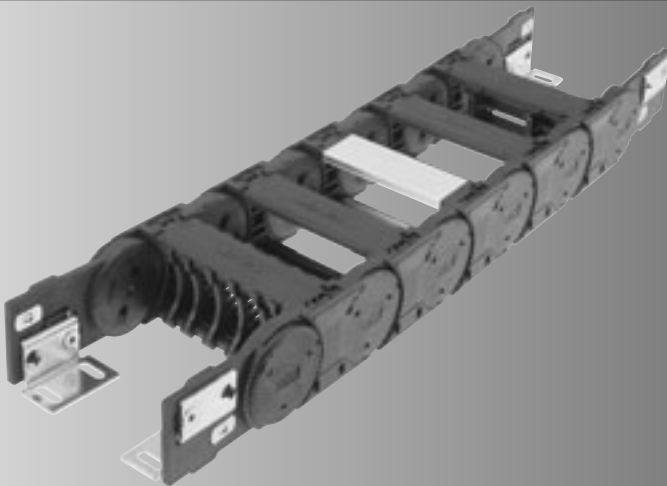


## CABLE DRAG CHAIN SYSTEMS



*MultiLine*

**MP 66**



# MP 66 - MultiLine

## Order variants

<b>Style (order code)</b>									
<b>Configuration (order code) * = standard</b>									
<b>Radius (order code)</b>									
in mm									
<b>Internal width (order code)</b>									
in mm									
<b>External width</b>									
in mm									
MP66 045	79	45	045						0*
MP66 062	96	62	062						1*
MP66 084	118	84	084						2
MP66 105	139	105	105	150	150				3
MP66 144	178	144	144	200	200				4
MP66 182	216	182	182	240	240				5
MP66 xxx	Inside	>45-		280	280				6
	+ 34	600	ALU	350	350				7
									9
<b>Order number:</b>									
	0660					0			0

### Configuration:

- 0\* crossbar every link; w/bias
- 1\* crossbar every link; w/o bias
- 2 crossbar EOL; w/bias
- 3 crossbar EOL; w/o bias
- 4 AL crossbar every link; w/bias
- 5 AL crossbar every link; w/o bias
- 6 AL crossbar EOL; w/bias
- 7 AL crossbar EOL; w/o bias
- 9 Customer order

### Style:

- 0 Standard (PA)
- 9 Special version

### Sample order

0660 045 150 00\*00

Inside width = 45 mm

Radius = 150 mm

Configuration = 0\*

Style = 0

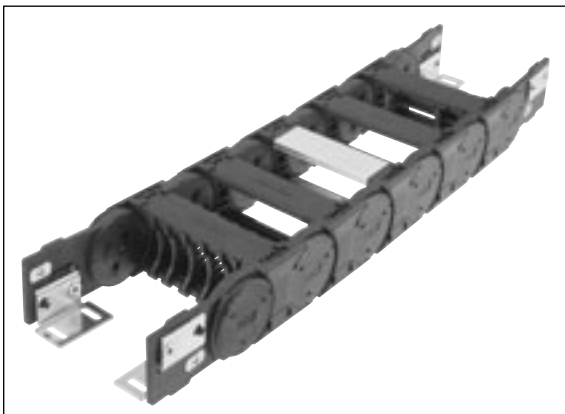
### Ideal operating conditions

- Opening cover on both sides
- Flexible internal separation
- Variable widths (aluminium frame ridge)
- Gliding arrangement
- Unsupported arrangement
- Quiet operation

### Alternative chain type

- MP 65 G closed series
- MP 62.1 / MP 62.2
- Higher stresses
- Flange connection (KA-F)

## Features



Chain bracket with variably positionable metal bracket



ZL strain relief plate



Frame ridges / covers in inside and outside bend can be removed



Radii with or without bias (RK/RV)



Aluminium frame ridges with integrated lock grid in variable lengths

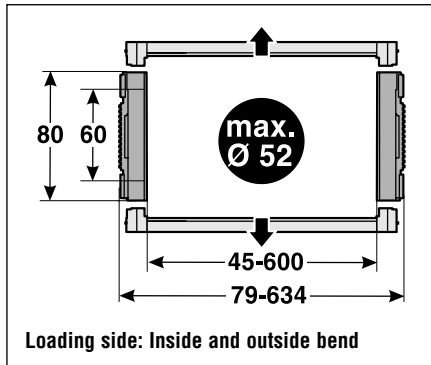


Plug-in shelf system for reliable cable guidance

# MP 66 - MultiLine

## Technical data

### Chain link dimensions



### Material properties

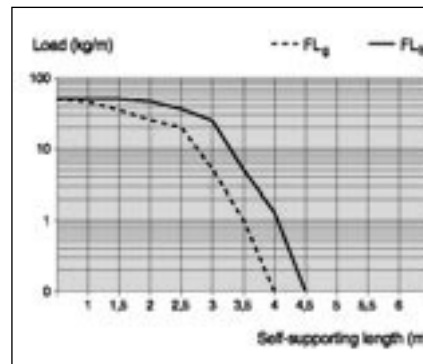
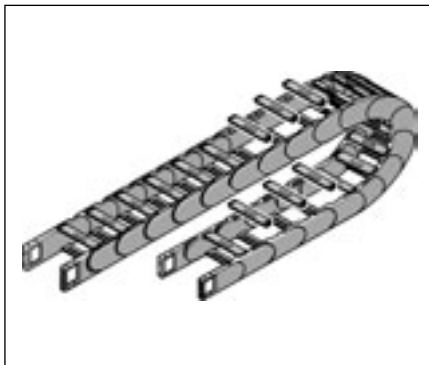
Service temperature: -30 to +120 °C  
 Gliding friction factor: 0.30  
 Static friction factor: 0.45  
 Fire classification: in conformity with UL94 HB

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,  $L_{vh}$ : 50 m  
 Travel distance, vertical, upright,  $L_{vu}$ : 5 m  
 Rotated 90°, self-supporting,  $L_{sg}$ : 2 m  
 Speed, gliding,  $V_g$ : 5 m/s  
 Speed, self-supporting,  $V_s$ : 15 m/s  
 Acceleration, gliding,  $a_g$ : 15 m/s<sup>2</sup>  
 Acceleration, self-supporting,  $a_s$ : 25 m/s<sup>2</sup>

### Unsupported length

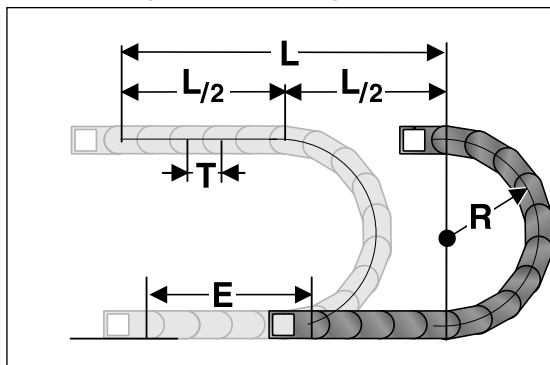


**$FL_g$ :**  
 Ideal installation situation for high stresses at the limit of the max. travel parameters. In this range the chain upper run is still biased, straight or has a max. sag of 10 – 50 mm depending on the type of chain.

**$FL_b$ :**  
 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 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



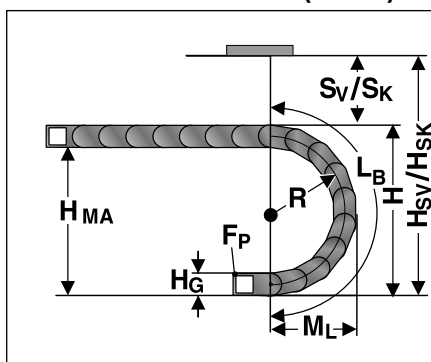
### Determining the chain length

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

≈ 1 m chain = 11 x 91.5 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)

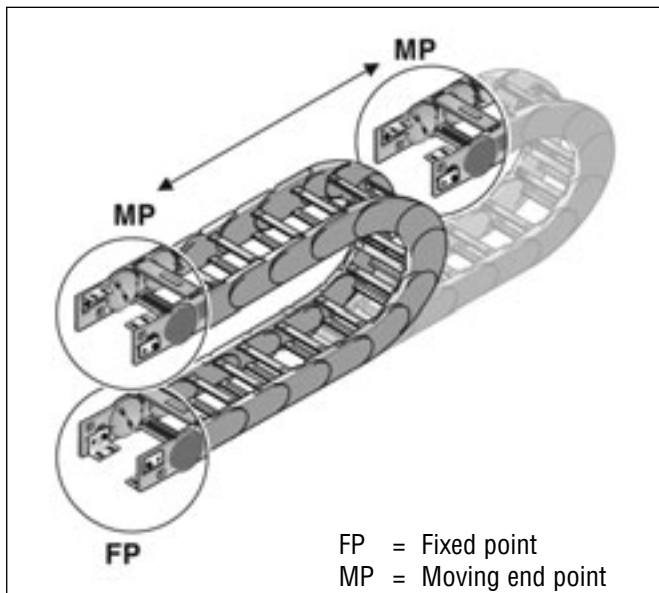


Radius R	150	200	240	280	350
Outside height of chain link ( $H_c$ )	80	80	80	80	80
Height of bend (H)	380	480	560	640	780
Height of moving end connection ( $H_{MA}$ )	300	400	480	560	700
Safety margin with bias ( $S_v$ )	50	50	50	50	50
Installation height with bias ( $H_{sv}$ )	430	530	610	690	830
Safety margin without bias ( $S_k$ )	15	15	15	15	15
Installation height without bias ( $H_{sk}$ )	395	495	575	655	795
Arc projection ( $M_l$ )	282	332	372	412	482
Bend length ( $L_b$ )	688	845	971	1096	1316



# MP 66 - MultiLine

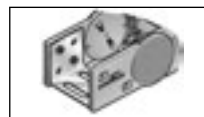
## Chain bracket



### Chain bracket U-part



Top



Bottom

### Chain bracket elbow fitting



Bottom / outside



Bottom / inside



Top / outside



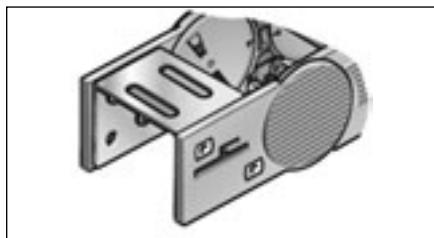
Top / inside

## Chain bracket U-part

Type

Order no.

Pack



KA 66 U

0660000054

1

This chain bracket is supplied as standard for 45 mm width. The bracket can be mounted at the top or bottom.

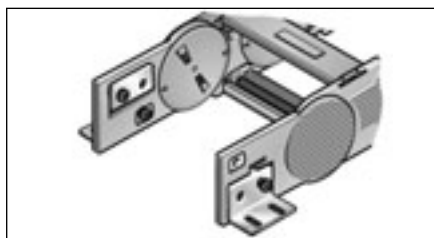
## Chain bracket elbow fitting

Type

Order no.

Material

Pack



KA 66

0660000050

Steel plate

1

KA 66

0660000060

Stainless steel 1.4301

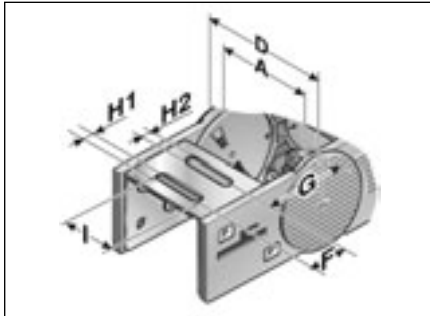
1

There are several options as regarding the chain bracket. The fixed-point bracket (inside/bottom) and the moving end bracket (inside/top) are supplied as standard. However, any other combination can be supplied upon request. The chain bracket is fastened at the end like a side link. This enables the chain to move right up to the bracket. Each chain requires two chain brackets. The brackets should be fastened with M8 screws.

# MP 66 - MultiLine

## Chain bracket U-part

Dimensions in mm

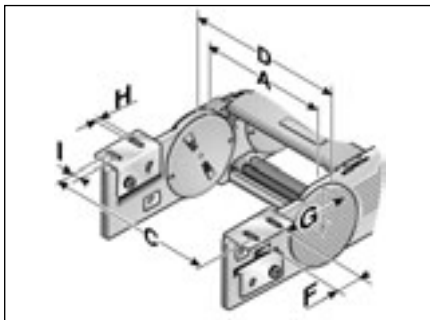


U-part

Type	A	D	F	G	H1	H2	I
KA 66 U	45.00	79.00	28.00	58.50	6.50	8.50	33.00

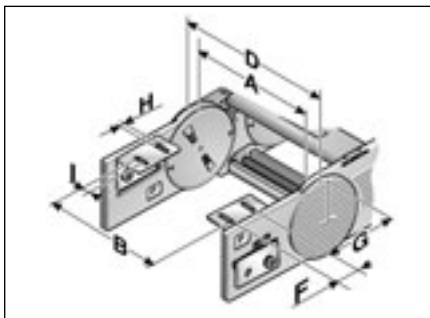
## Chain bracket elbow fitting

Dimensions in mm



Bottom and top / outside

Type	A	C	D	F	G	H Ø	I
KA 66	62.00	113.00	96.00	45.00	50.50	9.00	10.00
KA 66	84.00	135.00	117.50	45.00	50.50	9.00	10.00
KA 66	105.00	156.00	139.00	45.00	50.50	9.00	10.00
KA 66	144.00	195.00	177.50	45.00	50.50	9.00	10.00
KA 66	182.00	233.00	216.00	45.00	50.50	9.00	10.00
KA 66	Variable	A+51.00	A+34.00	45.00	50.50	9.00	10.00



Bottom and top / inside

Type	A	B	D	F	G	H Ø	I
KA 66	62.00	45.00	96.00	45.00	50.50	9.00	10.00
KA 66	84.00	67.00	117.50	45.00	50.50	9.00	10.00
KA 66	105.00	88.00	139.00	45.00	50.50	9.00	10.00
KA 66	144.00	127.00	177.50	45.00	50.50	9.00	10.00
KA 66	182.00	165.00	216.00	45.00	50.50	9.00	10.00
KA 66	Variable	A-17.00	A+34.00	45.00	50.50	9.00	10.00



# MP 66 - Accessories

## Separator



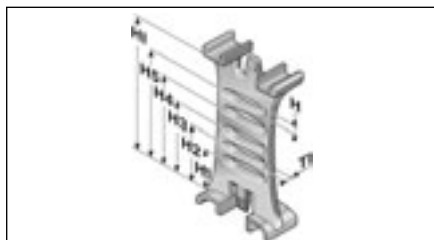
Separator

Type	Order no.	Description	Pack
TV 66	066000009000	Separator	1

Lock grid spacing 1.60 mm

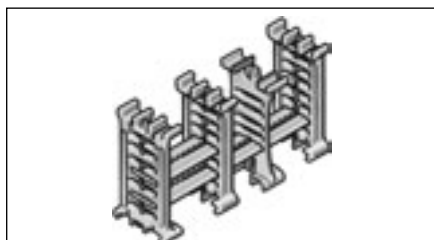
We recommend that separators are used if multiple round cables or conduits with differing diameters are to be installed. An offset configuration of the separators is advisable.

Type	Dimensions in mm							
	TI	H	H1	H2	H3	H4	H5	HI
TV 66	3.50	4.40	18.00	25.10	32.20	39.30	46.40	60.00



Separator

## Shelving system



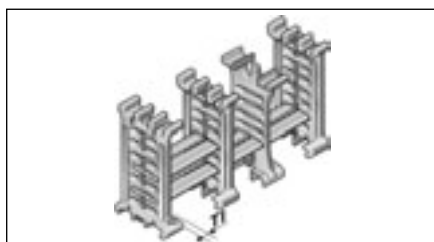
Shelving system

Type	Order no.	Description	Width in mm	Pack
RB 031	100000003100	RB 031 Shelf	31	1
RB 048	100000004800	RB 048 Shelf	48	1
RB 070	100000007000	RB 070 Shelf	70	1
RB 092	100000009200	RB 092 Shelf	92	1
RB 128	100000012800	RB 128 Shelf	128	1
RB 167	100000016700	RB 167 Shelf	167	1
RT 66	1000900100	RTA 66 Shelf support, incl. pin		1

Lock grid spacing 1.60 mm

In connection with at least two shelf supports (RT) the shelf becomes a shelving system. The additional levels prevent cables from criss-crossing and therefore destroying each other, whilst also avoiding excessive friction. The shelving system can be pre-assembled on request.

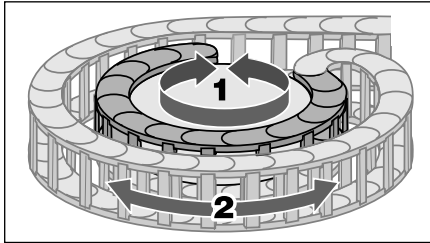
Type	Dimensions in mm	
	TI	
RT 66	6.50	



Shelving system

# MP 66 - Accessories

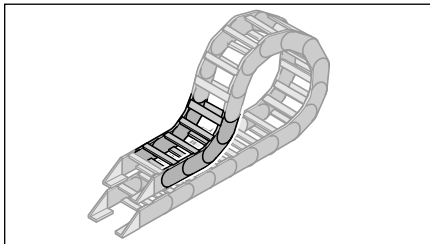
Back radius	Type	Order no.	Radius	Back Radius	Pack
	SR 66 (RÜ240/R150)	66000000060	150 mm	240 mm	1
	SR 66 (RÜ240/R200)	66000000060	200 mm	240 mm	1
	SR 66 (RÜ240/R240)	66000000060	240 mm	240 mm	1
	SR 66 (RÜ240/R280)	66000000060	280 mm	240 mm	1
	SR 66 (RÜ240/R350)	66000000060	350 mm	240 mm	1



Rotary movement

Side links with forward radius (R – through radius washer) and back radius (Rü – side link provided) permit movement in two directions.

Areas of application include rotary movements and low-lying chain brackets.

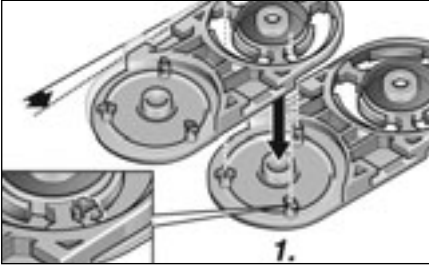


Low-lying chain bracket

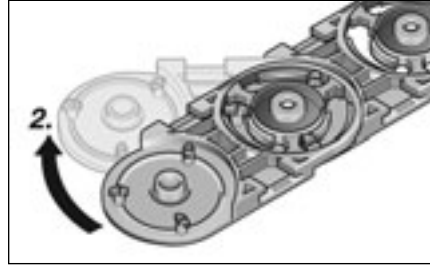


# MP 66 - MultiLine

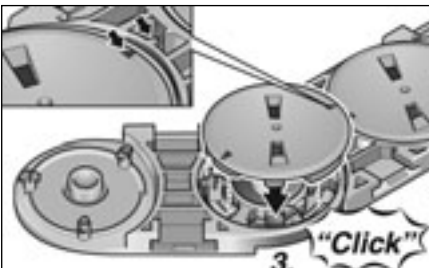
## Assembly



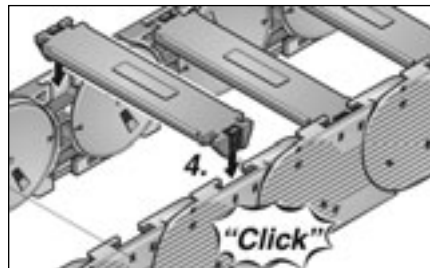
Step 1



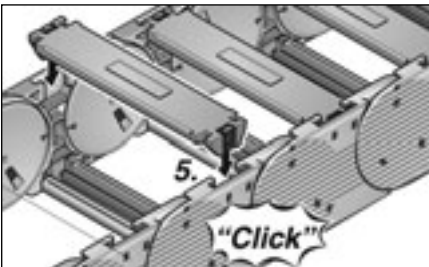
Step 2



Step 3

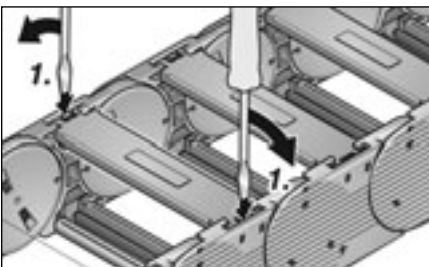


Step 4

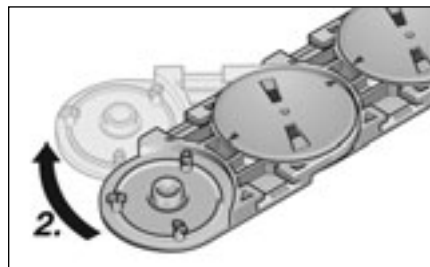


Step 5

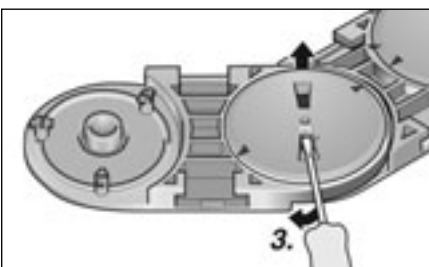
## Disassembly



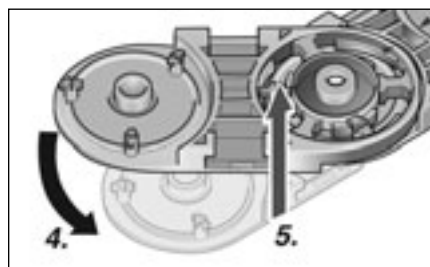
Step 1



Step 2



Step 3



Step 4