





E2 R100

e-tubes for cost-effective protection against dirt and chips



Advantages of the E2 R100 series:

- High level of protection against chips (including hot chips)
- Lids openable along the inner or outer radius, from both sides
- Robust and sealed
- Space-efficient with optimized ratio of inner to outer dimensions
- Light, easy to install and cost-effective
- Recommended for short travels and unsupported applications



When to use another e-tube:

- When larger interior heights are required ► **R2.1 e-tubes**, page 450
- When even higher strength is required ► **R4.1L e-tubes**, page 546
- When no chip protection is required ► **Series E2/000**, page 382
- For extremely chip-resistant e-tubes ► **RX system**, page 524
- When a particularly quiet operation is required using a smaller pitch
► **E2 R e-tubes**, page 500

Protection against dirt and chips, cost- effective - E2 R100 e-tubes

Attachment from any side
with KMA mounting
brackets

Chip protection:
smooth, chip-
resistant exterior

Long service life:
lateral gliding
surfaces

Fast assembly:
lids openable
along the inner
or outer radius,
from both sides

Space-saving:
optimized ratio of inner
to outer dimensions

Strong:
double stop-dog
system for long
unsupported lengths

Protected:
covered pin/bore
connection

Cost-effective, for applications with low and medium speeds. E2 R100 e-tubes work in hot chip areas, in areas of dirt and dust generated by woodworking, steel-mills, pulp and paper, textile, agriculture, coal-fired plants and many other hostile environments.

- High level of protection against chips (including hot chips)
- Robust and sealed
- Space-efficient with optimized ratio of inner to outer dimensions
- Modular interior separation
- Universal KMA mounting brackets with attachment options from any side

Typical industries and applications

- Machine tools ● Wood processing machines
- General mechanical engineering ● In all areas with dirt and chips



e-tubes made from igumid HT material for hot chips of up to +1562 °F available upon request



Electrically conductive ESD e-tubes
upon request



UL94-V0 classification
upon request



iF product design award
2000 series R117/R118

E2 R100 e-tubes | Selection table

Series	Inner height hi		Inner width Bi		Outer width Ba		Outer height ha		Bending radius R		Unsupported length
	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	≤ ft. (m)



E2 R100 e-tubes -
lids openable along the inner
radius, from both sides

R117	.83	(21)	.79-3.94	(20-100)	1.26-4.41	(32-112)	1.10	(28)	2.48-7.09	(63 - 180)	3.94 (1.20)
R157	1.57	(40)	1.57-7.87	(40-200)	2.20-8.50	(56-216)	1.97	(50)	3.94-9.84	(100 - 250)	7.38 (2.25)
R167	1.97	(50)	1.97-9.84	(50-250)	2.68-10.55	(68-268)	2.52	(64)	3.94-11.81	(100 - 300)	8.20 (2.50)



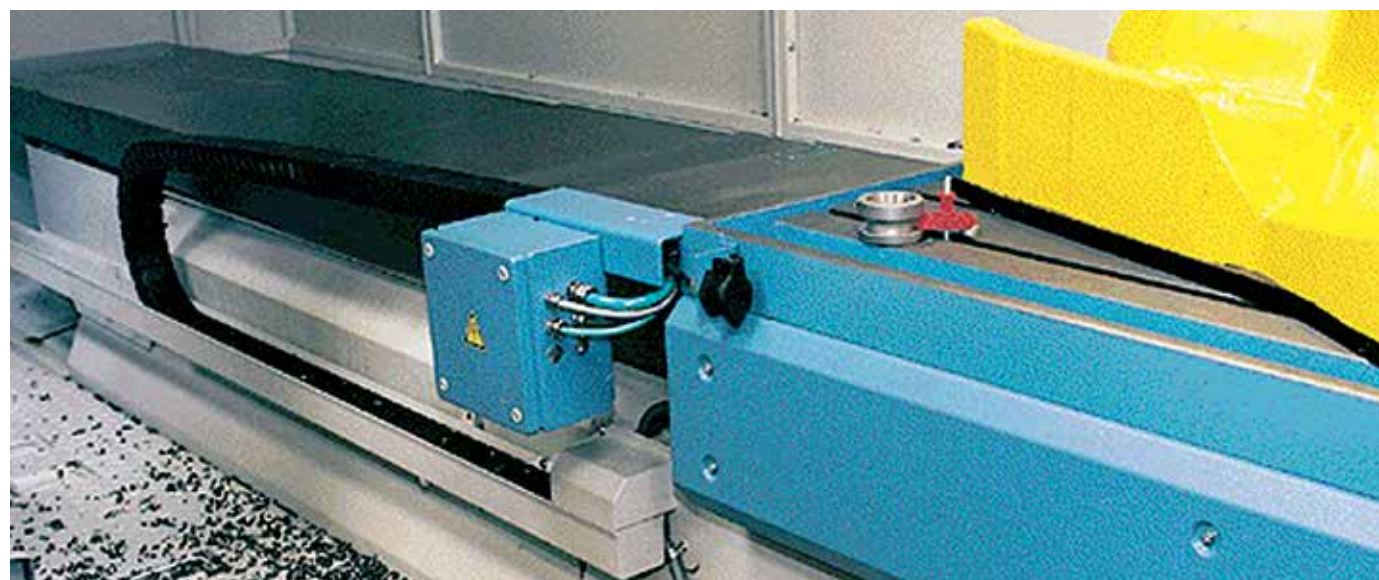
E2 R100 e-tubes-
lids openable along the
outer radius, from both sides

R118	.83	(21)	.98-3.15	(25-80)	1.46-3.62	(37-92)	1.10	(28)	2.48-7.09	(63 - 180)	3.94 (1.20)
R158	1.57	(40)	1.57-7.87	(40-200)	2.20-8.50	(56-216)	1.97	(50)	3.94-9.84	(100 - 250)	7.38 (2.25)
R168	1.97	(50)	1.97-7.87	(50-200)	2.68-8.58	(68-218)	2.52	(64)	3.94-11.81	(100 - 300)	8.20 (2.50)



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

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



igus® e-tubes provide safe protection for cables and can easily be opened

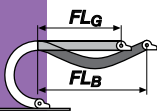
E2 R100 e-tubes | Technical data | Overview

Technical data



Speed gliding / acceleration gliding

upon request



Speed FL_G / acceleration FL_G

$\leq 32.8 \text{ ft/s (10 m/s) } / \leq 328 \text{ ft/s}^2 (100 \text{ m/s}^2)$

Speed FL_B / acceleration FL_B

$\leq 9.84 \text{ ft. (3 m/s) } / \leq 19.69 \text{ ft/s}^2 (6 \text{ m/s}^2)$



Material - permitted temperature °F, igumid G

$-40^\circ\text{F } (-40^\circ\text{C}) / +248^\circ\text{F } (+120^\circ\text{C})$



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	 Vertical hanging	 Vertical standing	 Side mounted unsupported
R117 / R118	$\leq 8.20 \text{ ft. (2.5m)}$	$\leq 65.62 \text{ ft. (20m)}$	$\leq 6.56 \text{ ft. (2.0m)}$	$\leq 2.29 \text{ ft. (0.7m)}$
R157 / R158	$\leq 14.76 \text{ ft. (4.5m)}$	$\leq 131.24 \text{ ft. (40m)}$	$\leq 9.84 \text{ ft. (3.0m)}$	$\leq 3.28 \text{ ft. (1.0m)}$
R167 / R168	$\leq 16.41 \text{ ft. (5.0m)}$	$\leq 164.05 \text{ ft. (50m)}$	$\leq 9.84 \text{ ft. (3.0m)}$	$\leq 3.28 \text{ ft. (1.0m)}$

E2 R100 e-tubes | Options and order keys

Options with order keys | Examples based on series R168

	<i>Standard</i>	<i>NC version - (No Camber) without pretension</i>	<i>e-tube - no burning- in of hot chips up to 1562°F</i>	<i>ESD - electrically conductive material</i>
	Part No. Standard	Part No. NC version	Part No. igumid HT	Part No. igumid ESD ³⁾
				
	168.100.R.0+	168.100.R.0.+NC	168.100.R.0.+HT	168.100.R.0.+ESD
	Ready to ship in 48-72hrs.*	Ready to ship in 5 business days*	Ready to ship in 6 weeks*	Ready to ship in 12 business days*

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

Order example | Order key and color examples | Examples based on series R168

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

e-tube 3.28 ft. (1m)	Please indicate e-tube length or number of links: 3.28 ft. (1m) or 17 links	168.100.100.0
+ Mounting brackets	KMA - 1 set	1680.100.12
Interior separation	with 2 separators assembled every 2 nd link	2 x 1686.01
Order text:	3.28 ft (1m) 168.100.100.0 + 1680.100.12 + 2 x 1686.01	

Order key and color examples | Examples based on series R168



Order key

e-tube openable along the outer radius

168.100.100.0

e-tube openable along the inner radius

168.100.100.0

Series / Type	
Width index (depends on <i>B</i>)	
Bend radius <i>R</i>	
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.



e-tubes | Series R117 | Lids openable along the inner radius, from both sides
 e-tubes | Series R118 | Lids openable along the outer radius, from both sides

Part No.		<i>Bi</i>	<i>Ba</i>	R117	R118
e-chains*		in. (mm)	in. (mm)	lbs/ft. (kg/m)	lbs/ft. (kg/m)
117.020.R.0	—	.79 (20)	1.26 (32)	≈ 0.29 (0.43)	≈ 0.29 (0.43)
117.025.R.0	118.025.R.0	.98 (25)	1.46 (37)	≈ 0.31 (0.46)	≈ 0.31 (0.46)
117.038.R.0	—	1.50 (38)	1.97 (50)	≈ 0.38 (0.56)	≈ 0.38 (0.56)
117.048.R.0	118.048.R.0	1.89 (48)	2.40 (60)	≈ 0.44 (0.66)	≈ 0.44 (0.66)
117.063.R.0	—	2.48 (63)	2.95 (75)	≈ 0.51 (0.76)	≈ 0.51 (0.76)
117.080.R.0	118.080.R.0	3.15 (80)	3.62 (92)	≈ 0.60 (0.89)	≈ 0.60 (0.89)
117.100.R.0	—	3.94 (100)	4.41 (112)	≈ 0.71 (1.06)	≈ 0.71 (1.06)

Complete Part No. with required radius (*R*). Example: 118.080.100.0

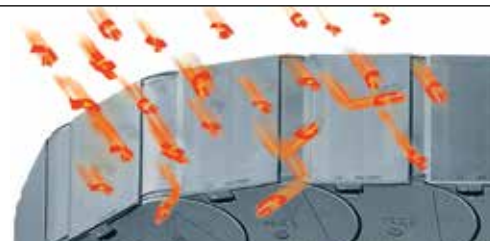
Available bend radii

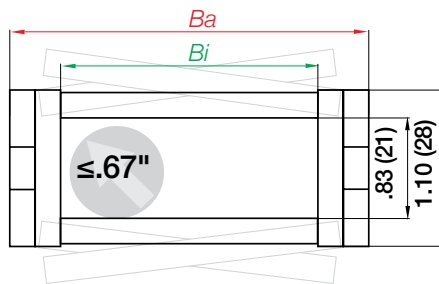
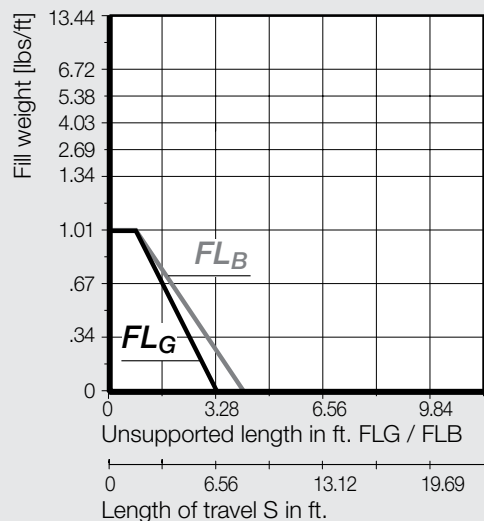
R in. (mm) | 2.48 (063) | 2.95 (075) | 3.94 (100) | 4.33 (110) | 4.92 (125) | 5.71 (145) | 7.09 (180) |

Hot chips up to +1562°F for e-tubes

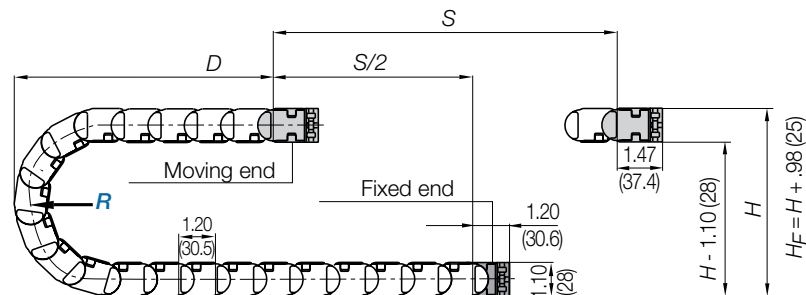
- e-tubes can repel chips up to +1562°F. Special production option with the igus® material igumid HT
- No hot chips melting or embedding into the chain

More information ► www.igus.com/HT



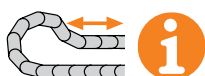


Inner height in. (mm)	.83 (21)
Pitch per link in. (mm)	1.20 (30.5)
Links/ft (m)	10 (33)
corresponds to (mm)	1,006.5
e-chain [®] length	$L_K = \frac{S}{2} + K$

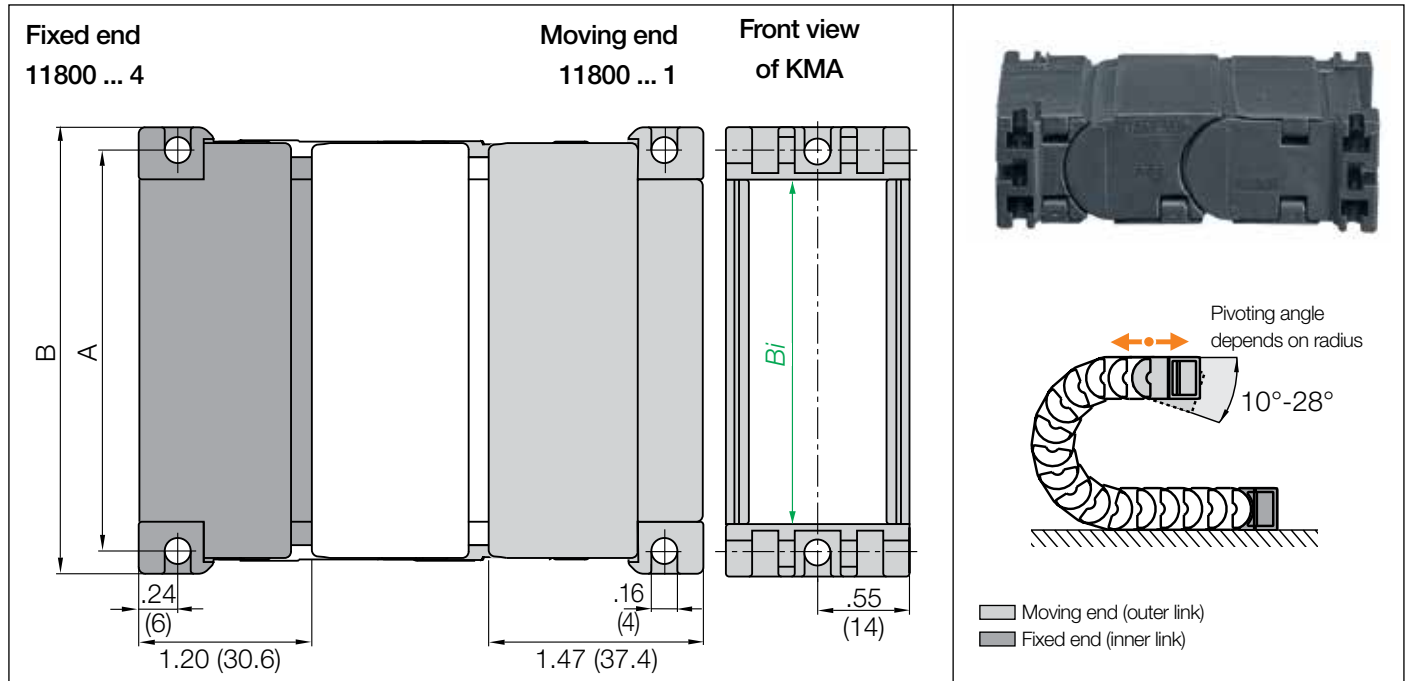


R	2.48 (063)	2.95 (075)	3.94 (100)	4.33 (110)	4.92 (125)	5.71 (145)	7.09 (180)
H	6.06 (154)	7.01 (178)	8.98 (228)	9.76 (248)	10.94 (278)	12.52 (318)	15.28 (388)
D	4.84 (123)	5.31 (135)	6.30 (160)	6.69 (170)	7.28 (185)	8.07 (205)	9.45 (240)
K	10.24 (260)	11.81 (300)	14.96 (380)	16.14 (410)	17.91 (455)	20.47 (520)	24.80 (630)

The required clearance height: $H_F = H + .98$ in. (25 mm) with .67 lbs/ft (1.0 kg/m) fill weight.



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



KMA, one end pivoting | Recommended for unsupported applications

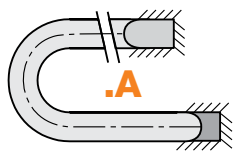
Width index	Part No. full set KMA one end pivoting	A in. (mm)	B in. (mm)	B_i in. (mm)
020. ▶	11800.020.14	1.14 (29)	1.42 (36)	.79 (20)
025. ▶	11800.025.14	1.34 (34)	1.61 (41)	.98 (25)
038. ▶	11800.038.14	1.85 (47)	2.13 (54)	1.50 (38)
048. ▶	11800.048.14	2.24 (57)	2.52 (64)	1.89 (48)
063. ▶	11800.063.14	2.83 (72)	3.11 (79)	2.48 (63)
080. ▶	11800.080.14	3.50 (89)	3.78 (96)	3.15 (80)
100. ▶	11800.100.14	4.29 (109)	4.57 (116)	3.94 (100)

Pivoting option at fixed end available upon request **Part No. 11800 ... 12**

(KMA = polymer metal mounting bracket)

The mounting brackets are supplied with hexagon nuts and can be attached with M4 bolts,

or the mounting brackets may also be attached with M4 hexagon socket DIN 912 cap bolts.



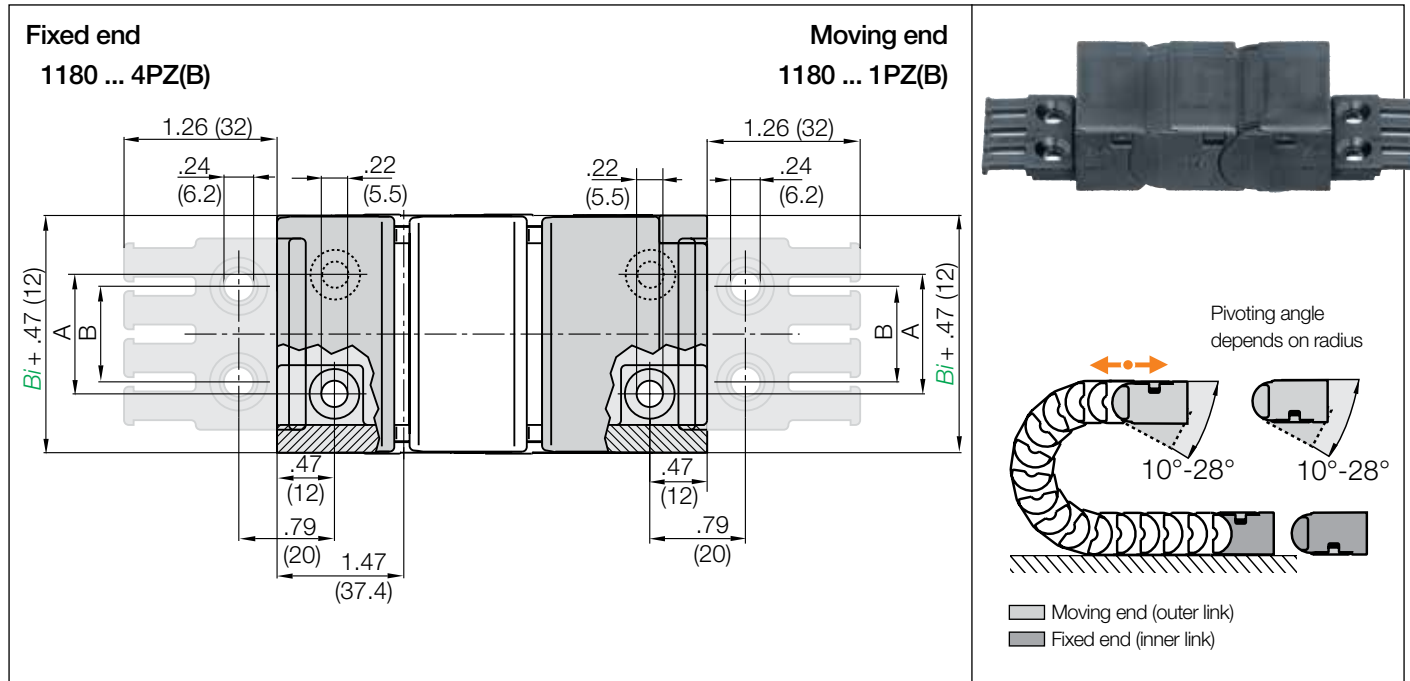
The bracket orientations are set automatically when using an igus® KMA mounting bracket with attachment from any side. To receive a KMA mounting bracket **pre-fitted** please add index **.A**.

11800.020.14.A Order example



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

Angled polymer bracket | One end pivoting



Angled polymer bracket one end pivoting | Recommended for unsupported applications

Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A in. (mm)	B in. (mm)	Bi in. (mm)
025. ▶	1180.025.14PZB	1180.025.14PZ	.47 (12)	.59 (15)	.98 (25)
038. ▶	1180.038.14PZB	1180.038.14PZ	.98 (25)	.79 (20)	1.50 (38)
048. ▶	1180.048.14PZB	1180.048.14PZ	1.38 (35)	1.18 (30)	1.89 (48)
063. ▶	1180.063.14PZB	1180.063.14PZ	1.97 (50)	1.57 (40)	2.48 (63)
080. ▶	1180.080.14PZB	1180.080.14PZ	2.64 (67)	2.36 (60)	3.15 (80)
100. ▶	1180.100.14PZB	1180.100.14PZ	3.43 (87)	3.15 (80)	3.94 (100)

Strain relief is possible on the moving end and/or the fixed end.

The following parts are required for attachment of the mounting brackets:

- Socket head cap bolt M5 DIN 912-8.8. Length depends on the thickness of the attachment base
- Hexagon nut M5 DIN 7991
- Washer 5.3 DIN 125-ST

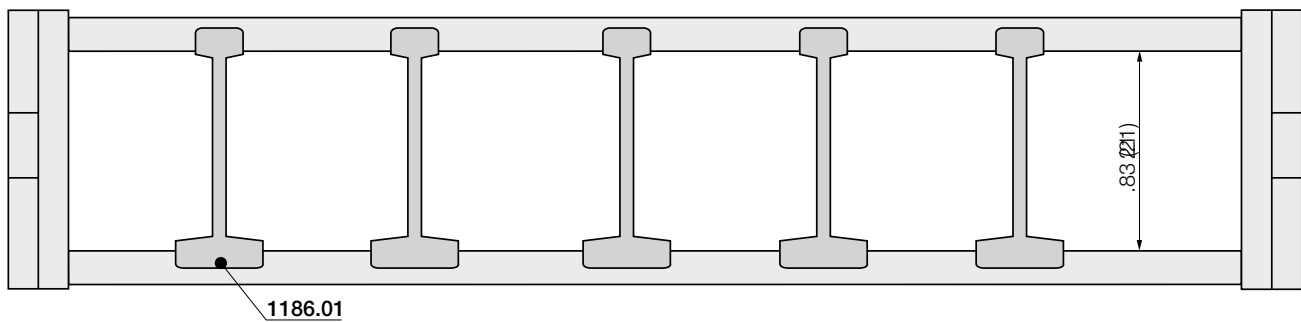


1180.048.14PZB.A1 Order example



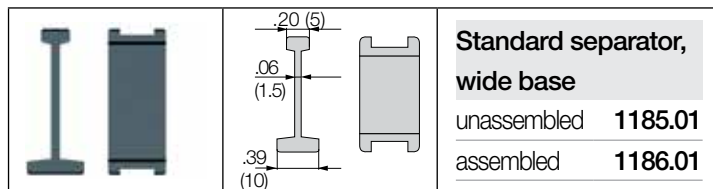
Strain relief: clamps, tiewrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1418

Interior separation



No lateral gap to side links necessary.

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

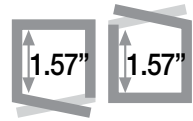


Standard separator

For simple vertical subdivision. Offers security due to its wide base design, also when used with large cables or hoses.



Typical use of igus® E2 R100 e-tubes - standing application in a machine tool



e-tubes | Series R157 | Lids openable along the inner radius, from both sides
 e-tubes | Series R158 | Lids openable along the outer radius, from both sides

Part No. e-tubes openable along the inner radius	Part No. e-tubes openable along the outer radius	<i>Bi</i> in. (mm)	<i>Ba</i> in. (mm)	R157 lbs/ft. (kg/m)	R158 lbs/ft. (kg/m)
157.040. <i>R</i> .0+	158.040. <i>R</i> .0+	1.57 (40)	2.20 (56)	≈ 0.81 (1.21)	≈ 0.81 (1.21)
157.050. <i>R</i> .0+	158.050. <i>R</i> .0+	1.97 (50)	2.60 (66)	≈ 0.87 (1.30)	≈ 0.87 (1.30)
157.075. <i>R</i> .0+	158.075. <i>R</i> .0+	2.95 (75)	3.58 (91)	≈ 1.01 (1.50)	≈ 1.01 (1.50)
157.088. <i>R</i> .0+	158.088. <i>R</i> .0+	3.46 (88)	4.09 (104)	≈ 1.06 (1.57)	≈ 1.06 (1.57)
157.090. <i>R</i> .0+	158.090. <i>R</i> .0+	3.46 (88)	4.09 (104)	≈ 1.10 (1.63)	≈ 1.10 (1.63)
157.100. <i>R</i> .0+	158.100. <i>R</i> .0+	3.94 (100)	4.57 (116)	≈ 1.15 (1.71)	≈ 1.15 (1.71)
157.125. <i>R</i> .0+	158.125. <i>R</i> .0+	4.92 (125)	5.55 (141)	≈ 1.29 (1.92)	≈ 1.29 (1.92)
157.135. <i>R</i> .0+	158.135. <i>R</i> .0+	5.31 (135)	5.91 (150)	≈ 1.41 (2.10)	≈ 1.41 (2.10)
157.150. <i>R</i> .0+	158.150. <i>R</i> .0+	5.91 (150)	6.54 (166)	≈ 1.43 (2.13)	≈ 1.43 (2.13)
157.175. <i>R</i> .0+	158.175. <i>R</i> .0+	6.89 (175)	7.52 (191)	≈ 1.57 (2.34)	≈ 1.57 (2.34)
157.200. <i>R</i> .0+	158.200. <i>R</i> .0+	7.87 (200)	8.50 (216)	≈ 1.71 (2.55)	≈ 1.71 (2.55)

1) Lid removable only, not hinged 2) Same dimensions as 157.088 - less recent design, no hinged option

*Width available upon request. Delivery time upon request.

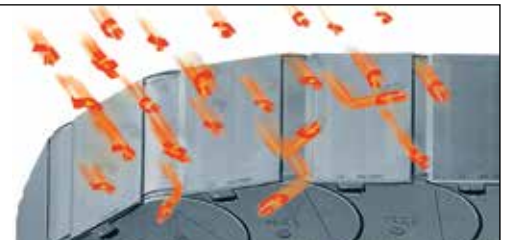
Complete Part No. with required radius (*R*). Example: 158.100.100.0+

Available bend radii

R in. (mm) | 3.94 (100) | 4.92 (125) | 5.91 (150) | 6.89 (175) | 7.87 (200) | 9.84 (250) |

Hot chips up to +1562°F for e-tubes

- e-tubes can repel chips up to +1562°F. Special production option with the igus® material igumid HT
 - No hot chips melting or embedding into the chain
- More information ► www.igus.com/HT

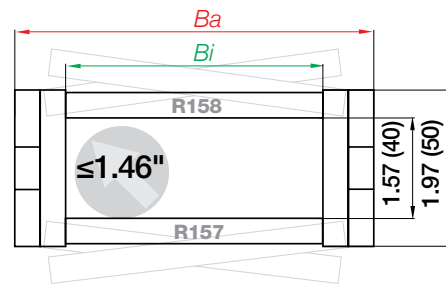
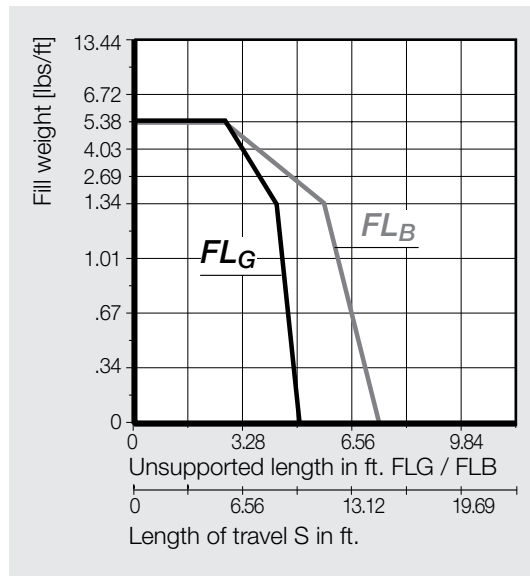


E2 R100 e-tubes | R157· R158 | Installation dimensions

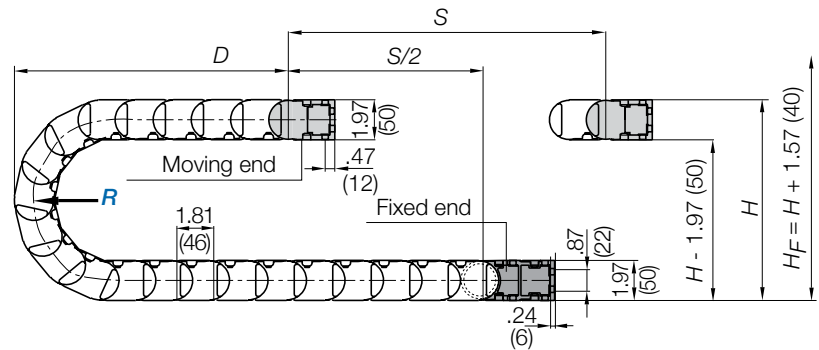
Unsupported applications | Short travels



R157
R158

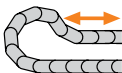


Inner height in. (mm)	1.57 (40)
Pitch per link in. (mm)	1.81 (46)
Links/ft (m)	6.63 (22)
corresponds to (mm)	1,012
e-chain* length	$L_K = \frac{S}{2} + K$

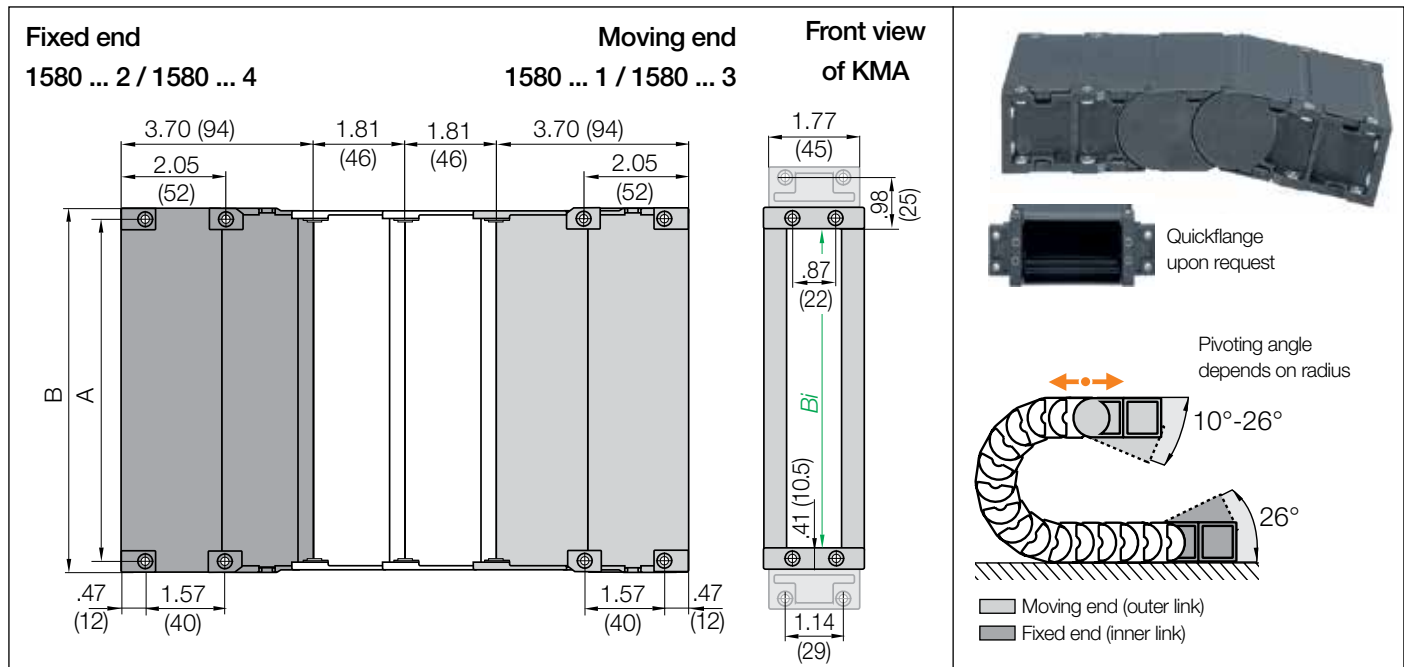


R	3.94 (100)	4.92 (125)	5.91 (150)	6.89 (175)	7.87 (200)	9.84 (250)
H	9.84 (250)	11.81 (300)	13.78 (350)	15.75 (400)	17.72 (450)	21.65 (550)
D	7.64 (194)	8.62 (219)	9.61 (244)	10.59 (269)	11.57 (294)	13.54 (344)
K	16.14 (410)	19.09 (485)	22.24 (565)	25.39 (645)	28.54 (725)	34.65 (880)

The required clearance height: $H_F = H + 1.57$ in. (40 mm) with .67 lbs/ft (1.0 kg/m) fill weight.



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



KMA, long pivoting
KMA, long locking

Recommended for unsupported applications

Recommended for vertical hanging and standing applications

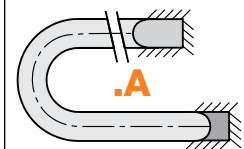
Width index	Part no. full set KMA pivoting	Part No. full set KMA locking	A in. (mm)	B in. (mm)	Bi in. (mm)
040. ▶	15801.040.12	15801.040.34	1.97 (50)	2.40 (61)	1.57 (40)
050. ▶	15800.050.12	15800.050.34	2.40 (60)	2.80 (71)	1.97 (50)
075. ▶	15800.075.12	15800.075.34	3.35 (85)	3.78 (96)	2.95 (75)
088. ▶	15800.088.12	15800.088.34	3.86 (98)	4.29 (109)	3.46 (88)
090. ▶	15801.090.12	15801.090.34	3.86 (98)	4.29 (109)	3.46 (88)
100. ▶	15800.100.12	15800.100.34	4.33 (110)	4.76 (121)	3.94 (100)
125. ▶	15800.125.12	15800.125.34	5.31 (135)	5.75 (146)	4.92 (125)
135. ▶	15800.135.12	15800.135.34	5.71 (145)	6.14 (156)	5.31 (135)
150. ▶	15800.150.12	15800.150.34	6.30 (160)	6.73 (171)	5.91 (150)
175. ▶	15800.175.12	15800.175.34	7.28 (185)	7.72 (196)	6.89 (175)
200. ▶	15800.200.12	15800.200.34	8.27 (210)	8.70 (221)	7.87 (200)

(KMA = polymer metal mounting bracket)

The following parts are required for attachment of the mounting brackets:

● Socket head cap bolt M5 DIN 912-8.8 Length depends on the thickness of the attachment base ● Washer 5.3 DIN 125-ST ● Hexagon nut M5 DIN 934-8

To receive full sets with pre-fitted quickflange please add index QF ▶ For example: Part No. 15800.100.12.QF. Unassembled quickflange: Part No. 15800.QF



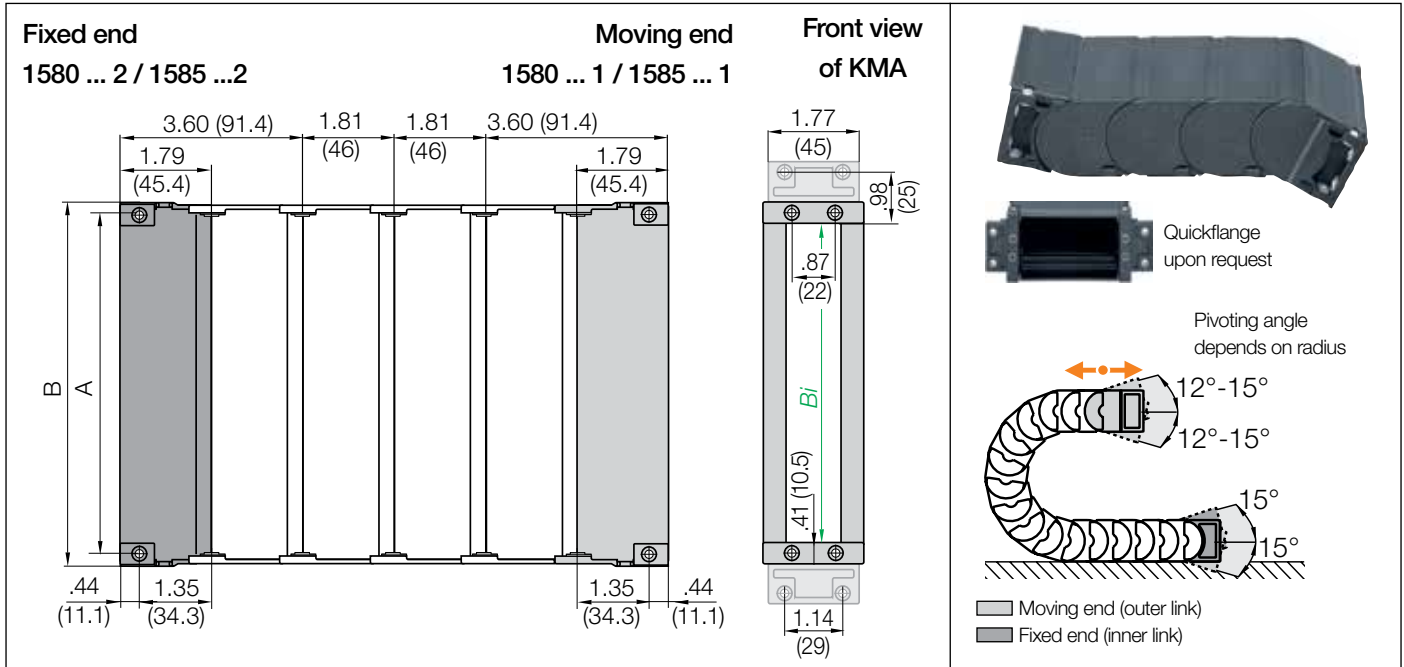
The bracket orientations are set automatically when using an igus® KMA mounting bracket with attachment from any side. To receive a KMA mounting bracket **pre-fitted** please add index **.A**.

15800.100.12.A Order example



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

KMA, short | Attachment from any side | Pivoting | Locking



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

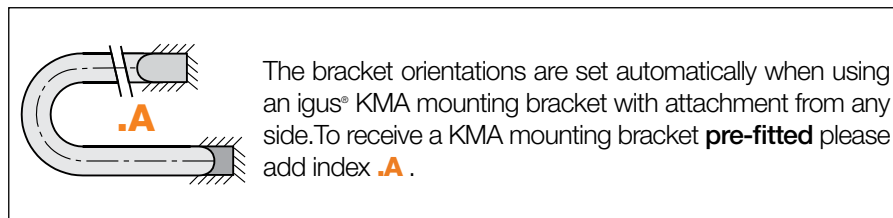
Width index	Part no. full set KMA pivoting	Part No. full set KMA locking	A in. (mm)	B in. (mm)	Bi in. (mm)
040. ▶	1580.040.12	1585.040.12	1.97 (50)	2.40 (61)	1.57 (40)
050. ▶	1580.050.12	1585.050.12	2.40 (60)	2.80 (71)	1.97 (50)
075. ▶	1580.075.12	1585.075.12	3.35 (85)	3.78 (96)	2.95 (75)
088. ▶	1580.088.12	1585.088.12	3.86 (98)	4.29 (109)	3.46 (88)
090. ▶	1580.090.12	1585.090.12	3.86 (98)	4.29 (109)	3.46 (88)
100. ▶	1580.100.12	1585.100.12	4.33 (110)	4.76 (121)	3.94 (100)
125. ▶	1580.125.12	1585.125.12	5.31 (135)	5.75 (146)	4.92 (125)
135. ▶	1580.135.12	1585.135.12	5.71 (145)	6.14 (156)	5.31 (135)
150. ▶	1580.150.12	1585.150.12	6.30 (160)	6.73 (171)	5.91 (150)
175. ▶	1580.175.12	1585.175.12	7.28 (185)	7.72 (196)	6.89 (175)
200. ▶	1580.200.12	1585.200.12	8.27 (210)	8.70 (221)	7.87 (200)

(KMA = polymer metal mounting bracket)

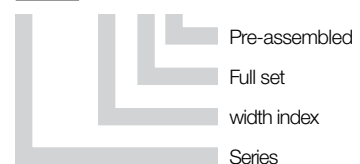
The following parts are required for attachment of the mounting brackets:

● Socket head cap bolt M5 DIN 912-8.8 Length depends on the thickness of the attachment base ● Washer 5.3 DIN 125-ST ● Hexagon nut M5 DIN 934-8

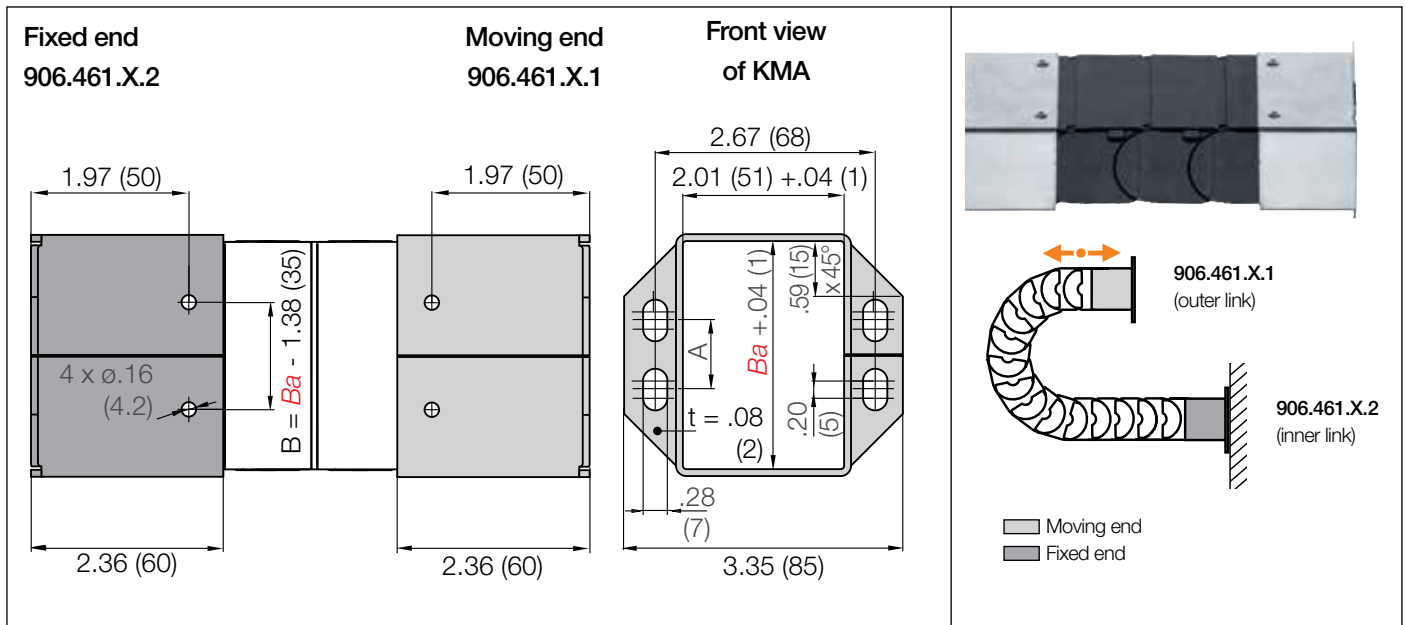
To receive full sets with pre-fitted quickflange please add index QF ▶ For example: Part No. 1580.100.12.QF. Unassembled quickflange: Part No. 15800.QF



1580.100.12.A Order example



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

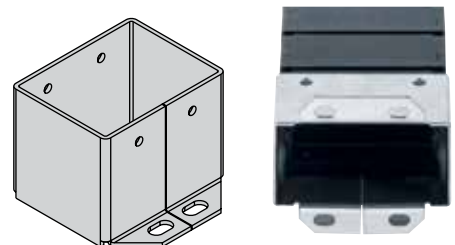
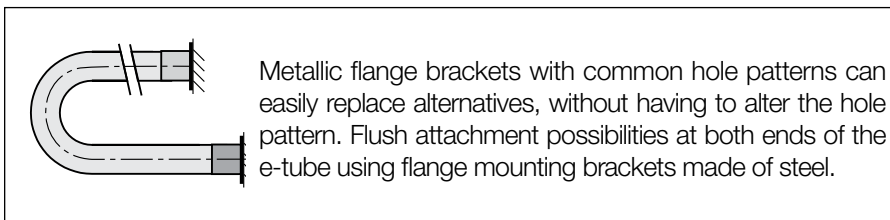


Steel flange, locking | Recommended for unsupported applications

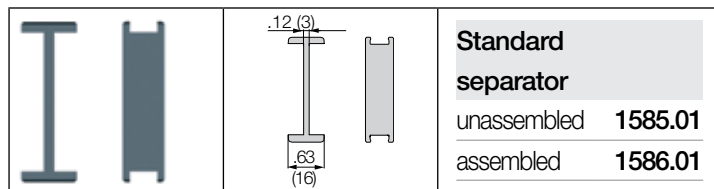
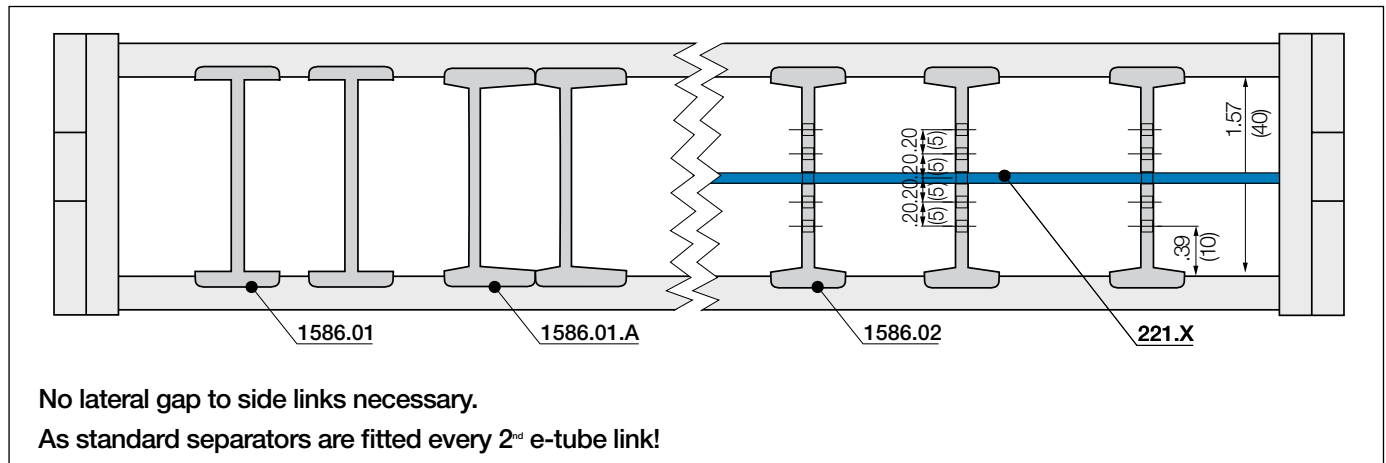
Width index	Hole Pattern	Part No. full set Steel flange	<i>Bi</i> in. (mm)	<i>Ba</i> in. (mm)	A in. (mm)	B in. (mm)
050. ▶	58.05	906.461.1.12*	1.97 (50)	2.60 (66)	.79 (20)	1.22 (31)
075. ▶	58.1	906.461.2.12*	2.95 (75)	3.58 (91)	1.18 (30)	2.24 (57)

* Available upon request delivery time upon request.

Mounting only with hexagon socket DIN 912 M6 and washer DIN 125, 6.3mm



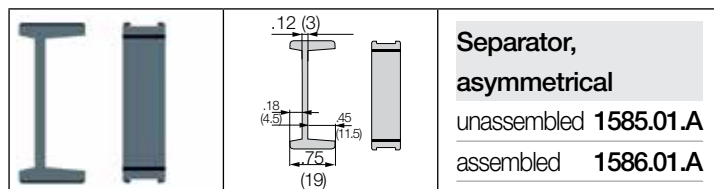
Strain relief: clamps, tiewrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ► From page 1418



Option 1 | Separators

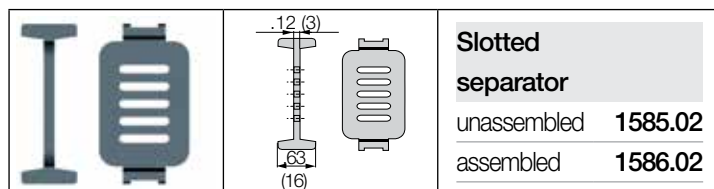
Standard separator

For simple vertical subdivision. Offers security due to its wide base design, also when used with large cables or hoses.



Separator, asymmetrical

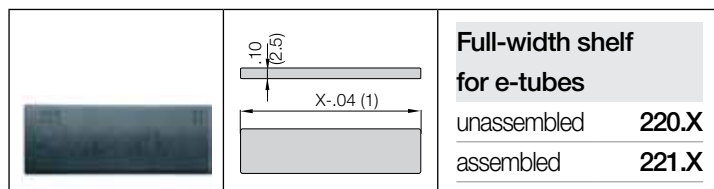
For side-mounted applications. Asymmetrical separator, no additional spacers necessary.



Option 2 | Full-width shelves

Slotted separator

Vertical separation in e-tubes. The slot allows basic vertical/horizontal shelving arrangements.



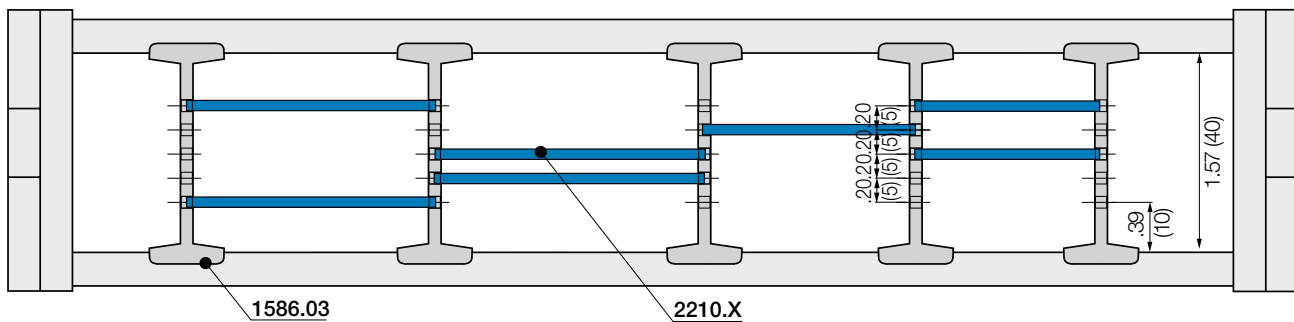
Full-width shelf

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

Full-width shelves

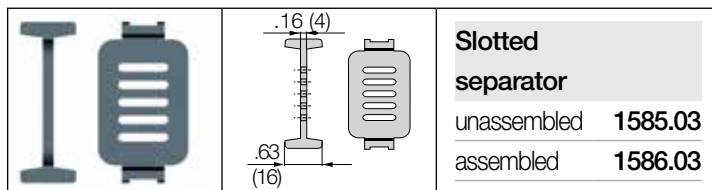
Width = X [mm]

X in. (mm)	unassembled	assembled	X in. (mm)	unassembled	assembled	X in. (mm)	unassembled	assembled
1.57 (040)	220.40	221.40	3.94 (100)	220.100	221.100	6.89 (175)	220.175	221.175
1.97 (050)	220.50	221.50	4.92 (125)	220.125	221.125	7.87 (200)	220.200	221.200
2.95 (075)	220.75	221.75	5.31 (135)	220.135	221.135			
3.46 (088)	220.88	221.88	5.91 (150)	220.150	221.150			



No lateral gap to side links necessary.

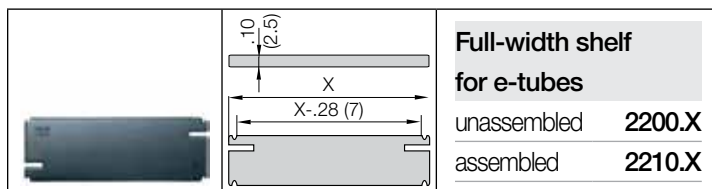
As standard separators are fitted every 2nd e-tube link!



Option 3 | Shelves

Slotted separator

Allows modular shelving arrangements.



Shelf

For applications involving many cables with different diameters, shelves can be fitted at different heights.

Full-width shelves

Width = X [mm]



X in. (mm)	unassembled	assembled
0.71 (018)	2200.18	2210.18
0.91 (023)	2200.23	2210.23
1.10 (028)	2200.28	2210.28
1.30 (033)	2200.33	2210.33
1.50 (038)	2200.38	2210.38

X in. (mm)	unassembled	assembled
1.69 (043)	2200.43	2210.43
1.89 (048)	2200.48	2210.48
2.28 (058)	2200.58	2210.58
2.68 (068)	2200.68	2210.68
2.87 (073)	2200.73	2210.73

X in. (mm)	unassembled	assembled
3.46 (088)	2200.88	2210.88
3.90 (099)	2200.99	2210.99
4.88 (124)	2200.124	2210.124
5.87 (149)	2200.149	2210.149

Separator with integrated strain relief teeth

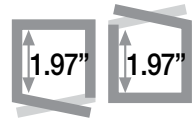
- Can be integrated into the mounting bracket or placed at any point in the e-tube
- Combines strain relief and interior separation, for restricted space conditions
- Strain relief separator is easy to assemble without any screws

Part No. 1585.01.Z - more information ► From page 1456





White igus® e-tube series E2 R100 in a medical application



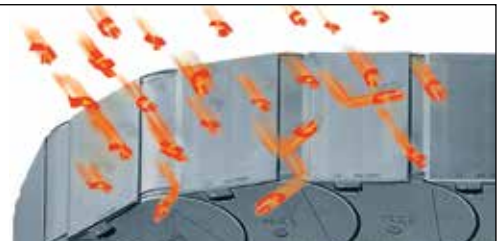
e-tubes | Series R167 | Lids openable along the inner radius, from both sides

e-tubes | Series R168 | Lids openable along the outer radius, from both sides

Part No. e-tubes openable along the inner radius	Part No. e-tubes openable along the outer radius	<i>Bi</i> in. (mm)	<i>Ba</i> in. (mm)	R167 lbs/ft. (kg/m)	R168 lbs/ft. (kg/m)
167.050. <i>R</i> .0.+	168.050. <i>R</i> .0.+	1.97 (50)	2.68 (68)	≈ 1.06 (1.58)	≈ 1.06 (1.58)
167.075. <i>R</i> .0.+	168.075. <i>R</i> .0.+	2.95 (75)	3.66 (93)	≈ 1.24 (1.84)	≈ 1.24 (1.84)
167.100. <i>R</i> .0.+	168.100. <i>R</i> .0.+	3.94 (100)	4.65 (118)	≈ 1.40 (2.09)	≈ 1.40 (2.09)
167.115. <i>R</i> .0.+	168.115. <i>R</i> .0.+	4.53 (115)	5.24 (133)	≈ 1.51 (2.24)	≈ 1.51 (2.24)
167.125. <i>R</i> .0.+	—	4.92 (125)	5.63 (143)	≈ 1.58 (2.35)	≈ 1.58 (2.35)
167.150. <i>R</i> .0.+	168.150. <i>R</i> .0.+	5.91 (150)	6.61 (168)	≈ 1.75 (2.60)	≈ 1.75 (2.60)
167.175. <i>R</i> .0.+	168.175. <i>R</i> .0.+	6.89 (175)	7.60 (193)	≈ 1.92 (2.86)	≈ 1.92 (2.86)
167.200. <i>R</i> .0.+	168.200. <i>R</i> .0.+	7.87 (200)	8.58 (218)	≈ 2.09 (3.11)	≈ 2.09 (3.11)
167.225. <i>R</i> .0.+	—	8.86 (225)	9.57 (243)	≈ 2.26 (3.37)	≈ 2.26 (3.37)
167.250. <i>R</i> .0.+	—	9.84 (250)	10.55 (268)	≈ 2.43 (3.62)	≈ 2.43 (3.62)

Complete Part No. with required radius (*R*). Example: 158.100.100.0+**Available bend radii***R* in. (mm) | 3.94 (100) | 4.92 (125) | 5.91 (150) | 6.89 (175) | 7.87 (200) | 8.85 (225) | 9.84 (250) | 11.81 (300) |**Hot chips up to +1562°F for e-tubes**

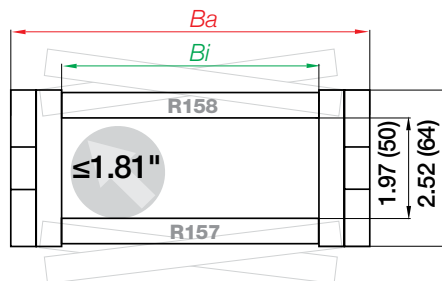
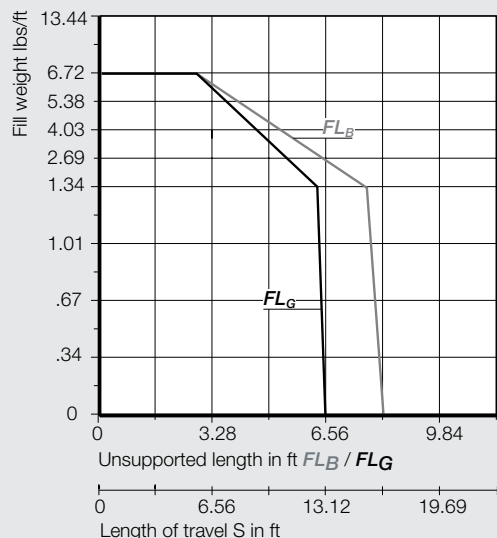
- e-tubes can repel chips up to +1562°F. Special production option with the igus® material igumid HT
- No hot chips melting or embedding into the chain

More information ► www.igus.com/HT**CFU strain relief with innovative honeycomb design**

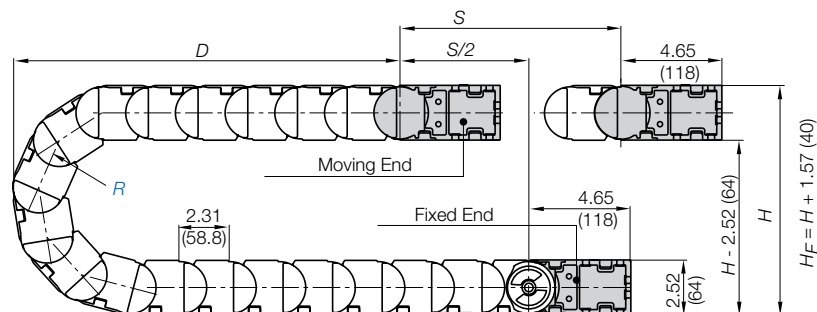
- Fast filling, openable from both sides for assembly in seconds
- Flexible honeycomb design for increased holding force
- Tribologically optimised honeycomb design for the best hold
- Universal use, compact, space-saving design

More information ► Page 1452



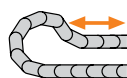


Inner height in. (mm)	1.97 (50)
Pitch per link in. (mm)	2.31 (58.8)
Links/ft (m)	5.19 (17)
corresponds to (mm)	999.6
e-chain* length	$L_K = \frac{S}{2} + K$

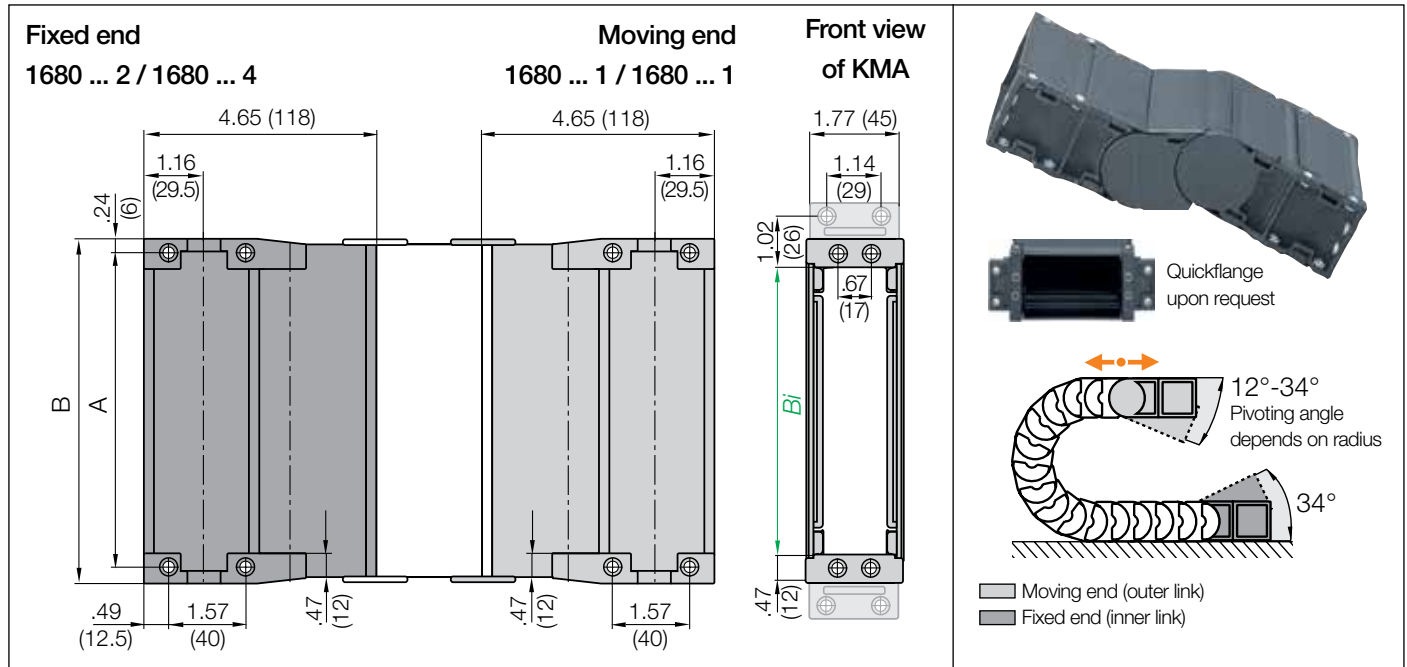


R	3.94 (100)	4.92 (125)	5.91 (150)	6.89 (175)	7.87 (200)	8.86 (225)	9.84 (250)	11.81 (300)
H	10.39 (264)	12.36 (314)	14.33 (364)	16.30 (414)	18.27 (464)	20.24 (514)	22.20 (564)	26.14 (664)
D	8.66 (220)	9.65 (245)	10.63 (270)	11.61 (295)	12.60 (320)	13.58 (345)	14.57 (370)	16.54 (420)
K	17.12 (435)	20.28 (515)	23.23 (590)	26.38 (670)	29.53 (750)	32.48 (825)	35.63 (905)	41.93 (1065)

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®.



KMA pivoting KMA locking

Recommended for unsupported applications

Recommended for vertical hanging and standing applications

Width index	Part no. full set KMA pivoting	Part No. full set KMA fixed end locking*	A in. (mm)	B in. (mm)	Bi in. (mm)
050. ▶	1680.050.12	1680.050.14	2.44 (62)	2.91 (74)	1.97 (50)
075. ▶	1680.075.12	1680.075.14	3.43 (87)	3.90 (99)	2.95 (75)
100. ▶	1680.100.12	1680.100.14	4.41 (112)	4.88 (124)	3.94 (100)
115. ▶	1680.115.12	1680.115.14	5.00 (127)	5.47 (139)	4.53 (115)
125. ▶	1680.125.12	1680.125.14	5.39 (137)	5.87 (149)	4.92 (125)
150. ▶	1680.150.12	1680.150.14	6.38 (162)	6.85 (174)	5.91 (150)
175. ▶	1680.175.12	1680.175.14	7.36 (187)	7.83 (199)	6.89 (175)
200. ▶	1680.200.12	1680.200.14	8.35 (212)	8.82 (224)	7.87 (200)
225. ▶	1680.225.12	1680.225.14	9.33 (237)	9.80 (249)	8.86 (225)
250. ▶	1680.250.12	1680.250.14	10.31 (262)	10.79 (274)	9.84 (250)

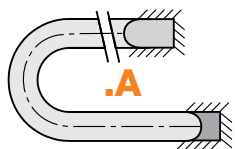
(KMA = polymer metal mounting bracket)

*only the fixed end is locking, the moving end is pivoting

The following parts are required for attachment of the mounting brackets:

● Socket head cap bolt M5 DIN 912-8.8 Length depends on the thickness of the attachment base ● Washer 5.3 DIN 125-ST ● Hexagon nut M5 DIN 934-8

To receive full sets with pre-fitted quickflange please add index QF ▶ For example: Part No. 1680.100.12.QF. Unassembled quickflange: Part No. 16800.QF



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**.

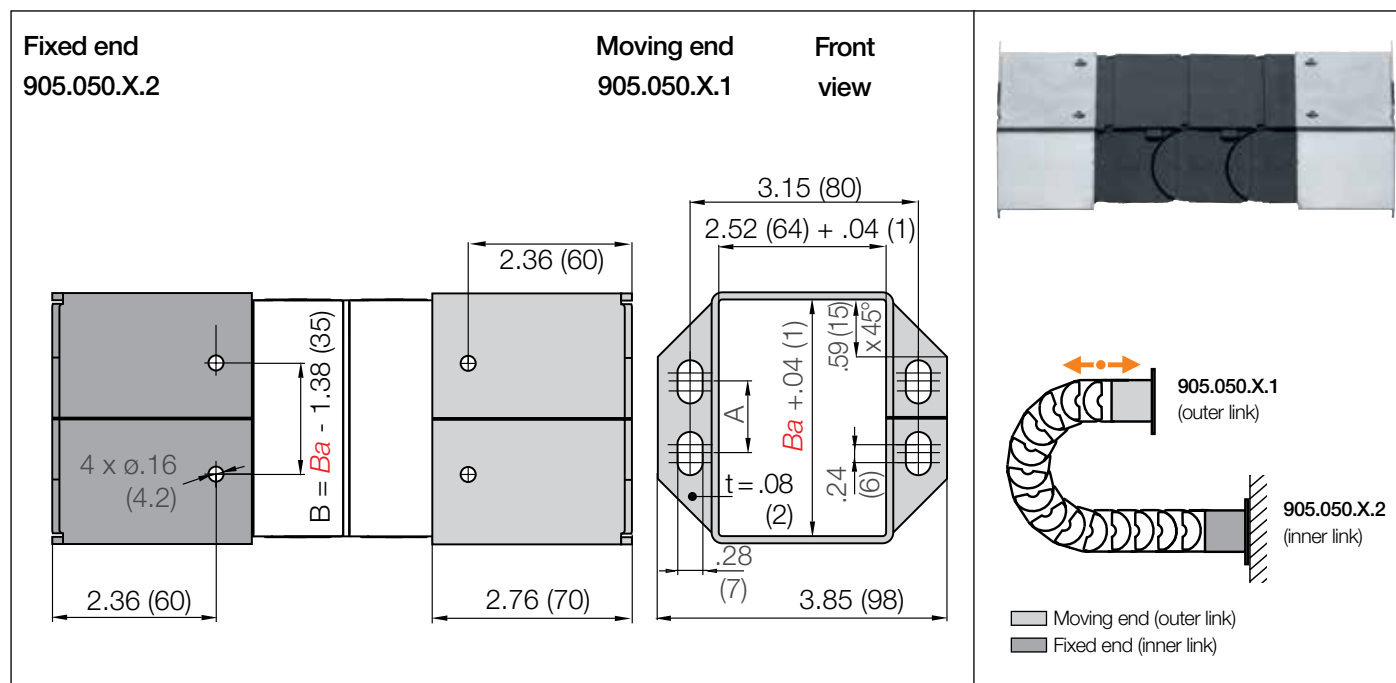
1680.100.12.A

Order example



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

Mounting brackets, flange steel | Locking

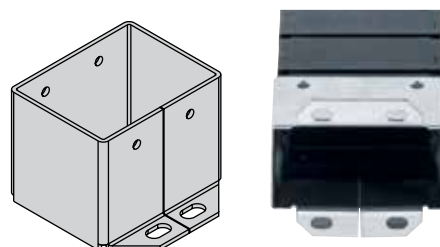
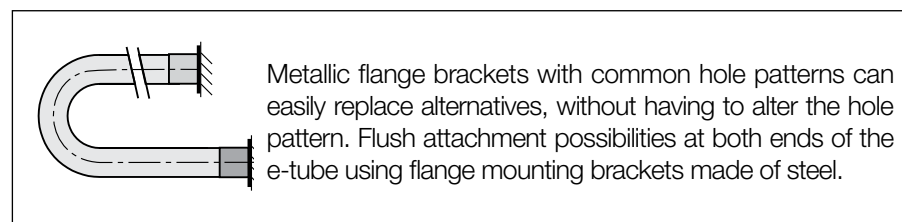


Steel flange, locking | Recommended for unsupported applications

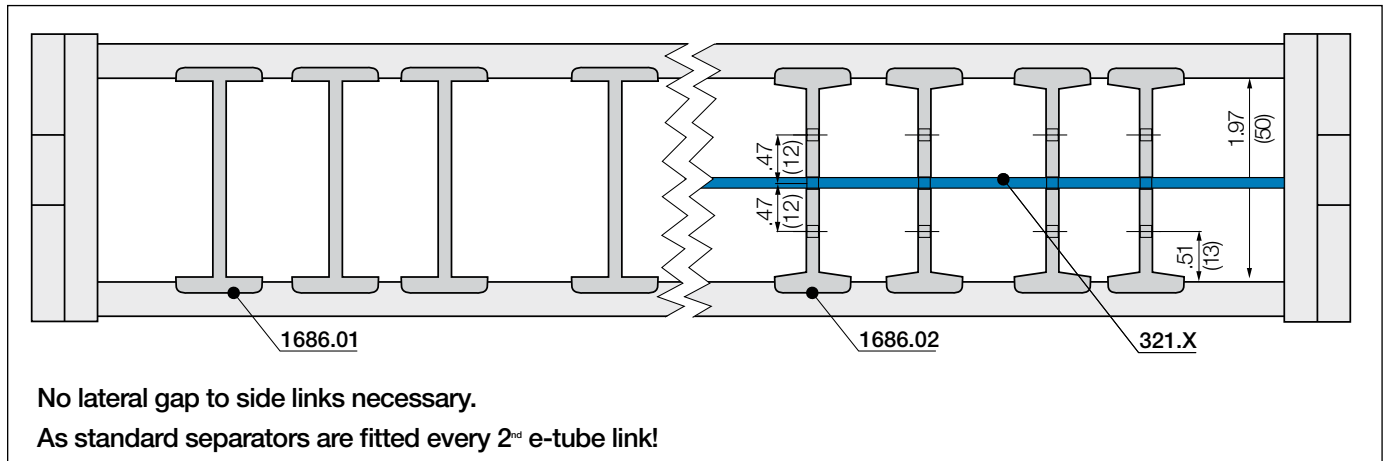
Width index	Hole Pattern	Part No. full set Steel flange	<i>Bi</i>	<i>Ba</i>	A	B
			in. (mm)	in. (mm)	in. (mm)	in. (mm)
075. ▶	68.01	905.050.1.12*	2.95 (75)	3.66 (93)	1.18 (30)	2.28 (58)
115.. ▶	68.02	905.050.2.12*	4.53 (115)	5.24 (133)	1.97 (50)	3.86 (98)
175. ▶	68.03	905.050.3.12*	6.89 (175)	7.59 (193)	3.94 (100)	6.22 (158)

* Available upon request delivery time upon request.

Mounting only with hexagon socket DIN 912 M6 and washer DIN 125, 6.3mm



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



		Standard separator	
		unassembled	1685.01
		assembled	1686.01

Option 1 | Separators

Standard separator

For simple vertical subdivision. Offers security due to its wide base design, also when used with large cables or hoses.

		Slotted separator	
		unassembled	1685.02
		assembled	1686.02

Option 2 | Full-width shelves

Slotted separator

Vertical separation in e-tubes. The slot allows basic vertical/horizontal shelving arrangements.

		Full-width shelf for e-tubes	
		unassembled	320.X
		assembled	321.X

Full-width shelf

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

Full-width shelves

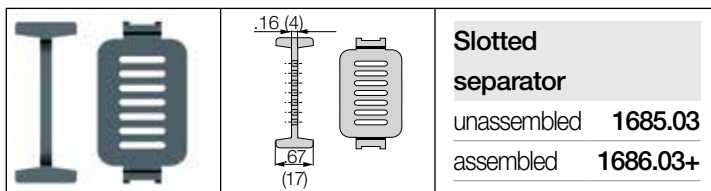
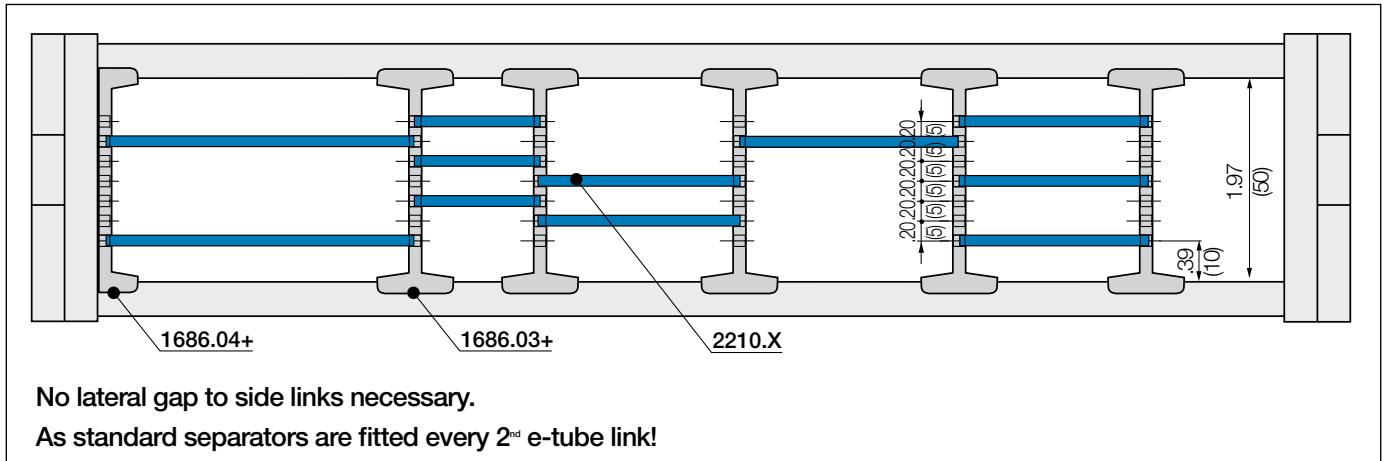
Width = X [mm]

X in. (mm)	unassembled	assembled
1.97 (050)	320.050	321.050
2.95 (075)	320.075	321.075
4.53 (115)	320.115	321.115

X in. (mm)	unassembled	assembled
4.92 (125)	320.125	321.125
5.91 (150)	320.150	321.150
6.89 (175)	320.175	321.175

X in. (mm)	unassembled	assembled
7.87 (200)	320.200	321.200
8.86 (225)	320.225	321.225
9.84 (250)	320.250	321.250

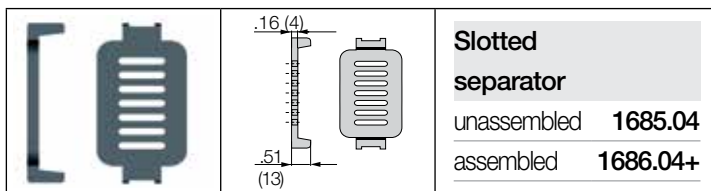
Interior separation | Option 3



Option 3 | Shelves

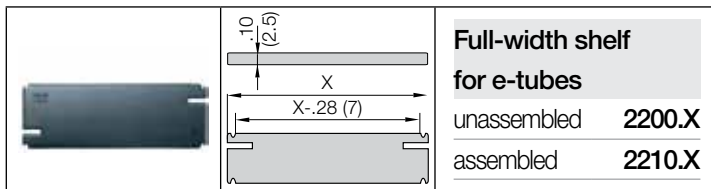
Slotted separator

Allows modular shelving arrangements.



Slotted side plate

Allows modular shelving right up to the side links. No clearance required!



Shelf

For applications involving many cables with different diameters, shelves can be fitted at different heights.

Full-width shelves

Width = X [mm]

X in. (mm)	unassembled	assembled
0.71 (018)	2200.18	2210.18
0.91 (023)	2200.23	2210.23
1.10 (028)	2200.28	2210.28
1.30 (033)	2200.33	2210.33
1.50 (038)	2200.38	2210.38

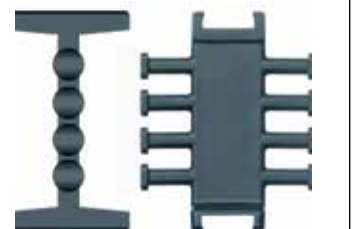
X in. (mm)	unassembled	assembled
1.69 (043)	2200.43	2210.43
1.89 (048)	2200.48	2210.48
2.28 (058)	2200.58	2210.58
2.68 (068)	2200.68	2210.68
2.87 (073)	2200.73	2210.73

X in. (mm)	unassembled	assembled
3.46 (088)	2200.88	2210.88
3.90 (099)	2200.99	2210.99
4.88 (124)	2200.124	2210.124
5.87 (149)	2200.149	2210.149

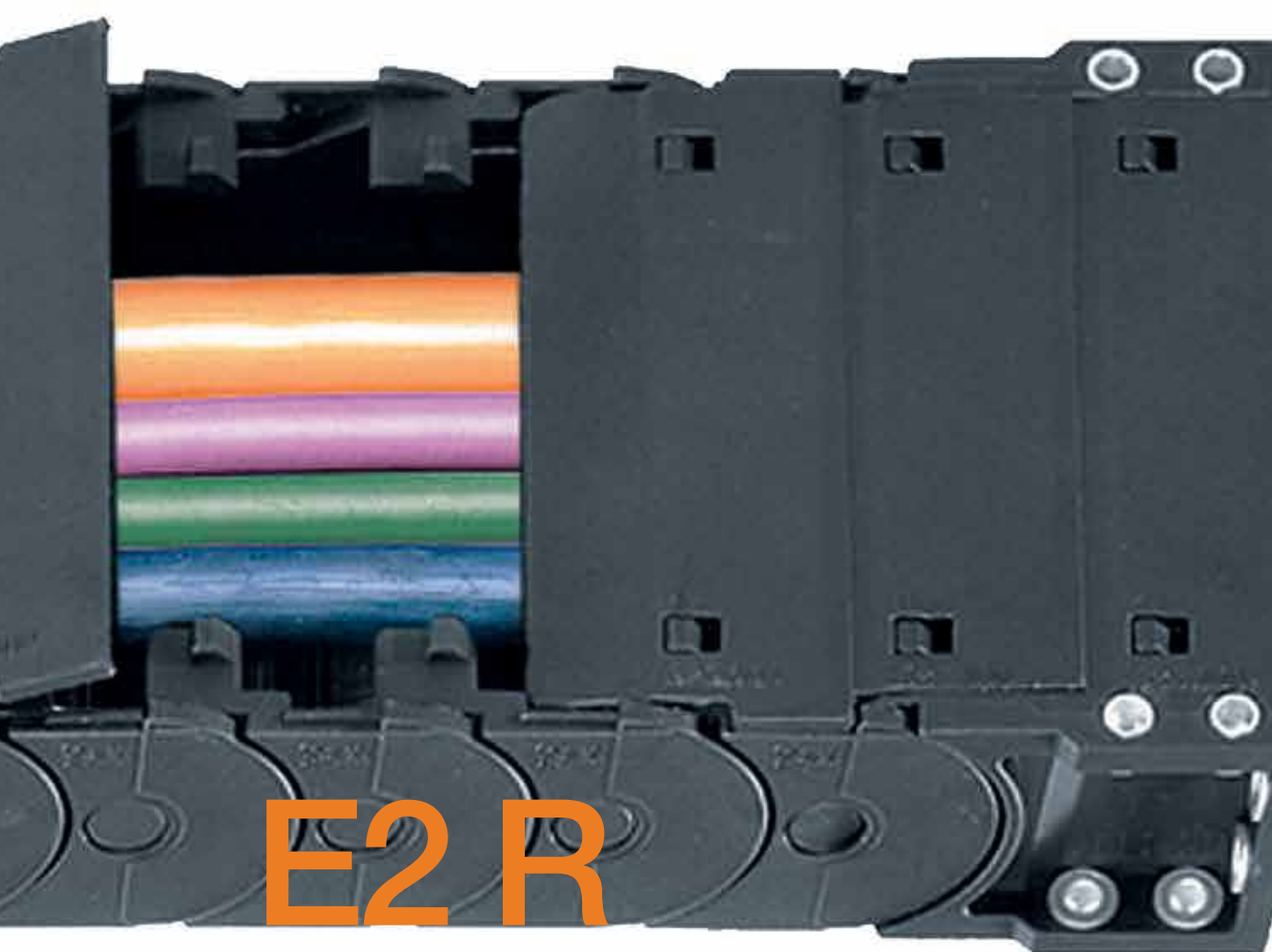
Separator with integrated strain relief teeth

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

Part No. 1685.01.Z - more information ► From page 1456







e-tubes for chip protection at higher speeds, smooth running



Advantages of the E2 R series:

- Strong e-tubes with small pitch for low noise, smooth running
- High level of protection against chips (including hot chips)
- Lids removable along the outer radius
- Robust and sealed
- Space-efficient with optimized ratio of inner to outer dimensions



When to use another e-tube:

- When a particularly cost-effective solution is required
 - ▶ R2.1 e-tubes, page 450
- When no chip protection is required
 - ▶ E2/000 e-chains®, page 382
- For extremely chip-resistant e-tubes
 - ▶ RX system, page 524
- When even higher strength is required
 - ▶ R4.1L e-tubes, page 546



Chip protection at higher speeds and smooth running - E2 R e-tubes

Attachment from
any side with KMA
mounting brackets

Chip protection:
smooth, chip-
resistant exterior

Fast assembly:
lids removable along
the outer radius

High strength:
large pin/bore and
crossbar with high
locking force

Smooth running:
small pitch for low-
noise, smooth running

Strong:
double stop-dog
system for long
unsupported lengths

E2 R e-tubes - small pitch for higher speeds and smooth motion. igus® e-tubes work in hot chip areas, in areas of dirt and dust generated by woodworking, steel mills, pulp and paper, textile, agriculture, coal plant and many other hostile environments.

- High level of protection against chips (including hot chips)
- Robust and sealed
- Space-efficient with optimized ratio of inner to outer dimensions
- Modular interior separation
- Universal KMA mounting brackets with attachment options from any side

Typical industries and applications

- Machine tools
- Wood processing machines
- General mechanical engineering
- In all areas with dirt and chips



e-tubes made from igumid HT material for hot chips of up to +1562 °F available upon request



Electrically conductive ESD e-tubes
upon request



UL94-V0 classification
upon request



iF product design award
1987 igus® series R68

E2 R e-tubes | Selection table

Series	Inner height		Inner width		Outer width		Outer height		Bending radius		Unsupported length
	hi		Bi		Ba		ha		R		
	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	≤ ft. (m)



E2 R100 e-tubes -
lids openable along the inner radius, from both sides

R48	.98	(25)	.98-5.12	(25-130)	1.42-5.55	(36-141)	1.42	(36)	2.36-9.84	(060-250)	4.92 (1.50)
R58	1.38	(35)	1.97-7.87	(50-200)	2.60-8.50	(66-216)	1.97	(50)	2.95-9.84	(075-250)	7.56 (2.30)
R68	1.77	(45)	1.97-9.84	(50-250)	2.68-10.55	(68-268)	2.52	(64)	3.94-11.81	(100-300)	8.20 (2.50)



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

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



E2 e-tubes in chip area of a machine tool. With igumid HT material resistant to chips up to +1562°F

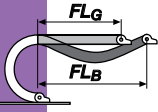
E2 R e-tubes | Technical data | Overview

Technical data



Speed gliding¹⁾ / acceleration gliding¹⁾

≤ 9.84 ft. (3 m/s) / ≤ 32.8 ft/s² (10 m/s²)



Speed FL_G / acceleration FL_G

≤ 32.8 ft/s (10 m/s) / ≤ 328 ft/s² (100 m/s²)

Speed FL_B / acceleration FL_B

≤ 9.84 ft. (3 m/s) / ≤ 19.69 ft/s² (6 m/s²)



Material - permitted temperature °F, igumid G

-40°F (-40°C) / +248°F (+120°C)



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	Zig-zag	Unsupported length lower run
R48	≤ 9.84 ft. (3.0m)	≤ 164.05 ft. (50m)	≤ 164.05 ft. (50m)	≤ 13.12 ft. (4.0m)	≤ 4.92 ft. (1.5m)	upon request	upon request
R58	≤ 14.76 ft. (4.50m)	≤ 246.08 ft. (75m)	≤ 164.05 ft. (50m)	≤ 13.12 ft. (4.0m)	≤ 6.56 ft. (2.0m)	upon request	upon request
R68	≤ 16.41 ft. (5.05m)	≤ 328.10 ft. (100m)	≤ 196.86 ft. (60m)	≤ 13.12 ft. (4.0m)	≤ 6.56 ft. (2.0m)	upon request	upon request

1) For gliding applications, please consult igus®.

E2 R e-tubes | Options and order keys

Options with order keys | Examples based on series R58

	<i>Standard</i>	<i>NC version - (No Camber) without pretension</i>	<i>e-tube - no burning- in of hot chips up to 1562°F</i>	<i>ESD - electrically conductive material</i>
	Part No. Standard	Part No. NC version	Part No. igumid HT	Part No. igumid ESD ³⁾
				
	58.100.R.0	58.100.R.0.NC	58.100.R.0.HT	58.100.R.0.ESD
	Ready to ship in 48-72hrs.*	Ready to ship in 5 business days*	Ready to ship in 6 weeks*	Ready to ship in 12 business days*

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

Order example | Order key and color examples | Examples based on series R58

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

e-tube 3.28 ft. (1m)	Please indicate e-tube length or number of links: 3.28 ft. (1m) or 28 links	58.100.100.0
+ Mounting brackets	KMA - 1 set	580.100.12
Interior separation	with 2 separators assembled every 2 nd link	2 x 582
Order text:	3.28 ft (1m) 58.100.100.0 + 580.100.12 + 2 x 582	

Order key

Lids removable along the outer radius

58.100.100.0

Series / Type	
Width index (depends on <i>B</i>)	
Bend radius <i>R</i>	
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.



e-tubes | Series R48 | Lids removable along the outer radius

Part No. e-tubes	<i>Bi</i>	<i>Ba</i>	R48
	in. (mm)	in. (mm)	lbs/ft. (kg/m)
48.025. <i>R</i> .0.	.98 (25)	1.42 (36)	≈ 0.43 (0.64)
48.050. <i>R</i> .0.	1.97 (50)	2.40 (61)	≈ 0.56 (0.84)
48.075. <i>R</i> .0.	2.95 (75)	3.39 (86)	≈ 0.69 (1.03)
48.100. <i>R</i> .0.	3.94 (100)	4.37 (111)	≈ 0.83 (1.23)
48.130. <i>R</i> .0.	5.12 (130)	5.55 (141)	≈ 0.98 (1.46)

Complete Part No. with required radius (*R*). Example: 48.100.100.0

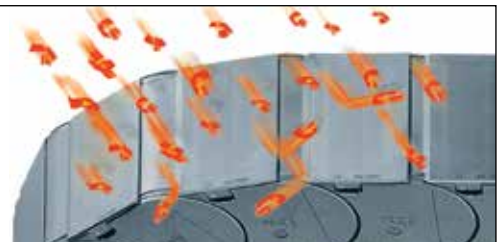
Available bend radii

R in. (mm) | 2.36 (060) | 2.95 (075) | 3.94 (100) | 4.92 (125) | 5.91 (150) | 6.89 (175) | 7.87 (200) | 9.84 (250) |

Hot chips up to +1562°F for e-tubes

- e-tubes can repel chips up to +1562°F. Special production option with the igus® material igumid HT
- No hot chips melting or embedding into the chain

More information ► www.igus.com/HT

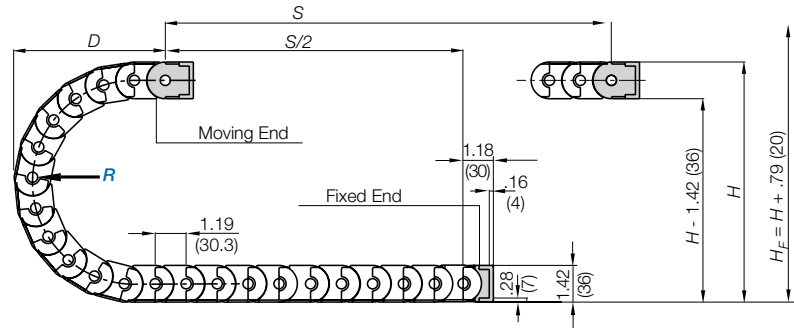
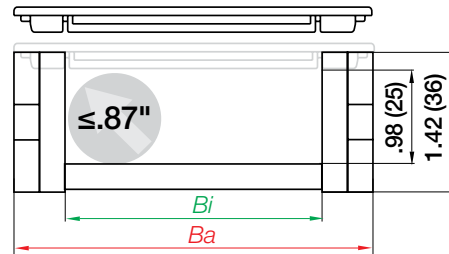
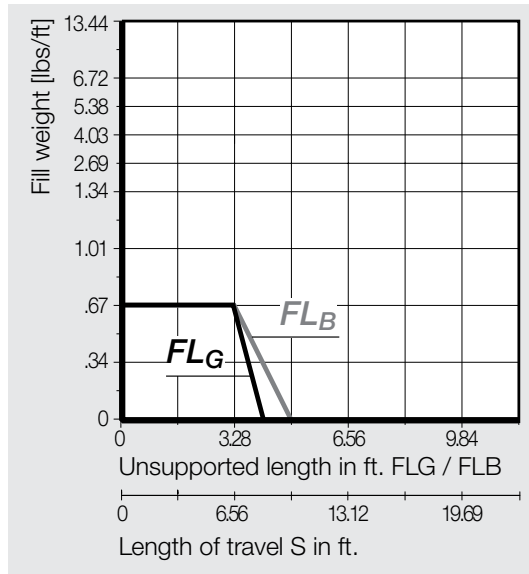


E2 R e-tubes | R48 | Installation dimensions

Unsupported applications | Short travels



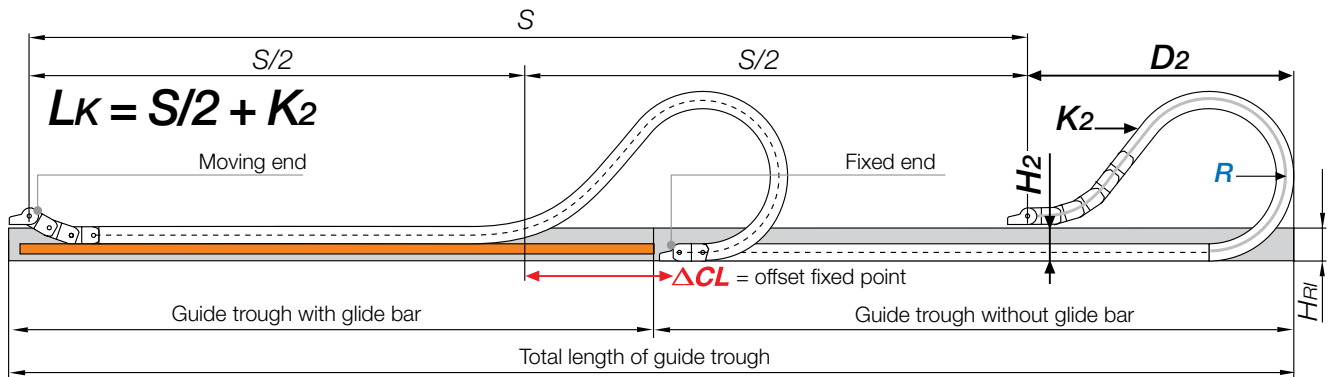
R48



R	2.36 (060)	2.95 (075)	3.94 (100)	4.92 (125)	5.91 (150)	6.89 (175)	7.87 (200)	9.84 (250)
H	6.14 (156)	7.32 (186)	9.29 (236)	11.26 (286)	13.23 (336)	15.20 (386)	17.17 (436)	21.10 (536)
D	4.84 (123)	5.43 (138)	6.42 (163)	7.40 (188)	8.39 (213)	9.37 (238)	10.35 (263)	12.32 (313)
K	9.84 (250)	11.81 (300)	14.76 (375)	17.91 (455)	21.06 (535)	24.21 (615)	27.17 (690)	33.46 (850)

The required clearance height: $H_F = H + .79$ in. (20 mm) with .34 lbs/ft (0.5 kg/m) fill weight.

Gliding applications | For long travel lengths from 16.4 ft. (5m) to max. 164 ft. (50m)



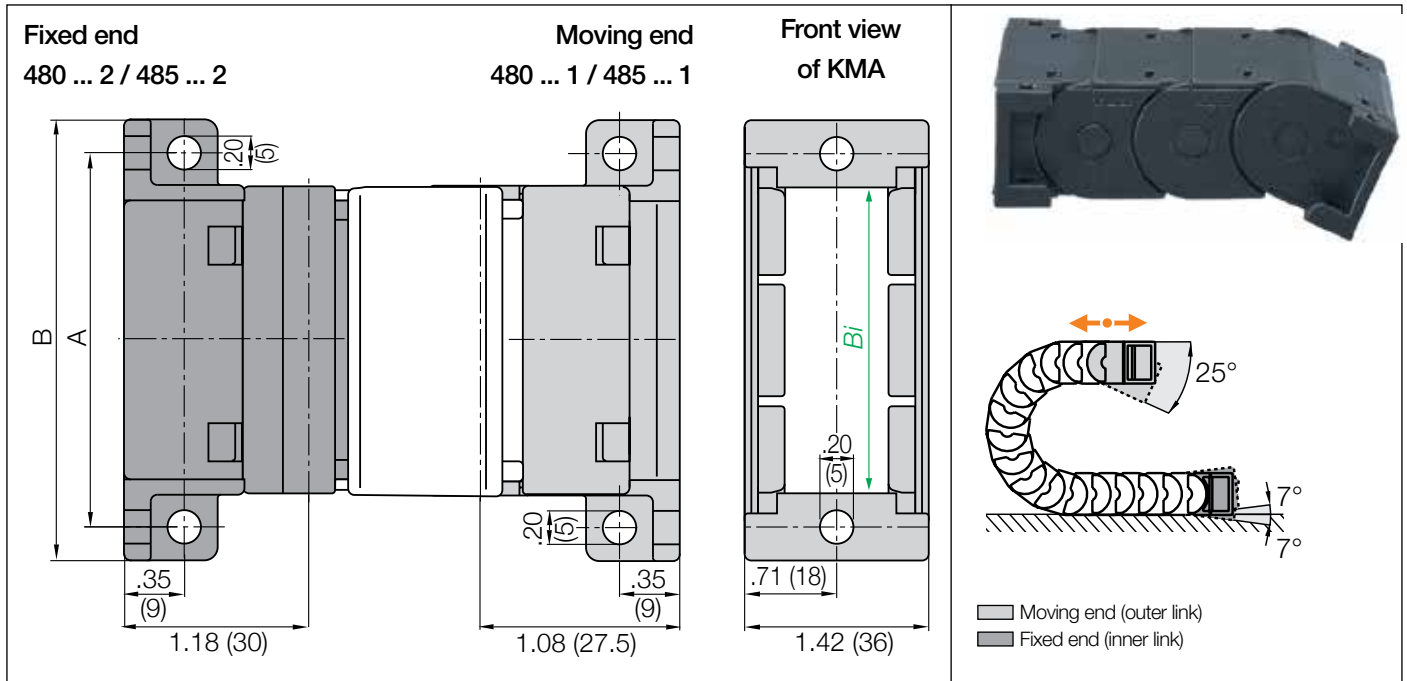
Note: We recommend the project planning of such a system to be carried out by igus®.

In case of travels between 6.56 and 16.41 ft. (2 and 5m) we recommend an e-tube with a longer unsupported length.

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

R	2.36 (060)	2.95 (075)	3.94 (100)	4.92 (125)	5.91 (150)	6.89 (175)	7.87 (200)	9.84 (250)
H ₂	6.14 (156)	7.32 (186)	6.93 (176)	6.93 (176)	6.93 (176)	6.93 (176)	6.93 (176)	—
D ₂	4.33 (110)	4.92 (125)	12.99 (330)	17.72 (450)	24.02 (610)	28.74 (730)	27.16 (690)	—
K ₂	9.84 (250)	11.81 (300)	21.46 (545)	29.84 (758)	38.19 (970)	45.31 (1151)	46.54 (1182)	—
ΔCL	—	—	6.69 (170)	10.63 (270)	14.96 (380)	18.50 (470)	—	—

*Values upon request



KMA pivoting
KMA locking

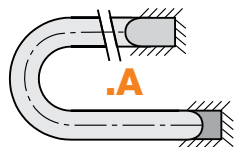
Recommended for unsupported applications
Recommended for vertical hanging and standing applications

Width index	Part no. full set KMA pivoting	Part No. full set KMA locking	A in. (mm)	B in. (mm)	Bi in. (mm)
025. ▶	480.025.12	485.025.12	1.77 (45)	2.17 (55)	.98 (25)
050. ▶	480.050.12	485.050.12	2.76 (70)	3.15 (80)	1.97 (50)
075. ▶	480.075.12	485.075.12	3.74 (95)	4.13 (105)	2.95 (75)
100. ▶	480.100.12	485.100.12	4.72 (120)	5.12 (130)	3.94 (100)
130. ▶	480.130.12	485.130.12	5.91 (150)	6.30 (160)	5.12 (130)

(KMA = polymer metal mounting bracket)

The following parts are required for attachment of the mounting brackets:

- Socket head cap bolt M5 DIN 912-8.8 Length depends on the thickness of the attachment base
- Washer 5.3 DIN 125-ST
- Hexagon nut M5 DIN 934-8



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**.

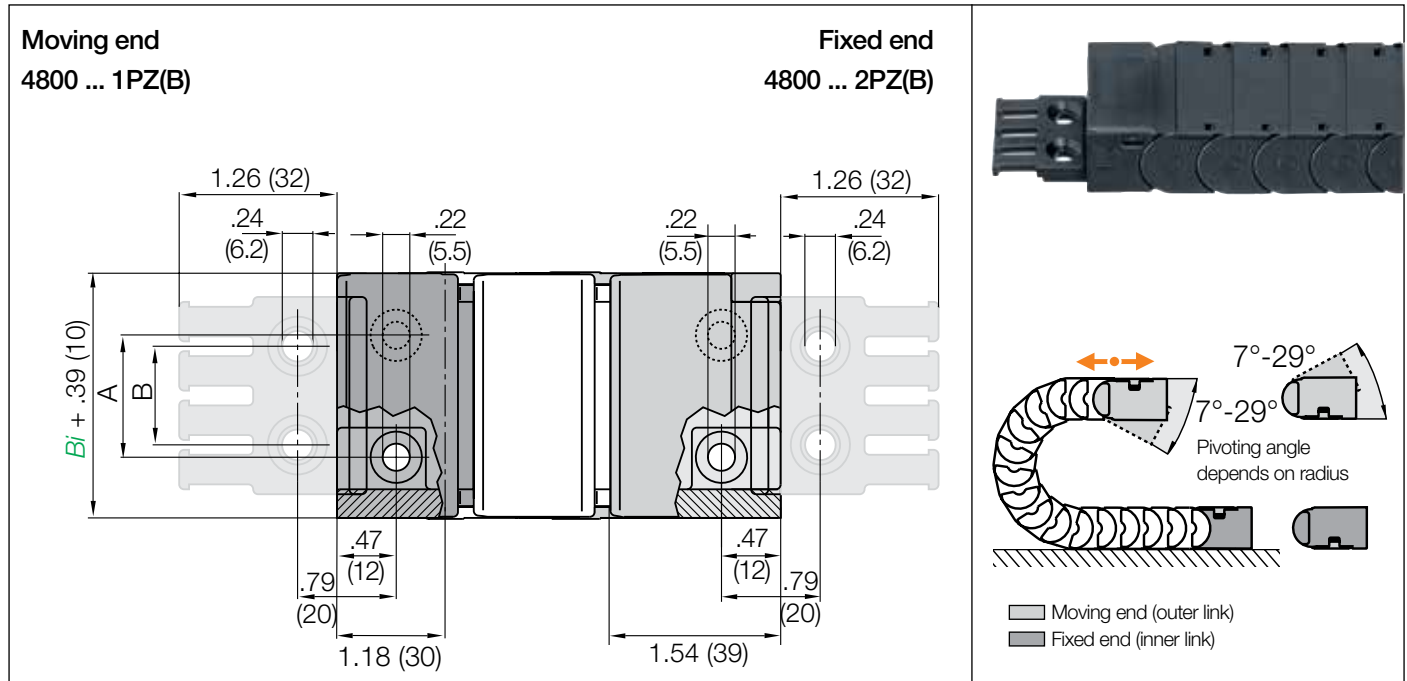
480.100.12.A

Order example



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

Angled polymer bracket | One end pivoting



Angled polymer bracket | One end pivoting Recommended for unsupported applications

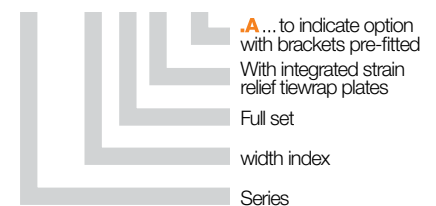
Width index	Part No. full set with tie-wrap plates	Part No. full set without tie-wrap plates	A in. (mm)	B in. (mm)	Number of teeth
025. ▶	4800.025.12PZB	4800.025.12	.47 (12)	.59 (15)	3
050. ▶	4800.050.12PZB	4800.050.12	1.46 (37)	1.18 (30)	5
075. ▶	4800.075.12PZB	4800.075.12	2.44 (62)	2.36 (60)	8
100. ▶	4800.100.12PZB	4800.100.12	3.43 (87)	3.15 (80)	10
130. ▶	—	4800.130.12	4.61 (117)	—	—

The following parts are required for attachment of the mounting brackets:

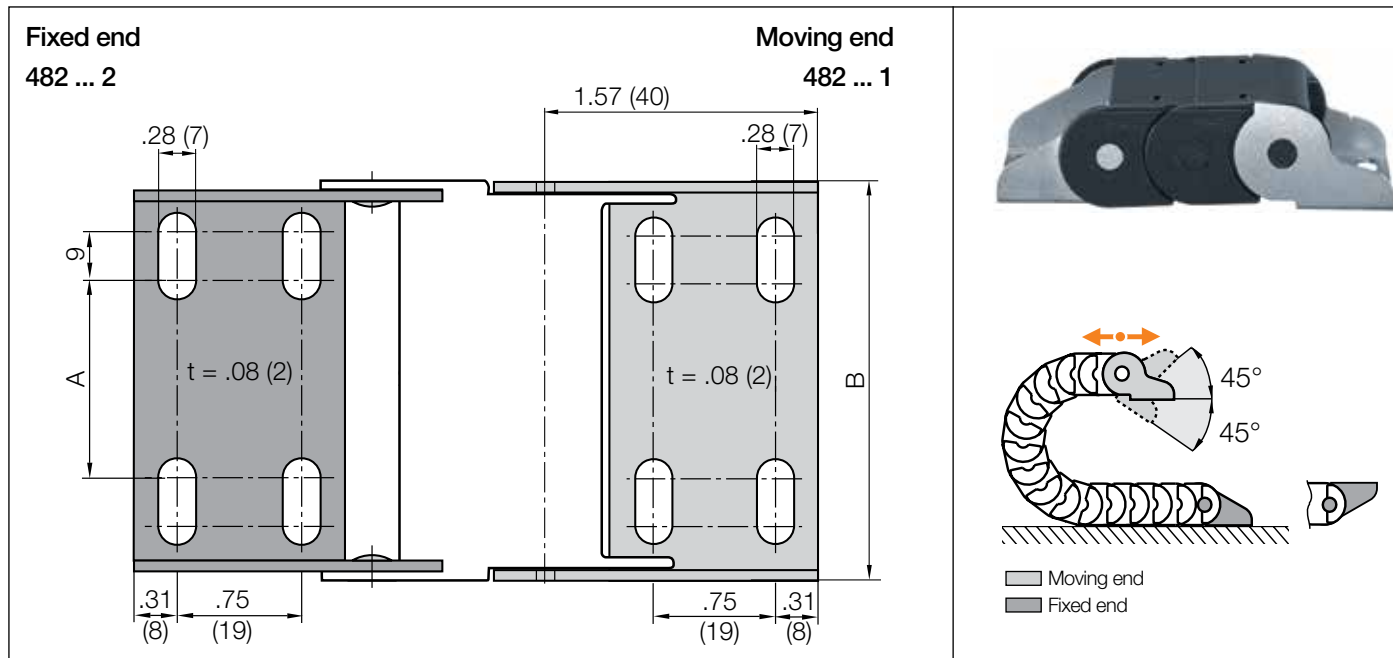
- Socket head cap bolt M5 DIN 912-8.8. Length depends on the thickness of the attachment base
- Hexagon nut M5 DIN 7991
- Washer 5.3 DIN 125-ST



4800.100.12PZB.A2 Order example



Strain relief: clamps, tie-wrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1418



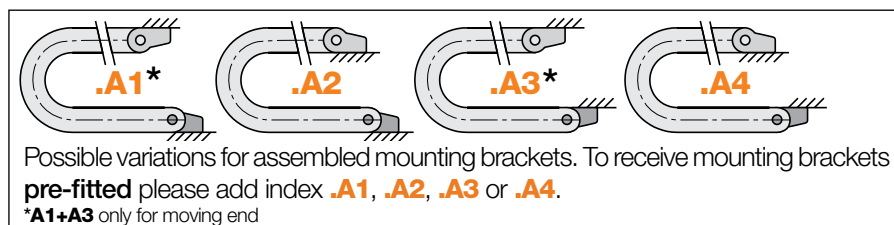
Steel mounting brackets | One end pivoting

Recommended for unsupported, vertical hanging, standing applications

Width index	Part No. full set Steel one end pivoting	A in. (mm)	B in. (mm)
025. ▶	482.025.12	–	1.38 (35)
050. ▶	482.050.12	.87 (22)	2.36 (60)
075. ▶	482.075.12	1.85 (47)	3.35 (85)
100. ▶	482.100.12	2.83 (72)	4.33 (110)
130. ▶	482.130.12	4.02 (102)	5.51 (140)

* Available upon request delivery time upon request.

Mounting only with hexagon socket DIN 912 M6 and washer DIN 125, .25" (6.3mm)



482.100.12.A1

Order example



.A... to indicate option with brackets pre-fitted

Full set

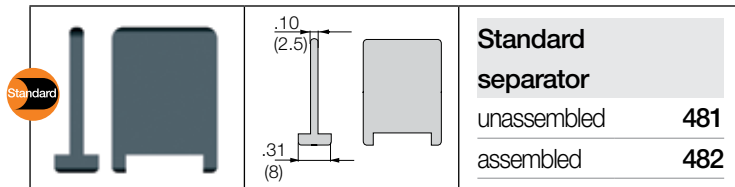
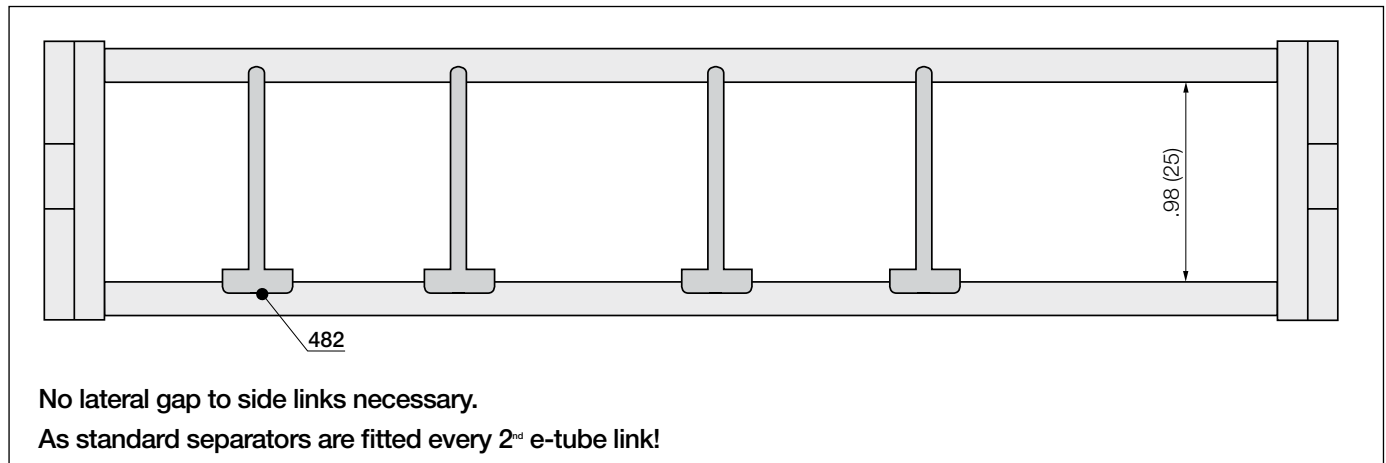
width index

Series



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

Interior separation



Standard separator

For simple vertical subdivision. Offers security due to its wide base design, also when used with large cables or hoses.

Separator with integrated strain relief teeth

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

Part No. 481.ZR - more information ► From page 1456





e-tubes | Series R58 | Lids removable along the outer radius

Part No. e-tubes	<i>Bi</i>	<i>Ba</i>	R58
	in. (mm)	in. (mm)	lbs/ft. (kg/m)
58.050. <i>R</i> .0.	1.97 (50)	2.60 (66)	≈ 1.01 (1.50)
58.075. <i>R</i> .0.	2.95 (75)	3.58 (91)	≈ 1.19 (1.77)
58.100. <i>R</i> .0.	3.94 (100)	4.57 (116)	≈ 1.37 (2.04)
58.125. <i>R</i> .0.	4.92 (125)	5.55 (141)	≈ 1.55 (2.31)
58.150. <i>R</i> .0.	5.91 (150)	6.54 (166)	≈ 1.75 (2.61)
58.175. <i>R</i> .0.	6.89 (175)	7.52 (191)	≈ 1.94 (2.88)
58.200. <i>R</i> .0.	7.87 (200)	8.50 (216)	≈ 2.12 (3.15)

Complete Part No. with required radius (*R*). Example: 58.100.100.0

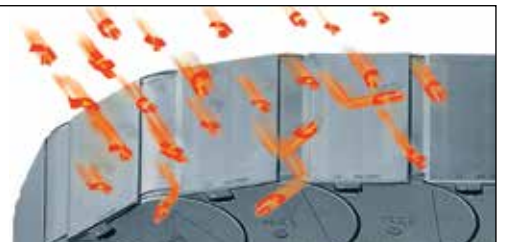
Available bend radii

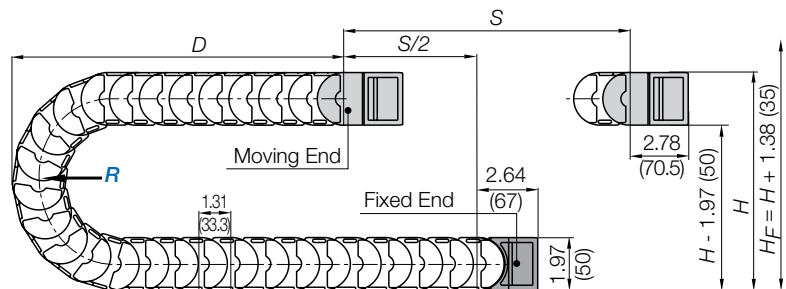
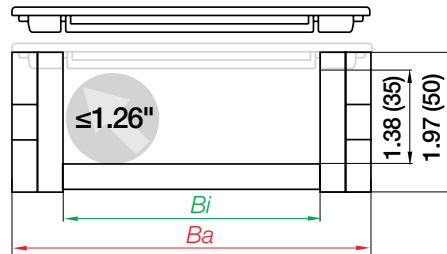
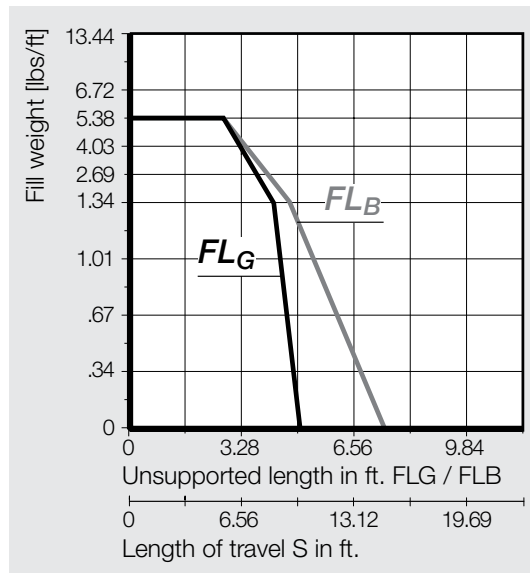
R in. (mm) | 2.95 (075) | 3.94 (100) | 4.92 (125) | 5.91 (150) | 7.87 (200) | 9.84 (250) |

Hot chips up to +1562°F for e-tubes

- e-tubes can repel chips up to +1562°F. Special production option with the igus® material igumid HT
- No hot chips melting or embedding into the chain

More information ► www.igus.com/HT

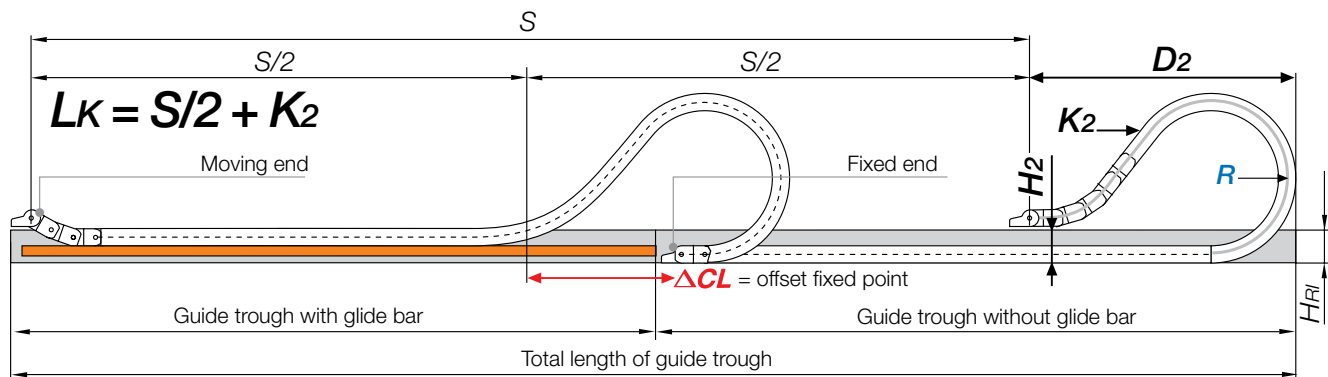




R	2.95 (075)	3.94 (100)	4.92 (125)	5.91 (150)	7.87 (200)	9.84 (250)
H	7.87 (200)	9.84 (250)	11.81 (300)	13.78 (350)	17.72 (450)	21.65 (550)
D	5.91 (150)	6.89 (175)	7.87 (200)	8.86 (225)	10.83 (275)	12.80 (325)
K	12.96 (305)	15.16 (385)	18.11 (460)	21.26 (540)	27.36 (695)	33.66 (855)

The required clearance height: $H_F = H + 1.38$ in. (35 mm) with .34 lbs/ft (0.5 kg/m) fill weight.

Gliding applications | For long travel lengths from 16.4 ft. (5m) to max. 246 ft. (75m)



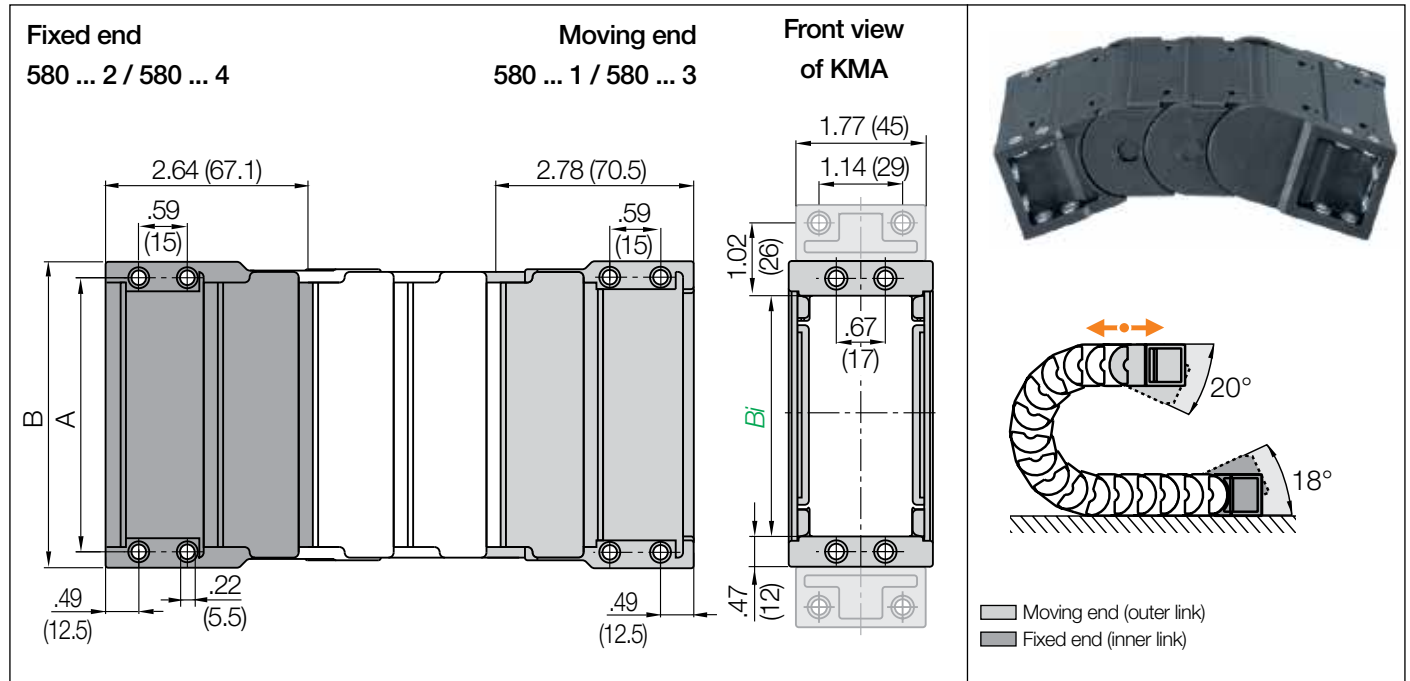
Note: We recommend the project planning of such a system to be carried out by igus®.

In case of travels between 9.84 and 16.41 ft. (3 and 5m) we recommend an e-tube with a longer unsupported length.

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

R	2.95 (075)	3.94 (100)	4.92 (125)	5.91 (150)	7.87 (200)	9.84 (250)
H ₂	5.91 (150)	6.54 (166)	6.54 (166)	6.54 (166)	6.54 (166)	6.54 (166)
D ₂	5.91 (150)	12.20 (310)	14.96 (380)	18.90 (480)	31.50 (800)	41.34 (1050)
K ₂	14.76 (375)	19.69 (500)	27.52 (699)	34.09 (866)	49.80 (1265)	65.55 (1665)
ΔCL	—	4.80 (122)	6.57 (167)	9.72 (247)	20.16 (512)	28.23 (717)

*Values upon request



KMA pivoting
KMA locking

Recommended for unsupported applications
Recommended for vertical hanging and standing applications

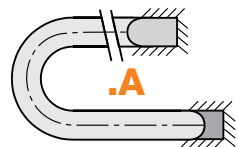
Width index	Part no. full set KMA pivoting	Part No. full set KMA locking	A in. (mm)	B in. (mm)	Bi in. (mm)
050. ▶	580.050.12	580.050.34	2.44 (62)	2.91 (74)	197 (50)
075. ▶	580.075.12	580.075.34	3.43 (87)	3.90 (99)	2.95 (75)
100. ▶	580.100.12	580.100.34	4.41 (112)	4.88 (124)	3.94 (100)
125. ▶	580.125.12	580.125.34	5.39 (137)	5.87 (149)	4.92 (125)
150. ▶	580.150.12	580.150.34	6.38 (162)	6.85 (174)	5.91 (150)
175. ▶	580.175.12	580.175.34	7.36 (187)	7.83 (199)	6.89 (175)
200. ▶	580.200.12	580.200.34	8.35 (212)	8.82 (224)	7.87 (200)

(KMA = polymer metal mounting bracket)

The following parts are required for attachment of the mounting brackets:

● Socket head cap bolt M5 DIN 912-8.8 Length depends on the thickness of the attachment base ● Washer 5.3 DIN 125-ST ● Hexagon nut M5 DIN 934-8

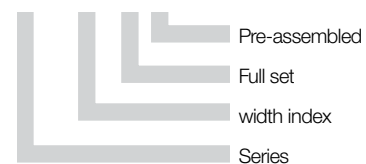
To receive full sets with pre-fitted quickflange please add index QF ▶ For example: Part No. 580.100.12.QF. Unassembled quickflange: Part No. 16800.QF



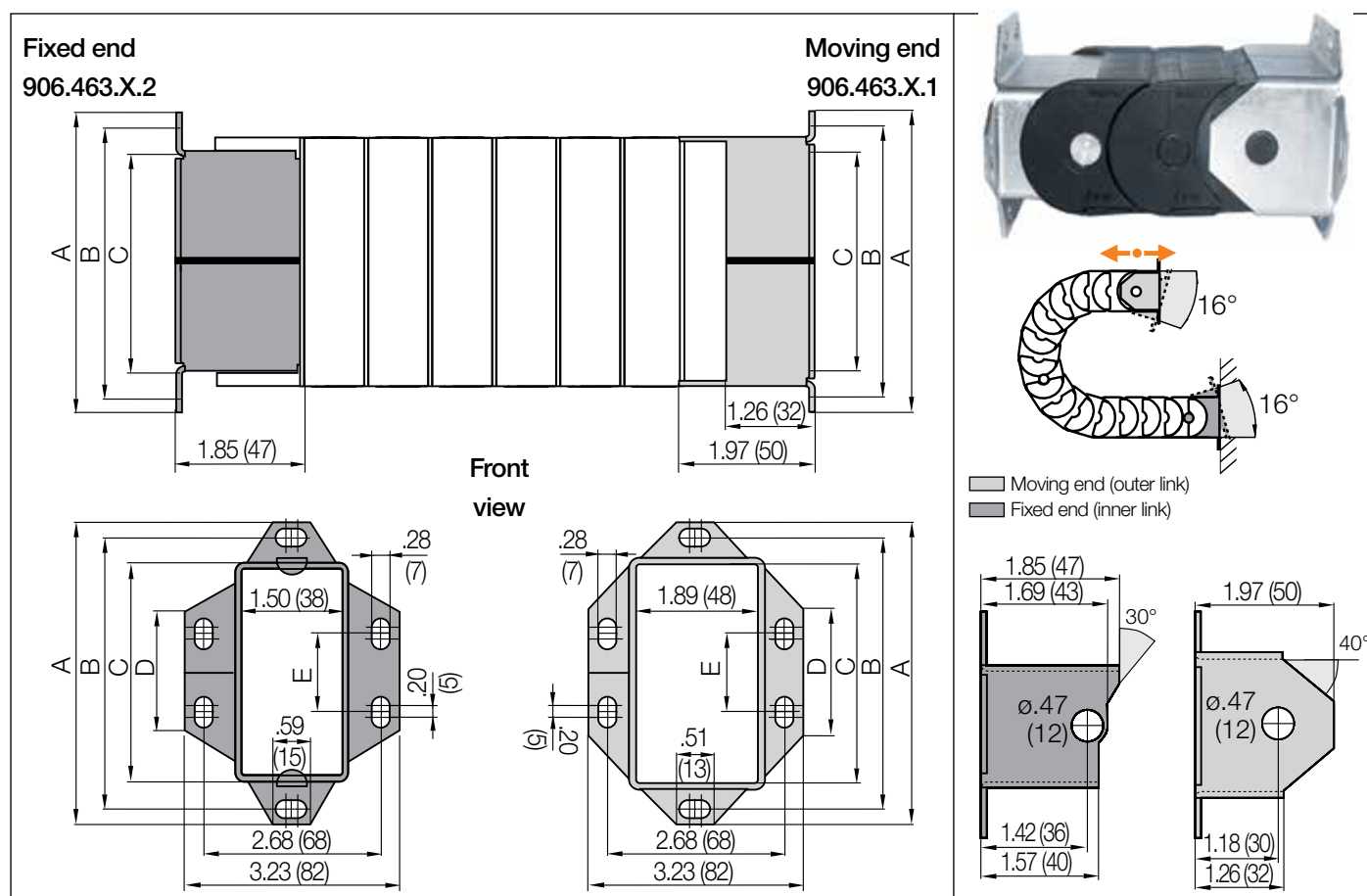
The bracket orientations are set automatically when using an igus® KMA mounting bracket with attachment from any side. To receive a KMA mounting bracket **pre-fitted** please add index **A**.

580.100.12.A

Order example



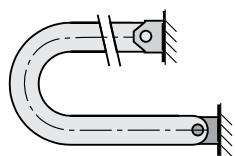
Strain relief: clamps, tiewrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1418



Steel flange, pivoting | Recommended for unsupported applications

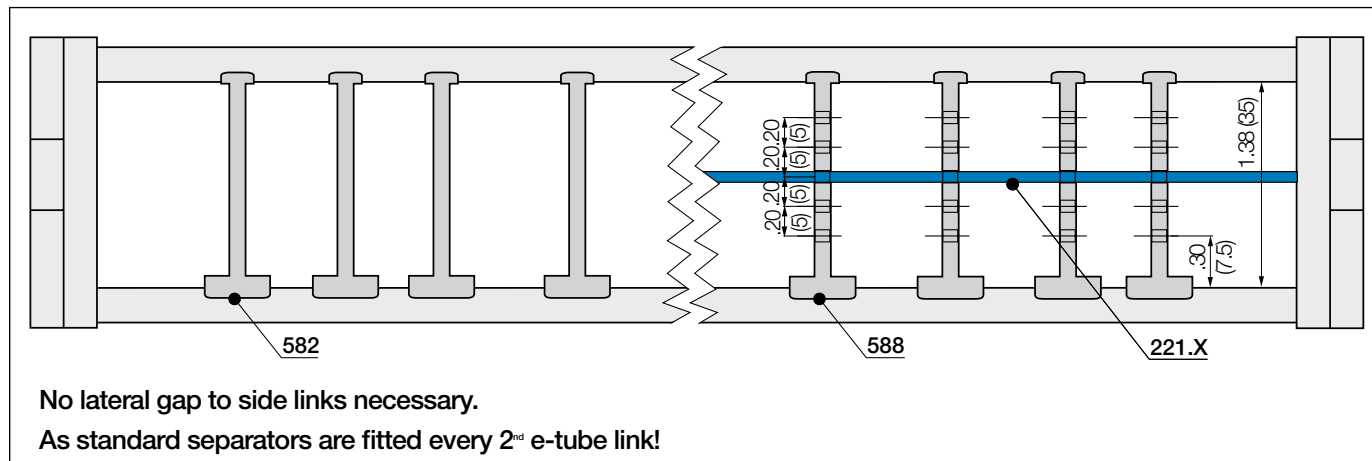
Width index	Hole pattern	Part No. Moving end	<i>Bi</i> in. (mm)	A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)
050. ▶	58.05	906.463.05.1	1.97 (50)	3.56 (90.5)	3.09 (78.5)	2.30 (58.3)	.96 (24.5)	.79 (20)
075. ▶	58.1	906.463.1.1	2.95 (75)	4.57 (116)	4.09 (104)	3.28 (83.3)	1.97 (50)	1.18 (30)

Width index	Hole pattern	Part No. Fixed end	<i>Bi</i> in. (mm)	A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)
050. ▶	58.05	906.463.05.2	1.97 (50)	3.56 (90.5)	3.09 (78.5)	2.30 (58.3)	.96 (24.5)	.79 (20)
075. ▶	58.1	906.463.1.2	2.95 (75)	4.57 (116)	4.09 (104)	3.28 (83.3)	1.97 (50)	1.18 (30)



Metallic flange brackets with common hole patterns can easily replace alternatives, without having to alter the hole pattern. Flush attachment possibilities at both ends of the e-tube using flange mounting brackets made of steel.

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



		Standard separator	
		unassembled	581
		assembled	582

Option 1 | Separators

Standard separator

For simple vertical subdivision. Offers security due to its wide base design, also when used with large cables or hoses.

		Slotted separator	
		unassembled	587
		assembled	588

Option 2 | Full-width shelves

Slotted separator

Vertical separation in e-tubes. The slot allows basic vertical/horizontal shelving arrangements.

		Full-width shelf for e-tubes	
		unassembled	220.X
		assembled	221.X

Full-width shelf

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

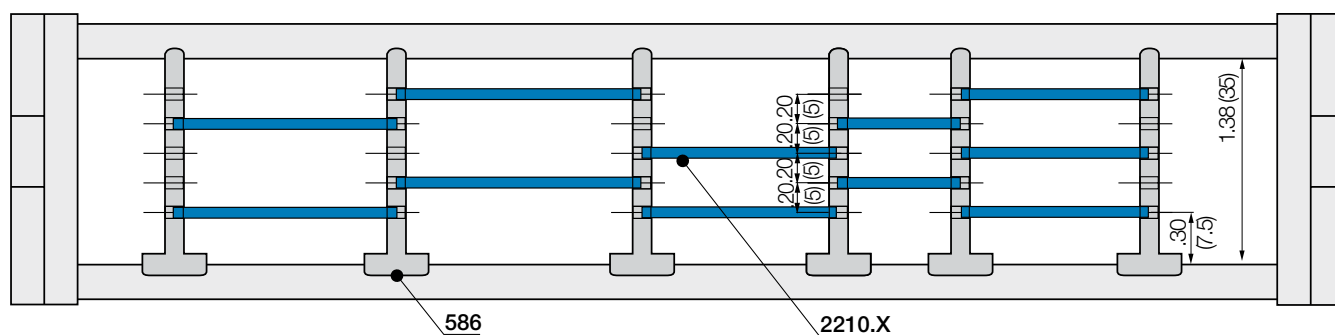
Full-width shelves

Width = X [mm]

X in. (mm)	unassembled	assembled
1.97 (050)	220.50	221.50
2.95 (075)	220.75	221.75
3.94 (100)	220.100	221.100

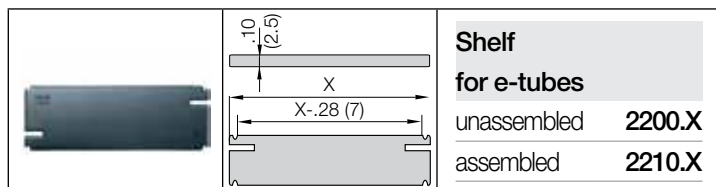
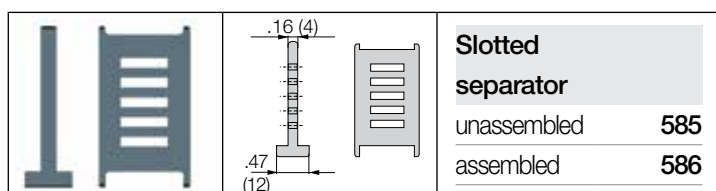
X in. (mm)	unassembled	assembled
4.92 (125)	220.125	221.125
5.91 (150)	220.150	221.150
6.89 (175)	220.175	221.175

X in. (mm)	unassembled	assembled
7.87 (200)	220.200	221.200



No lateral gap to side links necessary.

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



Option 3 | Shelves

Slotted separator

Allows modular shelving arrangements.

Shelf

For applications involving many cables with different diameters, shelves can be fitted at different heights.

Full-width shelves

Width = X [mm]

X in. (mm)	unassembled	assembled
0.71 (018)	2200.18	2210.18
0.91 (023)	2200.23	2210.23
1.10 (028)	2200.28	2210.28
1.30 (033)	2200.33	2210.33
1.50 (038)	2200.38	2210.38

X in. (mm)	unassembled	assembled
1.69 (043)	2200.43	2210.43
1.89 (048)	2200.48	2210.48
2.28 (058)	2200.58	2210.58
2.68 (068)	2200.68	2210.68
2.87 (073)	2200.73	2210.73

X in. (mm)	unassembled	assembled
3.46 (088)	2200.88	2210.88
3.90 (099)	2200.99	2210.99
4.88 (124)	2200.124	2210.124
5.87 (149)	2200.149	2210.149



e-tubes | Series R68 | Lids removable along the outer radius

Part No. e-tubes	<i>Bi</i> in. (mm)	<i>Ba</i> in. (mm)	R58 lbs/ft. (kg/m)
68.050. <i>R</i> .0.	1.97 (50)	2.68 (68)	≈ 1.28 (1.90)
68.075. <i>R</i> .0.	2.95 (75)	3.66 (93)	≈ 1.46 (2.18)
68.100. <i>R</i> .0.	3.94 (100)	4.65 (118)	≈ 1.65 (2.46)
68.115. <i>R</i> .0.	4.53 (115)	5.24 (133)	≈ 1.77 (2.63)
68.125. <i>R</i> .0.	4.92 (125)	5.63 (143)	≈ 1.86 (2.77)
68.150. <i>R</i> .0.	5.91 (150)	6.61 (168)	≈ 2.05 (3.05)
68.175. <i>R</i> .0.	6.89 (175)	7.60 (193)	≈ 2.26 (3.36)
68.200. <i>R</i> .0.	7.87 (200)	8.58 (218)	≈ 2.45 (3.64)
68.225. <i>R</i> .0.	8.86 (225)	9.57 (243)	≈ 2.63 (3.92)
68.250. <i>R</i> .0.	9.84 (250)	10.55 (268)	≈ 2.84 (4.23)

Complete Part No. with required radius (*R*). Example: 68.100.100.0

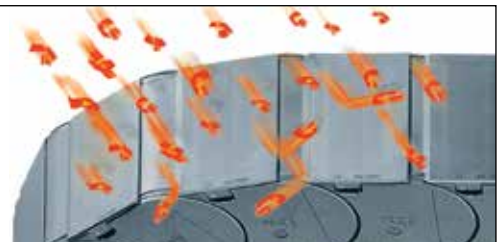
Available bend radii

R in. (mm) | 3.94 (100) | 4.92 (125) | 5.91 (150) | 6.89 (175) | 7.87 (200) | 8.86 (225) | 9.84 (250) | 11.81 (300) |

Hot chips up to +1562°F for e-tubes

- e-tubes can repel chips up to +1562°F. Special production option with the igus® material igumid HT
- No hot chips melting or embedding into the chain

More information ► www.igus.com/HT

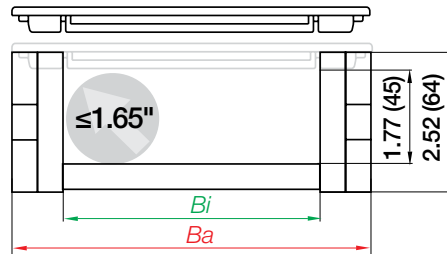
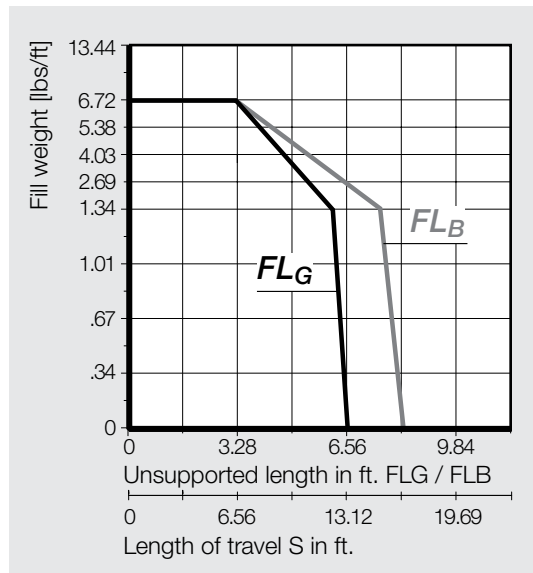


CFU strain relief with innovative honeycomb design

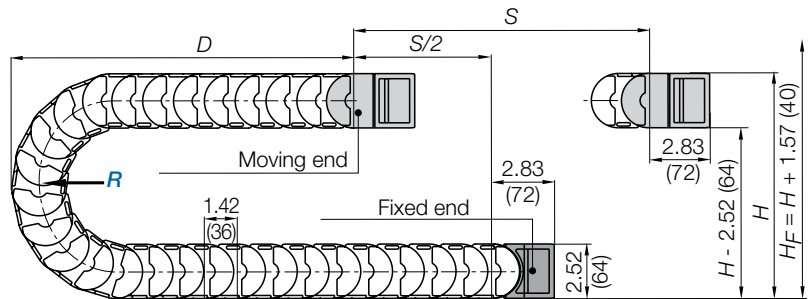
- Fast filling, openable from both sides for assembly in seconds
- Flexible honeycomb design for increased holding force
- Tribologically optimized honeycomb design for the best hold
- Universal use, compact, space-saving design

More information ► Page 1452





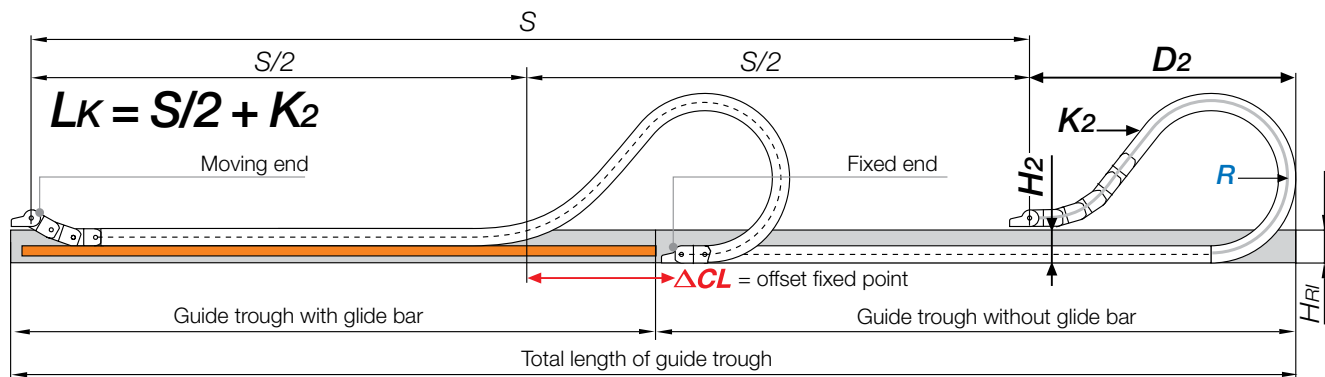
Inner height in. (mm)	1.77 (45)
Pitch per link in. (mm)	1.42 (36)
Links/ft (m)	8.45 (28)
corresponds to (mm)	1008
e-chain [®] length	$L_K = \frac{S}{2} + K$



R	3.94 (100)	4.92 (125)	5.91 (150)	6.89 (175)	7.87 (200)	8.86 (225)	9.84 (250)	11.81 (300)
H	10.39 (264)	12.36 (314)	14.33 (364)	16.30 (414)	18.27 (464)	20.24 (514)	22.20 (564)	26.14 (664)
D	7.32 (186)	8.31 (211)	9.29 (236)	10.28 (261)	11.26 (286)	12.24 (311)	13.23 (336)	15.20 (386)
K	15.35 (390)	18.31 (465)	21.46 (545)	24.60 (625)	27.76 (705)	30.71 (780)	33.86 (860)	39.96 (1015)

The required clearance height: $H_r = H + 1.57$ in. (40 mm) with 1.68 lbs/ft (2.5 kg/m) fill weight.

Gliding applications | For long travel lengths from 19.69 ft. (6m) to max. 328 ft. (100m)



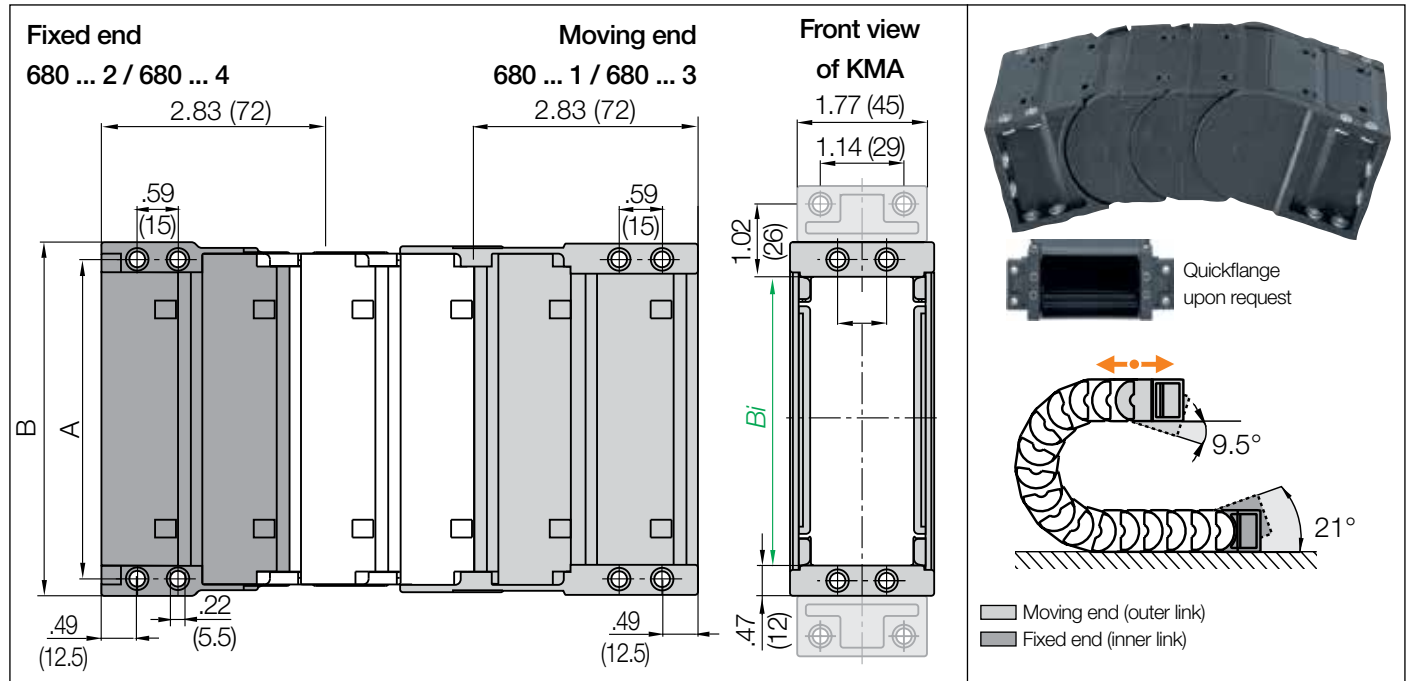
Note: We recommend the project planning of such a system to be carried out by igus[®].

In case of travels between 13.12 and 19.69 ft. (4 and 6m) we recommend an e-tube with a longer unsupported length.

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

R	3.94 (100)	4.92 (125)	5.91 (150)	6.89 (175)	7.87 (200)	8.86 (225)	9.84 (250)	11.81 (300)
H_r	7.91 (201)	8.66 (220)	8.66 (220)	8.66 (220)	8.66 (220)	8.66 (220)	8.66 (220)	8.66 (220)
D_2	7.87 (200)	14.57 (370)	17.32 (440)	21.26 (540)	25.59 (650)	27.56 (700)	33.46 (850)	41.34 (1050)
K_2	19.69 (500)	25.51 (648)	31.18 (792)	35.43 (900)	43.94 (1116)	49.96 (1269)	58.11 (1476)	70.87 (1800)
ΔCL	—	6.46 (164)	8.03 (204)	11.57 (294)	14.33 (364)	17.28 (439)	20.24 (514)	26.14 (664)

*Values upon request



KMA pivoting
KMA locking

Recommended for unsupported applications
Recommended for vertical hanging and standing applications

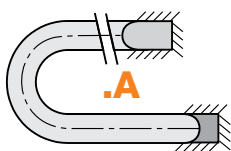
Width index	Part no. full set KMA pivoting	Part No. full set KMA locking	A in. (mm)	B in. (mm)	Bi in. (mm)
050. ▶	680.050.12	680.050.34	2.44 (62)	2.91 (74)	1.97 (50)
075. ▶	680.075.12	680.075.34	3.43 (87)	3.90 (99)	2.95 (75)
100. ▶	680.100.12	680.100.34	4.41 (112)	4.88 (124)	3.94 (100)
115. ▶	680.115.12	680.115.34	5.00 (127)	5.47 (139)	4.53 (115)
125. ▶	680.125.12	680.125.34	5.39 (137)	5.87 (149)	4.92 (125)
150. ▶	680.150.12	680.150.34	6.38 (162)	6.85 (174)	5.91 (150)
175. ▶	680.175.12	680.175.34	7.36 (187)	7.83 (199)	6.89 (175)
200. ▶	680.200.12	680.200.34	8.35 (212)	8.82 (224)	7.87 (200)
225. ▶	680.225.12	680.225.34	9.33 (237)	9.80 (249)	8.86 (225)
250. ▶	680.250.12	680.250.34	10.31 (262)	10.79 (274)	9.84 (250)

(KMA = polymer metal mounting bracket)

The following parts are required for attachment of the mounting brackets:

● Socket head cap bolt M5 DIN 912-8.8 Length depends on the thickness of the attachment base ● Washer 5.3 DIN 125-ST ● Hexagon nut M5 DIN 934-8

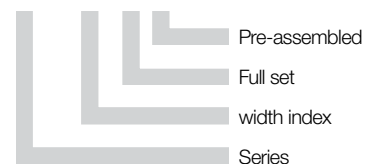
To receive full sets with pre-fitted quickflange please add index QF ▶ For example: Part No. 680.100.12.QF. Unassembled quickflange: Part No. 16800.QF



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**.

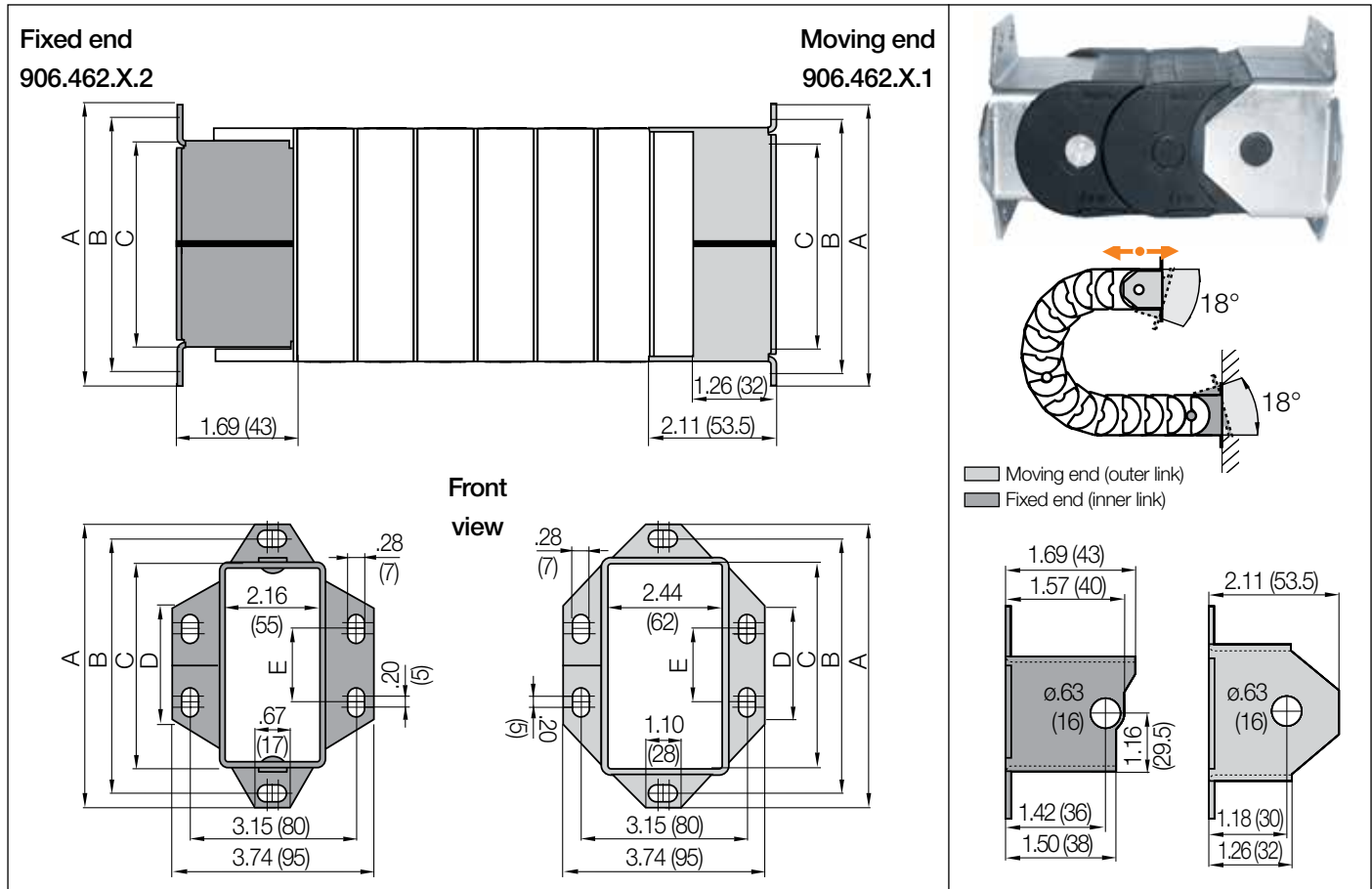
680.100.12.A

Order example



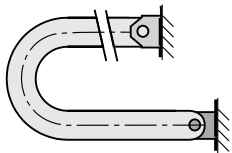
Strain relief: clamps, tie-wrap plates, nuggets and clips are available from stock. The complete chainfix range with ordering options ▶ From page 1418

Mounting brackets, steel flange | Pivoting



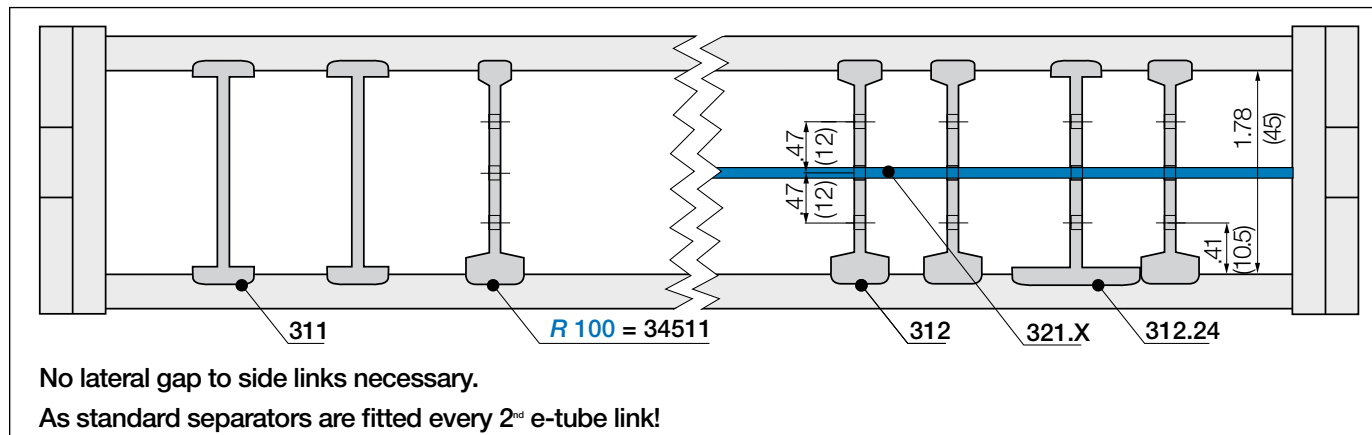
Steel flange, pivoting | Recommended for unsupported applications

Width index	Hole pattern	Part No. Moving end	Bi in. (mm)	A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)
075. ▶	68.1	906.462.1.1	2.95 (75)	4.57 (116)	4.09 (104)	3.28 (83.3)	1.97 (50)	1.18 (30)
115. ▶	68.2	906.462.2.1	4.53 (115)	6.14 (156)	5.67 (144)	4.85 (123.3)	3.54 (90)	1.97 (50)
175. ▶	68.3	906.462.3.1	6.89 (175)	8.50 (216)	8.03 (204)	7.22 (183.3)	5.91 (150)	3.54 (100)
Width index	Hole pattern	Part No. Fixed end	Bi in. (mm)	A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)
075. ▶	68.1	906.462.1.2	2.95 (75)	4.57 (116)	4.09 (104)	3.28 (83.4)	1.97 (50)	1.18 (30)
115. ▶	68.2	906.462.2.2	4.53 (115)	6.14 (156)	5.67 (144)	4.86 (123.4)	3.54 (90)	1.97 (50)
175. ▶	68.3	906.462.3.2	6.89 (175)	8.50 (216)	8.03 (204)	7.22 (183.4)	5.91 (150)	3.54 (100)



Metallic flange brackets with common hole patterns can easily replace alternatives, without having to alter the hole pattern. Flush attachment possibilities at both ends of the e-tube using flange mounting brackets made of steel.

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



		Standard separator	
		unassembled	301
		assembled	311

Option 1 | Separators

Standard separator

For simple vertical subdivision. Offers security due to its wide base design, also when used with large cables or hoses. **Not suitable for bend radius R 100!**

		Separator for radius R 100	
		unassembled	34501
		assembled	34511

Separator for radius R 100

If you select this bend radius please use this separator for a vertical subdivision.

		Slotted separator	
		unassembled	302
		assembled	312

Option 2 | Full-width shelves

Slotted separator

Vertical separation in e-tubes. The slot allows basic vertical/horizontal shelving arrangements.

		Standard separator, wide base	
		unassembled	302.24
		assembled	312.24

Slotted separator, wide base

If a wide space between the separators has to be kept or separators have to be fixed in their position.

		Full-width shelf for e-tubes	
		unassembled	320.X
		assembled	321.X

Full-width shelf

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

Full-width shelves

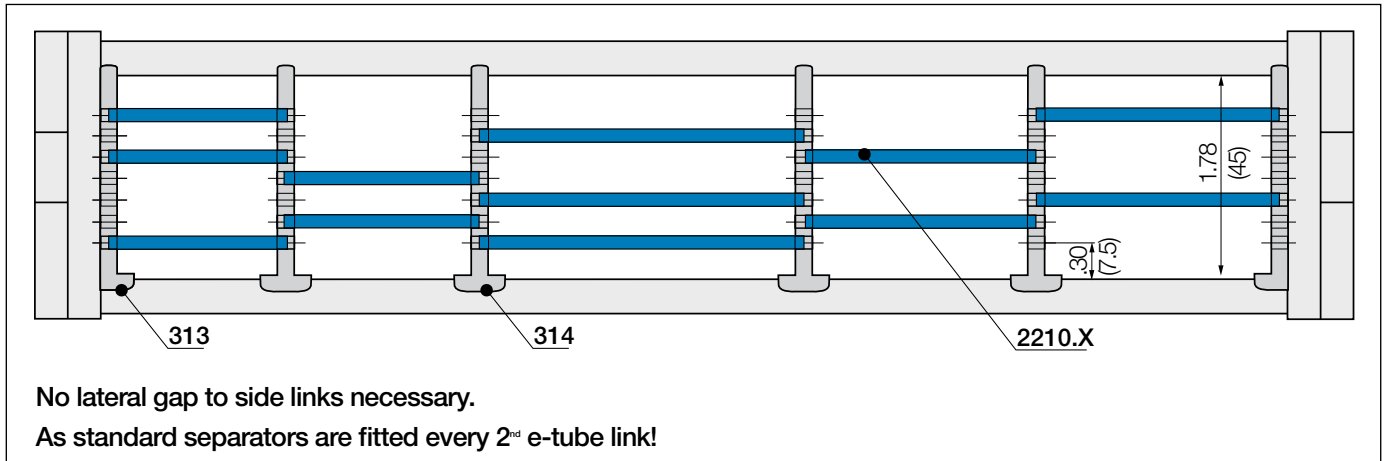
Width = X [mm]

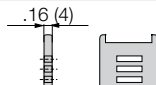
X in. (mm)	unassembled	assembled
1.97 (050)	320.050	321.050
2.95 (075)	320.075	321.075
4.53 (115)	320.115	321.115

X in. (mm)	unassembled	assembled
4.92 (125)	320.125	321.125
5.91 (150)	320.150	321.150
6.89 (175)	320.175	321.175

X in. (mm)	unassembled	assembled
7.87 (200)	320.200	321.200
8.86 (225)	320.225	321.225
9.84 (250)	320.250	321.250

Interior separation | Option 3

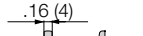


		Slotted separator	
		unassembled	304
		assembled	314

Option 3 | Shelves

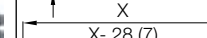
Slotted separator

Allows modular shelving arrangements.

		Slotted side plate	
		unassembled	303
		assembled	313

Slotted side plate

Allows modular shelving right up to the side links. No clearance required!

		Shelf for e-tubes	
		unassembled	2200.X
		assembled	2210.X

Shelf

For applications involving many cables with different diameters, shelves can be fitted at different heights.

Full-width shelves

Width = X [mm]



X in. (mm)	unassembled	assembled
0.71 (018)	2200.18	2210.18
0.91 (023)	2200.23	2210.23
1.10 (028)	2200.28	2210.28
1.30 (033)	2200.33	2210.33
1.50 (038)	2200.38	2210.38

X in. (mm)	unassembled	assembled
1.69 (043)	2200.43	2210.43
1.89 (048)	2200.48	2210.48
2.28 (058)	2200.58	2210.58
2.68 (068)	2200.68	2210.68
2.87 (073)	2200.73	2210.73

X in. (mm)	unassembled	assembled
3.46 (088)	2200.88	2210.88
3.90 (099)	2200.99	2210.99
4.88 (124)	2200.124	2210.124
5.87 (149)	2200.149	2210.149