

Price Index



Series 03

Special Features / Options



IPA Qualification Certificate:
Cleanroom test upon request



ESD Classification:
Electrically conductive ESD/
ATEX version upon request



Smallest inner height
.20" (5 mm)



Flammability Class
VDE 0304 IIC UL94 V2

Assembly Tips



Easy to assemble and disassemble

Usage Guidelines



- If quieter operation is required
- If cost is a factor
- If snap-open links are not necessary



- If snap-open links are required
 - Series 047 "Zipper"
- If quick insertion of cables with preassembled connector is required
 - Series E03 E-Z Chain

Features & Benefits

- 1 Mounting bracket with integrated strain relief
- 2 One-piece, non snap-open e-chain®
- 3 Very lightweight - low price
- 4 igus® smallest e-chain® - interior dimensions .20" x .20" (5 x 5 mm)
- 5 Dirt-repellant exterior
- 6 Available as E-Z style e-chain, See Chapter 2
- 7 Patented push-button design for better stability



Order Example: Complete e-chain®

Please indicate chain length or number of links. Example:

3.28 ft (1 m) 03-05-028-0

e-chain®

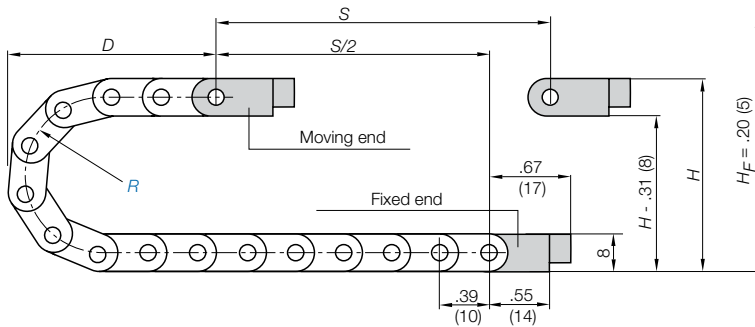
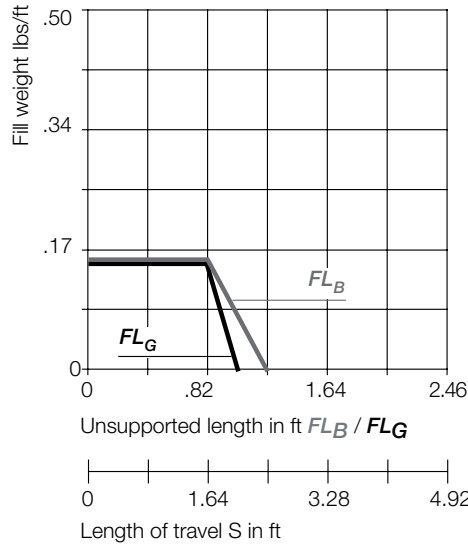
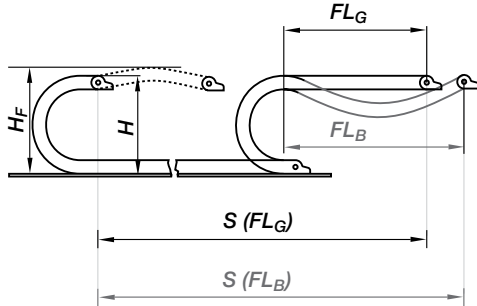
1 Set 03-05-12Z

Mounting Bracket

e-chain system® E2 Micro Series 03 Installation Dimensions

Short travel, unsupported length

- FL_B = unsupported with permitted sag
 - FL_G = unsupported with straight upper run
- Further information ► Design, Chapter 1



Pitch per link = .39" (10 mm)
 Links per ft (m) = 30.47 (100)
 For center mount applications:
 Chain length = $\frac{S}{2} + K$

The required clearance height: $H_F = H + .20$ in. (5 mm) (with .067 lbs/ft (0.1 kg/m) fill weight).
 Please consult igus® if space is particularly restricted.

R	.39 (010)	.47 (012)	.59 (015)	.71 (018)	1.10 (028)
H	1.10 (28)	1.26 (32)	1.50 (38)	1.73 (44)	2.52 (64)
D	1.14 (29)	1.22 (31)	1.34 (34)	1.46 (37)	1.85 (47)
K	2.17 (55)	2.36 (60)	2.76 (70)	3.15 (80)	4.33 (110)

Short Travels - Unsupported



Unsupported e-chains® feature positive camber over short travels. This must be accounted for when specifying the clearance height. Please refer to **Installation dimensions** for further details.

Legend

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

*If the mounting bracket location is set lower



PDF: igus.com/e-chain-pdfs
 Product information: igus.com/e-chains



Speed / acceleration FL_G	max. 65.6 ft/s (20 m/s) / max. 656 ft/s ² (200 m/s ²)
Speed / acceleration FL_B	max. 9.84 ft/s (3 m/s) / max. 19.69 ft/s ² (6 m/s ²)
Gliding speed / acceleration (maximum)	max. 9.84 ft/s (3 m/s) / max. 32.8 ft/s ² (10 m/s ²)
Material - permitted temperature	igumid NB / -40°F (-40°C) up to +176°F (+80° C)
Flammability Class, igumid NB	VDE 0304 IIC UL94 V2

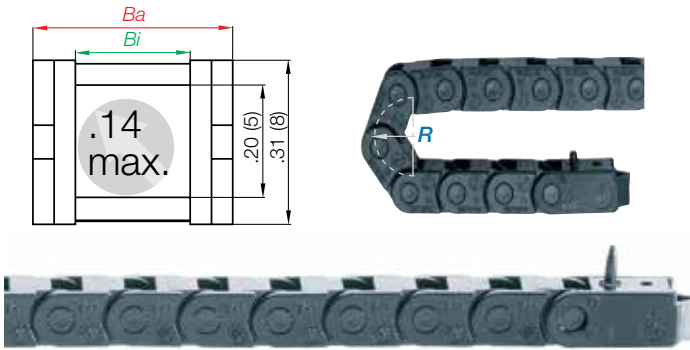
Technical Data



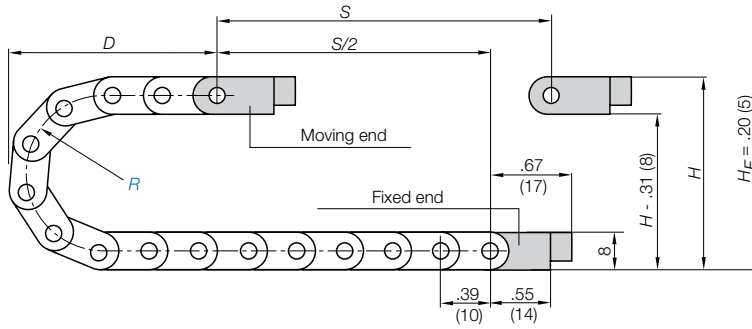
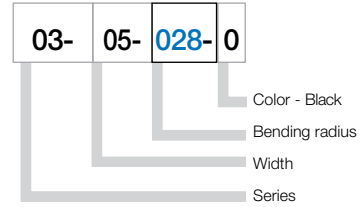
Details of material properties

► Chapter 1

Series 03 - e-chain® non snap-open



Part Number Structure



Supplement part number with required radius. Example: 03-05-028-0
Pitch: .39 in. (10 mm) per link links/ft (m) = 30.47 (100)

Part Number	<i>Bi</i> in. (mm)	<i>Ba</i> in. (mm)	Weight lbs/ft (kg/m)
03-05- <input type="text"/> -0	.20 (5)	.34 (8.7)	≈ 0.027 (0.04)
03-07- <input type="text"/> -0	.28 (7)	.42 (10.7)	≈ 0.034 (0.05)
03-10- <input type="text"/> -0	.39 (10)	.54 (13.7)	≈ 0.040 (0.06)

Choose from the radii below for all of the above sizes
Radius (mm) Example: 03-05-028-0

	010	012	015	018	028
<i>R</i>	.39 (010)	.47 (012)	.59 (015)	.71 (018)	1.10 (028)
<i>H</i>	1.10 (28)	1.26 (32)	1.50 (38)	1.73 (44)	2.52 (64)
<i>D</i>	1.14 (29)	1.22 (31)	1.34 (34)	1.46 (37)	1.85 (47)
<i>K</i>	2.17 (55)	2.36 (60)	2.76 (70)	3.15 (80)	4.33 (110)

0=Standard color black. For other colors see Chapter 1

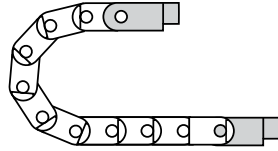
e-chain system® E2 Micro Series 03 Mounting Brackets



Polymer, one-piece

- One-piece mounting bracket
- Corrosion resistant
- Available preassembled
- Rapid installation through adaptor plate

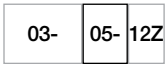
Moving end
03 ...1Z



Fixed end
03...2Z



Part Number Structure



Complete Set
Width
Mounting bracket for selected chain type

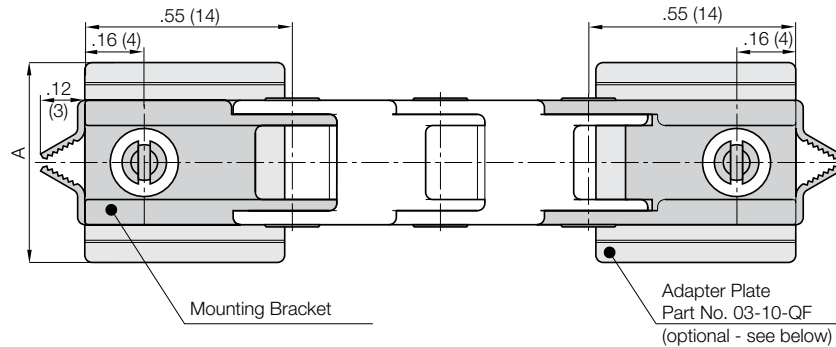
Full set, for both ends:

03- 05- 12Z Full set, each part with pin/bore

Single-part order:

03- 05- 1Z Mounting bracket with bore

03- 05- 2Z Mounting bracket with pin



Chain Width	Part No. Full Set	Dimension A in. (mm)
-05	03-05-12Z	.34 (8.7)
-07	03-07-12Z	.42 (10.7)
-10	03-10-12Z	.54 (13.7)

Additional Accessories



03-10-QF = Adapter plate for all sizes

The adapter has broken edges, so that it can be adapted to the respective chain width. It is not absolutely necessary for attaching the mounting brackets. The mounting brackets can also be screwed on without the adapter plate.

