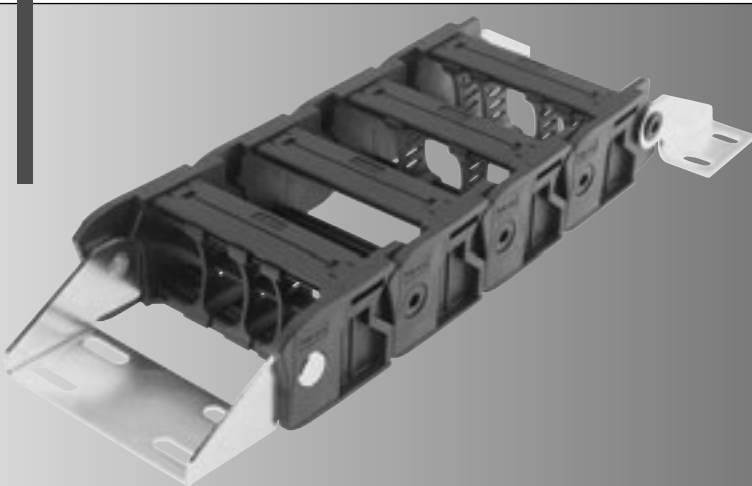


CABLE DRAG CHAIN SYSTEMS

MultiLine

MP 35





MP 35 - MultiLine

Order variants

Style (order code)							
Configuration (order code)							
Radius (order code)							
in mm							
Internal width (order code)							
in mm							
External width							
in mm							
MP35 062	82	62	062	70	070		
MP35 086	106	86	086	100	100		
MP35 102	122	102	102	150	150		
MP35 125	145	125	125	200	200	0	0
MP35 150	170	150	150	300	300	1	9

Order number:	0350			0			0
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Configuration:

- 0 crossbar every link; w/bias
- 1 crossbar every link; w/o bias

Style:

- 0 Standard (PA)
- 9 Special version

Sample order

0350 062 070 0000

Inside width = 62 mm

Radius = 70 mm

Configuration = 0

Style = 0

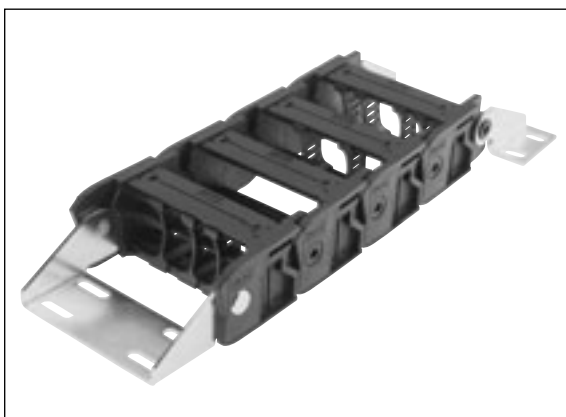
Ideal operating conditions

- Compact dimensions with opening cover in inside bend
- Quiet operation
- High stability
- Flexible internal separation
- Rotated 90°, unsupported
- Variant with bias (RV) for high unsupported lengths
- Variant without bias (RK) for gliding arrangements

Alternative chain type

- MP 36 G closed series
- MP 32
opens on both sides
variable widths
greater stresses
flange connection (KA-F)
back radii

Features



Chain bracket with variably positionable metal bracket



Radii with or without bias (RK/RV)



Back radius combinations



H-shelf for easy cable separation in the chain window



Integratable separator for cable separation



Frame ridges can be removed on one side



Plug-in shelf system for reliable cable guidance



ZL strain relief plate

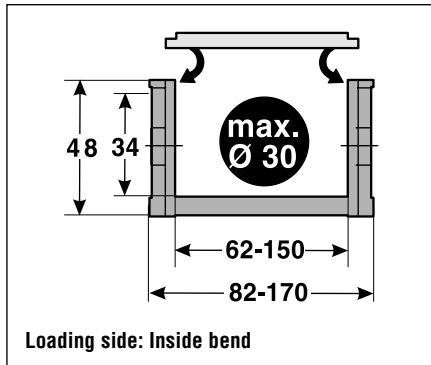


Chain bracket metal profile

MP 35 - MultiLine

Technical data

Chain link dimensions



Material properties

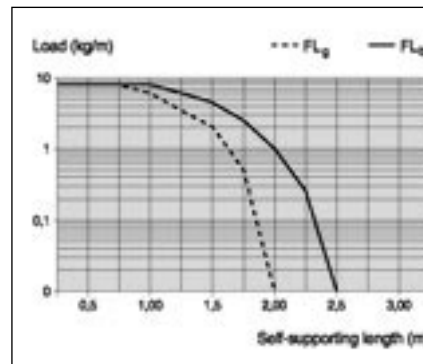
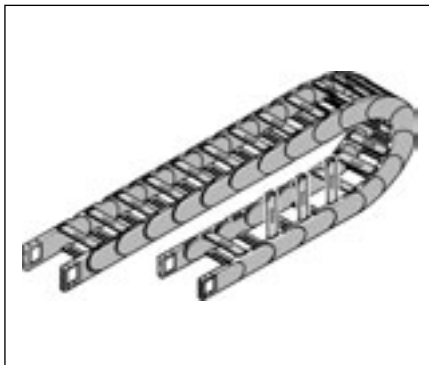
Service temperature: -30 to +120 °C
 Gliding friction factor: 0.30
 Static friction factor: 0,45
 Fire classification: in conformity with UL94 HB

Other material properties on request

Technical specifications

Travel distance, gliding, L_g : 80 m
 Travel distance, self-supporting, L_s : see diagram
 Travel distance, vertical, hanging, L_{vh} : 40 m
 Travel distance, vertical, upright, L_{vu} : 3 m
 Rotated 90°, self-supporting, L_{sg} : 1 m
 Speed, gliding, V_g : 3 m/s
 Speed, self-supporting, V_s : 10 m/s
 Acceleration, gliding, a_g : 15 m/s²
 Acceleration, self-supporting, a_s : 20 m/s²

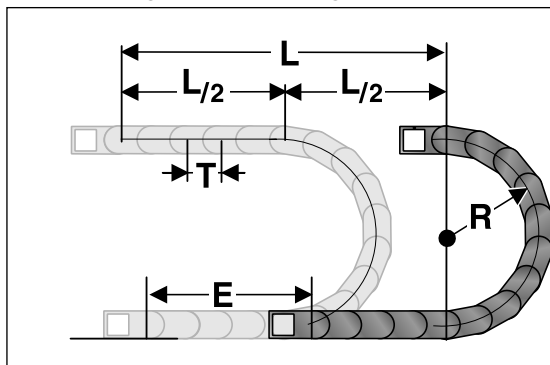
Unsupported length



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_b :
 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 certainly less than the max. sag. If the sag is greater than FL_b , the arrangement is unsuitable and should be avoided. Please choose a more stable murrplastik cable drag chain.

Determining the chain length



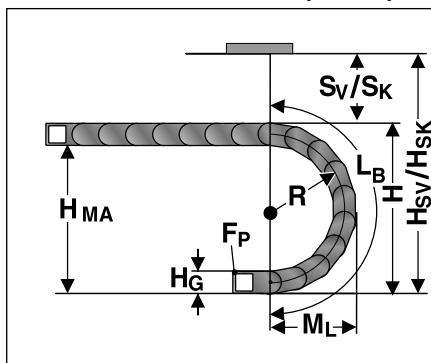
Determining the chain length

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

≈ 1 m chain = 17 x 58 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)

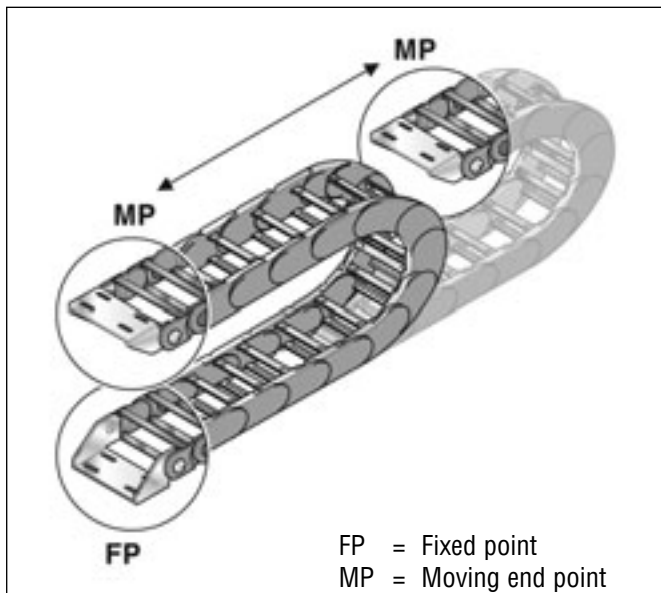


Radius R	70	100	150	200	300
Outside height of chain link (H_e)	48	48	48	48	48
Height of bend (H)	188	248	348	448	648
Height of moving end connection (H_{MA})	140	200	300	400	600
Safety margin with bias (S_v)	40	40	40	40	40
Installation height with bias (H_{sv})	228	288	388	488	688
Safety margin without bias (S_k)	15	15	15	15	15
Installation height without bias (H_{sk})	203	263	363	463	663
Arc projection (M_i)	152	182	232	282	382
Bend length (L_b)	353	447	604	761	1075



MP 35 - MultiLine

Chain bracket



Chain bracket U-part



Top



Bottom

Chain bracket elbow fitting



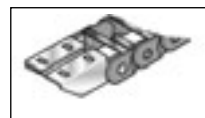
Bottom / outside



Top / inside

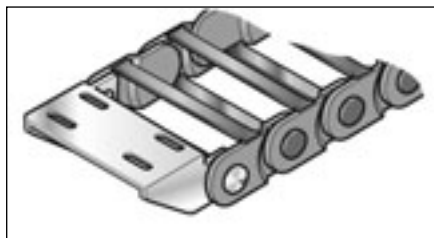


Top / outside



Top / inside

Chain bracket U-part

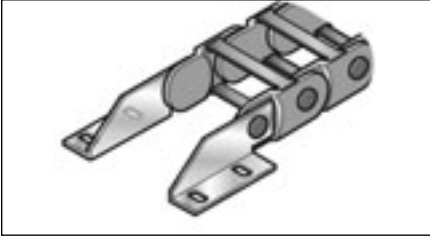


Type	Order no.	Material	Pack
KA 35062 Female end	035000007000	Steel plate	1
KA 35062 Male end	035000007100	Steel plate	1
KA 35086 Female end	035000007200	Steel plate	1
KA 35086 Male end	035000007300	Steel plate	1
KA 35102 Female end	035000007400	Steel plate	1
KA 35102 Male end	035000007500	Steel plate	1
KA 35125 Female end	035000007600	Steel plate	1
KA 35125 Male end	035000007700	Steel plate	1
KA 35150 Female end	035000007800	Steel plate	1
KA 35150 Male end	035000007900	Steel plate	1
KA 35062 Female end	035000008000	Stainless steel 1.4301	1
KA 35062 Male end	035000008100	Stainless steel 1.4301	1
KA 35086 Female end	035000008200	Stainless steel 1.4301	1
KA 35086 Male end	035000008300	Stainless steel 1.4301	1
KA 35102 Female end	035000008400	Stainless steel 1.4301	1
KA 35102 Male end	035000008500	Stainless steel 1.4301	1
KA 35125 Female end	035000008600	Stainless steel 1.4301	1
KA 35125 Male end	035000008700	Stainless steel 1.4301	1
KA 35150 Female end	035000008800	Stainless steel 1.4301	1
KA 35150 Male end	035000008900	Stainless steel 1.4301	1

The metal connection (U-shaped part) is precisely adjusted to the respective chain width.

It only needs to be snapped in the chain link. Please order one male and one female end bracket for each chain. The brackets should be fastened with M6 screws.

MP 35 - MultiLine

Chain bracket elbow fitting	Type	Order no.	Material	Pack
	KA 3508 Female end	0350000054	Steel plate	1
	KA 3508 Male end	0350000055	Steel plate	1
	KA 3509 Female end	0350000056	Stainless steel 1.4301	1
	KA 3509 Male end	0350000057	Stainless steel 1.4301	1

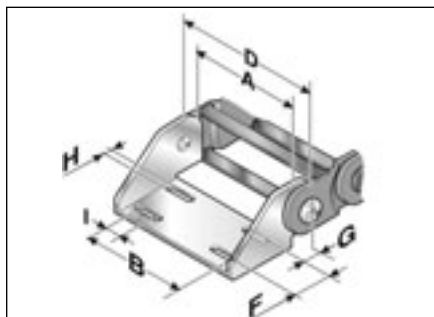
Please order one male and one female end bracket for each chain.



MP 35 - MultiLine

Chain bracket U-part

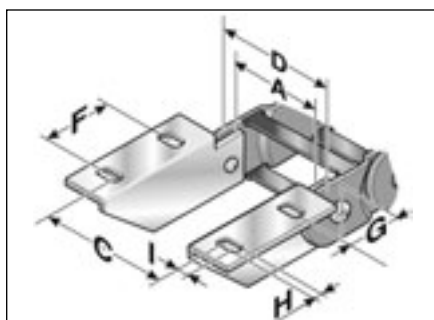
Dimensions in mm



Type	A	B	D	F	G	H Ø	I
KA 35062	62.00	53.50	82.00	25.00	20.00	7.00	15.00
KA 35086	86.00	77.50	106.00	25.00	20.00	7.00	15.00
KA 35102	102.00	93.50	122.00	25.00	20.00	7.00	15.00
KA 35125	125.00	116.5	145.00	25.00	20.00	7.00	15.00
KA 35150	150.00	142.00	170.00	25.00	20.00	7.00	15.00

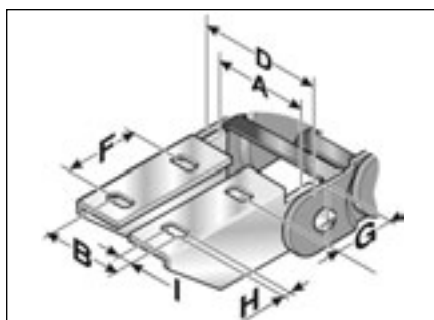
Chain bracket elbow fitting

Dimensions in mm



Elbow fitting, outside

Type	A	C	D	F	G	H Ø	I
KA 3508/09 Female end	62.00	90.00	98.00	25.00	20.00	7.00	8.00
KA 3508/09 Male end	62.00	100.50	98.00	25.00	20.00	7.00	8.00
KA 3508/09 Female end	86.00	114.00	122.00	25.00	20.00	7.00	8.00
KA 3508/09 Male end	86.00	124.50	122.00	25.00	20.00	7.00	8.00
KA 3508/09 Female end	102.00	130.00	138.00	25.00	20.00	7.00	8.00
KA 3508/09 Male end	102.00	140.50	138.00	25.00	20.00	7.00	8.00
KA 3508/09 Female end	125.00	153.00	161.00	25.00	20.00	7.00	8.00
KA 3508/09 Male end	125.00	163.50	161.00	25.00	20.00	7.00	8.00
KA 3508/09 Female end	150.00	178.00	186.00	25.00	20.00	7.00	8.00
KA 3508/09 Male end	150.00	188.50	186.00	25.00	20.00	7.00	8.00



Elbow fitting, inside

Type	A	B	D	F	G	H Ø	I
KA 3508/09 Female end	62.00	55.00	98.00	25.00	20.00	7.00	8.00
KA 3508/09 Male end	62.00	50.00	98.00	25.00	20.00	7.00	8.00
KA 3508/09 Female end	86.00	79.00	122.00	25.00	20.00	7.00	8.00
KA 3508/09 Male end	86.00	74.00	122.00	25.00	20.00	7.00	8.00
KA 3508/09 Female end	102.00	95.00	138.00	25.00	20.00	7.00	8.00
KA 3508/09 Male end	102.00	90.00	138.00	25.00	20.00	7.00	8.00
KA 3508/09 Female end	125.00	118.00	161.00	25.00	20.00	7.00	8.00
KA 3508/09 Male end	125.00	113.00	161.00	25.00	20.00	7.00	8.00
KA 3508/09 Female end	150.00	143.00	186.00	25.00	20.00	7.00	8.00
KA 3508/09 Male end	150.00	138.00	186.00	25.00	20.00	7.00	8.00

MP 35 - Accessories

Separator



Separator

Type	Order no.	Description	Pack
TR 35	035000009200	Separator	1

Lock grid spacing 3.00 mm

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	Dimensions in mm					
	TI	H1	H2	H3	HI	H

TR 35	2.00	10.90	16.90	22.90	33.80	2.50
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Separator

H-shaped shelf unit



H-shaped shelf unit

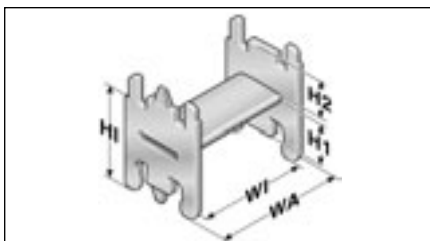
Type	Order no.	Description	Pack
RE 3533	100000353310	RE 3533 Shelf unit, H-shaped	1
RE 3548	100000354810	RE 3548 Shelf unit, H-shaped	1
RE 3557	100000353710	RE 3557 Shelf unit, H-shaped	1

Lock grid spacing 5.60 mm

Insert to obtain additional levels in pre-defined distances.

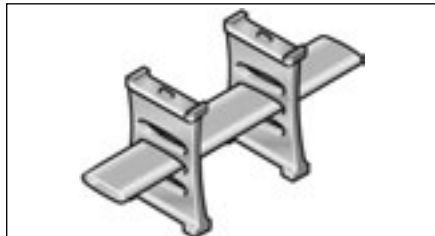
Type	Dimensions in mm				
	WA	WI	H1	H2	HI

RE 3533	35.50	30.50	18.00	12.00	33.00
RE 3548	50.50	45.50	18.00	12.00	33.00
RE 3557	59.50	54.50	18.00	12.00	33.00





MP 35 - Accessories

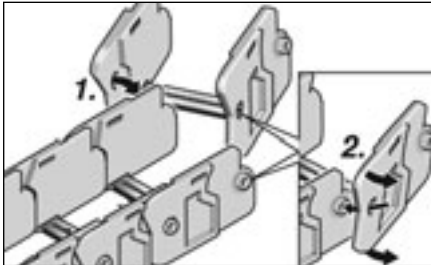
Shelving system	Type	Order no.	Description	Width in mm	Pack
	RBT 062	100000006200	RBT 062 Shelf	62	1
	RBT 086	100000008600	RBT 086 Shelf	86	1
	RBT 101	100000010100	RBT 101 Shelf	101	1
	RBT 125	100000012500	RBT 125 Shelf	125	1
	RBT 150	100000015000	RBT 150 Shelf	150	1
Lock grid spacing 3.00 mm					

Shelving system

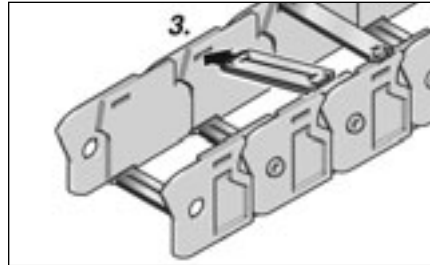
The shelf must be used with a minimum of two separators to create a shelving system. The additional levels prevent cables from criss-crossing and therefore destroying each other, whilst also avoiding excessive friction. The shelves are matched to the available chain widths.

MP 35 - MultiLine

Assembly

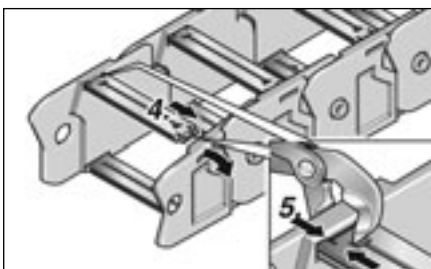


Step 1



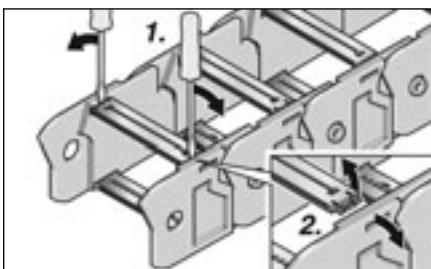
Step 2

The heavy-duty connection between the frame ridge and side wall has a positive fit. For this reason the frame ridges are fixed on one side over the entire chain length on one side panel first before being inserted into the opposite side panel.

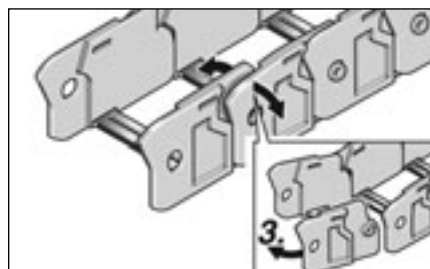


Step 3

Disassembly



Step 1



Step 2

Disassembly is effected in the reverse sequence to assembly. First lever the ridges out of the side panel on one side, then on the other side.