type MP 30

Internal height:	**30 mm**
Internal widths:	**40-200 mm**
outside widths:	**56-216 mm**
Radii:	**60-300 mm**
Pitch:	**50 mm**
Links per metre:	**20 pcs**

Variants 03-08 are only available from a radius of 100mm or above.

Variations

- MP 30.01
  Frame bridge in outside bend
  frame bridge in inside bend
  can be opened from outside bend
- MP 30.02
  Frame bridge in outside bend
  frame bridge in inside bend
  can be opened from inside bend
- MP 30.03
  Cover in outside bend
  cover in inside bend
  can be opened from outside bend
- MP 30.04
  Cover in outside bend
  cover in inside bend
  openable from inside bend
- MP 30.05
  Cover in outside bend
  frame bridge in inside bend
  openable from outside bend
- MP 30.06
  Cover in outside bend
  frame bridge in inside bend
  openable from inside bend
- MP 30.07
  Frame bridge in outside bend
  cover in inside bend
  openable from outside bend
- MP 30.08
  Frame bridge in outside bend
  cover in inside bend
  openable from inside bend

Version

Plastic bridge, full-ridged with bias
Plastic bridge, full-ridged without bias

Material

Standard (PA/black)
Special version

Ideal operating conditions

- Compact dimensions, Loading side in inside or outsdie radius
- Suppliable open (with frame bridges) and closed (with lids)
- Quiet operation
- High stability
- Very flexible internal separation
- Rotated 90°, unsupported
- Version with bias (RV) for greater self-supporting length
- Version without bias (RK) for gliding applications

Order variations of cable drag chains

Please select the variation for your cable drag chain

Type	Variant	Interior width mm	Radius mm	Version	Material	Length mm
0030	Frame bridge in outside bend, frame bridge in inside bend, can be opened from outside bend Frame bridge in outside bend, frame bridge in inside bend, can be opened from inside bend Cover in outside bend, cover in inside bend, can be opened from outside bend Cover in outside bend, cover in inside bend, openable from inside bend Cover in outside bend, frame bridge in inside bend, openable from outside bend Cover in outside bend, frame bridge in inside bend, openable from inside bend Frame bridge in outside bend, cover in inside bend, openable from outside bend Frame bridge in outside bend, cover in inside bend, openable from inside bend	40 50 60 75 85 100 125 150 200	0	Plastic bridge, full-ridged with bias Plastic bridge, full-ridged without bias	Standard (PA/black) Special version	0

Order variants of chain brackets

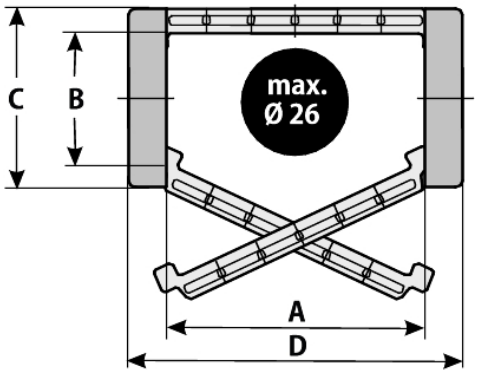
Please select the variation for your cable drag chain

Type	Interior width mm	Radius mm	Frame bridge-strain relief (item)	C-Profile (item)	Insert panel (item)
KA 003(					

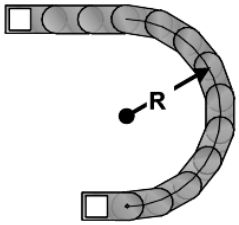
Printer configuration | Send configuration by e-mail

Dimensions

Interior/exterior widths (in mm)



Radii (in mm)



Interior width (A)	Interior height (B)	Exterior width (D)	Exterior height (C)
40	30	56	42
50	30	66	42
60	30	76	42
75	30	91	42
85	30	101	42
100	30	116	42
125	30	141	42
150	30	166	42
200	30	216	42

Radius
60
75
100
125
150
200
250
300

Features

- Radii with (RV) or without bias (RK)
- EMC cable drag chains for use in areas at risk of explosion
- Back radius combinations
- Integrable separator for cable separation
- EMC cable drag chains for use in areas of electrostatic discharge
- Chain bracket with metal inserts and strain relief
- Frame bridges, folding on one side
- Plug-in shelf system for reliable cable guidance

Technical data

Material characteristics standard (PA/black)

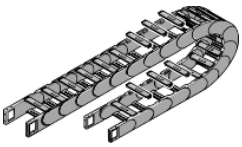
Service temperature: -20 – 100 °C
Gliding friction factor: 0.30
Static friction factor: 0.45
Fire classification: Based on UL94 HB

Other material properties on request

Technical specifications

Travel distance, gliding L_g:	60 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°, unsupported L_{90f}:	0.7 m
Speed, gliding V_g:	3 m/s
Speed, unsupported V_f:	10 m/s
Acceleration, gliding a_g:	10 m/s²
Acceleration, unsupported a_f:	15 m/s²

Self-supporting length

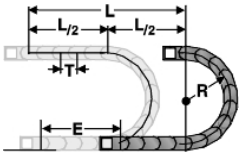


FL_g:
Ideal installation situation for high stresses at the limit of the max. travel parameters. In this range the chain upper run is still biased, straight or has a max. sag of 10 – 50 mm depending on the type of chain.

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 less than the max. sag. If the sag is greater than FLb, the application is critical and should be avoided. Please choose a more stable Murrplastik cable drag chain.

[HyperLinkDiagram]

Determining the chain length



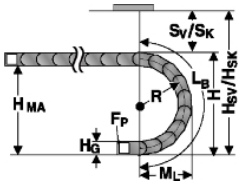
L = Travel distance
R = Radius
T = Pitch
E =

Länge = L / 2 + π × R + E

≈ 1 m chain = 20 x 50 mm links

The fixed point (FA) 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)	60	75	100	125	150	200	250	300
Outside height of chain link (H_G)	42	42	42	42	42	42	42	42
Height of bend (H)	182	212	262	312	362	462	562	662
Height of moving end connection (H_{MA})	140	170	220	270	320	420	520	620
Safety margin with bias (S_V)	38	38	38	38	38	38	38	38
Installation height with bias (H_{SV})	220	250	300	350	400	500	600	700
Safety margin without bias (S_K)	18	18	18	18	18	18	18	18
Installation height without bias (H_{SK})	200	230	280	330	380	480	580	680
Arc projection (M_L)	141	156	181	206	231	281	331	381
Bend length (L_B)	336	383	461	540	618	775	932	1089

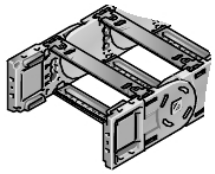
Chain weight (kg/m)

Internal width	Plastik full-ridged	Plastic cover
40	1,036	1,084
50	1,119	1,228
60	1,084	1,156
75	1,185	1,336
85	1,188	1,412
100	1,286	1,520
125	1,339	1,704
150	1,502	1,882
200	1,788	2,244

Chain bracket

FP = fixed point
MP = Moving end point

Chain bracket

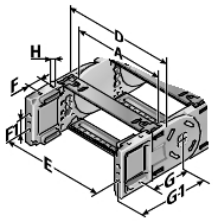


This chain bracket offers universal connection options (top, bottom and front) and is attached to the ends of the chain like a side link. This allows the chain to move right up to the bracket. Each chain requires one male and one female bracket. M5 screws and insert panels are used to secure the brackets in place. By default, the chain bracket is supplied with frame bridges. The chain bracket can then be optionally fitted with frame bridge strain relief plates (RS-ZL) or with strain relief using C-rails and type STF bow clamps.

Als PDF anzeigen

Create chain type with current configuration and all additional information in a PDF.

Type	Inside width A mm	Outside width D mm	E mm	F mm	G mm	G1 mm	H Ø mm
KA 030	40.0 – 200.0	A + 16.0	A + 9.0	12.0	45.0	72.0	5.5

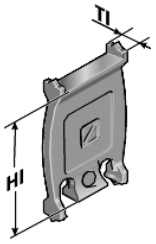


Accessories

TR separator closed

If multiple cable with varying circumferences are laid in the chain, we recommend using separators. An offset configuration of the separators is advisable.

Type	Order no.	Designation	Pitch mm	Pack qty.
TR 30-0	030100009300	TR 30-0 separator closed	2.5	1

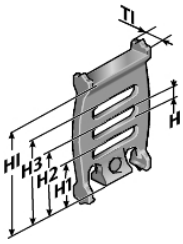


Type	Tl mm	Hl mm
TR 30-0	2.2	30.0

TR separator open

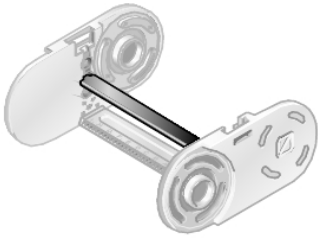
If multiple cable with varying circumferences are laid in the chain, we recommend using separators. An offset configuration of the separators is advisable.

Type	Order no.	Designation	Pitch mm	Pack qty.
TR 30-1	030100009400	TR 30-1 separator closed	2.5	1



Type	Tl mm	H mm	H1 mm	H2 mm	H3 mm	Hl mm
TR 30-1	2.2	3.0	8.0	16.5	19	30.0

Shelf, end-to-end RBD

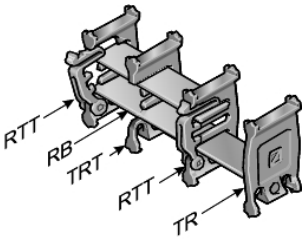


The shelf RBD creates a horizontal separation over the entire width of the chain links. When used together with the TRT 30 separator, an additional, vertical division can be realised.

Type	Order no.	for Inside width	Pack qty.
RBD 040-3 *	030100004001	40 mm	1
RBD 050-3 *	030100005001	50 mm	1
RBD 060-3 *	030100006001	60 mm	1
RBD 075-3 *	030100007501	75 mm	1
RBD 085-3 *	030100008501	85 mm	1
RBD 100-3	030100010001	100 mm	1

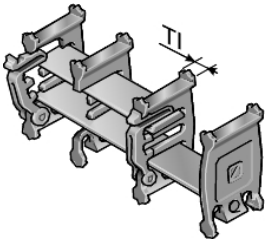
* available from 09-2010			

Shelving system



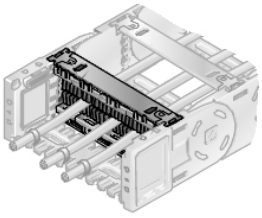
In connection with at least two separable shelf supports RTT or separable separators TRT the RB shelf becomes a shelving system that can be placed anywhere in the chain link. The shelf RBD creates a horizontal separation over the entire width of the chain links. If necessary the separator TRT can also be built in. The additional levels prevent cables from criss-crossing. Pre-assembly is not necessary as the shelving system and cabling can be assembled quickly and easily on site.

Type	Order no.	Designation	Width mm	Pitch mm	Pack qty.
RB 039-3	030100003900	RB 039-3 Shelf	39	2.5	1
RB 049-3	030100004900	RB 049-3 Shelf	49	2.5	1
RB 059-3	030100005900	RB 059-3 Shelf	59	2.5	1
RB 074-3	030100007400	RB 074-3 Shelf	74	2.5	1
RB 084-3	030100008400	RB 084-3 Shelf	84	2.5	1
RB 099-3	030100009900	RB 099-3 Shelf	99	2.5	1
RB 124-3	030100012400	RB 124-3 Shelf	124	2.5	1
RB 149-3	030100014900	RB 149-3 Shelf	149	2.5	1
RB 199-3	030100019900	RB 199-3 Shelf	199	2.5	1
RTT 30	030100006500	RTT 30 Shelf support, divisible		2.5	1
TRT 30	030100009200	TRT 30 separator separable		2.5	1



Type	TI mm
RTT/TRT	8.0

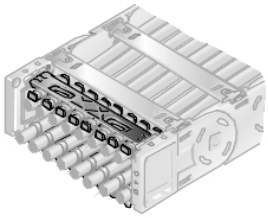
Brush support BT



The cable is lead into the neutral phase via the brush support. This innovative solution was specially designed for sensitive cables and applications that lead to a high level of wear to the cables.

Type	Order no.	Designation	Width mm	Pack qty.
BT20-30	030100009702	BT20-30 brush support	20	1
BT25-30	030100009802	BT25-30 brush support	25	1

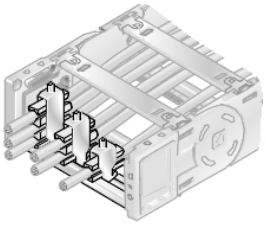
Frame bridge strain relief plate RS-ZL



Fixed integrated frame bridge strain relief plates in the chain brackets. Tailored to all frame bridge widths up to 200 mm. May be assembled on the inside and outside flexure curves at both chain endings.

Type	Order no.	For internal width mm	Pack qty.
RS-ZL 040-3	030104000010	40	1
RS-ZL 050-3	030105000010	50	1
RS-ZL 060-3	030106000010	60	1
RS-ZL 075-3	030107500010	75	1
RS-ZL 085-3	030108500010	85	1
RS-ZL 100-3	030110000010	100	1
RS-ZL 125-3	030112500010	125	1
RS-ZL 150-3	030115000010	150	1
RS-ZL 200-3	030120000010	200	1

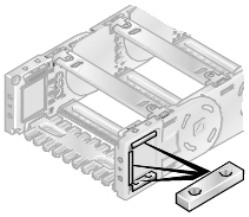
Strain relief with hooped clamp



C-rails (cathodic dipped) for permanent integration, for accommodating the Steel Fix hooped loops in the chain connections. The bow clamps can take up to 3 cables and are suitable for C-rails with a groove width of 11 mm. Due to the design of the trough elements a cable preserving cable guidance is ensured. Adjusted to all inside widths up to 200 mm. May be assembled on the inside and outside flexure curves at both chain endings. The entire height entered is a guide only. The actual height is, amongst other things, dependent on the diameter and the quality of the cable. A safety distance of 10 mm at the fixed point above the strain relief must be kept during gliding applications.

Type	Order no.	Ø mm	Width (B) mm	Height (H)* mm	Pitch (T) mm	Pack qty.
C-profile rail	81661610					
Single hooped clamp (for 1 cable)						
STF 12-1 Steel Fix	81661801	6 – 12	16	55	24	1
STF 14-1 Steel Fix	81661802	12 – 14	18	52	24	1
STF 16-1 Steel Fix	81661803	14 – 16	20	54	24	1
STF 18-1 Steel Fix	81661804	16 – 18	22	56	24	1
STF 20-1 Steel Fix	81661805	18 – 20	24	59	24	1
STF 22-1 Steel Fix	81661806	20 – 22	26	61	24	1
STF 26-1 Steel Fix	81661807	22 – 26	30	70	24	1
STF 30-1 Steel Fix	81661808	26 – 30	34	74	24	1
STF 34-1 Steel Fix	81661809	30 – 34	38	78	24	1
STF 38-1 Steel Fix	81661810	34 – 38	42	82	24	1
STF 42-1 Steel Fix	81661811	38 – 42	46	91	24	1
Double hooped clamp (for 2 cables)						
STF 12-2 Steel Fix	81661821	6 – 12	16	73	24	1
STF 14-2 Steel Fix	81661822	12 – 14	18	74	24	1
STF 16-2 Steel Fix	81661823	14 – 16	20	82	24	1
STF 18-2 Steel Fix	81661824	16 – 18	22	86	24	1
STF 20-2 Steel Fix	81661825	18 – 20	24	91	24	1
STF 22-2 Steel Fix	81661826	20 – 22	26	95	24	1
STF 26-2 Steel Fix	81661827	22 – 26	30	108	24	1
STF 30-2 Steel Fix	81661828	26 – 30	34	121	24	1
STF 34-2 Steel Fix	81661829	30 – 34	38	129	24	1
Triple hooped clamp (for 3 cables)						
STF 12-3 Steel Fix	81661841	6 – 12	16	98	24	1
STF 14-3 Steel Fix	81661842	12 – 14	18	98	24	1
STF 16-3 Steel Fix	81661843	14 – 16	20	105	24	1
STF 18-3 Steel Fix	81661844	16 – 18	22	111	24	1
STF 20-3 Steel Fix	81661845	18 – 20	24	118	24	1
STF 22-3 Steel Fix	81661846	20 – 22	26	130	24	1
* Total height with a max. cable Ø including C-rails						

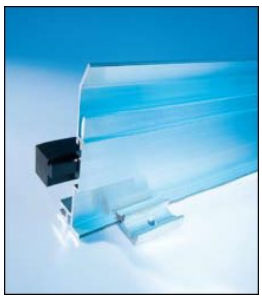
Insert panels EB



To fix the chain connection, the insert panels can be inserted above, below or on the side and are available with threads or through-holes.

Type	Order no.	Designation	Thread	Holes mm	Pack qty.
EB 25/30-FG V2A	030100005502	EB 25/30-FG V2A insert panel with thread	M5		1
EB 25/30-FB V2A	030100005500	EB 25/30-FG V2A insert panel with through-hole		5.5	1

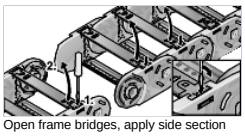
Variable guide channel systems



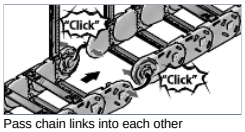
Guide channel systems for cable drag chains serve as trays for short travel distances and at the same time as guides for long travel distances. If no guide channel is used it is possible that the chain links may lay and move incorrectly. Especially for large bend radii as the side guidance does not exist. In most applications the cables/conduits enter the chain at a position central to the travel. This gives the shortest length of chain. In this case the chain is about half as long as the travel distance. If the chain is moved to the left (see illustration below) it simply rolls in the channel. If it is moved to the right, then it stacks on top of itself once the unsupported length has been exceeded. If the movement is further made into direction B the glide rail adjusts the difference in height and guarantees the minimum possible friction. This ensures the optimum free and correct running of the cable drag chain.

Assembly

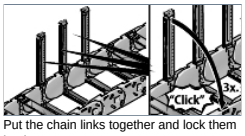
Assembly



Open frame bridges, apply side section

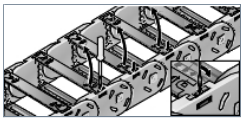


Pass chain links into each other

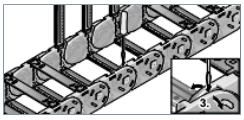


Put the chain links together and lock them in place

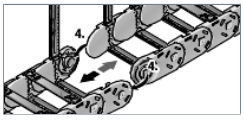
Dismantling



Open at least 3 frame bridges



Prise open chain link



Turn and pull apart chain

Design aids
CAD aids are available on the internet in the following formats:

Design aid (3D step)

Should the CAD format you desire not be listed, please contact our support team.

Representante oficial de:

[Argentina – Colombia – Ecuador – Bolivia – Paraguay.]

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