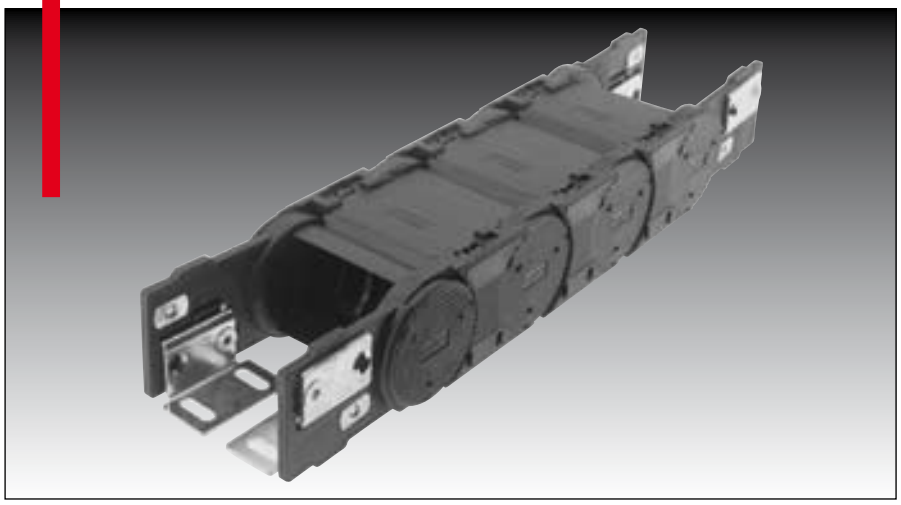
Cable drag chain systems



MultiLine

MP 43 G

MP 43 G - MultiLine

Order variants

Performance (order code)

Ridge version (order code)

Radius (order code) — The radii can be combined with any internal width

in mm

Internal width (order code)

in mm

Outside width
in mm

MP43 062	95	62	062				
MP43 084	117	84	084	125	125		
MP43 105	138	105	105	150	150	0	
MP43 144	177	144	144	200	200	1	0
MP43 182	215	182	182	250	250	9	9

Order-Number:	0430			0			0

Ridge version:

0 PA full-ridged with bias
1 PA full-ridged without bias
9 Custom version

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0430 062 125 0000

Internal width = 62 mm
Radius = 125 mm
Ridge version = 0
Version = 0

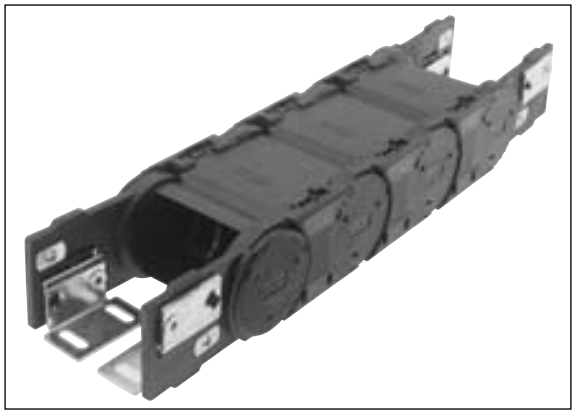
Ideal operating conditions:

- Compact dimensions with opening cover in inside/outside bend
- Quiet operation
- High stability
- Flexible internal separation

Alternative chain type:

- MP 44 open version
- MP 36 G/MP 65 G Flange connection

Features



Chain bracket with variably positionable metal angle

Radii with or without bias (RK/RV)

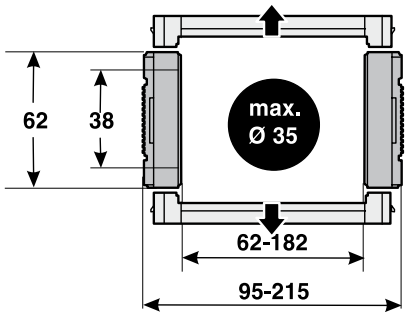
Strain relief plate ZL

Frame bridge/cover can be removed from inside and outside flexure curve

Plug-in shelf system for reliable cable guidance

Technical data

Chain link dimensions (mm)



Loading side: inside and outside flexure curve

Material characteristics standard (PA/black)

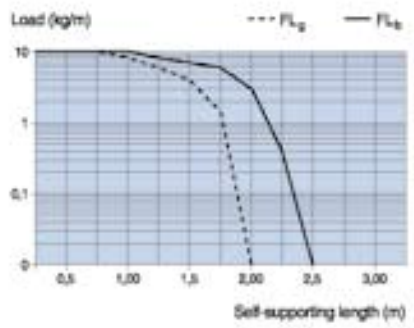
Service temperature:	-30 to 120° C
Gliding friction factor:	0.30
Static friction factor:	0.45
Fire classification:	Based on UL94 HB

Other material properties on request

Technical specifications

Travel distance, gliding, L_g:	50 m
Travel distance, self supporting, L_f:	see diagram
Travel distance, vertical, hanging, L_{vh}:	40 m
Travel distance, vertical, upright, L_{vs}:	3 m
Rotated 90°, self supporting, L_{90f}:	1 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:	20 m/s²

Self supporting length

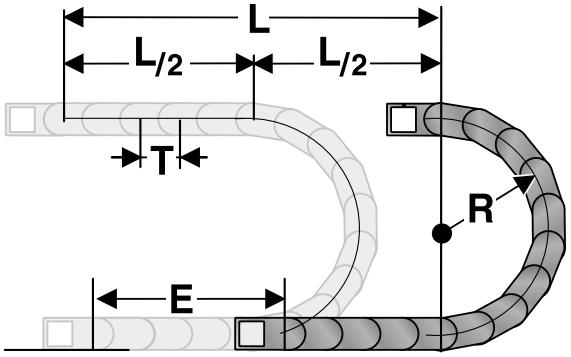


FL_g:
Ideal installation situation for high stresses at the limit of the max. travel parameters. In this range the chain upper run is still biased, straight or has a max. sag of 10 – 50 mm depending on the type of chain.

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 certainly 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

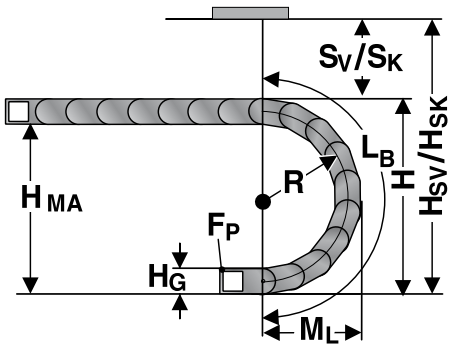
Determining the chain length

Length = $\frac{L}{2}$ + π x R + E

≈ 1 m chain = 13 x 75.5 mm link

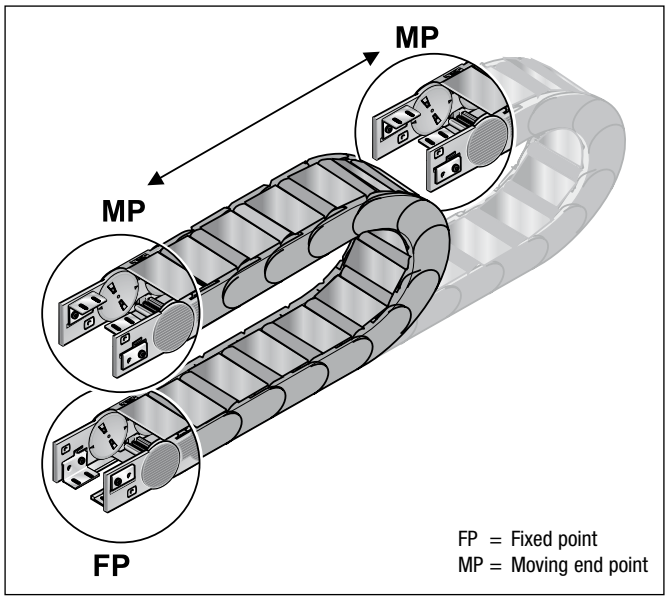
The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

Installation dimensions (in mm)

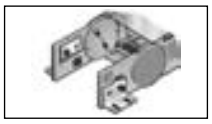


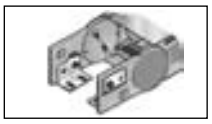
Radius R	125	150	200	250
Outside height of chain link (H_G)	62	62	62	62
Height of bend (H)	312	362	462	562
Height of moving end connection (H_{MA})	250	300	400	500
Safety margin with bias (S_V)	38	38	38	38
Installation height with bias (H_{SV})	350	400	500	600
Safety margin without bias (S_K)	13	13	13	13
Installation height without bias (H_{SK})	325	375	475	575
Arc projection (M_L)	232	256	306	356
Bend length (L_B)	565	644	801	958

Chain bracket

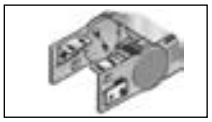


Chain bracket

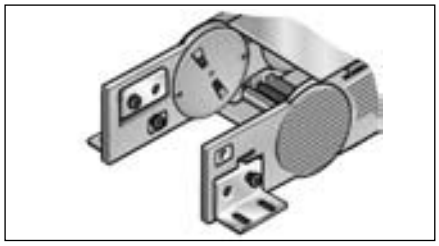

Bottom/Outside


Bottom/Inside


Top/Outside


Top/Inside

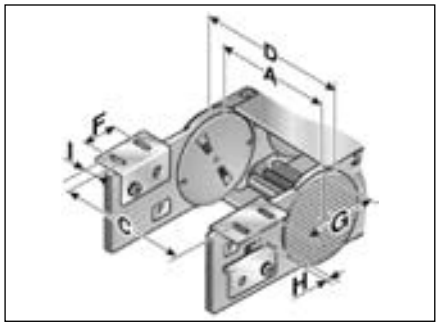
Chain bracket


KA 44

Type	Order no.	Material	Pack qty.
KA 44	0440000050	Sheet steel	1
KA 44	0440000052	Stainless steel 1.4301	1

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 M6 screws.

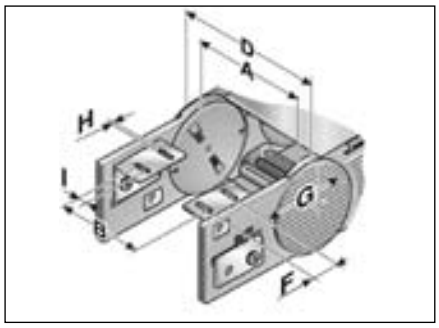
Chain bracket



Bottom and top/outside

Type	A mm	C mm	D mm	F mm	G mm	H Ø mm	I mm
KA 44	62.0	100.5	96.0	32.0	43.2	6.5	12.5
KA 44	84.0	122.5	118.0	32.0	43.2	6.5	12.5
KA 44	105.0	143.5	139.0	32.0	43.2	6.5	12.5
KA 44	144.0	182.5	177.0	32.0	43.2	6.5	12.5
KA 44	182.0	220.5	215.0	32.0	43.2	6.5	12.5

Chain bracket



Bottom and top/inside

Type	A mm	B mm	D mm	F mm	G mm	H Ø mm	I mm
KA 44	62.0	47.5	96.0	32.0	43.2	6.5	12.5
KA 44	84.0	69.5	118.0	32.0	43.2	6.5	12.5
KA 44	105.0	90.5	139.0	32.0	43.2	6.5	12.5
KA 44	144.0	129.5	177.0	32.0	43.2	6.5	12.5
KA 44	182.0	167.5	215.0	32.0	43.2	6.5	12.5

Separator


Separator

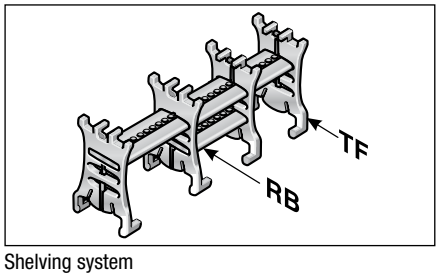
Type	Order no.	Designation	Pitch mm	Pack qty.
TF 43	0430000090	Separator	1.6	1

We recommend that moveable separators are used if multiple round cables or conduits with differing diameters are to be installed. An offset configuration of the separators is advisable. When the frame bridge is opened, the separator is guaranteed to remain solidly mounted on one side.


Separator

Type	TI mm	H mm	H1 mm	H2 mm	H3 mm	HI mm
TF 43	4.0	4.3	12.3	19.5	26.5	38.0

Shelving system



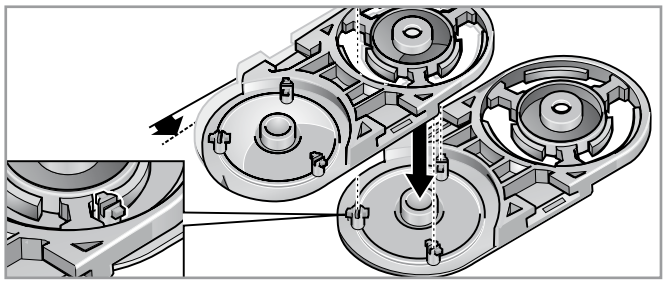
Shelving system

Type	Order no.	Designation	Width mm	Pitch mm	Pack qty.
RB 031	100000003100	RB 031 Shelf	31	1.6	1
RB 048	100000004800	RB 048 Shelf	48	1.6	1
RB 070	100000007000	RB 070 Shelf	70	1.6	1
RB 092	100000009200	RB 092 Shelf	92	1.6	1
RB 128	100000012800	RB 128 Shelf	128	1.6	1
RB 167	100000016700	RB 167 Shelf	167	1.6	1

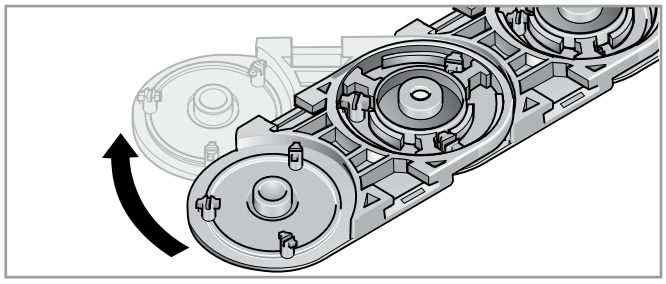
The shelf must be used with a minimum of two separators to create a shelving system. The additional levels prevent cables from criss-crossing and therefore destroying each other, whilst also avoiding excessive friction. The shelves are matched to the available chain widths.

MP 43 G - Accessories

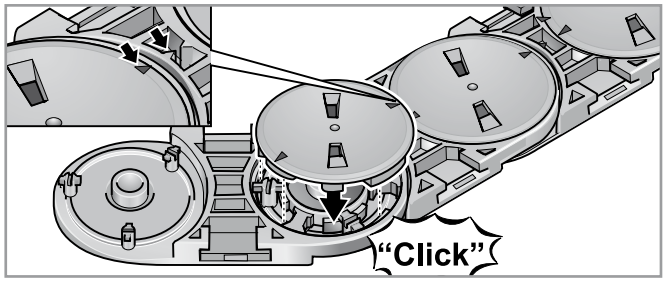
Assembly



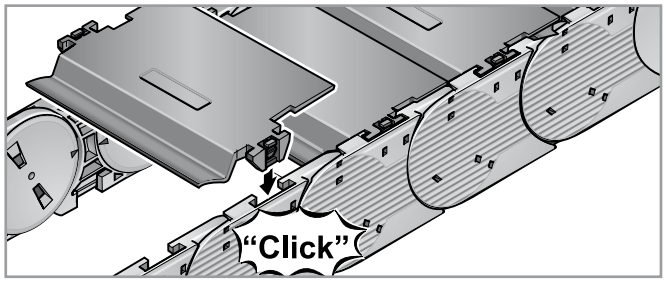
Step 1



Step 2



Step 3



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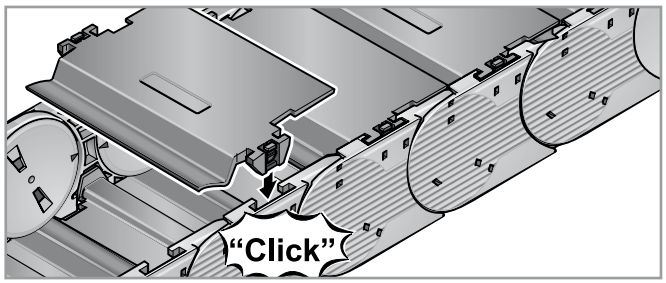
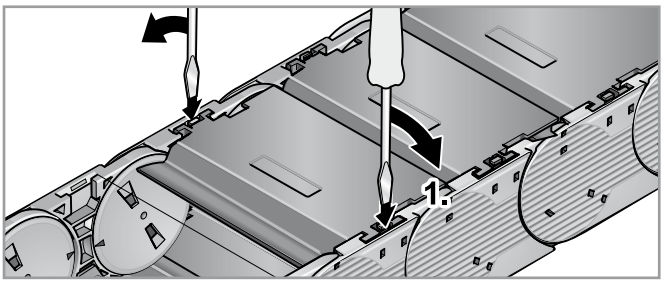
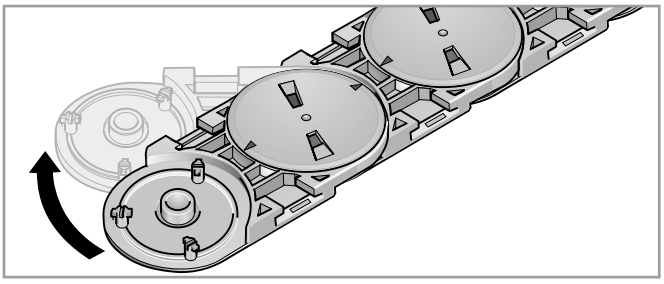


Step 5

Dismantling



Step 1



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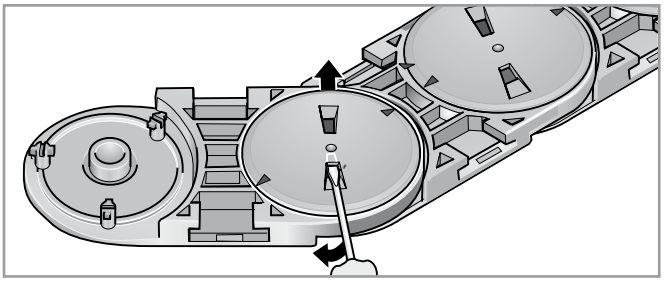

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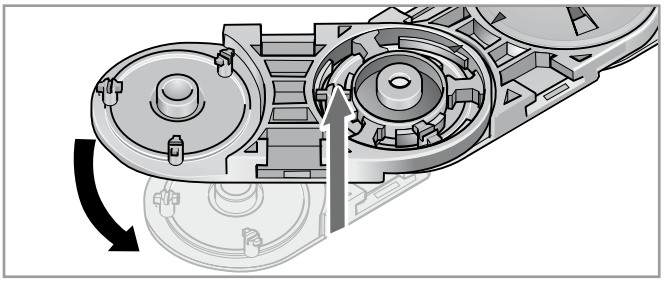

Step 4