



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
e-chains® / e-tubes	[mm]	[mm]	[kg/m]	[kg/m]	[kg/m]
14040. 14140.	05. R.0	50	76	≈ 2.47 ≈ 2.48	-
14040. 14140.	055. R.0	55	81	≈ 2.57 ≈ 2.50	-
14040. 14140.	06. R.0	65	91	≈ 2.66 ≈ 2.51	-
14040. 14140. 18840.1)	07. R.0	75	101	≈ 2.75 ≈ 2.25 ≈ 3.20	-
14040. 14140.	08. R.0	87	113	≈ 2.84 ≈ 2.44	-
14040. 14140. 18840.	10. R.0	100	126	≈ 2.93 ≈ 2.61 ≈ 3.49	-
14040. 14140.	11. R.0	112	139	≈ 3.06 ≈ 2.67	-
14040. 14140. 18840.	12. R.0	125	151	≈ 3.12 ≈ 2.71 ≈ 3.85	-
14040. 14140.	13. R.0	137	164	≈ 3.26 ≈ 2.77	-
14040. 14140. 18840.	15. R.0	150	176	≈ 3.32 ≈ 2.81 ≈ 4.28	-
14040. 14140.	16. R.0	162	189	≈ 3.43 ≈ 2.86	-
14040. 14140.	169. R.0	196	196	≈ 3.51 ≈ 2.90	-
14040. 14140. 18840.	17. R.0	175	201	≈ 3.54 ≈ 2.92 ≈ 4.54	-
14040. 14140.	182. R.0	182	209	≈ 3.58 ≈ 2.94	-
14040. 14140.	18. R.0	187	214	≈ 3.65 ≈ 2.97	-
14040. 14140. 18840.	20. R.0	200	226	≈ 3.67 ≈ 2.98 ≈ 4.85	-
14040. 14140.	207. R.0	207	234	≈ 3.73 ≈ 3.01	-
14040. 14140.	21. R.0	212	239	≈ 3.78 ≈ 3.04	-
14040. 14140.	22. R.0	225	251	≈ 3.85 ≈ 3.07	-
14040. 14140.	23. R.0	237	264	≈ 3.98 ≈ 3.14	-
14040. 14140. 18840.	25. R.0	250	276	≈ 4.07 ≈ 3.18 ≈ 5.58	-
14040. 14140.	26. R.0	262	289	≈ 4.16 ≈ 3.22	-
14040. 14140. 18840.	27. R.0	275	301	≈ 4.27 ≈ 3.28 ≈ 5.85	-

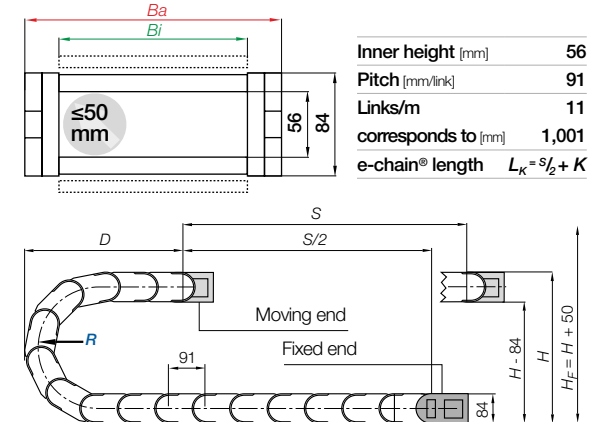
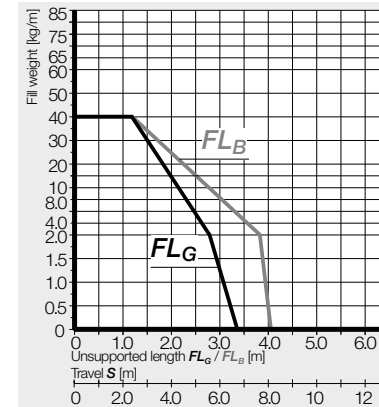
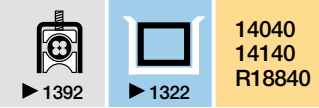
1) Lid removable, non-operable \*Radius not available for e-tubes

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

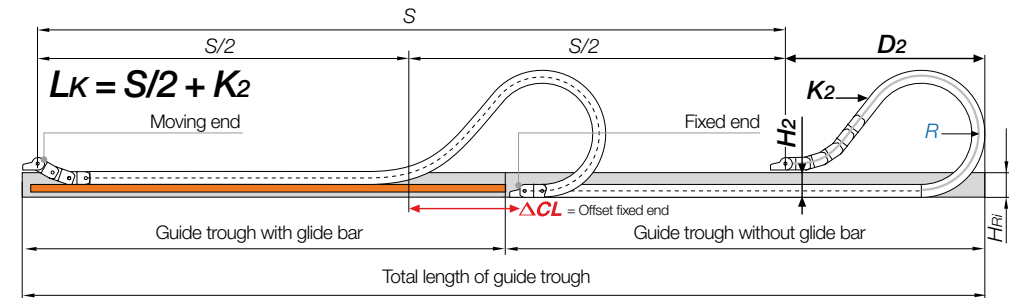


R	135*	150	175	200	250	300	400	500
H <sub>0-25</sub>	354	384	434	484	584	684	884	1,084
D	314	329	354	379	429	479	579	679
K	610	655	735	815	970	1,125	1,440	1,755

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

\*Radius not available for e-tubes

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

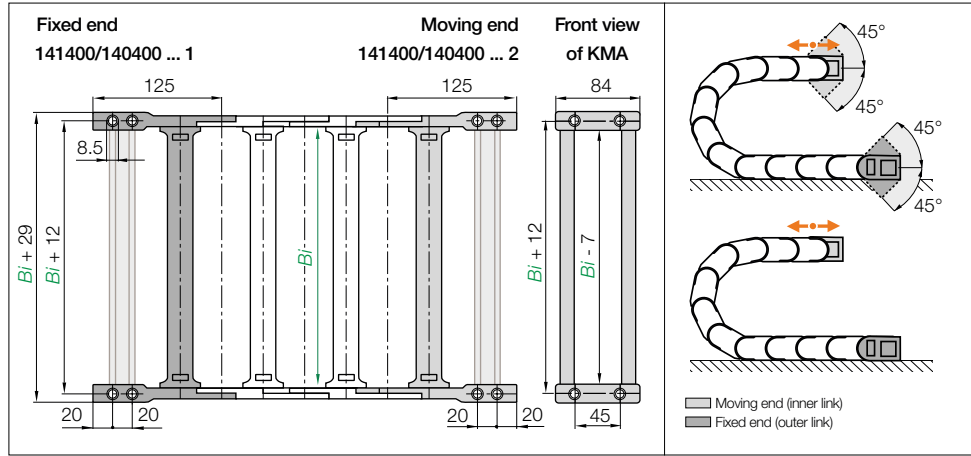


Note: We recommend the project planning of such a system to be carried out by igus®.

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

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

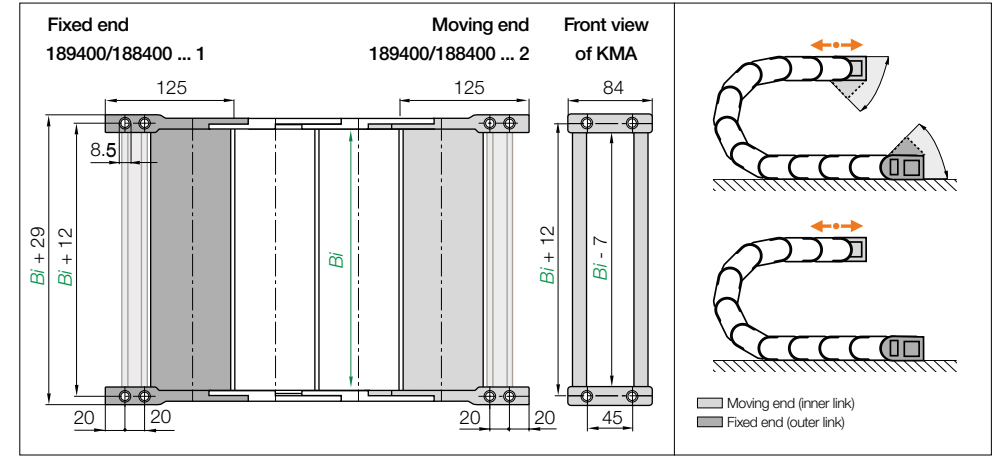
\*Radius not available for e-tubes



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

Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]	Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]
05.	▶ 141400.05 .12.C	140400.05 .12.C	50	28.	▶ 141400.28 .12.C	140400.28 .12.C	287
055.	▶ 141400.055 .12.C	140400.055 .12.C	55	30.	▶ 141400.30 .12.C	140400.30 .12.C	300
06.	▶ 141400.06 .12.C	140400.06 .12.C	65	31.	▶ 141400.31 .12.C	140400.31 .12.C	312
07.	▶ 141400.07 .12.C	140400.07 .12.C	75	32.	▶ 141400.32 .12.C	140400.32 .12.C	325
08.	▶ 141400.08 .12.C	140400.08 .12.C	87	33.	▶ 141400.33 .12.C	140400.33 .12.C	337
10.	▶ 141400.10 .12.C	140400.10 .12.C	100	35.	▶ 141400.35 .12.C	140400.35 .12.C	350
11.	▶ 141400.11 .12.C	140400.11 .12.C	112	36.	▶ 141400.36 .12.C	140400.36 .12.C	362
12.	▶ 141400.12 .12.C	140400.12 .12.C	125	37.	▶ 141400.37 .12.C	140400.37 .12.C	375
13.	▶ 141400.13 .12.C	140400.13 .12.C	137	38.	▶ 141400.38 .12.C	140400.38 .12.C	387
15.	▶ 141400.15 .12.C	140400.15 .12.C	150	40.	▶ 141400.40 .12.C	140400.40 .12.C	400
16.	▶ 141400.16 .12.C	140400.16 .12.C	162	41.	▶ 141400.41 .12.C	140400.41 .12.C	412
169.	▶ 141400.169 .12.C	140400.169 .12.C	169	42.	▶ 141400.42 .12.C	140400.42 .12.C	425
17.	▶ 141400.17 .12.C	140400.17 .12.C	175	43.	▶ 141400.43 .12.C	140400.43 .12.C	437
182.	▶ 141400.182 .12.C	140400.182 .12.C	182	45.	▶ 141400.45 .12.C	140400.45 .12.C	450
18.	▶ 141400.18 .12.C	140400.18 .12.C	187	46.	▶ 141400.46 .12.C	140400.46 .12.C	462
20.	▶ 141400.20 .12.C	140400.20 .12.C	200	47.	▶ 141400.47 .12.C	140400.47 .12.C	475
207.	▶ 141400.207 .12.C	140400.207 .12.C	207	48.	▶ 141400.48 .12.C	140400.48 .12.C	487
21.	▶ 141400.21 .12.C	140400.21 .12.C	212	50.	▶ 141400.50 .12.C	140400.50 .12.C	500
22.	▶ 141400.22 .12.C	140400.22 .12.C	225	51.	▶ 141400.51 .12.C	140400.51 .12.C	512
23.	▶ 141400.23 .12.C	140400.23 .12.C	237	52.	▶ 141400.52 .12.C	140400.52 .12.C	525
25.	▶ 141400.25 .12.C	140400.25 .12.C	250	53.	▶ 141400.53 .12.C	140400.53 .12.C	537
26.	▶ 141400.26 .12.C	140400.26 .12.C	262	55.	▶ 141400.55 .12.C	140400.55 .12.C	550
27.	▶ 141400.27 .12.C	140400.27 .12.C	275	60.	▶ 141400.60 .12.C	140400.60 .12.C	600

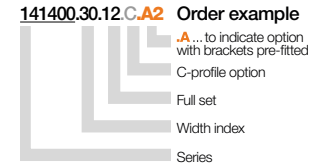
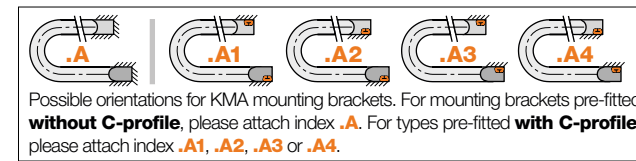
(KMA = polymer metal mounting bracket) For the C-profile option please add index .C



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

Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]	Width index	Part No. full set KMA pivoting	Part No. full set KMA locking	Bi [mm]
07.	▶ 189400.07 .12.C	188400.07 .12.C	75	25.	▶ 189400.25 .12.C	188400.25 .12.C	250
10.	▶ 189400.10 .12.C	188400.10 .12.C	100	27.	▶ 189400.27 .12.C	188400.27 .12.C	275
12.	▶ 189400.12 .12.C	188400.12 .12.C	125	30.	▶ 189400.30 .12.C	188400.30 .12.C	300
15.	▶ 189400.15 .12.C	188400.15 .12.C	150	35.	▶ 189400.35 .12.C	188400.35 .12.C	350
17.	▶ 189400.17 .12.C	188400.17 .12.C	175	40.	▶ 189400.40 .12.C	188400.40 .12.C	400
20.	▶ 189400.20 .12.C	188400.20 .12.C	200	46.	▶ 189400.46 .12.C	188400.46 .12.C	462

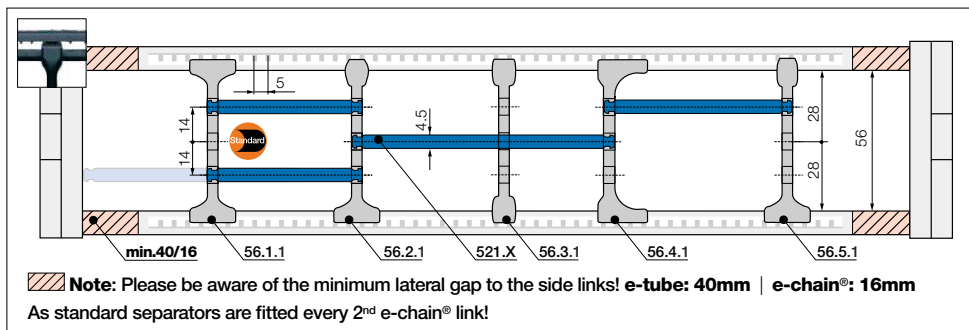
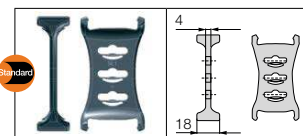
(KMA = polymer metal mounting bracket) For the C-profile option please add index .C



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

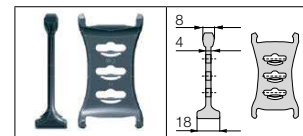
Interior separation | Increase cable service life

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

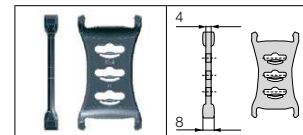
**Standard separator, wide base**  
unassembled **56.1**  
assembled **56.1.1**

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



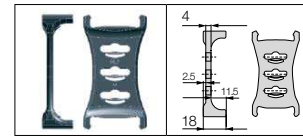
**Separator, narrow top**  
unassembled **56.2**  
assembled **56.2.1**

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



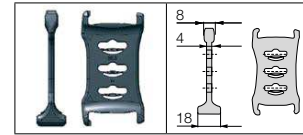
**Separator, narrow**  
unassembled **56.3**  
assembled **56.3.1**

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



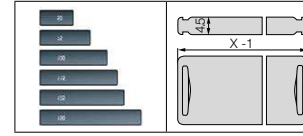
**Separator, asymmetrical**  
unassembled **56.4**  
assembled **56.4.1**

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



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

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



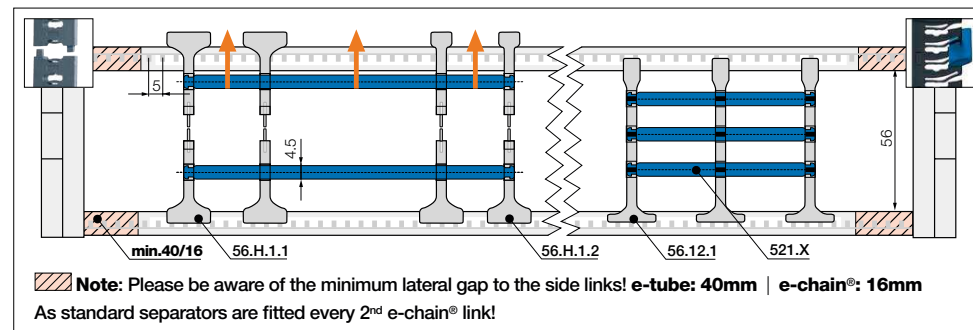
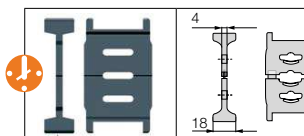
**Shelf, lockable**  
unassembled **520.X**  
assembled **521.X**

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

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

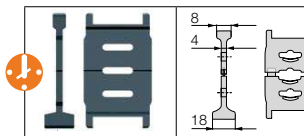


Interior separation | To allow faster filling

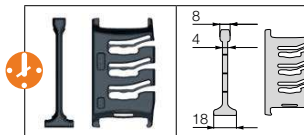



**Split separator, wide base/top**  
unassembled **56.H.1**  
assembled **56.H.1.1**

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



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



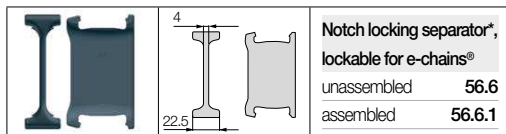
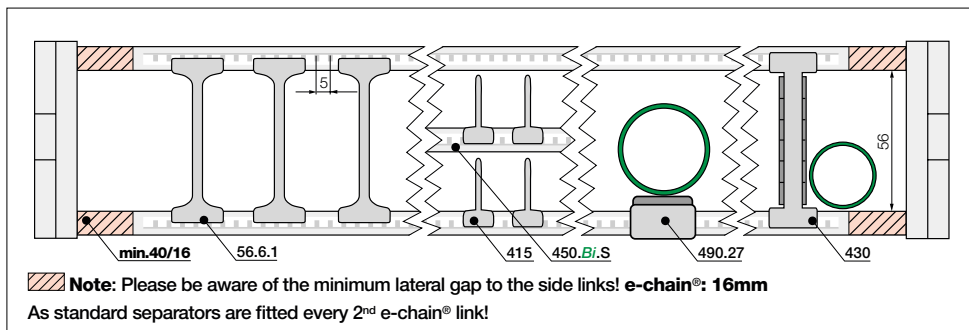
**Lean separator<sup>1)</sup>**  
unassembled **56.12**  
assembled **56.12.1**

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

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

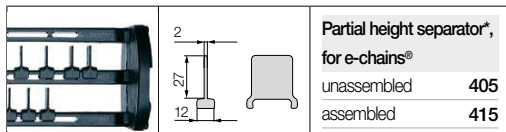
<sup>2)</sup> Lean interior separation vs. Standard separator - measured on a 4m long e-chain® fitted with 12 cables in the igus® readychain® factory





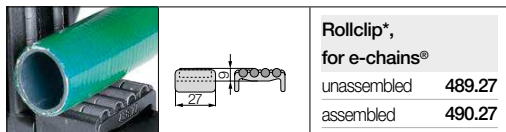
### Notch locking separator\* for increased holding force

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



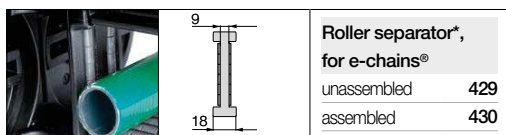
### Partial height separator\*

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



### Rollclip\*

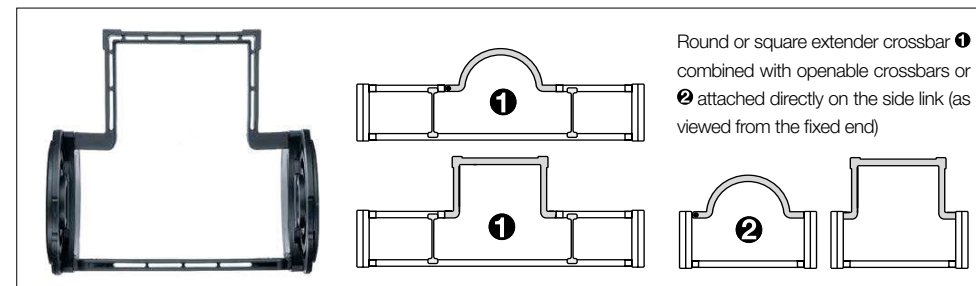
Minimises abrasion of sensitive hoses. Simply clamps onto the opening crossbar. The movable rollers compensate for relative movement between the e-chain® and hose.



### Roller separator\*

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

\*Only suitable for e-chains®



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

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

Part No. extender crossbar with fixed width, as individual parts	Hose Ø ≤ [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: 14040.10/15RHD<sup>E</sup>115/10.R.0

To receive extender crossbar RHD115 pre-fitted along the inner radius of the chain®, please add index Z: 14040.10/15RHD<sup>Z</sup>115/10.R.0

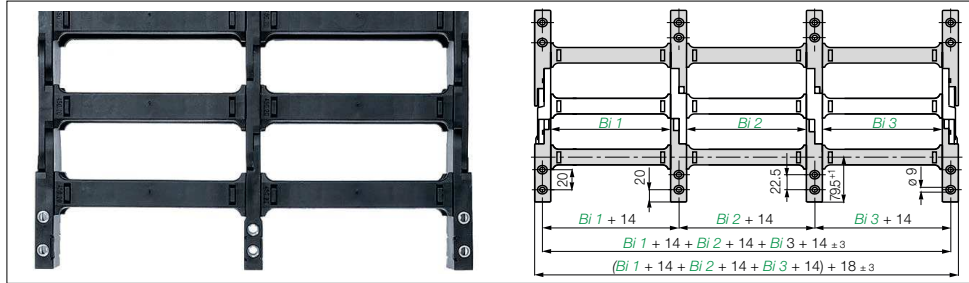
#### Order example: 2 fitted to side link

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: 14040.17RD<sup>Z</sup>115.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. <i>Bi1/Bi2/Bi3.R.0</i>	R18840. <i>Bi1/Bi2/Bi3.R.0</i>	422. <i>R.</i>

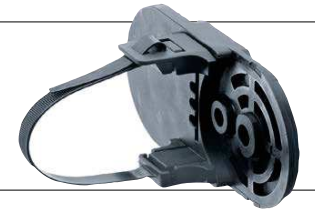
Complete Part No. with the width index *Bi1/Bi2/Bi3/etc.* and the radius (*R*). Example: 14040.10/20/10.200.0



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

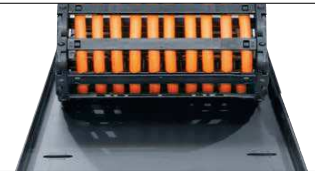
E4 snapclip - clip-on tiewrap

- 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.co.uk/14040](http://www.igus.co.uk/14040)



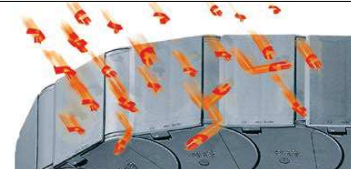
Steel support tray for support of the lower run

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



Hot swarf up to +850°C for e-tubes

- Lids and shelves can repel swarf up to +850°C. Special production option with the igus® material igumid HT
  - No hot swarf melting or embedding into the chain
- More information ► [www.igus.co.uk/HT](http://www.igus.co.uk/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.co.uk/E4savetime](http://www.igus.co.uk/E4savetime)



Roller crossbars - increase the service life of cables and hoses

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

