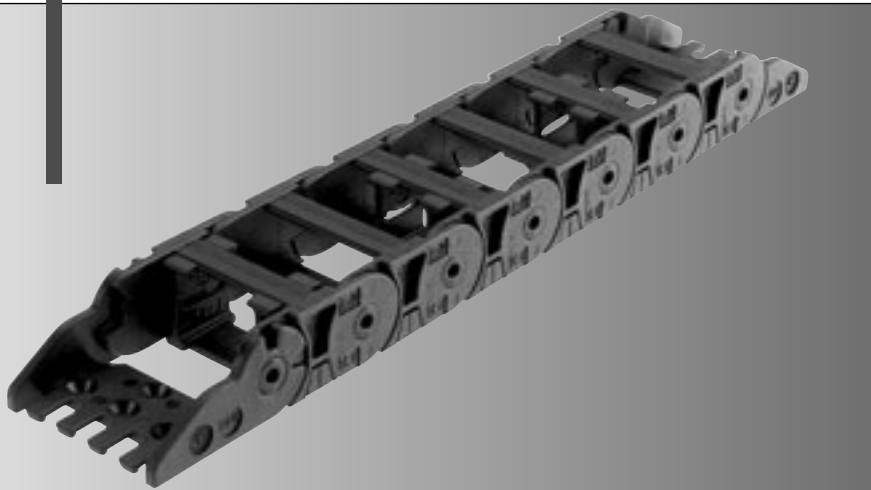


CABLE DRAG CHAIN SYSTEMS



MultiLine

MP 14



MP 14 - MultiLine

Order variants

Style (order code)						
Configuration (order code)						
Radius (order code)						
in mm						
Internal width (order code)						
in mm						
External width						
in mm						
MP14 016	24	16	016	25	025	
MP14 020	28	20	020	38	038	
MP14 030	38	30	030	48	048	
MP14 040	48	40	040	75	075	
						0
						9

Order number:	0140			0			0
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Configuration:

0 crossbar every link; w/bias

Style:

0 Standard (PA)
9 Special version

Sample order

0140 016 025 0000

Inside width = 16 mm

Radius = 25 mm

Configuration = 0

Style = 0

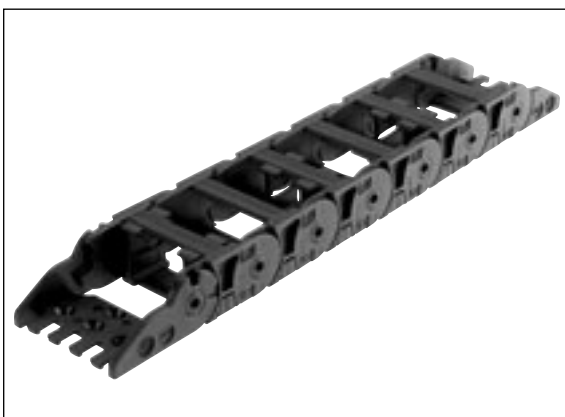
Ideal operating conditions

- Compact dimensions with opening cover in outside bend
- Quiet operation
- Unsupported arrangement
- Gliding arrangement

Alternative chain type

- MP 15
Higher degree of stiffness and torsional strength
- MP 18.2
Opening cover in inside bend
- MP 18.1 / MP 18.2
Greater self-supported lengths

Features



Radii with medium bias (R) for all applications



Integratable separator for cable separation



Chain bracket with integrated strain relief

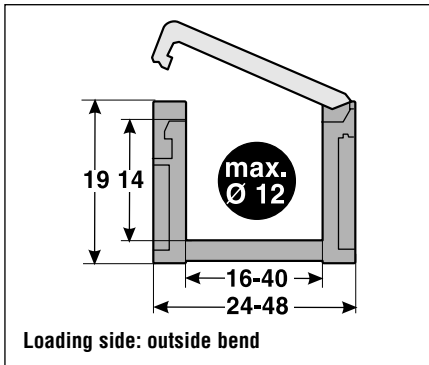


Frame ridges can be folded up on one side

MP 14 - MultiLine

Technical data

Chain link dimensions



Material properties

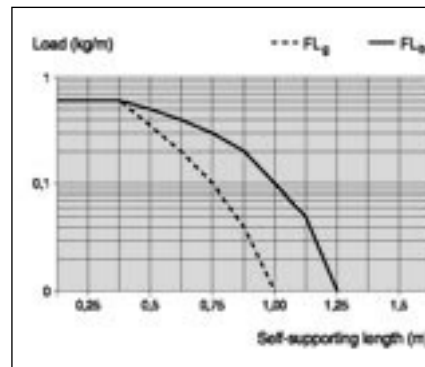
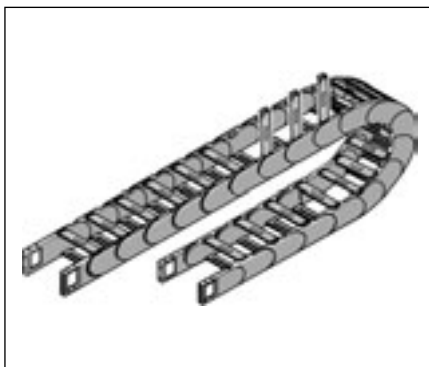
Service temperature: -30 to +120 °C
 Gliding friction factor: 0.30
 Static friction factor: 0.45
 Fire classification: in conformity with UL94 HB

Other material properties on request

Technical specifications

Travel distance, gliding, L_g : 12 m
 Travel distance, self-supporting, L_s : see diagram
 Travel distance, vertical, hanging, L_{vh} : 3 m
 Travel distance, vertical, upright, L_{vu} : 2 m
 Rotated 90°, self-supporting, L_{sq} : not recommended
 Speed, gliding, V_g : 2 m/s
 Speed, self-supporting, V_s : 4 m/s
 Acceleration, gliding, a_g : 2 m/s²
 Acceleration, self-supporting, a_s : 2 m/s²

Unsupported length

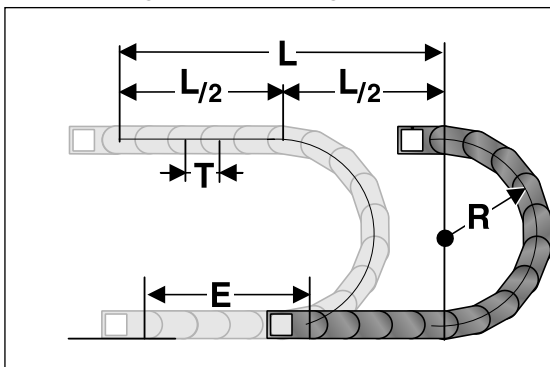


FL_g:
 Ideal installation situation for high stresses at the limit of the max. travel parameters. In this range the chain upper run is still biased, straight or has a max. sag of 10 – 50 mm depending on the type of chain.

FL_s:
 Satisfactory installation position for many applications working in the lower to middle range of the max. travel parameters. Depending on the chain type, the sag of the chain upper run is > 10 – 50 mm but less than the max. sag.

If the sag is greater than FL_s, the arrangement is unsuitable and should be avoided. Please choose a more stable murrplastik cable drag chain.

Determining the chain length



L = Travel distance
 R = Radius
 T = Pitch
 E = Distance between entry point and middle of travel distance

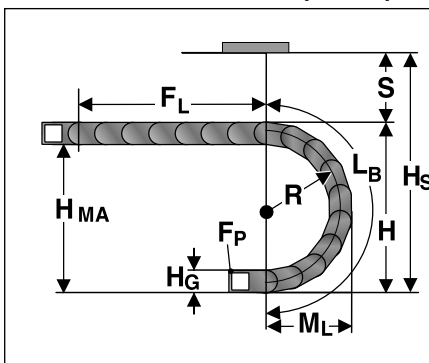
Determining the chain length

$$\text{Length} = \frac{L}{2} + \pi \times R + 2 \times T + E$$

≈ 1 m chain = 38 x 26 mm links

The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

Installation dimensions (in mm)

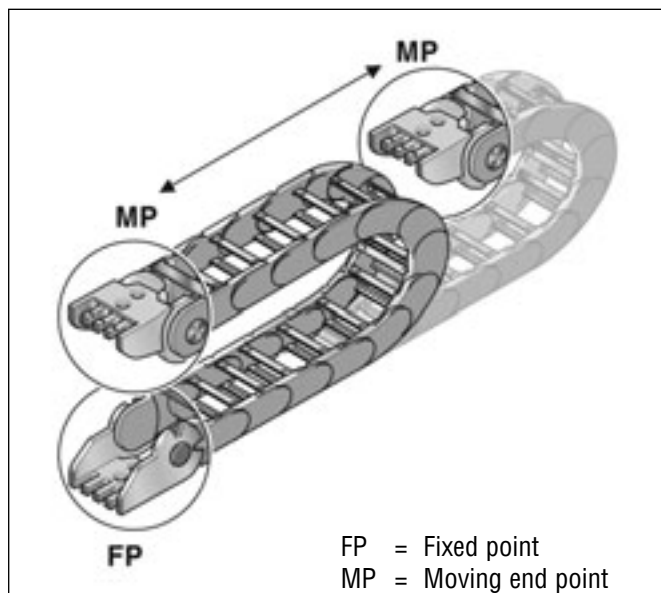


Radius R	25	38	48	75
Outside height of chain link (H_e)	19	19	19	19
Height of bend (H)	69	95	115	169
Height of moving end connection (H_{MA})	50	76	96	150
Safety margin (S)	20	20	20	20
Installation height (H_i)	89	115	135	189
Arc projection (M_l)	60.5	73.5	83.5	110.5
Bend length (L_b)	134	175	207	291



MP 14 - MultiLine

Chain bracket



Chain bracket



Top 0°



Bottom 0°



Top 90°



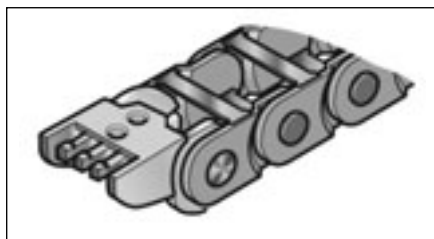
Bottom 90°

Chain bracket

Type

Order no.

Pack



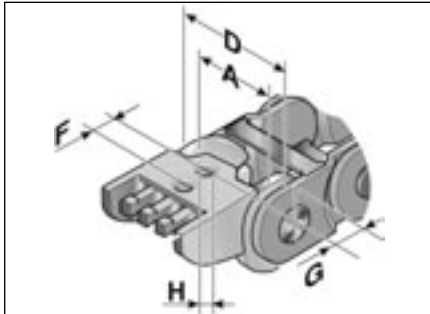
KA 14016 Female end	014000005000	1
KA 14016 Male end	014000005100	1
KA 14020 Female end	014000005200	1
KA 14020 Male end	014000005300	1
KA 14030 Female end	014000005400	1
KA 14030 Male end	014000005500	1
KA 14040 Female end	014000005600	1
KA 14040 Male end	014000005700	1

The chain bracket is an all plastics part. The bracket is precisely adjusted to the respective chain width and only needs to be snapped in at the chain link. Please order one male and one female end bracket for each chain. The brackets should be fastened with M3 screws. The cables or conduits may be fastened with cable ties on the integrated strain relief of the chain bracket.

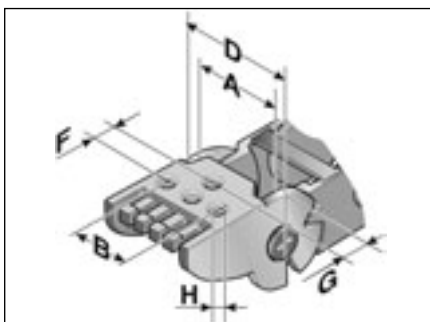
MP 14 - MultiLine

Chain bracket

Dimensions in mm



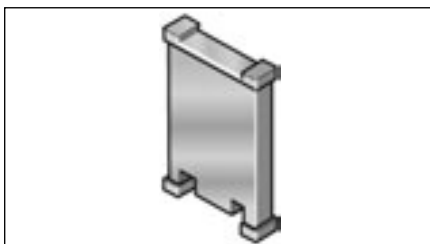
Type	A	D	F	G	H Ø
KA 14016 Female end	16.00	24.00	8.00	11.00	3.20
KA 14016 Male end	16.00	24.00	8.00	7.50	3.20
KA 14020 Female end	20.00	28.00	8.00	11.00	3.20
KA 14020 Male end	20.00	28.00	8.00	7.50	3.20



Type	A	B	D	F	G	H Ø
KA 14030 Female end	30.00	22.00	38.00	8.00	11.0	3.2
KA 14030 Male end	30.00	22.00	38.00	8.00	7.50	3.2
KA 14040 Female end	40.00	32.00	48.00	8.00	11.0	3.2
KA 14040 Male end	40.00	32.00	48.00	8.00	7.50	3.2

Separator

Type Order no. Description Pack

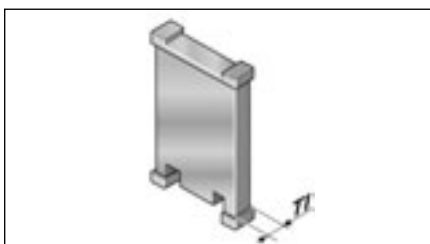


Separator

TR 14	014000009200	Separator	1
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We recommend that separators are used if multiple round cables or conduits with differing diameters are to be installed.
An offset configuration of the separators is advisable.

Type TI Dimensions in mm



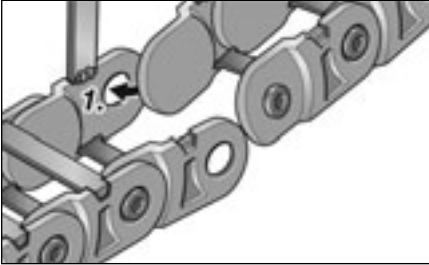
Separator

TR 14	1.50
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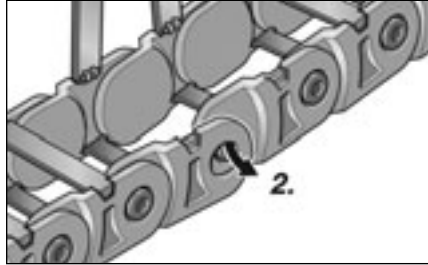


MP 14 - MultiLine

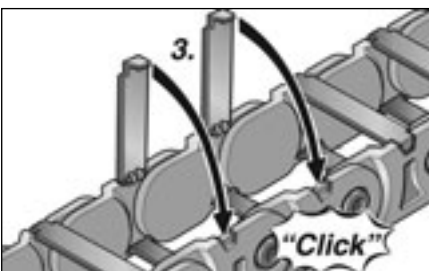
Assembly



Step 1

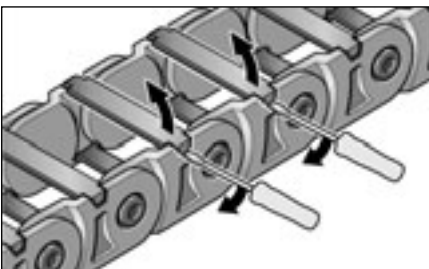


Step 2

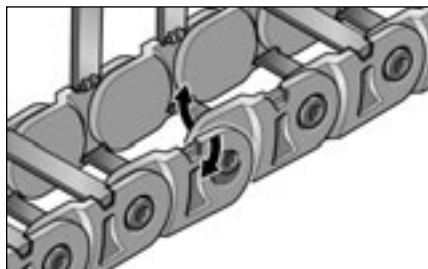


Step 3

Disassembly



Step 1



Step 2