

Price index



Low noise version E4/101  
Series 401 available with  
special rubber pads design



Cleanroom test  
upon request



ESD classification:  
Electrically conductive ESD/ATEX  
version upon request



Opening E-Chains®: Remove crossbars and clips - Insert screwdriver into the slot, push down, release by lever action



Remove lids/bottoms (E-Tubes) - Insert screwdriver into the slot, release by lever action



When to use the Series 400/410/R880:

- If a low-noise version is required
- At very high speeds and/or accelerations
- For long travels
- For high additional loads
- Also available without camber



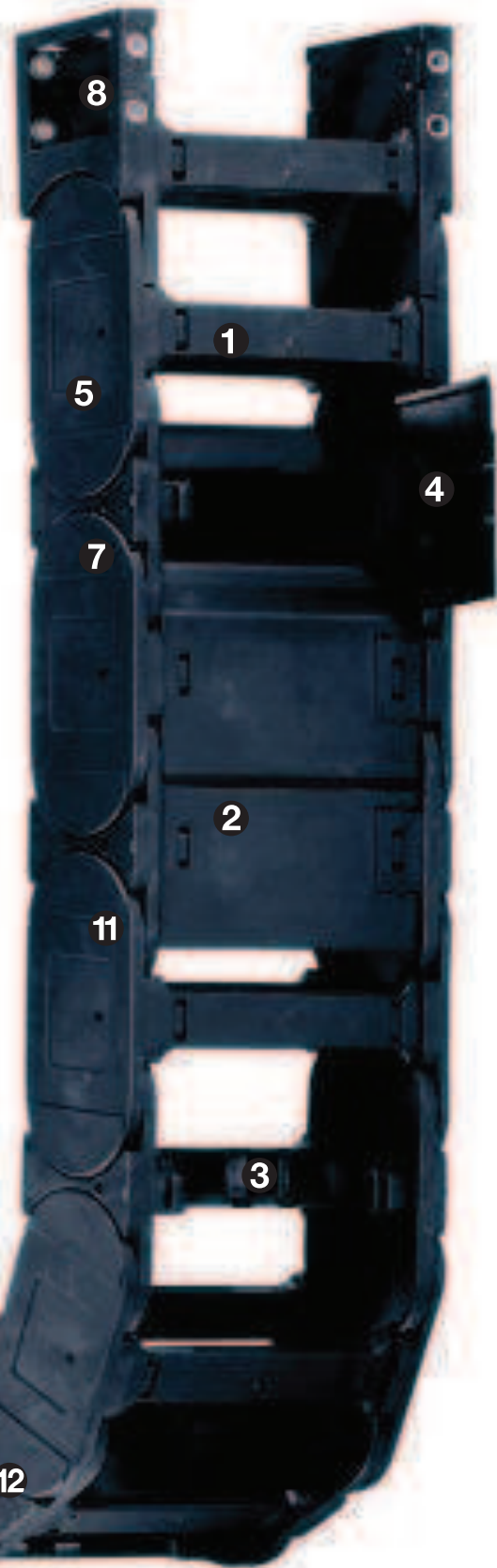
When not to use it:

- If long side-mounted, unsupported length is required  
▶ Series E4.56, page 7.62
- If an extrem vibration-free E-Chain® is necessary  
▶ Series E6.52, page 8.66

- ❶ Crossbars on E-Chain® removable along both radii
- ❷ Closed and open styles can be combined
- ❸ Numerous interior separation possibilities
- ❹ Hinged snap-open removable lids along outer radius
- ❺ Stop dog with "brake" for noise reduction
- ❻ Wide, rounded plastic crossbars
- ❼ Optimized glide pads with lateral wear allowance
- ❽ KMA mounting brackets with attachment points on all sides
- ❾ Locking or pivoting mounting brackets available
- ❿ Integrated strain relief possible
- ⓫ Dirt-repellent exterior
- ⓬ E-Chains® also available with reverse bending radius "RBR"



Also available as  
E4/00-NC without  
camber: 400-NC



Order example complete E-Chain®

Please indicate chain-lengths or number of links **Example: 3 m or 33 links**

3 m **400.30.300.0**



**E-Chain®**

with 2 separators **411** assembled every 2<sup>nd</sup> link



**Interior separation**

1 set **4000.30.1.12.C**



**Mounting bracket**

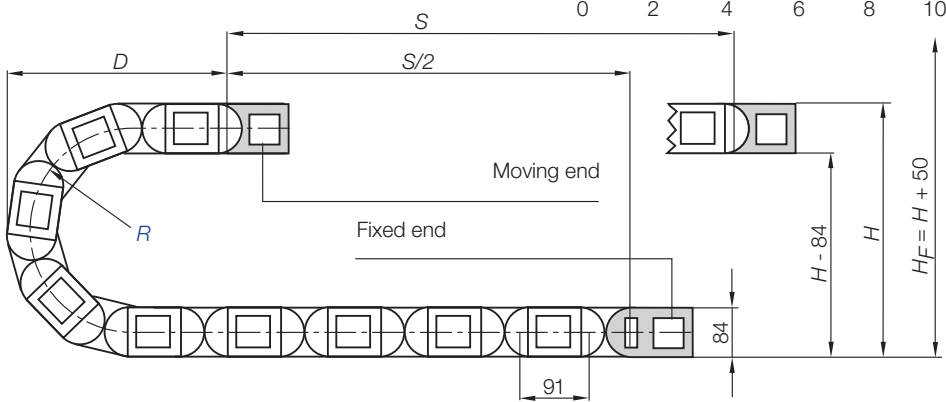
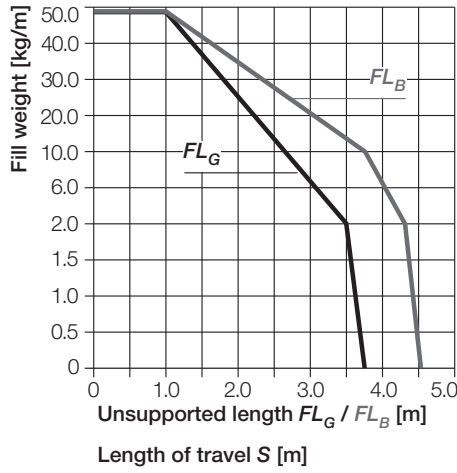
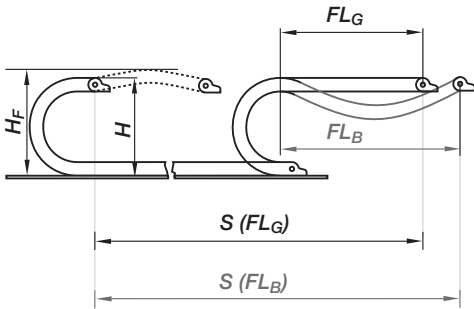


**Unsupported length**

$FL_G$  = with straight upper run

$FL_B$  = with permitted sag

Further information ► **Design, page 1.12**



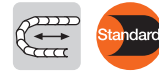
Pitch = 91 mm/link    Links/m = 11 (1001 mm)    Chain length =  $S/2 + K$

R	135	150	175	200	240	250	300	350	400	500
$H_{-0}^{+25}$	360	385	435	485	565	585	685	785	885	1085
D	270	285	310	335	375	385	435	485	535	635
K	650	750	825	900	1020	1050	1225	1340	1450	1775
$H_2$	360	266	266	266	266	266	266	266	266	266
$D_2^{+25}$	270	480	600	730	950	920	1180	1440	1530	1900
$K_2$	650	819	1092	1274	1547	1547	2002	2275	2548	3276

- S = Length of travel
  - R = Bending radius
  - H = Nominal clearance height
  - $H_F$  = Required clearance height
  - $H_{RI}$  = Trough inner height
  - D = Overlength E-Chain® radius in final position
  - $K = \pi \cdot R + \text{"safety"}$
  - $D_2$  = Over length - long travels, gliding
  - $K_2$  = \*Further add-on
  - $H_2$  = \*Mounting height
- \*if the mounting bracket location is set lower

**Other installation methods**

- Vertical, hanging  $\leq 100$  m
- Vertical, standing  $\leq 6$  m
- Side mounted, unsp.  $\leq 2,5$  m
- Rotary requires further calculation
- Unsupported length of upper run = upon request

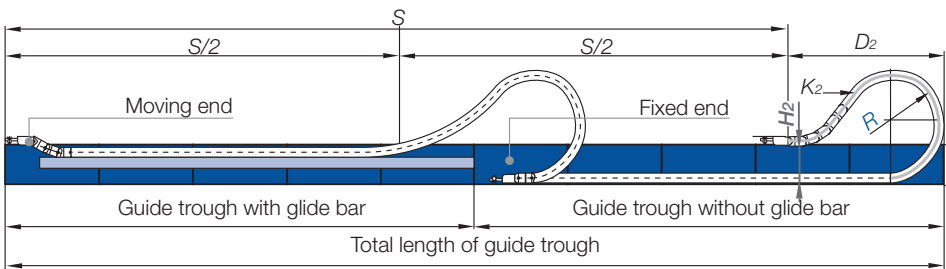


**Short travels - unsupported**

Unsupported E-Chains® feature positive camber over short travels. This must be accounted for when specifying the clearance height  $H_F$ . Please consult igus® if space is particularly restricted.

The required clearance height:  
 **$H_F = H + 50$  mm**  
(with 3,0 kg/m fill weight)

**Long travel lengths from 10 m to max. 400 m**    Chain length =  $S/2 + K_2$



In case of travels between 4 and 10 m we recommend a longer unsupported length.



**Gliding, long travel applications (max. 400 m)**

In this case the E-Chain® upper run will be introduced in a guide trough on the lower run. We recommend to realize the engineering of such a plant by our technicians.

Speed / acceleration $FL_G$	max. 20 [m/s] / max. 200 [m/s <sup>2</sup> ]
Speed / acceleration $FL_B$	max. 3 [m/s] / max. 6 [m/s <sup>2</sup> ]
Gliding speed / acceleration (maximum)	max. 10 [m/s] / max. 50 [m/s <sup>2</sup> ]
Material - permitted temperature °C	igumid G / -40° up to +120° C
Flammability class, igumid G	VDE 0304 IIC UL94 HB

**Technical Data**



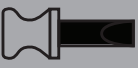
Details of material properties  
► page 1.38

For support of the lower run - **Support Tray tool kit** available ► page 9.70



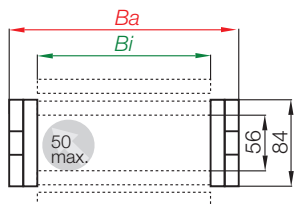
System E4/00  
Inner height: 56 mm

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



► page 7.161

igus® E-ChainSystems®

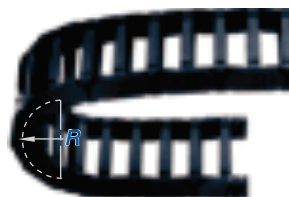


Part No. structure

400.	13.	250.	0
------	-----	------	---



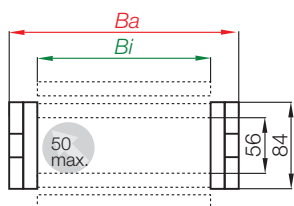
Series 400 - E-Chain® with crossbars every link



- Crossbars every link
- For rigid hydraulic hoses
- For applications particularly demanding
- Can be opened from two sides



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



Part No. structure

410.	13.	250.	0
------	-----	------	---



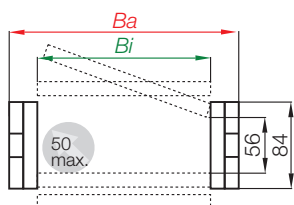
Series 410 - E-Chain® with crossbars every 2<sup>nd</sup> link



- Crossbars every 2<sup>nd</sup> link = Standard
- For nearly every situation
- Can be opened from two sides
- Easy assembly
- Stable
- Attractive price



igus® GmbH  
51147 Cologne



Part No. structure

880.	25.	250.	0
------	-----	------	---



Series R880 - Fully enclosed E-Tube



- Fully enclosed
- Excellent cable protection against dirt
- Protection against hot chips (up to 900°C)
- Lids along the entire inner radius are completely removable. Lids along the entire outer radius are single sided snap-open with a hinge on the other side to keep them attached to the chain or completely removable.



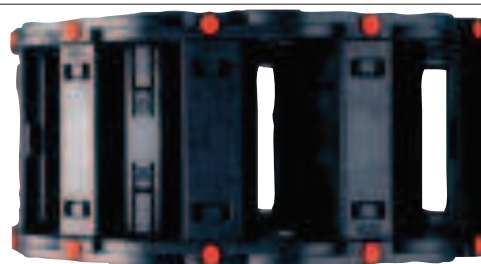
Internet: [www.igus.eu](http://www.igus.eu)  
E-mail: [info@igus.de](mailto:info@igus.de)

Low-noise! Special low-noise version with rubber pads

Series 401 - Order example: 401.22.250.0

Further information:

[www.igus.de](http://www.igus.de) or phone +49-0 22 03-96 49-800



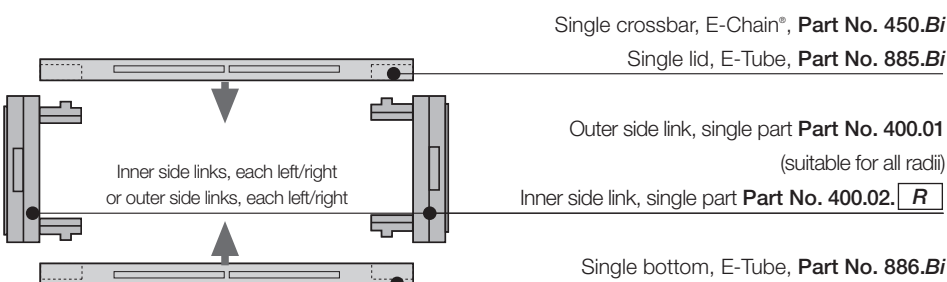
Part No.	<i>Bi</i> [mm]	<i>Ba</i> [mm]	400 [kg/m]	410 [kg/m]	R880 [kg/m]
400/410.05..... □.0	50	84	≈ 3,44	≈ 3,12	-
400/410.06..... □.0	65	99	≈ 3,50	≈ 3,20	-
400/410/880.07... □.0*	75	109	≈ 3,53	≈ 3,44	≈ 3,98
400/410.08..... □.0	87	121	≈ 3,56	≈ 3,48	-
400/410/880.10... □.0	100	134	≈ 3,71	≈ 3,53	≈ 4,27
400/410.11..... □.0	112	147	≈ 3,84	≈ 3,60	-
400/410/880.12... □.0	125	159	≈ 3,91	≈ 3,63	≈ 4,63
400/410.13..... □.0	137	172	≈ 4,04	≈ 3,70	-
400/410/880.15... □.0	150	184	≈ 4,10	≈ 3,73	≈ 5,06
400/410.16..... □.0	162	197	≈ 4,21	≈ 3,78	-
400/410.17..... □.0	175	209	≈ 4,32	≈ 3,84	-
400/410.18..... □.0	187	222	≈ 4,43	≈ 3,89	-
400/410/880.20... □.0	200	234	≈ 4,46	≈ 3,91	≈ 5,63
400/410.21..... □.0	212	247	≈ 4,57	≈ 3,96	-
400/410.22..... □.0	225	259	≈ 4,63	≈ 3,99	-
400/410.23..... □.0	237	272	≈ 4,76	≈ 4,06	-
400/410/880.25... □.0	250	284	≈ 4,85	≈ 4,10	≈ 6,36
400/410.26..... □.0	262	297	≈ 4,94	≈ 4,15	-
400/410/880.27... □.0	275	309	≈ 5,05	≈ 4,20	≈ 6,72
400/410.28..... □.0	287	322	≈ 5,07	≈ 4,21	-
400/410/880.30... □.0	300	334	≈ 5,29	≈ 4,32	≈ 7,02
400/410.31..... □.0	312	347	≈ 5,29	≈ 4,32	-
400/410.32..... □.0	325	359	≈ 5,38	≈ 4,37	-
400/410.33..... □.0	337	372	≈ 5,56	≈ 4,46	-
400/410/880.35... □.0	350	384	≈ 5,71	≈ 4,53	≈ 7,72
400/410.36..... □.0	362	397	≈ 5,71	≈ 4,53	-
400/410.37..... □.0	375	409	≈ 5,73	≈ 4,54	-
400/410.38..... □.0	387	422	≈ 5,82	≈ 4,59	-
400/410/880.40... □.0	400	434	≈ 6,02	≈ 4,69	≈ 8,72
400/410.41..... □.0	412	447	≈ 6,17	≈ 4,76	-
400/410.42..... □.0	425	459	≈ 6,33	≈ 4,84	-
400/410.43..... □.0	437	472	≈ 6,39	≈ 4,87	-
400/410.45..... □.0	450	484	≈ 6,46	≈ 4,91	-
400/410/880.46... □.0	462	497	≈ 6,48	≈ 4,92	≈ 9,19
400/410.47..... □.0	475	509	≈ 6,61	≈ 4,98	-
400/410.48..... □.0	487	522	≈ 6,65	≈ 5,01	-
400/410.50..... □.0	500	534	≈ 6,74	≈ 5,05	-
400/410.51..... □.0	512	547	≈ 6,77	≈ 5,06	-
400/410.52..... □.0	525	559	≈ 6,81	≈ 5,08	-
400/410.53..... □.0	537	572	≈ 6,96	≈ 5,16	-
400/410.55..... □.0	550	584	≈ 7,45	≈ 5,40	-
400/410.60..... □.0	600	634	≈ 7,65	≈ 5,50	-

Available bending radii

R [mm] 135\* 150 175 200 240 250 300 350 400 500

Supplement Part No. with required radius. Example: 400.30. 300.0

0 = standard color, other colors ▶ page 1.39 · Pitch = 91 mm/link - Links/m = 11



## Hot Chips up to 850°C

E-Tubes that repel hot chips, up to 850°C. Some applications, depending on amount and size of the chips, can burn or melt the surface. That is no longer the case with the igus® "igumid HT" material. Order example:

Full E-Tube made of HT\*:

**880.40.150.0.HT**

Lids made of HT:

**880.40.HTE.150.0**

\*for long travels upon request

Further Information:

[www.igus.de/en/HT](http://www.igus.de/en/HT)

Delivery time up to 4 weeks!



\* Removable lid only, no hinged option

\*\* not available for R880

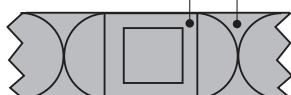


Extender crossbar for large diameter hoses ▶ page 7.196

## Part No. E-Chain® links, single parts

Inner side link

Outer side link



System E4/00  
Inner height: 56 mm

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

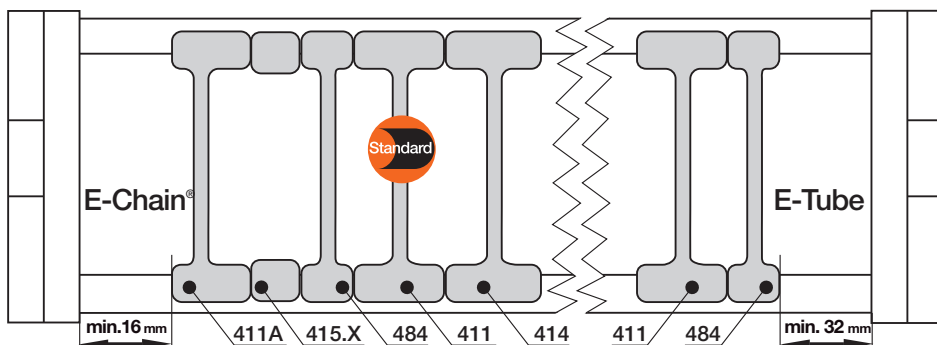


▶ page 7.161

igus® E-ChainSystems®



Vertical separators are used if a vertical subdivision is required. In the standard configuration, a separator is mounted at every second link. **Note:** Observe a lateral spacing of at least 32 mm (E-Tube) and 16 mm (E-Chain)!



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

igus® GmbH  
51147 Cologne

Internet: [www.igus.eu](http://www.igus.eu)  
E-mail: [info@igus.de](mailto:info@igus.de)



Vertical separator 401



Vertical separator 483



Spacer 405.XX



Locking separator 404

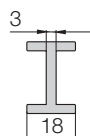


Vertical separator 406

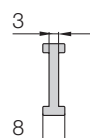


Asymmetric separator 401A

Vertical separator for E-Chains®/E-Tubes	
unassembled	401
assembled	411



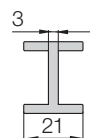
Vertical separator for E-Chains®/E-Tubes	
unassembled	483
assembled	484



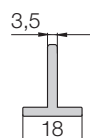
Spacer* for E-Chains®	
unassembled	405.XX
assembled	415.XX



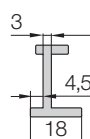
Locking separator for E-Chains®	
unassembled	404
assembled	414



Vertical separator for E-Tubes	
unassembled	406
assembled	416



Asymmetric separator for E-Chains®	
unassembled	401A
assembled	411A



\*For side-mounted applications

### Option 1: Vertical separators and spacers

● **Standard separator 401 for E-Chains®/E-Tubes** offers safe stability due to its broad foot design, also when used with thick cables or hoses.

● **Vertical separator 483 with a narrow foot for E-Chains® and E-Tubes** with applications where a large number of small cables need to be individually separated.

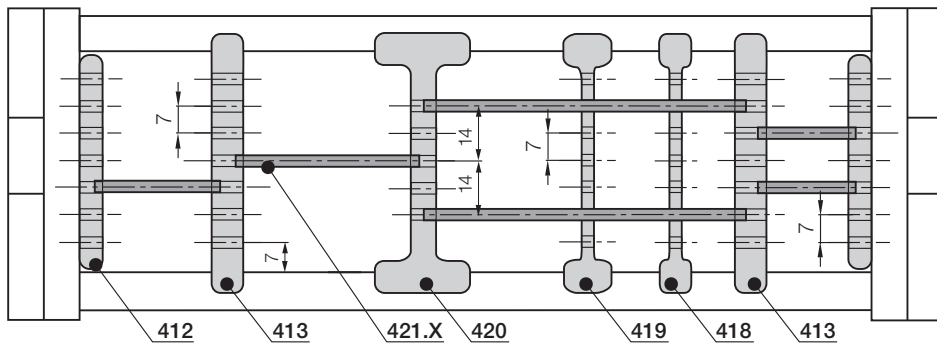
● Separators (e.g. "side mounted") for E-Chains® can be fixed in their position with **Spacers 405.XX**. The available inner height will be reduced by 2 mm, per spacer and side. To avoid this, the parts can be assembled on outside of the crossbar (not for long travels) **XX = width of the spacer** (available 10, 15, 20, 30 and 40 mm)

### Additionally:

● **Locking separator for E-Chains® 404** - with increased retention force for applications exposed to very high humidity or extreme loads. The extra retention force is achieved by asymmetric claws for the crossbar. Ensure proper alignment

● **Locking separator 406 for E4-Tubes** - safe fitting locked on lid or bottom of the Tube and sideways slideable. The opposing lid or bottom can easily be opened and closed. Especially capable if many separators need to be assembled on a tight inner width

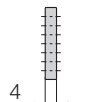
● **Asymmetric separator 401A for E-Chains®** with an 18-mm base, for combinations between spacers of different widths and vertical separators in side-mounted applications, for instance.



For use with many cables of differing diameters. E-Chains® and E-Tubes can be subdivided both vertically and horizontally. The shelves can be arranged elevator-shifted with different bottoms

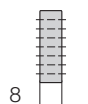
### Option 2: Shelves

● Side plates 402, middle plates 403 and shelves 420.X form the basic pattern of a shelf system. Shelves of various widths can be arranged at 7 different heights (in 7 mm increments).



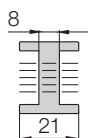
Side plate for E-Chains®/E-Tubes	
unassembled	402
assembled	412

● Locking vertical separator 410, slotted combined with shelves (only for E-Chains®).



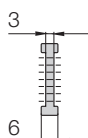
Middle plate for E-Chains®/E-Tubes	
unassembled	403
assembled	413

● Slotted separators 408, are used for very fine subdivisions. However, they cannot be retrofitted into an existing separation system without dismantling the interior separators first.

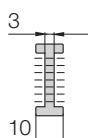


Locking vertical separator for E-Chains®	
unassembled	410
assembled	420

● The unilateral open slotted separator 409 can be retrofitted into an existing interior separation system without a need for dismantling the interior separators. During an installation of open slotted separators, the top and bottom notches cannot be occupied by shelves.



Slotted separator for E-Chains®/E-Tubes	
unassembled	408
assembled	418



Open slotted separator for E-Chains®/E-Tubes	
unassembled	409
assembled	419



Side plate 402



Middle plate 403



Locking vertical separator 410



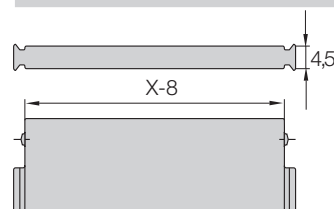
Slotted separator 408



Open slotted separator 409



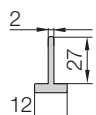
Shelf 420.X



Width X [mm]	Part No. unassembled	Part No. assembled
018	420.18	421.18
023	420.23	421.23
025	420.25	421.25
028	420.28	421.28
033	420.33	421.33
043	420.43	421.43
050	420.50	421.50
062	420.62	421.62

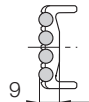
Width X [mm]	Part No. unassembled	Part No. assembled
075	420.75	421.75
088	420.88	421.88
100	420.100	421.100
125	420.125	421.125
150	420.150	421.150
175	420.175	421.175
187	420.187	421.187
200	420.200	421.200

### Additional elements for interior separation



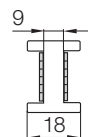
Center crossbar	
unassembled	405
assembled	415

**Center crossbar** - was developed for applications with a large number of thin cables. The center crossbar offers the option of subdividing the E-Chain® independently into upper and lower halves.



Rollclip	
unassembled	489.27
assembled	490.27

**Rollclip** - minimizes abrasion of particularly sensitive hoses. The Rollclip is simply clamped onto the opening crossbar. The movable rollers compensate for relative movement between the chain and hose.



Roller separator	
unassembled	429
assembled	430

**Roller separator** - performs a similar function to the Rollclip, but doubles as a separator.

System E4/00  
Inner height: 56 mm

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

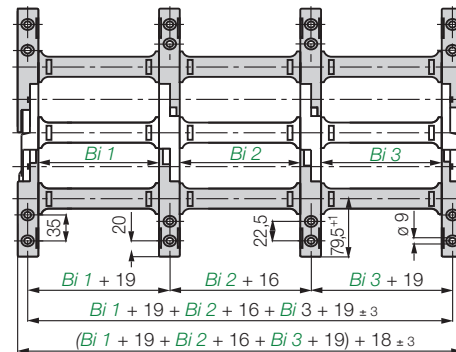




Part No. structure  
400.10 /20 /10. 200.0  
400.Bi1/Bi2/Bi3. R.0

### Extension links - for extremely wide E-Chains® up to 3,0 m

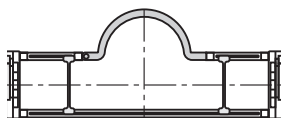
- For applications in which particularly high fill weights necessitate extremely wide E-Chains® (up to 3000 mm)
- The extension link design allows virtually limitless side-by-side attachment of chains
- The unsupported length of a chain can be increased when additional loads are required
- Extension links can be used with E-Chains®, E-Tubes or as a combination of both
- They are suitable for unsupported and gliding applications in a guide trough
- E-Chains® with extension links are attached with KMA or steel mounting brackets



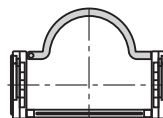
Consult igus® for your extender crossbar applications. We are happy to assist you with your design layout

### Extender crossbars - careful guide of hoses applications

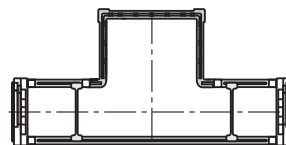
- Suitable for hoses with a maximum outer diameter of 245 mm
- Gliding operation with crossbars assembled along the outer radius and a special guide trough
- Gliding operation not guaranteed with crossbars assembled along the inner radius
- The extender crossbar can either be attached to the side links directly or can be used in combination with two stranded snap-open crossbars



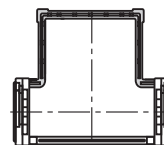
Round extender crossbar with snap-open crossbars



Attached directly to the side link



Square extender crossbar with snap-open crossbars



Attached directly to the side link

Part No.	Max Ø [mm] hose	Form	Installation side link	Combination with snap-open crossb.
450.15.RHD115	115	○	-	+
450.17.RD115	115	○	+	-
450.25.D150	150	□	+	-
450.30.D200	180	□	+	-
450.35.D250	195	□	+	-
450.40.D300	245	□	+	-
450.20.HD150	150	□	-	+
450.25.HD200	180	□	-	+
450.30.HD250	195	□	-	+

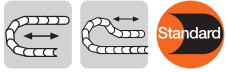
○ = round □ = square + = yes / - = no



### E4 clip-on cable binder

- For side-mounted applications ● Serves as a clip-on, lateral guide for hoses and cables on E-Chains®
- The loops can be adjusted as required ● Compatible with many E4 E-Chains® ● Stylish and economical
- One clip and one locking band are needed for each chain link ● Call us if you have any questions on project planning

Part No.	Form
450.B12	Locking clip, comprising a locking element
450.B12.200	Locking band, comprising a locking element and band; 12 x 1,5 x 200 mm



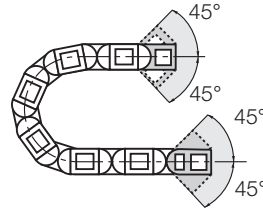
### The Standard - Option KMA\* - pivoting

- Recommended for unsupported and gliding applications
- Confined installation conditions
- Option - integrated C-profile strain relief device with Chainfix clip or strain relief tiwrap plates
- Corrosion resistant
- Universal mountable with attachment capability on all sides

\*KMA = Polymer Metal Mounting Bracket

Moving end

4000/8800...□.2

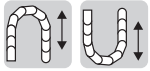
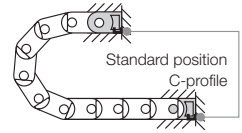


Fixed end

4000/8800...□.1



The attachment variants arising automatically by the choice of the KMA mounting bracket



### Option KMA - locking

- Recommended for vertical hanging / standing applications

Additionally:

- Universal mountable
- C-profile option
- Corrosion resistant
- Locked connections
- At very high acceleration

Moving end

4100/8900...□.2

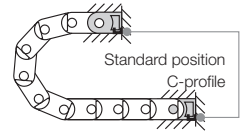


Fixed end

4100/8900...□.1

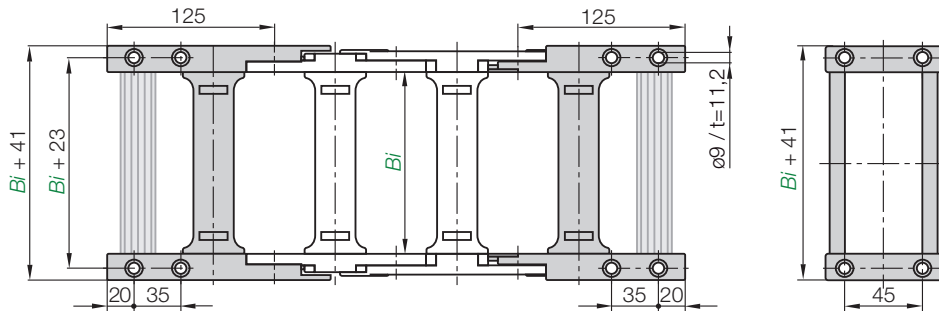


The attachment variants arising automatically by the choice of the KMA mounting bracket



Fixed end  
4000/8800...□.1 (pivoting)  
4100/8900...□.1 (locking)

Moving end  
(pivoting) 4000/8800...□.2  
(locking) 4100/8900...□.2

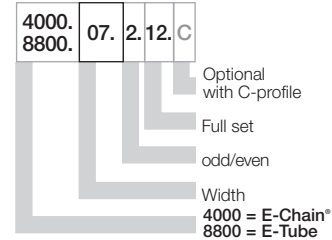


Width index	Part No. full set		C-profile option [mm]	Width index	Part No. full set		C-profile option [mm]
	pivoting	locking			pivoting	locking	
.05	4000	4100	.05.□.12.C 50	.32	4000	4100	.32.□.12.C 325
.06	4000	4100	.06.□.12.C 65	.33	4000	4100	.33.□.12.C 337
.07	4000/8800	4100/8900	.07.□.12.C 75	.35	4000/8800	4100/8900	.35.□.12.C 350
.10	4000/8800	4100/8900	.10.□.12.C 100	.36	4000	4100	.36.□.12.C 362
.11	4000	4100	.11.□.12.C 112	.37	4000	4100	.37.□.12.C 375
.12	4000/8800	4100/8900	.12.□.12.C 125	.38	4000	4100	.38.□.12.C 387
.13	4000	4100	.13.□.12.C 137	.40	4000/8800	4100/8900	.40.□.12.C 400
.15	4000/8800	4100/8900	.15.□.12.C 150	.41	4000	4100	.41.□.12.C 412
.16	4000	4100	.16.□.12.C 162	.42	4000	4100	.42.□.12.C 425
.17	4000	4100	.17.□.12.C 175	.43	4000	4100	.43.□.12.C 437
.18	4000	4100	.18.□.12.C 187	.45	4000	4100	.45.□.12.C 450
.20	4000/8800	4100/8900	.20.□.12.C 200	.46	4000/8800	4100/8900	.46.□.12.C 462
.21	4000	4100	.21.□.12.C 212	.47	4000	4100	.47.□.12.C 475
.22	4000	4100	.22.□.12.C 225	.48	4000	4100	.48.□.12.C 487
.23	4000	4100	.23.□.12.C 237	.50	4000	4100	.50.□.12.C 500
.25	4000/8800	4100/8900	.25.□.12.C 250	.51	4000	4100	.51.□.12.C 512
.26	4000	4100	.26.□.12.C 262	.52	4000	4100	.52.□.12.C 525
.27	4000/8800	4100/8900	.27.□.12.C 275	.53	4000	4100	.53.□.12.C 537
.28	4000	4100	.28.□.12.C 287	.55	4000	4100	.55.□.12.C 550
.30	4000/8800	4100/8900	.30.□.12.C 300	.60	4000	4100	.60.□.12.C 600
.31	4000	4100	.31.□.12.C 312				

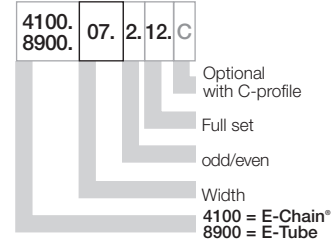
Please insert [1] for odd number of links or [2] for even number of links

### Dimensions and order configurations

Part No. structure (pivoting)



Part No. structure (locking)



**Note:** The E4/00 System may end with either an inner side or an outer side link. Keep in mind that an outer side link always forms the first chain link at the moving end. The Part No. depends on an even or odd numbers of links. Please insert: [1] for odd number of links or [2] for even number of links

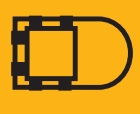
**Full set, for both ends:**  
4000.05.2.12.C (even)

**Single-part order:**  
4000.05.2.2.C (even)

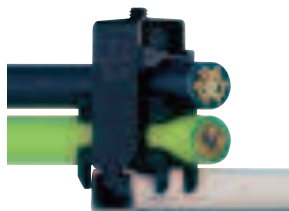
Mounting bracket moving end

4000.05.2.1.C (even)

Mounting bracket fixed end



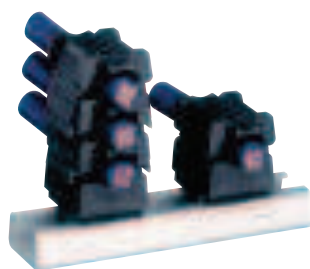




igus® Chainfix steel clamps and Chainfix stainless-steel clamps - max. pull forces, adjustable with hexagon socket. Available as single, double or triple clamps. Details ► chapter 10

### Chainfix clamps for the C-profile

Part No. single clamps		Part No. double clamps		Part No. triple clamps		Cable ø [mm]
steel	stainless steel	steel	stainless steel	steel	stainless steel	
CFX12.1	CFX12.1.E	CFX12.2	CFX12.2.E	CFX12.3	-	06 - 12
CFX14.1	CFX14.1.E	CFX14.2	CFX14.2.E	CFX14.3	-	12 - 14
CFX16.1	CFX16.1.E	CFX16.2	CFX16.2.E	CFX16.3	-	14 - 16
CFX18.1	CFX18.1.E	CFX18.2	CFX18.2.E	CFX18.3	-	16 - 18
CFX20.1	CFX20.1.E	CFX20.2	CFX20.2.E	CFX20.3	-	18 - 20
CFX22.1	CFX22.1.E	CFX22.2	CFX22.2.E	CFX22.3	-	20 - 22
CFX26.1	CFX26.1.E	CFX26.2	CFX26.2.E	-	-	22 - 26
CFX30.1	CFX30.1.E	CFX30.2	CFX30.2.E	-	-	26 - 30
CFX34.1	CFX34.1.E	CFX34.2	CFX34.2.E	-	-	30 - 34
CFX38.1	CFX38.1.E	-	-	-	-	34 - 38
CFX42.1	CFX42.1.E	-	-	-	-	38 - 42



### Chainfix Clip - Modular snap-on strain relief device for C-profile

Available for all igus® E-ChainSystems® with C-profiles and also suitable for assembly in the KMA mounting brackets and clip-on strain relief for crossbars. High pull forces, plug-in modular snap-on strain relief device. Details ► chapter 10

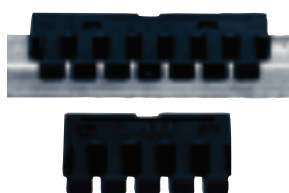
Cable ø [mm]	Part No. clamp	Part No. bottom part
04 - 08	CFC-08-M	CFC-08-C
08 - 12	CFC-12-M	CFC-12-C
12 - 16	CFC-16-M	CFC-16-C
16 - 20	CFC-20-M	CFC-20-C
20 - 24	CFC-24-M	CFC-24-C



### Chainfix Nugget for the C-Profile

Strain relief for the fixation of cables up to a diameter of Ø 30 mm. Easy to assemble, without any screws and tools. Easy strain relief due to fixation with pre-harnessed cable strap, very small space requirement. Details ► chapter 10

Part No.	ø max. conduit [mm]	Width [mm]
CFN.20	20	10,8
CFN.30.52	30	16,8
CFN.20.N35	20	20,0



### Chainfix tiwrap plates with clip-on connection for the C-profile

Can be plugged into the KMA C-profile. Easy to assemble without any screws. Easily solvable with screwdriver nevertheless safe stop. For all E-Chains® with KMA and integrated C-profile. Details ► chapter 10

Part No.	Width of strain relief [mm]	Number of teeth
3050.ZC	50	5
3075.ZC	75	7

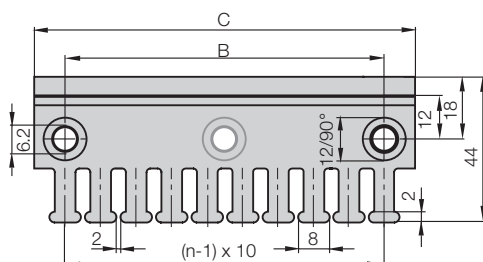
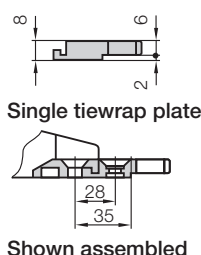


### Tiewrap plate as individual part

As individual component screwed on KMA. Can be plugged in the mounting brackets. Details ► chapter 10

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

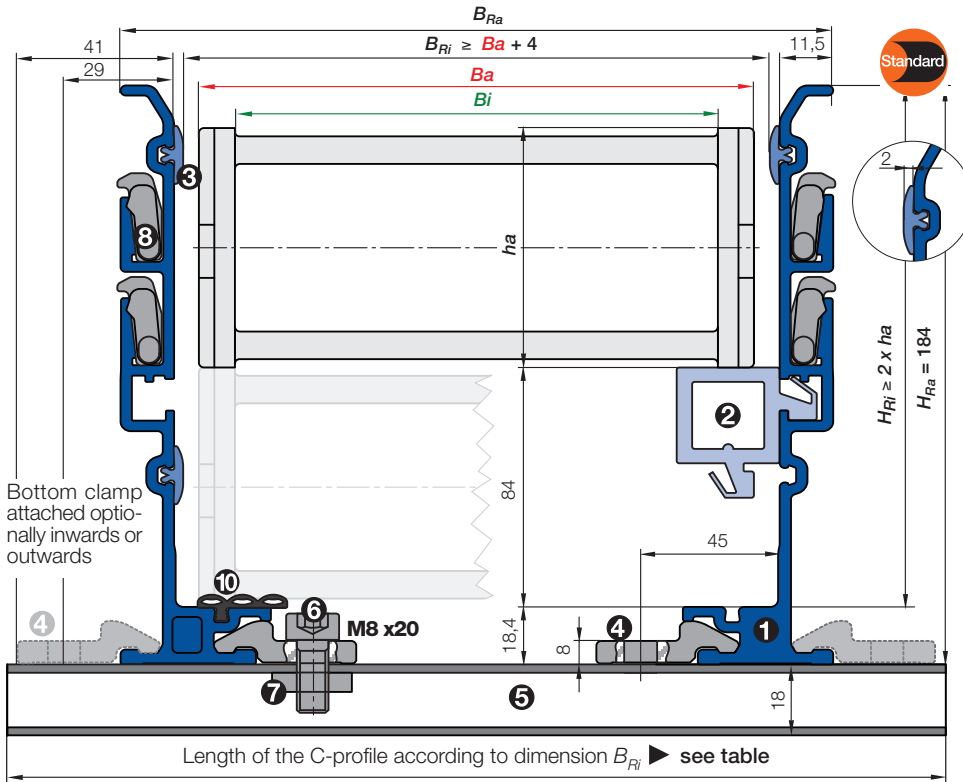
(- = no / + = yes)



# Aluminum "SuperTrough" | Basic Version



400  
410  
R880



- $Ba$  = Outer width E-Chains® / E-Tube
- $Bi$  = Inner width E-Chains® / E-Tube
- $ha$  = Outer height E-Chains® / E-Tube
- $H_{Ri}$  = Inner trough height
- $H_{Ra}$  = Outer trough height
- $B_{Ri}$  = Inner trough width ▶ depends on dim.  $Ba$
- $B_{Ra}$  = Outer trough width
- $n_{Mon}$  = Number of installation sets (left/right)
- $n_{Ri}$  = Number of trough sets (left/right)
- !  $H_{Ri} \geq 2 \cdot ha$
- $B_{Ri} \geq Ba + 4$
- = Guide trough set    ● = Glide bar
- = Installation set "Basic"    ● = C-profile

## Installation set "Basic" with C-profile

Bottom Clamp attached optionally inwards or outwards

400.05.200.0 ▶ Order example

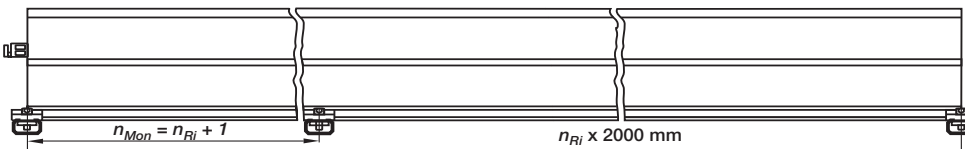
$B_{Ri}$ [mm]	Part No.	Part No.
	attached inwards	attached outwards
.05	88	960.50.225
.06	103	960.50.225
.07	113	960.50.250
.08	125	960.50.175
.10	138	960.50.200
.11	151	960.50.200
.12	163	960.50.225
.13	176	960.50.225
.15	188	960.50.250
.16	201	960.50.250
.17	213	960.50.275
.18	226	960.50.275
.20	238	960.50.300
.21	251	960.50.300
.22	263	960.50.325
.23	276	960.50.325
.25	288	960.50.350
.26	301	960.50.350
.27	313	960.50.375
.28	326	960.50.375
.30	338	960.50.400
.31	351	960.50.400
.32	363	960.50.425
.33	376	960.50.425
.35	388	960.50.450
.36	401	960.50.450
.37	413	960.50.475
.38	426	960.50.475
.40	438	960.50.500
.41	451	960.50.500
.42	463	960.50.525
.43	476	960.50.525
.45	488	960.50.550
.46	501	960.50.550
.47	513	960.50.575
.48	526	960.50.575
.50	538	960.50.600
.51	551	960.50.600
.52	563	960.50.625
.53	576	960.50.625
.55	588	960.50.650
.60	638	960.50.700



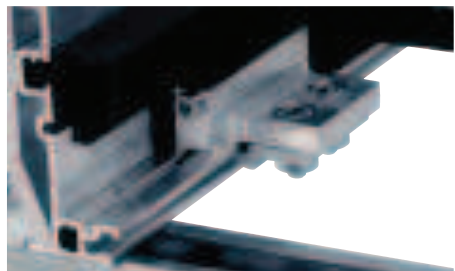
- **Components, trough "Basic":** ① Trough side parts, aluminum, 2 m ② Glide bar, plastic, 2 m ③ Glide strips, plastic, 2 m (without glide strips on request) ⑩ Optional: Silencer profile, rubber
- **Components, installation set "Basic":** ④ Bottom clamp, aluminum ⑤ C-profile, steel galvanized ⑥ Screw M8 x 20 ⑦ Sliding nut M8 ⑧ Interface connector, plastic

## Order example: Length of travel 30 m - Center mounted for Series 400.10.200.0 with $B_{Ri} = 138$

- Guide trough set (set of 2 trough side parts, incl. glide strips) **without** glide bar  
Order text: 16 m guide trough without glide bar (8 x 2 m sections)    Part No. 974.30.SL
- Guide trough set (set of 2 trough side parts, incl. glide strips) **with** glide bar  
Order text: 16 m guide trough with glide bar (8 x 2 m sections)    Part No. 974.31.SL
- Installation set "Basic" complete (guide trough-sets + 1)  
Order text: 17 installation sets "Basic"    Part No. 960.50.200
- Module for the fixed end  
Order text: 1 set    Part No. 974.80
- Option: For an additional noise dampening with silencer profile, please add Index A - Example:    Part No. 974.30.SLA



Principle sketch: Number of installation sets to be installed = Number of trough sections + 1



**A quick fix for mounting the stationary end of an E-Chain®**  
With this module for the fixed end, fast and easy mounting onto the Aluminum "SuperTrough" is now possible without any drilling. Fast mounting of the E-Chain® by clamping onto the aluminum trough

- Quick relocation of the stationary end
- No drilling necessary ▶ page 9.16

Insert for the installation set "Heavy-Duty": **974.50.XXX** instead of (960.50.XXX) on the right column "attached outwards"

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

