



# E6

**Extremely low noise,  
vibration and abrasion,  
cleanroom suitable**



**Advantages of the E6 system:**

- For very high speeds and accelerations
- For small bend radii
- High strength
- Available as closed e-tube for some sizes
- **Low-noise 37dB(A)<sup>1)</sup>** - extremely low noise and vibration
- **Cleanroom ISO Class 1<sup>2)</sup>** - virtually no wear or abrasion

1) Extremely low-noise - tested at the igus® lab 2) Cleanroom - series E6.29.060.150.0.CR



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

- With only limited suitability for side-mounted applications
  - ▶ **E4.1L, page 524** ▶ **E2/000, page 360**
- When a Reverse Bend Radius **RBR** is required
  - ▶ **E4.1L, page 524** ▶ **E2/000, page 360**
- For longer unsupported lengths
  - ▶ **E4.1L, page 524** ▶ **E2/000, page 360**
- For long travels
  - ▶ **E4.1, page 566** ▶ **E2/000, page 360**
- For even less vibration and noise or even greater dynamics
  - ▶ **E6.1, page 750**



Attachment from any side:  
with KMA mounting  
brackets

**Low noise from**  
**37dB(A)<sup>1)</sup>:**  
small pitch for low  
noise, smooth running

Long service life:  
low vibration,  
high strength

Dynamic:  
high speeds and  
accelerations

Quick assembly:  
openable along the  
inner and outer radius

Modular design:  
can be easily lengthened  
and shortened

High strength:  
for unsupported  
applications

No wear:  
polymer spring - no  
pin/bore connection

Variant:  
available as closed  
e-tube for some sizes

**Cleanroom ISO**  
**Class 1<sup>2)</sup>:**  
virtually no wear  
or abrasion

## Extremely low noise, vibration and abrasion, cleanroom suitable - system E6

The E6 series offers numerous advantages in addition to long life. It provides extremely quiet, low vibration operation, complimenting low vibration linear drives. It minimises the polygon effect which can occur during the rolling motion of an e-chain®. The ultra-low noise levels have been confirmed in a recent report by the Rheinland Technical Inspection Agency. Our extensive product range offers the right e-chain® size for any application; a wide range of interior separation is also available.

1) Extremely low-noise - tested at the igus® lab

2) Cleanroom - series E6.29.060.150.0.CR

### Typical industries and applications

- Cleanroom ● Stage and theatre technology
- Printing machines ● Automation ● Machine tools
- Measuring machines ● Semiconductor industry
- Medical industry ● Electronic industry
- General machinery



### IPA Qualification Certificate<sup>2)</sup> - Report IG 0704-400:

ISO Class 1, according to DIN EN ISO 14644-1 for system E6, series E6.29.060.150.0.CR at v = 0.5m/s, 2m/s

37dB(A)<sup>1)</sup> - value determined at the igus® test lab, v = 1.0m/s unsupported, series E6.29.080.075.0

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
E6.29	29	30 - 140	6 - 156	35	055 - 150	≈ 1.75	796
E6.35	35	30 - 140	50 - 160	42	055 - 150	≈ 1.90	802
E6.40	40	40 - 300	60 - 320	54	063 - 200	≈ 2.50	806
E6.52	52	40 - 300	64 - 324	65	075 - 250	≈ 3.00	812
E6.62	62	50 - 400	86 - 436	84	115 - 350	≈ 4.00	818
E6.80L	80	87 - 550	115 - 578	108	150 - 300	≈ 2.50	822
E6.80	80	50 - 600	100 - 650	108	150 - 450	≈ 5.25	828



### E6 e-chains®

crossbars removable along the inner and outer radius - standard



### R6 e-tubes

fully enclosed - lids removable along the inner and outer radius

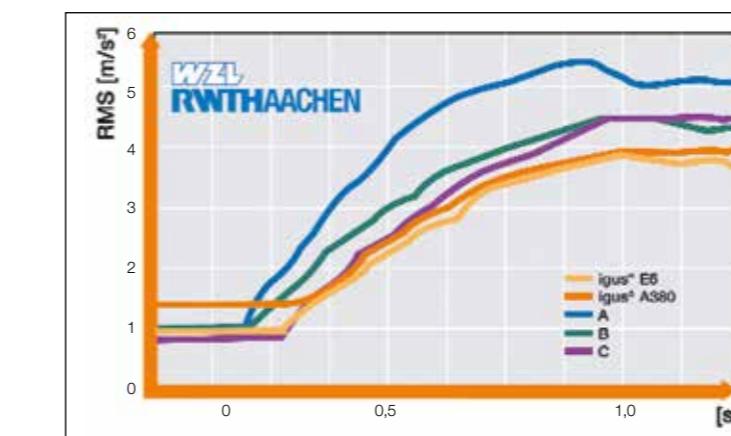
R6.29	28	30 - 120	46 - 136	35	055 - 150	≈ 1.75	796
R6.40	40	62	82	54	063 - 200	≈ 2.50	806
R6.52	52	50 - 200	74 - 224	65	075 - 250	≈ 3.00	812

\*Radius available upon request. Please consult igus® for delivery time.



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.



### E6 system - extremely quiet operation

Study by the Laboratorium für Werkzeugmaschinen und Betriebslehre (WZL) of the RWTH Aachen, Germany, on "Vibration tests on energy supply chains". Results: the "E6" energy supply system made by igus® GmbH, Cologne, is characterised by extremely low vibration and smooth operation



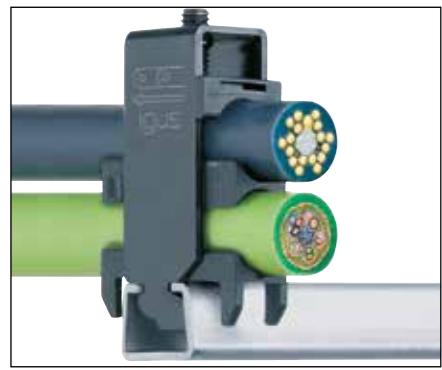
Lean separators enable extremely fast cable filling in several layers



Pivoting KMA mounting brackets - pivot angle corresponds to the bend radius



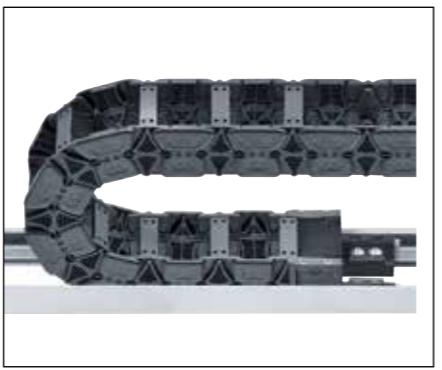
KMA mounting brackets with attachment options from any side



Strain relief e.g. clamps, tiewrap plates, nuggets, etc. ► From page 1300



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



Aluminium and steel support tray for support of the lower run ► From page 1264



A linear drive provides the highly dynamic feed for PCBs. This system is twice as fast as handling units with a toothed-belt drive; designed to withstand high dynamic loads, E6 e-chains® ensure a supply of power, coolant and control data with ultra-low noise and vibration

### Suitability of E6 e-chains® for cleanrooms - almost no wear or abrasion

By using a special material, the already low abrasion of the e-chain® can be reduced even further. In many applications where cumbersome special solutions are required, a simple standard e-chain® can be used instead. A comprehensive test programme was devised and performed for both gliding and unsupported use. For many applications, the e-chains® in special materials are virtually abrasion-free. IPA tests confirm that standard igus® e-chains® meet cleanroom requirements. "Tested and certified as very good!" e-chains® for cleanroom applications demand very high wear resistance of moving parts. e-chains®, for example, must be very wear-resistant, in order to meet the normal requirements for such a sensitive environment.



By eliminating the pin/bore connection, the unsupported E6 has very low abrasion and is suitable for cleanrooms



#### IPA Qualification Certificate - Report IG 0704-400:

- Special material "cleanroom" - ISO Class 1, according to DIN EN ISO 14644-1  
for series E6.29.060.150.0.CR at v = 0.5m/s, 2.0m/s
- Standard material - ISO Class 3, according to DIN EN ISO 14644-1  
for series E6.29.060.150.0 at v = 0.5m/s, 2.0m/s and  
series E6.29.050.055.0 with fitted cables CF34.15.04, CF9.05.12, CF11.02.01.02.PBA.LC.D

### E6 e-chains® in low-noise areas - from 37dB(A)

#### Selected noise tests - external noise corrected measurement values

e-chain® series	Test speed and test method	Averaging of the corrected sound pressure levels
igus® Series E6.29*	v = 1.0m/s unsupported	≈ 37 dB(A)
igus® series E6.52*	v = 0.5m/s side mounted unsupported	≈ 41 dB(A)
igus® series E6.52	v = 2.0m/s unsupported	≈ 46 dB(A)
Chain 1 third-party product	v = 2.0m/s unsupported	≈ 77 dB(A)
Chain 2 third-party product	v = 2.0m/s unsupported	≈ 68 dB(A)
Chain 3 third-party product	v = 2.0m/s unsupported	≈ 73 dB(A)

Source: TÜV Rheinland \*Source: igus® investigations



**Noise level ≤ 37dB(A)** - A measurement conducted by the Rhineland Technical Inspection Authority (TÜV Rheinland) in May 2002 indicates a value of ≤ 46dB(A) at 2m/s and with an unsupported length of 1.5m with series E6.52.100.100.0, and all this with at least 10dB(A) sound pressure level generated by external noise. We have received an official noise certificate from the Rhineland Technical Inspection Authority (TÜV Rheinland Berlin Brandenburg) and we are happy to provide you with a copy upon request. A measurement carried out in the igus® laboratory resulted in a value of 37dB(A) at 1m/s for the series E6.29.080.075.0 (unsupported length)

## Technical data

 Speed gliding <sup>1)</sup> / acceleration gliding <sup>1)</sup>	upon request
Speed $FL_G$ / acceleration $FL_G$	$\leq 20 \text{ [m/s]} / \leq 200 \text{ [m/s}^2]$
Speed $FL_B$ / acceleration $FL_B$	$\leq 3 \text{ [m/s]} / \leq 6 \text{ [m/s}^2]$
 Material - permitted temperature °C, igumid G	upon request
 Flammability class, igumid G	VDE 0304 IIC UL94-HB

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

1) Gliding applications for long travels are available upon request, please consult igus®.

## Installation types, maximum travels

Series	Unsupported	Gliding <sup>1)</sup>	Vertical hanging	Vertical standing	Side mounted unsupported
E6.29 / R6.29	$\leq 3.50\text{m}$	upon request	$\leq 30\text{m}$	$\leq 2.0\text{m}$	upon request
E6.35	$\leq 3.80\text{m}$	upon request	$\leq 30\text{m}$	$\leq 2.0\text{m}$	upon request
E6.40 / R6.40	$\leq 5.00\text{m}$	upon request	$\leq 30\text{m}$	$\leq 2.0\text{m}$	upon request
E6.52 / R6.52	$\leq 6.00\text{m}$	upon request	$\leq 50\text{m}$	$\leq 2.0\text{m}$	upon request
E6.62	$\leq 8.00\text{m}$	upon request	$\leq 60\text{m}$	$\leq 3.0\text{m}$	upon request
E6.80L	$\leq 5.00\text{m}$	upon request	$\leq 60\text{m}$	$\leq 4.0\text{m}$	upon request
E6.80	$\leq 10.5\text{m}$	upon request	$\leq 60\text{m}$	$\leq 4.0\text{m}$	upon request

1) Gliding applications for long travels are available upon request, please consult igus®.

## Options with order keys | Examples based on series E6.52

 Standard	NC version - (No Camber) without pretension
Part No. Standard	Part No. NC version

 E6.52.100.R.0	E6.52.100.R.0.NC
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 Ready to ship* in 24 - 48hrs.	Delivery time* upon request
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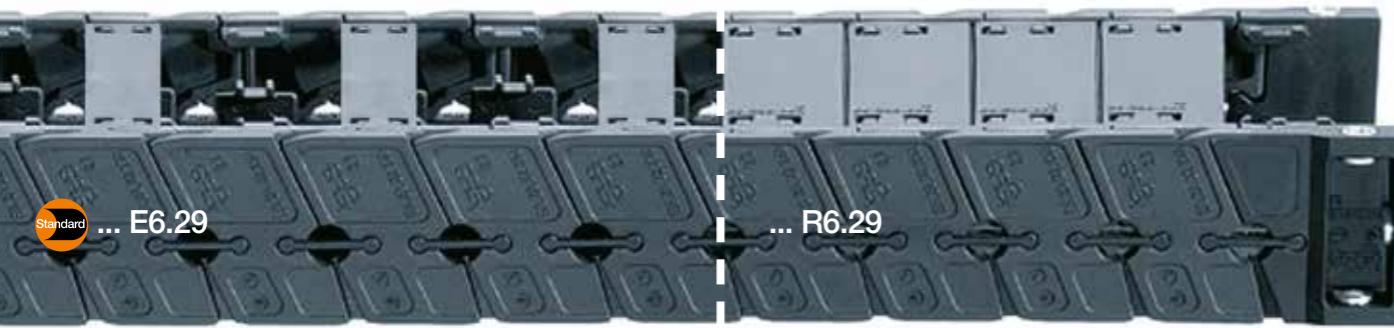
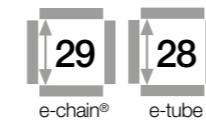
\*The delivery times indicated correspond to the average time until the ordered goods are dispatched.

## Order example | Order key and colour examples | Examples based on series E6.52

 Order example for complete e-chain® (1.0m), colour black, with mounting brackets and interior separation:	
e-chain® (1.0m)	Please indicate e-chain® length or number of links: 1.0m or 34 links
+ Mounting brackets	KMA pivoting - 1 set
Interior separation	with 2 separators assembled every 2 <sup>nd</sup> link
Order text:	1 m E6.52.100.075.0 + E6.520.100.12 + 2 x 38222

 Order key	E6.52.100.075.0 R6.52.100.075.0	Order index for colour options
e-chain®	Colour	Order index
e-tube	Black	.0
	Silver-grey	.31
	White	.1
	Grey-white	.1S
Series / Type	Orange	Special colour .2
Width index (depends on Bi)	Yellow	Special colour .4
Bend radius R	Light grey	Special colour .14
Colour index (standard black)	Black e-chains® available from stock.	Above special colours upon request.

Extremely low noise and vibration



e-chains® | Series E6.29 | Crossbars removable along the inner and outer radius  
 e-tubes | Series R6.29 | Lids removable along the inner and outer radius

Part No.	Part No.	<i>Bi</i>	<i>Ba</i>	E6.29	R6.29
e-chains®	e-tubes	[mm]	[mm]	[kg/m]	[kg/m]
E6.29. 030. R.0	R6.29. 030. R.0	30	46	0.73	0.80
E6.29. 040. R.0	R6.29. 040. R.0	40	56	0.75	0.85
E6.29. 050. R.0	R6.29. 050. R.0	50	66	0.78	0.89
E6.29. 060. R.0	R6.29. 060. R.0	60	76	0.80	0.94
E6.29. 070. R.0	R6.29.*070. R.0	70	86	0.83	0.97
E6.29. 080. R.0	R6.29. 080. R.0	80	96	0.85	1.03

Part No.	Part No.	<i>Bi</i>	<i>Ba</i>	E6.29	R6.29
e-chains®	e-tubes	[mm]	[mm]	[kg/m]	[kg/m]
E6.29. 090. R.0	R6.29.*090. R.0	90	106	0.88	1.08
E6.29. 100. R.0	R6.29.*100. R.0	100	116	0.90	1.13
E6.29. 110. R.0	R6.29. 110. R.0	110	126	0.93	1.18
E6.29. 120. R.0	R6.29. 120. R.0	120	136	0.95	1.22
E6.29. 140. R.0	R6.29. 140. R.0	140	156	1.00	-

\*Width available upon request. Please consult igus® for delivery time.

Available bend radii

*R* [mm] | 055 | 075 | 100 | 150 |

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

E6.29.080.100.0 = e-chain® / R6.29.080.100.0 = e-tube

#### Installation note - system E6

Open by removing the crossbar with a screwdriver.

Repeat the procedure on the other side.

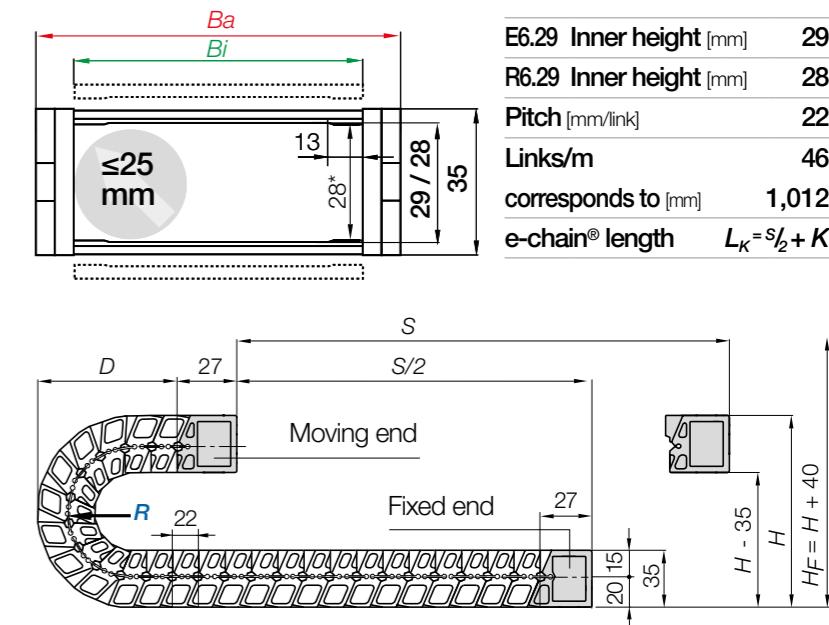
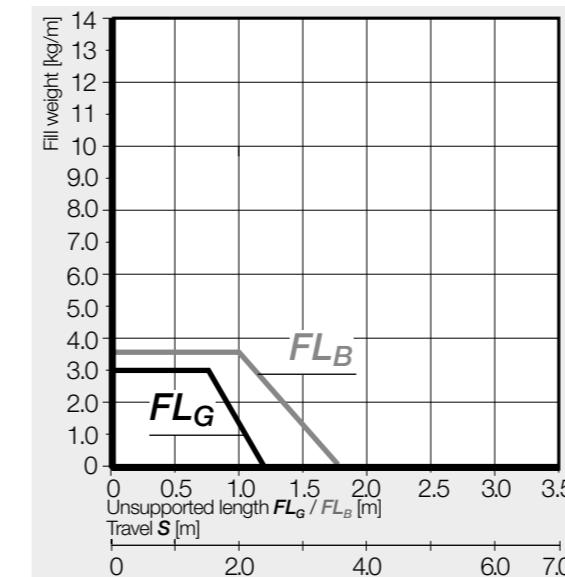
Assembly video available online at ► [www.igus.eu/E6\\_assembly](http://www.igus.eu/E6_assembly)



Unsupported applications | Short travels



E6.29 Inner height [mm]	29
R6.29 Inner height [mm]	28
Pitch [mm/link]	22
Links/m	46
corresponds to [mm]	1,012
e-chain® length $L_K = s_2 + K$	



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

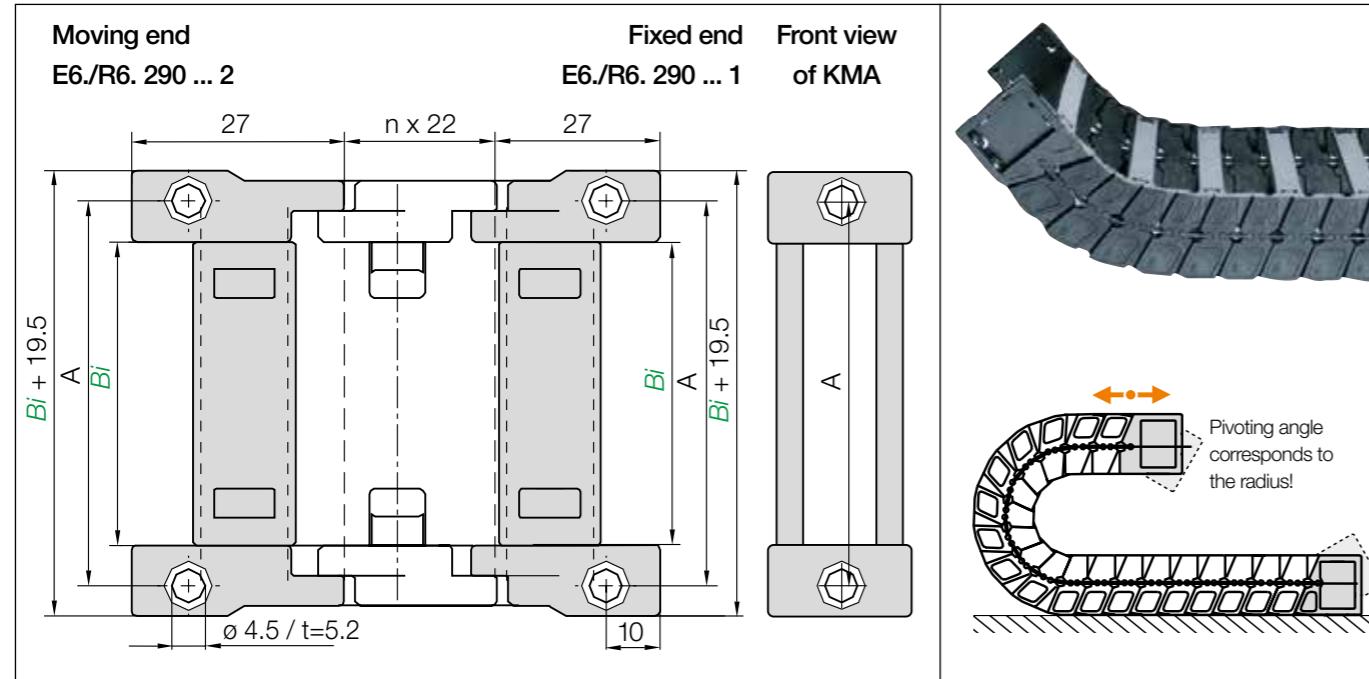
If a gliding application is required for a long travel, please consult igus®.

#### 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-chain®
- Open design - dirt and debris fall through

More information ► From page 1270





## KMA pivoting | Recommended for unsupported applications

Width index	Part No. full set <b>KMA pivoting</b>	A [mm]	Bi [mm]
030.	E6.290. R6.290. 030.12	40	30
040.	E6.290. R6.290. 040.12	50	40
050.	E6.290. R6.290. 050.12	60	50
060.	E6.290. R6.290. 060.12	70	60
070.	E6.290. R6.290. 070.12	80	70
080.	E6.290. R6.290. 080.12	90	80

\*Width available upon request. Please consult igus® for delivery time.

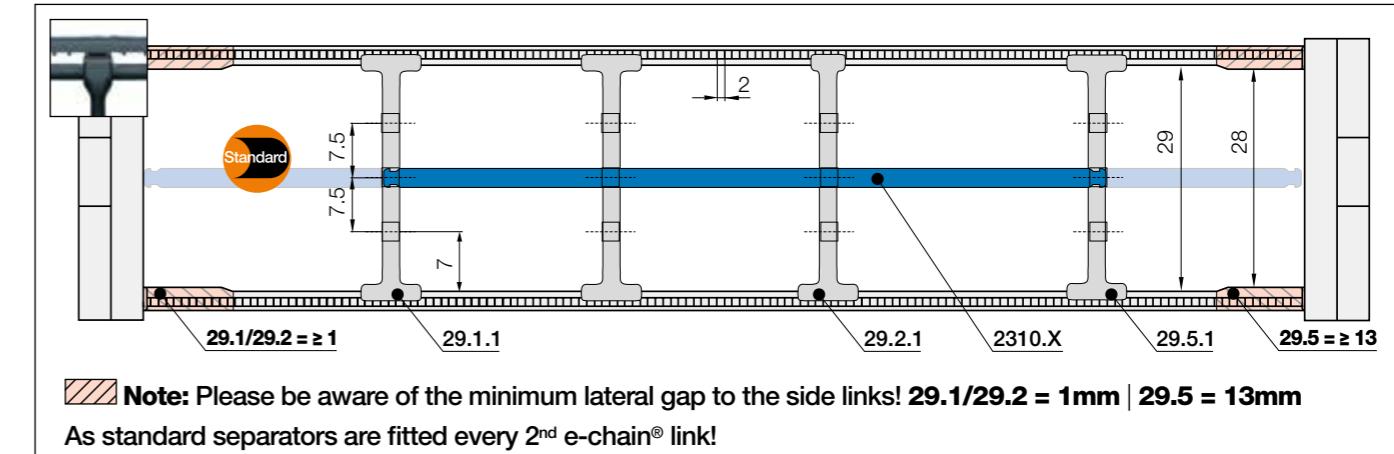
(KMA = polymer metal mounting bracket)



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

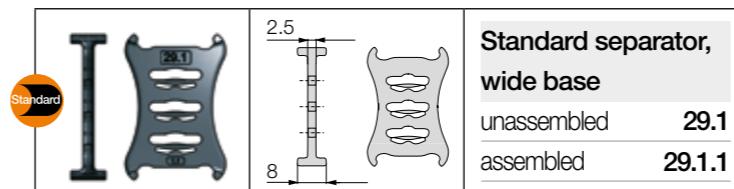


Previous generation of interior separation with other options ► [www.igus.eu/E6.29](http://www.igus.eu/E6.29)

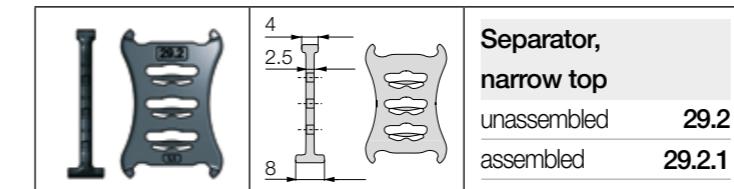


## Standard - for any application

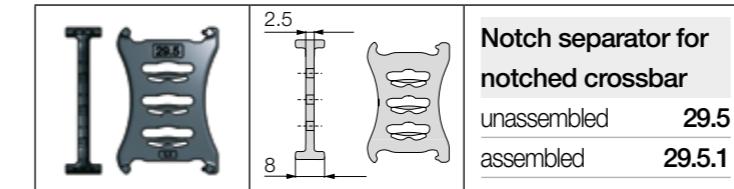
Separator with a wide base for maximum holding force in the e-chain®.



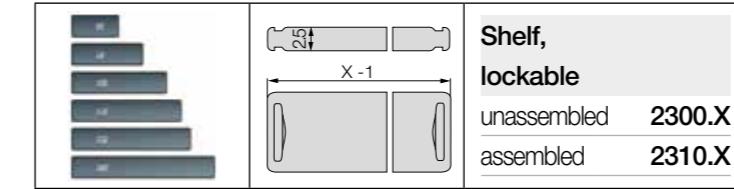
**Standard separator, wide base**  
unassembled 29.1  
assembled 29.1.1



**Separator, narrow top**  
unassembled 29.2  
assembled 29.2.1



**Notch separator for notched crossbar**  
unassembled 29.5  
assembled 29.5.1



**Shelf, lockable**  
unassembled 2300.X  
assembled 2310.X

## Locks securely in preset increments

Notch separator for exact positioning in e-chains®. Recommended for side-mounted applications.

## 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	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
Width = X [mm]									
	015	2300.015	2310.015	060	2300.060	2310.060	087	2300.087	2310.087
	025	2300.025	2310.025	062	2300.062	2310.062	090	2300.090	2310.090
	030	2300.030	2310.030	065	2300.065	2310.065	100	2300.100	2310.100
	038	2300.038	2310.038	070	2300.070	2310.070	103	2300.103	2310.103
	040	2300.040	2310.040	075	2300.075	2310.075	110	2300.110	2310.110
	050	2300.050	2310.050	077	2300.077	2310.077	120	2300.120	2310.120
	057	2300.057	2310.057	080	2300.080	2310.080	125	2300.125	2310.125

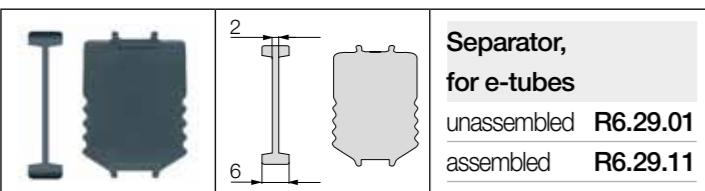
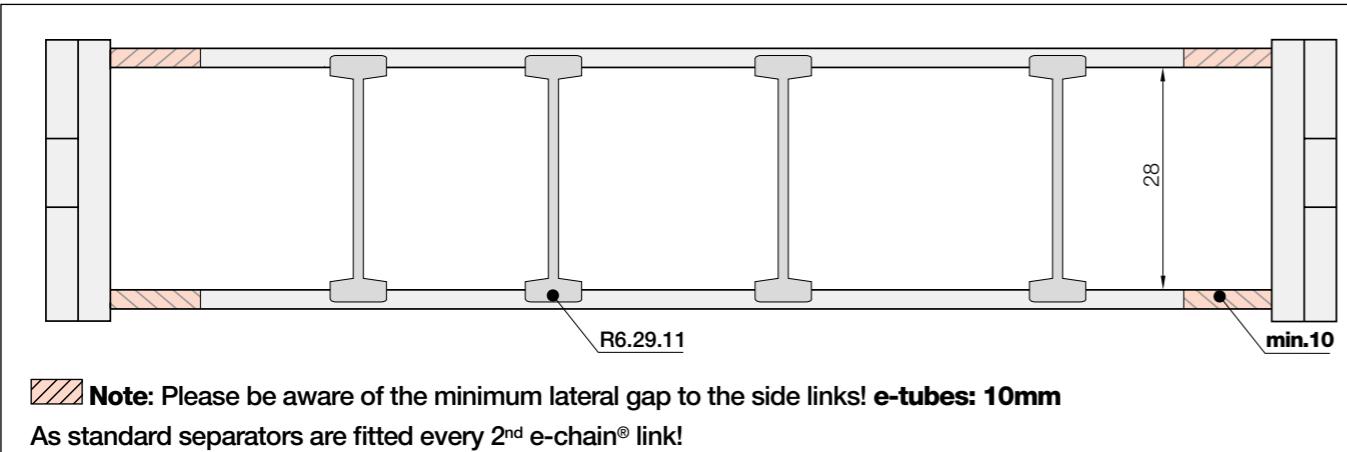
## Separator with integrated strain relief teeth

- Can be integrated into the mounting bracket or placed at any point in the e-chain®
- Combines strain relief and interior separation, for restricted space conditions
- Strain relief separator is easy to assemble without any screws

Part No. E6.29.02.Z. More information ► From page 1326



Interior separation (only for e-tubes, for e-chains® ► previous page)

**Separator for e-tubes**

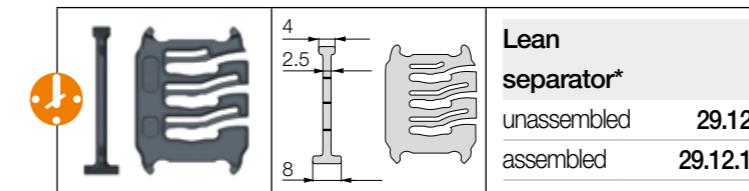
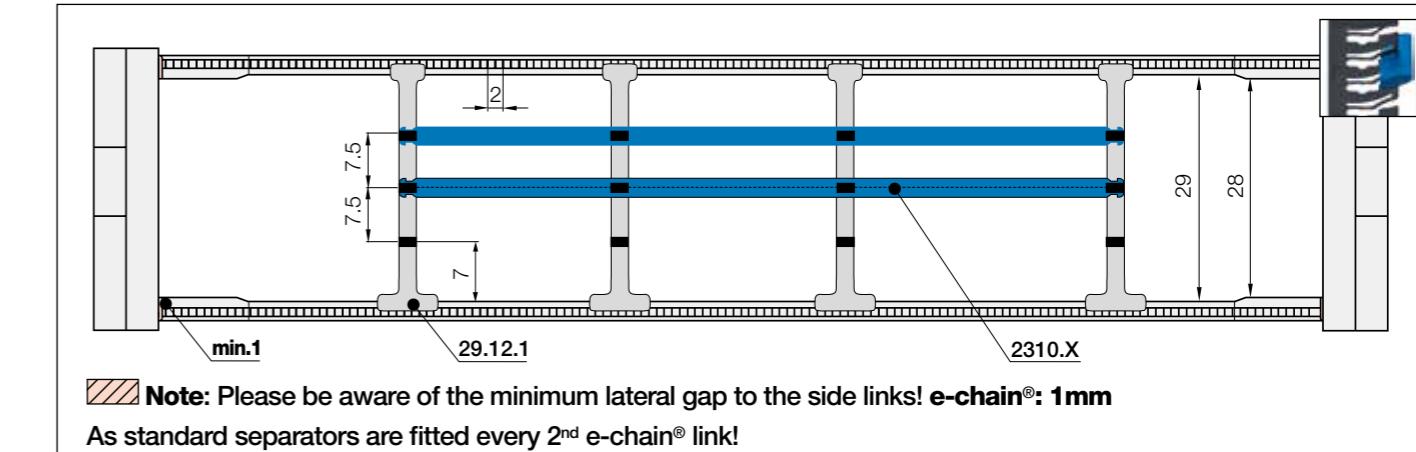
Notches on the separator indicate the clamping side of the separator. The notches on this separator mark the side that fixes to the lid.

**Separator with integrated strain relief teeth**

- Can be integrated into the mounting bracket or placed at any point in the e-chain®
  - Combines strain relief and interior separation, for restricted space conditions
  - Strain relief separator is easy to assemble without any screws
- Part No. R6.29.02.Z. More information ► From page 1326



Long travel length with side-mounted orientation using the low noise and vibration series E6 for a camera application

Interior separation | To allow faster filling **New****Lean separators\***

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)

# E6 | Series E6.35 | Product range

Extremely low noise and vibration

35



## e-chains® | Series E6.35 | Crossbars removable along the inner and outer radius

Part No.	<i>Bi</i>	<i>Ba</i>	E6.35
e-chains®	[mm]	[mm]	[kg/m]
E6.35. 030. R.0	30	50	0.88
E6.35. 040. R.0	40	60	0.90
E6.35. 050. R.0	50	70	0.92
E6.35. 060. R.0	60	80	0.94
E6.35. 070. R.0	70	90	0.96
E6.35. 080. R.0	80	100	0.99

Part No.	<i>Bi</i>	<i>Ba</i>	E6.35
e-chains®	[mm]	[mm]	[kg/m]
E6.35. 090. R.0	90	110	1.01
E6.35. 100. R.0	100	120	1.03
E6.35. 110. R.0	110	130	1.05
E6.35. 120. R.0	120	140	1.07
E6.35. 140. R.0	140	160	1.11

\*Radius available upon request. Please consult igus® for delivery time.

Available bend radii

*R* [mm] | 055 | 075 | 100 | 125\* | 150 |

Complete Part No. with required radius (*R*). Example: E6.35.100.100.0



### Installation note - system E6

Open by removing the crossbar with a screwdriver.

Repeat the procedure on the other side.

Assembly video available online at ► [www.igus.eu/E6\\_assembly](http://www.igus.eu/E6_assembly)

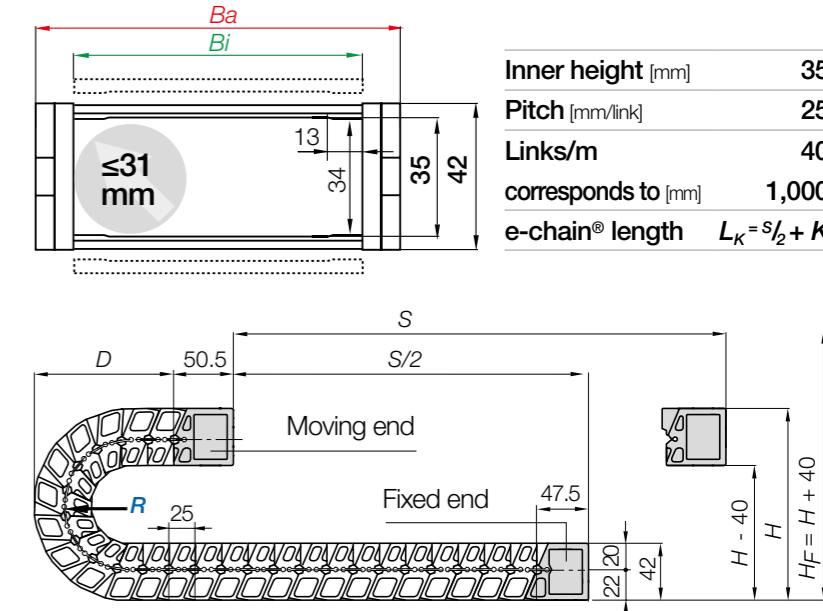
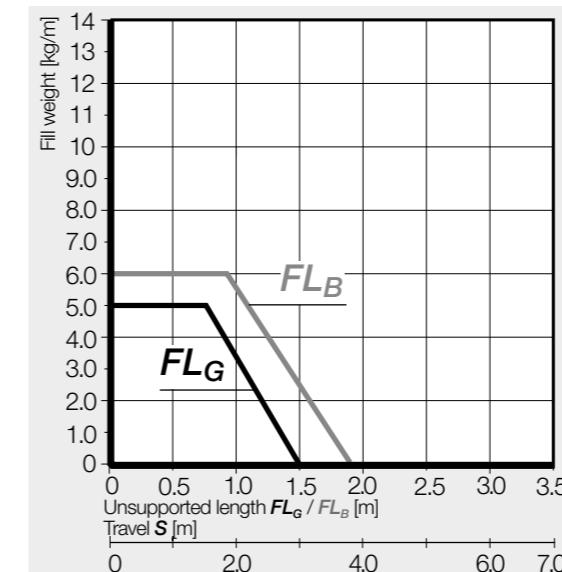
# E6 | Series E6.35 | Installation dimensions

Unsupported applications | Short travels



► 1300

► 1222



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

\*Radius available upon request. Please consult igus® for delivery time.

If a gliding application is required for a long travel, please consult igus®.

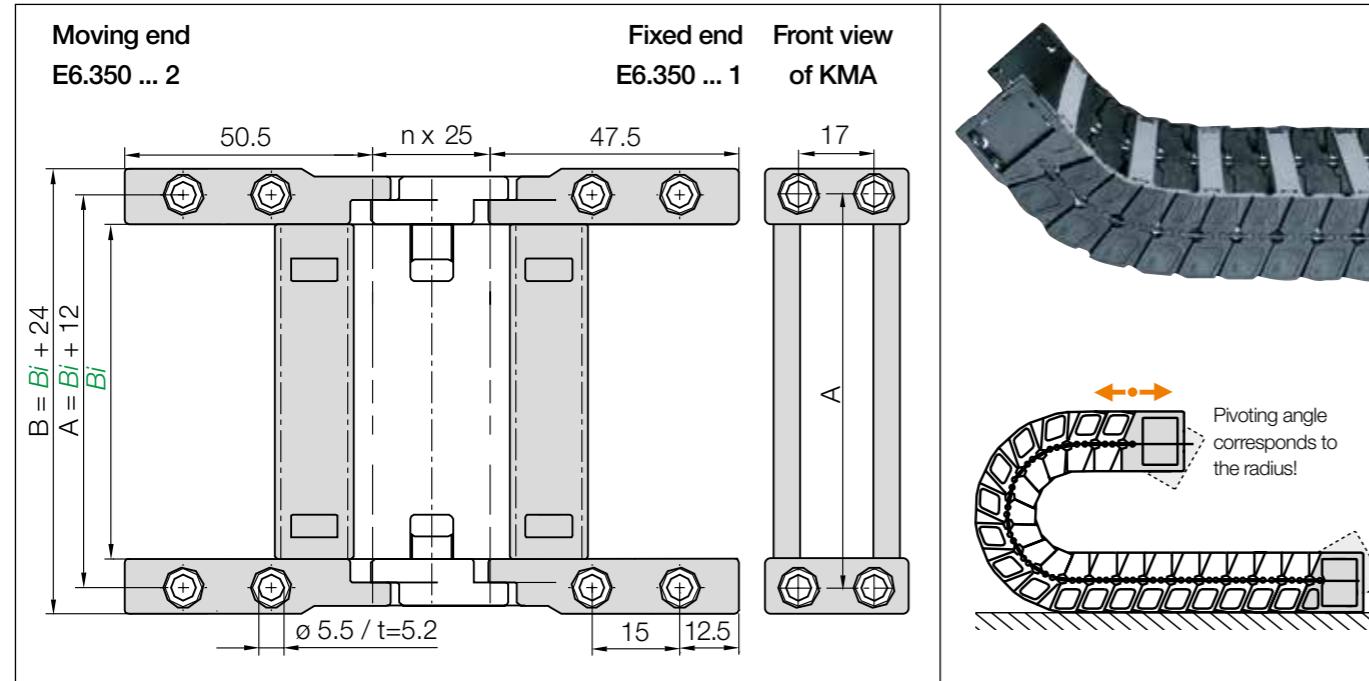
### Aluminium support tray

- Corrosion-resistant and seawater-resistant aluminium rails with adjustable width
- Noise-reducing glide strip integrated as standard
- Easy installation and connection of the e-chain®
- Open design - dirt and debris fall through

More information ► From page 1270



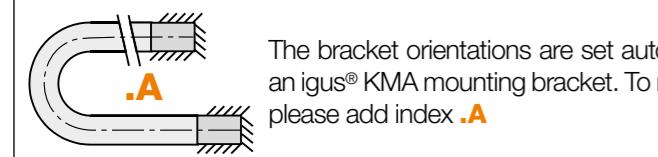
## KMA mounting brackets | Attachment from any side | Pivoting



## KMA pivoting | Recommended for unsupported applications

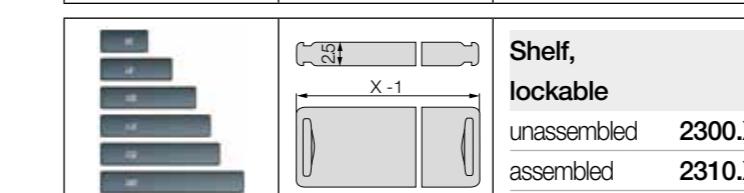
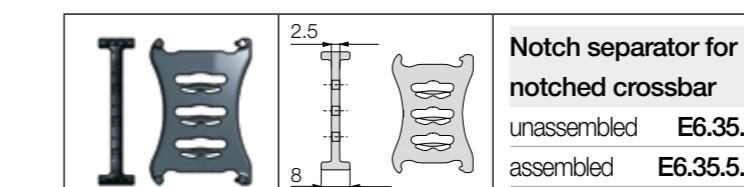
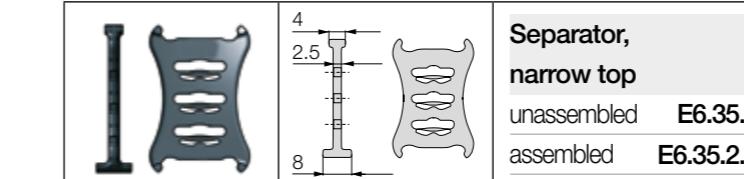
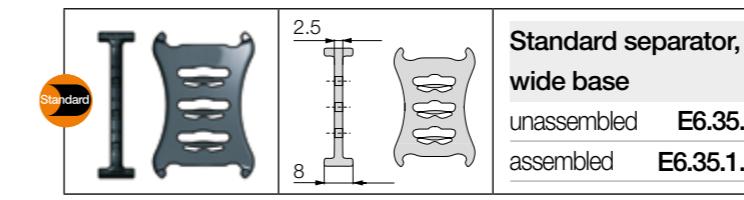
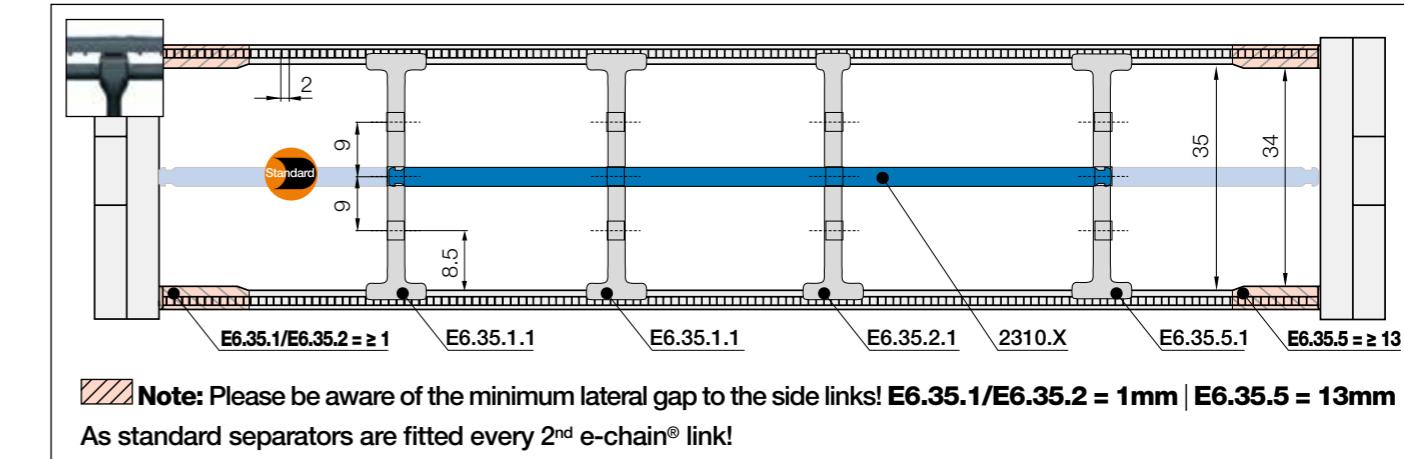
Width index	Part No. full set <b>KMA pivoting</b>	A [mm]	B [mm]	Bi [mm]
030. ►	E6.350. 030.12	42	54	30
040. ►	E6.350. 040.12	52	64	40
050. ►	E6.350. 050.12	62	74	50
060. ►	E6.350. 060.12	72	84	60
070. ►	E6.350. 070.12	82	94	70
080. ►	E6.350. 080.12	92	104	80

(KMA = polymer metal mounting bracket)



Strain relief e.g. clamps, tiewrap 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/E6.35](http://www.igus.eu/E6.35)

## Standard - for any application

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

## For even faster installation

Wide on one side for high holding force, narrow on opposite side for easy cable fitting.

## Locks securely in preset increments

Notch separator for exact positioning in e-chains®. Recommended for side-mounted applications.

## 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	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
Width = X [mm]	015	2300.015	2310.015	060	2300.060	2310.060	087	2300.087	2310.087
Series	025	2300.025	2310.025	062	2300.062	2310.062	090	2300.090	2310.090
	030	2300.030	2310.030	065	2300.065	2310.065	100	2300.100	2310.100
	038	2300.038	2310.038	070	2300.070	2310.070	103	2300.103	2310.103
	040	2300.040	2310.040	075	2300.075	2310.075	110	2300.110	2310.110
	050	2300.050	2310.050	077	2300.077	2310.077	120	2300.120	2310.120
	057	2300.057	2310.057	080	2300.080	2310.080	125	2300.125	2310.125

## Separator with integrated strain relief teeth

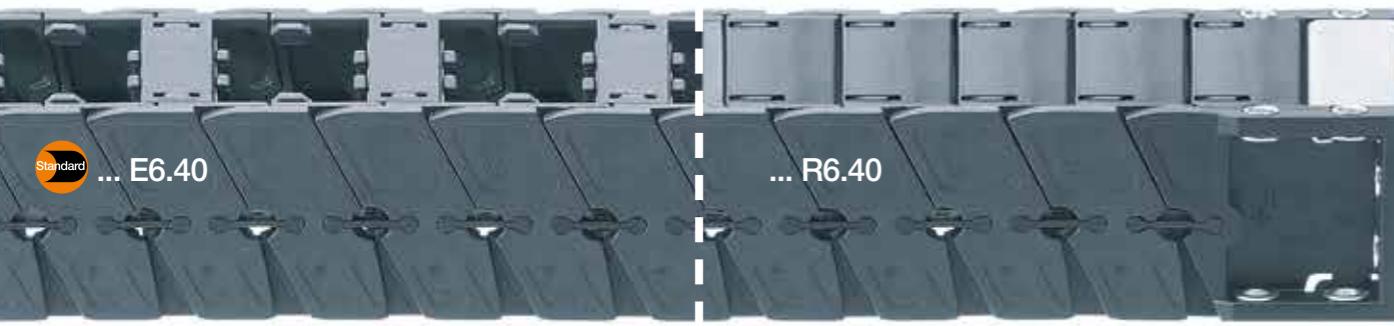
- Can be integrated into the mounting bracket or placed at any point in the e-chain®
- Combines strain relief and interior separation, for restricted space conditions
- Strain relief separator is easy to assemble without any screws

Part No. E6.35.02.Z. More information ► From page 1326



Extremely low noise and vibration

40



e-chains® | Series E6.40 | Crossbars removable along the inner and outer radius  
 e-tubes | Series R6.40 | Lids removable along the inner and outer radius

Part No.	Part No.	<i>Bi</i>	<i>Ba</i>	E6.40	R6.40
e-chains®	e-tubes	[mm]	[mm]	[kg/m]	[kg/m]
E6.40. 040.R.0	R6.40.* 040.R.0	40	60	≈ 1.29	–
E6.40. 050.R.0	R6.40.* 050.R.0	50	70	≈ 1.33	–
E6.40. 052.R.0	R6.40.* 052.R.0	52	72	≈ 1.34	–
E6.40. 062.R.0	R6.40.* 062.R.0	62	82	≈ 1.38	≈ 1.59
E6.40. 070.R.0	R6.40.* 070.R.0	70	90	≈ 1.41	–
E6.40. 075.R.0	R6.40.* 075.R.0	75	95	≈ 1.43	≈ 1.65
E6.40. 087.R.0	R6.40.* 087.R.0	87	107	≈ 1.48	–
E6.40. 100.R.0	R6.40.* 100.R.0	100	120	≈ 1.53	–

Part No.	Part No.	<i>Bi</i>	<i>Ba</i>	E6.40	R6.40
e-chains®	e-tubes	[mm]	[mm]	[kg/m]	[kg/m]
E6.40. 125.R.0	R6.40.* 125.R.0	125	145	≈ 1.63	–
E6.40. 150.R.0	R6.40.* 150.R.0	150	170	≈ 1.73	–
E6.40. 175.R.0	R6.40.* 175.R.0	175	195	≈ 1.83	–
E6.40. 200.R.0	R6.40.* 200.R.0	200	220	≈ 1.93	–
E6.40. 225.R.0	R6.40.* 225.R.0	225	245	≈ 2.02	–
E6.40. 250.R.0	R6.40.* 250.R.0	250	270	≈ 2.12	–
E6.40. 275.R.0	R6.40.* 275.R.0	275	295	≈ 2.22	–
E6.40. 300.R.0	R6.40.* 300.R.0	300	320	≈ 2.32	–

\*Width available upon request. Please consult igus® for delivery time.

## Available bend radii

*R* [mm] | 063 | 075 | 100 | 125 | 150 | 200 |Complete Part No. with required radius (*R*). Example:

E6.40.100.100.0 = e-chain® / R6.40.100.100.0 = e-tube



## Installation note - system E6

Open by removing the crossbar with a screwdriver.

Repeat the procedure on the other side.

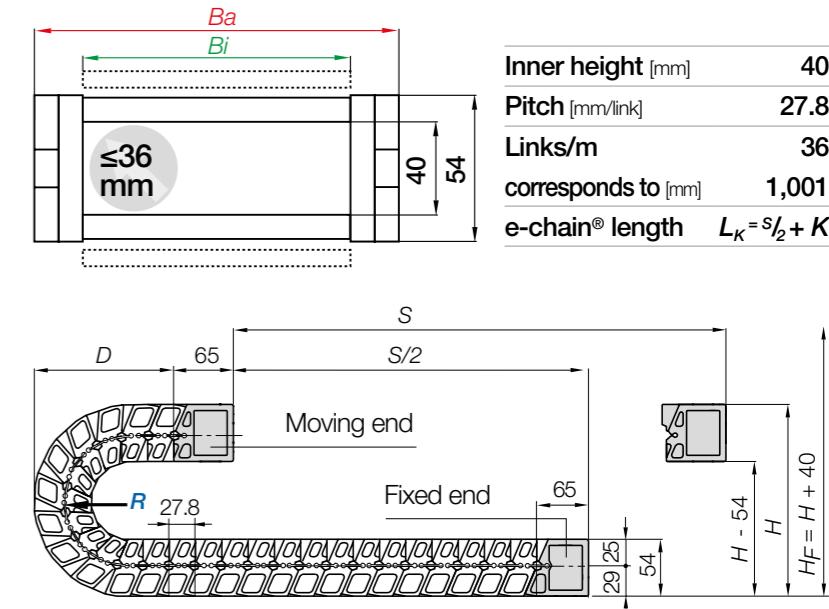
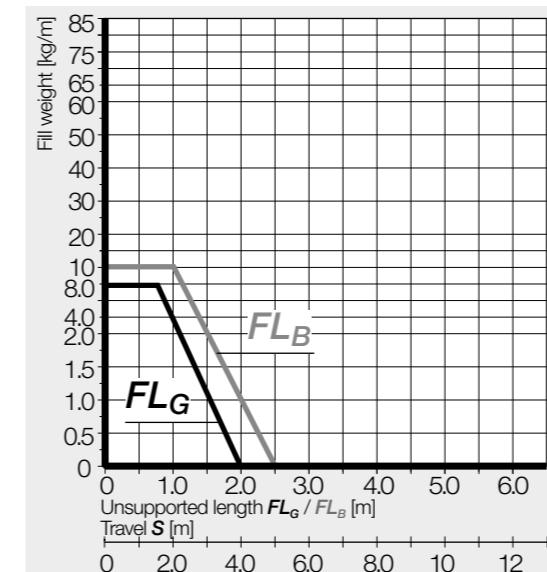
Assembly video available online at ► [www.igus.eu/E6\\_assembly](http://www.igus.eu/E6_assembly)

Unsupported applications | Short travels



► 1300

► 1224



<i>R</i>	063	075	100	125	150	200
<i>H</i>	224	248	298	348	398	498
<i>D</i>	134	146	171	196	221	271
<i>K</i>	255	295	370	450	530	685

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

If a gliding application is required for a long travel, please consult igus®.

## Aluminium support tray

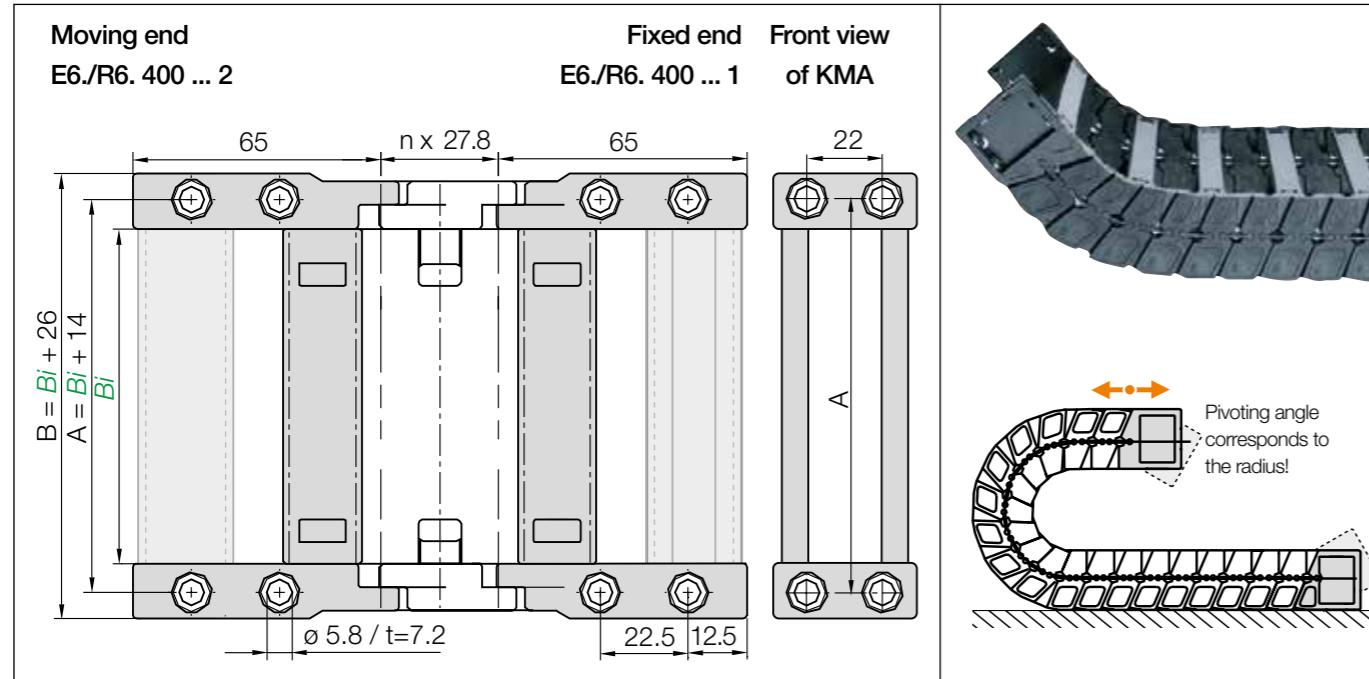
- Corrosion-resistant and seawater-resistant aluminium rails with adjustable width
- Noise-reducing glide strip integrated as standard
- Easy installation and connection of the e-chain®
- Open design - dirt and debris fall through

More information ► From page 1270



# E6 | Series E6.40·R6.40 | Accessories

KMA mounting brackets | Attachment from any side | Pivoting



## KMA pivoting | Recommended for unsupported applications

Width index	Part No. full set <b>KMA pivoting</b>	A [mm]	B [mm]	<i>Bi</i> [mm]
040.	E6.400. R6.400.* 040.12.C	54	66	<b>40</b>
050.	E6.400. R6.400.* 050.12.C	64	76	<b>50</b>
052.	E6.400. R6.400.* 052.12.C	66	78	<b>52</b>
062.	E6.400. R6.400. 062.12.C	76	88	<b>62</b>
070.	E6.400. R6.400.* 070.12.C	84	96	<b>70</b>
075.	E6.400. R6.400.* 075.12.C	89	101	<b>75</b>
087.	E6.400. R6.400.* 087.12.C	101	113	<b>87</b>
100.	E6.400. R6.400.* 100.12.C	114	126	<b>100</b>

\*Width available upon request. Please consult igus® for delivery time.

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



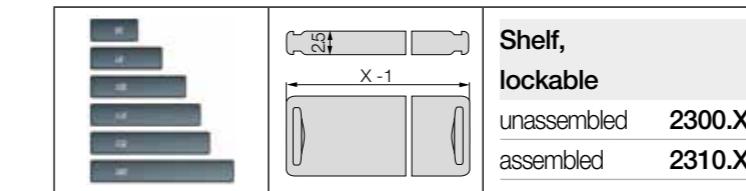
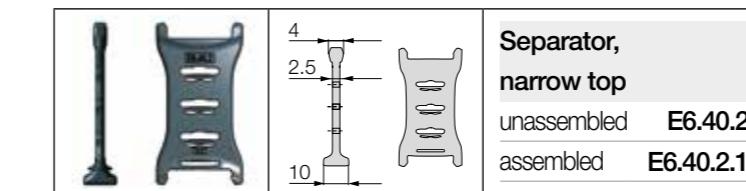
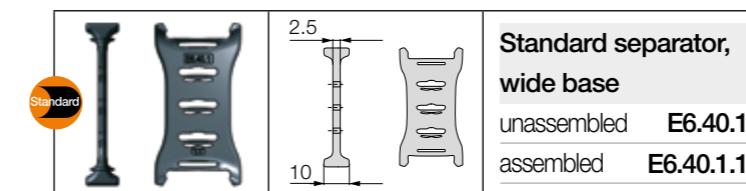
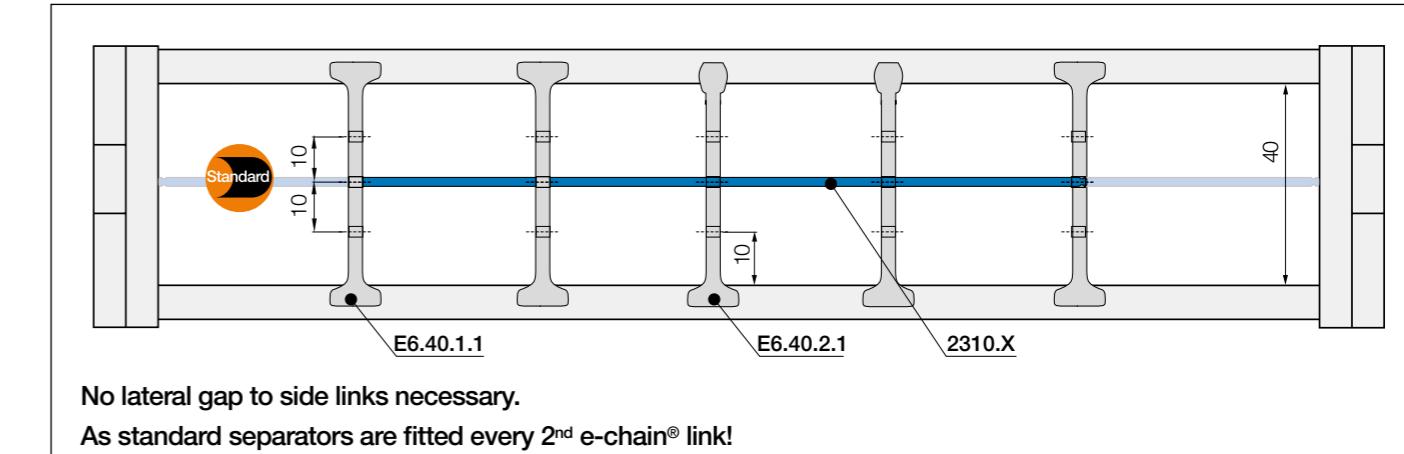
Orientations for KMA mounting brackets. To receive KMA pre-fitted **without C-profile** please add index **A**. Please add index **A2** for the standard version **with C-profile**, in the inner radius at the moving end and in the outer radius at the fixed end.

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

# E6 | e-chains® E6.40 | Accessories

Interior separation | Increase cable service life (only for e-chains®, for e-tubes ► next page)

Previous generation of interior separation with other options ► [www.igus.eu/E6.40](http://www.igus.eu/E6.40)



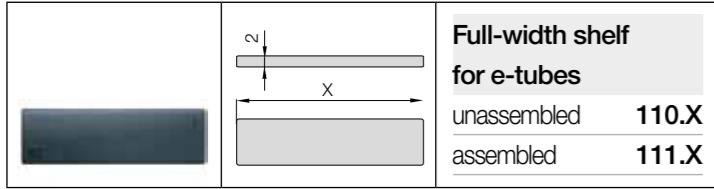
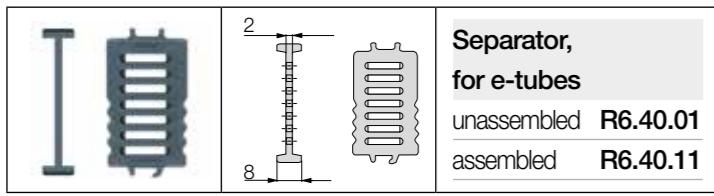
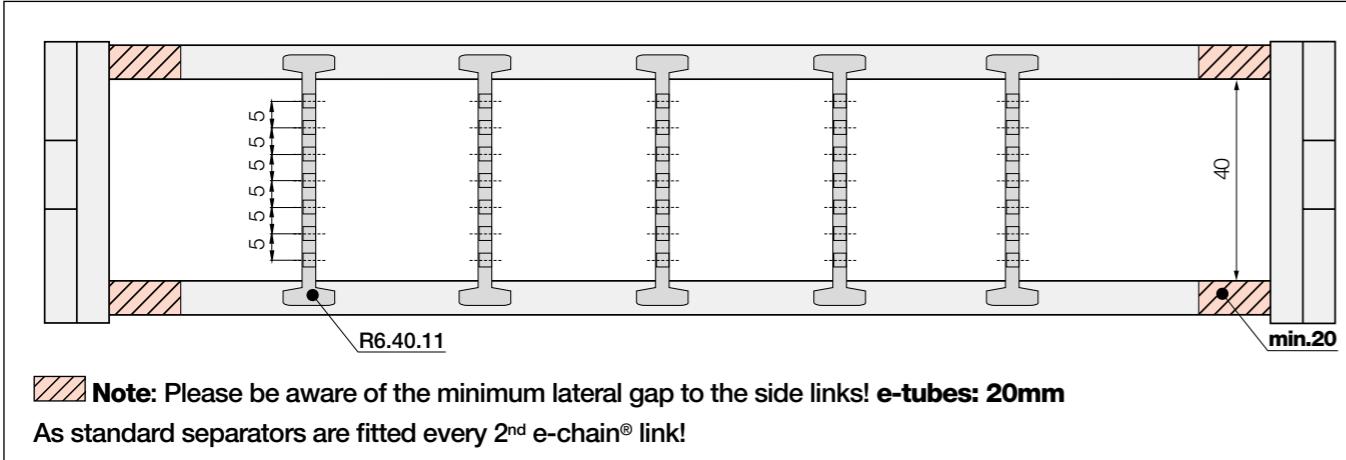
Shelves	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
<i>Width = X [mm]</i>									
	015	2300.015	2310.015	060	2300.060	2310.060	087	2300.087	2310.087
	025	2300.025	2310.025	062	2300.062	2310.062	090	2300.090	2310.090
	030	2300.030	2310.030	065	2300.065	2310.065	100	2300.100	2310.100
	038	2300.038	2310.038	070	2300.070	2310.070	103	2300.103	2310.103
	040	2300.040	2310.040	075	2300.075	2310.075	110	2300.110	2310.110
	050	2300.050	2310.050	077	2300.077	2310.077	120	2300.120	2310.120
	057	2300.057	2310.057	080	2300.080	2310.080	125	2300.125	2310.125

## Separator with integrated strain relief teeth

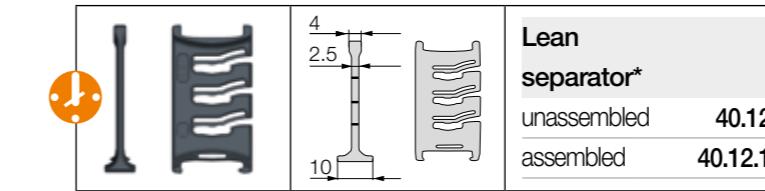
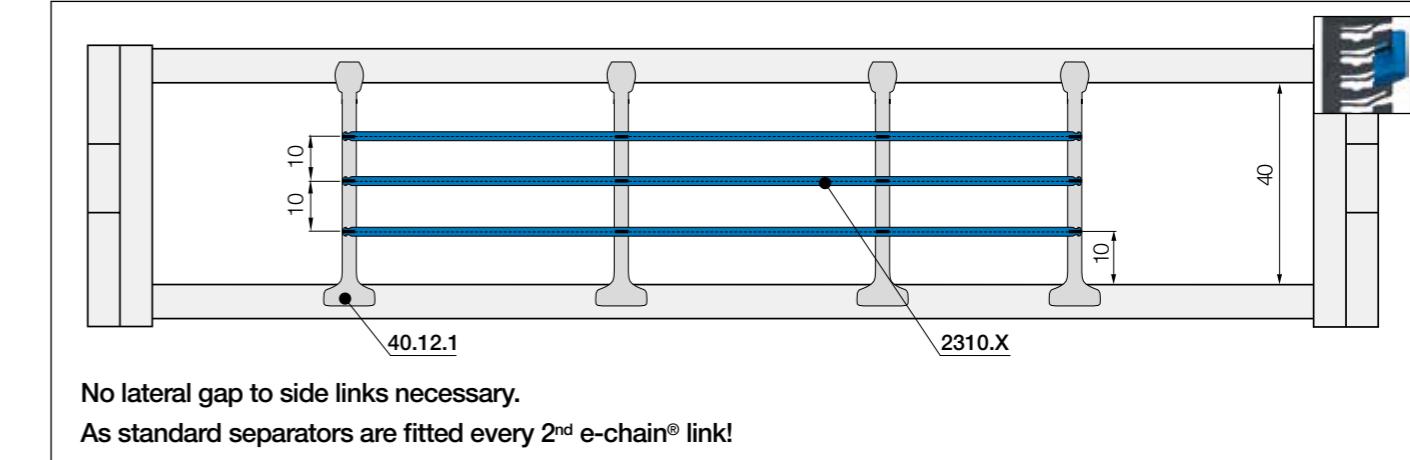
- Can be integrated into the mounting bracket or placed at any point in the e-chain®
- Combines strain relief and interior separation, for restricted space conditions
- Strain relief separator is easy to assemble without any screws

E6.40.02.Z. More information ► From page 1326

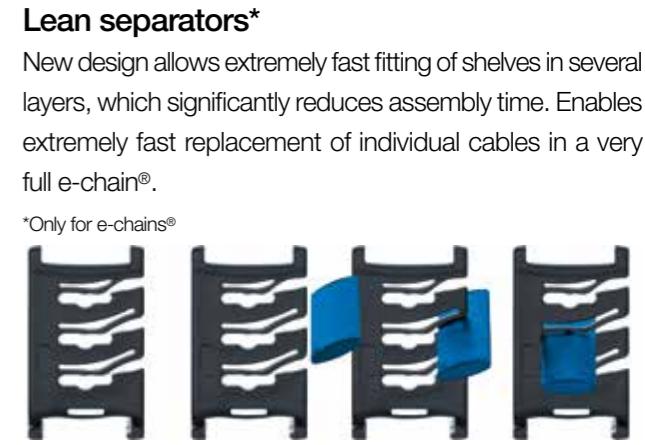


**E6 | e-tubes R6.40 | Accessories****Interior separation | Only for e-tubes** (e-chains® ► previous page)Previous generation of interior separation with other options ► [www.igus.eu/R6.40](http://www.igus.eu/R6.40)

<b>Full-width shelves</b> Width = X [mm]	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
030	110.30	111.30		070	110.70	111.70	110	110.110	111.110
040	110.40	111.40		080	110.80	111.80	120	110.120	111.120
050	110.50	111.50		090	110.90	111.90			
060	110.60	111.60		100	110.100	111.100			

**E6 | e-chains® E6.40 | Accessories****Interior separation | To allow faster filling** **New****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)

igus® system E6 on a linear drive for extremely high accelerations (over 10m/s<sup>2</sup>)

Extremely low noise and vibration

52



e-chains® | Series E6.52 | Crossbars removable along the inner and outer radius  
 e-tubes | Series R6.52 | Lids removable along the inner and outer radius

Part No.	Part No.	<i>Bi</i>	<i>Ba</i>	E6.52	R6.52
e-chains®	e-tubes	[mm]	[mm]	[kg/m]	[kg/m]
E6.52. 040. R.0	R6.52.*040. R.0	40	64	≈ 1.76	≈ 1.78
E6.52. 050. R.0	R6.52. 050. R.0	50	74	≈ 1.80	≈ 1.89
E6.52. 052. R.0	R6.52.*052. R.0	52	66	≈ 1.81	≈ 1.92
E6.52. 062. R.0	R6.52.*062. R.0	62	86	≈ 1.84	≈ 1.97
E6.52. 070. R.0	R6.52.*070. R.0	70	94	≈ 1.87	≈ 2.07
E6.52. 075. R.0	R6.52. 075. R.0	75	99	≈ 1.89	≈ 2.12
E6.52. 087. R.0	R6.52.*087. R.0	87	111	≈ 1.94	≈ 2.21
E6.52. 100. R.0	R6.52. 100. R.0	100	124	≈ 1.98	≈ 2.35

Part No.	Part No.	<i>Bi</i>	<i>Ba</i>	E6.52	R6.52
e-chains®	e-tubes	[mm]	[mm]	[kg/m]	[kg/m]
E6.52. 125. R.0	R6.52. 125. R.0	125	149	≈ 2.07	≈ 2.57
E6.52. 150. R.0	R6.52. 150. R.0	150	174	≈ 2.17	≈ 2.80
E6.52. 175. R.0	R6.52. 175. R.0	175	199	≈ 2.26	≈ 3.03
E6.52. 200. R.0	R6.52. 200. R.0	200	224	≈ 2.36	≈ 3.25
E6.52. 225. R.0	R6.52.*225. R.0	225	249	≈ 2.45	≈ 3.46
E6.52. 250. R.0	R6.52.*250. R.0	250	274	≈ 2.54	≈ 3.68
E6.52. 275. R.0	R6.52.*275. R.0	275	299	≈ 2.64	≈ 3.92
E6.52. 300. R.0	R6.52.*300. R.0	300	324	≈ 2.73	≈ 4.15

\*Width available upon request. Please consult igus® for delivery time.

## Available bend radii

*R* [mm] | 075 | 100 | 125 | 150 | 200 | 250 |Complete Part No. with required radius (*R*). Example:

E6.52.100.100.0 = e-chain® / R6.52.100.100.0 = e-tube



## Installation note - system E6

Open by removing the crossbar with a screwdriver.

Repeat the procedure on the other side.

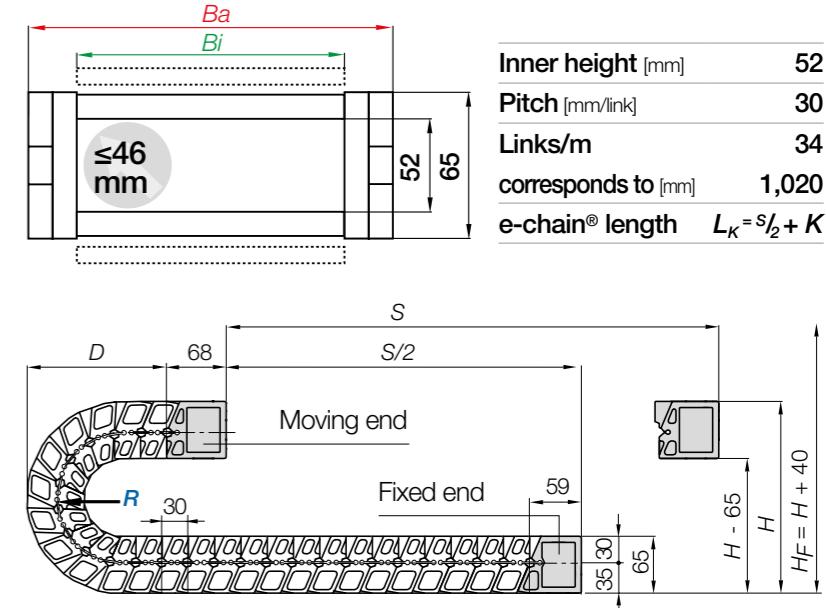
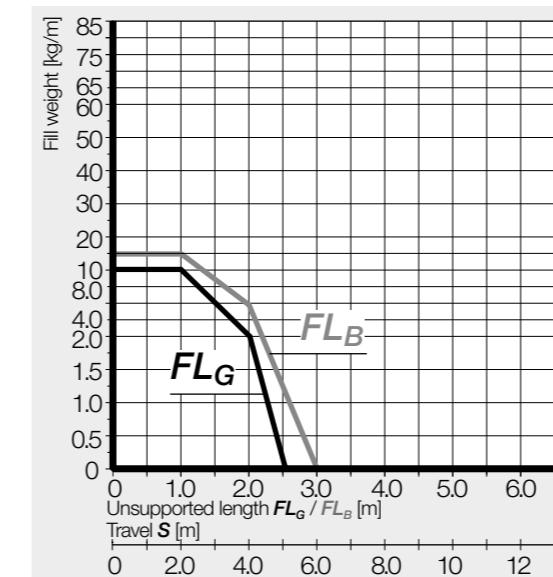
Assembly video available online at ► [www.igus.eu/E6\\_assembly](http://www.igus.eu/E6_assembly)

Unsupported applications | Short travels



► 1300

► 1228



<i>R</i>	075	100	125	150	200	250
<i>H</i>	270	320	365	420	520	620
<i>D</i>	155	180	203	230	280	330
<i>K</i>	300	375	455	535	690	850

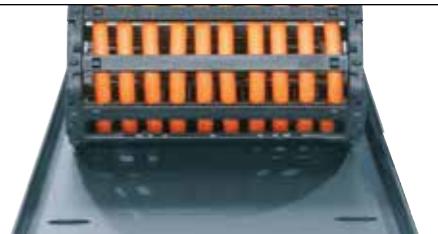
The required clearance height:  $H_F = H + 40\text{mm}$  (with 2.0kg/m fill weight)

If a gliding application is required for a long travel, please consult igus®.

## Steel support tray for support of the lower run

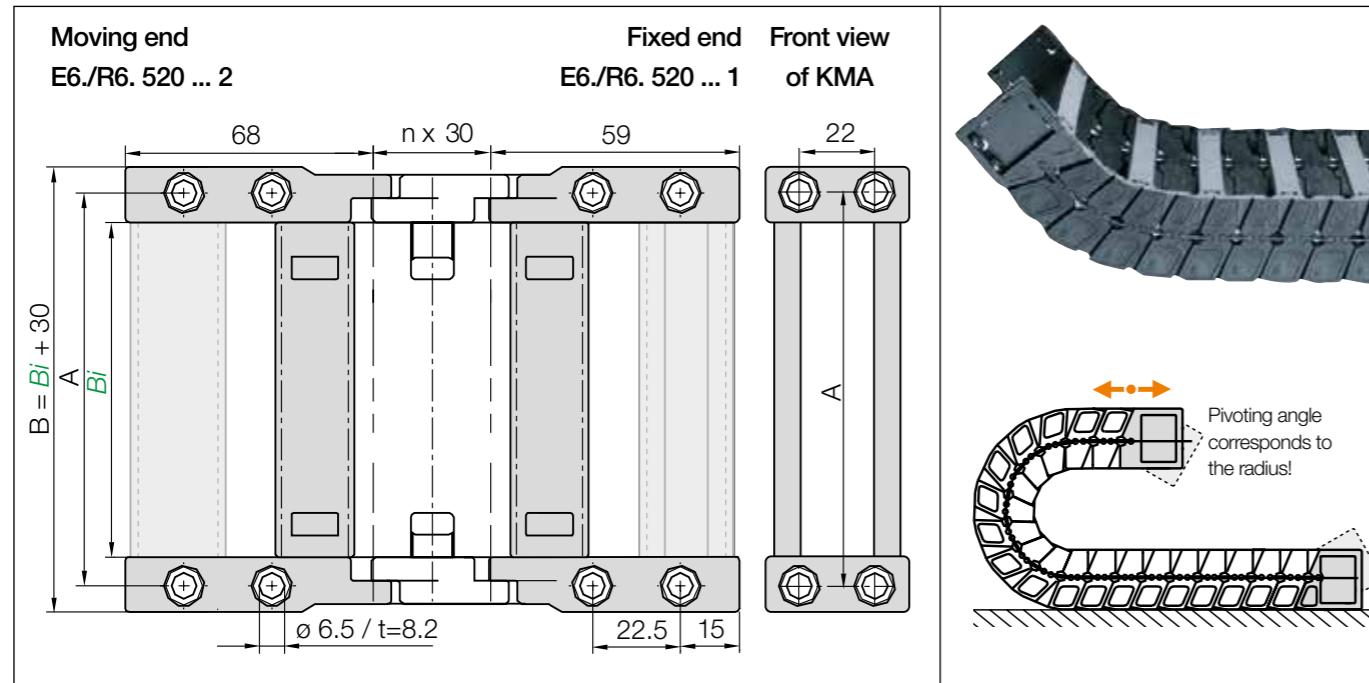
- Simple one-piece support trays for the lower run
- To your requirements and specification
- 4 options available

More information ► From page 1264



**E6 | Series E6.52·R6.52 | Accessories**

KMA mounting brackets | Attachment from any side | Pivoting

**KMA pivoting | Recommended for unsupported applications**

Width index	Part No. full set <b>KMA pivoting</b>	A [mm]	B [mm]	<i>Bi</i> [mm]
040.	E6.520. R6.520.* 040.12.C	56	70	<b>40</b>
050.	E6.520. R6.520. 050.12.C	66	80	<b>50</b>
052.	E6.520. R6.520.* 052.12.C	68	82	<b>52</b>
062.	E6.520. R6.520.* 062.12.C	78	92	<b>62</b>
070.	E6.520. R6.520.* 070.12.C	86	100	<b>70</b>
075.	E6.520. R6.520. 075.12.C	91	105	<b>75</b>
087.	E6.520. R6.520.* 087.12.C	103	117	<b>87</b>
100.	E6.520. R6.520. 100.12.C	116	130	<b>100</b>

\*Width available upon request. Please consult igus® for delivery time.

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

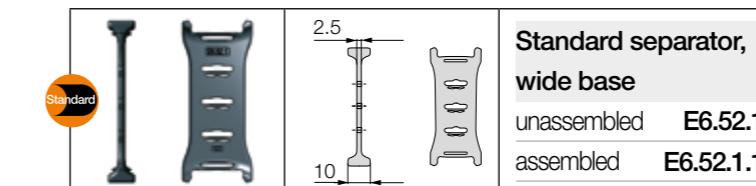
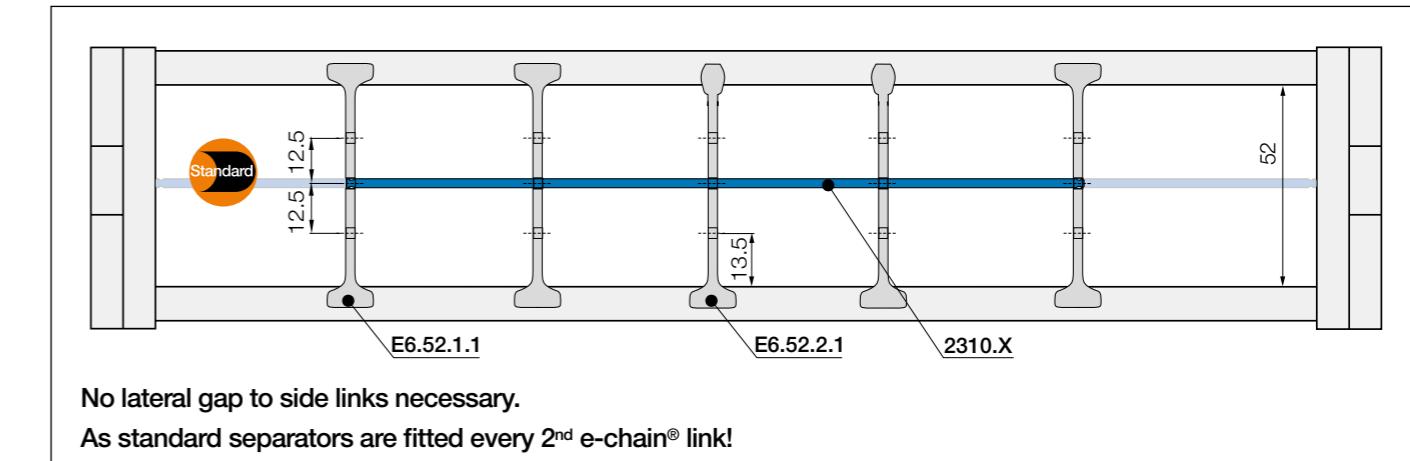


Orientations for KMA mounting brackets. To receive KMA pre-fitted **without C-profile** please add index **.A**. Please add index **.A2** for the standard version **with C-profile**, in the inner radius at the moving end and in the outer radius at the fixed end.

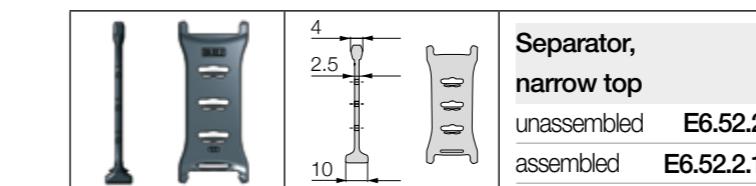
 **Strain relief** e.g. clamps, tiewrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with ordering options ► From page 1300

**E6 | e-chains® E6.52 | Accessories**

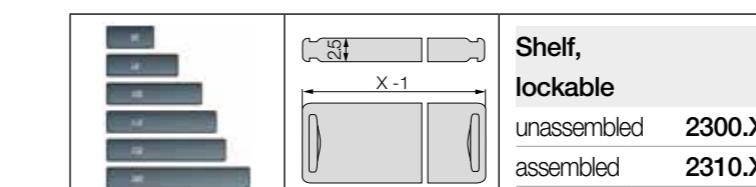
Interior separation | Increase cable service life (only for e-chains®, for e-tubes ► next page)

Previous generation of interior separation with other options ► [www.igus.eu/E6.52](http://www.igus.eu/E6.52)**Standard - for any application**

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

**For even faster installation**

Wide on one side for high holding force, narrow on opposite side for easy cable fitting.

**Horizontal separation**

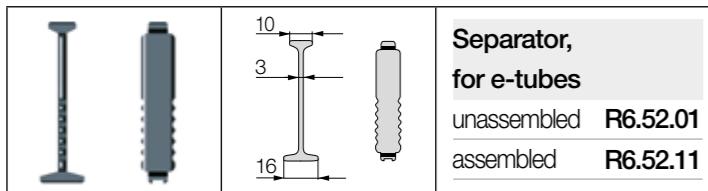
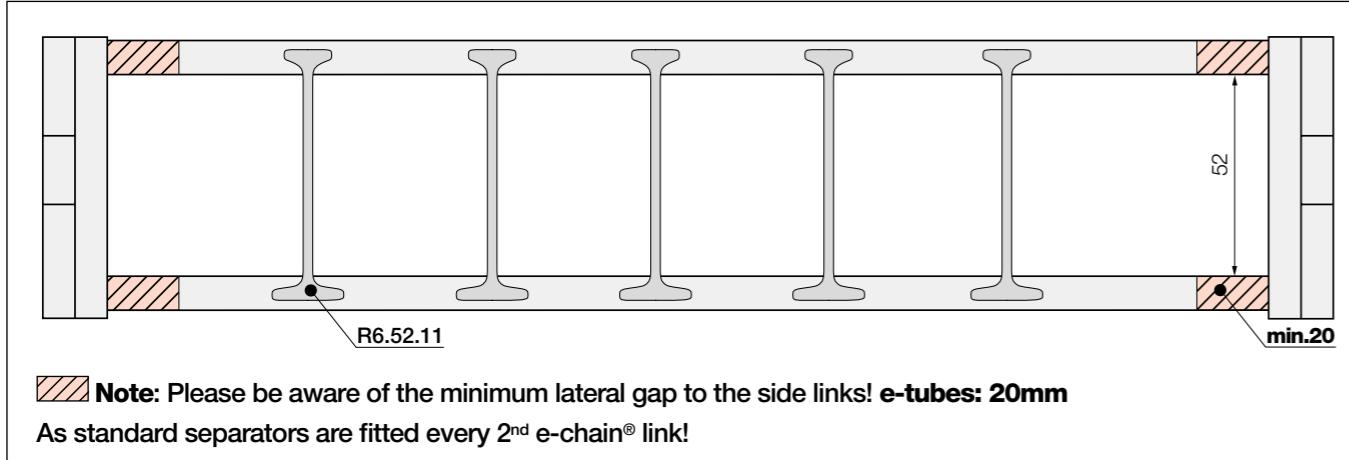
Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

Shelves	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
<i>Width = X [mm]</i>									
	015	2300.015	2310.015	060	2300.060	2310.060	087	2300.087	2310.087
	025	2300.025	2310.025	062	2300.062	2310.062	090	2300.090	2310.090
	030	2300.030	2310.030	065	2300.065	2310.065	100	2300.100	2310.100
	038	2300.038	2310.038	070	2300.070	2310.070	103	2300.103	2310.103
	040	2300.040	2310.040	075	2300.075	2310.075	110	2300.110	2310.110
	050	2300.050	2310.050	077	2300.077	2310.077	120	2300.120	2310.120
	057	2300.057	2310.057	080	2300.080	2310.080	125	2300.125	2310.125

## E6 | e-tubes R6.52 | Accessories

### Interior separation | Only for e-tubes (e-chains® ► previous page)

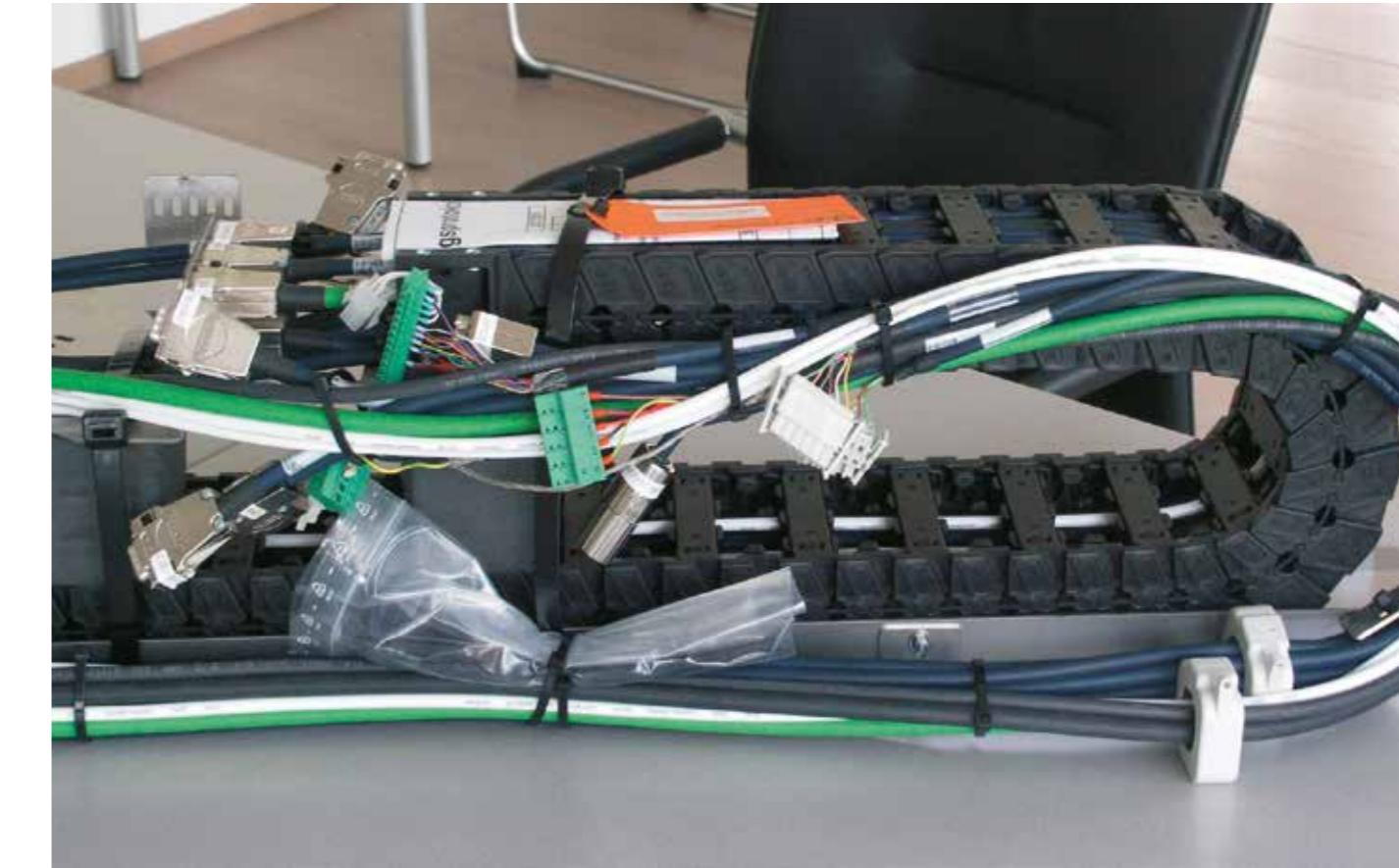
Previous generation of interior separation with other options ► [www.igus.eu/R6.29](http://www.igus.eu/R6.29)



### Separator for e-tubes

Notches on the separator indicate the clamping side of the separator. The notches on this separator mark the side that fixes to the lid.

## E6 | Application example



Preassembled energy supply systems significantly reduce assembly times. As cleanroom compatibility is required in this positioning system, a cleaning protocol is provided with each pre-harnessed e-chain system®



## e-chains® | Series E6.62 | Crossbars removable along the inner and outer radius

Part No.	<i>Bi</i>	<i>Ba</i>	E6.62
e-chains®	[mm]	[mm]	[kg/m]
E6.62. 05. R.0	50	86	3.22
E6.62. 06. R.0	68	104	3.28
E6.62. 07. R.0	75	111	3.31
E6.62. 087. R.0	87	123	3.35
E6.62. 097. R.0	97	133	3.38
E6.62. 10. R.0	100	136	3.39
E6.62. 11. R.0	108	144	3.42
E6.62. 112. R.0	112	148	3.43
E6.62. 12. R.0	125	161	3.48
E6.62. 137. R.0	137	173	3.52
E6.62. 15. R.0	150	186	3.57
E6.62. 162. R.0	162	198	3.61
E6.62. 17. R.0	168	204	3.63
E6.62. 18. R.0	175	211	3.65
E6.62. 187. R.0	187	223	3.69
E6.62. 20. R.0	200	236	3.74

Part No.	<i>Bi</i>	<i>Ba</i>	E6.62
e-chains®	[mm]	[mm]	[kg/m]
E6.62. 212. R.0	212	248	3.78
E6.62. 23. R.0	225	261	3.83
E6.62. 237. R.0	237	273	3.87
E6.62. 25. R.0	250	286	3.91
E6.62. 262. R.0	262	298	3.95
E6.62. 28. R.0	275	311	4.00
E6.62. 29. R.0	287	323	4.04
E6.62. 30. R.0	300	336	4.09
E6.62. 312. R.0	312	348	4.13
E6.62. 325. R.0	325	361	4.17
E6.62. 337. R.0	337	373	4.21
E6.62. 350. R.0	350	386	4.26
E6.62. 362. R.0	362	398	4.30
E6.62. 375. R.0	375	411	4.35
E6.62. 387. R.0	387	423	4.39
E6.62. 400. R.0	400	436	4.43

## Available bend radii

*R* [mm] | 115 | 150 | 200 | 250 | 300 | 350 |Complete Part No. with required radius (*R*). Example: E6.62.10.250.0

## Installation note - system E6

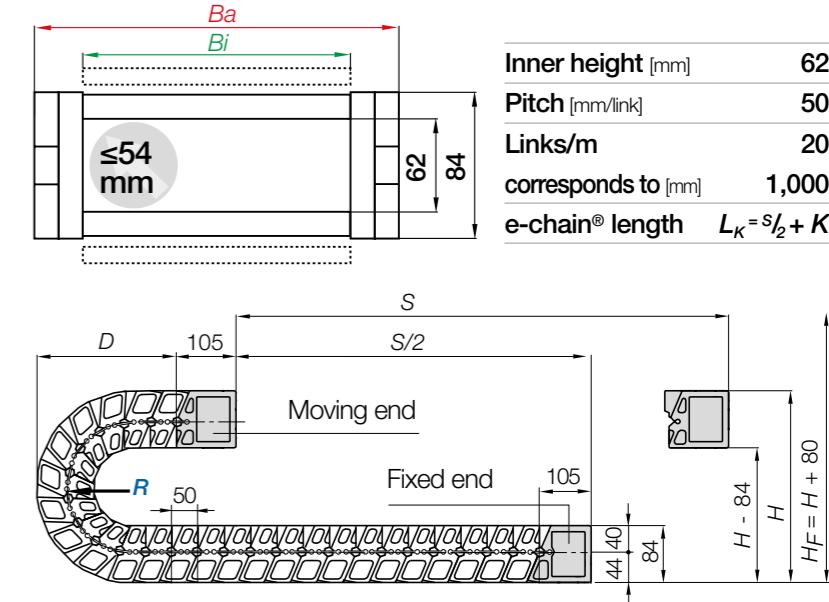
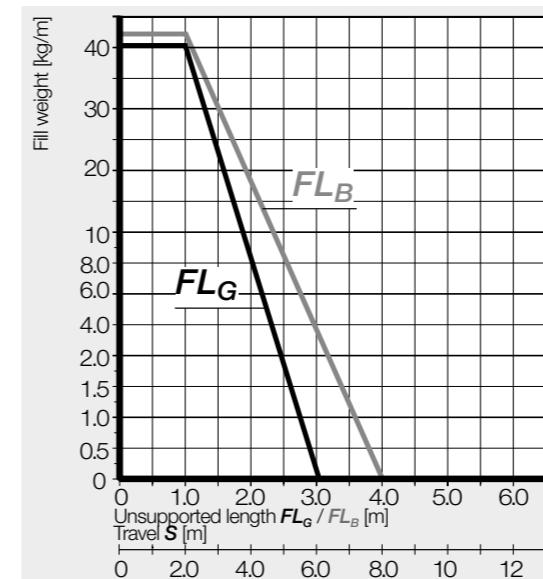
Open by removing the crossbar with a screwdriver.

Repeat the procedure on the other side.

Assembly video available online at ► [www.igus.eu/E6\\_assembly](http://www.igus.eu/E6_assembly)

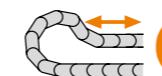
► 1300

► 1230



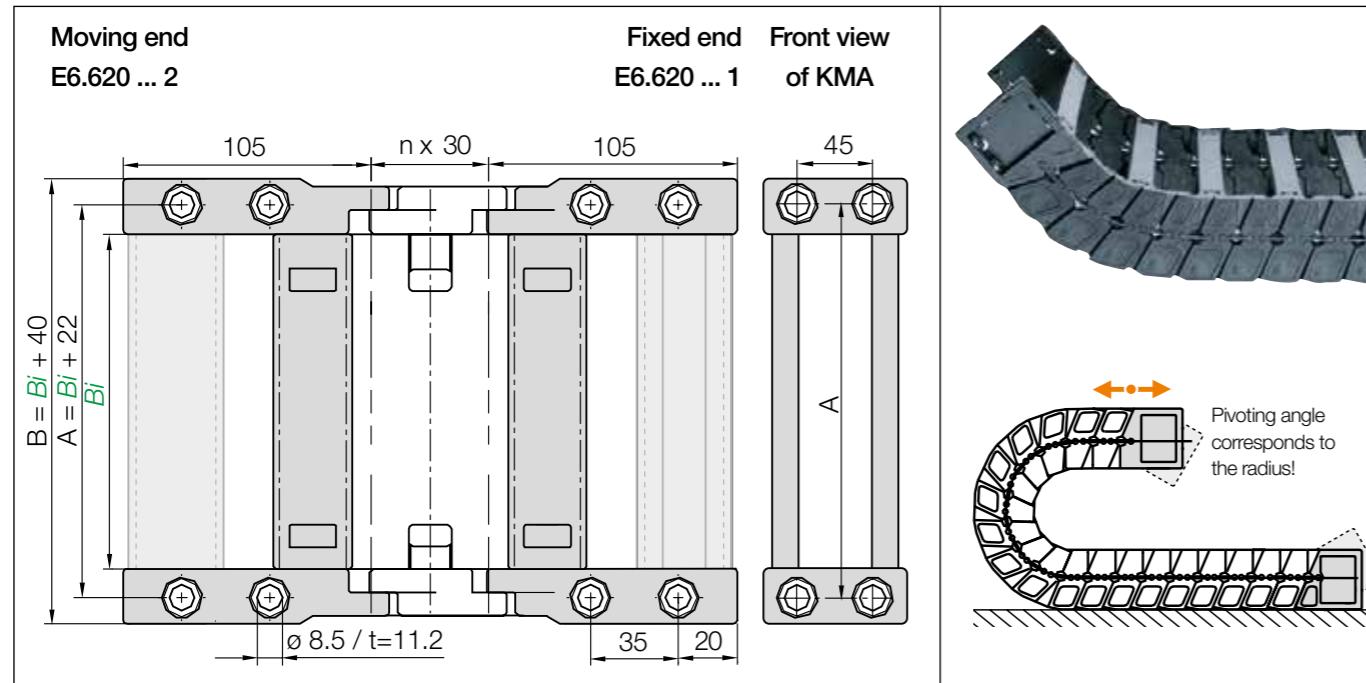
<i>R</i>	115	150	200	250	300	350
<i>H</i>	388	458	558	658	758	858
<i>D</i>	234	269	319	369	419	469
<i>K</i>	465	575	730	890	1,045	1,200

The required clearance height:  $H_F = H + 80\text{mm}$  (with 2.0kg/m fill weight)



If a gliding application is required for a long travel, please consult igus®.

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



## KMA pivoting | Recommended for unsupported applications

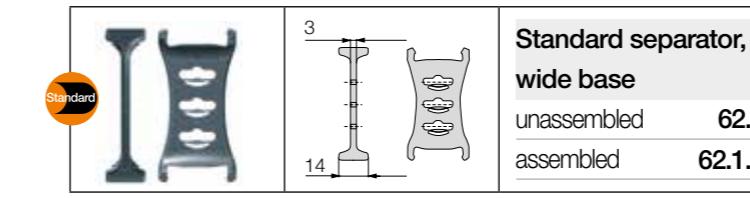
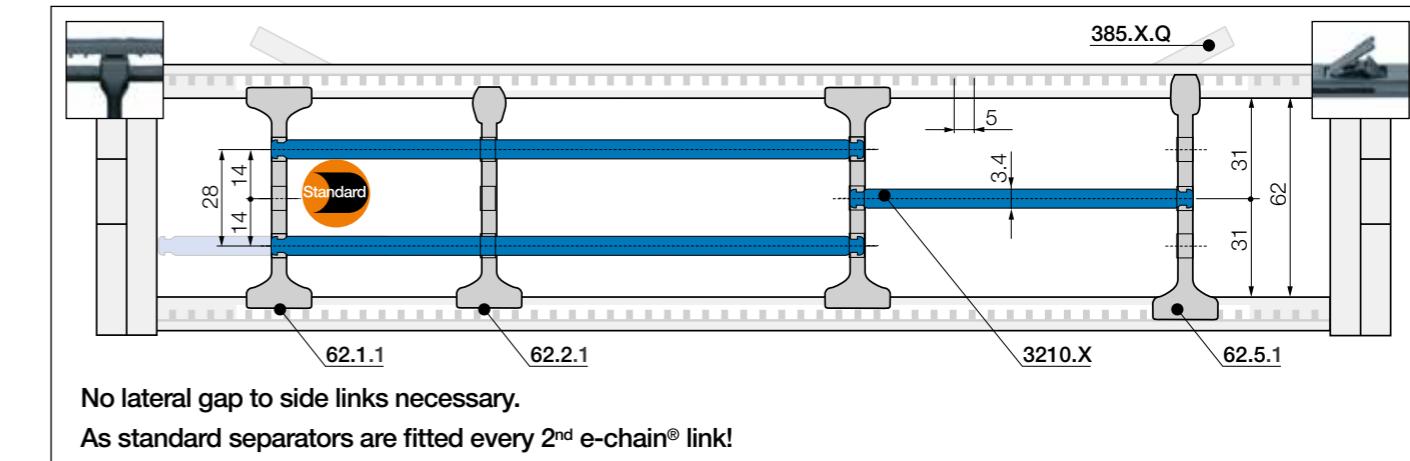
Width index	Part No. full set <b>KMA pivoting</b>	A [mm]	B [mm]	<i>Bi</i> [mm]
05.	E6.620. 05. 12.C	72	90	50
06.	E6.620. 06. 12.C	90	108	68
07.	E6.620. 07. 12.C	97	115	75
087.	E6.620. 087.12.C	109	127	87
097.	E6.620. 097.12.C	119	137	97
10.	E6.620. 10. 12.C	122	140	100
11.	E6.620. 11. 12.C	130	148	108
112.	E6.620. 112.12.C	134	152	112
12.	E6.620. 12. 12.C	147	165	125
137.	E6.620. 137.12.C	159	177	137
15.	E6.620. 15. 12.C	172	190	150
162.	E6.620. 162.12.C	184	202	162
17.	E6.620. 17. 12.C	190	208	168
18.	E6.620. 18. 12.C	197	215	175
187.	E6.620. 187.12.C	209	227	187
20.	E6.620. 20. 12.C	222	240	200

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

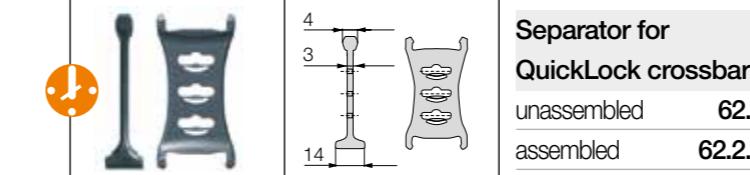
Orientations for KMA mounting brackets. To receive KMA pre-fitted **without C-profile** please add index .A. Please add index .A2 for the standard version **with C-profile**, in the inner radius at the moving end and in the outer radius at the fixed end.

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

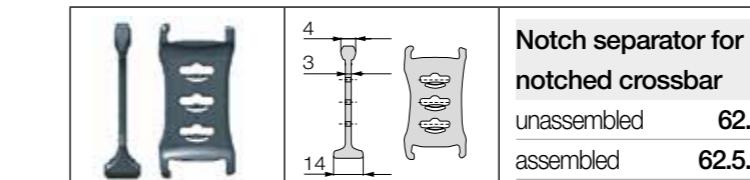
## Interior separation | Increase cable service life

Previous generation of interior separation with other options ► [www.igus.eu/E6.62](http://www.igus.eu/E6.62)

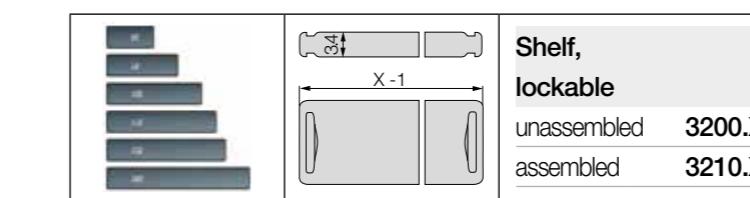
**Standard - for any application**  
Separator with a wide base for maximum holding force in the e-chain®.



**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.



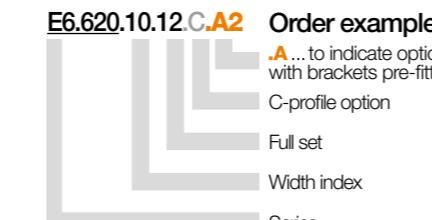
**Locks securely in preset increments**  
Notch separator for exact positioning in e-chains®. Recommended for side-mounted applications.



**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	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			

**E6.620.10.12.C.A2 Order example**

...to indicate option with brackets pre-fitted

C-profile option

Full set

Width index

Series

# E6 | Series E6.80L | Product range

Extremely low noise and vibration

80



## e-chains® | Series E6.80L | Crossbars removable along the inner and outer radius

Part No.	<i>Bi</i> [mm]	<i>Ba</i> [mm]	E6.80L [kg/m]
E6.80L. 08. R.0	87	115	3.28
E6.80L. 10. R.0	100	128	3.33
E6.80L. 11. R.0	112	140	3.38
E6.80L. 12. R.0	125	153	3.43
E6.80L. 13. R.0	137	165	3.49
E6.80L. 15. R.0	150	178	3.55
E6.80L. 16. R.0	162	190	3.61
E6.80L. 17. R.0	175	203	3.67
E6.80L. 18. R.0	187	215	3.73
E6.80L. 20. R.0	200	228	3.79
E6.80L. 21. R.0	212	240	3.85
E6.80L. 22. R.0	225	253	3.91
E6.80L. 23. R.0	237	265	3.97
E6.80L. 25. R.0	250	278	4.02
E6.80L. 26. R.0	262	290	4.09
E6.80L. 27. R.0	275	303	4.14
E6.80L. 28. R.0	287	315	4.20
E6.80L. 30. R.0	300	328	4.26
E6.80L. 31. R.0	312	340	4.32

Part No.	<i>Bi</i> [mm]	<i>Ba</i> [mm]	E6.80L [kg/m]
E6.80L. 32. R.0	325	353	4.38
E6.80L. 33. R.0	337	365	4.44
E6.80L. 35. R.0	350	378	4.50
E6.80L. 36. R.0	362	390	4.56
E6.80L. 37. R.0	375	403	4.62
E6.80L. 38. R.0	387	415	4.68
E6.80L. 40. R.0	400	428	4.74
E6.80L. 41. R.0	412	440	4.80
E6.80L. 42. R.0	425	453	4.85
E6.80L. 43. R.0	437	465	4.92
E6.80L. 45. R.0	450	478	5.03
E6.80L. 46. R.0	462	490	5.09
E6.80L. 47. R.0	475	503	5.15
E6.80L. 48. R.0	487	515	5.21
E6.80L. 50. R.0	500	528	5.27
E6.80L. 51. R.0	512	540	5.33
E6.80L. 52. R.0	525	553	5.39
E6.80L. 53. R.0	537	565	5.45
E6.80L. 55. R.0	550	578	5.51

### Available bend radii

*R* [mm] | 150 | 175 | 200 | 250 | 300 |

Complete Part No. with required radius (*R*). Example: E6.80L.10.175.0



### Installation note - system E6

Open by removing the crossbar with a screwdriver.  
Repeat the procedure on the other side.

Assembly video available online at ► [www.igus.eu/E6\\_assembly](http://www.igus.eu/E6_assembly)

# E6 | Series E6.80L | Installation dimensions

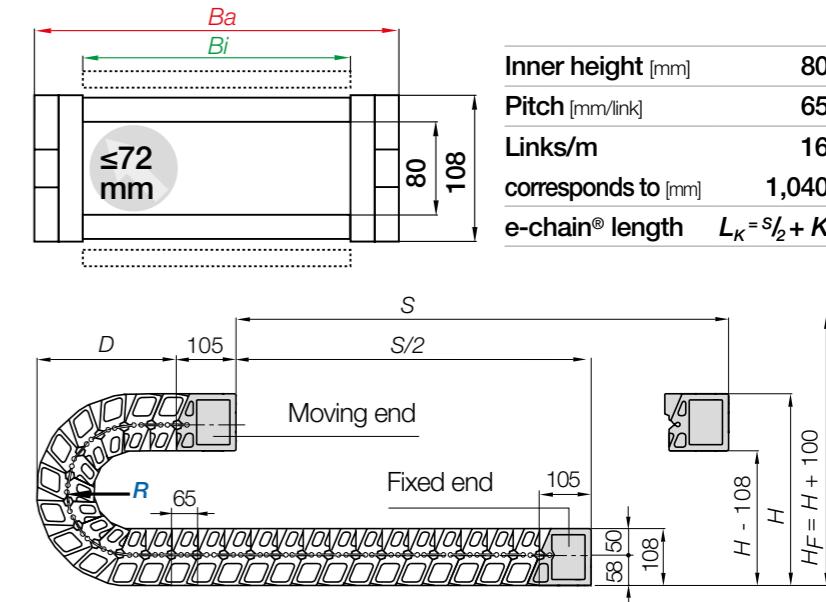
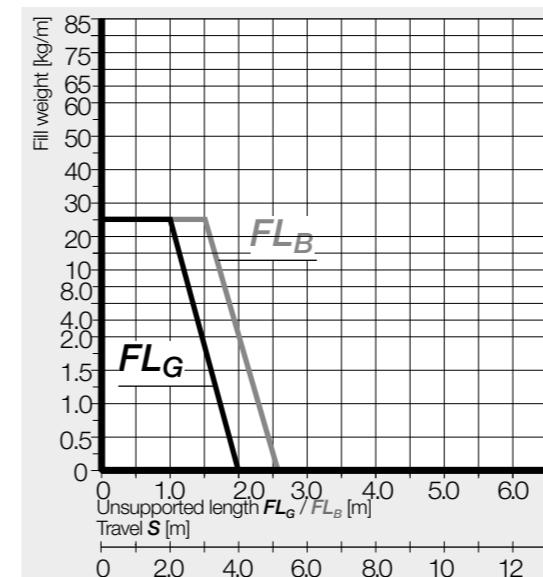
Unsupported applications | Short travels



E6.80L

► 1300

► 1232

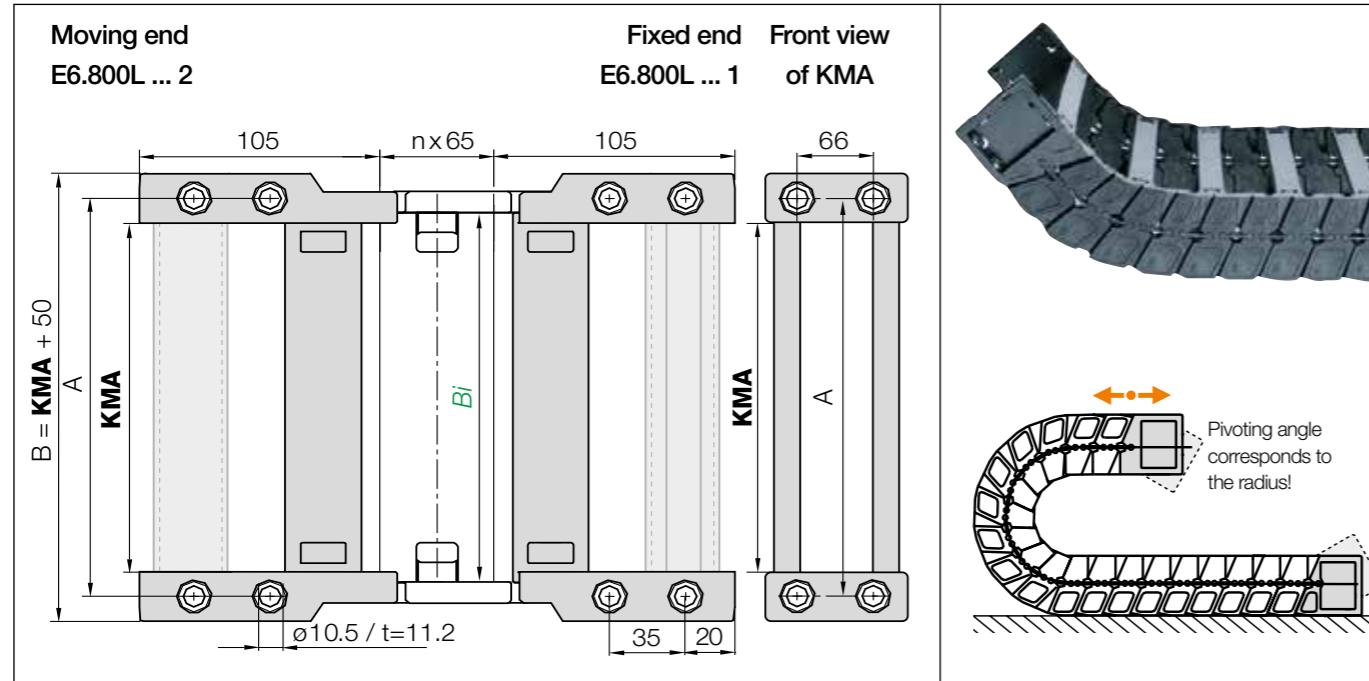


<i>R</i>	150	175	200	250	300
<i>H</i>	516	566	616	716	816
<i>D</i>	306	331	356	406	456
<i>K</i>	605	680	760	915	1,075

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

If a gliding application is required for a long travel, please consult igus®.

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



## KMA pivoting | Recommended for unsupported applications

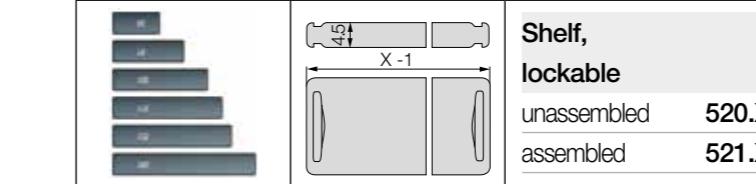
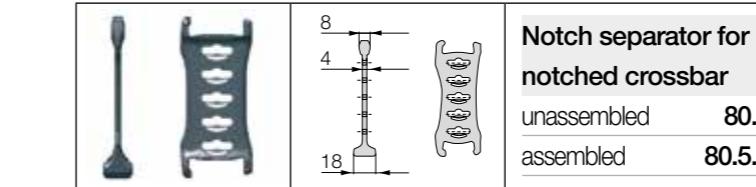
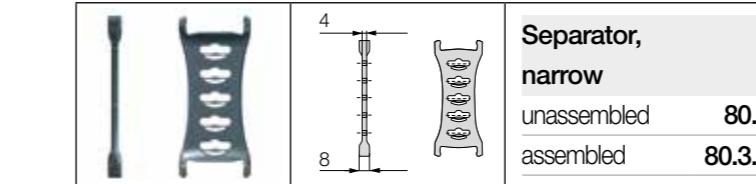
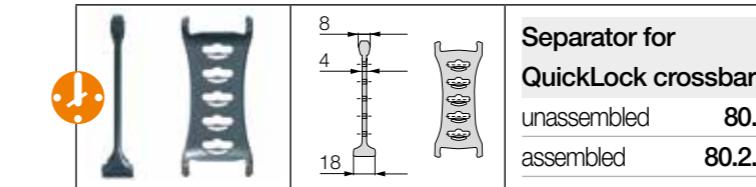
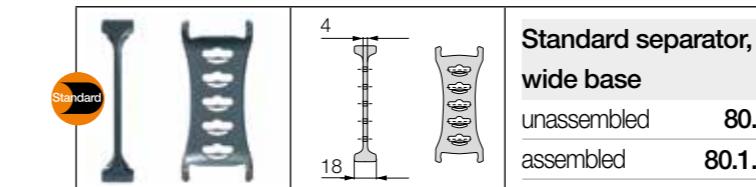
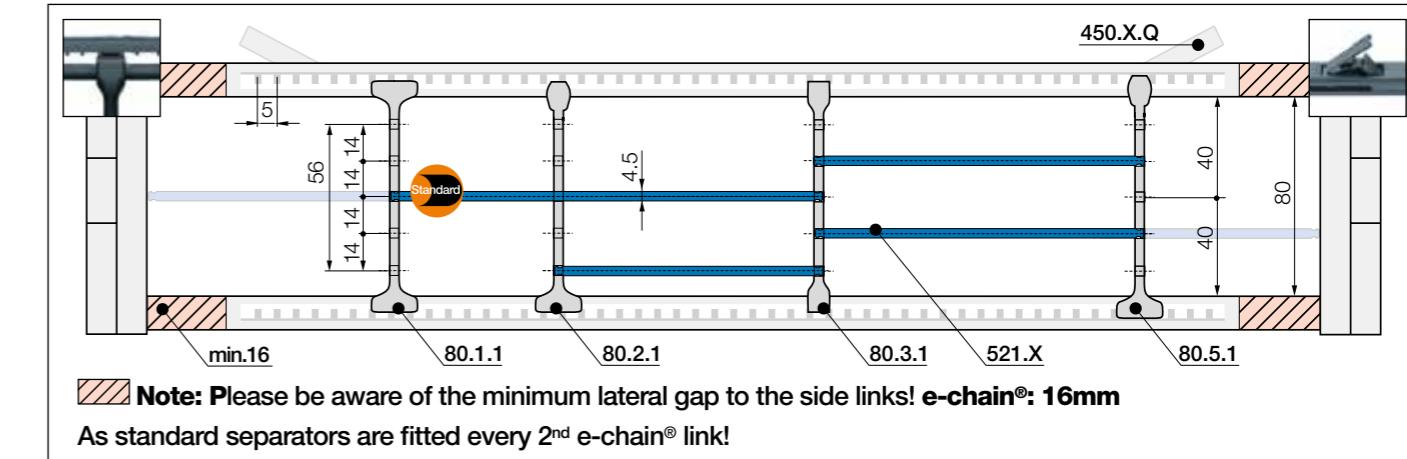
Width index	Part No. full set <b>KMA pivoting</b>	A [mm]	KMA [mm]	Width index	Part No. full set <b>KMA pivoting</b>	A [mm]	KMA [mm]
08.	E6.800L.08. 12.C	103	75	32.	E6.800L.32. 12.C	340	312
10.	E6.800L.10. 12.C	115	87	33.	E6.800L.33. 12.C	353	325
11.	E6.800L.11. 12.C	128	100	35.	E6.800L.35. 12.C	365	337
12.	E6.800L.12. 12.C	140	112	36.	E6.800L.36. 12.C	378	350
13.	E6.800L.13. 12.C	153	125	37.	E6.800L.37. 12.C	390	362
15.	E6.800L.15. 12.C	165	137	38.	E6.800L.38. 12.C	403	375
16.	E6.800L.16. 12.C	178	150	40.	E6.800L.40. 12.C	415	387
17.	E6.800L.17. 12.C	190	162	41.	E6.800L.41. 12.C	428	400
18.	E6.800L.18. 12.C	203	175	42.	E6.800L.42. 12.C	440	412
20.	E6.800L.20. 12.C	215	187	43.	E6.800L.43. 12.C	453	425
21.	E6.800L.21. 12.C	228	200	45.	E6.800L.45. 12.C	465	437
22.	E6.800L.22. 12.C	240	212	46.	E6.800L.46. 12.C	478	450
23.	E6.800L.23. 12.C	253	225	47.	E6.800L.47. 12.C	490	462
25.	E6.800L.25. 12.C	265	237	48.	E6.800L.48. 12.C	503	475
26.	E6.800L.26. 12.C	278	250	50.	E6.800L.50. 12.C	515	487
27.	E6.800L.27. 12.C	290	262	51.	E6.800L.51. 12.C	528	500
28.	E6.800L.28. 12.C	303	275	52.	E6.800L.52. 12.C	540	512
30.	E6.800L.30. 12.C	315	287	53.	E6.800L.53. 12.C	553	525
31.	E6.800L.31. 12.C	328	300	55.	E6.800L.55. 12.C	565	537

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

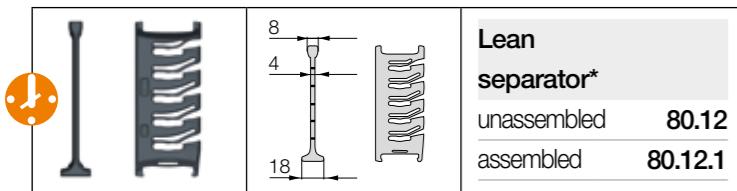
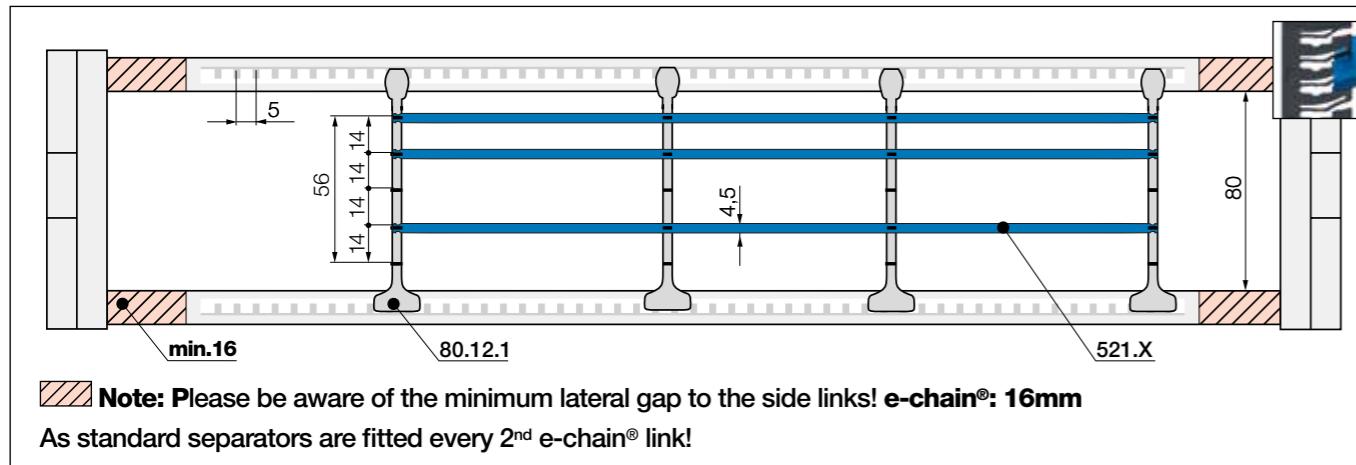
Orientations for KMA mounting brackets. To receive KMA pre-fitted **without C-profile** please add index .A. Please add index .A2 for the standard version **with C-profile**, in the inner radius at the moving end and in the outer radius at the fixed end.

Strain relief e.g. clamps, tiewrap 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/E6.80L](http://www.igus.eu/E6.80L)

Shelves	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
Width = X [mm]									
	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



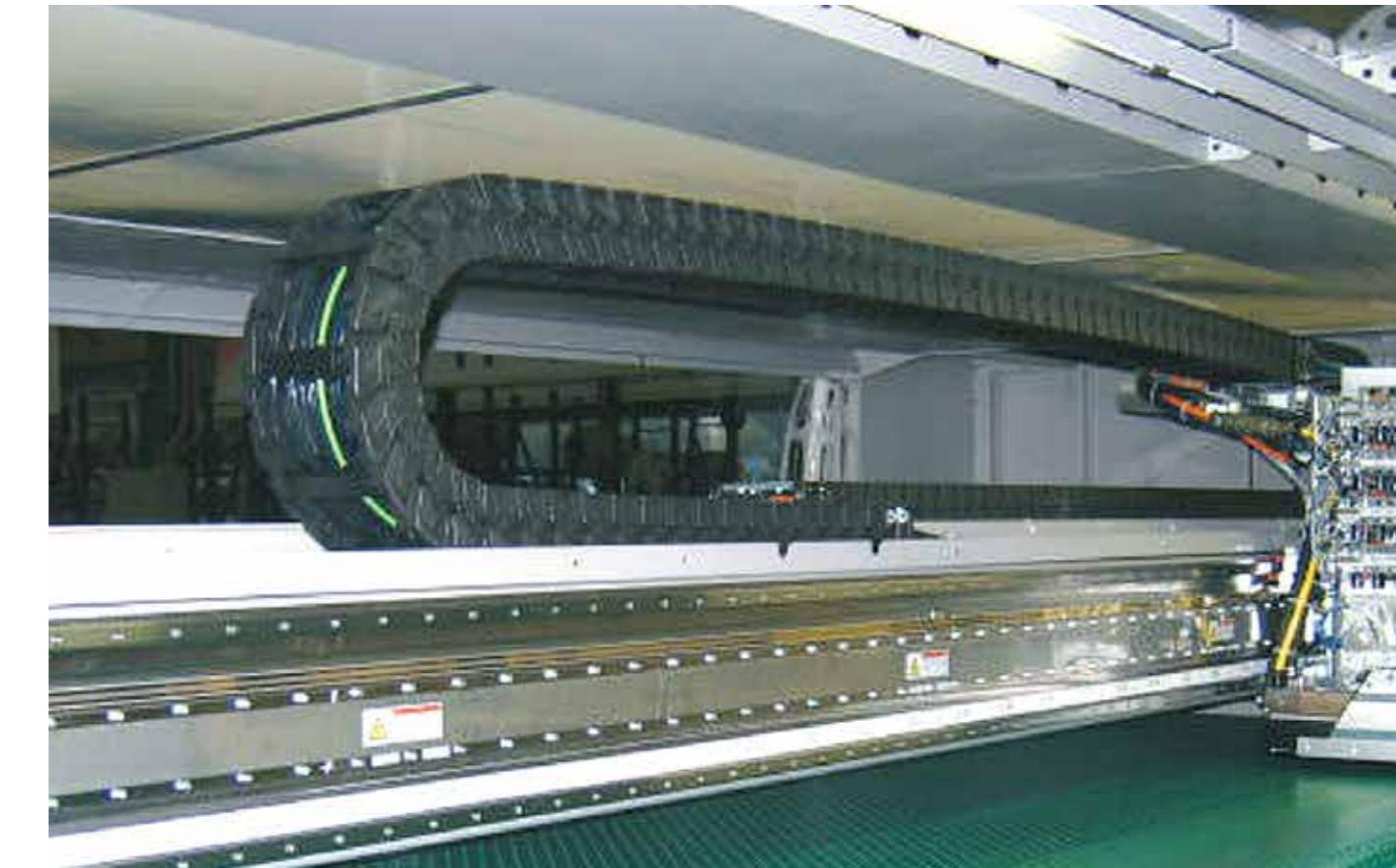
**Lean separator design - several layers of cables fitted quickly, save up to 50%\* assembly time**

(\*Lean separator vs. standard separator - measured on a 4m long e-chain® fitted with 12 cables in the igus® readychain® factory)

#### Lean separators\*

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®



The E6 system is one of the best ways to guide energy, data and media safely and with very low vibration on printers and plotters

# E6 | Series E6.80 | Product range

Extremely low noise and vibration

80



## e-chains® | Series E6.80 | Crossbars removable along the inner and outer radius

Part No.	<i>Bi</i>	<i>Ba</i>	E6.80
e-chains®	[mm]	[mm]	[kg/m]
E6.80. 05. R.0	50	100	5.21
E6.80. 06. R.0	65	115	5.28
E6.80. 07. R.0	75	125	5.33
E6.80. 08. R.0	87	137	5.38
E6.80. 10. R.0	100	150	5.45
E6.80. 11. R.0	112	162	5.50
E6.80. 12. R.0	125	175	5.57
E6.80. 13. R.0	137	187	5.62
E6.80. 15. R.0	150	200	5.68
E6.80. 16. R.0	162	212	5.74
E6.80. 17. R.0	175	225	5.80
E6.80. 18. R.0	187	237	5.86
E6.80. 20. R.0	200	250	5.92
E6.80. 21. R.0	212	262	5.98
E6.80. 22. R.0	225	275	6.04
E6.80. 23. R.0	237	287	6.10
E6.80. 25. R.0	250	300	6.16
E6.80. 26. R.0	262	312	6.21
E6.80. 27. R.0	275	325	6.28
E6.80. 28. R.0	287	337	6.33
E6.80. 30. R.0	300	350	6.39

### Available bend radii

*R* [mm] | 150 | 200 | 250 | 300 | 350 | 400 | 450 |

Complete Part No. with required radius (*R*). Example: E6.80.10.300.0



### Installation note - system E6

Open by removing the crossbar with a screwdriver.  
Repeat the procedure on the other side.

Assembly video available online at ► [www.igus.eu/E6\\_assembly](http://www.igus.eu/E6_assembly)

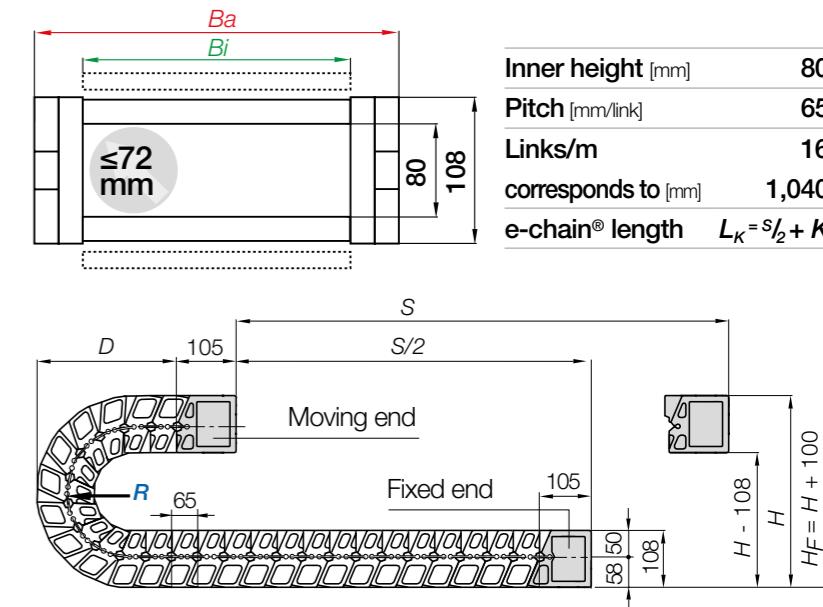
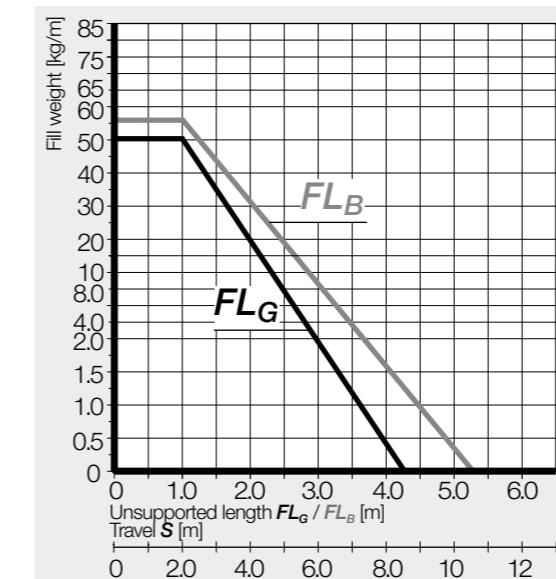
# E6 | Series E6.80 | Installation dimensions

Unsupported applications | Short travels



► 1300

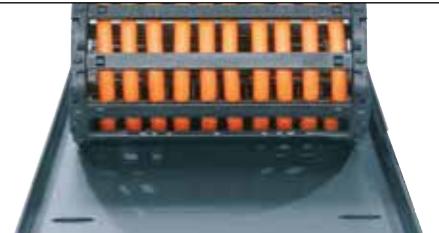
► 1232



<i>R</i>	150	200	250	300	350	400	450
<i>H</i>	516	616	716	816	916	1,016	1,116
<i>D</i>	306	356	406	456	506	556	606
<i>K</i>	605	760	920	1,075	1,230	1,390	1,545

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

If a gliding application is required for a long travel, please consult igus®.

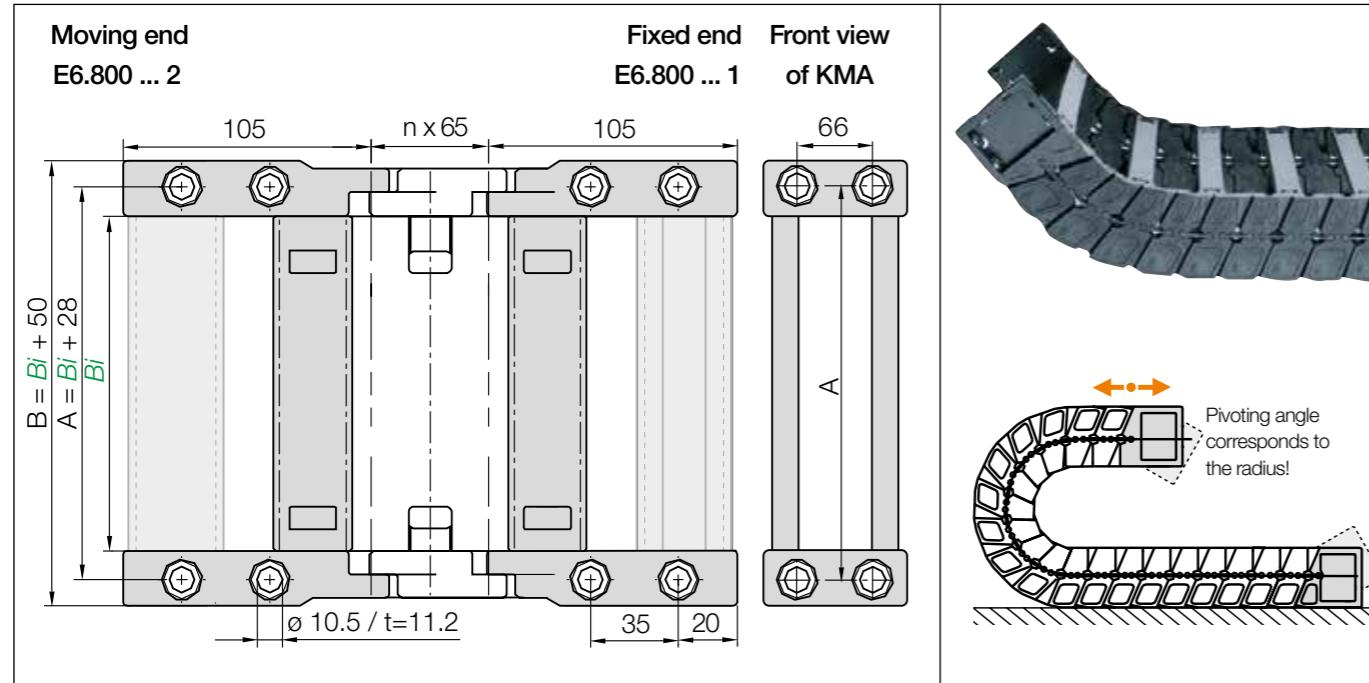


### Steel support tray for support of the lower run

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

More information ► From page 1264

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



## KMA pivoting | Recommended for unsupported applications

Width index	Part No. full set <b>KMA pivoting</b>	A [mm]	B [mm]	<i>Bi</i> [mm]
05.	E6.800. 05. 12.C	78	100	<b>50</b>
06.	E6.800. 06. 12.C	93	115	<b>65</b>
07.	E6.800. 07. 12.C	103	125	<b>75</b>
08.	E6.800. 08. 12.C	115	137	<b>87</b>
10.	E6.800. 10. 12.C	128	150	<b>100</b>
11.	E6.800. 11. 12.C	140	162	<b>112</b>
12.	E6.800. 12. 12.C	153	175	<b>125</b>
13.	E6.800. 13. 12.C	165	187	<b>137</b>
15.	E6.800. 15. 12.C	178	200	<b>150</b>
16.	E6.800. 16. 12.C	190	212	<b>162</b>
17.	E6.800. 17. 12.C	203	225	<b>175</b>
18.	E6.800. 18. 12.C	215	237	<b>187</b>
20.	E6.800. 20. 12.C	228	250	<b>200</b>
21.	E6.800. 21. 12.C	240	262	<b>212</b>
22.	E6.800. 22. 12.C	253	275	<b>225</b>
23.	E6.800. 23. 12.C	265	287	<b>237</b>
25.	E6.800. 25. 12.C	278	300	<b>250</b>
26.	E6.800. 26. 12.C	290	412	<b>262</b>
27.	E6.800. 27. 12.C	303	325	<b>275</b>
28.	E6.800. 28. 12.C	315	337	<b>287</b>
30.	E6.800. 30. 12.C	328	350	<b>300</b>

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

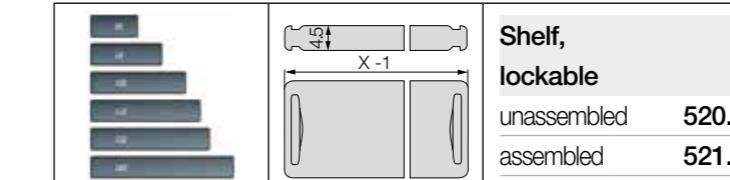
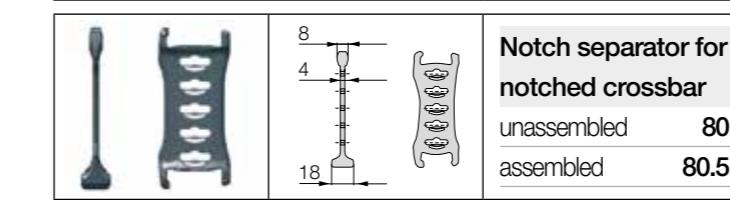
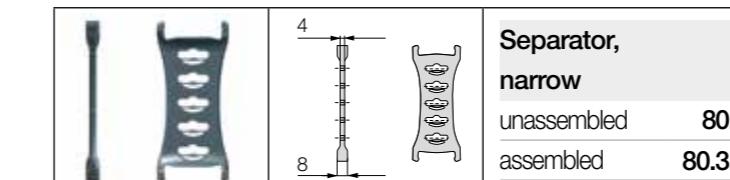
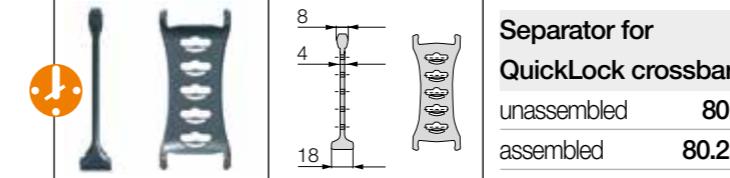
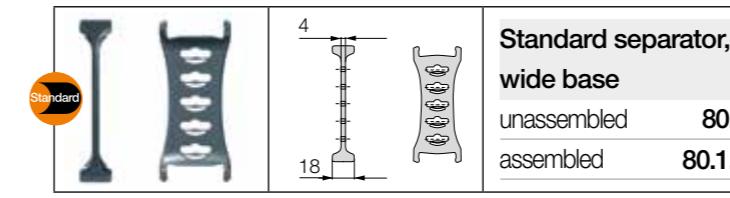
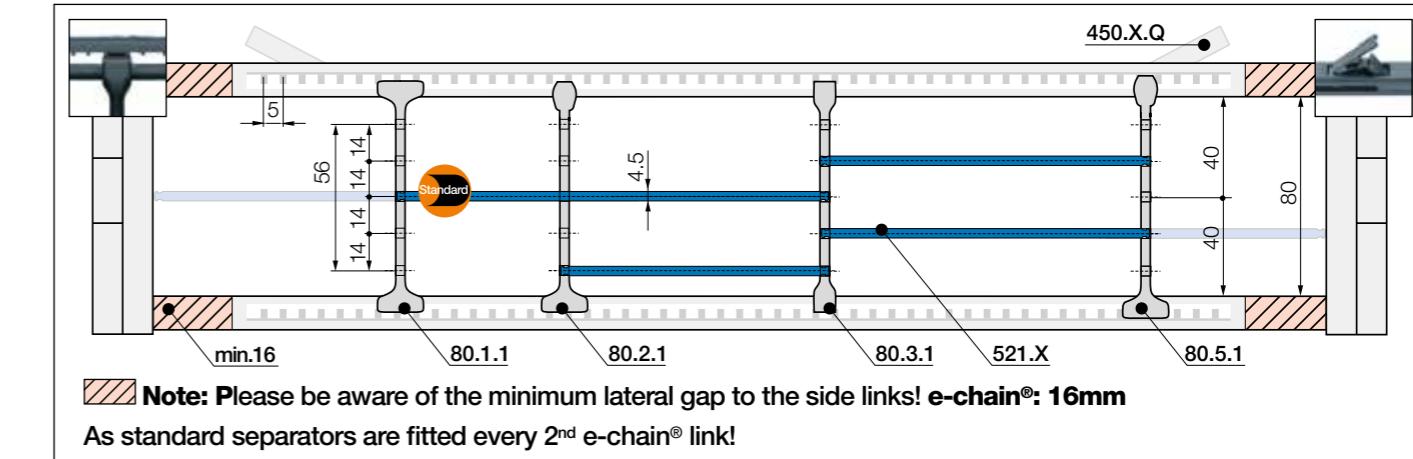


Orientations for KMA mounting brackets. To receive KMA pre-fitted **without C-profile** please add index **.A**. Please add index **.A2** for the standard version **with C-profile**, in the inner radius at the moving end and in the outer radius at the fixed end.

**E6.800.10.12.C.A2 Order example**

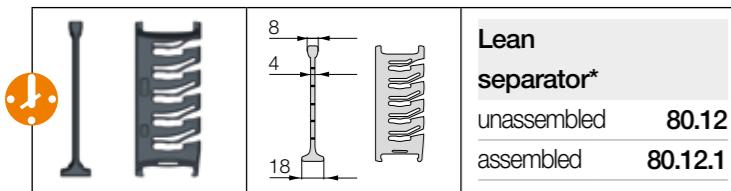
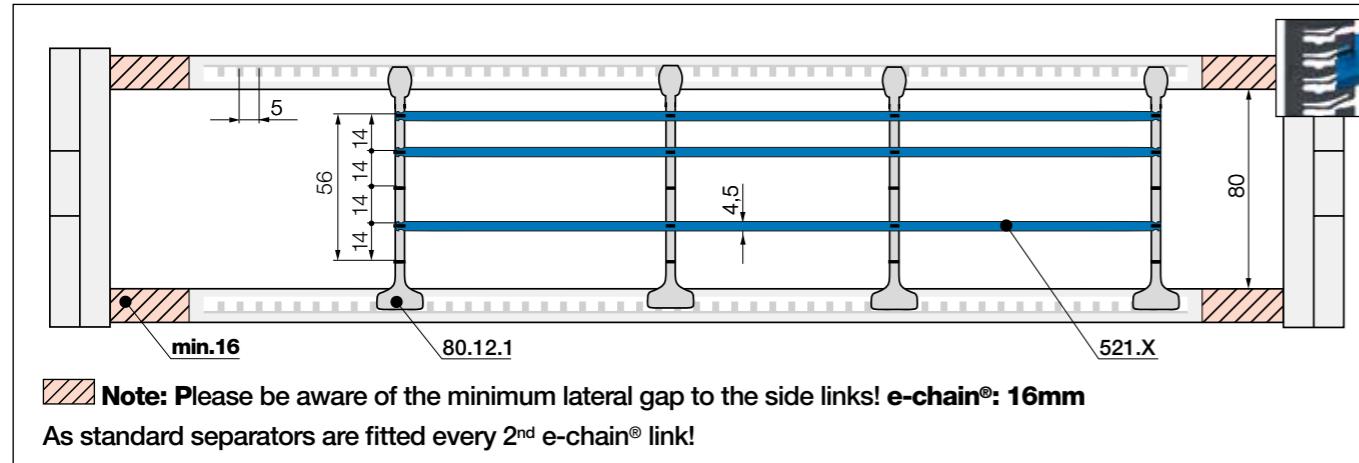
- **.A**... to indicate option with brackets pre-fitted
- C-profile option
- Full set
- Width index
- Series

## Interior separation | Increase cable service life

Previous generation of interior separation with other options ► [www.igus.eu/E6.80](http://www.igus.eu/E6.80)

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

**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



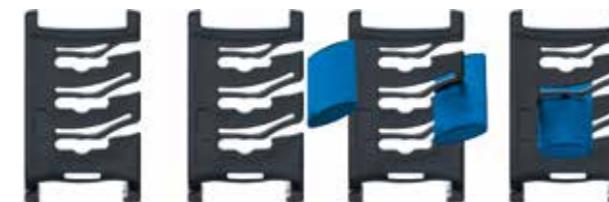
**Lean separator design - several layers of cables fitted quickly, save up to 50%\* assembly time**

(\*Lean separator vs. standard separator - measured on a 4m long e-chain® fitted with 12 cables in the igus® readychain® factory)

#### Lean separators\*

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®



igus® system E6 guiding an extraction hose - speed 8m/s, acceleration 78.5m/s<sup>2</sup>



# e-skin®

## Novel energy supply system for cleanrooms



### Advantages of the e-skin® series:

- Hose consisting of an upper and lower shell that form a complete enclosure when connected together
- Easy filling with "zipper" function
- Special design allows unsupported lengths
- Less installation space required
- Cable-friendly with defined minimum bend radius
- Available with interior separation
- Prevents unintentional sideways movement
- Simple maintenance and inspection of the cables inside
- Protection against dust and water ingress
- Suitable for cleanrooms according to IPA ISO class 1



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

- For longer unsupported lengths
  - ▶ E3, page 732
  - ▶ E6.1, page 750
- For higher speeds
  - ▶ E3, page 732
  - ▶ E6.1, page 750
- For high exposure to dirt
  - ▶ RX e-tubes, page 502



## Novel energy supply system for cleanrooms - e-skin®

e-skin® is a hose consisting of an upper and lower shell that form a complete enclosure when connected together. The simple and reclosable opening mechanism enables easy maintenance and inspection of the cables inside. e-skin® has many advantages over conventional corrugated tubes.

- Special design allows unsupported lengths
- Openable, quick assembly
- Available with interior separation
- Less installation space required
- Protection against dust and water ingress

### Typical industries and applications

- Cleanroom
- Pick & Place
- Printers
- Any machine that uses corrugated hoses



Easy filling, can be opened and closed like a zipper



### IPA Qualification Certificate2) - Report IG 1504-755:

e-skin® **RBR** (prototype) tested at  $v = 0.5 \text{ m/s}$ ,  
 $1 \text{ m/s}$ ,  $2 \text{ m/s}$  and  $a = 1 \text{ m/s}^2$ ,  $2 \text{ m/s}^2$ ,  $4 \text{ m/s}^2$

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 min.*</i> [mm]	Page
<b>e-skin® - oval design</b>						
SK28	28	68	95	40	055	842
SK40 <b>New</b>	38	85	118	57	100	846

\*Note: The minimum bend radius is determined by the bottom of the e-skin® tube!

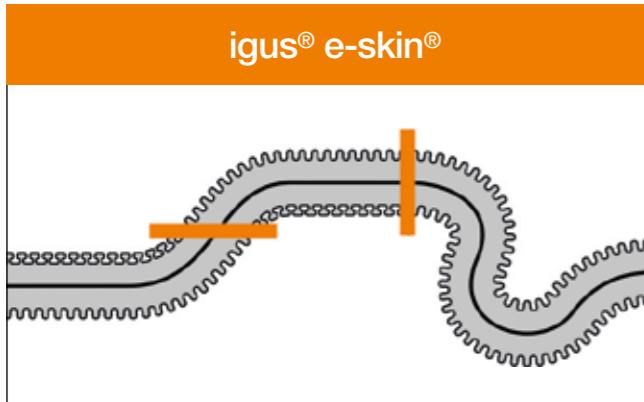
**Available from stock. Ready to ship in 24 - 48 hrs.\***

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

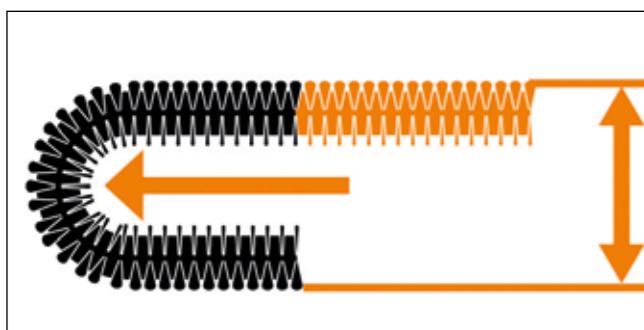


With the e-skin®, igus® offers a modular corrugated tube with a self-supporting function for energy supply in the smallest possible space. The product is certified in accordance with IPA ISO Class 1 and can be used in cleanrooms. e-skin® provides systems with data, media and energy without generating airborne particles through friction which could contaminate the room.

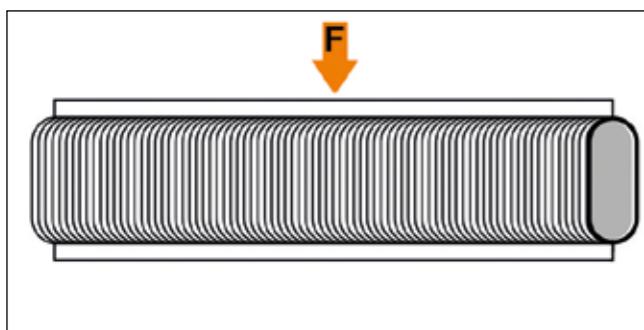
The corrugated tube is made up of abrasion-resistant plastic and its separable upper and lower shells can be easily put together by a "zipper" to a fully enclosed tube. This simultaneously guarantees cleanroom suitability as well as offering quick filling with cables.



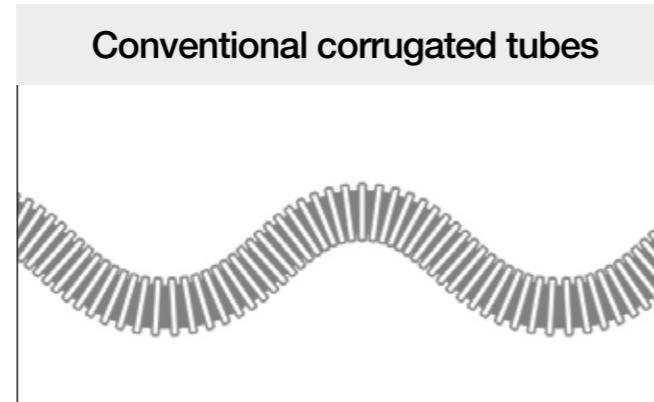
e-skin® consists of two shells (upper and lower). The shells can be configured in order to define movement



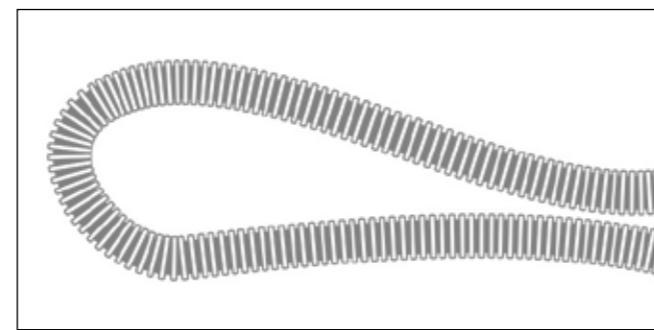
e-skin® is suitable for short unsupported lengths



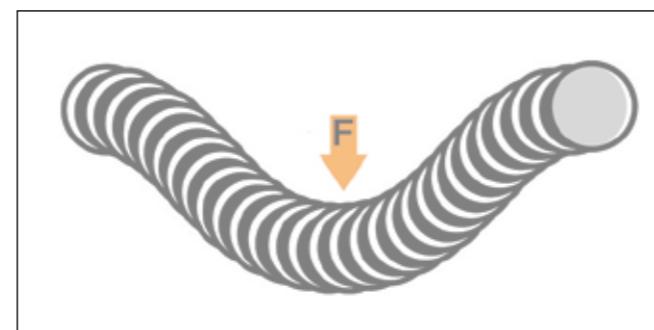
Lateral stability thanks to an oval geometry of the e-skin®



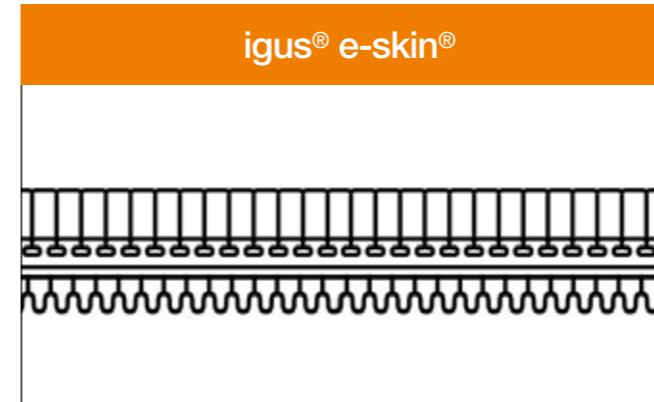
Corrugated tubes have the same bend radius along their entire length



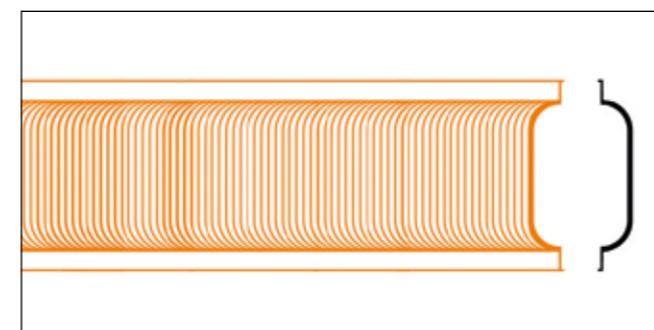
Corrugated tubes cannot be used for unsupported applications



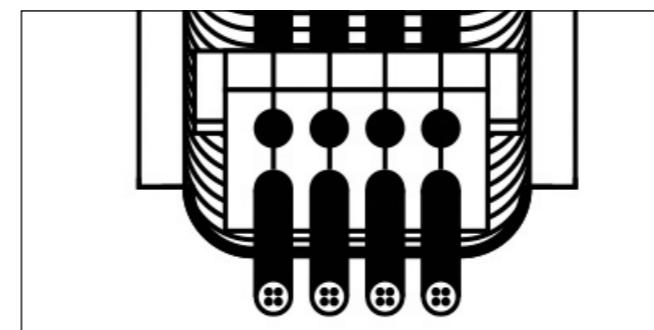
Very little any stability in respect of forces acting on the sides



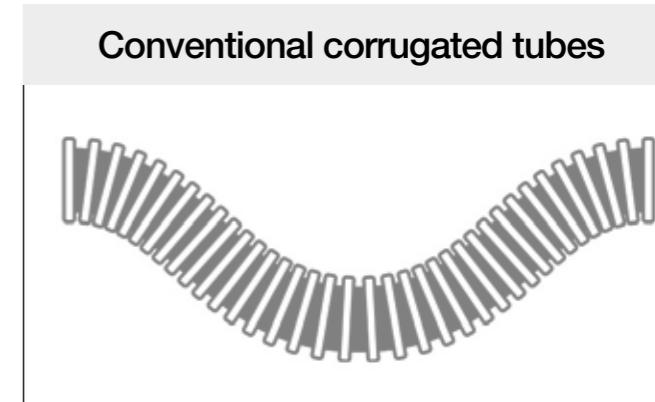
e-skin® supports itself



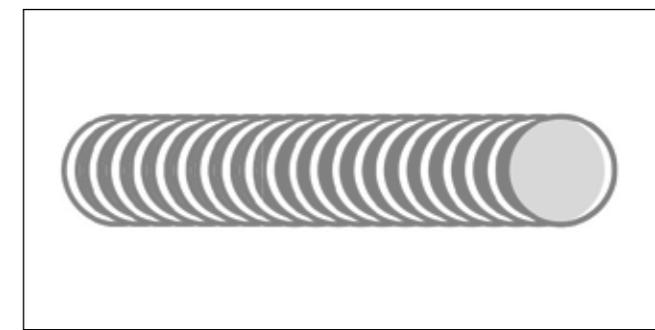
e-skin® is openable, easy to fill



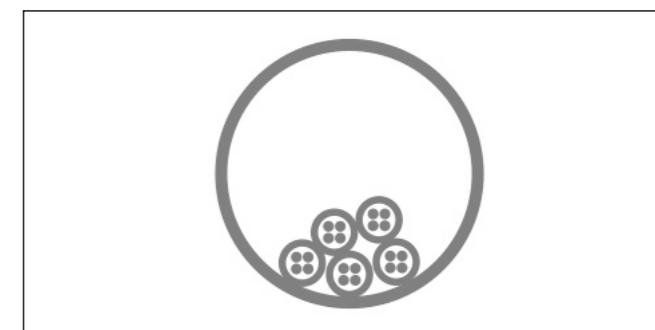
e-skin® can be fitted with interior separation



Corrugated tubes have very little any inherent rigidity. e-rib solves this ► [www.igus.eu/e-rib](http://www.igus.eu/e-rib)

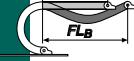


Corrugated tubes (for dynamic applications) cannot be opened



The interior of corrugated tubes cannot be divided into sections

## Technical data

 Speed $FL_G$ / acceleration $FL_G$	$\leq 10 \text{ [m/s]} / \leq 75 \text{ [m/s}^2]$
 Speed $FL_B$ / acceleration $FL_B$	upon request
 e-chain® material - permitted temperature °C, igumid SK	+10°C up to +50°
Mounting bracket material - permitted temperature °C, igumid NB	+10°C up to +50°
 Flammability class	UL94-HB

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

## Installation types, maximum travels

Series	 Unsupported	 Vertical hanging	 Vertical standing	 Side mounted unsupported
SK28	$\leq 1.50\text{m}$	upon request	upon request	upon request
SK40	$\leq 2.50\text{m}$	upon request	upon request	upon request

## Options with order keys | Examples based on series SK28

 Standard		Reverse Bend Radius
Part No. Standard		Part No. <i>RBR</i>
		A version with Reverse Bend Radius (RBR) can be easily made by using the bottom shell for the complete e-skin®. Thus very defined movements can be implemented with the two parts. Note: The minimum bend radius is determined by the bottom of the e-skin® tube!

 **SK28.068.02.1**

 **SK28.068.02/02.1**

 Ready to ship\*  
in 24 - 48hrs.

Available  
upon request

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

## Order example | Order key and colour examples | Examples based on series SK28

 Order example for complete e-chain® (1m),  
colour white, with mounting brackets and interior separation:

e-chain® (1,000mm)	Please order the required length in mm	<b>SK28.068.02.1</b>
+ Mounting brackets	KMA 1 set (with tiewrap plates)	<b>SK280.068.12ZB.1</b>
Interior separation	fitted every 112mm	<b>SK28.1.1.01</b>
Order text:	1.000 mm SK28.068.02.1 + SK280.068.12ZB.1 + 16 x SK28.1.1.01	

 Order key

Oval design	<b>SK28.068.02.1</b>	Order index
Series / Type		Colour
Inner height		<input type="checkbox"/> <b>White</b>
Width index		Standard
Version		<b>.1</b>
Colour index (standard white)		White e-skin® e-chains® available from stock.

# e-skin® | Series SK28 | Product range

Fully enclosed, cost-effective energy supply | Oval design

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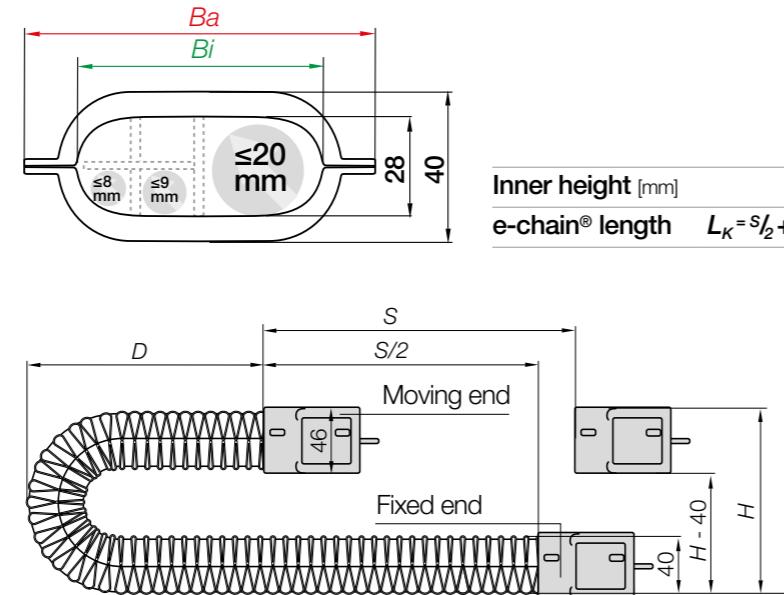
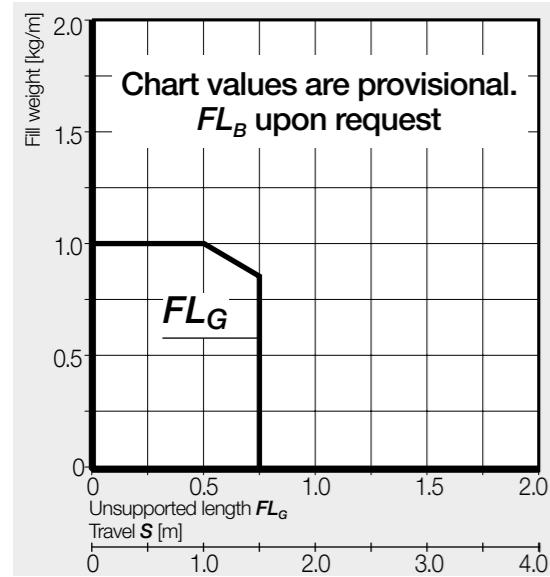


Series SK28 | Oval design | Can be opened and closed like a zipper

Part No.	<i>Bi</i>	<i>Ba</i>	<i>hi</i>	<i>ha</i>	<i>R min.*</i>	SK <sub>28</sub>
e-chains®	[mm]	[mm]	[mm]	[mm]	[mm]	[kg/m]
SK28.068.02.1	68	95	28	40	055	≈ 0.54

\*\*Available upon request. Please consult igus® for delivery time. \*Note: The minimum bend radius is determined by the bottom of the e-skin® tube!

## Installation dimensions



*R min.\** 055 \*Note: The minimum bend radius is determined by the bottom of the e-skin® tube!

*H* 250 No bend radius is specified in the part number, since it depends on travel and fill weight. The smallest

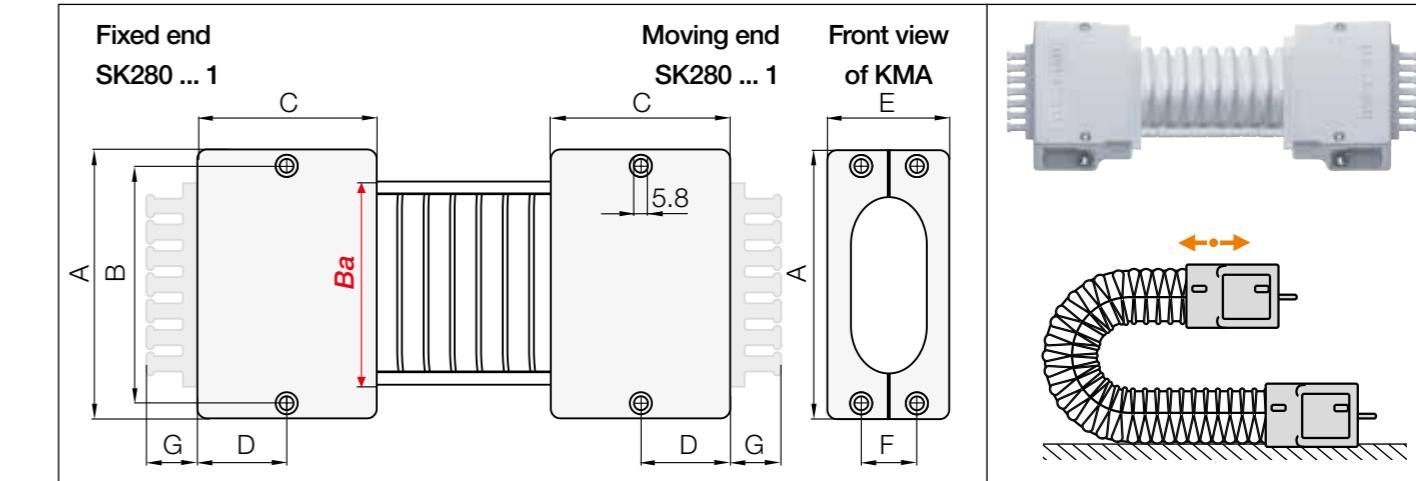
*D* 160 specified radius below is the minimum to guarantee the service life of the cables. In most applications,

*K* 399 however, the radius remains larger because the shape of the tube defines this.

The required clearance height:  $H_F = H + 265$ mm (with 0.75kg/m fill weight)

# e-skin® | Series SK28 | Accessories

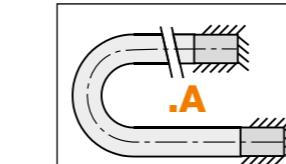
Mounting brackets | Interior separation



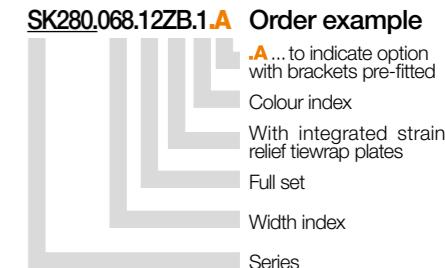
KMA | Recommended for unsupported, vertical hanging, standing applications

Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A	B	C	D	E	F	G	Number of teeth
068.	► SK280.068.12.1	SK280.068.12ZB.1	104	92	68	35	46	21	18	7

(KMA = polymer metal mounting bracket)

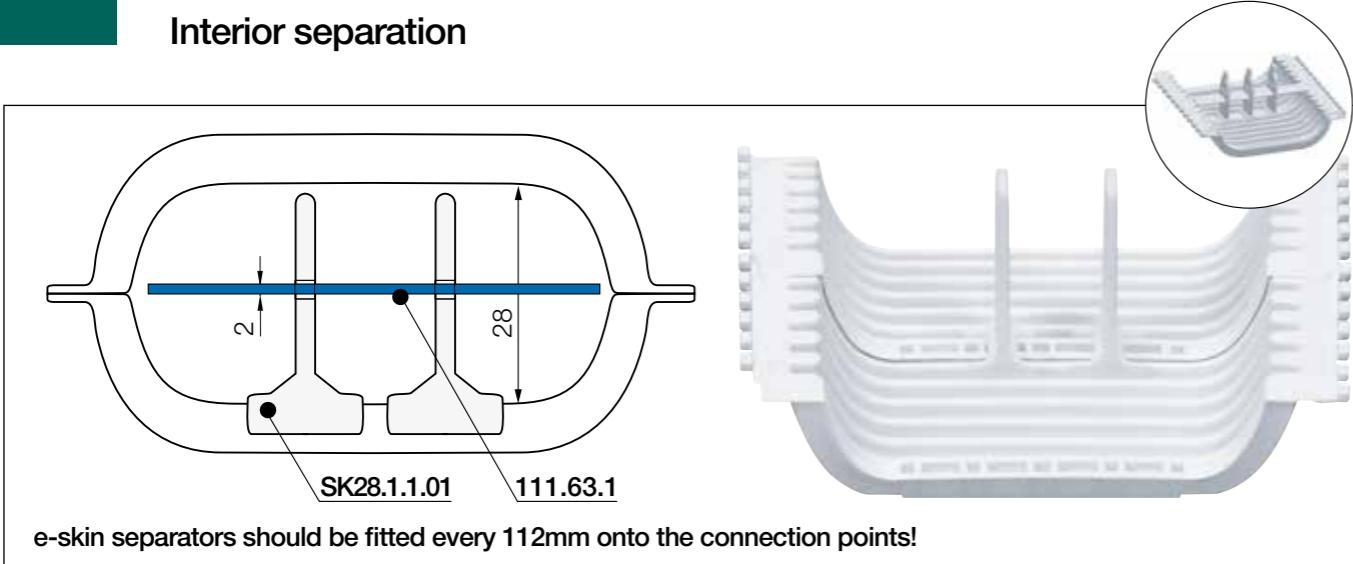


The bracket orientations are set automatically when using an igus® KMA mounting bracket. To receive KMA pre-fitted please add index .A



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

## Interior separation



		<b>Slotted separator</b>
unassembled	SK28.1.01	
assembled	SK28.1.1.01	

		<b>Full-width shelf, continuous</b>
unassembled	110.63.1	
assembled	111.63.1	

**Vertical separation - slotted separators**

The interior separation\* system for the igus® e-skin® consists of individual separators and full-width shelves, which can be fitted in a variety of ways.

**Full-width shelf**

This option is for applications with many small cables with similar diameters. For full width separation.



Absolutely dust-free environment for printed-circuit-board production using the abrasion-resistant e-skin® from igus®

# e-skin® | Series SK40 | Product range New

Fully enclosed, cost-effective energy supply | Oval design

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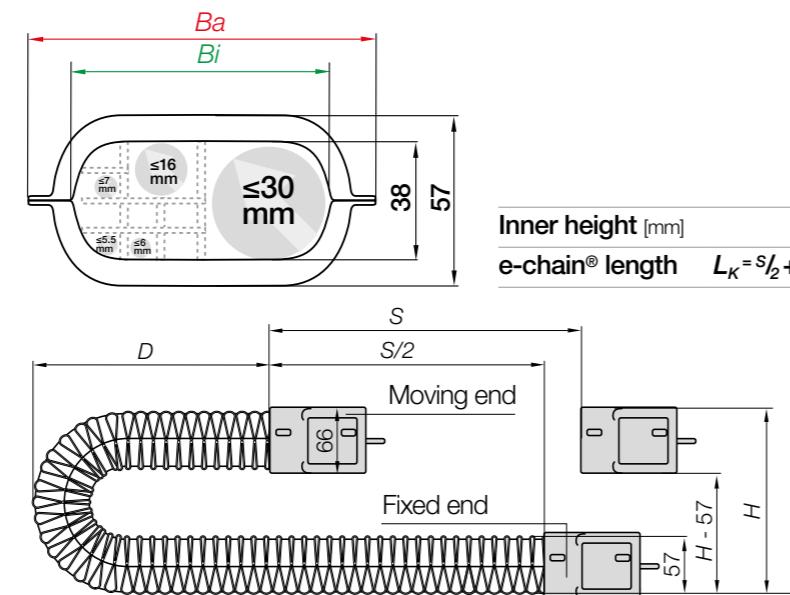
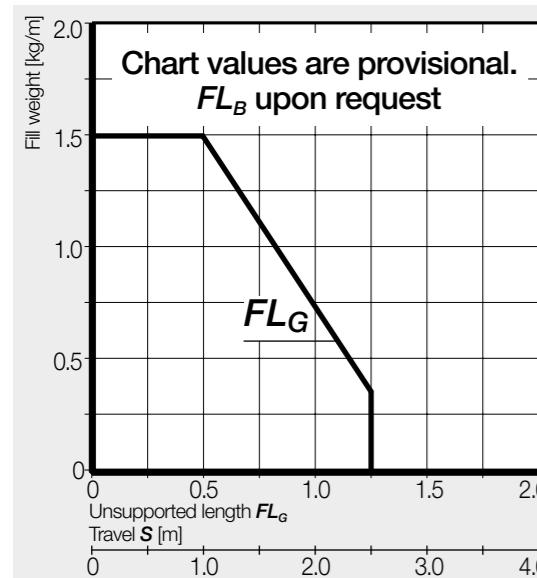


Series SK40 | Oval design | Can be opened and closed like a zipper

Part No.	<i>Bi</i>	<i>Ba</i>	<i>hi</i>	<i>ha</i>	<i>R min.*</i>	SK40
e-chains®	[mm]	[mm]	[mm]	[mm]	[mm]	[kg/m]
SK40.085.02.1	85	118	38	57	100	≈ 1.15

\*Note: The minimum bend radius is determined by the bottom of the e-skin® tube!

## Installation dimensions



*R min.\** 100 \*Note: The minimum bend radius is determined by the bottom of the e-skin® tube!

*H* 350 No bend radius is specified in the part number, since it depends on travel and fill weight. The smallest

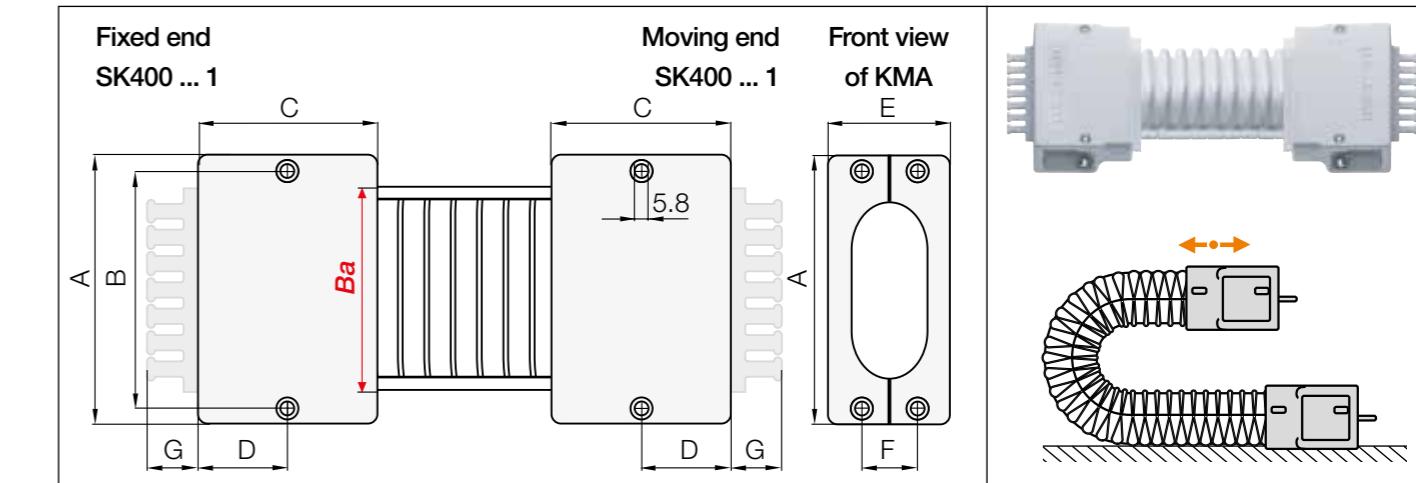
*D* 300 specified radius below is the minimum to guarantee the service life of the cables. In most applications,

*K* 693 however, the radius remains larger because the shape of the tube defines this.

The required clearance height:  $H_F = H + 355$ mm (with 0.75kg/m fill weight)

# e-skin® | Series SK40 | Accessories

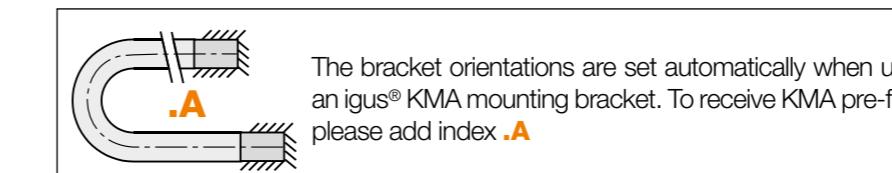
Mounting brackets | Interior separation



KMA | Recommended for unsupported, vertical hanging, standing applications

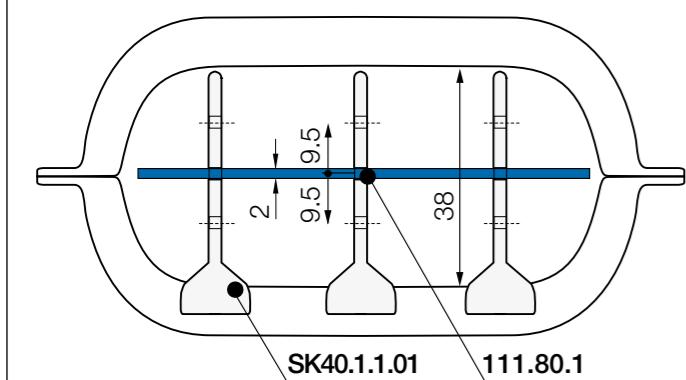
Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A	B	C	D	E	F	G	Number of teeth
085.	► SK400.085.12ZB.1	SK400.085.12ZB.1	125	113	68	35	66	41	18	10

\*Width available upon request. Please consult igus® for delivery time.

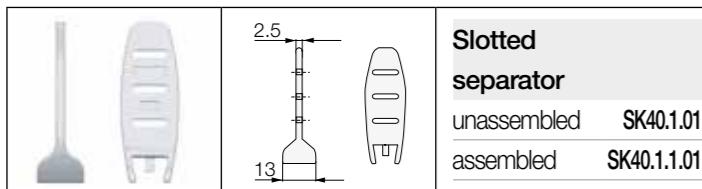


Strain relief e.g. clamps, tiewrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with ordering options ► From page 1300

## Interior separation

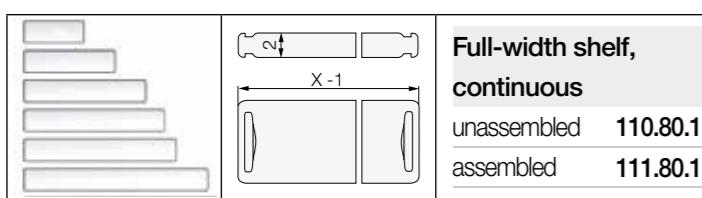


e-skin separators should be fitted every 112mm onto the connection points!



#### Vertical separation - slotted separators

The interior separation\* system for the igus® e-skin® consists of individual separators and full-width shelves, which can be fitted in a variety of ways.

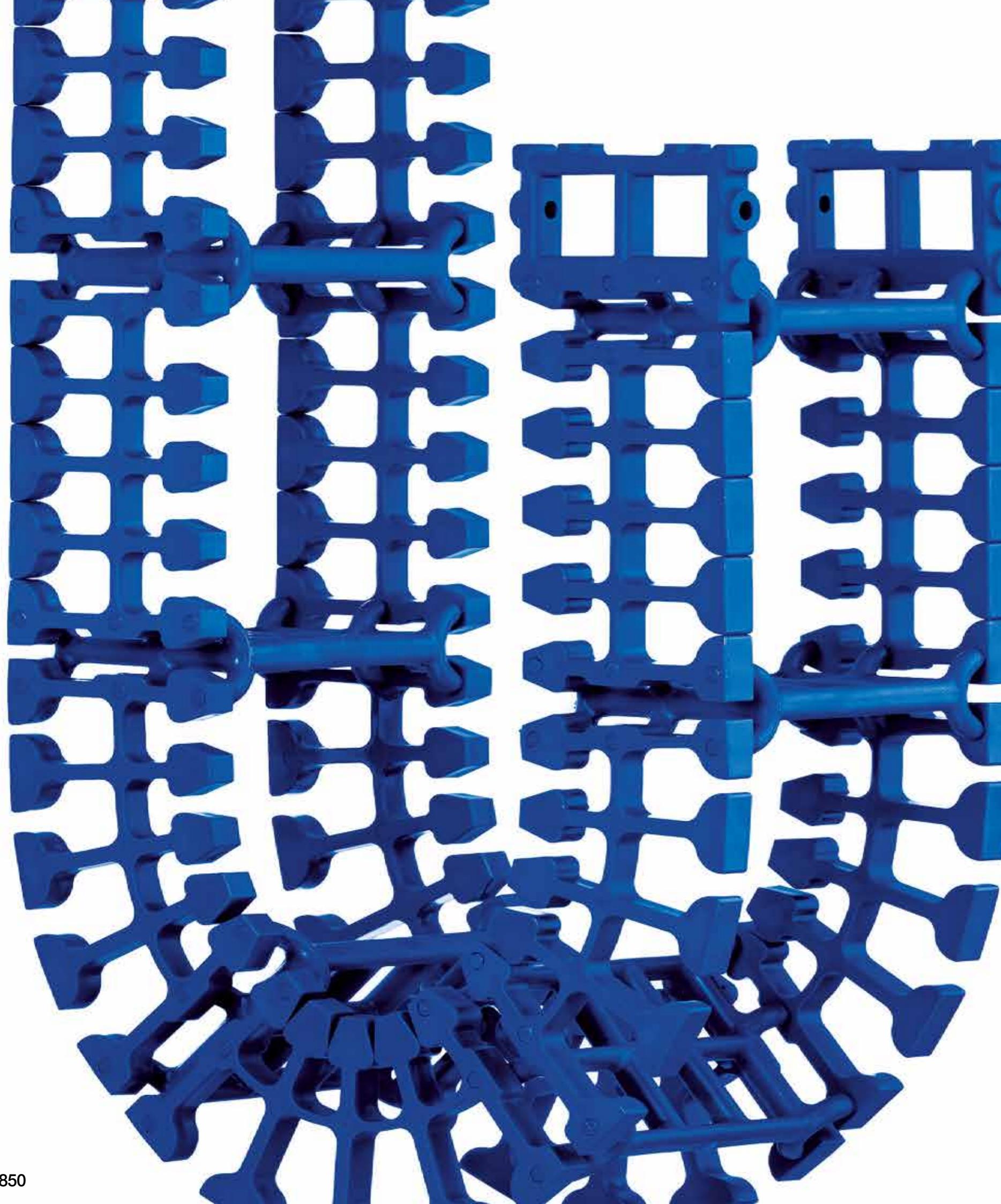


#### Full-width shelf

This option is for applications with many small cables with similar diameters. For full width separation.



The igus® e-skin® e-chain® can be used for short unsupported lengths in cleanrooms



# TH3

The first e-chain®  
designed according to  
hygienic principles - TH3



#### Advantages of the TH3 system:

- The first e-chain® designed according to hygienic principles
- Easy to clean due to open design
- FDA- and EU-compliant materials - blue material, typical for plastic parts in the food industry (consists of igumid TH NB for the side parts and igumid TH G for the frames and mounting brackets)
- Good resistance to aggressive cleaning agents and chemicals
- Rounded edges mean that there are no dead spaces or resulting germ formation
- No material on material rubbing
- No bolted connections
- Operating temperature -40°C / +70°C
- reddot award winner 2017

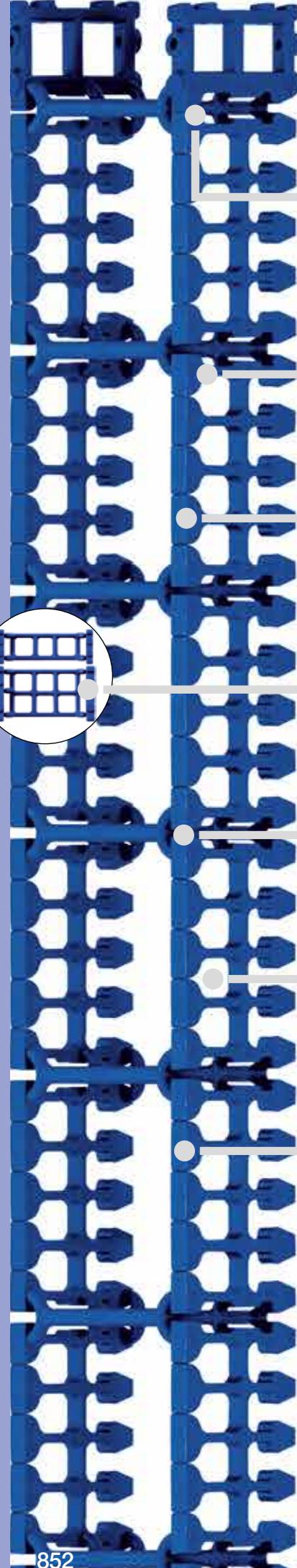


#### When to use another igus® e-chain® series:

- When hygienic design does not matter but cleanroom capability is required
  - ▶ T3, page 722
- When Cleanroom ISO Class 1 is required
  - ▶ E6.1, page 750



reddot award 2017  
winner



Attachment from any side:  
polymer mounting  
brackets

Easy to clean:  
open design for effective  
and easy cleaning

Hygienic design principle:  
FDA-compliant materials

Modular design:  
4 different widths for  
interior separation,  
available in 2 inner heights

Cable-friendly:  
due to smooth,  
rounded contours

No dead spaces:  
large gaps - no  
material overlaps

Food industry material:  
resistant to detergents  
and chemicals

## The first e-chain® designed according to hygienic principles - TH3

The igus® TH3 e-chain® is the world's first plastic e-chain® developed according to "Hygienic Design Guidelines". The open design of the e-chain® is very easy to clean and, thanks to rounded corners and the absence of bolted connections, dead spaces and the resulting germ formation are avoided. The blue material, which is typical of plastic parts in the food industry, is also highly resistant to aggressive cleaning agents and chemicals. The e-chain® is suitable for applications with the highest hygienic requirements for safe cable and hose guidance.

- Choice of 2 inner heights and 4 inner widths
- Interior separation segments separate the cables and hoses from each other to provide enough clearance for easy cleaning
- For plastic parts in the food industry, the blue material is FDA-compliant
- reddot award winner 2017

### Typical industries and applications

- Packaging machines
- Food and beverage/filling machines
- Wherever hygiene requirements are very high and cables and hoses have to be guided safely and securely



reddot award 2017  
winner



The material of the igus® hygienic design e-chain® is FDA and EU regulation-compliant

Segment design	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
<b>System TH3 - hygienic design e-chain®</b>								
2-segment	TH3.25.2/26 New	25.5	70	86	35	070	1.2	856
	TH3.45.2/20	2 x 20	70	90	57	090	1.4	860
<b>3-segment</b>								
TH3.25.3/26	New	25.5	95	111	35	070	1.2	856
	TH3.45.3/20	2 x 20	95	115	57	090	1.4	860
<b>4-segment</b>								
TH3.25.4/26*		25.5	120	136	35	070	1.2	856
	TH3.45.4/20*	2 x 20	120	140	57	090	1.4	860
<b>5-segment</b>								
TH3.25.5/26*		25.5	145	161	35	070	1.2	856
	TH3.45.5/20	New 2 x 20	145	165	57	090	1.4	860

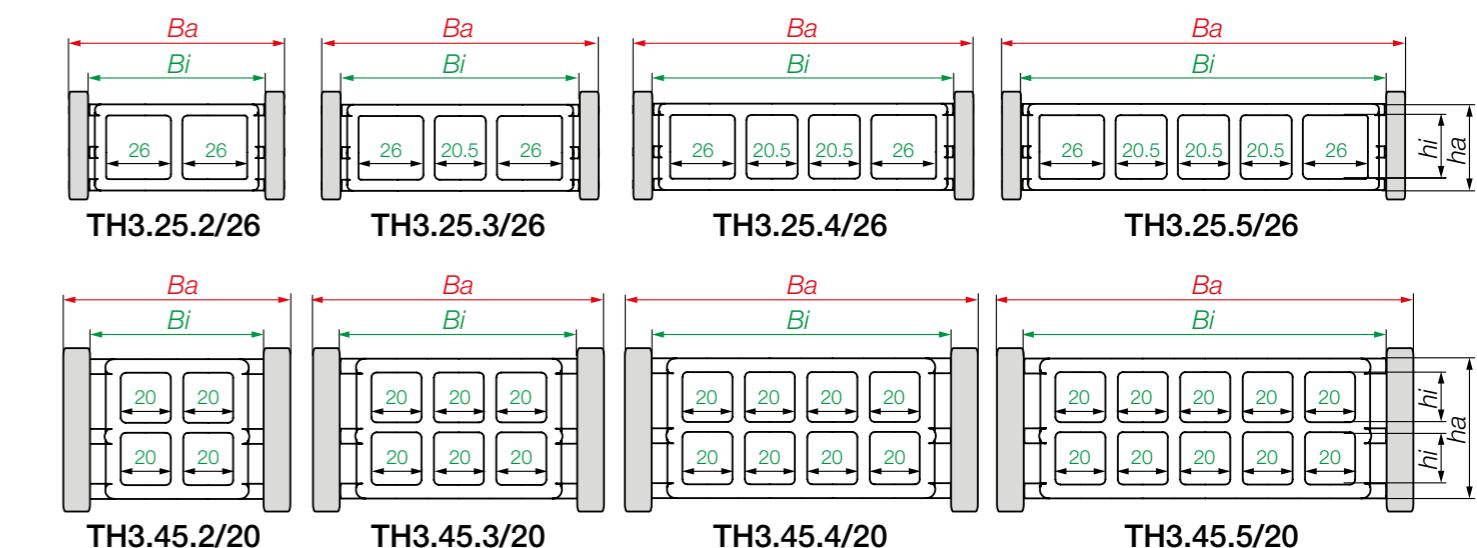
\*Width available upon request. Please consult igus® for delivery time.



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.

### Size overview - Interior separation segments



## Technical data

 Speed $FL_G$ / acceleration $FL_G$	upon request
 Side part material - permitted temperature °C, igumid TH NB	-40°C / +70°C
Material interior separation segment - permitted temperature °C, igumid TH G	-40°C / +70°C
Mounting bracket material - permitted temperature °C, igumid TH G	-40°C / +70°C
 Flammability class, igumid TH NB	VDE 0304 IIC UL94-HB
Flammability class, igumid TH G	VDE 0304 IIC UL94-HB

  $FL_G$  = unsupported with straight upper run

## Installation types, maximum travels

Series	Unsupported	Vertical hanging	Vertical standing
TH3.25	≤ 1.2m	≤ 6.0m	≤ 1.8m
TH3.45	≤ 1.5m	≤ 6.0m	≤ 2.0m



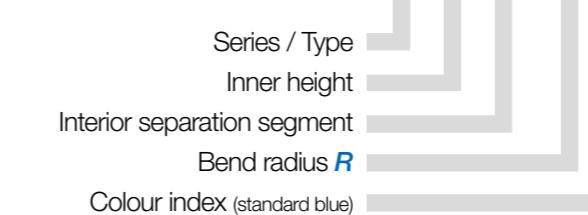
## Order example | Order key and colour examples | Examples based on series TH3.45

 Order example for complete e-chain® (1.0m), colour blue, with mounting brackets and interior separation:

e-chain® (1.0m)	Indicate e-chain® length or number of side parts	TH3.45.3/20.090.8
+ Mounting brackets	1 set	TH3.450.3/20.12.8
Interior separation	The interior separation segments connect the side parts of the e-chain®. The interior separation is already included in the part number of the e-chain®.	
Order text:	1m TH3.45.3/20.090.8 + 1 set TH3.450.3/20.12.8	

 Order key

Hygienic design e-chains® TH3.45.3/20.090.8



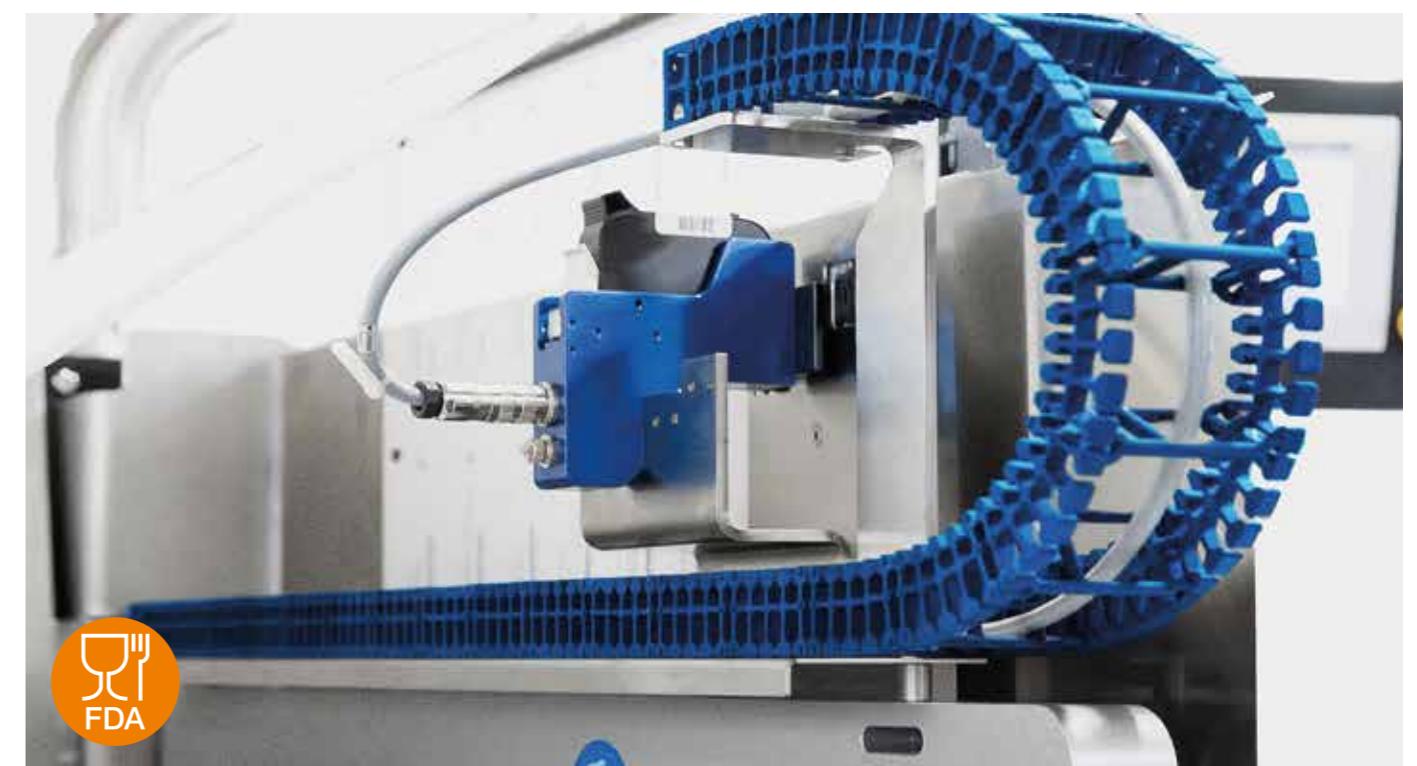
Order index

Colour	Order index
 blue	.8



For plastic parts in the food industry; the blue material is FDA-compliant.

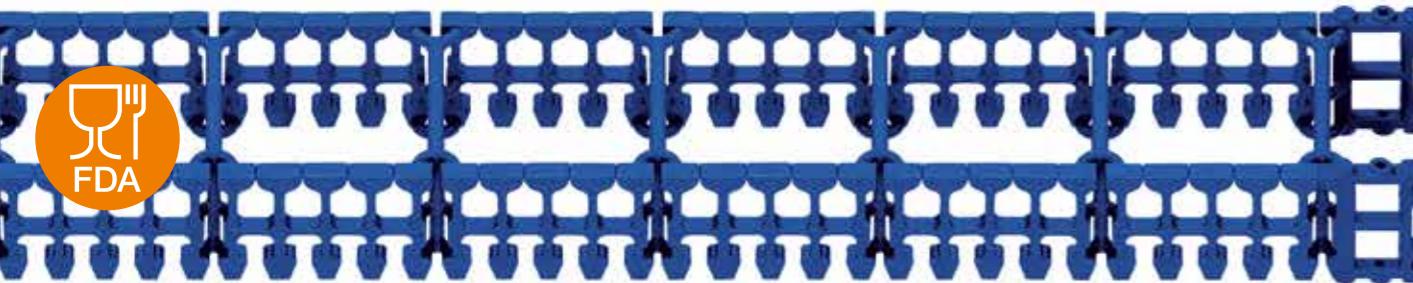
Blue e-chain® made from FDA-compliant material from stock.



The TH3 e-chain® is the world's first plastic e-chain® developed according to "Hygienic Design Guidelines" (04/2018)

World's first hygienic design e-chain®

25.5



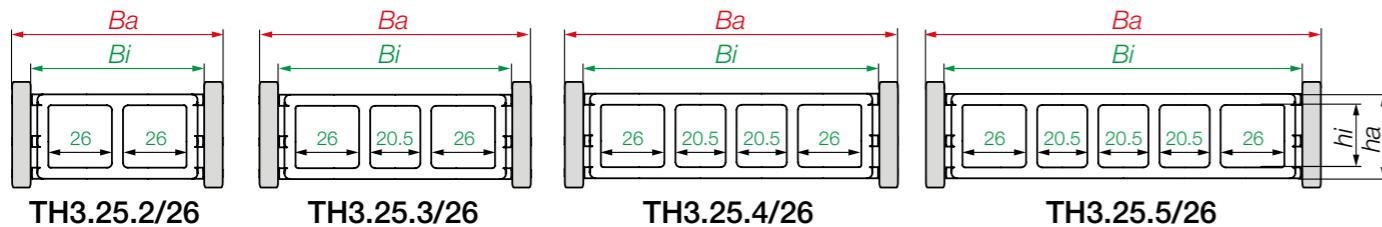
## e-chains® | Series TH3.25 | 3-piece, hygienic design

Segment design	Part No.	Chamber width	<i>Bi</i>	<i>Ba</i>	<i>R</i>	Available bend radii	TH3.25
2-segment	TH3.25.2/26.R.8	26/26	70	86	070		≈ 0.45
3-segment	TH3.25.3/26.R.8	26/20.5/26	95	111	070		≈ 0.47
4-segment	TH3.25.4/26.R.8*	26/20.5/20.5/26	120	136	070		≈ 0.50
5-segment	TH3.25.5/26.R.8*	26/20.5/20.5/20.5/26	145	161	070		≈ 0.54

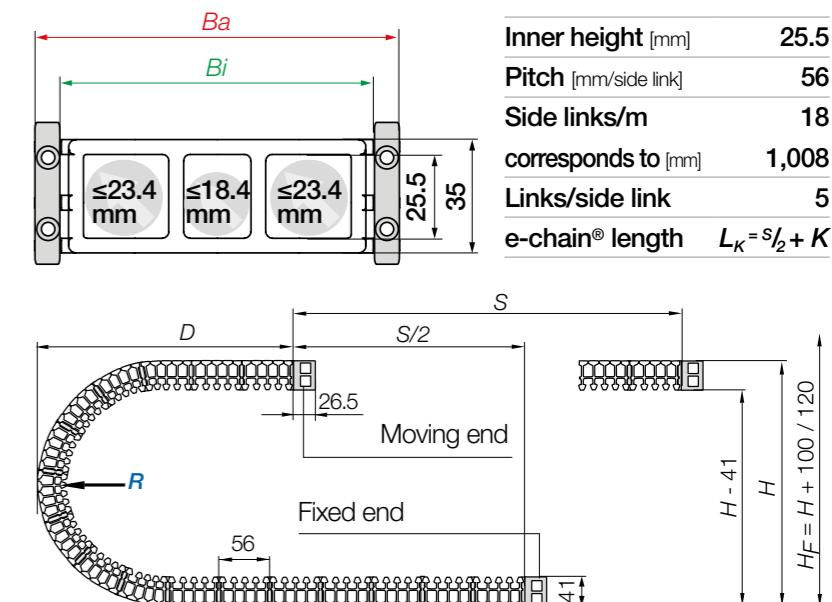
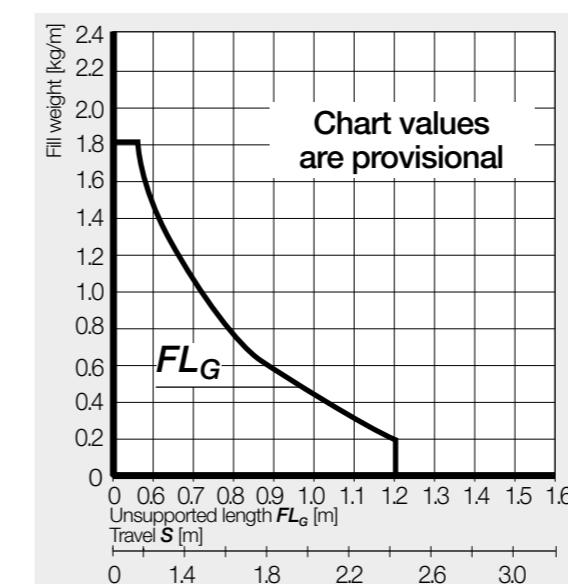
\*Width available upon request. Please consult igus® for delivery time.

Complete Part No. with required radius (*R*). Example: TH3.25.3/26.070.8

## Interior separation segments series TH3.25 | Size overview



Unsupported applications | Short travels

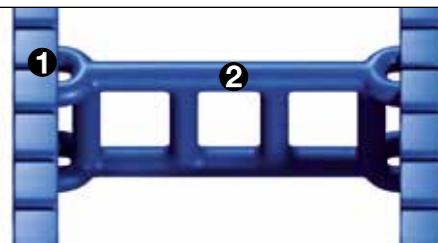
*R* min.\*

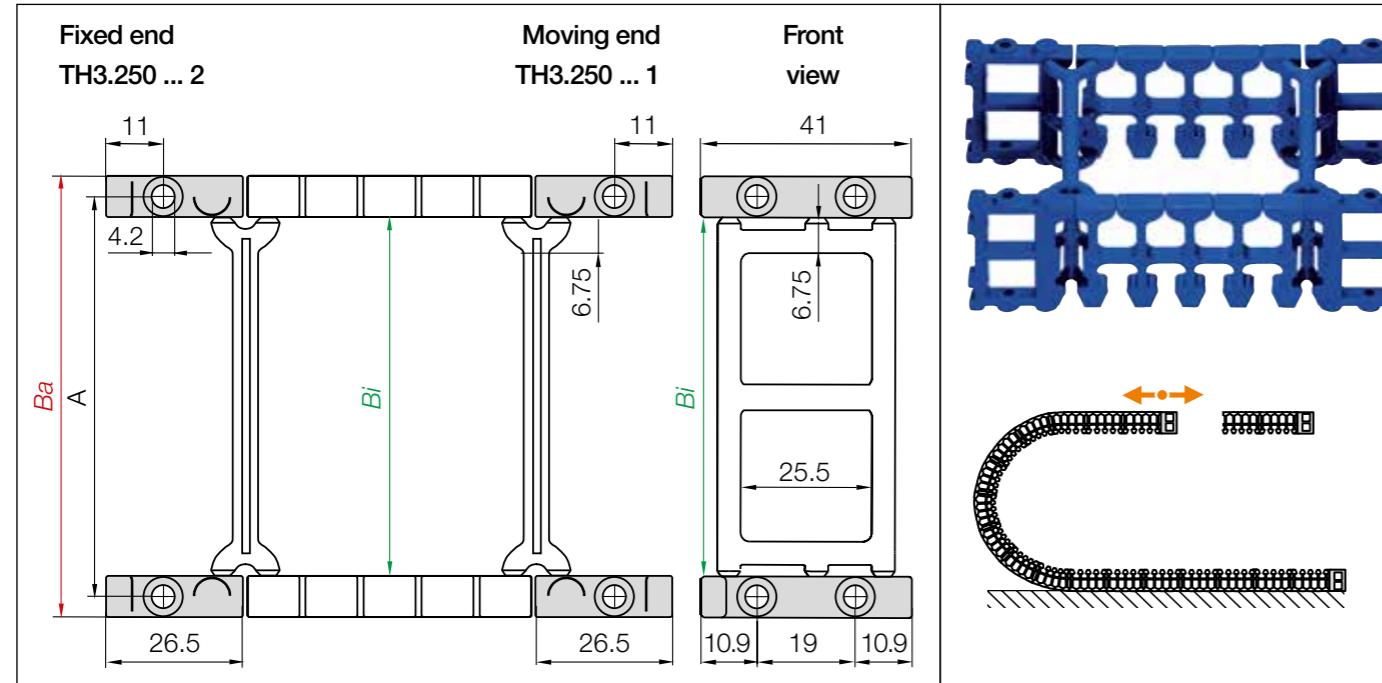
070	*Note: The bend radius depends on the length of the e-chain®. Smallest possible radius = 70 mm
180	Required clearance height <i>H<sub>F</sub></i> amounts to:
110	Travel distance up to 300m = 280mm
240	Travel distance from 300 up to 1,000mm = 300mm

The required clearance height *H<sub>F</sub>* = *H* + 100 and accordingly *H* + 120 (with 0.4kg/m fill weight)

## TH3 - 3-piece hygienic design e-chain®

- The TH3 e-chain® consists of 3 parts, the two side parts ① and one interior separation segment ②
- The interior separation segments connect the side parts of the e-chain®
- The segments are available in 4 different widths

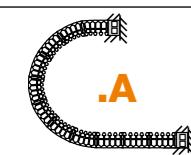




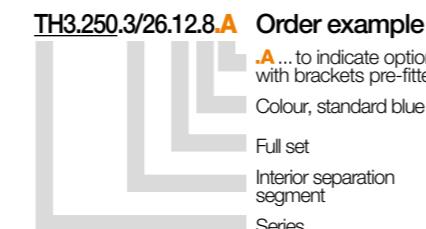
## FDA-compliant mounting brackets, locking | For unsupported applications

Width index	Part No.	A [mm]	Bi [mm]	Ba [mm]
<b>full set locking</b>				
2/26	TH3.250.2/26.12.8	77.5	70	86
3/26	TH3.250.3/26.12.8	102.5	95	111
4/26	TH3.250.4/26.12.8*	127.5	120	136
5/26	TH3.250.5/26.12.8*	152.5	145	161

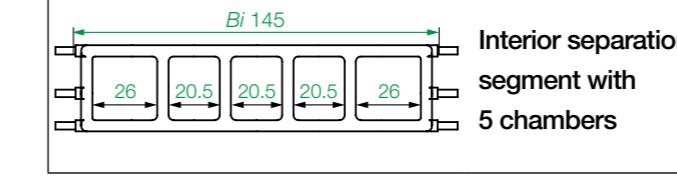
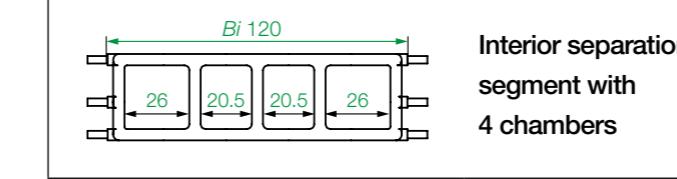
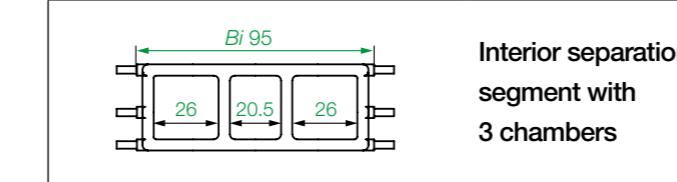
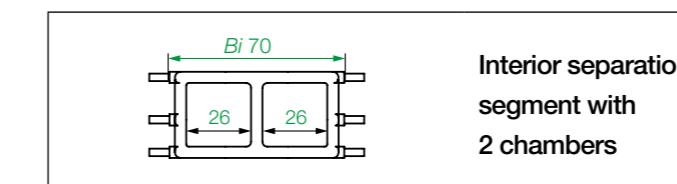
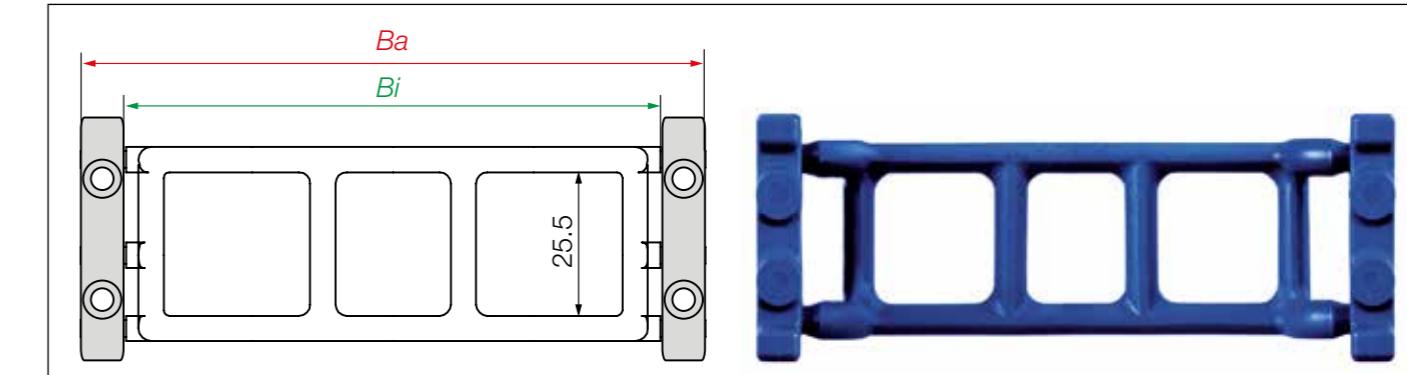
\*Width available upon request. Please consult igus® for delivery time.



The bracket orientations are set automatically when using mounting brackets. To receive brackets **pre-fitted** please add index **A**.

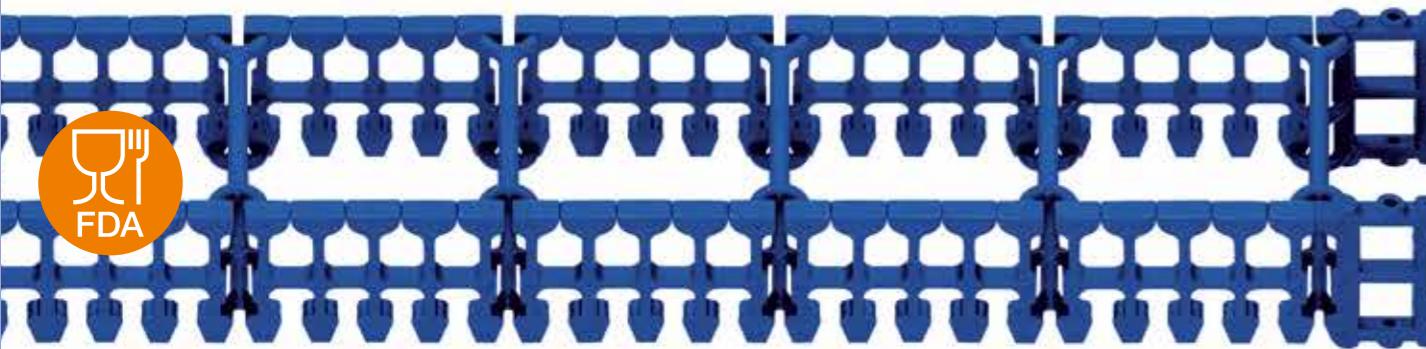


 **Strain relief** e.g. clamps, tiewrap plates, nuggets and plug-in clips are available from stock. The complete chainfix range with ordering options ► From page 1300



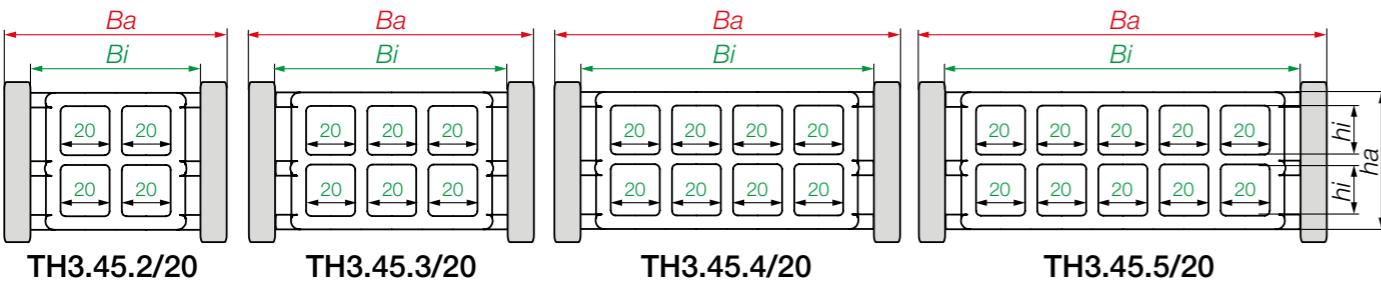
System TH3 - the open design allows effective and easy cleaning

World's first hygienic design e-chain®

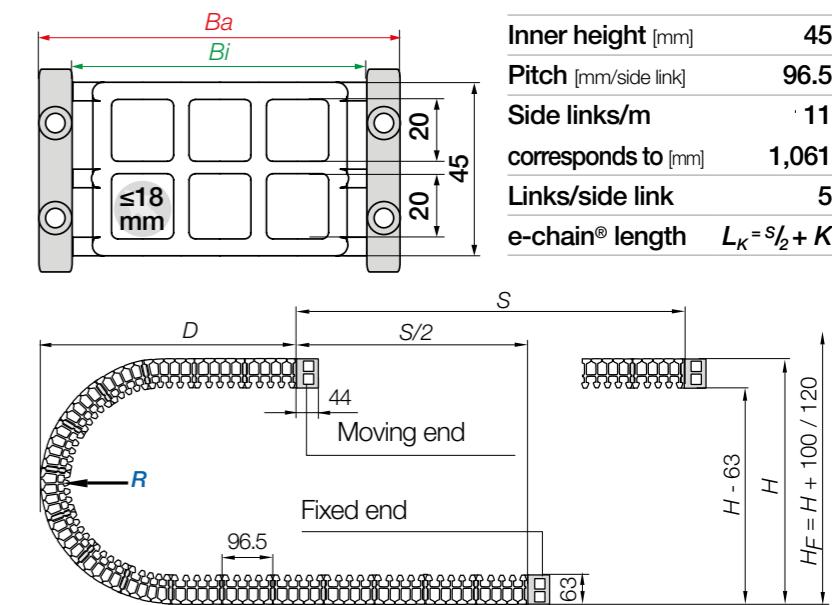
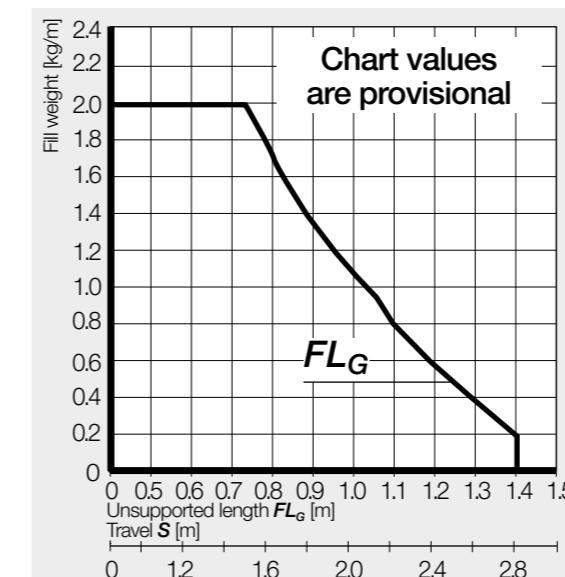
**e-chains® | Series TH3.45 | 3-piece, hygienic design**

Segment design	Part No.	Chamber width	<i>Bi</i>	<i>Ba</i>	<i>R</i>	Available bend radii	TH3.45
			[mm]	[mm]	[mm]	[kg/m]	
2-segment	TH3.45.2/20.R.8	20/20	70	90	090		≈ 0.82
3-segment	TH3.45.3/20.R.8	20/20/20	95	115	090		≈ 0.87
4-segment	TH3.45.4/20.R.8*	20/20/20/20	120	140	090		≈ 0.92
5-segment	TH3.45.5/20.R.8	20/20/20/20/20	145	165	090		≈ 0.98

\*Width available upon request. Please consult igus® for delivery time.

Complete Part No. with required radius (*R*). Example: TH3.45.3/20.090.8**Interior separation segments series TH3.45 | Size overview**

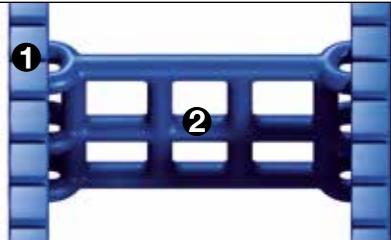
Unsupported applications | Short travels

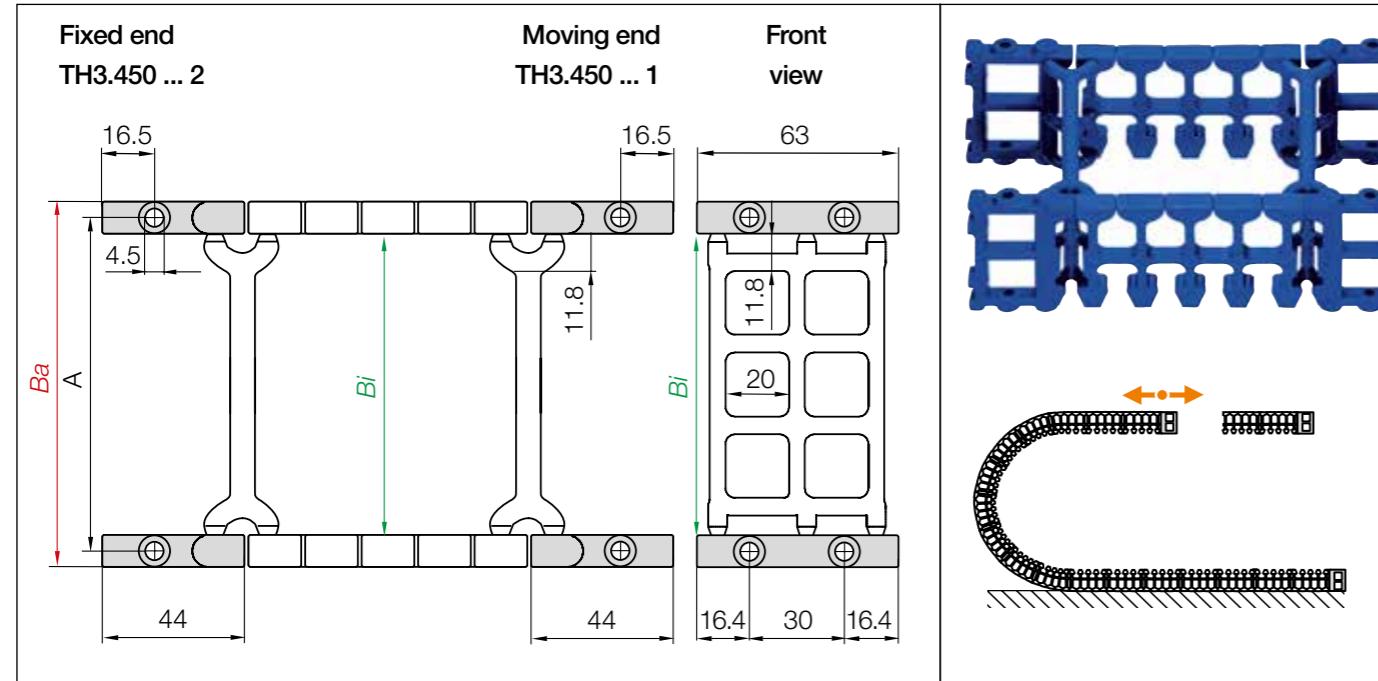


<i>R</i> min.*	090	*Note: The bend radius depends on the length of the e-chain®. The smallest possible radius is 90 mm
<i>H</i>	250	Required clearance height <i>H</i> <sub>F</sub> amounts to:
<i>D</i>	120	Travel distance up to 300m = 350mm
<i>K</i>	338	Travel distance from 300 up to 1,000mm = 370mm

The required clearance height *H*<sub>F</sub> = *H* + 100 and accordingly *H* + 120 (with 1.0kg/m fill weight)**TH3 - 3-piece hygienic design e-chain®**

- The TH3 e-chain® consists of 3 parts, the two side parts ① and one interior separation segment ②
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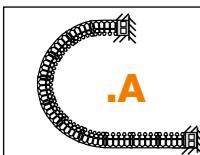




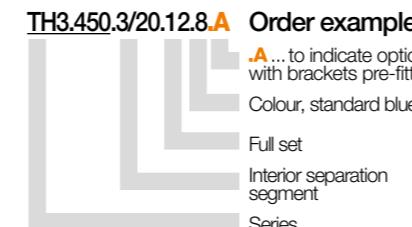
## FDA-compliant mounting brackets, locking | For unsupported applications

Width index	Part No. full set locking	A [mm]	Bi [mm]	Ba [mm]
2/20 ►	TH3.450.2/20.12.8	80	70	90
3/20 ►	TH3.450.3/20.12.8	105	95	115
4/20 ►	TH3.450.4/20.12.8*	130	120	140
5/20 ►	TH3.450.5/20.12.8	155	145	165

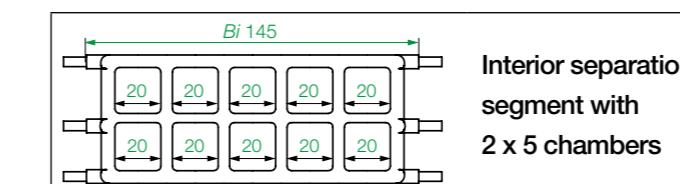
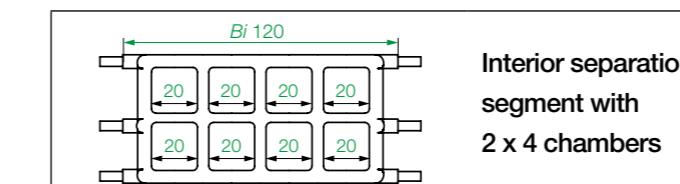
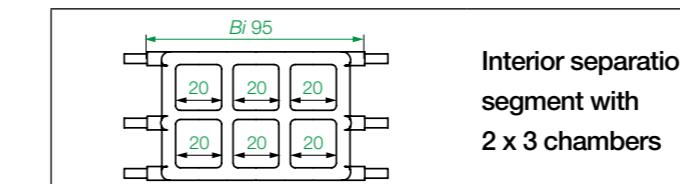
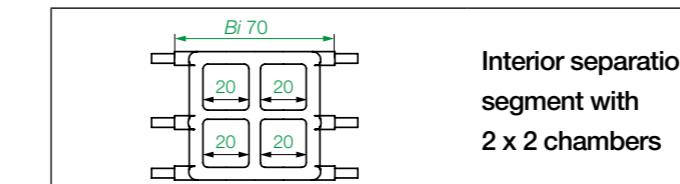
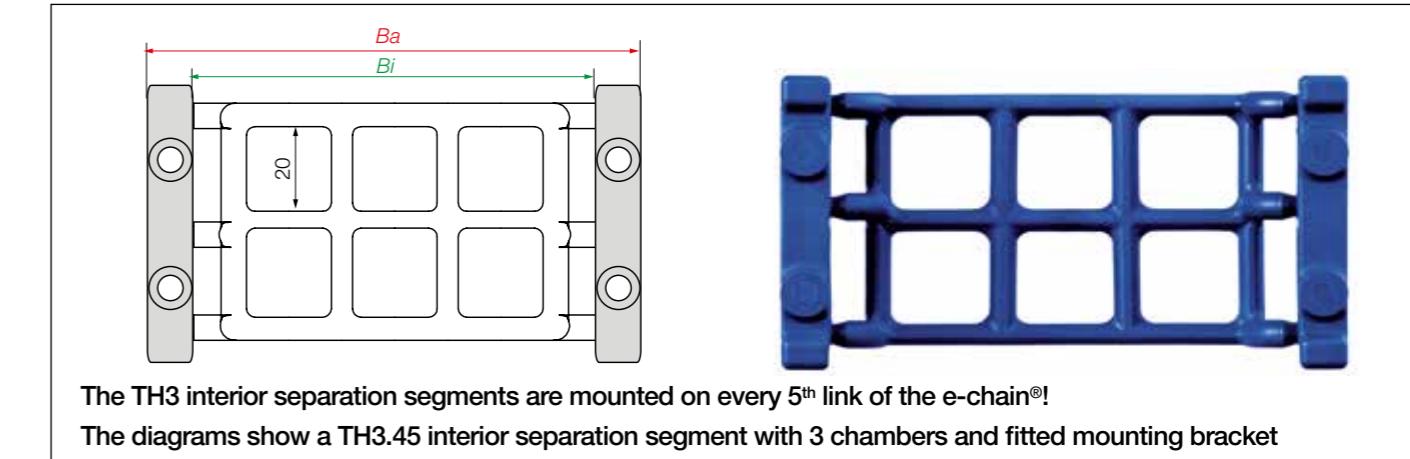
\*Width available upon request. Please consult igus® for delivery time.



The bracket orientations are set automatically when using mounting brackets. To receive brackets **pre-fitted** please add index **A**.



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



The TH3 series is suitable for applications with the highest hygienic requirements for safe cable and hose guidance