

E2 micro | Series B09

● ● ● Price index



UL94-V2 classifications
upon request



Special equipment:
Electrically conductive ESD/ATEX
version upon request

- ❶ Snap-open along outer radius with film-hinge
 - ❷ Small pitch for low-noise, smooth operation
 - ❸ For high acceleration
 - ❹ Light weight
 - ❺ Mounting bracket with integrated strain relief
 - ❻ Modular 2-piece link design - saves assembly time
 - ❼ Easy to shorten and lengthen at any given point
 - ❽ Closed, easy to open version
- ▶ Series R09 Zipper E-Tube, page 4.32



Easy to assemble and to disassemble



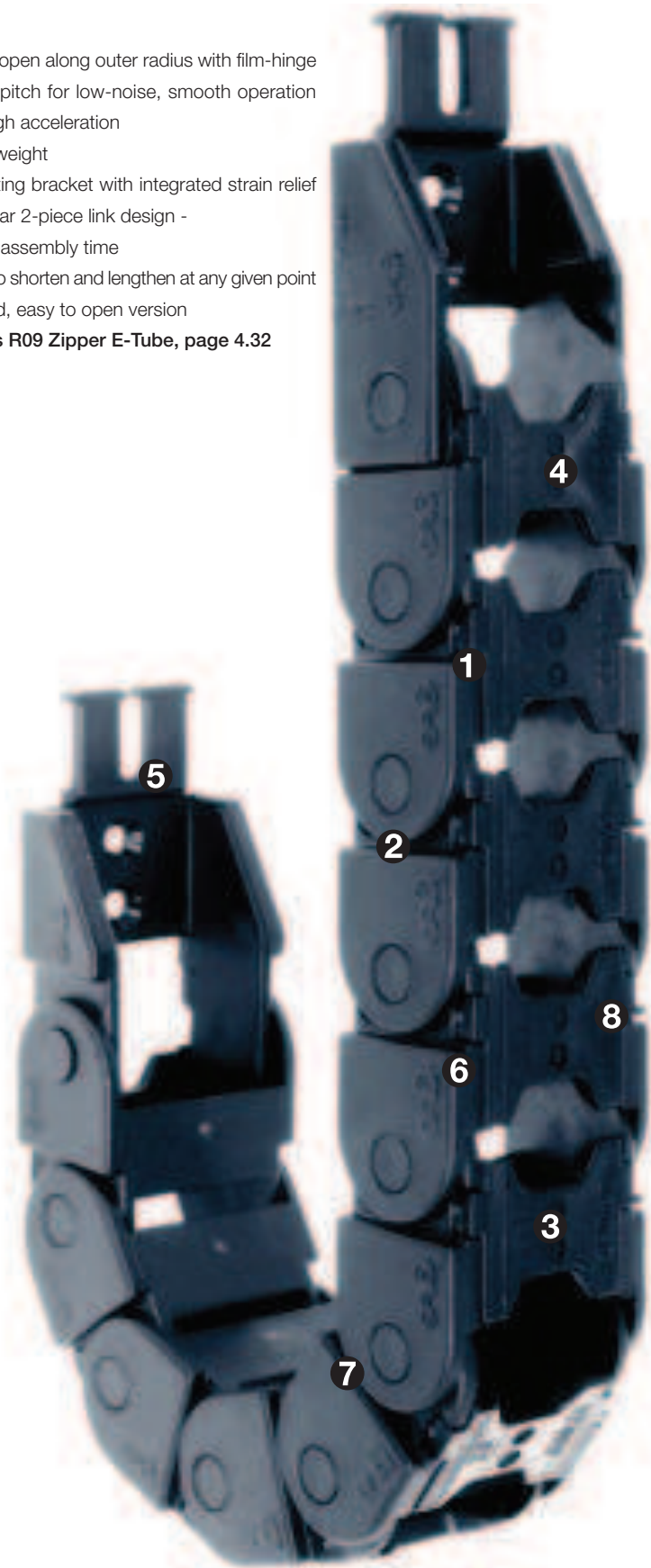
When to use the Series B09:

- If a small and lightweight E-Chain® is required
- If an openable small and reasonable E-Chain® is required
- Perfect for handling machines and pick and place robots



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
- If a fast openable E-Tube system is required
 - ▶ Series R09, page 4.32



Order example complete E-Chain®

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

1 m B09.20.038.0



E-Chain®

1 set 080.20.12PZ



Mounting bracket

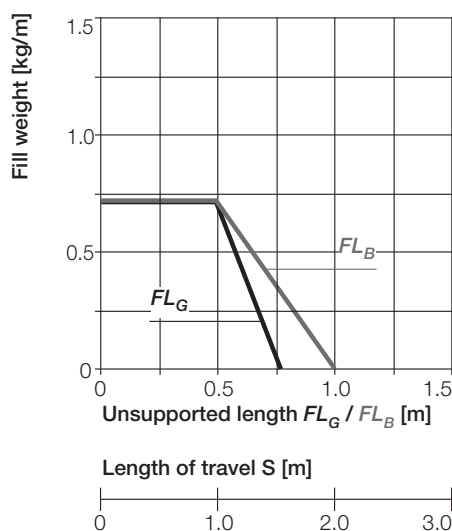
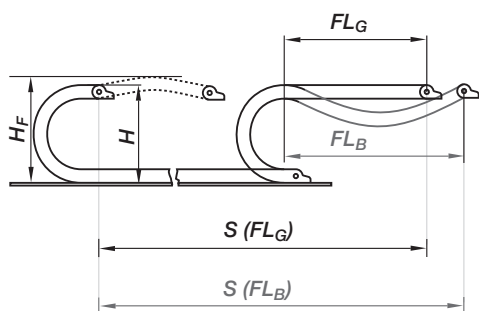


Unsupported length

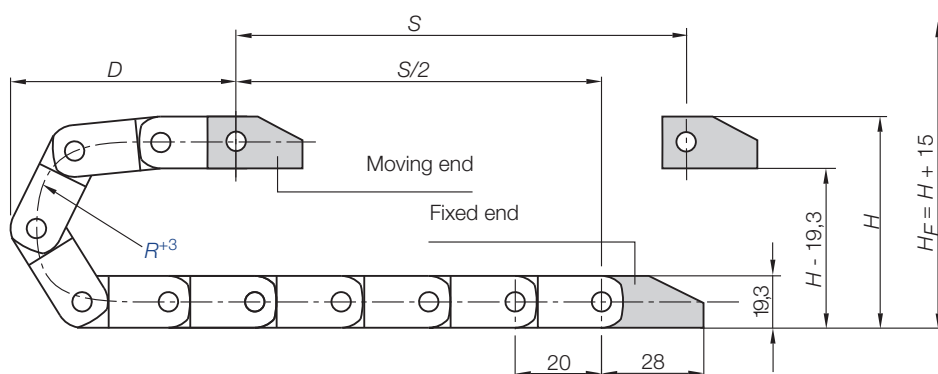
FL_G = with straight upper run

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	028	038	048
H	76	96	116
D	60	70	80
K	130	160	190

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

Speed / acceleration FL_G	max. 20 [m/s] / max. 200 [m/s ²]
Speed / acceleration FL_B	max. 3 [m/s] / max. 6 [m/s ²]
Gliding speed / acceleration (maximum)	max. 10 [m/s] / max. 50 [m/s ²]
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

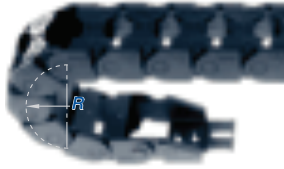
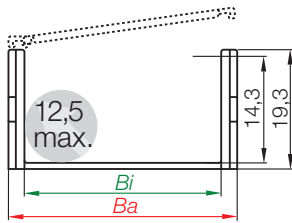


E2 micro
 Inner height: 14,3 mm

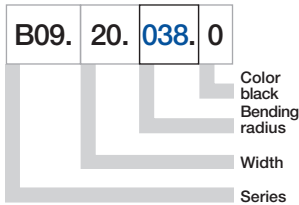
Phone +49- (0) 22 03-96 49-800
 Fax +49- (0) 22 03-96 49-222



► page 5.9



Part No. structure



Series B09 snap-open along inner radius

Part No.	B_i [mm]	B_a [mm]	R [mm]	Bending Radii	Weight [kg/m]
B09.16.□.0	16	24,2	028	038 048	≈ 0,24
B09.20.□.0	20	28,2	028	038 048	≈ 0,25
B09.30.□.0	30	38,2	028	038 048	≈ 0,28
B09.40.□.0	40	48,2	028	038 048	≈ 0,31

 Supplement part no. with required radius (R) Example: B09.20.038.0

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

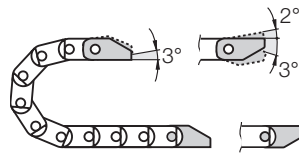




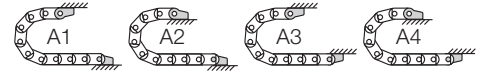
Polymer - pivoting

- 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)

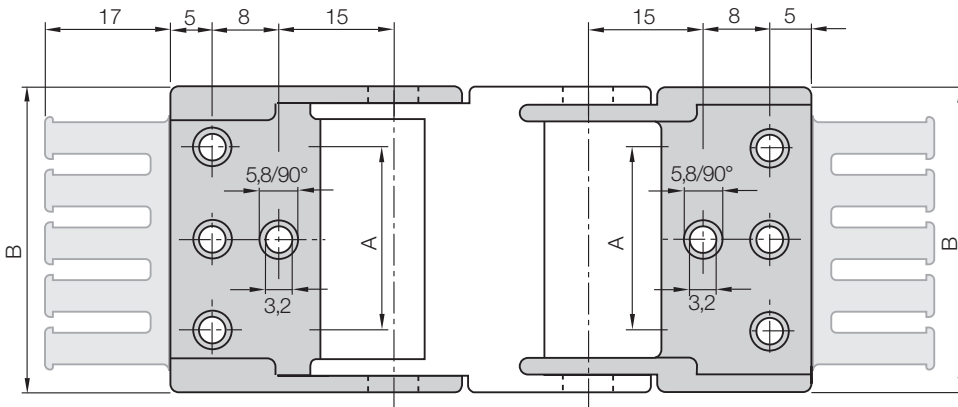


080...2(PZ) Fixed end
with pin (inner link)



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.

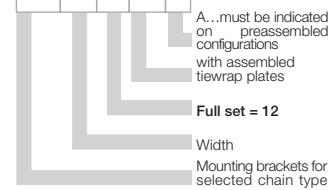
080.16.12 - 080.20.12: center bores only
080.30.12 - 080.40.12: bores (see figure above)

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]
B09.16. ▶	080.16. 12 PZ	080.16. 12	2	-	24,2
B09.20. ▶	080.20. 12 PZ	080.20. 12	2	-	28,2
B09.30. ▶	080.30. 12 PZ	080.30. 12	3	22	38,2
B09.40. ▶	080.40. 12 PZ	080.40. 12	4	32	48,2

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

Part No. structure

080. 16. 12 PZ A1



Full set, for both ends:

080. 16. 12 PZ +tiwrap plate

Single-part order:

080. 16. 1 PZ +tiwrap plate

Mounting bracket with bore

080. 16. 2 PZ +tiwrap plate

Mounting bracket with pin



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



Quickfix - mounting bracket with dowel, available upon request

Additional Features



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