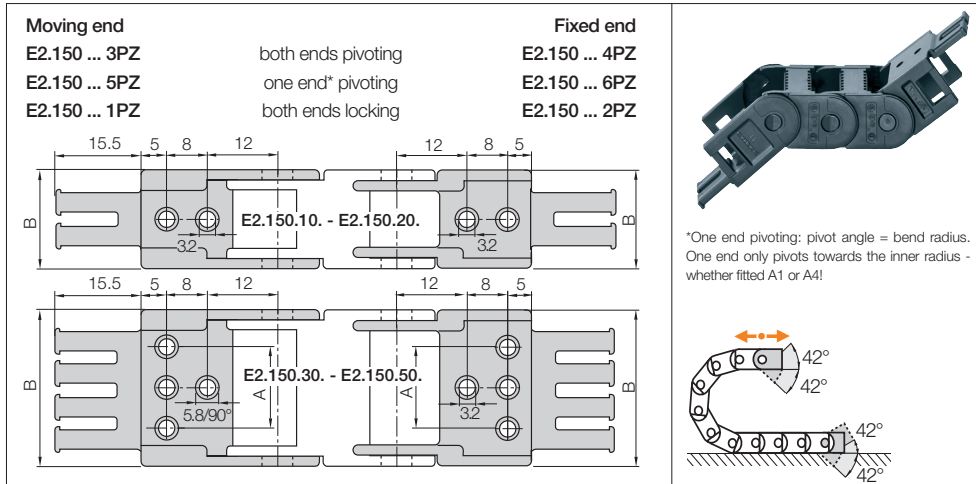




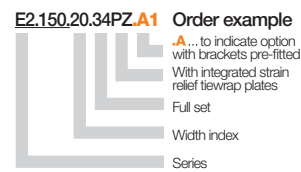
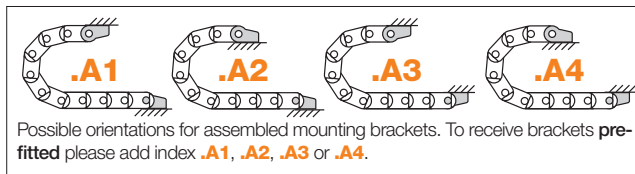
E2i.15  
E2.15  
E2C.15

## E2.1 micro | Series E2.15 | Accessories

Mounting brackets, polymer one-piece | Pivoting | Locking



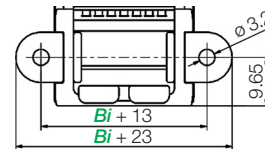
Width index	Part No. full set with tiewrap plates both ends pivoting	Part No. full set with tiewrap plates one end* pivoting	Part No. full set with tiewrap plates both ends locking	A [mm]	B [mm]	Number of teeth
10. ▶	E2.150.10.34PZ	E2.150.10.56PZ	E2.150.10.12PZ	-	17.8	1
13. ▶	E2.150.13.34PZ	E2.150.13.56PZ	E2.150.13.12PZ	-	20.8	1
16. ▶	E2.150.16.34PZ	E2.150.16.56PZ	E2.150.16.12PZ	-	23.8	2
20. ▶	E2.150.20.34PZ	E2.150.20.56PZ	E2.150.20.12PZ	-	27.8	2
30. ▶	E2.150.30.34PZ	E2.150.30.56PZ	E2.150.30.12PZ	22	37.8	3
40. ▶	E2.150.40.34PZ	E2.150.40.56PZ	E2.150.40.12PZ	32	47.8	4
50. ▶	E2.150.50.34PZ	E2.150.50.56PZ	E2.150.50.12PZ	42	57.8	5



### Additional features



The quickflange can be clipped-in to all mounting brackets. Contains a housing for hexagonal nut and socket cap bolt M3. **Single Part No.:** E2.150.QF or Part No. incl. mounting bracket: E2.150.20.34PZQF

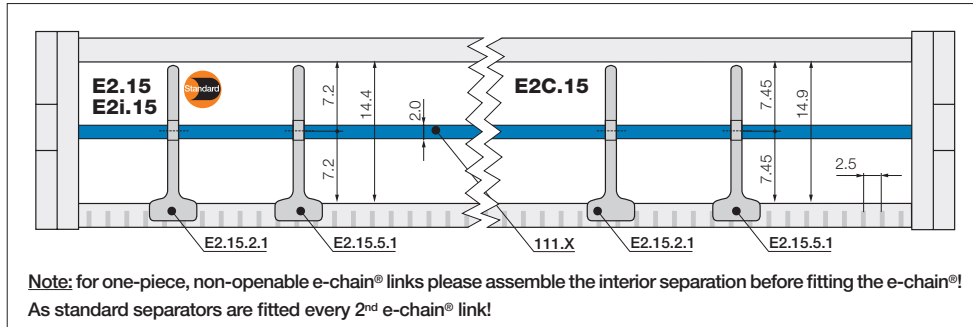


332 More information ▶ [www.igus.eu/E2i.15](http://www.igus.eu/E2i.15) ▶ [www.igus.eu/E2.15](http://www.igus.eu/E2.15) ▶ [www.igus.eu/E2C.15](http://www.igus.eu/E2C.15)



## E2.1 micro | Series E2.15 | Accessories

Interior separation | Increase cable service life



**Standard separator**

unassembled **E2.15.2**  
assembled **E2.15.2.1**

### Standard - for any application

For easy vertical separation in e-chains®. Separators can be arranged in any position in the e-chain® cross-section. Without notches, freely movable.

**Notch separator for notched crossbar**

unassembled **E2.15.5**  
assembled **E2.15.5.1**

### Locks securely in preset increments

Notch separator for exact positioning in e-chains®. Recommended for side-mounted applications.

**Full-width shelf for e-chains®**

unassembled **110.X**  
assembled **111.X**

### Full-width shelf

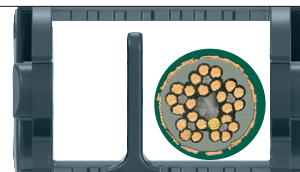
This option is for applications with many small cables with similar diameters. For full width separation.

Full-width shelves Width = X [mm]	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
		010	110.10	111.10	020	110.20	111.20	050	110.50
	013	110.13	111.13	030	110.30	111.30			
	016	110.16	111.16	040	110.40	111.40			

### 75% less wear

- igus® separators increase the service life of the cables by a factor of 4
- Separators with a rounded design for less cable wear and abrasion
- Optimised for easier and faster assembly

More information ► [www.igus.eu/E2.1open](http://www.igus.eu/E2.1open)



### Interior separation assembly tool for the E2.1 micro

- Easy fitting of separators and shelves
- Significant assembly time reduction
- Grip and tool tip can be ordered separately and are easy to change

More information ► [www.igus.eu/E2.1open](http://www.igus.eu/E2.1open)

