



# E6 clean-room

## 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
- Suitable for cleanroom according to IPA ISO Class 3<sup>2)</sup>
- Tested for ISO class 1 cleanroom use

<sup>1)</sup> Extremely low-noise - tested at the igus® lab

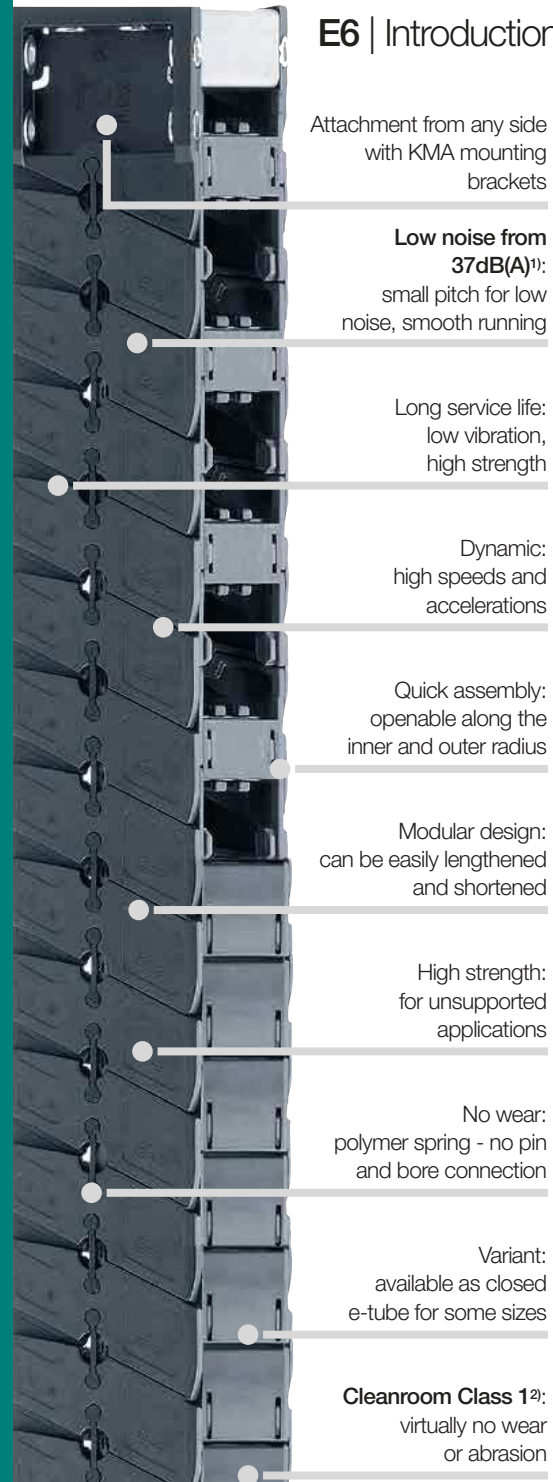
<sup>2)</sup> Cleanroom IG0704-400 ISO Class 3 for E6.29.060.150.0 series



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

- With only limited suitability for side-mounted applications
  - ▶ E4.1L, page 538 ▶ E2/000, page 374
- For longer unsupported lengths
  - ▶ E4.1L, page 538 ▶ E2/000, page 374
- For long travels
  - ▶ E4.1, page 616 ▶ E2/000, page 374
- For even less vibration and noise or even greater dynamics
  - ▶ E6.1, page 832





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 and bore connection

Variant: available as closed e-tube for some sizes

Cleanroom 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, complementing 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 Class 1 proven in the igus® laboratory and Class 3 certified IGO704-400 IPA

### 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 cleanroom Class 3<sup>2)</sup>, according to DIN EN ISO 14644-1 for series E6.29.060.150.0 at v = 0.5m/s, 2.0m/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
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E6 e-chains®  
crossbars removable along the inner and outer radius - standard

E6.29	29	30 - 140	46 - 156	35	055 - 150	≈ 1.75	878
E6.35	35	30 - 140	50 - 160	42	055 - 150	≈ 1.90	884
E6.40	40	40 - 300	60 - 320	54	063 - 200	≈ 2.50	888
E6.52	52	40 - 300	64 - 324	65	075 - 250	≈ 3.00	894
E6.62	62	50 - 400	86 - 436	84	115 - 350	≈ 4.00	900
E6.80L	80	87 - 550	115 - 578	108	150 - 300	≈ 2.50	904
E6.80	80	50 - 600	100 - 650	108	150 - 450	≈ 5.25	910

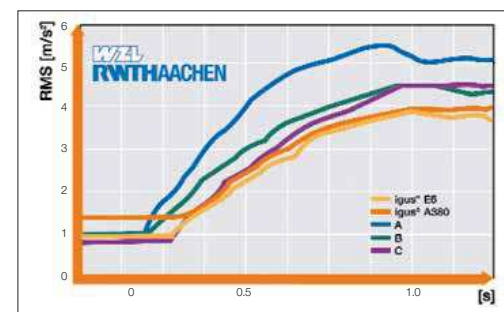


R6 e-tubes  
fully enclosed - lids removable along the inner and outer radius

R6.29	28	30 - 120	46 - 136	35	055 - 150	≈ 1.75	878
R6.40	40	62	82	54	063 - 200	≈ 2.50	888
R6.52	52	50 - 200	74 - 224	65	075 - 250	≈ 3.00	894

Available from stock. Ready to ship in 72hrs.\*  
\*Average time before the ordered goods are dispatched.

Further information about igus® cleanroom e-chains® and the new, unique igus® cleanroom laboratory for IPA cleanroom Class 1 components ► From page 144



### E6 system – extremely quiet operation

Study by the Machine Tools Laboratory and Business Operations (WZL) at RWTH Aachen on "Vibration Tests in 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



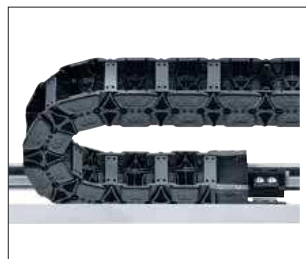
KMA mounting brackets with attachment options from any side



Strain relief elements include clamps, tiewraps, plates, nuggets, etc. ▶ From page 1392



Aluminium "SuperTrough" - the standard igus® guide trough ▶ From page 1298



Aluminium and steel support trays for support of the lower run ▶ From page 1358

### Cleanroom qualification of E6 e-chains®

By using a special material, the already low abrasion behaviour 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. IPA tests confirm that the standard e-chains® from igus® meet the requirements in cleanrooms and have been "Tested and certified as very good!". 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.



### IPA classification - report 0704-400:

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



Further information about igus® cleanroom e-chains® and the new, unique igus® cleanroom laboratory for IPA cleanroom Class 1 components ▶ From page 144



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

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

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

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

Source: TÜV Rheinland \*Source: igus® investigations



Noise level  $\leq 37\text{dB(A)}$  - a measurement conducted by the Rhineland Technical Inspection Authority (TÜV Rheinland) in May 2002 indicates a value of  $\leq 46\text{dB(A)}$  at  $2\text{m/s}$  and with an unsupported length of  $1.5\text{m}$  with series E6.52.100.100.0, and all this with at least  $10\text{dB(A)}$  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  $37\text{dB(A)}$  at  $v = 1\text{m/s}$  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 $FL_G$	$\leq 20$ [m/s] / $\leq 200$ [m/s <sup>2</sup> ]
	Speed $FL_B$ / acceleration $FL_B$	$\leq 3$ [m/s] / $\leq 6$ [m/s <sup>2</sup> ]
	igumid GE side part material - permitted temperature °C	upon request
	igumid G crossbar material, permitted temperature °C	upon request
	Scalable crossbar material, igumid TE - permitted temperature °C	upon request
	Flammability class	VDE 0304 IIC UL94-HB

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

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

Installation types, maximum travels

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

1) If a gliding application is required for a long travel, 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
	Ready to ship in 72hrs.*	Ready to ship in 12 business days*

\*Average time before 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	E6.52.100.075.0
+ Mounting brackets	KMA pivoting - 1 set	E6.520.100.12
Interior separation	with 2 separators assembled every 2 <sup>nd</sup> link	2 x 38222
Order text:	1m E6.52.100.075.0 + E6.520.100.12 + 2 x 38222	

Order key

e-chain® **E6.52.100.075.0**  
e-tube **R6.52.100.075.0**

Order index for colour options

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

Black e-chains® ready to ship in 72hrs.\*  
Above special colours upon request.

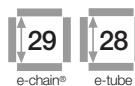
Series / Type

Width index (depends on B)

Bend radius R

Colour index (standard black)

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.	Bi	Ba	E6.29	R6.29	Part No.	Part No.	Bi	Ba	E6.29	R6.29	
e-chains®	e-tubes	[mm]	[mm]	[kg/m]	[kg/m]	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	E6.29.090.R.0	R6.29.090.R.0*	90	106	0.88	1.08	
E6.29.040.R.0	R6.29.040.R.0	40	56	0.75	0.85	E6.29.100.R.0	R6.29.100.R.0*	100	116	0.90	1.13	
E6.29.050.R.0	R6.29.050.R.0	50	66	0.78	0.89	E6.29.110.R.0	R6.29.110.R.0	110	126	0.93	1.18	
E6.29.060.R.0	R6.29.060.R.0	60	76	0.80	0.94	E6.29.120.R.0	R6.29.120.R.0	120	136	0.95	1.22	
E6.29.070.R.0	R6.29.070.R.0*	70	86	0.83	0.97	E6.29.140.R.0	-	140.R.0	140	156	1.00	-
E6.29.080.R.0	R6.29.080.R.0	80	96	0.85	1.03							

\*Width available upon request. Delivery time upon request.

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

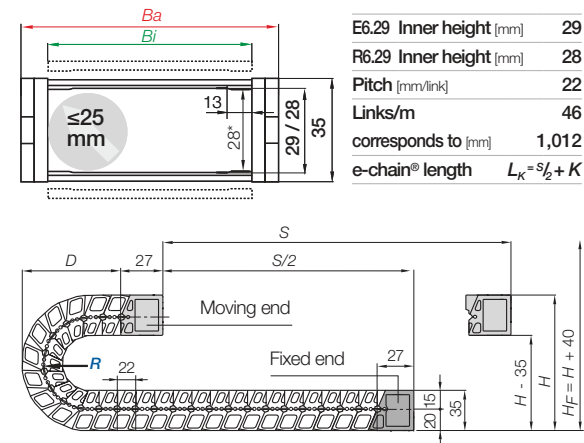
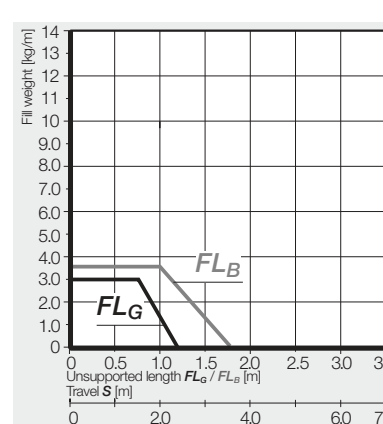


### Installation note - system E6

To open, insert the screwdriver into the locking mechanism and prise it open. Repeat the procedure on the other side.

An assembly video is 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 $L_K = S/2 + K$	

R	055	075	100	150
H	180	220	270	370
D	108	128	153	203
K	220	280	360	520

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 1362

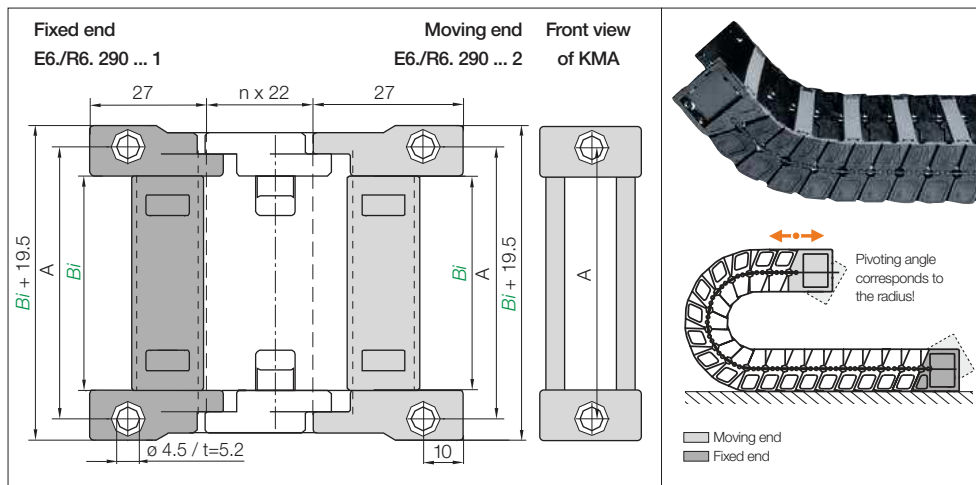


### Steel support tray for support of the lower run

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

More information ► From page 1356



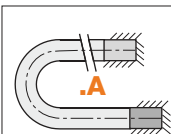


KMA pivoting | Recommended for unsupported applications

Width index	Part No. Full set KMA pivoting	A [mm]	Bi [mm]	Width index	Part No. Full set KMA pivoting	A [mm]	Bi [mm]
030.	E6.290. R6.290. 030.12	40	30	090.	E6.290. R6.290.* 090.12	100	90
040.	E6.290. R6.290. 040.12	50	40	100.	E6.290. R6.290.* 100.12	110	100
050.	E6.290. R6.290. 050.12	60	50	110.	E6.290. R6.290. 110.12	120	110
060.	E6.290. R6.290. 060.12	70	60	120.	E6.290. R6.290. 120.12	130	120
070.	E6.290. R6.290.* 070.12	80	70	140.	E6.290 - 140.12	150	140
080.	E6.290. R6.290. 080.12	90	80				

\*Width available upon request. Delivery time upon request.

(KMA = polymer metal mounting bracket)



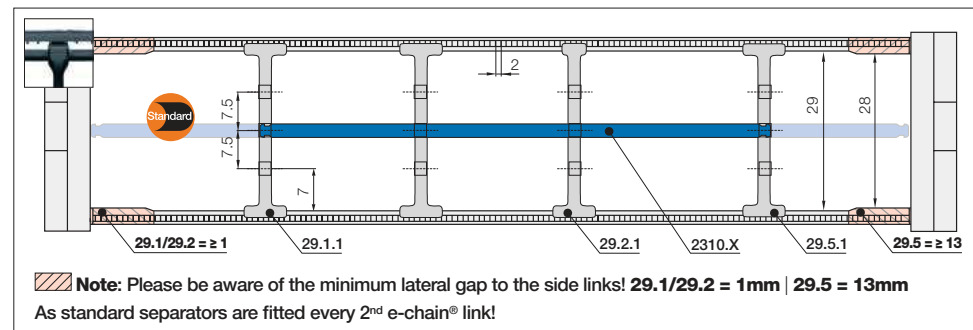
The bracket orientations are set automatically when using an igus® KMA mounting bracket with attachment from any side. To receive a KMA mounting bracket pre-fitted please add index **A**.

E6.290.080.12.A Order example



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

Previous generation of interior separation with other options ► [www.igus.eu/E6.2](http://www.igus.eu/E6.2)



**Standard separator, wide base**

unassembled 29.1  
assembled 29.1.1

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

**Separator, narrow top**

unassembled 29.2  
assembled 29.2.1

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

**Notch separator for notched crossbar**

unassembled 29.5  
assembled 29.5.1

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

**Shelf, lockable**

unassembled 2300.X  
assembled 2310.X

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

**Shelves**  
Width = X [mm]

X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
015	2300.015	2310.015	060	2300.060	2310.060	087	2300.87	2310.087
025	2300.025	2310.025	062	2300.062	2310.062	090	2300.90	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

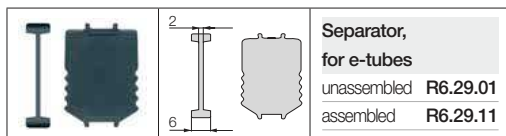
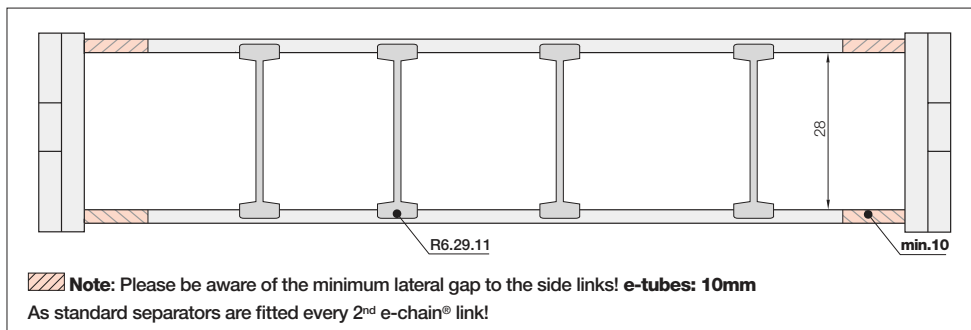
**Separator with integrated strain relief teeth**

- Can be integrated into the mounting bracket or placed at any point
- 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 1428



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.

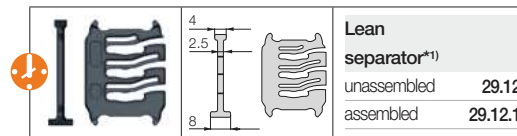
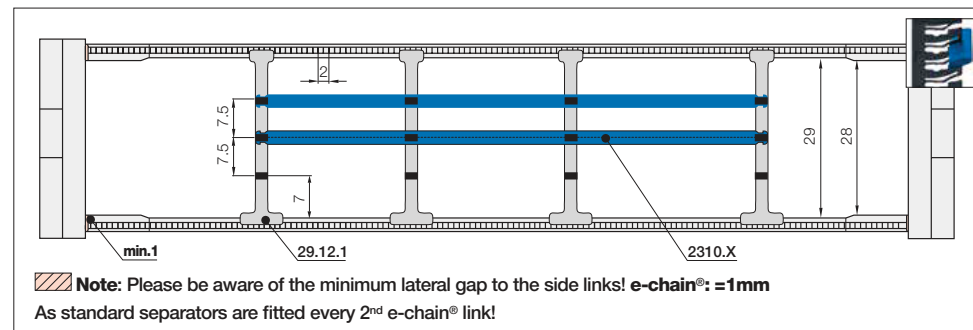
**Separator with integrated strain relief teeth**

- Can be integrated into the mounting bracket or placed at any point
  - Combines strain relief and interior separation, for restricted space conditions
  - Strain relief separator is easy to assemble without any screws
- Part No. R6.35.02.Z - more information ► From page 1428



e-chain® from the E6 range accelerates work processes in the wafer-handling application in chip production

Interior separation | To allow faster filling



**Lean separators\*1)**

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

\*Only suitable for e-chains®

With the lean separator you can quickly insert several layers of cables into the e-chain® and reduce the installation time by up to 50%<sup>2)</sup>. 2) Lean interior separation vs. standard interior separation - measured on a 4m long e-chain® fitted with 12 cables in the igus® lab



Extremely low noise and vibration

35



... E6.35

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

Part No.	<i>B<sub>i</sub></i>	<i>B<sub>a</sub></i>	E6.35	Part No.	<i>B<sub>i</sub></i>	<i>B<sub>a</sub></i>	E6.35
e-chains®	[mm]	[mm]	[kg/m]	e-chains®	[mm]	[mm]	[kg/m]
E6.35. 030. R.0	30	50	0.88	E6.35. 090. R.0	90	110	1.01
E6.35. 040. R.0	40	60	0.90	E6.35. 100. R.0	100	120	1.03
E6.35. 050. R.0	50	70	0.92	E6.35. 110. R.0	110	130	1.05
E6.35. 060. R.0	60	80	0.94	E6.35. 120. R.0	120	140	1.07
E6.35. 070. R.0	70	90	0.96	E6.35. 140. R.0	140	160	1.11
E6.35. 080. R.0	80	100	0.99				

## Available bend radii

*R* [mm] | 055 | 075 | 100 | 150 |Complete Part No. with required radius (*R*). Example: E6.35.100.100.0

## Installation note - system E6

To open, insert the screwdriver into the locking mechanism and prise it open. Repeat the procedure on the other side.

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

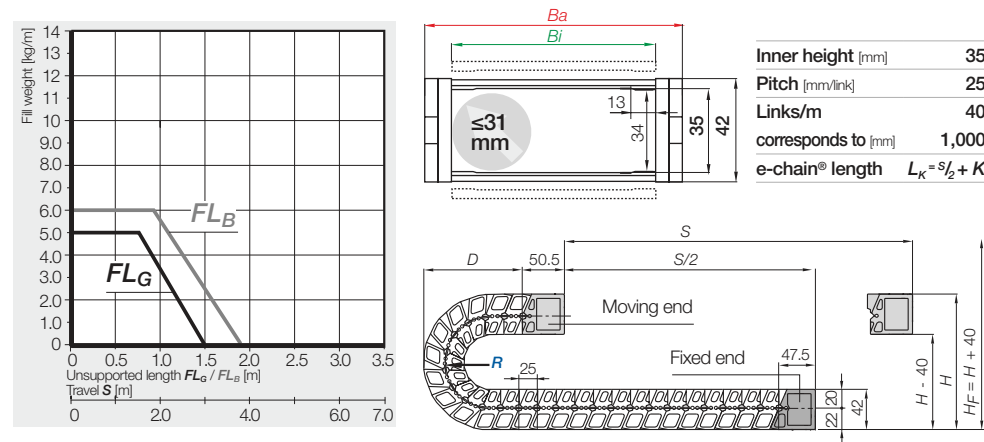
Unsupported applications | Short travels



► 1392



► 1314



<i>R</i>	055	075	100	150
<i>H</i>	189	229	279	379
<i>D</i>	115	135	160	210
<i>K</i>	225	290	365	525

The required clearance height:  $H_F = H + 40$ 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 1362



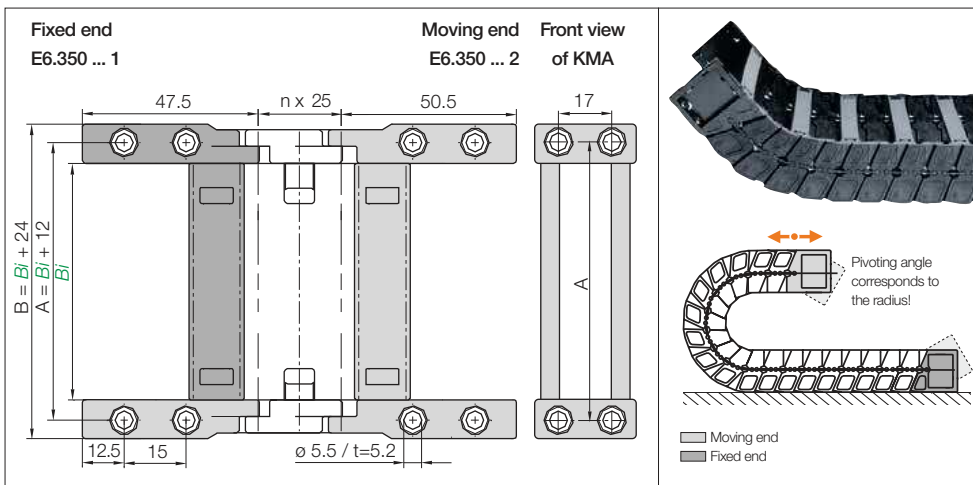
## Steel support tray for support of the lower run

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

More information ► From page 1356



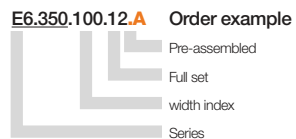
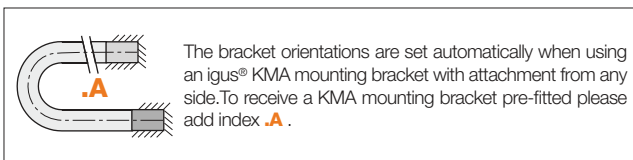




KMA pivoting | Recommended for unsupported applications

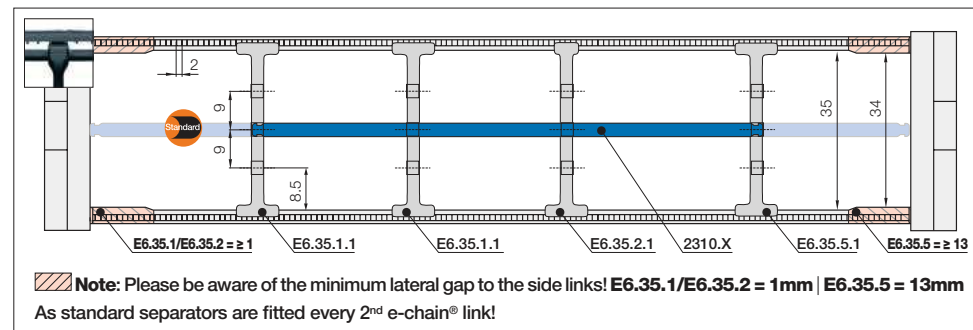
Width index	Part No. Full set KMA pivoting	A [mm]	B [mm]	Bi [mm]	Width index	Part No. Full set KMA pivoting	A [mm]	B [mm]	Bi [mm]
030.	E6.350. 030.12	42	54	30	090.	E6.350. 090.12	102	114	90
040.	E6.350. 040.12	52	64	40	100.	E6.350. 100.12	112	124	100
050.	E6.350. 050.12	62	74	50	110.	E6.350. 110.12	122	134	110
060.	E6.350. 060.12	72	84	60	120.	E6.350. 120.12	132	144	120
070.	E6.350. 070.12	82	94	70	140.	E6.350. 140.12	152	164	140
080.	E6.350. 080.12	92	104	80					

(KMA = polymer metal mounting bracket)



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

Previous generation of interior separation with other options ► [www.igus.eu/E6.35](http://www.igus.eu/E6.35)



**Standard separator, wide base**

unassembled **E6.35.1**  
 assembled **E6.35.1.1**

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

**Separator, narrow top**

unassembled **E6.35.2**  
 assembled **E6.35.2.1**

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

**Notch separator for notched crossbar**

unassembled **E6.35.5**  
 assembled **E6.35.5.1**

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

**Shelf, lockable**

unassembled **2300.X**  
 assembled **2310.X**

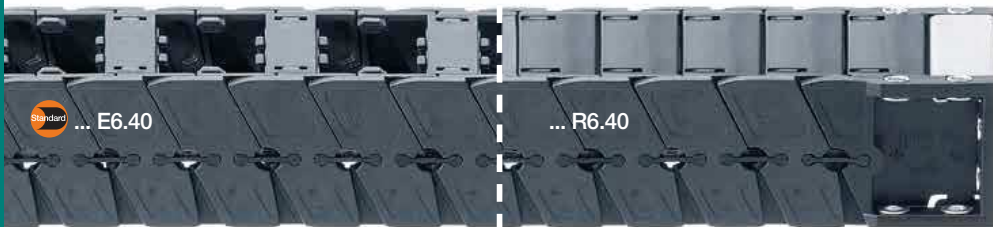
**Horizontal separation**  
 Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

Shelves Width = X [mm]	X [mm] unassembled assembled			X [mm] unassembled assembled			X [mm] unassembled assembled		
	015	2300.015	2310.015	060	2300.060	2310.060	087	2300.87	2310.087
025	2300.025	2310.025	062	2300.062	2310.062	090	2300.90	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
- 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 1428



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.	Bi	Ba	E6.40	R6.40	Part No.	Part No.	Bi	Ba	E6.40	R6.40
e-chains®	e-tubes	[mm]	[mm]	[kg/m]	[kg/m]	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. 125.R.0	R6.40. 125.R.0*	125	145	≈ 1.63	-
E6.40. 050.R.0	R6.40. 050.R.0*	50	70	≈ 1.33	-	E6.40. 150.R.0	R6.40. 150.R.0*	150	170	≈ 1.73	-
E6.40. 052.R.0	R6.40. 052.R.0*	52	72	≈ 1.34	-	E6.40. 175.R.0	R6.40. 175.R.0*	175	195	≈ 1.83	-
E6.40. 062.R.0	R6.40. 062.R.0	62	82	≈ 1.38	≈ 1.59	E6.40. 200.R.0	R6.40. 200.R.0*	200	220	≈ 1.93	-
E6.40. 070.R.0	R6.40. 070.R.0*	70	90	≈ 1.41	-	E6.40. 225.R.0	R6.40. 225.R.0*	225	245	≈ 2.02	-
E6.40. 075.R.0	R6.40. 075.R.0*	75	95	≈ 1.43	-	E6.40. 250.R.0	R6.40. 250.R.0*	250	270	≈ 2.12	-
E6.40. 087.R.0	R6.40. 087.R.0*	87	107	≈ 1.48	-	E6.40. 275.R.0	R6.40. 275.R.0*	275	295	≈ 2.22	-
E6.40. 100.R.0	R6.40. 100.R.0*	100	120	≈ 1.53	-	E6.40. 300.R.0	R6.40. 300.R.0*	300	320	≈ 2.32	-

\*Width available upon request. Delivery time upon request.

Available bend radii

R [mm] | 063 | 075 | 100 | 125 | 150 | 200 |

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

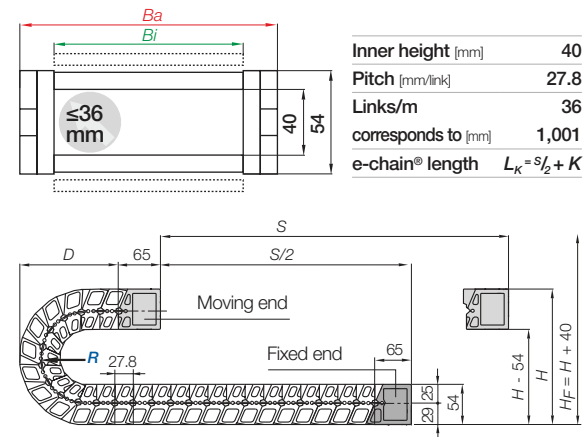
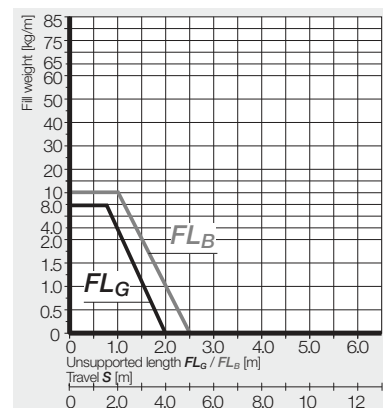
E6.40.62.100.0 = e-chain® / R6.40.62.100.0 = e-tube



Installation note - system E6

To open, insert the screwdriver into the locking mechanism and prise it open. Repeat the procedure on the other side.

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



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

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

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

**Aluminium support tray**

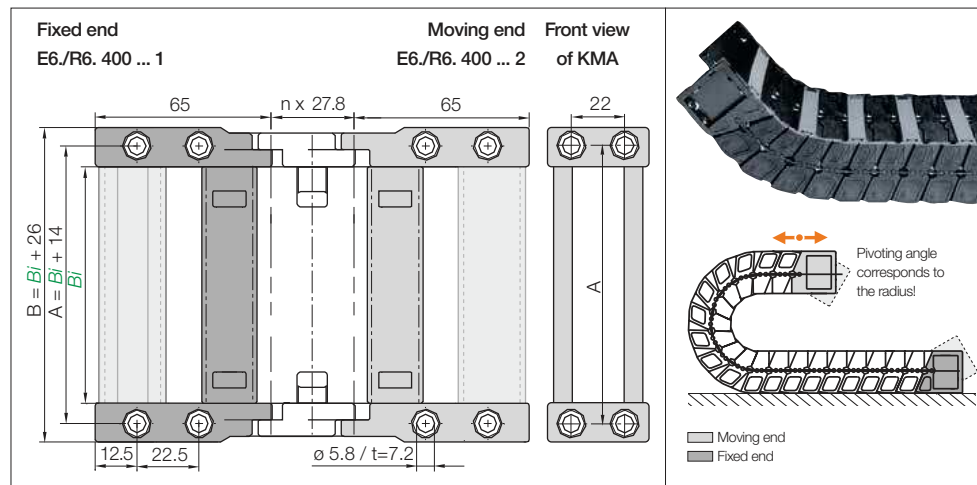
- Corrosion-resistant and seawater-resistant aluminium rails with adjustable width
- Noise-reducing glide strip integrated as standard
- Easy installation and connection of the e-chain®
- Open design - dirt and debris fall through

More information ► From page 1362

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

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

More information ► From page 1356

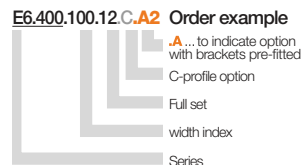
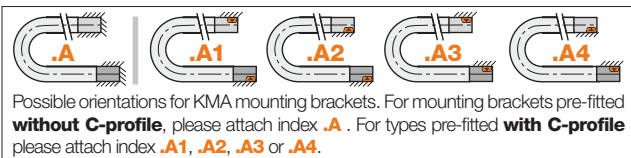


KMA pivoting | Recommended for unsupported applications

Width index	Part No. Full set KMA pivoting	A [mm]	B [mm]	Bi [mm]	Width index	Part No. Full set KMA pivoting	A [mm]	B [mm]	Bi [mm]
040.	E6.400. R6.400.* 040.12.C	54	66	40	125.	E6.400. R6.400.* 125.12.C	139	151	125
050.	E6.400. R6.400.* 050.12.C	64	76	50	150.	E6.400. R6.400.* 150.12.C	154	176	150
052.	E6.400. R6.400.* 052.12.C	66	78	52	175.	E6.400. R6.400.* 175.12.C	189	201	175
062.	E6.400. R6.400.* 062.12.C	76	88	62	200.	E6.400. R6.400.* 200.12.C	214	226	200
070.	E6.400. R6.400.* 070.12.C	84	96	70	225.	E6.400. R6.400.* 225.12.C	239	251	225
075.	E6.400. R6.400.* 075.12.C	89	101	75	250.	E6.400. R6.400.* 250.12.C	264	276	250
087.	E6.400. R6.400.* 087.12.C	101	113	87	275.	E6.400. R6.400.* 275.12.C	289	301	275
100.	E6.400. R6.400.* 100.12.C	114	126	100	300.	E6.400. R6.400.* 300.12.C	314	326	300

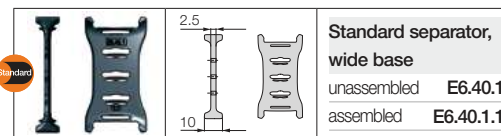
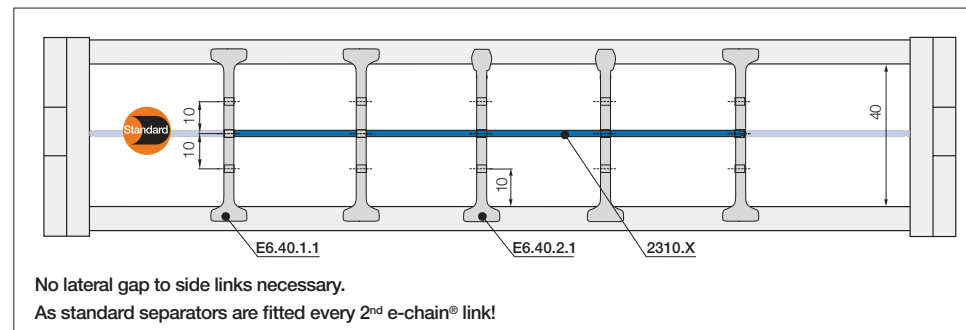
\*Width available upon request. Delivery time upon request.

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

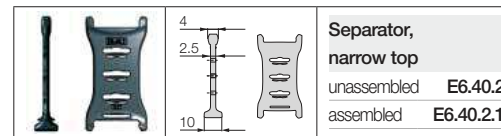


**Strain relief** e.g. clamps, tie-wrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ► From page 1392

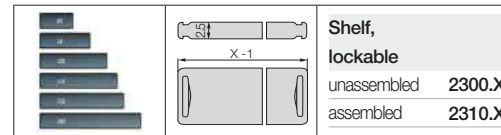
Previous generation of interior separation with other options ► [www.igus.eu/E6.40](http://www.igus.eu/E6.40)



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



**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**  
Width = X [mm]

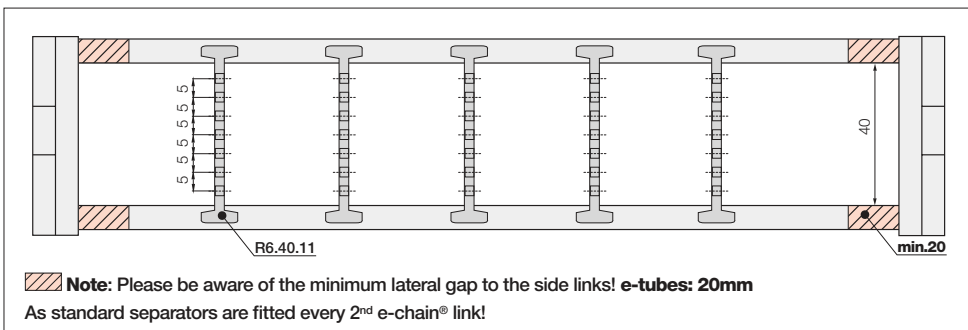
X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
015	2300.015	2310.015	060	2300.060	2310.060	087	2300.87	2310.087
025	2300.025	2310.025	062	2300.062	2310.062	090	2300.90	2310.090
030	2300.030	2310.030	065	2300.065	2310.065	100	2300.100	2310.100
038	2300.038	2310.038	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





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)



**Separator, for e-tubes**  
unassembled **R6.40.01**  
assembled **R6.40.11**

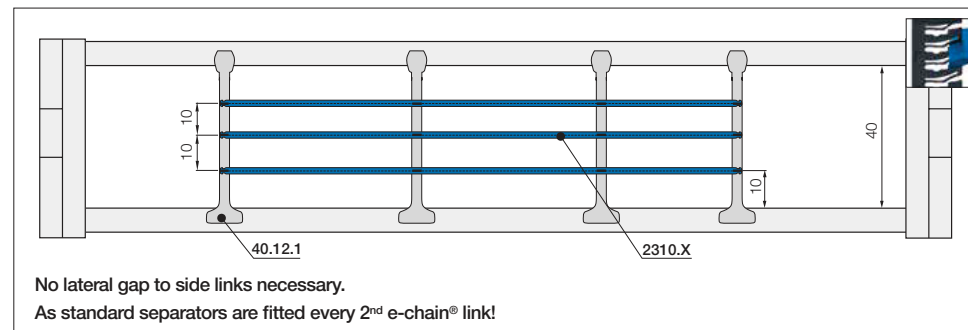
**Separator for e-tubes**  
Notches on the separator indicate the clamping side of the separator. The notches on this separator mark the side that fixes to the lid.

**Full-width shelf for e-tubes**  
unassembled **110.X**  
assembled **111.X**

**Full-width shelf for e-tubes**  
This option is for applications with many small cables with similar diameters for full-width separation.

Full-width shelves 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
	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			

Interior separation | To allow faster filling

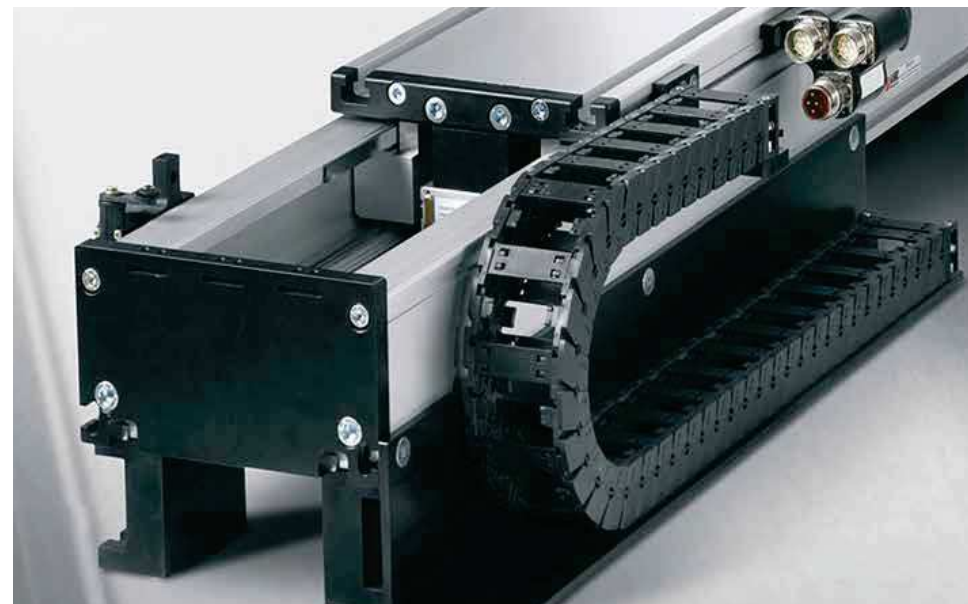


**Lean separator\*1)**  
unassembled **40.12**  
assembled **40.12.1**

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

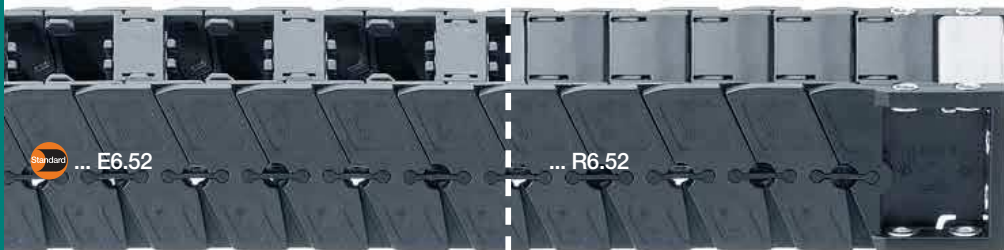
\*Only suitable for e-chains®

With the lean separator you can quickly insert several layers of cables into the e-chain® and reduce the installation time by up to 50%<sup>2)</sup>. 2) Lean interior separation vs. standard interior separation - measured on a 4m long e-chain® fitted with 12 cables in the igus® lab



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

Extremely low noise and vibration



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.	Bi	Ba	E6.52	R6.52	Part No.	Part No.	Bi	Ba	E6.52	R6.52
e-chains®	e-tubes	[mm]	[mm]	[kg/m]	[kg/m]	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. 125. R.0	R6.52. 125. R.0	125	149	≈ 2.07	≈ 2.57
E6.52. 050. R.0	R6.52. 050. R.0	50	74	≈ 1.80	≈ 1.89	E6.52. 150. R.0	R6.52. 150. R.0	150	174	≈ 2.17	≈ 2.80
E6.52. 052. R.0	R6.52. 052. R.0*	52	66	≈ 1.81	≈ 1.92	E6.52. 175. R.0	R6.52. 175. R.0	175	199	≈ 2.26	≈ 3.03
E6.52. 062. R.0	R6.52. 062. R.0*	62	86	≈ 1.84	≈ 1.97	E6.52. 200. R.0	R6.52. 200. R.0	200	224	≈ 2.36	≈ 3.25
E6.52. 070. R.0	R6.52. 070. R.0*	70	94	≈ 1.87	≈ 2.07	E6.52. 225. R.0	R6.52. 225. R.0*	225	249	≈ 2.45	≈ 3.46
E6.52. 075. R.0	R6.52. 075. R.0	75	99	≈ 1.89	≈ 2.12	E6.52. 250. R.0	R6.52. 250. R.0*	250	274	≈ 2.54	≈ 3.68
E6.52. 087. R.0	R6.52. 087. R.0*	87	111	≈ 1.94	≈ 2.21	E6.52. 275. R.0	R6.52. 275. R.0*	275	299	≈ 2.64	≈ 3.92
E6.52. 100. R.0	R6.52. 100. R.0	100	124	≈ 1.98	≈ 2.35	E6.52. 300. R.0	R6.52. 300. R.0*	300	324	≈ 2.73	≈ 4.15

\*Width available upon request. Delivery time upon request.

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

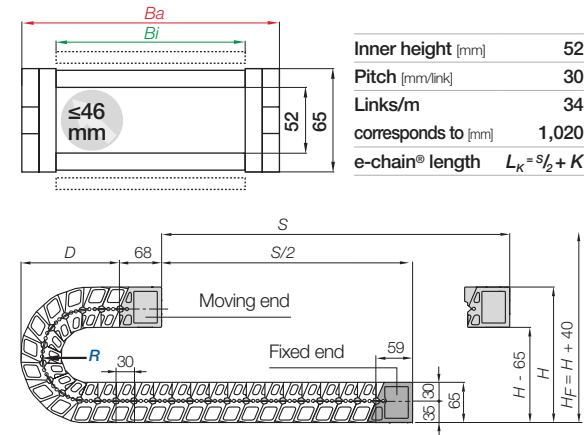
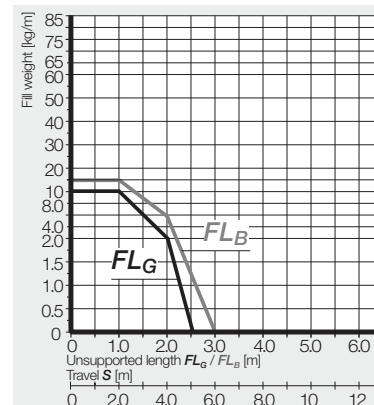


### Installation note - system E6

To open, insert the screwdriver into the locking mechanism and prise it open. Repeat the procedure on the other side.

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

Unsupported applications | Short travels



Inner height [mm]	52
Pitch [mm/link]	30
Links/m	34
corresponds to [mm]	1,020
e-chain® length $L_K = S/2 + K$	

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

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

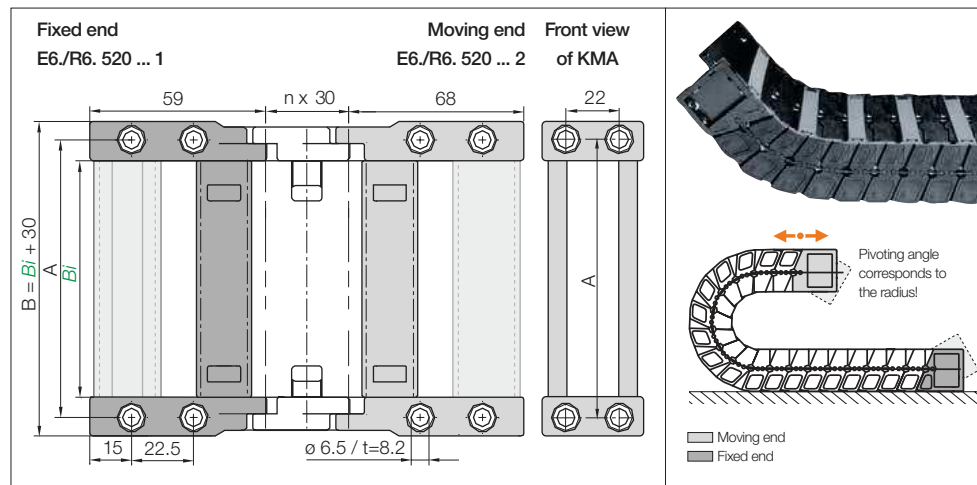
**i** If a gliding application is required for a long travel, please consult igus®.

### 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 1356



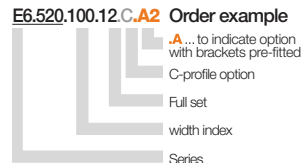
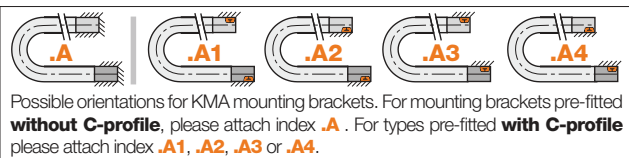


KMA pivoting | Recommended for unsupported applications

Width index	Part No. Full set KMA pivoting	A [mm]	B [mm]	Bi [mm]	Width index	Part No. Full set KMA pivoting	A [mm]	B [mm]	Bi [mm]
040.	E6.520. R6.520.* 040.12.C	56	70	40	125.	E6.520. R6.520. 125.12.C	141	155	125
050.	E6.520. R6.520. 050.12.C	66	80	50	150.	E6.520. R6.520. 150.12.C	166	180	150
052.	E6.520. R6.520.* 052.12.C	68	82	52	175.	E6.520. R6.520. 175.12.C	191	205	175
062.	E6.520. R6.520.* 062.12.C	78	92	62	200.	E6.520. R6.520. 200.12.C	216	230	200
070.	E6.520. R6.520.* 070.12.C	86	100	70	225.	E6.520. R6.520.* 225.12.C	241	255	225
075.	E6.520. R6.520. 075.12.C	91	105	75	250.	E6.520. R6.520.* 250.12.C	266	280	250
087.	E6.520. R6.520.* 087.12.C	103	117	87	275.	E6.520. R6.520.* 275.12.C	291	300	275
100.	E6.520. R6.520. 100.12.C	116	130	100	300.	E6.520. R6.400.* 300.12.C	316	330	300

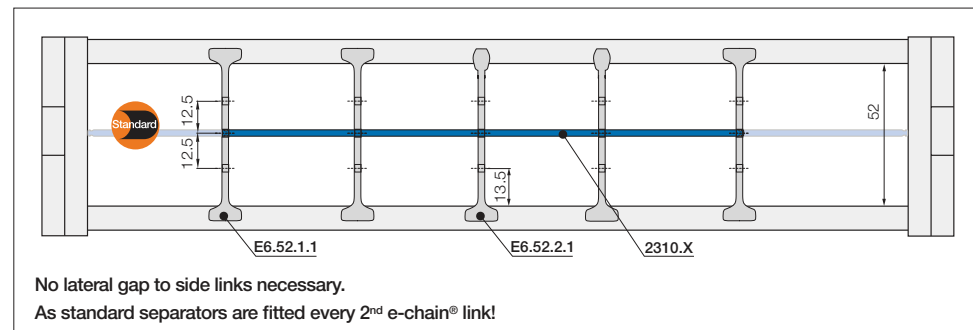
\*Width available upon request. Delivery time upon request.

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



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

Previous generation of interior separation with other options ► [www.igus.eu/E6.52](http://www.igus.eu/E6.52)



		2.5 10	<b>Standard separator, wide base</b>	unassembled E6.52.1
			assembled E6.52.1.1	
		4 2.5 10	<b>Separator, narrow top</b>	unassembled E6.52.2
			assembled E6.52.2.1	
		X-1	<b>Shelf, lockable</b>	unassembled 2300.X
			assembled 2310.X	

**Standard - for any application**

Separator with a wide base for maximum holding force.

**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**

Width = X [mm]

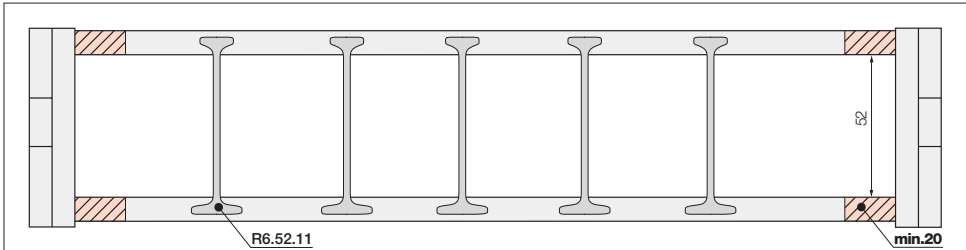


X [mm]	unassembled	assembled	X [mm]	unassembled	assembled	X [mm]	unassembled	assembled
015	2300.015	2310.015	060	2300.060	2310.060	087	2300.87	2310.087
025	2300.025	2310.025	062	2300.062	2310.062	090	2300.90	2310.090
030	2300.030	2310.030	065	2300.065	2310.065	100	2300.100	2310.100
038	2300.038	2310.038	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

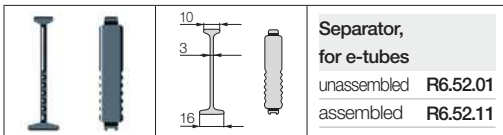


Interior separation | Only for e-tubes (e-chains® ► previous page)

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



**Note:** Please be aware of the minimum lateral gap to the side links! **e-tubes: 20mm**  
As standard separators are fitted every 2<sup>nd</sup> e-chain® link!



**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.



Pre-assembled 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®

Extremely low noise and vibration

62



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

Part No.	Bi	Ba	E6.62	Part No.	Bi	Ba	E6.62
e-chains®	[mm]	[mm]	[kg/m]	e-chains®	[mm]	[mm]	[kg/m]
E6.62. 05. R.0	50	86	3.22	E6.62. 212. R.0	212	248	3.78
E6.62. 06. R.0	68	104	3.28	E6.62. 23. R.0	225	261	3.83
E6.62. 07. R.0	75	111	3.31	E6.62. 237. R.0	237	273	3.87
E6.62. 087. R.0	87	123	3.35	E6.62. 25. R.0	250	286	3.91
E6.62. 097. R.0	97	133	3.38	E6.62. 262. R.0	262	298	3.95
E6.62. 10. R.0	100	136	3.39	E6.62. 28. R.0	275	311	4.00
E6.62. 11. R.0	108	144	3.42	E6.62. 29. R.0	287	323	4.04
E6.62. 112. R.0	112	148	3.43	E6.62. 30. R.0	300	336	4.09
E6.62. 12. R.0	125	161	3.48	E6.62. 312. R.0	312	348	4.13
E6.62. 137. R.0	137	173	3.52	E6.62. 325. R.0	325	361	4.17
E6.62. 15. R.0	150	186	3.57	E6.62. 337. R.0	337	373	4.21
E6.62. 162. R.0	162	198	3.61	E6.62. 350. R.0	350	386	4.26
E6.62. 17. R.0	168	204	3.63	E6.62. 362. R.0	362	398	4.30
E6.62. 18. R.0	175	211	3.65	E6.62. 375. R.0	375	411	4.35
E6.62. 187. R.0	187	223	3.69	E6.62. 387. R.0	387	423	4.39
E6.62. 20. R.0	200	236	3.74	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

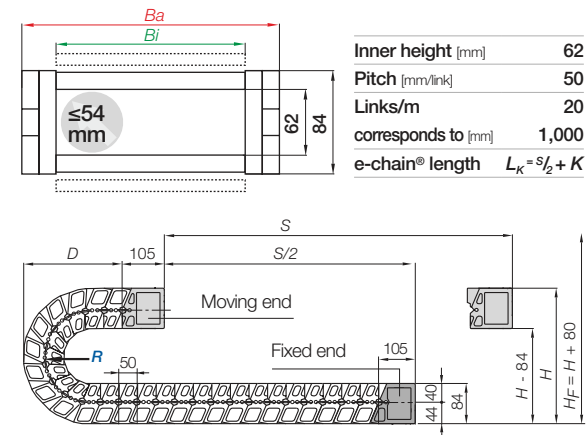
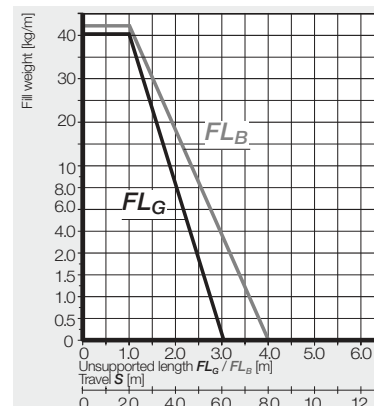


## Installation note - system E6

To open, insert the screwdriver into the locking mechanism and prise it open. Repeat the procedure on the other side.

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

Unsupported applications | Short travels



Inner height [mm]	62
Pitch [mm/link]	50
Links/m	20
corresponds to [mm]	1,000
e-chain® length $L_K = S/2 + K$	

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

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

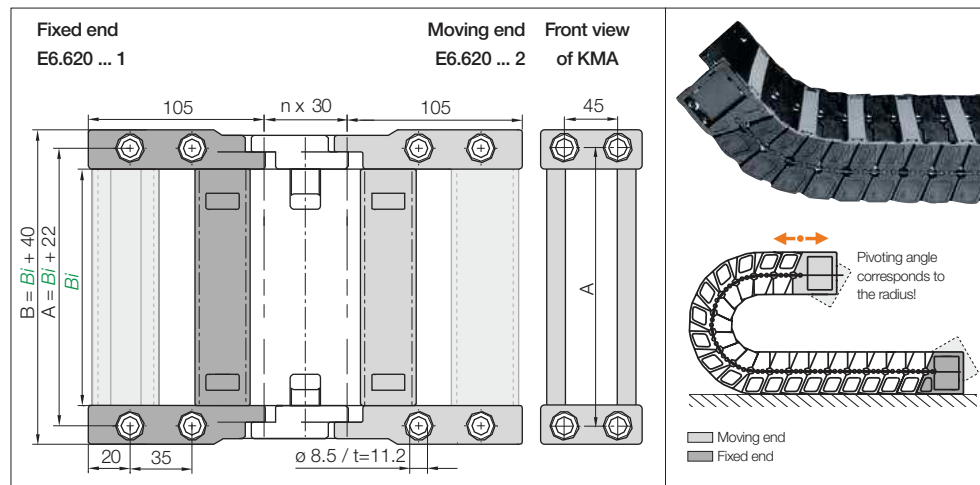
**i** If a gliding application is required for a long travel, please consult igus®.

## 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 1356

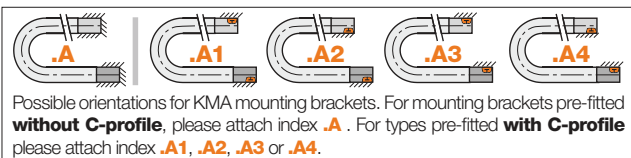




KMA pivoting | Recommended for unsupported applications

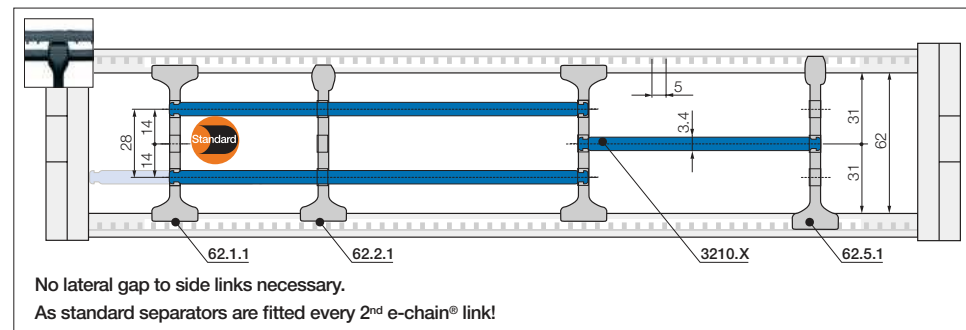
Width index	Part No. Full set KMA pivoting	A [mm]	B [mm]	Bi [mm]	Width index	Part No. Full set KMA pivoting	A [mm]	B [mm]	Bi [mm]
05.	E6.620. 05. 12.C	72	90	50	212.	E6.620. 212.12.C	234	252	212
06.	E6.620. 06. 12.C	90	108	68	23.	E6.620. 23. 12.C	247	265	225
07.	E6.620. 07. 12.C	97	115	75	237.	E6.620. 237.12.C	259	277	237
087.	E6.620. 087.12.C	109	127	87	25.	E6.620. 25. 12.C	272	290	250
097.	E6.620. 097.12.C	119	137	97	262.	E6.620. 262.12.C	284	302	262
10.	E6.620. 10. 12.C	122	140	100	28.	E6.620. 28. 12.C	297	315	275
11.	E6.620. 11. 12.C	130	148	108	29.	E6.620. 29. 12.C	309	327	287
112.	E6.620. 112.12.C	134	152	112	30.	E6.620. 30. 12.C	322	340	300
12.	E6.620. 12. 12.C	147	165	125	312.	E6.620. 312.12.C	334	352	312
137.	E6.620. 137.12.C	159	177	137	325.	E6.620. 325.12.C	347	365	325
15.	E6.620. 15. 12.C	172	190	150	337.	E6.620. 337.12.C	359	377	337
162.	E6.620. 162.12.C	184	202	162	350.	E6.620. 350.12.C	372	390	350
17.	E6.620. 17. 12.C	190	208	168	362.	E6.620. 362.12.C	384	402	362
18.	E6.620. 18. 12.C	197	215	175	375.	E6.620. 375.12.C	397	415	375
187.	E6.620. 187.12.C	209	227	187	387.	E6.620. 387.12.C	409	427	387
20.	E6.620. 20. 12.C	222	240	200	400.	E6.620. 400.12.C	422	440	400

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



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

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



**Standard separator, wide base**

unassembled **62.1**  
assembled **62.1.1**

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

**Separator, narrow top**

unassembled **62.2**  
assembled **62.2.1**

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

**Notch separator\* for notched crossbar**

unassembled **62.5**  
assembled **62.5.1**

**Locks securely in preset increments**  
Notch separator for exact positioning. Recommended for side-mounted applications.  
(\*Suitable from **Bi 75**)

**Shelf, lockable**

unassembled **3200.X**  
assembled **3210.X**

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

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



Extremely low noise and vibration

80



... E6.80L

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

Part No.	Bi	Ba	E6.80L	Part No.	Bi	Ba	E6.80L
e-chains®	[mm]	[mm]	[kg/m]	e-chains®	[mm]	[mm]	[kg/m]
E6.80L. 08. R.0	87	115	3.28	E6.80L. 32. R.0	325	353	4.38
E6.80L. 10. R.0	100	128	3.33	E6.80L. 33. R.0	337	365	4.44
E6.80L. 11. R.0	112	140	3.38	E6.80L. 35. R.0	350	378	4.50
E6.80L. 12. R.0	125	153	3.43	E6.80L. 36. R.0	362	390	4.56
E6.80L. 13. R.0	137	165	3.49	E6.80L. 37. R.0	375	403	4.62
E6.80L. 15. R.0	150	178	3.55	E6.80L. 38. R.0	387	415	4.68
E6.80L. 16. R.0	162	190	3.61	E6.80L. 40. R.0	400	428	4.74
E6.80L. 17. R.0	175	203	3.67	E6.80L. 41. R.0	412	440	4.80
E6.80L. 18. R.0	187	215	3.73	E6.80L. 42. R.0	425	453	4.85
E6.80L. 20. R.0	200	228	3.79	E6.80L. 43. R.0	437	465	4.92
E6.80L. 21. R.0	212	240	3.85	E6.80L. 45. R.0	450	478	5.03
E6.80L. 22. R.0	225	253	3.91	E6.80L. 46. R.0	462	490	5.09
E6.80L. 23. R.0	237	265	3.97	E6.80L. 47. R.0	475	503	5.15
E6.80L. 25. R.0	250	278	4.02	E6.80L. 48. R.0	487	515	5.21
E6.80L. 26. R.0	262	290	4.09	E6.80L. 50. R.0	500	528	5.27
E6.80L. 27. R.0	275	303	4.14	E6.80L. 51. R.0	512	540	5.33
E6.80L. 28. R.0	287	315	4.20	E6.80L. 52. R.0	525	553	5.39
E6.80L. 30. R.0	300	328	4.26	E6.80L. 53. R.0	537	565	5.45
E6.80L. 31. R.0	312	340	4.32	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**

To open, insert the screwdriver into the locking mechanism and prise it open. Repeat the procedure on the other side.

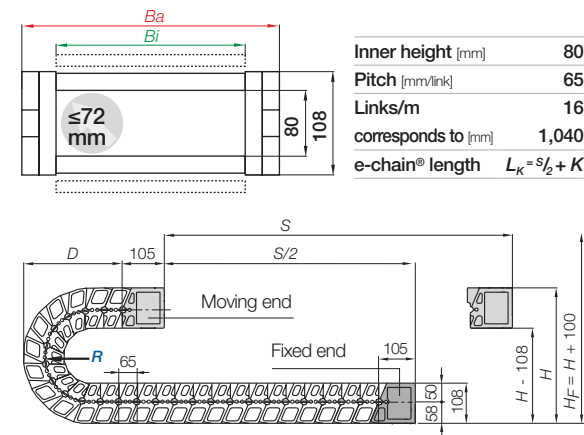
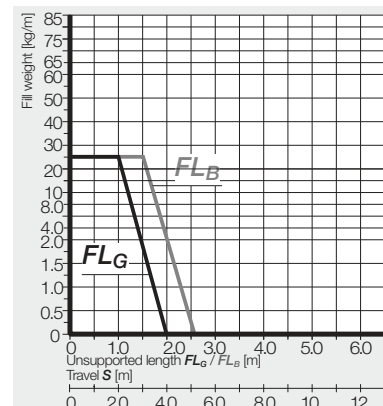
An assembly video is available online at ► [www.igus.eu/E6\\_assembly](http://www.igus.eu/E6_assembly)

Unsupported applications | Short travels



► 1392

► 1324



Inner height [mm]	80
Pitch [mm/link]	65
Links/m	16
corresponds to [mm]	1,040
e-chain® length $L_K = S/2 + K$	

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

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



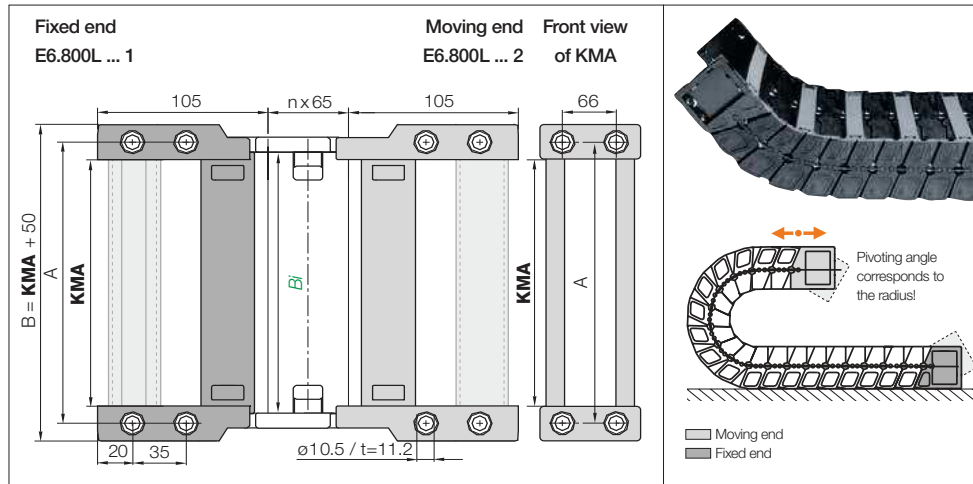
**i** If a gliding application is required for a long travel, please consult igus®.

**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 1356

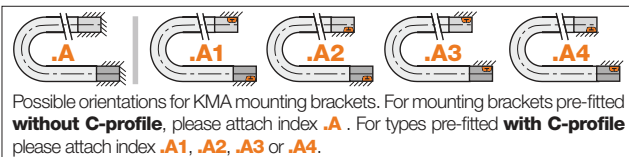




KMA pivoting | Recommended for unsupported applications

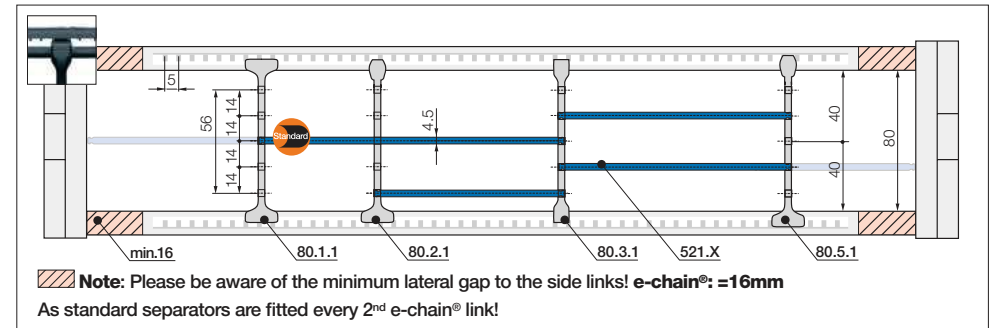
Width index	Part No. Full set KMA pivoting	A [mm]	KMA [mm]	Width index	Part No. Full set KMA pivoting	A [mm]	KMA [mm]
08.	E6.800L.08. 12.C	103	75	32.	E6.800L.32. 12.C	340	312
10.	E6.800L.10. 12.C	115	87	33.	E6.800L.33. 12.C	353	325
11.	E6.800L.11. 12.C	128	100	35.	E6.800L.35. 12.C	365	337
12.	E6.800L.12. 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



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

Previous generation of interior separation with other options ► www.igus.eu/E6.80L



			<b>Standard separator, wide base</b>	unassembled <b>80.1</b>	assembled <b>80.1.1</b>
			<b>Separator, narrow top</b>	unassembled <b>80.2</b>	assembled <b>80.2.1</b>
			<b>Separator, narrow</b>	unassembled <b>80.3</b>	assembled <b>80.3.1</b>
			<b>Notch separator for notched crossbar</b>	unassembled <b>80.5</b>	assembled <b>80.5.1</b>
			<b>Shelf, lockable</b>	unassembled <b>520.X</b>	assembled <b>521.X</b>

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

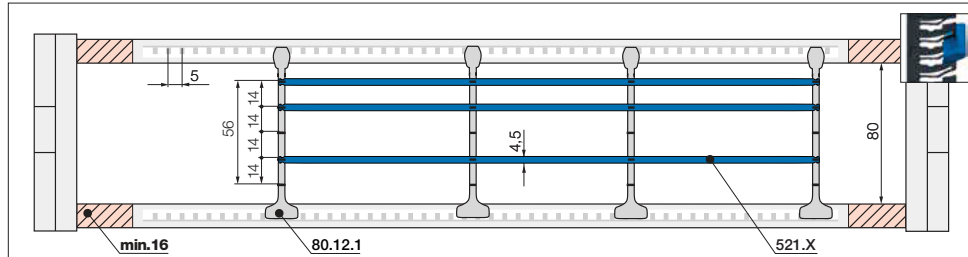
**For even faster installation**  
 Wide on one side for high holding force, narrow on opposite side for easy cable fitting.

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

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

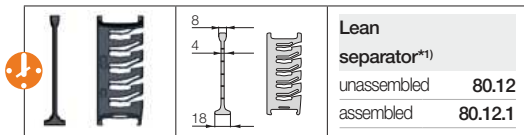
**Horizontal separation**  
 Full-width shelf locks securely into separators at both ends, giving a fixed width. Can be used as full-width or partial shelf.

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



**Note:** Please be aware of the minimum lateral gap to the side links! **e-chain®: =16mm**

As standard separators are fitted every 2<sup>nd</sup> e-chain® link!



#### Lean separators\*1)

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

\*Only suitable for e-chains®



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

on a 4m long e-chain® fitted with 12 cables in the igus® lab



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



Extremely low noise and vibration

80



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

Part No.	Bi	Ba	E6.80	Part No.	Bi	Ba	E6.80
e-chains®	[mm]	[mm]	[kg/m]	e-chains®	[mm]	[mm]	[kg/m]
E6.80. 05. R.0	50	100	5.21	E6.80. 31. R.0	312	362	6.45
E6.80. 06. R.0	65	115	5.28	E6.80. 32. R.0	325	375	6.51
E6.80. 07. R.0	75	125	5.33	E6.80. 33. R.0	337	387	6.57
E6.80. 08. R.0	87	137	5.38	E6.80. 35. R.0	350	400	6.63
E6.80. 10. R.0	100	150	5.45	E6.80. 36. R.0	362	412	6.69
E6.80. 11. R.0	112	162	5.50	E6.80. 37. R.0	375	425	6.75
E6.80. 12. R.0	125	175	5.57	E6.80. 38. R.0	387	437	6.80
E6.80. 13. R.0	137	187	5.62	E6.80. 40. R.0	400	450	6.88
E6.80. 15. R.0	150	200	5.68	E6.80. 41. R.0	412	462	6.92
E6.80. 16. R.0	162	212	5.74	E6.80. 42. R.0	425	475	6.99
E6.80. 17. R.0	175	225	5.80	E6.80. 43. R.0	437	487	7.04
E6.80. 18. R.0	187	237	5.86	E6.80. 45. R.0	450	500	7.10
E6.80. 20. R.0	200	250	5.92	E6.80. 46. R.0	462	512	7.16
E6.80. 21. R.0	212	262	5.98	E6.80. 47. R.0	475	525	7.22
E6.80. 22. R.0	225	275	6.04	E6.80. 48. R.0	487	537	7.28
E6.80. 23. R.0	237	287	6.10	E6.80. 50. R.0	500	550	7.34
E6.80. 25. R.0	250	300	6.16	E6.80. 51. R.0	512	562	7.40
E6.80. 26. R.0	262	312	6.21	E6.80. 52. R.0	525	575	7.46
E6.80. 27. R.0	275	325	6.28	E6.80. 53. R.0	537	587	7.52
E6.80. 28. R.0	287	337	6.33	E6.80. 55. R.0	550	600	7.58
E6.80. 30. R.0	300	350	6.39	E6.80. 60. R.0	600	650	7.81

Available bend radii

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

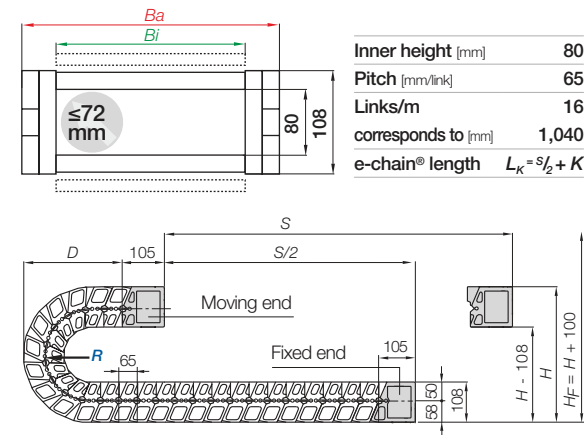
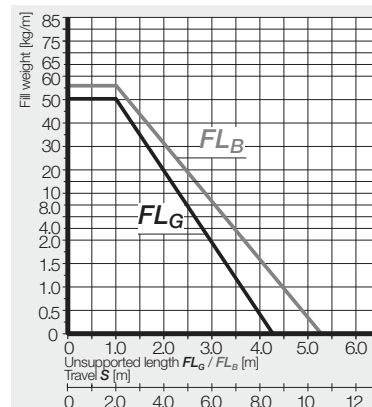
Complete Part No. with required radius (R). Example: E6.80.10.300.0

**Installation note - system E6**

To open, insert the screwdriver into the locking mechanism and prise it open. Repeat the procedure on the other side.

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

Unsupported applications | Short travels



R	150	200	250	300	350	400	450
H	516	616	716	816	916	1,016	1,116
D	306	356	406	456	506	556	606
K	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)



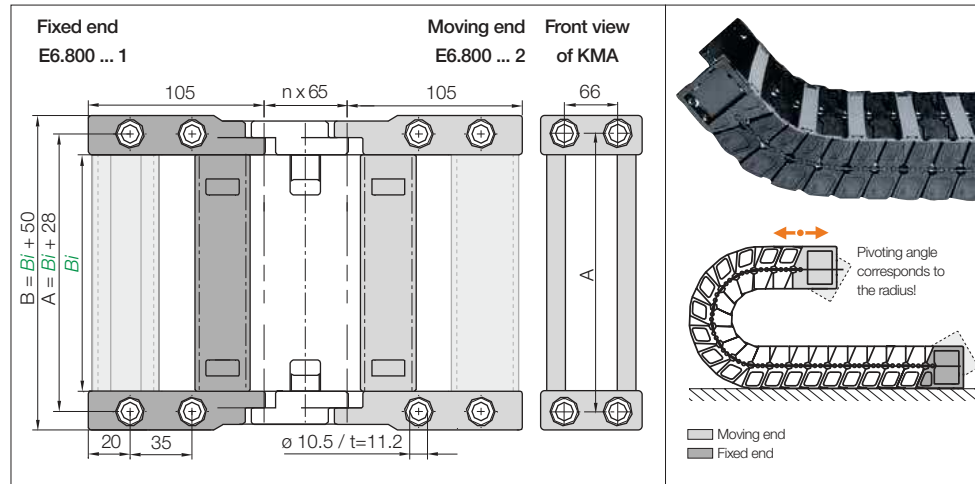
**i** If a gliding application is required for a long travel, please consult igus®.

**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 1356

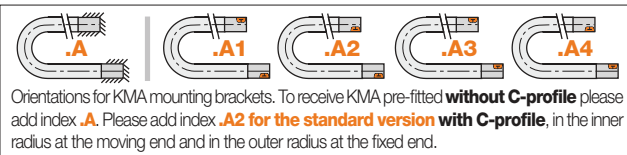




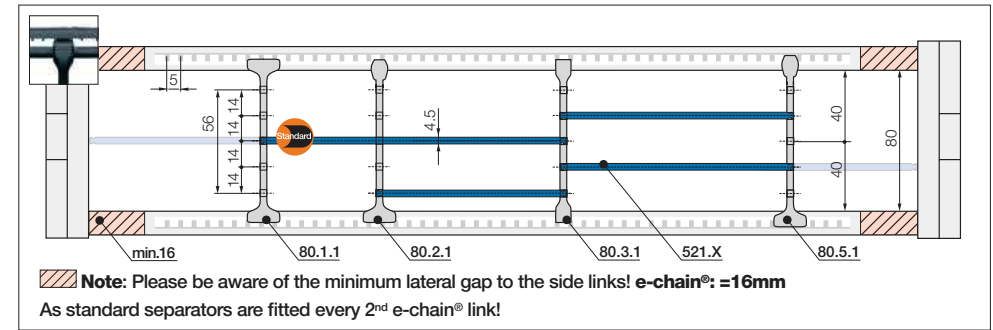
KMA pivoting | Recommended for unsupported applications

Width index	Part No. Full set KMA pivoting	A [mm]	B [mm]	$B_i$ [mm]	Width index	Part No. Full set KMA pivoting	A [mm]	B [mm]	$B_i$ [mm]
05.	E6.800.05.12.C	78	100	50	31.	E6.800.31.12.C	340	362	312
06.	E6.800.06.12.C	93	115	65	32.	E6.800.32.12.C	353	375	325
07.	E6.800.07.12.C	103	125	75	33.	E6.800.33.12.C	365	387	337
08.	E6.800.08.12.C	115	137	87	35.	E6.800.35.12.C	378	400	350
10.	E6.800.10.12.C	128	150	100	36.	E6.800.36.12.C	390	412	362
11.	E6.800.11.12.C	140	162	112	37.	E6.800.37.12.C	403	425	375
12.	E6.800.12.12.C	153	175	125	38.	E6.800.38.12.C	415	437	387
13.	E6.800.13.12.C	165	187	137	40.	E6.800.40.12.C	428	450	400
15.	E6.800.15.12.C	178	200	150	41.	E6.800.41.12.C	440	462	412
16.	E6.800.16.12.C	190	212	162	42.	E6.800.42.12.C	453	475	425
17.	E6.800.17.12.C	203	225	175	43.	E6.800.43.12.C	465	487	437
18.	E6.800.18.12.C	215	237	187	45.	E6.800.45.12.C	478	500	450
20.	E6.800.20.12.C	228	250	200	46.	E6.800.46.12.C	490	512	462
21.	E6.800.21.12.C	240	262	212	47.	E6.800.47.12.C	503	525	475
22.	E6.800.22.12.C	253	275	225	48.	E6.800.48.12.C	515	537	487
23.	E6.800.23.12.C	265	287	237	50.	E6.800.50.12.C	528	550	500
25.	E6.800.25.12.C	278	300	250	51.	E6.800.51.12.C	540	562	512
26.	E6.800.26.12.C	290	312	262	52.	E6.800.52.12.C	553	575	525
27.	E6.800.27.12.C	303	325	275	53.	E6.800.53.12.C	565	587	537
28.	E6.800.28.12.C	315	337	287	55.	E6.800.55.12.C	578	600	550
30.	E6.800.30.12.C	328	350	300	60.	E6.800.60.12.C	628	650	600

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



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



		<b>Standard separator, wide base</b>	unassembled <b>80.1</b>	assembled <b>80.1.1</b>
		<b>Separator, narrow top</b>	unassembled <b>80.2</b>	assembled <b>80.2.1</b>
		<b>Separator, narrow</b>	unassembled <b>80.3</b>	assembled <b>80.3.1</b>
		<b>Notch separator for notched crossbar</b>	unassembled <b>80.5</b>	assembled <b>80.5.1</b>
		<b>Shelf, lockable</b>	unassembled <b>520.X</b>	assembled <b>521.X</b>

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

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

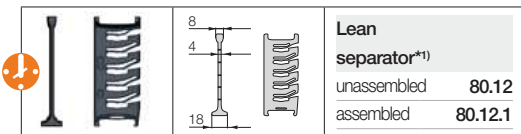
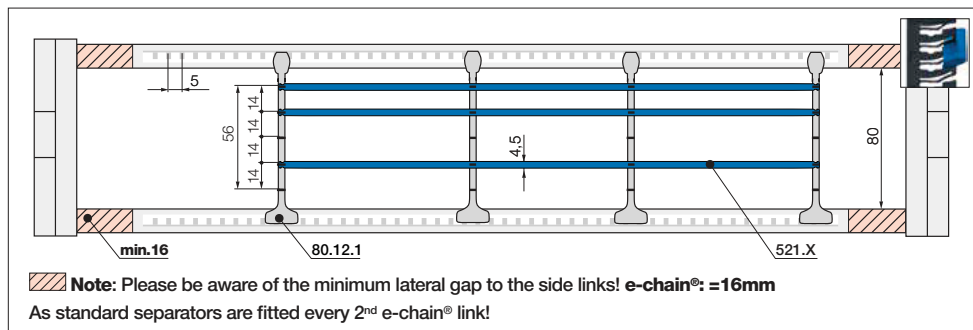
**For a large number of thin cables**  
Separator with a narrow base for a large number of thin cables side by side. Saves space.

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

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

**Lean separators\*1)**

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

\*Only suitable for e-chains®

With the lean separator you can quickly insert several layers of cables into the e-chain® and reduce the installation time by up to 50%<sup>2)</sup>. 2) Lean interior separation vs. standard interior separation - measured on a 4m long e-chain® fitted with 12 cables in the igus® lab



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



An igus® e-chain® from the E6 range accelerates work processes in the wafer-handling application in chip production. The E6 easily supplies energy for wafer handling in chip production requiring acceleration rates of up to 4m/s<sup>2</sup> and speeds of up to 6m/s. Its low abrasion is especially important because a high degree of purity is critical in chip production. The E6 is cleanroom-compatible and has Fraunhofer IPA certification