

NEW in this catalog

All-sides attachment

Noise dampening pads, optional
= -10dB(A)

Chip protection

NC without pretension

Lateral glide surfaces for side-mounted operation

25% faster assembly with QuickLock system

Very high capacity due to the undercut design

Notch crossbar with backside scaling

+ "Light Design", large, new inner height

When to use Series 14550·14650·19050:

- If weight and price reduction as well as a compromise in strength is needed
- If an e-chain®/e-tube with an inner height of 70 mm is required
- If inner widths up to 600 mm are required
- For unsupported lengths up to 4,2 m and fill weights up to 48 kg/m
- Also suitable for side-mounted, vertical standing or hanging applications



When to use a different igus® Series

- If an extremely **low-noise** and low-vibration e-chain® is required (≤ 46 dB(A))
 - ▶ **Series E6.80, page 8.88**
- If larger unsupported lengths are required in side-mounted applications
 - ▶ **Series 15050, page 7.216**
 - ▶ **Series E4.80, page 7.96**
- If increased unsupported lengths and longer travels are required
 - ▶ **Series 15050, page 7.216**
 - ▶ **Series E4.80, page 7.96**



The new igus® E4 e-chain® opener reduces assembly time ▶ page 7.161



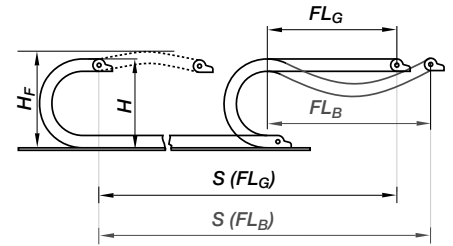
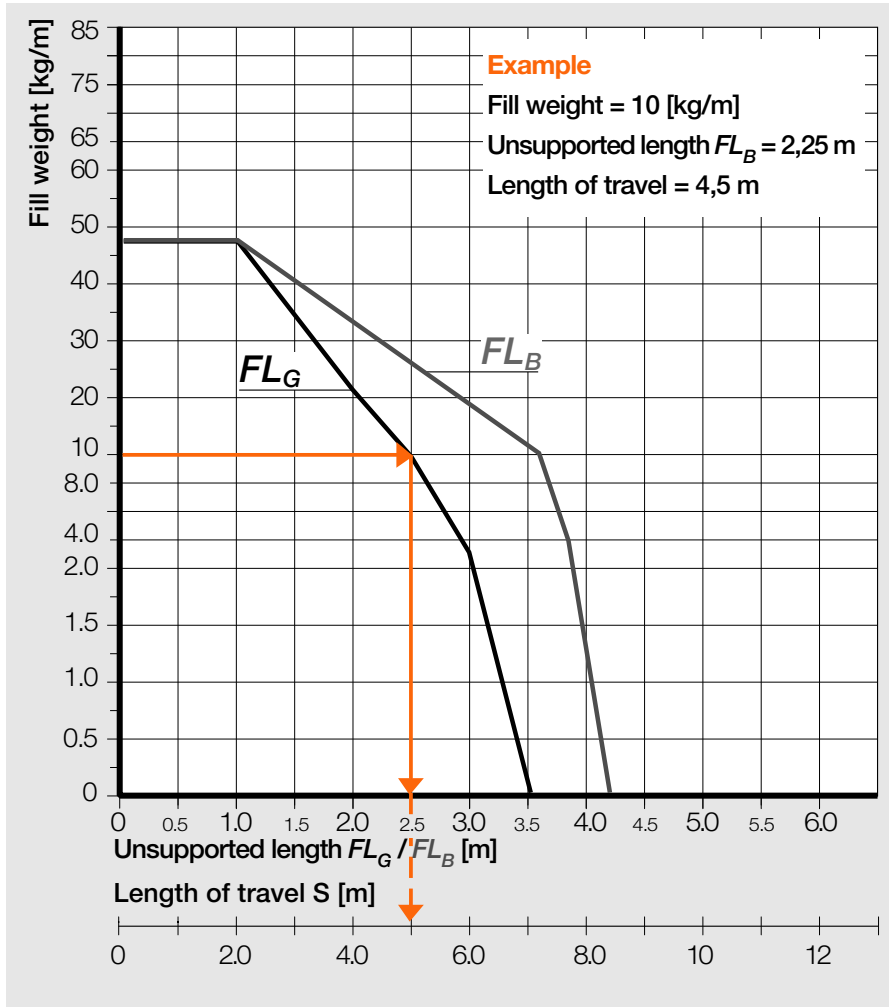
Available from stock. Delivery in 24h or today!*

*Delivery time means time until shipping of goods



3D-CAD files, configurators, PDF ▶ www.igus.de/en/14550

E4/light | 14550·14650·19050 | Dimensions | Unsupported

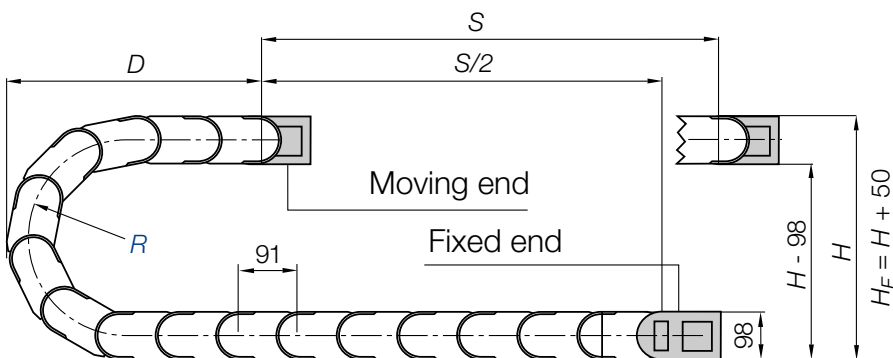


Standard Unsupported applications

Unsupported e-chains® feature positive camber over short travels. This must be accounted for when specifying the clearance height H_F . Please consult igus® if space is particularly restricted. More information ► **Design, page 1.8**

Gliding applications

Long travels ► upon request



Technical Data

Speed, material, temperature and flammability class ► **page 7.162**

Pitch = 91 mm/link
Links/m = 11 (1001 mm)
Chain length = $\frac{S}{2} + K$

R	150	175	200	250	300	350	400	450	500	600
H	400	450	500	600	700	800	900	1000	1100	1300
D	290	315	340	390	440	490	540	590	640	740
K	655	735	815	970	1125	1285	1440	1600	1755	2070

The required clearance height: $H_F = H + 50$ mm (with 2,5 kg/m fill weight)



FL_G = with straight upper run
 FL_B = with permitted sag

S = Length of travel
 R = Bending radius

H = Nominal clearance height
 H_F = Required clearance height

D = Overlength e-chain®, radius in final position
 $K = \pi \cdot R + \text{"safety"}$



e-chains® | Series **14550** crossbars every link | Series **14650** crossbars every 2nd link

Part No.		<i>Bi</i>	<i>Ba</i>	14550	14650		
crossbars every link	crossbars every 2 nd link	[mm]	[mm]	[kg/m]	[kg/m]		
14550.	14650.	05.	R.0	50	77	≈ 3,28	≈ 3,27
14550.	14650.	06.	R.0	65	92	≈ 3,37	≈ 3,31
14550.	14650.	07.	R.0	75	102	≈ 3,44	≈ 3,35
14550.	14650.	08.	R.0	87	114	≈ 3,52	≈ 3,38
14550.	14650.	10.	R.0	100	127	≈ 3,61	≈ 3,43
14550.	14650.	11.	R.0	112	139	≈ 3,73	≈ 3,49
14550.	14650.	12.	R.0	125	152	≈ 3,81	≈ 3,53
14550.	14650.	13.	R.0	137	164	≈ 3,94	≈ 3,60
14550.	14650.	15.	R.0	150	177	≈ 3,98	≈ 3,62
14550.	14650.	16.	R.0	162	189	≈ 4,09	≈ 3,67
14550.	14650.	17.	R.0	175	202	≈ 4,23	≈ 3,74
14550.	14650.	18.	R.0	187	214	≈ 4,34	≈ 3,80
14550.	14650.	20.	R.0	200	227	≈ 4,39	≈ 3,82
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.	25.	R.0	250	277	≈ 4,76	≈ 4,00
14550.	14650.	26.	R.0	262	289	≈ 4,85	≈ 4,05
14550.	14650.	27.	R.0	275	302	≈ 4,95	≈ 4,10
14550.	14650.	28.	R.0	287	314	≈ 5,01	≈ 4,13
14550.	14650.	30.	R.0	300	327	≈ 5,16	≈ 4,21

Part No.		<i>Bi</i>	<i>Ba</i>	14550	14650		
crossbars every link	crossbars every 2 nd link	[mm]	[mm]	[kg/m]	[kg/m]		
14550.	14650.	31.	R.0	312	339	≈ 5,20	≈ 4,23
14550.	14650.	32.	R.0	325	352	≈ 5,30	≈ 4,28
14550.	14650.	33.	R.0	337	364	≈ 5,42	≈ 4,34
14550.	14650.	35.	R.0	350	377	≈ 5,62	≈ 4,44
14550.	14650.	36.	R.0	362	389	≈ 5,53	≈ 4,39
14550.	14650.	37.	R.0	375	402	≈ 5,63	≈ 4,44
14550.	14650.	38.	R.0	387	414	≈ 5,74	≈ 4,50
14550.	14650.	40.	R.0	400	427	≈ 6,01	≈ 4,63
14550.	14650.	41.	R.0	412	439	≈ 5,94	≈ 4,60
14550.	14650.	42.	R.0	425	452	≈ 6,23	≈ 4,74
14550.	14650.	43.	R.0	437	464	≈ 6,07	≈ 4,66
14550.	14650.	45.	R.0	450	477	≈ 6,40	≈ 4,83
14550.	14650.	46.	R.0	462	489	≈ 6,35	≈ 4,80
14550.	14650.	47.	R.0	475	502	≈ 6,39	≈ 4,82
14550.	14650.	48.	R.0	487	514	≈ 6,64	≈ 4,95
14550.	14650.	50.	R.0	500	527	≈ 6,74	≈ 5,00
14550.	14650.	51.	R.0	512	539	≈ 6,65	≈ 4,95
14550.	14650.	52.	R.0	525	552	≈ 6,82	≈ 5,04
14550.	14650.	53.	R.0	537	564	≈ 6,92	≈ 5,09
14550.	14650.	55.	R.0	550	577	≈ 7,34	≈ 5,30
14550.	14650.	60.	R.0	600	627	≈ 7,57	≈ 5,41

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

Supplement Part No. with required radius (*R*). Example: 14550.10.300.0

When to use e-chains® with crossbars every link: ● Lateral acceleration > 0,5m/s² ● High fill weights and rigid hydraulic hoses ● Humidity: > 85%, temperature: > 50°C (122° F)

When to use e-chains® with crossbars every 2nd link: ● Suitable for nearly all applications ● Lower price



Part No. of e-chain® links as single parts ► page 7.163



Standard e-chains® incl. accessories from stock. **Delivery in 24h or today.***

*Delivery time means time until shipping of goods

fully enclosed



e-tubes | Series 19050 - fully enclosed

Part No. fully enclosed	<i>Bi</i> [mm]	<i>Ba</i> [mm]	19050 [kg/m]
19050. 07. R.0	75	102	≈ 4,00
19050. 10. R.0	100	127	≈ 4,33
19050. 12. R.0	125	152	≈ 4,70
19050. 15. R.0	150	177	≈ 5,04
19050. 17. R.0	175	202	≈ 5,41
19050. 20. R.0	200	227	≈ 5,64

Part No. fully enclosed	<i>Bi</i> [mm]	<i>Ba</i> [mm]	19050 [kg/m]
19050. 25. R.0	250	277	≈ 6,32
19050. 27. R.0	275	302	≈ 6,65
19050. 30. R.0	300	327	≈ 6,99
19050. 35. R.0	350	377	≈ 7,68
19050. 40. R.0	400	427	≈ 8,36
19050. 46. R.0	462	489	≈ 9,21

Available bending radii *R* [mm] 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600

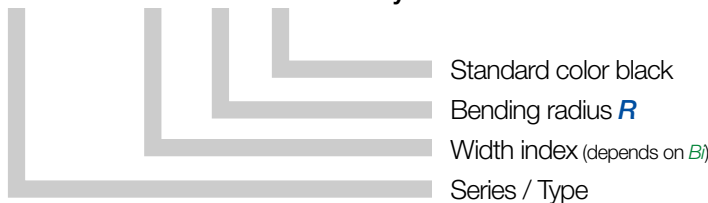
Supplement Part No. with required radius (*R*). Example: 19050.10.300.0

When to use fully enclosed e-tubes: ● Excellent cable protection against dirt ● Lids along the entire inner radius are completely removable. Lids along the entire outer radius are single sided snap-open with a hinge on the other side to keep them attached to the e-chain® or completely removable ● HT-Version optional, protection against hot chips up to 850°C (1562° F)

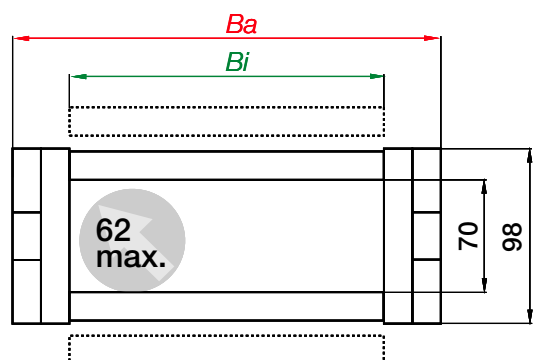


Order key for all types

- 14550. 10. 300. 0 e-chain® (crossbars every link)
- 14650. 10. 300. 0 e-chain® (crossbars every 2nd link)
- 19050. 10. 300. 0 Fully enclosed e-tube



Dimensioning



- 14550.10.300.0 = e-chain® with crossbars every link, inner width *Bi* 100 mm, radius *R* 300 mm, color black
 - 14650.10.300.0 = e-chain® with crossbars every 2nd link, inner width *Bi* 100 mm, radius *R* 300 mm, color black
 - 19050.10.300.0 = Fully enclosed e-tube, inner width *Bi* 100 mm, radius *R* 300 mm, color black
- More order examples, variations and configurations ► page 7.214



Standard e-tubes incl. accessories from stock. Delivery in 24h or today!*
*Delivery time means time until shipping of goods

14550
14650
19050

E4/light | 14550·14650·19050 | Product range | Options



QuickLock crossbars | Quick opening - up to 25% faster assembly

Part No.	QuickLock crossbar for	<i>Bi</i>		
crossbars every link	crossbars every 2 nd link			
	Inner radius	Outer radius		
	Both radii	[mm]		
14550. 14650.	15. QZ.R.0	15. QE.R.0	15. Q.R.0	150
14550. 14650.	16. QZ.R.0	16. QE.R.0	16. Q.R.0	162
14550. 14650.	17. QZ.R.0	17. QE.R.0	17. Q.R.0	175
14550. 14650.	18. QZ.R.0	18. QE.R.0	18. Q.R.0	187
14550. 14650.	20. QZ.R.0	20. QE.R.0	20. Q.R.0	200
14550. 14650.	21 QZ.R.0	21 QE.R.0	21 Q.R.0	212
14550. 14650.	22. QZ.R.0	22. QE.R.0	22. Q.R.0	225
14550. 14650.	23. QZ.R.0	23. QE.R.0	23. Q.R.0	237
14550. 14650.	25. QZ.R.0	25. QE.R.0	25. Q.R.0	250
14550. 14650.	26. QZ.R.0	26. QE.R.0	26. Q.R.0	262
14550. 14650.	27. QZ.R.0	27. QE.R.0	27. Q.R.0	275
14550. 14650.	28. QZ.R.0	28. QE.R.0	28. Q.R.0	287
14550. 14650.	30. QZ.R.0	30. QE.R.0	30. Q.R.0	300
14550. 14650.	31. QZ.R.0	31. QE.R.0	31. Q.R.0	312
14550. 14650.	32. QZ.R.0	32. QE.R.0	32. Q.R.0	325
14550. 14650.	33. QZ.R.0	33. QE.R.0	33. Q.R.0	337
14550. 14650.	35. QZ.R.0	35. QE.R.0	35. Q.R.0	350
14550. 14650.	36. QZ.R.0	36. QE.R.0	36. Q.R.0	362
14550. 14650.	37. QZ.R.0	37. QE.R.0	37. Q.R.0	375
14550. 14650.	38. QZ.R.0	38. QE.R.0	38. Q.R.0	387
14550. 14650.	40. QZ.R.0	40. QE.R.0	40. Q.R.0	400

Part No.	QuickLock crossbar for	<i>Bi</i>		
crossbars every link	crossbars every 2 nd link			
	Inner radius	Outer radius		
	Both radii	[mm]		
14550. 14650.	41. QZ.R.0	41. QE.R.0	41. Q.R.0	412
14550. 14650.	42. QZ.R.0	42. QE.R.0	42. Q.R.0	425
14550. 14650.	43. QZ.R.0	43. QE.R.0	43. Q.R.0	437
14550. 14650.	45. QZ.R.0	45. QE.R.0	45. Q.R.0	450
14550. 14650.	46. QZ.R.0	46. QE.R.0	46. Q.R.0	462
14550. 14650.	47. QZ.R.0	47. QE.R.0	47. Q.R.0	475
14550. 14650.	48. QZ.R.0	48. QE.R.0	48. Q.R.0	487
14550. 14650.	50. QZ.R.0	50. QE.R.0	50. Q.R.0	500
14550. 14650.	51. QZ.R.0	51. QE.R.0	51. Q.R.0	512
14550. 14650.	52. QZ.R.0	52. QE.R.0	52. Q.R.0	525
14550. 14650.	53. QZ.R.0	53. QE.R.0	53. Q.R.0	537
14550. 14650.	55. QZ.R.0	55. QE.R.0	55. Q.R.0	550
14550. 14650.	60. QZ.R.0	60. QE.R.0	60. Q.R.0	600

QuickLock crossbars: inner widths from 150 mm possible!

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

Supplement Part No. with required radius (*R*). Example: 14550.10QZ.300.0



For e-chains® with QuickLock crossbar supplement Part No. with required Index QZ / QE / Q

Part No. 14550.10QZ.300.0 = QuickLock crossbar for inner radius

Part No. 14550.10QE.300.0 = QuickLock crossbar for outer radius

Part No. 14550.10Q .300.0 = QuickLock crossbar for both radii



e-chain® with QuickLock crossbars - Delivery time: 3-5 work days.*

*Delivery time means time until shipping of goods

E4/light | 14550·14650·19050 | Product range | Options



...-10 dB(A)
depends on environmental conditions,
similar to figure

...NC-Version

Noise dampening | ≈ -10 dB(A)

NC-Version | Without pretension

With pads			<i>Bi</i>	With pads			<i>Bi</i>
crossbars: every link	e-tube every 2 nd link fully enclosed		[mm]	crossbars: every link	e-tube every 2 nd link fully enclosed		[mm]
S14550.S14650.	-	05.R.0	50	S14550.S14650.	-	31.R.0	312
S14550.S14650.	-	06.R.0	65	S14550.S14650.	-	32.R.0	325
S14550.S14650.S19050.	07.R.0	75		S14550.S14650.	-	33.R.0	337
S14550.S14650.	-	08.R.0	87	S14550.S14650.S19050.	35.R.0	350	
S14550.S14650.S19050.	10.R.0	100		S14550.S14650.	-	36.R.0	362
S14550.S14650.	-	11.R.0	112	S14550.S14650.	-	37.R.0	375
S14550.S14650.S19050.	12.R.0	125		S14550.S14650.	-	38.R.0	387
S14550.S14650.	-	13.R.0	137	S14550.S14650.S19050.	40.R.0	400	
S14550.S14650.S19050.	15.R.0	150		S14550.S14650.	-	41.R.0	412
S14550.S14650.	-	16.R.0	162	S14550.S14650.	-	42.R.0	425
S14550.S14650.S19050.	17.R.0	175		S14550.S14650.	-	43.R.0	437
S14550.S14650.	-	18.R.0	187	S14550.S14650.	-	45.R.0	450
S14550.S14650.S19050.	20.R.0	200		S14550.S14650.S19050.	46.R.0	462	
S14550.S14650.	-	21.R.0	212	S14550.S14650.	-	47.R.0	475
S14550.S14650.	-	22.R.0	225	S14550.S14650.	-	48.R.0	487
S14550.S14650.	-	23.R.0	237	S14550.S14650.	-	50.R.0	500
S14550.S14650.S19050.	25.R.0	250		S14550.S14650.	-	51.R.0	512
S14550.S14650.	-	26.R.0	262	S14550.S14650.	-	52.R.0	525
S14550.S14650.S19050.	27.R.0	275		S14550.S14650.	-	53.R.0	537
S14550.S14650.	-	28.R.0	287	S14550.S14650.	-	55.R.0	550
S14550.S14650.S19050.	30.R.0	300				60.R.0	600

NC-Version			<i>Bi</i>	NC-Version			<i>Bi</i>
crossbars: every link	e-tube every 2 nd link fully enclosed		[mm]	crossbars: every link	e-tube every 2 nd link fully enclosed		[mm]
14550.14650.	-	05.R.0.NC	50	14550.14650.	-	31.R.0.NC	312
14550.14650.	-	06.R.0.NC	65	14550.14650.	-	32.R.0.NC	325
14550.14650.19050.	07.R.0.NC	75		14550.14650.	-	33.R.0.NC	337
14550.14650.	-	08.R.0.NC	87	14550.14650.19050.	35.R.0.NC	350	
14550.14650.19050.	10.R.0.NC	100		14550.14650.	-	36.R.0.NC	362
14550.14650.	-	11.R.0.NC	112	14550.14650.	-	37.R.0.NC	375
14550.14650.19050.	12.R.0.NC	125		14550.14650.	-	38.R.0.NC	387
14550.14650.	-	13.R.0.NC	137	14550.14650.19050.	40.R.0.NC	400	
14550.14650.19050.	15.R.0.NC	150		14550.14650.	-	41.R.0.NC	412
14550.14650.	-	16.R.0.NC	162	14550.14650.	-	42.R.0.NC	425
14550.14650.19050.	17.R.0.NC	175		14550.14650.	-	43.R.0.NC	437
14550.14650.	-	18.R.0.NC	187	14550.14650.	-	45.R.0.NC	450
14550.14650.19050.	20.R.0.NC	200		14550.14650.19050.	46.R.0.NC	462	
14550.14650.	-	21.R.0.NC	212	14550.14650.	-	47.R.0.NC	475
14550.14650.	-	22.R.0.NC	225	14550.14650.	-	48.R.0.NC	487
14550.14650.	-	23.R.0.NC	237	14550.14650.	-	50.R.0.NC	500
14550.14650.19050.	25.R.0.NC	250		14550.14650.	-	51.R.0.NC	512
14550.14650.	-	26.R.0.NC	262	14550.14650.	-	52.R.0.NC	525
14550.14650.19050.	27.R.0.NC	275		14550.14650.	-	53.R.0.NC	537
14550.14650.	-	28.R.0.NC	287	14550.14650.	-	55.R.0.NC	550
14550.14650.19050.	30.R.0.NC	300				60.R.0.NC	600

Available bending radii *R* [mm] 150* | 175* | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 *not available for e-tubes

Supplement Part No. with required radius (*R*). Example: **S14550.10.300.0** or **14550.10.300.0.NC**



For e-chains® with noise dampening pads supplement Part No. with required index "S"

Example: **Part No. S14550.10.300.0** = e-chain® (crossbars every link) with noise dampening

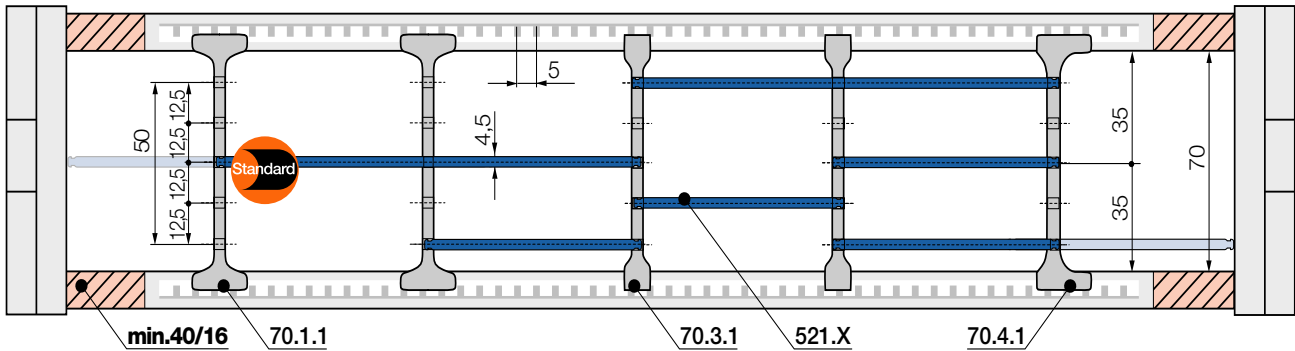
For NC-e-chains® without pretension supplement Part No. with required index "NC"

Example: **Part No. 14550.10.300.0.NC** = e-chain® (crossbars every link) without pretension




Low-noise e-chain® and NC-Version - Delivery time: 3-5 workdays*

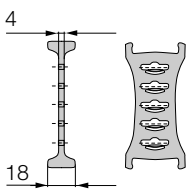
*Delivery time means time until shipping of goods



Note: Please observe a lateral spacing to the side links! **e-tube: 40 mm** | **e-chain®: 16 mm**
In the standard configuration separators are assembled every 2nd e-chain® link!




Standard separator, wide base
unassembled **70.1**
assembled **70.1.1**

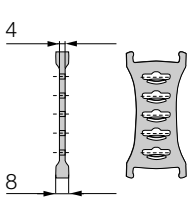


Standard - for all applications

Separator with a wide base for maximum locking strength and safe standing in e-chains® and e-tubes.




Separator, narrow base*
unassembled **70.3**
assembled **70.3.1**



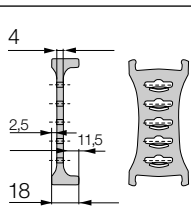
For many thin cables

Separator with a narrow base for a large number of thin cables side by side. Saves space in e-chains® and e-tubes. Also available for QuickLock crossbars.

*available upon request. Delivery time: approx. 1-2 weeks after receipt of order



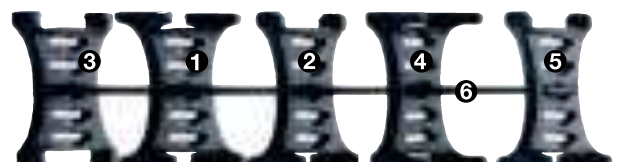
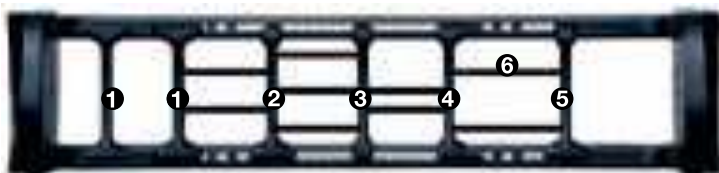
Asymmetrical separator*
unassembled **70.4**
assembled **70.4.1**



For side-mounted applications

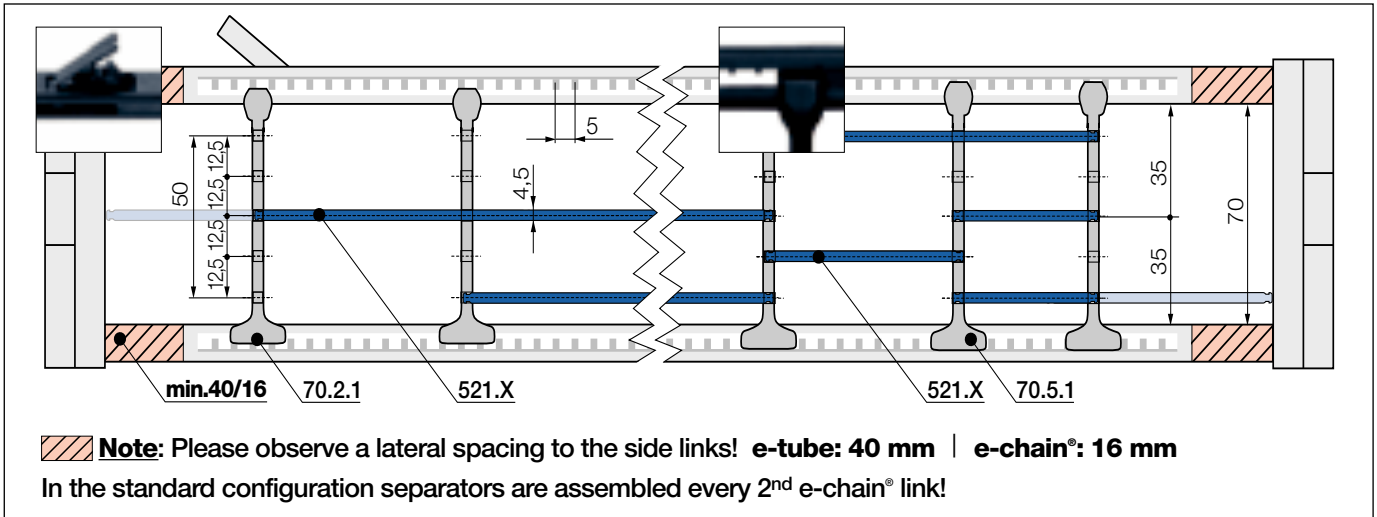
Asymmetrical separator, for defined distance. No additional spacers necessary for e-chains® and e-tubes.

*available upon request. Delivery time: approx. 1-2 weeks after receipt of order



- ① Standard separator, wide base - Part No. 70.1
- ② Separator for QuickLock crossbar - Part No. 70.2
- ③ Separator, narrow base - Part No. 70.3
- ④ Separator, asymmetrical - Part No. 70.4
- ⑤ Notch separator - Part No. 70.5
- ⑥ Full-width self, lockable - Part No. 520.XX

New generation interior separation



Separator for QuickLock crossbar*
unassembled **70.2**
assembled **70.2.1**

For even faster installation

Separator for igus® QuickLock crossbar 450.X.Q. Firm hold to one side with a wide base, narrow on opposed side for easy cable assembly (slight grip). For e-tubes also.

*available upon request. Delivery time: approx. 1-2 weeks after receipt of order

Notch separator for notch crossbar*
unassembled **70.5**
assembled **70.5.1**

Locks safely onto in 5 mm increments

Notch separator for the new notch crossbar, with scaling on the notch crossbars. For exact positioning in e-chains® and e-tubes. Recommended for side-mounted applications.

*available upon request. Delivery time: approx. 1-2 weeks after receipt of order

Full-width shelf, lockable
unassembled **520.X**
assembled **521.X**

Horizontal separation

Shelf locks safely into separators on both ends, fixed width possible. Separators can be moved freely over the shelf in horizontal direction. Usable in 5 levels.

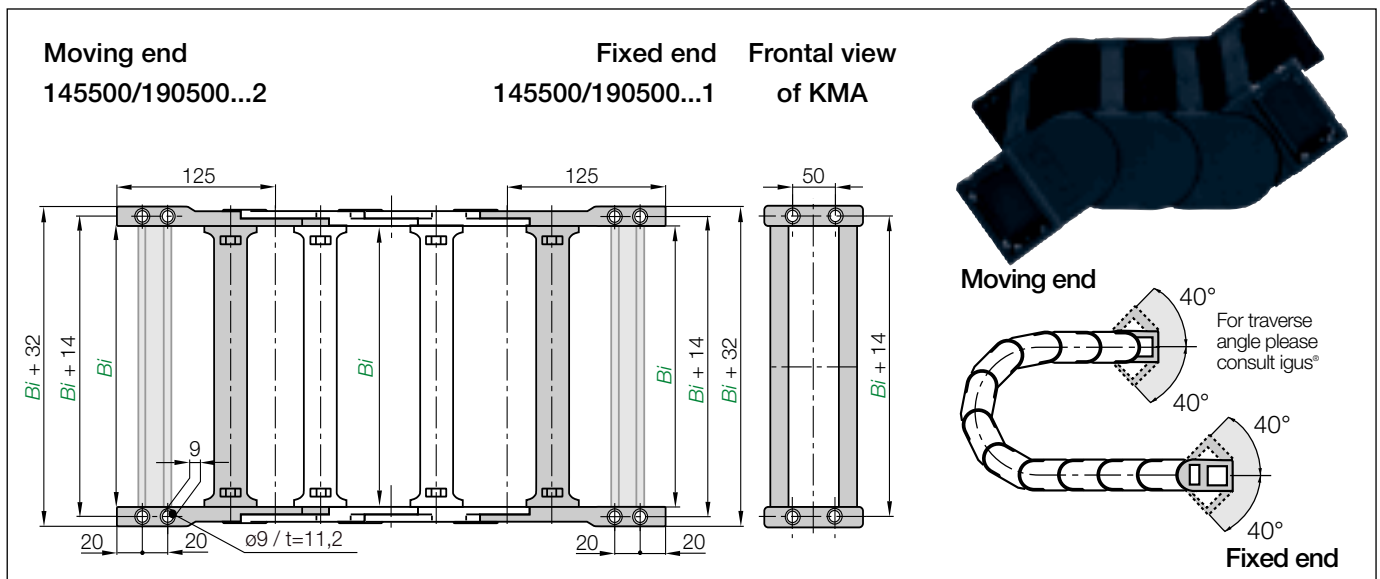


Lockable full-width shelves - for the standard interior separation

Width X [mm]	unassembled	assembled	Width X [mm]	unassembled	assembled	Width X [mm]	unassembled	assembled
050	520.050	521.050	125	520.125	521.125	225	520.225	521.225
065	520.065	521.065	150	520.150	521.150	250	520.250	521.250
075	520.075	521.075	175	520.175	521.175	300	520.300	521.300
100	520.100	521.100	200	520.200	521.200	450	520.450	521.450

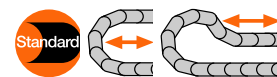
14550·14650·19050 | KMA mounting brackets pivoting

For tight installation conditions, all-sides attachment



KMA pivoting | All-sides attachment. Recommended for unsupported and gliding applications

Width index	Part No. full set pivoting (+ C-profile option)	Bi [mm]	Width index	Part No. full set pivoting (+ C-profile option)	Bi [mm]
05.	▶ 145500. – 05. 12.C 50	50	31.	▶ 145500. – 31. 12.C 312	312
06.	▶ 145500. – 06. 12.C 65	65	32.	▶ 145500. – 32. 12.C 325	325
07.	▶ 145500. 190500. 07. 12.C 75	75	33.	▶ 145500. – 33. 12.C 337	337
08.	▶ 145500. – 08. 12.C 87	87	35.	▶ 145500. 190500. 35. 12.C 350	350
10.	▶ 145500. 190500. 10. 12.C 100	100	36.	▶ 145500. – 36. 12.C 362	362
11.	▶ 145500. – 11. 12.C 112	112	37.	▶ 145500. – 37. 12.C 375	375
12.	▶ 145500. 190500. 12. 12.C 125	125	38.	▶ 145500. – 38. 12.C 387	387
13.	▶ 145500. – 13. 12.C 137	137	40.	▶ 145500. 190500. 40. 12.C 400	400
15.	▶ 145500. 190500. 15. 12.C 150	150	41.	▶ 145500. – 41. 12.C 412	412
16.	▶ 145500. – 16. 12.C 162	162	42.	▶ 145500. – 42. 12.C 425	425
17.	▶ 145500. 190500. 17. 12.C 175	175	43.	▶ 145500. – 43. 12.C 437	437
18.	▶ 145500. – 18. 12.C 187	187	45.	▶ 145500. – 45. 12.C 450	450
20.	▶ 145500. 190500. 20. 12.C 200	200	46.	▶ 145500. 190500. 46. 12.C 462	462
21.	▶ 145500. – 21. 12.C 212	212	47.	▶ 145500. – 47. 12.C 475	475
22.	▶ 145500. – 22. 12.C 225	225	48.	▶ 145500. – 48. 12.C 487	487
23.	▶ 145500. – 23. 12.C 237	237	50.	▶ 145500. – 50. 12.C 500	500
25.	▶ 145500. 190500. 25. 12.C 250	250	51.	▶ 145500. – 51. 12.C 512	512
26.	▶ 145500. – 26. 12.C 262	262	52.	▶ 145500. – 52. 12.C 525	525
27.	▶ 145500. 190500. 27. 12.C 275	275	53.	▶ 145500. – 53. 12.C 537	537
28.	▶ 145500. – 28. 12.C 287	287	55.	▶ 145500. – 55. 12.C 550	550
30.	▶ 145500. 190500. 30. 12.C 300	300	60.	▶ 145500. – 60. 12.C 600	600



- Standard
- For tight installation conditions
- Option: integrated chainfix strain relief with C-profile
- Corrosion resistant
- Option: threaded sockets upon request (KMA = Polymer Metal Mounting Bracket)

Part No. structure (pivoting)

145500.10.12.C



Single-part order:

Mounting bracket **Moving end**

145500.10.2.C

Mounting bracket **Fixed end**

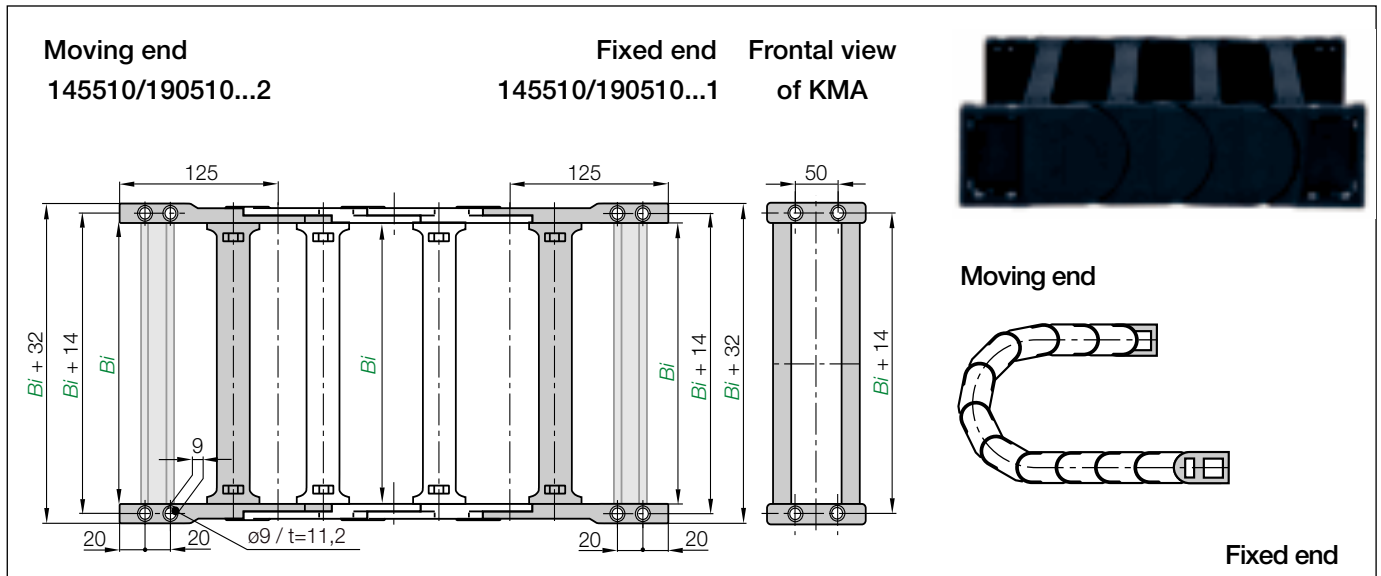
145500.10.1.C



Strain relief, e.g. clamps, tiwrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with order options ▶ from page 10.1

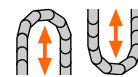
14550·14650·19050 | KMA mounting brackets locking

For very high speed and acceleration, all-sides attachment



KMA locking | All-sides attachment. Recommended for vertical hanging and standing applications

Width index	Part No. full set locking (+ C-profile option)	Bi [mm]	Width index	Part No. full set locking (+ C-profile option)	Bi [mm]
05.	▶ 145510. – 05. 12.C 50	50	31.	▶ 145510. – 31. 12.C 312	312
06.	▶ 145510. – 06. 12.C 65	65	32.	▶ 145510. – 32. 12.C 325	325
07.	▶ 145510. 190510. 07. 12.C 75	75	33.	▶ 145510. – 33. 12.C 337	337
08.	▶ 145510. – 08. 12.C 87	87	35.	▶ 145510. 190510. 35. 12.C 350	350
10.	▶ 145510. 190510. 10. 12.C 100	100	36.	▶ 145510. – 36. 12.C 362	362
11.	▶ 145510. – 11. 12.C 112	112	37.	▶ 145510. – 37. 12.C 375	375
12.	▶ 145510. 190510. 12. 12.C 125	125	38.	▶ 145510. – 38. 12.C 387	387
13.	▶ 145510. – 13. 12.C 137	137	40.	▶ 145510. 190510. 40. 12.C 400	400
15.	▶ 145510. 190510. 15. 12.C 150	150	41.	▶ 145510. – 41. 12.C 412	412
16.	▶ 145510. – 16. 12.C 162	162	42.	▶ 145510. – 42. 12.C 425	425
17.	▶ 145510. 190510. 17. 12.C 175	175	43.	▶ 145510. – 43. 12.C 437	437
18.	▶ 145510. – 18. 12.C 187	187	45.	▶ 145510. – 45. 12.C 450	450
20.	▶ 145510. 190510. 20. 12.C 200	200	46.	▶ 145510. 190510. 46. 12.C 462	462
21.	▶ 145510. – 21. 12.C 212	212	47.	▶ 145510. – 47. 12.C 475	475
22.	▶ 145510. – 22. 12.C 225	225	48.	▶ 145510. – 48. 12.C 487	487
23.	▶ 145510. – 23. 12.C 237	237	50.	▶ 145510. – 50. 12.C 500	500
25.	▶ 145510. 190510. 25. 12.C 250	250	51.	▶ 145510. – 51. 12.C 512	512
26.	▶ 145510. – 26. 12.C 262	262	52.	▶ 145510. – 52. 12.C 525	525
27.	▶ 145510. 190510. 27. 12.C 275	275	53.	▶ 145510. – 53. 12.C 537	537
28.	▶ 145510. – 28. 12.C 287	287	55.	▶ 145510. – 55. 12.C 550	550
30.	▶ 145510. 190510. 30. 12.C 300	300	60.	▶ 145510. – 60. 12.C 600	600



- Locked connections
- At high acceleration
- Universally mountable
- C-profile option
- Corrosion resistant
- Option: threaded sockets upon request (KMA = Polymer Metal Mounting Bracket)

Part No. structure (locking)

145510.10.12.C



Single-part order:

Mounting bracket **Moving end**

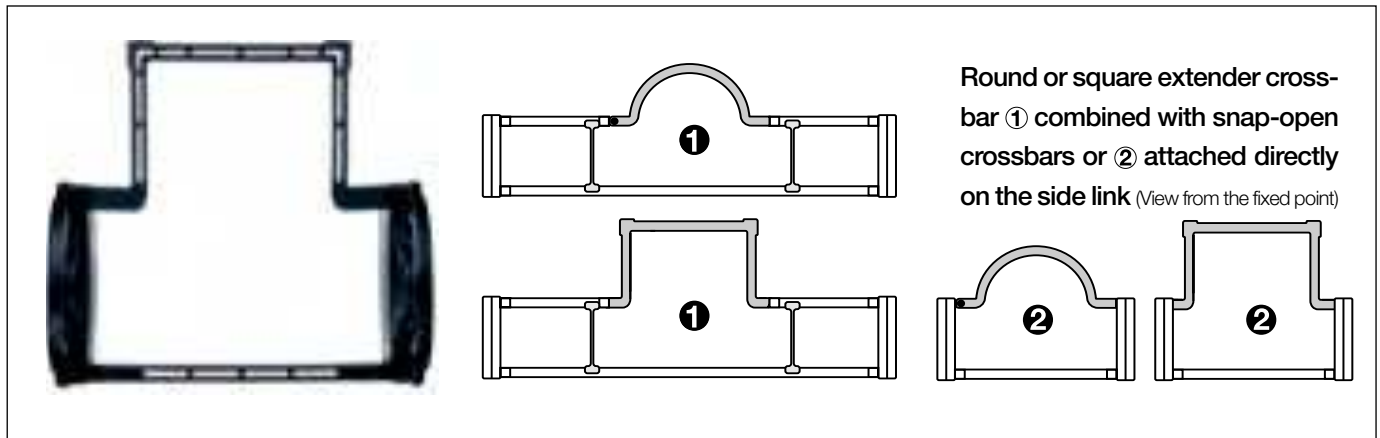
145510.10.2.C

Mounting bracket **Fixed end**

145510.10.1.C



Strain relief, e.g. clamps, tie-wrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with order options ▶ from page 10.1



Round or square extender crossbar ① combined with snap-open crossbars or ② attached directly on the side link (View from the fixed point)

Extender crossbars | careful guide of hoses applications

- Suitable for hoses with a maximum outer diameter of 270 mm
- Gliding with crossbars assembled along outer radius and a special guide trough
- Extender crossbar ① for snap-open crossbars or ② attached directly on the side link



Order examples - extender crossbar

① Combination with snap-open crossbars

RHD115 for outer radius "E" incl. e-chain®:

14550.10/15RHDE115/10.R.0

RHD115 for inner radius "Z" incl. e-chain®:

14550.10/15RHDZ115/10.R.0

② Installation on side link

RD115 for outer radius "E" incl. e-chain®:

14550.17RE115.R.0

RD115 for inner radius "Z" incl. e-chain®:

14550.17RDZ115.R.0

Part No. single part	Max Ø [mm] hose	Form	② Installation on side link	① Combination with snap-open crossbars
450.15.RHD115	115	○ round	no	yes
450.17.RD115	115	○ round	yes	no
450.25.D150	150	□ square	yes	no
450.30.D200	200	□ square	yes	no
450.35.D250	220	□ square	yes	no
450.40.D300	270	□ square	yes	no
450.20.HD150	150	□ square	no	yes
450.25.HD200	200	□ square	no	yes
450.30.HD250	220	□ square	no	yes



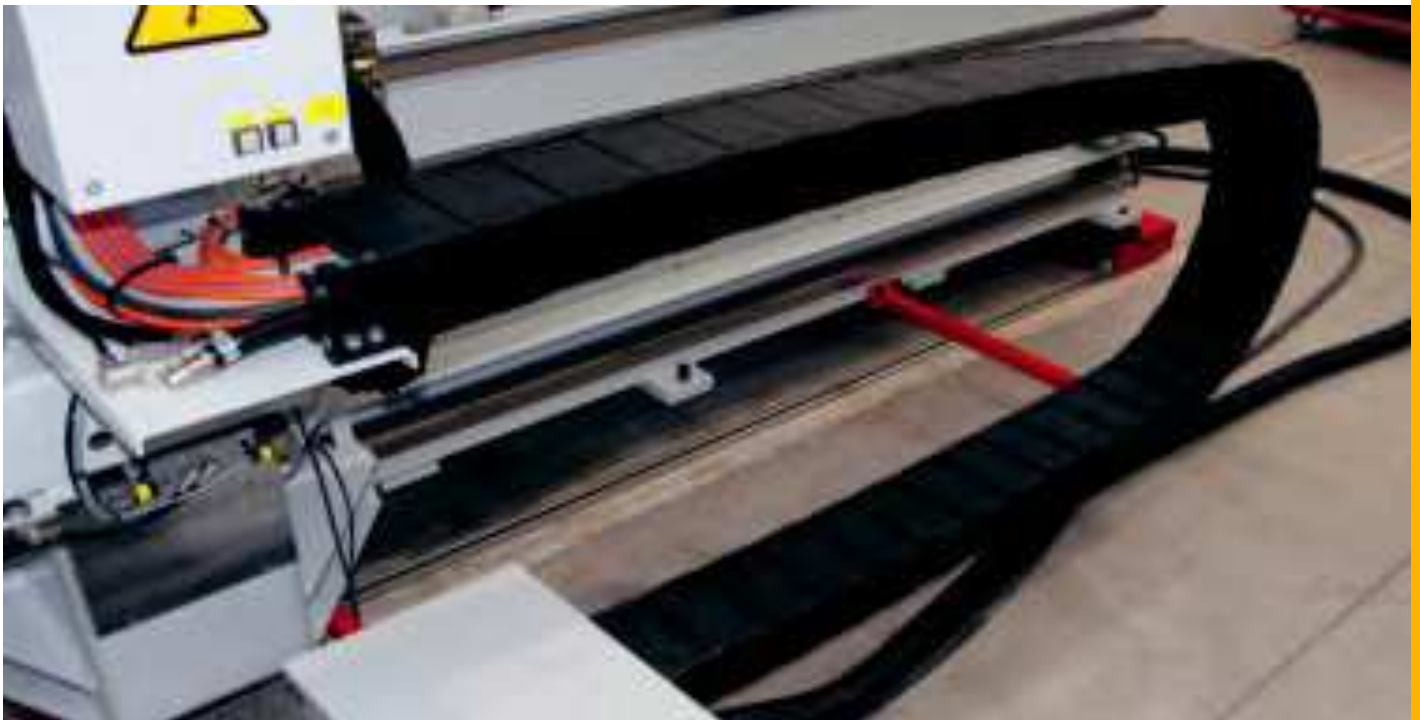
Strain relief system

Clamps, tiwrap plates, nuggets and plug-in clips. The complete chainfix range with many order options ► **from page 10.1**

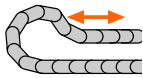


Support tray tool kit

For support of the lower run. Simple one-piece support trays according to your requirements and specification ► **from page 9.70**



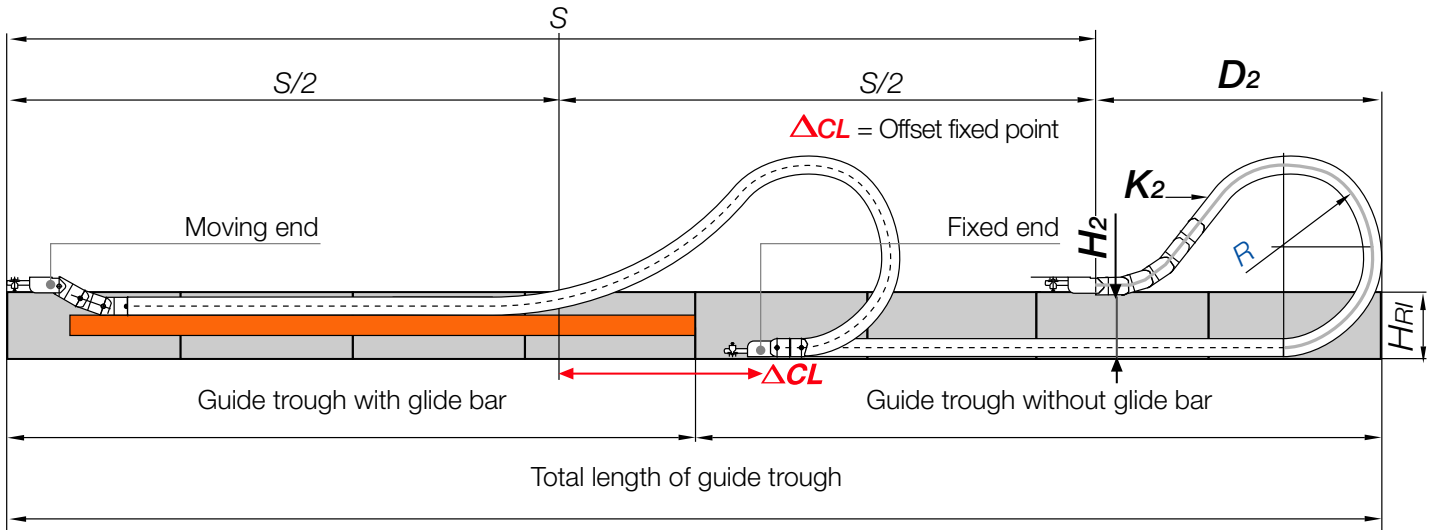
E4/light e-tubes protect tubes and hoses safely against dirt and chips



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

Solution for long travel applications - In this case the e-chain® upper run will be introduced in a guide trough on the lower run. For travels more than 100 m we recommend to realize the engineering of such a plant by our technicians. **In case of travels between 8 and 12 m we recommend a longer unsupported length.** More information ► **Design, from page 1.16.**

(Guide trough available upon request. Delivery in approx. 6-8 weeks from receipt of order)



Pitch = 91 mm/link · Links/m = 11 (1001 mm) · Chain length = $S/2 + K$

Guide trough available upon request. Delivery in approx. 6-8 weeks from receipt of order.

R	150	175	200	250	300	350	400	450	500	600*
H ₂	266	266	266	266	266	266	266	266	266	*
D ₂ ⁺²⁵	450	530	710	920	1120	1340	1530	**	1830	*
K ₂	819	1001	1274	1638	1911	2184	2548	**	3185	*
ΔCL	124	159	209	359	509	659	829	959	1159	*

Please note: For using *R 600 for long travels (gliding), please consult igus® first. **Values upon request.



The complete range of special solutions for long travel applications incl. order function ► from page 9.76



H₂ = Mounting height (if the moving end is set lower) K₂ = Further add-on (if the moving end is set lower) ΔCL = Offset fixed point S = Length of travel
D₂ = Over length - long travels, gliding R = Bending radius H_{RI} = Inner trough height S/2 = Half length of travel



Spray-painting robot with System E4 e-chain® used in an ATEX version made of igumid ESD.
High accelerations of up to 6 m/s^2 and high braking rates with a weight of the robot of approx. one ton



Standard

Additional noise dampening with pads

QuickLock crossbar - reduce assembly time up to 25%

Part No.
Standard
e-chains®/e-tubes



Part No.
Low noise (with pads)
e-chains®/e-tubes



Part No.
QuickLock crossbar
for inner radius



Part No.
QuickLock crossbar
for outer radius

Part No.
QuickLock crossbar
for both radii

QuickLock crossbars: inner widths from *Bi* 150 mm!



14550.10.R.0
Crossbar every link

S14550.10.R.0
Crossbar every link

14550.10QZ.R.0
Crossbar every link

14550.10QE.R.0
Crossbar every link

14550.10Q.R.0
Crossbar every link

14650.10.R.0
Crossbar every 2nd link

S14650.10.R.0
Crossbar every 2nd link

14650.10QZ.R.0
Crossbar every 2nd link

14650.10QE.R.0
Crossbar every 2nd link

14650.10Q.R.0
Crossbar every 2nd link

19050.10.R.0
e-tube, closed

S19050.10.R.0
e-tube, closed



Delivery in
24h or today!*

Delivery time:
3-5 work days

Delivery time:
3-5 work days

Delivery time:
3-5 work days

Delivery time:
3-5 work days

Combination possibilities | Examples

	Low-noise option	QuickLock crossbar	NC-Version	RBR-Version	XXL-Material	HT-Material*	ESD-Material
Low-noise option		S14550.10Q.R.0	S14550.10.R.0.NC	-	S14550.10.R.0.XXL	S14550.10.R.0.HT	S14550.10.R.0.ESD
QuickLock crossbar	S14550.10Q.R.0		14550.10Q.R.0.NC	14550.10Q.R1/R2.0	14550.10Q.R.0.XXL	-	14550.10Q.R.0.ESD
NC-Version	S14550.10.R.0.NC	14550.10Q.R.0.NC		-	-	19050.10.R.0.HT.NC	14550.10.R.0.ESD.NC
RBR-Version	-	14550.10Q.R1/R2.0	-		-	19050.10.R1/R2.0.HT	14550.10.R1/R2.0.ESD
XXL-Material	S14550.10.R.0.XXL	14550.10Q.R.0.XXL	-	-		-	-
HT-Material*	S14550.10.R.0.HT	-	19050.10.R.0.HT.NC	19050.10.R1/R2.0.HT	-		-
ESD-	S14550.10.R.0.ESD	14550.10Q.R.0.ESD	14550.10.R.0.ESD.NC	14550.10.R1/R2.0.ESD	-	-	

*for gliding applications please consult igus®

E4/light | 14550·14650·19050 | Options and order key

NC-Version -
(no camber)
without pretension

Reverse bending
radius for circular
movements

Unsupported
lengths +25%
possible

No burning-in of
hot chips up to
850°C (1562° F)

ATEX/ESD classi-
fied e-chains® -
II 2 GD

Part No.
NC-Material
e-chains®/e-tubes

Part No.
RBR
e-chains®/e-tubes

Part No.
XXL-Material**
e-chains®/e-tubes

Part No.
HT-Material
only for e-tubes

Part No.
ESD-Material
e-chains®/e-tubes

14550.10.R.0.NC
Crossbar every link

14550.10.R1/R2.0
Crossbar every link

14550.10.R.0.XXL
Crossbar every link

19050.10.R.0.HT
Complete e-tube*

14550.10.R.0.ESD
Crossbar every link

14650.10.R.0.NC
Crossbar every 2nd link

14650.10.R1/R2.0
Crossbar every 2nd link

14650.10.R.0.XXL
Crossbar every 2nd link

19050.10.HT.R.0
Lid and bottom

14650.10.R.0.ESD
Crossbar every 2nd link

19050.10.R.0.NC
e-tube, closed

19050.10.R1/R2.0
e-tube, closed

19050.10.R.0.XXL
e-tube, closed

19050.10.HTZ.R.0
Bottom only

19050.10.R.0.ESD
e-tube, closed

19050.10.HTE.R.0
Lid only

Delivery time
3-5 work days

Delivery time
10 work days
(2-5 work days with
express surcharge)

Delivery time
1-2 weeks
**Sidebands made from
XXL-Material

Delivery time
10 work days
*for gliding applications
please consult igus®

Delivery time
5 work days

Order example | Order key and color options

Order example for complete e-chain® (3,0 m, with crossbars every link), color black, mounting brackets with C-profiles and interior separation:

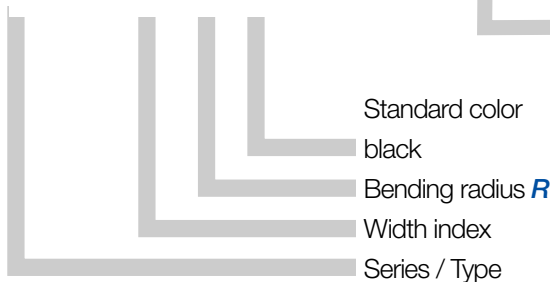
e-chain® (3,0 m) Please indicate e-chain® length or number of links: 3,0 m or 33 links **14550.10.300.0**

+ Mounting brackets 1 set (with integrated C-profiles) **145500.10.12.C**

+ Interior separation with 2 separators assembled every 2nd link **2 x 70.1.1**

Order text: 3,0 m 14550.10.300.0 + 145500.10.12.C + 2 x Part No. 70.1.1

Order key
14550.10.300.0



Color options for e-chains® and e-tubes

Color	Order index	Color	Order index
black	.0 from stock!	green*	.7
white*	.1	grey*	.3 for e-chains®
violet*	.5	dusty grey*	.3 for e-tubes
yellow*	.4	agate grey*	.11
orange*	.2	light grey*	.14
red*	.6	black grey*	.13
blue*	.8	yellow/black*	.9

Black e-chains® from stock! *Colored e-chains® can delivered in 15 work days (5 work days at an express surcharge).

Available from stock. Delivery in 24h or today!*
*Delivery time means time until shipping of goods