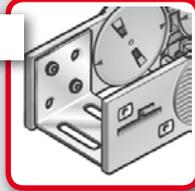


System overview

1

Chain bracket

Chain bracket U-part



2

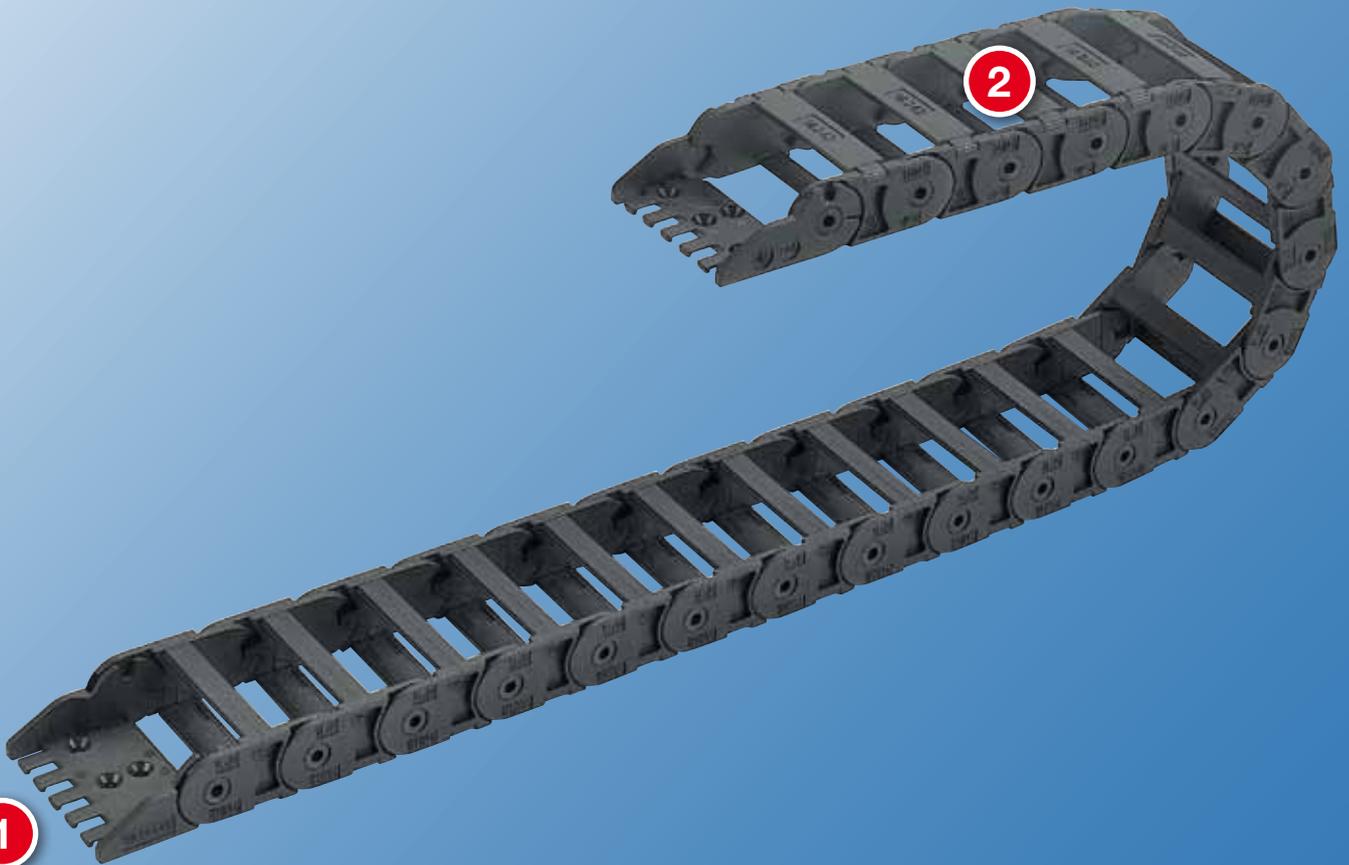
Shelving system

Separator TR



1

2

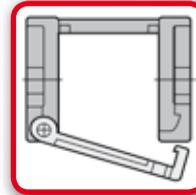


Guide channels

Aluminium VAW

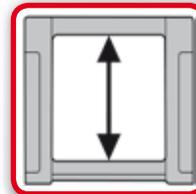


Technical data



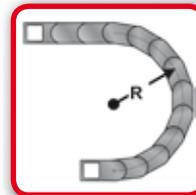
Loading side

outside flexure curve



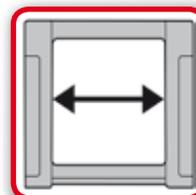
Available interior heights

14.0 mm



Available radii

25.0 – 75.0 mm



Available interior widths

16.0 – 40.0 mm

Ordering key

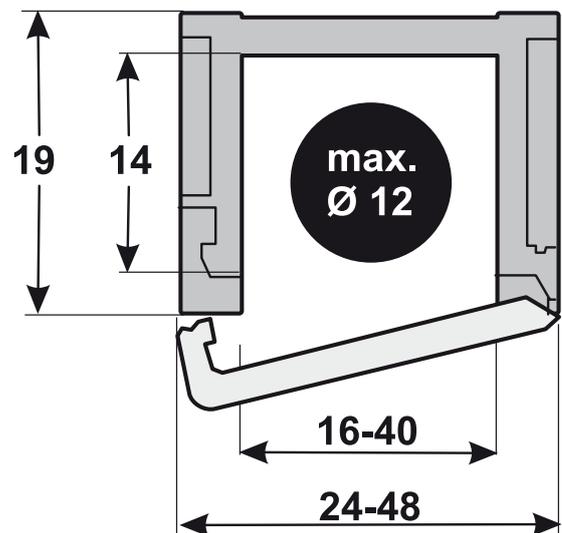
Type	Variation	Dimensions			Ridge version		Chain length mm
		Inside width mm	Outside width mm	Radius mm		Material	
0140	01	16 20 30 40	24 28 38 48	25 38 48 75	0	0	
Ordering key		<input type="text"/>					



Chain link

Loading side:

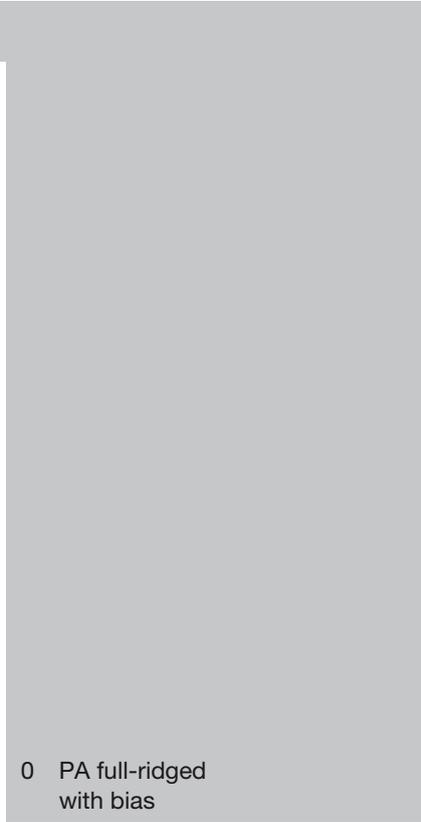
outside flexure curve



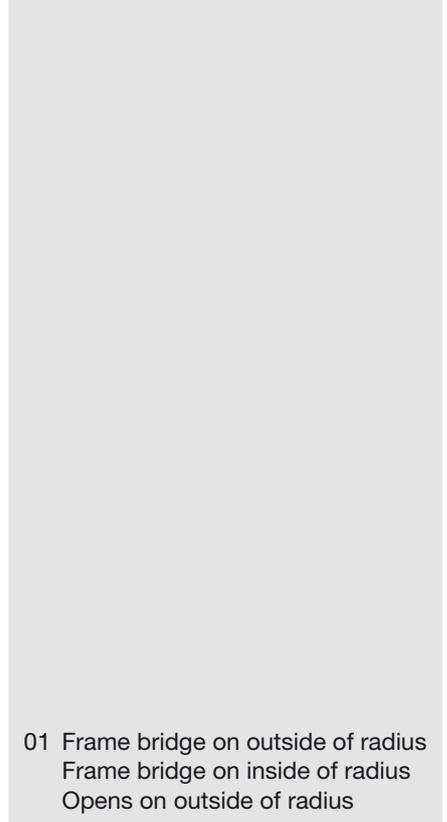
Dimensions in mm



0 Standard (PA/black)
9 Special version



0 PA full-ridged with bias



01 Frame bridge on outside of radius
Frame bridge on inside of radius
Opens on outside of radius

Order sample: 0140 01 020 048 0 0 988

Frame bridge in inside and outside bend; can be opened in outside bend
Inside width 20 mm; radius 48 mm
Full-ridged with bias, material black-coloured polyamide
Chain length 988 mm (38 links)

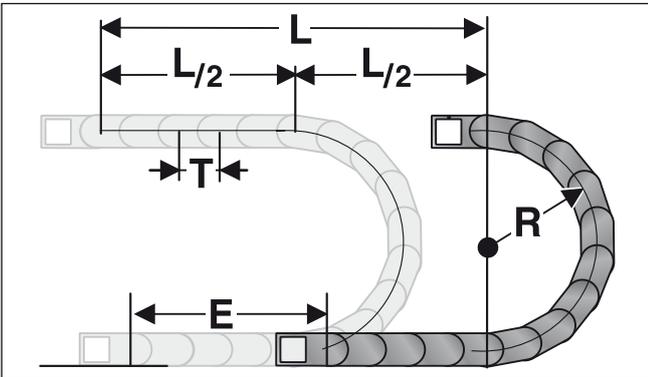
Technical specifications

Travel distance gliding L_g max.:	12.0 m
Travel distance self-supporting L_r max.:	see diagram
Travel distance vertical, hanging L_{vh} max.:	3.0 m
Travel distance vertical, upright L_{vs} max.:	2.0 m
Rotated 90°, unsupported L_{90f} max.:	not recommended
Speed, gliding V_g max.:	2.0 m/s
Speed, self-supporting V_r max.:	4.0 m/s
Acceleration, gliding a_g max.:	2.0 m/s ²
Acceleration, self-supporting a_r max.:	2.0 m/s ²

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.	

Determining the chain length



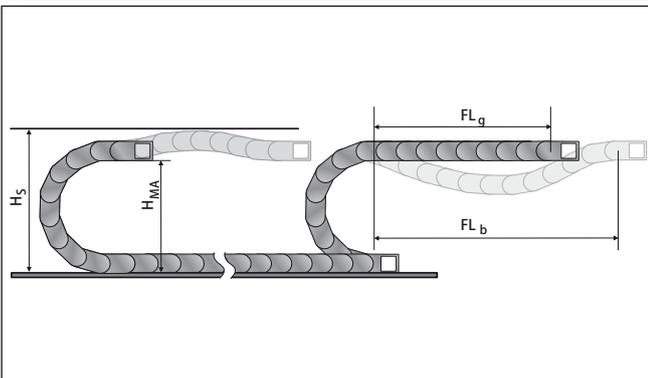
The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

$$\text{Chain length calculation} = L/2 + \pi * R + 2 * T + E$$

≈ 1 m chain = x 26.0 mm links.

E = distance between entry point and middle of travel distance
L = travel distance
R = radius
P = Pitch

Self-supporting length



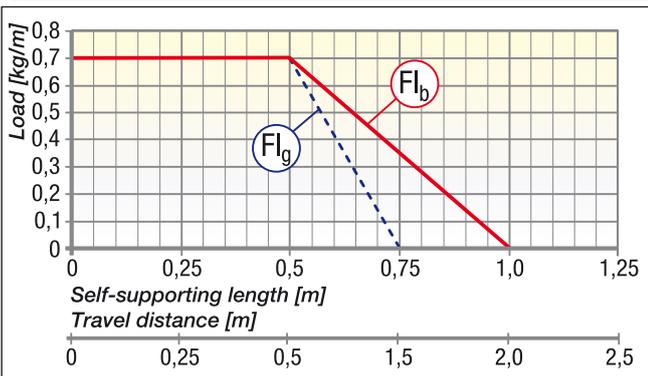
The self-supporting length is the distance between the chain bracket on the moving end and the start of the chain arch.

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

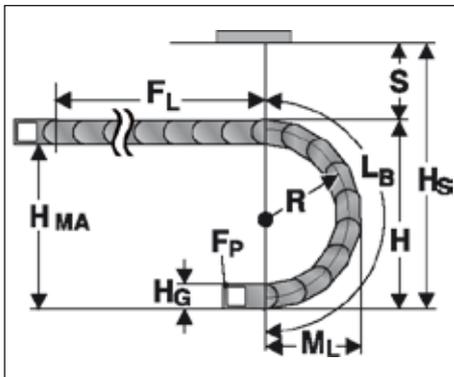
Load diagram for self-supporting applications



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

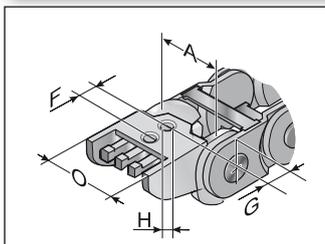
FL_b Self-supporting Length, upper run bent
In the FL_b range, the chain upper run has a sag of more than , but this is still less than the maximum sag. Where the sag is greater than that permitted in the FL_b range, the application is critical and should be avoided. The self-supporting length can be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

Installation dimensions

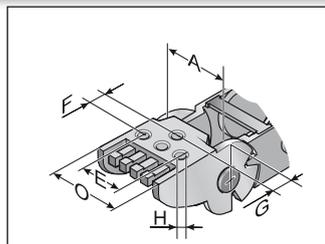


Radius R	25	38	48	75
Outside height of chain link (H_o)	19	19	19	19
Height of bend (H)	69	95	115	169
Height of moving end connection (H_{MA})	50	76	96	150
Safety margin (S)	20	20	20	20
Installation height (H_s)	89	115	135	189
Arc projection (M_L)	61	74	84	111
Bend length (L_b)	134	175	207	291

Chain bracket U-part



KA 14...

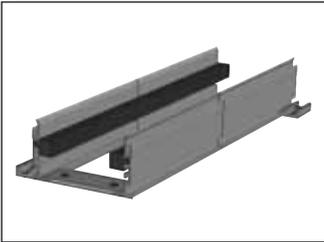


KA 14...

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 M3 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	E mm	F mm	G mm	HØ mm	
KA 14016 male	014000005000	Plastic	16.0		8.0	11.0	3.2	A+8.0
KA 14016 female	014000005100	Plastic	16.0		8.0	7.5	3.2	A+8.0
KA 14020 male	014000005200	Plastic	20.0		8.0	11.0	3.2	A+8.0
KA 14020 female	014000005300	Plastic	20.0		8.0	7.5	3.2	A+8.0
KA 14030 male	014000005400	Plastic	30.0	A-8.0	8.0	11.0	3.2	A+8.0
KA 14030 female	014000005500	Plastic	30.0	A-8.0	8.0	7.5	3.2	A+8.0
KA 14040 male	014000005600	Plastic	40.0	A-8.0	8.0	11.0	3.2	A+8.0
KA 14040 female	014000005700	Plastic	40.0	A-8.0	8.0	7.5	3.2	A+8.0

Guide channels (VAW)



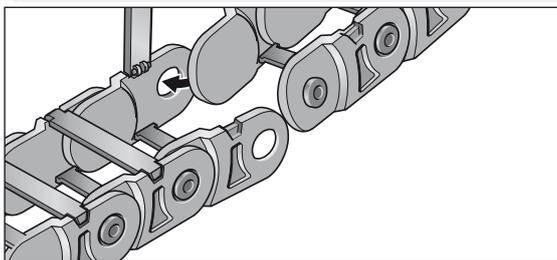
VAW

For this cable drag chain, a variable guide channel system is available, constructed from aluminium sections.

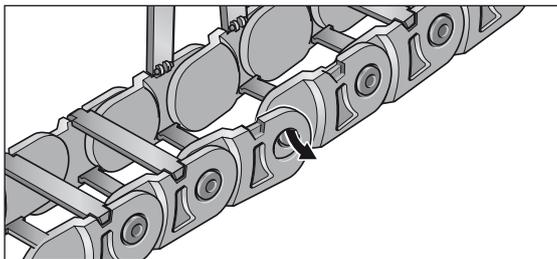
The variable guide channel ensures that the cable drag chain is supported and guided securely.

For help on choosing, please consult the chapter „Variable Guide Channel System“.

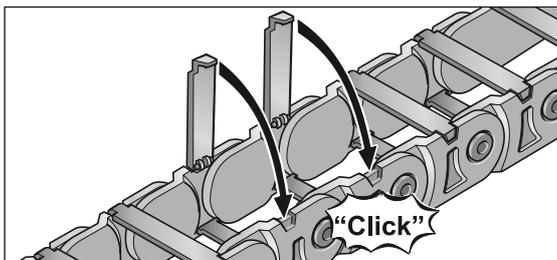
Assembly



Step 1

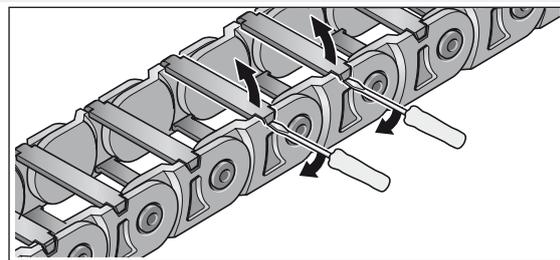


Step 2

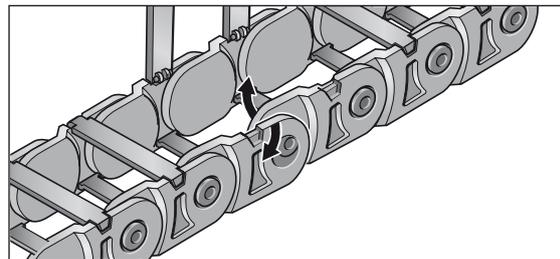


Step 3

Disassembly



Step 1



Step 2