



Cable drag chain systems

MP 66, MP 65G

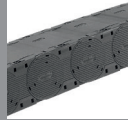
MP 66

OPEN

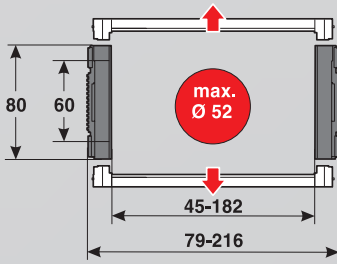
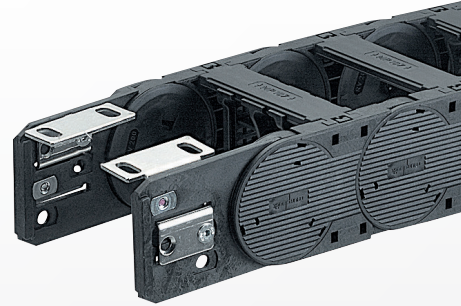


MP 65G

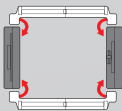
CLOSED



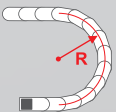
- PLASTIC OR ALUMINIUM VERSION
- METAL CHAIN BRACKET
- OPENS ON OUTSIDE BEND



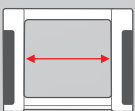
TECHNICAL DATA



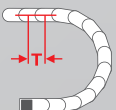
Loading side
Inside and outside bend



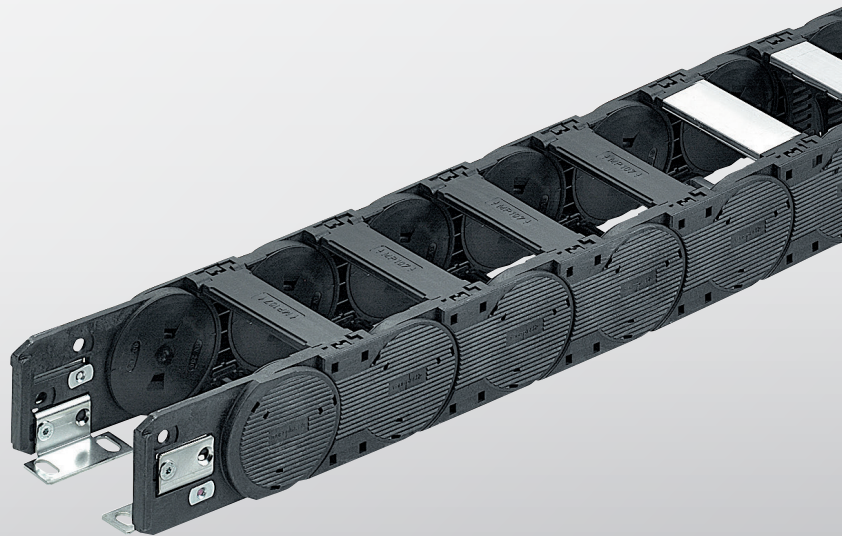
Available radii
150.0 – 400.0 mm



Available interior widths
With plastic frame bridge
45.0 – 182.0 mm
With Alu frame bridge / With Alu cover
77.0 – 600.0 mm /



Pitch
T = 91.5 mm





TECHNICAL SPECIFICATIONS

Travel distance gliding L_g max.	60.0 m
Travel distance self-supporting L_s max.	see diagram on page 5
Travel distance vertical, hanging L_{vh} max.	50.0 m
Travel distance vertical, upright L_{vs} max.	5.0 m
Rotated 90°, unsupported L_{90f} max.	2.0 m
Speed, gliding V_g max.	5.0 m/s
Speed, self-supporting V_s max.	15.0 m/s
Acceleration, gliding a_g max.	15.0 m/s ²
Acceleration, self-supporting a_s max.	20.0 m/s ²

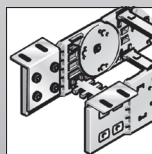
Contact our engineering department to meet any higher requirements: efk@murrplastik.de

MATERIAL PROPERTIES

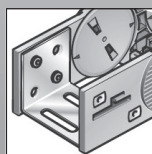
Standard material	Polyamide (PA) black
Service temperature	-30.0 – 120.0 °C
Gliding friction factor	0.3
Static friction factor	0.45
Fire classification	Based on UL 94 HB

Other material properties on request.

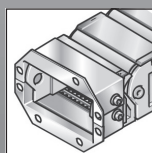
CHAIN BRACKET



Chain bracket angle

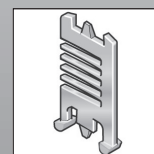


Chain bracket U-part

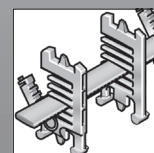


End brackets flange

SHELVING SYSTEM

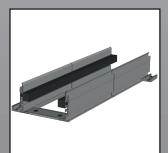


Separator TR



Shelving system RS

GUIDE CHANNELS

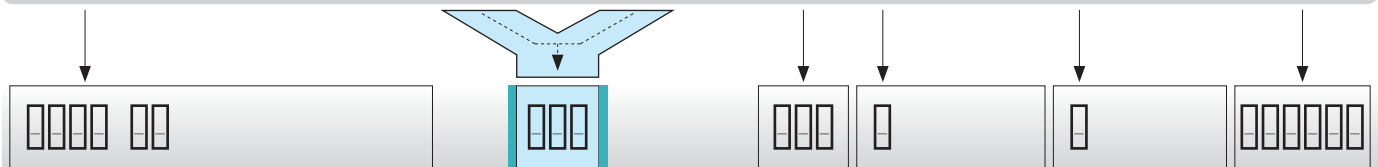


VAW aluminium

ORDERING KEY

Dimensions in mm [US inch]

Type code	Variation	Inside width	Outside width	Inside width	Outside width	Radius	Rail variant	Material	Chain length
0660 30	MP 66 open Frame bridge on outside of radius Frame bridge on inside bend Opens on inside and outside of radius	045¹⁾ [1.77]	079¹⁾ [3.11]			150¹⁾ [5.91]	0 Plastic, full-ridged with bias	0 Polyamide standard (PA/black)	
		062¹⁾ [2.44]	096¹⁾ [3.78]						
0650 44	MP 65G Closed Cover on outside of radius Cover on inside of radius Opens on inside and outside of radius	084 [3.31]	118 [4.65]			200 [7.87]	1 Plastic, full-ridged without bias	9 Special version (on request)	
		105 [4.13]	139 [5.47]						
		144 [5.67]	178 [7.01]			240 [9.45]	2 Plastic, half-ridged with bias		
		182¹⁾ [7.17]	216¹⁾ [8.50]						
						280 [11.02]	3 Plastic, half-ridged without bias		
						350 [13.78]	4 Aluminium full-ridged with bias		
						400 [15.75]	5 Aluminium full-ridged without bias		
							6 Aluminium half-ridged with bias		
							7 Aluminium half-ridged without bias		
							9 Special version (on request)		



ORDER SAMPLE: 0660 30 045 150 0 0 1556

Frame bridge in outside bend, frame bridge in inside bend, can be opened from inside and outside bend
 Inside width 45 mm; radius 150 mm
 Plastic bridge, full-ridged with bias, material black-coloured polyamide
 Chain length 1556 mm (17 links)

¹⁾ for Variant 30 only

NOTE ON CONFIGURATION

Aluminium frame bridges:

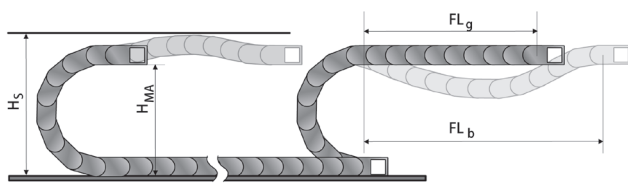
Aluminium frame bridges can be supplied in 1 mm width sizes for inner widths from 77.0 mm – 600.0 mm .

Strain relief:

The end brackets utilise strain relief plates (ZL) for cable strain relief.

For detailed information, please consult the corresponding product documentation.

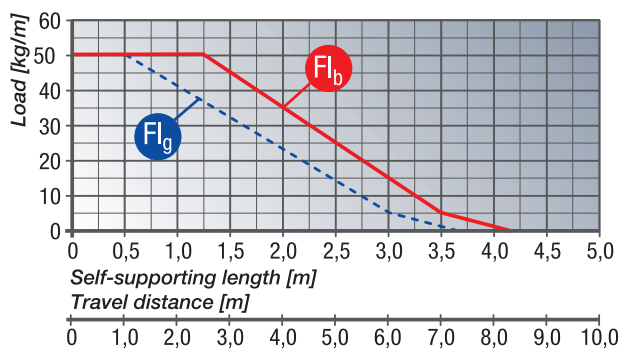
SELF-SUPPORTING LENGTH



The self-supporting length is the distance between the chain bracket on the moving end and the start of the chain arch. The installation variant FL_g offers the lowest load and wear for the cable drag chain. The maximum travel parameters (speed and acceleration) can be applied for this variant.

- H_s = Installation height plus safety
- H_{MA} = Height of moving end connection
- FL_g = Self-supporting length, upper run straight
- FL_b = Self-supporting length, upper run bent

LOAD DIAGRAM FOR SELF-SUPPORTING APPLICATIONS



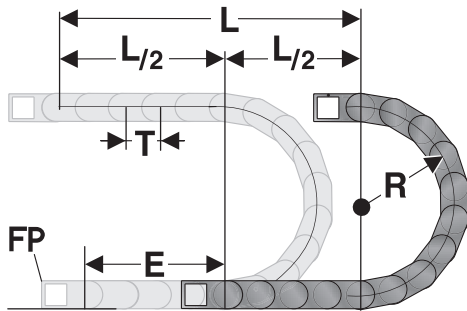
FL_g Self-supporting length, upper run straight

In the FL_g range, the chain upper run still has a bias, is straight or has a maximum sag of 60.0 mm.

FL_b Self-supporting length, upper run bent

In the FL_b range, the chain upper run has a sag of more than 60.0 mm, but this is still less than the maximum sag. Where the sag is greater than that permitted in the FL_b range, the application is critical and should be avoided. The self-supporting length can be optimized by using a support for the upper run or a more stable energy chain.

DETERMINING THE CHAIN LENGTH



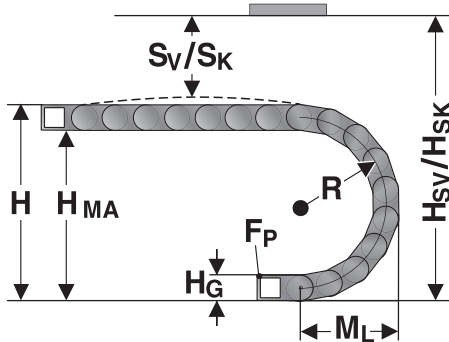
The fixed point of the cable drag chain should be connected in the middle of the travel distance.

This arrangement gives the shortest connection between the fixed point (FP) and the moving consumer and thus the most efficient chain length.

Chain length calculation = $L/2 + \pi * R + E$
 $\approx 1 \text{ m chain} = 11 \text{ qty. x } 91.5 \text{ mm links.}$

- E = distance between entry point and middle of travel distance
- L = travel distance
- R = radius
- T = Pitch 91.5 mm

EINBAUMASSE



The moving end chain connection is to be screw fixed at height H_{MA} for the respective radius.

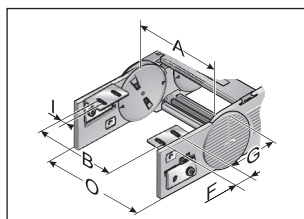
Concerning the installed dimensions, you must take into account whether the chain links are equipped with or without bias.

For chain links without bias, the „Installed height without bias H_{SK} “ value has to be taken into account.

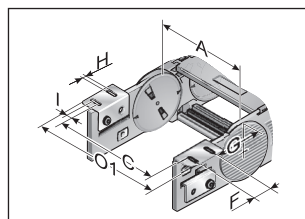
If the chain links are equipped with a bias, the value „Installed height with bias H_{SV} “ has to be taken into account.

Radius R	150	200	240	280	350	400
Outside height of chain link (H_c)	80	80	80	80	80	80
Height of bend (H)	380	480	560	640	780	880
Height of moving end bracket (H_{MA})	300	400	480	560	700	800
Safety margin with bias (S_v)	50	50	50	50	50	50
Installation height with bias (H_{SV})	430	530	610	690	830	930
Safety margin without bias (S_k)	15	15	15	15	15	15
Installation height without bias (H_{SK})	395	495	575	655	795	895
Arc projection (M_L)	282	332	372	412	482	532

CHAIN BRACKET ANGLE KA 66



KA 66 (inside up / down)



KA 66 (outside up / down)

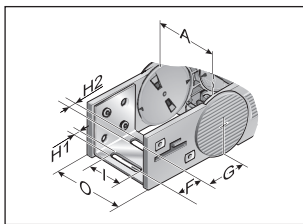
There are several options regarding the chain bracket. The fixed-point bracket (inside/bottom) and the moving end bracket (inside/top) are supplied as standard. However, any other combination can be supplied upon request. The chain bracket is fastened at the end like a side link. This enables the chain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

Type	Order No.	Material	Inside width						Outside width KA	Outside width KA	
			A	B	C	F	G	HØ			I
			mm	mm	mm	mm	mm	mm	mm	mm	mm
KA 66	0660000050	Sheet steel	62.0 – 182.0	A-17.0	A+51.0	45.0	50.5	9.0	10.0	A+34.0	A+64.0

CHAIN BRACKET ANGLE KA 66

Type	Order No.	Material	Inside width							Outside width KA	Outside width KA
			A mm	B mm	C mm	F mm	G mm	HØ mm	I mm	O mm	O1 mm
KA 66	0660000060	Stainless steel 1.4301	62.0 – 182.0	A-17.0	A+51.0	45.0	50.5	9.0	10.0	A+34.0	A+64.0

CHAIN BRACKET U-PART KA 66

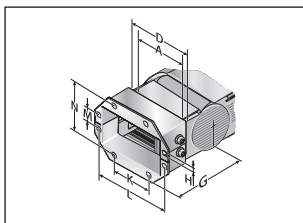


KA 66 U

The chain bracket is a fully plastic 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 M5 screws. The cables or conduits may be fastened with cable ties on the integrated strain relief of the chain bracket.

Type	Order No.	Material	Inside width					Outside width KA		
			A mm	F mm	G mm	H1 mm	H2 mm	I mm	O mm	
KA 66 U	0660000054	Sheet steel	45.0	28.0	58.5	6.5	8.5	33.0	A+34.0	

END BRACKETS FLANGE KA 65 G

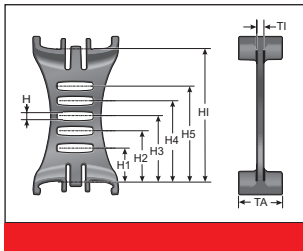


FL 082 – 142

A cable drag chain requires two chain brackets. The divisible flange connection has been specifically designed for commissioning and re-installation. This keeps the chain in the installed position.

Type	Order No.	Material	Inside width						
			A mm	G mm	HØ mm	K mm	L mm	M mm	N mm
FL 082	0650000070	Sheet steel	86.0	136.0	7.0	78.0	141.5	40.0	105.0
FL 107	0650000072	Sheet steel	102.0	136.0	7.0	100.0	163.5	40.0	105.0
FL 142	0650000074	Sheet steel	125.0	136.0	7.0	138.0	201.5	40.0	105.0
FL 082	0650000080	Stainless steel 1.4301	86.0	136.0	7.0	78.0	141.5	40.0	105.0
FL 107	0650000082	Stainless steel 1.4301	102.0	136.0	7.0	100.0	163.5	40.0	105.0
FL 142	0650000084	Stainless steel 1.4301	125.0	136.0	7.0	138.0	201.5	40.0	105.0

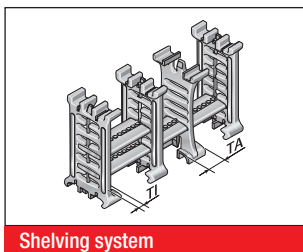
SEPARATOR TR 66



We recommend that separators be used if multiple round cables or conduits with differing diameters are to be installed.

Type	Order No.	Designation	Version	TI mm	TA mm	H mm	H1 mm	H2 mm	H3 mm	H4 mm	H5 mm	H6 mm	H7 mm
TV 66	066000009000	Separator	lockable	3.5	20.0	4.4	15.8	22.9	30.0	37.1	44.2	51.3	60.0

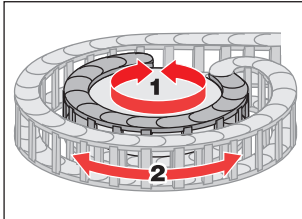
SHELVING SYSTEM MP 66



The shelf must be used with a minimum of two shelf supports to create a shelving system. The additional levels prevent cables from criss-crossing and minimise the friction between them. The shelving system may be preassembled on request.

Type	Order No.	Designation	Width mm	Clearance width mm	Pitch mm	TI mm	H1 mm	H2 mm	H3 mm	H4 mm	H5 mm	H6 mm	H7 mm
RB 031	100000003100	Shelf	42.0	31.0	1.61.6								
RB 048	100000004800	Shelf	59.0	48.0	1.61.6								
RB 070	100000007000	Shelf	81.0	70.0	1.61.6								
RB 092	100000009200	Shelf	103.0	92.0	1.61.6								
RB 100	100000010000	Shelf	111.0	100.0	1.61.6								
RB 128	100000012800	Shelf	139.0	128.0	1.61.6								
RB 167	100000016700	Shelf	178.0	167.0	1.61.6								
RT 66	1000900100	Shelf support	4.3		1.61.6	6.5	8.7	15.8	22.9	30.0	37.1	44.2	51.3

REAR-FACING MP 66

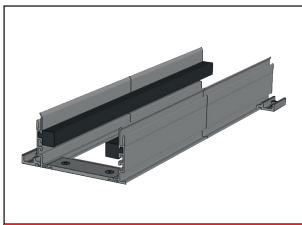


Rotating movement

Side links with radius forward (R) and radius backward (Rü) allow for movement in two directions. This is intended for rotating movements and lowered chain brackets.

Type	Order No.	Rear-facing radius mm	Version
SR 66 (RÜ240)	066000000060	240.0	Available for radii 150, 200, 240, 280 and 350 mm

GUIDE CHANNEL VAW (ALUMINIUM)



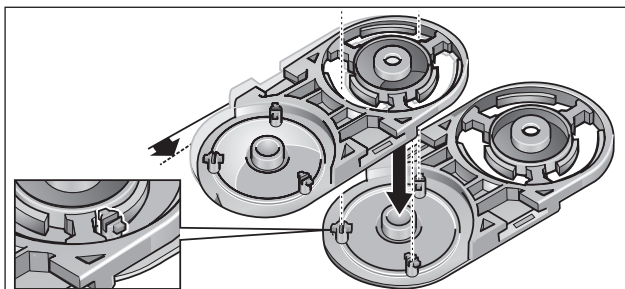
VAW aluminium

For this cable drag chain, a variable guide channel system is available, constructed from aluminium sections. The variable guide channel ensures that the cable drag chain is supported and guided securely. For help on choosing, please consult the chapter „Variable Guide Channel System“.

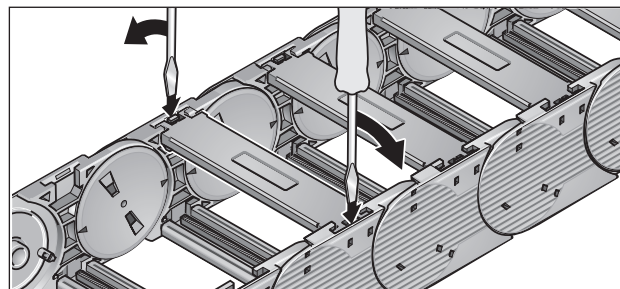
MP 66 OPEN / MP 65G CLOSED

ASSEMBLY

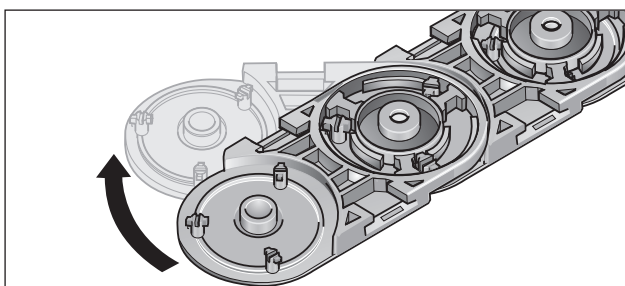
DISASSEMBLY



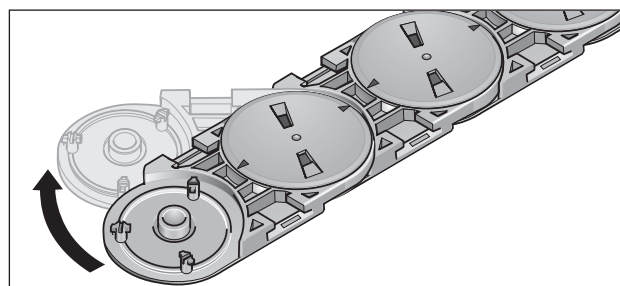
Step 1



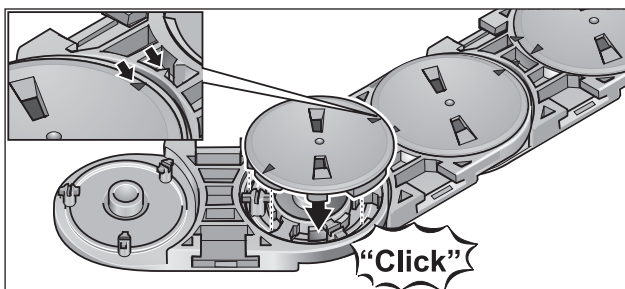
Step 1



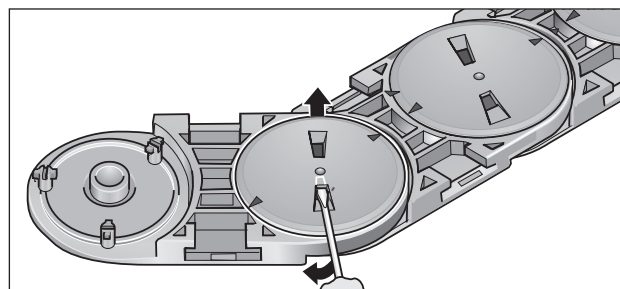
Step 2



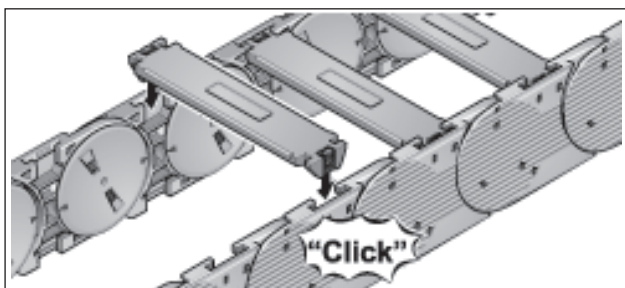
Step 2



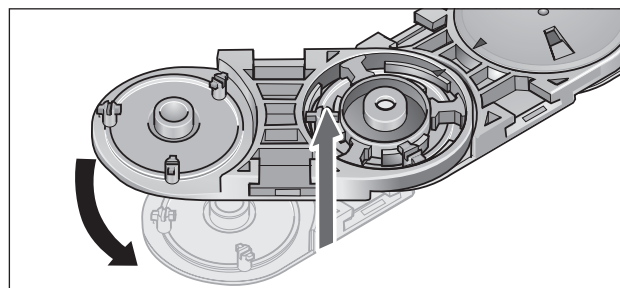
Step 3



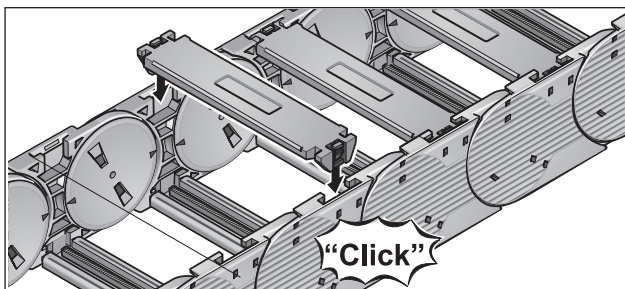
Step 3



Step 4



Step 4



Step 5

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