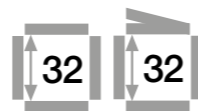


E4.1 | Series E4.32·H4.32·R4.32 | Product range

Strong due to undercut design, medium inner height



e-chains® | Series E4.32 | Crossbars every link (crossbars removable along the inner and outer radius)
e-chains® | Series H4.32 | Crossbars every 2nd link (crossbars removable along the inner and outer radius)
e-tubes | Series R4.32 | Fully enclosed (lids openable along the outer radius, from one side)

Part No.	Bi	Ba	E4.32	H4.32	R4.32	Part No.	Bi	Ba	E4.32	H4.32	R4.32
e-chains® / e-tubes	[mm]	[mm]	[kg/m]	[kg/m]	[kg/m]	e-chains® / e-tubes	[mm]	[mm]	[kg/m]	[kg/m]	[kg/m]
E4.▲ H4. R4.1) 32.05. R.0	50	73	≈ 1.68	≈ 1.62	≈ 1.83	E4. H4. - 32.212. R.0	212	236	≈ 2.68	≈ 2.12	-
E4.▲ H4. - 32.06. R.0	68	91	≈ 1.81	≈ 1.68	-	E4. H4. - 32.23. R.0	225	248	≈ 2.78	≈ 2.17	-
E4.▲ H4. R4. 32.07. R.0	75	98	≈ 1.85	≈ 1.70	≈ 2.11	E4. H4. - 32.237. R.0	237	261	≈ 2.81	≈ 2.18	-
E4.▲ H4. - 32.087. R.0	87	110	≈ 1.92	≈ 1.73	-	E4. H4. R4. 32.25. R.0	250	273	≈ 2.95	≈ 2.25	≈ 4.15
E4. H4. - 32.097. R.0	97	120	≈ 1.98	≈ 1.76	-	E4. H4. - 32.262. R.0	262	286	≈ 3.03	≈ 2.29	-
E4.▲ H4. R4. 32.10. R.0	100	123	≈ 2.00	≈ 1.78	≈ 2.33	E4. H4. - 32.28. R.0	275	298	≈ 3.10	≈ 2.33	-
E4. H4. R4. 32.11. R.0	108	131	≈ 2.06	≈ 1.80	≈ 2.39	E4. H4. - 32.29. R.0	287	311	≈ 3.14	≈ 2.34	-
E4. H4. - 32.112. R.0	112	136	≈ 2.07	≈ 1.81	-	E4. H4. R4. 32.30. R.0	300	323	≈ 3.27	≈ 2.41	≈ 4.69
E4. H4. R4. 32.12. R.0	125	148	≈ 2.18	≈ 1.87	≈ 2.57	E4. H4. - 32.312. R.0	312	336	≈ 3.29	≈ 2.42	-
E4. H4. - 32.137. R.0	137	161	≈ 2.24	≈ 1.89	-	E4. H4. - 32.325. R.0	325	348	≈ 3.39	≈ 2.47	-
E4.▲ H4. R4. 32.15. R.0	150	173	≈ 2.33	≈ 1.94	≈ 2.84	E4. H4. - 32.337. R.0	337	361	≈ 3.45	≈ 2.50	-
E4. H4. - 32.162. R.0	162	186	≈ 2.36	≈ 1.95	-	E4. H4. - 32.350. R.0	350	373	≈ 3.68	≈ 2.61	-
E4. H4. R4. 32.17. R.0	168	191	≈ 2.44	≈ 1.99	≈ 3.00	E4. H4. - 32.362. R.0	362	386	≈ 3.78	≈ 2.66	-
E4.▲ H4. - 32.18. R.0	175	198	≈ 2.46	≈ 2.00	-	E4. H4. - 32.375. R.0	375	398	≈ 3.85	≈ 2.70	-
E4. H4. - 32.187. R.0	187	211	≈ 2.51	≈ 2.03	-	E4. H4. - 32.387. R.0	387	411	≈ 3.92	≈ 2.73	-
E4.▲ H4. R4. 32.20. R.0	200	223	≈ 2.63	≈ 2.09	≈ 3.35	E4. H4. - 32.400. R.0	400	423	≈ 3.98	≈ 2.77	-

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

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

Available bend radii

R [mm] | 063* | 075* | 100* | 125 | 150 | 175 | 200 | 220 | 250 | 300 |

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

E4.32.30.300.0 = crossbars every link / H4.32.30.300.0 = crossbars every 2nd link / R4.32.30.300.0 = fully enclosed

ESD - many sizes from stock

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

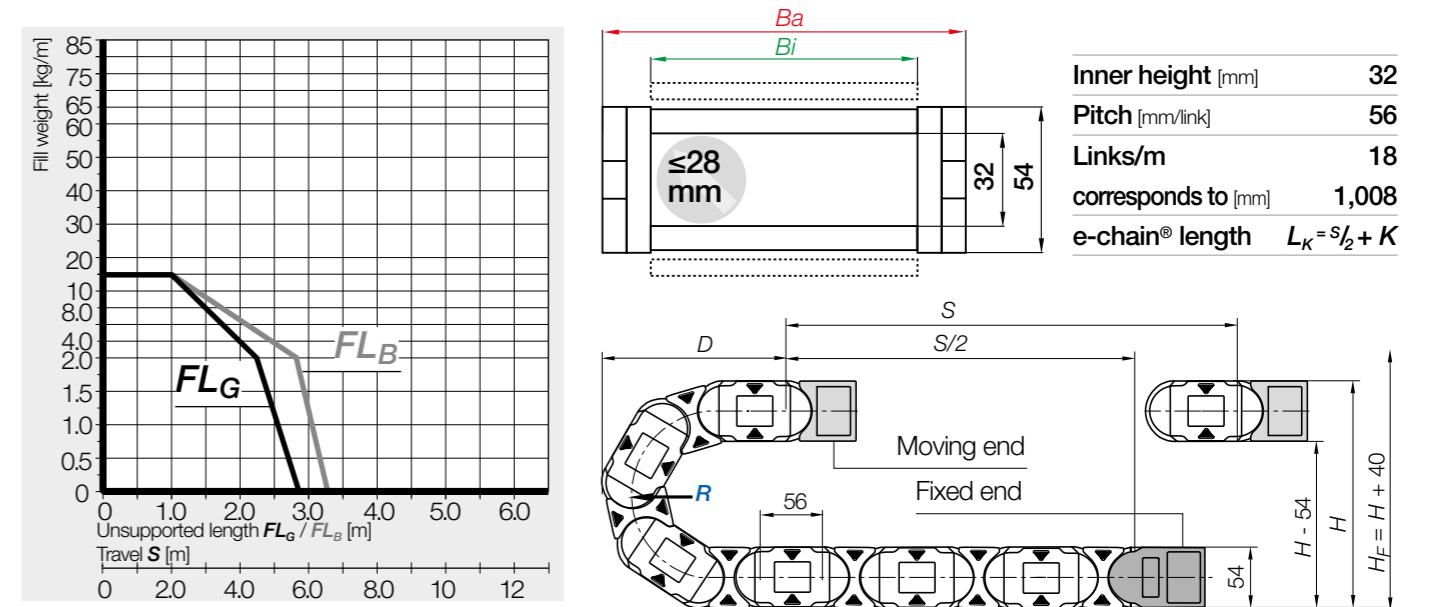
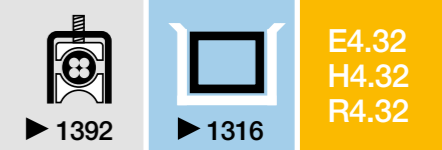
More information and the complete product range

▶ From page 142 or at ▶ www.igus.eu/esd



E4.1 | E4.32·H4.32·R4.32 | Installation dimensions

Unsupported applications | Short travels

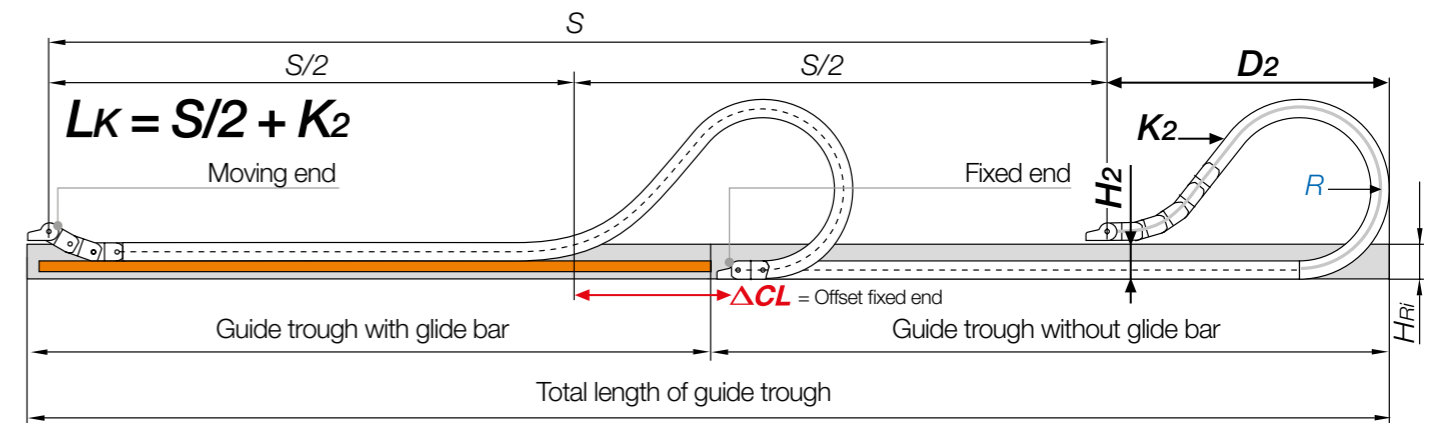


R	063*	075*	100*	125	150	175	200	220	250	300
H ⁺²⁰	180	204	254	304	354	404	454	494	554	654
D	174	186	211	236	261	286	311	331	361	411
K	310	350	430	505	585	665	745	805	900	1,055

The required clearance height: $H_f = H + 40\text{mm}$ (with 2.0kg/m fill weight)

*Radius not available for e-tubes

Gliding applications | For travel lengths from 10m to max. 200m



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

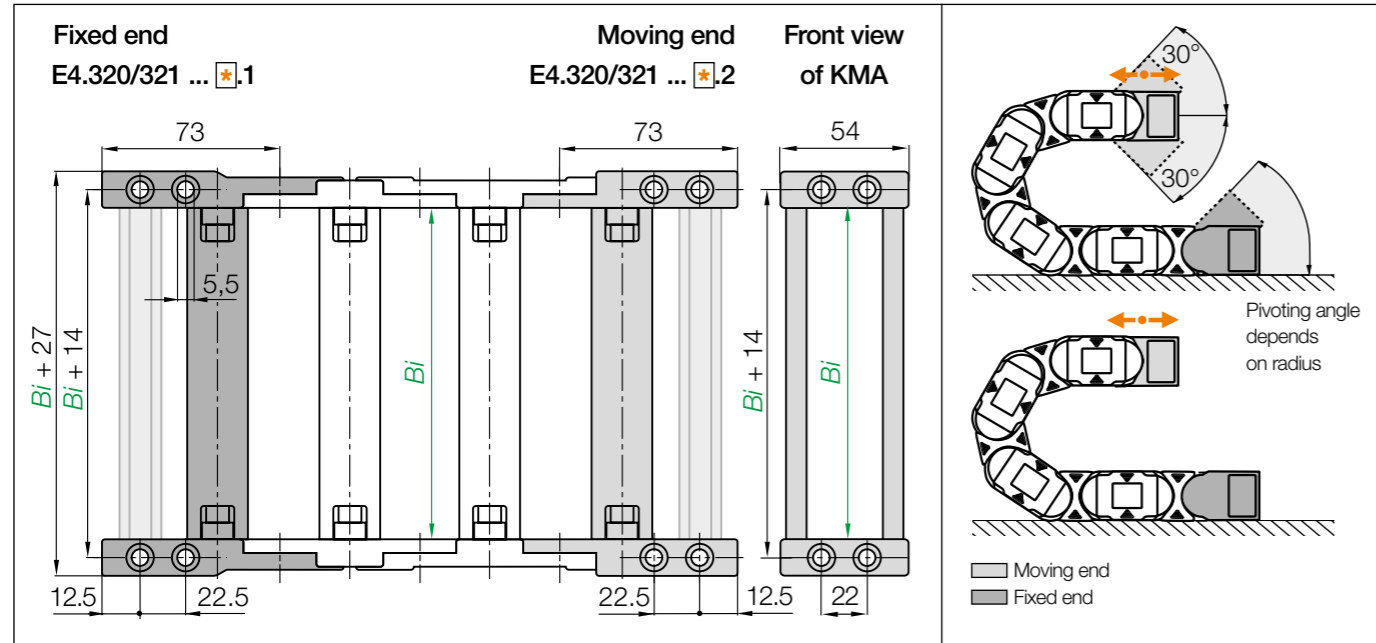
In case of travels between 7 and 10m we recommend an e-chain® with a longer unsupported length.

R	063*	075*	100*	125	150	175	200	220	250	300
H ₂	126	150	166	166	166	166	166	166	166	166
D ₂ ⁺²⁵	146	158	370	470	500	655	770	900	930	1,100
K ₂	310	350	616	784	896	1,120	1,288	1,456	1,568	1,904
ΔCL	-	-	160	210	240	370	460	540	570	690

*Radius not available for e-tubes

E4.1 | e-chains® E4.32-H4.32 | Accessories

KMA mounting brackets | Attachment from any side | Pivoting | Locking



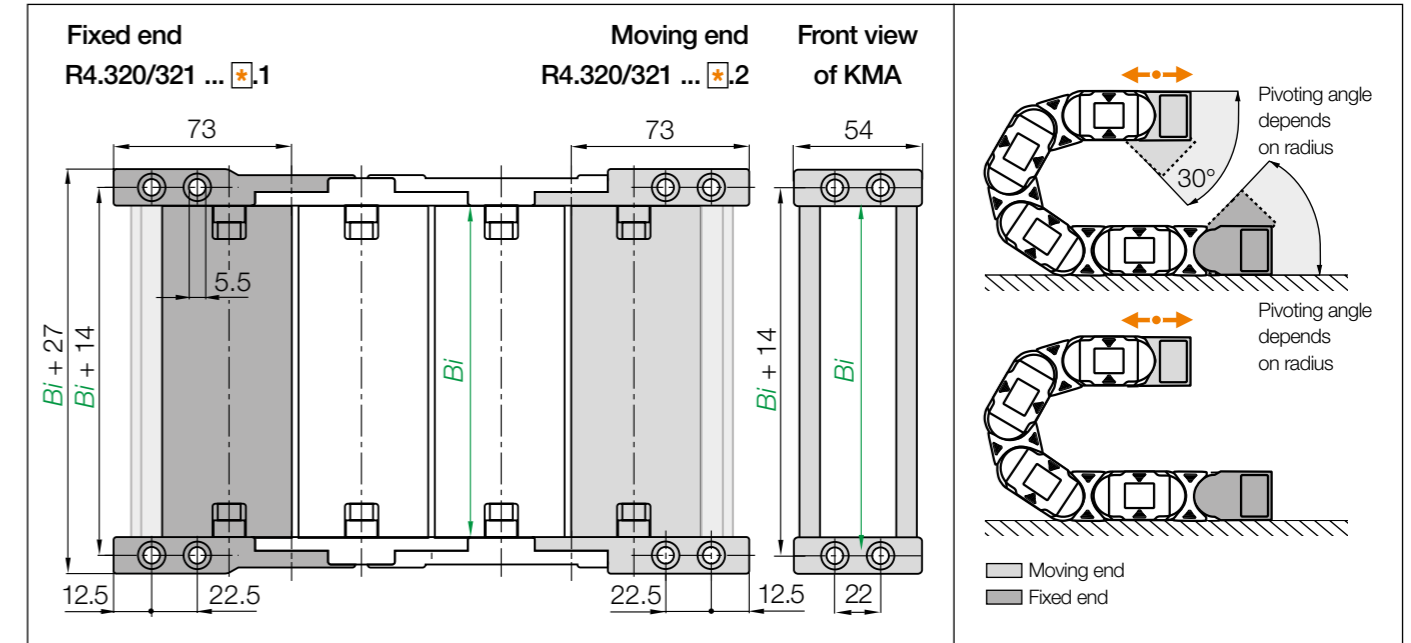
KMA pivoting | Recommended for unsupported and gliding applications
KMA locking | Recommended for vertical hanging and standing applications

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.	E4.320.05	E4.321.05	50	212.	E4.320.212	E4.321.212	212
06.	E4.320.06	E4.321.06	68	23.	E4.320.23	E4.321.23	225
07.	E4.320.07	E4.321.07	75	237.	E4.320.237	E4.321.237	237
087.	E4.320.087	E4.321.087	87	25.	E4.320.25	E4.321.25	250
09.	E4.320.097	E4.321.097	97	262.	E4.320.262	E4.321.262	262
10.	E4.320.10	E4.321.10	100	28.	E4.320.28	E4.321.28	275
11.	E4.320.11	E4.321.11	108	29.	E4.320.29	E4.321.29	287
112.	E4.320.112	E4.321.112	112	30.	E4.320.30	E4.321.30	300
12.	E4.320.12	E4.321.12	125	312.	E4.320.312	E4.321.312	312
137.	E4.320.137	E4.321.137	137	325.	E4.320.325	E4.321.325	325
15.	E4.320.15	E4.321.15	150	337.	E4.320.337	E4.321.337	337
162.	E4.320.162	E4.321.162	162	350.	E4.320.350	E4.321.350	350
17.	E4.320.17	E4.321.17	168	362.	E4.320.362	E4.321.362	362
18.	E4.320.18	E4.321.18	175	375.	E4.320.375	E4.321.375	375
187.	E4.320.187	E4.321.187	187	387.	E4.320.387	E4.321.387	387
20.	E4.320.20	E4.321.20	200	400.	E4.320.400	E4.321.400	400

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

E4.1 | e-tubes R4.32 | Accessories

KMA mounting brackets | Attachment from any side | Pivoting | Locking

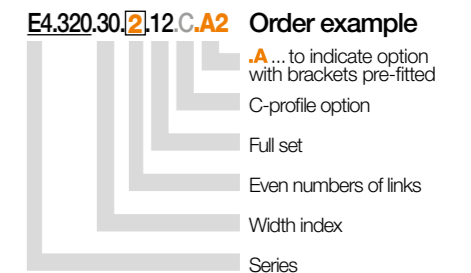
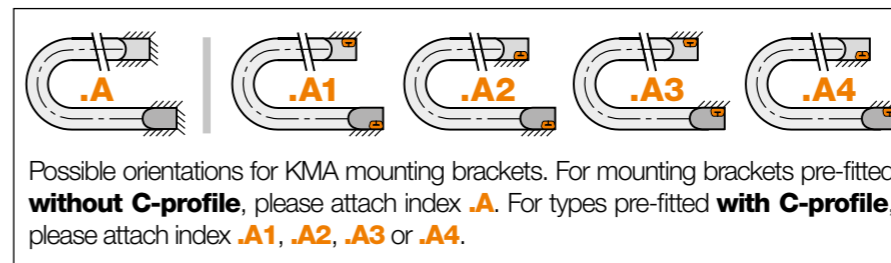
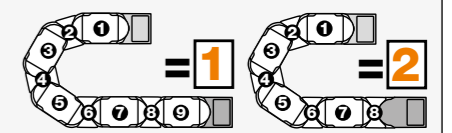


KMA pivoting | Recommended for unsupported and gliding applications
KMA locking | Recommended for vertical hanging and standing applications

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.	R4.320.05	R4.321.05	50	15.	R4.320.15	R4.321.15	150
07.	R4.320.07	R4.321.07	75	17.	R4.320.17	R4.321.17	168
10.	R4.320.10	R4.321.10	100	20.	R4.320.20	R4.321.20	200
11.	R4.320.11	R4.321.11	108	25.	R4.320.25	R4.321.25	250
12.	R4.320.12	R4.321.12	125	30.	R4.320.30	R4.321.30	300

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

Note: The e-chains® may end with either an inner or an outer side link. An outer side link should always be the first e-chain® link at the moving end. Please specify the index 1 (for odd) or 2 (for even) depending on an even or odd number of links required.

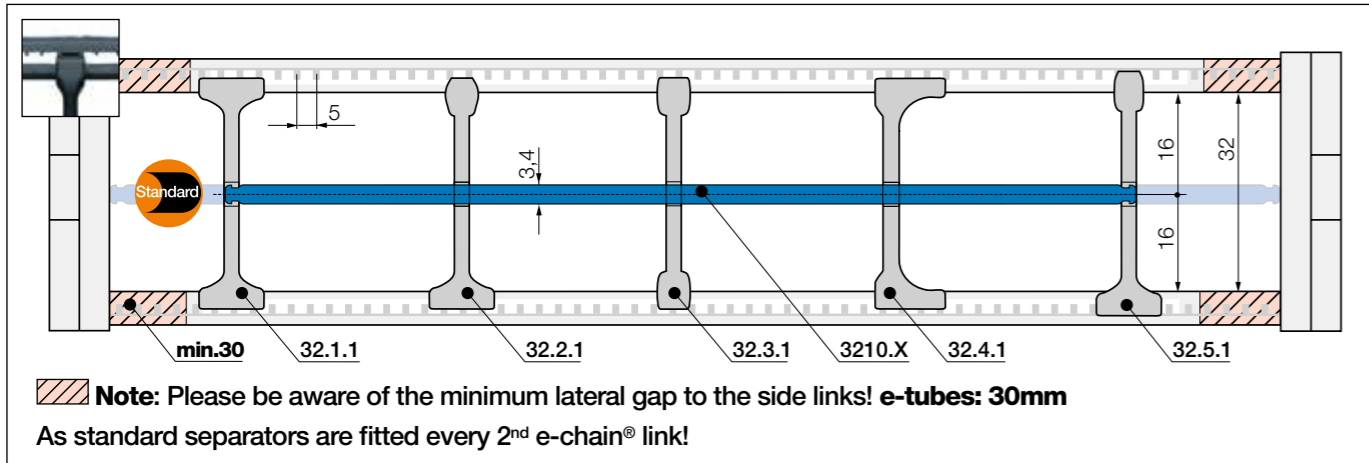


Strain relief e.g. clamps, tie-wrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1392

E4.1 | Series E4.32·H4.32·R4.32 | Accessories

Interior separation | Increase cable service life

Previous generation of interior separation with other options ► www.igus.eu/E4.32



Standard separator, wide base

unassembled	32.1
assembled	32.1.1

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

Separator, narrow top

unassembled	32.2
assembled	32.2.1

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

Separator, narrow

unassembled	32.3
assembled	32.3.1

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

Separator, asymmetrical

unassembled	32.4
assembled	32.4.1

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

Notch separator for notched crossbar

unassembled	32.5
assembled	32.5.1

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

Shelf, lockable

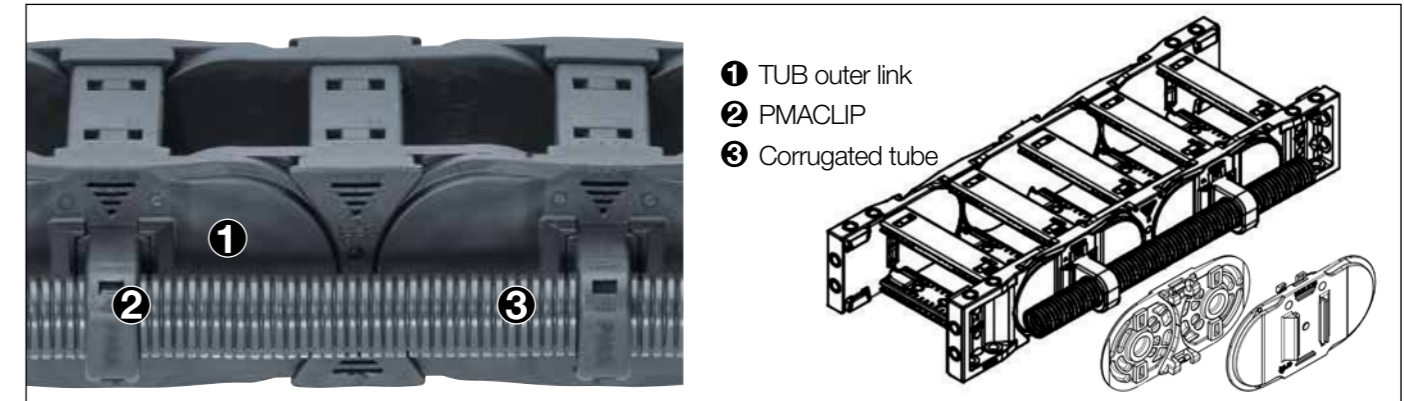
unassembled	3200.X
assembled	3210.X

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

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

E4.1 | Series E4.32·H4.32·R4.32 | Further accessories

TUB



TUB | Safe guidance for corrugated tubes parallel to the e-chain®

- Additional, simple guidance for corrugated tubes on the outside of the e-chain®
- PMACLIP support to be easily clipped on corrugated tubes with nominal widths 07, 10, 12, 17mm
- Easy access to the corrugated tubes, fast replacement of the hoses
- Reduce assembly time and cost - easy to assemble, without any additional screws or tools
- The part number includes the e-chain® with TUB side sections; the PMACLIP support and the hose are ordered separately

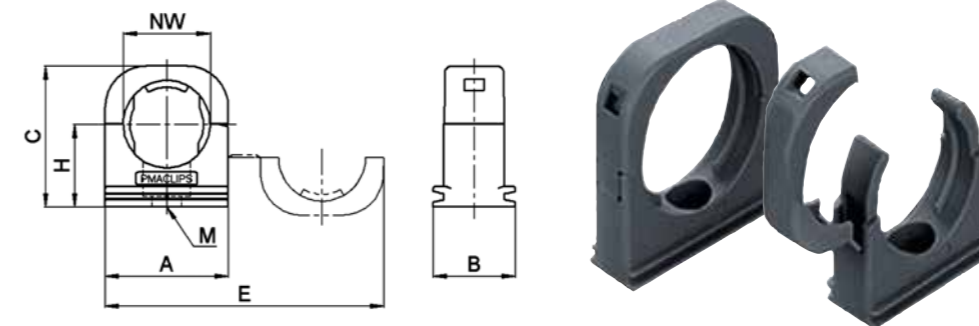
Part No. TUB Outer link right*	Part No. TUB Outer link left*	Part No. TUB Outer link at both ends*	For corrugated tube nominal diameter Ø [mm]
E4.32.XXXTUBR.R.0	E4.32.XXXTUBL.R.0	E4.32.XXXTUB.R.0	07 / 10 / 12 / 17

*As viewed from the fixed end

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

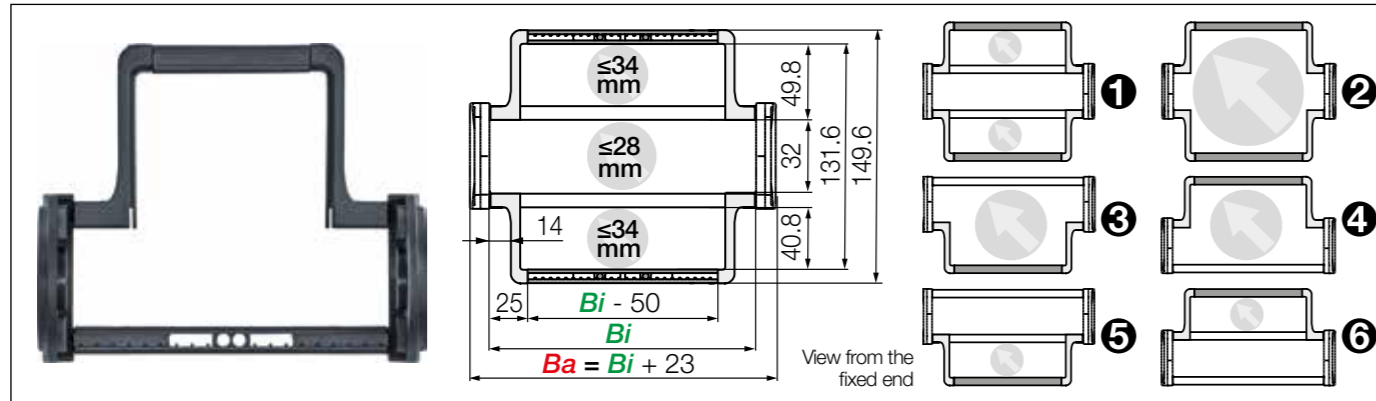
E4.32.10TUBR.150.0 = with TUB outer sections every 2nd right hand link

Product range | PMACLIP | Support, one-piece, with safety clip



PMACLIP support - one-piece construction with safety clip, suitable for corrugated tubes

Part No.	NW Ø [mm]	A mm	B mm	C mm	H mm	E mm	M mm
I-BFH-07-0	07	17.0	20.0	21.5	13.5	40.5	M4
I-BFH-10-0	10	20.5	20.0	24.5	15.5	47.5	M5
I-BFH-12-0	12	24.0	20.0	27.0	16.5	54.5	M5
I-BFH-17-0	17	30.0	20.0	34.0	20.0	68.0	M6



Extender crossbars with flexible width | Safe guiding for large hoses

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

Versions	Hose	Part No.	Part No.
e-chain® with extender crossbar	Ø ≤ [mm]	crossbars every link	crossbars every 2 nd link
❶ Extender crossbar and standard crossbar alternating along the inner and outer radius ¹⁾	34	E4.32.XXXHB50.R.0	-
❷ Extender crossbar on both sides along the inner and outer radius ²⁾	120	E4.32.XXXB50.R.0	H4.32.XXXB50.R.0 ²⁾
❸ Extender crossbar along the outer radius ³⁾	72	E4.32.XXXBE50.R.0	H4.32.XXXBE50.R.0 ²⁾
❹ Extender crossbar along the inner radius ²⁾	72	E4.32.XXXBZ50.R.0	H4.32.XXXBZ50.R.0 ²⁾
❺ Extender crossbar and standard crossbar alternating along the outer radius ³⁾	34	E4.32.XXXHBE50.R.0	-
❻ Extender crossbar and standard crossbar alternating along inner radius ¹⁾	34	E4.32.XXXHBZ50.R.0	-

1) Minimum bend radius: R 125 2) Minimum bend radius: R 150 3) Minimum bend radius: R 063

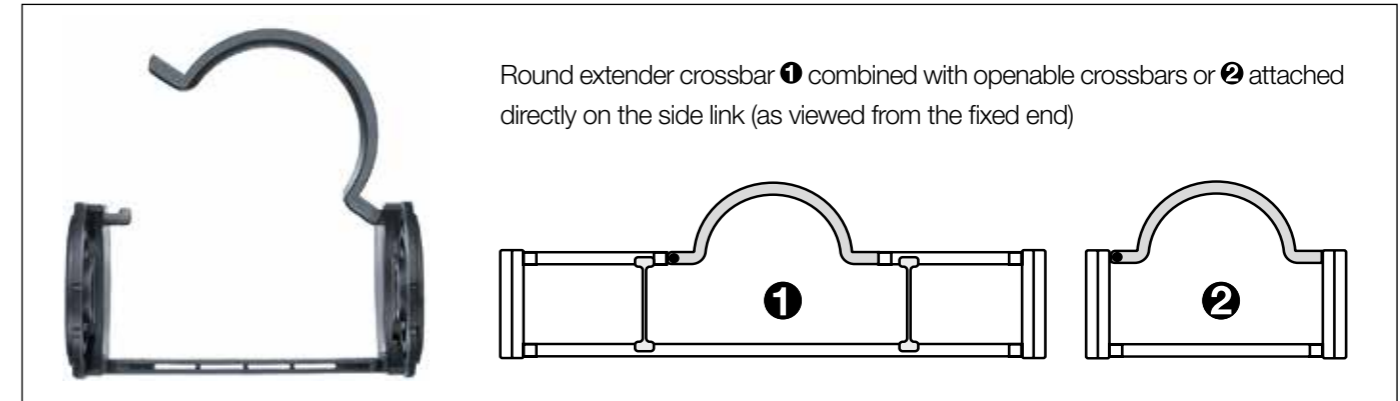
Bi [mm] Available inner widths

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

Part number with the width index XXX of the Bi and the radius (R) supplement e.g. E4.32.10B50.150.0 = Bi 100 / e-chain® with crossbars every link / extender crossbars from both sides along the inner and outer radius / bend radius (R) 150



The E4.1 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 105mm
- Option ❶ extender crossbars with fixed width to combine with openable crossbars
- Option ❷ extender crossbars with fixed width attached directly on the side link
- Optionally openable along the inner "Z" or the outer radius "E"
- Gliding with crossbars assembled along the outer radius and a special guide trough

Part No. extender crossbar with fixed width, as individual parts	Hose	Extender crossbar shape	❷ Fitted to side link	❶ Combine with openable crossbars
	Ø ≤ [mm]			
385.15RHD115	105	O round	No	Yes
385.18RD115	105	O round	Yes	No

Order example: ❶ combined with openable crossbars

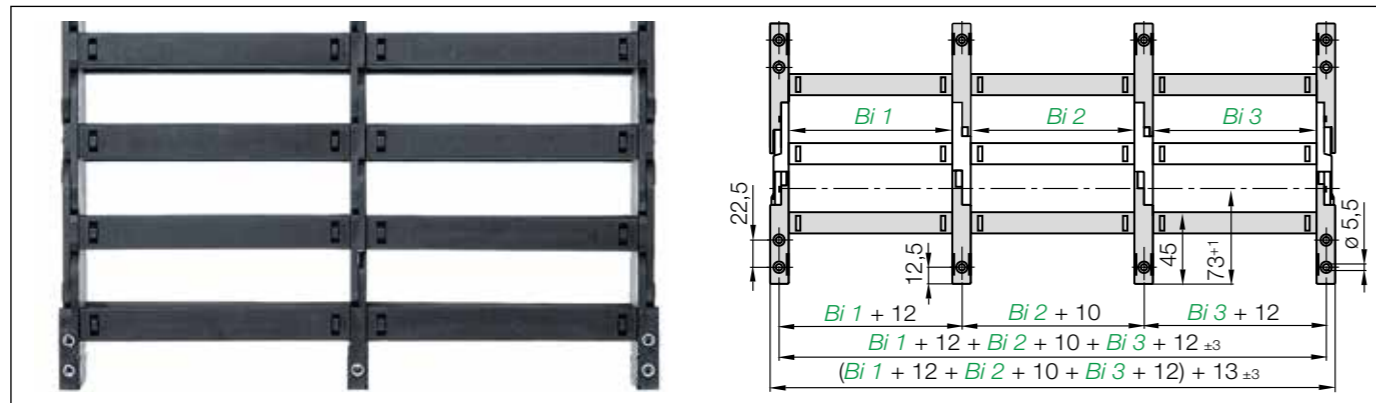
To receive extender crossbar RHD115 pre-fitted along the outer radius of the-chain®, please add index E: E4.32.10/15RHDE115/10.R.0

To receive extender crossbar RHD115 pre-fitted along the inner radius of the-chain®, please add index Z: E4.32.10/15RHDZ115/10.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: E4.32.18RDE115.R.0

To receive extender crossbar RD115 pre-fitted along the inner radius of the-chain®, please add index Z: E4.32.18RDZ115.R.0

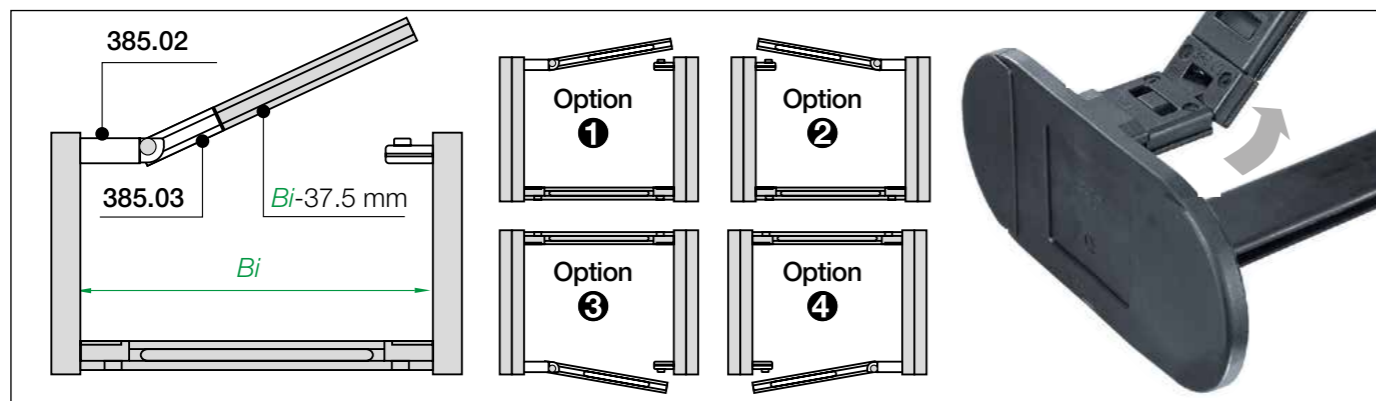


Extension links | For extremely wide e-chains® up to 3.0m

- 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
E4.32.Bi1/Bi2/Bi3.R.0	R4.32.Bi1/Bi2/Bi3.R.0	284.R.

Complete Part No. with the width index *Bi1/Bi2/Bi3/etc.* and the radius (*R*). Example: E4.32.10/20/10.200.0



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): $Bi-37.5$ 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
E4.32.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: E4.32.137.1.200.0

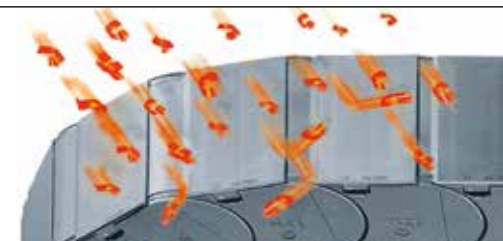
Aluminium support tray

- Corrosion-resistant and seawater-resistant aluminium rails with adjustable width
 - Noise-reducing glide strip integrated as standard
 - Easy installation and connection of the e-tube
 - Open design - dirt and debris fall through
- More information ► From page 1362



Hot swarf up to +850°C for e-tubes

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



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



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



Option: E4Q - the next generation of easy-to-assemble igus® e-chains®

The latest E4Q e-chains® generation combines proven design features of the 12-year old, robust E4.1 e-chains® standard with new bionic design elements and a novel opening mechanism. This gives the E4Q an even longer service life and significantly improved ease of installation.

- Opening and closing completely without tools
 - Greater strength and longer unsupported lengths
 - Lighter e-chain® links due to material saving
 - Optional noise dampening - new system for noise reduction
- More information ► From page 580

