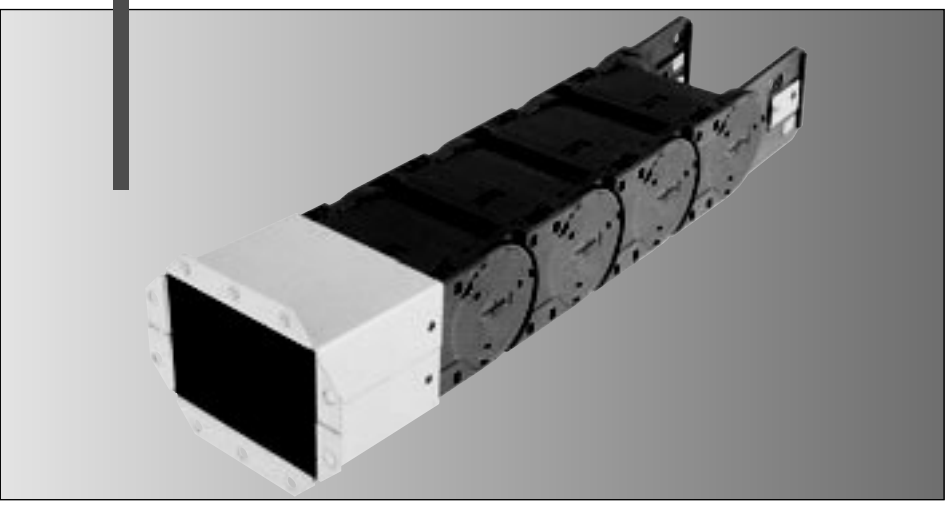
CABLE DRAG CHAIN SYSTEMS

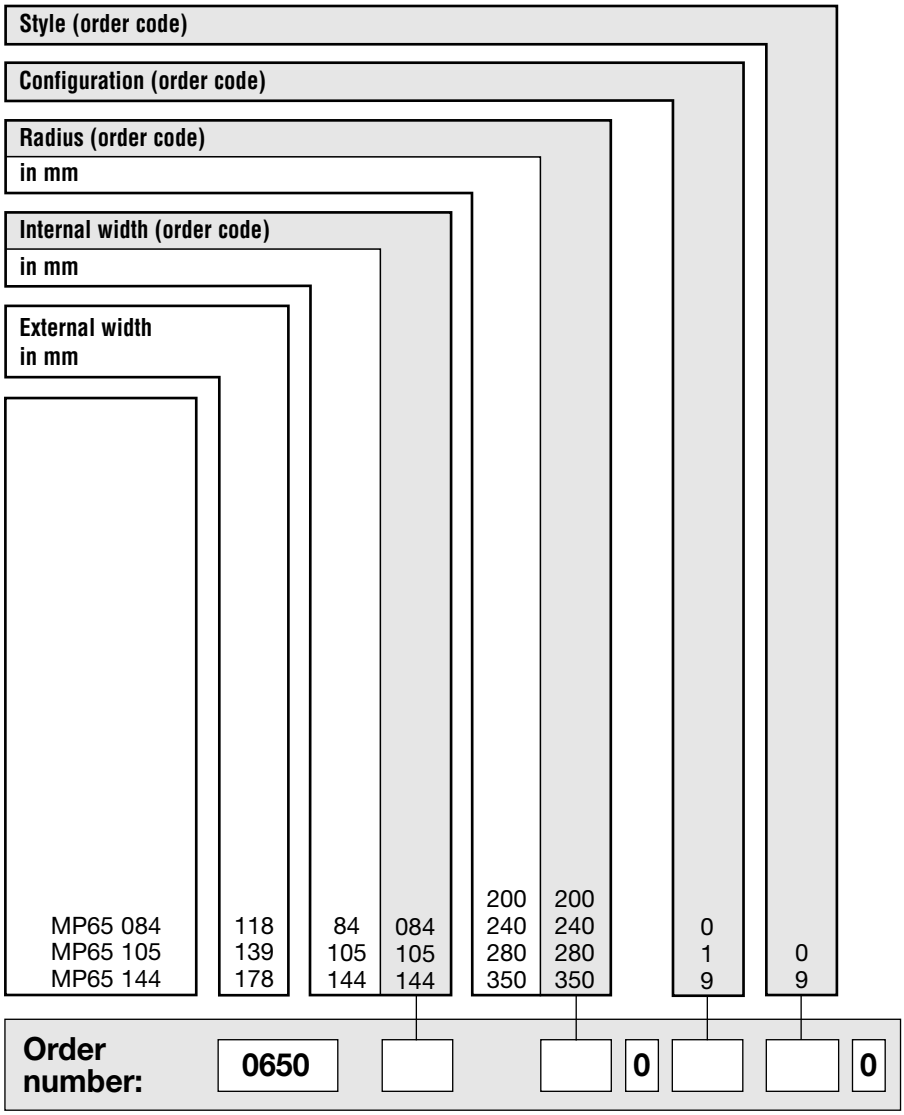


MultiLine

MP 65 G

MP 65 G - MultiLine

Order variants



Configuration:

0 crossbar every link; w/bias
1 crossbar every link; w/o bias
9 Customer order

Style:

0 Standard (PA)
9 Special version

Sample order

0650 084 200 0000

Inside width = 84 mm
Radius = 200 mm
Configuration = 0
Style = 0

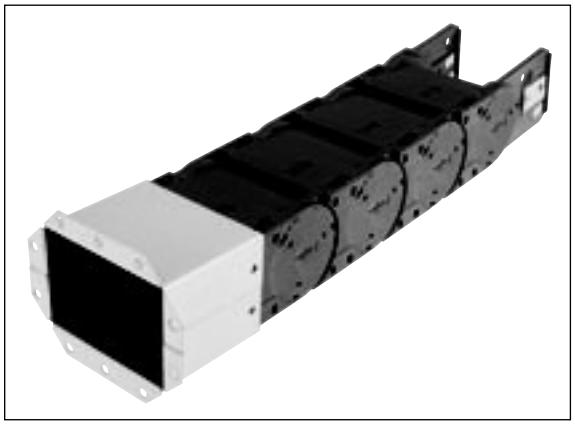
Ideal operating conditions

- Compact dimensions with opening cover on both sides
- Quiet operation
- High stability
- Flexible internal separation

Alternative chain type

- MP 66 Open version

Features



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

Radii with or without bias (RK/RV)

Flange connection for closed cable drag chains

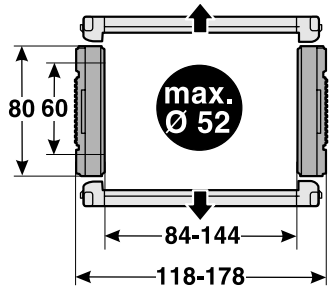
Plug-in shelf system for reliable cable guidance

ZL strain relief plate

MP 65 G - MultiLine

Technical data

Chain link dimensions



Loading side: Inside and outside bend

Material properties

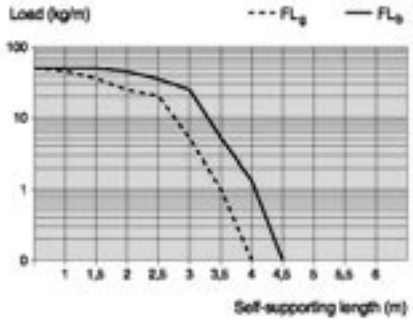
Service temperature:	-30 to +120 °C
Gliding friction factor:	0.30
Static friction factor:	0.45
Fire classification:	in conformity with UL94 HB

Other material properties on request

Technical specifications

Travel distance, gliding, L_g:	60 m
Travel distance, self-supporting, L_f:	see diagram
Travel distance, vertical, hanging, L_{vh}:	50 m
Travel distance, vertical, upright, L_{vs}:	5 m
Rotated 90°, self-supporting, L_{90f}:	2 m
Speed, gliding, V_g:	5 m/s
Speed, self-supporting, V_f:	15 m/s
Acceleration, gliding, a_g:	15 m/s²
Acceleration, self-supporting, a_f:	25 m/s²

Unsupported length

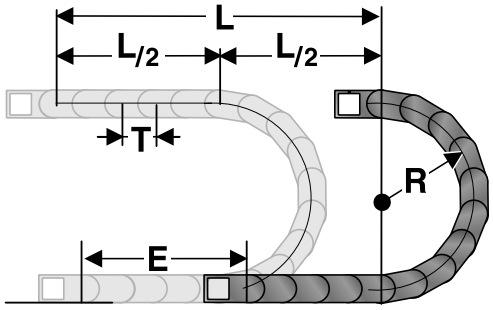


FL_g:
Ideal installation situation for high stresses at the limit of the max. travel parameters. In this range the chain upper run is still biased, straight or has a max. sag of 10 – 50 mm depending on the type of chain.

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 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



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

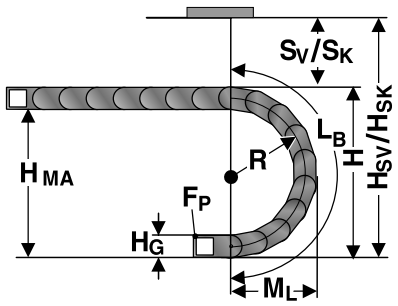
Determining the chain length

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

≈ 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.

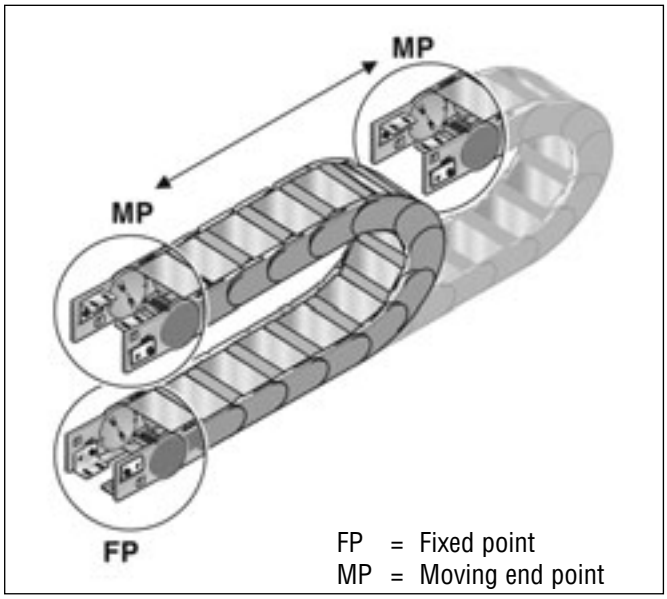
Installation dimensions (in mm)



Radius R	200	240	280	350
Outside height of chain link (H_G)	80	80	80	80
Height of bend (H)	480	560	640	780
Height of moving end connection (H_{MA})	400	480	560	700
Safety margin with bias (S_v)	50	50	50	50
Installation height with bias (H_{SV})	530	610	690	830
Safety margin without bias (S_K)	15	15	15	15
Installation height without bias (H_{SK})	495	575	655	795
Arc projection (M_L)	332	372	412	482
Bend length (L_B)	845	971	1096	1316

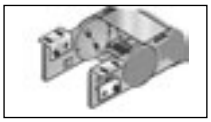
MP 65 G - MultiLine

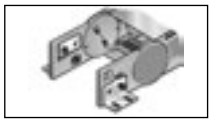
Chain bracket



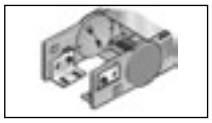
Chain bracket flange

Chain bracket elbow fitting

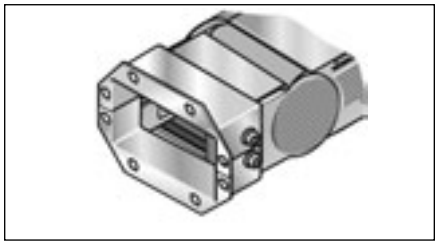

Top / outside


Bottom / outside


Top / inside


Bottom / inside

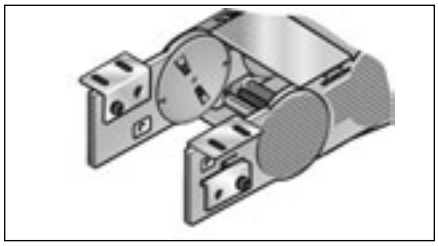
Chain bracket flange



Type	Order no.	Material	Pack
FL 082	0650000070	Steel plate	1
FL 107	0650000072	Steel plate	1
FL 142	0650000074	Steel plate	1
FL 082	0650000080	Stainless steel 1.4301	1
FL 107	0650000082	Stainless steel 1.4301	1
FL 142	0650000084	Stainless steel 1.4301	1

A cable drag chain requires two chain brackets. The flange connection is divisible for the purposes of operation and re-installation.
This design keeps the chain secured in the installed position.

Chain bracket elbow fitting



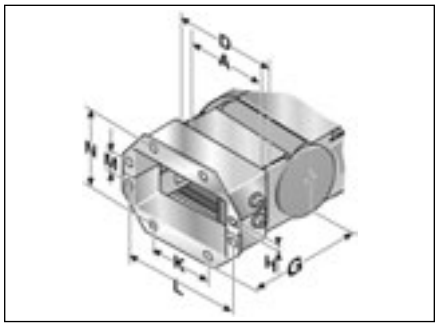
Type	Order no.	Material	Pack
KA 66	0660000050	Steel plate	1
KA 66	0660000060	Stainless steel 1.4301	1

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 M6 screws.

MP 65 G - MultiLine

Chain bracket flange

Dimensions in mm

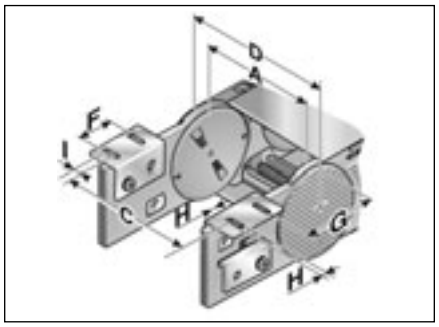


Flange

Type	A	D	G	H Ø	K	L	M	N
FL 082	86.00	105.00	60.40	7.00	78.00	141.50	40.00	105.00
FL 107	102.00	121.00	60.40	7.00	100.00	163.50	40.00	105.00
FL 142	125.00	144.00	60.40	7.00	138.00	201.50	40.00	105.00

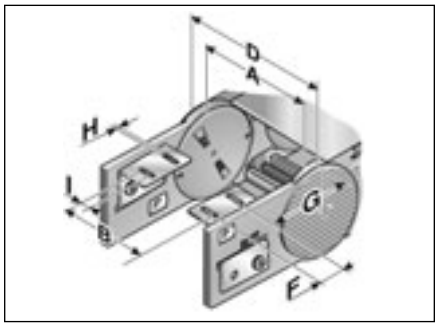
Chain bracket elbow fitting

Dimensions in mm



Bottom and top / outside

Type	A	C	D	F	G	H Ø	I
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



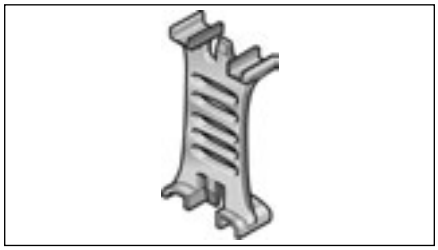
Bottom and top / inside

Type	A	B	D	F	G	H Ø	I
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

MP 65 G - Accessories

Separator

Type	Order no.	Description	Pack
TV 66	066000009000	Separator	1

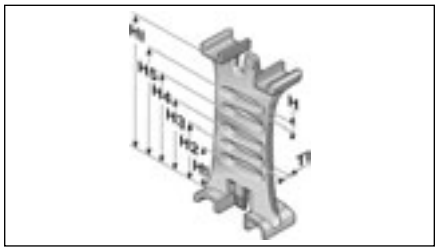


Separator

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.

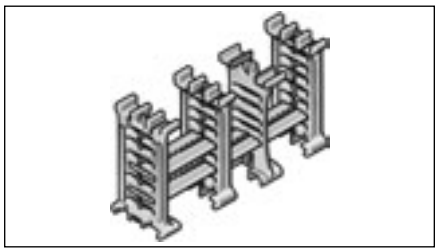
	Dimensions in mm							
Type	TI	H	H1	H2	H3	H4	H5	HI
TV 66	3.50	4.40	18.00	25.10	32.20	39.30	46.40	60.00



Separator

Shelving system

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
RT 66	1000900100	RT 66 Shelf support incl. pin		1

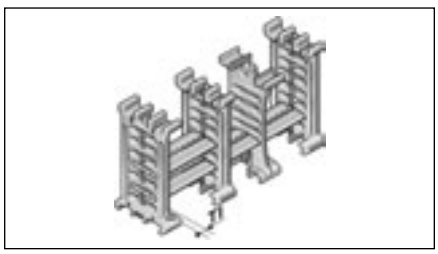


Shelving system

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.

	Dimensions in mm
Type	TI
RT 66	6.50



Shelving system

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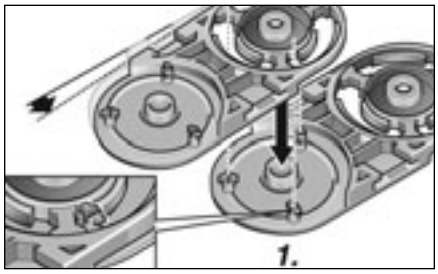
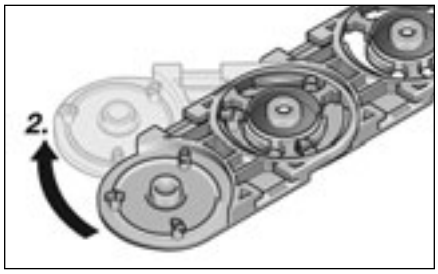
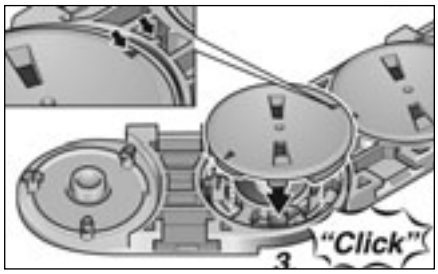
Assembly



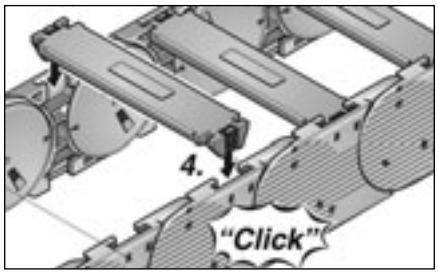
Step 1



Step 2



Step 3



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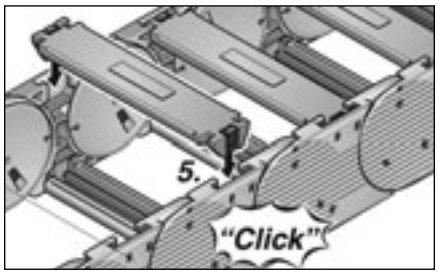
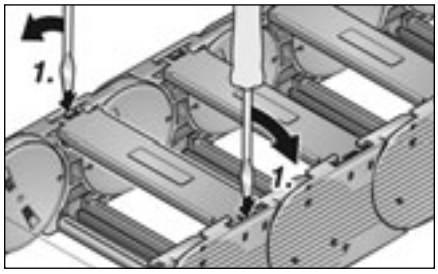
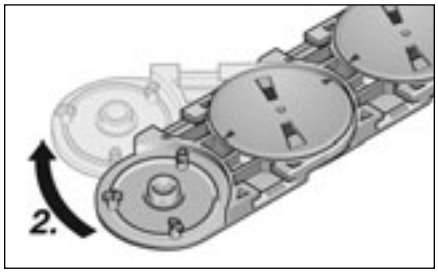


Step 5

Disassembly



Step 1



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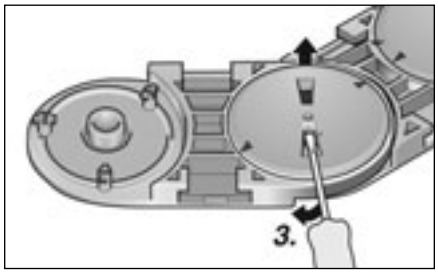

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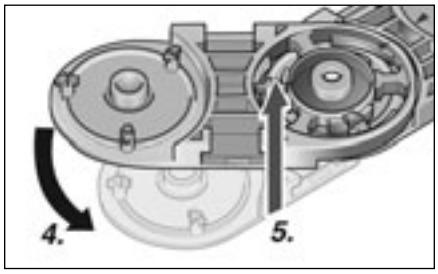

Step 4