



**Undercut  
design.**

**Strong  
connection.**

# E4/light

## Large, light and strong



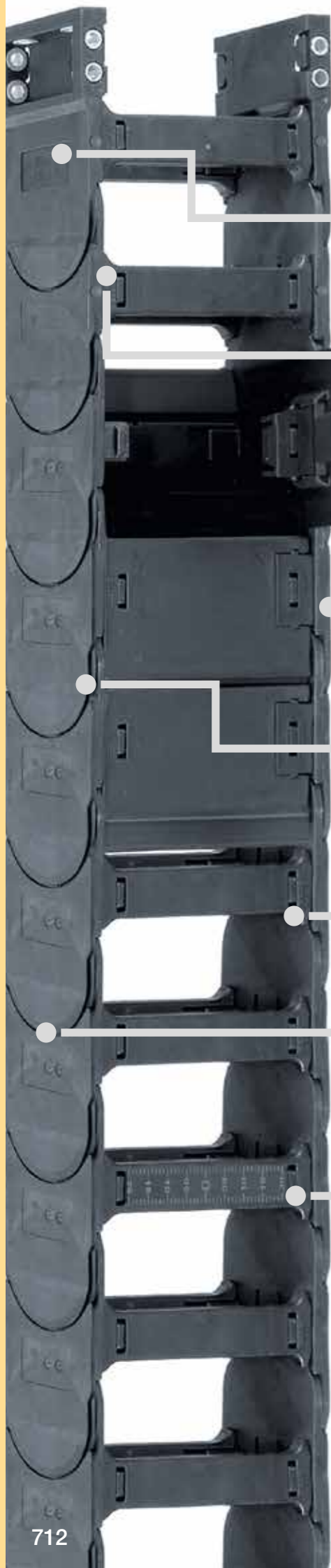
### Advantages of the E4/light system:

- Large inner heights combined with low weight
- E4/light e-chains® offer optimum price and performance solutions for many applications
- Especially suitable for short travel distances, hanging and standing designs



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

- For easy, tool-free opening and closing - the next generation of easy-to-assemble e-chains®
  - ▶ E4Q, page 580
- When the e-chain® needs to be extremely quiet with very low vibration
  - ▶ E6.1, page 832
- When the e-chain® is to be used in cleanrooms
  - ▶ E6.1, page 832
- If large unsupported lengths are required for side-mounted applications
  - ▶ E4.1, page 616
- When longer unsupported lengths and longer travels are required
  - ▶ E4.1, page 616
- When the current standard up to 64mm is preferred
  - ▶ E4.1L, page 538



Attachment from any side: with KMA mounting brackets

Quiet operation: optional noise dampers

Swarf protection: openable lids

Long service life: lateral gliding surfaces

High strength: due to undercut design

Strong: crossbars with double locking

Low-noise operation: due to integrated brake

Precise separation: notch crossbar with visual scale

## Large, light and strong - E4/light system

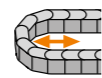
Weight reduction, a larger interior space and a reduced price. The characteristics of the E4/light system: thinner side links (for all series) and a thinner crossbar (for some series: 14240, 14340). E4/light e-chains® offer an optimum price/performance ratio for many applications. Especially for short travels, hanging and small standing applications. E4/light types are often first choice.

### Typical industries and applications

- Machine tools ● Material handling equipment
- Stone-cutting machines ● Woodworking machines
- Vehicles ● Construction machinery
- Limited application for long travel distances
- General mechanical engineering etc.



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



Side-mounted - unsupported



High torsional rigidity

Series Part No.	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
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**e-chains® with crossbars every link**  
the all-rounder - also for particularly demanding applications

Please observe the guidelines for the e-chains® selection, further information ► From page 114

14040	56	50 - 600	76 - 626	84	135 - 500	4.0	718
14240	62	50 - 400	76 - 426	84	135 - 500	4.0	728
14550	70	50 - 600	77 - 627	98	150 - 600	4.2	736
15050	80	50 - 600	80 - 630	108	150 - 600	4.6	744
15250	86	50 - 400	80 - 430	108	150 - 600	4.6	754
1640	112	50 - 600	84 - 634	140	200 - 600	4.5	762



**e-chains® with crossbars every 2<sup>nd</sup> link**  
the cost-effective, easy-to-install alternative for almost all applications

Please observe the guidelines for the e-chains® selection, further information ► From page 114

14140	56	50 - 600	76 - 626	84	135 - 500	4.0	718
14340	62	50 - 400	76 - 426	84	135 - 500	4.0	728
14650	70	50 - 600	77 - 627	98	150 - 600	4.2	736
15150	80	50 - 600	80 - 630	108	150 - 600	4.6	744
15350	86	50 - 400	80 - 430	108	150 - 600	4.6	754



**e-tubes**  
fully enclosed, excellent cable protection

Please observe the guidelines for the e-chains® selection, further information ► From page 114

R18840	56	75 - 462	101 - 489	84	150 - 500	4.0	718
R19050	70	75 - 462	102 - 489	98	200 - 600	4.2	736
R19850	80	75 - 462	105 - 493	108	200 - 500	4.6	744
R1608	108	200 - 500	234 - 534	140	250 - 600	4.5	762



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

\*Average time before the ordered goods are dispatched.



E4/light undercut design, for high stability and strength



E4/light - high strength even for side-mounted applications



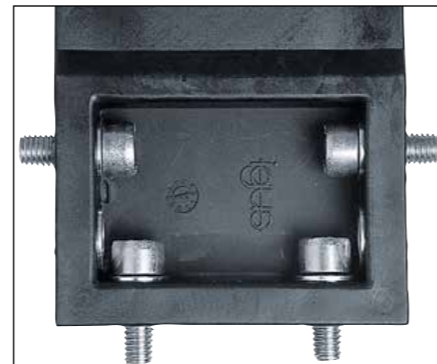
Crossbars openable on both sides



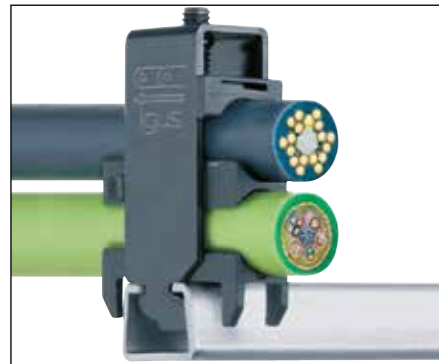
Flexible extender crossbar range - e-chain® extender for enlarging the interior, large range of widths possible



The extension link design allows virtually unlimited side-by-side extension



KMA mounting brackets with attachment options from any side



Strain relief e.g. clamps, tiwrap plates, nuggets, etc. ▶ From page 1392



Aluminium "SuperTrough" - the standard igus® guide trough ▶ From page 1298



Steel support tray - for support of the lower run ▶ From page 1356

Technical data







	Speed gliding / acceleration gliding	≤ 5 [m/s] / ≤ 50 [m/s <sup>2</sup> ]
	Speed $FL_G$ / acceleration $FL_G$	≤ 20 [m/s] / ≤ 200 [m/s <sup>2</sup> ]
	Speed $FL_B$ / acceleration $FL_B$	≤ 3 [m/s] / ≤ 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

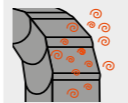

Installation types, maximum travels

Series								
	Unsupported	Gliding	Vertical hanging	Vertical standing	Side mounted unsupported	Rotary	Zig-zag	Unsupported length lower run
14040/14140/R18840	≤ 8.0m	≤ 150m	≤ 80m	≤ 6.0m	≤ 2.0m	with rework	upon request	upon request
14240/14340	≤ 8.0m	≤ 150m	≤ 80m	≤ 6.0m	≤ 2.0m	with rework	upon request	upon request
14550/14650/R19050	≤ 8.4m	≤ 250m	≤ 90m	≤ 6.0m	≤ 2.0m	with rework	upon request	upon request
15050/15150/R19850	≤ 9.2m	≤ 250m	≤ 100m	≤ 6.0m	≤ 2.0m	with rework	upon request	upon request
15250/15350	≤ 9.2m	≤ 250m	≤ 100m	≤ 6.0m	≤ 2.0m	with rework	upon request	upon request
1640/R1608	≤ 9.0m	≤ 400m	≤ 100m	≤ 5.0m	≤ 2.0m	with rework	upon request	upon request

Options with order keys | Examples based on series 14040/14140/18840

 <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>
<b>Part No. Standard</b>	<b>Part No. NC version</b>	<b>Part No. RBR</b>	<b>Part No. XXL material</b>
			
<b>14040.30.R.0</b> e-chain® with crossbars every link	<b>14040.30.R.0.NC</b> e-chain® with crossbars every link	<b>14040.30.R1/R2.0</b> e-chain® with crossbars every link	<b>14040.30.R.0.XXL</b> e-chain® with crossbars every link <sup>1)</sup>
<b>14140.30.R.0</b> e-chain® with crossbars every 2 <sup>nd</sup> link	<b>14140.30.R.0.NC</b> e-chain® with crossbars every 2 <sup>nd</sup> link	<b>14140.30.R1/R2.0</b> e-chain® with crossbars every 2 <sup>nd</sup> link	<b>14140.30.R.0.XXL</b> e-chain® with crossbars every 2 <sup>nd</sup> link <sup>1)</sup>
<b>18840.30.R.0</b> e-tube, closed	<b>18840.30.R.0.NC</b> e-tube, closed	<i>RBR for e-tubes - please consult igus®</i>	<b>18840.30.R.0.XXL</b> e-tube, closed <sup>1)</sup>
 <b>Ready to ship in 24 - 48hrs.*</b>	<b>Ready to ship in 3-5 business days*</b>	<b>Ready to ship in 12 business days</b>	<b>Ready to ship in 12 business days*</b>


▲ ESD version - some series available from stock - further information and the complete product range ► from page 142

<i>e-tube - no burning-in of hot swarf up to +850°C</i>	<i>ESD - electrically conductive material</i>
<b>Part No. igumid HT</b>	<b>Part No. igumid ESD</b>
	
<b>18840.30.R.0.HT</b> Complete e-tube made of HT material <sup>2)</sup>	<b>14040.30.R.0.ESD</b> e-chain® with crossbars every link
<b>18840.30.HT.R.0</b> Lid and shelves made of HT material (side plates of standard material)	<b>14140.30.R.0.ESD</b> e-chain® with crossbars every 2 <sup>nd</sup> link
<b>Ready to ship in 6 weeks*</b>	<b>Ready to ship in 12 business days*▲</b>






\*Average time before the ordered goods are dispatched.

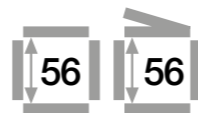
1) Side-bands made from XXL material 2) Available upon request. Delivery time upon request

Order example | Examples based on series 14040

 <b>Order example for complete e-chain® (3.0m), colour black, with mounting brackets and interior separation:</b>	
<b>e-chain® (3.0m)</b>	Please indicate e-chain® length or number of links: 3.0m or 33 links <b>14040.30.300.0</b>
<b>+ Mounting brackets</b>	1 set (with integrated C-profiles) <b>140400.30.12.C</b>
<b>Interior separation</b>	with 2 separators assembled every 2 <sup>nd</sup> link <b>2 x 56.1.1</b>
<b>Order text:</b>	<b>3m 140400.30.300.0 + 141400.30.12.C + 2 x 56.1.1</b>

Order key and colour examples | Examples based on series 14040/14140/18840

 <b>Order key</b>			
e-chain® with crossbars every link	<b>14040.30.300.0</b>		
e-chain® with crossbars every 2 <sup>nd</sup> link	<b>14140.30.300.0</b>		
e-tube fully enclosed	<b>18840.30.300.0</b>		
Series / Type			
Width index (depends on B)			
Bend radius R			
Colour index (standard black)			
<b>Order index for colour options</b>			
Colour	Order index	Colour	Order index
Black	Standard .0	Orange	Special colour .2
Silver-grey	Special colour .31	Yellow	Special colour .4
White	Special colour .1	Light grey	Special colour .14
Grey-white	Special colour .1S		
<b>Black e-chains® ready to ship in 24 - 48hrs.*</b>			
Above special colours upon request.			



**e-chains® / e-tubes** | Series 14040 | Crossbars every link (crossbars removable along the inner and outer radius)  
**e-chains®** | Series 14140 | Crossbars every 2<sup>nd</sup> link (crossbars removable along the inner and outer radius)  
**e-tubes** | Series R18840 | Fully enclosed (lids openable along the outer radius, from one side)

Part No.	Bi	Ba	14040	14140	18840
e-chains® / e-tubes	[mm]	[mm]	[kg/m]	[kg/m]	[kg/m]
14040. 14140. - 05. R.0	50	76	≈ 2.47	≈ 2.48	-
14040. 14140. - 055.R.0	55	81	≈ 2.57	≈ 2.50	-
14040. 14140. - 06. R.0	65	91	≈ 2.66	≈ 2.51	-
14040. 14140. 18840. 07. R.0	75	101	≈ 2.75	≈ 2.25	≈ 3.20
14040. 14140. - 08. R.0	87	113	≈ 2.84	≈ 2.44	-
14040. 14140. 18840. 10. R.0	100	126	≈ 2.93	≈ 2.61	≈ 3.49
14040. 14140. - 11. R.0	112	139	≈ 3.06	≈ 2.67	-
14040. 14140. 18840. 12. R.0	125	151	≈ 3.12	≈ 2.71	≈ 3.85
14040. 14140. - 13. R.0	137	164	≈ 3.26	≈ 2.77	-
14040. 14140. 18840. 15. R.0	150	176	≈ 3.32	≈ 2.81	≈ 4.28
14040. 14140. - 16. R.0	162	189	≈ 3.43	≈ 2.86	-
14040. 14140. - 169.R.0	196	196	≈ 3.51	≈ 2.90	-
14040. 14140. 18840. 17. R.0	175	201	≈ 3.54	≈ 2.92	≈ 4.54
14040. 14140. - 182.R.0	182	209	≈ 3.58	≈ 2.94	-
14040. 14140. - 18. R.0	187	214	≈ 3.65	≈ 2.97	-
14040. 14140. 18840. 20. R.0	200	226	≈ 3.67	≈ 2.98	≈ 4.85
14040. 14140. - 207.R.0	207	234	≈ 3.73	≈ 3.01	-
14040. 14140. - 21. R.0	212	239	≈ 3.78	≈ 3.04	-
14040. 14140. - 22. R.0	225	251	≈ 3.85	≈ 3.07	-
14040. 14140. - 23. R.0	237	264	≈ 3.98	≈ 3.14	-
14040. 14140. 18840. 25. R.0	250	276	≈ 4.07	≈ 3.18	≈ 5.58
14040. 14140. - 26. R.0	262	289	≈ 4.16	≈ 3.22	-
14040. 14140. 18840. 27. R.0	275	301	≈ 4.27	≈ 3.28	≈ 5.85

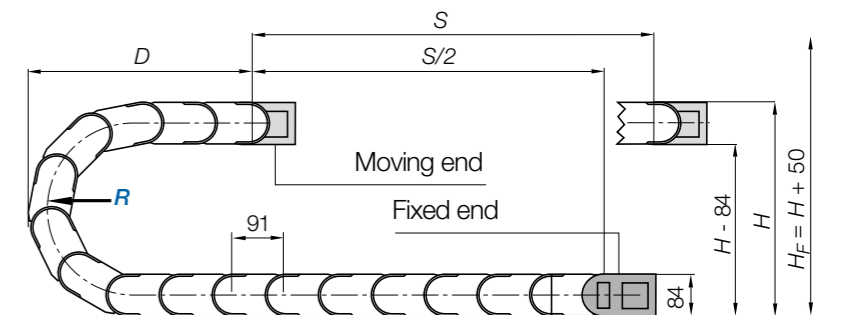
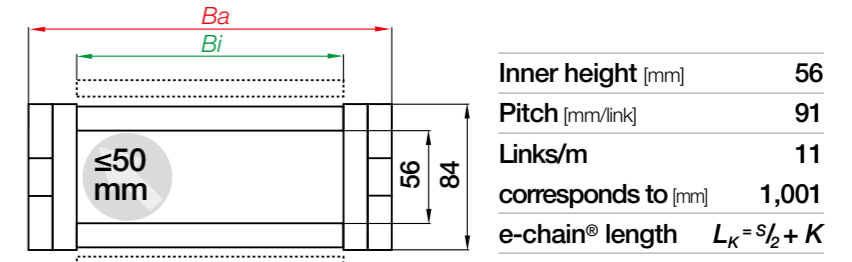
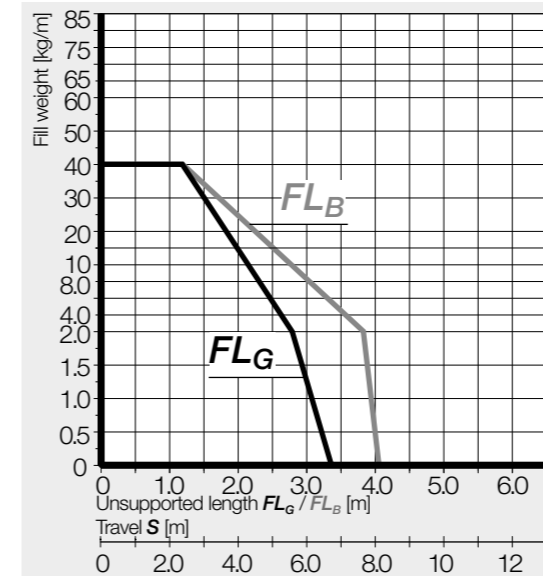
1) Lid removable, non-openable \*Radius not available for e-tubes

**Available bend radii**

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

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

14040.30.300.0 = crossbars every link / 14140.30.300.0 = crossbars every 2<sup>nd</sup> link / 18840.30.300.0 = fully enclosed

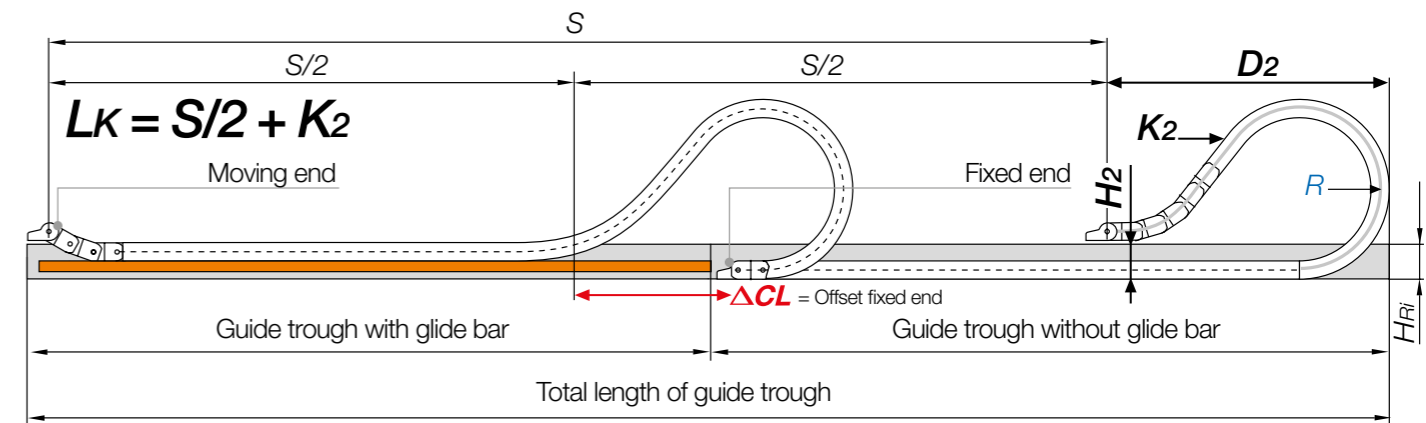


R	135*	150	175	200	250	300	400	500
H <sub>25</sub>	354	384	434	484	584	684	884	1,084
D	314	329	354	379	429	479	579	679
K	610	655	735	815	970	1,125	1,440	1,755

The required clearance height:  $H_F = H + 50\text{mm}$  (with 2.0kg/m fill weight)

\*Radius not available for e-tubes

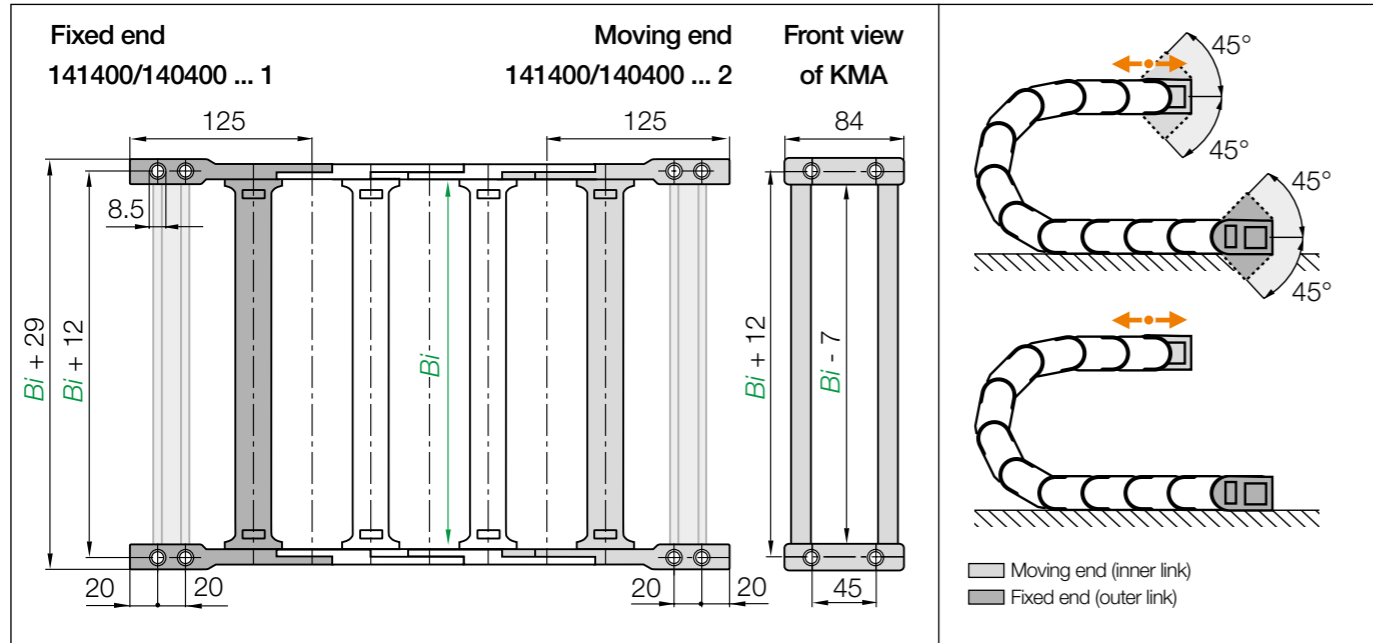
**Gliding applications | For travel lengths from 12m to max. 150m**



**Note:** We recommend the project planning of such a system to be carried out by igus®. In case of travels between 8 and 12m we recommend an e-chain® with a longer unsupported length.

R	135*	150	175	200	250	300	400	500
H <sub>2</sub>	266	266	266	266	266	266	266	266
D <sub>25</sub>	390	450	530	710	920	1,120	1,530	1,830
K <sub>2</sub>	728	819	1,001	1,274	1,638	1,911	2,548	3,185
ΔCL	124	159	209	359	509	659	959	1,159

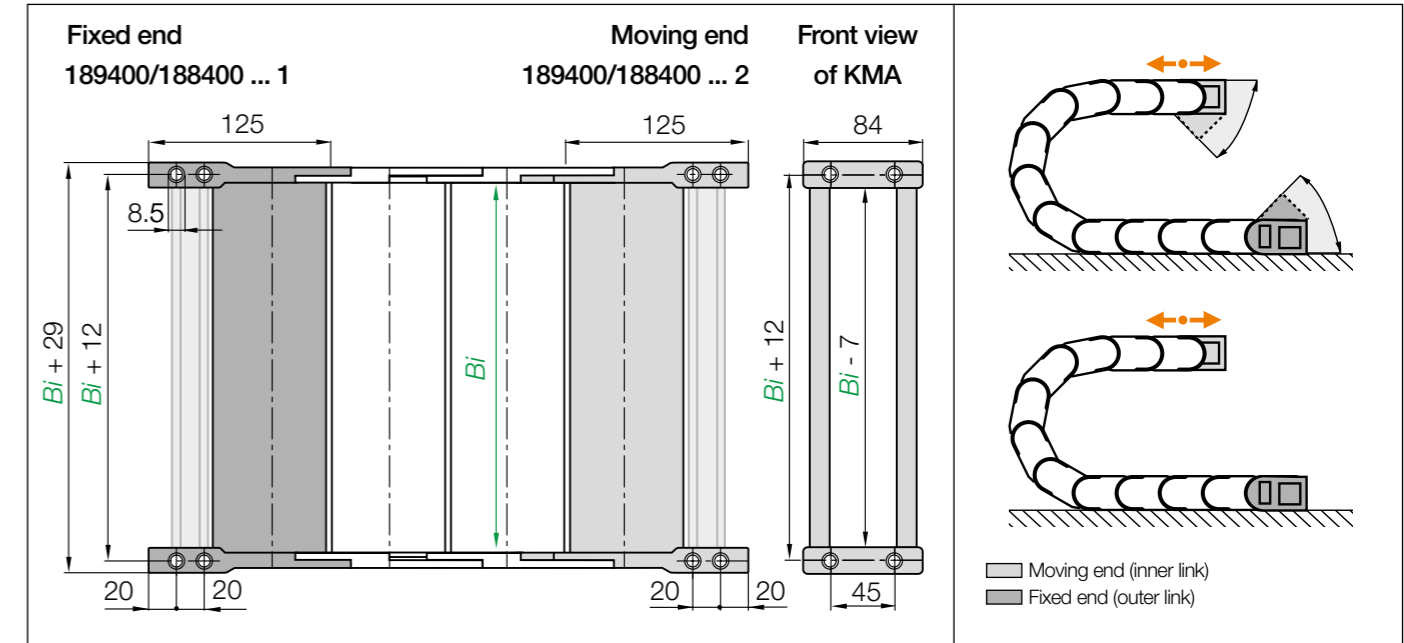
\*Radius not available for e-tubes



**KMA pivoting** | Recommended for unsupported and gliding applications  
**KMA locking** | Recommended for vertical hanging and standing applications

Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]	Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]
05.	141400. 05 .12.C	140400. 05 .12.C	50	28.	141400. 28 .12.C	140400. 28 .12.C	287
055.	141400. 055 .12.C	140400. 055 .12.C	55	30.	141400. 30 .12.C	140400. 30 .12.C	300
06.	141400. 06 .12.C	140400. 06 .12.C	65	31.	141400. 31 .12.C	140400. 31 .12.C	312
07.	141400. 07 .12.C	140400. 07 .12.C	75	32.	141400. 32 .12.C	140400. 32 .12.C	325
08.	141400. 08 .12.C	140400. 08 .12.C	87	33.	141400. 33 .12.C	140400. 33 .12.C	337
10.	141400. 10 .12.C	140400. 10 .12.C	100	35.	141400. 35 .12.C	140400. 35 .12.C	350
11.	141400. 11 .12.C	140400. 11 .12.C	112	36.	141400. 36 .12.C	140400. 36 .12.C	362
12.	141400. 12 .12.C	140400. 12 .12.C	125	37.	141400. 37 .12.C	140400. 37 .12.C	375
13.	141400. 13 .12.C	140400. 13 .12.C	137	38.	141400. 38 .12.C	140400. 38 .12.C	387
15.	141400. 15 .12.C	140400. 15 .12.C	150	40.	141400. 40 .12.C	140400. 40 .12.C	400
16.	141400. 16 .12.C	140400. 16 .12.C	162	41.	141400. 41 .12.C	140400. 41 .12.C	412
169.	141400. 169 .12.C	140400. 169 .12.C	169	42.	141400. 42 .12.C	140400. 42 .12.C	425
17.	141400. 17 .12.C	140400. 17 .12.C	175	43.	141400. 43 .12.C	140400. 43 .12.C	437
182.	141400. 182 .12.C	140400. 182 .12.C	182	45.	141400. 45 .12.C	140400. 45 .12.C	450
18.	141400. 18 .12.C	140400. 18 .12.C	187	46.	141400. 46 .12.C	140400. 46 .12.C	462
20.	141400. 20 .12.C	140400. 20 .12.C	200	47.	141400. 47 .12.C	140400. 47 .12.C	475
207.	141400. 207 .12.C	140400. 207 .12.C	207	48.	141400. 48 .12.C	140400. 48 .12.C	487
21.	141400. 21 .12.C	140400. 21 .12.C	212	50.	141400. 50 .12.C	140400. 50 .12.C	500
22.	141400. 22 .12.C	140400. 22 .12.C	225	51.	141400. 51 .12.C	140400. 51 .12.C	512
23.	141400. 23 .12.C	140400. 23 .12.C	237	52.	141400. 52 .12.C	140400. 52 .12.C	525
25.	141400. 25 .12.C	140400. 25 .12.C	250	53.	141400. 53 .12.C	140400. 53 .12.C	537
26.	141400. 26 .12.C	140400. 26 .12.C	262	55.	141400. 55 .12.C	140400. 55 .12.C	550
27.	141400. 27 .12.C	140400. 27 .12.C	275	60.	141400. 60 .12.C	140400. 60 .12.C	600

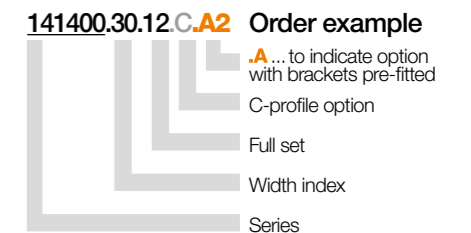
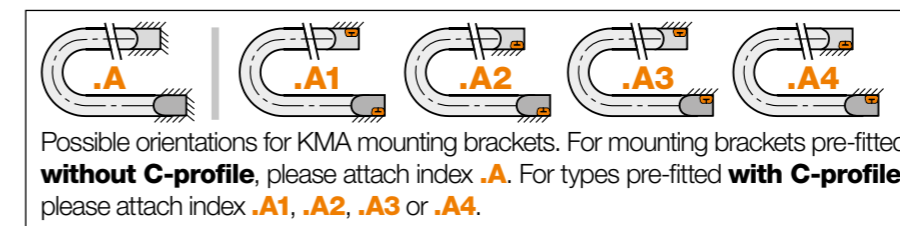
(KMA = polymer metal mounting bracket) For the C-profile option please add index .C



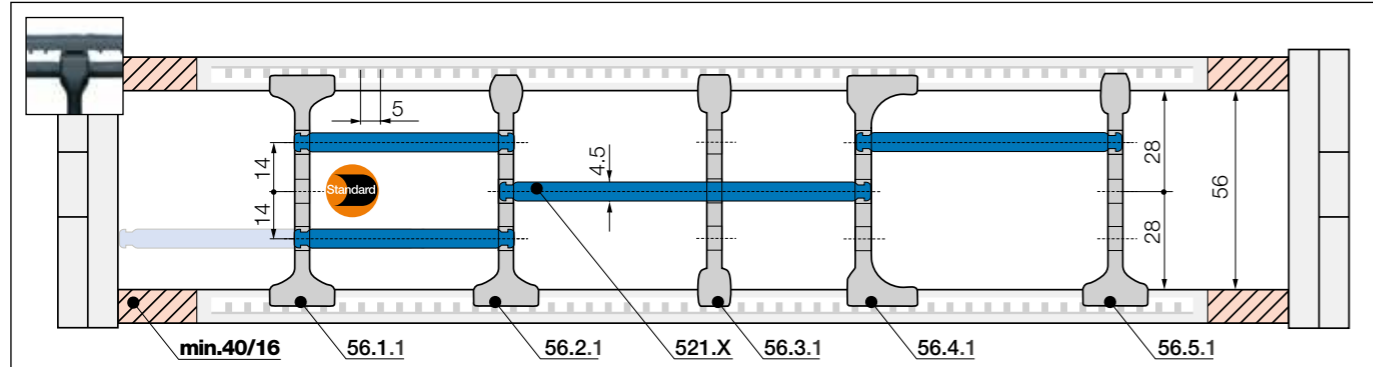
**KMA pivoting** | Recommended for unsupported and gliding applications  
**KMA locking** | Recommended for vertical hanging and standing applications

Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]	Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]
07.	189400. 07 .12.C	188400. 07 .12.C	75	25.	189400. 25 .12.C	188400. 25 .12.C	250
10.	189400. 10 .12.C	188400. 10 .12.C	100	27.	189400. 27 .12.C	188400. 27 .12.C	275
12.	189400. 12 .12.C	188400. 12 .12.C	125	30.	189400. 30 .12.C	188400. 30 .12.C	300
15.	189400. 15 .12.C	188400. 15 .12.C	150	35.	189400. 35 .12.C	188400. 35 .12.C	350
17.	189400. 17 .12.C	188400. 17 .12.C	175	40.	189400. 40 .12.C	188400. 40 .12.C	400
20.	189400. 20 .12.C	188400. 20 .12.C	200	46.	189400. 46 .12.C	188400. 46 .12.C	462

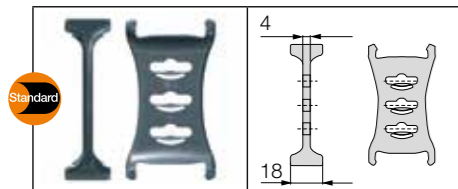
(KMA = polymer metal mounting bracket) For the C-profile option please add index .C



**Strain relief** e.g. clamps, tie-wrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ► From page 1392

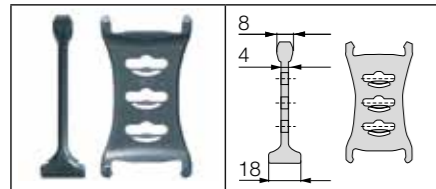


**Note:** Please be aware of the minimum lateral gap to the side links! **e-tube: 40mm** | **e-chain®: 16mm**  
As standard separators are fitted every 2<sup>nd</sup> e-chain® link!



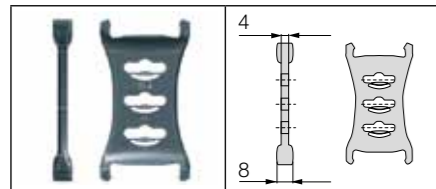
**Standard separator, wide base**  
unassembled **56.1**  
assembled **56.1.1**

**Standard - for any application**  
Separator with a wide base for maximum holding force.



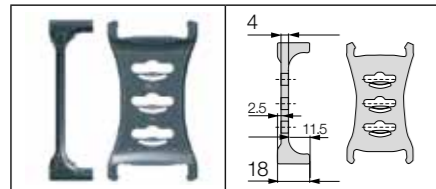
**Separator, narrow top**  
unassembled **56.2**  
assembled **56.2.1**

**For even faster installation**  
Wide on one side for high holding force, narrow on opposite side for easy cable fitting.



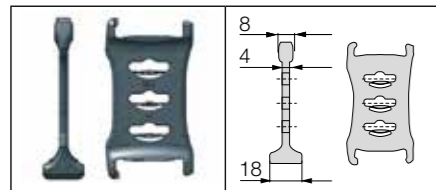
**Separator, narrow**  
unassembled **56.3**  
assembled **56.3.1**

**For small cables**  
Separator with a narrow base for a large number of small cables side by side. Saves space.



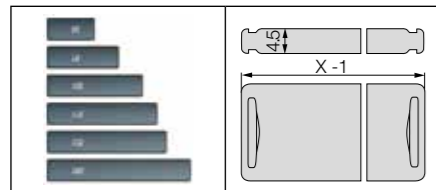
**Separator, asymmetrical**  
unassembled **56.4**  
assembled **56.4.1**

**For side-mounted applications**  
Asymmetrical separator, for defined gap distance. No additional spacers required.



**Notch separator for notched crossbar**  
unassembled **56.5**  
assembled **56.5.1**

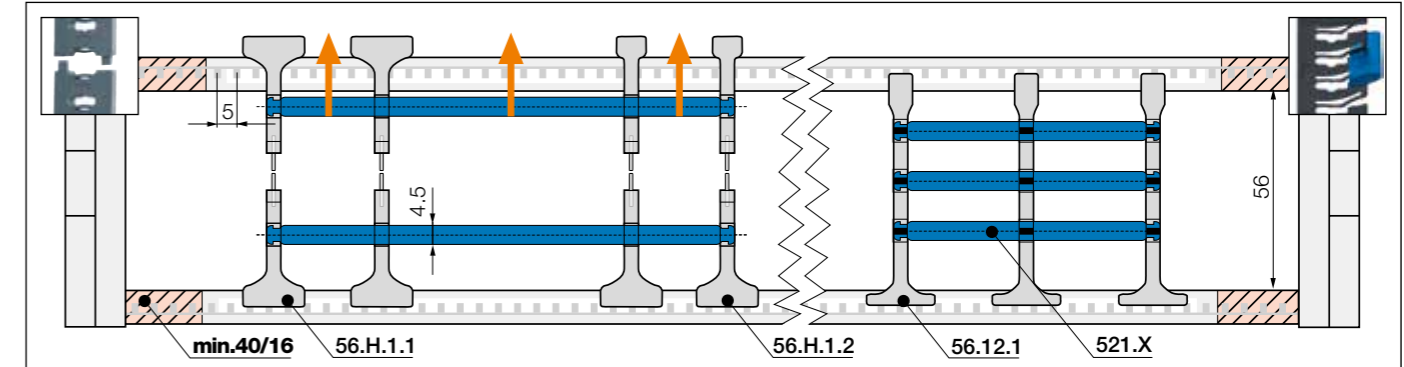
**Locks securely in preset increments**  
Notch separator for exact positioning. Recommended for side-mounted applications.



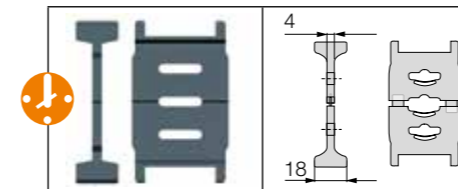
**Shelf, lockable**  
unassembled **520.X**  
assembled **521.X**

**Horizontal separation**  
Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

Shelves Width = X [mm]	X [mm]		X [mm]		X [mm]		X [mm]		
	unassembled	assembled	unassembled	assembled	unassembled	assembled	unassembled	assembled	
	050	520.050	521.050	150	520.150	521.150	300	520.300	521.300
	065	520.065	521.065	175	520.175	521.175	350	520.350	521.350
	075	520.075	521.075	200	520.200	521.200	375	520.375	521.375
	100	520.100	521.100	225	520.225	521.225	387	520.387	521.387
	125	520.125	521.125	250	520.250	521.250	450	520.450	521.450

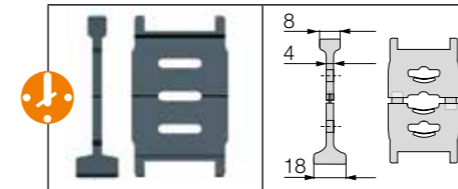


**Note:** Please be aware of the minimum lateral gap to the side links! **e-tube: 40mm** | **e-chain®: 16mm**  
As standard separators are fitted every 2<sup>nd</sup> e-chain® link!

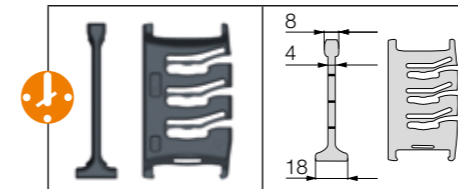


**Split separator, wide base/top**  
unassembled **56.H.1**  
assembled **56.H.1.1**

**Split separators**  
In order to fill e-chains® more easily and effectively, these separators can be split in the middle. This allows easier access to middle shelf partitions. Fast assembly and easy retrofit. 2 types available: with wide or narrow top.



**Split separator, narrow top**  
unassembled **56.H.2**  
assembled **56.H.2.1**



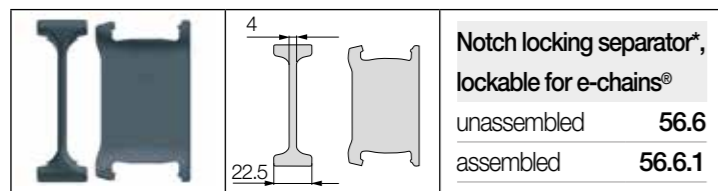
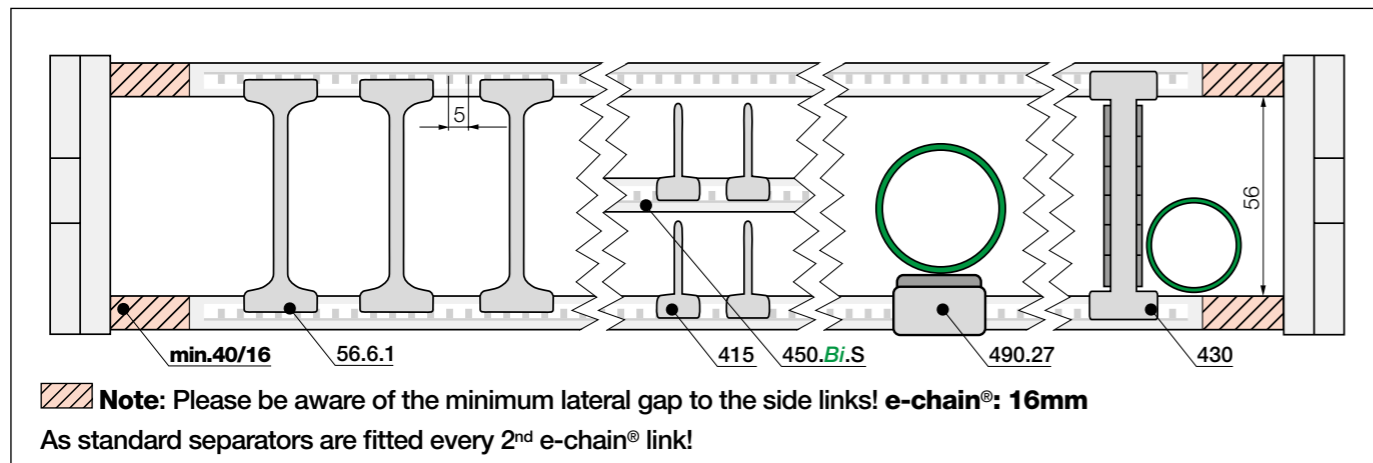
**Lean separator<sup>1)</sup>**  
unassembled **56.12**  
assembled **56.12.1**

**Lean separators<sup>1)</sup>**  
For quick fitting of shelves in several layers.  
**1) Note: Please combine maximum 4 lean separators with one shelf. Not suitable for side-mounted e-chains®!**

With the lean separator you can quickly insert several layers of cables into the e-chain® and reduce the installation time by up to 50%<sup>2)</sup>.

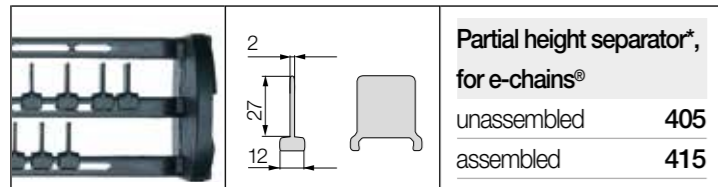
2) Lean interior separation vs. Standard separator - measured on a 4m long e-chain® fitted with 12 cables in the igus® readychain® factory





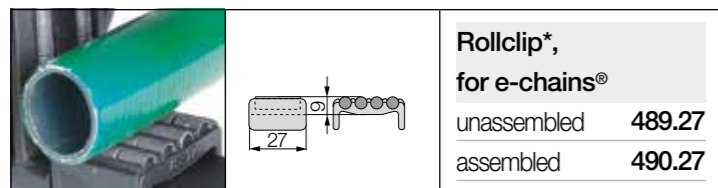
**Notch locking separator\* for increased holding force**

Notch locking separators offer higher crossbar opening forces for high humidity and/or large hydraulic hoses. They can be positioned precisely and then locked in position.



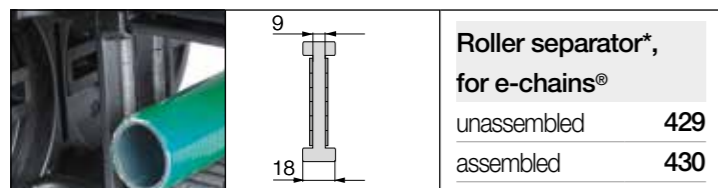
**Partial height separator\***

In conjunction with an additional opening crossbar, part no. 450.Bi.S, it provides the option to separate the upper and lower halves of the e-chain® independently of each other.



**Rollclip\***

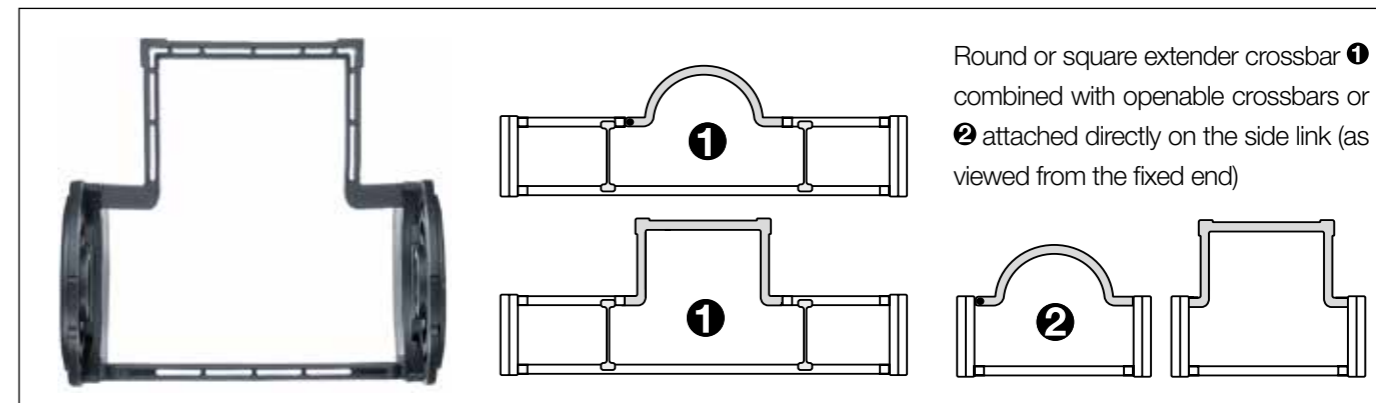
Minimises abrasion of sensitive hoses. Simply clamps onto the opening crossbar. The movable rollers compensate for relative movement between the e-chain® and hose.



**Roller separator\***

The roller separator is used in a similar way to the rollclip. It is used like a separator. For rigid cables and hoses.

\*Only suitable for e-chains®



**Extender crossbars with fixed width | Safe guiding for large hoses**

- Suitable for hoses with a maximum outer diameter of 245mm.
- Option 1 extender crossbars with fixed width to combine with openable crossbars
- Option 2 extender crossbars with fixed width attached directly on the side link
- Optionally openable along the inner "Z" or the outer radius "E"
- Gliding with crossbars assembled along the outer radius and a special guide trough

Part No. extender crossbar with fixed width, as individual parts	Hose $\varnothing \leq$ [mm]	Extender crossbar shape	2 Fitted to side link	1 Combine with openable crossbars
450.15RHD115	115	○ round	No	Yes
450.17RD115	115	○ round	Yes	No
450.25D150	150	□ square	Yes	No
450.30D200	180	□ square	Yes	No
450.35D250	195	□ square	Yes	No
450.40D300	245	□ square	Yes	No
450.20HD150	150	□ square	No	Yes
450.25HD200	180	□ square	No	Yes
450.30HD250	195	□ square	No	Yes

**Order example: 1 combined with openable crossbars**

To receive extender crossbar RHD115 pre-fitted along the outer radius of the-chain®, please add index **E: 14040.10/15RHDE115/10.R.0**

To receive extender crossbar RHD115 pre-fitted along the inner radius of the-chain®, please add index **Z: 14040.10/15RHDZ115/10.R.0**

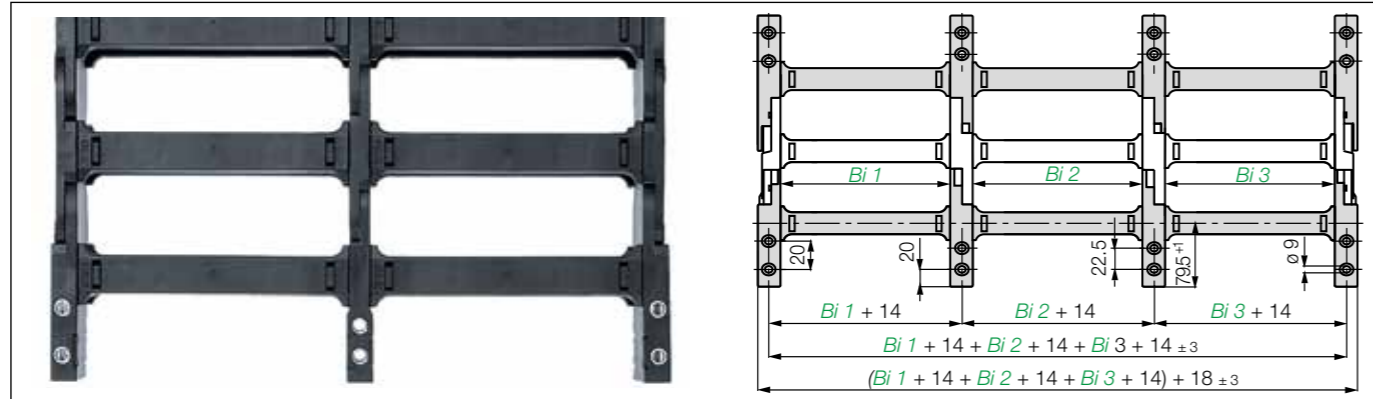
**Order example: 2 fitted to side link**

To receive extender crossbar RD115 pre-fitted along the outer radius of the-chain®, please add index **E: 14040.17RDE115.R.0**

To receive extender crossbar RD115 pre-fitted along the inner radius of the-chain®, please add index **Z: 14040.17RDZ115.R.0**



Extension links



Extension links | For extremely wide e-chains® up to 3.0m

- Virtually unlimited side-by-side extension
- For extremely wide e-chains® up to 3000mm
- Unsupported length  $FL_G$  max. can be increased when heavy fill weights are required
- e-chains® and e-tubes can be combined
- Attached with KMA or steel mounting brackets

Part No.	Part No.	Part No.
Extension link e-chain®	Extension link e-tube	Extension link as an individual part
14040.Bi1/Bi2/Bi3.R.0	R18840.Bi1/Bi2/Bi3.R.0	422.R.

Complete Part No.with the width index *Bi1/Bi2/Bi3/etc.* and the radius (*R*). Example: 14040.10/20/10.200.0



Paint spraying robot with system E4 e-chains® in ESD version. High rates of acceleration of up to 6m/s<sup>2</sup> and high braking rates for a robot weight of approx. one ton

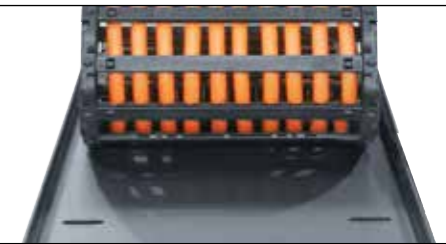
E4 snapclip - clip-on tiewrap

- For side-mounted applications, compatible with many E4 e-chains®
  - Serves as a clip-on, lateral guide for hoses and cables on e-chains®
  - The loops can be adjusted as required
- More information ► [www.igus.eu/14040](http://www.igus.eu/14040)



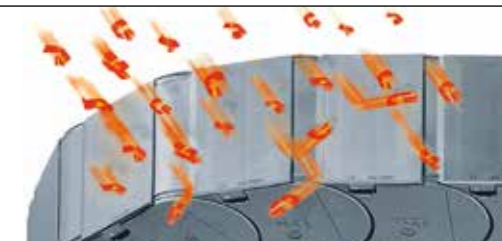
Steel support tray for support of the lower run

- Simple one-piece support trays for the lower run
  - To your requirements and specification
  - 4 options available
- More information ► From page 1356



Hot swarf up to +850°C for e-tubes

- Lids and shelves can repel swarf up to +850°C. Special production option with the igus® material igumid HT
  - No hot swarf melting or embedding into the chain
- More information ► [www.igus.eu/HT](http://www.igus.eu/HT)



Reduce assembly time - E4 e-chain® opener

- e-chain® opener tools for easy opening and closing of e-chains®
  - Simple opening and closing of e-chain® crossbars
  - Also for use in hard to reach locations
  - Significant assembly time reduction
- More information ► [www.igus.eu/E4savetime](http://www.igus.eu/E4savetime)



Roller crossbars - increase the service life of cables and hoses

- Significantly reduce jacket abrasion of very stiff cables and hoses with rolling contact surfaces equipped with tribo-optimised bearings
  - For sensitive hoses in restricted space
  - Usable along the inner and/or outer radius, retrofit possible
- More information ► upon request





e-chains® | Series 14240 | Crossbars every link (crossbars removable along the inner and outer radius)  
 e-chains® | Series 14340 | Crossbars every 2<sup>nd</sup> link (crossbars removable along the inner and outer radius)

Part No.	Bi	Ba	14240	14340	Part No.	Bi	Ba	14240	14340
e-chains®	[mm]	[mm]	[kg/m]	[kg/m]	e-chains®	[mm]	[mm]	[kg/m]	[kg/m]
14240 <sup>▲</sup> 14340. 05. R.0	50	76	≈ 2.37	≈ 2.32	14240. 14340. 212.R.0	212	239	≈ 2.95	≈ 2.60
14240v 14340. 06. R.0	68	94	≈ 2.40	≈ 2.33	14240. 14340. 23. R.0	225	251	≈ 3.01	≈ 2.63
14240. 14340. 07. R.0	75	101	≈ 2.42	≈ 2.34	14240. 14340. 237.R.0	237	264	≈ 3.04	≈ 2.65
14240. 14340. 087.R.0	87	114	≈ 2.47	≈ 2.36	14240. 14340. 25. R.0	250	276	≈ 3.10	≈ 2.68
14240. 14340. 097.R.0	97	123	≈ 2.51	≈ 2.38	14240. 14340. 262.R.0	262	289	≈ 3.11	≈ 2.69
14240 <sup>▲</sup> 14340. 10. R.0	100	126	≈ 2.52	≈ 2.39	14240. 14340. 28. R.0	275	301	≈ 3.19	≈ 2.72
14240. 14340. 11. R.0	108	134	≈ 2.55	≈ 2.40	14240. 14340. 29. R.0	287	314	≈ 3.20	≈ 2.73
14240. 14340. 112.R.0	112	139	≈ 2.55	≈ 2.41	14240. 14340. 30. R.0	300	326	≈ 3.30	≈ 2.78
14240. 14340. 12. R.0	125	151	≈ 2.62	≈ 2.44	14240. 14340. 312.R.0	312	339	≈ 3.31	≈ 2.79
14240. 14340. 137.R.0	137	164	≈ 2.66	≈ 2.46	14240. 14340. 325.R.0	325	351	≈ 3.37	≈ 2.81
14240 <sup>▲</sup> 14340. 15. R.0	150	176	≈ 2.72	≈ 2.49	14240. 14340. 337.R.0	337	364	≈ 3.40	≈ 2.83
14240. 14340. 162.R.0	162	189	≈ 2.73	≈ 2.49	14240. 14340. 350.R.0	350	376	≈ 3.56	≈ 2.91
14240. 14340. 17. R.0	168	194	≈ 2.79	≈ 2.52	14240. 14340. 362.R.0	362	389	≈ 3.61	≈ 2.93
14240 <sup>▲</sup> 14340. 18. R.0	175	201	≈ 2.82	≈ 2.53	14240. 14340. 375.R.0	375	401	≈ 3.64	≈ 2.95
14240. 14340. 187.R.0	187	214	≈ 2.84	≈ 2.55	14240. 14340. 387.R.0	387	414	≈ 3.69	≈ 2.97
14240 <sup>▲</sup> 14340. 20. R.0	200	226	≈ 2.89	≈ 2.58	14240. 14340. 400.R.0	400	426	≈ 3.73	≈ 2.99

▲ ESD version (Electro Static Discharge) available from stock. More information ► From page 142

Available bend radii

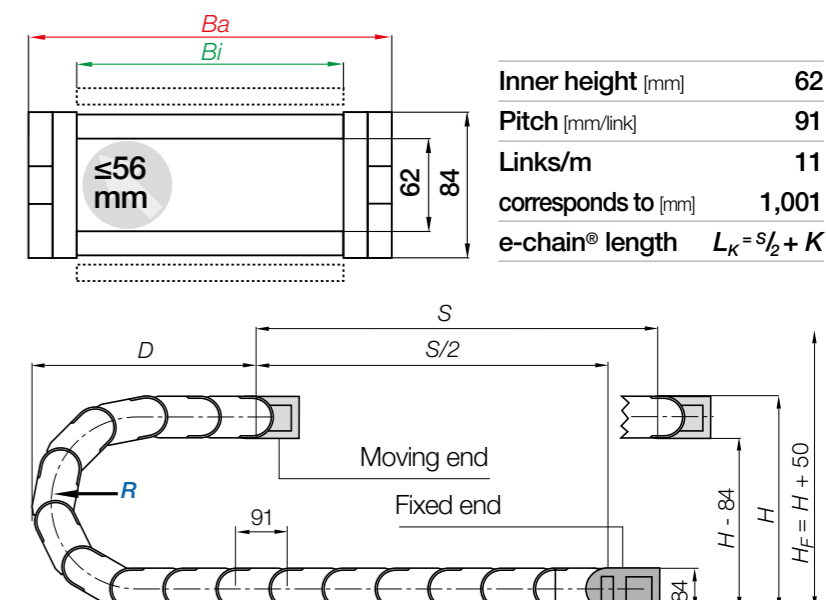
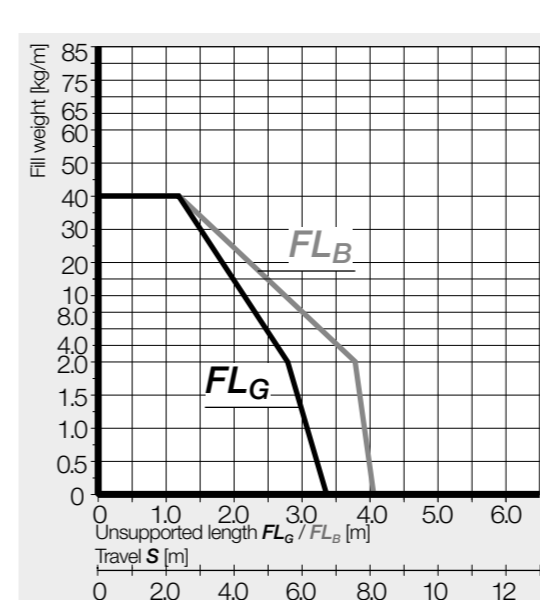
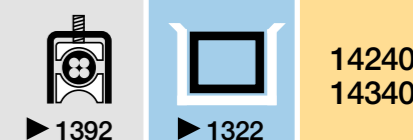
R [mm] | 135 | 150 | 175 | 200 | 250 | 300 | 400 | 500 |

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

14240.20.300.0 = crossbars every link / 14340.20.300.0 = crossbars every 2<sup>nd</sup> link

ESD - many sizes from stock

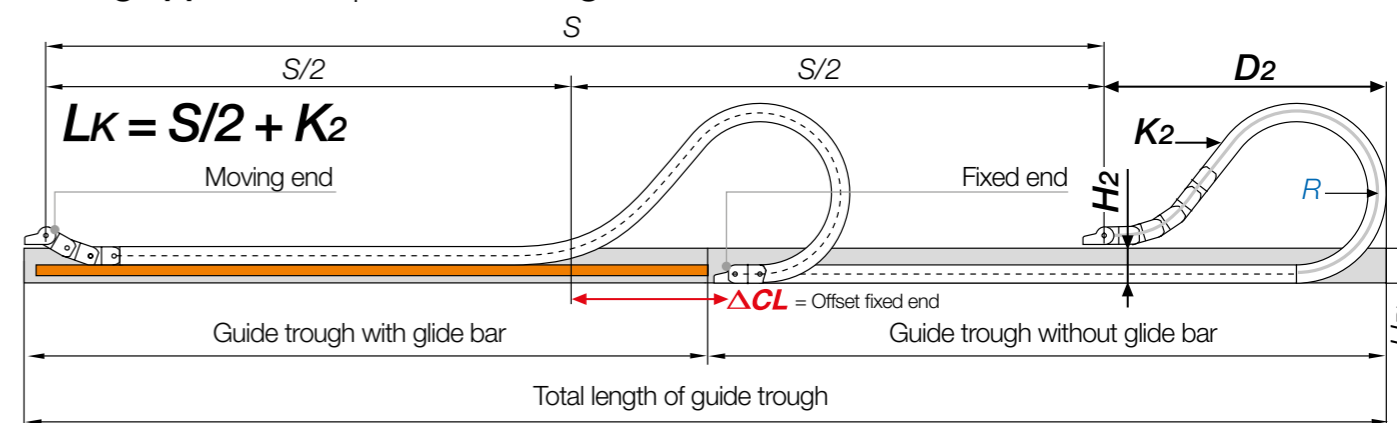
- Standardised product made from igamid ESD
  - ESD material tested for over 10 million cycles for the toughest requirements
  - Short delivery times including mounting brackets and interior separation; 24hrs, from stock
- More information and the complete product range ► From page 142



R	135	150	175	200	250	300	400	500
H <sub>25</sub> <sup>-0</sup>	354	384	434	484	584	684	884	1,084
D	314	329	354	379	429	479	579	679
K	610	655	735	815	970	1,125	1,440	1,755

The required clearance height:  $H_F = H + 50\text{mm}$  (with 2.0kg/m fill weight)

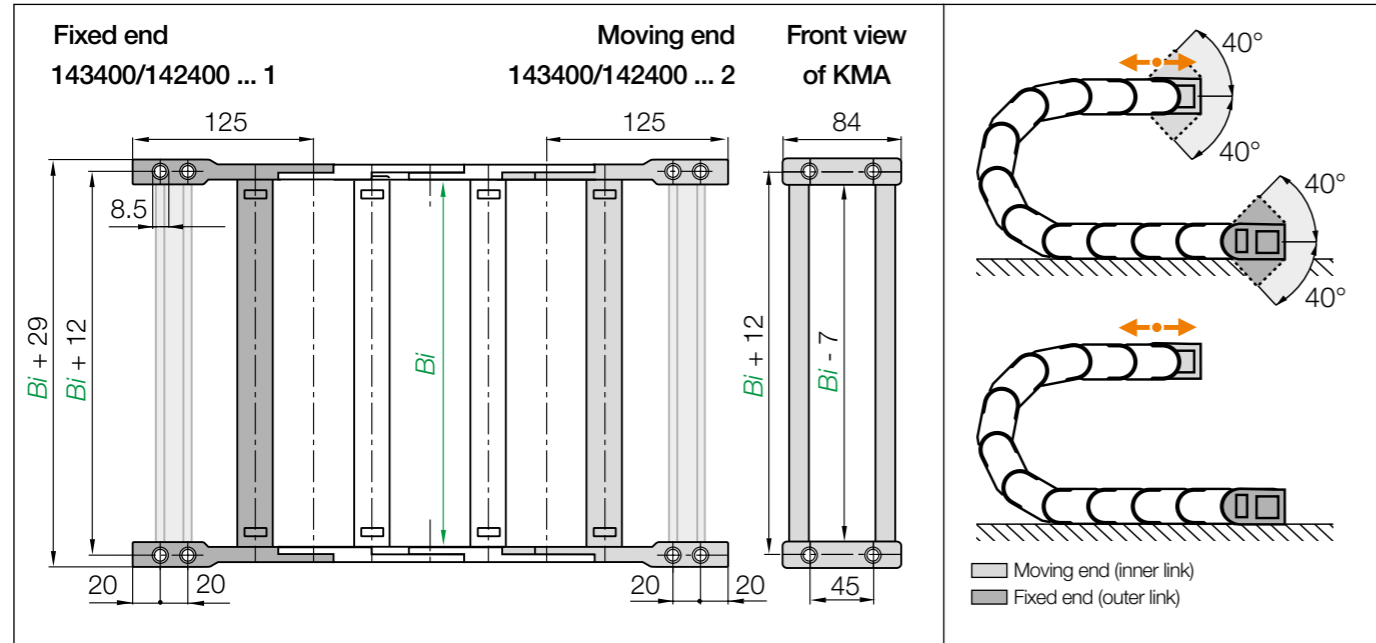
Gliding applications | For travel lengths from 12m to max. 250m



**Note:** We recommend the project planning of such a system to be carried out by igus®.

In case of travels between 9 and 12m we recommend an e-chain® with a longer unsupported length.

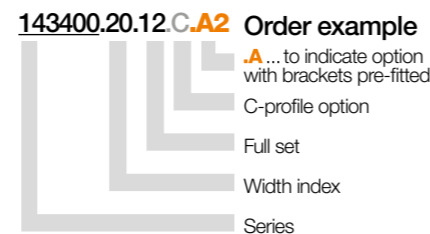
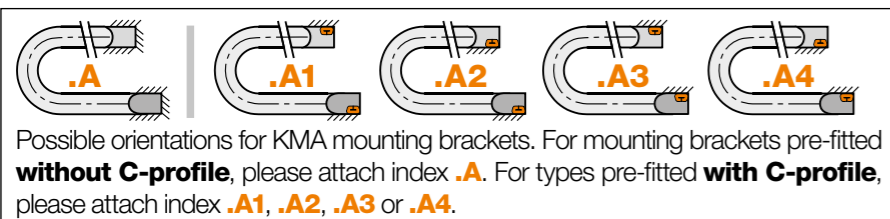
R	135	150	175	200	250	300	400	500
H <sub>2</sub>	266	266	266	266	266	266	266	266
D <sub>25</sub> <sup>+25</sup>	390	450	550	710	920	1,120	1,530	1,850
K <sub>2</sub>	728	819	1,001	1,274	1,638	1,911	2,548	3,185
ΔCL	124	159	209	359	509	659	959	1,159



**KMA pivoting** | Recommended for unsupported and gliding applications  
**KMA locking** | Recommended for vertical hanging and standing applications

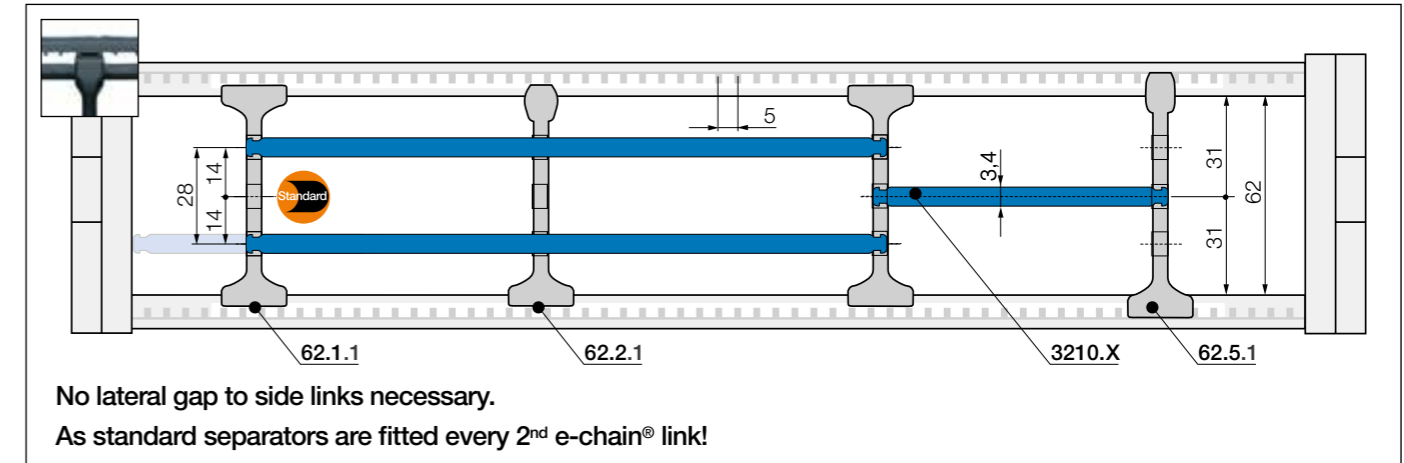
Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]	Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]
05.	143400.05.12.C	142400.05.12.C	50	212.	143400.212.12.C	142400.212.12.C	212
06.	143400.06.12.C	142400.06.12.C	68	23.	143400.23.12.C	142400.23.12.C	225
07.	143400.07.12.C	142400.07.12.C	75	237.	143400.237.12.C	142400.237.12.C	237
087.	143400.087.12.C	142400.087.12.C	87	25.	143400.25.12.C	142400.25.12.C	250
097.	143400.097.12.C	142400.097.12.C	97	262.	143400.262.12.C	142400.262.12.C	262
10.	143400.10.12.C	142400.10.12.C	100	28.	143400.28.12.C	142400.28.12.C	275
11.	143400.11.12.C	142400.11.12.C	108	29.	143400.29.12.C	142400.29.12.C	287
112.	143400.112.12.C	142400.112.12.C	112	30.	143400.30.12.C	142400.30.12.C	300
12.	143400.12.12.C	142400.12.12.C	125	312.	143400.312.12.C	142400.312.12.C	312
137.	143400.137.12.C	142400.137.12.C	137	325.	143400.325.12.C	142400.325.12.C	325
15.	143400.15.12.C	142400.15.12.C	150	337.	143400.337.12.C	142400.337.12.C	337
162.	143400.162.12.C	142400.162.12.C	162	350.	143400.350.12.C	142400.350.12.C	350
17.	143400.17.12.C	142400.17.12.C	168	362.	143400.362.12.C	142400.362.12.C	362
18.	143400.18.12.C	142400.18.12.C	175	375.	143400.375.12.C	142400.375.12.C	375
187.	143400.187.12.C	142400.187.12.C	187	387.	143400.387.12.C	142400.387.12.C	387
20.	143400.20.12.C	142400.20.12.C	200	400.	143400.400.12.C	142400.400.12.C	400

(KMA = polymer metal mounting bracket) For the C-profile option please add index **C**



**Strain relief** e.g. clamps, tiwrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1392

Previous generation of interior separation with other options ▶ [www.igus.eu/14240](http://www.igus.eu/14240)



**Standard separator, wide base**

unassembled	62.1
assembled	62.1.1

**Standard - for any application**  
 Separator with a wide base for maximum holding force.

**Separator, narrow top**

unassembled	62.2
assembled	62.2.1

**For even faster installation**  
 Wide on one side for high holding force, narrow on opposite side for easy cable fitting.

**Notch separator for notched crossbar**

unassembled	62.5
assembled	62.5.1

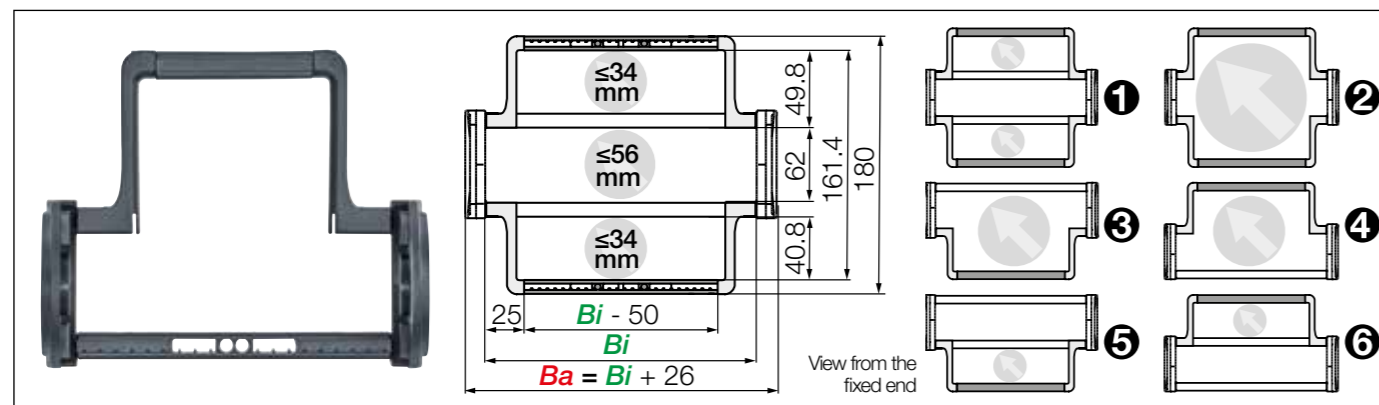
**Locks securely in preset increments**  
 Notch separator for exact positioning. Recommended for side-mounted applications.

**Shelf, lockable**

unassembled	3200.X
assembled	3210.X

**Horizontal separation**  
 Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

Shelves Width = X [mm]	X [mm]		X [mm]		X [mm]			
	unassembled	assembled	unassembled	assembled	unassembled	assembled		
050	3200.050	3210.050	125	3200.125	3210.125	225	3200.225	3210.225
075	3200.075	3210.075	150	3200.150	3210.150	250	3200.250	3210.250
100	3200.100	3210.100	175	3200.175	3210.175			
115	3200.115	3210.115	200	3200.200	3210.200			



### Extender crossbars with flexible width | Safe guiding for large hoses

- For guiding and protecting large hoses
- With mounting for noise dampers
- Cable-friendly design, high crossbar holding force
- The openable extender crossbars can be fitted in different ways and combinations
- Optionally openable along the inner or outer radius

Versions	Hose	Part No.	Part No.
e-chain® with extender crossbar	Ø ≤ [mm]	crossbars every link	crossbars every 2 <sup>nd</sup> link
❶ Extender crossbar and standard crossbar alternating along the inner and outer radius <sup>1)</sup>	34	14240.XXXHB50.R.0	-
❷ Extender crossbar on both sides along the inner and outer radius <sup>2)</sup>	140	14240.XXXB50.R.0	14340.XXXB50.R.0 <sup>2)</sup>
❸ Extender crossbar along the outer radius <sup>3)</sup>	100	14240.XXXBE50.R.0	14340.XXXBE50.R.0 <sup>2)</sup>
❹ Extender crossbar along the inner radius <sup>2)</sup>	100	14240.XXXBZ50.R.0	14340.XXXBZ50.R.0 <sup>2)</sup>
❺ Extender crossbar and standard crossbar alternating along the outer radius <sup>3)</sup>	34	14240.XXXHBE50.R.0	-
❻ Extender crossbar and standard crossbar alternating along inner radius <sup>1)</sup>	34	14240.XXXHYZ50.R.0	-

1) Minimum bend radius: R 135 2) Minimum bend radius: R 150 3) Minimum bend radius: R 135

Bi [mm] Available inner widths

| 100 | 125 | 137 | 150 | 162 | 175 | 187 | 200 | 212 | 225 | 237 | 250 |  
| 262 | 275 | 287 | 300 | 312 | 325 | 337 | 350 | 362 | 375 | 387 | 400 |

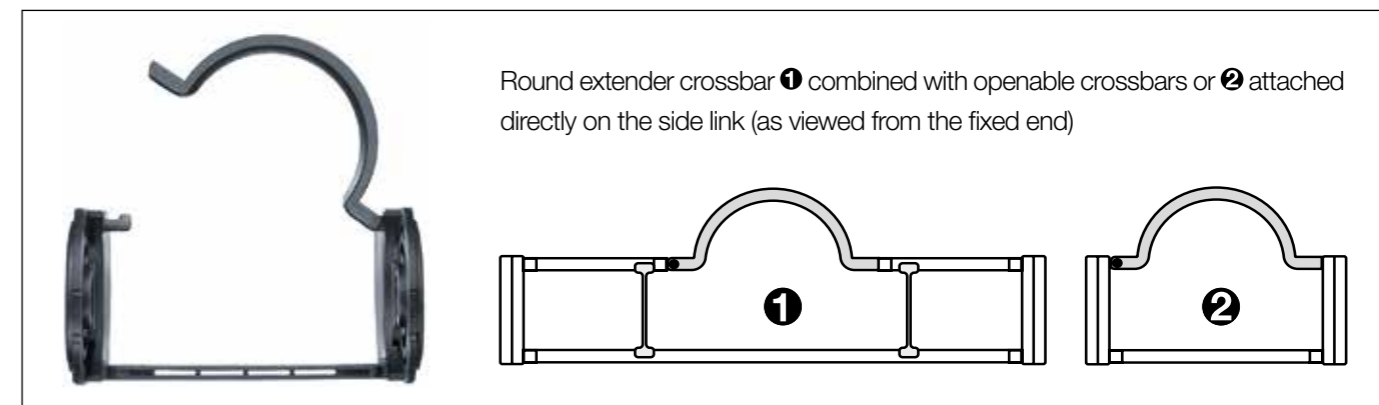
Part number with the width index XXX of the Bi and the radius (R) e.g.

14240.10B50.150.0 = Bi 100 / e-chain® with crossbars every link /

Extender crossbars on both sides along the inner and outer radius / Bend radius (R) 150



The E4/light can be fitted with openable extender crossbars, which increase the size of the interior of the e-chain®. Crossbars can be fitted in various ways: from one or both sides, alternating with standard crossbars and or any combination



### Extender crossbars with fixed width | Safe guiding for large hoses

- Suitable for hoses with a maximum outer diameter of 115mm.
- Option ❶ extender crossbars with fixed width to combine with openable crossbars
- Option ❷ extender crossbars with fixed width attached directly on the side link
- Optionally openable along the inner "Z" or the outer radius "E"
- Gliding with crossbars assembled along the outer radius and a special guide trough

Part No. extender crossbar with fixed width, as individual parts	Hose	Extender crossbar shape	❷ Fitted to side link	❶ Combine with openable crossbars
	Ø ≤ [mm]			
385.15RHD115	115	○ round	No	Yes
385.18RD115	115	○ round	Yes	No

#### Order example: ❶ combined with openable crossbars

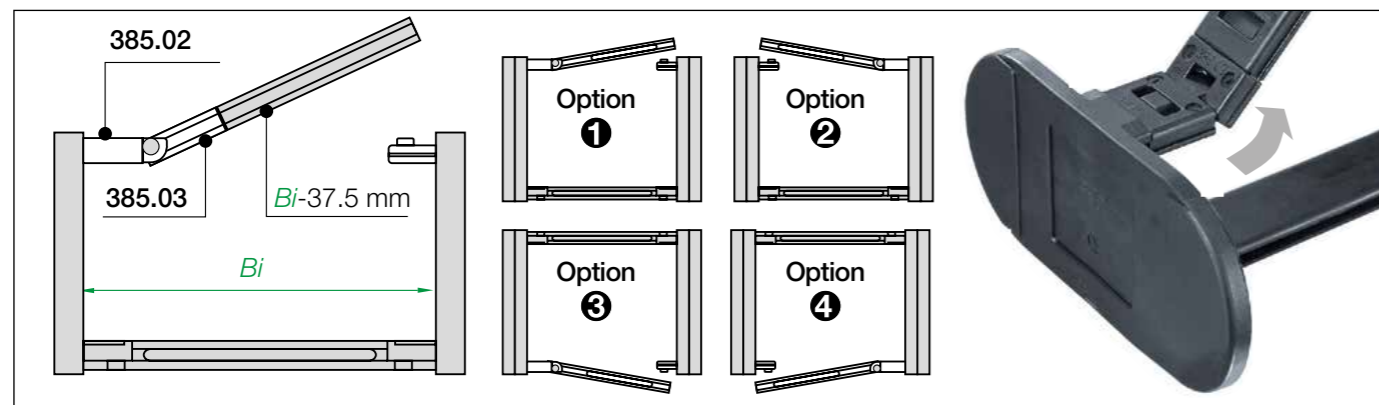
To receive extender crossbar RHD115 pre-fitted along the outer radius of the-chain®, please add index E: 14240.10/15RHDE115/10.R.0

To receive extender crossbar RHD115 pre-fitted along the inner radius of the-chain®, please add index Z: 14240.10/15RHDZ115/10.R.0

#### Order example: ❷ fitted to side link

To receive extender crossbar RD115 pre-fitted along the outer radius of the-chain®, please add index E: 14240.18RDE115.R.0

To receive extender crossbar RD115 pre-fitted along the inner radius of the-chain®, please add index Z: 14240.18RDZ115.R.0



**Hinged crossbars | Swivel clip | Openable crossbar remains attached to the e-chain®**

- When opening crossbars must remain attached to the e-chain®
- Hinged crossbars consist of a swivel clip and a shortened crossbar
- Openable crossbar (shortened):  $Bi-37.5\text{mm}$  (smallest inner width  $Bi = 87.5$ )
- Please consult igus® for assistance with this product

Part No.	Part No.	Part No. openable
e-chain® with hinged crossbar	swivel clip as an individual part	crossbar as an individual part
14240. $Bi$ . $Z$ . $R$ .0	385.02	385.03

Complete Part No. with the width index  $Bi$ , the index  $Z$  for the required option and the radius ( $R$ ). Example: 14240.137.1.200.0



E4/light e-tubes protect cables and hoses against dirt and swarf

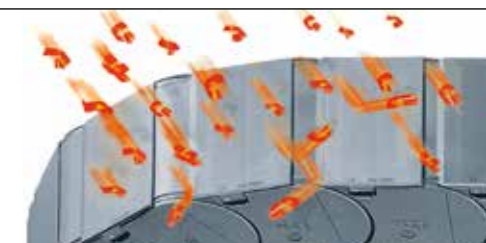
**Steel support tray for support of the lower run**

- Simple one-piece support trays for the lower run
  - To your requirements and specification
  - 4 options available
- More information ► From page 1356



**Hot swarf up to +850°C for e-tubes**

- Lids and shelves, on which +850°C hot swarf bounces off, as special production with the igus® material igumid HT
  - No hot swarf melting or embedding into the chain
- More information ► [www.igus.eu/HT](http://www.igus.eu/HT)



**Reduce assembly time - E4 e-chain® opener**

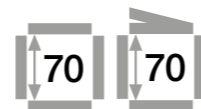
- e-chain® opener tools for easy opening and closing of e-chains®
  - Simple opening and closing of e-chain® crossbars
  - Also for use in hard to reach locations
  - Significant assembly time reduction
- More information ► [www.igus.eu/E4savetime](http://www.igus.eu/E4savetime)



**Roller crossbars - increase the service life of cables and hoses**

- Significantly reduce jacket abrasion of very stiff cables and hoses with rolling contact surfaces equipped with tribo-optimised bearings
  - For sensitive hoses in restricted space
  - Usable along the inner and/or outer radius, retrofit possible
- More information ► upon request





e-chains® / e-tubes | Series 14550 | Crossbars every link (crossbars removable along the inner and outer radius)  
 e-chains® | Series 14650 | Crossbars every 2<sup>nd</sup> link (crossbars removable along the inner and outer radius)  
 e-tubes | Series R19050 | Fully enclosed (lids openable along the outer radius, from one side)

Part No.	Bi	Ba	14550	14650	19050	Part No.	Bi	Ba	14550	14650	19050		
e-chains® / e-tubes	[mm]	[mm]	[kg/m]	[kg/m]	[kg/m]	e-chains® / e-tubes	[mm]	[mm]	[kg/m]	[kg/m]	[kg/m]		
14550. 14650.	05. R.0	50	77	≈ 3.28	≈ 3.27	-	14550. 14650.	28. R.0	287	314	≈ 5.01	≈ 4.13	-
14550. 14650.	055.R.0	55	82	≈ 3.33	≈ 3.29	-	14550. 14650. 19050.	30. R.0	300	327	≈ 5.16	≈ 4.21	≈ 6.99
14550. 14650.	06. R.0	65	92	≈ 3.37	≈ 3.31	-	14550. 14650.	31. R.0	312	339	≈ 5.20	≈ 4.23	-
14550. 14650. 19050.	07. R.0	75	102	≈ 3.44	≈ 3.35	≈ 4.00	14550. 14650.	32. R.0	325	352	≈ 5.30	≈ 4.28	-
14550. 14650.	08. R.0	87	114	≈ 3.52	≈ 3.38	-	14550. 14650.	33. R.0	337	364	≈ 5.42	≈ 4.34	-
14550. 14650. 19050.	10. R.0	100	127	≈ 3.61	≈ 3.43	≈ 4.33	14550. 14650. 19050.	35. R.0	350	377	≈ 5.62	≈ 4.44	≈ 7.68
14550. 14650.	11. R.0	112	139	≈ 3.73	≈ 3.49	-	14550. 14650.	36. R.0	362	389	≈ 5.53	≈ 4.39	-
14550. 14650. 19050.	12. R.0	125	152	≈ 3.81	≈ 3.53	≈ 4.70	14550. 14650.	37. R.0	375	402	≈ 5.63	≈ 4.44	-
14550. 14650.	13. R.0	137	164	≈ 3.94	≈ 3.60	-	14550. 14650.	38. R.0	387	414	≈ 5.74	≈ 4.50	-
14550. 14650. 19050.	15. R.0	150	177	≈ 3.98	≈ 3.62	≈ 5.04	14550. 14650. 19050.	40. R.0	400	427	≈ 6.01	≈ 4.63	≈ 8.36
14550. 14650.	16. R.0	162	189	≈ 4.09	≈ 3.67	-	14550. 14650.	41. R.0	412	439	≈ 5.94	≈ 4.60	-
14550. 14650.	169.R.0	169	197	≈ 4.18	≈ 3.71	-	14550. 14650.	42. R.0	425	452	≈ 6.23	≈ 4.74	-
14550. 14650. 19050.	17. R.0	175	202	≈ 4.23	≈ 3.74	≈ 5.41	14550. 14650.	43. R.0	437	464	≈ 6.07	≈ 4.66	-
14550. 14650.	182.R.0	182	210	≈ 4.27	≈ 3.76	-	14550. 14650.	45. R.0	450	477	≈ 6.40	≈ 4.83	-
14550. 14650.	18. R.0	187	214	≈ 4.34	≈ 3.80	-	14550. 14650. 19050.	46. R.0	462	489	≈ 6.35	≈ 4.80	≈ 9.21
14550. 14650. 19050.	20. R.0	200	227	≈ 4.39	≈ 3.82	≈ 5.64	14550. 14650.	47. R.0	475	502	≈ 6.39	≈ 4.82	-
14550. 14650.	207.R.0	207	235	≈ 4.44	≈ 3.84	-	14550. 14650.	48. R.0	487	514	≈ 6.64	≈ 4.95	-
14550. 14650.	21. R.0	212	239	≈ 4.46	≈ 3.86	-	14550. 14650.	50. R.0	500	527	≈ 6.74	≈ 5.00	-
14550. 14650.	22. R.0	225	252	≈ 4.53	≈ 3.89	-	14550. 14650.	51. R.0	512	539	≈ 6.65	≈ 4.95	-
14550. 14650.	23. R.0	237	264	≈ 4.64	≈ 3.95	-	14550. 14650.	52. R.0	525	552	≈ 6.82	≈ 5.04	-
14550. 14650. 19050.	25. R.0	250	277	≈ 4.76	≈ 4.00	≈ 6.32	14550. 14650.	53. R.0	537	564	≈ 6.92	≈ 5.09	-
14550. 14650.	26. R.0	262	289	≈ 4.85	≈ 4.05	-	14550. 14650.	55. R.0	550	577	≈ 7.34	≈ 5.30	-
14550. 14650. 19050.	27. R.0	275	302	≈ 4.95	≈ 4.10	≈ 6.65	14550. 14650.	60. R.0	600	627	≈ 7.57	≈ 5.41	-

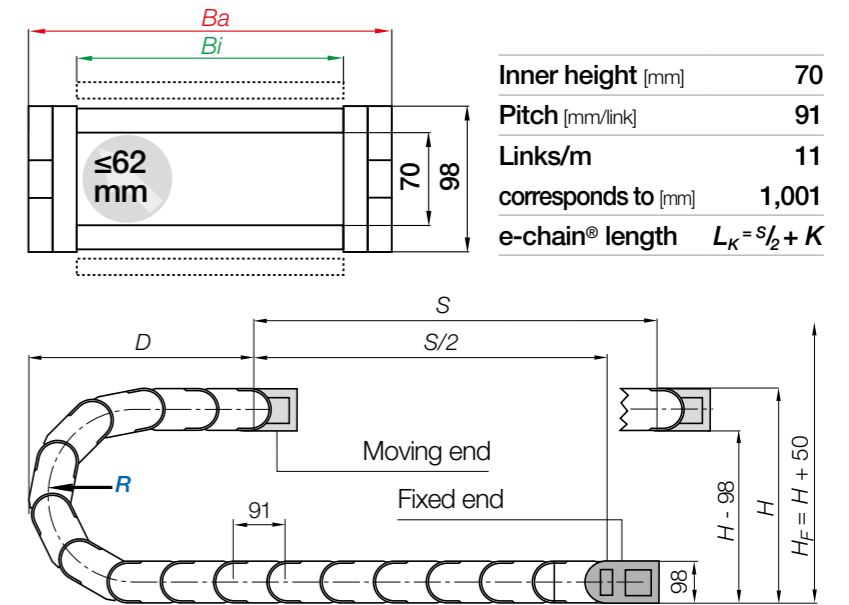
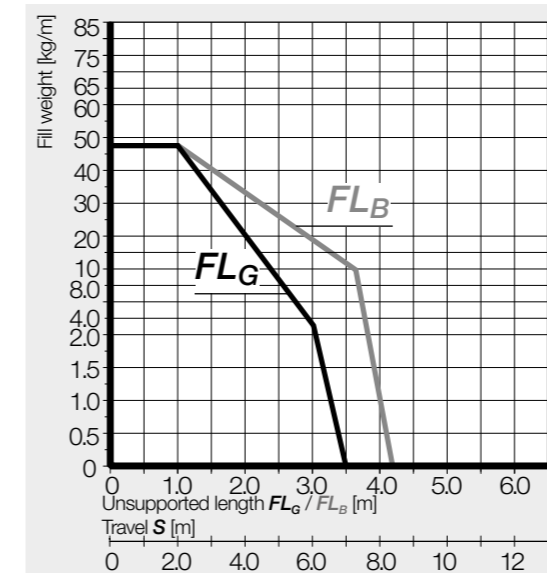
\*Radius not available for e-tubes

Available bend radii

R [mm] | 150\* | 175\* | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |

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

14550.30.300.0 = crossbars every link / 14650.30.300.0 = crossbars every 2<sup>nd</sup> link / 19050.30.300.0 = fully enclosed

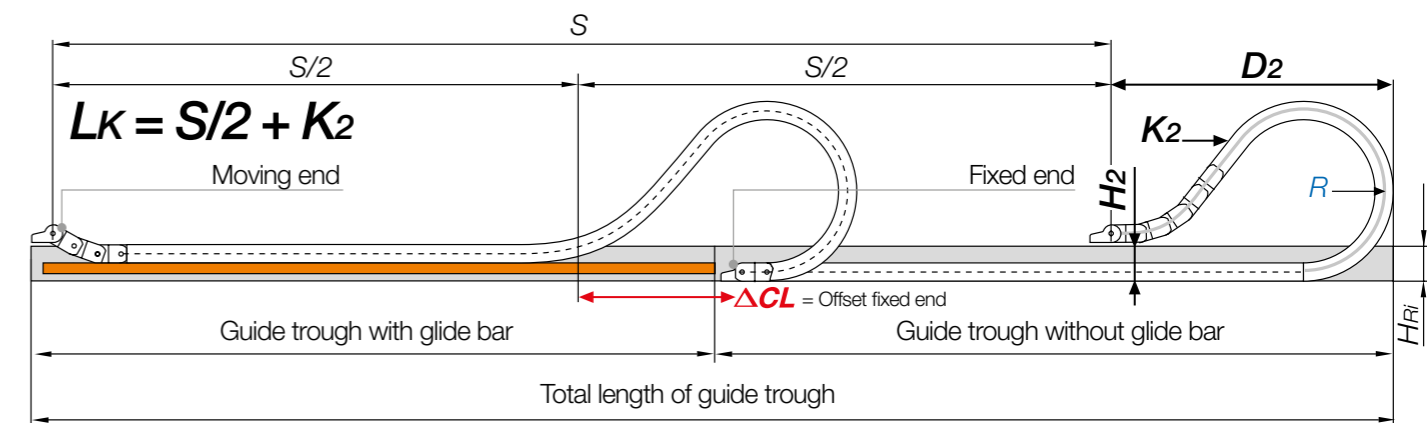


R	150*	175*	200	250	300	350	400	450	500	600
H	398	448	498	598	698	798	898	998	1,098	1,298
D	336	361	386	436	486	536	586	636	686	786
K	655	735	815	970	1,125	1,285	1,440	1,600	1,755	2,070

The required clearance height:  $H_F = H + 50\text{mm}$  (with 2.5kg/m fill weight)

\*Radius not available for e-tubes

Gliding applications | For travel lengths from 12m to max. 250m

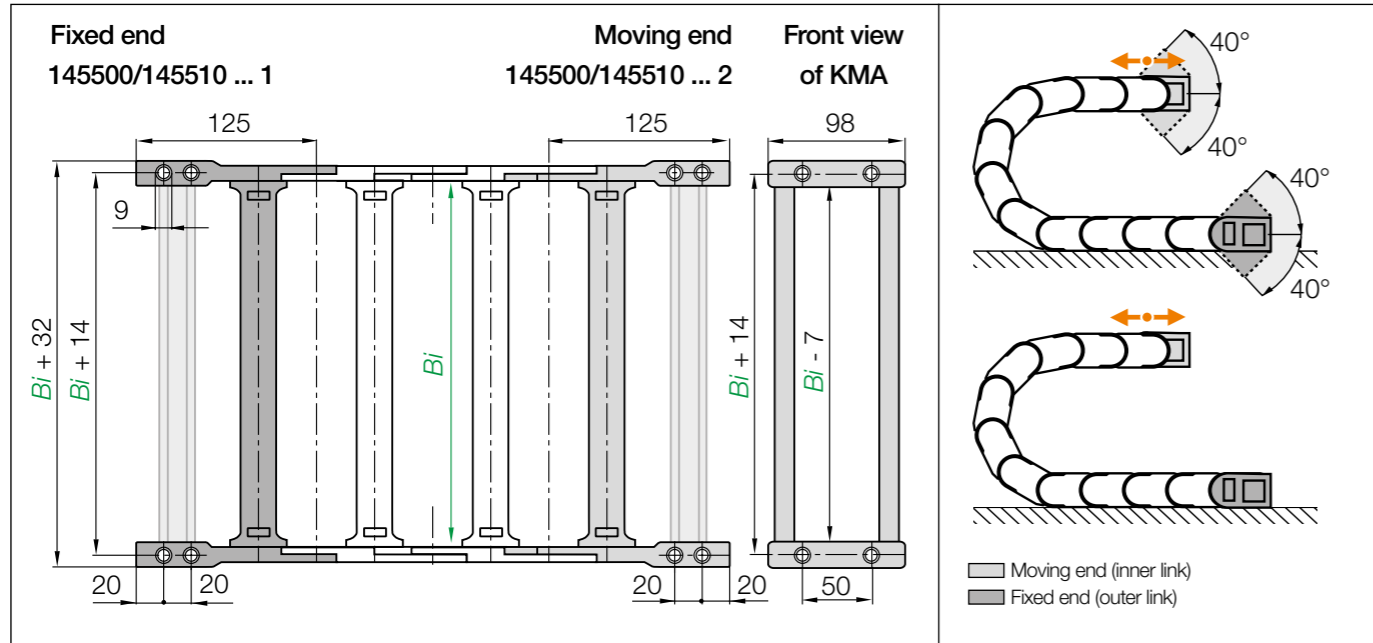


Note: We recommend the project planning of such a system to be carried out by igus®.

In case of travels between 8 and 12m we recommend an e-chain® with a longer unsupported length.

R	150*	175*	200	250	300	350	400	450	500	600 <sup>2)</sup>
H <sub>2</sub>	266	266	266	266	266	266	266	266	266	-
D <sub>2</sub> <sup>+25</sup>	450	530	710	920	1,120	1,340	1,530	1,048	1,830	-
K <sub>2</sub>	819	1,001	1,274	1,638	1,911	2,184	2,548	2,821	3,185	-
ΔCL	124	159	209	359	509	659	829	959	1,159	-

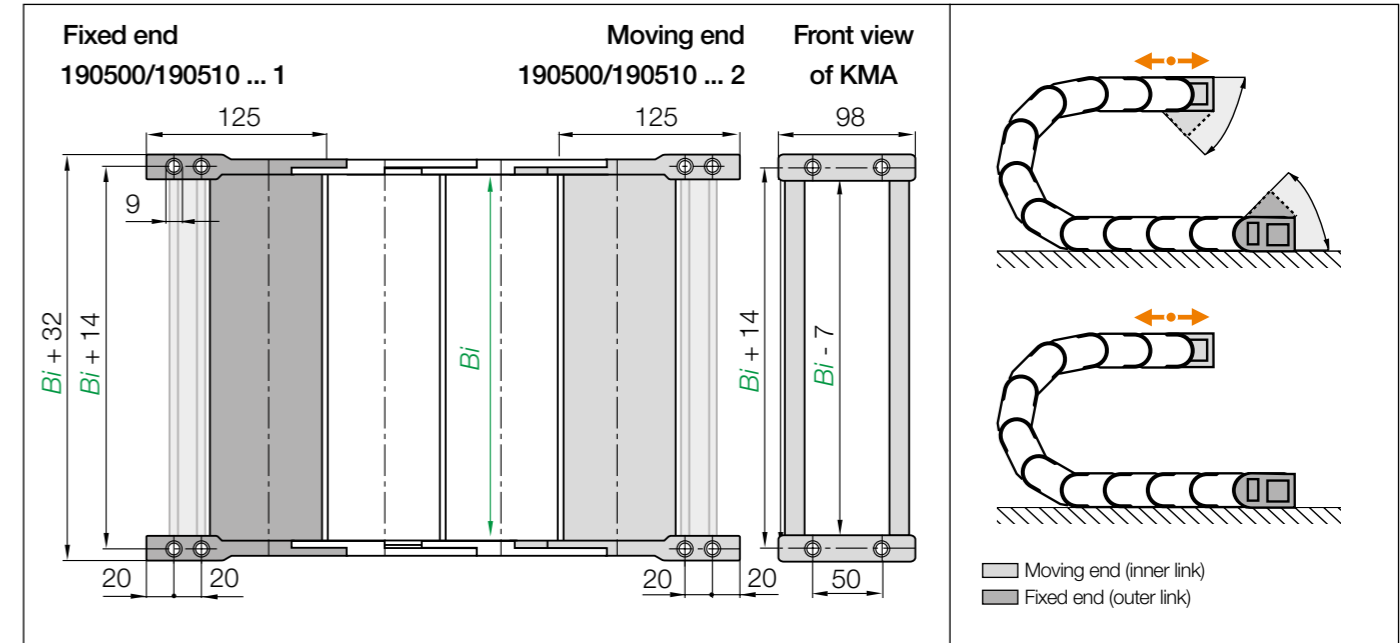
\*Radius not available for e-tubes 2) R 600 not suitable For travel lengths. Please consult igus®.



**KMA pivoting** | Recommended for unsupported and gliding applications  
**KMA locking** | Recommended for vertical hanging and standing applications

Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]	Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]
05.	145500. 05 .12.C	145510. 05 .12.C	50	28.	145500. 28 .12.C	145510. 28 .12.C	287
055.	145500. 055 .12.C	145510. 055 .12.C	55	30.	145500. 30 .12.C	145510. 30 .12.C	300
06.	145500. 06 .12.C	145510. 06 .12.C	65	31.	145500. 31 .12.C	145510. 31 .12.C	312
07.	145500. 07 .12.C	145510. 07 .12.C	75	32.	145500. 32 .12.C	145510. 32 .12.C	325
08.	145500. 08 .12.C	145510. 08 .12.C	87	33.	145500. 33 .12.C	145510. 33 .12.C	337
10.	145500. 10 .12.C	145510. 10 .12.C	100	35.	145500. 35 .12.C	145510. 35 .12.C	350
11.	145500. 11 .12.C	145510. 11 .12.C	112	36.	145500. 36 .12.C	145510. 36 .12.C	362
12.	145500. 12 .12.C	145510. 12 .12.C	125	37.	145500. 37 .12.C	145510. 37 .12.C	375
13.	145500. 13 .12.C	145510. 13 .12.C	137	38.	145500. 38 .12.C	145510. 38 .12.C	387
15.	145500. 15 .12.C	145510. 15 .12.C	150	40.	145500. 40 .12.C	145510. 40 .12.C	400
16.	145500. 16 .12.C	145510. 16 .12.C	162	41.	145500. 41 .12.C	145510. 41 .12.C	412
169.	145500. 169 .12.C	145510. 169 .12.C	169	42.	145500. 42 .12.C	145510. 42 .12.C	425
17.	145500. 17 .12.C	145510. 17 .12.C	175	43.	145500. 43 .12.C	145510. 43 .12.C	437
182.	145500. 182 .12.C	145510. 182 .12.C	182	45.	145500. 45 .12.C	145510. 45 .12.C	450
18.	145500. 18 .12.C	145510. 18 .12.C	187	46.	145500. 46 .12.C	145510. 46 .12.C	462
20.	145500. 20 .12.C	145510. 20 .12.C	200	47.	145500. 47 .12.C	145510. 47 .12.C	475
207.	145500. 207 .12.C	145510. 207 .12.C	207	48.	145500. 48 .12.C	145510. 48 .12.C	487
21.	145500. 21 .12.C	145510. 21 .12.C	212	50.	145500. 50 .12.C	145510. 50 .12.C	500
22.	145500. 22 .12.C	145510. 22 .12.C	225	51.	145500. 51 .12.C	145510. 51 .12.C	512
23.	145500. 23 .12.C	145510. 23 .12.C	237	52.	145500. 52 .12.C	145510. 52 .12.C	525
25.	145500. 25 .12.C	145510. 25 .12.C	250	53.	145500. 53 .12.C	145510. 53 .12.C	537
26.	145500. 26 .12.C	145510. 26 .12.C	262	55.	145500. 55 .12.C	145510. 55 .12.C	550
27.	145500. 27 .12.C	145510. 27 .12.C	275	60.	145500. 60 .12.C	145510. 60 .12.C	600

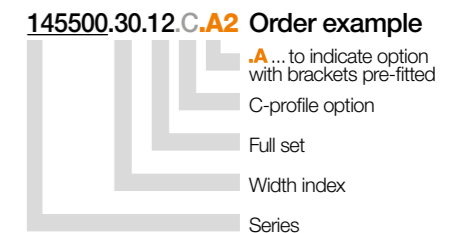
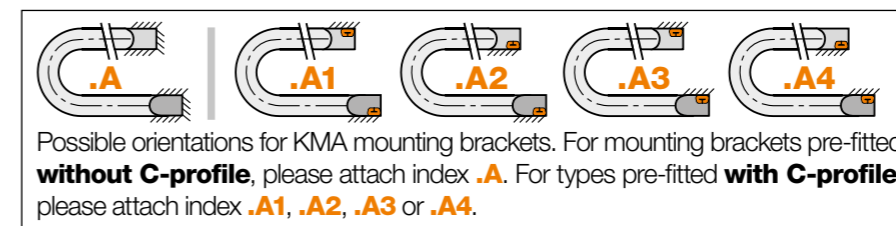
(KMA = polymer metal mounting bracket) For the C-profile option please add index .C



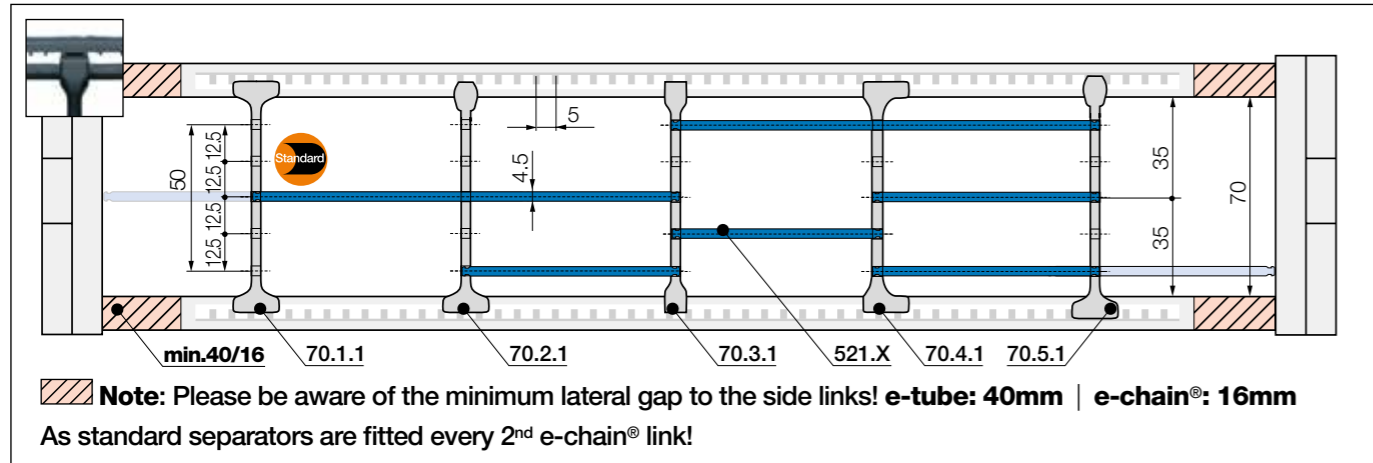
**KMA pivoting** | Recommended for unsupported and gliding applications  
**KMA locking** | Recommended for vertical hanging and standing applications

Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]	Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]
07.	190500. 07 .12.C	190510. 07 .12.C	75	25.	190500. 25 .12.C	190510. 25 .12.C	250
10.	190500. 10 .12.C	190510. 10 .12.C	100	27.	190500. 27 .12.C	190510. 27 .12.C	275
12.	190500. 12 .12.C	190510. 12 .12.C	125	30.	190500. 30 .12.C	190510. 30 .12.C	300
15.	190500. 15 .12.C	190510. 15 .12.C	150	35.	190500. 35 .12.C	190510. 35 .12.C	350
17.	190500. 17 .12.C	190510. 17 .12.C	175	40.	190500. 40 .12.C	190510. 40 .12.C	400
20.	190500. 20 .12.C	190510. 20 .12.C	200	46.	190500. 46 .12.C	190510. 46 .12.C	462

(KMA = polymer metal mounting bracket) For the C-profile option please add index .C



**Strain relief** e.g. clamps, tie-wrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ► From page 1392



**Standard separator, wide base**

unassembled	70.1
assembled	70.1.1

**Standard - for any application**  
Separator with a wide base for maximum holding force.

**Separator, narrow top**

unassembled	70.2
assembled	70.2.1

**For even faster installation**  
Wide on one side for high holding force, narrow on opposite side for easy cable fitting.

**Separator, narrow**

unassembled	70.3
assembled	70.3.1

**For small cables**  
Separator with a narrow base for a large number of small cables side by side. Saves space.

**Separator, asymmetrical**

unassembled	70.4
assembled	70.4.1

**For side-mounted applications**  
Asymmetrical separator, for defined gap distance. No additional spacers required.

**Notch separator for notched crossbar**

unassembled	70.5
assembled	70.5.1

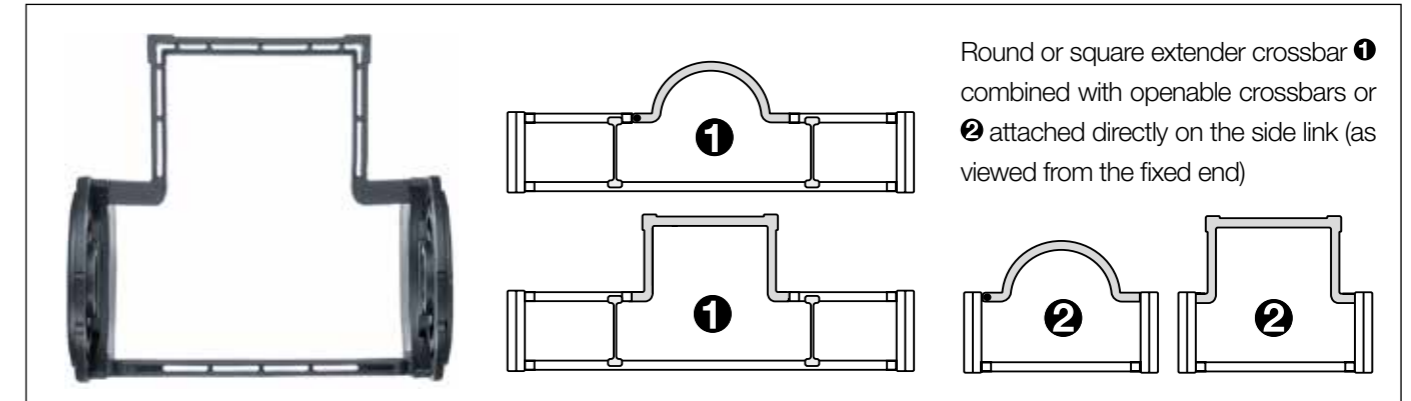
**Locks securely in preset increments**  
Notch separator for exact positioning. Recommended for side-mounted applications.

**Shelf, lockable**

unassembled	520.X
assembled	521.X

**Horizontal separation**  
Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

Shelves Width = X [mm]	X [mm]		X [mm]		X [mm]			
	unassembled	assembled	unassembled	assembled	unassembled	assembled		
050	520.050	521.050	150	520.150	521.150	300	520.300	521.300
065	520.065	521.065	175	520.175	521.175	350	520.350	521.350
075	520.075	521.075	200	520.200	521.200	375	520.375	521.375
100	520.100	521.100	225	520.225	521.225	387	520.387	521.387
125	520.125	521.125	250	520.250	521.250	450	520.450	521.450



**Extender crossbars with fixed width | Safe guiding for large hoses**

- Suitable for hoses with a maximum outer diameter of 270mm.
- Option 1 extender crossbars with fixed width to combine with openable crossbars
- Option 2 extender crossbars with fixed width attached directly on the side link
- Optionally openable along the inner "Z" or the outer radius "E"
- Gliding with crossbars assembled along the outer radius and a special guide trough

Part No. extender crossbar with fixed width, as individual parts	Hose $\varnothing \leq$ [mm]	Extender crossbar shape	2 Fitted to side link	1 Combine with openable crossbars
450.15RHD115	115	○ round	No	Yes
450.17RD115	115	○ round	Yes	No
450.25D150	150	□ square	Yes	No
450.30D200	200	□ square	Yes	No
450.35D250	220	□ square	Yes	No
450.40D300	270	□ square	Yes	No
450.20HD150	150	□ square	No	Yes
450.25HD200	200	□ square	No	Yes
450.30HD250	220	□ square	No	Yes

**Order example: 1 combined with openable crossbars**

To receive extender crossbar RHD115 pre-fitted along the outer radius of the-chain®, please add index **E: 14550.10/15RHE115/10.R.0**

To receive extender crossbar RHD115 pre-fitted along the inner radius of the-chain®, please add index **Z: 14550.10/15RHZ115/10.R.0**

**Order example: 2 fitted to side link**

To receive extender crossbar RD115 pre-fitted along the outer radius of the-chain®, please add index **E: 14550.17RDE115.R.0**

To receive extender crossbar RD115 pre-fitted along the inner radius of the-chain®, please add index **Z: 14550.17RDZ115.R.0**



### Steel support tray for support of the lower run

- Simple one-piece support trays for the lower run
- To your requirements and specification
- 4 options available

More information ► From page 1356



### Hot swarf up to +850°C for e-tubes

- Lids and shelves, on which +850°C hot swarf bounces off, as special production with the igus® material igumid HT
- No hot swarf melting or embedding into the chain

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



### Reduce assembly time - E4 e-chain® opener

- e-chain® opener tools for easy opening and closing of e-chains®
- Simple opening and closing of e-chain® crossbars
- Also for use in hard to reach locations
- Significant assembly time reduction

More information ► [www.igus.eu/E4savetime](http://www.igus.eu/E4savetime)



### Roller crossbars - increase the service life of cables and hoses

- Significantly reduce jacket abrasion of very stiff cables and hoses with rolling contact surfaces equipped with tribo-optimised bearings
- For sensitive hoses in restricted space
- Usable along the inner and/or outer radius, retrofit possible

More information ► upon request



Various igus® e-chains® installed vertically including light-weight E4/light e-chains®



**e-chains®** | Series 15050 | Crossbars every link (crossbars removable along the inner and outer radius)  
**e-chains®** | Series 15150 | Crossbars every 2<sup>nd</sup> link (crossbars removable along the inner and outer radius)  
**e-tubes** | Series R19850 | Fully enclosed (lids openable along the outer radius, from one side)

Part No.	Bi	Ba	15050	15150	19850	Part No.	Bi	Ba	15050	15150	19850
e-chains® / e-tubes	[mm]	[mm]	[kg/m]	[kg/m]	[kg/m]	e-chains® / e-tubes	[mm]	[mm]	[kg/m]	[kg/m]	[kg/m]
15050. 15150. - 05. R.0	50	80	≈ 3.85	≈ 3.84	-	15050. 15150. - 28. R.0	287	318	≈ 5.54	≈ 4.69	-
15050. 15150. - 055.R.0	55	85	≈ 3.90	≈ 3.86	-	15050. 15150. 19850. 30. R.0	300	330	≈ 5.76	≈ 4.80	≈ 7.49
15050. 15150. - 06. R.0	65	95	≈ 3.95	≈ 3.88	-	15050. 15150. - 31. R.0	312	343	≈ 5.80	≈ 4.82	-
15050. 15150. 19850. 07. R.0	75	105	≈ 4.00	≈ 3.92	≈ 4.46	15050. 15150. - 32. R.0	325	355	≈ 5.85	≈ 4.84	-
15050. 15150. - 08. R.0	87	117	≈ 4.05	≈ 3.96	-	15050. 15150. - 33. R.0	337	368	≈ 6.03	≈ 4.93	-
15050. 15150. 19850. 10. R.0	100	130	≈ 4.18	≈ 4.00	≈ 4.74	15050. 15150. 19850. 35. R.0	350	380	≈ 6.18	≈ 5.01	≈ 8.24
15050. 15150. - 11. R.0	112	143	≈ 4.31	≈ 4.07	-	15050. 15150. - 36. R.0	362	393	≈ 6.19	≈ 5.02	-
15050. 15150. 19850. 12. R.0	125	155	≈ 4.38	≈ 4.10	≈ 5.10	15050. 15150. - 37. R.0	375	405	≈ 6.20	≈ 5.02	-
15050. 15150. - 13. R.0	137	168	≈ 4.51	≈ 4.17	-	15050. 15150. - 38. R.0	387	418	≈ 6.29	≈ 5.06	-
15050. 15150. 19850. 15. R.0	150	180	≈ 4.58	≈ 4.20	≈ 5.53	15050. 15150. 19850. 40. R.0	400	430	≈ 6.49	≈ 5.16	≈ 9.20
15050. 15150. - 16. R.0	162	193	≈ 4.69	≈ 4.26	-	15050. 15150. - 41. R.0	412	443	≈ 6.64	≈ 5.24	-
15050. 15150. - 169.R.0	169	200	≈ 4.77	≈ 4.30	-	15050. 15150. - 42. R.0	425	455	≈ 6.80	≈ 5.31	-
15050. 15150. 19850. 17. R.0	175	205	≈ 4.80	≈ 4.31	≈ 5.88	15050. 15150. - 43. R.0	437	468	≈ 6.86	≈ 5.35	-
15050. 15150. - 182.R.0	182	213	≈ 4.85	≈ 4.33	-	15050. 15150. - 45. R.0	450	480	≈ 6.93	≈ 5.38	-
15050. 15150. - 18. R.0	187	218	≈ 4.91	≈ 4.37	-	15050. 15150. 19850. 46. R.0	462	493	≈ 6.95	≈ 5.39	≈ 9.66
15050. 15150. 19850. 20. R.0	200	230	≈ 4.93	≈ 4.38	≈ 6.11	15050. 15150. - 47. R.0	475	505	≈ 7.08	≈ 5.46	-
15050. 15150. - 207.R.0	207	238	≈ 4.99	≈ 4.41	-	15050. 15150. - 48. R.0	487	518	≈ 7.16	≈ 5.49	-
15050. 15150. - 21. R.0	212	243	≈ 5.04	≈ 4.43	-	15050. 15150. - 50. R.0	500	530	≈ 7.22	≈ 5.52	-
15050. 15150. - 22. R.0	225	255	≈ 5.10	≈ 4.47	-	15050. 15150. - 51. R.0	512	543	≈ 7.24	≈ 5.53	-
15050. 15150. - 23. R.0	237	268	≈ 5.24	≈ 4.53	-	15050. 15150. - 52. R.0	525	555	≈ 7.28	≈ 5.56	-
15050. 15150. 19850. 25. R.0	250	280	≈ 5.32	≈ 4.58	≈ 6.83	15050. 15150. - 53. R.0	537	568	≈ 7.44	≈ 5.63	-
15050. 15150. - 26. R.0	262	293	≈ 5.41	≈ 4.62	-	15050. 15150. - 55. R.0	550	580	≈ 7.92	≈ 5.87	-
15050. 15150. 19850. 27. R.0	275	305	≈ 5.52	≈ 4.68	≈ 7.26	15050. 15150. - 60. R.0	600	630	≈ 8.12	≈ 5.97	-

▲ ESD version (Electro Static Discharge) available from stock. More information ► From page 142

Available bend radii

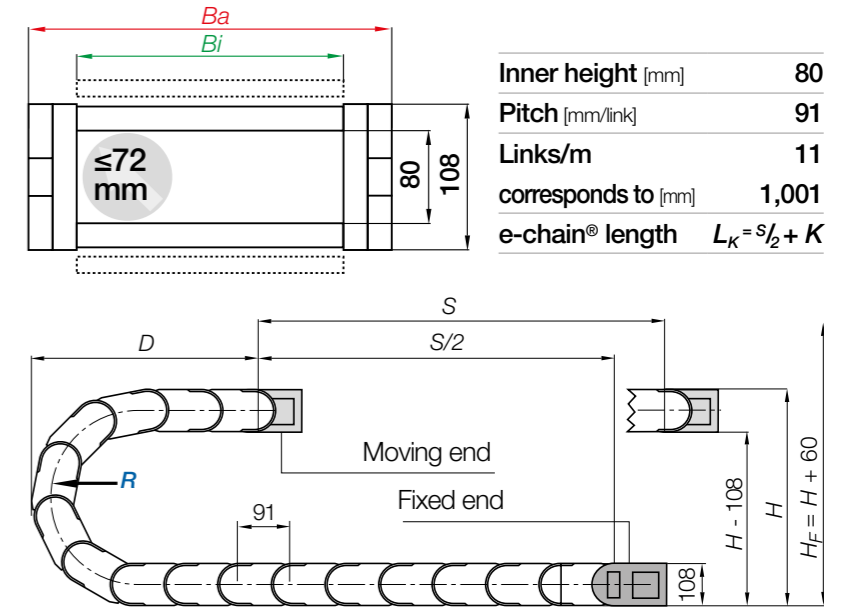
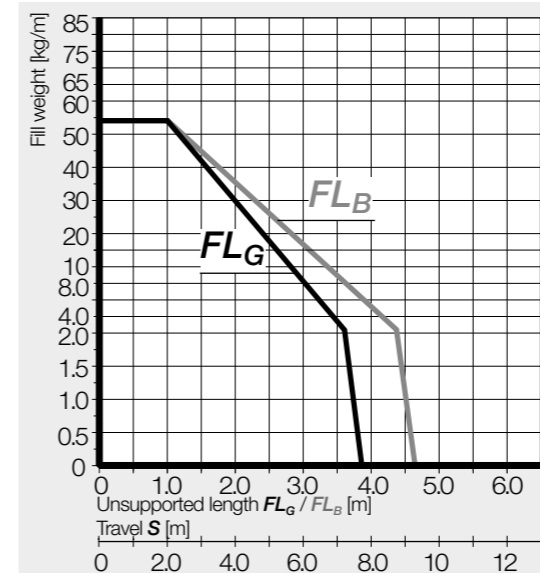
R [mm] | 150\* | 200 | 250 | 300 | 350 | 400 | 500 | 600 |

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

15050.30.300.0 = crossbars every link / 15150.30.300.0 = crossbars every 2<sup>nd</sup> link / 19850.30.300.0 = fully enclosed

ESD - many sizes from stock

- Standardised product made from igumid ESD
  - ESD material tested for over 10 million cycles for the toughest requirements
  - Short delivery times including mounting brackets and interior separation; 24hrs, from stock
- More information and the complete product range ► From page 142

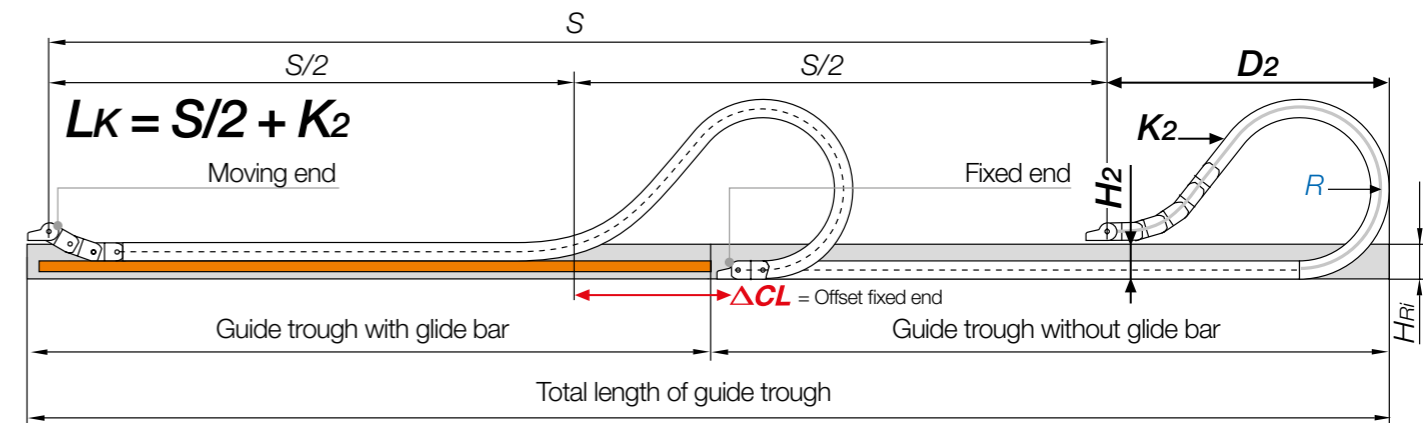


R	150*	200	250	300	350	400	500	600
H <sub>25</sub>	408	508	608	708	808	908	1,108	1,308
D	341	391	441	491	541	591	691	791
K	655	815	970	1,125	1,285	1,440	1,755	2,070

The required clearance height:  $H_F = H + 60\text{mm}$  (with 3.0kg/m fill weight)

\*Radius not available for e-tubes

Gliding applications | For travel lengths from 12m to max. 250m

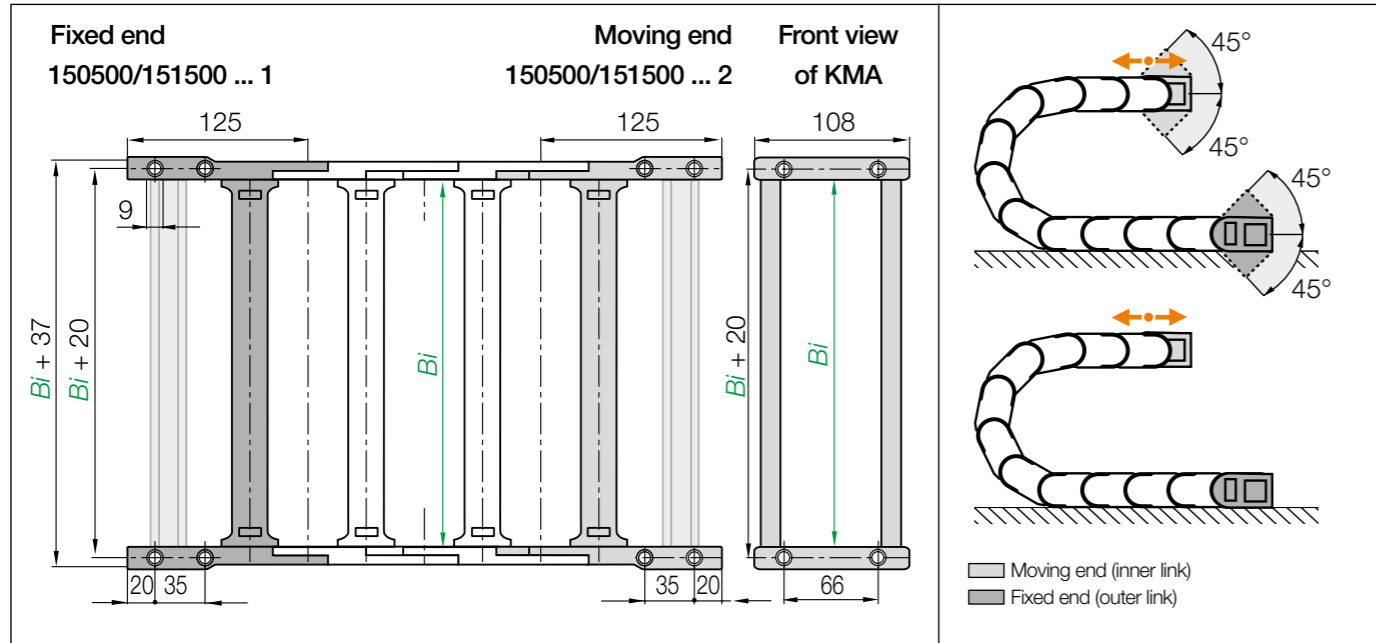


**Note:** We recommend the project planning of such a system to be carried out by igus®.

In case of travels between 9 and 12m we recommend an e-chain® with a longer unsupported length.

R	150*	200	250	300	350	400	500	600 <sup>1)</sup>
H <sub>2</sub>	242	242	242	242	242	242	242	-
D <sub>25</sub>	550	800	950	1,200	1,550	1,700	2,175	-
K <sub>2</sub>	910	1,274	1,638	2,002	2,457	2,730	3,458	-
ΔCL	209	409	509	709	1,009	1,109	1,484	-

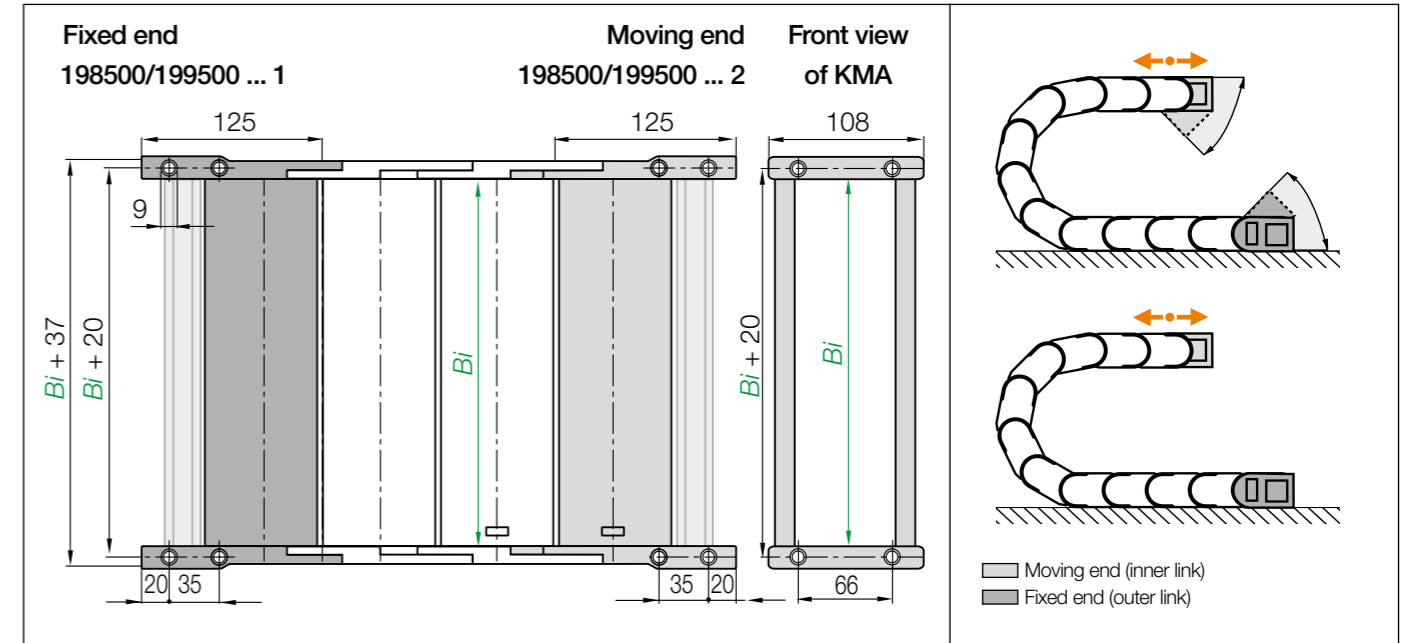
\*Radius not available for e-tubes 1) R 600 not suitable For travel lengths. Please consult igus®.



**KMA pivoting** | Recommended for unsupported and gliding applications  
**KMA locking** | Recommended for vertical hanging and standing applications

Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]	Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]
05.	150500. 05 .12.C	151500. 05 .12.C	50	28.	150500. 28 .12.C	151500. 28 .12.C	287
055.	150500. 055 .12.C	151500. 055 .12.C	55	30.	150500. 30 .12.C	151500. 30 .12.C	300
06.	150500. 06 .12.C	151500. 06 .12.C	65	31.	150500. 31 .12.C	151500. 31 .12.C	312
07.	150500. 07 .12.C	151500. 07 .12.C	75	32.	150500. 32 .12.C	151500. 32 .12.C	325
08.	150500. 08 .12.C	151500. 08 .12.C	87	33.	150500. 33 .12.C	151500. 33 .12.C	337
10.	150500. 10 .12.C	151500. 10 .12.C	100	35.	150500. 35 .12.C	151500. 35 .12.C	350
11.	150500. 11 .12.C	151500. 11 .12.C	112	36.	150500. 36 .12.C	151500. 36 .12.C	362
12.	150500. 12 .12.C	151500. 12 .12.C	125	37.	150500. 37 .12.C	151500. 37 .12.C	375
13.	150500. 13 .12.C	151500. 13 .12.C	137	38.	150500. 38 .12.C	151500. 38 .12.C	387
15.	150500. 15 .12.C	151500. 15 .12.C	150	40.	150500. 40 .12.C	151500. 40 .12.C	400
16.	150500. 16 .12.C	151500. 16 .12.C	162	41.	150500. 41 .12.C	151500. 41 .12.C	412
169.	150500. 169 .12.C	151500. 169 .12.C	169	42.	150500. 42 .12.C	151500. 42 .12.C	425
17.	150500. 17 .12.C	151500. 17 .12.C	175	43.	150500. 43 .12.C	151500. 43 .12.C	437
182.	150500. 182 .12.C	151500. 182 .12.C	182	45.	150500. 45 .12.C	151500. 45 .12.C	450
18.	150500. 18 .12.C	151500. 18 .12.C	187	46.	150500. 46 .12.C	151500. 46 .12.C	462
20.	150500. 20 .12.C	151500. 20 .12.C	200	47.	150500. 47 .12.C	151500. 47 .12.C	475
207.	150500. 207 .12.C	151500. 207 .12.C	207	48.	150500. 48 .12.C	151500. 48 .12.C	487
21.	150500. 21 .12.C	151500. 21 .12.C	212	50.	150500. 50 .12.C	151500. 50 .12.C	500
22.	150500. 22 .12.C	151500. 22 .12.C	225	51.	150500. 51 .12.C	151500. 51 .12.C	512
23.	150500. 23 .12.C	151500. 23 .12.C	237	52.	150500. 52 .12.C	151500. 52 .12.C	525
25.	150500. 25 .12.C	151500. 25 .12.C	250	53.	150500. 53 .12.C	151500. 53 .12.C	537
26.	150500. 26 .12.C	151500. 26 .12.C	262	55.	150500. 55 .12.C	151500. 55 .12.C	550
27.	150500. 27 .12.C	151500. 27 .12.C	275	60.	150500. 60 .12.C	151500. 60 .12.C	600

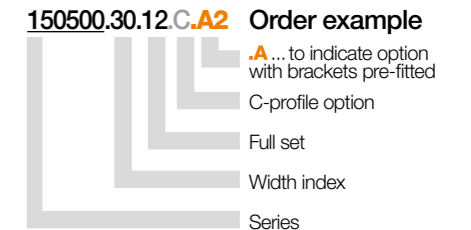
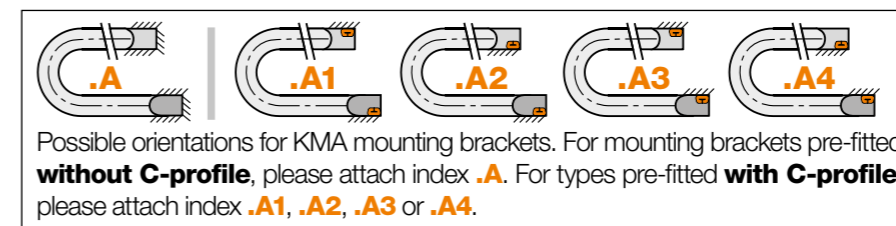
(KMA = polymer metal mounting bracket) For the C-profile option please add index .C



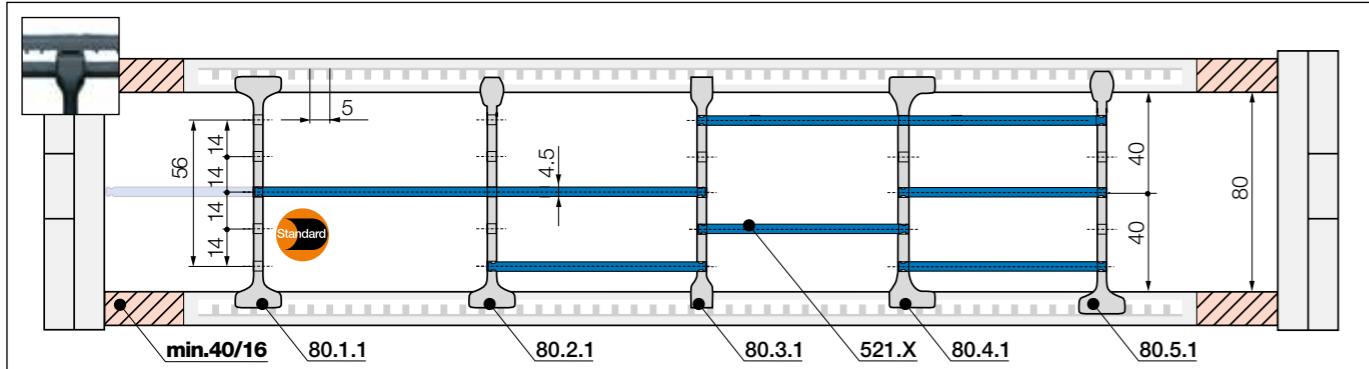
**KMA pivoting** | Recommended for unsupported and gliding applications  
**KMA locking** | Recommended for vertical hanging and standing applications

Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]	Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]
07.	198500. 07 .12.C	199500. 07 .12.C	75	25.	198500. 25 .12.C	199500. 25 .12.C	250
10.	198500. 10 .12.C	199500. 10 .12.C	100	27.	198500. 27 .12.C	199500. 27 .12.C	275
12.	198500. 12 .12.C	199500. 12 .12.C	125	30.	198500. 30 .12.C	199500. 30 .12.C	300
15.	198500. 15 .12.C	199500. 15 .12.C	150	35.	198500. 35 .12.C	199500. 35 .12.C	350
17.	198500. 17 .12.C	199500. 17 .12.C	175	40.	198500. 40 .12.C	199500. 40 .12.C	400
20.	198500. 20 .12.C	199500. 20 .12.C	200	46.	198500. 46 .12.C	199500. 46 .12.C	462

(KMA = polymer metal mounting bracket) For the C-profile option please add index .C



**Strain relief** e.g. clamps, tie-wrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ► From page 1392



**Note:** Please be aware of the minimum lateral gap to the side links! **e-tube: 40mm** | **e-chain®: 16mm**  
As standard separators are fitted every 2<sup>nd</sup> e-chain® link!

**Standard separator, wide base**

unassembled	80.1
assembled	80.1.1

**Standard - for any application**  
Separator with a wide base for maximum holding force.

**Separator, narrow top**

unassembled	80.2
assembled	80.2.1

**For even faster installation**  
Wide on one side for high holding force, narrow on opposite side for easy cable fitting.

**Separator, narrow**

unassembled	80.3
assembled	80.3.1

**For small cables**  
Separator with a narrow base for a large number of small cables side by side. Saves space.

**Separator, asymmetrical**

unassembled	80.4
assembled	80.4.1

**For side-mounted applications**  
Asymmetrical separator, for defined gap distance. No additional spacers required.

**Notch separator for notched crossbar**

unassembled	80.5
assembled	80.5.1

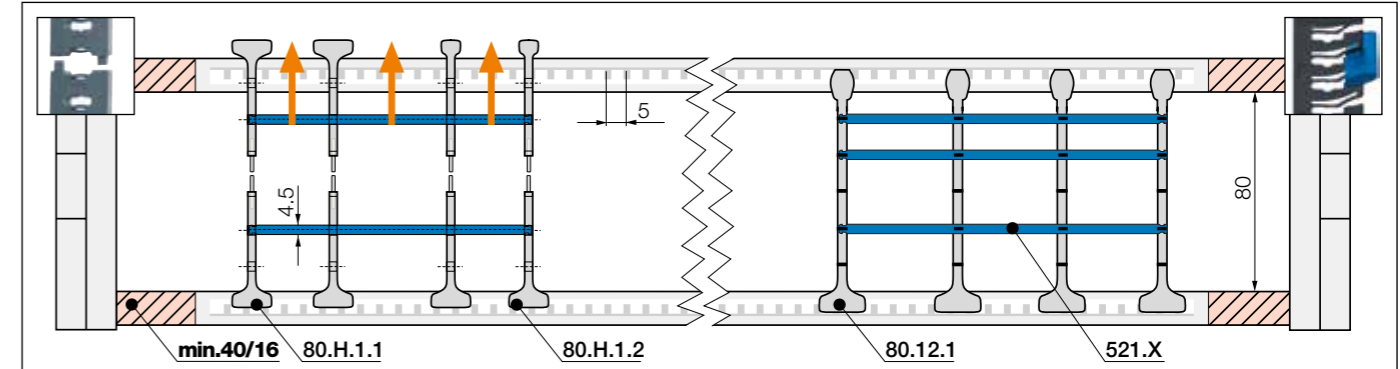
**Locks securely in preset increments**  
Notch separator for exact positioning. Recommended for side-mounted applications.

**Shelf, lockable**

unassembled	520.X
assembled	521.X

**Horizontal separation**  
Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

Shelves Width = X [mm]	X [mm]		X [mm]		X [mm]		X [mm]	
	unassembled	assembled	unassembled	assembled	unassembled	assembled	unassembled	assembled
	050	520.050	150	520.150	300	520.300	450	520.450
	065	520.065	175	520.175	350	520.350		
	075	520.075	200	520.200	375	520.375		
	100	520.100	225	520.225	387	520.387		
	125	520.125	250	520.250	450	520.450		



**Note:** Please be aware of the minimum lateral gap to the side links! **e-tube: 40mm** | **e-chain®: 16mm**  
As standard separators are fitted every 2<sup>nd</sup> e-chain® link!

**Split separator, wide base/top**

unassembled	80.H.1
assembled	80.H.1.1

**Split separators**  
In order to fill e-chains® more easily and effectively, these separators can be split in the middle. This allows easier access to middle shelf partitions. Fast assembly and easy retrofit. 2 types available: with wide or narrow top.

**Split separator, narrow top**

unassembled	80.H.2
assembled	80.H.2.1

**Lean separator<sup>1)</sup>**

unassembled	80.12
assembled	80.12.1

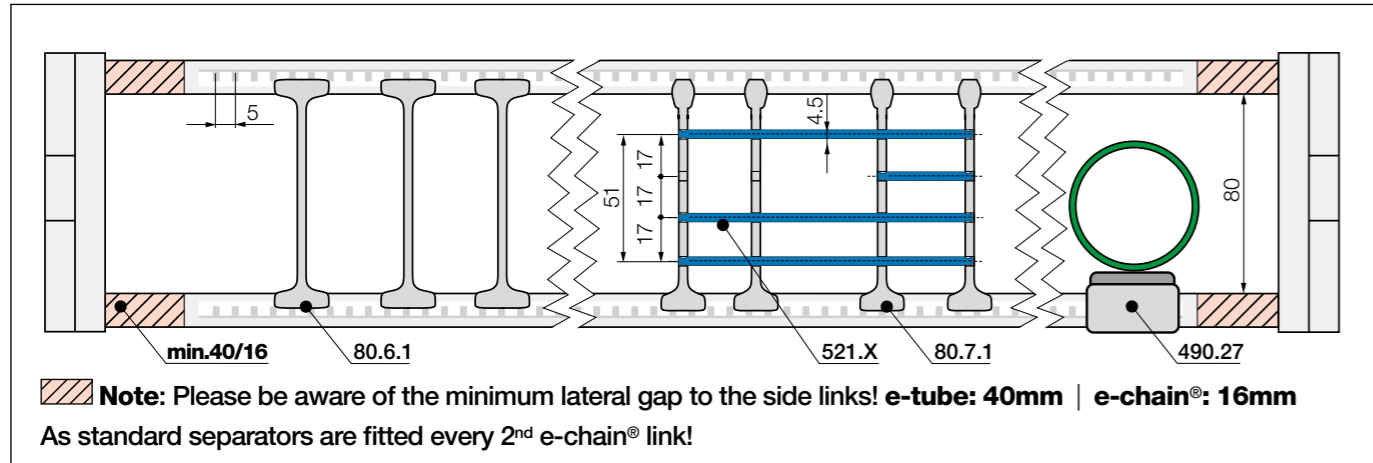
**Lean separators<sup>1)</sup>**  
For quick fitting of shelves in several layers.  
**1) Note: Please combine maximum 4 lean separators with one shelf. Not suitable for side-mounted e-chains®!**

With the lean separator you can quickly insert several layers of cables into the e-chain® and reduce the installation time by up to 50%<sup>2)</sup>.

2) Lean interior separation vs. Standard separator - measured on a 4m long e-chain® fitted with 12 cables in the igus® readychain® factory



More interior separation options



**Notch locking separator\*, lockable for e-chains®**  
unassembled **80.6**  
assembled **80.6.1**

**Notch locking separator\* for increased holding force**

Notch locking separators offer higher crossbar opening forces for high humidity and/or large hydraulic hoses. They can be positioned precisely and then locked in position.

**Separator, one end locking**  
unassembled **80.7**  
assembled **80.7.1**

**Separator, one end locking**

Offset slots for more variability.

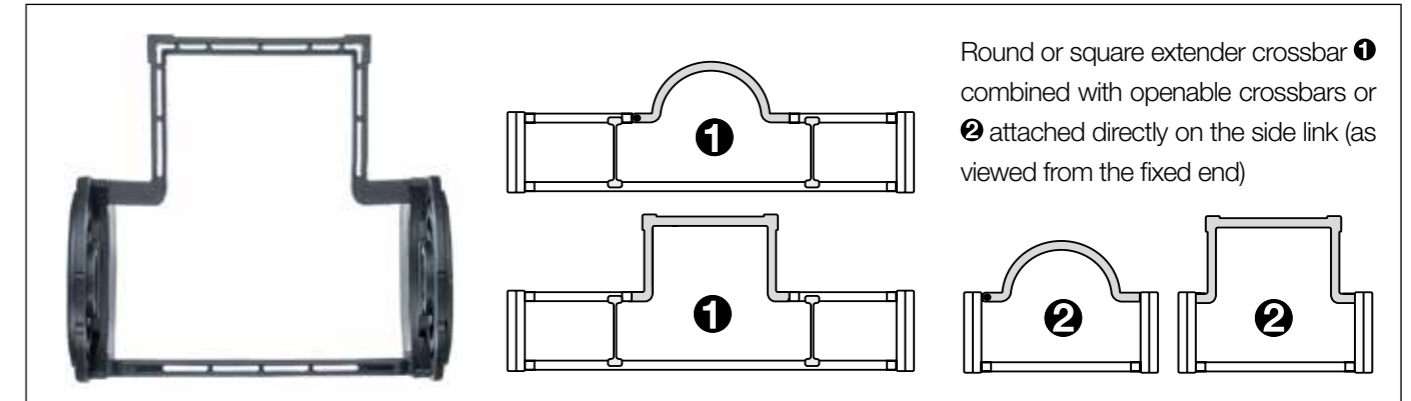
**Rollclip\*, for e-chains®**  
unassembled **489.27**  
assembled **490.27**

**Rollclip\***

Minimises abrasion of sensitive hoses. Simply clamps onto the opening crossbar. The movable rollers compensate for relative movement between the e-chain® and hose.

\*Only suitable for e-chains®

Extender crossbar with fixed width



Extender crossbars with fixed width | Safe guiding for large hoses

- Suitable for hoses with a maximum outer diameter of 270mm.
- Option **1** extender crossbars with fixed width to combine with openable crossbars
- Option **2** extender crossbars with fixed width attached directly on the side link
- Optionally openable along the inner "Z" or the outer radius "E"
- Gliding with crossbars assembled along the outer radius and a special guide trough

Part No. extender crossbar with fixed width, as individual parts	Hose $\varnothing \leq$ [mm]	Extender crossbar shape	<b>2</b> Fitted to side link	<b>1</b> Combine with openable crossbars
450.15RHD115	115	○ round	No	Yes
450.17RD115	115	○ round	Yes	No
450.25D150	150	□ square	Yes	No
450.30D200	200	□ square	Yes	No
450.35D250	220	□ square	Yes	No
450.40D300	270	□ square	Yes	No
450.20HD150	150	□ square	No	Yes
450.25HD200	200	□ square	No	Yes
450.30HD250	220	□ square	No	Yes

**Order example: 1 combined with openable crossbars**

To receive extender crossbar RHD115 pre-fitted along the outer radius of the-chain®, please add index **E: 15050.10/15RHDE115/10.R.0**

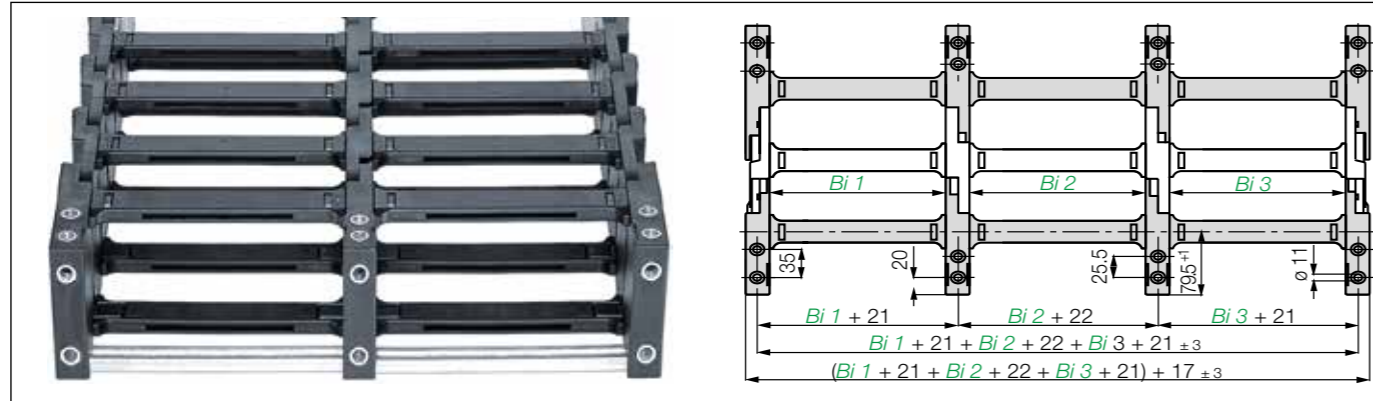
To receive extender crossbar RHD115 pre-fitted along the inner radius of the-chain®, please add index **Z: 15050.10/15RHDZ115/10.R.0**

**Order example: 2 fitted to side link**

To receive extender crossbar RD115 pre-fitted along the outer radius of the-chain®, please add index **E: 15050.17RDE115.R.0**

To receive extender crossbar RD115 pre-fitted along the inner radius of the-chain®, please add index **Z: 15050.17RDZ115.R.0**

Extension links



Extension links | For extremely wide e-chains® up to 3.0m

- Virtually unlimited side-by-side extension
- For extremely wide e-chains® up to 3000mm
- Unsupported length  $FL_G$  max. can be increased when heavy fill weights are required
- e-chains® and e-tubes can be combined
- Attached with KMA or steel mounting brackets

Part No.	Part No.	Part No.
Extension link e-chain®	Extension link e-tube	Extension link as an individual part
15050.Bi1/Bi2/Bi3.R.0	R19850.Bi1/Bi2/Bi3.R.0	522.R.

Complete Part No.with the width index *Bi1/Bi2/Bi3/etc.* and the radius (*R*). Example: 14040.10/20/10.200.0



Handling unit indoor crane - long unsupported span with an igus® E4 series

E4 snapclip - clip-on tiewrap

- For side-mounted applications, compatible with many E4 e-chains®
  - Serves as a clip-on, lateral guide for hoses and cables on e-chains®
  - The loops can be adjusted as required
- More information ► [www.igus.eu/15050](http://www.igus.eu/15050)



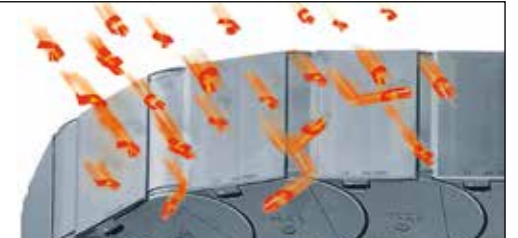
Steel support tray for support of the lower run

- Simple one-piece support trays for the lower run
  - To your requirements and specification
  - 4 options available
- More information ► From page 1356



Hot swarf up to +850°C for e-tubes

- Lids and shelves, on which +850°C hot swarf bounces off, as special production with the igus® material igumid HT
  - No hot swarf melting or embedding into the chain
- More information ► [www.igus.eu/HT](http://www.igus.eu/HT)



Reduce assembly time - E4 e-chain® opener

- e-chain® opener tools for easy opening and closing of e-chains®
  - Simple opening and closing of e-chain® crossbars
  - Also for use in hard to reach locations
  - Significant assembly time reduction
- More information ► [www.igus.eu/E4savetime](http://www.igus.eu/E4savetime)



Roller crossbars - increase the service life of cables and hoses

- Significantly reduce jacket abrasion of very stiff cables and hoses with rolling contact surfaces equipped with tribo-optimised bearings
  - For sensitive hoses in restricted space
  - Usable along the inner and/or outer radius, retrofit possible
- More information ► upon request



Strong due to undercut design, large inner height



e-chains® | Series 15250 | Crossbars every link (crossbars removable along the inner and outer radius)  
 e-chains® | Series 15350 | Crossbars every 2<sup>nd</sup> link (crossbars removable along the inner and outer radius)

Part No.	Bi	Ba	15250	15350	Part No.	Bi	Ba	15250	15350
e-chains®	[mm]	[mm]	[kg/m]	[kg/m]	e-chains®	[mm]	[mm]	[kg/m]	[kg/m]
15250. 15350. 05. R.0	50	80	≈ 3.64	≈ 3.56	15250. 15350. 212.R.0	212	243	≈ 4.26	≈ 3.86
15250. 15350. 06. R.0	68	98	≈ 3.72	≈ 3.60	15250. 15350. 23. R.0	225	255	≈ 4.32	≈ 3.89
15250. 15350. 07. R.0	75	105	≈ 3.74	≈ 3.61	15250. 15350. 237.R.0	237	268	≈ 4.34	≈ 3.90
15250. 15350. 087.R.0	87	117	≈ 3.79	≈ 3.63	15250. 15350. 25. R.0	250	280	≈ 4.42	≈ 3.94
15250. 15350. 097.R.0	97	127	≈ 3.83	≈ 3.65	15250. 15350. 262.R.0	262	293	≈ 4.47	≈ 3.97
15250. 15350. 10. R.0	100	130	≈ 3.85	≈ 3.66	15250. 15350. 28. R.0	275	305	≈ 4.51	≈ 3.99
15250. 15350. 11. R.0	108	138	≈ 3.87	≈ 3.67	15250. 15350. 29. R.0	287	318	≈ 4.53	≈ 4.00
15250. 15350. 112.R.0	112	143	≈ 3.88	≈ 3.68	15250. 15350. 30. R.0	300	330	≈ 4.61	≈ 4.04
15250. 15350. 12. R.0	125	155	≈ 3.95	≈ 3.71	15250. 15350. 312.R.0	312	343	≈ 4.63	≈ 4.05
15250. 15350. 137.R.0	137	167	≈ 3.98	≈ 3.73	15250. 15350. 325.R.0	325	355	≈ 4.69	≈ 4.08
15250. 15350. 15. R.0	150	180	≈ 4.04	≈ 3.75	15250. 15350. 337.R.0	337	368	≈ 4.73	≈ 4.10
15250. 15350. 162.R.0	162	193	≈ 4.06	≈ 3.76	15250. 15350. 350.R.0	350	380	≈ 4.87	≈ 4.17
15250. 15350. 17. R.0	168	198	≈ 4.11	≈ 3.79	15250. 15350. 362.R.0	362	393	≈ 4.92	≈ 4.20
15250. 15350. 18. R.0	175	205	≈ 4.12	≈ 3.80	15250. 15350. 375.R.0	375	405	≈ 4.97	≈ 4.22
15250. 15350. 187.R.0	187	218	≈ 4.15	≈ 3.81	15250. 15350. 387.R.0	387	418	≈ 5.01	≈ 4.24
15250. 15350. 20. R.0	200	230	≈ 4.23	≈ 3.85	15250. 15350. 400.R.0	400	430	≈ 5.05	≈ 4.26

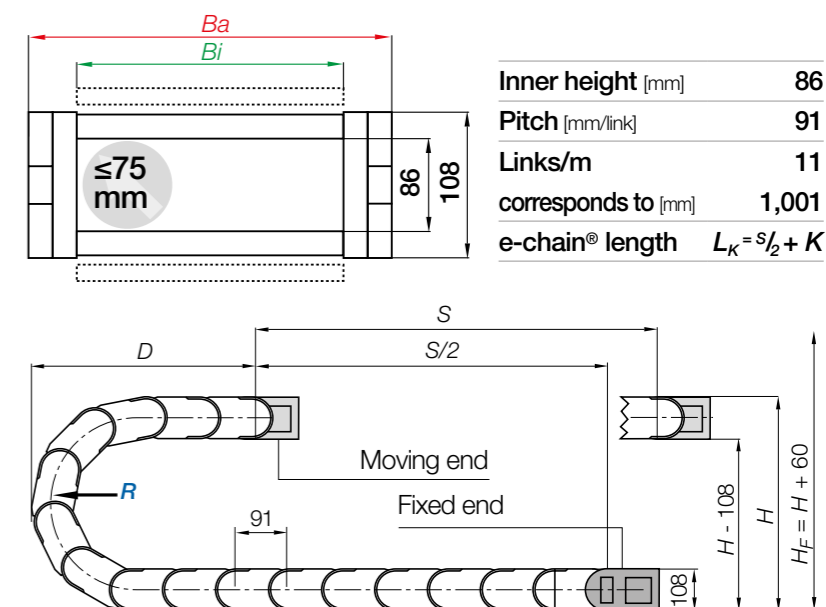
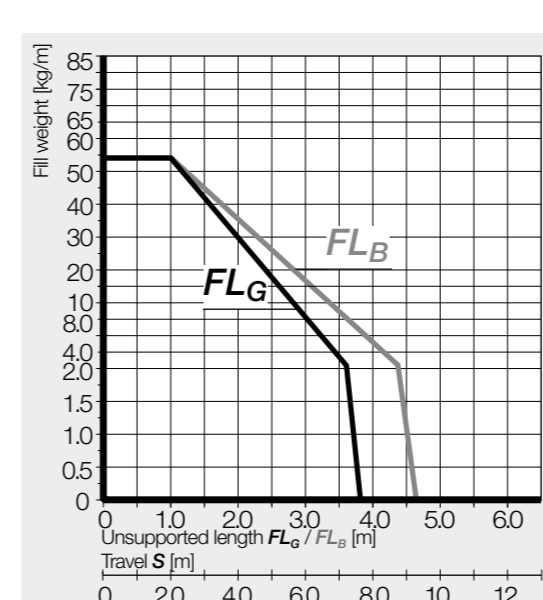
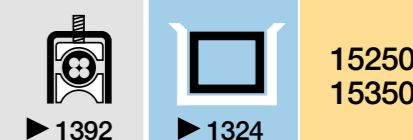
Available bend radii

R [mm] | 150 | 200 | 250 | 300 | 350 | 400 | 500 | 600 |

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

15250.20.300.0 = crossbars every link / 15350.20.300.0 = crossbars every 2<sup>nd</sup> link

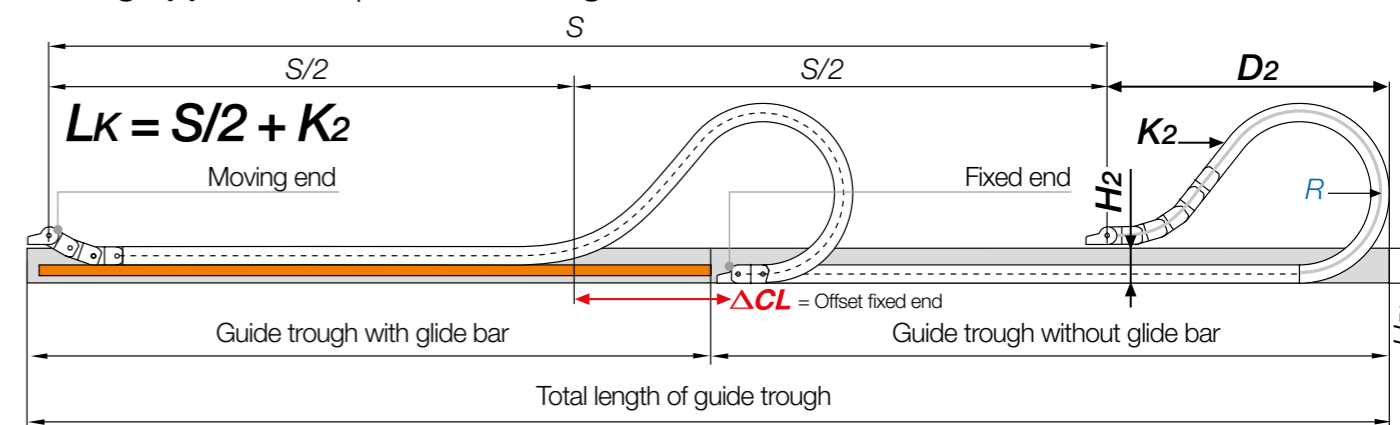
Unsupported applications | Short travels



R	150	200	250	300	350	400	500	600
H <sub>±25</sub> <sup>-0</sup>	408	508	608	708	808	908	1,108	1,308
D	341	391	441	491	541	591	691	791
K	655	815	970	1,125	1,285	1,440	1,755	2,070

The required clearance height:  $H_F = H + 60\text{mm}$  (with 3.0kg/m fill weight)

Gliding applications | For travel lengths from 12m to max. 250m

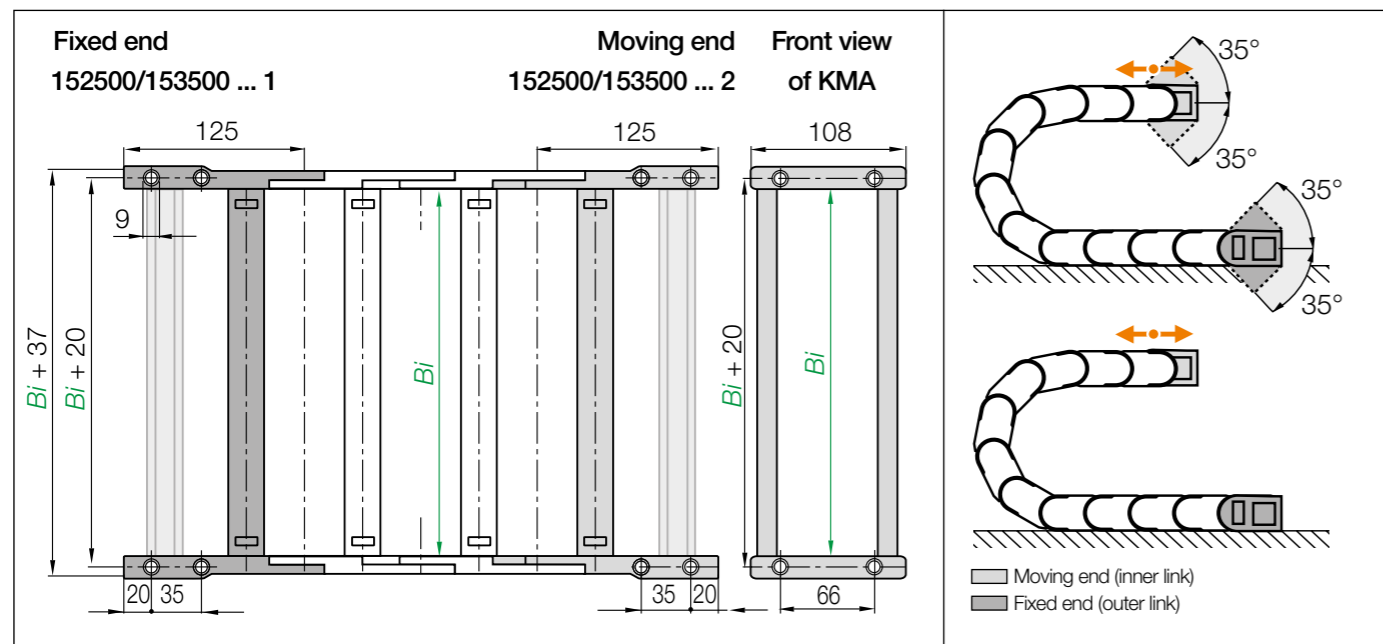


**Note:** We recommend the project planning of such a system to be carried out by igus®.

In case of travels between 9 and 12m we recommend an e-chain® with a longer unsupported length.

R	150	200	250	300	350	400	500	600 <sup>1)</sup>
H <sub>2</sub>	242	242	242	242	242	242	242	-
D <sub>2</sub> <sup>+25</sup>	550	800	950	1,200	1,550	1,700	2,175	-
K <sub>2</sub>	910	1,274	1,638	2,002	2,457	2,730	3,458	-
ΔCL	209	409	509	709	1,009	1,109	1,339	-

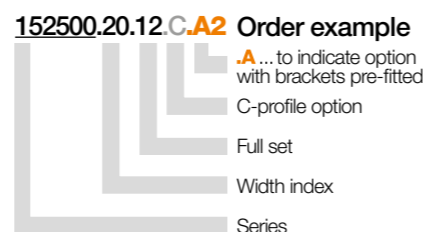
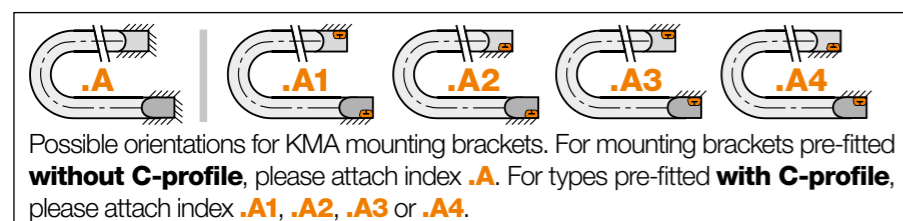
1) R 600 not suitable For travel lengths. Please consult igus®.



**KMA pivoting** | Recommended for unsupported and gliding applications  
**KMA locking** | Recommended for vertical hanging and standing applications

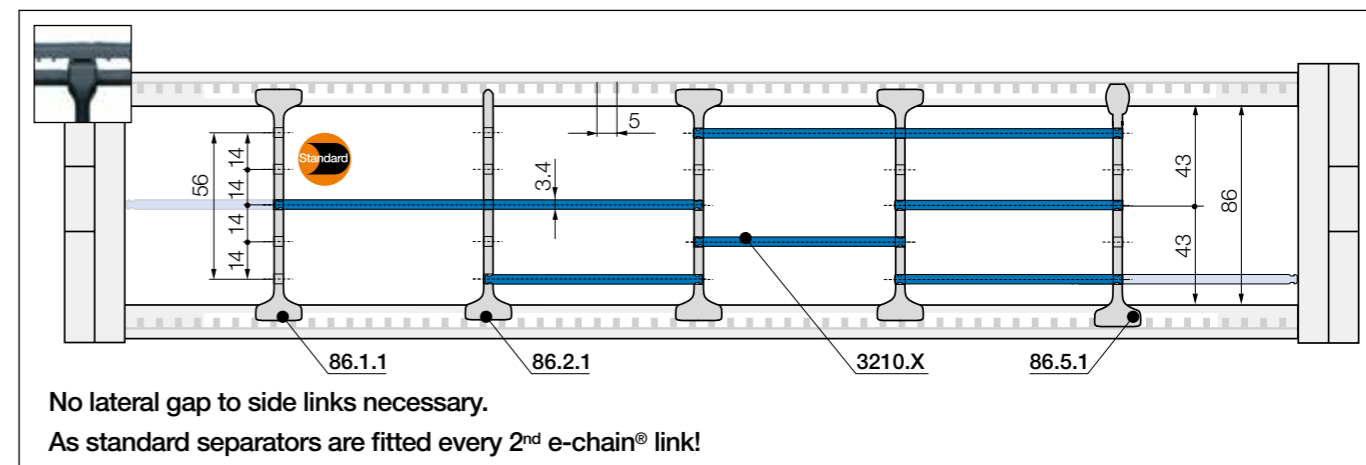
Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]	Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]
05.	152500.05 .12.C	153500.05 .12.C	50	212.	152500.212 .12.C	153500.212 .12.C	212
06.	152500.06 .12.C	153500.06 .12.C	68	23.	152500.23 .12.C	153500.23 .12.C	225
07.	152500.07 .12.C	153500.07 .12.C	75	237.	152500.237 .12.C	153500.237 .12.C	237
087.	152500.087 .12.C	153500.087 .12.C	87	25.	152500.25 .12.C	153500.25 .12.C	250
097.	152500.097 .12.C	153500.09 .12.C	97	262.	152500.262 .12.C	153500.262 .12.C	262
10.	152500.10 .12.C	153500.10 .12.C	100	28.	152500.28 .12.C	153500.28 .12.C	275
11.	152500.11 .12.C	153500.11 .12.C	108	29.	152500.29 .12.C	153500.29 .12.C	287
112.	152500.112 .12.C	153500.112 .12.C	112	30.	152500.30 .12.C	153500.30 .12.C	300
12.	152500.12 .12.C	153500.12 .12.C	125	312.	152500.312 .12.C	153500.312 .12.C	312
137.	152500.137 .12.C	153500.137 .12.C	137	325.	152500.325 .12.C	153500.325 .12.C	325
15.	152500.15 .12.C	153500.15 .12.C	150	337.	152500.337 .12.C	153500.337 .12.C	337
162.	152500.162 .12.C	153500.162 .12.C	162	350.	152500.350 .12.C	153500.350 .12.C	350
17.	152500.17 .12.C	153500.17 .12.C	168	362.	152500.362 .12.C	153500.362 .12.C	362
18.	152500.18 .12.C	153500.18 .12.C	175	375.	152500.375 .12.C	153500.375 .12.C	375
187.	152500.187 .12.C	153500.187 .12.C	187	387.	152500.387 .12.C	153500.387 .12.C	387
20.	152500.20 .12.C	153500.20 .12.C	200	400.	152500.400 .12.C	153500.400 .12.C	400

(KMA = polymer metal mounting bracket) For the C-profile option please add index C



**Strain relief** e.g. clamps, tiwrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1392

Previous generation of interior separation with other options ▶ [www.igus.eu/15250](http://www.igus.eu/15250)



**Standard separator, wide base**

unassembled	86.1
assembled	86.1.1

**Standard - for any application**  
Separator with a wide base for maximum holding force.

**Separator, narrow top**

unassembled	86.2
assembled	86.2.1

**For even faster installation**  
Wide on one side for high holding force, narrow on opposite side for easy cable fitting.

**Notch separator for notched crossbar**

unassembled	86.5
assembled	86.5.1

**Locks securely in preset increments**  
Notch separator for exact positioning. Recommended for side-mounted applications.

**Shelf, lockable**

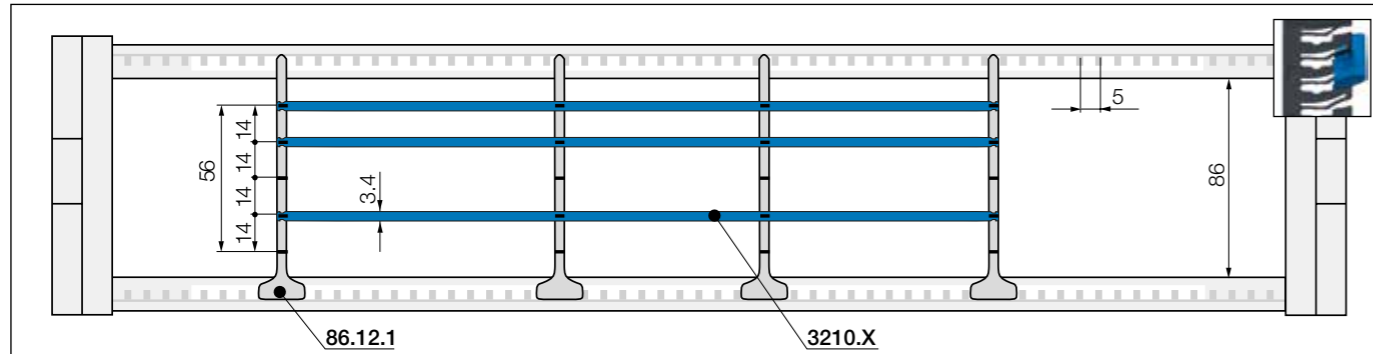
unassembled	3200.X
assembled	3210.X

**Horizontal separation**  
Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

**Shelves**  
Width = X [mm]

X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
050	3200.050	3210.050	125	3200.125	3210.125	225	3200.225	3210.225
075	3200.075	3210.075	150	3200.150	3210.150	250	3200.250	3210.250
100	3200.100	3210.100	175	3200.175	3210.175			
115	3200.115	3210.115	200	3200.200	3210.200			





No lateral gap to side links necessary.  
As standard separators are fitted every 2<sup>nd</sup> e-chain® link!

Lean separator <sup>1)</sup>	
unassembled	86.12
assembled	86.12.1

**Lean separators<sup>1)</sup>**

For quick fitting of shelves in several layers.

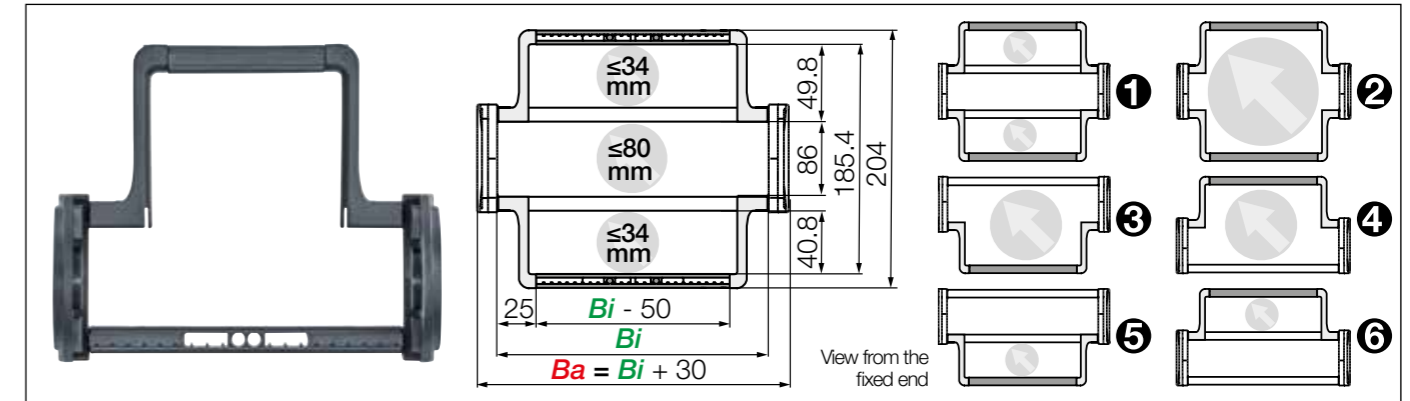
**1) Note: Please combine maximum 4 lean separators with one shelf. Not suitable for side-mounted e-chains®!**

With the lean separator you can quickly insert several layers of cables into the e-chain® and reduce the installation time by up to 50%<sup>2)</sup>.

<sup>2)</sup> Lean interior separation vs. Standard separator - measured on a 4m long e-chain® fitted with 12 cables in the igus® readychain® factory



System E4/light e-chains® - can be filled with cables of diameters up to 100mm



**Extender crossbars with flexible width | Safe guiding for large hoses**

- For guiding and protecting large hoses
- With mounting for noise dampers
- Cable-friendly design, high crossbar holding force
- The openable extender crossbars can be fitted in different ways and combinations
- Optionally openable along the inner or outer radius

Versions	Hose Ø ≤ [mm]	Part No. crossbars every link	Part No. crossbars every 2 <sup>nd</sup> link
<b>e-chain® with extender crossbar</b>			
1) Extender crossbar and standard crossbar alternating along the inner and outer radius <sup>1)</sup>	34	15250.XXXHB50.R.0	-
2) Extender crossbar on both sides along the inner and outer radius <sup>2)</sup>	150	15250.XXXB50.R.0	15350.XXXB50.R.0 <sup>2)</sup>
3) Extender crossbar along the outer radius <sup>3)</sup>	120	15250.XXXBE50.R.0	15350.XXXBE50.R.0 <sup>2)</sup>
4) Extender crossbar along the inner radius <sup>2)</sup>	120	15250.XXXBZ50.R.0	15350.XXXBZ50.R.0 <sup>2)</sup>
5) Extender crossbar and standard crossbar alternating along the outer radius <sup>3)</sup>	34	15250.XXXHBE50.R.0	-
6) Extender crossbar and standard crossbar alternating along inner radius <sup>1)</sup>	34	15250.XXXHBZ50.R.0	-

<sup>1)</sup> Minimum bend radius: R 125 <sup>2)</sup> Minimum bend radius: R 150 <sup>3)</sup> Minimum bend radius: R 150

**Bi [mm] Available inner widths**

| 100 | 125 | 137 | 150 | 162 | 175 | 187 | 200 | 212 | 225 | 237 | 250 |  
| 262 | 275 | 287 | 300 | 312 | 325 | 337 | 350 | 362 | 375 | 387 | 400 |

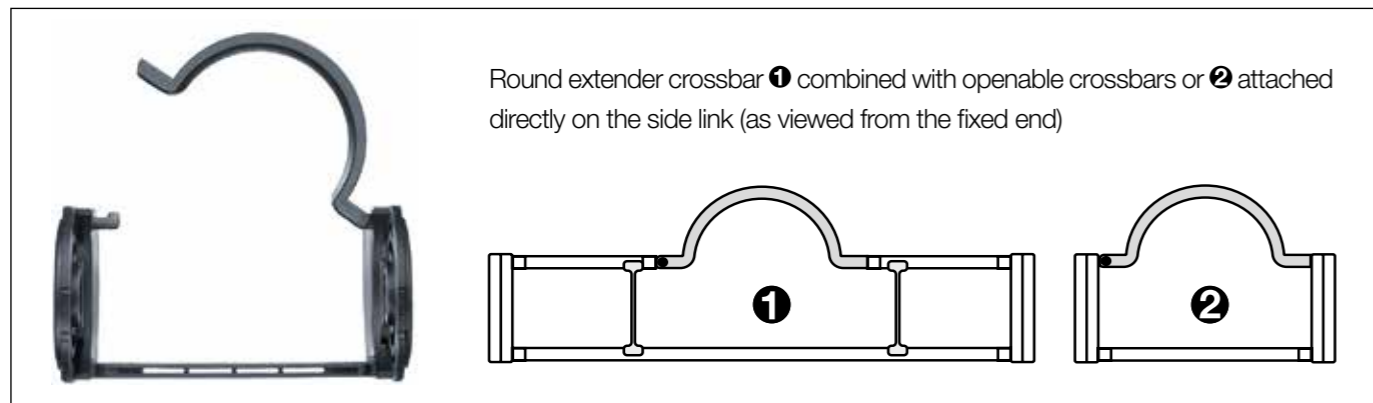
Part number with the width index **XXX** of the **Bi** and the radius (**R**) e.g.

15250.10B50.150.0 = **Bi** 100 / e-chain® with crossbars every link / Extender crossbars from both sides along the inner and outer radius / Bend radius (**R**) 150



The E4/light can be fitted with openable extender crossbars, which increase the size of the interior of the e-chain®. Crossbars can be fitted in various ways: from one or both sides, alternating with standard crossbars and or any combination

Extender crossbar with fixed width



Extender crossbars with fixed width | Safe guiding for large hoses

- Suitable for hoses with a maximum outer diameter of 115mm.
- Option ① extender crossbars with fixed width to combine with openable crossbars
- Option ② extender crossbars with fixed width attached directly on the side link
- Optionally openable along the inner "Z" or the outer radius "E"
- Gliding with crossbars assembled along the outer radius and a special guide trough

Part No. extender crossbar with fixed width, as individual parts	Hose $\varnothing \leq$ [mm]	Extender crossbar shape	② Fitted to side link	① Combine with openable crossbars
385.15RHD115	115	○ round	No	Yes
385.18RD115	115	○ round	Yes	No

Order example: ① combined with openable crossbars

To receive extender crossbar RHD115 pre-fitted along the outer radius of the-chain®, please add index **E**: 15250.10/15RHDE115/10.R.0

To receive extender crossbar RHD115 pre-fitted along the inner radius of the-chain®, please add index **Z**: 15250.10/15RHDZ115/10.R.0

Order example: ② fitted to side link

To receive extender crossbar RD115 pre-fitted along the outer radius of the-chain®, please add index **E**: 15250.18RDE115.R.0

To receive extender crossbar RD115 pre-fitted along the inner radius of the-chain®, please add index **Z**: 15250.18RDZ115.R.0

Steel support tray for support of the lower run

- Simple one-piece support trays for the lower run
- To your requirements and specification
- 4 options available

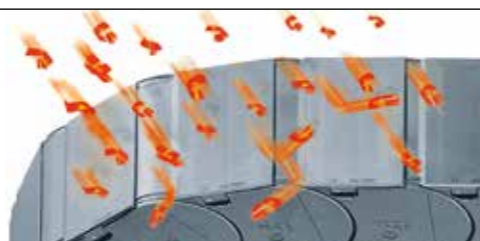
More information ► From page 1356



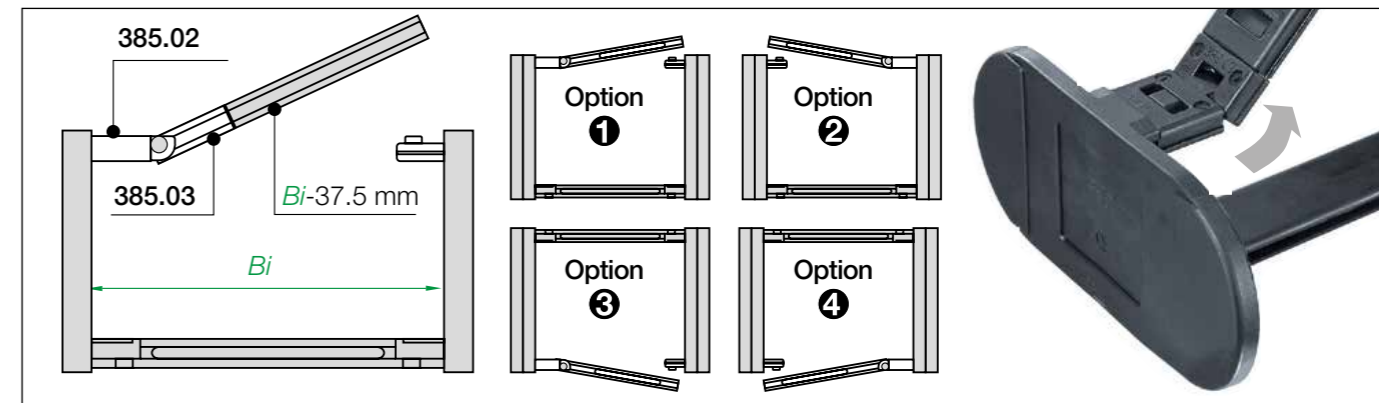
Hot swarf up to +850°C for e-tubes

- Lids and shelves, on which +850°C hot swarf bounces off, as special production with the igus® material igumid HT
- No hot swarf melting or embedding into the chain

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



Hinged crossbar | Swivel clips



Hinged crossbars | Swivel clip | Openable crossbar remains attached to the e-chain®

- When opening crossbars must remain attached to the e-chain®
- Hinged crossbars consist of a swivel clip and a shortened crossbar
- Openable crossbar (shortened):  $Bi-37.5$ mm (smallest inner width  $Bi = 87.5$ )
- Please consult igus® for assistance with this product

Part No. e-chain® with hinged crossbar	Part No. swivel clip as an individual part	Part No. openable crossbar as an individual part
15250. <i>Bi.Z.R.0</i>	385.02	385.03

Complete Part No. with the width index *Bi*, the index *Z* for the required option and the radius (*R*). Example: 15250.137.1.200.0

Reduce assembly time - E4 e-chain® opener

- e-chain® opener tools for easy opening and closing of e-chains®
- Simple opening and closing of e-chain® crossbars
- Also for use in hard to reach locations
- Significant assembly time reduction

More information ► [www.igus.eu/E4savetime](http://www.igus.eu/E4savetime)

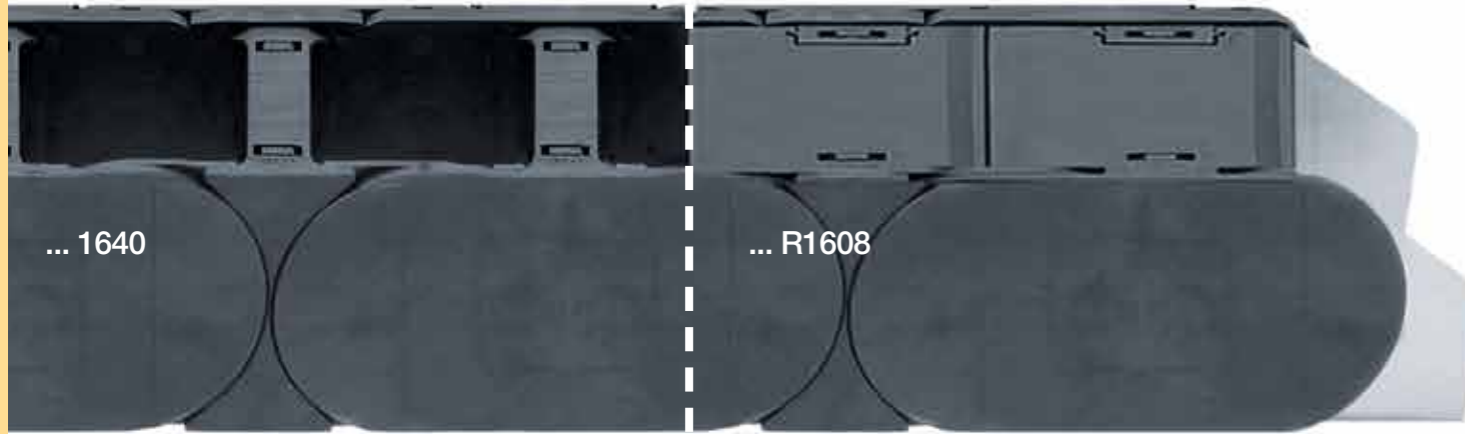
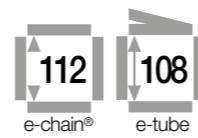


Roller crossbars - increase the service life of cables and hoses

- Significantly reduce jacket abrasion of very stiff cables and hoses with rolling contact surfaces equipped with tribo-optimised bearings
- For sensitive hoses in restricted space
- Usable along the inner and/or outer radius, retrofit possible

More information ► upon request





e-chains® | Series 1640 | Crossbars every link (crossbars removable along the inner and outer radius)  
e-tubes | Series R1608 | Fully enclosed (lids openable along the outer radius, from one side)

Part No.		Bi	Ba	1640	1608
e-chains® / e-tubes		[mm]	[mm]	[kg/m]	[kg/m]
1640.	05. R.0	50	84	≈ 5.10	-
1640.	055.R.0	55	89	≈ 5.14	-
1640.	06. R.0	65	99	≈ 5.18	-
1640.	07. R.0	75	109	≈ 5.27	-
1640.	08. R.0	87	121	≈ 5.31	-
1640.	10. R.0	100	134	≈ 5.36	-
1640.	11. R.0	112	146	≈ 5.45	-
1640.	12. R.0	125	159	≈ 5.54	-
1640.	13. R.0	137	171	≈ 5.63	-
1640.	15. R.0	150	184	≈ 5.67	-
1640.	16. R.0	162	196	≈ 5.74	-
1640.	169.R.0	169	204	≈ 5.82	-
1640.	17. R.0	175	209	≈ 5.81	-
1640.	182.R.0	182	217	≈ 5.85	-
1640.	18. R.0	187	221	≈ 5.88	-
1640. 1608.	20. R.0	200	234	≈ 5.89	≈ 7.69
1640.	207.R.0	207	242	≈ 5.95	-
1640.	21. R.0	212	246	≈ 5.96	-
1640.	22. R.0	225	259	≈ 6.01	-
1640.	23. R.0	237	271	≈ 6.09	-
1640. 1608.	25. R.0	250	284	≈ 6.15	≈ 8.39
1640.	26. R.0	262	296	≈ 6.20	-
1640.	27. R.0	275	309	≈ 6.27	-

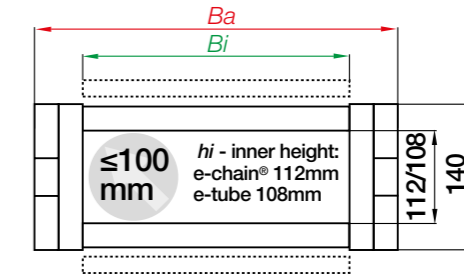
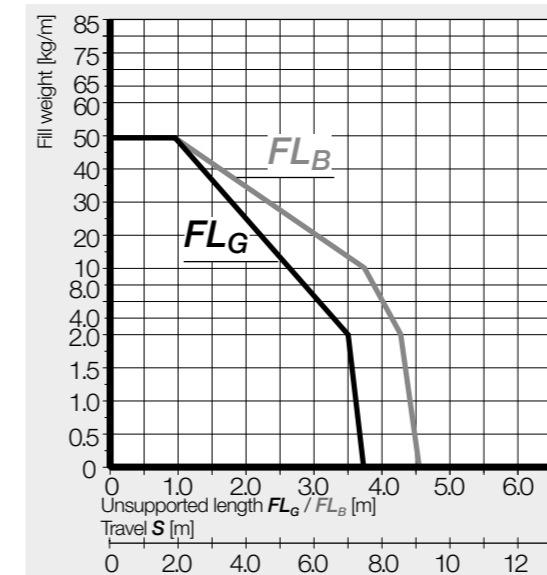
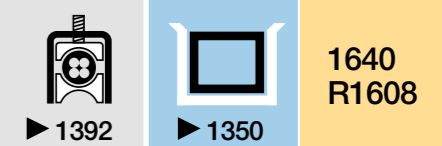
\*Radius not available for e-tubes

Available bend radii

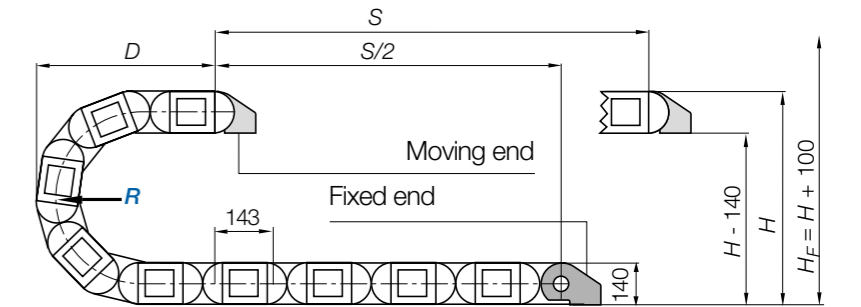
R [mm] | 200\* | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |

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

1640.30.300.0 = crossbars every link / 1608.30.300.0 = fully enclosed



1640	Inner height [mm]	112
R1608	Inner height [mm]	108
	Pitch [mm/link]	143
	Links/m	8
	corresponds to [mm]	1,001
	e-chain® length	$L_K = S/2 + K$

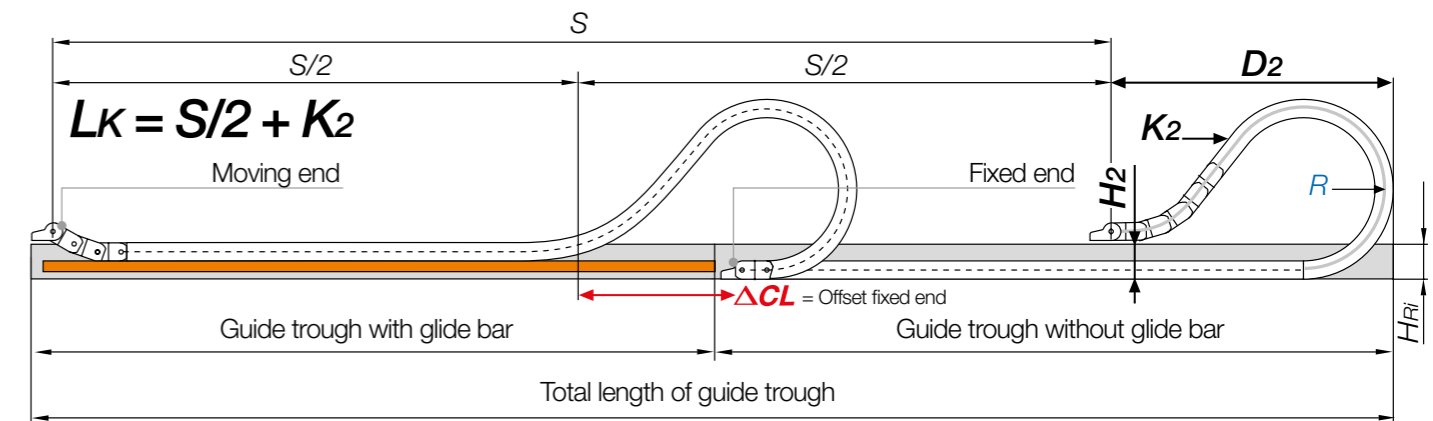


R	200*	250	300	350	400	450	500	550	600
H	540	640	740	840	940	1,040	1,140	1,240	1,340
D	485	535	585	635	685	735	785	835	885
K	915	1,075	1,230	1,390	1,545	1,700	1,860	2,015	2,175

The required clearance height:  $H_F = H + 100\text{mm}$  (with 5.0kg/m fill weight)

\*Radius not available for e-tubes

Gliding applications | For travel lengths from 14m to max. 400m

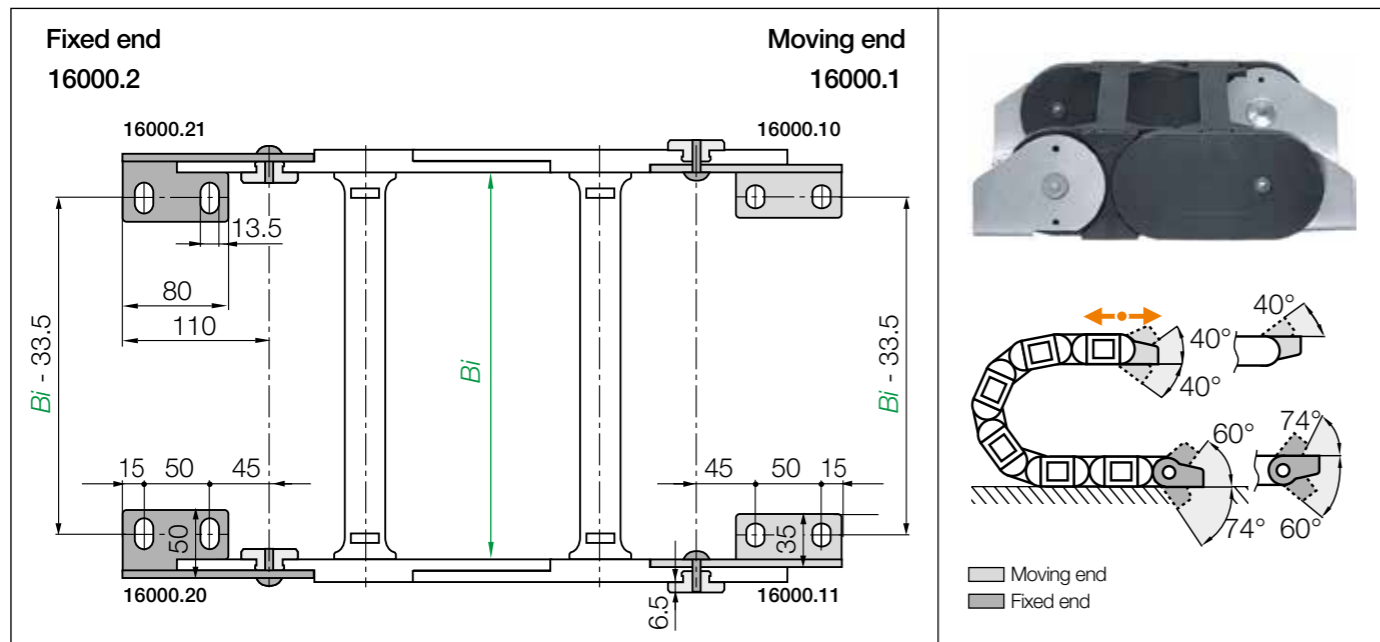


**Note:** We recommend the project planning of such a system to be carried out by igus®.

In case of travels between 9 and 14m we recommend an e-chain® with a longer unsupported length.

R	200*	250	300	350	400	450	500	550	600
H <sub>2</sub>	325	325	325	325	325	325	325	325	325
D <sub>2</sub> <sup>+25</sup>	900	1,000	1,100	1,250	1,450	1,600	1,700	1,900	2,050
K <sub>2</sub>	1573	1,716	1,859	2,288	2,574	2,860	3,146	3,432	3,861
ΔCL	450	500	550	650	800	900	950	1,100	1,200

\*Radius not available for e-tubes

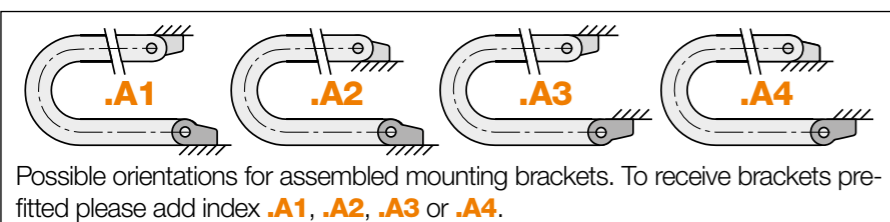
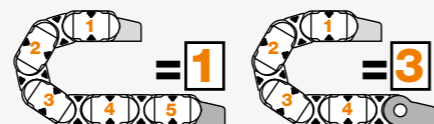


Steel pivoting | For unsupported, gliding, vertical standing and vertical hanging applications

Part No. full set	Description
<b>steel pivoting</b>	<b>Mounting bracket</b>
16000.1.12.VS E45	Full set (both ends) ending with outer side link, <b>screwed</b> - standard
16000.3.12.VS E45	Full set (both ends) beginning with outer side link (moving end) - ending with inner side link (fixed end), <b>screwed</b> - standard

Stainless steel version available. Please add the index .E45! (Material: stainless steel 1.4301)

**Note:** The e-chains® may end with either an inner or an outer side link. An outer side link should always be the first e-chain® link at the moving end. Please specify the index **1** (for odd) or **3** (for even) depending on an even or odd number of links required. For the best appearance, make sure the e-chain® ends with **1** outer side links whenever possible. (with odd number of links)

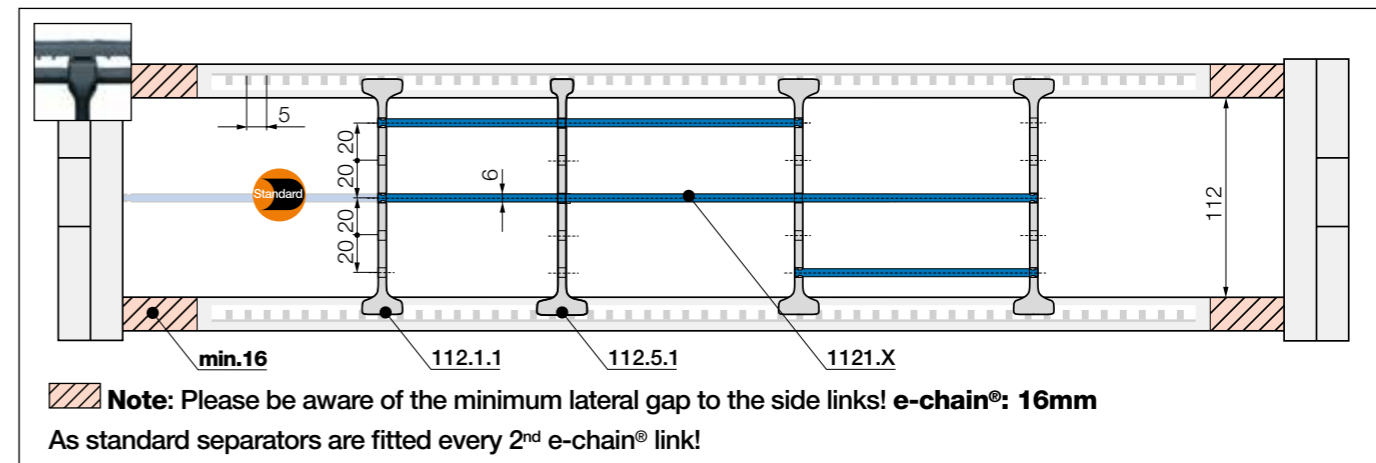


16000.1.12.VS.A2 Order example

- .A... to indicate option with brackets pre-fitted
- Pre-assembled
- Full set, pivoting
- Odd numbers of links
- Series

**Strain relief** e.g. clamps, tiwrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1392

Previous generation of interior separation with other options ▶ [www.igus.eu/1640](http://www.igus.eu/1640)



**Standard separator, wide base**

unassembled	112.1
assembled	112.1.1

**Standard - for any application**  
Separator with a wide base for maximum holding force.

**Notch separator for notched crossbar**

unassembled	112.5
assembled	112.5.1

**Locks securely in preset increments**  
Notch separator for exact positioning. Recommended for side-mounted applications.

**Shelf, lockable**

unassembled	1120.X
assembled	1121.X

**Horizontal separation**  
Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

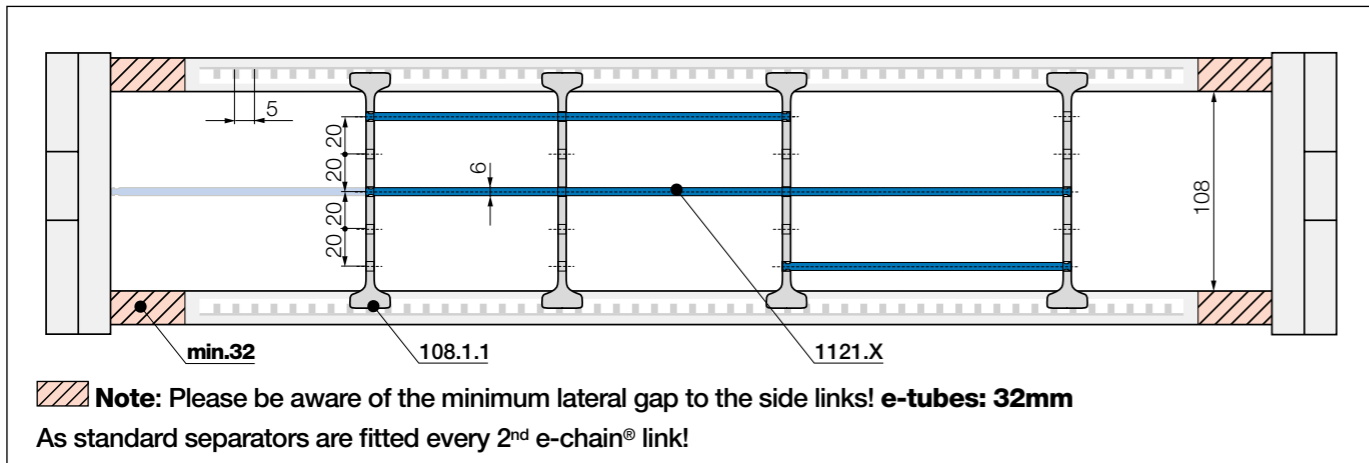
**Shelves**  
Width = X [mm]



X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
050	1120.050	1121.050	150	1120.150	1121.150	300	1120.300	1121.300
065	1120.065	1121.065	175	1120.175	1121.175	350	1120.350	1121.350
075	1120.075	1121.075	200	1120.200	1121.200	375	1120.375	1121.375
100	1120.100	1121.100	225	1120.225	1121.225	387	1120.387	1121.387
125	1120.125	1121.125	250	1120.250	1121.250	450	1120.450	1121.450

Interior separation | Increase cable service life | Only for e-tubes

Previous generation of interior separation with other options ► [www.igus.eu/R1608](http://www.igus.eu/R1608)



**Standard separator, wide base**

unassembled	108.1
assembled	108.1.1

**Standard - for any application**  
Separator with a wide base for maximum holding force.

**Shelf, lockable**

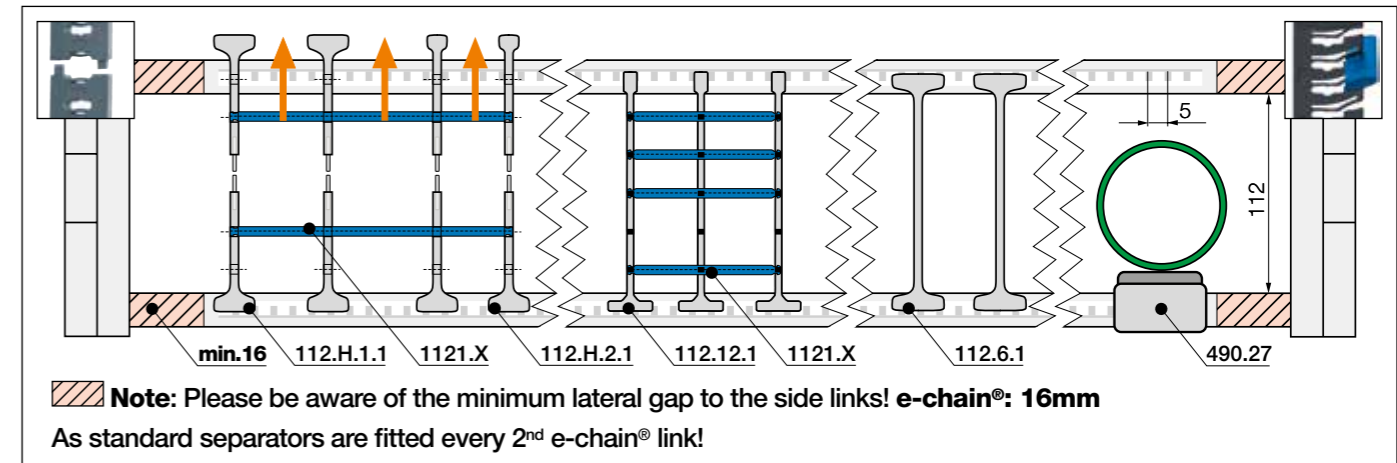
unassembled	1120.X
assembled	1121.X

**Horizontal separation**  
Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

**Shelves**  
Width = X [mm]

X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
050	1120.050	1121.050	150	1120.150	1121.150	300	1120.300	1121.300
065	1120.065	1121.065	175	1120.175	1121.175	350	1120.350	1121.350
075	1120.075	1121.075	200	1120.200	1121.200	375	1120.375	1121.375
100	1120.100	1121.100	225	1120.225	1121.225	387	1120.387	1121.387
125	1120.125	1121.125	250	1120.250	1121.250	450	1120.450	1121.450

Interior separation | To allow faster filling | Only for e-chains®



**Split separator, wide base/top\***

unassembled	112.H.1
assembled	112.H.1.1

**Split separators\***  
In order to fill e-chains® more easily and effectively, these separators can be split in the middle. This allows easier access to middle shelf partitions. Fast assembly and easy retrofit. 2 types available: with wide or narrow top.

**Split separator, narrow top\***

unassembled	112.H.2
assembled	112.H.2.1

**Lean separator\*<sup>1)3)</sup>**

unassembled	112.12
assembled	112.12.1

**Lean separators\*<sup>1)3)</sup>**  
For quick fitting of shelves in several layers.  
**1) Note: Please combine maximum 4 lean separators with one shelf. Not suitable for side-mounted e-chains®!**  
\*Suitable for e-chains® only 3) Available upon request. Delivery time upon request

With the lean separator you can quickly insert several layers of cables into the e-chain® and reduce the installation time by up to 50%<sup>2)</sup>.

2) Lean interior separation vs. Standard separator - measured on a 4m long e-chain® fitted with 12 cables in the igus® readychain® factory



More interior separation options | Only for e-chains®

**Notch locking separator\*, lockable for e-chains®**

unassembled	112.6
assembled	112.6.1

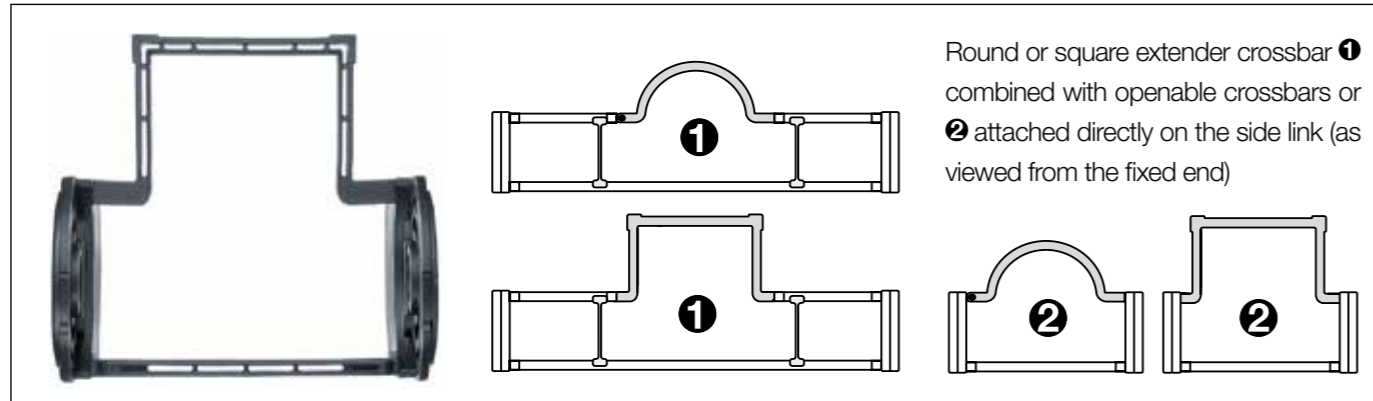
**Notch locking separator\* for increased holding force**  
Notch locking separators offer higher crossbar opening forces for high humidity and/or large hydraulic hoses. They can be positioned precisely and then locked in position.

**Rollclip\*, for e-chains®**

unassembled	489.27
assembled	490.27

**Rollclip\***  
Minimises abrasion of sensitive hoses. Simply clamps onto the opening crossbar. The movable rollers compensate for relative movement between the e-chain® and hose. \*Only suitable for e-chains®

Extender crossbar with fixed width



Extender crossbars with fixed width | Safe guiding for large hoses

- Suitable for hoses with a maximum outer diameter of 300mm
- Option ❶ extender crossbars with fixed width to combine with openable crossbars
- Option ❷ extender crossbars with fixed width attached directly on the side link
- Optionally openable along the inner "Z" or the outer radius "E"
- Gliding with crossbars assembled along the outer radius and a special guide trough

Part No. extender crossbar with fixed width, as individual parts	Hose $\varnothing \leq$ [mm]	Extender crossbar shape	❷ Fitted to side link	❶ Combine with openable crossbars
450.15RHD115	115	○ round	No	Yes
450.17RD115	115	○ round	Yes	No
450.25D150	150	□ square	Yes	No
450.30D200	200	□ square	Yes	No
450.35D250	250	□ square	Yes	No
450.40D300	300	□ square	Yes	No
450.20HD150	150	□ square	No	Yes
450.25HD200	200	□ square	No	Yes
450.30HD250	250	□ square	No	Yes

Order example: ❶ combined with openable crossbars

To receive extender crossbar RHD115 pre-fitted along the outer radius of the-chain®, please add index **E**: 1640.10/15RHDE115/10.R.0

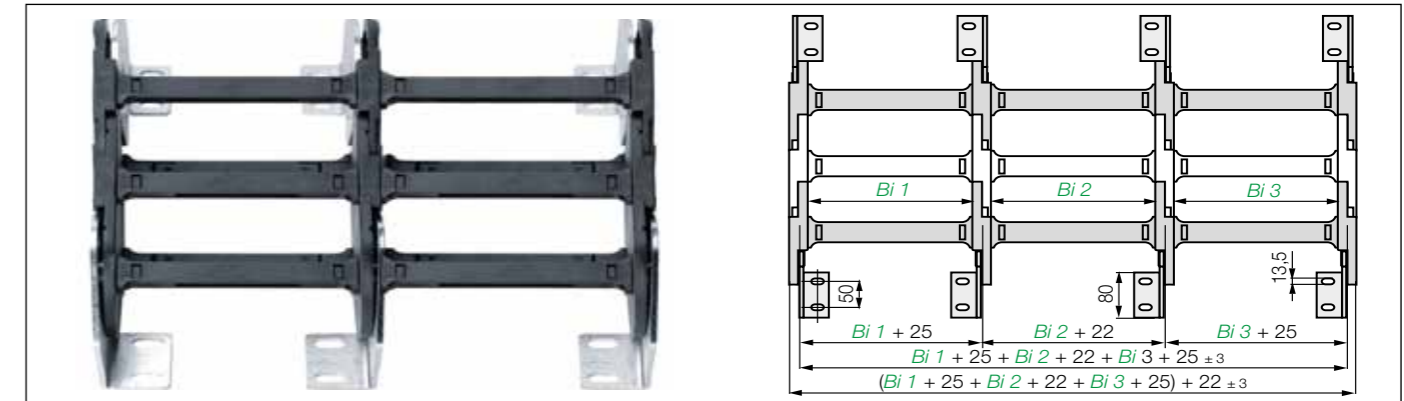
To receive extender crossbar RHD115 pre-fitted along the inner radius of the-chain®, please add index **Z**: 1640.10/15RHDZ115/10.R.0

Order example: ❷ fitted to side link

To receive extender crossbar RD115 pre-fitted along the outer radius of the-chain®, please add index **E**: 1640.17RDE115.R.0

To receive extender crossbar RD115 pre-fitted along the inner radius of the-chain®, please add index **Z**: 1640.17RDZ115.R.0

Extension links

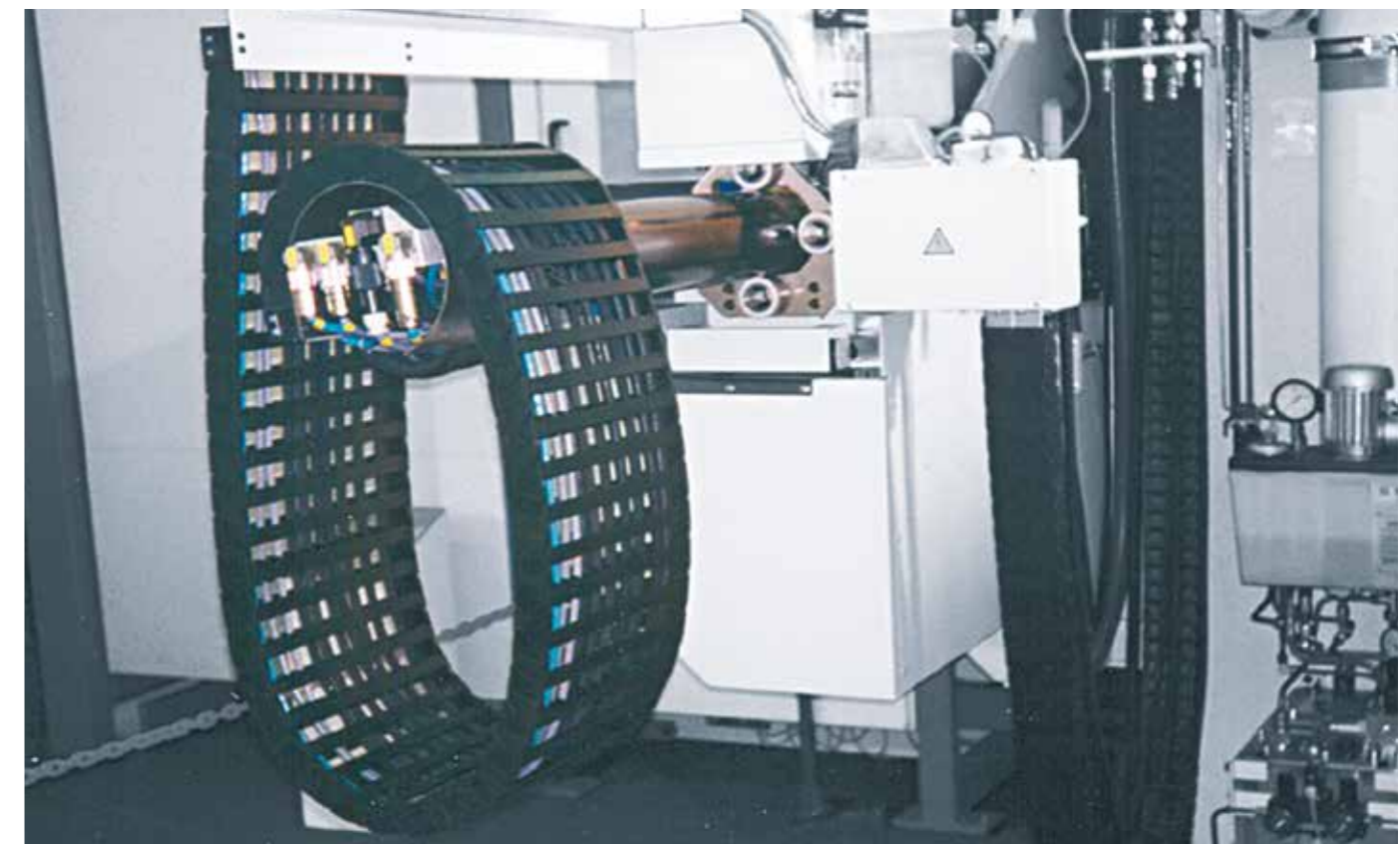


Extension links | For extremely wide e-chains® up to 3.0m

- Virtually unlimited side-by-side extension
- For extremely wide e-chains® up to 3000mm
- Unsupported length  $FL_G$  max. can be increased when heavy fill weights are required
- e-chains® and e-tubes can be combined
- Attached with KMA or steel mounting brackets

Part No.	Part No.	Part No.
Extension link e-chain®	Extension link e-tube	Extension link as an individual part
1640.Bi1/Bi2/Bi3.R.0	R1608.Bi1/Bi2/Bi3.R.0	6022.R.

Complete Part No.with the width index **Bi1/Bi2/Bi3/etc.** and the radius (**R**). Example: 1640.10/20/10.200.0



Circular movements (also with Reverse Bend Radius "RBR") are possible

**E4 snapclip - clip-on tie-wrap**

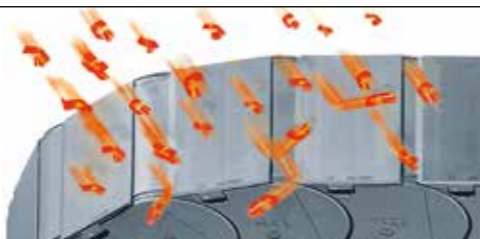
- For side-mounted applications, compatible with many E4 e-chains®
  - Serves as a clip-on, lateral guide for hoses and cables on e-chains®
  - The loops can be adjusted as required
- More information ► [www.igus.eu/1640](http://www.igus.eu/1640)**

**Steel support tray for support of the lower run**

- Simple one-piece support trays for the lower run
  - To your requirements and specification
  - 4 options available
- More information ► From page 1356**

**Hot swarf up to +850°C for e-tubes**

- Lids and shelves, on which +850°C hot swarf bounces off, as special production with the igus® material igumid HT
  - No hot swarf melting or embedding into the chain
- More information ► [www.igus.eu/HT](http://www.igus.eu/HT)**

**Reduce assembly time - E4 e-chain® opener**

- e-chain® opener tools for easy opening and closing of e-chains®
  - Simple opening and closing of e-chain® crossbars
  - Also for use in hard to reach locations
  - Significant assembly time reduction
- More information ► [www.igus.eu/E4savetime](http://www.igus.eu/E4savetime)**

**Roller crossbars - increase the service life of cables and hoses**

- Significantly reduce jacket abrasion of very stiff cables and hoses with rolling contact surfaces equipped with tribo-optimised bearings
  - For sensitive hoses in restricted space
  - Usable along the inner and/or outer radius, retrofit possible
- More information ► upon request**



Side-mounted E4/light e-tubes - machine tool fitted with a swarf-repellent e-tube from the E4 modular system