

zipper

Zip fastening e-chains® and e-tubes



Advantages of the zipper series:

- zipper-like design for quick opening and closing of lids
- zipper e-chains® can be lengthened and shortened at any point
- Small pitch for low noise, smooth running
- Interior separation possible



When to use another e-chain® series:

- When an easy filling without opening and closing of the chain is required
 - ▶ **easy chain®**, page 212
- If an easy-to-open and cost-effective e-chain® is required
 - ▶ **E2.1 micro**, page 334
- If openable crossbars are not necessary
 - ▶ **E2 micro**, page 274



Zip fastening e-chains® and e-tubes - zipper

Our "zipper" e-chains® and e-tubes deliver a perfect combination of practicality and performance. The "zipper" function makes them a very useful product to reduce assembly time. The small pitch, the tough-elastic zipper-band, and sturdy link work well in high acceleration applications. The "zipper" series is one of our most popular igus® e-chain® series for demanding applications.

The zipper-like design for quick opening and closing of lids

The zipper e-chains® can be lengthened and shortened at any point

Small pitch for low noise, smooth running
High accelerations: 100m/s² and more

Industrial industries and applications

Pick & place robots ● Semi-conductor machines ● Linear motors, actuators ● Measuring equipment ● Machine tools (zipper drive) ● General machinery, etc.



58 dB(A) - value determined at the igus® test-lab,
v = 1.0m/s unsupported, series 09.50.028.0



UL94-V0 classification
upon request



Electrically conductive ESD e-chains® -
several series available from stock



iF product design award
2002 igus® Series R09
1989 igus® Series 15

per 



zipper - e-chains®
crossbars on a strip - zip-open
along the outer radius

Series	Inner height <i>h_f</i> [mm]	Inner width <i>Bi</i> [mm]	Outer width <i>Ba</i> [mm]	Outer height <i>ha</i> [mm]	Bend radius <i>R</i> [mm]	Unsupported length ≤ [m]	Page
047	9	10 - 16	16 - 22	12.5	018 - 038	0.40	246
07	10.3	06 - 64	12.5 - 71	15	018 - 048	0.55	248
09	15	10 - 64	18.2 - 72.2	19.3	028 - 048	1.00	252
15	17	15 - 100	26 - 113	24	038 - 180	1.20	258
17	32	15 - 100	25.5 - 113	39	063 - 125	1.00	266



zipper - e-tubes -
protection against
dirt and swarf
lids on a strip - zip-open
along the outer radius

R07	10.3	10 - 50	16.5 - 57	15	038 - 048	0.55	250
R09	15	10 - 50	18.2 - 58.2	19.3	048 - 100	1.00	256
R15	17	25 - 80	36 - 94	24	063 - 180	1.20	262
R17	32	15 - 63	26 - 74	39	063 - 125	1.20	270



Available from stock. Ready to ship in 24 - 48hrs.*

*Average time before the ordered goods are dispatched.

igus 3D CAD, configurators, service life calculation and more ► www.igus.eu/zipper

Options with order keys | Examples based on series 15

i	Standard	NC version - (No Camber) without pretension	ESD - electrically conductive material
	Part No. Standard	Part No. NC version	Part No. Iguimid ESD
	Standard	NC	
	15.025.R.0	15.025.R.0.NC	15.025.R.0.ESD

Ready to ship
in 24 - 48hrs.*

Ready to ship
in 12 business days*

Ready to ship
in 12 business days*▲

▲ ESD version - some series available from stock - further information and the complete product range ► From page 142
*Average time before the ordered goods are dispatched.

Order example | Order key and colour examples | Examples based on series 15

Order example for complete e-chain® (1.0m),
colour black, with mounting brackets and interior separation:

e-chain® (1.0m)	Please indicate e-chain® length or number of links: 1.0m or 33 links	15.025.075.0
+ Mounting brackets	1 set (with tiewrap plates)	1025.34PZ
Interior separation	with 2 separators assembled every 2 nd link	2 x 154
Order text:	1m 15.025.075.0 + 1025.34PZ + 2 x 154	

Order key

e-chain® zip-open along the outer radius
e-tube zip-open along the outer radius

Order index for colour options

Colour

Order index

Colour

Order index

15.025.075.0

R15.025.075.0

Black

Orange

Silver-grey

Yellow

White

Light grey

Grey-white

Special colour

.0

.31

.1

.1S

Standard

Special colour

Special colour

Special colour

.2

.4

.14

Special colour

Series / Type

Width index (depends on **R**)

Bend radius **R**

Colour index (standard black)

Black e-chains® ready to ship in 24 - 48hrs.*

Above special colours upon request.

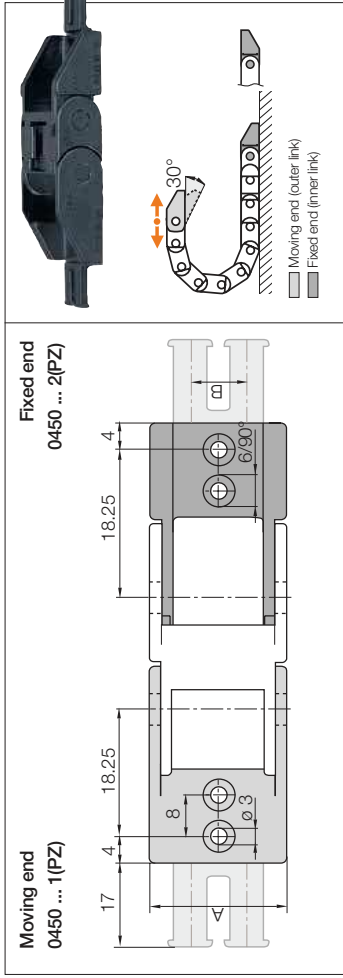
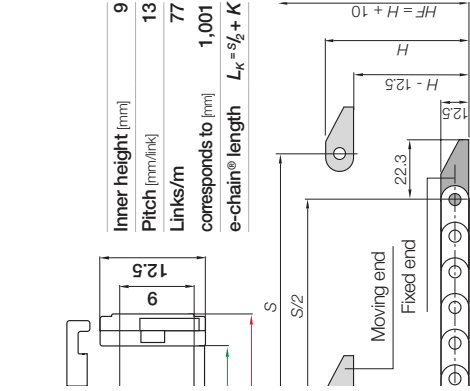


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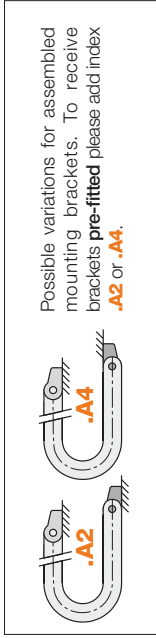
Open along the outer radius

nd radii	Weight [kg/m]
38	≈ 0.10
38	≈ 0.11



Width index	Part No. full set with tiwrap plates	Part No. full set without tiwrap plates	A [mm]	B [mm]	Number of teeth
10. ▲	0450.10.12PZ	0450.10.12	16	-	1
16. ▲	0450.16.12PZ	0450.16.12	22	10	2

Mounting bracket with strain relief tiwrap plate has reductions of ø 3mm / ø 6mm 90°
Mounting bracket without strain relief tiwrap plate only has holes of ø 3mm

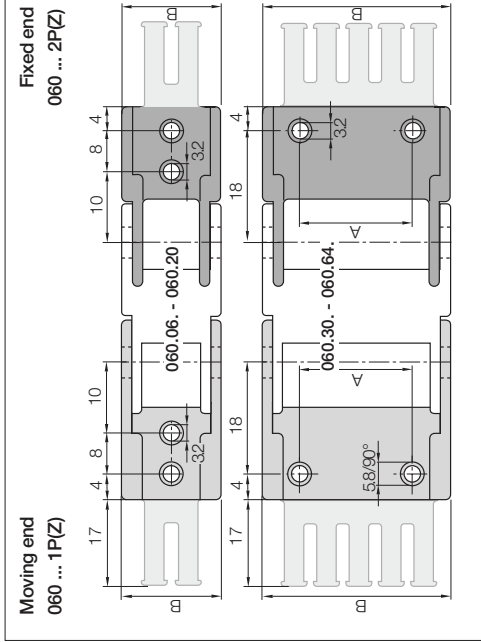
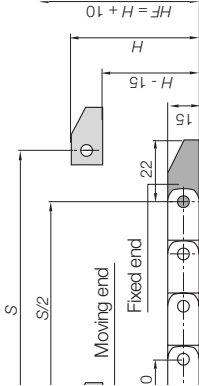




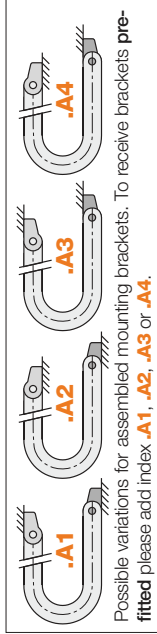
en along the outer radius

nd radii	Weight [kg/m]
38 -	≈ 0.13
38 -	≈ 0.14
38 -	≈ 0.16
38 -	≈ 0.17
38 -	≈ 0.20
38 -	≈ 0.23
38 -	≈ 0.26
38 048	≈ 0.30

Inner height [mm]	10.3
Pitch [mm/link]	20
Links/m	50
corresponds to [mm]	1,000
e-chain® length	$L_K = s/2 + K$



Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
06. ▲	060.06.12PZ	060.06.12	-	12.5	1
10. ▲	060.10.12PZ	060.10.12	-	16.5	1
16. ▲	060.16.12PZ	060.16.12	-	22.5	2
20. ▲	060.20.12PZ	060.20.12	-	27.0	2
30. ▲	060.30.12PZ	060.30.12	22	37.0	3
40. ▲	060.40.12PZ	060.40.12	32	47.0	4
50. ▲	060.50.12PZ	060.50.12	42	57.0	5
64. ▲	060.64.12PZ	060.64.12	56	71.0	6



ESD - many sizes from stock

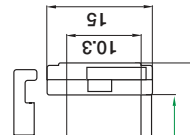
- Standardised product made from igumid ESD
- ESD material tested for over 10 million cycles for the toughest requirements
- Short delivery times including mounting brackets and interior separation; 24hrs, from stock

More information and the complete product range
▲ From page 142 or at ► www.igus.eu/esd

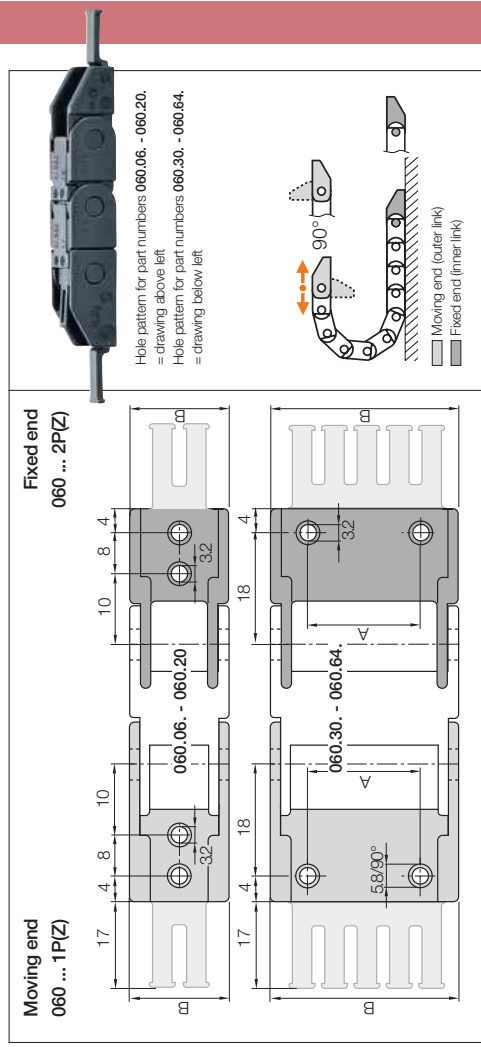
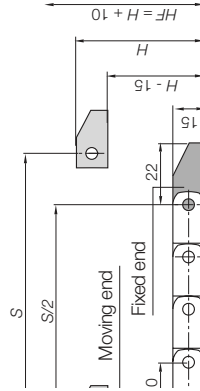


the outer radius

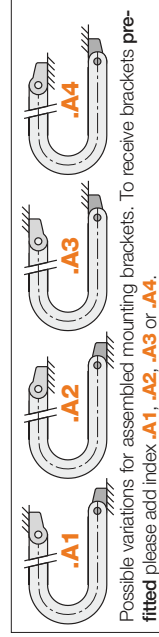
nd radii	Weight [kg/m]
	≈ 0.16
	≈ 0.18
	≈ 0.19
	≈ 0.22
	≈ 0.25
	≈ 0.28



Inner height [mm]	10.3
Pitch [mm/link]	20
Links/m	50
corresponds to [mm]	1,000
e-chain® length	$L_K = S_o + K$



Width index		Part No. full set with tiwrap plates	Part No. full set without tiwrap plates	A [mm]	B [mm]	Number of teeth
10. ▲		060.10.12PZ	060.10.12	–	16.5	1
16. ▲		060.16.12PZ	060.16.12	–	22.5	2
20. ▲		060.20.12PZ	060.20.12	–	27.0	2
30. ▲		060.30.12PZ	060.30.12	22	37.0	3
40. ▲		060.40.12PZ	060.40.12	32	47.0	4
50. ▲		060.50.12PZ	060.50.12	42	57.0	5



Order example

A to indicate option with brackets pre-fitted

With integrated strain relief tiewrap plates

Full set

Series

060.40.12PZA1

Telefon: +420 416 711 333
E-mail: lin-tech@hennlich.cz

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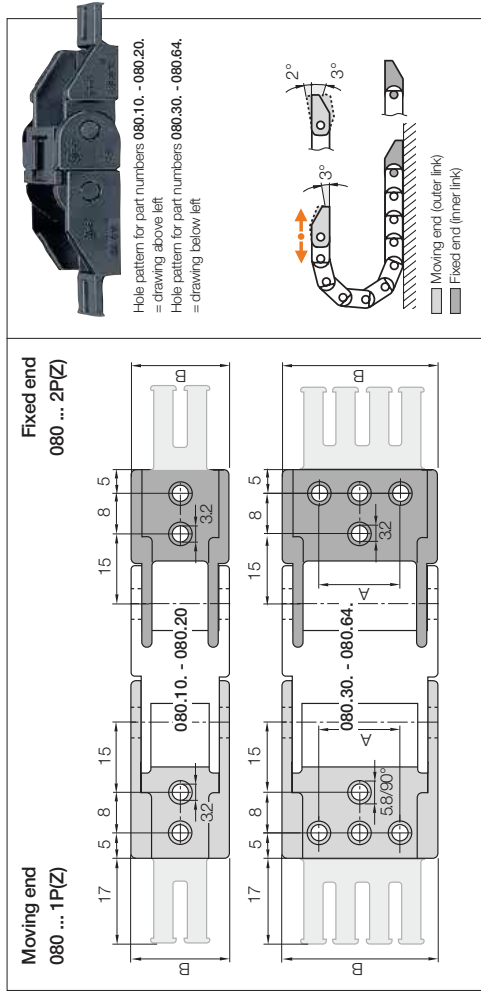
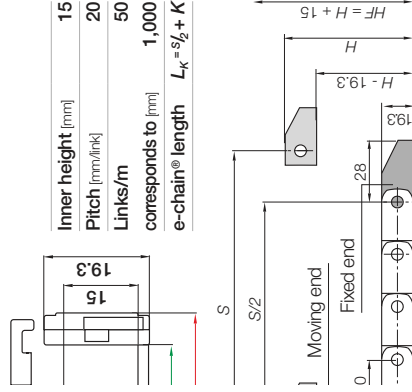
251

www.hennlich.cz/lin-tech

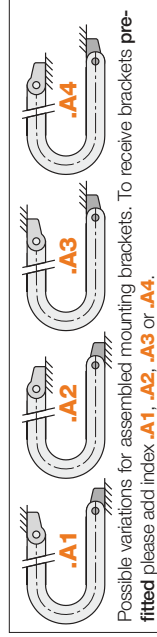


en along the outer radius

nd radii	Weight
48	[kg/m] ≈ 0.21
48	≈ 0.24
48	≈ 0.25
48	≈ 0.28
48	≈ 0.31
48	≈ 0.34
48	≈ 0.39



Width index		Part No. full set with tiwrap plates	Part No. full set without tiwrap plates	A [mm]	B [mm]	Number of teeth
10. ▲		080.10.12PZ	080.10.12	–	18.2	1
16. ▲		080.16.12PZ	080.16.12	–	24.2	2
20. ▲		080.20.12PZ	080.20.12	–	28.2	2
30. ▲		080.30.12PZ	080.30.12	22	38.2	3
40. ▲		080.40.12PZ	080.40.12	32	48.2	4
50. ▲		080.50.12PZ	080.50.12	42	58.2	5
64. ▲		080.64.12PZ	–	56	72.2	6



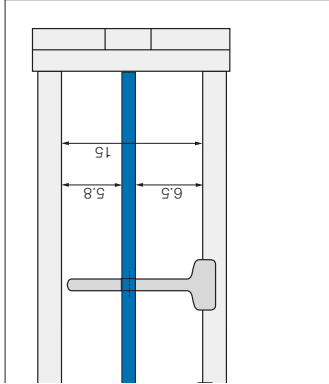
Possible variations for assembled mounting brackets. To receive brackets **pre-fitted** please add index **.A1, .A2, .A3** or **.A4**.



ESD - many sizes from stock

- Standardised product made from Igidur ESD
 - ESD material tested for over 10 million cycles for the toughest requirements
 - Short delivery times including mounting brackets and interior separation; 24hrs, from stock
- More information and the complete product range**
- From page 142 or at ► www.igus.eu/esd

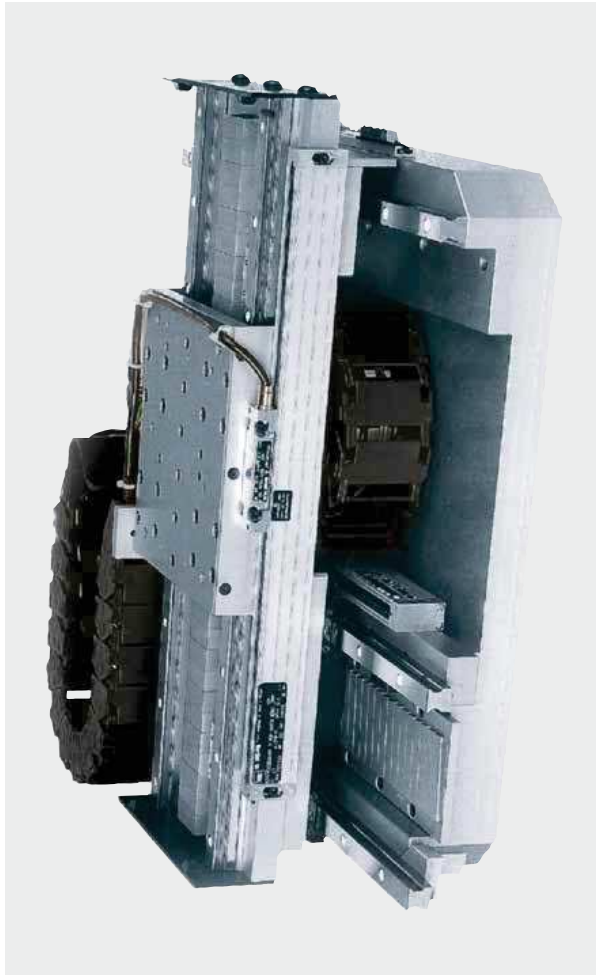




zipper separator
The slot allows basic vertical/horizontal arrangements.

width shelf
The shelf is for applications with many small cables with diameters. For full-width separation.

	X (mm)	unassembled	assembled
assembled	050	110.50	111.50
		111.40	



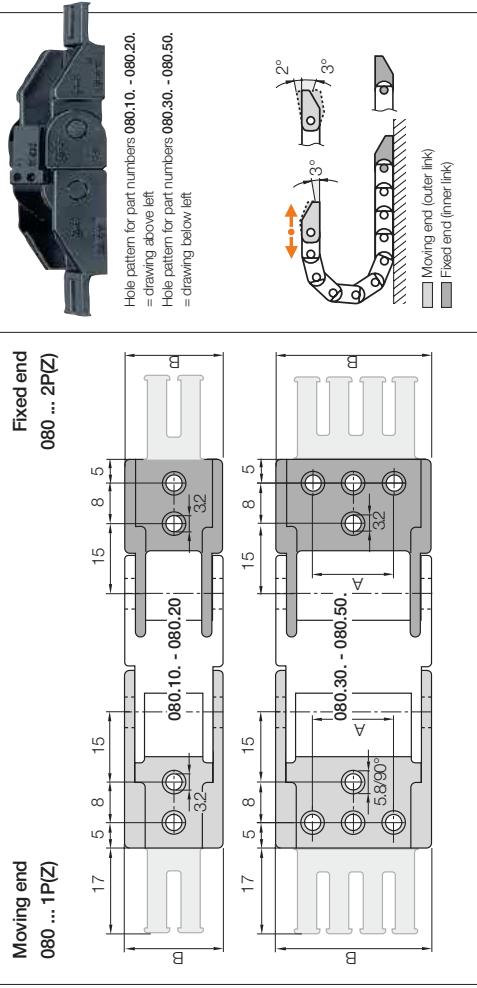
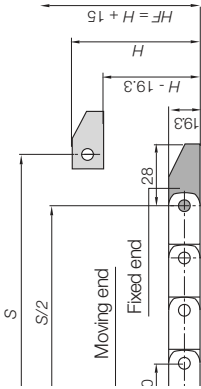
igus® zipper e-chain® on an X/Y unit. Acceleration: 100m/s²



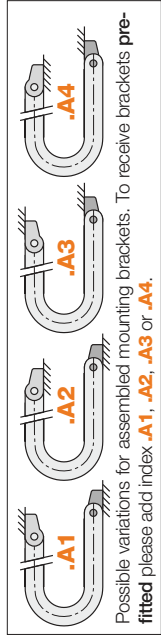
g the outer radius

nd radii	Weight [kg/m]
20	≈ 0.23
30	≈ 0.26
40	≈ 0.27
50	≈ 0.30
60	≈ 0.33
70	≈ 0.36

Inner height [mm]	15
Pitch [mm/link]	20
Links/m	50
corresponds to [mm]	1,000
e-chain® length	$L_K = s/2 + K$



Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
10. ▲	080.10.12PZ	080.10.12	—	18.2	1
16. ▲	080.16.12PZ	080.16.12	—	24.2	2
20. ▲	080.20.12PZ	080.20.12	—	28.2	2
30. ▲	080.30.12PZ	080.30.12	22	38.2	3
40. ▲	080.40.12PZ	080.40.12	32	48.2	4
50. ▲	080.50.12PZ	080.50.12	42	58.2	5



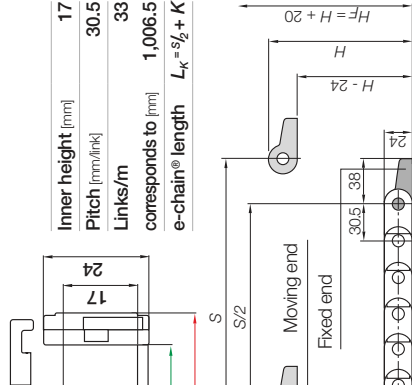
Possible variations for assembled mounting brackets. To receive brackets **pre-fitted** please add index **.A1**, **.A2**, **.A3** or **.A4**.



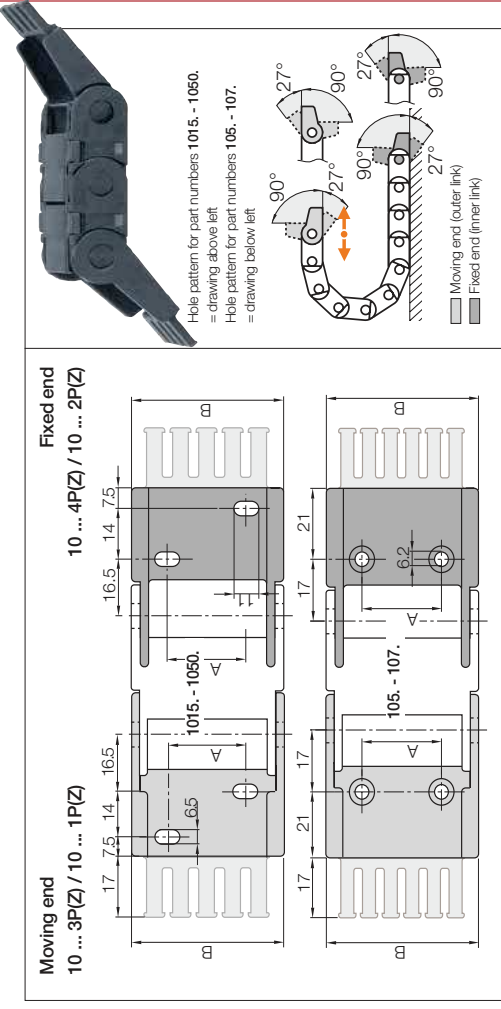


en along the outer radius

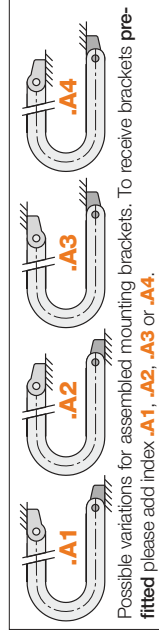
nd radii	Weight [kg/m]					
75	100	110	125	145	180	≈0.35
75	100	110	125	145	180	≈0.40
75	100	110	125	145	180	≈0.46
75	100	110	125	145	180	≈0.52
75	100	110	125	145	180	≈0.63
75	100	110	125	145	180	≈0.70
75	100	110	125	145	180	≈0.76



145	180
313	383
202	237
520	630



Width index		Part No. full set pivoting		Part No. full set locking		A [mm]	B [mm]	Number of teeth
		with tiwrap plates	without tiwrap plate	with tiwrap plates	without tiwrap plate			
015. ▲		1015.34PZ	1015.34P	1015.12PZ	1015.12P	—	25.5	2
025. ▲		1025.34PZ	1025.34P	1025.12PZ	1025.12P	10	35.5	3
038. ▲		1038.34PZ	1038.34P	1038.12PZ	1038.12P	23	48.5	4
050. ▲		1050.34PZ	1050.34P	1050.12PZ	1050.12P	35	60.5	5
5. ▲		105.34PZ	105.34P	105.12PZ	105.12P	48	75.0	6
6. ▲		106.34PZ	106.34P	106.12PZ	106.12P	65	92.0	8
7. ▲		107.34PZ	107.34P	107.12PZ	107.12P	85	112.0	10



Order example
1025.34PZA1 ...to indicate option with brackets pre-fitted
 With integrated strain relief tiewrap plates
 Full set
 Series

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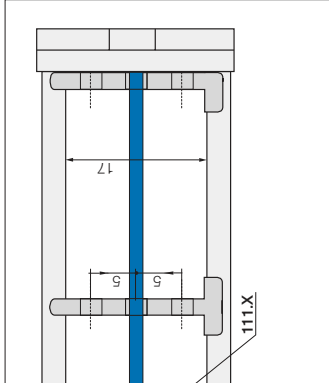
259

HENNLICH - ŽIJEME TECHNIKOU

o.z. LIN-TECH HENNLICH s.r.o.
Českolipská 9, 412 01 Litoměřice

Telefon: +420 416 711 333
E-mail: lin-tech@hennlich.cz

www.hennlich.cz/lin-tech



1 separator
separation. The slot allows basic vertical/horizontal arrangements.

1 side plate
modular shelving right up to the side links. No re required!

width shelf
ion is for applications with many small cables with diameters. For full-width separation.

assembled	X [mm]	unassembled	assembled
111.50	100	110.100	111.100
111.63			
111.80			



igus® zipper e-chain® series 15 in a special purpose machine for quick cable installation

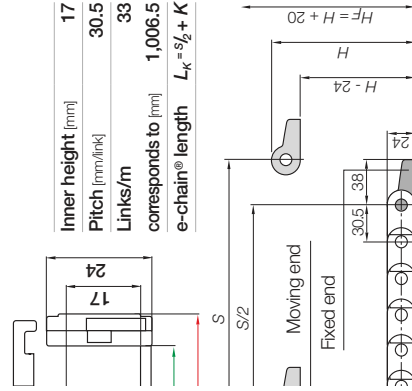


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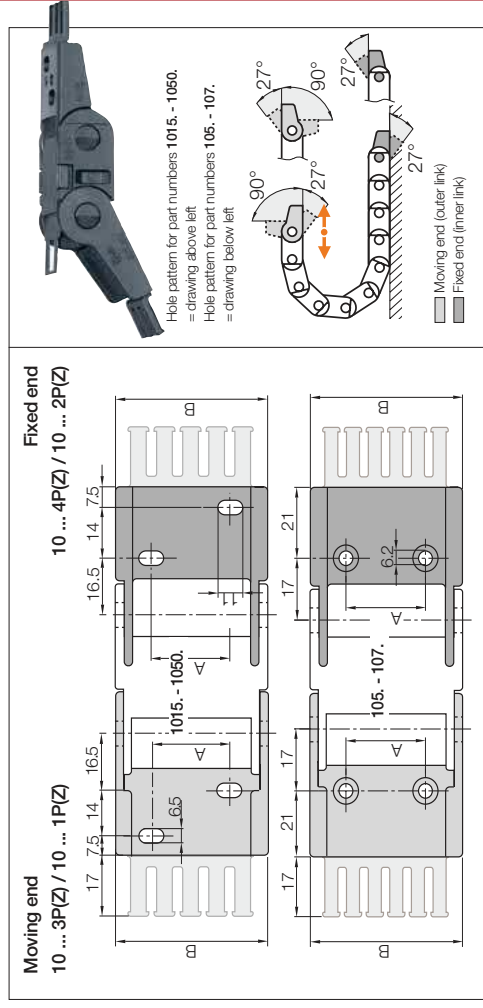


the outer radius

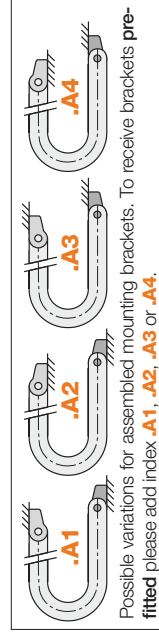
nd radii	Weight [kg/m]			
00	110	125	145	180
				=0.45
00	110	125	145	180
				=0.51
00	110	125	145	180
				=0.68
00	110	125	145	180
				=0.75



180	180
383	383
237	237
630	630



Width index		Part No. full set pivoting		Part No. full set locking		A [mm]	B [mm]	Number of teeth
		with tiwrap plates	without tiwrap plates	with tiwrap plates	without tiwrap plates			
025, ▲		1025.34PZ	1025.34P	1025.12PZ	1025.12P	10	35.5	3
038, ▲		1038.34PZ	1038.34P	1038.12PZ	1038.12P	23	48.5	4
063, ▲		105.34PZ	105.34P	105.12PZ	105.12P	48	75.0	6
080, ▲		106.34PZ	106.34P	106.12PZ	106.12P	65	92.0	8



1025.34PZ.A1

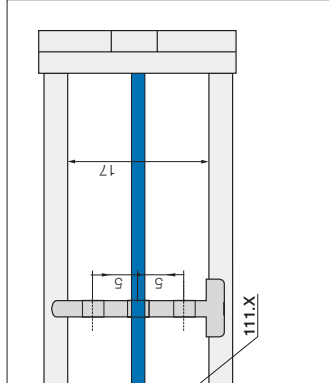
Order example

A... to indicate option with brackets pre-fitted

With integrated strain relief lewlap plates

Full set

Series



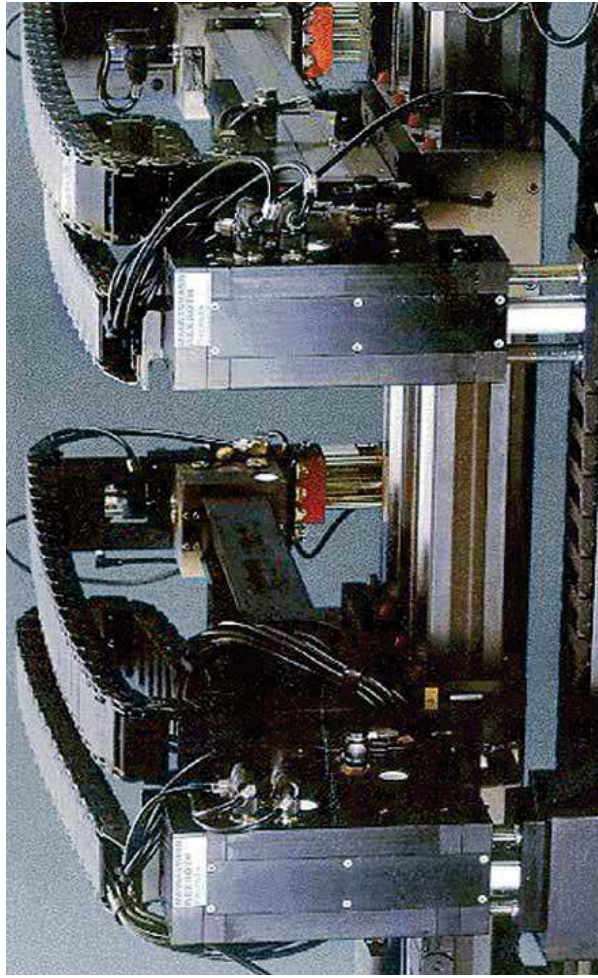
1 separator

separation in e-tubes. The slot allows basic vertical/ horizontal shelving arrangements.

width shelf

ion is for applications with many small cables with diameters. For full-width separation.

assembled
111.63
111.80



Series 15 on a pick and place machine. Acceleration: 100 m/s², smooth running

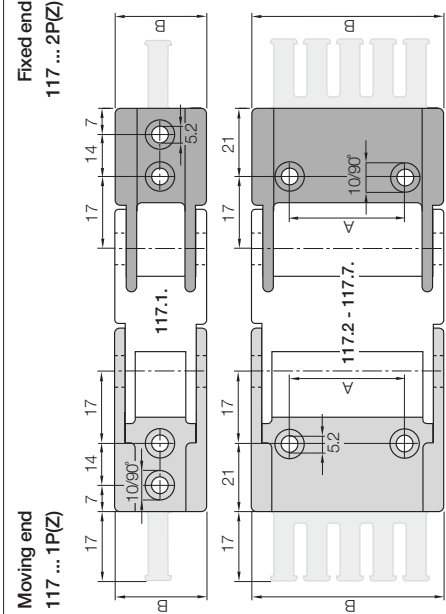


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en along the outer radius

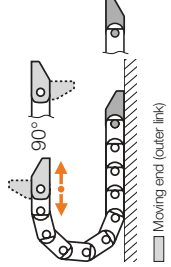
nd radii	Weight [kg/m]
30 125	≈ 0.52
30 125	≈ 0.59
30 125	≈ 0.65
30 125	≈ 0.70
30 125	≈ 0.83
30 125	≈ 0.92
30 125	≈ 1.06



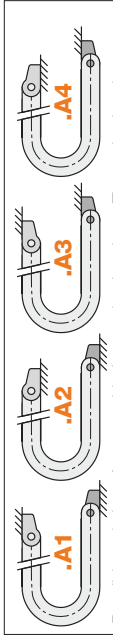
Fixed end
117 ... 2P(Z)

Moving end
117 ... 1P(Z)

Hole pattern for part numbers 117.1.
= drawing above left
Hole pattern for part numbers 117.2. - 117.7.
= drawing below left



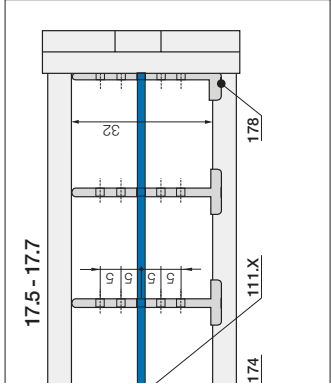
Width index	Part No. full set with tiewrap plates	Part No. full set without tiewrap plates	A [mm]	B [mm]	Number of teeth
1. ▲	117.1.12PZ	117.1.12P	–	25.5	1
2. ▲	117.2.12PZ	117.2.12P	12	35.5	3
3. ▲	117.3.12PZ	117.3.12P	25	48.5	4
4. ▲	117.4.12PZ	117.4.12P	37	60.5	5
5. ▲	117.5.12PZ	117.5.12P	48	76	6
6. ▲	117.6.12PZ	117.6.12P	65	93	8
7. ▲	117.7.12PZ	117.7.12P	85	113	10



Possible variations for assembled mounting brackets. To receive brackets pre-fitted please add index .A1, .A2, .A3 or .A4.



Order example
.A... to indicate option
with brackets pre-fitted
With integrated strain
relief tiewrap plates
Full set
Series



width index 17.1 up to 17.4

side separator

separation. The slot allows basic vertical/horizontal arrangements.

side plate

modular shelving right up to the side links. No cable required!

width index 17.5 up to 17.7

side separator

separation. The slot allows basic vertical/horizontal arrangements.

side plate

modular shelving right up to the side links. No cable required!

widths

width shelf

dimension is for applications with many small cables with diameters. For full-width separation.

	X [mm]	unassembled	assembled
assembled	100	110.100	111.100
111.50			
111.63			
111.80			



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**HENNLICH -
ČIŽEME TECHNIKOU**

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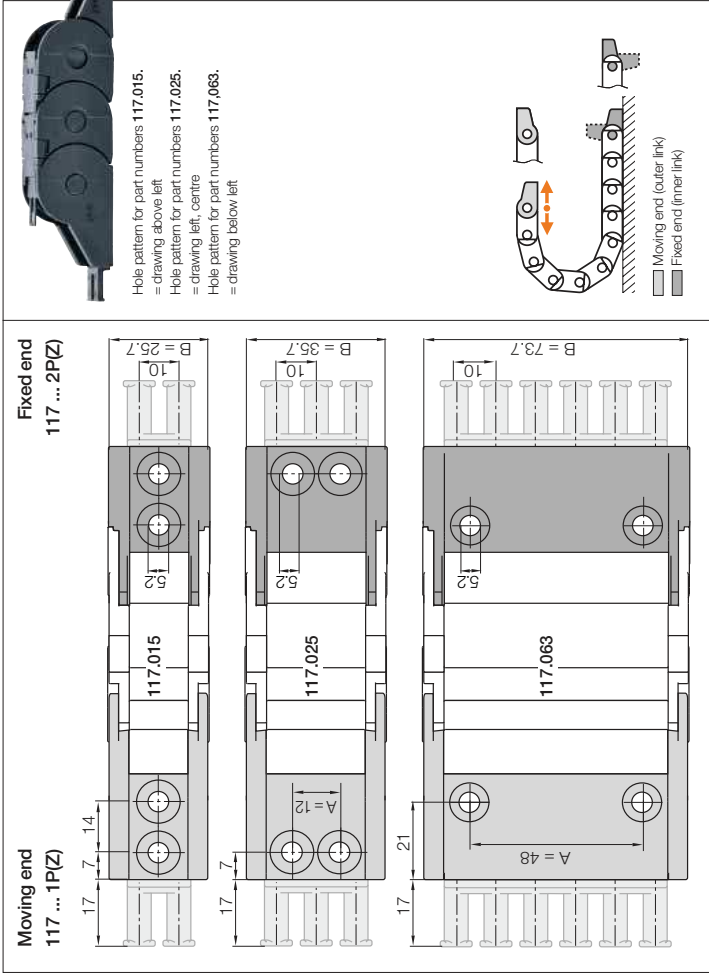
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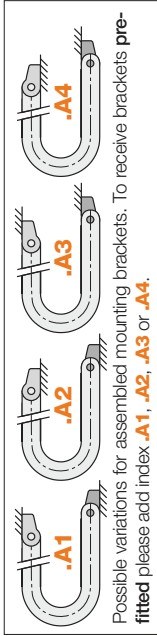
the outer radius

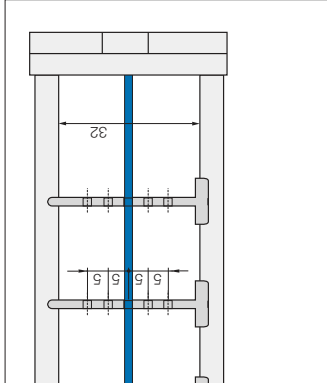
nd radii	Weight [kg/m]
30 125	≈ 0.57
30 125	≈ 0.64
30 125	≈ 0.88



Width index	Part No. full set with tie-wrap plates	Part No. full set without tie-wrap plates	A [mm]	B [mm]	Number of teeth
015. ▶	117.015.12PZ	117.015.12P	–	25.7	2
025. ▶	117.025.12PZ	117.025.12P	12	35.7	3
063. ▶	117.063.12PZ*	117.063.12P*	48	73.7	6

*Pivoting requires rework





Separator

Separation in e-tubes. The slot allows basic vertical/horizontal shelving arrangements.

Width shelf

Separation is for applications with many small cables with small diameters. For full-width separation.

assembled
111.63

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