



**Undercut  
design.**

**Strong  
connection.**

# E4/light

## Large, light and strong



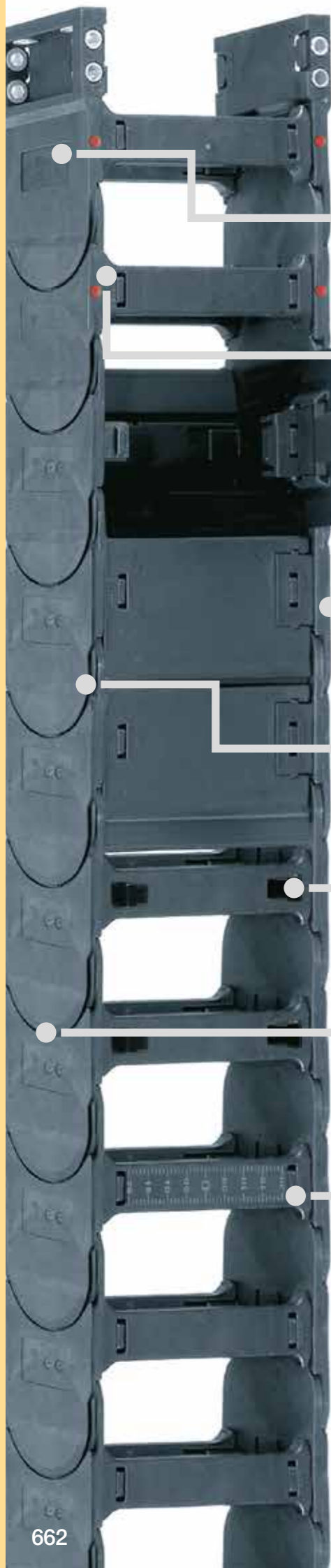
### Advantages of the E4/light system:

- 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:

- When the e-chain® needs to be extremely quiet with very low vibration
  - ▶ E6.1, page 750
- When the e-chain® is to be used in cleanrooms
  - ▶ E6.1, page 750
- If large unsupported lengths are required for side-mounted applications
  - ▶ E4.1, page 566
- When longer unsupported lengths and longer travels are required
  - ▶ E4.1, page 566
- When the current standard up to 64mm is preferred
  - ▶ E4.1L, page 524



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

25% faster: easy assembly with QuickLock crossbars

Quiet operation: due to integrated brake

Precise separation: notch crossbar with visual scale

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

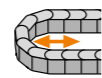
Weight reduction, a larger interior space and a reduced price. The characteristics of the E4/light system: thinner side links (for all types) and a thinner crossbar (for some types: 14240, 14340). E4/light e-chains® represent solutions with an optimum price/performance ratio for many applications. Especially 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	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**  
e-chains® for particularly demanding applications

14040	56	50 - 600	76 - 626	84	135 - 500	4.0	668
14240	62	50 - 400	76 - 426	84	135 - 500	4.0	678
14550	70	50 - 600	77 - 627	98	150 - 600	4.2	686
15050	80	50 - 600	80 - 630	108	150 - 600	4.6	694
15250	86	50 - 400	80 - 430	108	150 - 600	4.6	704
1640	112	50 - 600	84 - 634	140	200 - 600	4.5	712



**e-chains® with crossbars every 2<sup>nd</sup> link**  
e-chains® for almost any application - standard

14140	56	50 - 600	76 - 626	84	135 - 500	4.0	668
14340	62	50 - 400	76 - 426	84	135 - 500	4.0	678
14650	70	50 - 600	77 - 627	98	150 - 600	4.2	686
15150	80	50 - 600	80 - 630	108	150 - 600	4.6	694
15350	86	50 - 400	80 - 430	108	150 - 600	4.6	704



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

R18840	56	75 - 462	101 - 489	84	150 - 500	4.0	668
R19050	70	75 - 462	102 - 489	98	200 - 600	4.2	686
R19850	80	75 - 462	105 - 493	108	200 - 500	4.6	694
R1608	108	200 - 500	234 - 534	140	250 - 600	4.5	712



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

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





E4/light undercut design, for high stability and strength



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



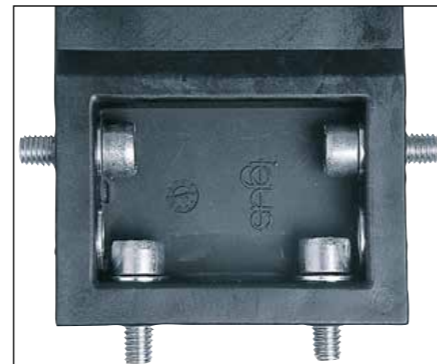
Crossbars openable on both sides



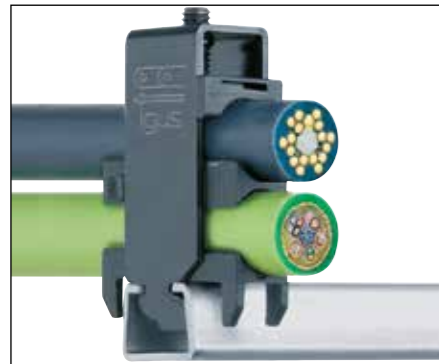
Flexible extender crossbar range - e-chain® extender for enlarging the interior, large range of widths possible



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, tie-wrap plates, nuggets, etc. ▶ From page 1300



Aluminium "SuperTrough" - the standard igus® guide trough ▶ From page 1208



Support tray kit - for support of the lower run ▶ From page 1264

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



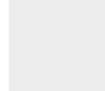
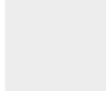
■  $FL_G$  = unsupported with straight upper run ■  $FL_B$  = unsupported with permitted sag

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


**i** **Standard** Quick opening crossbar - reduce assembly time by up to 25%

Part No. Standard	QuickLock crossbar along the inner radius	QuickLock crossbar along the outer radius	QuickLock crossbar on both sides
 <b>14040.30.R.0</b> e-chain® with crossbars every link	 <b>14040.30QZ.R.0</b> e-chain® with crossbars every link	 <b>14040.30QE.R.0</b> e-chain® with crossbars every link	 <b>14040.30Q.R.0</b> e-chain® with crossbars every link
<b>14140.30.R.0</b> e-chain® with crossbars every 2 <sup>nd</sup> link	<b>14140.30QZ.R.0</b> e-chain® with crossbars every 2 <sup>nd</sup> link	<b>14140.30QE.R.0</b> e-chain® with crossbars every 2 <sup>nd</sup> link	<b>14140.30Q.R.0</b> e-chain® with crossbars every 2 <sup>nd</sup> link
<b>18840.30.R.0</b> e-tube, closed			

 <b>Ready to ship* in 24 - 48 hrs.</b>	<b>Delivery time* 3-5 business days</b>	<b>Delivery time* 3-5 business days</b>	<b>Delivery time* 3-5 business days</b>
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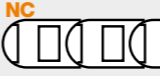




\*The delivery times indicated correspond to the average time until the ordered goods are dispatched.

## Order example | Examples based on series 14040

 **Order example for complete e-chain® (3.0m), colour black, with mounting brackets and interior separation:**

e-chain® (3.0m)	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>3 m 140400.30.300.0 + 141400.30.12.C + 2 x 56.1.1</b>	

**NC version - (No Camber) without pretension** **Reverse Bend Radius (RBR) for circular movements** **Unsupported lengths +25% possible** **No burning-in of hot swarf up to +850°C (1562°F)** **ESD - electrically conductive material**

Part No. NC-Version	Part No. RBR	Part No. XXL material <sup>2)</sup>	Part No. igumid HT	Part No. igumid ESD
 <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	 <b>18840.30.R.0.HT<sup>3)</sup></b> Complete e-tube	 <b>14040.30.R.0.ESD</b> e-chain® with crossbars every 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	<b>18840.30HT.R.0</b> all lids	<b>14140.30.R.0.ESD</b> e-chain® with crossbars every 2 <sup>nd</sup> link
<b>18840.30.R.0.NC</b> e-tube, closed	<b>RBR for e-tubes - please consult igus®</b>	<b>18840.30.R.0.XXL</b> e-tube, closed	<b>18840.30HTZ.R.0</b> outer radius lid only	<b>18840.30.R.0.ESD</b> e-tube, closed
			<b>18840.30HTE.R.0</b> inner radius lid only	





<b>Delivery time* 2-5 business days</b>	<b>Delivery time*<sup>1)</sup> 5-10 business days</b>	<b>Delivery time* 5 business days</b>	<b>Delivery time* 7-10 business days</b>	<b>Delivery time* several series from stock</b>
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\*The delivery times indicated correspond to the average time until the ordered goods are dispatched.








1) 2-5 business days with express surcharge 2) Side-bands made from XXL material 3) Available upon request. Delivery time upon request

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

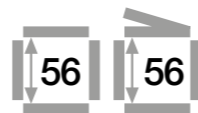
 **Order key**

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)	

**Order index for colour options**

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

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



e-chains® | Series 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	Part No.	Bi	Ba	14040	14140	18840
e-chains® / e-tubes	[mm]	[mm]	[kg/m]	[kg/m]	[kg/m]	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. - 28. R.0	287	314	≈ 4.29	≈ 3.29	-
14040. 14140. - 055.R.0	55	81	≈ 2.57	≈ 2.50	-	14040. 14140. 18840. 30. R.0	300	326	≈ 4.51	≈ 3.40	≈ 6.24
14040. 14140. - 06. R.0	65	91	≈ 2.66	≈ 2.51	-	14040. 14140. - 31. R.0	312	339	≈ 4.57	≈ 3.42	-
14040. 14140. 18840. 07. R.0	75	101	≈ 2.75	≈ 2.25	≈ 3.20	14040. 14140. - 32. R.0	325	351	≈ 4.60	≈ 3.44	-
14040. 14140. - 08. R.0	87	113	≈ 2.84	≈ 2.44	-	14040. 14140. - 33. R.0	337	364	≈ 4.77	≈ 3.53	-
14040. 14140. 18840. 10. R.0	100	126	≈ 2.93	≈ 2.61	≈ 3.49	14040. 14140. 18840. 35. R.0	350	376	≈ 4.93	≈ 3.61	≈ 6.99
14040. 14140. - 11. R.0	112	139	≈ 3.06	≈ 2.67	-	14040. 14140. - 36. R.0	362	389	≈ 4.94	≈ 3.61	-
14040. 14140. 18840. 12. R.0	125	151	≈ 3.12	≈ 2.71	≈ 3.85	14040. 14140. - 37. R.0	375	401	≈ 4.95	≈ 3.62	-
14040. 14140. - 13. R.0	137	164	≈ 3.26	≈ 2.77	-	14040. 14140. - 38. R.0	387	414	≈ 5.04	≈ 3.66	-
14040. 14140. 18840. 15. R.0	150	176	≈ 3.32	≈ 2.81	≈ 4.28	14040. 14140. 18840. 40. R.0	400	426	≈ 5.24	≈ 3.76	≈ 7.94
14040. 14140. - 16. R.0	162	189	≈ 3.43	≈ 2.86	-	14040. 14140. - 41. R.0	412	439	≈ 5.39	≈ 3.84	-
14040. 14140. - 169.R.0	196	196	≈ 3.51	≈ 2.90	-	14040. 14140. - 42. R.0	425	451	≈ 5.54	≈ 3.92	-
14040. 14140. 18840. 17. R.0	175	201	≈ 3.54	≈ 2.92	≈ 4.54	14040. 14140. - 43. R.0	437	464	≈ 5.61	≈ 3.95	-
14040. 14140. - 182.R.0	182	209	≈ 3.58	≈ 2.94	-	14040. 14140. - 45. R.0	450	476	≈ 5.68	≈ 3.98	-
14040. 14140. - 18. R.0	187	214	≈ 3.65	≈ 2.97	-	14040. 14140. 18840. 46. R.0	462	489	≈ 5.70	≈ 3.99	≈ 8.40
14040. 14140. 18840. 20. R.0	200	226	≈ 3.67	≈ 2.98	≈ 4.85	14040. 14140. - 47. R.0	475	501	≈ 5.83	≈ 4.06	-
14040. 14140. - 207.R.0	207	234	≈ 3.73	≈ 3.01	-	14040. 14140. - 48. R.0	487	514	≈ 5.86	≈ 4.08	-
14040. 14140. - 21. R.0	212	239	≈ 3.78	≈ 3.04	-	14040. 14140. - 50. R.0	500	526	≈ 5.96	≈ 4.13	-
14040. 14140. - 22. R.0	225	251	≈ 3.85	≈ 3.07	-	14040. 14140. - 51. R.0	512	539	≈ 5.98	≈ 4.14	-
14040. 14140. - 23. R.0	237	264	≈ 3.98	≈ 3.14	-	14040. 14140. - 52. R.0	525	551	≈ 6.03	≈ 4.16	-
14040. 14140. 18840. 25. R.0	250	276	≈ 4.07	≈ 3.18	≈ 5.58	14040. 14140. - 53. R.0	537	564	≈ 6.18	≈ 4.24	-
14040. 14140. - 26. R.0	262	289	≈ 4.16	≈ 3.22	-	14040. 14140. - 55. R.0	550	576	≈ 6.67	≈ 4.48	-
14040. 14140. 18840. 27. R.0	275	301	≈ 4.27	≈ 3.28	≈ 5.85	14040. 14140. - 60. R.0	600	626	≈ 6.98	≈ 4.58	-

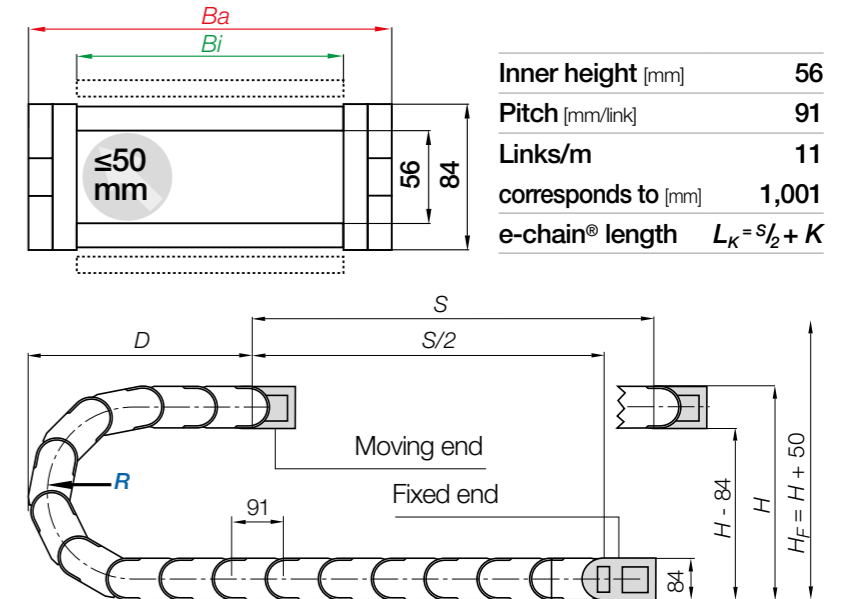
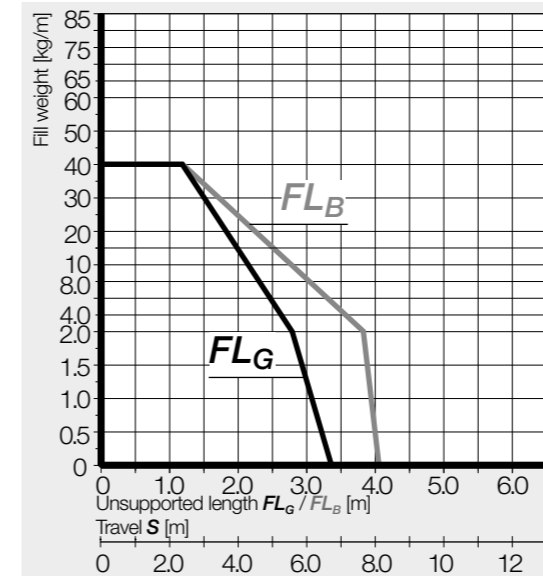
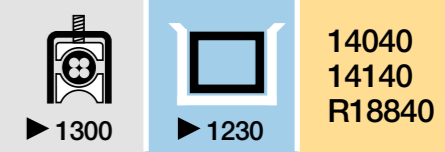
1) Lid removable, non-openable \*Radius not available for e-tubes

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

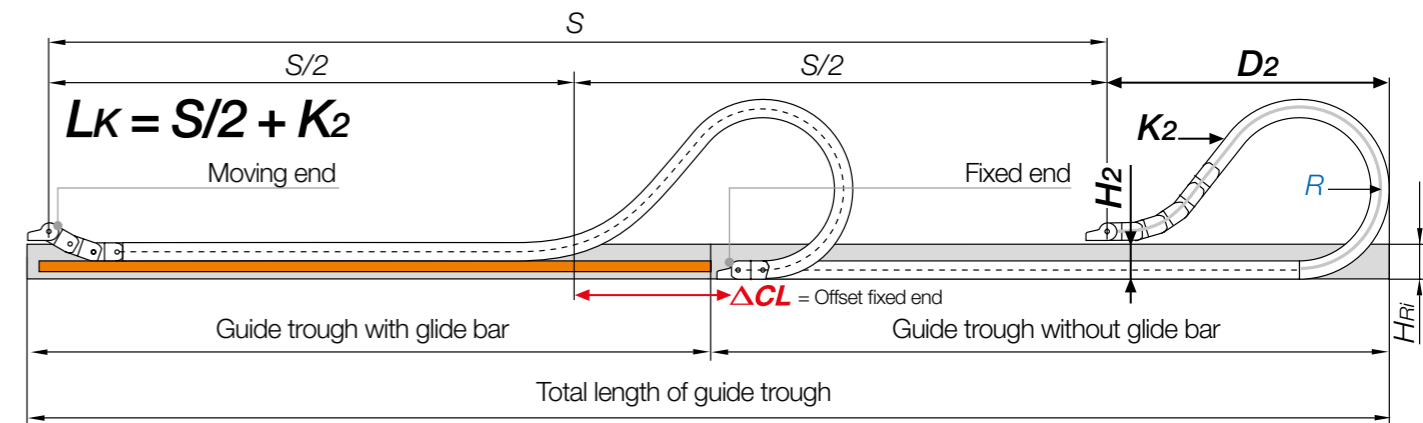


R	135*	150	175	200	250	300	400	500
H <sub>±25</sub>	354	384	434	484	584	684	884	1,084
D	314	329	354	379	429	479	579	679
K	610	655	735	815	970	1,125	1,440	1,755

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 long travels from 12m to max. 150m



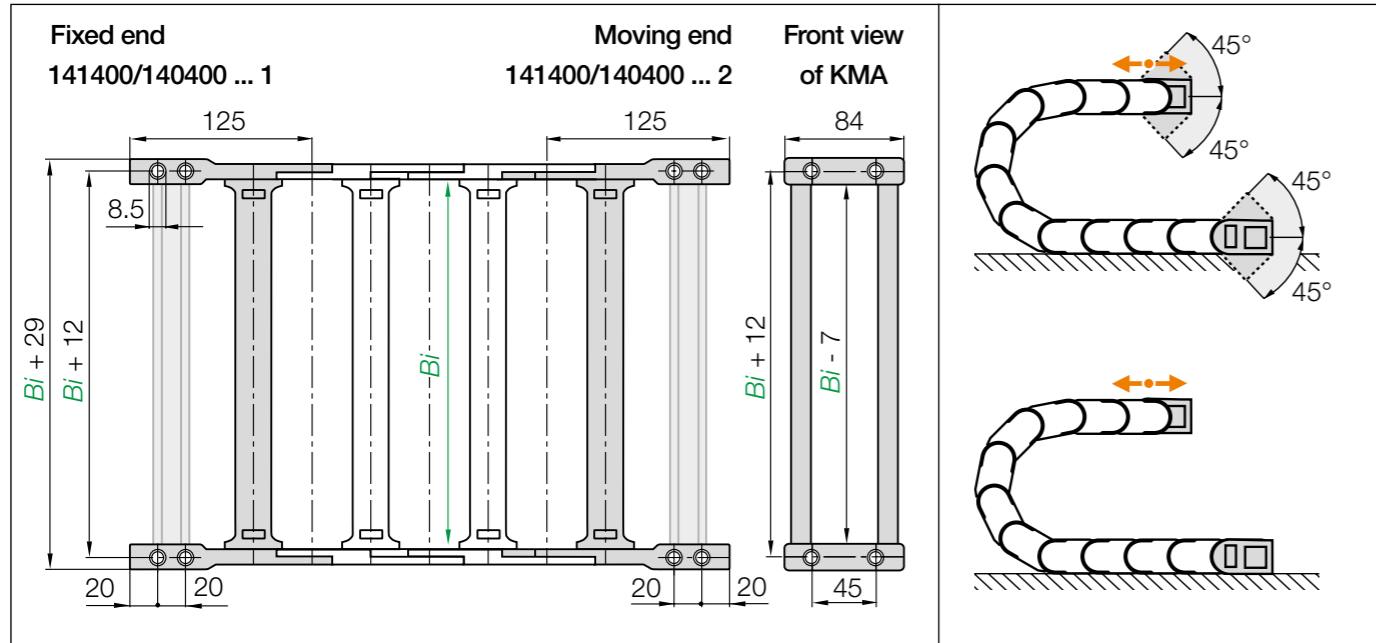
Note: We recommend the project planning of such a system to be carried out by igus®.

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>2</sub> <sup>+25</sup>	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

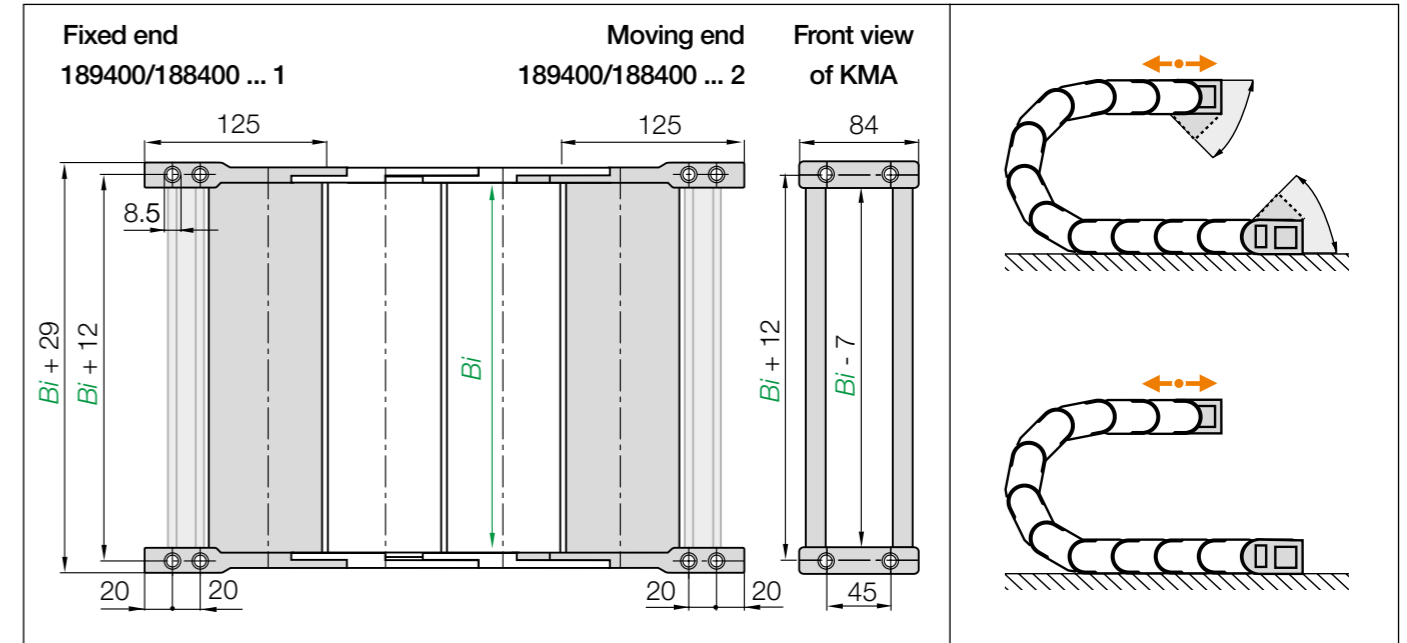




**KMA pivoting** | Recommended for unsupported and gliding applications  
**KMA locking** | Recommended for vertical hanging and standing applications

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

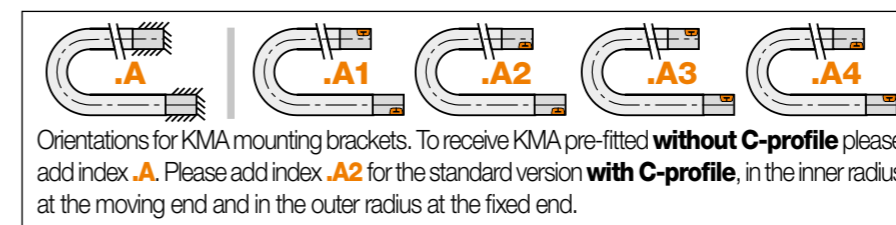
(KMA = polymer metal mounting bracket) For the C-profile option please add index .C



**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

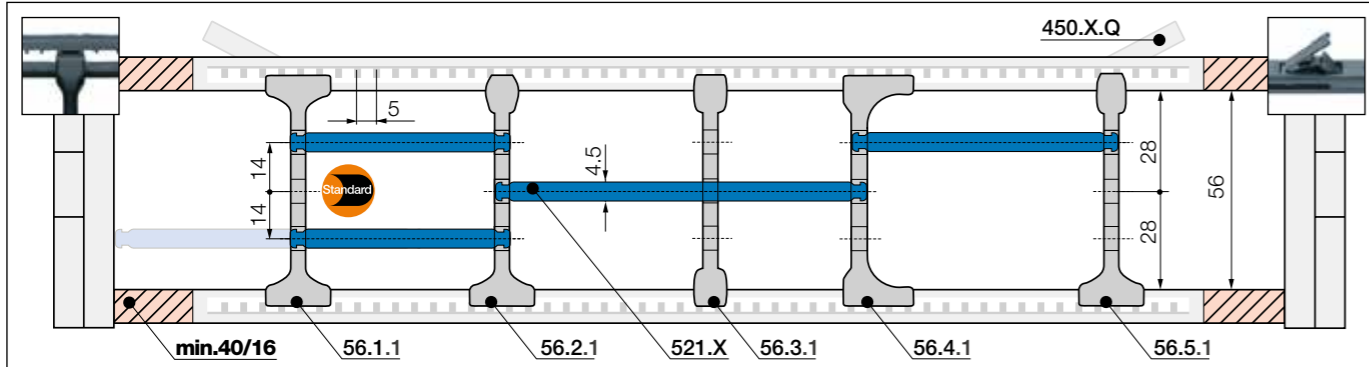


**141400.30.12.C.A2** Order example  
.A... to indicate option with brackets pre-fitted  
C-profile option  
Full set  
Width index  
Series

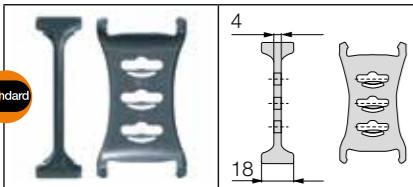
**Strain relief** e.g. clamps, tiwrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with ordering options ▶ From page 1300

Interior separation | Increase cable service life

Previous generation of interior separation with other options ► [www.igus.eu/14040](http://www.igus.eu/14040)

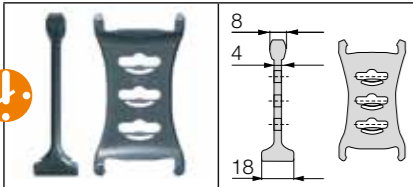


**Note:** Please be aware of the minimum lateral gap to the side links! **e-tube: 40mm | e-chain®: 16mm**  
As standard separators are fitted every 2<sup>nd</sup> e-chain® link!



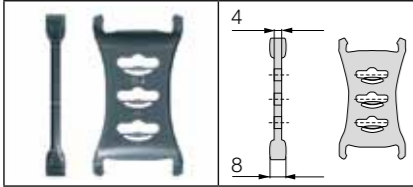
<b>Standard separator, wide base</b>
unassembled <b>56.1</b>
assembled <b>56.1.1</b>

**Standard - for any application**  
Separator with a wide base for maximum holding force in the e-chain®.



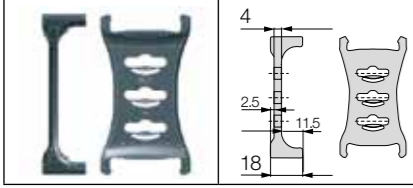
<b>Separator for QuickLock crossbar</b>
unassembled <b>56.2</b>
assembled <b>56.2.1</b>

**For even faster installation**  
Separator for igus® QuickLock crossbar **450.X.Q.** Wide on one side for high holding force, narrow on opposite side for easy cable fitting.



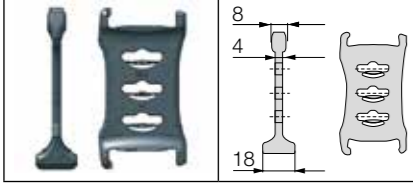
<b>Separator, narrow</b>
unassembled <b>56.3</b>
assembled <b>56.3.1</b>

**For small cables**  
Separator with a narrow base for a large number of small cables side by side. Saves space in the e-chain®. Also available for QuickLock crossbars.



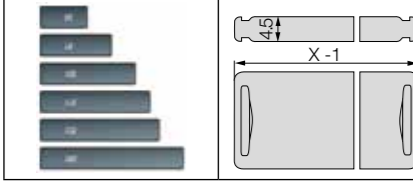
<b>Separator, asymmetrical</b>
unassembled <b>56.4</b>
assembled <b>56.4.1</b>

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



<b>Notch separator for notched crossbar</b>
unassembled <b>56.5</b>
assembled <b>56.5.1</b>

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

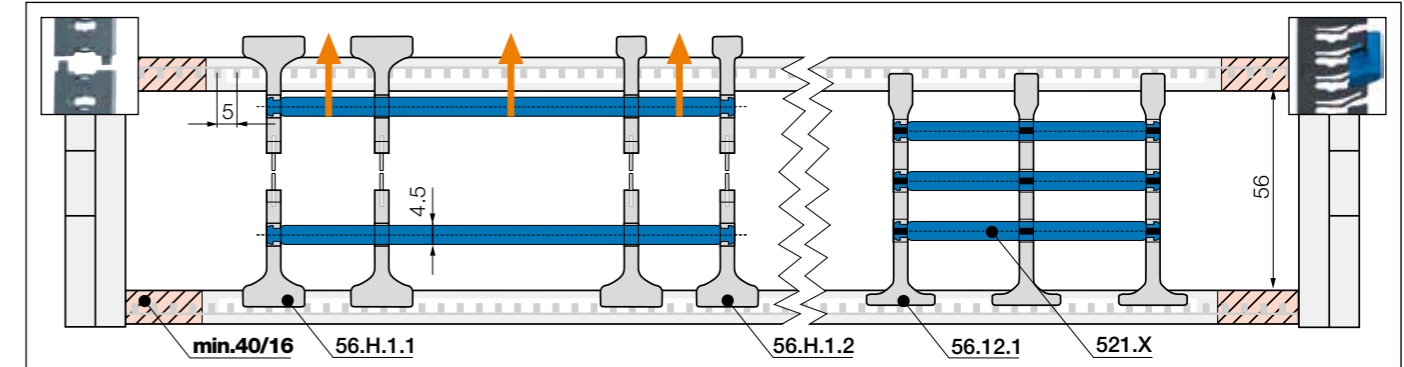


<b>Shelf, lockable</b>
unassembled <b>520.X</b>
assembled <b>521.X</b>

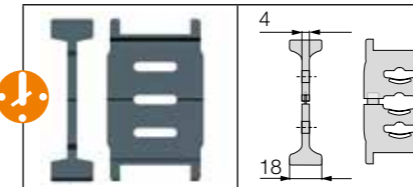
**Horizontal separation**  
Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

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	520.375
100	520.100	521.100	225	520.225	521.225	387	520.387	520.387
125	520.125	521.125	250	520.250	521.250	450	520.450	521.450

Interior separation | To allow faster filling

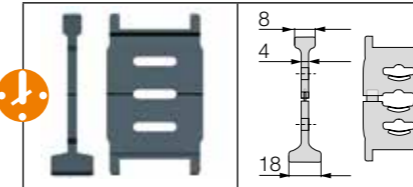


**Note:** Please be aware of the minimum lateral gap to the side links! **e-tube: 40mm | e-chain®: 16mm**  
As standard separators are fitted every 2<sup>nd</sup> e-chain® link!

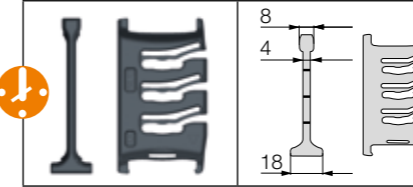


<b>Split separator, wide base/top</b>
unassembled <b>56.H.1</b>
assembled <b>56.H.1.1</b>

**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.



<b>Split separator, narrow top</b>
unassembled <b>56.H.2</b>
assembled <b>56.H.2.1</b>

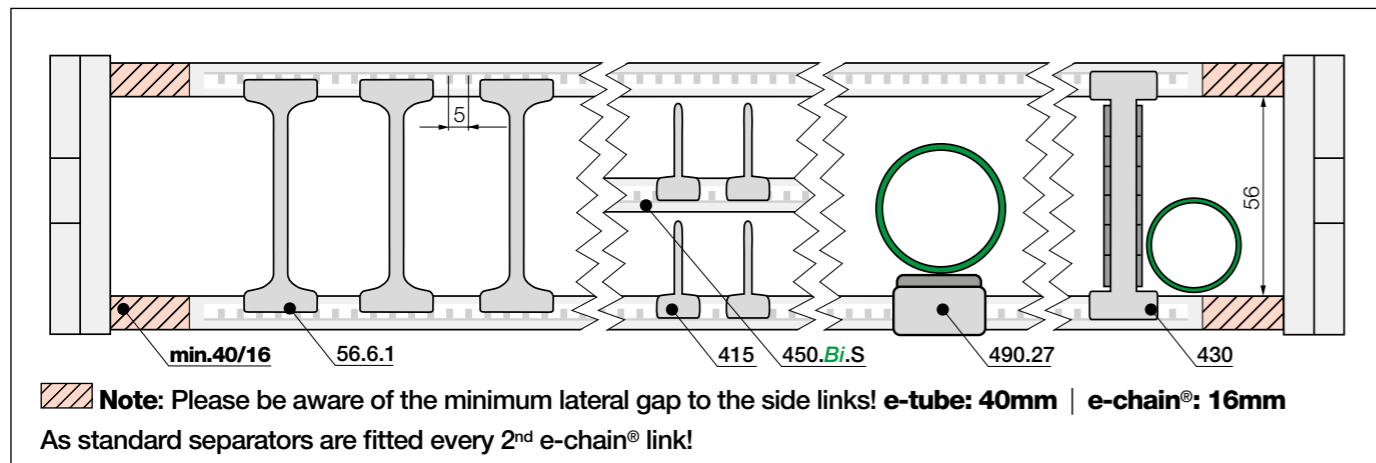


<b>Lean separator</b>
unassembled <b>56.12</b>
assembled <b>56.12.1</b>

**Lean separators New**  
New design allows extremely fast fitting of shelves in several layers, which significantly reduces assembly time. Enables extremely fast replacement of individual cables in a very full e-chain®.

**Lean separator design - several layers of cables fitted quickly, save up to 50%\* assembly time**  
(\*Lean separator vs. standard separator - measured on a 4m long e-chain® fitted with 12 cables in the igus® readychain® factory)





		<b>Notch locking separator</b>
		unassembled 56.6
		assembled 56.6.1

**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.

		<b>Partial height separator*</b>
		unassembled 405
		assembled 415

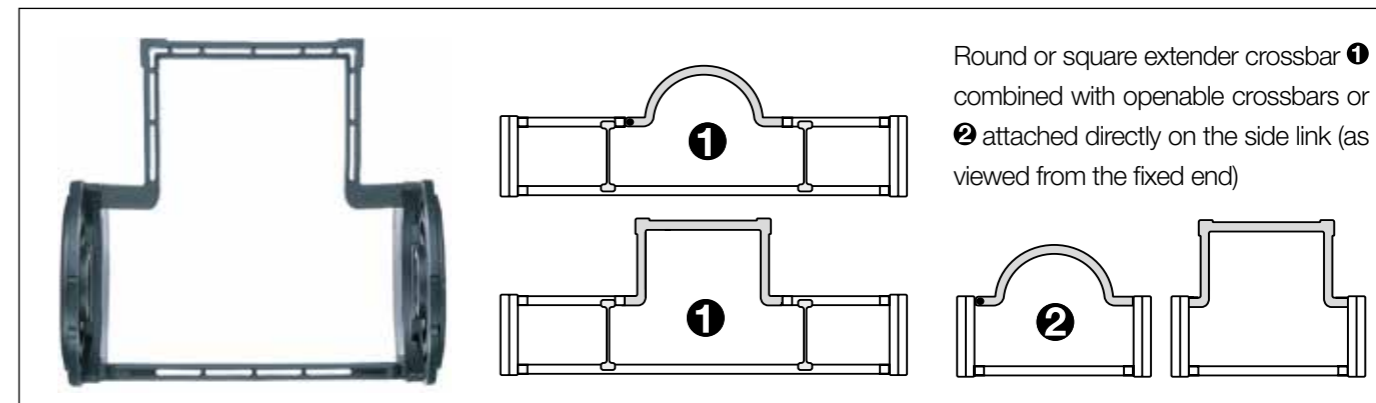
**Partial height separator\***  
In conjunction with an additional opening crossbar, part no. 450.Bi.S, it provides the option to separate the upper and lower halves of the e-chain® independently of each other.

		<b>Rollclip for e-chains®</b>
		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.

		<b>Roller separator* for e-chains®</b>
		unassembled 429
		assembled 430

**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 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**

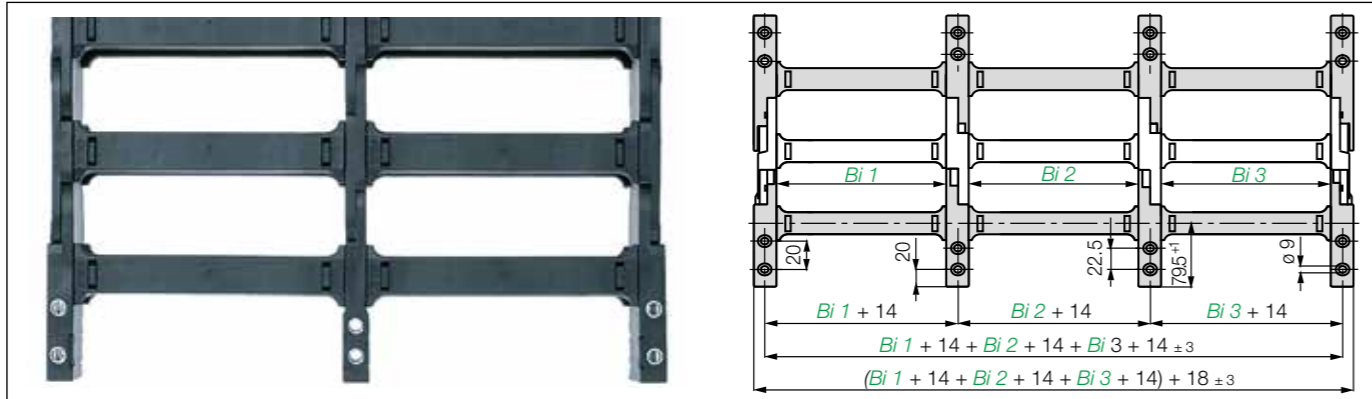
To receive extender crossbar RHD115 pre-fitted along the outer radius of the-chain®, please add index **E: 14040.10/15RHE115/10.R.0**  
To receive extender crossbar RHD115 pre-fitted along the inner radius of the-chain®, please add index **Z: 14040.10/15RHZ115/10.R.0**

**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: 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.

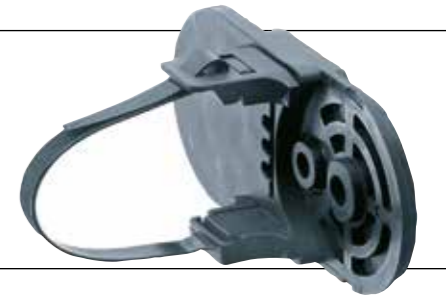
Complete Part No.with the width index *Bi1/Bi2/Bi3/etc.* and the radius (*R*). Example: 14040.10/20/10.200.0



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

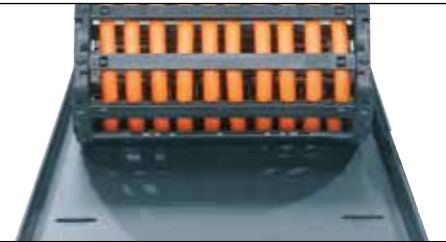
E4 snapclip - clip-on tiewrap

- 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)



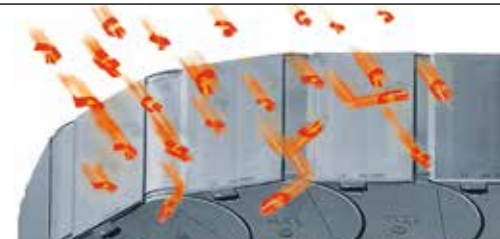
Steel support tray for support of the lower run

- Simple one-piece support trays for the lower run
  - To your requirements and specification
  - 4 options available
- More information ► From page 1264



Hot swarf up to +850°C

- e-tubes to withstand 850°C hot swarf, as a special option
  - No hot swarf melting or embedding into the chain
  - igus® igumid HT material
- 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 ► [www.igus.eu/roller-crossbar](http://www.igus.eu/roller-crossbar)





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]
14240.1) 14340. 05. R.0	50	76	≈ 2.37	≈ 2.32	14240. 14340. 212.R.0	212	239	≈ 2.95	≈ 2.60
14240.1) 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
14240.1) 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
14240.1) 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
14240.1) 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
14240.1) 14340. 20. R.0	200	226	≈ 2.89	≈ 2.58	14240. 14340. 400.R.0	400	426	≈ 3.73	≈ 2.99

1) Available as ESD version from stock

Available bend radii

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

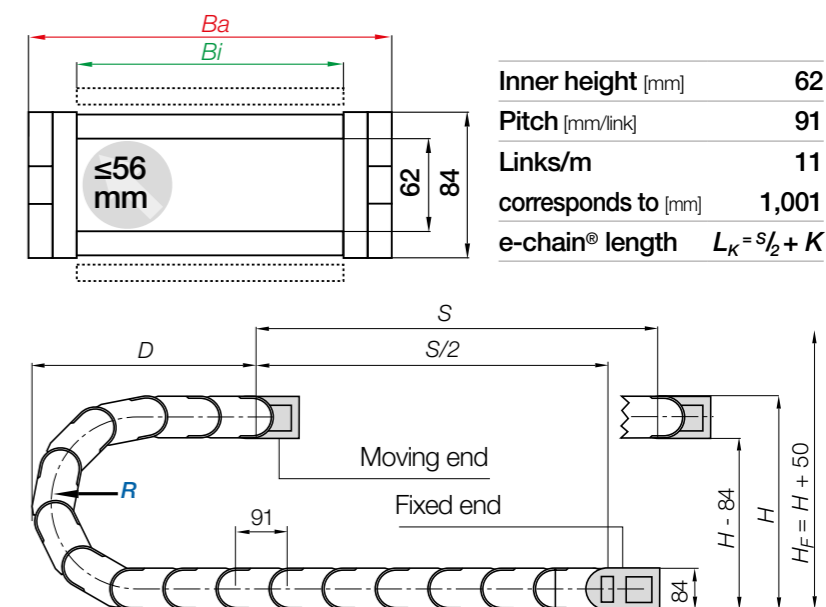
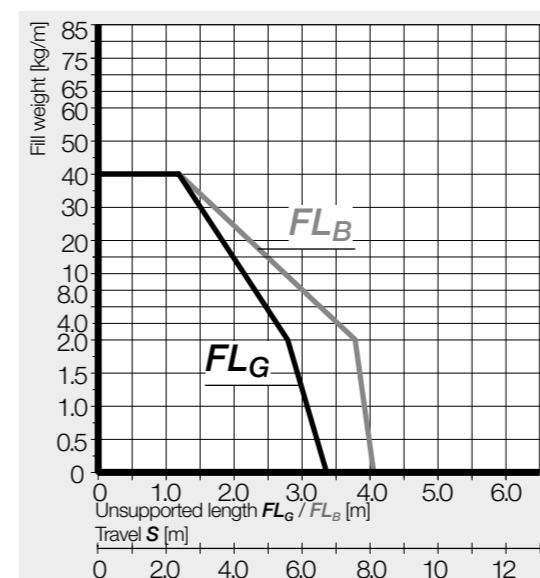
Complete Part No. with required radius (R). Example:

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 igumid ESD
- ESD material tested with over 10 million cycles for the toughest requirements
- Short delivery times including mounting brackets and interior separation; 24hrs, from stock

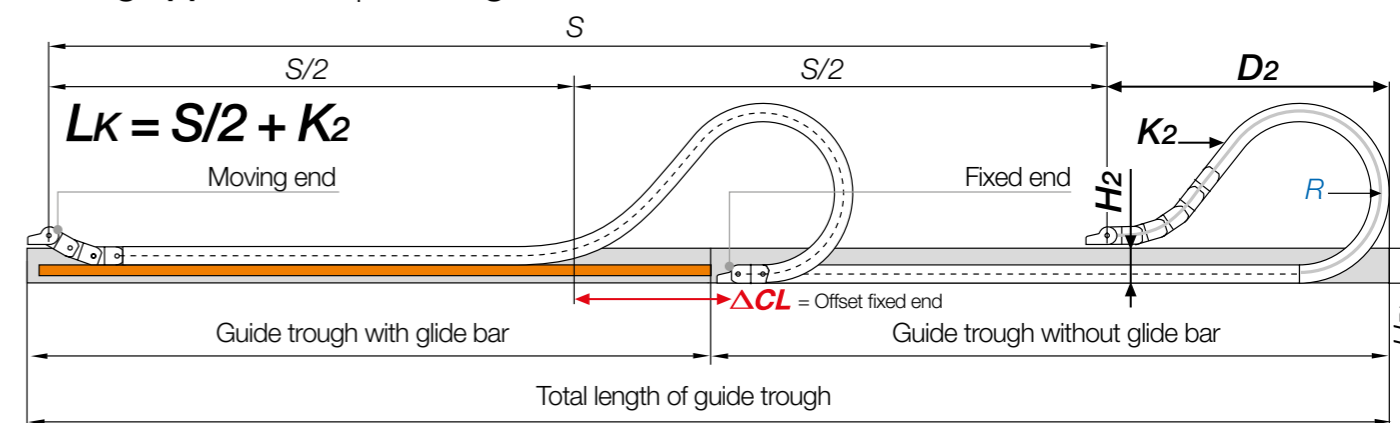
More information ► [www.igus.eu/esd](http://www.igus.eu/esd)



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)

Gliding applications | For long travels from 12m to max. 250m

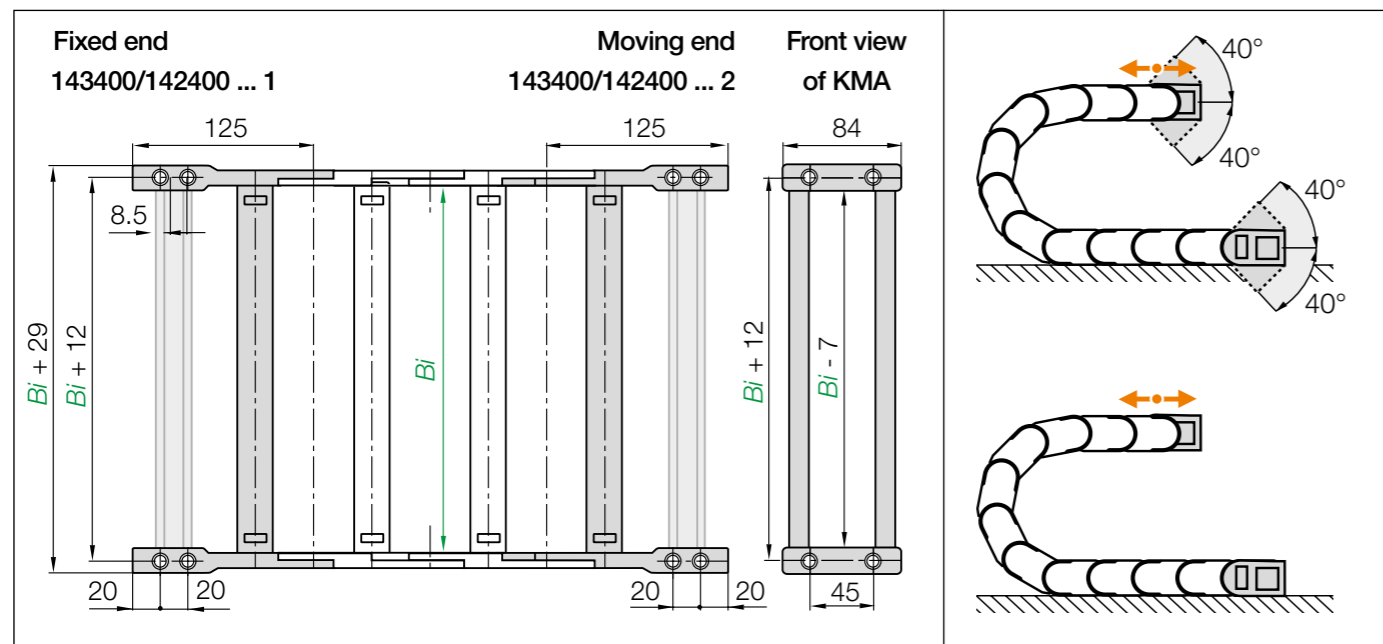


Note: We recommend the project planning of such a system to be carried out by igus®.

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>	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





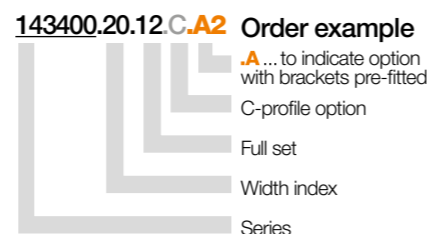
**KMA pivoting** | Recommended for unsupported and gliding applications  
**KMA locking** | Recommended for vertical hanging and standing applications

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**

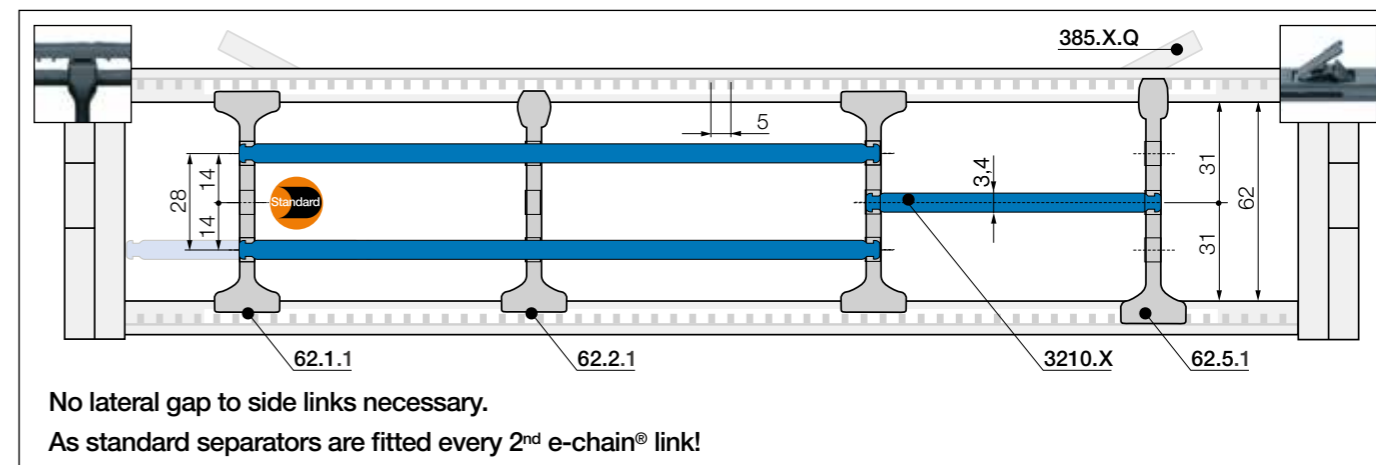


Orientations for KMA mounting brackets. To receive KMA pre-fitted **without C-profile** please add index **.A**. Please add index **.A2** for the standard version **with C-profile**, in the inner radius at the moving end and in the outer radius at the fixed end.

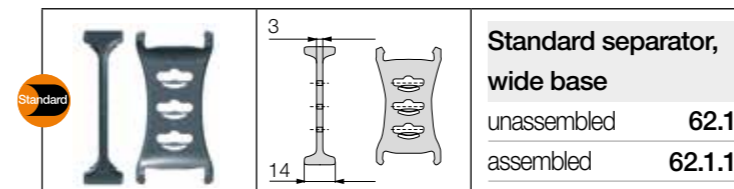


**Strain relief** e.g. clamps, tiwrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with ordering options ► From page 1300

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



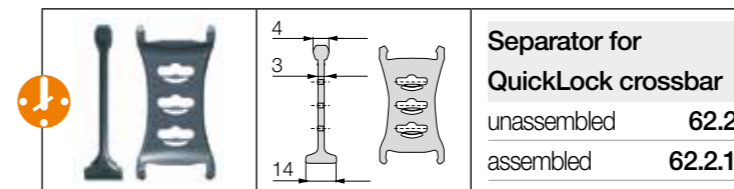
No lateral gap to side links necessary.  
As standard separators are fitted every 2<sup>nd</sup> e-chain® link!



**Standard separator, wide base**  
unassembled **62.1**  
assembled **62.1.1**

**Standard - for any application**

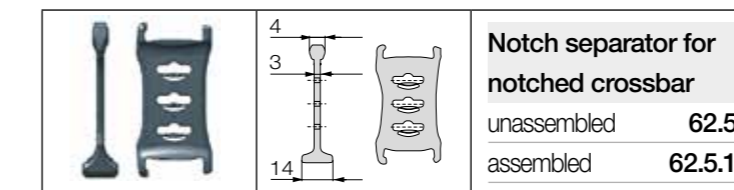
Separator with a wide base for maximum holding force in the e-chain®.



**Separator for QuickLock crossbar**  
unassembled **62.2**  
assembled **62.2.1**

**For even faster installation**

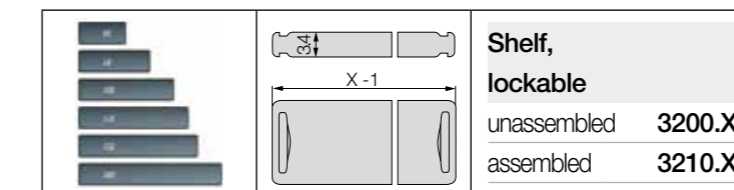
Separator for igus® QuickLock crossbar **385.X.Q**. Wide on one side for high holding force, narrow on opposite side for easy cable fitting.



**Notch separator for notched crossbar**  
unassembled **62.5**  
assembled **62.5.1**

**Locks securely in preset increments**

Notch separator for exact positioning in e-chains®. 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.

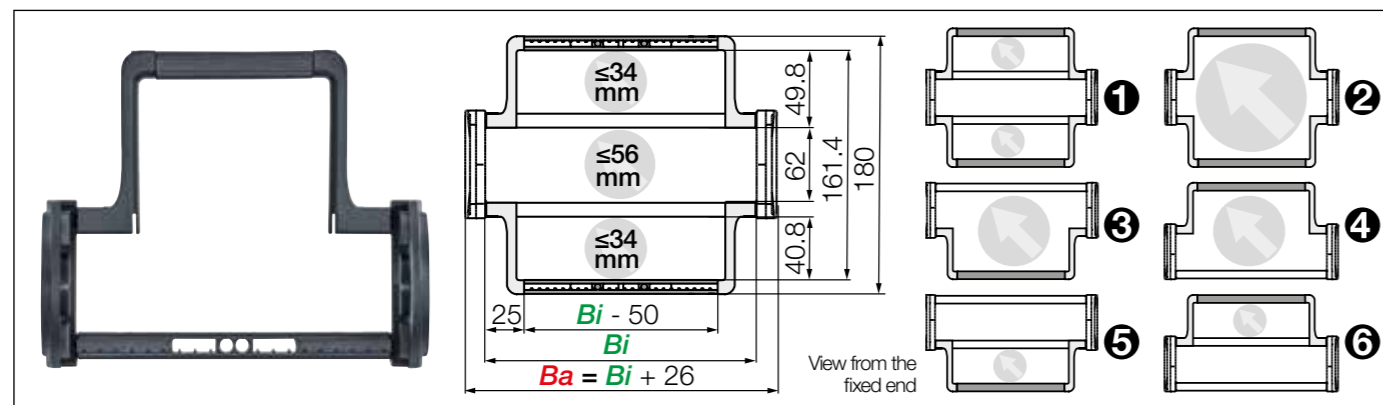
**Shelves**

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			





### 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
e-chain® with extender crossbar			
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.XXXHBZ50.R.0	-

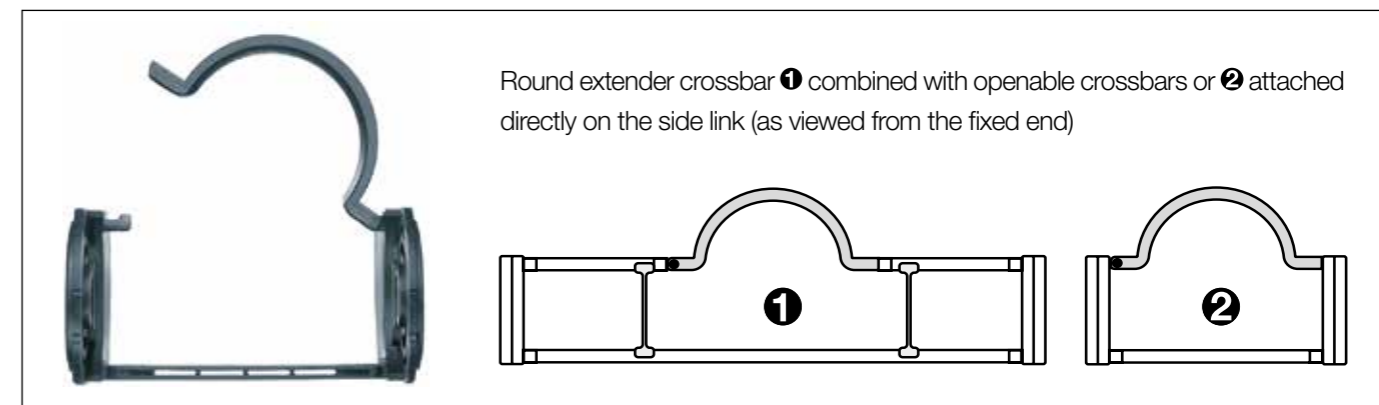
1) Minimal bend radius: R 135 2) Minimal bend radius: R 150 3) Minimal bend radius: R 135

Bi [mm]

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



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 Ø ≤ [mm]	Extender crossbar shape	❷ Fitted to side link	❶ Combine with openable crossbars
385.15RHD115	115	O round	No	Yes
385.18RD115	115	O round	Yes	No

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

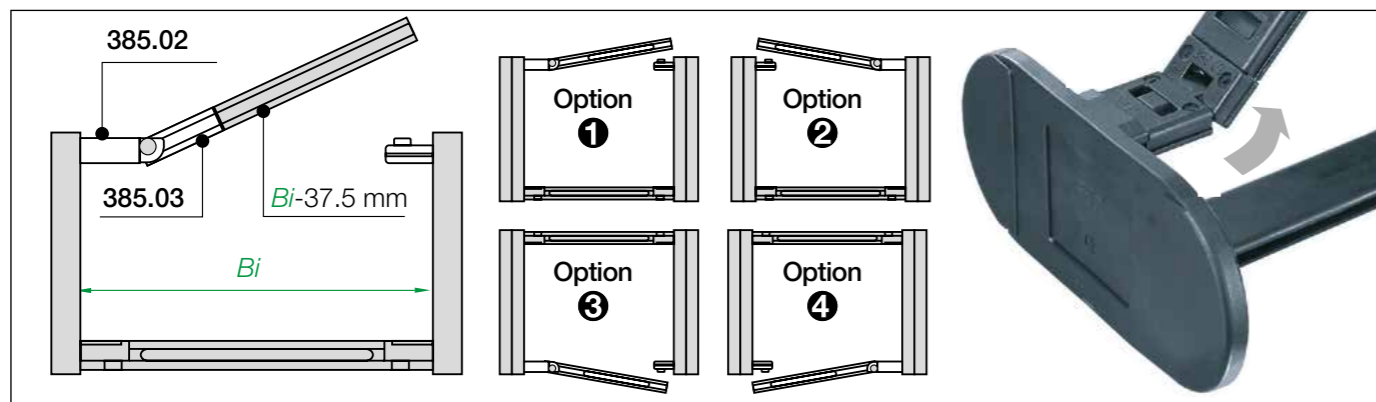
To receive extender crossbar RHD115 pre-fitted along the outer radius of the-chain®, please add index **E**: 14240.10/15RHDE115/10.R.0

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

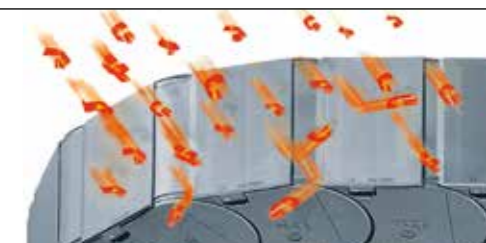
### Steel support tray for support of the lower run

- Simple one-piece support trays for the lower run
  - To your requirements and specification
  - 4 options available
- More information ► From page 1264



### Hot swarf up to +850°C

- e-tubes to withstand 850°C hot swarf, as a special option
  - No hot swarf melting or embedding into the chain
  - igus® igumid HT material
- 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)

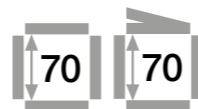


### Roller crossbars - increase the service life of cables and hoses

- 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 ► [www.igus.eu/roller-crossbar](http://www.igus.eu/roller-crossbar)







e-chains® | Series 14550  
e-chains® | Series 14650  
e-tubes | Series R19050

Crossbars every link (crossbars removable along the inner and outer radius)  
Crossbars every 2<sup>nd</sup> link (crossbars removable along the inner and outer radius)  
Fully enclosed (lids openable along the outer radius, from one side)

Part No.	Bi	Ba	14550	14650	19050
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. - 055.R.0	55	82	≈ 3.33	≈ 3.29	-
14550. 14650. - 06. R.0	65	92	≈ 3.37	≈ 3.31	-
14550. 14650. 19050. 07. R.0	75	102	≈ 3.44	≈ 3.35	≈ 4.00
14550. 14650. - 08. R.0	87	114	≈ 3.52	≈ 3.38	-
14550. 14650. 19050. 10. R.0	100	127	≈ 3.61	≈ 3.43	≈ 4.33
14550. 14650. - 11. R.0	112	139	≈ 3.73	≈ 3.49	-
14550. 14650. 19050. 12. R.0	125	152	≈ 3.81	≈ 3.53	≈ 4.70
14550. 14650. - 13. R.0	137	164	≈ 3.94	≈ 3.60	-
14550. 14650. 19050. 15. R.0	150	177	≈ 3.98	≈ 3.62	≈ 5.04
14550. 14650. - 16. R.0	162	189	≈ 4.09	≈ 3.67	-
14550. 14650. - 169.R.0	169	197	≈ 4.18	≈ 3.71	-
14550. 14650. 19050. 17. R.0	175	202	≈ 4.23	≈ 3.74	≈ 5.41
14550. 14650. - 182.R.0	182	210	≈ 4.27	≈ 3.76	-
14550. 14650. - 18. R.0	187	214	≈ 4.34	≈ 3.80	-
14550. 14650. 19050. 20. R.0	200	227	≈ 4.39	≈ 3.82	≈ 5.64
14550. 14650. - 207.R.0	207	235	≈ 4.44	≈ 3.84	-
14550. 14650. - 21. R.0	212	239	≈ 4.46	≈ 3.86	-
14550. 14650. - 22. R.0	225	252	≈ 4.53	≈ 3.89	-
14550. 14650. - 23. R.0	237	264	≈ 4.64	≈ 3.95	-
14550. 14650. 19050. 25. R.0	250	277	≈ 4.76	≈ 4.00	≈ 6.32
14550. 14650. - 26. R.0	262	289	≈ 4.85	≈ 4.05	-
14550. 14650. 19050. 27. R.0	275	302	≈ 4.95	≈ 4.10	≈ 6.65

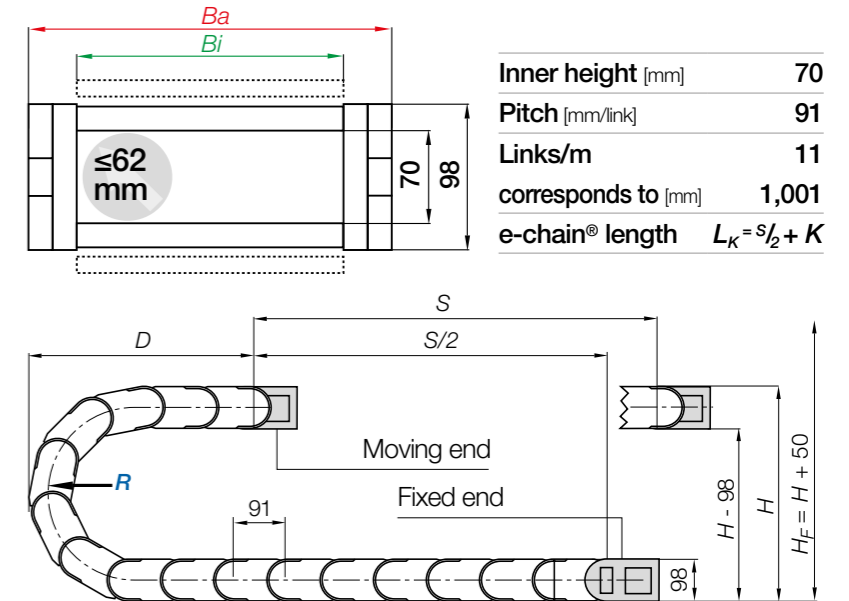
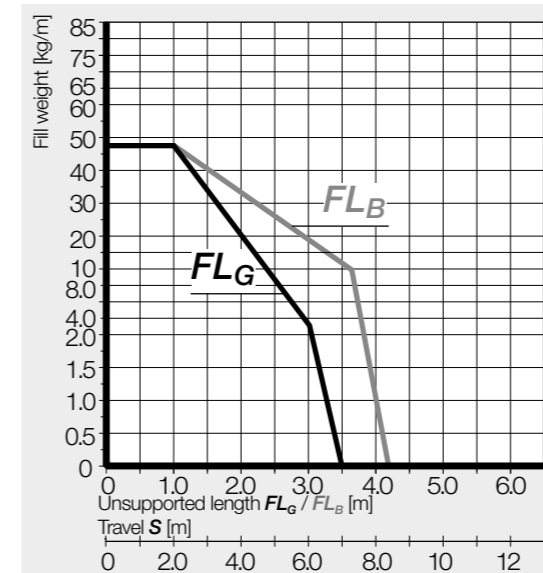
\*Radius not available for e-tubes

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

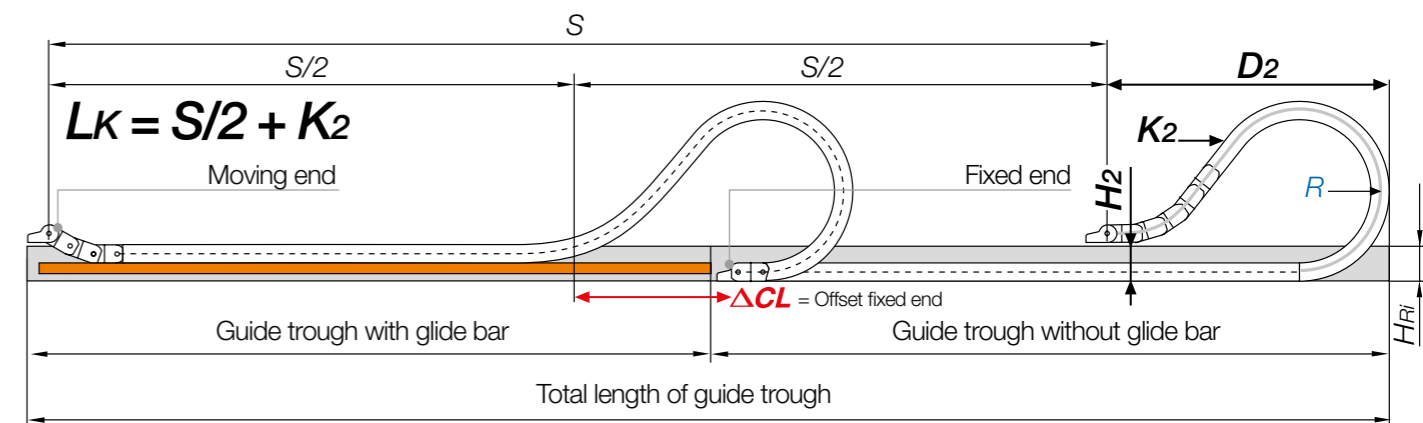


R	150*	175*	200	250	300	350	400	450	500	600
H	398	448	498	598	698	798	898	998	1,098	1,298
D	336	361	386	436	486	536	586	636	686	786
K	655	735	815	970	1,125	1,285	1,440	1,600	1,755	2,070

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 long travels from 12m to max. 250m



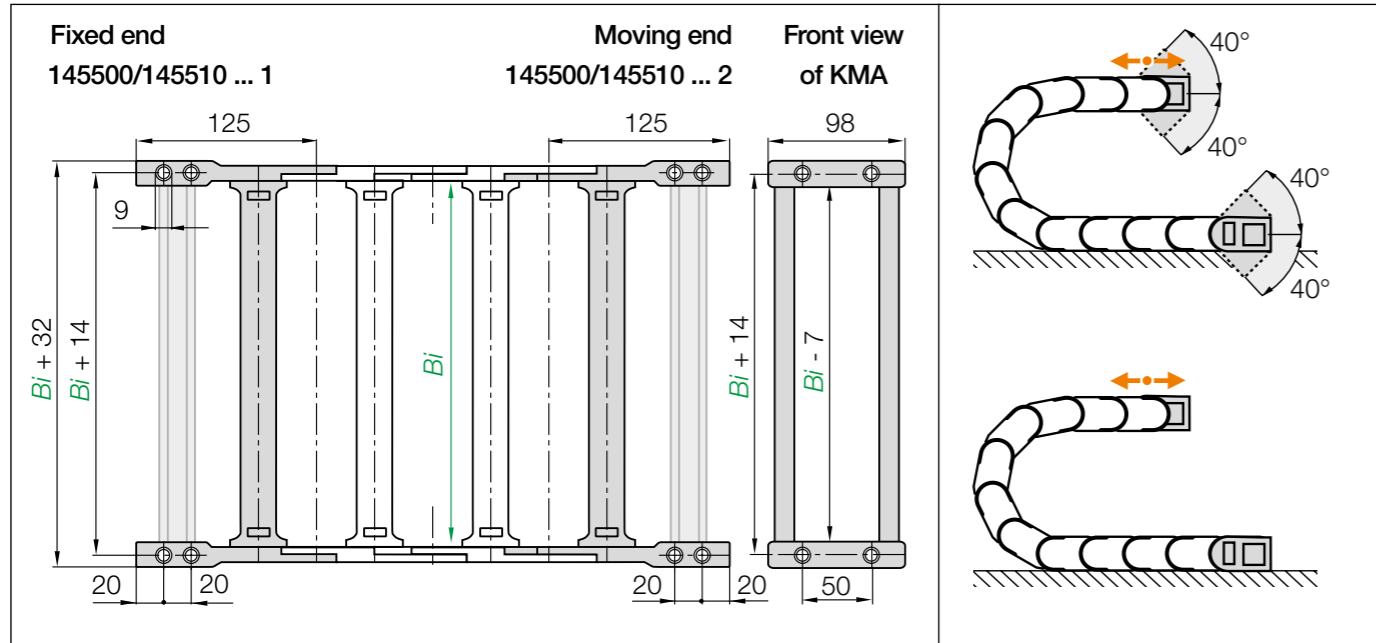
Note: We recommend the project planning of such a system to be carried out by igus®.

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 long travels. Please consult igus®.

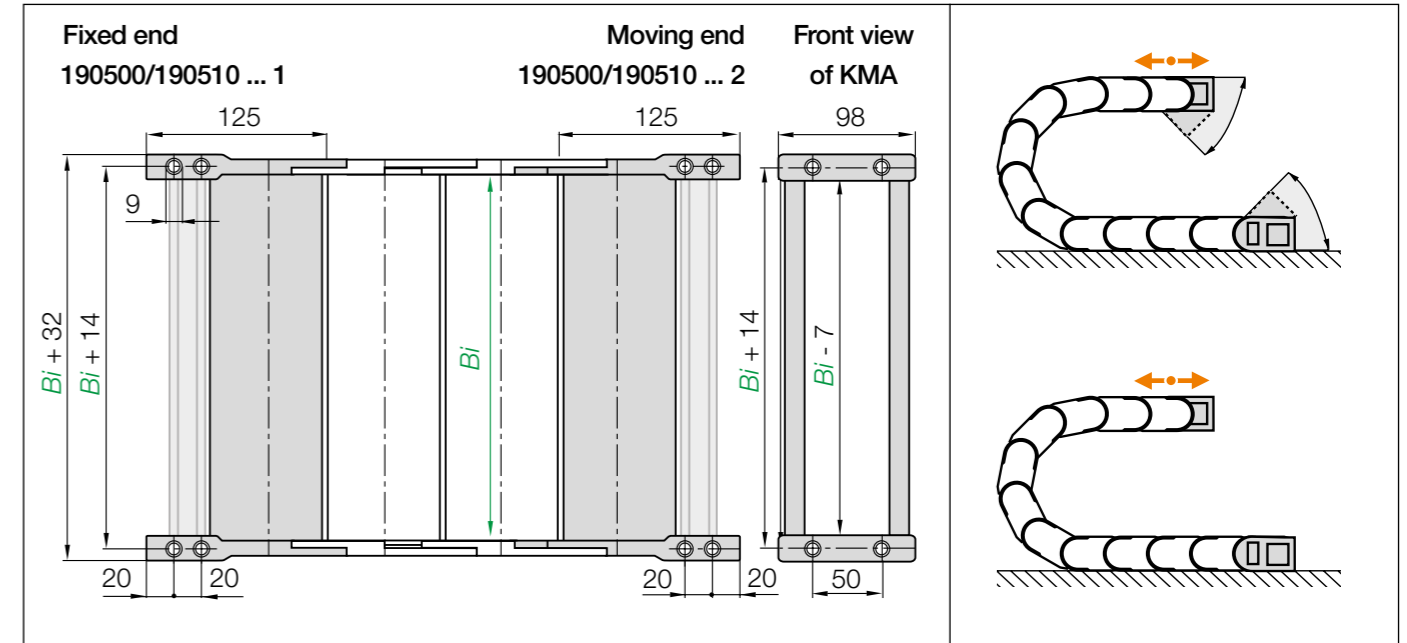




**KMA pivoting** | Recommended for unsupported and gliding applications  
**KMA locking** | Recommended for vertical hanging and standing applications

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

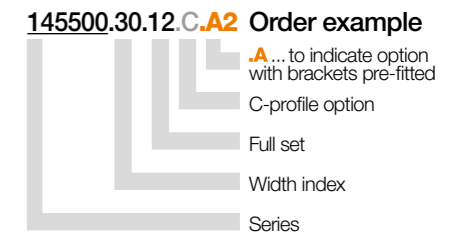
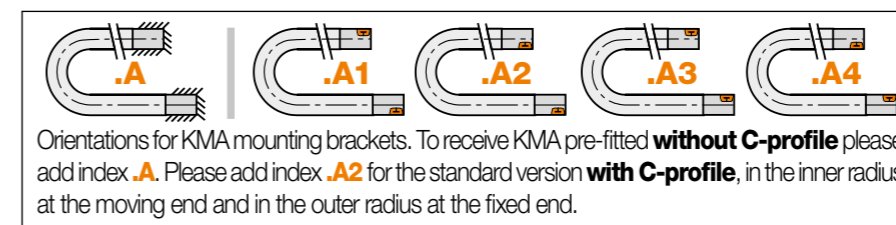
(KMA = polymer metal mounting bracket) For the C-profile option please add index .C



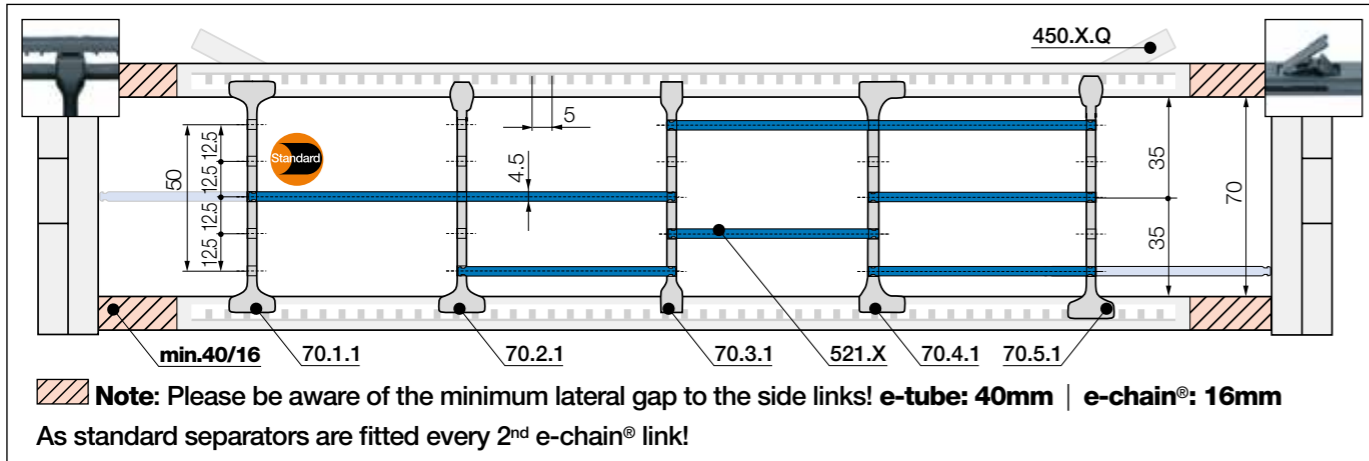
**KMA pivoting** | Recommended for unsupported and gliding applications  
**KMA locking** | Recommended for vertical hanging and standing applications

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 plug-in clips are available from stock. The complete chainfix range with ordering options ▶ From page 1300



**Standard separator, wide base**

unassembled	70.1
assembled	70.1.1

**Standard - for any application**  
Separator with a wide base for maximum holding force in the e-chain®.

**Separator for QuickLock crossbar**

unassembled	70.2
assembled	70.2.1

**For even faster installation**  
Separator for igus® QuickLock crossbar 450.X.Q. 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 in the e-chain®. Also available for QuickLock crossbars.

**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

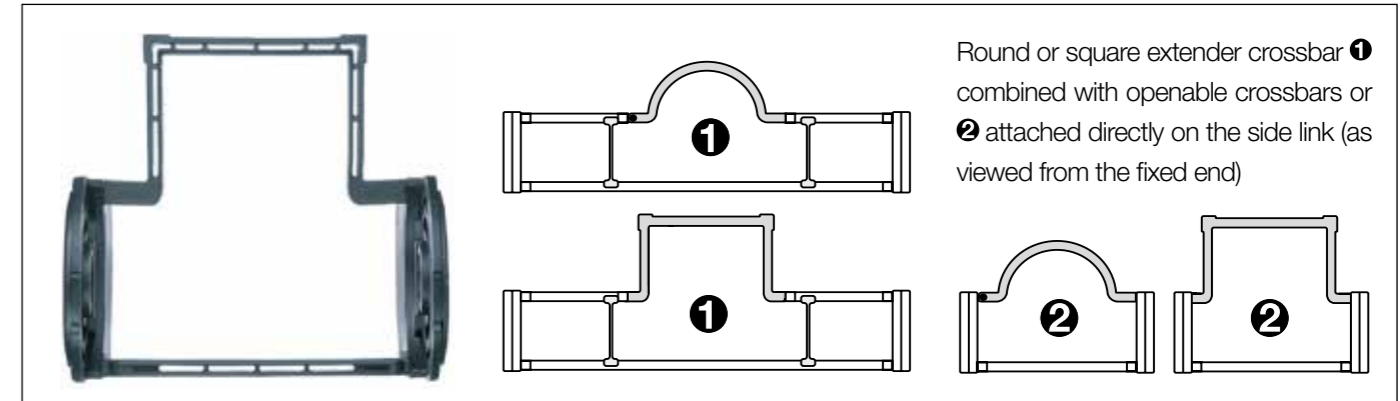
**Locks securely in preset increments**  
Notch separator for exact positioning in e-chains®. Recommended for side-mounted applications.

**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	520.375
100	520.100	521.100	225	520.225	521.225	387	520.387	520.387
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 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 Ø ≤ [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	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: ❶ 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: ❷ 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

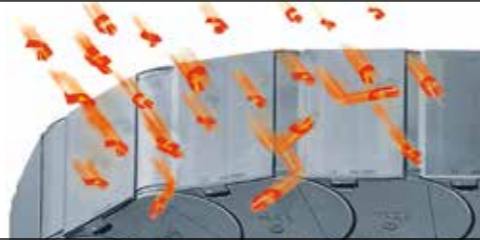
More information ► From page 1264



### Hot swarf up to +850°C

- e-tubes to withstand 850°C hot swarf, as a special option
- No hot swarf melting or embedding into the chain
- igus® igumid HT material

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 ► [www.igus.eu/roller-crossbar](http://www.igus.eu/roller-crossbar)



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
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. - 055.R.0	55	85	≈ 3.90	≈ 3.86	-
15050. 15150. - 06. R.0	65	95	≈ 3.95	≈ 3.88	-
15050! 15150. 19850. 07. R.0	75	105	≈ 4.00	≈ 3.92	≈ 4.46
15050. 15150. - 08. R.0	87	117	≈ 4.05	≈ 3.96	-
15050. 15150. 19850. 10. R.0	100	130	≈ 4.18	≈ 4.00	≈ 4.74
15050. 15150. - 11. R.0	112	143	≈ 4.31	≈ 4.07	-
15050! 15150. 19850. 12. R.0	125	155	≈ 4.38	≈ 4.10	≈ 5.10
15050. 15150. - 13. R.0	137	168	≈ 4.51	≈ 4.17	-
15050! 15150. 19850. 15. R.0	150	180	≈ 4.58	≈ 4.20	≈ 5.53
15050. 15150. - 16. R.0	162	193	≈ 4.69	≈ 4.26	-
15050. 15150. - 169.R.0	169	200	≈ 4.77	≈ 4.30	-
15050. 15150. 19850. 17. R.0	175	205	≈ 4.80	≈ 4.31	≈ 5.88
15050. 15150. - 182.R.0	182	213	≈ 4.85	≈ 4.33	-
15050. 15150. - 18. R.0	187	218	≈ 4.91	≈ 4.37	-
15050! 15150. 19850. 20. R.0	200	230	≈ 4.93	≈ 4.38	≈ 6.11
15050. 15150. - 207.R.0	207	238	≈ 4.99	≈ 4.41	-
15050. 15150. - 21. R.0	212	243	≈ 5.04	≈ 4.43	-
15050. 15150. - 22. R.0	225	255	≈ 5.10	≈ 4.47	-
15050. 15150. - 23. R.0	237	268	≈ 5.24	≈ 4.53	-
15050! 15150. 19850. 25. R.0	250	280	≈ 5.32	≈ 4.58	≈ 6.83
15050. 15150. - 26. R.0	262	293	≈ 5.41	≈ 4.62	-
15050. 15150. 19850. 27. R.0	275	305	≈ 5.52	≈ 4.68	≈ 7.26

1) ⚠ ESD version available from stock \*Radius not available for e-tubes

Available bend radii

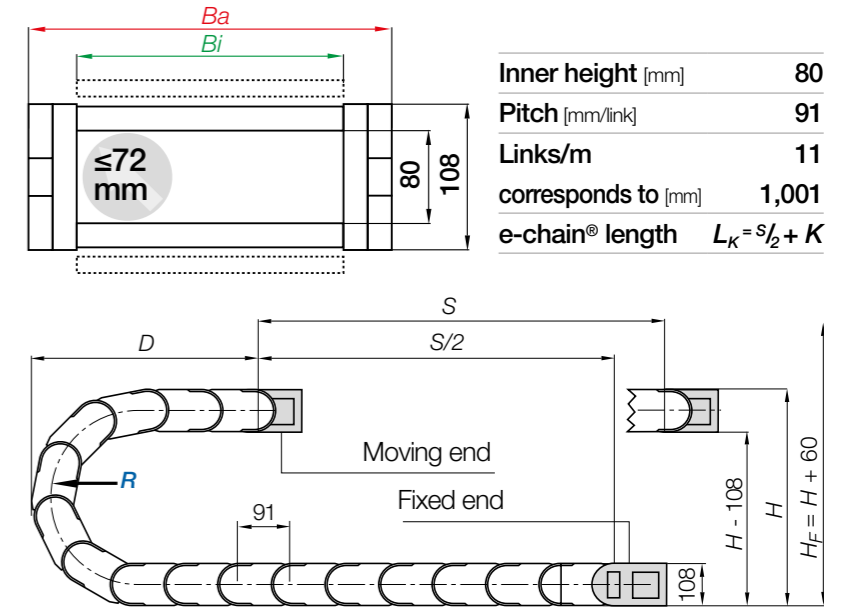
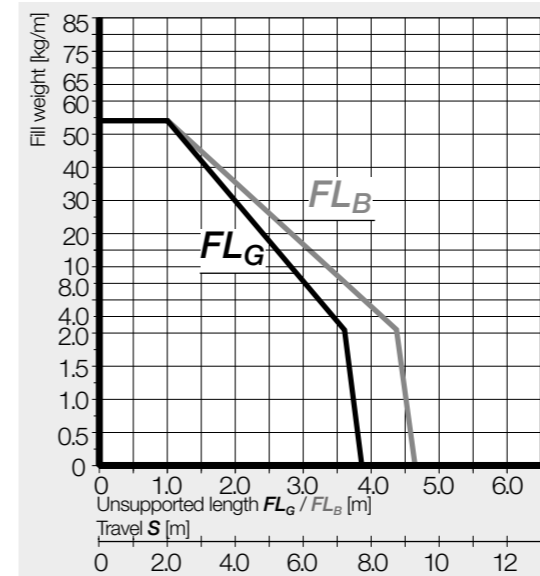
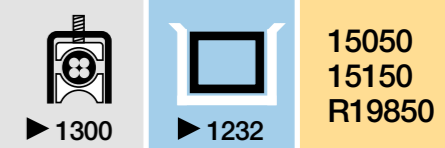
R [mm] | 150\* | 200 | 250 | 300 | 350 | 400 | 500 | 600 |

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

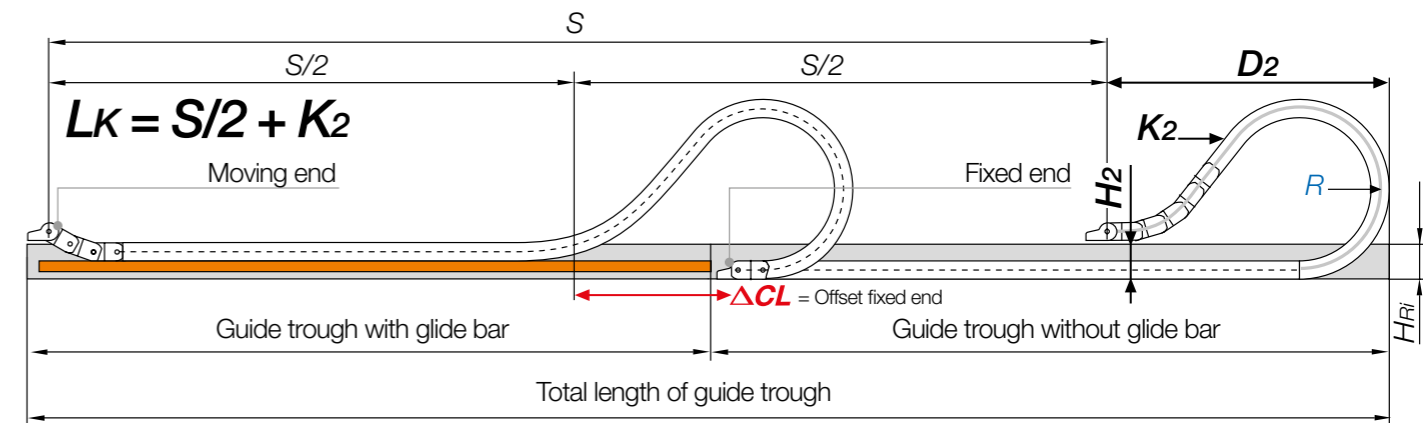


R	150*	200	250	300	350	400	500	600
H <sub>25</sub>	408	508	608	708	808	908	1,108	1,308
D	341	391	441	491	541	591	691	791
K	655	815	970	1,125	1,285	1,440	1,755	2,070

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 long travels from 12m to max. 250m

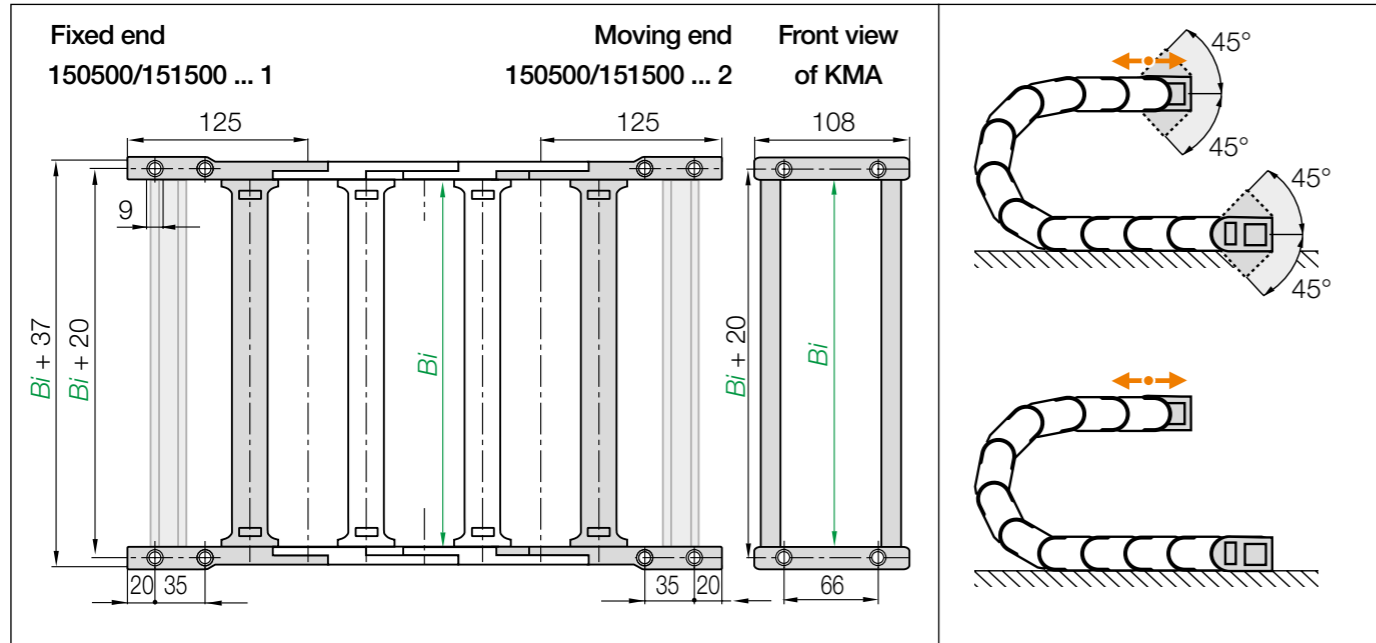


Note: We recommend the project planning of such a system to be carried out by igus®.

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	-

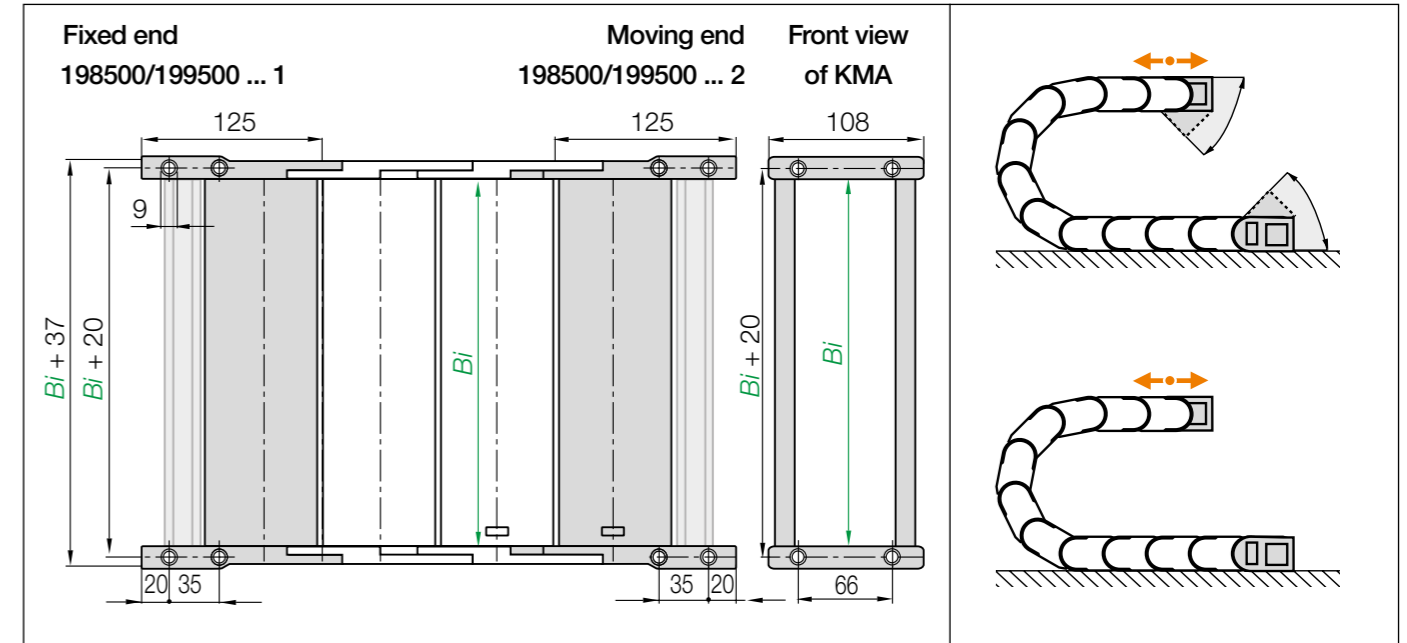
\*Radius not available for e-tubes 1) R 600 not suitable for long travels. Please consult igus®.



**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

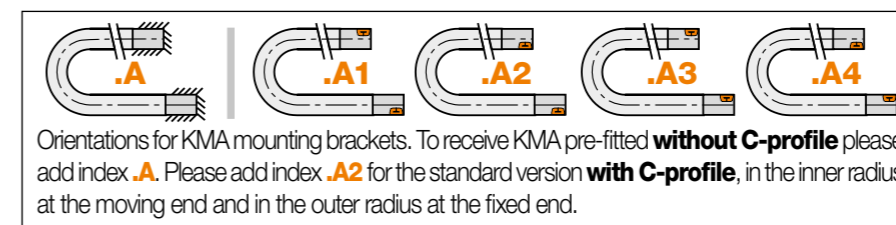
(KMA = polymer metal mounting bracket) For the C-profile option please add index .C



**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



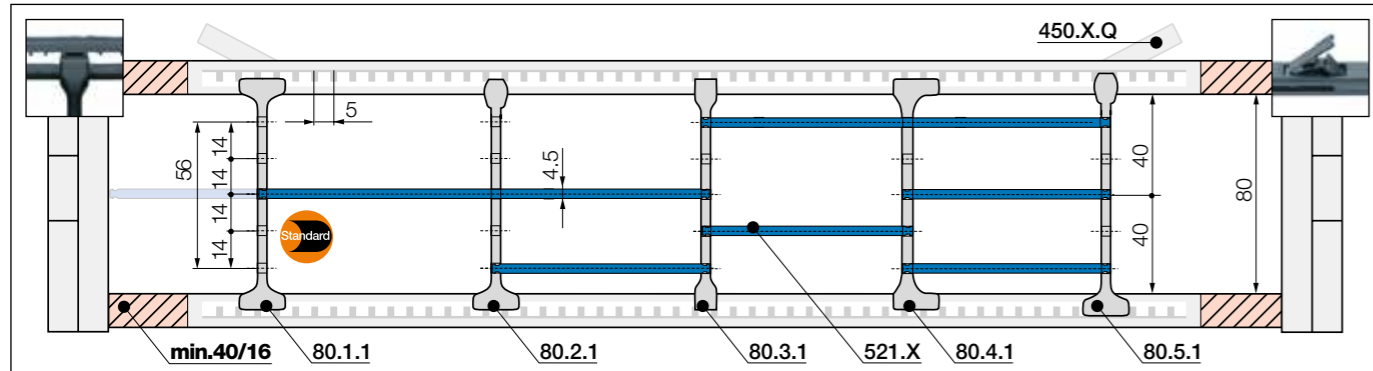
**150500.30.12.C.A2** Order example  
**.A...** to indicate option with brackets pre-fitted  
 C-profile option  
 Full set  
 Width index  
 Series

**Strain relief** e.g. clamps, tiwrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with ordering options ▶ From page 1300



Interior separation | Increase cable service life

Previous generation of interior separation with other options ► [www.igus.eu/15050](http://www.igus.eu/15050)



**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 in the e-chain®.

**Separator for QuickLock crossbar**

unassembled	80.2
assembled	80.2.1

**For even faster installation**  
Separator for igus® QuickLock crossbar 450.X.Q. 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 in the e-chain®. Also available for QuickLock crossbars.

**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 in e-chains®. Recommended for side-mounted applications.

**Shelf, lockable**

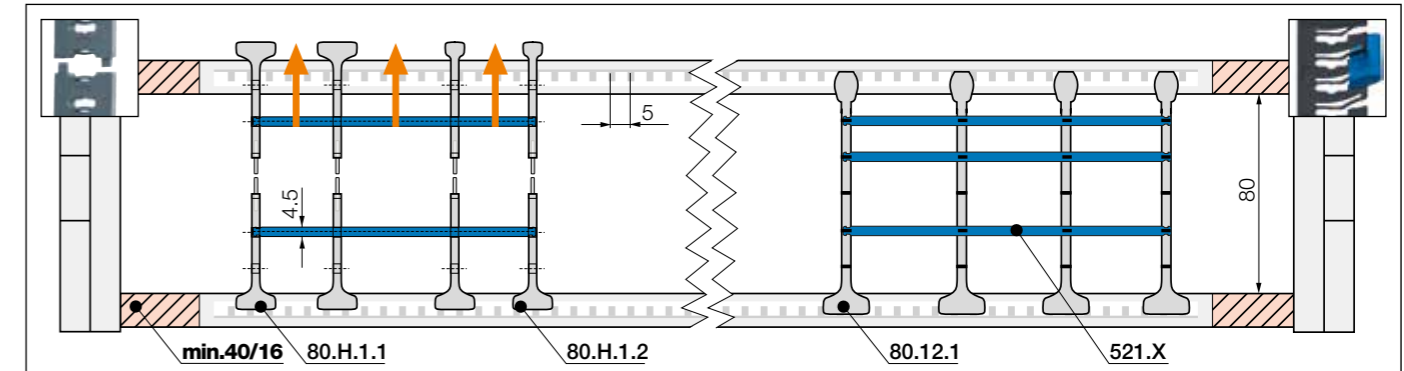
unassembled	520.X
assembled	521.X

**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	520.375
	100	520.100	521.100	225	520.225	521.225	387	520.387	520.387
	125	520.125	521.125	250	520.250	521.250	450	520.450	521.450



Interior separation | To allow faster filling



**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

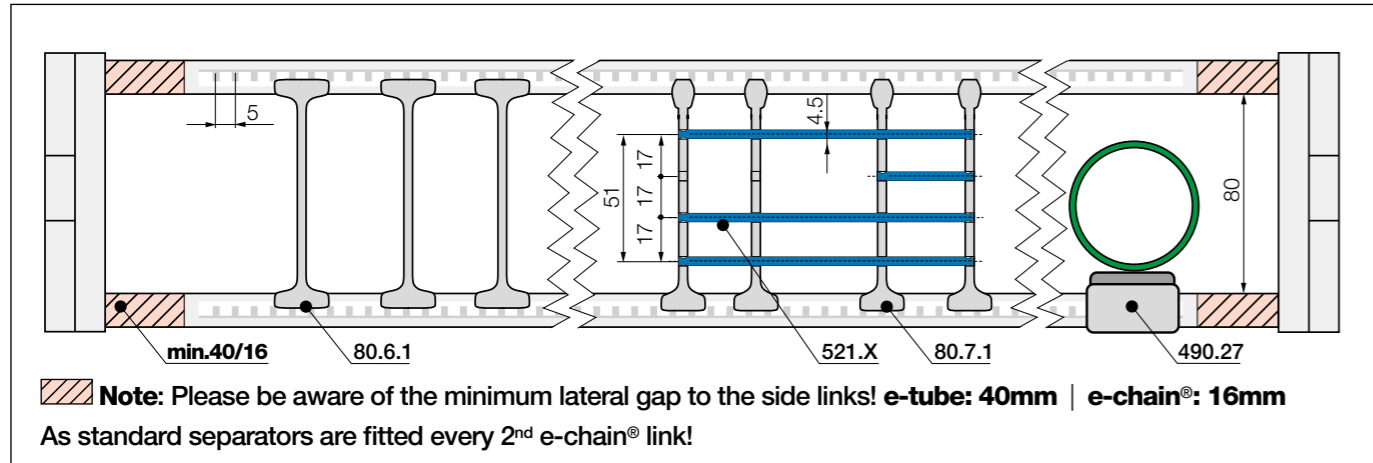
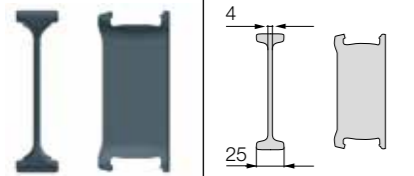
**Lean separator**

unassembled	80.12
assembled	80.12.1

**Lean separators New**  
New design allows extremely fast fitting of shelves in several layers, which significantly reduces assembly time. Enables extremely fast replacement of individual cables in a very full e-chain®.

**Lean separator design - several layers of cables fitted quickly, save up to 50%\* assembly time**  
(\*Lean separator vs. standard separator - measured on a 4m long e-chain® fitted with 12 cables in the igus® readychain® factory)



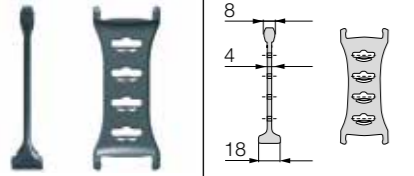



**Notch locking separator for increased holding force**

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.

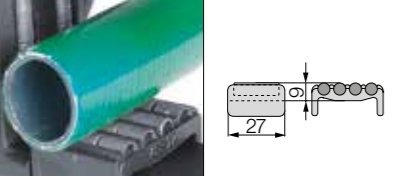


**Separator, one end locking**

unassembled	80.7
assembled	80.7.1

**Separator, one end locking**

Offset slots for more variability



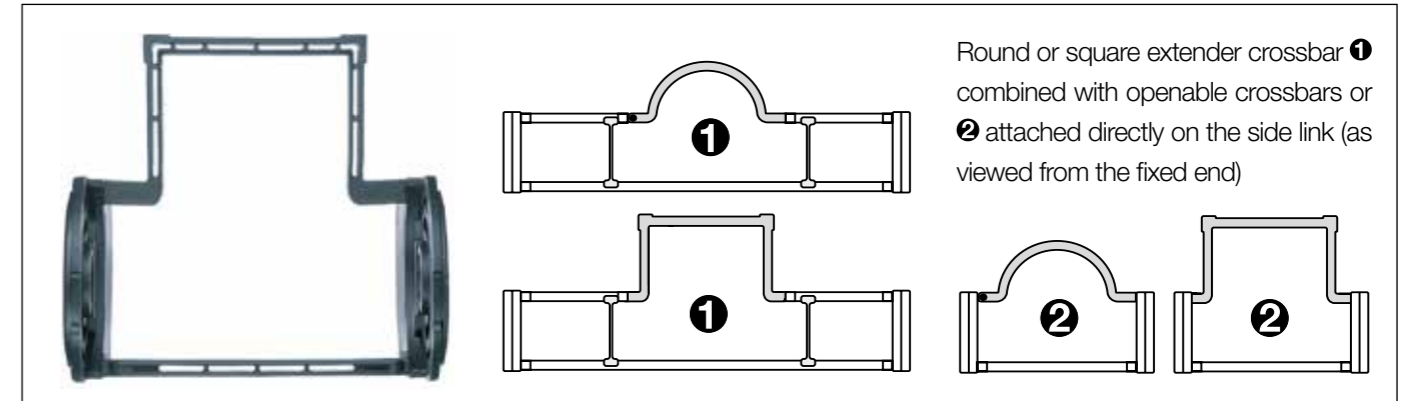
**Rollclip for e-chains®**

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 for e-chains®



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

- Suitable for hoses with a maximum outer diameter of 270mm
- 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	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: ❶ 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**

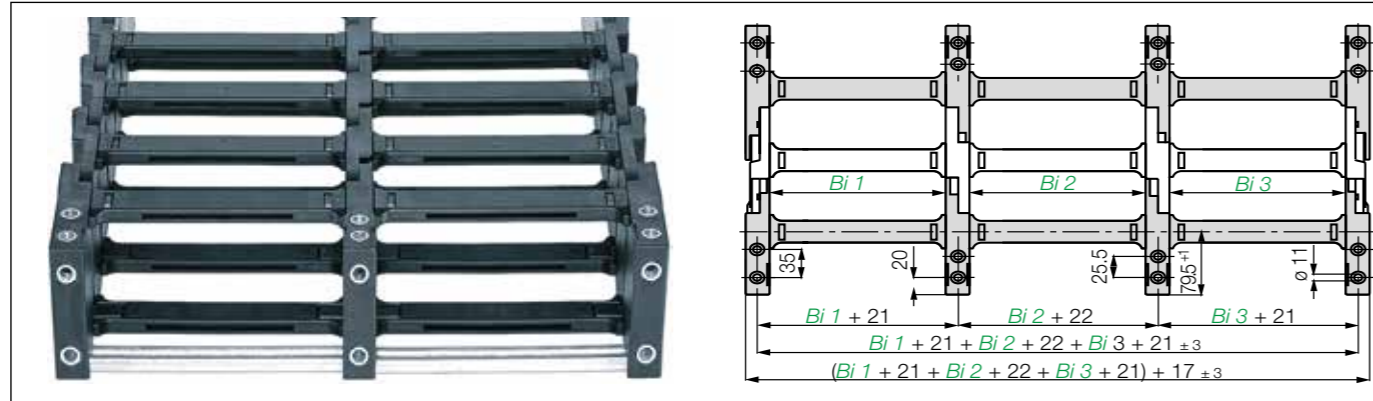
**Order example: ❷ fitted to side link**

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.

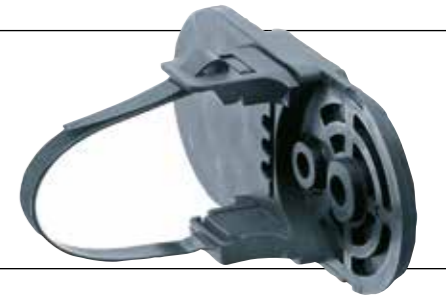
Complete Part No.with the width index *Bi1/Bi2/Bi3/etc.* and the radius (*R*). Example: 14040.10/20/10.200.0



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

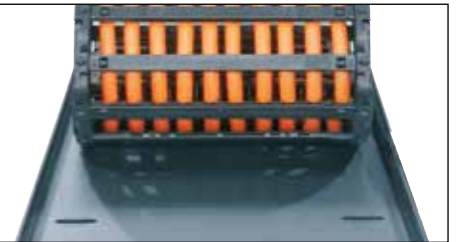
E4 snapclip - clip-on tiewrap

- 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)



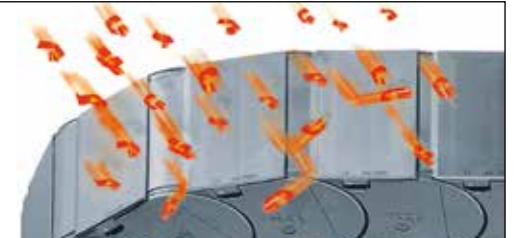
Steel support tray for support of the lower run

- Simple one-piece support trays for the lower run
  - To your requirements and specification
  - 4 options available
- More information ► From page 1264



Hot swarf up to +850°C

- e-tubes to withstand 850°C hot swarf, as a special option
  - No hot swarf melting or embedding into the chain
  - igus® igumid HT material
- 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 ► [www.igus.eu/roller-crossbar](http://www.igus.eu/roller-crossbar)





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)

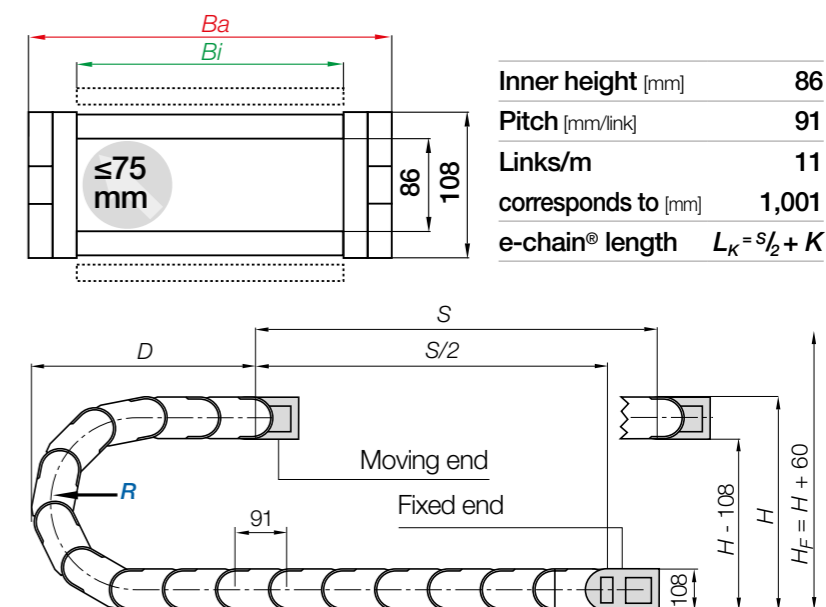
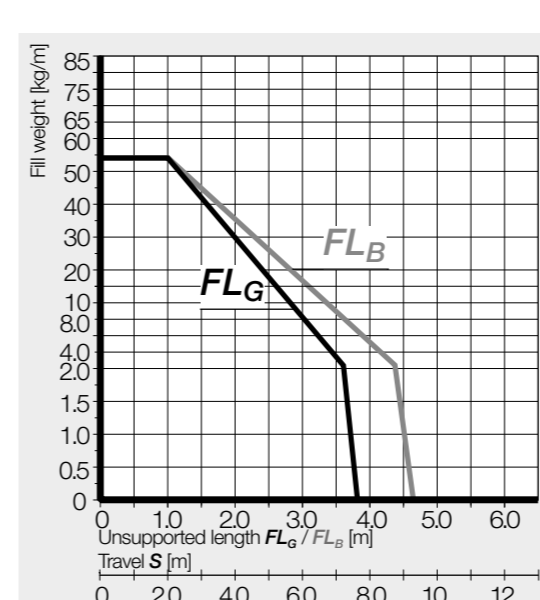
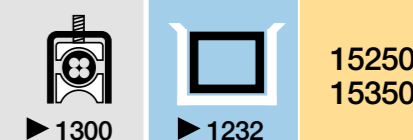
Part No.	Bi	Ba	15250	15350	Part No.	Bi	Ba	15250	15350
e-chains®	[mm]	[mm]	[kg/m]	[kg/m]	e-chains®	[mm]	[mm]	[kg/m]	[kg/m]
15250. 15350. 05. R.0	50	80	≈ 3.64	≈ 3.56	15250. 15350. 212.R.0	212	243	≈ 4.26	≈ 3.86
15250. 15350. 06. R.0	68	98	≈ 3.72	≈ 3.60	15250. 15350. 23. R.0	225	255	≈ 4.32	≈ 3.89
15250. 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:

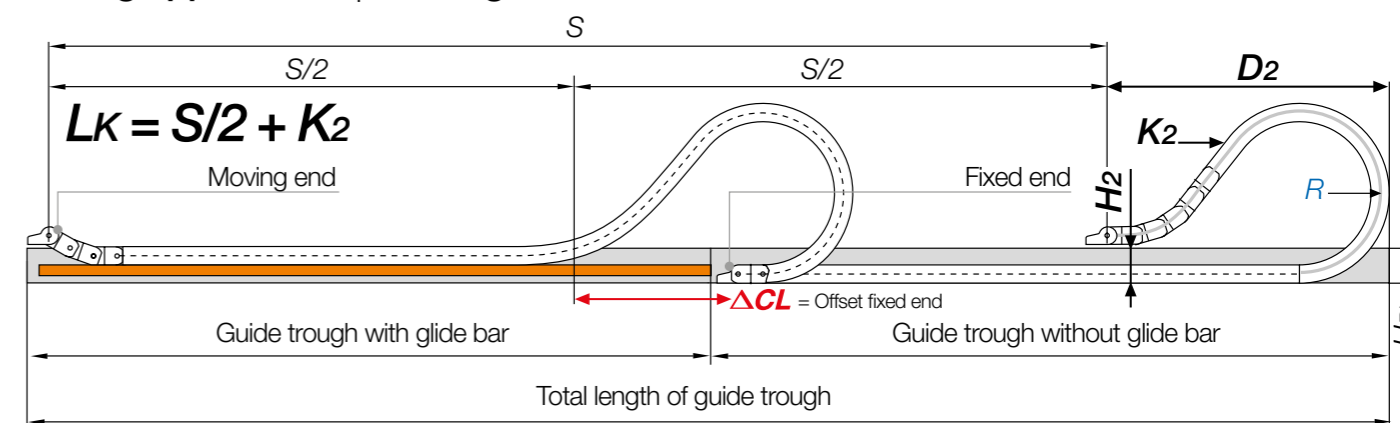
15250.20.300.0 = crossbars every link / 15350.20.300.0 = crossbars every 2<sup>nd</sup> link



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 long travels from 12m to max. 250m



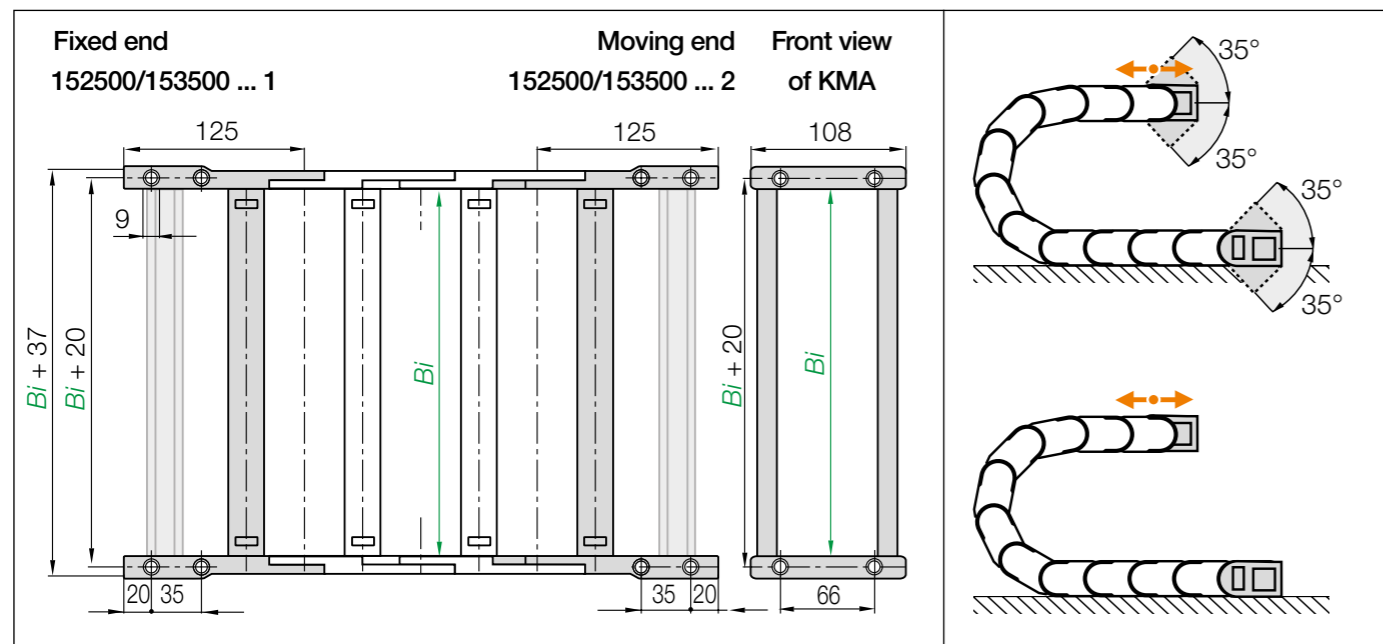
**Note:** We recommend the project planning of such a system to be carried out by igus®.

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 long travels. Please consult igus®.

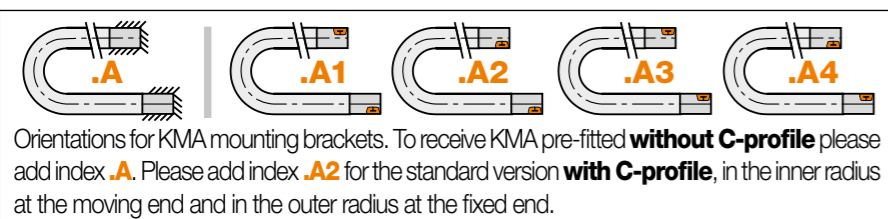




**KMA pivoting** | Recommended for unsupported and gliding applications  
**KMA locking** | Recommended for vertical hanging and standing applications

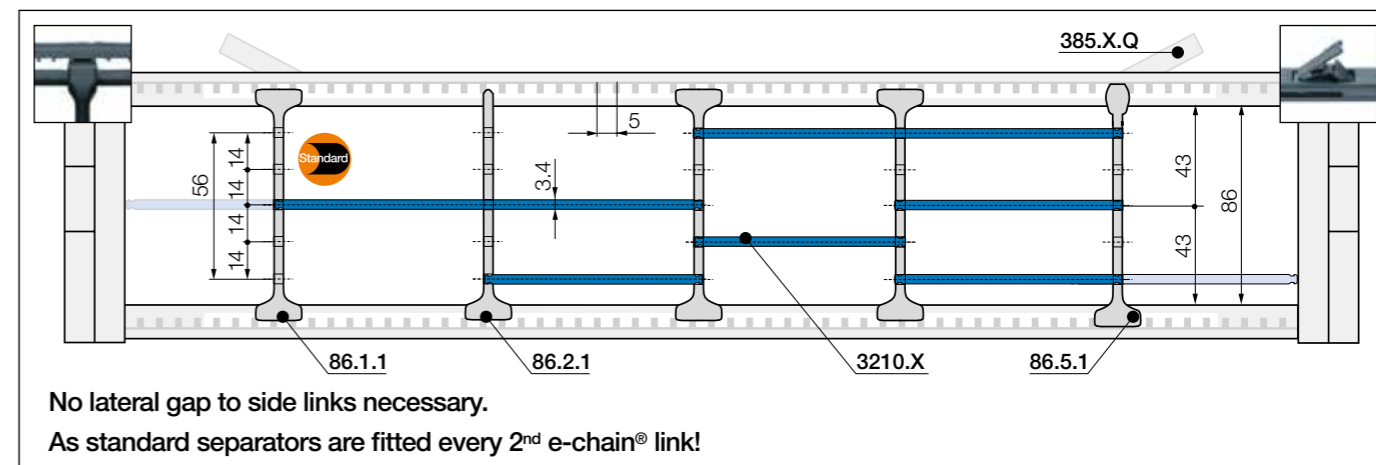
Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]	Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]
05.	152500.05 .12.C	153500.05 .12.C	50	212.	152500.212 .12.C	153500.212 .12.C	212
06.	152500.06 .12.C	153500.06 .12.C	68	23.	152500.23 .12.C	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
09.	152500.09 .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 plug-in clips are available from stock. The complete chainfix range with ordering options ► From page 1300

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 in the e-chain®.

**Separator for QuickLock crossbar**

unassembled	86.2
assembled	86.2.1

**For even faster installation**

Separator for igus® QuickLock crossbar 385.X.Q. 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 in e-chains®. Recommended for side-mounted applications.

**Shelf, lockable**

unassembled	3200.X
assembled	3210.X

**Horizontal separation**

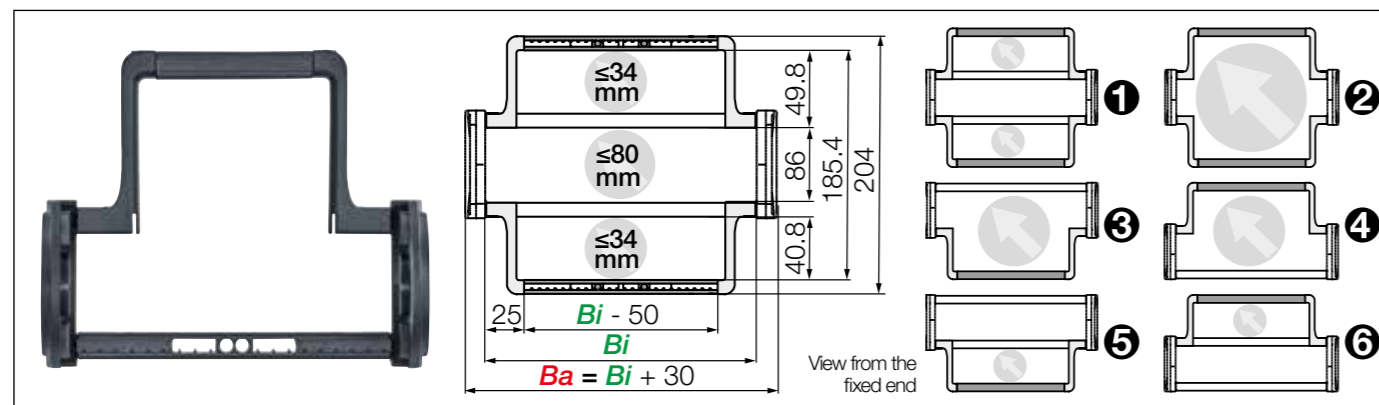
Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

**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			



### 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
e-chain® with extender crossbar			
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	–

1) Minimum bend radius: R 125 2) Minimum bend radius: R 150 3) Minimum bend radius: R 150

#### Bi [mm] Available inner widths

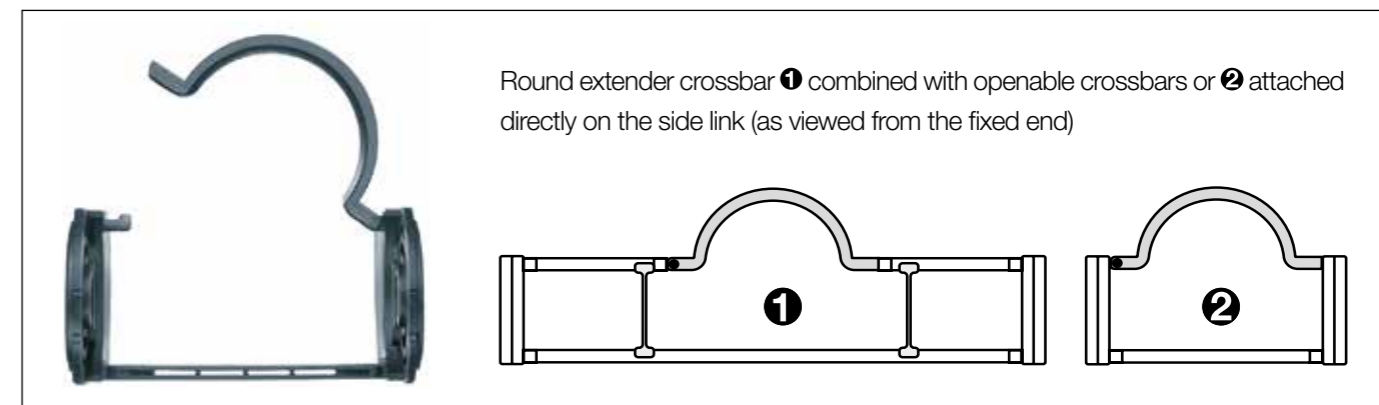
| 100 | 125 | 137 | 150 | 162 | 175 | 187 | 200 | 212 | 225 | 237 | 250 |  
| 262 | 275 | 287 | 300 | 312 | 325 | 337 | 350 | 362 | 375 | 387 | 400 |

Complete Part No. with the width index XXX Bi and the minimum bend radius (R). Example:

15250.100B50.150.0 = crossbars every link, extender crossbar on both sides along the inner and outer radius



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 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 Ø ≤ [mm]	Extender crossbar shape	② Fitted to side link	① Combine with openable crossbars
385.15RHD115	115	O round	No	Yes
385.18RD115	115	O 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

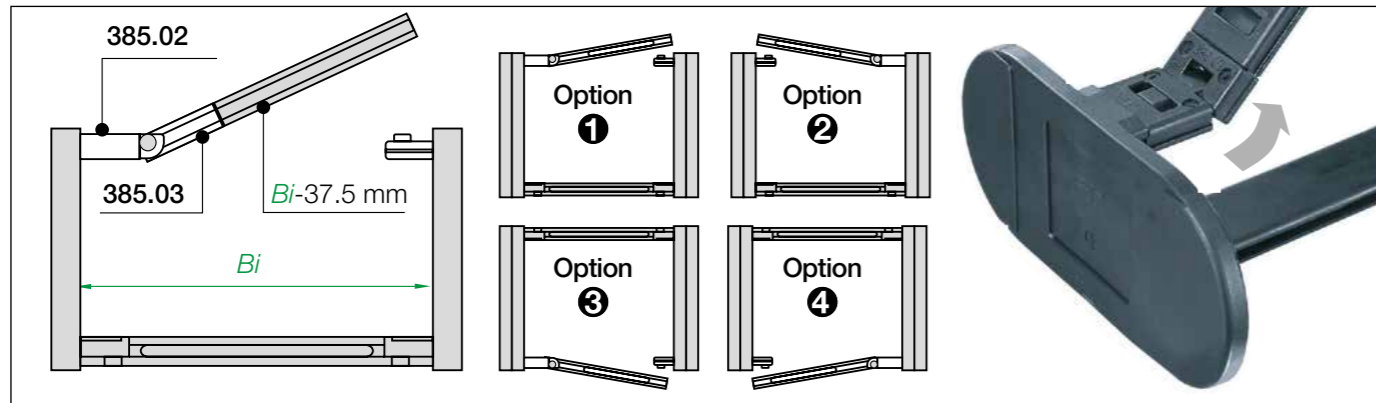
To receive extender crossbar RHD115 pre-fitted along the inner radius of the-chain®, please add index **Z**: 15250.10/15RHDZ115/10.R.0

#### 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





**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
15250. $Bi$ . $Z$ . $R$ .0	385.02	385.03

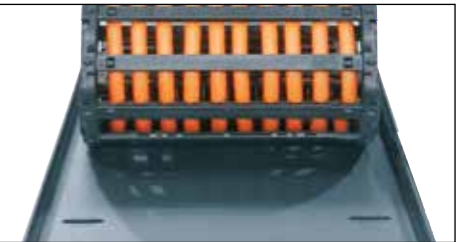
Complete Part No. with the width index  $Bi$ , the index  $Z$  for the required option and the radius ( $R$ ). Example: 15250.137.1.200.0



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

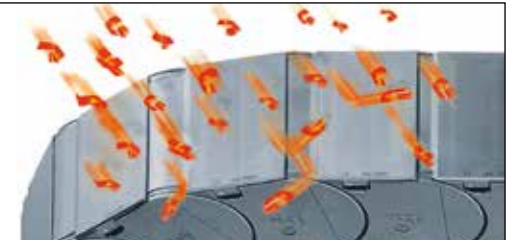
**Steel support tray for support of the lower run**

- Simple one-piece support trays for the lower run
  - To your requirements and specification
  - 4 options available
- More information ► From page 1264



**Hot swarf up to +850°C**

- e-tubes to withstand 850°C hot swarf, as a special option
  - No hot swarf melting or embedding into the chain
  - igus® igumid HT material
- 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)

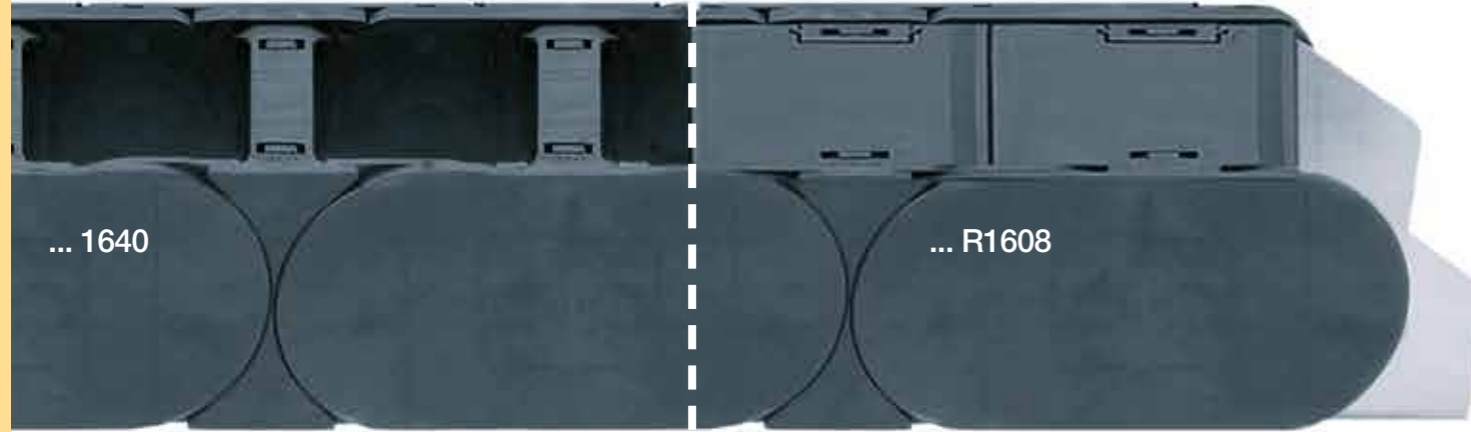
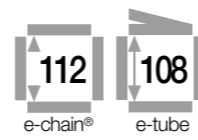


**Roller crossbars - increase the service life of cables and hoses**

- 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 ► [www.igus.eu/roller-crossbar](http://www.igus.eu/roller-crossbar)



New



**e-chains® | Series 1640** | Crossbars every link (crossbars removable along the inner and outer radius)  
**e-tube | 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	-

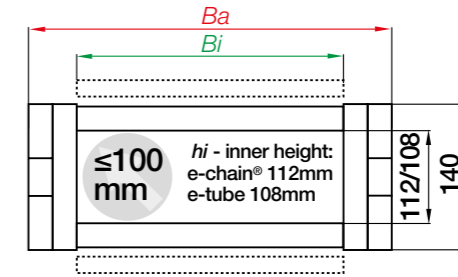
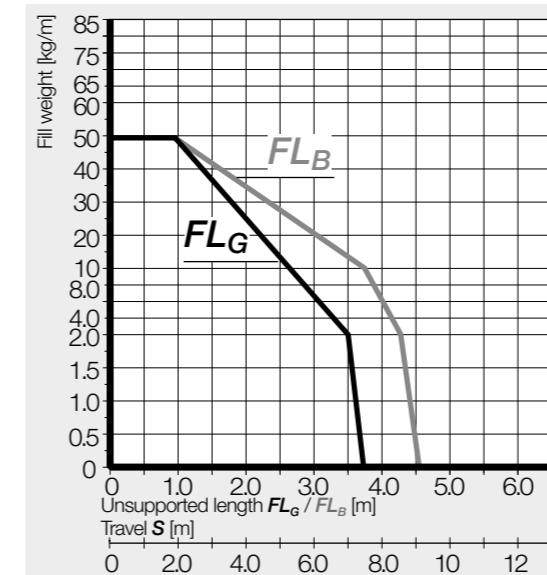
\*Radius not available for e-tubes

**Available bend radii**

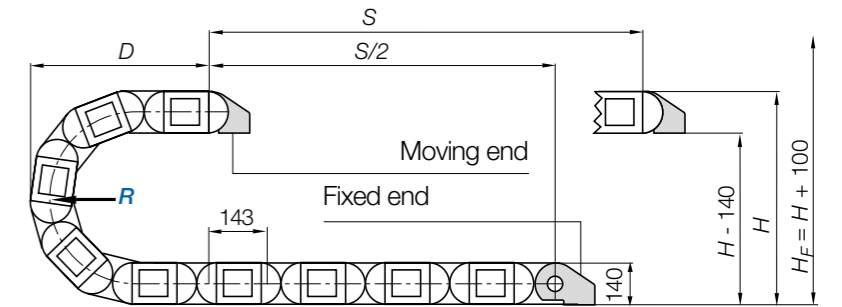
R [mm] | 200\* | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |

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	7
corresponds to [mm]	1,001
e-chain® length	$L_K = S/2 + K$

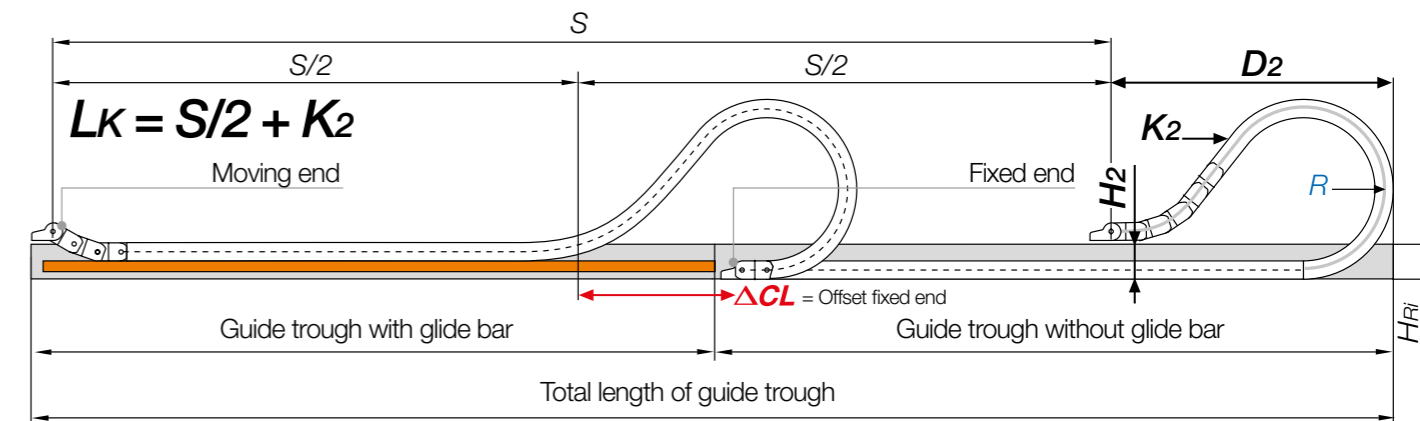


R	200*	250	300	350	400	450	500	550	600
H	540	640	740	840	940	1,040	1,140	1,240	1,340
D	485	535	585	635	685	735	785	835	885
K	915	1,075	1,230	1,390	1,545	1,700	1,860	2,015	2,175

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 long travels from 14m to max. 400m**



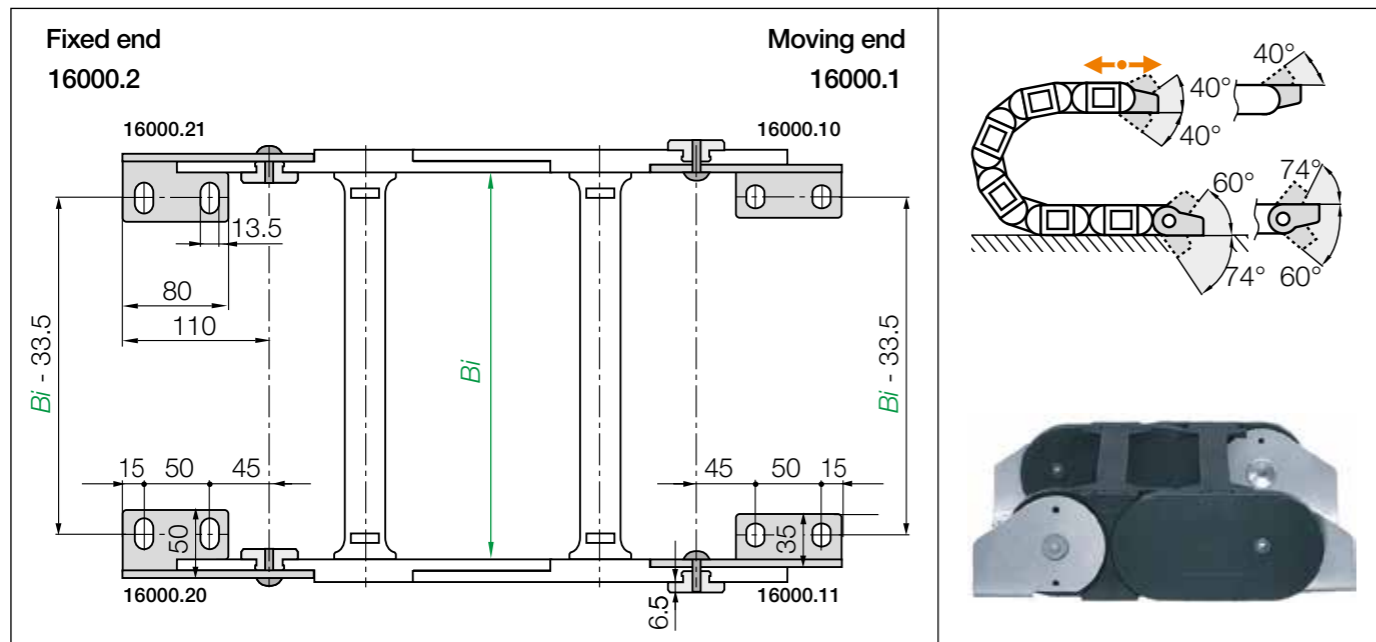
**Note:** We recommend the project planning of such a system to be carried out by igus®.

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

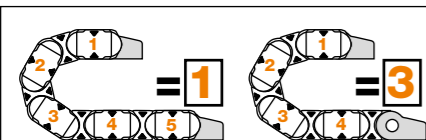




**Steel pivoting | For unsupported, gliding, vertical hanging and vertical standing applications**

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

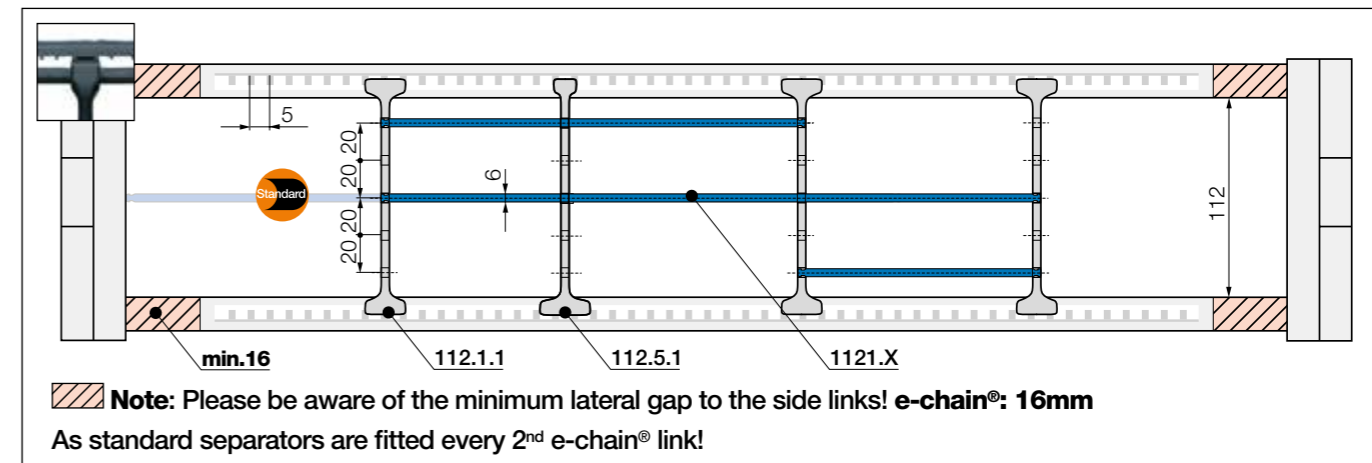
Stainless steel version available. Please add the index **.E!** (Material: stainless steel 1.4301)



**Note:** Depending on the chain length, the e-chain® may end with **1** either an outer or an **3** inner side link. For the best appearance, make sure the e-chain® ends with **1** outer side links whenever possible. (with odd number of links)

**Strain relief** e.g. clamps, tiwrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with ordering options ► From page 1300

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



**Standard separator, wide base**

unassembled	<b>112.1</b>
assembled	<b>112.1.1</b>

**Standard - for any application**  
Separator with a wide base for maximum holding force in the e-chain®.

**Notch separator for notched crossbar**

unassembled	<b>112.5</b>
assembled	<b>112.5.1</b>

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

**Shelf, lockable**

unassembled	<b>1120.X</b>
assembled	<b>1121.X</b>

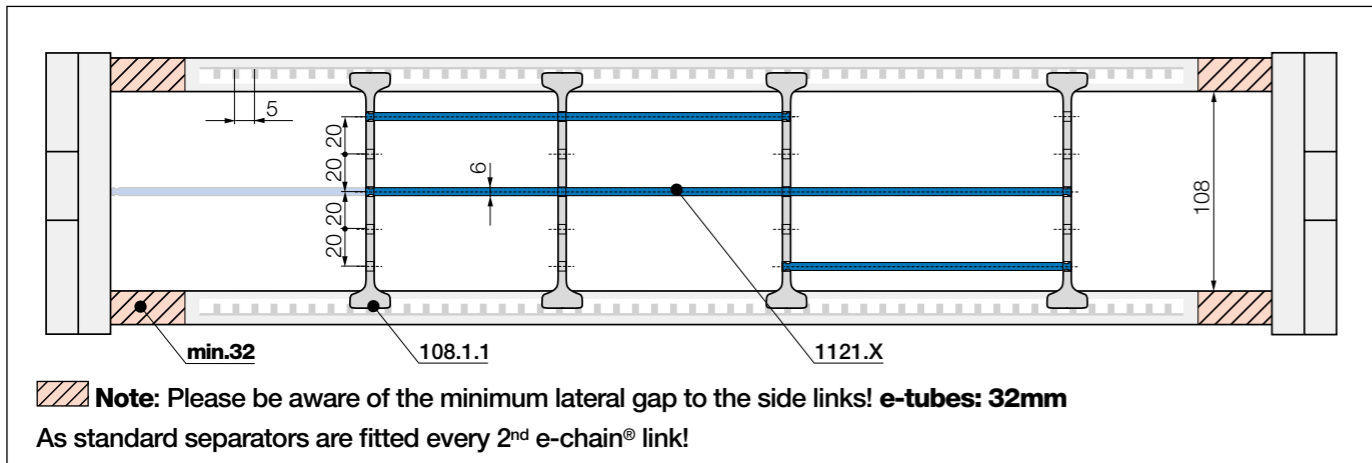
**Horizontal separation**  
Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.



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

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 in the e-chain®.

**Shelf, lockable**

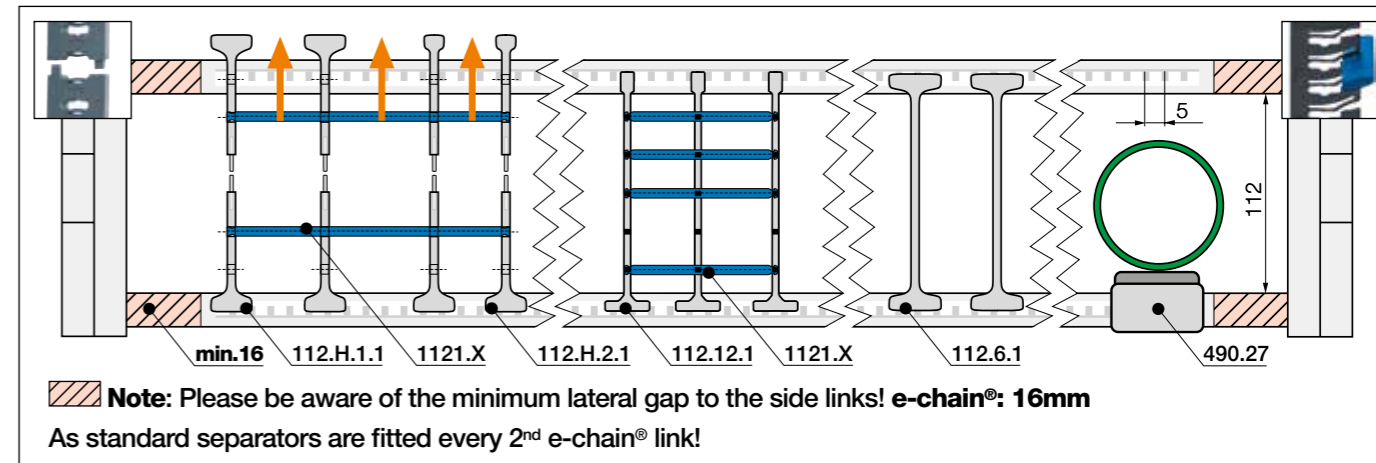
unassembled	1120.X
assembled	1121.X

**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



**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\***

unassembled	112.12
assembled	112.12.1

**Lean separators\* New**  
New design allows extremely fast fitting of shelves in several layers, which significantly reduces assembly time. Enables extremely fast replacement of individual cables in a very full e-chain®.

\*Only for e-chains®

**Lean separator design - several layers of cables fitted quickly, save up to 50%\* assembly time**  
(\*Lean separator 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**

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®**

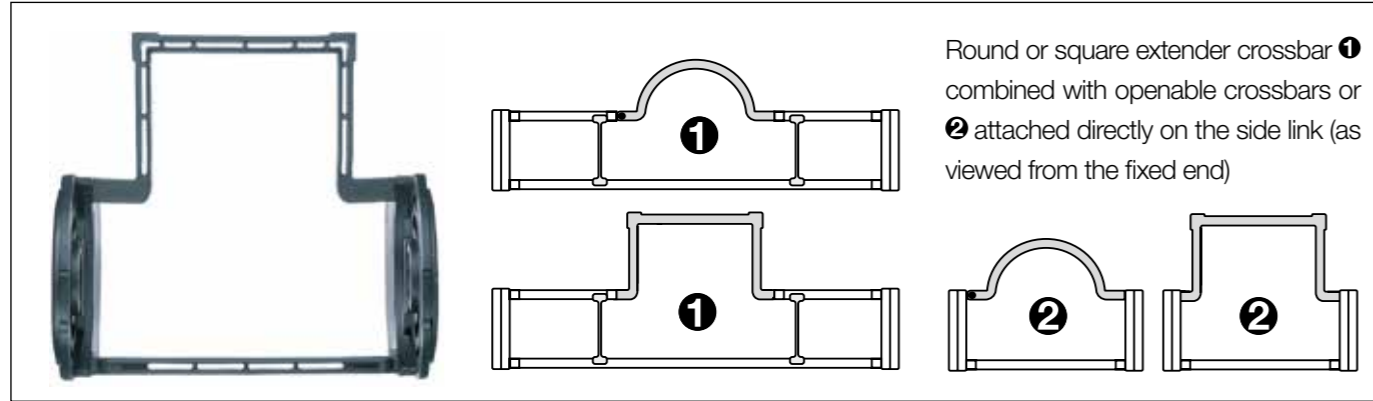
unassembled	489.27
assembled	490.27

**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 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 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	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: 1 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

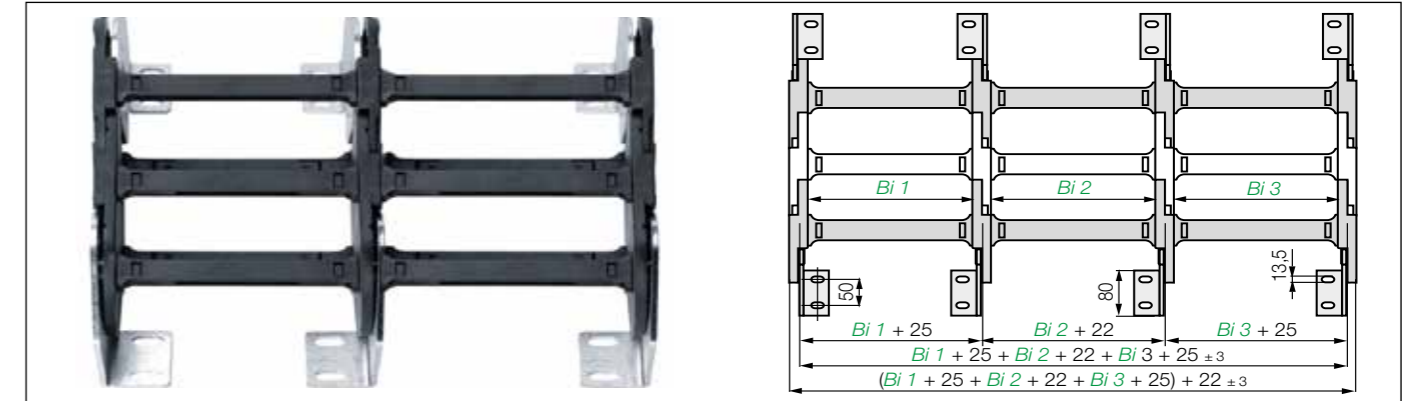
To receive extender crossbar RHD115 pre-fitted along the inner radius of the-chain®, please add index **Z**: 1640.10/15RHDZ115/10.R.0

Order example: 2 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

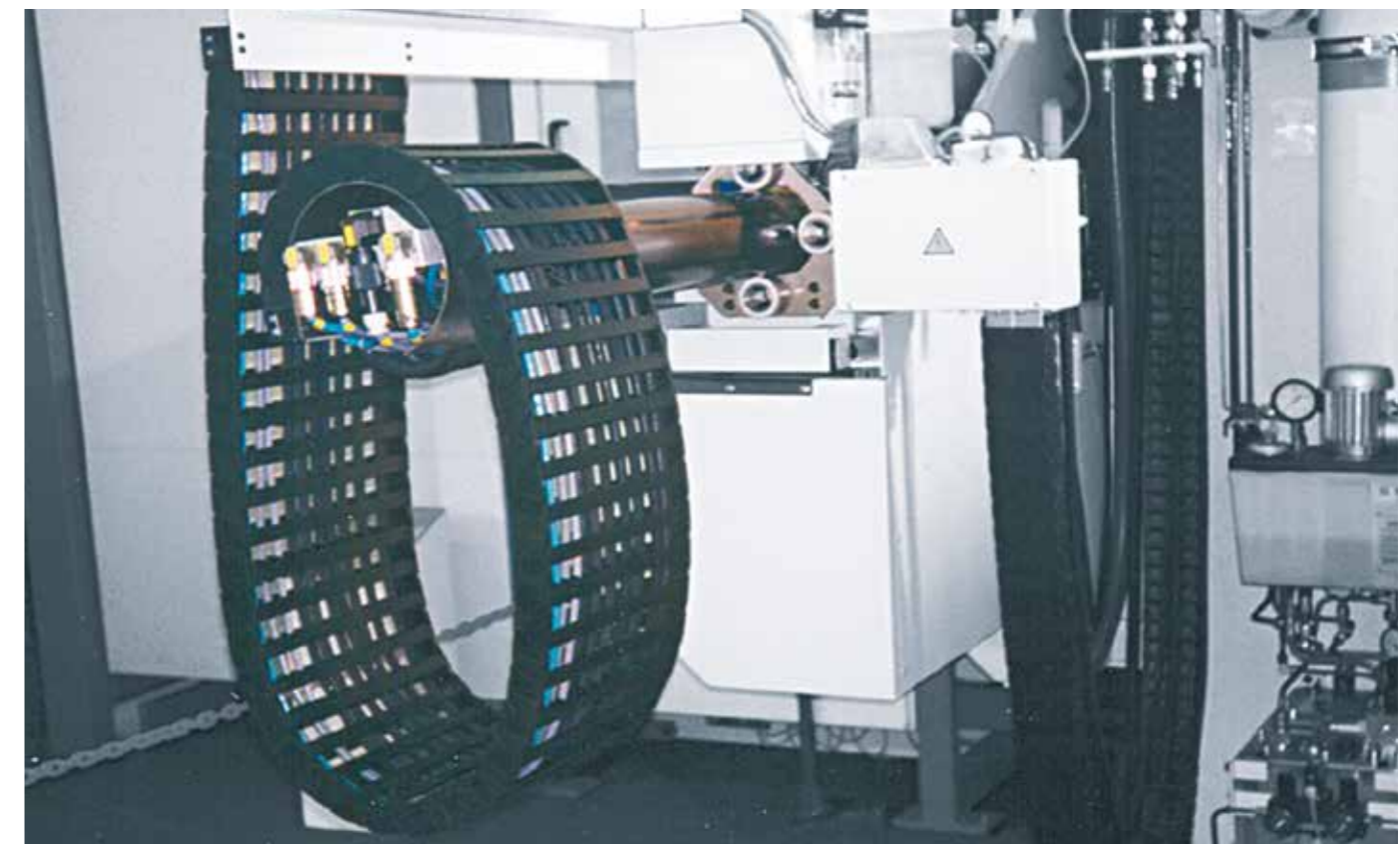


Extension links | For extremely wide e-chains® up to 3.0m

- 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



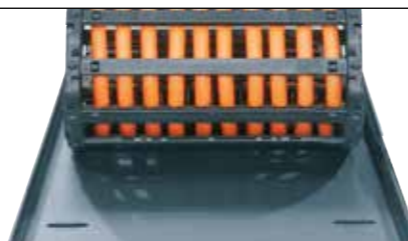
Circular movements (also with Reverse Bend Radius "RBR") are possible

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

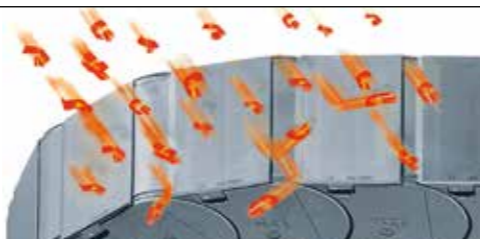
- For side-mounted applications, compatible with many E4 e-chains®
  - Serves as a clip-on, lateral guide for hoses and cables on e-chains®
  - The loops can be adjusted as required
- More information ► [www.igus.eu/1640](http://www.igus.eu/1640)**

**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 1264**

**Hot swarf up to +850°C**

- e-tubes to withstand 850°C hot swarf, as a special option
  - No hot swarf melting or embedding into the chain
  - igus® igumid HT material
- 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 ► [www.igus.eu/roller-crossbar](http://www.igus.eu/roller-crossbar)**



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