
Fraunhofer
IPA
TESTED®
DEVICE
igus GmbH
Energy chain E61.29.50.075.0
Report No. IG 1303-640

E6.1

clean-room

Dynamic, quiet, light and cleanroom suitable

Advantages of the E6.1 system:

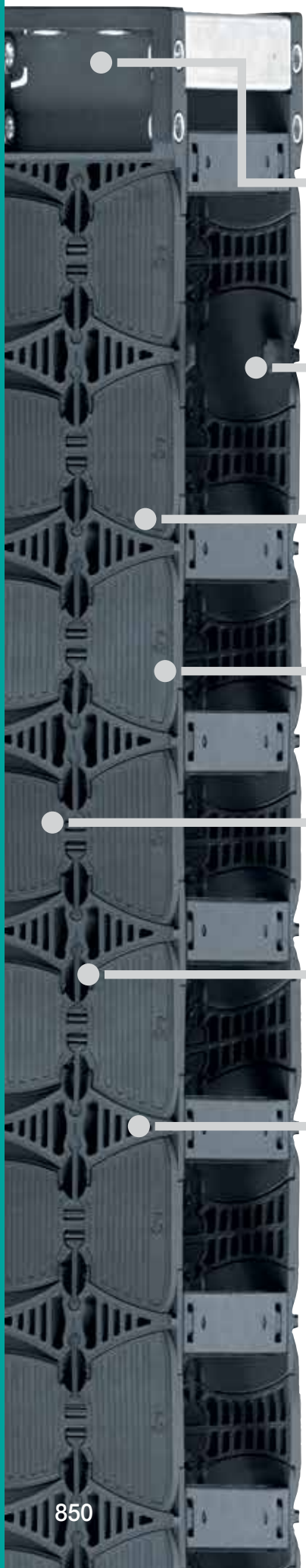
- Extremely quiet, low-vibration e-chain®
- For very high speeds and accelerations
- Ideal ratio of internal and external dimensions with thinner outer links and optimized crossbar geometry
- High push/pull forces
- Small bend radii
- Low noise 32dB(A)[1] - extremely low noise and vibration
- Suitable for cleanrooms according to IPA cleanroom Class 1[2]

1) Extremely low-noise - tested at the igus® lab Series E61.29.070.055.0

2) Cleanroom - E61.29.50.075.0 series

When to use another e-chain® series:

- For side-mounted applications
  - ▶ **E6, page 886**
  - ▶ **E2/000, page 382**
- When a Reverse Bend Radius ***RBR*** is required
  - ▶ **E2/000, page 382**
- For longer unsupported lengths
  - ▶ **E2/000, page 382**
- For long travels
  - ▶ **E2/000, page 382**
- When an enclosed e-chain® for smooth running is required
  - ▶ **R6, page 886**
  - ▶ **e-skin® corrugated tube SK / SKS / SKY, page 838**



Attachment from any side with KMA mounting brackets

Fast assembly: crossbars removable along the inner and outer radius

Low noise from 32dB(A)[1]: small pitch for low noise, smooth running

Dynamic: high speeds and accelerations

Long service life: low vibration, high strength

IPA cleanroom Class 1[2]: virtually no wear or abrasion

Modular design: can be easily lengthened and shortened

Series E61.29 special feature: crossbar openable along inner and outer radius, from both sides

Dynamic, quiet, light and cleanroom suitable - E6.1

The E6.1 series is a development of the E6 series. It incorporates all the advantages of the E6 such as strength, cleanroom-compatibility and low weight in addition to even quieter operation at higher maximum speeds. In addition, its accessibility to the interior and the assembly and handling have been improved.

- Quiet - from a noise level of 32dB(A)[1]
- Weight savings approx. 30% compared to the E6 system
- Highly dynamic
- Extremely low vibration
- Cleanroom-compatible due to principle of low-abrasion for connectors, without pin and bore connection
- Virtually no polygon effect, smooth rolling operation
- Smooth interior design for a long lifetime for cables and hoses
- Crossbars removable along the inner and outer radius
- Option without camber (NC) simply by turning the inner link

1) Extremely low-noise - tested at the igus® lab Series E61.29.070.055.0

2) Cleanroom - E61.29.50.075.0 series

Typical industries and applications

● Semiconductor industry ● Studio equipment and camera tracking systems ● Printer/plotter industry ● In applications with extremely high accelerations ● When noise reduction and a low level of abrasion are important

32dB(A)[1] - level determined at the igus® test-lab, *v* = 197 fpm (1.0m/s) unsupported, series E61.29.070.055.0

More information ▶ www.igus.com/E6.1

E6.1 | Selection table

Series	Inner height *hi*		Inner width *Bi*		Outer width *Ba*		Outer height *ha*		Bend radius *R*		Unsupported length	
	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	≤ ft.	≤ (m)
												
E61.29	1.14	(29)	1.18-5.51	(30-140)	1.73-6.06	(44-154)	1.38	(35)	2.17-5.91	(055-150)	5.74	(1.75)

E6.1 e-chains®
openable along inner and outer radius, from both sides

E6.1 e-chains®
crossbars removable along the inner and outer radius

EF61.29	1.14	(29)	1.18-5.51	(30-140)	1.73-6.06	(44-154)	1.38	(35)	2.17-5.91	(055-150)	5.74	(1.75)
E61.35	1.38	(35)	1.18-5.51	(30-140)	1.81-6.14	(46-156)	1.65	(42)	2.17-5.91	(055-150)	6.23	(1.90)
E61.40	1.57	(40)	1.57-11.81	(40-300)	2.20-12.44	(56-316)	2.13	(54)	2.48-7.87	(063-200)	8.20	(2.50)
E61.52	2.05	(52)	1.57-11.81	(40-300)	2.52-12.76	(64-324)	2.56	(65)	2.95-5.91	(075-150)	9.84	(3.00)
E61.62	2.44	(62)	1.97-15.75	(50-400)	3.22-17.01	(82-432)	3.31	(84)	4.53	(115)	13.12	(4.00)
E61.80	3.15	(80)	1.97-23.62	(50-600)	3.94-25.59	(100-650)	4.25	(108)	5.91	(150)	17.23	(5.25)

Available from stock. Orders ship as early as today.*

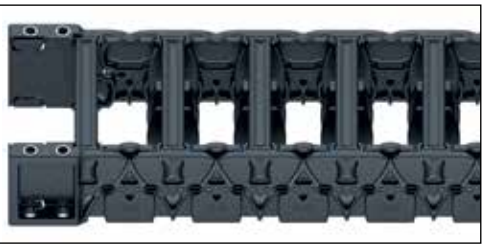
*On average 90% of orders ship the same day..

clean-room **Further information about igus® cleanroom e-chains® and the new, unique igus® cleanroom laboratory for IPA cleanroom Class 1 components** ▶ From page 146

Next e-chain® generation for highest cleanroom suitability ISO cleanroom Class 1; C6

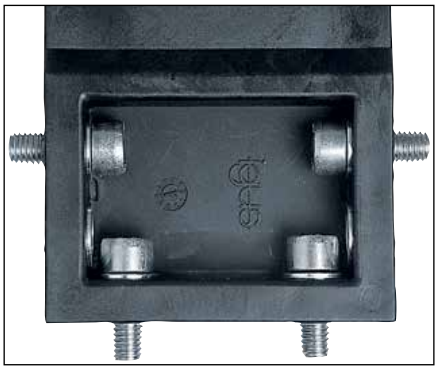
- Optimized design without any measurable abrasion
- Parts that contact the cables are made of tribo-optimized igulen CR1

Samples available upon request ▶ Please consult igus®.

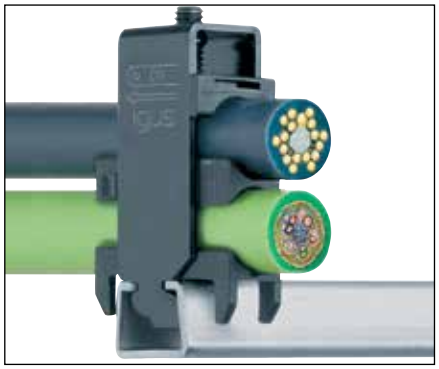


Lean separators enable extremely fast cable filling in several layers

Series E61.29 with openable mechanism, openable on left or right

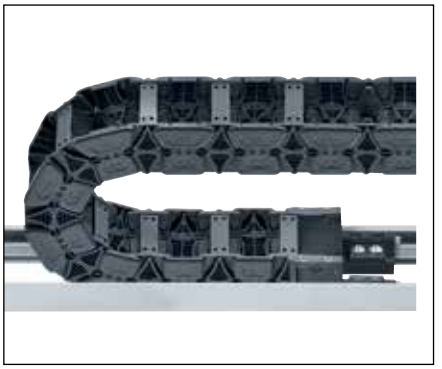


KMA mounting brackets with attachment options from any side



Strain relief e.g. clamps, tiewrap plates, nuggets, etc. ▶ **From page 1418**

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



Aluminum and steel support trays for support of the lower run ▶ **From page 1394**

The interior of the E6.1 has been designed to be extremely cable-friendly to increase the service life of cables and hoses even more. The crossbars are very smooth and rounded as is the transition from e-chain® link to crossbar, and all markings have been moved outside of the e-chain® cross section.

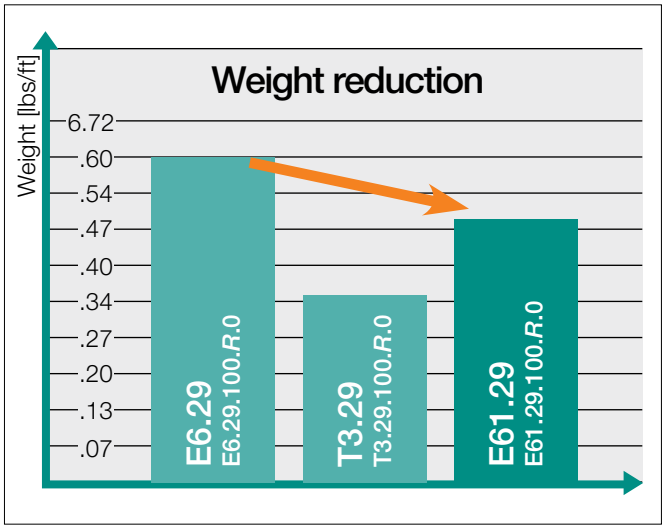
Cleanroom qualification of igus® system E6.1 e-chains®

By using a special material, the already low abrasion behavior 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.

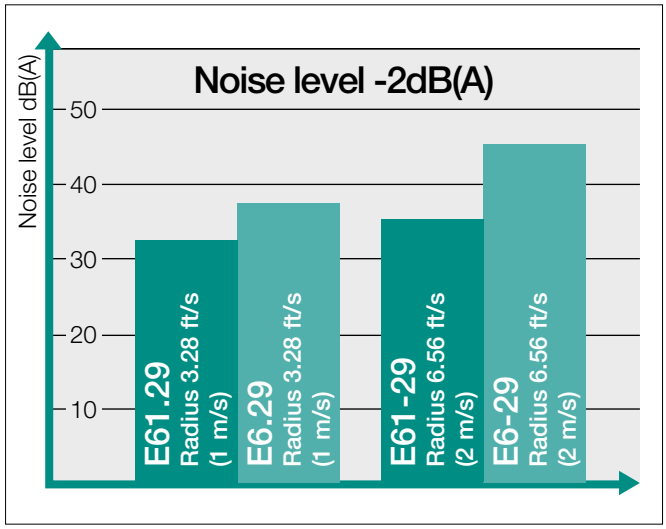
IPA Qualification Certificate[2] - Report IG 1303-640-1:
ISO Class 1, according to DIN EN ISO 14644-1 for system E6.1, series E61.29.50.075.0 at *v* = 98.4 fpm (0.5m/s), 197 fpm (1m/s), 394 fpm (2m/s)

Further information about igus® cleanroom e-chains® and the new, unique igus® cleanroom laboratory for IPA cleanroom Class 1 components ▶ From page 146

System E6.1 internal tests in the igus® lab

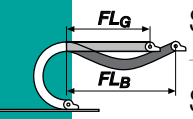


The E6.1 generation can take up higher accelerations, due to a weight reduction, making it a highly dynamic yet still extremely quiet e-chain®



Series E61.29 tests in the igus® test lab show noise levels, which are 2 dB(A) below the already class-leading noise-levels of the igus® E6.29 series

Technical data



Speed gliding[1] / acceleration gliding	upon request
Speed FL_G / acceleration FL_G	≤ 64.6 ft/s (20 m/s) /≤ 656 ft/s² (200 m/s²)
Speed FL_B / acceleration FL_B	≤ 9.84 ft. (3 m/s) /≤ 19.69 ft/s² (6 m/s²)
e-chain® link material, igumid G, permitted temperature °F,	upon request
Scalable crossbar material, igumid TE, permitted temperature °F,	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) If a gliding application is required for a long travel, please consult igus®.

Installation types, maximum travels

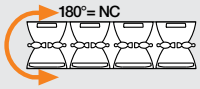
Series	Unsupported	Gliding[1]	Vertical hanging	Vertical standing	Side mounted unsupported
EF6.1.29 / E61.29	≤ 11.48ft. (3.5m)	upon request	≤ 82.03 ft. (25m)	≤ 6.56 ft. (2.0m)	upon request
E61.35	≤ 12.47 ft. (3.8m)	upon request	≤ 98.43 ft. (30m)	≤ 6.56 ft. (2.0m)	upon request
E61.40	≤ 16.41 ft. (5.0m)	upon request	≤ 98.43 ft. (30m)	≤ 6.56 ft. (2.0m)	upon request
E61.52	≤ 19.69 ft. (6.0m)	upon request	≤ 164.05 ft. (50m)	≤ 6.56 ft. (2.0m)	upon request
E61.62	≤ 26.25 ft. (8.0m)	upon request	≤ 196.86 ft. (60m)	≤ 9.84 ft. (3.0m)	upon request
E61.80	≤ 34.45 ft. (10.5m)	upon request	≤ 196.86 ft. (60m)	≤ 13.12 ft. (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 E61.52

Standard

Simply turn outer side link, no additional rework

Part No. Standard	Part No. NC version
	
E61.52.100.*R*.0	E61.52.100.*R*.0.NC
Ready to ship in 72hrs.*	Ready to ship in 72hrs.*

*On average 90% of orders ship the same day.

Order key and color examples | Examples based on series E61.52

Order example for complete e-chain® 3.28 ft. (1m), color black, with mounting brackets and interior separation:

e-chain® 3.28 ft. (1m)	Please indicate e-chain® length or number of links: 3.28ft. (1m) or 34 links	E61.52.100.075.0
+ Mounting brackets	KMA pivoting - 1 set	E61.520.100.12
Interior separation	with 2 separators assembled every 2nd link	2 x E6.52.1.1
Order text:	**3.28 ft (1m) E61.52.100.075.0 + E61.520.100.12 + 2 x E6.52.1.1**	

Order key

crossbars removable **E61.52.100.075.0**

- Series / Type
- Width index (depends on *Bi*)
- Bend radius *R*
- Color index (standard black)

Order index for color options

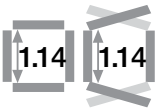
Color	Order index		Color	Order index	
Black	Standard	.0	Orange	Special color	.2
Silver-grey	Special color	.31	Yellow	Special color	.4
White	Special color	.1	Light grey	Special color	.14
Grey-white	Special color	.1S			

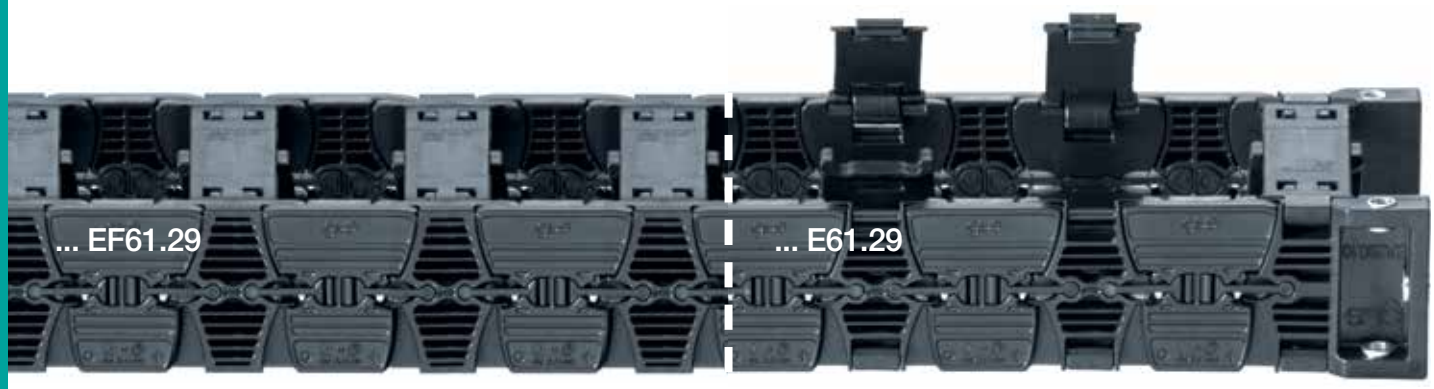
Black e-chains® ready to ship in 24 - 48hrs.*

Above special colors upon request.

E6.1 | Series EF61.29 · E61.29 | Product range

Dynamic, quiet, light, cleanroom suitable and easy to open





EF61.29 | Crossbars removable along the inner and outer radius
E61.29 | Crossbars openable along the inner and outer radius, from both sides

Part Number removable crossbars	Part Number openable from both sides	*Bi* in. (mm)	*Ba* in. (mm)	Weight lbs/ft. (kg/m)
EF61.29.030.*R*.0	E61.29.030.*R*.0	1.18 (30)	1.73 (44)	≈ 0.37 (0.558)
EF61.29.040.*R*.0	E61.29.040.*R*.0	1.57 (40)	2.13 (54)	≈ 0.39 (0.583)
EF61.29.050.*R*.0	E61.29.050.*R*.0	1.97 (50)	2.52 (64)	≈ 0.41 (0.608)
EF61.29.060.*R*.0	E61.29.060.*R*.0	2.36 (60)	2.91 (74)	≈ 0.43 (0.633)
EF61.29.070.*R*.0	E61.29.070.*R*.0	2.76 (70)	3.31 (84)	≈ 0.44 (0.657)
EF61.29.080.*R*.0	E61.29.080.*R*.0	3.15 (80)	3.70 (94)	≈ 0.46 (0.682)
EF61.29.090.*R*.0	E61.29.090.*R*.0	3.54 (90)	4.09 (104)	≈ 0.48 (0.707)
EF61.29.100.*R*.0	E61.29.100.*R*.0	3.94 (100)	4.49 (114)	≈ 0.49 (0.732)
EF61.29.110.*R*.0	E61.29.110.*R*.0	4.33 (110)	4.88 (124)	≈ 0.51 (0.757)
EF61.29.120.*R*.0	E61.29.120.*R*.0	4.72 (120)	5.27 (134)	≈ 0.53 (0.782)
EF61.29.140.*R*.0	E61.29.140.*R*.0	5.51 (140)	6.06 (154)	≈ 0.54 (0.807)

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

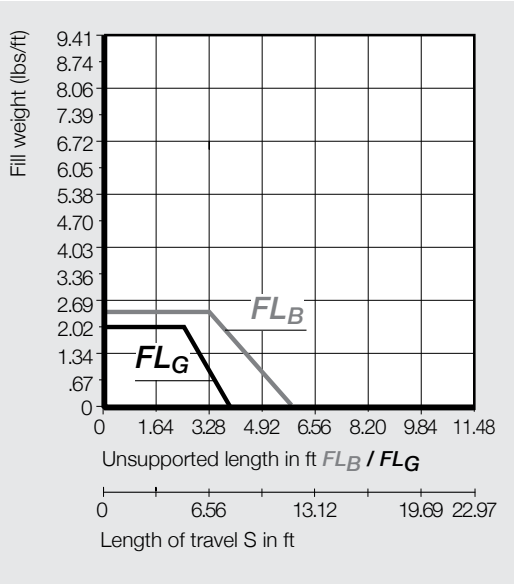
1) Radius not available for e-tubes

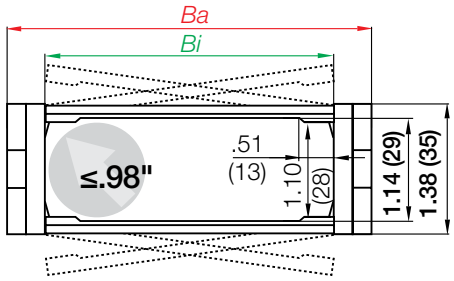
Complete Part No. with required radius (*R*). Example: **EF61.29.050.100.0 / E61.29.050.100.0**

Available bend radii

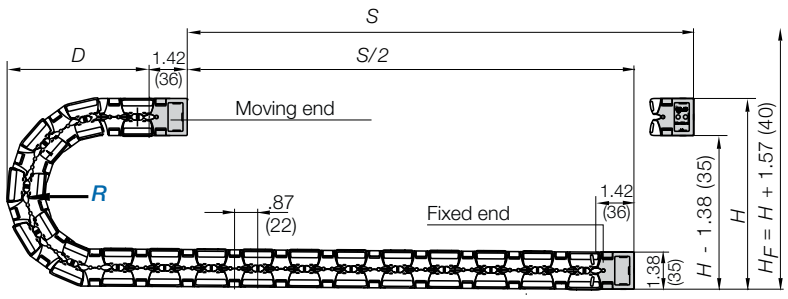
***R* in.** (mm) | **2.17** (055) | **2.95** (075) | **3.94** (100) | **4.92** (125) | **5.91** (150) |

Unsupported applications | Short travels



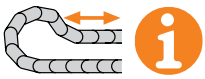


Inner height in. (mm)	1.14 (29)
Pitch per link in. (mm)	.87 (22)
Links/ft (m)	13.79 (46)
corresponds to (mm)	1,012
e-chain® length	$L_K = S/2 + K$



R	2.17 (055)	2.95 (075)	3.94 (100)	4.92 (125)	5.91 (150)
H	6.89 (175)	8.46 (215)	10.43 (265)	12.40 (315)	14.37 (365)
D	4.15 (105.5)	4.94 (125.5)	5.93 (150.5)	6.91 (175.5)	7.89 (200.5)
K	8.66 (220)	11.02 (280)	14.17 (360)	17.32 (440)	20.47 (520)

The required clearance height: **H_F = H + 1.57 in. (40 mm)** with 1.34 lbs/ft (2.0 kg/m) fill weight.



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

Aluminum support tray

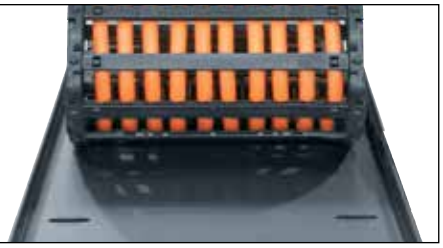
- Corrosion-resistant and seawater-resistant aluminum rails with adjustable width
- Noise-reducing glide strip integrated as standard
- Easy installation and connection of the e-tube
- Open design - dirt and debris fall through

More information ▶ From page 1400

Steel support tray for support of the lower run

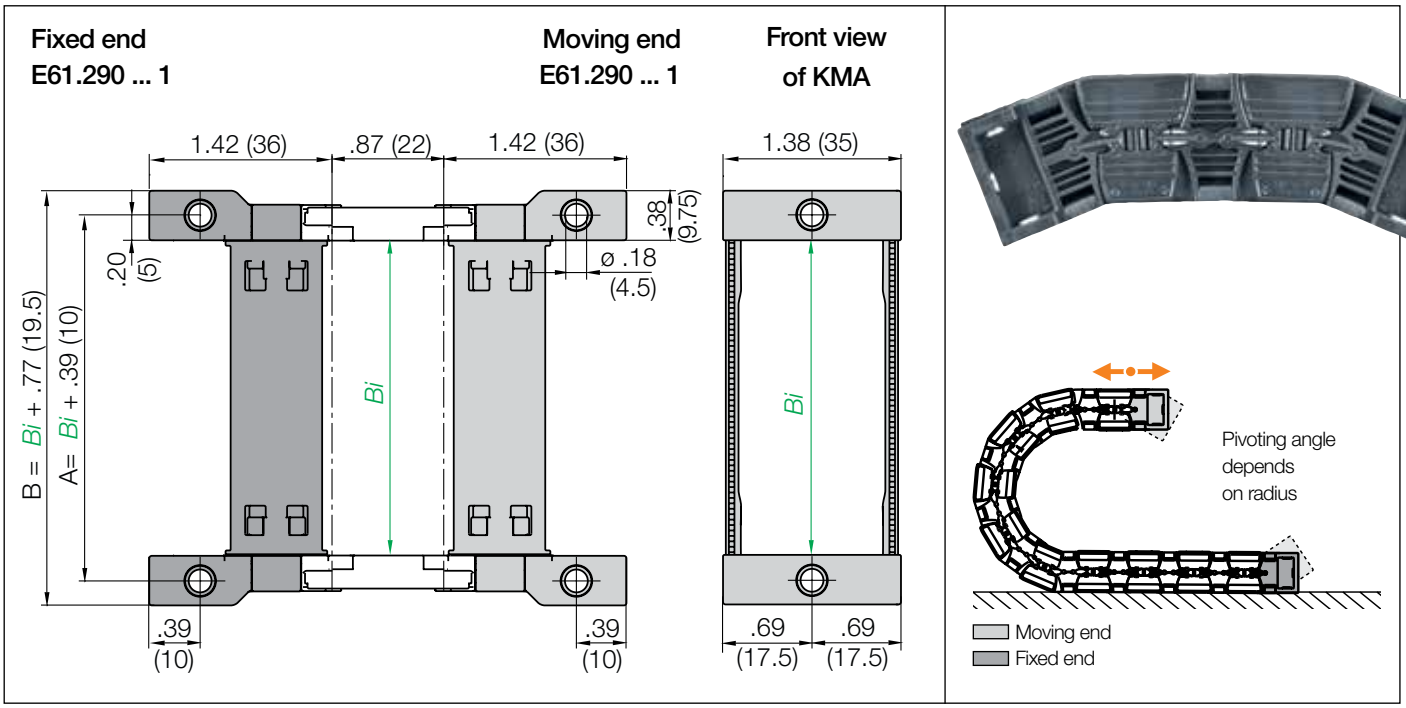
- Simple one-piece support trays for the lower run
- To your requirements and specification
- 4 options available

More information ▶ From page 1394



E6.1 | Series EF61.29·E61.29 | Accessories

KMA mounting brackets | Attachment from any side | Pivoting

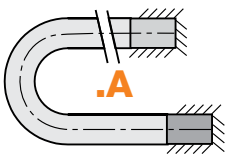


KMA pivoting | Recommended for unsupported applications

Width index	Part No. Full set KMA pivoting	A in. (mm)	B in. (mm)	*Bi* in. (mm)
030. ▶	E61.290.030.12	1.57 (40)	1.95 (49.5)	1.18 (30)
040. ▶	E61.290.040.12	1.97 (50)	2.34 (59.5)	1.57 (40)
050. ▶	E61.290.050.12	2.36 (60)	2.74 (69.5)	1.97 (50)
060. ▶	E61.290.060.12	2.76 (70)	3.13 (79.5)	2.36 (60)
070. ▶	E61.290.070.12	3.15 (80)	3.52 (89.5)	2.76 (70)
080. ▶	E61.290.080.12	3.54 (90)	3.92 (99.5)	3.15 (80)

Width index	Part No. Full set KMA pivoting	A in. (mm)	B in. (mm)	*Bi* in. (mm)
090. ▶	E61.290.090.12	3.94 (100)	4.31 (109.5)	3.54 (90)
100. ▶	E61.290.100.12	4.33 (110)	4.70 (119.5)	3.94 (100)
110. ▶	E61.290.110.12	4.72 (120)	5.10 (129.5)	4.33 (110)
120. ▶	E61.290.120.12	5.12 (130)	5.49 (139.5)	4.72 (120)
140. ▶	E61.290.140.12	5.91 (150)	6.28 (159.5)	5.51 (140)

(KMA = polymer metal mounting bracket) **KMA mounting brackets are only available for an odd number of links.**

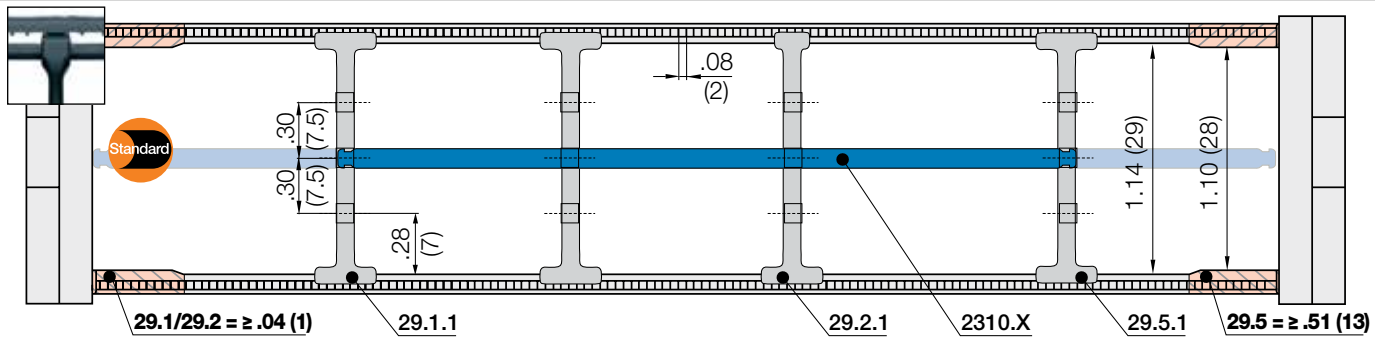


The bracket orientations are set automatically when using an igus® KMA mounting bracket with attachment from any side.To receive a KMA mounting bracket pre-fitted please add index **.A** .

E61.290.050.12.A Order example

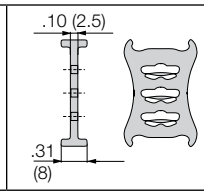
Strain relief **e.g. clamps, tiewrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1418**

Interior separation | Increase cable service life

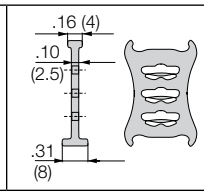


Note: Please be aware of the minimum lateral gap to the side links! **29.1/29.2 = .04" (1mm) | 29.5 = .51" (13mm)**

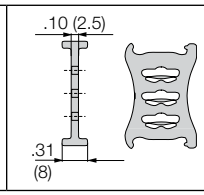
As standard separators are fitted every 2nd e-chain® link!



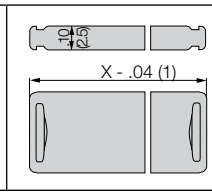
Standard separator, wide base	
unassembled	**29.1**
assembled	**29.1.1**



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**

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.

Locks securely in preset increments

(*Suitable from *Bi* 75)

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 in. (mm)

X in. (mm	unassembled	assembled	X in. (mm	unassembled	assembled	X in. (mm	unassembled	assembled
.59 (015)	**2300.015**	**2310.015**	2.36 (060)	**2300.060**	**2310.060**	3.43 (087)	**2300.087**	**2310.087**
.98 (025)	**2300.025**	**2310.025**	2.44 (062)	**2300.062**	**2310.062**	3.54 (090)	**2300.090**	**2310.090**
1.18 (030)	**2300.030**	**2310.030**	2.56 (065)	**2300.065**	**2310.065**	3.94 (100)	**2300.100**	**2310.100**
1.50 (038)	**2300.038**	**2310.038**	2.76 (070)	**2300.070**	**2310.070**	4.06 (103)	**2300.103**	**2310.103**
1.57 (040)	**2300.040**	**2310.040**	2.95 (075)	**2300.075**	**2310.075**	4.33 (110)	**2300.110**	**2310.110**
1.97 (050)	**2300.050**	**2310.050**	3.03 (077)	**2300.077**	**2310.077**	4.72 (120)	**2300.120**	**2310.120**
2.24 (057)	**2300.057**	**2310.057**	3.15 (080)	**2300.080**	**2310.080**	4.92 (125)	**2300.125**	**2310.125**

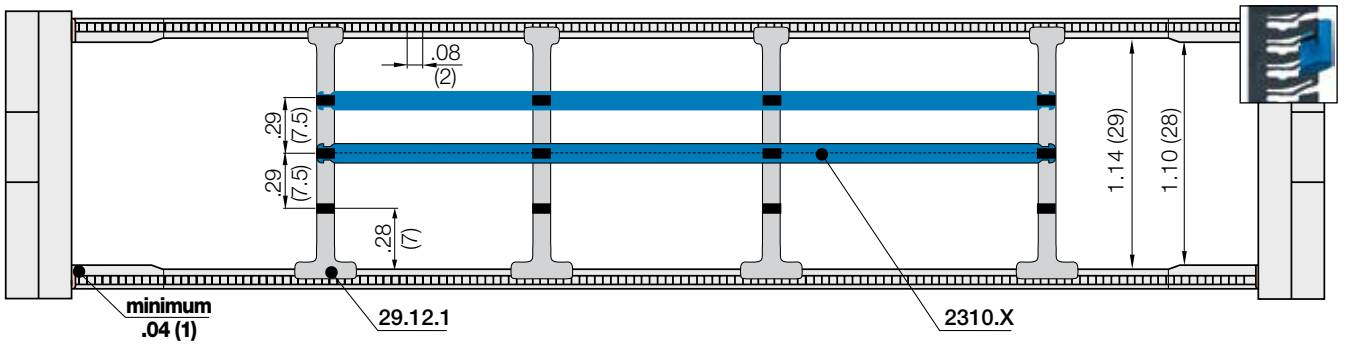
Separator with integrated strain relief teeth

- 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

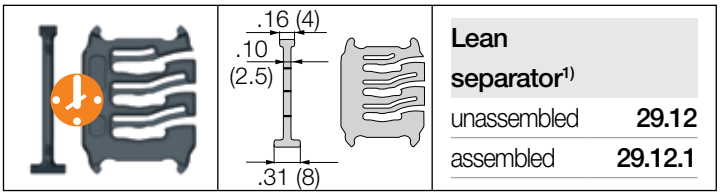
Part No. E6.29.02.Z - more information ▶ From page 1457

E6.1 | Series EF61.29·E61.29 | Accessories

Interior separation | To allow faster filling



Note: Please be aware of the minimum lateral gap to the side links! **e-chain®: .04" (1mm)**
As standard separators are fitted every 2nd e-chain® link!



Lean separator[1)]	
unassembled	**29.12**
assembled	**29.12.1**

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®!

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%[2)].

2) Lean interior separation vs. standard interior separation - measured on a 4m long e-chain® fitted with 12 cables in the igus® lab

Cleanroom suitable E6.1 series as a harnessed readychain® system for the semiconductor industry

E6.1 | Series E61.35 | Product range

Dynamic, quiet, light and cleanroom suitable

e-chains® | Series E61.35 | Crossbars removable along the inner and outer radius

Part No. e-chains®	*Bi* in. (mm)	*Ba* in. (mm)	Weight lbs/ft. (kg/m)
E61.35.030.*R*.0	1.18 (30)	1.81 (46)	≈ 0.439 (0.653)
E61.35.040.*R*.0	1.57 (40)	2.20 (56)	≈ 0.454 (0.675)
E61.35.050.*R*.0	1.97 (50)	2.60 (66)	≈ 0.468 (0.696)
E61.35.060.*R*.0	2.36 (60)	2.99 (76)	≈ 0.482 (0.718)
E61.35.070.*R*.0	2.76 (70)	3.39 (86)	≈ 0.497 (0.739)
E61.35.080.*R*.0	3.15 (80)	3.78 (96)	≈ 0.511 (0.761)

Part No. e-chains®	*Bi* in. (mm)	*Ba* in. (mm)	Weight lbs/ft. (kg/m)
E61.35.090.*R*.0	3.54 (90)	4.17 (106)	≈ 0.526 (0.783)
E61.35.100.*R*.0	3.94 (100)	4.57 (116)	≈ 0.540 (0.804)
E61.35.110.*R*.0	4.33 (110)	4.96 (126)	≈ 0.555 (0.826)
E61.35.120.*R*.0	4.72 (120)	5.35 (136)	≈ 0.570 (0.848)
E61.35.140.*R*.0	5.51 (140)	6.14 (156)	≈ 0.599 (0.891)

Complete Part No. with required radius (*R*). Example: **E61.35.100.100.0**

Available bend radii

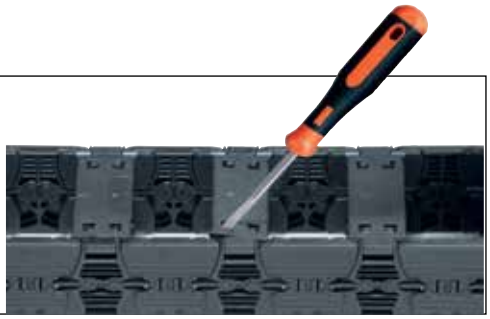
***R* in.** (mm) | **2.17** (055) | **2.95** (075) | **3.94** (100) | **4.92** (125) | **5.91** (150) |

Installation note - system E6.1

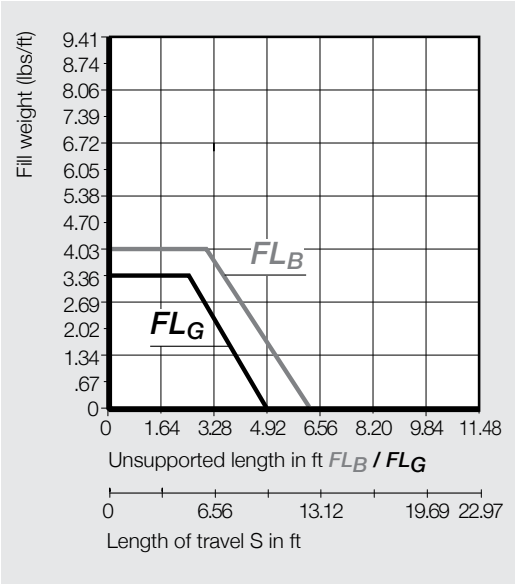
To open, insert the screwdriver into the locking mechanism and prise it open. Repeat the procedure on the other side.

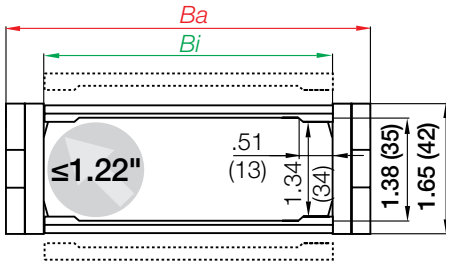
An assembly video is available online at

► www.igus.com/E61_assembly

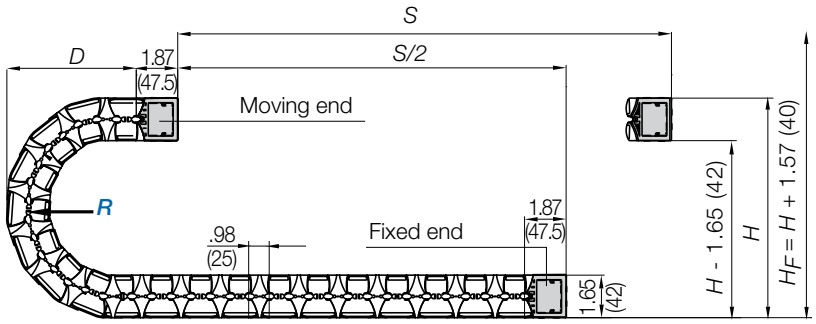


Unsupported applications | Short travels



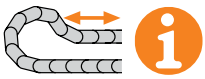


Inner height in. (mm)	**1.38 (35)**
Pitch per link in. (mm)	**.98 (25)**
Links/ft (m)	**12.24 (40)**
corresponds to (mm)	**1,000**
e-chain® length	$L_K = {}^{S}/_{2} + K$



R	2.17 (055)	2.95 (075)	3.94 (100)	4.92 (125)	5.91 (150)
H	7.56 (192)	9.13 (232)	11.10 (282)	13.10 (332)	15.04 (382)
D	4.47 (113.5)	5.26 (133.5)	6.24 (158.5)	7.22 (183.5)	8.21 (208.5)
K	8.86 (225)	11.42 (290)	14.37 (365)	17.52 (445)	20.67 (525)

The required clearance height: H_F = ***H*** **+ 1.57 in. (40 mm)** with 1.34 lbs/ft (2.0 kg/m) fill weight.



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

Aluminum support tray

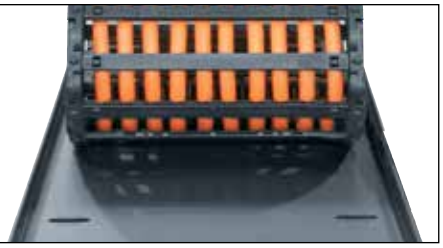
- Corrosion-resistant and seawater-resistant aluminum rails with adjustable width
- Noise-reducing glide strip integrated as standard
- Easy installation and connection of the e-tube
- Open design - dirt and debris fall through

More information ▶ From page 1400

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 1394



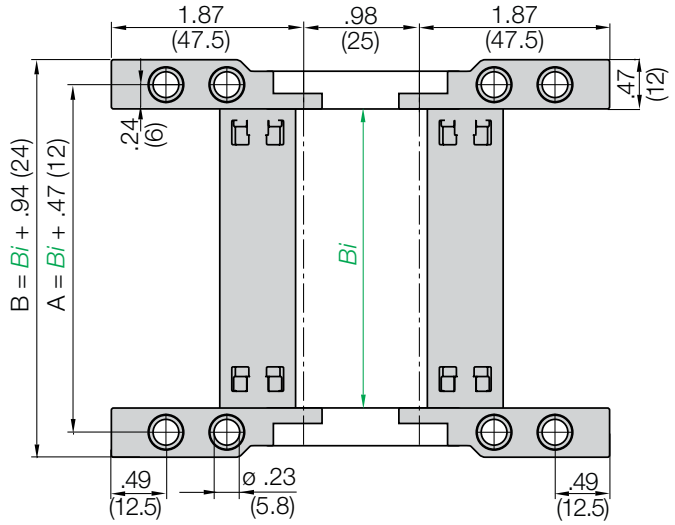
E6.1 | Series E61.35 | Accessories

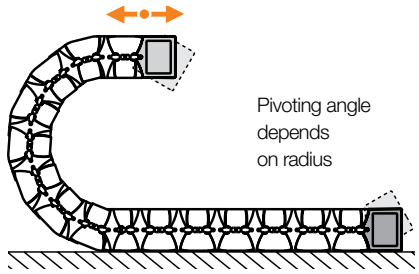
KMA mounting brackets | Attachment from any side | Pivoting

Fixed end
E61.350 ... 1

Moving end
E61.350 ... 1

Front view
of KMA



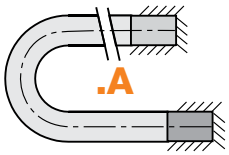


Moving end
Fixed end

KMA pivoting | Recommended for unsupported applications

Width index		Part No. Full set KMA pivoting	A in. (mm)	B in. (mm)	Bi in. (mm)
030.	▶	E61.350.030.12	1.65 (42)	2.13 (54)	1.18 (30)
040.	▶	E61.350.040.12	2.05 (52)	2.52 (64)	1.57 (40)
050.	▶	E61.350.050.12	2.44 (62)	2.91 (74)	1.97 (50)
060.	▶	E61.350.060.12	2.83 (72)	3.31 (84)	2.36 (60)
070.	▶	E61.350.070.12	3.23 (82)	3.70 (94)	2.76 (70)
080.	▶	E61.350.080.12	3.62 (92)	4.09 (104)	3.15 (80)
090.	▶	E61.350.090.12	4.02 (102)	4.49 (114)	3.54 (90)
100.	▶	E61.350.100.12	4.41 (112)	4.88 (124)	3.94 (100)
110.	▶	E61.350.110.12	4.80 (122)	5.28 (134)	4.33 (110)
120.	▶	E61.350.120.12	5.20 (132)	5.67 (144)	4.72 (120)
140 .	▶	E61.350.140.12	5.98 (152)	6.46 (164)	5.51 (140)

(KMA = polymer metal mounting bracket) **KMA mounting brackets are only available for an odd number of links.**



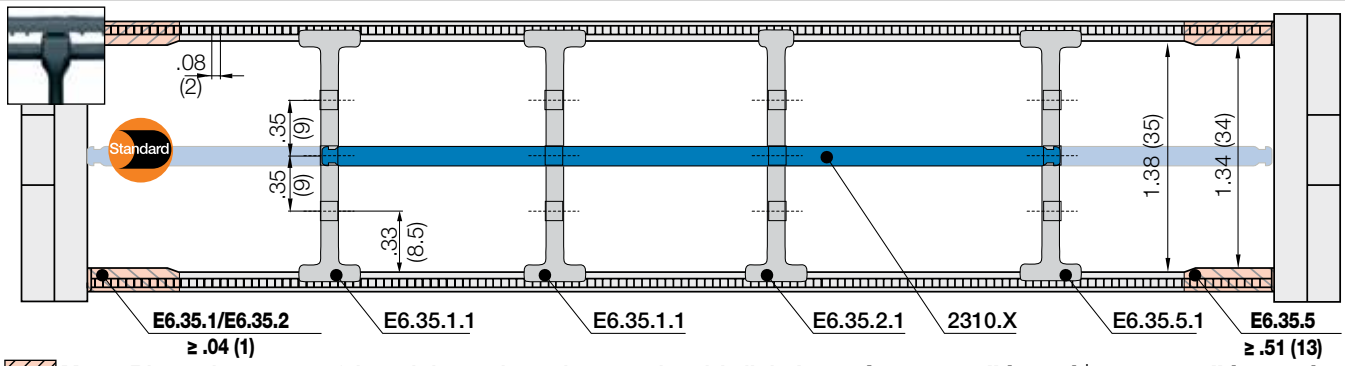
The bracket orientations are set automatically when using an igus® KMA mounting bracket with attachment from any side. To receive a KMA mounting bracket pre-fitted please add index **.A** .

E61.350.100.12.A Order example

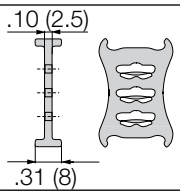
Strain relief e.g. clamps, tiewrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1418

E6.1 | Series E61.35 | Accessories

Interior separation | Increase cable service life



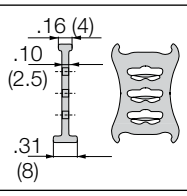
Note: Please be aware of the minimum lateral gap to the side links! **29.1/29.2 = .04" (1mm) | 29.5 = .51" (13mm)**
As standard separators are fitted every 2nd e-chain® link!



Standard separator, wide base	
unassembled	**E6.35.1**
assembled	**E6.35.1.1**

Standard - for any application

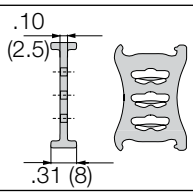
Separator with a wide base for maximum holding force.



Separator, narrow top	
unassembled	**E6.35.2**
assembled	**E6.35.2.1**

For even faster installation

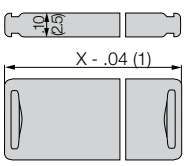
Wide on one side for high holding force, narrow on opposite side for easy cable fitting.



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 in. (mm)

X in. (mm	unassembled	assembled	X in. (mm	unassembled	assembled	X in. (mm	unassembled	assembled
.59 (015)	**2300.015**	**2310.015**	2.36 (060)	**2300.060**	**2310.060**	3.43 (087)	**2300.087**	**2310.087**
.98 (025)	**2300.025**	**2310.025**	2.44 (062)	**2300.062**	**2310.062**	3.54 (090)	**2300.090**	**2310.090**
1.18 (030)	**2300.030**	**2310.030**	2.56 (065)	**2300.065**	**2310.065**	3.94 (100)	**2300.100**	**2310.100**
1.50 (038)	**2300.038**	**2310.038**	2.76 (070)	**2300.070**	**2310.070**	4.06 (103)	**2300.103**	**2310.103**
1.57 (040)	**2300.040**	**2310.040**	2.95 (075)	**2300.075**	**2310.075**	4.33 (110)	**2300.110**	**2310.110**
1.97 (050)	**2300.050**	**2310.050**	3.03 (077)	**2300.077**	**2310.077**	4.72 (120)	**2300.120**	**2310.120**
2.24 (057)	**2300.057**	**2310.057**	3.15 (080)	**2300.080**	**2310.080**	4.92 (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 1457

E6.1 | Series E61.40 | Product range

Dynamic, quiet, light and cleanroom suitable

1.57

e-chains® | Series E61.40 | Crossbars removable along the inner and outer radius

Part No. e-chains®	*Bi* in. (mm)	*Ba* in. (mm)	Weight lbs/ft. (kg/m)
E61.40.040.*R*.0	1.57 (40)	2.20 (56)	≈ 0.613 (0.913)
E61.40.050.*R*.0	1.97 (50)	2.60 (66)	≈ 0.638 (0.950)
E61.40.052.*R*.0	2.05 (52)	2.68 (68)	≈ 0.643 (0.957)
E61.40.062.*R*.0	2.44 (62)	3.07 (78)	≈ 0.668 (0.994)
E61.40.070.*R*.0	2.76 (70)	3.39 (86)	≈ 0.687 (1.023)
E61.40.075.*R*.0	2.95 (75)	3.58 (91)	≈ 0.700 (1.042)
E61.40.087.*R*.0	3.43 (87)	4.06 (103)	≈ 0.716 (1.066)
E61.40.100.*R*.0	3.94 (100)	4.57 (116)	≈ 0.762 (1.134)

Part No. e-chains®	*Bi* in. (mm)	*Ba* in. (mm)	Weight lbs/ft. (kg/m)
E61.40.125.*R*.0	4.92 (125)	5.55 (141)	≈ 0.824 (1.226)
E61.40.150.*R*.0	5.91 (150)	6.54 (166)	≈ 0.886 (1.318)
E61.40.175.*R*.0	6.89 (175)	7.52 (191)	≈ 0.947 (1.410)
E61.40.200.*R*.0	7.87 (200)	8.50 (216)	≈ 1.009 (1.502)
E61.40.225.*R*.0	8.86 (225)	9.49 (241)	≈ 1.072 (1.595)
E61.40.250.*R*.0	9.84 (250)	10.47 (266)	≈ 1.134 (1.687)
E61.40.275.*R*.0	10.83 (275)	11.46 (291)	≈ 1.195 (1.779)
E61.40.300.*R*.0	11.81 (300)	12.44 (316)	≈ 1.257 (1.871)

Complete Part No. with required radius (*R*). Example: **E61.40.100.100.0**

Available bend radii

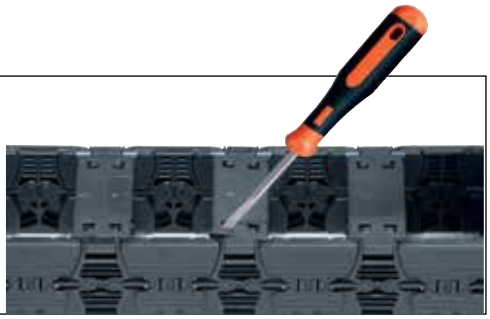
R **in.** (mm) | **2.48** (063) | **2.95** (075) | **3.94** (100) | **4.92** (125) | **5.91** (150) | **7.87** (200) |

Installation note - system E6.1

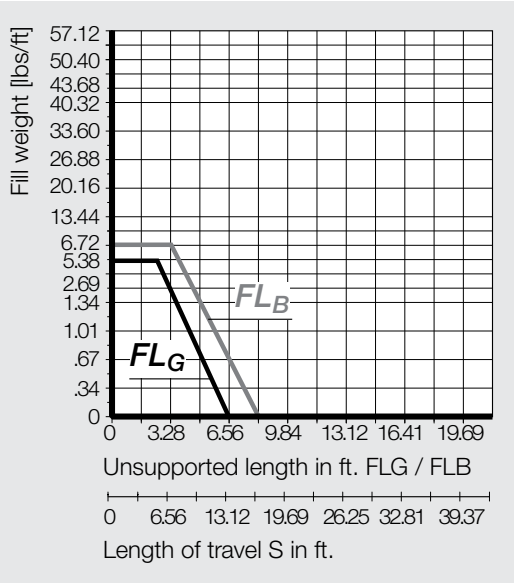
To open, insert the screwdriver into the locking mechanism and prise it open. Repeat the procedure on the other side.

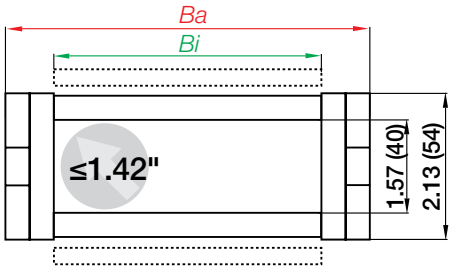
An assembly video is available online at

▶ www.igus.com/E61_assembly

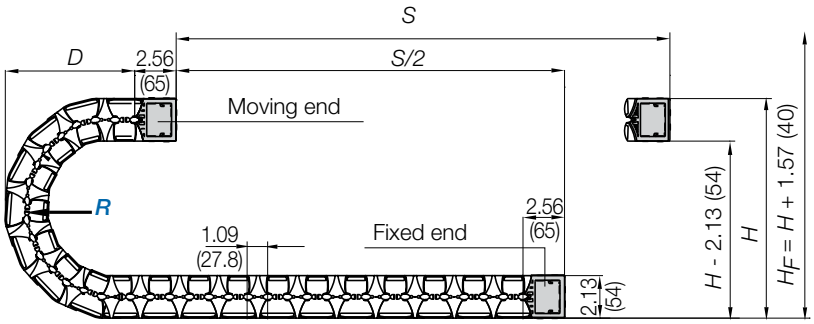


Unsupported applications | Short travels



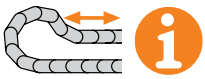


Inner height in. (mm)	1.57 (40)
Pitch per link in. (mm)	1.09 (27.8)
Links/ft (m)	11.01 (36)
corresponds to (mm)	1,001
e-chain® length	$L_K = {}^{S}/_{2} + K$



R	2.48 (063)	2.95 (075)	3.94 (100)	4.92 (125)	5.91 (150)	7.87 (200)
H	8.66 (220)	9.61 (244)	11.57 (294)	13.54 (344)	15.51 (394)	19.45 (494)
D	5.20 (132)	5.67 (144)	6.65 (169)	7.64 (194)	8.62 (219)	10.59 (269)
K	10.04 (255)	11.61 (295)	14.57 (370)	17.72 (450)	2.09 (530)	26.97 (685)

The required clearance height: H_F = **H + 1.57 in. (40 mm)** with 1.34 lbs/ft (2.0 kg/m) fill weight.



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

Aluminum support tray

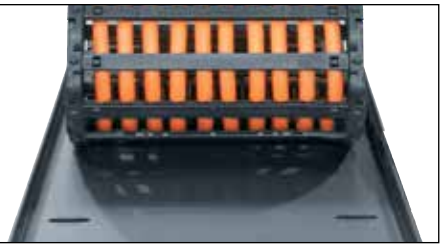
- Corrosion-resistant and seawater-resistant aluminum rails with adjustable width
- Noise-reducing glide strip integrated as standard
- Easy installation and connection of the e-tube
- Open design - dirt and debris fall through

More information ▶ From page 1400

Steel support tray for support of the lower run

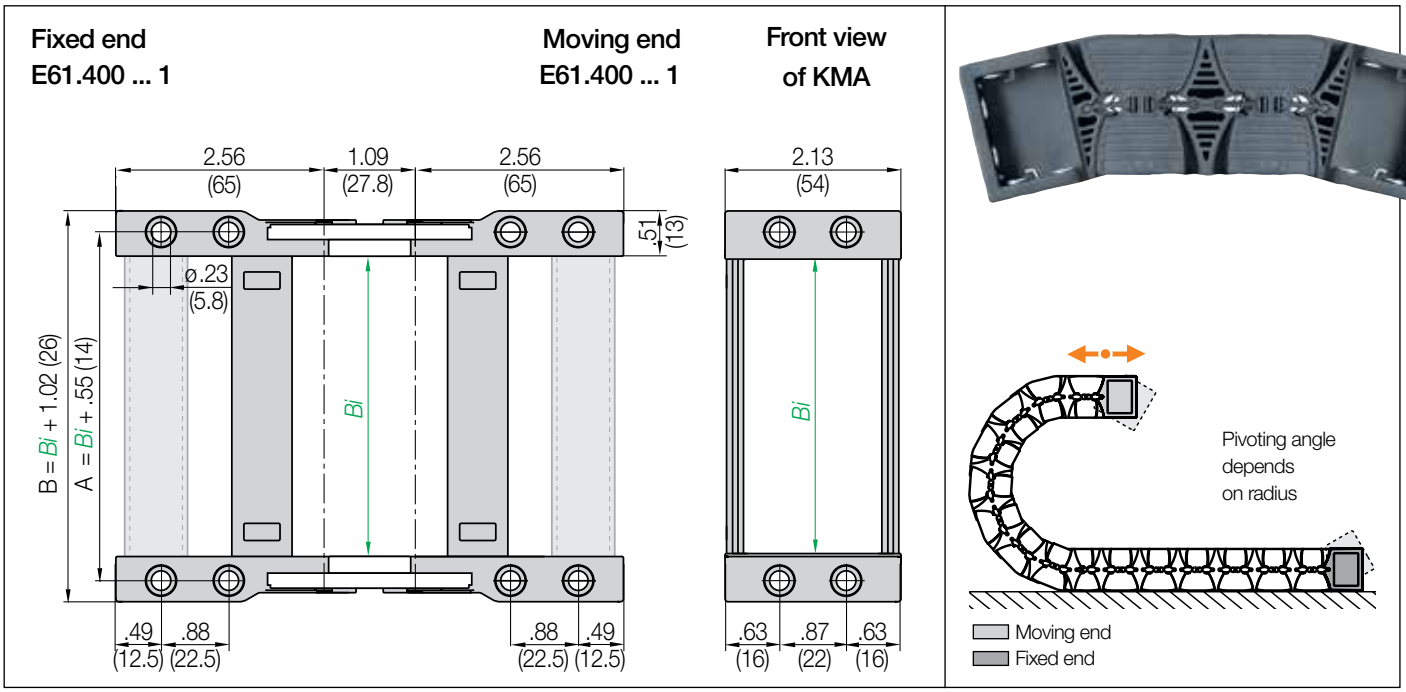
- Simple one-piece support trays for the lower run
- To your requirements and specification
- 4 options available

More information ▶ From page 1394



E6.1 | Series E61.40 | Accessories

KMA mounting brackets | Attachment from any side | Pivoting

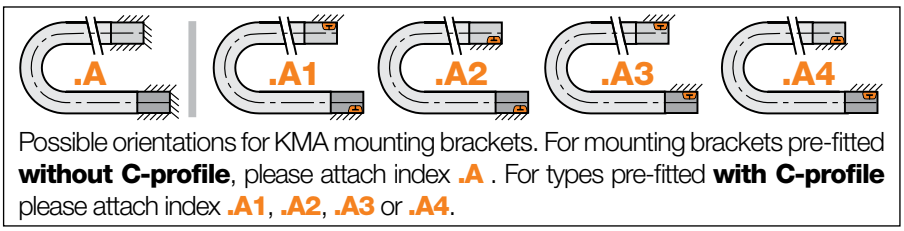


KMA pivoting | Recommended for unsupported applications

Width index	Part No. Full set KMA pivoting	A in. (mm)	B in. (mm)	Bi in. (mm)
040. ▶	E61.400.040.12.C	2.13 (54)	2.60 (66)	1.57 (40)
050. ▶	E61.400.050.12.C	2.52 (64)	2.99 (76)	1.97 (50)
052. ▶	E61.400.052.12.C	2.66 (66)	3.07 (78)	2.05 (52)
062. ▶	E61.400.062.12.C	2.99 (76)	3.46 (88)	2.44 (62)
070. ▶	E61.400.070.12.C	3.31 (84)	3.78 (96)	2.76 (70)
075. ▶	E61.400.075.12.C	3.50 (89)	3.98 (101)	2.95 (75)
087. ▶	E61.400.087.12.C	3.98 (101)	4.45 (113)	3.42 (87)
100. ▶	E61.400.100.12.C	4.49 (114)	4.96 (126)	3.94 (100)

Width index	Part No. Full set KMA pivoting	A in. (mm)	B in. (mm)	Bi in. (mm)
125. ▶	E61.400.125.12.C	5.47 (139)	5.94 (151)	4.92 (125)
150. ▶	E61.400.150.12.C	6.46 (164)	6.93 (176)	5.91 (150)
175. ▶	E61.400.175.12.C	7.44 (189)	7.91 (201)	6.89 (175)
200. ▶	E61.400.200.12.C	8.43 (214)	8.90 (226)	7.87 (200)
225. ▶	E61.400.225.12.C	9.41 (239)	9.88 (251)	8.86 (225)
250. ▶	E61.400.250.12.C	10.39 (264)	10.87 (276)	9.84 (250)
275. ▶	E61.400.275.12.C	11.38 (289)	11.85 (301)	10.83 (275)
300. ▶	E61.400.300.12.C	12.36 (314)	12.83 (326)	11.81 (300)

(KMA = polymer metal mounting bracket) For the C-profile option please add index **.C**. **KMA mounting brackets are only available for an odd number of links.**



Possible orientations for KMA mounting brackets. For mounting brackets pre-fitted **without C-profile**, please attach index **.A** . For types pre-fitted **with C-profile** please attach index **.A1**, **.A2**, **.A3** or **.A4**.

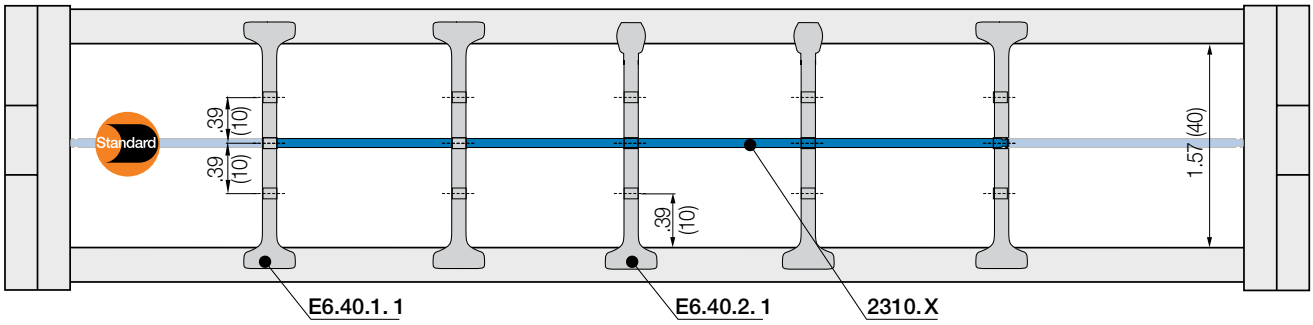
E61.400.100.12.C.A2 **Order example**

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

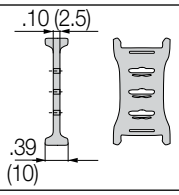
Strain relief **e.g. clamps, tiewrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1418**

E6.1 | Series E61.40 | Accessories

Interior separation | Increase cable service life

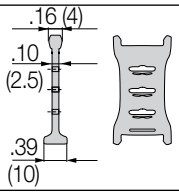


Note: Please be aware of the minimum lateral gap to the side links! **29.1/29.2 = .04" (1mm) | 29.5 = .51" (13mm)**
As standard separators are fitted every 2nd e-chain® link!



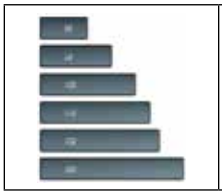
Standard separator, wide base

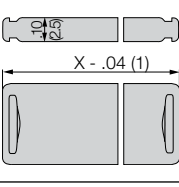
unassembled	**E6.40.1**
assembled	**E6.40.1.1**



Separator, narrow top

unassembled	**E6.40.2**
assembled	**E6.40.2.1**





Shelf, lockable

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 in. (mm)

X in. (mm	unassembled	assembled	**X** in. (mm	unassembled	assembled	**X** in. (mm	unassembled	assembled
.59 (015)	**2300.015**	**2310.015**	2.36 (060)	**2300.060**	**2310.060**	3.43 (087)	**2300.087**	**2310.087**
.98 (025)	**2300.025**	**2310.025**	2.44 (062)	**2300.062**	**2310.062**	3.54 (090)	**2300.090**	**2310.090**
1.18 (030)	**2300.030**	**2310.030**	2.56 (065)	**2300.065**	**2310.065**	3.94 (100)	**2300.100**	**2310.100**
1.50 (038)	**2300.038**	**2310.038**	2.76 (070)	**2300.070**	**2310.070**	4.06 (103)	**2300.103**	**2310.103**
1.57 (040)	**2300.040**	**2310.040**	2.95 (075)	**2300.075**	**2310.075**	4.33 (110)	**2300.110**	**2310.110**
1.97 (050)	**2300.050**	**2310.050**	3.03 (077)	**2300.077**	**2310.077**	4.72 (120)	**2300.120**	**2310.120**
2.24 (057)	**2300.057**	**2310.057**	3.15 (080)	**2300.080**	**2310.080**	4.92 (125)	**2300.125**	**2310.125**

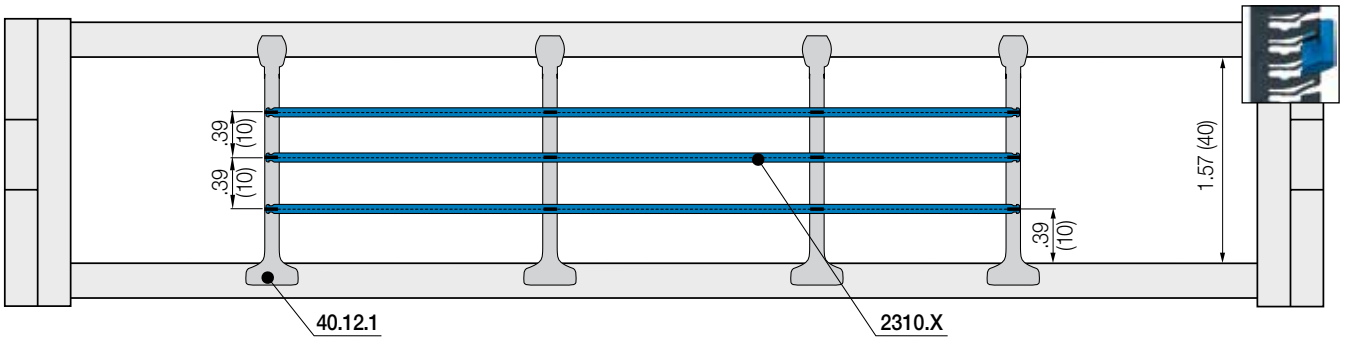
Separator with integrated strain relief teeth

- 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. E6.40.02.Z - more information ▶ From page 1457

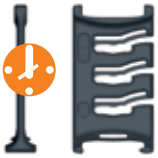
E6.1 | Series E61.40 | Accessories

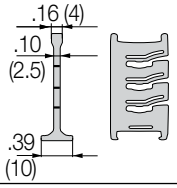
Interior separation | To allow faster filling



No lateral gap to side links necessary.

As standard separators are fitted every 2nd e-chain® link!





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®!

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%[2].

2) Lean interior separation vs. standard interior separation - measured on a 4m long e-chain® fitted with 12 cables in the igus® lab

Very small bend radii are possible with chainflex® CF98 control cable in this E6.1 readychain® system. It offers smooth operation and is suitable for cleanrooms

E6.1 | Series E61.52 | Product range

Dynamic, quiet, light and cleanroom suitable

2.05

e-chains® | Series E61.52 | Crossbars removable along the inner and outer radius

Part No. e-chains®	*Bi* in. (mm)	*Ba* in. (mm)	Weight lbs/ft. (kg/m)
E61.52.040.*R*.0	1.57 (40)	2.52 (64)	≈ 1.128 (1.679)
E61.52.050.*R*.0	1.97 (50)	2.91 (74)	≈ 1.158 (1.724)
E61.52.052.*R*.0	2.05 (52)	2.99 (76)	≈ 1.165 (1.733)
E61.52.062.*R*.0	2.46 (62.5)	3.41 (86.5)	≈ 1.196 (1.780)
E61.52.070.*R*.0	2.76 (70)	3.70 (94)	≈ 1.219 (1.814)
E61.52.075.*R*.0	2.95 (75)	3.90 (99)	≈ 1.234 (1.836)
E61.52.087.*R*.0	3.44 (87.5)	4.39 (111.5)	≈ 1.271 (1.892)
E61.52.100.*R*.0	3.94 (100)	4.88 (124)	≈ 1.309 (1.948)

Part No. e-chains®	*Bi* in. (mm)	*Ba* in. (mm)	Weight lbs/ft. (kg/m)
E61.52.125.*R*.0	4.92 (125)	5.87 (149)	≈ 1.384 (2.060)
E61.52.150.*R*.0	5.91 (150)	6.85 (174)	≈ 1.460 (2.172)
E61.52.175.*R*.0	6.89 (175)	7.83 (199)	≈ 1.534 (2.283)
E61.52.200.*R*.0	7.87 (200)	8.81 (224)	≈ 1.609 (2.395)
E61.52.225.*R*.0	8.86 (225)	9.80 (249)	≈ 1.685 (2.507)
E61.52.250.*R*.0	9.84 (250)	10.79 (274)	≈ 1.760 (2.619)
E61.52.275.*R*.0	10.83 (275)	11.77 (299)	≈ 1.835 (2.731)
E61.52.300.*R*.0	11.81 (300)	12.76 (324)	≈ 1.910 (2.843)

Complete Part No. with required radius (*R*). Example: **E61.52.100.100.0**

Available bend radii

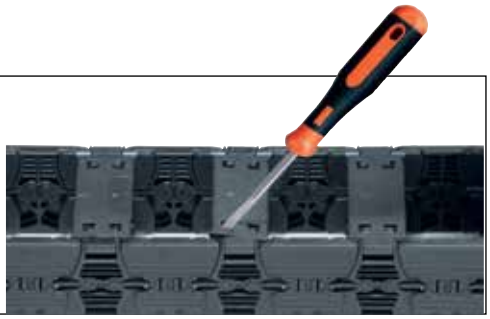
R **in.** (mm) | **2.95** (075) | **3.94** (100) | **4.92** (125) | **5.91** (150) | **6.89** (175) | **7.87** (200) |

Installation note - system E6.1

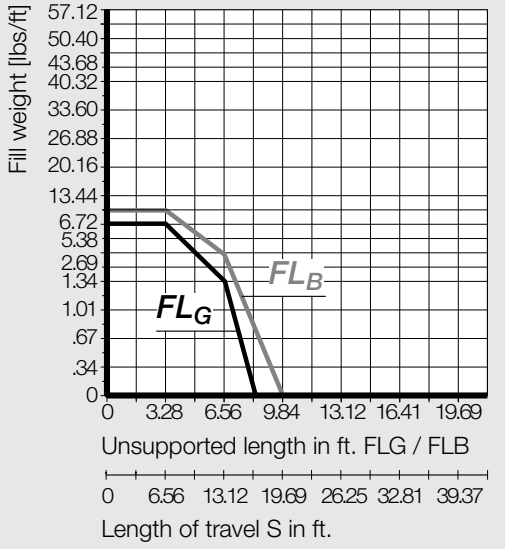
To open, insert the screwdriver into the locking mechanism and prise it open. Repeat the procedure on the other side.

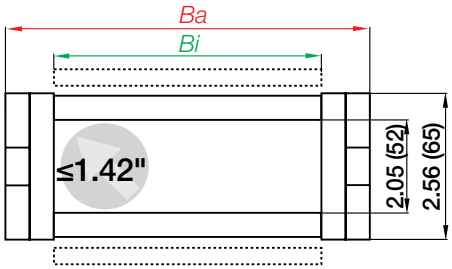
An assembly video is available online at

▶ www.igus.com/E61_assembly

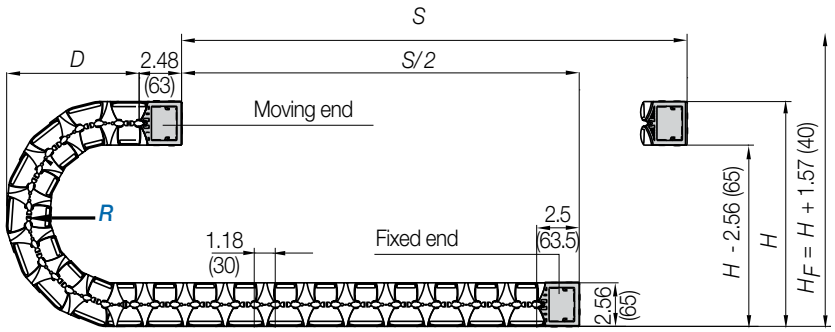


Unsupported applications | Short travels



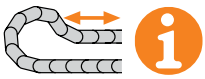


Inner height in. (mm)	2.05 (52)
Pitch per link in. (mm)	1.18 (30)
Links/ft (m)	10 (34)
corresponds to (mm)	1,020
e-chain® length	$L_K = {}^{S}/_{2} + K$



R	2.95 (075)	3.94 (100)	4.92 (125)	5.91 (150)	6.89 (175)	7.87 (200)
H	10.43 (265)	12.40 (315)	14.37 (365)	16.34 (415)	18.31 (465)	20.27 (515)
D	6.02 (153)	7.01 (178)	7.99 (203)	8.98 (228)	9.96 (253)	10.94 (278)
K	11.81 (300)	14.76 (375)	17.91 (455)	21.06 (535)	24.02(610)	27.16 (690)

The required clearance height: **H_F = H + 1.57 in. (40 mm)** with 1.34 lbs/ft (2.0 kg/m) fill weight.

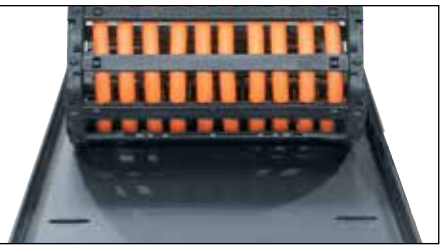


If a gliding application is required for a long travel, please consult igus®.

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 1394



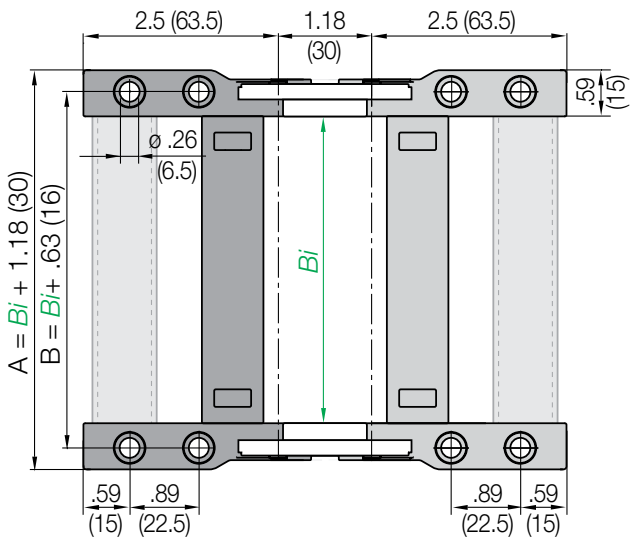
E6.1 | Series E61.52 | Accessories

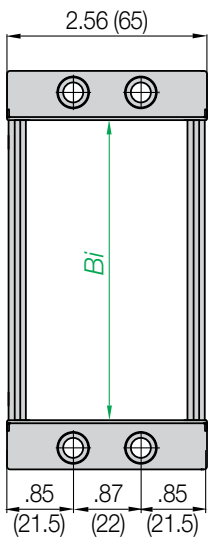
KMA mounting brackets | Attachment from any side | Pivoting

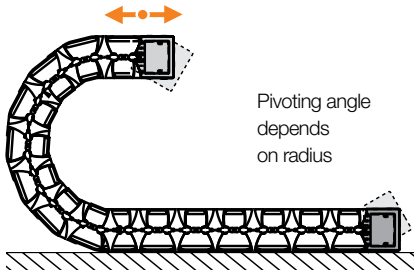
Fixed end
E61.520 ... 1

Moving end
E61.520 ... 1

Front view
of KMA





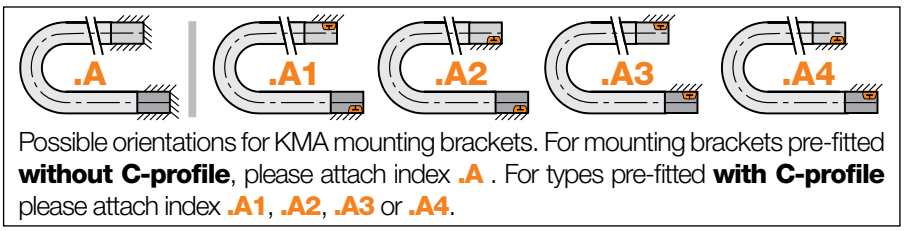


KMA pivoting | Recommended for unsupported applications

Width index	Part No. Full set KMA pivoting	A in. (mm)	B in. (mm)	Bi in. (mm)
040. ▶	E61.520.040.12.C	2.76 (70)	2.20 (56)	1.57 (40)
050. ▶	E61.520.050.12.C	3.15 (80)	2.60 (66)	1.97 (50)
052. ▶	E61.520.052.12.C	3.23 (82)	2.68 (68)	2.05 (52)
062. ▶	E61.520.062.12.C	3.64 (92.5)	3.09 (78.5)	2.46 (62.5)
070. ▶	E61.520.070.12.C	3.94 (100)	3.39 (86)	2.76 (70)
075. ▶	E61.520.075.12.C	4.13 (105)	3.58 (91)	2.95 (75)
087. ▶	E61.520.087.12.C	4.63 (117.5)	4.07 (103.5)	3.44 (87.5)
100. ▶	E61.520.100.12.C	5.12 (130)	4.57 (116)	3.94 (100)

Width index	Part No. Full set KMA pivoting	A in. (mm)	B in. (mm)	Bi in. (mm)
125. ▶	E61.520.125.12.C	6.10 (155)	5.55 (141)	4.92 (125)
150. ▶	E61.520.150.12.C	7.09 (180)	6.54 (166)	5.91 (150)
175 . ▶	E61.520.175.12.C	8.07 (205)	7.52 (191)	6.89 (175)
200 . ▶	E61.520.200.12.C	9.06 (230)	8.50 (216)	7.87 (200)
225 . ▶	E61.520.225.12.C	10.04 (255)	9.49 (241)	8.86 (225)
250 . ▶	E61.520.250.12.C	11.02 (280)	10.47 (266)	9.84 (250)
275 . ▶	E61.520.275.12.C	12.01 (305)	11.46 (291)	10.83 (275)
300 . ▶	E61.520.300.12.C	12.99 (330)	12.44 (316)	11.81 (300)

(KMA = polymer metal mounting bracket) For the C-profile option please add index **.C**. **KMA mounting brackets are only available for an odd number of links.**



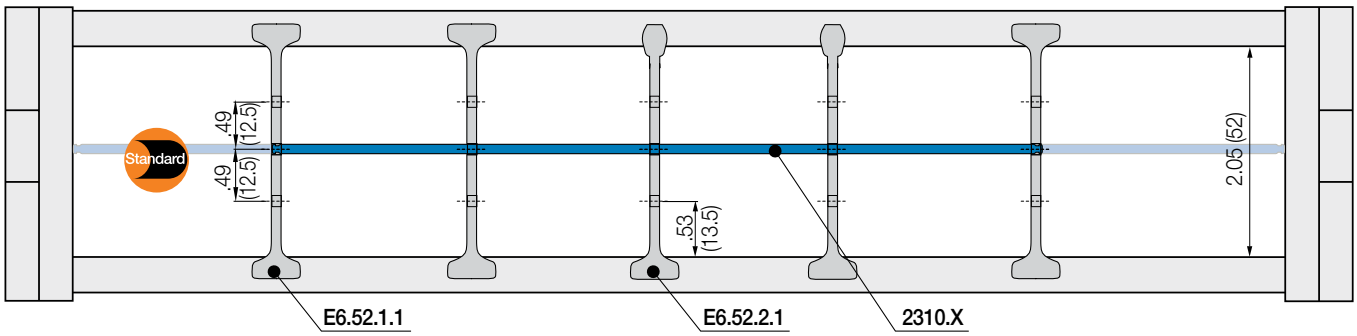
Possible orientations for KMA mounting brackets. For mounting brackets pre-fitted **without C-profile**, please attach index **.A** . For types pre-fitted **with C-profile** please attach index **.A1**, **.A2**, **.A3** or **.A4**.

E61.520.100.12.C.A2 **Order example**

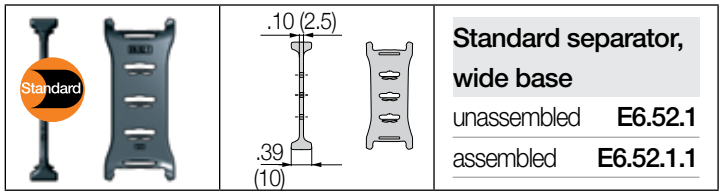
.A ... to indicate option with brackets pre-fitted
C-profile option
Full set
width index
Series

Strain relief e.g. clamps, tiewrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1418

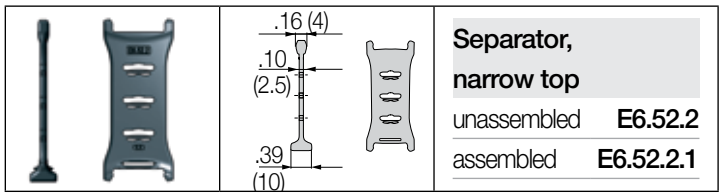
Interior separation | Increase cable service life



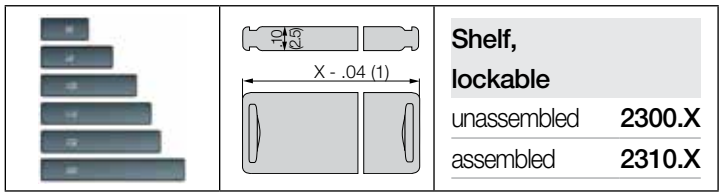
Note: Please be aware of the minimum lateral gap to the side links! **29.1/29.2 = .04" (1mm) | 29.5 = .51" (13mm)**
As standard separators are fitted every 2nd e-chain® link!



Standard separator, wide base	
unassembled	**E6.52.1**
assembled	**E6.52.1.1**



Separator, narrow top	
unassembled	**E6.52.2**
assembled	**E6.52.2.1**



Shelf, lockable	
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 in. (mm)

X in. (mm	unassembled	assembled	**X** in. (mm	unassembled	assembled	**X** in. (mm	unassembled	assembled
.59 (015)	**2300.015**	**2310.015**	2.36 (060)	**2300.060**	**2310.060**	3.43 (087)	**2300.087**	**2310.087**
.98 (025)	**2300.025**	**2310.025**	2.44 (062)	**2300.062**	**2310.062**	3.54 (090)	**2300.090**	**2310.090**
1.18 (030)	**2300.030**	**2310.030**	2.56 (065)	**2300.065**	**2310.065**	3.94 (100)	**2300.100**	**2310.100**
1.50 (038)	**2300.038**	**2310.038**	2.76 (070)	**2300.070**	**2310.070**	4.06 (103)	**2300.103**	**2310.103**
1.57 (040)	**2300.040**	**2310.040**	2.95 (075)	**2300.075**	**2310.075**	4.33 (110)	**2300.110**	**2310.110**
1.97 (050)	**2300.050**	**2310.050**	3.03 (077)	**2300.077**	**2310.077**	4.72 (120)	**2300.120**	**2310.120**
2.24 (057)	**2300.057**	**2310.057**	3.15 (080)	**2300.080**	**2310.080**	4.92 (125)	**2300.125**	**2310.125**

E6.1 | Series E61.62 | Product range

Dynamic, quiet, light and cleanroom suitable

2.44

e-chains® | Series E61.62 | Crossbars removable along the inner and outer radius

Part No. e-chains®	*Bi* in. (mm)	*Ba* in. (mm)	Weight lbs/ft. (kg/m)
E61.62.05.*R*.0	1.97 (50)	3.23 (82)	≈ 1.689 (2.514)
E61.62.06.*R*.0	2.68 (68)	3.94 (100)	≈ 1.732 (2.577)
E61.62.07.*R*.0	2.95 (75)	4.21 (107)	≈ 1.748 (2.601)
E61.62.087.*R*.0	3.43 (87)	4.69 (119)	≈ 1.775 (2.642)
E61.62.097.*R*.0	3.82 (97)	5.08 (129)	≈ 1.796 (2.673)
E61.62.10.*R*.0	3.94 (100)	5.20 (132)	≈ 1.806 (2.687)
E61.62.11.*R*.0	4.25 (108)	5.51 (140)	≈ 1.824 (2.715)
E61.62.112.*R*.0	4.41 (112)	5.67 (144)	≈ 1.834 (2.729)
E61.62.12.*R*.0	4.92 (125)	6.18 (157)	≈ 1.864 (2.774)
E61.62.137.*R*.0	5.39 (137)	6.65 (169)	≈ 1.892 (2.816)
E61.62.15.*R*.0	5.91 (150)	7.17 (182)	≈ 1.923 (2.861)
E61.62.162.*R*.0	6.38 (162)	7.64 (194)	≈ 1.950 (2.902)
E61.62.17.*R*.0	6.61 (168)	7.87 (200)	≈ 1.964 (2.923)
E61.62.18.*R*.0	6.89 (175)	8.15 (207)	≈ 1.980 (2.947)
E61.62.187.*R*.0	7.36 (187)	8.62 (219)	≈ 2.009 (2.989)
E61.62.20.*R*.0	7.87 (200)	9.13 (232)	≈ 2.039 (3.034)

Part No. e-chains®	*Bi* in. (mm)	*Ba* in. (mm)	Weight lbs/ft. (kg/m)
E61.62.212.*R*.0	8.35 (212)	9.61 (244)	≈ 2.067 (3.076)
E61.62.23.*R*.0	8.86 (225)	10.12 (257)	≈ 2.097 (3.121)
E61.62.237.*R*.0	9.33 (237)	10.59 (269)	≈ 2.125 (3.162)
E61.62.25.*R*.0	9.84 (250)	11.10 (282)	≈ 2.155 (3.207)
E61.62.262.*R*.0	10.31 (262)	11.57 (294)	≈ 2.183 (3.249)
E61.62.28.*R*.0	10.83 (275)	12.09 (307)	≈ 2.213 (3.294)
E61.62.29.*R*.0	11.30 (287)	12.56 (319)	≈ 2.242 (3.336)
E61.62.30.*R*.0	11.81 (300)	13.07 (332)	≈ 2.272 (3.381)
E61.62.312.*R*.0	12.28 (312)	13.54 (344)	≈ 2.299 (3.422)
E61.62.325.*R*.0	12.80 (325)	14.06 (357)	≈ 2.330 (3.467)
E61.62.337.*R*.0	13.27 (337)	14.53 (369)	≈ 2.358 (3.509)
E61.62.350.*R*.0	13.78 (350)	15.04 (382)	≈ 2.388 (3.554)
E61.62.362.*R*.0	14.25 (362)	15.51 (394)	≈ 2.416 (3.596)
E61.62.375.*R*.0	14.76 (375)	16.02 (407)	≈ 2.447 (3.641)
E61.62.387.*R*.0	15.24 (387)	16.50 (419)	≈ 2.474 (3.682)
E61.62.400.*R*.0	15.75 (400)	17.01 (432)	≈ 2.541(3.782)

Complete Part No. with required radius (*R*). Example: **E61.62.100.100.0**

Available bend radii

***R* in.** (mm) | **4.52 (115)** | 5.91 (150)* | 7.87 (200)* | 9.84 (250)* | 11.81 (300)* | 13.78 (350)* |

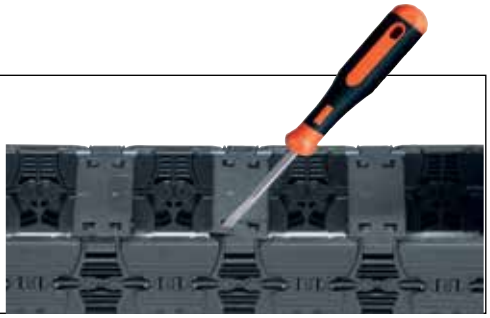
*Radius available upon request.

Installation note - system E6.1

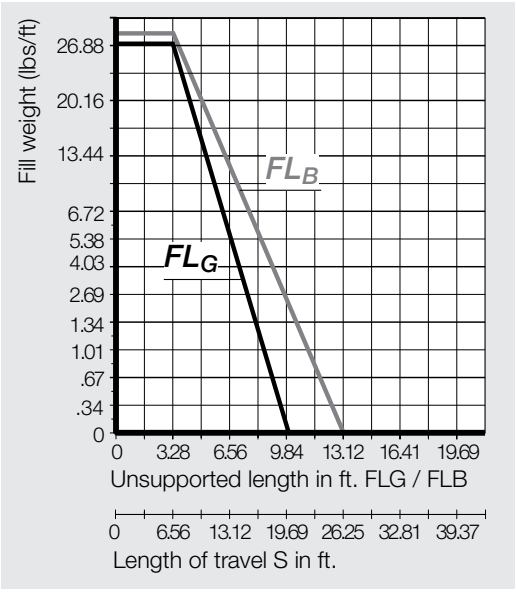
To open, insert the screwdriver into the locking mechanism and prise it open. Repeat the procedure on the other side.

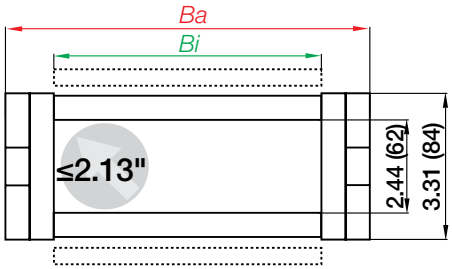
An assembly video is available online at

▶ www.igus.com/E61_assembly

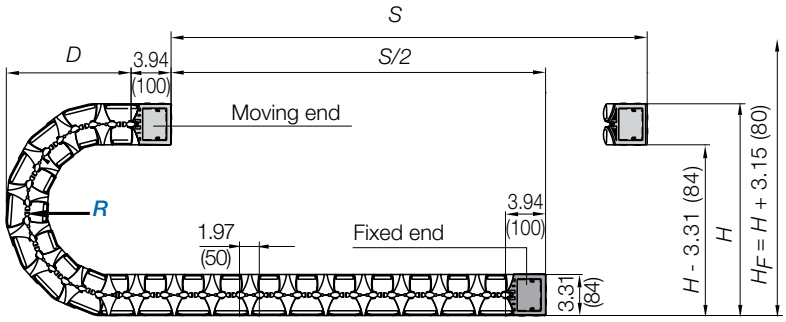


Unsupported applications | Short travels





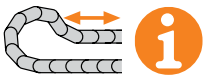
Inner height in. (mm)	2.44 (62)
Pitch per link in. (mm)	1.97 (50)
Links/ft (m)	6.09 (20)
corresponds to (mm)	1,000
e-chain® length	$L_K = {}^{S}/_{2} + K$



R	**4.52 (115)**	5.91 (150)*	7.87 (200)*	9.84 (250)*	11.81 (300)*	13.78 (350)*
H	15.12 (384)	17.87 (454)	21.81 (554)	25.74 (654)	29.69 (754)	33.62 (854)
D	9.13 (232)	10.51 (267)	12.48 (317)	14.45 (367)	16.42 (417)	18.39 (467)
K	18.31 (465)	22.63 (575)	28.74 (730)	35.04 (890)	41.14 (1045)	47.24 (1200)

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

The required clearance height: H_F = ***H*** **+ 3.15 in. (80 mm)** with 1.34 lbs/ft (2.0 kg/m) fill weight.

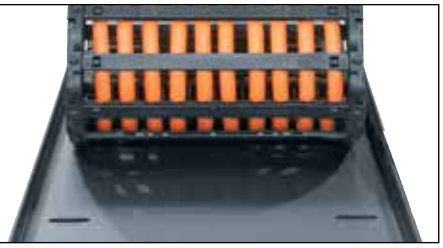


If a gliding application is required for a long travel, please consult igus®.

Steel support tray for support of the lower run

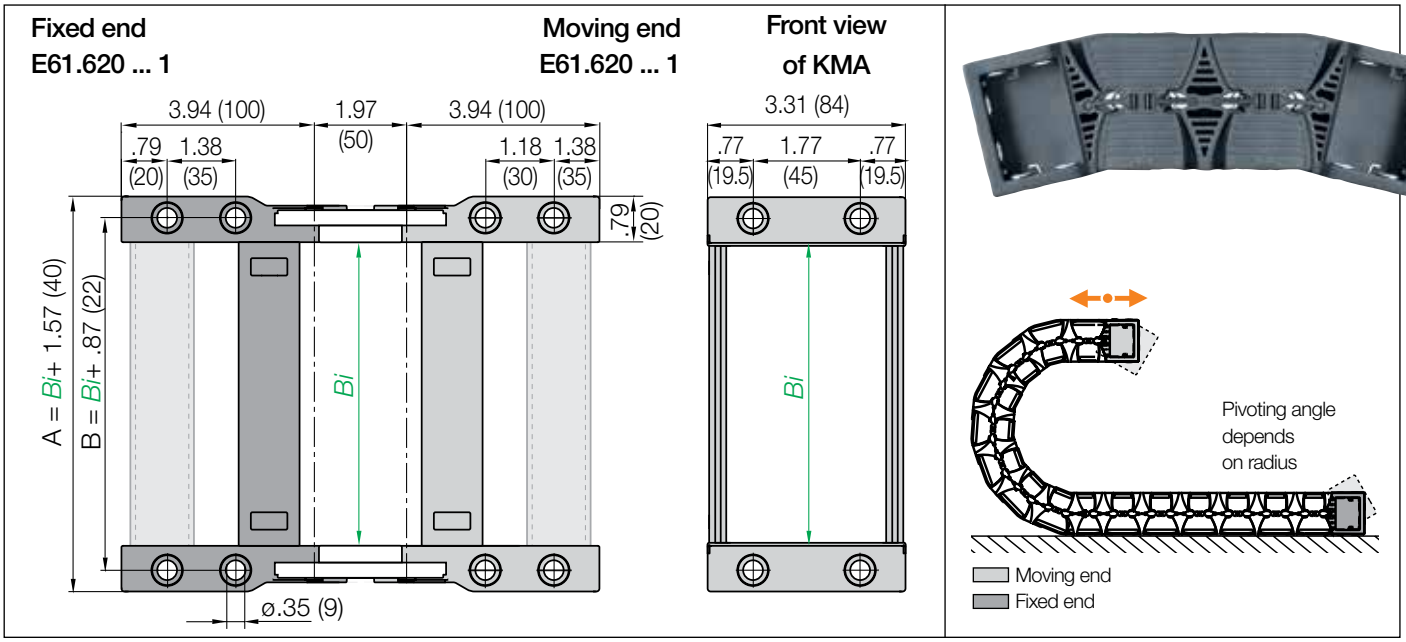
- Simple one-piece support trays for the lower run
- To your requirements and specification
- 4 options available

More information ▶ From page 1394



E6.1 | Series E61.62 | Accessories

KMA mounting brackets | Attachment from any side | Pivoting

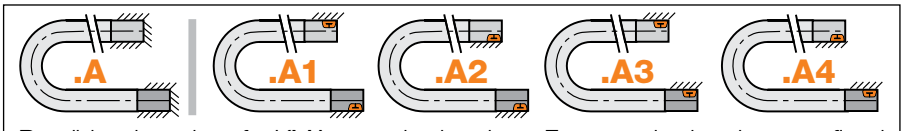


KMA pivoting | Recommended for unsupported applications

Width index	Part No. Full set KMA pivoting	A in. (mm)	B in. (mm)	Bi in. (mm)
05.	E61.620.05. 12.C	3.54 (90)	2.83 (72)	1.97 (50)
06.	E61.620.06. 12.C	4.25 (108)	3.54 (90)	2.68 (68)
07.	E61.620.07. 12.C	4.53 (115)	3.82 (97)	2.95 (75)
087.	E61.620.087.12.C	5.00 (127)	4.29 (109)	3.43 (87)
097.	E61.620.097.12.C	5.39 (137)	4.69 (119)	3.82 (97)
10.	E61.620.10. 12.C	5.51 (140)	4.80 (122)	3.94 (100)
11.	E61.620.11. 12.C	5.83 (148)	5.12 (130)	4.25 (108)
112.	E61.620.112.12.C	5.98 (152)	5.28 (134)	4.41 (112)
12.	E61.620.12. 12.C	6.50 (165)	5.79 (147)	4.92 (125)
137.	E61.620.137.12.C	6.97 (177)	6.26 (159)	5.39 (137)
15 .	E61.620.15. 12.C	7.48 (190)	6.77 (172)	5.91 (150)
162 .	E61.620.162.12.C	7.95 (202)	7.24 (184)	6.38 (162)
17 .	E61.620.17. 12.C	8.19 (208)	7.48 (190)	6.61 (168)
18 .	E61.620.18. 12.C	8.46 (215)	7.76 (197)	6.89 (175)
187 .	E61.620.187.12.C	8.94 (227)	8.23 (209)	7.36 (187)
20 .	E61.620.20. 12.C	9.45 (240)	8.74 (222)	7.87 (200)

Width index	Part No. Full set KMA pivoting	A in. (mm)	B in. (mm)	Bi in. (mm)
212.	E61.620.212.12.C	9.92 (252)	9.21 (234)	8.35 (212)
23.	E61.620.23. 12.C	10.43 (265)	9.72 (247)	8.86 (225)
237.	E61.620.237.12.C	10.91 (277)	10.20 (259)	9.33 (237)
25.	E61.620.25. 12.C	11.42 (290)	10.71 (272)	9.84 (250)
262.	E61.620.262.12.C	11.89 (302)	11.18 (284)	10.31 (262)
28.	E61.620.28. 12.C	12.40 (315)	11.69 (297)	10.83 (275)
29.	E61.620.29. 12.C	12.87 (327)	12.17 (309)	11.30 (287)
30.	E61.620.30. 12.C	13.39 (340)	12.68 (322)	11.81 (300)
312.	E61.620.312.12.C	13.86 (352)	13.15 (334)	12.28 (312)
325.	E61.620.325.12.C	14.37 (365)	13.66 (347)	12.80 (325)
337 .	E61.620.337.12.C	14.84 (377)	14.13 (359)	13.27 (337)
350 .	E61.620.350.12.C	15.35 (390)	14.65 (372)	13.78 (350)
362 .	E61.620.362.12.C	15.83 (402)	15.12 (384)	14.25 (362)
375 .	E61.620.375.12.C	16.34 (415)	15.63 (397)	14.76 (375)
387 .	E61.620.387.12.C	16.81 (427)	16.10 (409)	15.24 (387)
400 .	E61.620.400.12.C	17.32 (440)	16.61 (422)	15.75 (400)

(KMA = polymer metal mounting bracket) For the C-profile option please add index **.C**. **KMA mounting brackets are only available for an odd number of links.**

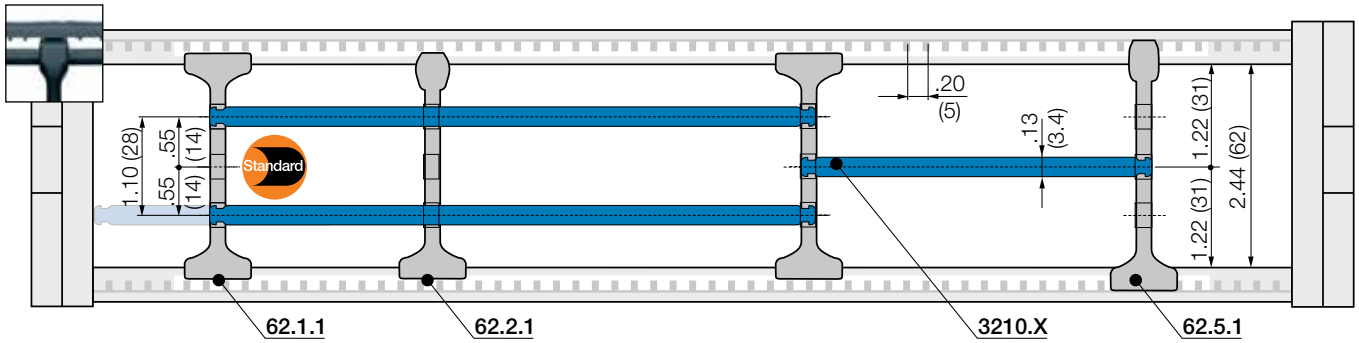


Possible orientations for KMA mounting brackets. For mounting brackets pre-fitted **without C-profile**, please attach index **.A** . For types pre-fitted **with C-profile** please attach index **.A1**, **.A2**, **.A3** or **.A4**.

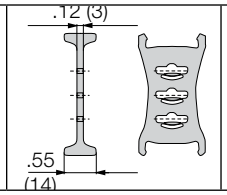
E61.620.100.12.C.A2 **Order example**

Strain relief **e.g. clamps, tiewrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1418**

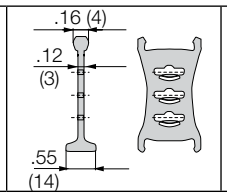
Interior separation | Increase cable service life



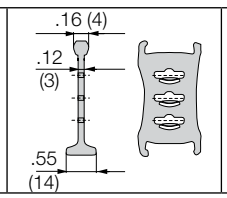
No lateral gap to side links necessary.
As standard separators are fitted every 2nd e-chain® link!



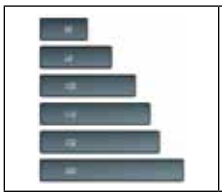
Standard separator, wide base	
unassembled	62.1
assembled	62.1.1

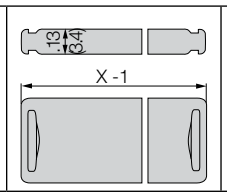


Separator, narrow top	
unassembled	62.2
assembled	62.2.1



Separator, asymmetrical	
unassembled	62.5
assembled	62.5.1





Shelf, lockable	
unassembled	3200.X
assembled	3210.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.

Locks securely in preset increments

Notch separator for exact positioning. Recommended for side-mounted applications.

(*Suitable from *Bi* 75)

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 in. (mm)

X in. (mm	unassembled	assembled
1.97 (050)	**3200.050**	**3210.050**
2.95 (075)	**3200.075**	**3210.075**
3.94 (100)	**3200.100**	**3210.100**
4.53 (115)	**3200.115**	**3210.115**

X in. (mm	unassembled	assembled
4.92 (125)	**3200.125**	**3210.125**
5.91 (150)	**3200.150**	**3210.150**
6.89 (175)	**3200.175**	**3210.175**
7.87 (200)	**3200.200**	**3210.200**

X in. (mm	unassembled	assembled
8.86 (225)	**3200.225**	**3210.225**
9.84 (250)	**3200.250**	**3210.250**

E6.1 | Series E61.80 | Product range

Dynamic, quiet, light and cleanroom suitable

3.15”

e-chains® | Series E61.80 | Crossbars removable along the inner and outer radius

Part No. e-chains®	*Bi* in. (mm)	*Ba* in. (mm)	Weight lbs/ft. (kg/m)
E61.80.05.*R*.0	1.97 (50)	3.94 (100)	≈ 1.953 (2.906)
E61.80.06.*R*.0	2.56 (65)	4.53 (115)	≈ 2.002 (2.979)
E61.80.07.*R*.0	2.95 (75)	4.92 (125)	≈ 2.035 (3.028)
E61.80.08.*R*.0	3.43 (87)	5.39 (137)	≈ 2.076 (3.089)
E61.80.10.*R*.0	3.94 (100)	5.91 (150)	≈ 2.117 (3.150)
E61.80.11.*R*.0	4.41 (112)	6.38 (162)	≈ 2.156 (3.209)
E61.80.12.*R*.0	4.92 (125)	6.89 (175)	≈ 2.199 (3.272)
E61.80.13.*R*.0	5.39 (137)	7.36 (187)	≈ 2.238 (3.331)
E61.80.15.*R*.0	5.91 (150)	7.87 (200)	≈ 2.281 (3.394)
E61.80.16.*R*.0	6.38 (162)	8.35 (212)	≈ 2.320 (3.453)
E61.80.17.*R*.0	6.89 (175)	8.86 (225)	≈ 2.363 (3.516)
E61.80.18.*R*.0	7.36 (187)	9.33 (237)	≈ 2.402 (3.575)
E61.80.20.*R*.0	7.87 (200)	9.84 (250)	≈ 2.445 (3.638)
E61.80.21.*R*.0	8.35 (212)	10.32 (262)	≈ 2.484 (3.697)
E61.80.22.*R*.0	8.86 (225)	10.82 (275)	≈ 2.527 (3.760)
E61.80.23.*R*.0	9.33 (237)	11.30 (287)	≈ 2.566 (3.819)
E61.80.25.*R*.0	9.84 (250)	11.81 (300)	≈ 2.609 (3.882)
E61.80.26.*R*.0	10.31 (262)	12.28 (312)	≈ 2.648 (3.941)
E61.80.27.*R*.0	10.83 (275)	12.80 (325)	≈ 2.691 (4.004)
E61.80.28.*R*.0	11.30 (287)	13.27 (337)	≈ 2.730 (4.063)
E61.80.30.*R*.0	11.81 (300)	13.78 (350)	≈ 2.773 (4.127)

Part No. e-chains®	*Bi* in. (mm)	*Ba* in. (mm)	Weight lbs/ft. (kg/m)
E61.80.31.*R*.0	12.28 (312)	14.25 (362)	≈ 2.812 (4.185)
E61.80.32.*R*.0	12.80 (325)	14.76 (375)	≈ 2.855 (4.249)
E61.80.33.*R*.0	13.27 (337)	15.24 (387)	≈ 2.894 (4.307)
E61.80.35.*R*.0	13.78 (350)	15.75 (400)	≈ 2.937 (4.371)
E61.80.36.*R*.0	14.25 (362)	16.22 (412)	≈ 2.976 (4.429)
E61.80.37.*R*.0	14.76 (375)	16.73 (425)	≈ 3.019 (4.493)
E61.80.38.*R*.0	15.24 (387)	17.20 (437)	≈ 3.058 (4.551)
E61.80.40.*R*.0	15.75 (400)	17.72 (450)	≈ 3.101 (4.615)
E61.80.41.*R*.0	16.22 (412)	18.19 (462)	≈ 3.140 (4.673)
E61.80.42.*R*.0	16.73 (425)	18.70 (475)	≈ 3.183 (4.737)
E61.80.43.*R*.0	17.20 (437)	19.17 (487)	≈ 3.217 (4.787)
E61.80.45.*R*.0	17.72 (450)	19.69 (500)	≈ 3.257 (4.847)
E61.80.46.*R*.0	18.19 (462)	20.16 (512)	≈ 3.297 (4.907)
E61.80.47.*R*.0	18.70 (475)	20.67 (525)	≈ 3.338 (4.967)
E61.80.48.*R*.0	19.17 (487)	21.14 (537)	≈ 3.378 (5.027)
E61.80.50.*R*.0	19.69 (500)	21.65 (550)	≈ 3.418 (5.087)
E61.80.51.*R*.0	20.16 (512)	22.13 (562)	≈ 3.459 (5.147)
E61.80.52.*R*.0	20.67 (525)	22.64 (575)	≈ 3.499 (5.207)
E61.80.53.*R*.0	21.14 (537)	23.11 (587)	≈ 3.539 (5.267)
E61.80.55.*R*.0	21.65 (550)	23.62 (600)	≈ 3.580 (5.327)
E61.80.60.*R*.0	23.62 (600)	25.59 (650)	≈ 3.734 (5.557)

Complete Part No. with required radius (*R*). Example: **E61.80.100.150.0**

Available bend radii

***R* in.** (mm) | **5.91 (150)** | 7.87 (200)* | 9.84 (250)* | 11.81 (300)* | 13.78 (350)* | 15.75 (400)* |

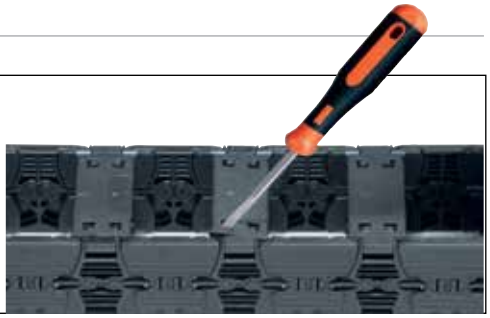
*Radius available upon request.

Installation note - system E6.1

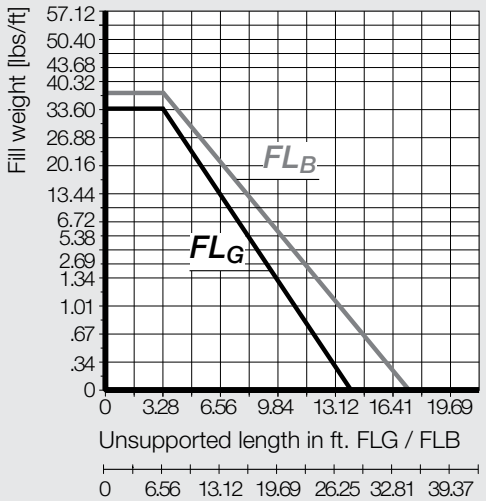
To open, insert the screwdriver into the locking mechanism and prise it open. Repeat the procedure on the other side.

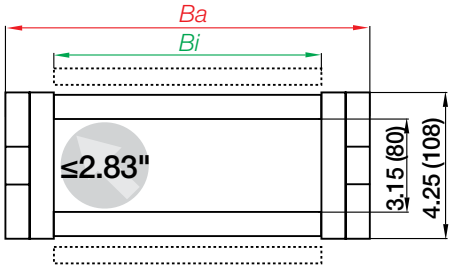
An assembly video is available online at

▶ www.igus.com/E61_assembly

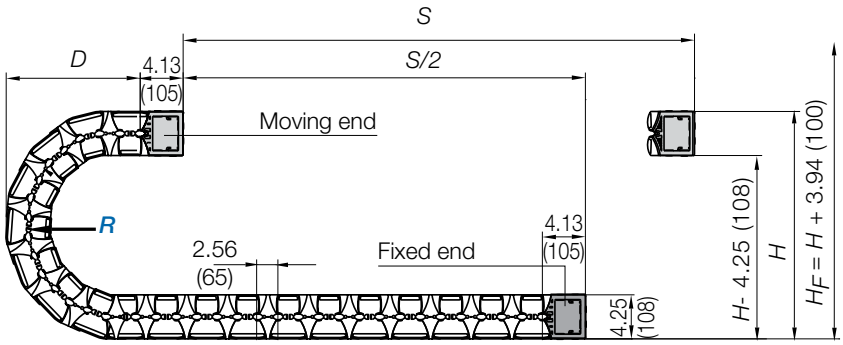


Unsupported applications | Short travels





Inner height in. (mm)	3.15 (80)
Pitch per link in. (mm)	2.56 (65)
Links/ft (m)	4.69 (16)
corresponds to (mm)	1,040
e-chain® length	$L_K = {}^{S}/_{2} + K$



R	5.91 (150)	7.87 (200)*	9.84 (250)*	11.81 (300)*	13.78 (350)*	15.75 (400)*
H	20.00 (508)	23.94 (608)	27.87 (708)	31.81 (808)	35.75 (908)	39.69 (1008)
D	11.87 (301.5)	13.84 (351.5)	15.81 (401.5)	17.78 (451.5)	19.74 (501.5)	21.71 (551.5)
K	23.82 (605)	29.92 (760)	36.22 (920)	42.32 (1075)	48.43 (1230)	54.72 (1390)

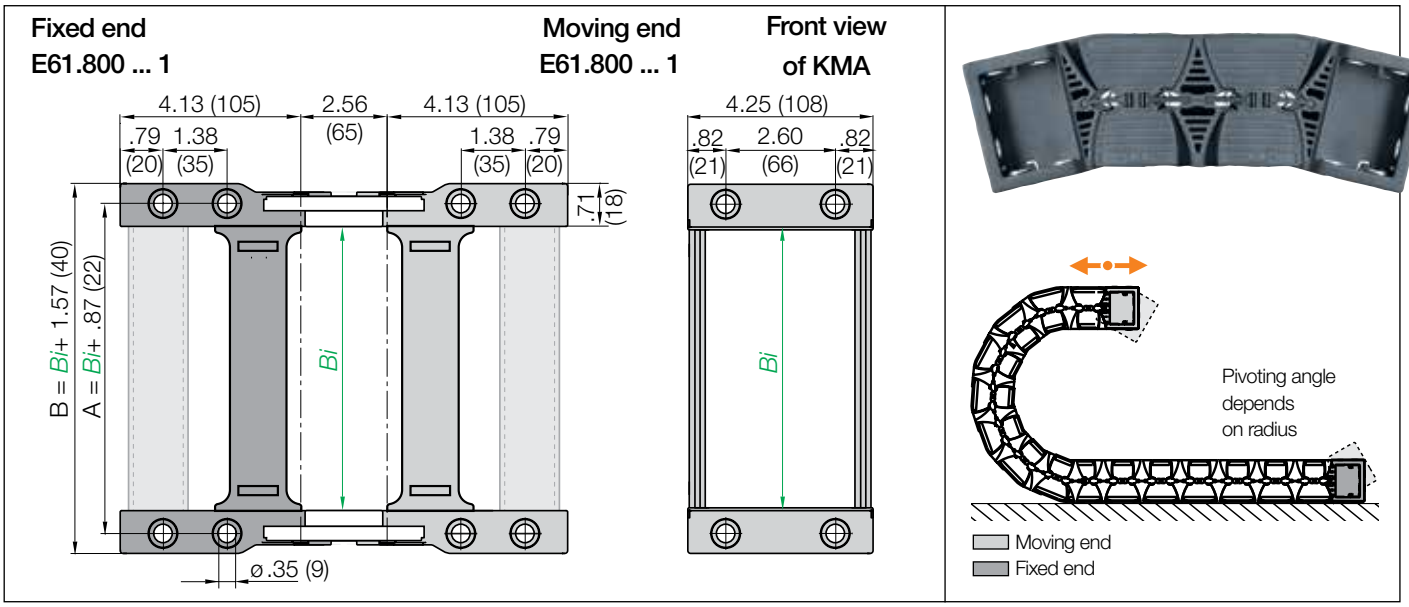
*Radius available upon request. Please consult igus® for delivery time.

The required clearance height: $H_F = H$ **+ 3.15 in. (80 mm)** with 3.36 lbs/ft (5.0 kg/m) fill weight.

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

E6.1 | Series E61.80 | Accessories

KMA mounting brackets | Attachment from any side | Pivoting

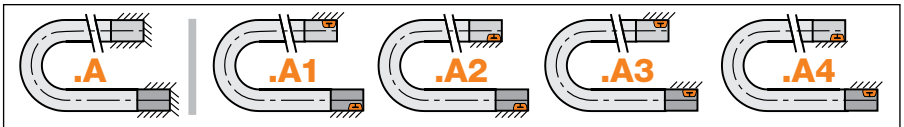


KMA pivoting | Recommended for unsupported applications

Width index	Part No. Full set KMA pivoting	A in. (mm)	B in. (mm)	Bi in. (mm)
05. ▶	E61.800.05.12.C	2.83 (72)	3.54 (90)	**1.97 (50)**
06. ▶	E61.800.06.12.C	3.43 (87)	4.13 (105)	**2.56 (65)**
07. ▶	E61.800.07.12.C	3.82 (97)	4.53 (115)	**2.95 (75)**
08. ▶	E61.800.08.12.C	4.29 (109)	5.00 (127)	**3.43 (87)**
10. ▶	E61.800.10.12.C	4.80 (122)	5.51 (140)	**3.94 (100)**
11. ▶	E61.800.11.12.C	5.28 (134)	5.98 (152)	**4.41 (112)**
12. ▶	E61.800.12.12.C	5.79 (147)	6.50 (165)	**4.92 (125)**
13. ▶	E61.800.13.12.C	6.26 (159)	6.97 (177)	**5.39 (137)**
15. ▶	E61.800.15.12.C	6.77 (172)	7.48 (190)	**5.91 (150)**
16. ▶	E61.800.16.12.C	7.24 (184)	7.95 (202)	**6.38 (162)**
17 . ▶	E61.800.17.12.C	7.76 (197)	8.46 (215)	**6.89 (175)**
18 . ▶	E61.800.18.12.C	8.23 (209)	8.94 (227)	**7.36 (187)**
20 . ▶	E61.800.20.12.C	8.74 (222)	9.45 (240)	**7.87 (200)**
21 . ▶	E61.800.21.12.C	9.21 (234)	9.92 (252)	**8.35 (212)**
22 . ▶	E61.800.22.12.C	9.72 (247)	10.43 (265)	**8.86 (225)**
23 . ▶	E61.800.23.12.C	10.20 (259)	10.91 (277)	**9.33 (237)**
25. ▶	E61.800.25.12.C	10.71 (272)	11.42 (290)	**9.84 (250)**
26. ▶	E61.800.26.12.C	11.18 (284)	11.89 (302)	**10.31 (262)**
27. ▶	E61.800.27.12.C	11.69 (297)	12.40 (315)	**10.83 (275)**
28. ▶	E61.800.28.12.C	12.17 (309)	12.87 (327)	**11.30 (287)**
30. ▶	E61.800.30.12.C	12.68 (322)	13.39 (340)	**11.81 (300)**

Width index	Part No. Full set KMA pivoting	A in. (mm)	B in. (mm)	Bi in. (mm)
31. ▶	E61.800.31.12.C	13.15 (334)	13.86 (352)	**12.28 (312)**
32. ▶	E61.800.32.12.C	13.66 (347)	14.37 (365)	**12.80 (325)**
33. ▶	E61.800.33.12.C	14.13 (359)	14.84 (377)	**13.27 (337)**
35. ▶	E61.800.35.12.C	14.65 (372)	15.35 (390)	**13.78 (350)**
36. ▶	E61.800.36.12.C	15.12 (384)	15.83 (402)	**14.25 (362)**
37 . ▶	E61.800.37.12.C	15.63 (397)	16.34 (415)	**14.76 (375)**
38 . ▶	E61.800.38.12.C	16.10 (409)	16.81 (427)	**15.24 (387)**
40 . ▶	E61.800.40.12.C	16.61 (422)	17.32 (440)	**15.75 (400)**
41 . ▶	E61.800.41.12.C	17.09 (434)	17.80 (452)	**16.22 (412)**
42 . ▶	E61.800.42.12.C	17.60 (447)	18.31 (465)	**16.73 (425)**
43 . ▶	E61.800.43.12.C	18.07 (459)	18.78 (477)	**17.20 (437)**
45 . ▶	E61.800.45.12.C	18.58 (472)	19.29 (490)	**17.72 (450)**
46 . ▶	E61.800.46.12.C	19.06 (484)	19.76 (502)	**18.19 (462)**
47 . ▶	E61.800.47.12.C	19.57(497)	20.28 (515)	**18.70 (475)**
48 . ▶	E61.800.48.12.C	20.04 (509)	20.75 (527)	**19.17 (487)**
50 . ▶	E61.800.50.12.C	20.55 (522)	21.26 (540)	**19.69 (500)**
51 . ▶	E61.800.51.12.C	21.02 (534)	21.73 (552)	**20.16 (512)**
52 . ▶	E61.800.52.12.C	21.54 (547)	22.24 (565)	**20.67 (525)**
53 . ▶	E61.800.53.12.C	22.01 (559)	22.72 (577)	**21.14 (537)**
55 . ▶	E61.800.55.12.C	22.52 (572)	23.23 (590)	**21.65 (550)**
60 . ▶	E61.800.60.12.C	24.49 (622)	25.20 (640)	**23.62 (600)**

(KMA = polymer metal mounting bracket) For the C-profile option please add index **.C**. **KMA mounting brackets are only available for an odd number of links.**



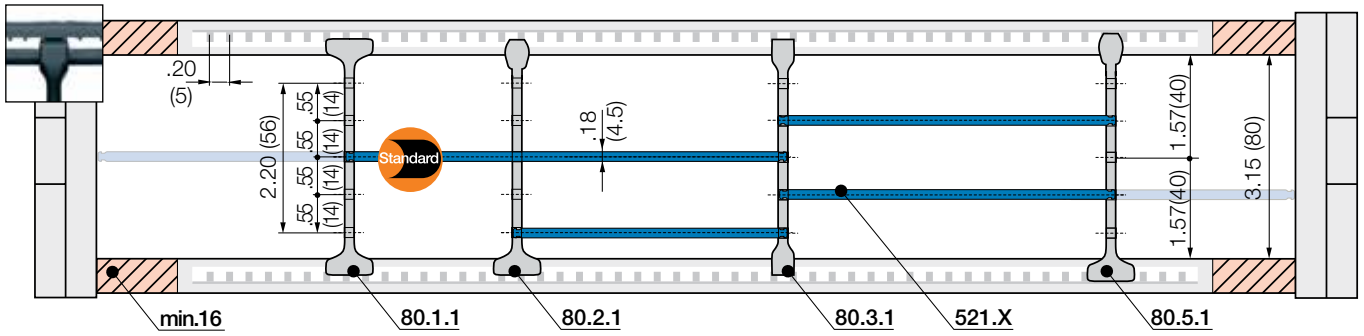
Possible orientations for KMA mounting brackets. For mounting brackets pre-fitted **without C-profile**, please attach index **.A** . For types pre-fitted **with C-profile** please attach index **.A1**, **.A2**, **.A3** or **.A4**.

E61.800.100.12.C.A2 **Order example**

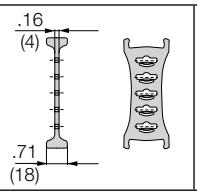
.A ... to indicate option with brackets pre-fitted
C-profile option
Full set
width index
Series

E6.1 | Series E61.80 | Accessories

Interior separation | Increase cable service life



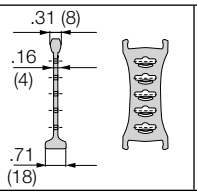
No lateral gap to side links necessary.
As standard separators are fitted every 2nd e-chain® link!



Standard separator, wide base	
unassembled	80.1
assembled	80.1.1

Standard - for any application

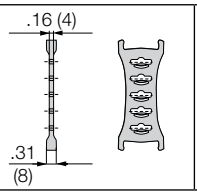
Separator with a wide base for maximum holding force.



Separator, narrow top	
unassembled	80.2
assembled	80.2.1

For even faster installation

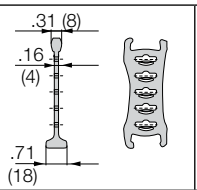
Wide on one side for high holding force, narrow on opposite side for easy cable fitting.



Separator, asymmetrical	
unassembled	80.3
assembled	80.3.1

For a large number of thin cables

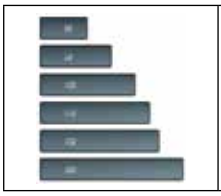
Separator with a narrow base for a large number of thin cables side by side. Saves space.

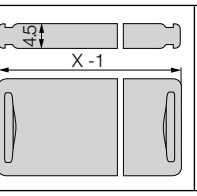


Separator, asymmetrical	
unassembled	80.5
assembled	80.5.1

Locks securely in preset increments

Notch separator for exact positioning. Recommended for side-mounted applications.





Shelf, lockable	
unassembled	520.X
assembled	521.X

Horizontal separation

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

Shelves

Width = X in. (mm)

X in. (mm)	unassembled	assembled
1.97 (050)	520.050	521.050
2.56 (065)	520.065	521.065
2.95 (075)	520.075	521.075
3.94 (100)	520.100	521.100
4.92 (125)	520.125	521.125

X in. (mm)	unassembled	assembled
5.91 (150)	520.150	521.150
6.89 (175)	520.175	521.175
7.87 (200)	520.200	521.200
8.86 (225)	520.225	521.225
9.84 (250)	520.250	521.250

X in. (mm)	unassembled	assembled
11.81 (300)	520.300	521.300
13.78 (350)	520.350	521.350
14.76 (375)	520.375	521.375
15.24 (387)	520.387	521.387
17.72 (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 1418

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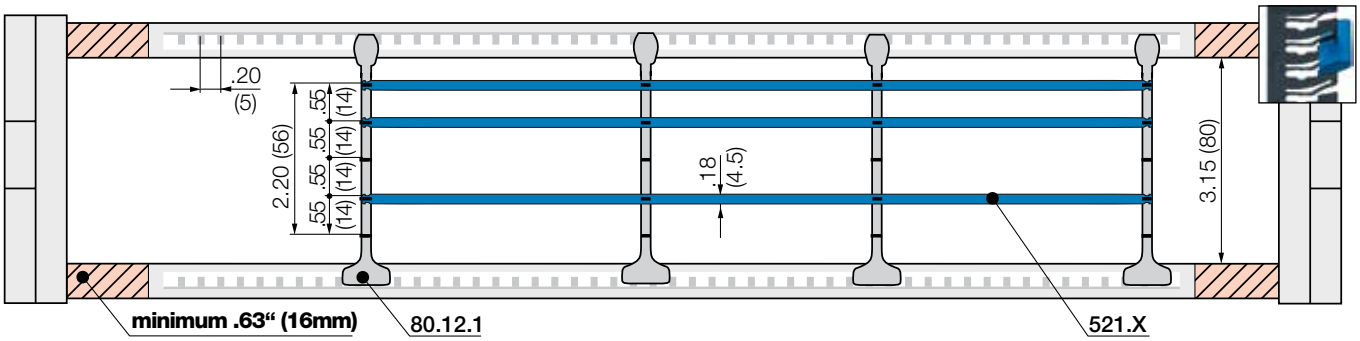
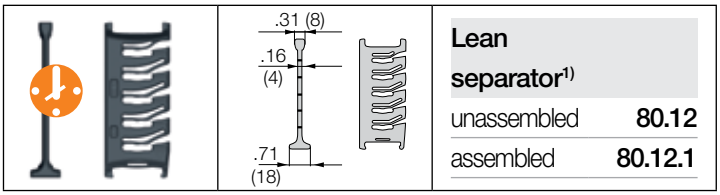
Interior separation | To allow faster filling



Note: Please be aware of the minimum lateral gap to the side links! **e-chain®: = .63" (16mm)**

As standard separators are fitted every 2nd e-chain® link!



Lean separator[1)]	
unassembled	80.12
assembled	80.12.1

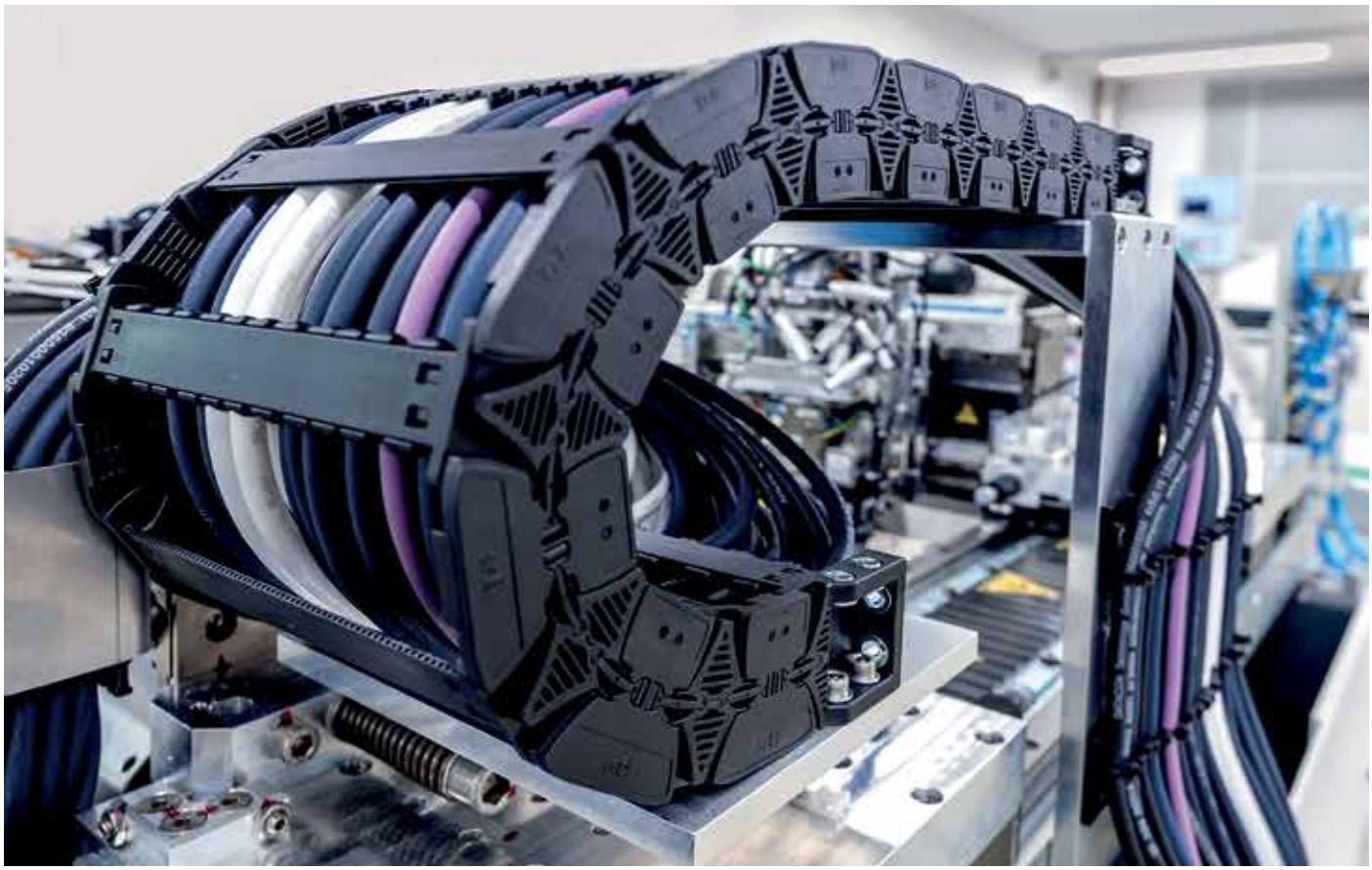
Lean separators[1)]

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®!

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%[2)].

2) Lean interior separation vs. standard interior separation - measured on a 4m long e-chain® fitted with 12 cables in the igus® lab



Fully harnessed e-chain systems® to your requirements. E6.1 e-chain® system and chainflex® cables both cleanroom suitable in the semiconductor industry