



Price index



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



UL94-V2 classifications
upon request



Low-noise



"Zipper-fast" opening and closing

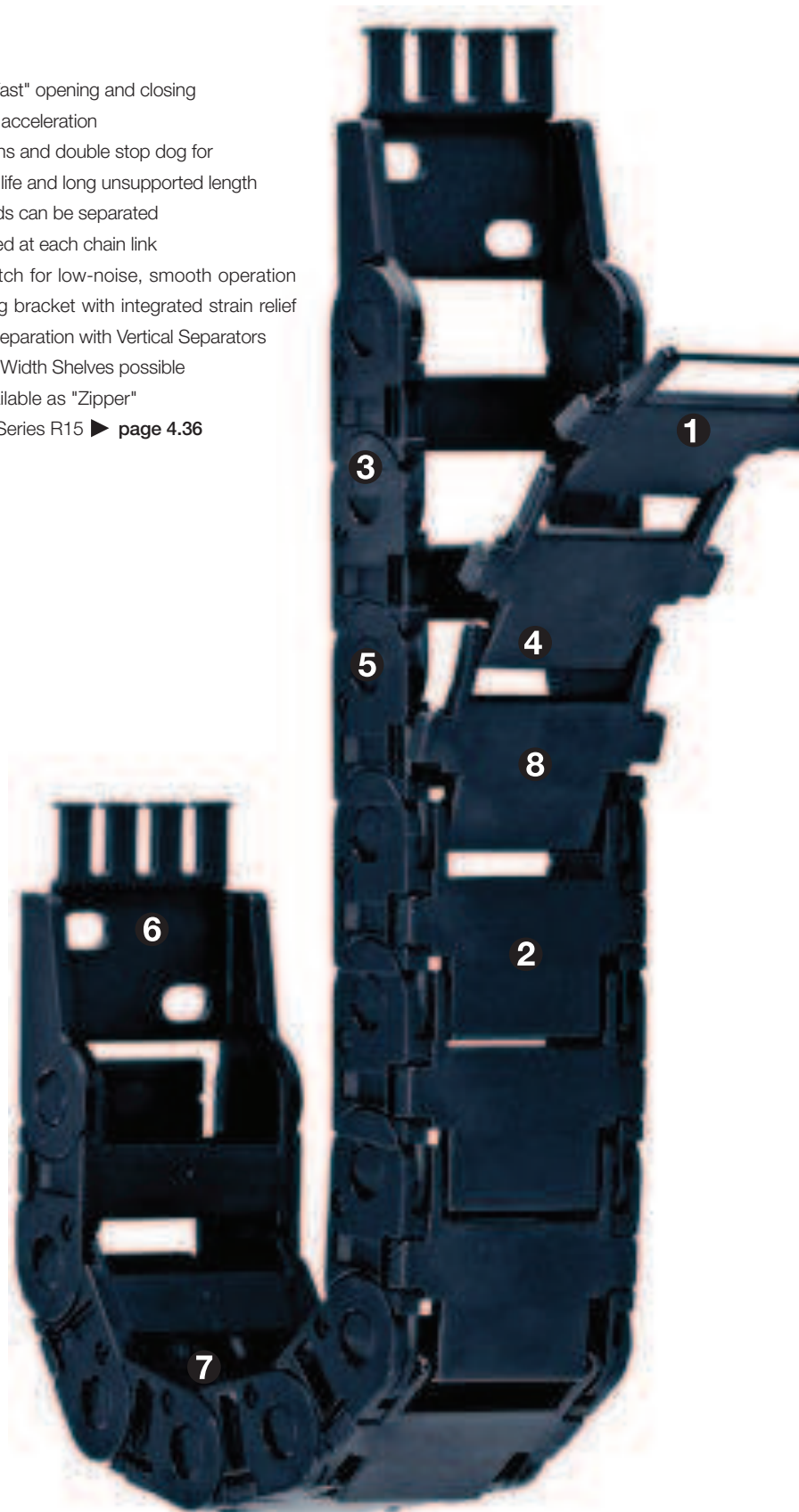
**When to use the Series 15:**

- If fast, zipper-like accessibility to cables is required
- If connection options are required (Quicksnap, Quickfix, ...)
- If interior separation is required
- If high stability and long service life are required

**When not to use it:**

- If opening of the link is not necessary
 - ▶ Series 10 E2 mini, page 5.48
- If torsion occurs
 - ▶ Series E14 Easy Chain®, page 3.32
- If the chain must snap-open along the inner radius
 - ▶ B15i E2 mini, page 5.70
- If a closed tube system is required
 - ▶ Series R15 Zipper, page 4.36

- ① "Zipper-fast" opening and closing
- ② For high acceleration
- ③ Large pins and double stop dog for superior life and long unsupported length
- ④ Zipper lids can be separated and joined at each chain link
- ⑤ Small pitch for low-noise, smooth operation
- ⑥ Mounting bracket with integrated strain relief
- ⑦ Interior separation with Vertical Separators and Full-Width Shelves possible
- ⑧ Also available as "Zipper" E-Tube Series R15 ▶ page 4.36

**Order example complete E-Chain®**Please indicate chain-lengths or number of links **Example: 1 m or 33 links**1 m **15.025.038.0**

E-Chain®

with 2 separators **154** assembled every 2nd link

Interior separation

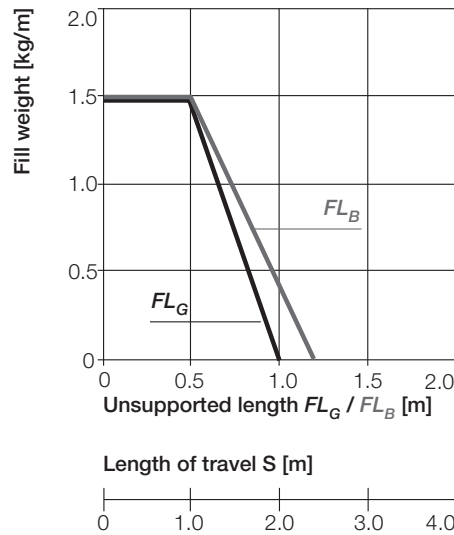
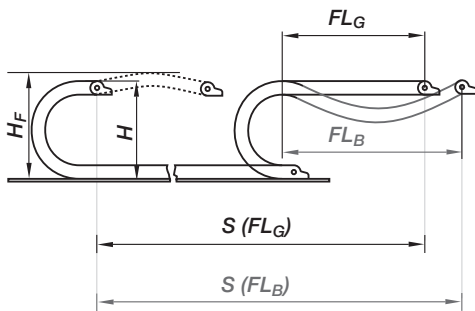
1 set **1025.12PZ**

Mounting bracket

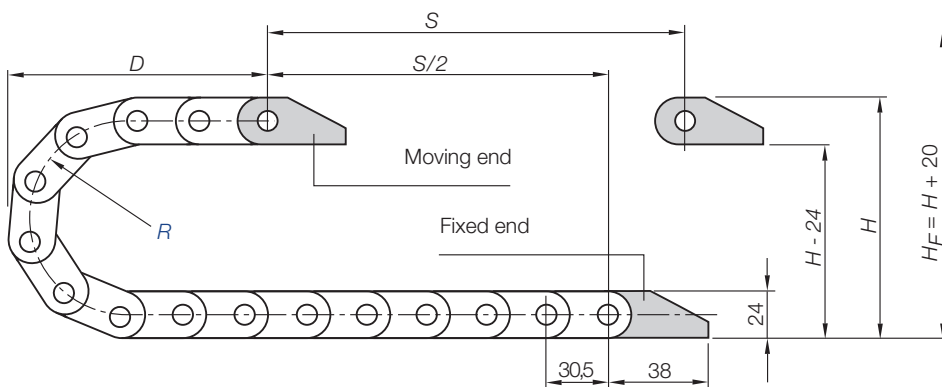


Unsupported length

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 = 30,5 mm/link Links/m = 33 (1.006,5 mm) Chain length = $S/2 + K$

R	038	048	075	100	110	125	145	180
H	100	120	175	225	245	275	315	385
D	90	120	145	155	170	190	225	279
K	185	215	300	375	410	455	520	630

The required clearance height:
 $H_F = H + 20$ mm
 (with 1,0 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

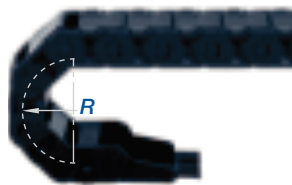
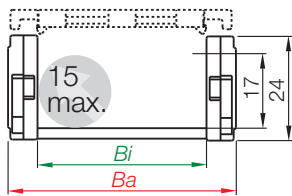


Zipper E-Chains®
 Inner height: 17 mm

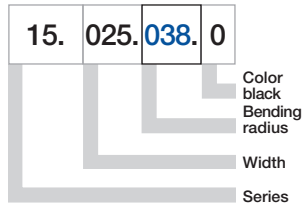
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► page 4.5



Part No. structure



Series 15 E-Chain® - zip-open along outer radius

Part No.	Bi [mm]	Ba [mm]	R [mm]	Bending Radii	Weight [kg/m]
15.015.□.0	15	26	038	048 075 100 110 125 145 180	≈ 0,35
15.025.□.0	25	36	038	048 075 100 110 125 145 180	≈ 0,40
15.038.□.0	38	49	038	048 075 100 110 125 145 180	≈ 0,46
15.050.□.0	50	61	038	048 075 100 110 125 145 180	≈ 0,52
15.5.□.0	63	76	038	048 075 100 110 125 145 180	≈ 0,63
15.6.□.0	80	94	038	048 075 100 110 125 145 180	≈ 0,70
15.7.□.0	100	113	038	048 075 100 110 125 145 180	≈ 0,76

Supplement part no. with required radius (R) Example: 15.025.038.0

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



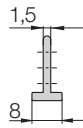
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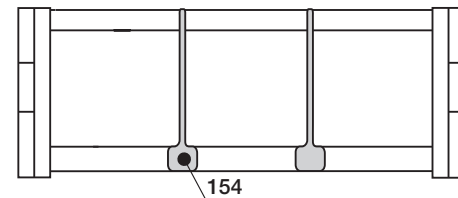
Zipper | Series 15 | Accessories | Interior Separation

Vert. Separator, slotted	
unassembled	153
assembled	154

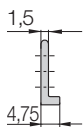


Option 1: Vertical Separators

- Vertical Separators are used if a vertical subdivision of the E-Chain® interior is required
- Standard subdivision with Vertical Separator, slotted 154, for combinations with Full-Width Shelf 111.X
- By standard Vertical Separators are assembled every other chain link.

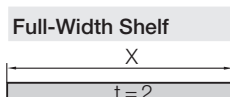
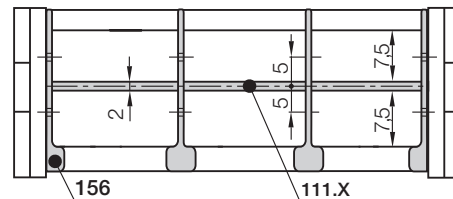


Side Plate	
unassembled	155
assembled	156



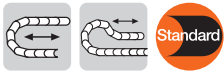
Option 2: Full-Width Shelves

- For applications involving many thin cables with similar or identical diameters.
- Side Plate 156 can be combined with Vertical Separator, slotted 154 and Full-Width Shelf 111.X



Width X [mm]	Part No. unassembled	Part No. assembled
015	110.15	111.15
025	110.25	111.25
038	110.38	111.38
050	110.50	111.50

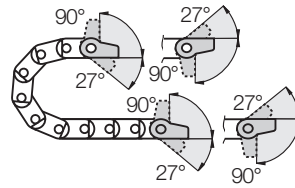
Width X [mm]	Part No. unassembled	Part No. assembled
063	110.63	111.63
080	110.80	111.80
100	110.100	111.100



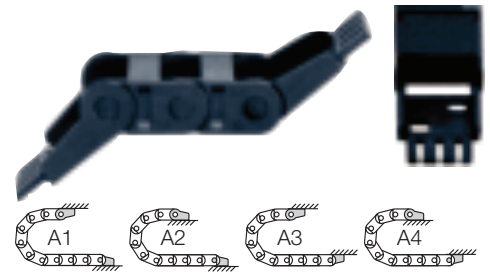
The Standard - option polymer - pivoting

- Recommended for unsupported and gliding applications
- Well suited for tight installation conditions
- Strain relief with detachable tiwrap plates
- Variable traverse angle for flexible assembly
- The twistability of the E-Chain® and the option to assemble the mounting brackets on the fixed end and/or the moving end, enable various installation options

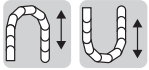
Moving end with bore
(outer link) 10...3P(Z)



10...4P(Z) Fixed end
with pin (inner link)



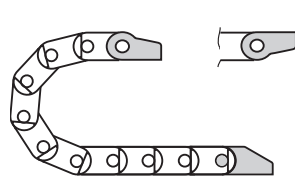
Possible installation conditions for assembled mounting brackets ▶ Order example "preassembled" below



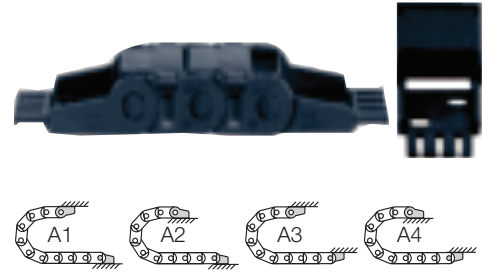
Option polymer - locking

- Recommended for unsupported and gliding applications
- Furthermore:
 - At very high speed and/or acceleration
 - If space is limited for height (the H_F measurement)
 - The twistability of the E-Chain® and the option to assemble the mounting brackets on the fixed end and/or the moving end, enable various installation options

Moving end with bore
(outer link) 10...1P(Z)

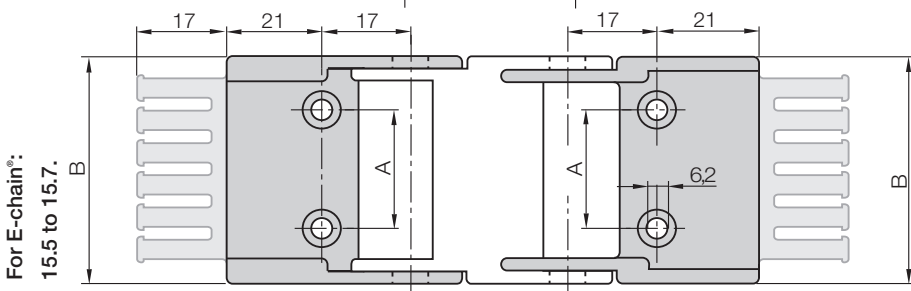
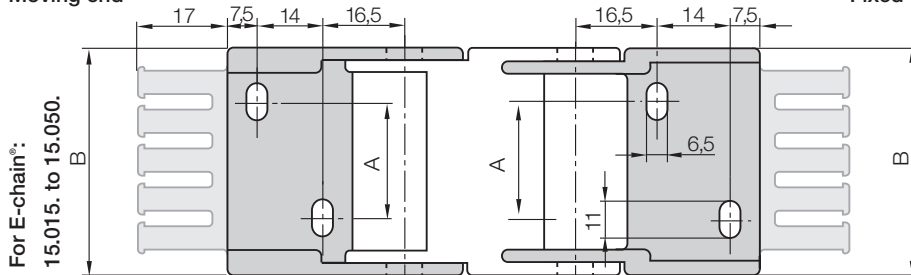


10...2P(Z) Fixed end
with pin (inner link)



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

10...3P(Z) Standard! (pivoting)
10...1P(Z) (locking)
Moving end



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]
15.015. ▶	1015. [] PZ	1015. [] P	2	-	25,5
15.025. ▶	1025. [] PZ	1025. [] P	3	10	35,5
15.038. ▶	1038. [] PZ	1038. [] P	4	23	48,5
15.050. ▶	1050. [] PZ	1050. [] P	5	35	60,5
15.5. ▶	105. [] PZ	105. [] P	6	48	75,0
15.6. ▶	106. [] PZ	106. [] P	8	65	92,0
15.7. ▶	107. [] PZ	107. [] P	10	85	112,0

Please add the Part No. with the requested index - 34 for the pivoting configuration

e.g. 1015. [34] PZ or 12 for the locking configuration e.g. 1015. [12] PZ

For the preassembled mode please add the index [A1]...[A4] e.g. 1015. [34] PZ [A1]

Standard! (pivoting) 10...4P(Z)
(locking) 10...2P(Z)
Fixed end

Dimensions and order configurations

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

Part No. structure (pivoting)

1015. 34 PZ A1

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

Full set pivoting = 34

Mounting brackets for selected chain type

Full set, for both ends:

1015. 34 PZ +tiwrap plate

Single-part order:

1015. 3 PZ +tiwrap plate

Mounting bracket with bore

1015. 4 PZ +tiwrap plate

Mounting bracket with pin

Part No. structure (locking)

1015. 12 PZ A1

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

Full set Starr = 12

Mounting brackets for selected chain type

Full set, for both ends:

1015. 12 PZ +tiwrap plate

Single-part order:

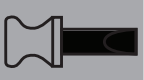
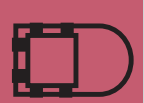
1015. 1 PZ +tiwrap plate

Mounting bracket with bore

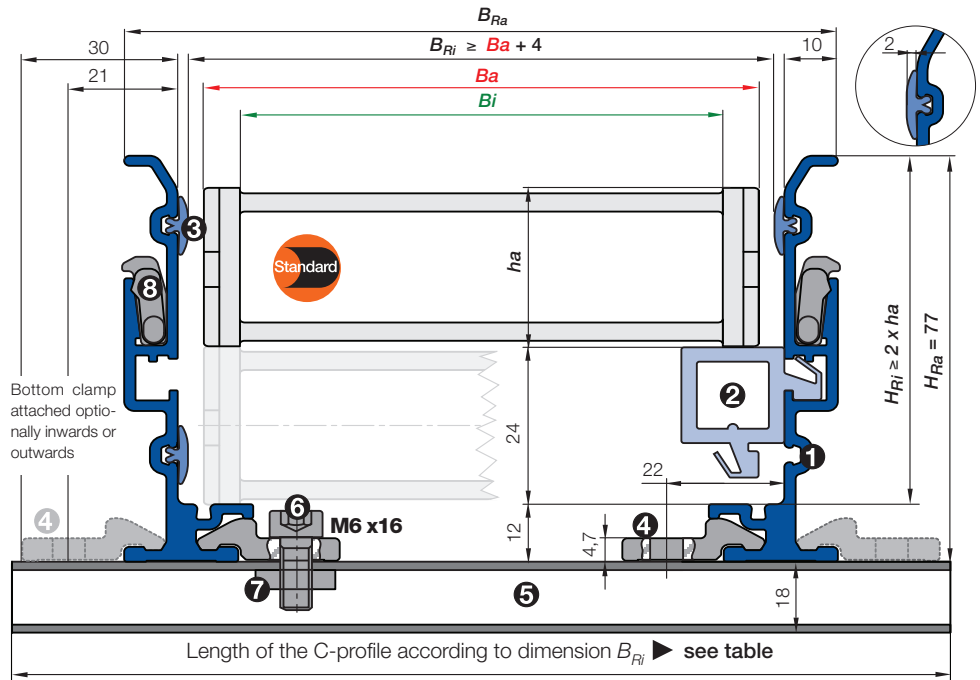
1015. 2 PZ +tiwrap plate

Mounting bracket with pin

Quicksnap + Quickfix upon request



- B_a = Outer width E-Chains® / E-Tube
- B_i = Inner width E-Chains® / E-Tube
- h_a = Outer height E-Chains® / E-Tube
- H_{Ri} = Inner trough height
- H_{Ra} = Outer trough height
- B_{Ri} = Inner trough width ▶ depends on dim. B_a
- B_{Ra} = Outer trough width
- n_{Mon} = Number of installation sets (left/right)
- n_{Ri} = Number of troughs sets (left/right)
- ! $H_{Ri} \geq 2 \cdot h_a$
- ! $B_{Ri} \geq B_a + 4$
- = Guide trough set ● = Glide bar
- = Installation set "Basic" ● = C-profile



- **Components, trough "Basic":** 1 Trough side parts, aluminum, 2 m 2 Glide bar, plastic, 2 m 3 Glide strips, plastic, 2 m (without glide strips on request)
- **Components, installation set "Basic":** 4 Bottom clamp, aluminum 5 C-profile, steel galvanized 6 Screw M6 x16 7 Sliding nut M6 8 Interface connector, plastic

Installation set "Basic" with C-profile

Bottom Clamp attached optionally inwards or outwards

15.050.038.0 ▶ Order example

	B_{Ri} [mm]	Part No.	
		attached inwards	attached outwards
.015	30	-	960.30.125
.025	40	-	960.30.150
.038	53	-	960.30.150
.050	65	960.30.125	960.30.175
.5	80	960.30.125	960.30.175
.6	98	960.30.150	960.30.200
.7	117	960.30.175	960.30.225

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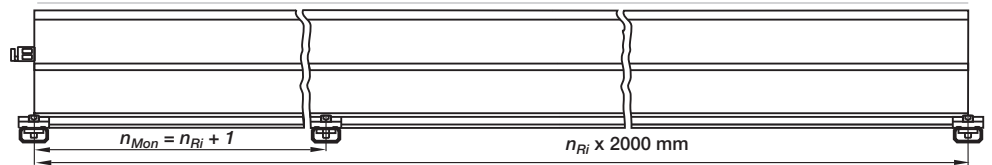
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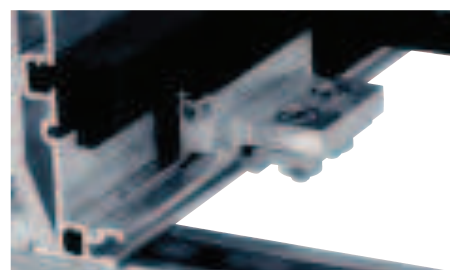


Order example: Length of travel 30 m - Center mounted for Series 15.050.038.0 with $B_{Ri} = 65$

- Guide trough set (set of 2 trough side parts, incl. glide strips) **without** glide bar
Order text: 16 m guide trough without glide bar (8 x 2 m sections) Part No. 970.30.SL
- Guide trough set (set of 2 trough side parts, incl. glide strips) **with** glide bar
Order text: 16 m guide trough with glide bar (8 x 2 m sections) Part No. 970.31.SL
- Installation set "Basic" complete (guide trough-sets + 1)
Order text: 17 installation sets "Basic" Part No. 960.30.125
- Module for the fixed end
Order text: 1 set Part No. 970.80
- Option:** For an additional noise dampening with silencer profile, please add Index A - Example:
Part No. 970.30.SLA



Principle sketch: Number of installation sets to be installed = **Number of trough sections + 1**



A quick fix for mounting the stationary end of an E-Chain®

With this module for the fixed end, fast and easy mounting onto the Aluminum "SuperTrough" is now possible without any drilling. Fast mounting of the E-Chain® by clamping onto the aluminum trough

- Quick relocation of the stationary end
- No drilling necessary