



Price index



UL94-V2 classifications upon request



ESD classification: Electrically conductive ESD/ATEX version upon request



iF-Design Award Winner Series R117/R118

- 1 Effective chip protection, even against hot metal chips
- 2 Smooth, chip-repellent exterior
- 3 Double stop dog for strong unsupported length
- 4 Snap-open from the side, covered pin/bore connection
- 5 Lateral glide surfaces for side-mounted operation
- 6 Snap-open lids along inner or outer radius
- 7 Universal KMA mounting brackets with attachment capability on all sides
- 8 Space-efficient with optimized ratio of inner dimension to outer dimension



To open the E-Tube Series R100 lift up the lid with the screwdriver and swivel lid to the side



When to use the Series R117/R118:

- If snap-open accessibility along inner or outer radius is required
- If price is an issue
- If flush attachment is required



When not to use it:

- For smoother running and smaller pitch
 - ▶ E-Tubes E2, Series R48, page 6.22



Order example complete E-Tube

Please indicate tube-lengths or number of links Example: 1 m or 33 links

1 m 117.100.100.0



E-Tube

1 set 11800.100.14



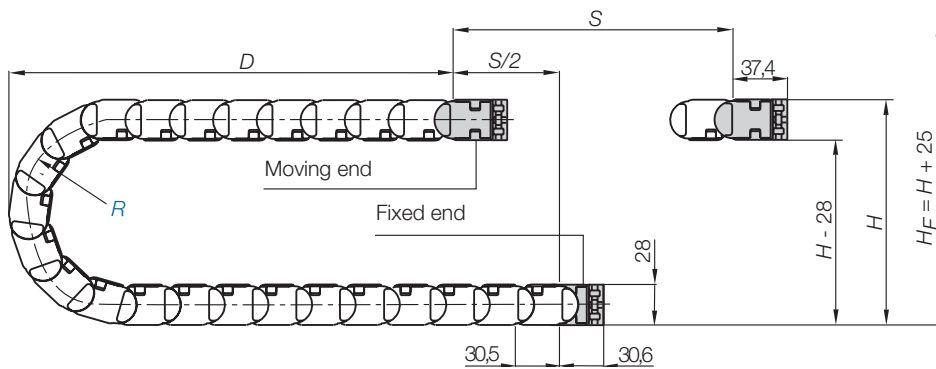
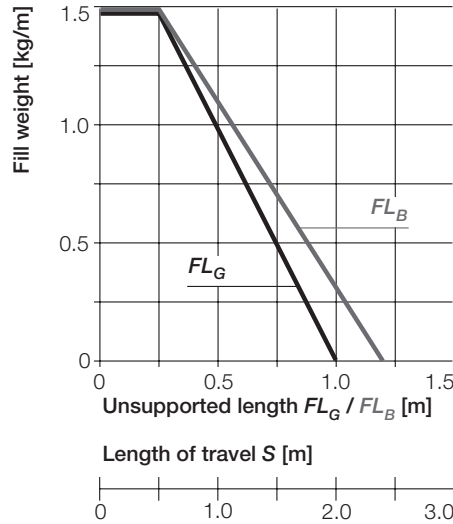
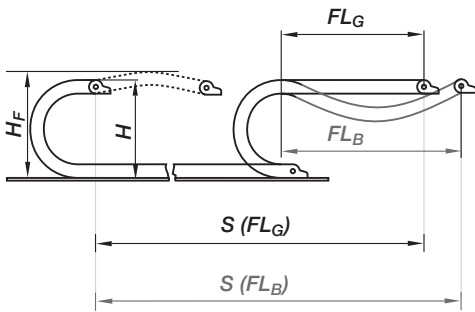
Mounting bracket

Unsupported length

FL_G = with straight upper run

FL_B = with permitted sag

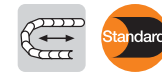
Further information ► **Design, chapter 1**



Pitch = 30,5 mm/link Links/m = 33 (1000,6 mm) Chain length = $S/2 + K$

R	063	075	100	110	125	145	180
H	154	178	228	248	278	318	388
D	110	120	145	155	170	190	225
K	260	300	375	410	455	520	630

- S = Length of travel
- R = Bending radius
- H = Nominal clearance height
- H_F = Required clearance height
- D = Overlength E-Chain® radius in final position
- $K = \pi \cdot R + \text{"safety"}$



Short travels - unsupported

Unsupported E-Chains® feature positive camber over short travels. This must be accounted for when specifying the clearance height H_F . Please consult igus® if space is particularly restricted.

The required clearance height:
 $H_F = H + 25 \text{ mm}$
(with 1,0 kg/m fill weight)

Speed / acceleration FL_G	max. 10 [m/s] / max. 100 [m/s ²]
Speed / acceleration FL_B	max. 3 [m/s] / max. 6 [m/s ²]
Gliding speed / acceleration (maximum)	max. 0,5 [m/s] / max. 5 [m/s ²]
Material - permitted temperature °C	igumid G / -40° up to +130° C
Flammability class, igumid G	VDE 0304 IIC UL94 HB

Technical Data



Details of material properties

► **chapter 1**



E2 E-Tubes Type R
Inner height: 21 mm

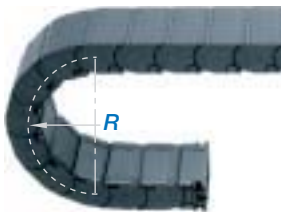
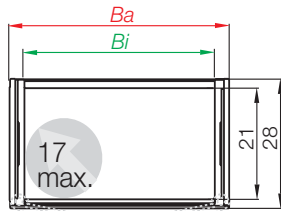
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► page 6.3



Part No. structure

117. 100. 100. 0

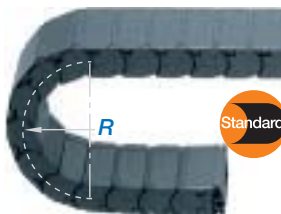
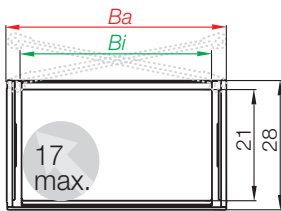


Series R117 - hinged, snap-open on both sides of the inner radius

Part No.	Bi [mm]	Ba [mm]	R [mm]	Bending radii	Weight [kg/m]
117.020.□.0	20	32	063	075 100 110 125 145 180	≈ 0,43
117.025.□.0	25	37	063	075 100 110 125 145 180	≈ 0,46
117.038.□.0	38	50	063	075 100 110 125 145 180	≈ 0,56
117.048.□.0	48	60	063	075 100 110 125 145 180	≈ 0,66
117.063.□.0	63	75	063	075 100 110 125 145 180	≈ 0,76
117.080.□.0	80	92	063	075 100 110 125 145 180	≈ 0,89
117.100.□.0	100	112	063	075 100 110 125 145 180	≈ 1,06

Supplement Part No. with required radius. Example: 117.100.100.0

0 = standard color, other colors ▶ chapter 1 · Pitch = 30,5 mm/link - Links/m = 33



Part No. structure

118. 100. 100. 0



Series R118 - hinged, snap-open on both sides of the outer radius

Part No.	Bi [mm]	Ba [mm]	R [mm]	Bending radii	Weight [kg/m]
118.020.□.0*	20	32	063	075 100 110 125 145 180	≈ 0,43
118.025.□.0	25	37	063	075 100 110 125 145 180	≈ 0,46
118.038.□.0*	38	50	063	075 100 110 125 145 180	≈ 0,56
118.048.□.0	48	60	063	075 100 110 125 145 180	≈ 0,66
118.063.□.0*	63	75	063	075 100 110 125 145 180	≈ 0,76
118.080.□.0	80	92	063	075 100 110 125 145 180	≈ 0,89
118.100.□.0*	100	112	063	075 100 110 125 145 180	≈ 1,06

*upon request

Supplement Part No. with required radius. Example: 118.100.100.0

0 = standard color, other colors ▶ chapter 1 · Pitch = 30,5 mm/link - Links/m = 33

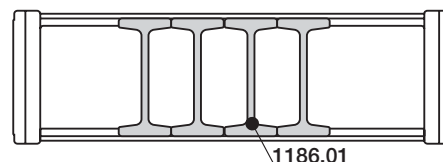


Serie R117 · R118 - Interior Separation

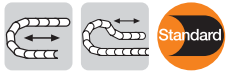
Vertical Separator	Dimensions	Part No.
unassembled	1,5 x 5	1185.01
assembled	10	1186.01

Option 1: Vertical Separators

- Vertical Separators are used if a vertical subdivision of the E-Chain® interior is required
- Standard subdivision with Vertical Separator 1185.01
- By standard Vertical Separators are assembled every other chain link.



Series R117 · R118 - Mounting Brackets KMA

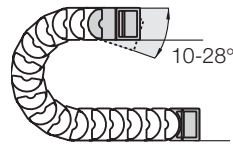


Option KMA* - pivoting

- Pivoting
- Short and long travels
- Space-restricted
- Corrosion-resistant
- Pivoting option at fixed end available upon request (Part No. 11800...12)

*KMA = Polymer Metal Mounting Bracket

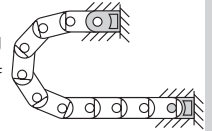
Moving end with bore
(outer link) 11800...1



11800...4 Fixed end
with pin (inner link)

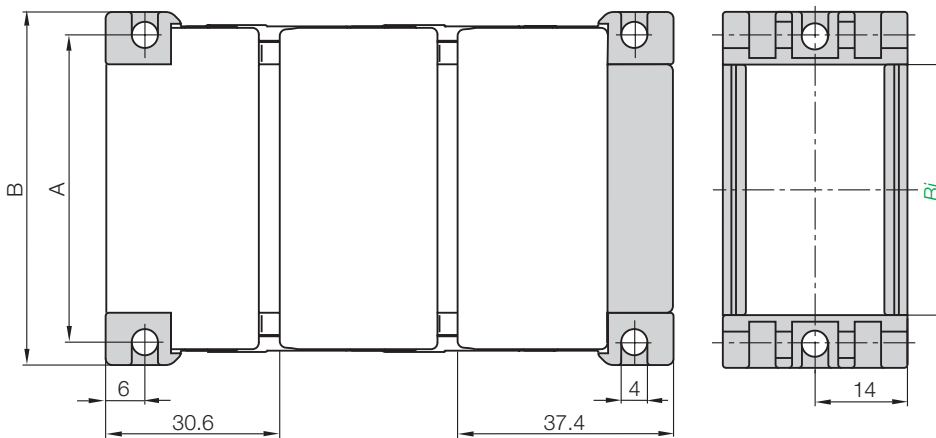


The attachment variants arising automatically by the choice of the KMA mounting bracket



11800...4
Fixed end

11800...1
Moving end



Dimensions and order configurations



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 socket head cap bolts.

Part No. structure

11800.020.14 A



Full set, for both ends:

11800.020.14

Single-part order:

11800.020.1

Mounting bracket with bore

11800.020.4

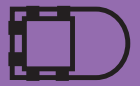
Mounting bracket with pin

For E-Chain®	Part No. full set	Dim. A [mm]	Dim. B [mm]
117-118.020. ▶	11800.020.14	29	36
117-118.025. ▶	11800.025.14	34	41
117-118.038. ▶	11800.038.14	47	54
117-118.048. ▶	11800.048.14	57	64
117-118.063. ▶	11800.063.14	72	79
117-118.080. ▶	11800.080.14	89	96
117-118.100. ▶	11800.100.14	109	116

Please add the Part No. with the requested index - e.g. 11800.048.14

For the preassembled mode please add the index [A] e.g. 11800.048.14 [A]

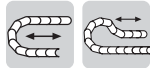
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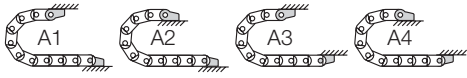
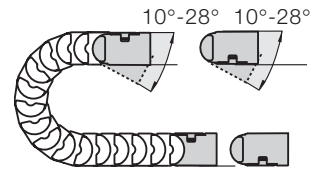
▶ page 6.3



Angled polymer bracket

- Locked connection to E-Tube
- Minimized external width
- For long travels
- Attachment option for strain relief tiwrap plate

Moving end with bore
(outer link) 1180...1PZ(B)



Possible installation conditions for assembled mounting brackets ► Order example "preassembled" below

1180...4PZ(B) Fixed end
with pin (inner link)

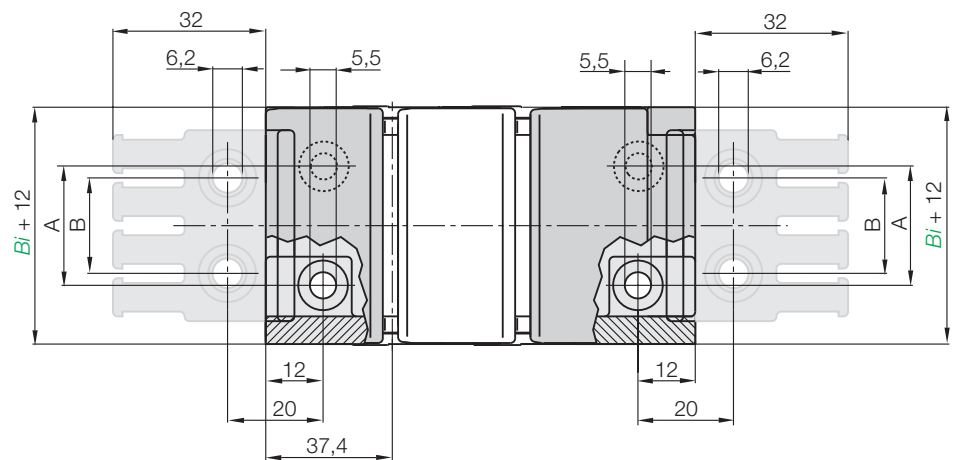
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Dimensions and order configurations

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

1180...1PZ(B)
Moving end

1180 ...4PZ(B)
Fixed end



Part No. structure

1180.048.14.PZB.A1

A... must be indicated on preassembled configurations with assembled tiwrap plates
Full set = 14
Width
Mounting brackets for selected chain type

Full set, for both ends:

1180.048.14.PZB +tiwrap plate

Single-part order:

1180.048.1.PZB +tiwrap plate

Mounting bracket with bore

1180.048.4.PZB +tiwrap plate

Mounting bracket with pin

For E-Chain®	Part No. full set with tiwrap plate	Part No. full set without tiwrap plate	Dim. A [mm]	Dim. B [mm]
117-118.025. ►	1180.025.14PZB	1180.025.14PZ	12	15
117-118.038. ►	1180.038.14PZB	1180.038.14PZ	25	20
117-118.048. ►	1180.048.14PZB	1180.048.14PZ	35	30
117-118.063. ►	1180.063.14PZB	1180.063.14PZ	50	40
117-118.080. ►	1180.080.14PZB	1180.080.14PZ	67	60
117-118.100. ►	1180.100.14PZB	1180.100.14PZ	87	80

Please add the Part No. with the requested index - e.g. 1180.048.12.PZB

For the preassembled mode please add the index A1 ... A4 e.g. 1180.048.12PZB.A1

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

- Countersunk bolt M5 DIN 912-8.8 Length depends on the thickness of the attachment base
- Hexagon nut M5 DIN 934-8

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