

● ● ● Price index



Upon request: Cleanroom Class 1
(ISO class 3) tested by the Dryden
Engineering Company, California



UL94-V2 classifications
upon request



iF-Design
Award Winner



Low-noise



"Zipper-fast" opening and closing



When to use the Series R09:

- If extremely quick, zipper-like access to cables is required
- If chip protection is required
- If quick, easy insertion of cables with preassembled connectors is required
- If aesthetic design is required



When not to use it:

- If opening of the link is not necessary
 - ▶ Series 08 E2 micro, page 5.34
- If cable installation without opening lids is possible
 - ▶ Series E08 Easy Chain®, page 3.28

- 1 "Zipper-fast" opening and closing
- 2 Small pitch for low-noise, smooth operation
- 3 Protection against dirt and chips
- 4 iF-Design Award Winner
- 5 Light weight
- 6 Zipper lids can be separated and joined at each chain link
- 7 For high acceleration
- 8 Mounting bracket with integrated strain relief
- 9 Small zip-open E-Tube
- 10 Also available as "Zipper" E-Chain® Series 09 ▶ page 4.14



Order example complete E-Tube

Please indicate tube-lengths or number of links Example: 1 m or 50 links

1 m R09.20.048.0



E-Tube

1 set 080.20.12PZ



Mounting bracket

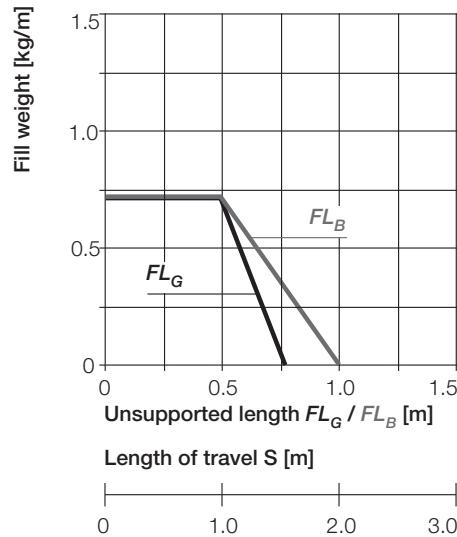
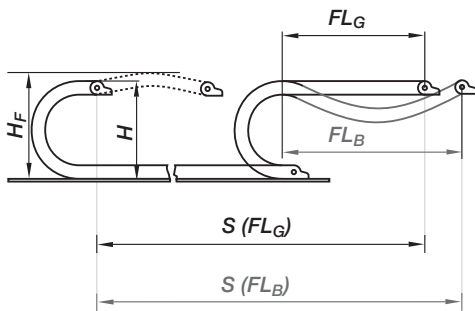


Unsupported length

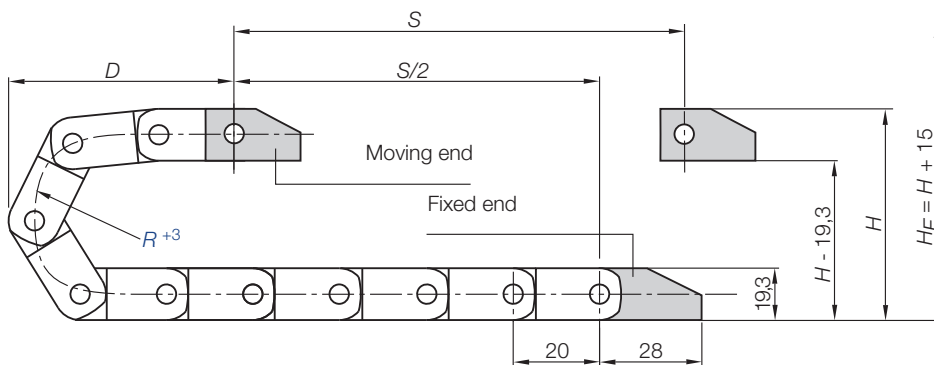
FL_G = with straight upper run

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 = 20 mm/link Links/m = 50 (1.000 mm) Chain length = $S/2 + K$

R	048	075	100
H	116	170	220
D	80	107	132
K	190	280	360

The required clearance height:
 $H_F = H + 15 \text{ mm}$
 (with 0,3 kg/m fill weight)



Zipper E-Tubes
 Inner height: 15 mm

Phone +49- (0) 22 03-96 49-800
 Fax +49- (0) 22 03-96 49-222



Speed / acceleration FL_G	max. 20 [m/s] / max. 200 [m/s²]
Speed / acceleration FL_B	max. 3 [m/s] / max. 6 [m/s²]
Gliding speed / acceleration (maximum)	max. 10 [m/s] / max. 50 [m/s²]
Material - permitted temperature °C	igumid G / -40° to +120° C
Flammability class, igumid G	VDE 0304 IIC UL94 HB

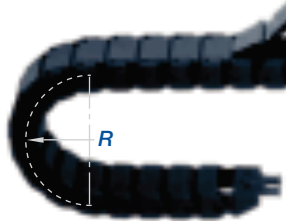
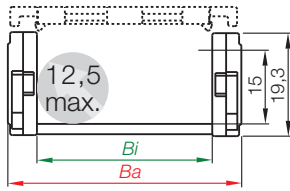
Technical Data



Details of material properties
 ► page 1.38



► page 4.5



Part No. structure

R09.	20.	048.	0
		Color black	
		Bending radius	
		Width	
		Series	

Series R09 E-Tube - zip-open along the outer radius

Part No.	B_i [mm]	B_a [mm]	R [mm]	Bending Radii	Weight [kg/m]
R09.10. <input type="text"/> .0	10	18,2	048	075 100	≈ 0,21
R09.16. <input type="text"/> .0	16	24,2	048	075 100	≈ 0,24
R09.20. <input type="text"/> .0	20	28,2	048	075 100	≈ 0,25
R09.30. <input type="text"/> .0	30	38,2	048	075 100	≈ 0,28
R09.40. <input type="text"/> .0	40	48,2	048	075 100	≈ 0,31
R09.50. <input type="text"/> .0	50	58,2	048	075 100	≈ 0,34

Supplement part no. with required radius (R) Example: R09.20. .0

0 = standard color, other colors ► page 1.39 · Pitch = 20 mm/link - Links/m = 50

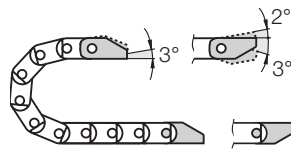




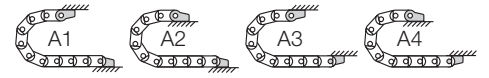
Polymer, one-piece

- One-piece mounting bracket
- Corrosion-resistant
- Available preassembled
- Inner and outer attachment possible
- Available with or without integrated strain relief tiwrap plates

Moving end with bore
(outer link) 080...1(PZ)



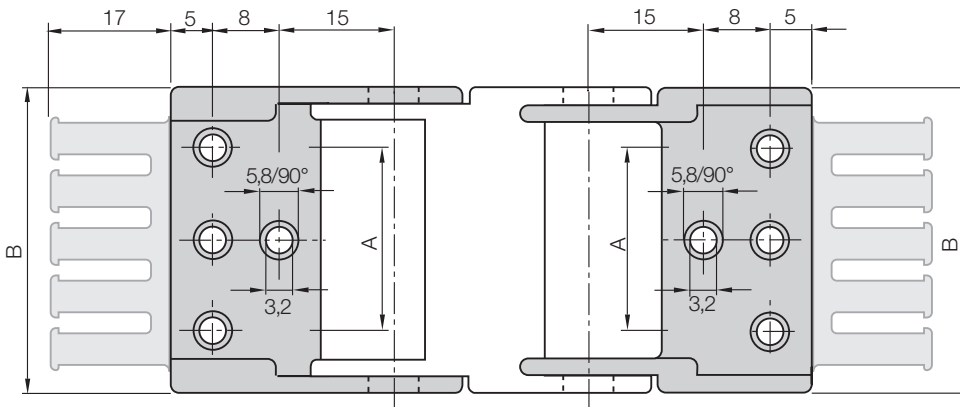
080...2(PZ) Fixed end
with pin (inner link)



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

080...1(PZ)

Moving end



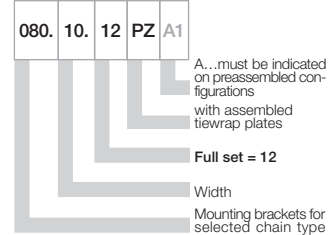
080...2(PZ)

Fixed end

Dimensions and order configurations

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

Part No. structure



080.10.12 - 080.20.12: center bores only

080.30.12 - 080.50.12: bores (see figure above)

For E-chain®	Part No. full set with tiwrap plate	Part No. full set without tiwrap plate	Number of teeth	Dim. A [mm]	Dim. B [mm]
R09.10. ▶	080.10. 12 PZ	080.10. 12	1	-	18,2
R09.16. ▶	080.16. 12 PZ	080.16. 12	2	-	24,2
R09.20. ▶	080.20. 12 PZ	080.20. 12	2	-	28,2
R09.30. ▶	080.30. 12 PZ	080.30. 12	3	22	38,2
R09.40. ▶	080.40. 12 PZ	080.40. 12	4	32	48,2
R09.50. ▶	080.50. 12 PZ	080.50. 12	5	42	58,2

For the **preassembled** mode please add the index **A1** ... **A4** Example: 080.16. 12 **A1**

Full set, for both ends:

080. 10. 12 PZ +tiwrap plate

Single-part order:

080. 10. 1 PZ +tiwrap plate

Mounting bracket **with bore**

080. 10. 2 PZ +tiwrap plate

Mounting bracket **with pin**

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Quicksnap - the complete, detachable mounting unit, available upon request



Quickfix - mounting bracket with dowel, available upon request

Additional Features

