

● ● ● Price index



UL94-V2 classifications
upon request



ESD classification:
Electrically conductive
ESD/ATEX version upon request

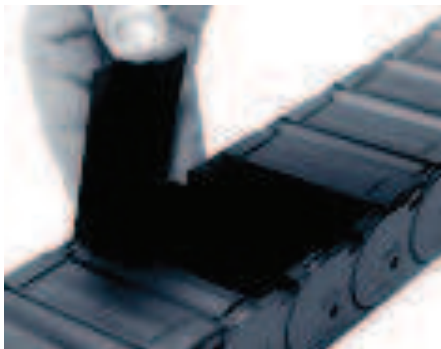


iF-Design Award Winner
Series R117/R118



E-Tubes with HT-material
for hot chips up to 850°C
available upon request

- 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 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 6.26



Order example complete E-Tube

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

1 m 117.100.100.0

E-Tube

with 2 separators 1186.01 assembled every 2nd link

Interior separation

1 set 11800.100.14

Mounting bracket

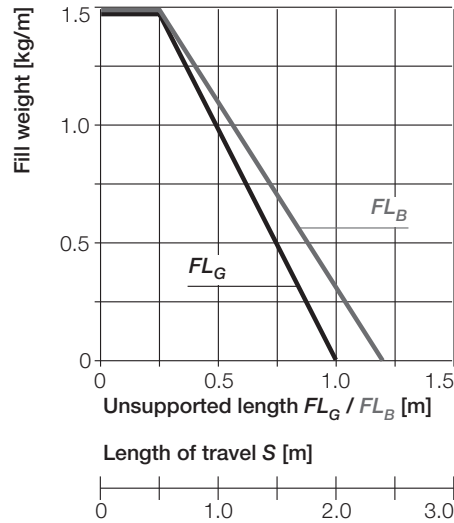
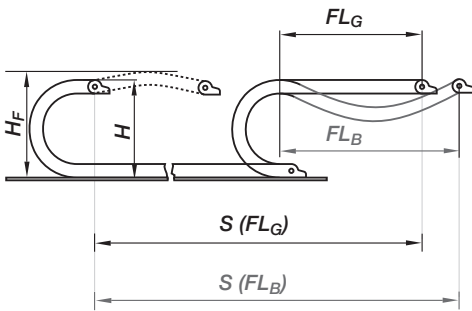


Unsupported length

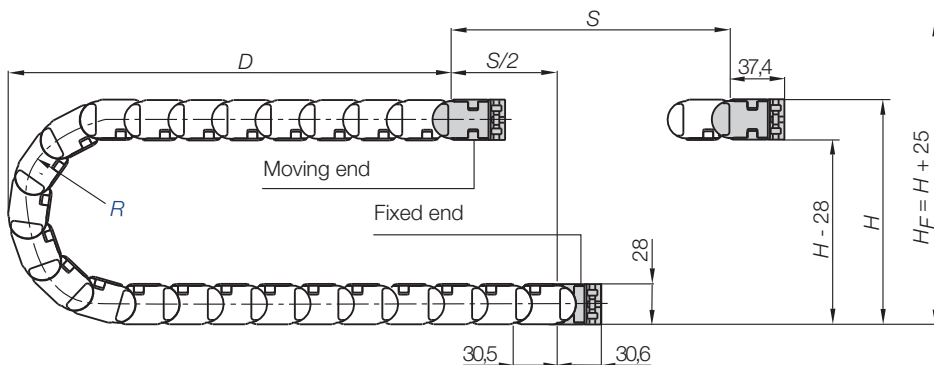
FL_G = with straight upper run

FL_B = with permitted sag

Further information ► **Design, page 1.12**



- 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.

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

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

Hot Chips up to 850°C

E-Tubes that repel hot chips, up to 850 °C. Some applications, depending on amount and size of the chips, can burn or melt the surface. That is no longer the case with the igus® "igumid HT" material.

Order example - Full E-Tube made of HT*: **118.080.100.0.HT**

Order example - Lids made of HT: **118.080HT.100.0**

*for long travels upon request

Delivery time up to 4 weeks! Further Information: www.igus.de/en/HT



Technical Data

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 +120° C
Flammability class, igumid G	VDE 0304 IIC UL94 HB



Details of material properties
► page 1.38

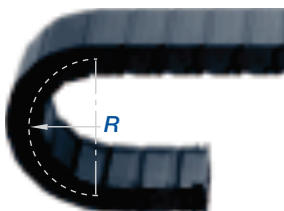
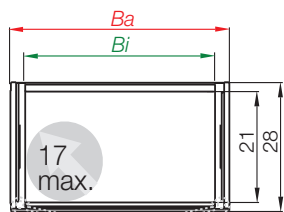


E2 E-Tubes Type R
Inner height: 21 mm

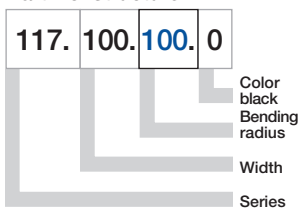
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► page 6.5



Part No. structure

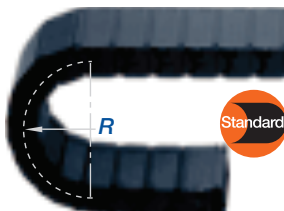
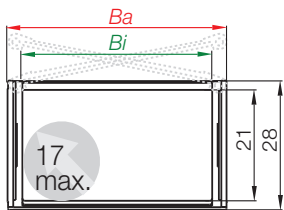


Series R117 - hinged, snap-open on both sides of the inner radius

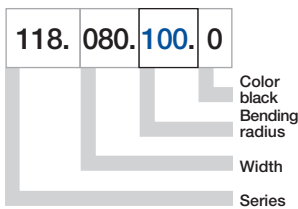
Part No.	B_i [mm]	B_a [mm]	R [mm]	Bending radii						Weight [kg/m]
117.020.□.0	20	32	063	075	100	110	125	145	180	≈ 0,43
117.025.□.0	25	37	063	075	100	110	125	145	180	≈ 0,46
117.038.□.0	38	50	063	075	100	110	125	145	180	≈ 0,56
117.048.□.0	48	60	063	075	100	110	125	145	180	≈ 0,66
117.063.□.0	63	75	063	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 ▶ page 1.39 · Pitch = 30,5 mm/link - Links/m = 33



Part No. structure



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

Part No.	B_i [mm]	B_a [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

The sizes 020 / 038 / 063 / 100 are available upon request.

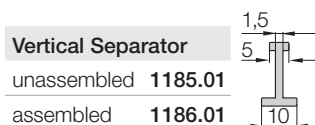
Delivery time: approx. 8-10 weeks after receipt of order

Supplement Part No. with required radius. Example: 118.080.100.0

0 = standard color, other colors ▶ page 1.39 · Pitch = 30,5 mm/link - Links/m = 33



Series R117·R118 | Accessories | Interior Separation



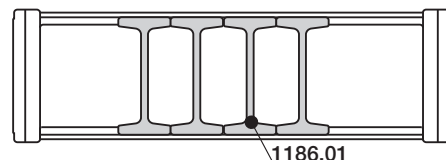
Vertical Separator	
unassembled	1185.01
assembled	1186.01

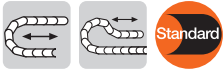
Option 1: Vertical Separators

Vertical Separators are used if a vertical subdivision of the E-Chain® interior is required -

By standard Vertical Separators are assembled every other E-Chain® link

- Standard subdivision with Vertical Separator 1185.01



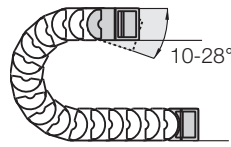


Option KMA* - pivoting

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

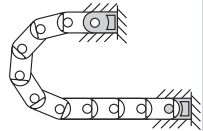
*KMA = Polymer Metal Mounting Bracket

Moving end (outer link)
11800...1



11800...4

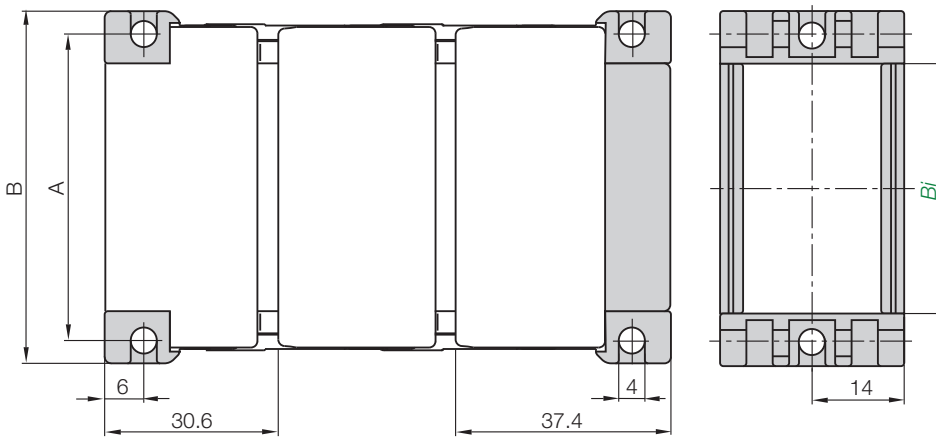
Fixed end (inner link)



Mounting bracket attachment

11800...4
Fixed end

11800...1
Moving end

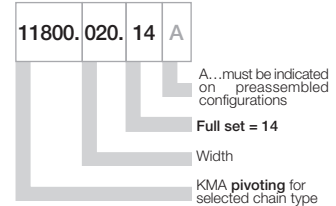


Dimensions and order configurations



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



Full set, for both ends:

11800.020.14

Single-part order:

11800.020.1

Mounting bracket with bore

11800.020.4

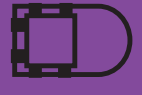
Mounting bracket with pin

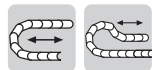
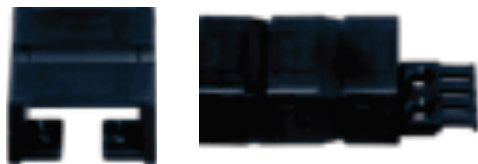
For Series	Part No. full set	Dim. A [mm]	Dim. B [mm]
117-118.020. ▶	11800.020.14	29	36
117-118.025. ▶	11800.025.14	34	41
117-118.038. ▶	11800.038.14	47	54
117-118.048. ▶	11800.048.14	57	64
117-118.063. ▶	11800.063.14	72	79
117-118.080. ▶	11800.080.14	89	96
117-118.100. ▶	11800.100.14	109	116

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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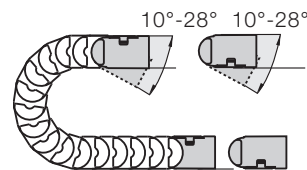




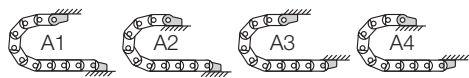
Angled polymer bracket

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

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



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



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

Dimensions and order configurations

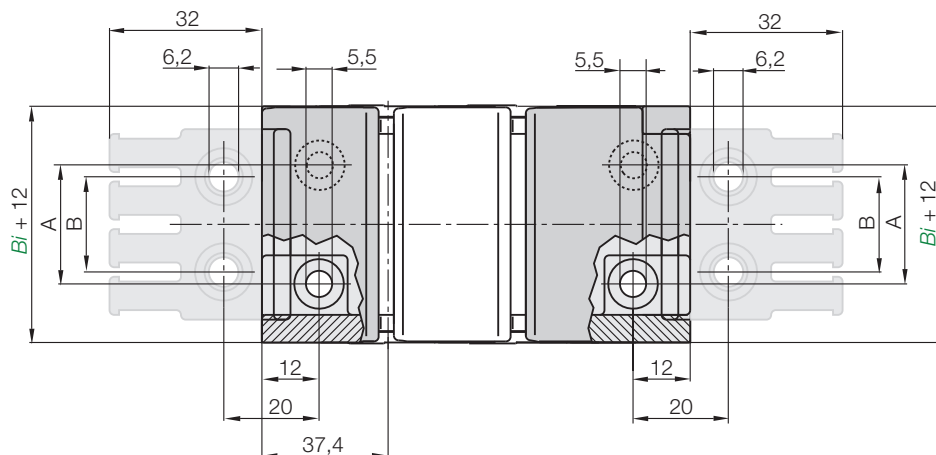
Strain relief is possible on the moving end and/or the fixed end.

1180...1PZ(B)

Moving end

1180 ...4PZ(B)

Fixed end



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igus® GmbH
51147 Cologne

Part No. structure

1180.048.14.PZB.A1

A... must be indicated on preassembled configurations with assembled tiewrap plates

Full set = 14

Width

Mounting brackets for selected chain type

Full set, for both ends:

1180.048.14.PZB+tiewrap plate

Single-part order:

1180.048.1.PZB+tiewrap plate

Mounting bracket with bore

1180.048.4.PZB+tiewrap plate

Mounting bracket with pin

For Series	Part No. full set with tiewrap plate	Part No. full set without tiewrap 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:

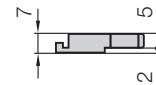
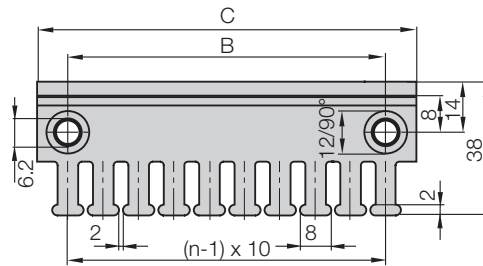
- Countersunk bolt M5 DIN 912-8.8 Length depends on the thickness of the attachment base
- Hexagon nut M5 DIN 934-8

Internet: www.igus.eu
E-mail: info@igus.de

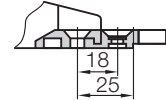
Tiewrap plate	No. of teeth <i>n</i>	Dim. C [mm]	Dim. B [mm]
2020.ZB	3	30	15
2030.ZB	4	40	20
2040.ZB	5	50	30
2050.ZB	6	60	40
2070.ZB	8	80	60
2090.ZB =			
(2030.ZB + 2040.ZB)	9	90	-
2100.ZB	10	100	80
2125.ZB =			
(2050.ZB + 2050.ZB)	12	120	-

Tiewrap plate as individual part

As individual component screwed on KMA. Can be plugged in the mounting brackets. **Details** ▶ **chapter 10**



Single tiewrap plate



Shown assembled

E2 E-Tubes Type R
Inner height: 21 mm

Cable tiewraps as individual part

Cable tiewraps (100-piece bag)	Width x length	max. Ø	Tensile strength
CFB.001	4,8 x 150 mm	36 mm	222 N



Other strain relief elements
▶ chapter 10

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▶ chapter 10



▶ page 6.5