



Cable drag chain systems

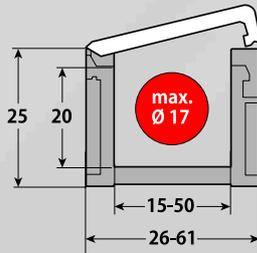
MP 20

MP 20

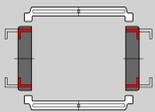
OPEN



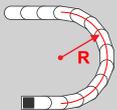
- LOW-COST VARIANT
- CHAIN BRACKET WITH INTEGRATED STRAIN RELIEF
- FRAME BRIDGE WITH INTEGRAL HINGE



TECHNICAL DATA



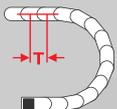
Loading side
Inside bend



Available radii
38.0 – 125.0 mm



Available interior widths
With plastic frame bridge
15.0 – 50.0 mm



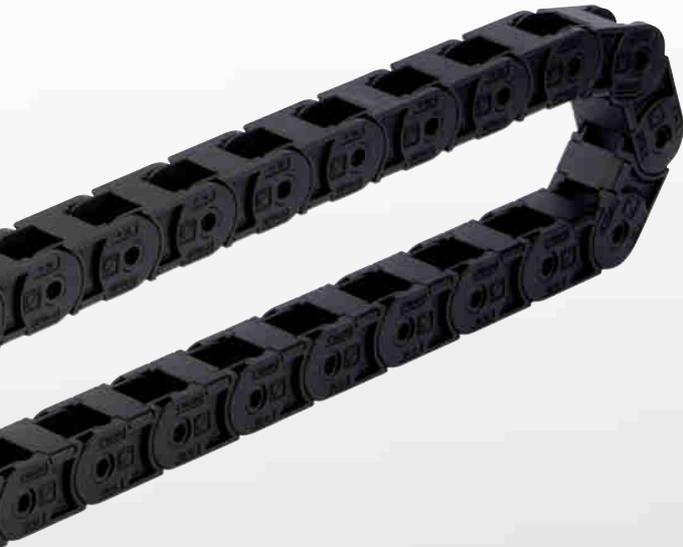
Pitch
T = 35.0 mm



TECHNICAL SPECIFICATIONS

Travel distance gliding L_g max.	not recommended
Travel distance self-supporting L_f max.	see diagram on page 5
Travel distance vertical, hanging L_{vh} max.	8.0 m
Travel distance vertical, upright L_{vs} max.	3.0 m
Rotated 90°, unsupported L_{90f} max.	0.5 m
Speed, self-supporting V_f max.	10.0 m/s
Acceleration, self-supporting a , max.	10.0 m/s ²

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

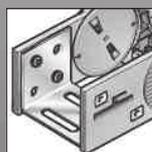


MATERIAL PROPERTIES

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

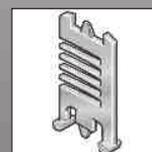
Other material properties on request.

CHAIN BRACKET



Chain bracket U-part

SHELVING SYSTEM



Separator TR

GUIDE CHANNELS

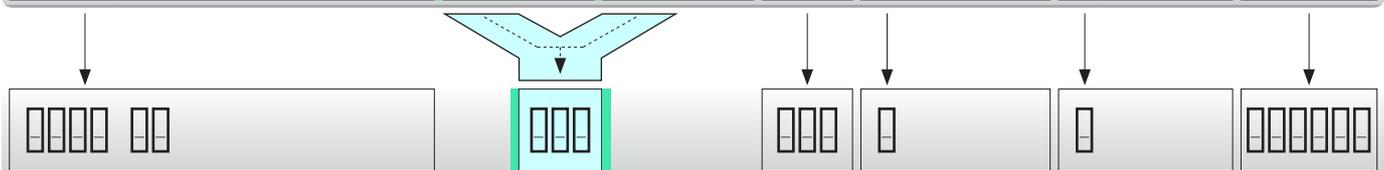


VAW aluminium

ORDERING KEY

Dimensions in mm [US inch]

Type code	Variation	Inside width	Outside width	Inside width	Outside width	Radius	Rail variant	Material	Chain length
0202 02	Frame bridge on outside of radius Frame bridge on inside bend Opens on inside of radius	015 ¹⁾ [0.59]	026 [1.02]			038 [1.50]	0 Plastic, full-ridged with bias	0 Polyamide standard (PA/black)	
		025 [0.98]	036 [1.42]						
		038 [1.50]	049 [1.93]						
		050 [1.97]	061 [2.40]			048 [1.89]			
						075 [2.95]			
						100 [3.94]			
						125 [4.92]			

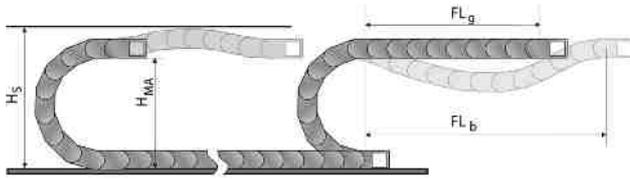


SAMPLE ORDER: 0202 02 025 048 0 0 770

Frame bridge in outside bend, frame bridge in inside bend, opens on inside bend
 Inside width 25 mm; radius 48 mm
 Plastic bridge, full-ridged with bias, material black-coloured polyamide
 Chain length 770 mm (22 links)

¹⁾ max. line diameter 13 mm

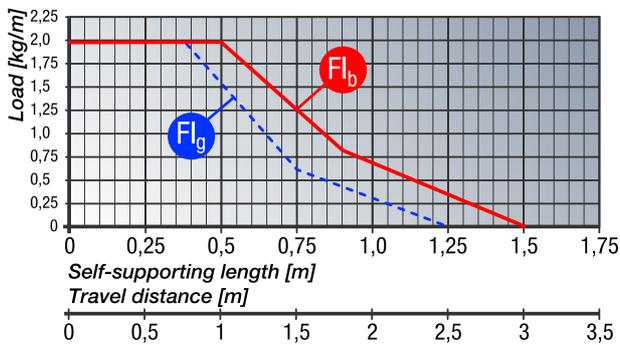
SELF-SUPPORTING LENGTH



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

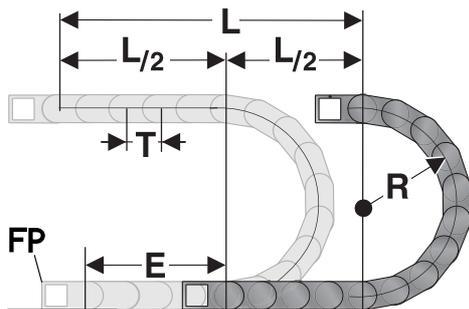
LOAD DIAGRAM FOR SELF-SUPPORTING APPLICATIONS



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 40.0 mm.

FL_b Self-supporting length, upper run bent
In the FL_b range, the chain upper run has a sag of more than 40.0 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

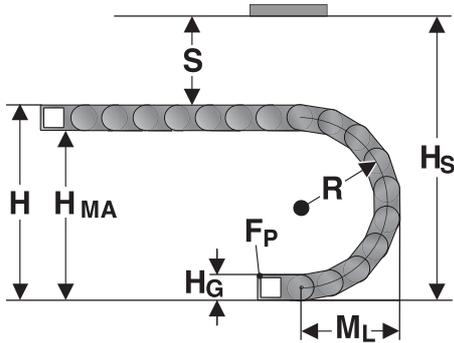


The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

Chain length calculation = $L/2 + \pi * R + 2 * T + E$
 $\approx 1 \text{ m chain} = 29 \text{ qty.} \times 35.0 \text{ mm links.}$

- E = distance between entry point and middle of travel distance
- L = travel distance
- R = radius
- T = Pitch 35.0 mm

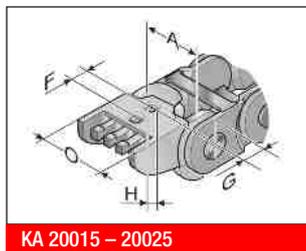
EINBAUMASSE



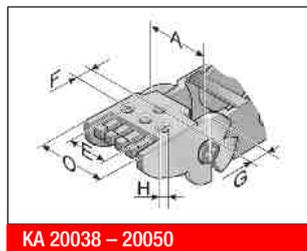
The moving end chain connection is to be screw fixed at height H_{MA} for the respective radius.
For the installed dimension the „Installed height H_S “ value has to be taken into account.

Radius R	38	48	75	100	125
Outside height of chain link (H_G)	25	25	25	25	25
Height of bend (H)	101	121	175	225	275
Height of moving end bracket (H_{MA})	76	96	150	200	250
Safety margin (S)	20	20	20	20	20
Installation height (H_S)	121	141	195	245	295
Arc projection (M_L)	86	96	123	148	173

CHAIN BRACKET U-PART KA 20



KA 20015 – 20025

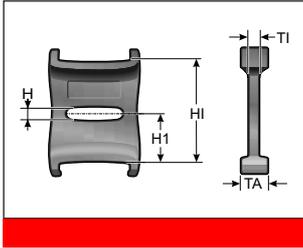


KA 20038 – 20050

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 O mm
			A mm	E mm	F mm	G mm	HØ mm	
KA 20015 Female end	020200005000	Plastic	15.0		19.0	16.5	5.5	A+11.0
KA 20015 Male end	020200005100	Plastic	15.0		19.0	16.5	5.5	A+11.0
KA 20025 Female end	020200005200	Plastic	25.0		19.0	16.5	5.5	A+11.0
KA 20025 Male end	020200005300	Plastic	25.0		19.0	16.5	5.5	A+11.0
KA 20038 Female end	020200005400	Plastic	38.0	A-18.0	19.0	16.5	5.5	A+11.0
KA 20038 Male end	020200005500	Plastic	38.0	A-18.0	19.0	16.5	5.5	A+11.0
KA 20050 Female end	020200005600	Plastic	50.0	A-16.0	19.0	16.5	5.5	A+11.0
KA 20050 Male end	020200005700	Plastic	50.0	A-16.0	19.0	16.5	5.5	A+11.0

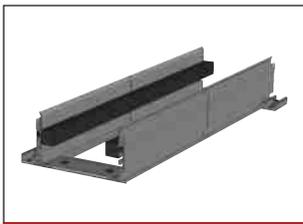
SEPARATOR TR 20



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
TR 20	020000009000	Separator	moveable	1.6	8.0	2.5	10.0	10.0

GUIDE CHANNEL VAW (ALUMINIUM)

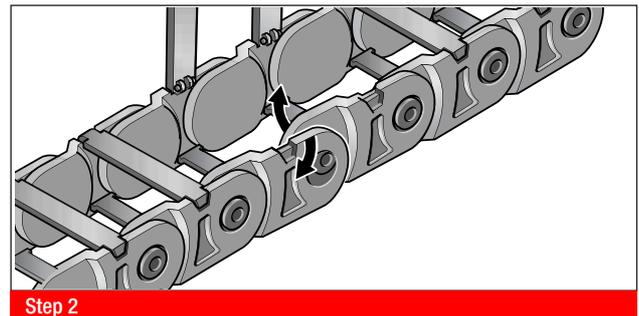
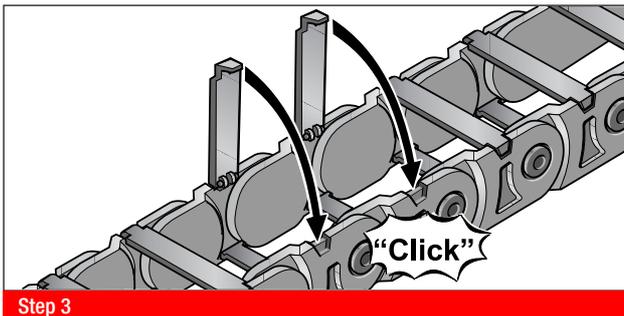
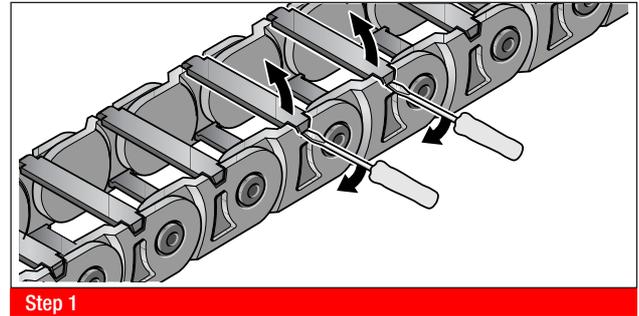
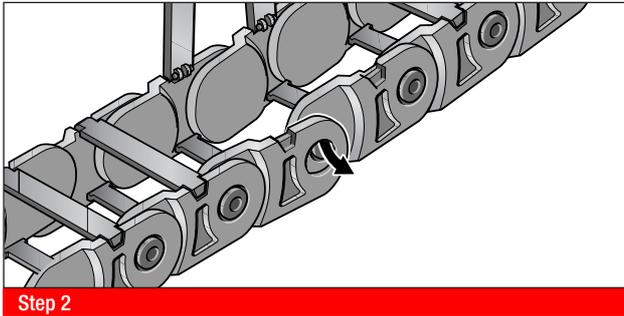


VAW aluminium

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“.

ASSEMBLY

DISASSEMBLY



All details given in our sales material prospectuses and catalogues as well as the information available online are based on our current knowledge of the products described.

The electronic data and files made available by Murrplastik, particularly CAD files are based on our current knowledge of the product described.

A legally binding assurance of certain properties or the suitability for a certain purpose can not be determined from this information.

All information with respect to the chemical and physical properties of Murrplastik products as well as application advice given verbally, in writing or by tests, is given to the best of our knowledge.

This does not free the purchaser of carrying out their own inspections and tests in order to determine the suitability of a product for a specific purpose.

Murrplastik accepts no responsibility for the available information being up-to-date, correct or complete. Neither do we accept responsibility for the quality of this information.

Murrplastik accepts no liability for damage caused as a result of using our products.

Murrplastik reserves the right to make technical changes and improvements through constant further development of products and services.

Our General Terms and Conditions apply.