

Price Index



This E4 Series is a
"Low-noise-Version"



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 600/601/R608:

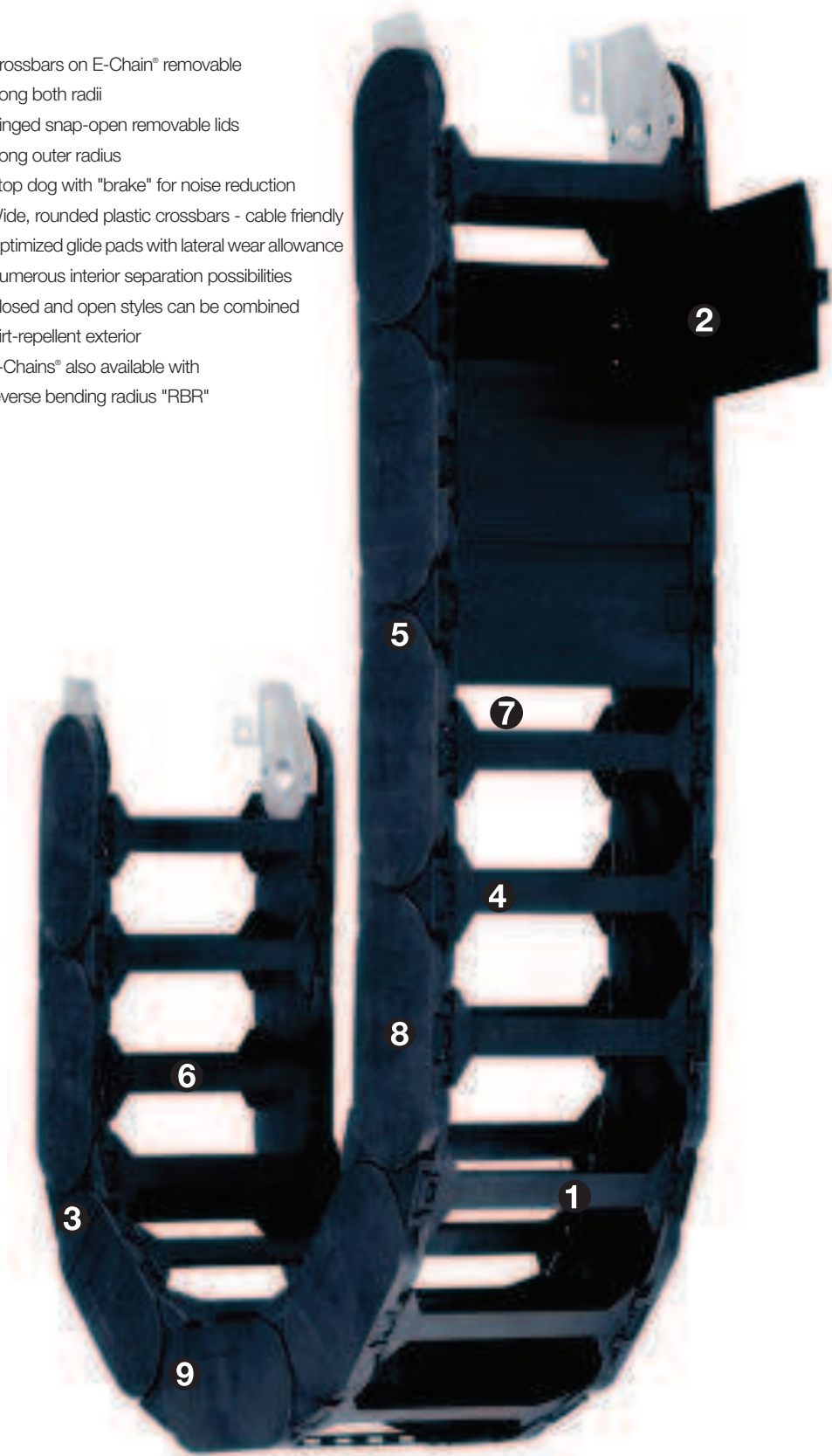
- If a low-noise version is required
- At very high speeds and/or accelerations
- For long travels
- For high additional loads



When not to use it:

- If a simple and low-cost solution is required
 - ▶ Series 1640, page 7.90
- If an increased inner height is required
 - ▶ Series 640, page 7.208

- ❶ Crossbars on E-Chain® removable along both radii
- ❷ Hinged snap-open removable lids along outer radius
- ❸ Stop dog with "brake" for noise reduction
- ❹ Wide, rounded plastic crossbars - cable friendly
- ❺ Optimized glide pads with lateral wear allowance
- ❻ Numerous interior separation possibilities
- ❼ Closed and open styles can be combined
- ❽ Dirt-repellent exterior
- ❾ E-Chains® also available with reverse bending radius "RBR"



Order example complete E-Chain®

Please indicate chain-lengths or number of links **Example: 6 m or 42 links**

6 m **600.30.300.0**



E-Chain®

with 2 separators **6011** assembled every 2nd link



Interior separation

1 set **6000.1.12**



Mounting bracket

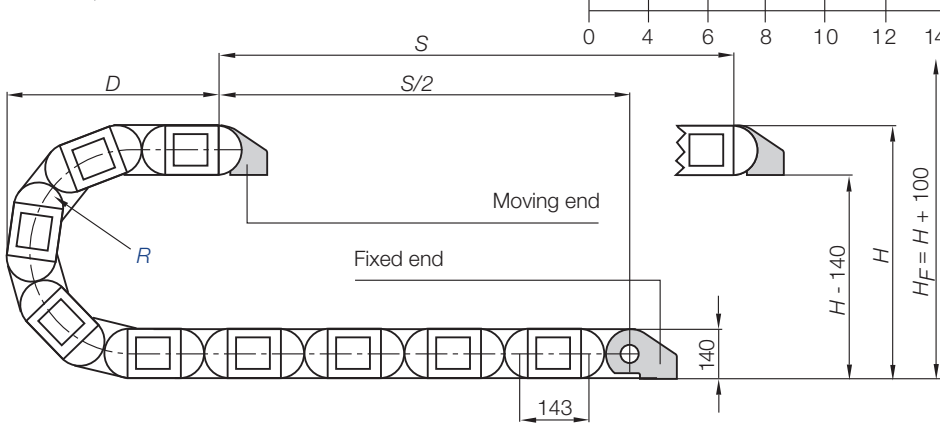
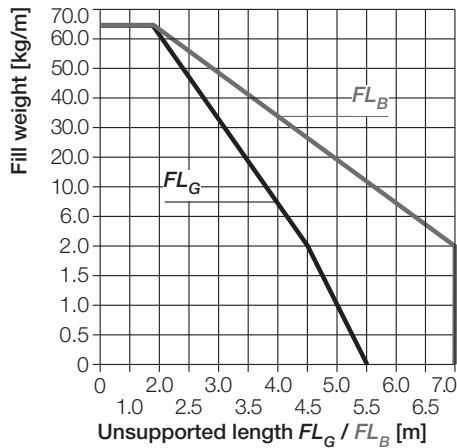
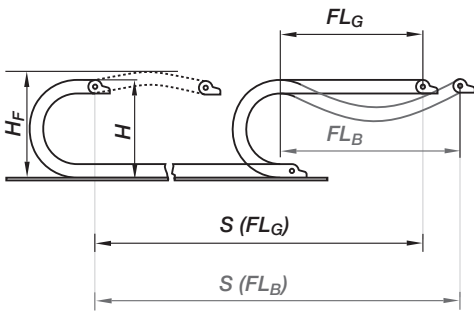


Unsupported length

FL_G = with straight upper run

FL_B = with permitted sag

Further information ► Design, page 1.12



Pitch = 143 mm/link Links/m = 7 (1001 mm) Chain length = $S/2 + K$

R	200	250	300	350	400	450	500	550	600	750	1000
H	545	645	745	845	945	1045	1145	1245	1345	1645	2145
D	415	465	515	565	615	665	715	765	815	965	1215
K	920	1080	1240	1400	1560	1720	1870	2020	2175	2660	3435
H ₂	325	325	325	325	325	325	325	325	325	325	-
D ₂ ⁺²⁵	900	1000	1100	1250	1450	1600	1700	1900	2050	2850	-
K ₂	1573	1716	1859	2288	2574	2860	3146	3432	3861	5005	-

- 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 = $\pi \cdot R$ + "safety"
 - D₂ = Over length - long travels, gliding
 - K₂ = *Further add-on
 - H₂ = *Mounting height
- *if the mounting bracket location is set lower

Other installation methods

- Vertical, hanging ≤ 120 m
- Vertical, standing ≤ 6 m
- Side mounted, un supp. ≤ 6 m
- Rotary requires further calculation
- Unsupported length of upper run = upon request

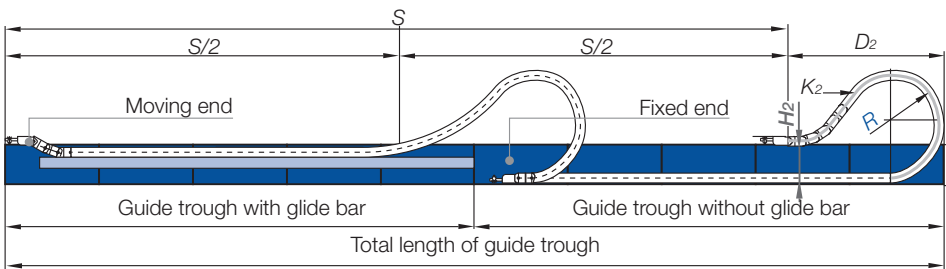


Short travels - unsupported

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 + 100 mm
(with 5,0 kg/m fill weight)

Long travel lengths from 10 m to max. 450 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. 450 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 ²]
Speed / acceleration FL_B	max. 3 [m/s] / max. 6 [m/s ²]
Gliding speed / acceleration (maximum)	max. 10 [m/s] / max. 50 [m/s ²]
Material - permitted temperature °C	igumid G / -40° up to +120° C
Flammability class, igumid G	VDE 0304 IIC UL94 HB

Technical Data

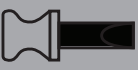
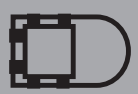


Details of material properties
► page 1.38



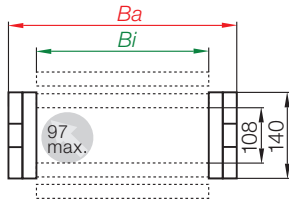
System E4/00
Inner height: 108 mm

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► page 7.161

igus® E-ChainSystems®

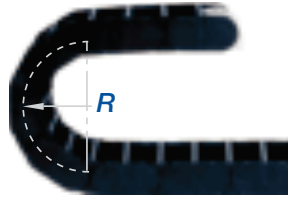


Part No. structure

600. 30. 300. 0



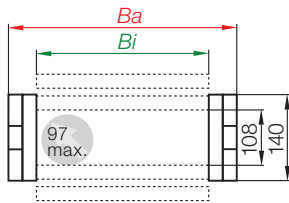
Series 600 - E-Chain® with crossbars every link



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



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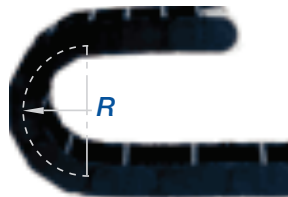


Part No. structure

601. 30. 300. 0



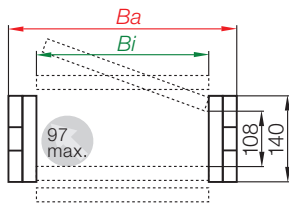
Series 601 - E-Chain® with crossbars every 2nd link



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



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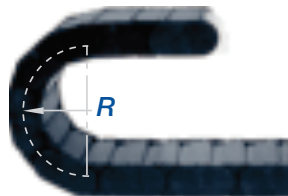


Part No. structure

608. 30. 300. 0



Series R608 - 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
E-mail: info@igus.de

Part No.	<i>Bi</i> [mm]	<i>Ba</i> [mm]	600 [kg/m]	601 [kg/m]	R608 [kg/m]
600/601/608.20... <input type="text"/> .0	200	252	≈ 8,75	≈ 7,99	**
600/601/608.25... <input type="text"/> .0	250	302	≈ 9,11	≈ 8,17	**
600/601/608.30... <input type="text"/> .0	300	352	≈ 9,45	≈ 8,34	**
600/601.32..... <input type="text"/> .0	320	372	≈ 9,59	≈ 8,41	-
600/601/608.35... <input type="text"/> .0	350	402	≈ 9,74	≈ 8,48	**
600/601/608.40... <input type="text"/> .0	400	452	≈ 10,19	≈ 8,71	**
600/601.45..... <input type="text"/> .0	450	502	≈ 10,32	≈ 8,77	-
600/601.50..... <input type="text"/> .0	500	552	≈ 10,63	≈ 8,93	-
600/601.55..... <input type="text"/> .0	550	602	≈ 10,98	≈ 9,10	-
600/601.60..... <input type="text"/> .0	600	652	≈ 11,47	≈ 9,35	-

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*:

608.40.250.0.HT

Lids made of HT:

608.40.HTE.250.0

*for long travels upon request

Further Information:

www.igus.de/en/HT

Delivery time up to 4 weeks!



Available bending radii

R [mm] *

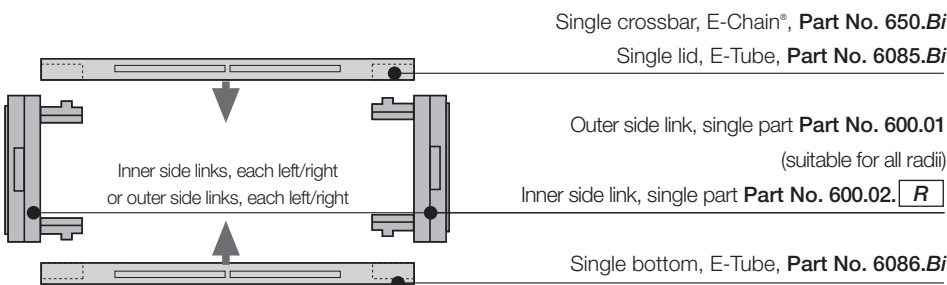
Supplement Part No. with required radius. Example: 600.30..0

0 = standard color, other colors ▶ page 1.39 · Pitch = 143 mm/link - Links/m = 7

*not available for R608 **upon request



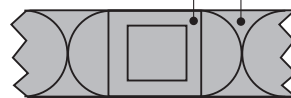
Extension links for extremely wide E-Chains®
▶ upon request



Part No. E-Chain® links, single parts

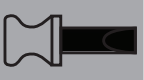
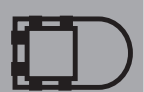
Inner side link

Outer side link

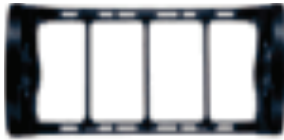


System E4/00
Inner height: 108 mm

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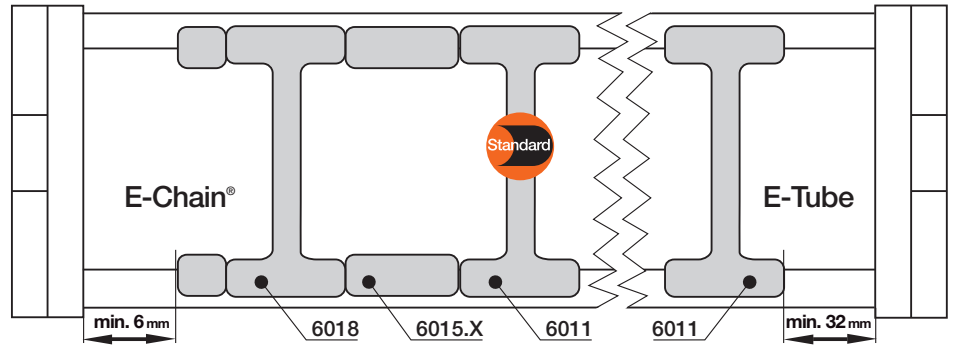


▶ page 7.161



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 6 mm (E-Chain)!
Exception: Minimum spacing
Locking separator 6008 = 23 mm

Exception: Minimum spacing
Locking separator 6008 = 23 mm



Vertical separator
6001



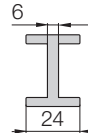
Spacer
6005.XX



Locking separator
6008

Vertical separator for E-Chains®/E-Tubes

unassembled	6001
assembled	6011



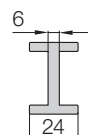
Spacer*, for E-Chains®

unassembled	6005.XX
assembled	6015.XX



Locking separator for E-Chains®

unassembled	6008
assembled	6018



*For side-mounted applications

Option 1: Vertical separators and spacers

● **Standard separator 6001 for E-Chains® and E-Tubes** offers safe stability due to its wide base design, also when used with thick cables or hoses.

● Separators (e.g. "side mounted") for E-Chains® can be fixed in their position with **Spacers 6005.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 mm)

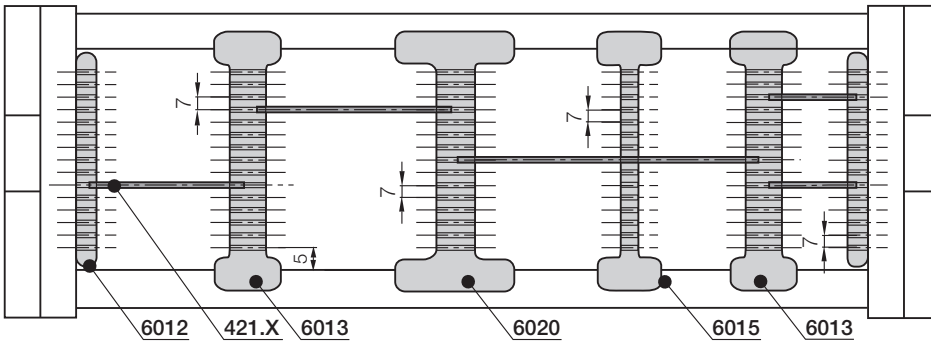
Additionally:

● **Locking separator 6008 for E-Chains®** - 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.

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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 6002, middle plates 6003 and shelves 420.X form the basic pattern of a shelf system. Shelves of various widths can be arranged at 15 different heights (in 7 mm increments).

● Locking vertical separator 6010 combined with shelves. Triple slots (only for E-Chains®).

● Slotted separators 6004 are used for very fine subdivisions. However, they cannot be retrofitted into an existing separation system without dismantling the interior separators first.

● The unilateral open slotted separator 6005 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.

	Side plate for E-Chains®/E-Tubes
unassembled	6002
assembled	6012

	Middle plate for E-Chains®/E-Tubes
unassembled	6003
assembled	6013

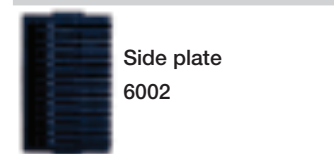
	Locking vertical separator for E-Chains®
unassembled	6010
assembled	6020

	Slotted separator for E-Chains®/E-Tubes
unassembled	6004
assembled	6014

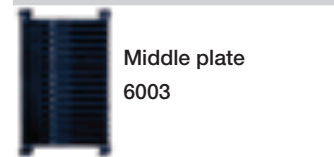
	Open slotted separator for E-Chains®/E-Tubes
unassembled	6005
assembled	6015

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

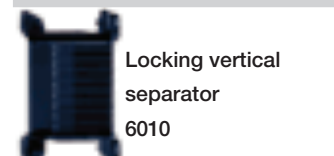
Width X [mm]	Part No. unassembled	Part No. assembled
075	420.75	421.75
088	420.88	421.88
100	420.100	421.100
125	420.125	421.125
150	420.150	421.150
175	420.175	421.175
187	420.187	421.187
200	420.200	421.200



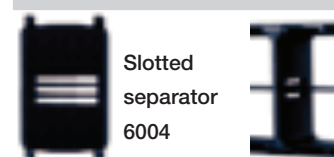
Side plate 6002



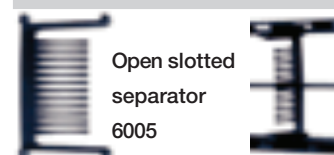
Middle plate 6003



Locking vertical separator 6010



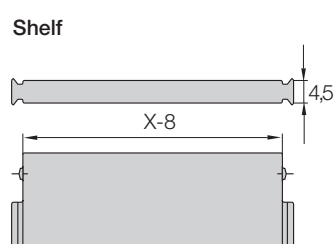
Slotted separator 6004



Open slotted separator 6005



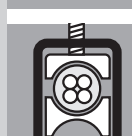
Shelf 420.X

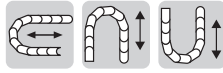


Shelf

System E4/00
Inner height: 108 mm

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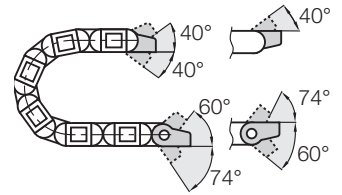




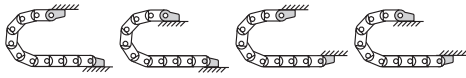
Option steel - pivoting

- For pivoting connections
- One part (two-piece) for all chain widths
- Electrically conductive

Moving end
6000.1



Fixed end
6000.2



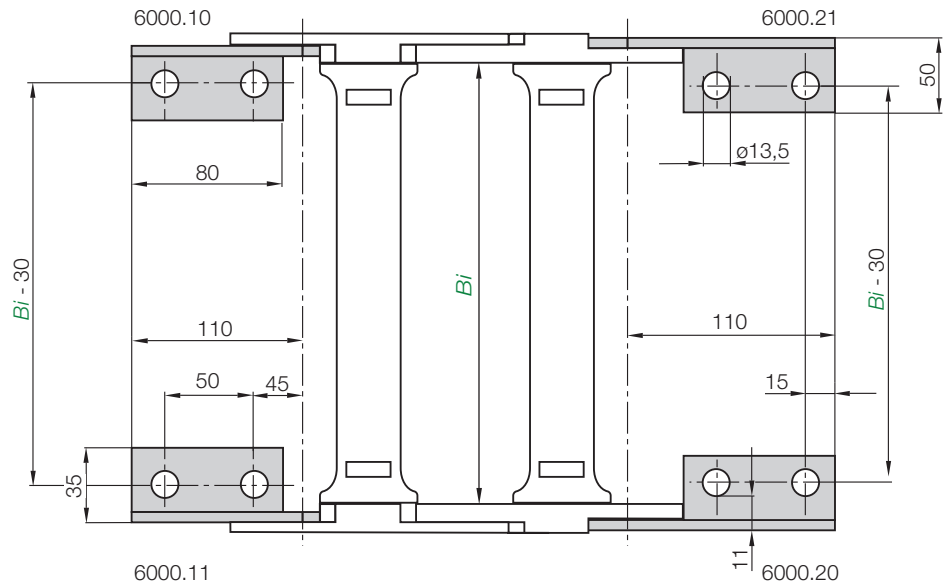
Possible installation conditions -

Further installation angles ► installation sketch

Dimensions and order configurations

Moving end
6000.1

Fixed end
6000.2



Note mounting brackets:

Depending on the E-Chain® length, the carrier will end with outer or inner side links. For the best appearance, make sure the chain ends with outer side link whenever possible. An odd number of links will always end with outer side links.

Part No.	Mounting bracket
6000.1.12	Full attachment set (both sides) for E-Chain®, ending with outer side link
6000.3.12	Full attachment set (both sides) for E-Chain®, beginning with outer side link (moving end), ending with inner side link (fixed end)
6000.1	Mounting bracket set moving end (one side) for outer side link
6000.2	Mounting bracket set fixed end (one side) for inner side link

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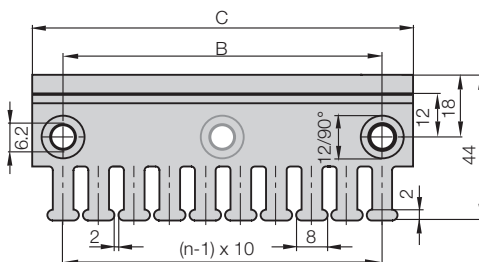
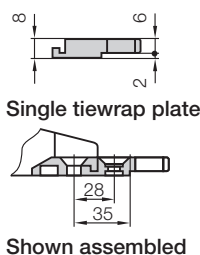
Internet: www.igus.eu
E-mail: info@igus.de

E4/00 | Series 600·601·R608 | Accessories | Strain Relief



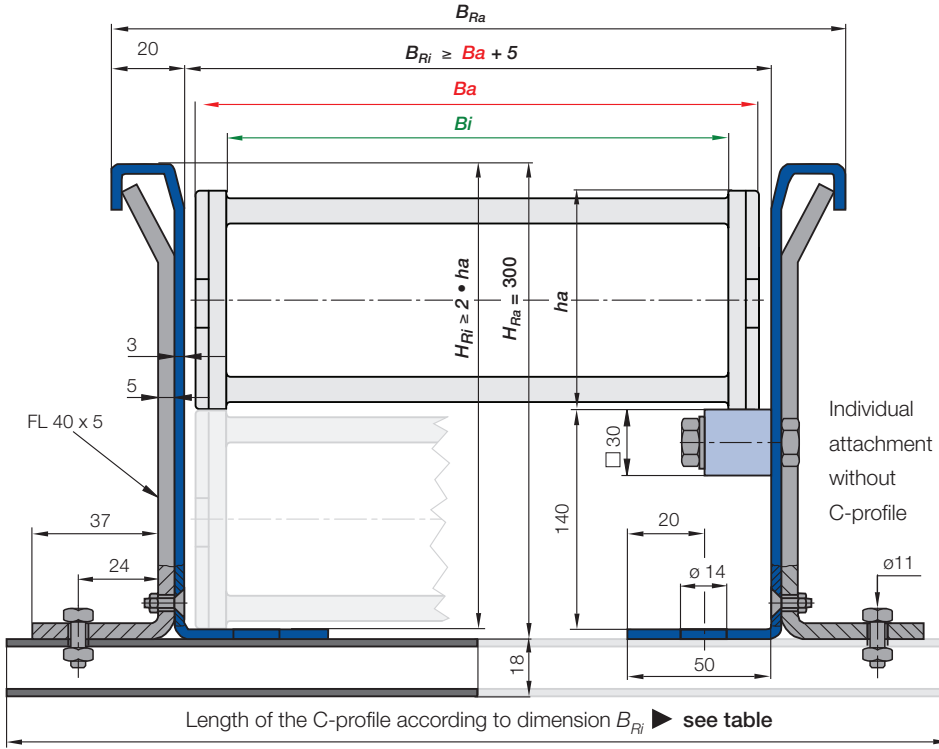
Tiewrap plate as individual part

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)



- B_a = Outer width E-Chains® / E-Tube
- B_i = Inner width E-Chains® / E-Tube
- h_a = Outer height E-Chains® / E-Tube
- H_{Ri} = Inner trough height
- H_{Ra} = Outer trough height
- B_{Ri} = Inner trough width ▶ depends on dim. B_a
- B_{Ra} = Outer trough width
- n_{Mon} = Number of installation sets (left/right)
- n_{Ri} = Number of trough sets (left/right)
- ! $H_{Ri} \geq 2 \cdot h_a$
- $B_{Ri} \geq B_a + 5$
- = Guide trough set ● = Glide bar
- = Installation set ● = C-profile

Installation set with C-profile

600.20.300.0 ▶ Order example

	B_{Ri}	Part No.	Installation set
.20	257	98.50.375	
.25	307	98.50.425	
.30	357	98.50.475	
.32	377	98.50.500	
.35	407	98.50.525	
.40	457	98.50.575	
.45	507	98.50.625	
.50	557	98.50.675	
.55	607	98.50.725	
.60	657	98.50.775	

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

- Guide trough without glide bars
Part No. 98.30
- Guide trough with glide bars
Part No. 98.31
- Installation sets as end connectors
Part No. 98.50.XX

.XX indicates the length of the C-profile on which the guide trough is mounted. The values and part numbers are specified in the table on the left. Standard length of the trough components and glide bars is 2 m. The required overall length of the guide trough directly correlates to the length of travel. Special dimensions are available for confined spaces.

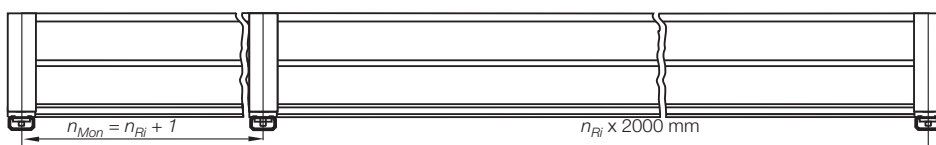


Illustration top: Guide trough with and without glide bar. Illustration bottom: installation set

Order example: Length of travel 30 m - Center mounted for Series 600.30.300.0 with $B_{Ri} = 357$

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. 98.30
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. 98.31
Installation set "Basic" complete (Guide trough-sets + 1)	
Order text: 17 Installation sets (with C-profile)	Part No. 98.50.475

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



▶ chapter 10



▶ chapter 9



▶ page 7.161