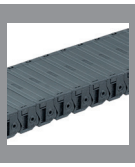
murrplastik

Cable drag chain systems

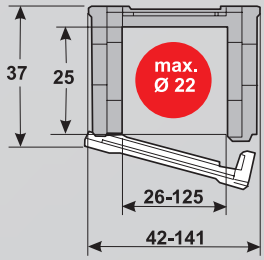
MP 25G

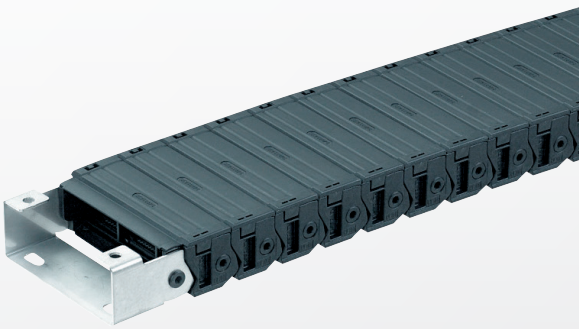
EFK

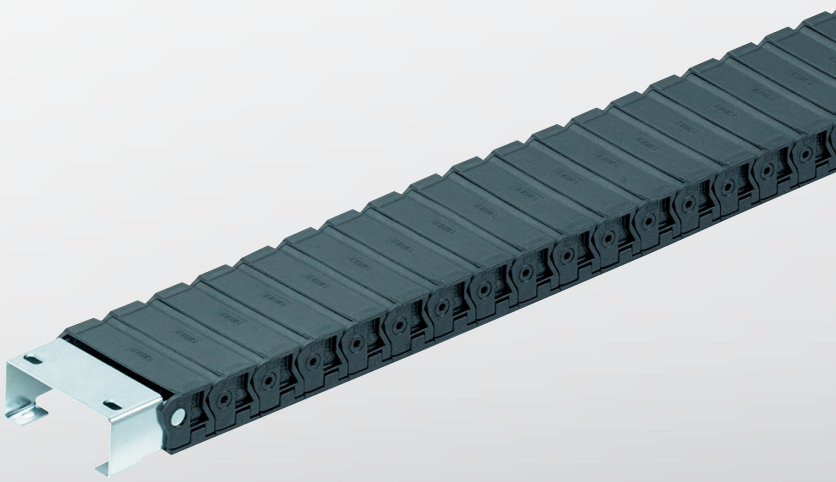
MP 25G
CLOSED



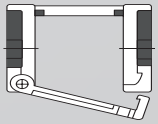
- CLOSED VARIANTS, STARTING WITH R60
- COMPACT DESIGN



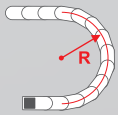




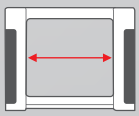
TECHNICAL DATA



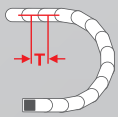
Loading side
Outside bend



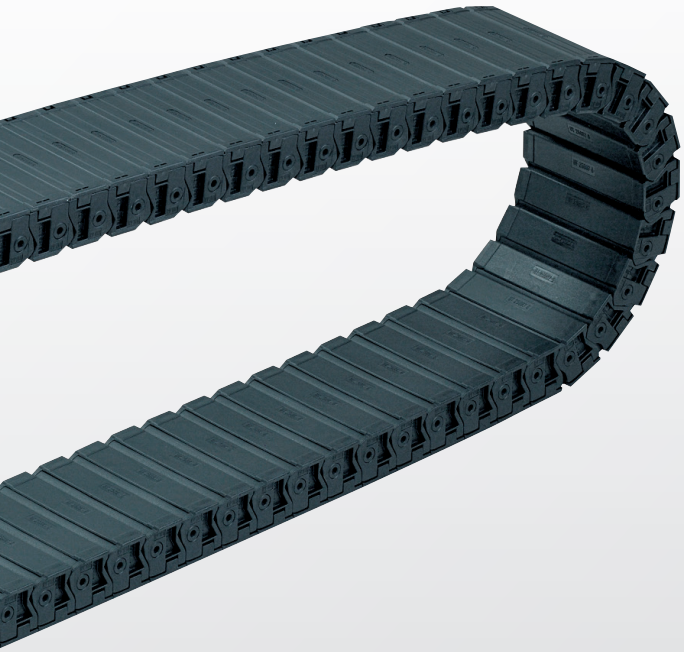
Available radii
60.0 – 250.0 mm



Available interior widths
With plastic frame bridge
26.0 – 125.0 mm



Pitch
T = 30.0 mm



TECHNICAL SPECIFICATIONS

Travel distance gliding L_g max.	40.0 m
Travel distance self-supporting L_f max.	see diagram on page 5
Travel distance vertical, hanging L_{vh} max.	25.0 m
Travel distance vertical, upright L_{vs} max.	3.0 m
Rotated 90°, unsupported L_{90f} max.	1.0 m
Speed, gliding V_g max.	3.0 m/s
Speed, self-supporting V_f max.	6.0 m/s
Acceleration, gliding a_g max.	10.0 m/s²
Acceleration, self-supporting a_f max.	15.0 m/s²

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

MATERIAL PROPERTIES

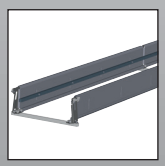
Standard material	Polyamide (PA) black
Service temperature	-30.0 – 120.0 °C
Gliding friction factor	0.3
Static friction factor	0.45
Fire classification	Based on UL 94 HB

Other material properties on request.

SHELVING SYSTEM

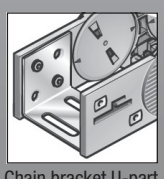
Separator TR

GUIDE CHANNELS

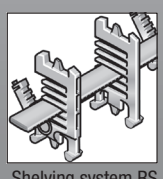


VAW stainless steel

CHAIN BRACKET



Chain bracket U-part



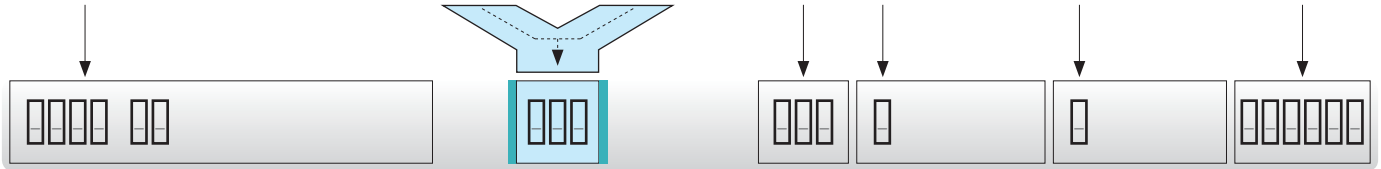
Shelving system RS

VAW aluminium

ORDERING KEY

Dimensions in mm [US inch]

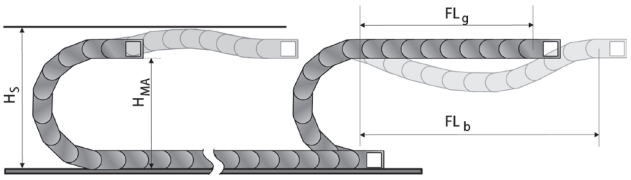
Type code	Variation	Inside width	Outside width	Inside width	Outside width	Radius	Rail variant	Material	Chain length
0250 03	Cover on outside of radius Cover on inside of radius Opens on outside bend	026 [1.02]	042 [1.65]			060 [2.36]	0 Plastic, full-ridged with bias	0 Polyamide standard (PA/black)	
		037 [1.46]	053 [2.09]						
		062 [2.44]	078 [3.07]			075 [2.95]		7 EMC (PA/light grey)	
		087 [3.43]	103 [4.06]						
		101 [3.98]	117 [4.61]			100 [3.94]		9 Special version (on request)	
		125 [4.92]	141 [5.55]						
						125 [4.92]			
						150 [5.91]			
						200 [7.87]			
						250 [9.84]			



ORDER SAMPLE: 0250 03 026 060 0 0 1230

Cover in outside bend, cover in inside bend, can be opened from outside bend
Inside width 26 mm; radius 60 mm
Plastic bridge, full-ridged with bias, material black-coloured polyamide
Chain length 1230 mm (41 links)

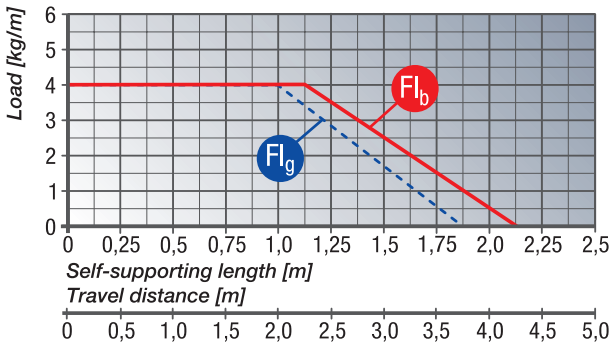
SELF-SUPPORTING LENGTH



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

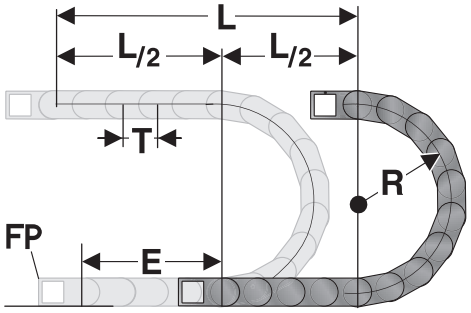
LOAD DIAGRAM FOR SELF-SUPPORTING APPLICATIONS



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 of60.0 mm.

FL_b Self-supporting length, upper run bent
In the FL_b range, the chain upper run has a sag of more than60.0 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

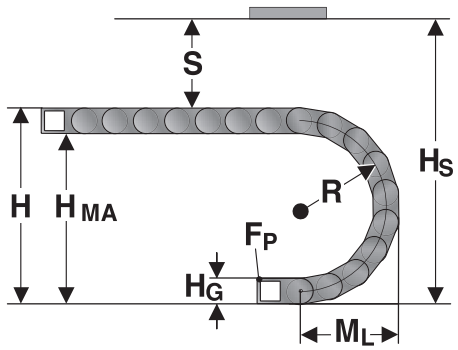


The fixed point of the cable drag chain should be connected in the middle of the travel distance.
This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

Chain length calculation = L/2 + π * R + 2 * T + E
≈ 1 m chain = 33 qty. x 30.0 mm links.

E = distance between entry point and middle of travel distance
L = travel distance
R = radius
T = Pitch 30.0 mm

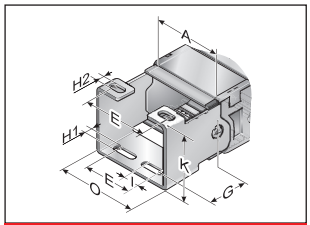
EINBAUMASSE



The moving end chain connection is to be screw fixed at height H_{MA} for the respective radius.
For the installed dimension the „Installed height H_S“ value has to be taken into account.

Radius R	60	75	100	125	150	200	250
Outside height of chain link (H_G)	37	37	37	37	37	37	37
Height of bend (H)	157	187	237	287	337	437	537
Height of moving end bracket (H_{MA})	120	150	200	250	300	400	500
Safety margin (S)	33	33	33	33	33	33	33
Installation height (H_S)	190	220	270	320	370	470	570
Arc projection (M_L)	109	124	149	174	199	249	299

CHAIN BRACKET U-PART KA 25 G



KA 25026 – 25125

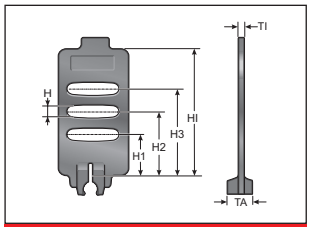
The chain bracket can be supplied either in galvanised sheet steel or stainless steel. To secure one cable drag chain, you will need a bracket with a drilled hole and a bracket with a bolt.

Type	Order No.	Material	Inside width A mm	E mm	G mm	H1 mm	H2 mm	I mm	K mm	Outside width KA O mm
KA 25026 C Female end	025000001000	Sheet steel	26.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+11.0
KA 25026 C Male end	025000001100	Sheet steel	26.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+8.0
KA 25037 C Female end	025000001200	Sheet steel	37.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+11.0
KA 25037 C Male end	025000001300	Sheet steel	37.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+8.0
KA 25062 C Female end	025000001400	Sheet steel	62.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+11.0
KA 25062 C Male end	025000001500	Sheet steel	62.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+8.0
KA 25087 C Female end	025000001600	Sheet steel	87.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+11.0
KA 25087 C Male end	025000001700	Sheet steel	87.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+8.0
KA 25101 C Female end	025000001800	Sheet steel	101.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+11.0
KA 25101 C Male end	025000001900	Sheet steel	101.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+8.0
KA 25125 C Female end	025000002000	Sheet steel	125.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+11.0
KA 25125 C Male end	025000002100	Sheet steel	125.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+8.0
KA 25026 C Female end	025000003000	Stainless steel 1.4301	26.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+11.0
KA 25026 C Male end	025000003100	Stainless steel 1.4301	26.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+8.0
KA 25037 C Female end	025000003200	Stainless steel 1.4301	37.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+11.0

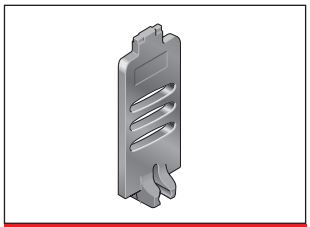
CHAIN BRACKET U-PART KA 25 G

Type	Order No.	Material	Inside width A mm	E mm	G mm	H1 mm	H2 mm	I mm	K mm	Outside width KA O mm
KA 25037 C Male end	025000003300	Stainless steel 1.4301	37.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+8.0
KA 25062 C Female end	025000003400	Stainless steel 1.4301	62.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+11.0
KA 25062 C Male end	025000003500	Stainless steel 1.4301	62.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+8.0
KA 25087 C Female end	025000003600	Stainless steel 1.4301	87.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+11.0
KA 25087 C Male end	025000003700	Stainless steel 1.4301	87.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+8.0
KA 25101 C Female end	025000003800	Stainless steel 1.4301	101.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+11.0
KA 25101 C Male end	025000003900	Stainless steel 1.4301	101.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+8.0
KA 25125 C Female end	025000004000	Stainless steel 1.4301	125.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+11.0
KA 25125 C Male end	025000004100	Stainless steel 1.4301	125.0	A-10.0	42.0	6.6	6.6	6.6	36.0	A+8.0

TR 25G SEPARATOR



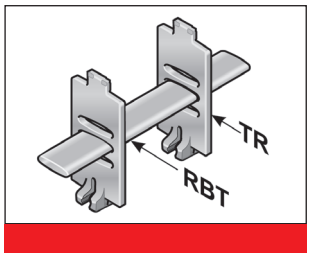
Separator



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	HI mm
TR 25G	025000009200	Separator	lockable	2.0	8.0	2.5	8.3	12.8	17.3	25.0

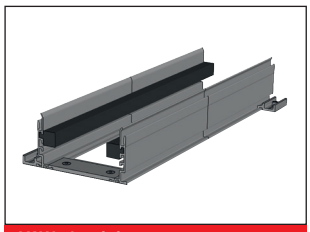
SHELVING SYSTEM MP 25G

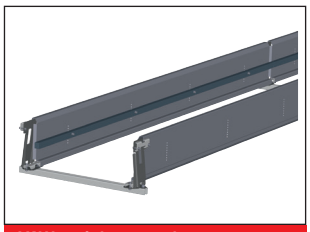


The shelf must be used with a minimum of two separators to create a shelving system. The additional levels prevent cables from criss-crossing and minimise the friction between them. The shelves are matched to the available chain widths.

Type	Order No.	Designation	Width mm	Pitch mm
RBT 037	100000003700	Shelf	37.0	2.52.5
RBT 062	100000006200	Shelf	62.0	2.52.5
RBT 086	100000008600	Shelf	86.0	2.52.5
RBT 101	100000010100	Shelf	101.0	2.52.5
RBT 125	100000012500	Shelf	125.0	2.52.5

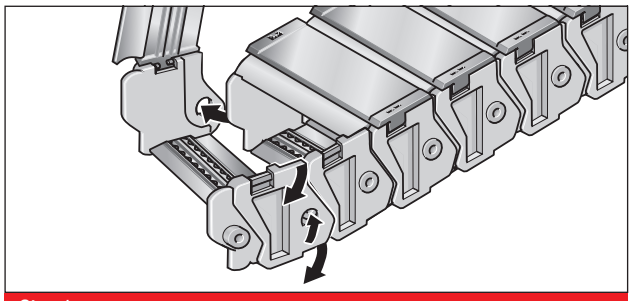
GUIDE CHANNEL VAW (ALUMINIUM / STAINLESS STEEL)


VAW aluminium

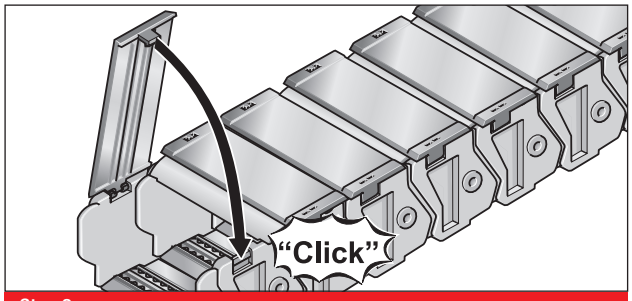

VAW stainless steel

For this cable drag chain, a range of variable guide channel systems are available, constructed from aluminium or stainless steel 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“.

ASSEMBLY

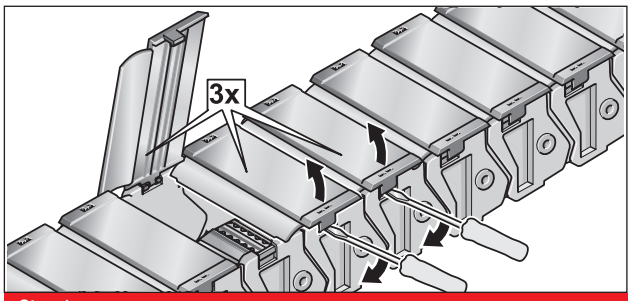


Step 1

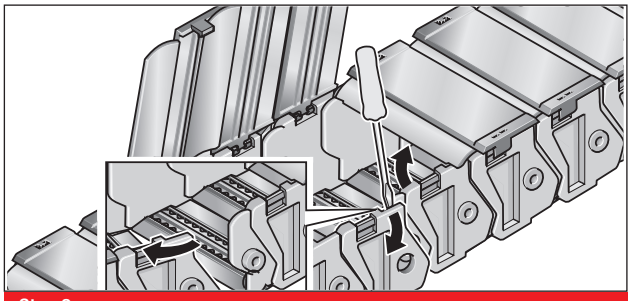


Step 2

DISASSEMBLY



Step 1



Step 2