Cable drag chain systems

Overview

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Open cable drag chain systems

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Perfect solutions start with specific questions

Murrplastik Systemtechnik has been supplying cable drag chain systems for many years.The constant exchange of information with our customers helps us to develop new innovative products, and also to provide a continuous extension of our delivery programme. This close relationship with the customer has created cable drag chains that are of great value and use to them.

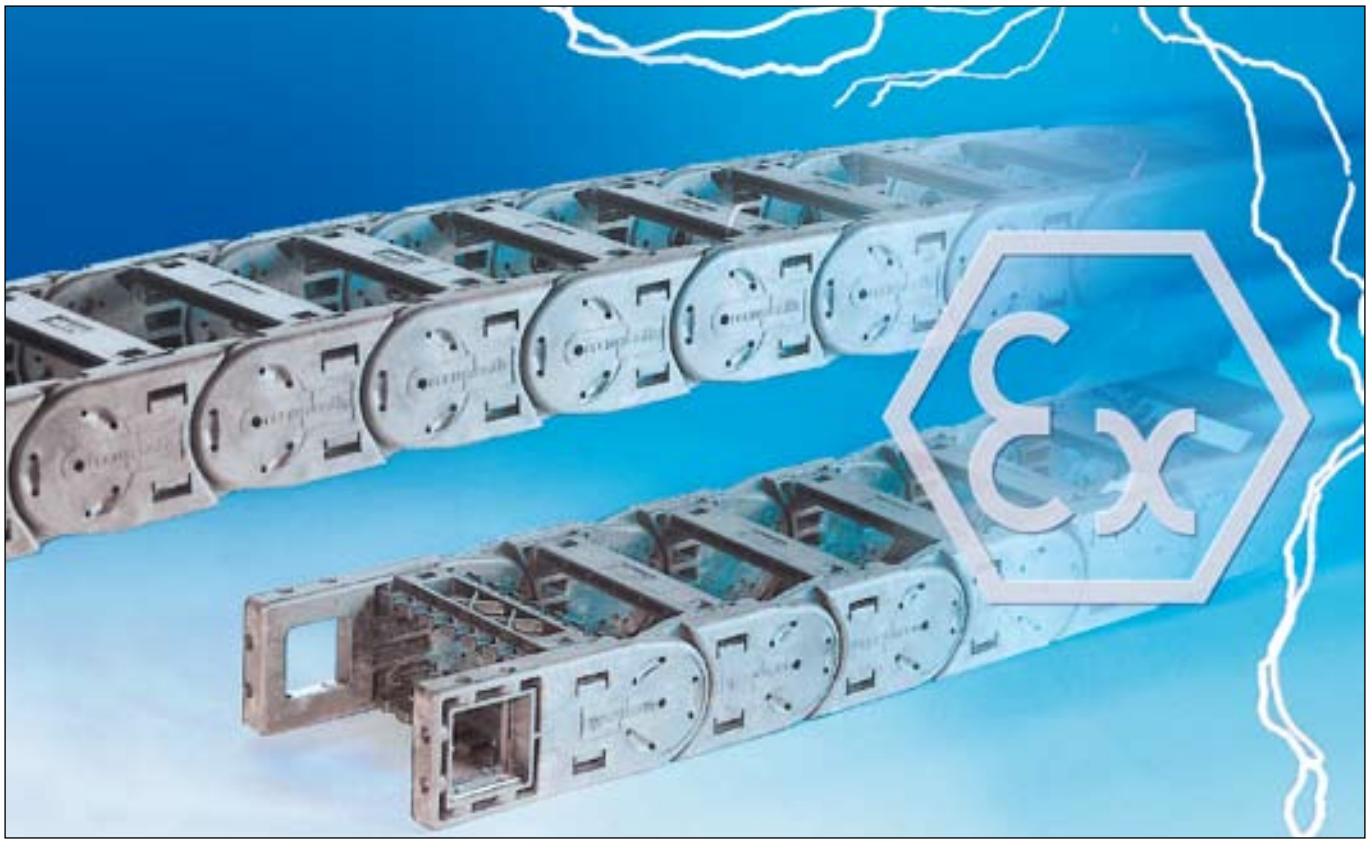
Our complete range of cable drag chains includes: Cable drag chains, guide channels, cables, strain relief, and assembly.
Our chains have demonstrated their quality under the most extreme permanent loads and environmental influences.
In consultation with our customers, our experts select the right solution from our varied and extensive range of systems to suit each customer's individual requirements. As such, we have developed a procedure whereby we can determine customer requirements quickly and precisely and find the right solution for the customer's specific application.

We recommend our handbook to assembly as a guide to proper arrangement for cable drag chain systems and integrating them into your facility.

Philosophy of cable drag chains

Murrplastik Systemtechnik offers cable drag chain systems with optimum mechanical features and outstanding application use for our customers.

ATEX chains



Safety based on ATEX CE EX II 2GD

ESD cable drag chains have a high discharge capability and are used in potentially explosive areas and clean rooms. All mechanical parts have been subject to Atex standards since July 2003.
Our cable drag chains are entitled to carry the following labelling:

CE EX II 2GD

The CE means that Murrplastik has tested its chains as pieces of equipment. This has the following benefits: It is no longer necessary to have the chains approved by an expert. If a chain needs replacing, work can be resumed immediately if the chain in question is the Murrplastik CE chain. Considerable time and expense is saved by not having to go through the approval procedure.
With our CE-certified chains there is no danger of being the weakest link!

- **Full ATEX certification CE EX II 2GD**
- **Simple to exchange, Certification still stands**
- **For Ex zones 1, 2, 21, 22**
- **No need for additional acceptance by experts**

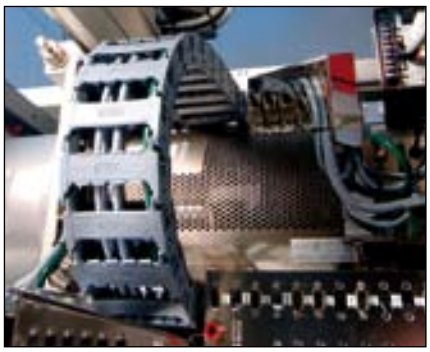
Clean room chains

Application in sensitive clean environments

Clean room cable drag chains from Murrplastik Systemtechnik are produced using special materials. The cable drag chains offer premiere clean room properties. With minimal abrasion, and hence particle purity, as well as outstanding discharge of electromagnetic currents, these cable drag chains set new standards.

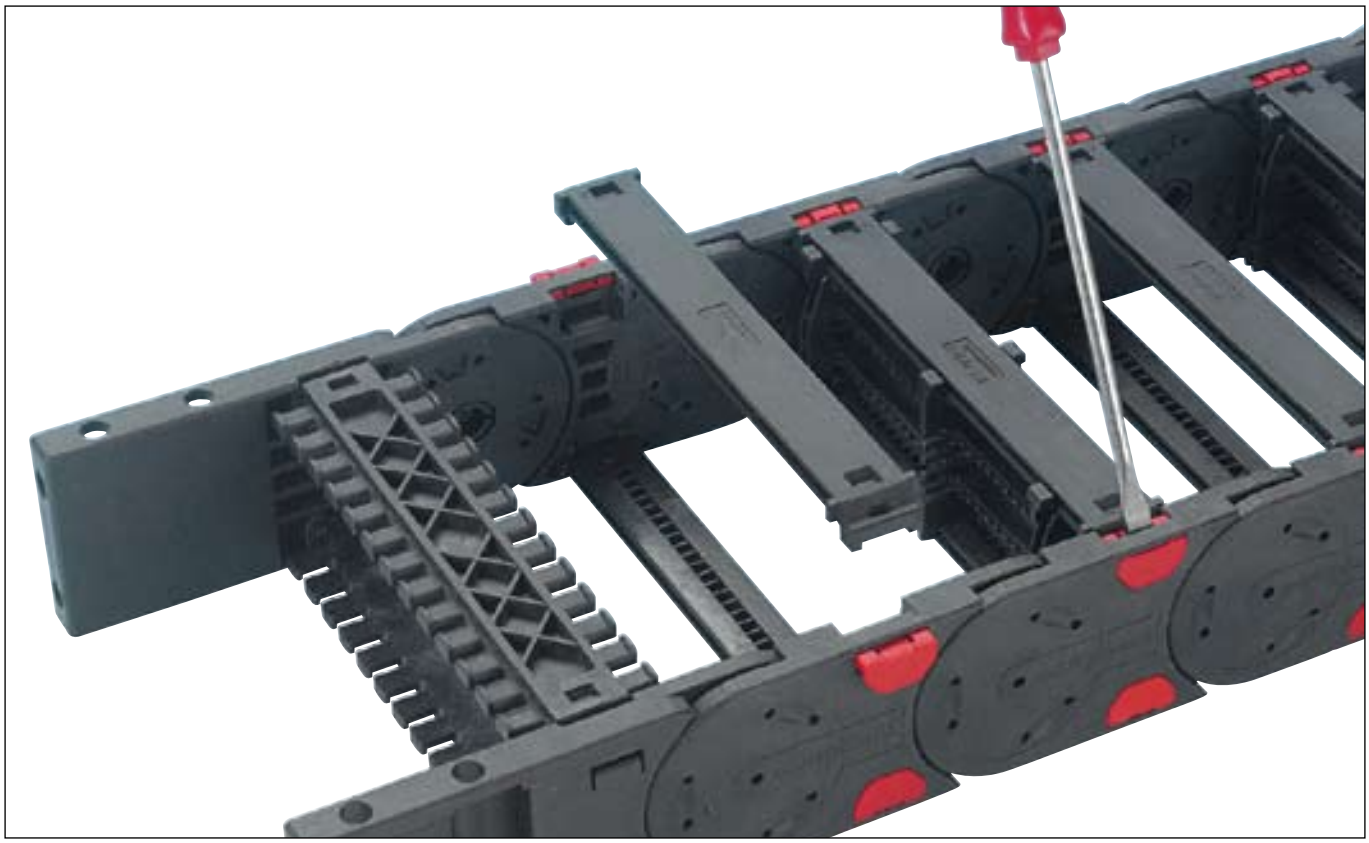
The discharge capacity fulfils the ATEX European guidelines. Both characteristics, the discharge capacity and abrasion, have been tested and verified by respected institutions.

In spite of the outstanding discharge and abrasion properties, Murrplastik nevertheless refused to compromise in the slightest when it comes to functionality, reliability and easy of assembly.



- ✔ **Clean room classification by Fraunhofer-Institut (IPA)**
- ✔ **Fulfils the ATEX European guidelines**
- ✔ **Uncompromising functionality**
- ✔ **Unflinching reliability**

Click lock



Click and go!

Fast and easy

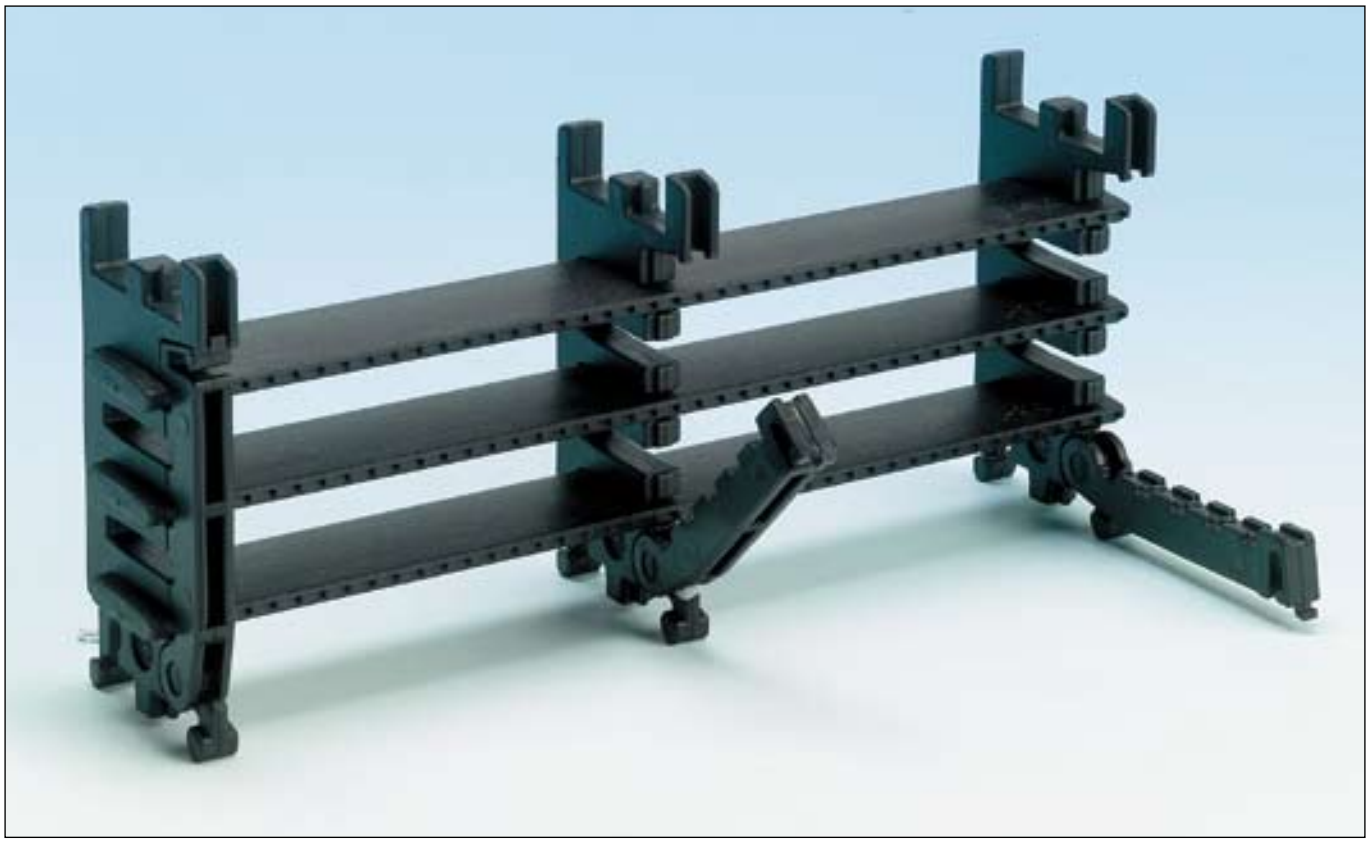
The frame bridges can be fitted and removed quickly and with very little effort.
A slight turn of the screwdriver between the side link and the frame bridge and the click lock is open. Retrofitting a cable in the chain is also a quick and simple task.
Assembly is even simpler. Position the frame bridge in the side links and lock the click lock by hand.

With other chains retrofitting is virtually impossible.
With the click lock it is child's play.

Fitting and removal are rarely quicker or simpler without compromising stability.

- ✔ **Quick assembly Click and go!**
- ✔ **REFA time and motion study conducted**
- ✔ **Assembly without tools**
- ✔ **Easy assembly**
- ✔ **Incredibly simple to retrofit cables**

Foldable shelf system



Extremely versatile

Flexibility is the word

The possibilities are endless with the shelf system.

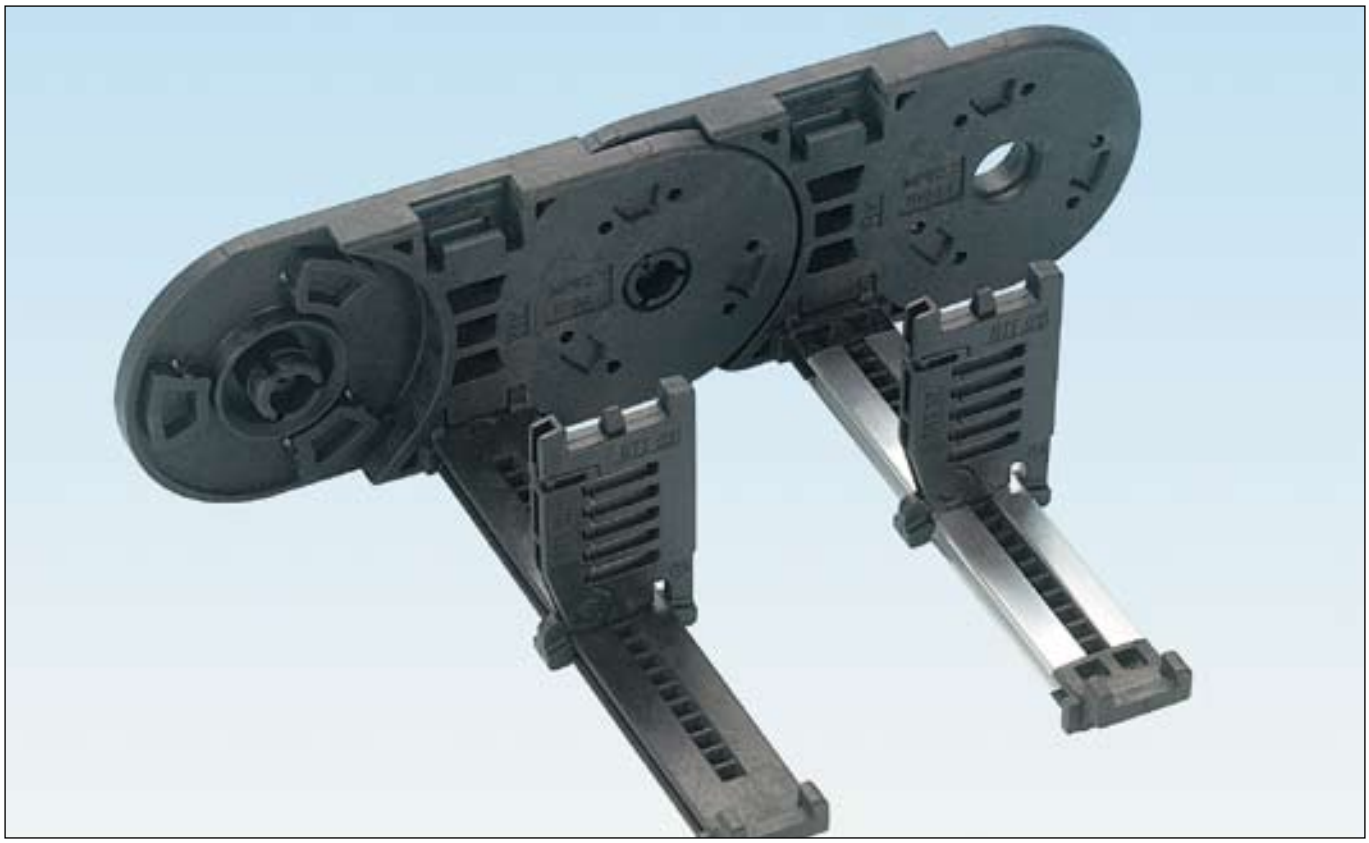
It is ridiculously easy to find the right configuration for each individual requirement. The combination of the click lock and the foldable shelf system even allows modifications to be made when installed.

The shelf separators lock firmly into the frame bridges and, once in place, they cannot slip.
No matter what type of installation – horizontal, backwards, etc. – the cables stay in the position that was originally intended.

This means: a long service life and no uneven wear to the chain.

- ✔ **Easy assembly**
- ✔ **REFA time and motion study conducted**
- ✔ **Lockable separator, fixed position**
- ✔ **Quick installation**
- ✔ **Even when installed changes can be made**

Variable frame bridges



Variable fixed frame bridges

Variable and yet fixed

Frame bridges come in two alternative versions:plastic or aluminium.
The plastic version is standard and comes in several widths.

The aluminium version can be supplied in any width. It is especially popular for applications requiring widths of over 550 mm.

The separators, both the plastic and the aluminium ones, lock into the frame bridge and are thus fixed in place. The separators remain in their original position regardless of the type of installation and any movements. The frame bridges and separators form a stable unit.

The Murrplastik frame bridges are variable and yet flexible.

- ✔ **Flexible adjustment due to closely spaced lock tabs**
- ✔ **Fixed with lock tabs**
- ✔ **Variable length**
- ✔ **Extremely stable**

Chain bracket

Optimal connections

Fast and easy to assemble

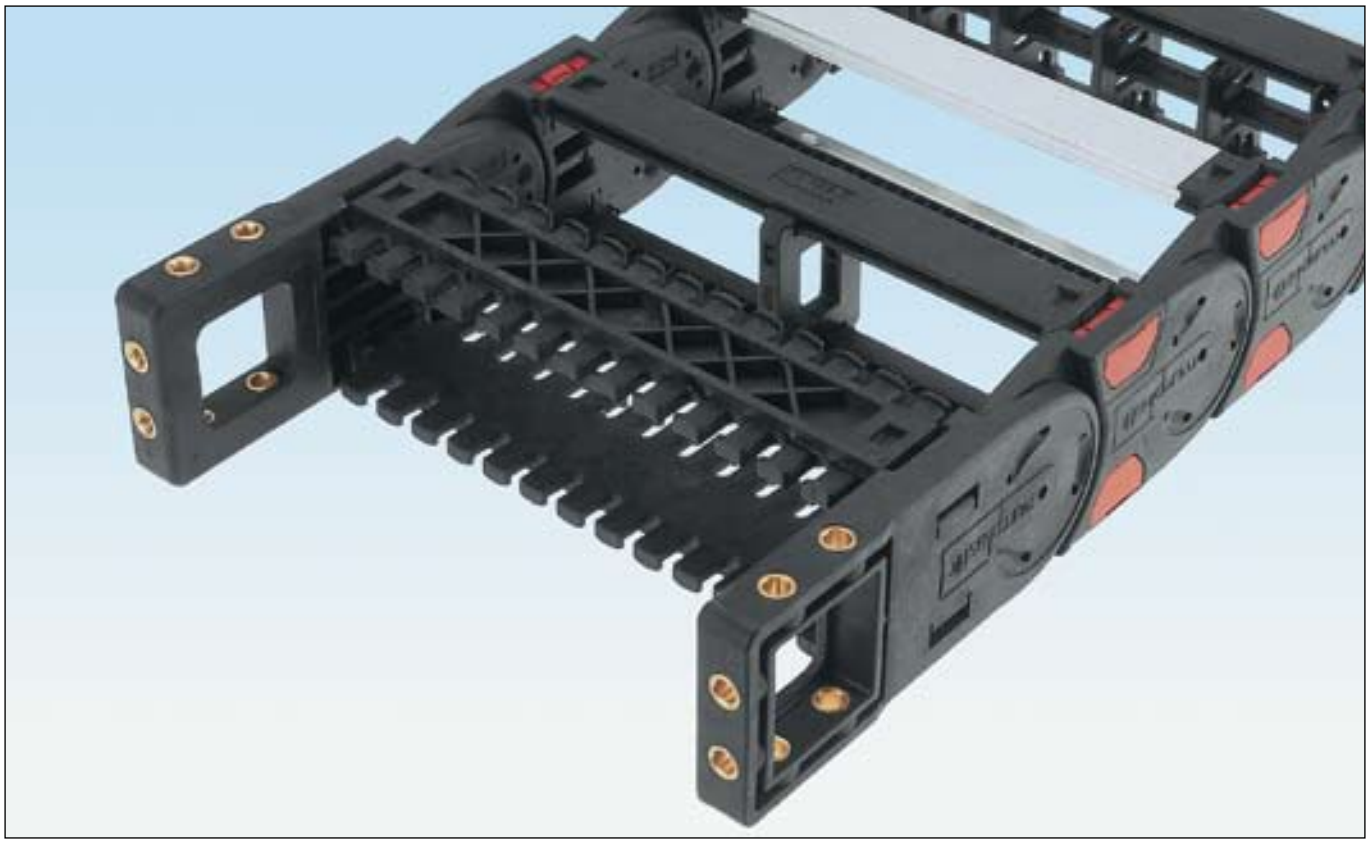
Metal bushes are injected permanently into the plastic in the chain bracket. There are two types:
a threaded bush and a normal one.

Both types of bush inhibit cold flow properties during screwing, thus effecting an extremely good fit. The threaded bush is screwed directly without a nut.

Safe and highly compact chain fastening with no fumbling.

- ✔ **No cold flow deformation**
- ✔ **Quick**
- ✔ **Secure fastening**
- ✔ **Compact**

Integrated strain relief



Economic with time and space

Simple and safe strain relief

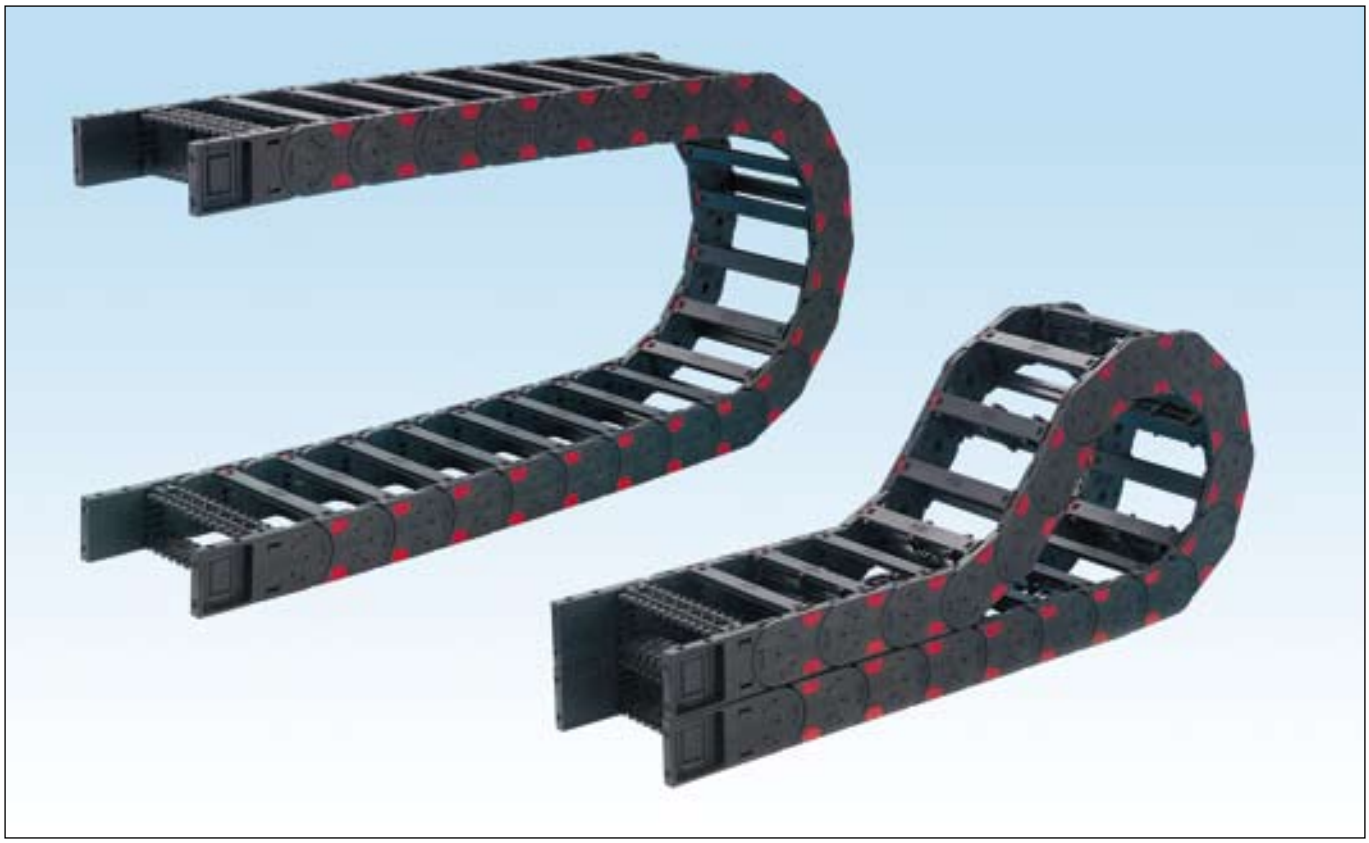
No cumbersome special design for cable strain relief. Everything is quick and safe with the Murrplastik cable drag chain system.

Special strain relief frame bridges are used on the chain bracket. The strain relief is effected by cable ties. The cable is fixed on the strain relief plate on two sides. It is impossible for the cable plate to slip down because the cable tie is securely enclosed by the plate.

This integrated strain relief system is very quick to assemble and is extremely economical on space.

- ✔ **Easy to assemble**
- ✔ **Compact construction**
- ✔ **Economical**
- ✔ **Saves space**
- ✔ **Secure strain relief**

Bias



All types of stress

Flexible with a range of options

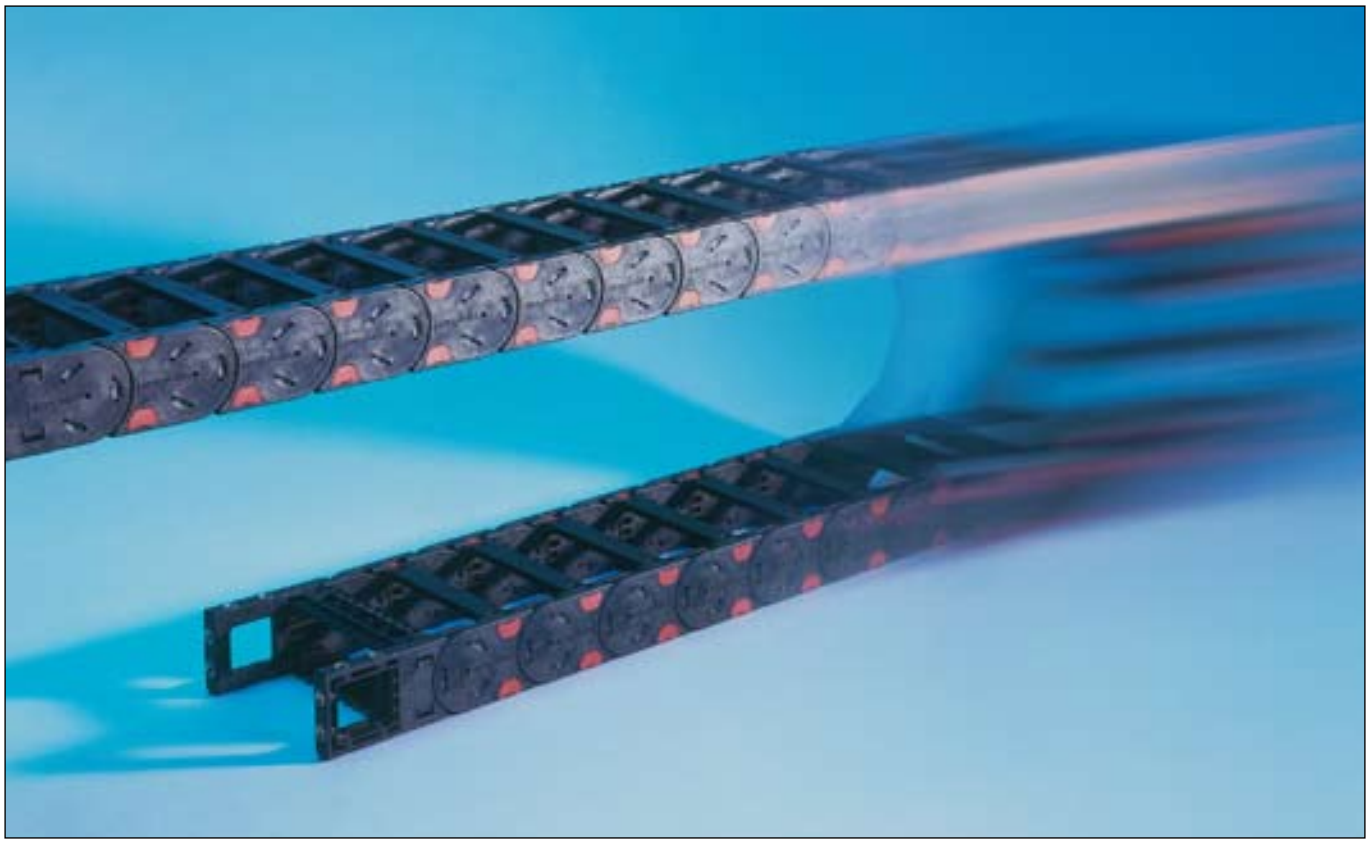
Low installation height and narrow radii are becoming increasingly important.

These criteria are met by our chain links with back radii. This means a smaller radius and no restriction on the position of the chain bracket.

The design remains flexible and compact without compromising service life.

- ✔ **Installation space reduced (backwards)**
- ✔ **Self supporting position increased (bias)**
- ✔ **Improved gliding (without bias)**
- ✔ **Service life prolonged**

High acceleration



Extreme stresses

High acceleration –
long service life

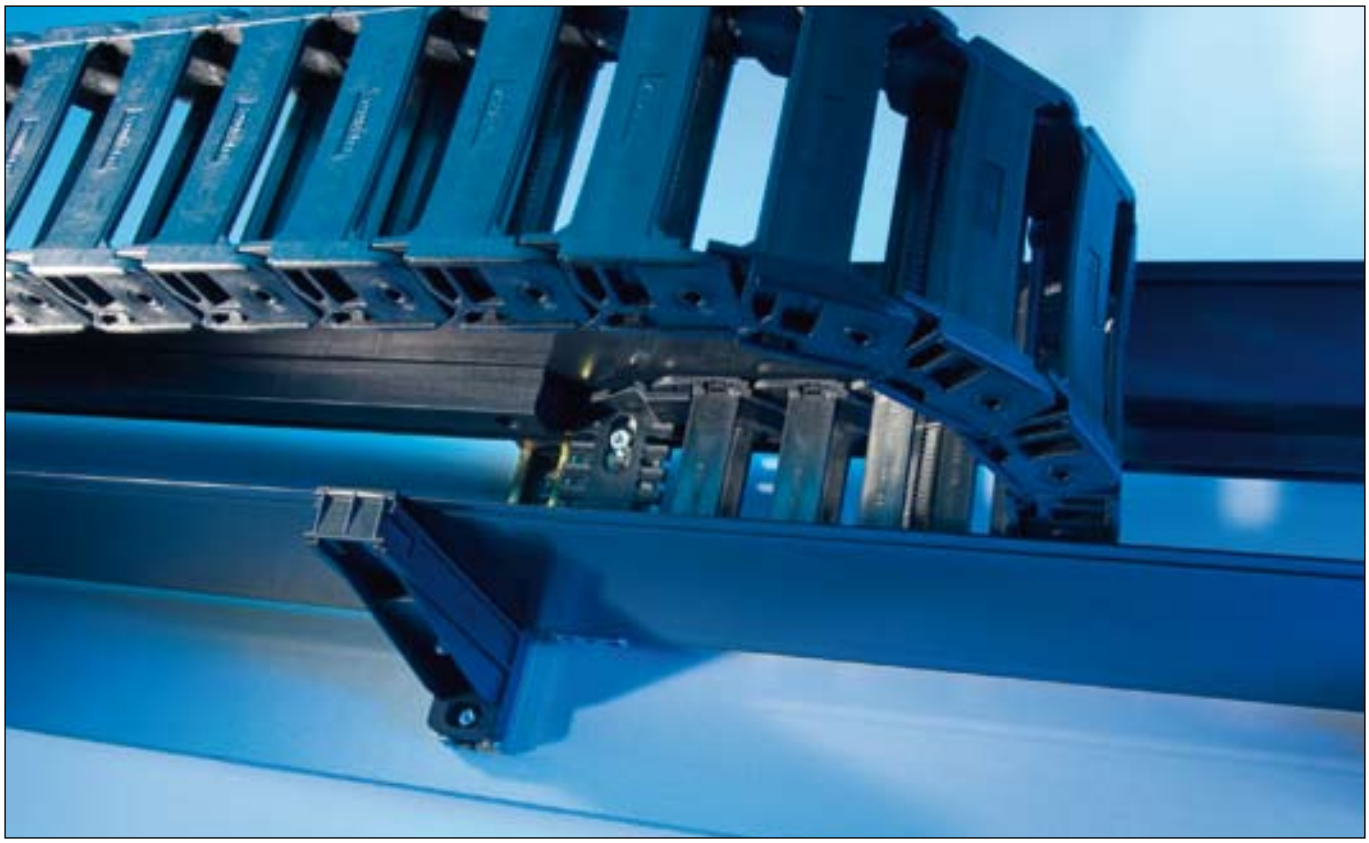
Are you looking for cable drag chains which can cope with extremely fast acceleration and yet still guarantee long service life? Then look no further than Murrplastik Systemtechnik.

During the design of our cable drag chains, the focus was on high acceleration rates and long service life. The cable drag chains should not restrict you in the design of your applications.

Even in extreme cases we will be pleased to offer you chains which can withstand extreme stress along with expert advice on applications.

- ✔ **Extreme accelerations**
- ✔ **Long service life**
- ✔ **High continuous load**

VAW guide channels



Guide channel system

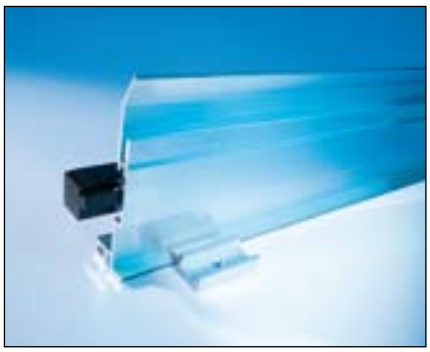
For maximum speed assembly

The VAW variable guide channel system is harmonised for Murrplastik cable drag chains. The aluminium guide channel system can be adapted quickly to various types and widths of chain.

Assembly is quick and easy:

The aluminium guide channel is secured with clamping pieces on the base.
No screwing or welding – simply press special plastic pieces into the groove provided and a perfectly aligned join is established between two sections.

This carefully designed guide channel system saves up to 70 % working time.



- ✔ **Quick and easy assembly.**
- ✔ **High quality**
- ✔ **Highly economical**
- ✔ **Tailored system**
- ✔ **Long service life**

Fabrication

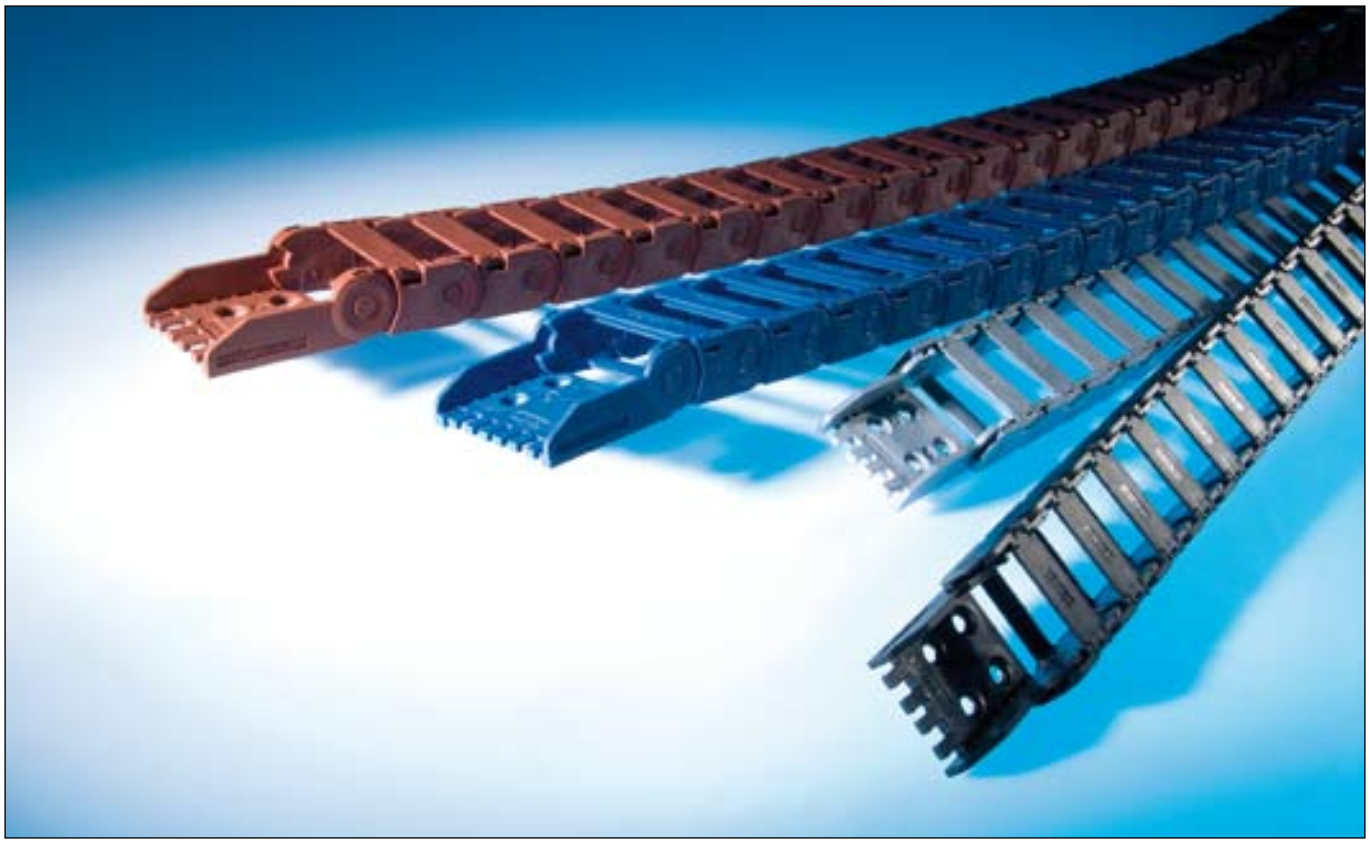
Everything from one source

Reduce your labour costs and save time by taking advantage of our experience in chain systems gained over many years.

At the customer's request we assemble complete cable drag chains with cables. We handle the layout, assembly and ordering of individual components. The customer is supplied with a ready-made assembly which only needs to be fitted.

Thanks to our experience of cable drag chains and cables acquired over many years, we can combine both elements in one system. This guarantees a long service life.

- ✔ **System guarantee**
- ✔ **Easy handling**
- ✔ **Saves time and hassle when ordering**
- ✔ **Reduced warehousing costs**



Visible differentiation

Extreme areas of application require different materials.

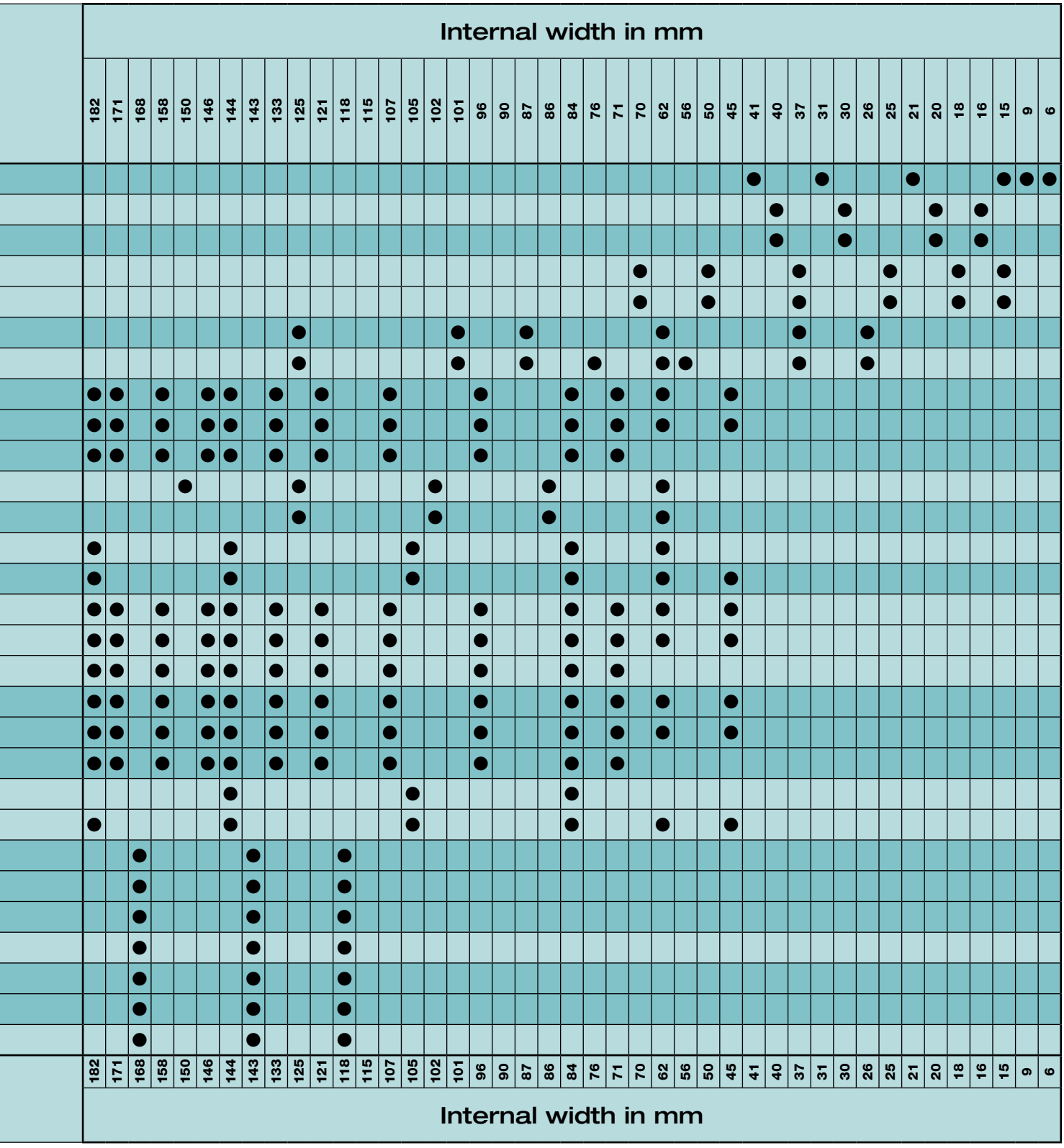
The Murrplastik colour coding system enables you to recognise and classify different materials and hence areas of application safely and easily.

Clear assignments, safe use – as with all Murrplastik products.

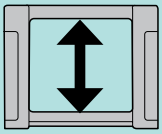
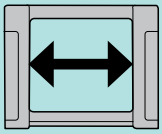
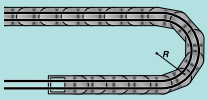
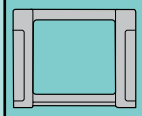
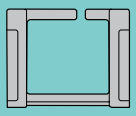
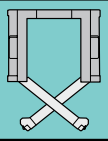
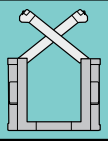
- **Murrplastik colour coding system**
- **Black cable drag chains: Polyamide (PA): standard**
- **Light grey cable drag chains: Polyamide (PA): ESD model**
- **Oxide red cable drag chains: Polyamide (PA), UL 94/V0**
- **Blue cable drag chains: Polypropylene (PP)**

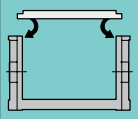
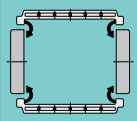
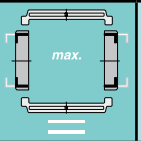
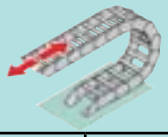
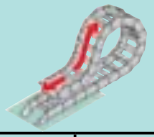
Overview internal widths

Internal height in mm	Chain type	Model: open	Model: closed	Variable width	Version: ESD (PA/light grey)	Version: UL94/V0 (PA/oxide red)	Version: Polypropylene (PP/blue)	Internal width in mm: 546	518	496	468	446	418	396	368	346	343	318	296	293	268	246	243	225	220	218	196	193	190
10	10.1	❒			❊	❊																							
14	14	❒																											
15	15	❒			❊	❊																							
18	18.1	❒			❊	❊	❊																						
	18.2	❒			❊	❊	❊																						
25	25 G		■		❊																								
26	3000	❒			❊	❊	❊																						
32	32	❒		◆				●		●		●		●		●			●			●			●		●		
	32.2	❒		◆	❊		❊	●		●		●		●		●			●			●			●		●		
	32.3 G		■	◆										●		●			●			●			●		●		
34	35	❒																											
36	36 G		■																										
38	43 G		■																										
40	44	❒		◆																									
42	41	❒		◆				●		●		●		●		●			●			●			●		●		
	41.2	❒		◆	❊		❊	●		●		●		●		●			●			●			●		●		
	41.3 G		■	◆										●		●			●			●			●		●		
52	52.1	❒		◆				●		●		●		●		●			●			●			●		●		
	52.2	❒		◆	❊		❊	●		●		●		●		●			●			●			●		●		
	52.3 G		■	◆										●		●			●			●			●		●		
60	65 G		■																										
	66	❒		◆																									
62	62.1	❒		◆					●		●		●		●		●	●		●	●		●			●		●	
	62.2	❒		◆	❊		❊		●		●		●		●		●	●		●	●		●			●		●	
	62.3 G		■	◆									●		●		●	●		●	●		●			●		●	
72	72	❒		◆					●		●		●		●		●	●		●	●		●			●		●	
82	82.2	❒		◆	❊		❊		●		●		●		●		●	●		●	●		●			●		●	
	82.3 G		■	◆									●		●		●	●		●	●		●			●		●	
102	102.2	❒		◆					●		●		●		●		●	●		●	●		●			●		●	
								546	518	496	468	446	418	396	368	346	343	318	296	293	268	246	243	225	220	218	196	193	190
								Internal width in mm																					


Internal width in mm
182 171 168 158 150 146 144 143 133 125 121 118 115 107 105 102 101 96 90 87 86 84 76 71 70 62 56 50 45 41 40 37 31 30 26 25 21 20 18 16 15 9 6
Internal width in mm

Overview models/travel distances

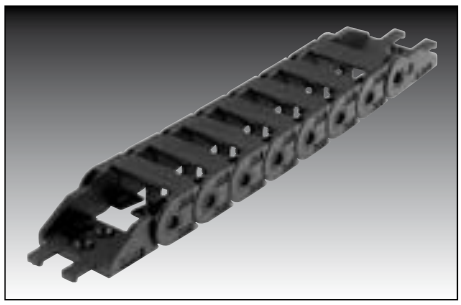
Chain type	Dimensions					Opening variants			
									
	Internal height	Inside width		Bending radius		None	slit	Inside bend foldable	Outside bend foldable
	in mm	in mm		in mm					
		From	To	From	To				
10.1	10	6	41	18	58		■		
14	14	16	40	25	75				■
15	15	16	40	25	75	■			
18.1	18	15	70	28	78				■
18.2								■	
25 G	25	26	125	60	250			■	
3000	26	26	125	50	300			■	
32	32	45	546	80	250				
32.2									
32.3 G				120					
35	34	62	150	70	300				
36 G	36	62	125	80	200			■	
43 G	38	62	182	125	250				
44	40	45	182	90	250				
41	42	45	546	75	300				
41.2									
41.3 G				150					
52.1	52	45	546	100	350				
52.2									
52.3 G				150					
65 G	60	84	144	200	350				
66		45	182	150					
62.1	62	118	518	150	500				
62.2									
62.3 G				200					
72	72	118	518	150	500				
82.2	82	118	518	150	500				
82.3 G				200					
102.2	102	118	518	250	500				

Opening variants			Parameters					
								
Inside bend engages	**Inside and outside bend** engage	**Inside and outside bend** click lock	**Travel distance**		**Speed**		**Acceleration**	
			Unsupported	Gliding	Unsupported	Gliding	Unsupported	Gliding
			m		m/s		m/s²	
			1.0	10.0	4.0	2.0	2.0	2.0
			2.0	12.0	4.0	2.0	2.0	2.0
			2.0	12.0	4.0	2.0	2.0	2.0
			3.0	20.0	5.0	2.0	5.0	5.0
			3.0	-	5.0	-	5.0	-
			3.0	40.0	6.0	3.0	15.0	10.0
			4.0	60.0	6.0	3.0	15.0	10.0
	■		4.5	100.0	20.0	5.0	30.0	25.0
		■	4.5	100.0	20.0	5.0	30.0	25.0
		■	4.5	100.0	20.0	5.0	30.0	25.0
■			4.5	80.0	10.0	3.0	20.0	15.0
			4.0	80.0	10.0	3.0	20.0	15.0
	■		5.0	50.0	15.0	5.0	20.0	15.0
	■		5.0	50.0	15.0	5.0	20.0	15.0
	■		7.0	120.0	20.0	5.0	30.0	25.0
		■	7.0	120.0	20.0	5.0	30.0	25.0
		■	7.0	120.0	20.0	5.0	30.0	25.0
	■		9.0	150.0	20.0	5.0	30.0	15.0
		■	9.0	150.0	20.0	5.0	30.0	25.0
		■	9.0	150.0	20.0	5.0	30.0	25.0
	■		8.0	60.0	15.0	5.0	25.0	15.0
	■		8.0	60.0	15.0	5.0	25.0	15.0
	■		10.0	180.0	20.0	5.0	40.0	25.0
		■	10.0	180.0	20.0	5.0	40.0	25.0
		■	10.0	180.0	20.0	5.0	40.0	25.0
	■		10.0	200.0	20.0	5.0	40.0	25.0
		■	11.0	250.0	20.0	5.0	40.0	25.0
		■	11.0	250.0	20.0	5.0	40.0	25.0
		■	12.0	300.0	20.0	5.0	40.0	25.0

Technical data: open cable drag chains

MP 10.1

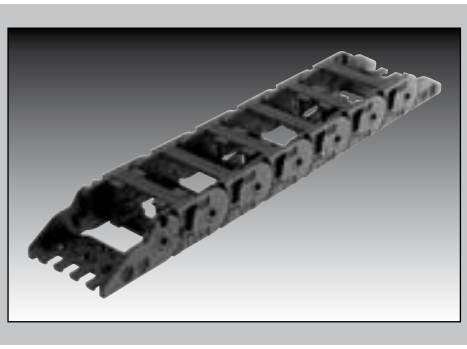
Page 37



- Interior height: 10 mm
- Interior widths: 6–41 mm
- Radii: 18-58 mm
- Pitch: 15 mm
- Links per meter: 67 pc
- Loading side: outside flexure curve slitted
- max. cable diameter: 8 mm

MP 14

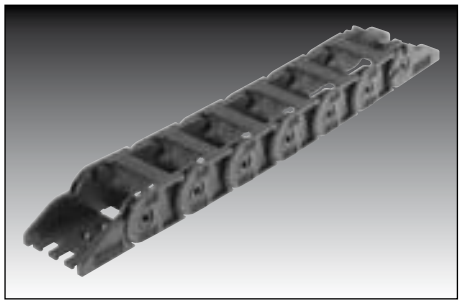
Page 38



- Interior height: 14 mm
- Interior widths: 16-40 mm
- Radii: 25-75 mm
- Pitch: 26 mm
- Links per meter: 38 pc
- Loading side: outside flexure curve
- max. cable diameter: 12 mm

MP 15

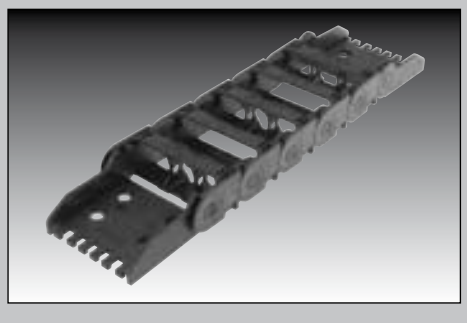
Page 39



- Interior height: 14 mm
- Interior widths: 16-40 mm
- Radii: 25-75 mm
- Pitch: 26 mm
- Links per meter: 38 pc
- Loading side: Non-opening
- max. cable diameter: 12 mm

MP 18.1

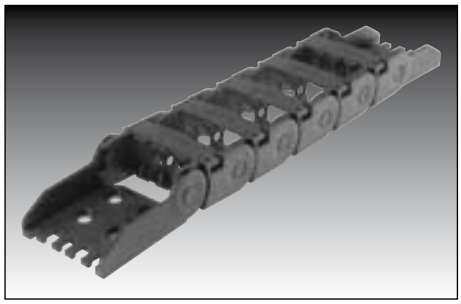
Page 40



- Interior height: 18 mm
- Interior widths: 15-70 mm
- Radii: 28-78 mm
- Pitch: 33 mm
- Links per meter: 30 pc
- Loading side: outside flexure curve
- max. cable diameter: 15 mm

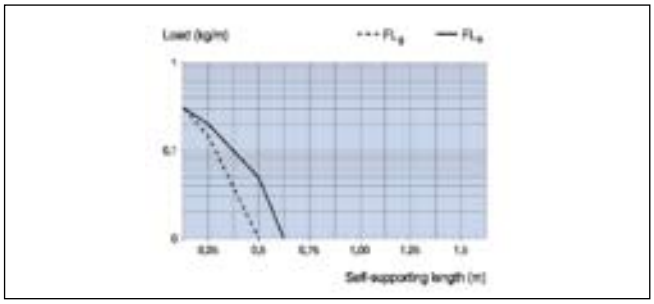
MP 18.2

Page 41

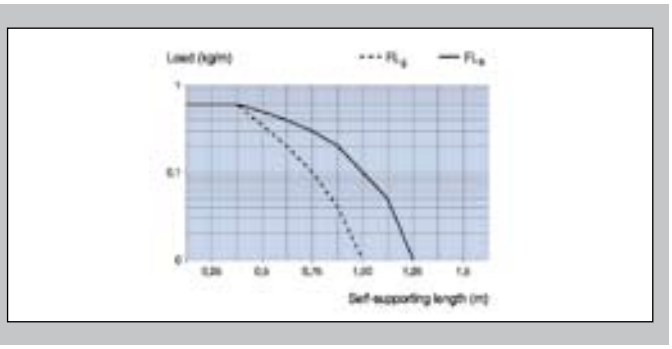


- Interior height: 18 mm
- Interior widths: 15-70 mm
- Radii: 28-78 mm
- Pitch: 33 mm
- Links per meter: 30 pc
- Loading side: inside flexure curve
- max. cable diameter: 15 mm

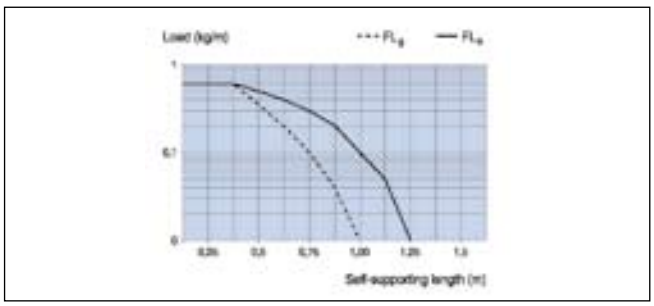
- Travel distance, gliding: 10 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 2 m
- Travel distance, vertical, upright: 1 m
- Rotated 90°, unsupported: not recommended
- Speed, gliding 2 m/s
- Speed, unsupported 4 m/s
- Acceleration, gliding 2 m/s²
- Acceleration, unsupported 2 m/s²



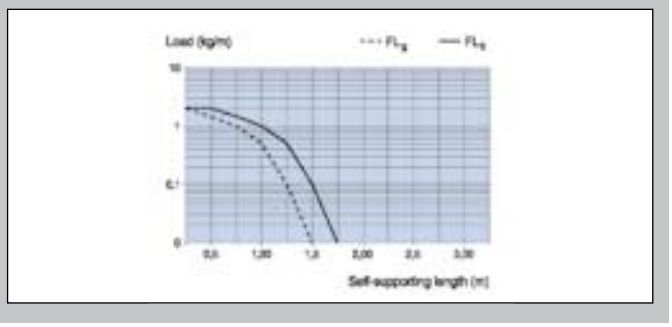
- Travel distance, gliding: 12 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 3 m
- Travel distance, vertical, upright: 2 m
- Rotated 90°, unsupported: not recommended
- Speed, gliding 2 m/s
- Speed, unsupported 4 m/s
- Acceleration, gliding 2 m/s²
- Acceleration, unsupported 2 m/s²



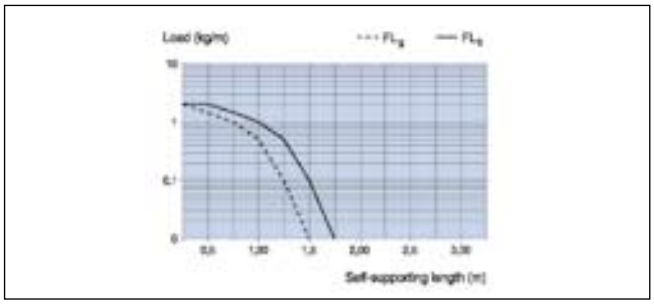
- Travel distance, gliding: 12 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 3 m
- Travel distance, vertical, upright: 2 m
- Rotated 90°, unsupported: not recommended
- Speed, gliding 2 m/s
- Speed, unsupported 4 m/s
- Acceleration, gliding 2 m/s²
- Acceleration, unsupported 2 m/s²



- Travel distance, gliding: 20 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 8 m
- Travel distance, vertical, upright: 3 m
- Rotated 90°, unsupported: 0.5 m
- Speed, gliding 2 m/s
- Speed, unsupported 5 m/s
- Acceleration, gliding 5 m/s²
- Acceleration, unsupported 5 m/s²



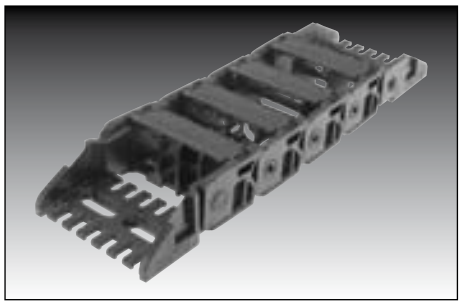
- Travel distance, gliding: not recommended
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 8 m
- Travel distance, vertical, upright: 3 m
- Rotated 90°, unsupported: 0.5 m
- Speed, unsupported 5 m/s
- Acceleration, unsupported 5 m/s²



Technical data: open cable drag chains

MP 3000

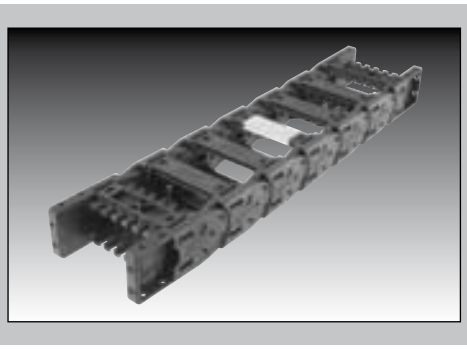
Page 42



- Interior height: 26 mm
- Interior widths: 26-125 mm
- Radii: 50-300 mm
- Pitch: 45 mm
- Links per meter: 22 pc
- Loading side: inside flexure curve
- Existing shelving system
- max. cable diameter: 23 mm

MP 32

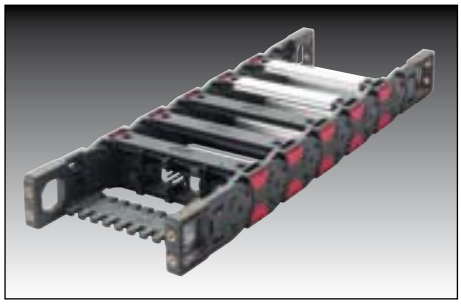
Page 43



- Interior height: 32 mm
- Interior widths: 45-546 mm
- Radii: 80-250 mm
- Pitch: 64.5 mm
- Links per meter: 16 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 23 mm

MP 32.2

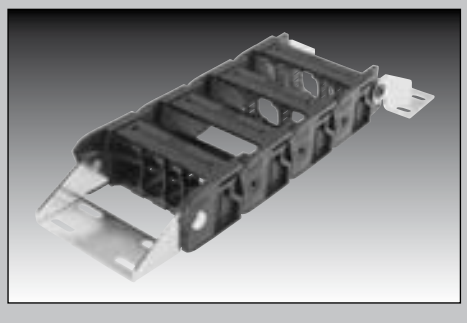
Page 44



- Interior height: 32 mm
- Interior widths: 45-546 mm
- Radii: 80-250 mm
- Pitch: 64.5 mm
- Links per meter: 16 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 28 mm

MP 35

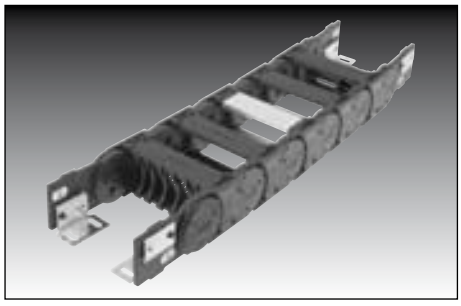
Page 45



- Interior height: 34 mm
- Interior widths: 62-150 mm
- Radii: 70-300 mm
- Pitch: 58 mm
- Links per meter: 17 pc
- Loading side: inside flexure curve
- Existing shelving system
- max. cable diameter: 30 mm

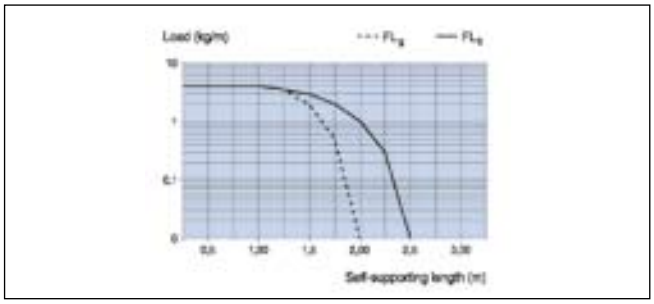
MP 44

Page 46

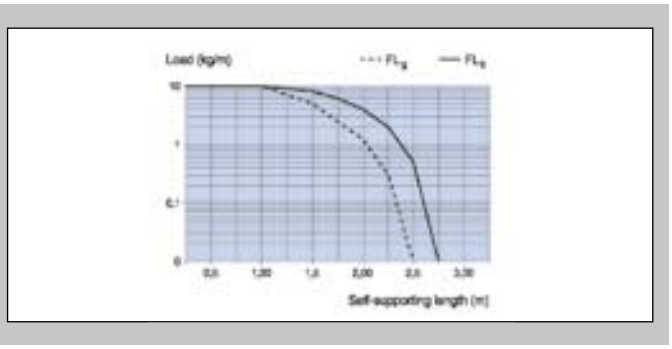


- Interior height: 40 mm
- Interior widths: 45-182 mm
- Radii: 90-250 mm
- Pitch: 75.5 mm
- Links per meter: 13 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 35 mm

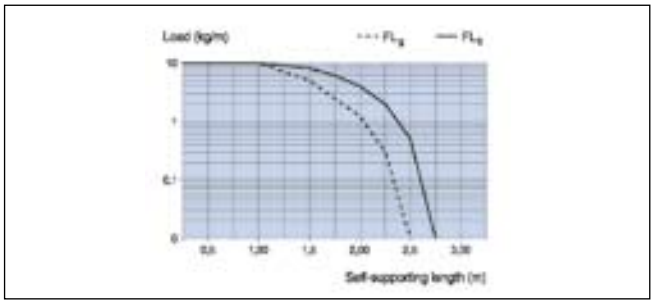
- Travel distance, gliding: 60 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 40 m
- Travel distance, vertical, upright: 3 m
- Rotated 90°, unsupported: 0.7 m
- Speed, gliding 3 m/s
- Speed, unsupported 6 m/s
- Acceleration, gliding 10 m/s²
- Acceleration, unsupported 15 m/s²



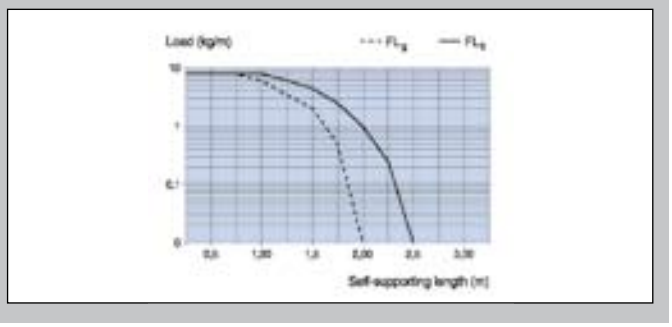
- Travel distance, gliding: 100 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 60 m
- Travel distance, vertical, upright: 5 m
- Rotated 90°, unsupported: 2 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 30 m/s²



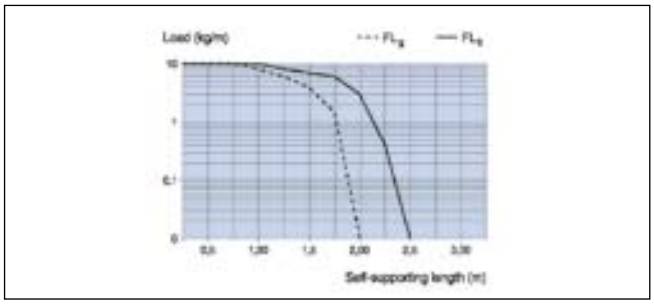
- Travel distance, gliding: 100 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 60 m
- Travel distance, vertical, upright: 5 m
- Rotated 90°, unsupported: 1 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 30 m/s²



- Travel distance, gliding: 80 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 40 m
- Travel distance, vertical, upright: 3 m
- Rotated 90°, unsupported: 1 m
- Speed, gliding 3 m/s
- Speed, unsupported 10 m/s
- Acceleration, gliding 15 m/s²
- Acceleration, unsupported 20 m/s²



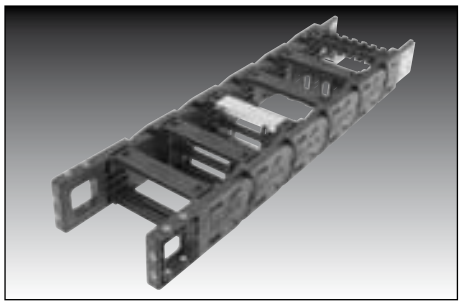
- Travel distance, gliding: 50 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 40 m
- Travel distance, vertical, upright: 3 m
- Rotated 90°, unsupported: 1 m
- Speed, gliding 5 m/s
- Speed, unsupported 15 m/s
- Acceleration, gliding 15 m/s²
- Acceleration, unsupported 20 m/s²



Technical data: open cable drag chains

MP 41

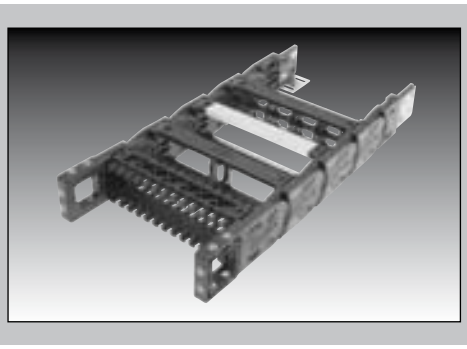
Page 47



- Interior height: 42 mm
- Interior widths: 45-546 mm
- Radii: 90-300 mm
- Pitch: 77 mm
- Links per meter: 13 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 36 mm

MP 41.2

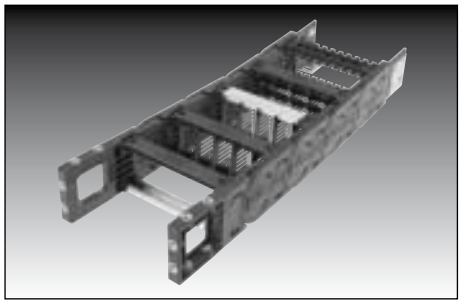
Page 48



- Interior height: 42 mm
- Interior widths: 45-546 mm
- Radii: 90-300 mm
- Pitch: 77 mm
- Links per meter: 13 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 36 mm

MP 52.1

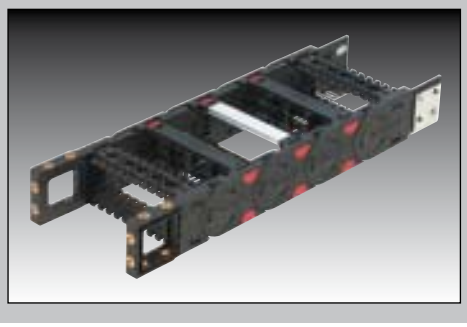
Page 49



- Interior height: 52 mm
- Interior widths: 45-546 mm
- Radii: 100-350 mm
- Pitch: 91 mm
- Links per meter: 11 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 45 mm

MP 52.2

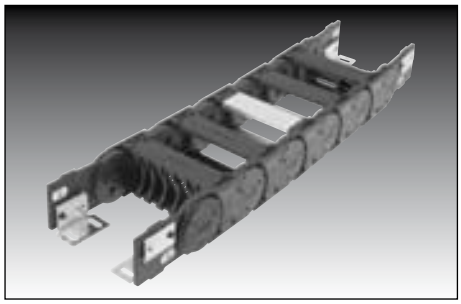
Page 50



- Interior height: 52 mm
- Interior widths: 45-546 mm
- Radii: 100-350 mm
- Pitch: 91 mm
- Links per meter: 11 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 45 mm

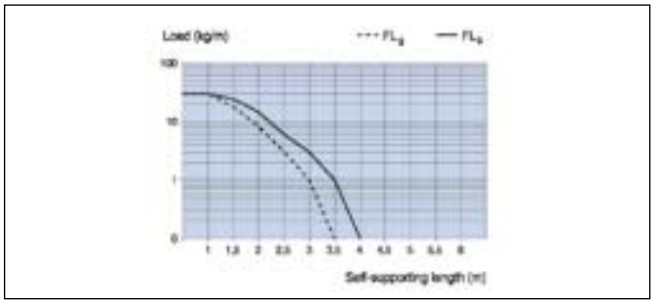
MP 66

Page 51

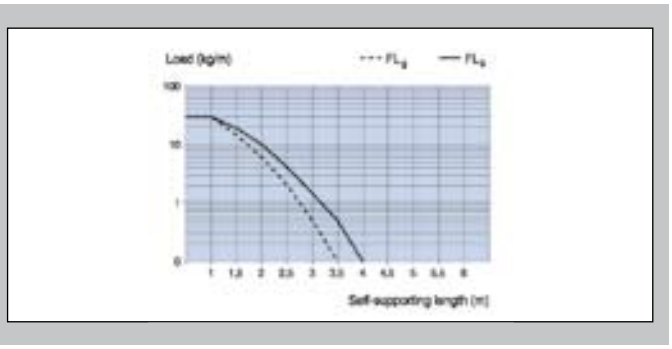


- Interior height: 60 mm
- Interior widths: 45-182 mm
- Radii: 150-350 mm
- Pitch: 91.5 mm
- Links per meter: 11 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 52 mm

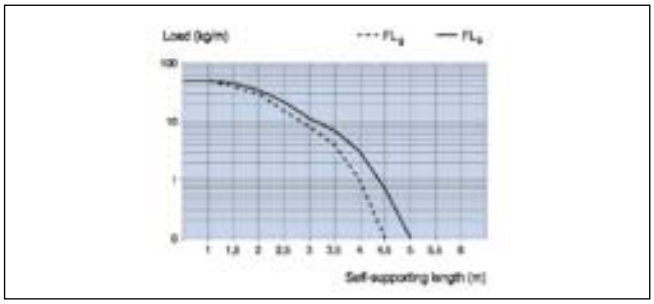
- Travel distance, gliding: 120 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 100 m
- Travel distance, vertical, upright: 6 m
- Rotated 90°, unsupported: 2 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 30 m/s²



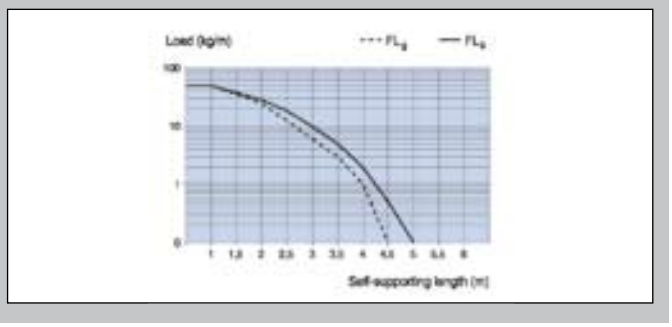
- Travel distance, gliding: 120 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 100 m
- Travel distance, vertical, upright: 6 m
- Rotated 90°, unsupported: 1 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 30 m/s²



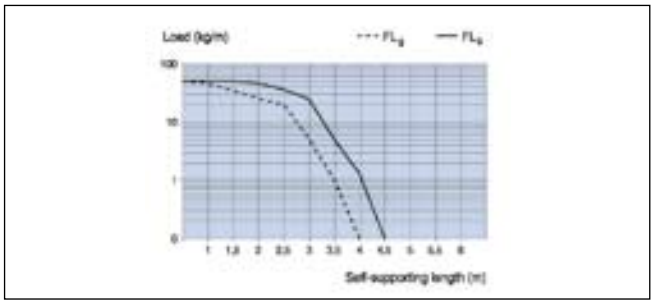
- Travel distance, gliding: 150 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 100 m
- Travel distance, vertical, upright: 6 m
- Rotated 90°, unsupported: 3 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 30 m/s²



- Travel distance, gliding: 150 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 100 m
- Travel distance, vertical, upright: 6 m
- Rotated 90°, unsupported: 2 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 30 m/s²



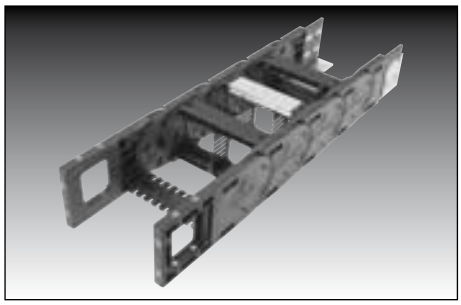
- Travel distance, gliding: 80 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 50 m
- Travel distance, vertical, upright: 5 m
- Rotated 90°, unsupported: 2 m
- Speed, gliding 5 m/s
- Speed, unsupported 15 m/s
- Acceleration, gliding 15 m/s²
- Acceleration, unsupported 25 m/s²



Technical data: open cable drag chains

MP 62.1

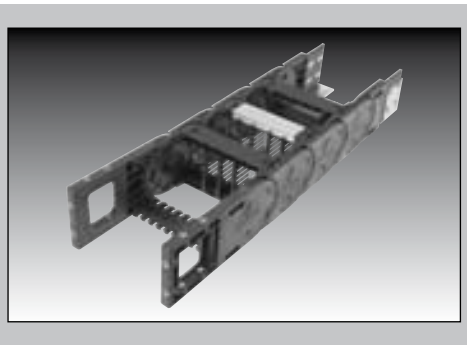
Page 52



- Interior height: 62 mm
- Interior widths: 118-518 mm
- Radii: 150-500 mm
- Pitch: 100 mm
- Links per meter: 10 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 52 mm

MP 62.2

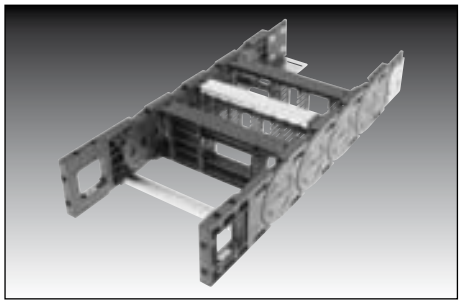
Page 53



- Interior height: 62 mm
- Interior widths: 118-518 mm
- Radii: 150-500 mm
- Pitch: 100 mm
- Links per meter: 10 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 52 mm

MP 72

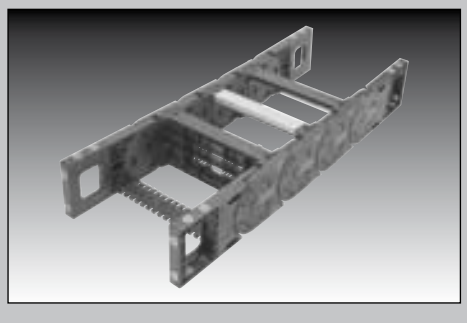
Page 54



- Interior height: 72 mm
- Interior widths: 118-518 mm
- Radii: 150-500 mm
- Pitch: 100 mm
- Links per meter: 10 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 60 mm

MP 82.2

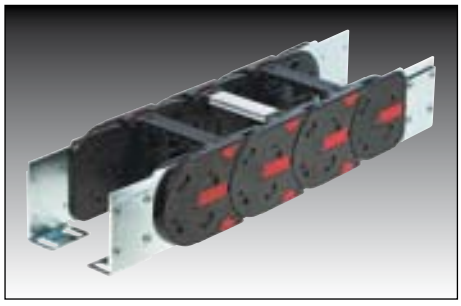
Page 55



- Interior height: 82 mm
- Interior widths: 118-518 mm
- Radii: 150-500 mm
- Pitch: 118 mm
- Links per meter: 9 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 65 mm

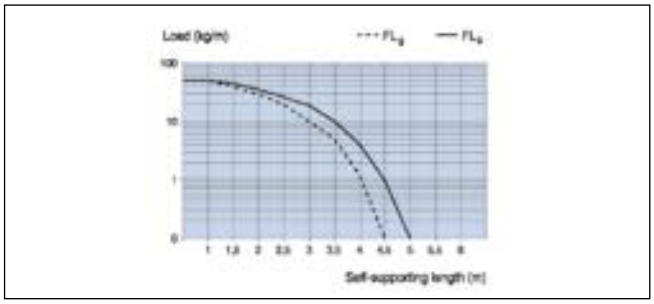
MP 102.2

Page 56

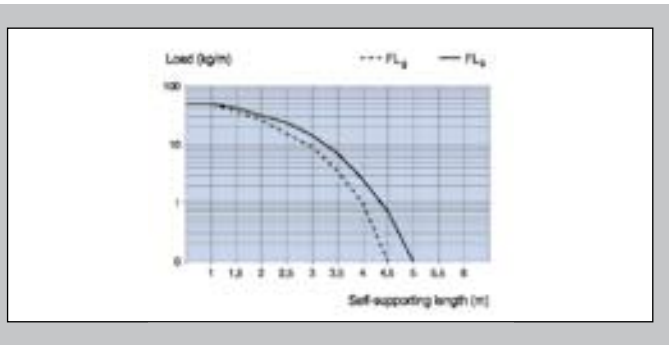


- Interior height: 104 mm
- Interior widths: 118-518 mm
- Radii: 250-500 mm
- Pitch: 141 mm
- Links per meter: 7 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 83 mm

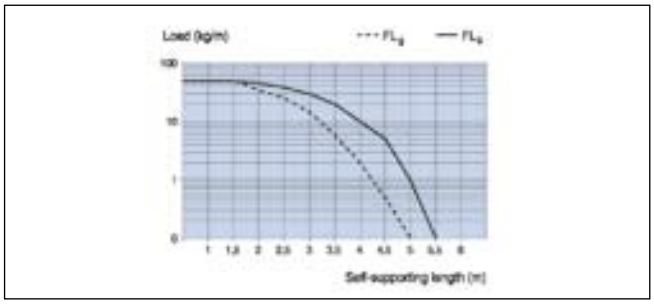
- Travel distance, gliding: 150 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 120 m
- Travel distance, vertical, upright: 6 m
- Rotated 90°, unsupported: 4 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 40 m/s²



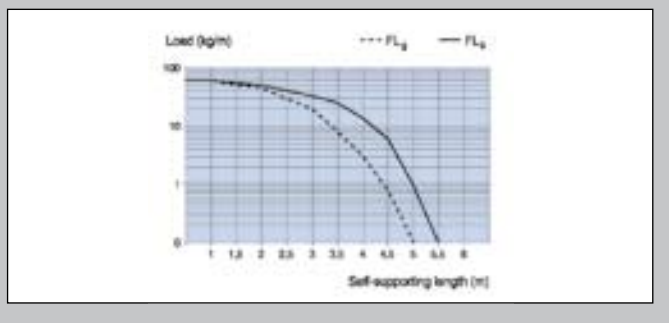
- Travel distance, gliding: 150 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 120 m
- Travel distance, vertical, upright: 6 m
- Rotated 90°, unsupported: 4 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 40 m/s²



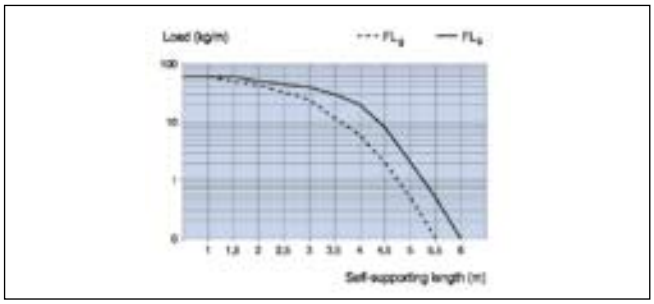
- Travel distance, gliding: 150 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 120 m
- Travel distance, vertical, upright: 6 m
- Rotated 90°, unsupported: 6 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 40 m/s²



- Travel distance, gliding: 150 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 120 m
- Travel distance, vertical, upright: 6 m
- Rotated 90°, unsupported: 3 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 40 m/s²



- Travel distance, gliding: 150 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 150 m
- Travel distance, vertical, upright: 8 m
- Rotated 90°, unsupported: 8 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 40 m/s²



Technical data: closed cable drag chains

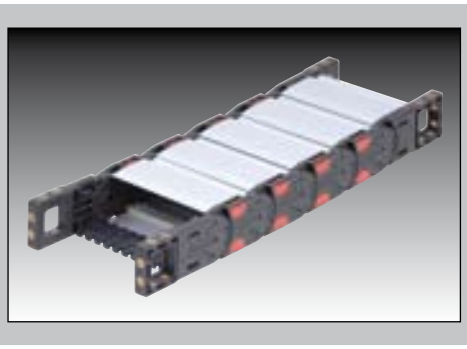
MP 25 G

Page 57

- Interior height: 25 mm
- Interior widths: 26-125 mm
- Radii: 60-250 mm
- Pitch: 30 mm
- Links per meter: 33 pc
- Loading side: outside flexure curve
- Existing shelving system
- max. cable diameter: 22 mm

MP 32.3 G

Page 58



- Interior height: 32 mm
- Interior widths: 45-396 mm
- Radii: 120-250 mm
- Pitch: 64.5 mm
- Links per meter: 16 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 28 mm

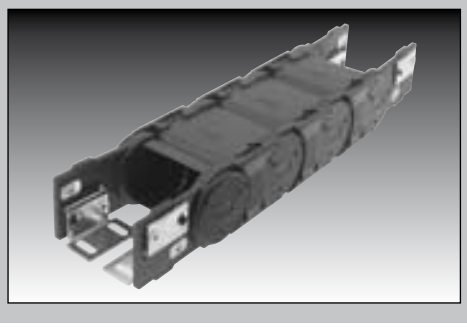
MP 36 G

Page 59

- Interior height: 36 mm
- Interior widths: 62-125 mm
- Radii: 80-200 mm
- Pitch: 40 mm
- Links per meter: 25 pc
- Loading side: inside flexure curve
- Existing shelving system
- max. cable diameter: 32 mm

MP 43 G

Page 60



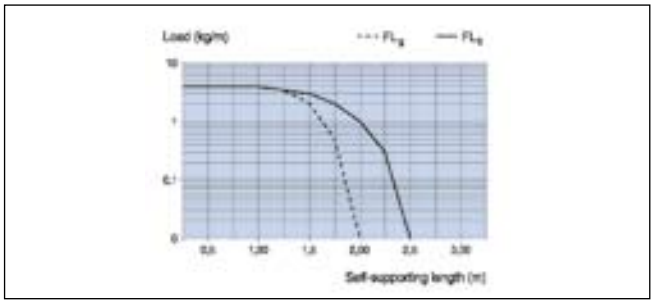
- Interior height: 38 mm
- Interior widths: 62-182 mm
- Radii: 125-250 mm
- Pitch: 75.5 mm
- Links per meter: 13 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 35 mm

MP 41.3 G

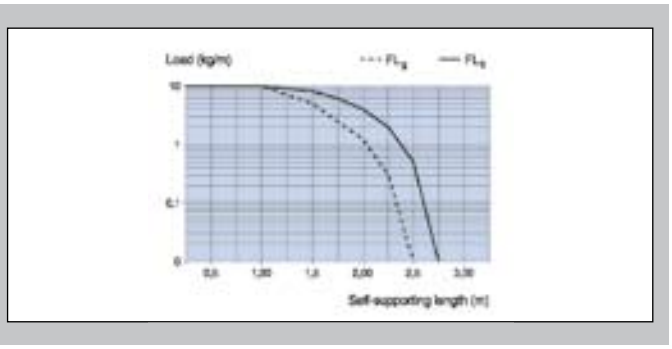
Page 61

- Interior height: 42 mm
- Interior widths: 45-396 mm
- Radii: 150-300 mm
- Pitch: 77.0 mm
- Links per meter: 13 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 36 mm

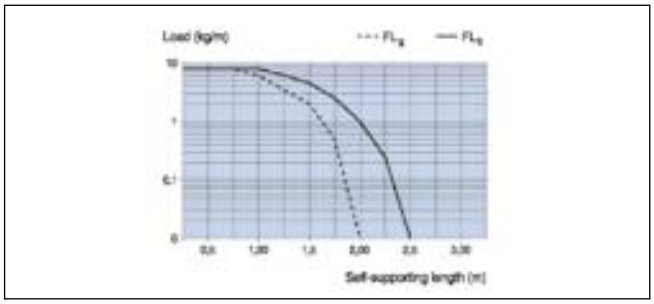
- Travel distance, gliding: 40 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 25 m
- Travel distance, vertical, upright: 3 m
- Rotated 90°, unsupported: 1 m
- Speed, gliding 3 m
- Speed, unsupported 6 m/s
- Acceleration, gliding 10 m/s²
- Acceleration, unsupported 15 m/s²



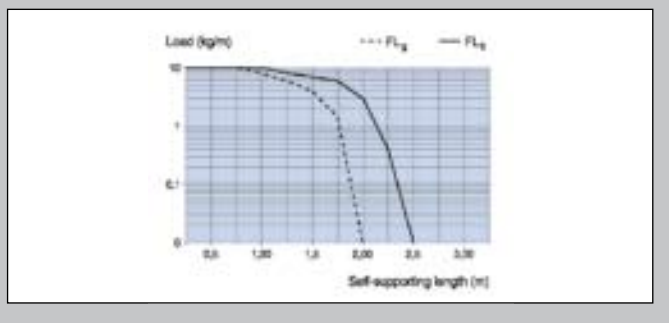
- Travel distance, gliding: 100 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 60 m
- Travel distance, vertical, upright: 5 m
- Rotated 90°, unsupported: 1 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 30 m/s²



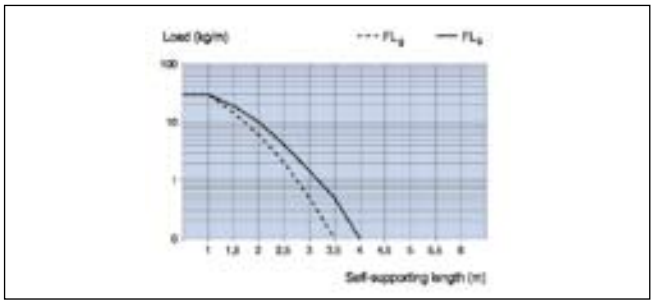
- Travel distance, gliding: 60 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 30 m
- Travel distance, vertical, upright: 3 m
- Rotated 90°, unsupported: 1 m
- Speed, gliding 3 m/s
- Speed, unsupported 10 m/s
- Acceleration, gliding 15 m/s²
- Acceleration, unsupported 20 m/s²



- Travel distance, gliding: 50 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 40 m
- Travel distance, vertical, upright: 3 m
- Rotated 90°, unsupported: 1 m
- Speed, gliding 5 m/s
- Speed, unsupported 15 m/s
- Acceleration, gliding 15 m/s²
- Acceleration, unsupported 20 m/s²



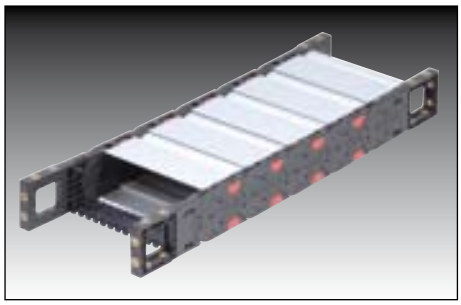
- Travel distance, gliding: 120 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 100 m
- Travel distance, vertical, upright: 6 m
- Rotated 90°, unsupported: 1 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 30 m/s²



Technical data: closed cable drag chains

MP 52.3 G

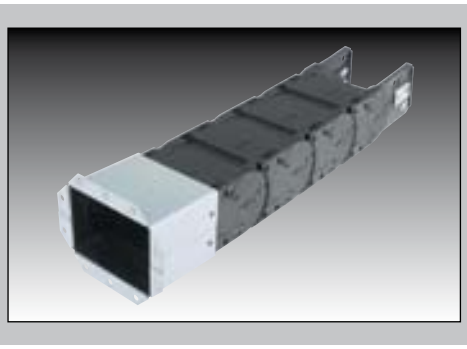
Page 62



- Interior height: 52 mm
- Interior widths: 45-396 mm
- Radii: 150-350 mm
- Pitch: 91.0 mm
- Links per meter: 11 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 45 mm

MP 65 G

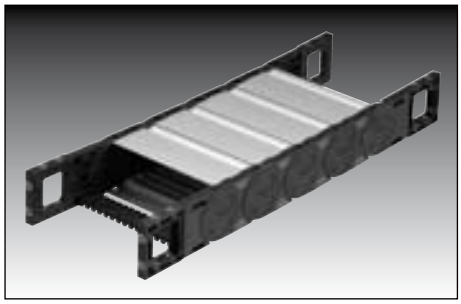
Page 63



- Interior height: 60 mm
- Interior widths: 84-144 mm
- Radii: 200-350 mm
- Pitch: 91.5 mm
- Links per meter: 11 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 52 mm

MP 62.3 G

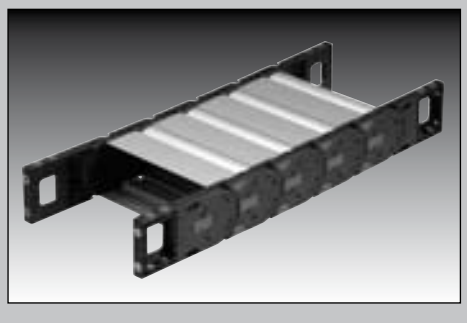
Page 64



- Interior height: 62 mm
- Interior widths: 118-418 mm
- Radii: 200-500 mm
- Pitch: 100.0 mm
- Links per meter: 10 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 52 mm

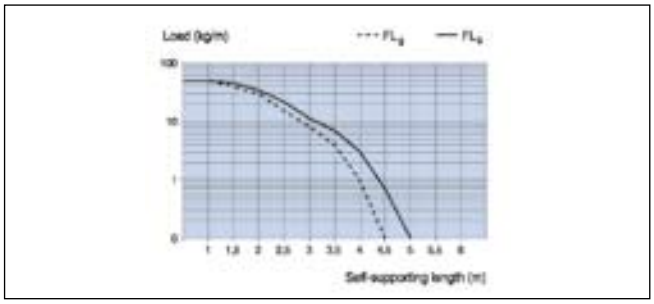
MP 82.3 G

Page 65

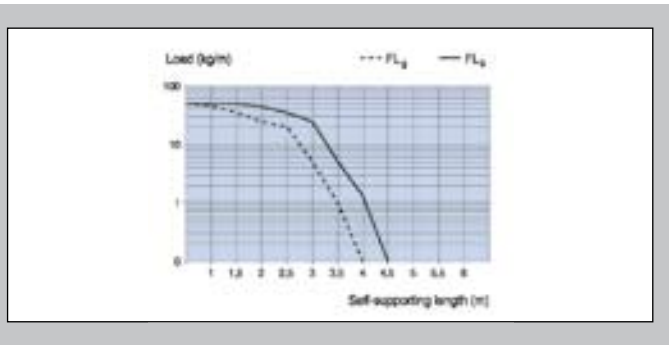


- Interior height: 82 mm
- Interior widths: 118-418 mm
- Radii: 200-500 mm
- Pitch: 118.0 mm
- Links per meter: 9 pc
- Loading side: inside and outside flexure curve
- Existing shelving system
- max. cable diameter: 65 mm

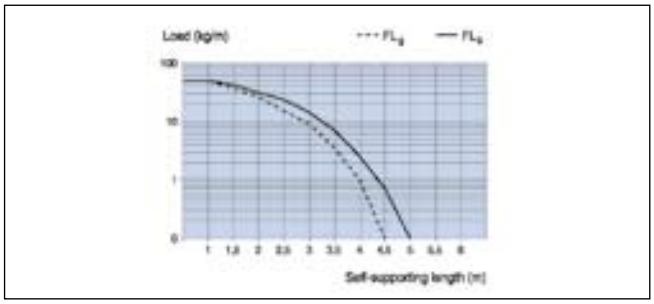
- Travel distance, gliding: 150 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 100 m
- Travel distance, vertical, upright: 6 m
- Rotated 90°, unsupported: 3 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 30 m/s²



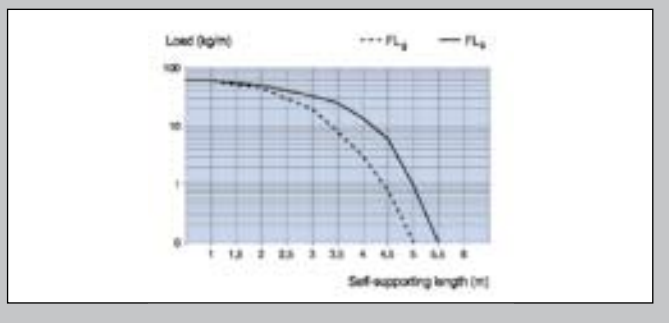
- Travel distance, gliding: 60 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 50 m
- Travel distance, vertical, upright: 5 m
- Rotated 90°, unsupported: 2 m
- Speed, gliding 5 m/s
- Speed, unsupported 15 m/s
- Acceleration, gliding 15 m/s²
- Acceleration, unsupported 25 m/s²



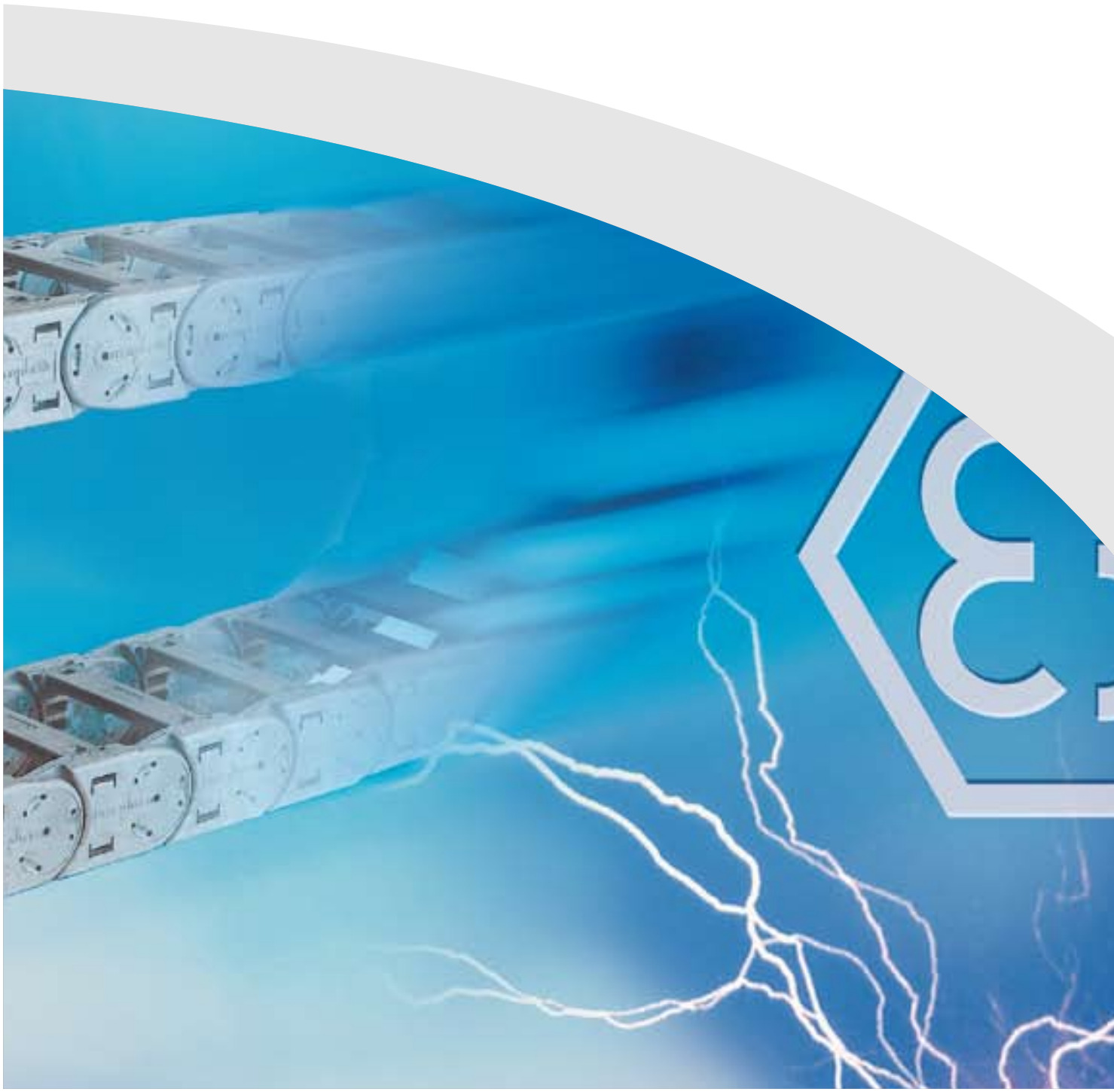
- Travel distance, gliding: 150 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 120 m
- Travel distance, vertical, upright: 6 m
- Rotated 90°, unsupported: 2 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 40 m/s²



- Travel distance, gliding: 150 m
- Travel distance, self supporting: see diagram
- Travel distance, vertical, hanging: 120 m
- Travel distance, vertical, upright: 6 m
- Rotated 90°, unsupported: 3 m
- Speed, gliding 5 m/s
- Speed, unsupported 20 m/s
- Acceleration, gliding 25 m/s²
- Acceleration, unsupported 40 m/s²



Information about ESD cable drag chains



Murrplastik Systemtechnik GmbH has incorporated cable drag chain systems for use in potentially explosive locations in its delivery programme. All cable drag chains and accessories of the standard delivery programme may be delivered as a special range of products providing explosive protection.
Made from a special material, these cable drag chains do not accumulate charge and also have a very high derivation ability for electrostatic charges; as such they not only meet, but largely exceed, the requirements of ATEX 94/9/EC. From June 2003, all components and machines used in potentially explosive areas must be approved under the ATEX directive.

Murrplastik cable drag chains are certified as appliances which provide significant advantages for the user.
In and of themselves, our products are approved components conforming to ATEX 94/9/EC, thus obviating the need for acceptance of the entire machine.

Additional informational materials

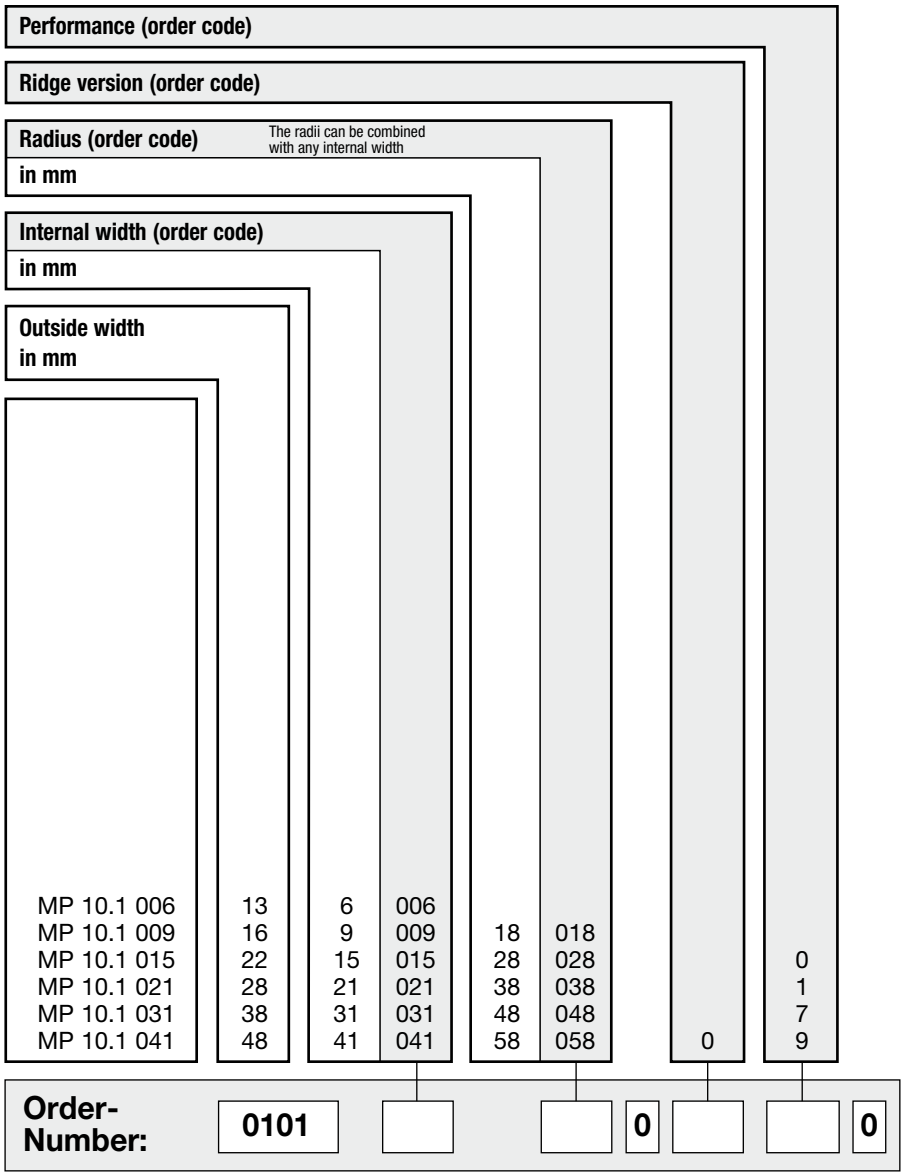
- ATEX Operating Manual
- Info brochure ESD chains
- Usage guidelines

Please request

B450

MP 10.1 - EasyLine

Order variants



Ridge version:

0 PA full-ridged with bias

Version:

0 Standard (PA/black)
1 UL94/V0 (PA/oxide red)
7 ESD (PA/light grey)
9 Custom version

Sample order:

0101 006 018 0000

Internal width = 6 mm
Radius = 18 mm
Ridge version = 0
Version = 0

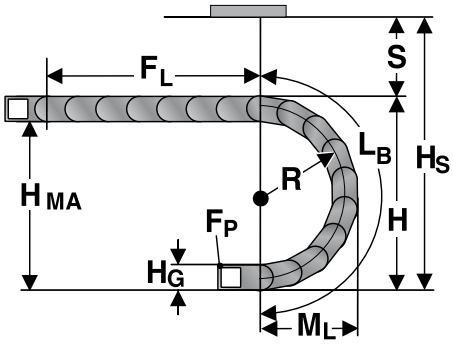
Ideal operating conditions:

- EASY mechanism for simple filling
- Quiet operation
- Unsupported arrangement
- Gliding arrangement

Alternative chain type:

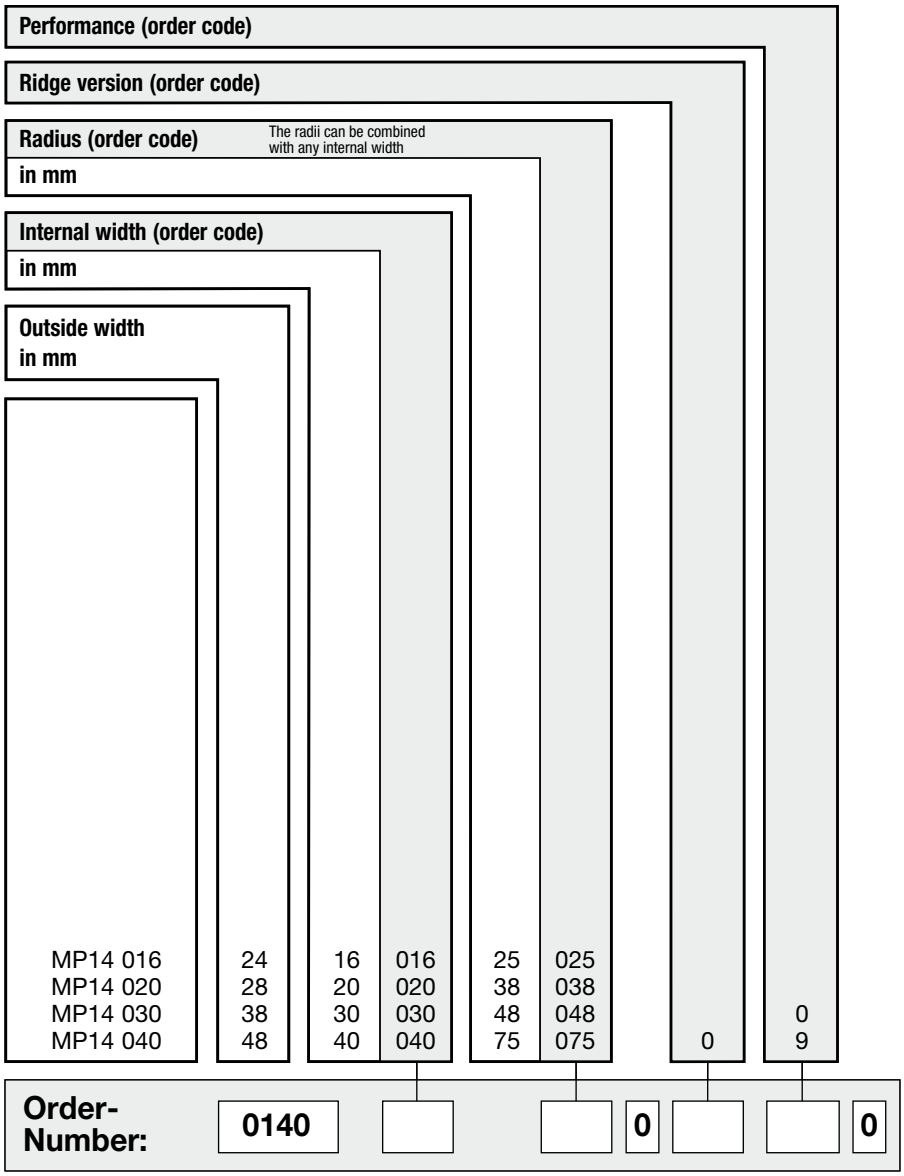
- MP 14/MP 15 Greater self supporting lengths
- MP 14/MP 15 Higher level of stiffness and torsional strength

Installation dimensions (in mm)



Radius R	18	28	38	48	58
Outside height of chain link (H_G)	14	14	14	14	14
Height of bend (H)	50	70	90	110	130
Height of moving end connection (H_{MA})	36	56	76	96	116
Safety margin (S)	10	10	10	10	10
Installation height (H_S)	60	80	100	120	140
Arc projection (M_L)	40	50	60	70	80
Bend length (L_B)	94	125	156	188	219

Order variants



Ridge version:

0 PA full-ridged with bias

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0140 016 025 0000

Internal width = 16 mm
Radius = 25 mm
Ridge version = 0
Version = 0

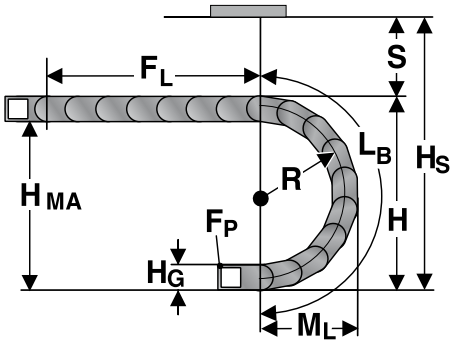
Ideal operating conditions:

- Compact dimensions with opening cover in outside bend
- Quiet operation
- Unsupported arrangement
- Gliding arrangement

Alternative chain type:

- MP 15 Higher level of stiffness and torsional strength
- MP 18. opening cover in inside bend
- MP 18.1/MP 18.2 Great self supporting lengths

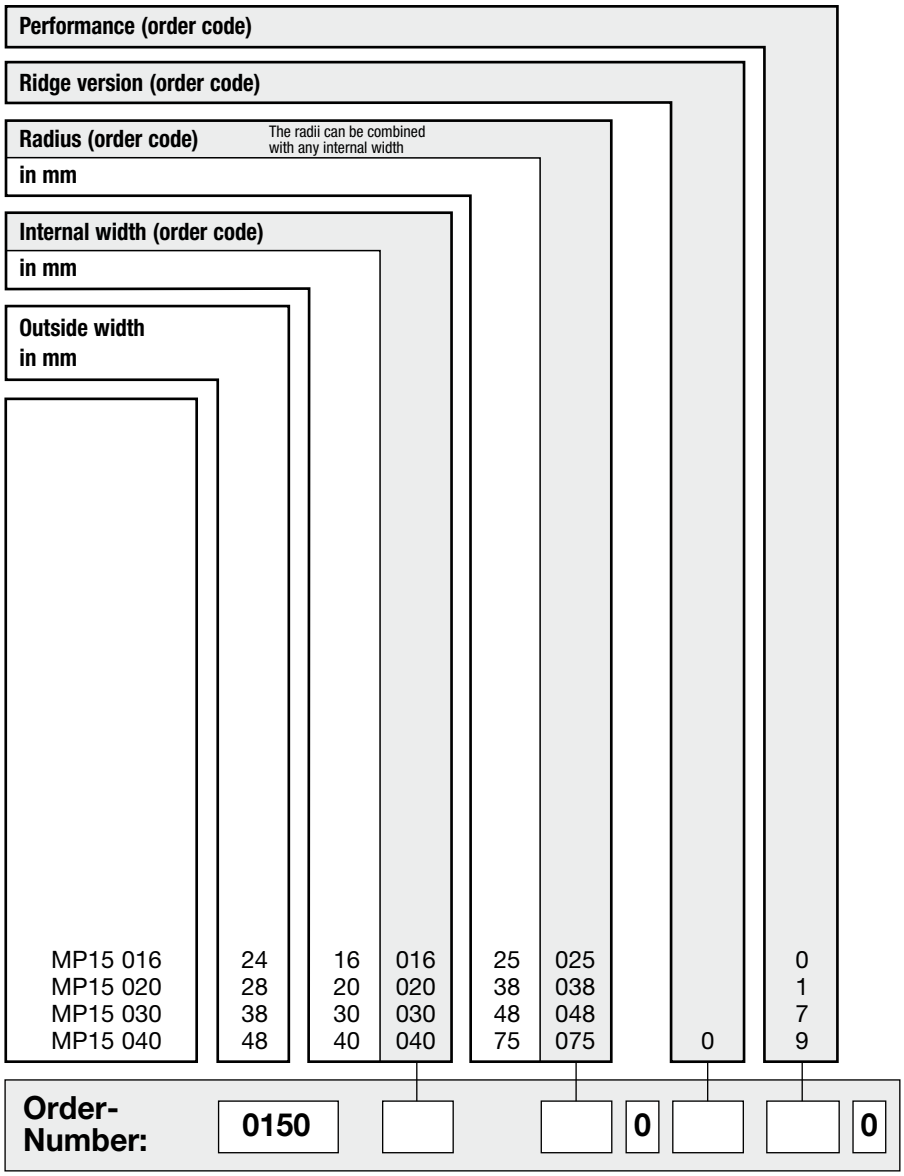
Installation dimensions (in mm)



Radius R	25	38	48	75
Outside height of chain link (H_G)	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)	60	74	84	110
Bend length (L_B)	134	175	207	291

MP 15 - MultiLine

Order variants



Ridge version:

0 PA full-ridged with bias

Version:

0 Standard (PA/black)
1 UL94/V0 (PA/oxide red)
7 ESD (PA/light grey)
9 Custom version

Sample order:

0150 016 025 0000

Internal width = 16 mm
Radius = 25 mm
Ridge version = 0
Version = 0

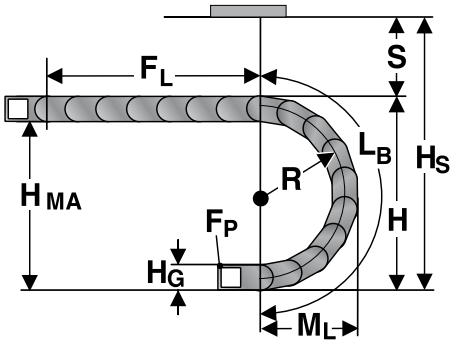
Ideal operating conditions:

- Closed structure gives high degree of stiffness and torsional strength
- Quiet operation
- Compact dimensions with high stability
- Unsupported arrangement
- Gliding arrangement

Alternative chain type:

- MP 14 Cover variant for opening
- MP 18.1/MP 18.2 Great self supporting lengths

Installation dimensions (in mm)



Radius R	25	38	48	75
Outside height of chain link (H_G)	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)	60	74	84	110
Bend length (L_B)	134	175	207	291

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

MP18.1 015	28	15	015				
MP18.1 018	31	18	018				0
MP18.1 025	38	25	025	28	028		1
MP18.1 037	50	37	037	38	038		5
MP18.1 050	63	50	050	48	048		7
MP18.1 070	83	70	070	78	078	0	9

Order-Number:	0181			0			0

Ridge version:

0 PA full-ridged with bias

Version:

0 Standard (PA/black)
1 UL94/V0 (PA/oxide red)
5 Polypropylene (PP/blue)
7 ESD (PA/light grey)
9 Custom version

Sample order:

0181 015 028 0000

Internal width = 15 mm
Radius = 28 mm
Ridge version = 0
Version = 0

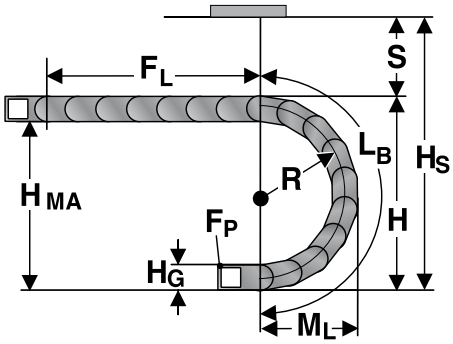
Ideal operating conditions:

- Compact dimensions with opening cover in outside bend
- Quiet operation
- High stability
- Flexible internal separation
- Gliding arrangement
- Unsupported arrangement
- Rotated 90°, unsupported

Alternative chain type:

- MP 18. opening cover in inside bend
- MP 3000 greater unsupported lengths

Installation dimensions (in mm)



Radius R	28	38	48	78
Outside height of chain link (H_G)	23	23	23	23
Height of bend (H)	79	99	119	179
Height of moving end connection (H_{MA})	56	76	96	156
Safety margin (S)	30	30	30	30
Installation height (H_s)	109	129	149	209
Arc projection (M_L)	72	82	92	122
Bend length (L_B)	157	188	220	314

MP 18.2 - 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

MP18.2 015	28	15	015				
MP18.2 018	31	18	018				0
MP18.2 025	38	25	025	28	028		1
MP18.2 037	50	37	037	38	038		5
MP18.2 050	63	50	050	48	048		7
MP18.2 070	83	70	070	78	078	0	9

Order-Number:	0182			0			0

Ridge version:

0 PA full-ridged with bias

Version:

0 Standard (PA/black)
1 UL94/V0 (PA/oxide red)
5 Polypropylene (PP/blue)
7 ESD (PA/light grey)
9 Custom version

Sample order:

0182 015 028 0000

Internal width = 15 mm
Radius = 28 mm
Ridge version = 0
Version = 0

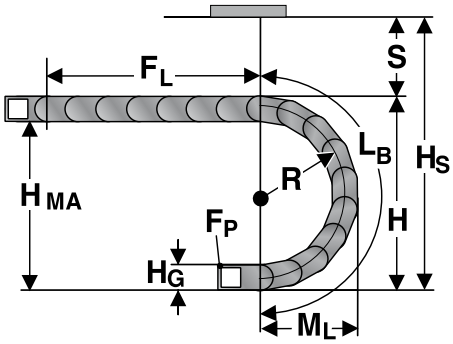
Ideal operating conditions:

- Compact dimensions with opening cover in inside bend
- Quiet operation
- High stability
- Flexible internal separation
- Unsupported arrangement
- Rotated 90°, unsupported

Alternative chain type:

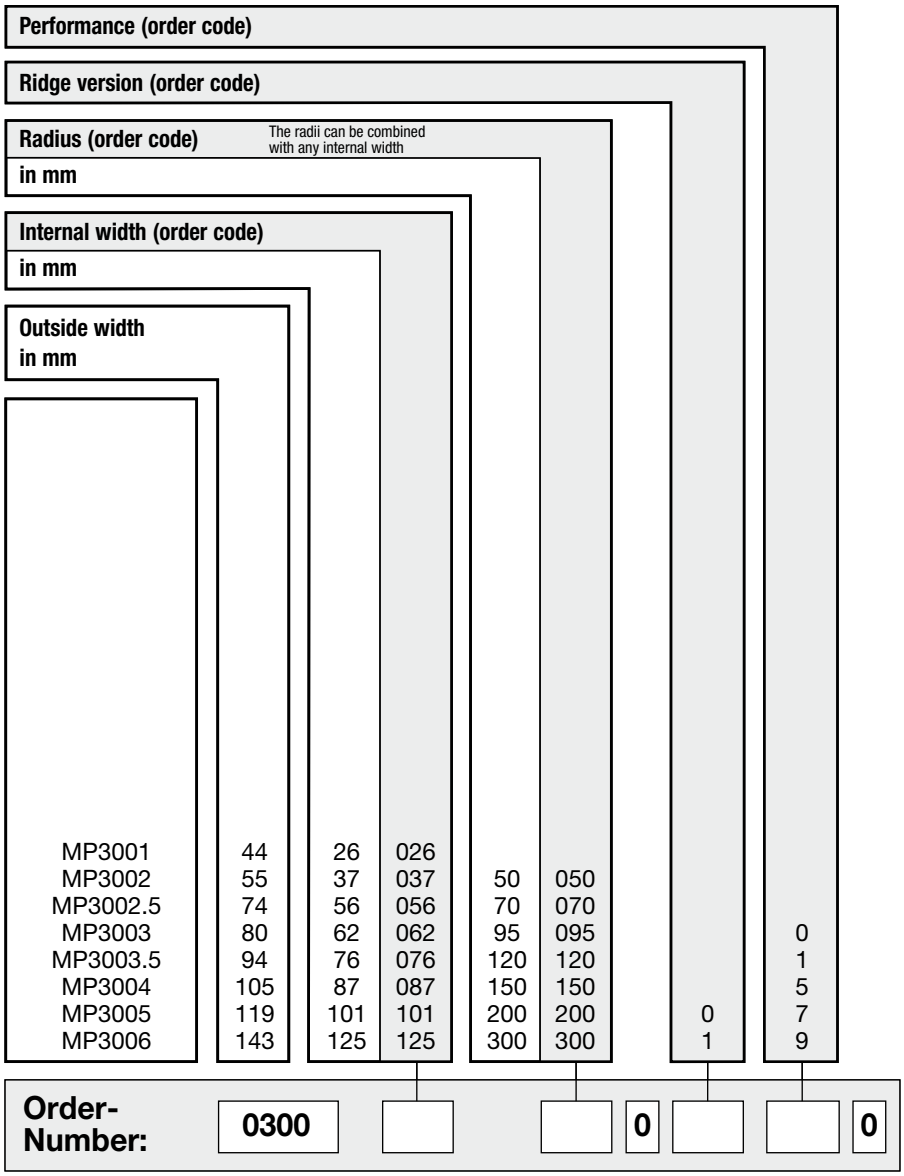
- MP 18.1 Opening cover on outside of radius
- MP 3000 greater unsupported lengths
- MP 18.1 gliding arrangement

Installation dimensions (in mm)



Radius R	28	38	48	78
Outside height of chain link (H_G)	23	23	23	23
Height of bend (H)	79	99	119	179
Height of moving end connection (H_{MA})	56	76	96	156
Safety margin (S)	30	30	30	30
Installation height (H_S)	109	129	149	209
Arc projection (M_L)	72	82	92	122
Bend length (L_B)	157	188	220	314

Order variants



Ridge version:

0 PA full-ridged with bias
1 PA full-ridged without bias

Version:

0 Standard (PA/black)
1 UL94/V0 (PA/oxide red)
5 Polypropylene (PP/blue)
7 ESD (PA/light grey)
9 Custom version

Sample order:

0300 026 050 0000

Internal width = 26 mm
Radius = 50 mm
Ridge version = 0
Version = 0

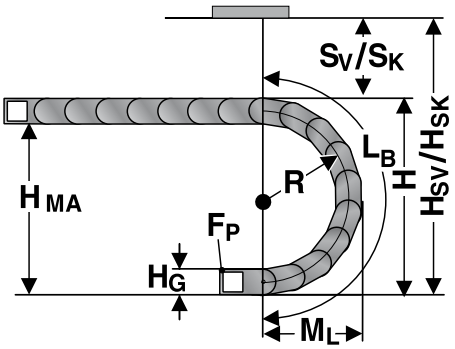
Ideal operating conditions:

- Compact dimensions with opening cover in inside bend
- Quiet operation
- High stability
- Flexible internal separation
- Rotated 90°, unsupported
- Version with bias (RV) for greater self supporting length
- Version with bias (RV) for gliding arrangement

Alternative chain type:

- MP 25 G closed series
- MP 32 can be opened on both sides
- MP 32 variable widths
- MP 32 greater stresses
- MP 32 flange connection (KA-F)
- MP 32 Back radii

Installation dimensions (in mm)



Radius R	50	70	95	120	150	200	300
Outside height of chain link (H_G)	35	35	35	35	35	35	35
Height of bend (H)	135	175	225	275	335	435	635
Height of moving end connection (H_{MA})	100	140	190	240	300	400	600
Safety margin with bias (S_V)	45	45	45	45	45	45	45
Installation height with bias (H_{SV})	180	220	270	320	380	480	680
Safety margin without bias (S_K)	10	10	10	10	10	10	10
Installation height without bias (H_{SK})	145	185	235	285	345	445	645
Arc projection (M_L)	112	132	158	182	212	262	362
Bend length (L_B)	257	320	398	477	571	728	1042

MP 32 - PowerLine

Order variants

Performance (order code)	Outside width in mm	Internal width in mm	Radius (order code) in mm (The radii can be combined with any internal width)		Ridge version (order code) *= standard	Version (order code)
MP32 045	71	45	045			
MP32 062	88	62	062			
MP32 071	97	71	071			
MP32 084	110	84	084			
MP32 096	122	96	096			
MP32 107	133	107	107			
MP32 121	147	121	121			
MP32 133	159	133	133			
MP32 144	170	144	144			
MP32 146	172	146	146			
MP32 158	184	158	158			
MP32 171	197	171	171			
MP32 182	208	182	182			
MP32 196	222	196	196			
MP32 220	246	220	220			
MP32 246	272	246	246			
MP32 296	322	296	296			
MP32 346	372	346	346			
MP32 396	422	396	396	80	080	
MP32 446	472	446	446	100	100	0
MP32 496	522	496	496	120	120	2*
MP32 546	572	546	546	150	150	4
MP32 xxx	inside + 26	>80–600	Alu	200	200	6
				250	250	9

Order-Number:	0320			0			0

Ridge version:

0 PA full-ridged with bias
2* PA half-ridged with bias
4 Alu full-ridged with bias
6 Alu half-ridged with bias
9 Custom version

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0320 045 080 0000

Internal width = 45 mm
Radius = 80 mm
Ridge version = 0
Version = 0

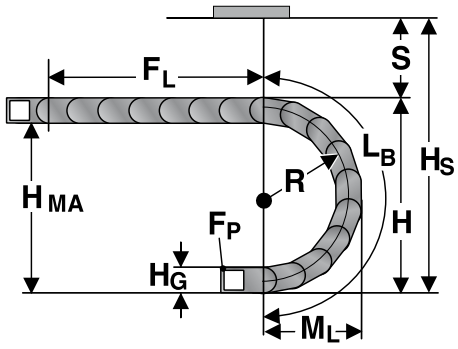
Ideal operating conditions:

- Extreme accelerations
- Extreme speeds
- Extreme self supporting lengths
- Very high additional loads
- Both sides must be opened
- Aluminium frame bridge in variable lengths
- Flexible internal separation
- Rotated 90°, unsupported
- Rotated 90°, horizontal

Alternative chain type:

- MP 36 G closed series
- MP 18. opening cover in inside bend
- MP 35 easier to use

Installation dimensions (in mm)



Radius R	80	100	120	150	200	250
Outside height of chain link (H_G)	53	53	53	53	53	53
Height of bend (H)	233	273	313	373	473	573
Height of moving end connection (H_{MA})	180	220	260	320	420	520
Safety margin (S)	30	30	30	30	30	30
Installation height (H_S)	263	303	343	403	503	603
Arc projection (M_L)	181	201	221	251	301	351
Bend length (L_B)	430	493	556	650	807	964

Order variants

Outside width in mm	Internal width (order code) in mm		Radius (order code) in mm (The radii can be combined with any internal width)		Ridge version (order code) *= standard	Performance (order code)
MP 32.2 045	71	45	045			
MP 32.2 062	88	62	062			
MP 32.2 071	97	71	071			
MP 32.2 084	110	84	084			
MP 32.2 096	122	96	096			
MP 32.2 107	133	107	107			
MP 32.2 121	147	121	121			
MP 32.2 133	159	133	133			
MP 32.2 144	170	144	144			
MP 32.2 146	172	146	146			
MP 32.2 158	184	158	158			
MP 32.2 171	197	171	171			
MP 32.2 182	208	182	182			
MP 32.2 196	222	196	196			
MP 32.2 220	246	220	220			
MP 32.2 246	272	246	246			
MP 32.2 296	322	296	296			
MP 32.2 346	372	346	346			
MP 32.2 396	422	396	396	80	080	
MP 32.2 446	472	446	446	100	100	0
MP 32.2 496	522	496	496	120	120	2*
MP 32.2 546	572	546	546	150	150	4
MP 32.2 xxx	inside + 26	>45–600	Alu	200	200	6
				250	250	9
						0 5 7 9

Order-Number: 0322 [ ] [ ] 0 [ ] [ ] 0

Ridge version:

0 PA full-ridged with bias
2* PA half-ridged with bias
4 Alu full-ridged with bias
6 Alu half-ridged with bias
9 Custom version

Version:

0 Standard (PA/black)
5 Polypropylene (PP/blue)
7 ESD (PA/light grey)
9 Custom version

Sample order:

0322 045 080 0000

Internal width = 45 mm
Radius = 80 mm
Ridge version = 0
Version = 0

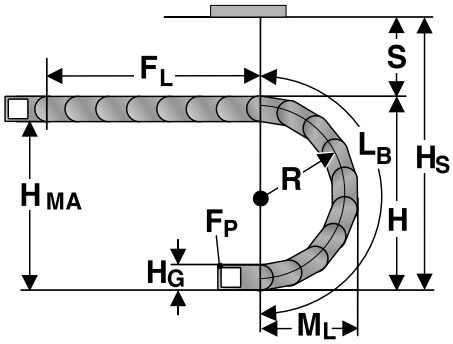
Ideal operating conditions:

- Extreme accelerations
- Extreme speeds
- Very high additional loads
- Both sides must be opened
- Long travel distances
- Extreme self supporting lengths

Alternative chain type:

- MP 32.3 closed series
- MP 35 for easy applications, opens toward inner bend
- MP 32 greater unsupported lengths

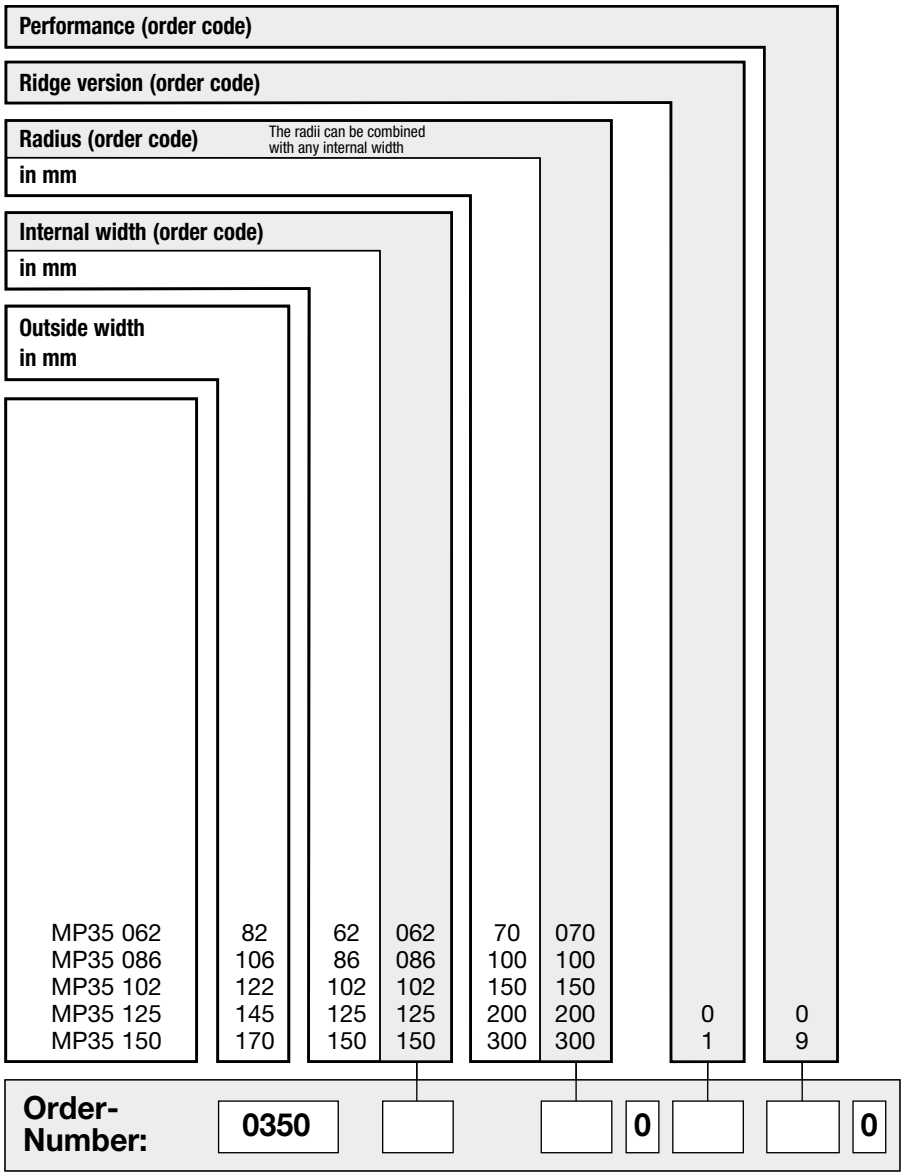
Installation dimensions (in mm)



Radius R	80	100	120	150	200	250
Outside height of chain link (H_G)	53	53	53	53	53	53
Height of bend (H)	233	273	313	373	473	573
Height of moving end connection (H_{MA})	180	220	260	320	420	520
Safety margin (S)	30	30	30	30	30	30
Installation height (H_S)	263	303	343	403	503	603
Arc projection (M_L)	181	201	221	251	301	351
Bend length (L_B)	430	493	556	650	807	964

MP 35 - MultiLine

Order variants



Ridge version:

0 PA full-ridged with bias
1 PA full-ridged without bias

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0350 062 070 0000

Internal width = 62 mm
Radius = 70 mm
Ridge version = 0
Version = 0

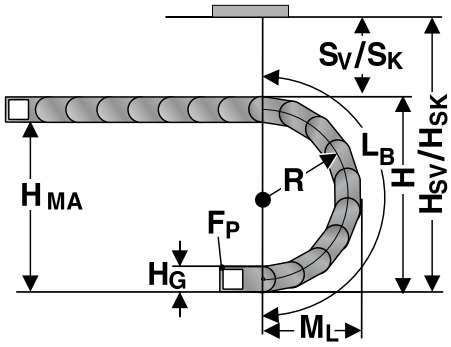
Ideal operating conditions:

- Compact dimensions with
- opening cover in inside bend
- Quiet operation
- High stability
- Flexible internal separation
- Rotated 90°, unsupported
- Version with bias (RV) for greater self supporting length
- Version with bias (RV) for gliding arrangement

Alternative chain type:

- MP 36 G closed series
- MP 32 can be opened on both sides
- MP 32 variable widths
- MP 32 greater stresses
- MP 32 flange connection (KA-F)
- MP 32 Back radii

Installation dimensions (in mm)



Radius R	70	100	150	200	300
Outside height of chain link (H_G)	48	48	48	48	48
Height of bend (H)	188	248	348	448	648
Height of moving end connection (H_{MA})	140	200	300	400	600
Safety margin with bias (S_V)	40	40	40	40	40
Installation height with bias (H_{SV})	228	288	388	488	688
Safety margin without bias (S_K)	15	15	15	15	15
Installation height without bias (H_{SK})	203	263	363	463	663
Arc projection (M_L)	152	182	232	282	382
Bend length (L_B)	353	447	604	761	1075

Order variants

Performance (order code)	Outside width in mm	Internal width (order code) in mm	Radius (order code) in mm (The radii can be combined with any internal width)		Ridge version (order code) *= standard	Version (order code)
MP44 045	78	45	045		0*	
MP44 062	95	62	062		1*	
MP44 084	117	84	084		2	
MP44 105	138	105	105	90	3	
MP44 144	177	144	144	125	4	
MP44 182	215	182	182	150	5	
MP44 xxx	inside + 33	>118-600	Alu	200 250	6 7 9	0 9

Order-Number: 0440 [ ] [ ] 0 [ ] [ ] 0

Ridge version:

0* PA full-ridged with bias
1* PA full-ridged without bias
2 PA half-ridged with bias
3 PA half-ridged without bias
4 Alu full-ridged with bias
5 Alu full-ridged without bias
6 Alu half-ridged with bias
7 Alu half-ridged without bias
9 Custom version

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0440 045 090 0000

Internal width = 45 mm
Radius = 90 mm
Ridge version = 0
Version = 0

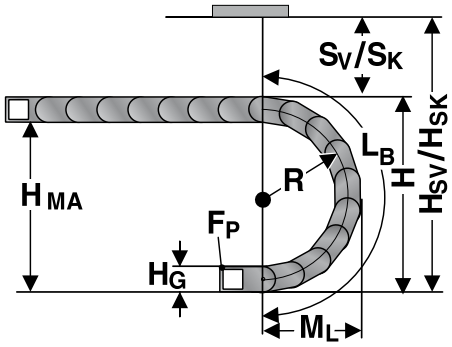
Ideal operating conditions:

- Opening cover in inside/outside bend
- Flexible internal separation
- Aluminium frame bridge in variable lengths
- Gliding arrangement
- Unsupported arrangement
- Quiet operation

Alternative chain type:

- MP 43 G closed series
- MP 41 greater stresses
- MP 41 flange connection (KA-F)
- MP 41 Back radii

Installation dimensions (in mm)



Radius R	90	125	150	200	250
Outside height of chain link (H_G)	60	60	60	60	60
Height of bend (H)	240	310	360	460	560
Height of moving end connection (H_{MA})	180	250	300	400	500
Safety margin with bias (S_V)	38	38	38	38	38
Installation height with bias (H_{SV})	278	348	398	498	598
Safety margin without bias (S_K)	13	13	13	13	13
Installation height without bias (H_{SK})	253	323	373	473	573
Arc projection (M_L)	196	230	256	306	356
Bend length (L_B)	452	562	641	798	955

Order variants

Performance (order code)

Ridge version (order code) *= standard

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

in mm

Internal width (order code)

in mm

Outside width in mm

MP41 045	77	45	045				
MP41 062	94	62	062				
MP41 071	103	71	071				
MP41 084	116	84	084				
MP41 096	128	96	096				
MP41 107	139	107	107				
MP41 121	153	121	121				
MP41 133	167	133	133				
MP41 144	176	144	144				
MP41 146	178	146	146				
MP41 158	192	158	158				
MP41 171	203	171	171				
MP41 182	214	182	182				
MP41 196	228	196	196				
MP41 220	252	220	220				
MP41 246	278	246	246				
MP41 296	328	296	296				
MP41 346	378	346	346				
MP41 396	428	396	396	90	090		
MP41 446	478	446	446	120	120	0	
MP41 496	528	496	496	150	150	2*	
MP41 546	578	546	546	200	200	4	
MP41 xxx	inside + 32	>80–600	Alu	250	250	6	0
				300	300	9	9

Order Number:	0410			0			0

Ridge version:

0 PA full-ridged with bias
2* PA half-ridged with bias
4 Alu full-ridged with bias
6 Alu half-ridged with bias
9 Custom version

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0410 045 090 0000

Internal width = 45 mm
Radius = 90 mm
Ridge version = 0
Version = 0

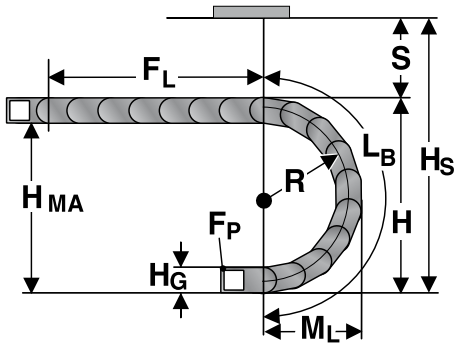
Ideal operating conditions:

- Extreme accelerations
- Extreme speeds
- Extreme self supporting lengths
- Very high additional loads
- Both sides must be opened
- Aluminium frame bridge in variable lengths
- Flexible internal separation
- Rotated 90°, unsupported
- Rotated 90°, horizontal

Alternative chain type:

- MP 44 version with/without bias
- MP 41.2 simpler assembly

Installation dimensions (in mm)



Radius R	90	120	150	200	250	300
Outside height of chain link (H_G)	62	62	62	62	62	62
Height of bend (H)	252	312	372	472	572	672
Height of moving end connection (H_{MA})	190	250	310	410	510	610
Safety margin (S)	30	30	30	30	30	30
Installation height (H_S)	282	342	402	502	602	702
Arc projection (M_L)	203	233	263	313	363	413
Bend length (L_B)	473	567	661	818	975	1132

MP 41.2 - PowerLine 2nd generation

Order variants

Performance (order code)	Outside width in mm	Internal width (order code) in mm	Internal width in mm	Radius (order code) in mm (The radii can be combined with any internal width)		Ridge version (order code) *= standard	Version (order code)
MP41.2 045	77	45	045			0	0
MP41.2 062	94	62	062			1	5
MP41.2 071	103	71	071			2*	7
MP41.2 084	116	84	084			3*	9
MP41.2 096	128	96	096			4	
MP41.2 107	139	107	107			5	
MP41.2 121	153	121	121			6	
MP41.2 133	167	133	133			7	
MP41.2 144	176	144	144			9	
MP41.2 146	178	146	146				
MP41.2 158	192	158	158				
MP41.2 171	203	171	171				
MP41.2 182	214	182	182				
MP41.2 196	228	196	196				
MP41.2 220	252	220	220				
MP41.2 246	278	246	246				
MP41.2 296	328	296	296				
MP41.2 346	378	346	346				
MP41.2 396	428	396	396	90	090		
MP41.2 446	478	446	446	120	120		
MP41.2 496	528	496	496	150	150		
MP41.2 546	578	546	546	200	200		
MP41.2 xxx	inside + 32	>80–600	Alu	250	250		
				300	300		

Order-Number:	0412			0			0

Ridge version:

0 PA full-ridged with bias
1 PA full-ridged without bias
2* PA half-ridged with bias
3* PA half-ridged without bias
4 Alu full-ridged with bias
5 Alu full-ridged without bias
6 Alu half-ridged with bias
7 Alu half-ridged without bias
9 Custom version

Version:

0 Standard (PA/black)
5 Polypropylene (PP/blue)
7 ESD (PA/light grey)
9 Custom version

Sample order:

0412 045 090 0000

Internal width = 45 mm
Radius = 90 mm
Ridge version = 0
Version = 0

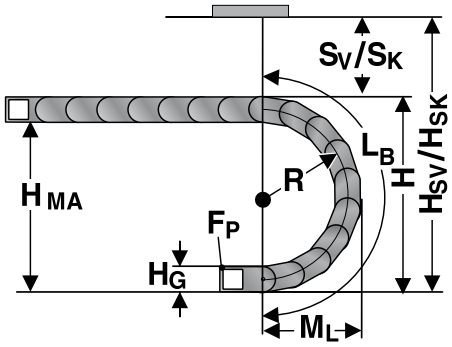
Ideal operating conditions:

- Extreme accelerations
- Extreme speeds
- Very high additional loads
- Both sides must be opened
- Aluminium frame bridge in variable lengths
- Flexible internal separation

Alternative chain type:

- MP 44 version with/without bias
- MP 41 greater unsupported length

Installation dimensions (in mm)



Radius R	90	120	150	200	250	300
Outside height of chain link (H_G)	62	62	62	62	62	62
Height of bend (H)	252	312	372	472	572	672
Height of moving end connection (H_{MA})	190	250	310	410	510	610
Safety margin with bias (S_V)	30	30	30	30	30	30
Installation height with bias (H_{SV})	282	342	402	502	602	702
Safety margin without bias (S_K)	15	15	15	15	15	15
Installation height without bias (H_{SK})	267	327	387	487	587	687
Arc projection (M_L)	203	233	263	313	363	413
Bend length (L_B)	473	567	661	818	975	1132

MP 52.1 - PowerLine

Order variants

Performance (order code)	Outside width in mm	Internal width (order code) in mm	Radius (order code) in mm (The radii can be combined with any internal width)	Ridge version (order code) *= standard	Version (order code)
MP52.1 045	77	45	045		
MP52.1 062	94	62	062		
MP52.1 071	103	71	071		
MP52.1 084	116	84	084		
MP52.1 096	128	96	096		
MP52.1 107	139	107	107		
MP52.1 121	153	121	121		
MP52.1 133	169	133	133		
MP52.1 144	176	144	144		
MP52.1 146	178	146	146		
MP52.1 158	194	158	158		
MP52.1 171	203	171	171		
MP52.1 182	214	182	182		
MP52.1 196	228	196	196		
MP52.1 246	278	246	246		0
MP52.1 296	328	296	296		1
MP52.1 346	378	346	346		2*
MP52.1 396	428	396	396	100 100	3*
MP52.1 446	478	446	446	150 150	4
MP52.1 496	528	496	496	200 200	5
MP52.1 546	578	546	546	250 250	6
MP52.1 xxx	inside + 32	>80–600	Alu	300 300 350 350	7 9	0 9

Order-Number:	0521			0			0

Ridge version:

0 PA full-ridged with bias
1 PA full-ridged without bias
2* PA half-ridged with bias
3* PA half-ridged without bias
4 Alu full-ridged with bias
5 Alu full-ridged without bias
6 Alu half-ridged with bias
7 Alu half-ridged without bias
9 Custom version

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0521 045 100 0000

Internal width = 45 mm
Radius = 100 mm
Ridge version = 0
Version = 0

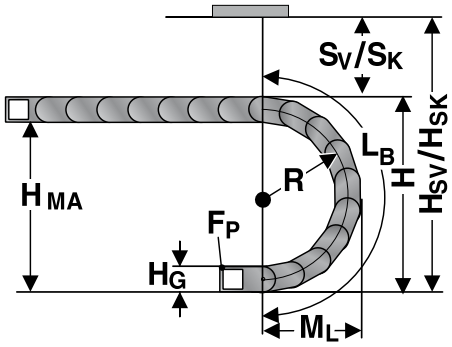
Ideal operating conditions:

- Extreme accelerations
- Extreme speeds
- Extreme self supporting lengths
- Very high additional loads
- Both sides must be opened
- Aluminium frame bridge in variable lengths
- Flexible internal separation
- Rotated 90°, unsupported
- Rotated 90°, horizontal
- Version with/without bias

Alternative chain type:

- MP 65 G closed series
- MP 66 easier to use
- MP 52.2 simpler assembly

Installation dimensions (in mm)



Radius R	100	150	200	250	300	350
Outside height of chain link (H_G)	74	74	74	74	74	74
Height of bend (H)	304	404	504	604	704	804
Height of moving end connection (H_{MA})	230	330	430	530	630	730
Safety margin with bias (S_V)	46	46	46	46	46	46
Installation height with bias (H_{SV})	350	450	550	650	750	850
Safety margin without bias (S_K)	16	16	16	16	16	16
Installation height without bias (H_{SK})	320	420	520	620	720	820
Arc projection (M_L)	243	293	343	393	443	493
Bend length (L_B)	568	725	882	1039	1196	1353

MP 52.2 - PowerLine 2nd generation

Order variants

Outside width in mm	Internal width in mm	Radius in mm (The radii can be combined with any internal width)	Ridge version (order code) *= standard	Performance (order code)
MP52.2 045	77	45	045	100	100	0	0
MP52.2 062	94	62	062	150	150	1	5
MP52.2 071	103	71	071	175	175	2*	7
MP52.2 084	116	84	084	200	200	3*	9
MP52.2 096	128	96	096	250	250	4	
MP52.2 107	139	107	107	300	300	5	
MP52.2 121	153	121	121	350	350	6	
MP52.2 133	165	133	133			7	
MP52.2 144	176	144	144			9	
MP52.2 146	178	146	146				
MP52.2 158	190	158	158				
MP52.2 171	203	171	171				
MP52.2 182	214	182	182				
MP52.2 196	228	196	196				
MP52.2 220	252	220	220				
MP52.2 246	278	246	246				
MP52.2 296	328	296	296				
MP52.2 346	378	346	346				
MP52.2 396	428	396	396				
MP52.2 446	478	446	446				
MP52.2 496	528	496	496				
MP52.2 546	578	546	546				
MP52.2 999	inside + 32	>80–600	Alu				

Order-Number:	0522			0		0

Ridge version:

0 PA full-ridged with bias
1 PA full-ridged without bias
2* PA half-ridged with bias
3* PA half-ridged without bias
4 Alu full-ridged with bias
5 Alu full-ridged without bias
6 Alu half-ridged with bias
7 Alu half-ridged without bias
9 Custom version

Version:

0 Standard (PA/black)
5 Polypropylene (PP/blue)
7 ESD (PA/light grey)
9 Custom version

Sample order:

0522 045 100 0000

Internal width = 45 mm
Radius = 100 mm
Ridge version = 0
Version = 0

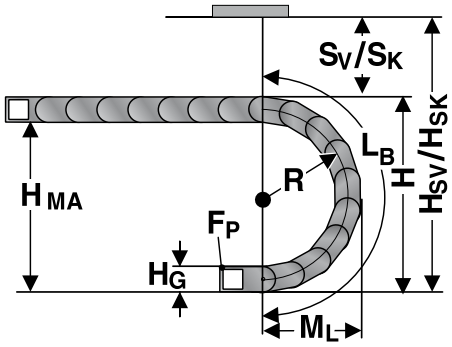
Ideal operating conditions:

- Extreme accelerations
- Extreme speeds
- Very high additional loads
- Both sides must be opened
- Aluminium frame bridge in variable lengths
- Flexible internal separation
- Version with/without bias

Alternative chain type:

- MP 65 G closed series
- MP 66 easier to use
- MP 52.1 greater unsupported length

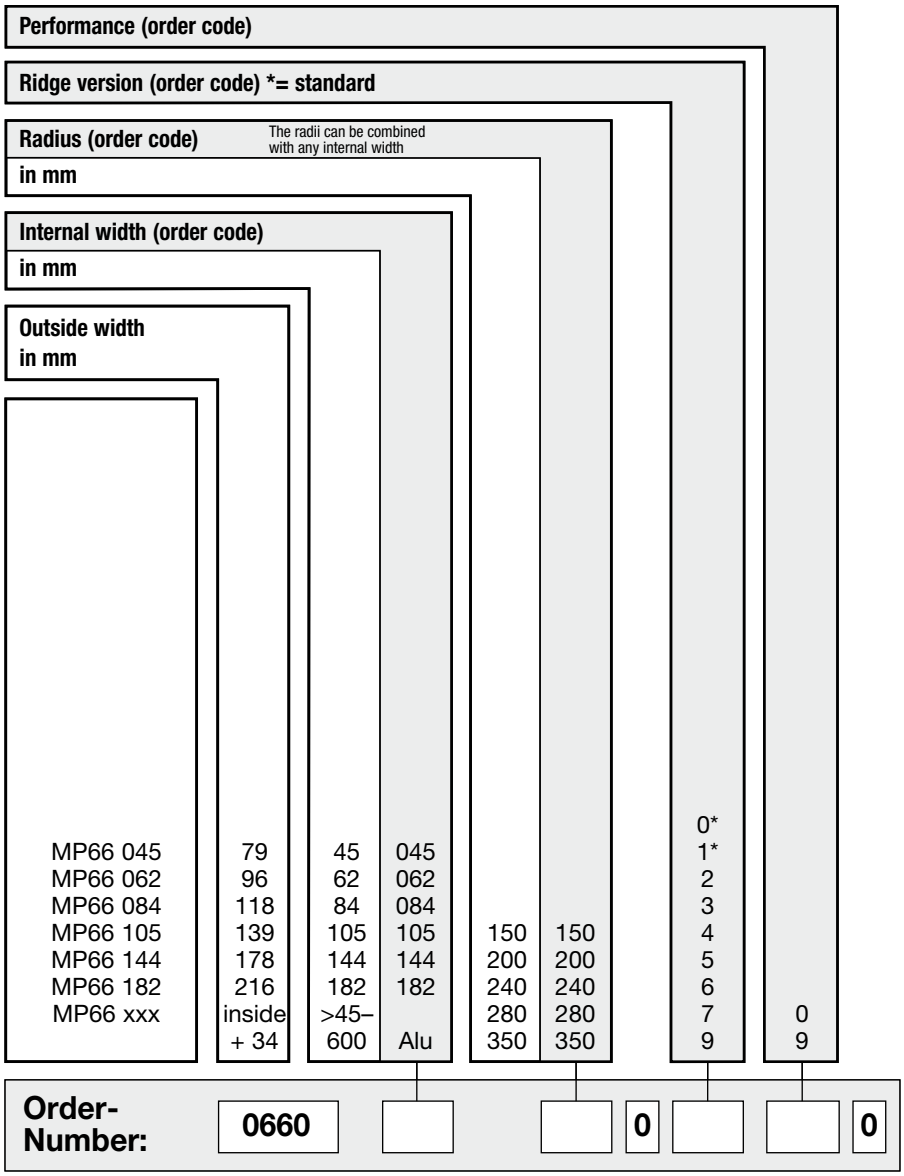
Installation dimensions (in mm)



Radius R	100	150	175	200	250	300	350
Outside height of chain link (H_G)	74	74	74	74	74	74	74
Height of bend (H)	304	404	454	504	604	704	804
Height of moving end connection (H_{MA})	230	330	380	430	530	630	730
Safety margin with bias (S_V)	46	46	46	46	46	46	46
Installation height with bias (H_{SV})	350	450	500	550	650	750	850
Safety margin without bias (S_K)	16	16	16	16	16	16	16
Installation height without bias (H_{SK})	320	420	470	520	620	720	820
Arc projection (M_L)	243	293	318	343	393	443	493
Bend length (L_B)	568	725	804	882	1039	1196	1353

MP 66 - MultiLine

Order variants



Ridge version:

0* PA full-ridged with bias
1* PA full-ridged without bias
2 PA half-ridged with bias
3 PA half-ridged without bias
4 Alu full-ridged with bias
5 Alu full-ridged without bias
6 Alu half-ridged with bias
7 Alu half-ridged without bias
9 Custom version

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0660 045 150 0000

Internal width = 45 mm
Radius = 150 mm
Ridge version = 0
Version = 0

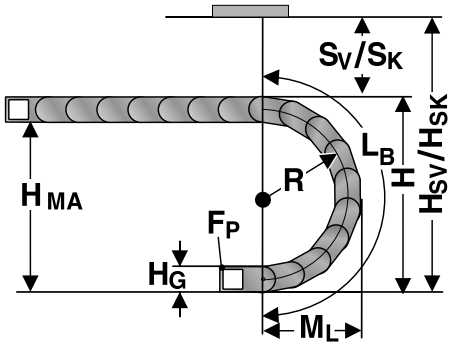
Ideal operating conditions:

- Opening cover in inside/outside bend
- Flexible internal separation
- Aluminium frame bridge in variable lengths
- Gliding arrangement
- Unsupported arrangement
- Quiet operation

Alternative chain type:

- MP 65 G closed series
- MP 62.1/MP 62.2 greater stresses
- MP 62.1/MP 62.2 flange connection (KA-F)

Installation dimensions (in mm)



Radius R	150	200	240	280	350
Outside height of chain link (H_G)	80	80	80	80	80
Height of bend (H)	380	480	560	640	780
Height of moving end connection (H_{MA})	300	400	480	560	700
Safety margin with bias (S_V)	50	50	50	50	50
Installation height with bias (H_{SV})	430	530	610	690	830
Safety margin without bias (S_K)	15	15	15	15	15
Installation height without bias (H_{SK})	395	495	575	655	795
Arc projection (M_L)	282	332	372	412	482
Bend length (L_B)	688	845	971	1096	1316

Order variants

Performance (order code)

Ridge version (order code) *= standard

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

Internal width (order code)
in mm

Outside width
in mm

MP 62.1 118	150	118	118				
MP 62.1 143	175	143	143				
MP 62.1 168	200	168	168				
MP 62.1 193	225	193	193				
MP 62.1 218	250	218	218				
MP 62.1 243	275	243	243				
MP 62.1 268	300	268	268				
MP 62.1 293	325	293	293			0	
MP 62.1 318	350	318	318			1	
MP 62.1 343	375	343	343			2*	
MP 62.1 368	400	368	368	150	150	3*	
MP 62.1 418	450	418	418	200	200	4	
MP 62.1 468	500	468	468	250	250	5	
MP 62.1 518	550	518	518	300	300	6	
MP 62.1 xxx	inside + 32	>118-600	Alu	400 500	400 500	7 9	0 9

Order-Number:	0620			0			0

Ridge version:

0 PA full-ridged with bias
1 PA full-ridged without bias
2* PA half-ridged with bias
3* PA half-ridged without bias
4 Alu full-ridged with bias
5 Alu full-ridged without bias
6 Alu half-ridged with bias
7 Alu half-ridged without bias
9 Custom version

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0620 118 150 0000

Internal width = 118 mm
Radius = 150 mm
Ridge version = 0
Version = 0

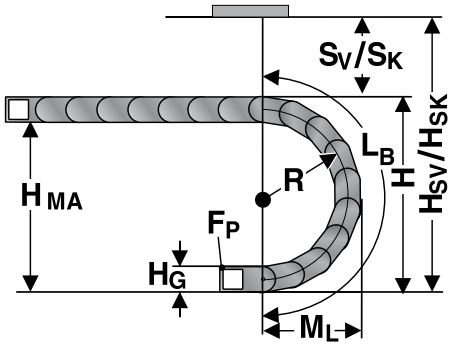
Ideal operating conditions:

- Extreme accelerations
- Extreme speeds
- Extreme self supporting lengths
- Very high additional loads
- Both sides must be opened
- Aluminium frame bridge in variable lengths
- Flexible internal separation
- Rotated 90°, unsupported
- Rotated 90°, horizontal
- Version with/without bias

Alternative chain type:

- MP 65 G closed series
- MP 66 easier to use
- MP 62.2 simpler assembly

Installation dimensions (in mm)



Radius R	150	200	250	300	400	500
Outside height of chain link (H_G)	94	94	94	94	94	94
Height of bend (H)	424	524	624	724	924	1124
Height of moving end connection (H_{MA})	330	430	530	630	830	1030
Safety margin with bias (S_V)	50	50	50	50	50	50
Installation height with bias (H_{SV})	474	574	674	774	974	1174
Safety margin without bias (S_K)	20	20	20	20	20	20
Installation height without bias (H_{SK})	444	544	644	744	944	1144
Arc projection (M_L)	312	362	412	462	562	662
Bend length (L_B)	766	923	1080	1237	1551	1865

MP 62.2 - HeavyLine 2nd generation

Order variants

Outside width in mm	Internal width (order code) in mm		Radius (order code) in mm (The radii can be combined with any internal width)		Ridge version (order code) *= standard	Performance (order code)
MP 62.2 118	150	118	118			
MP 62.2 143	175	143	143			
MP 62.2 168	200	168	168			
MP 62.2 193	225	193	193			
MP 62.2 218	250	218	218			
MP 62.2 243	275	243	243			
MP 62.2 268	300	268	268			
MP 62.2 293	325	293	293		0	
MP 62.2 318	350	318	318		1	
MP 62.2 343	375	343	343	150	150	2*	
MP 62.2 368	400	368	368	200	200	3*	
MP 62.2 418	450	418	418	250	250	4	
MP 62.2 468	500	468	468	300	300	5	0
MP 62.2 518	550	518	518	350	350	6	5
MP 62.2 xxx	inside + 32	>118-600	Alu	400	400	7	7
				500	500	9	9
Order-Number:	0622					0	0

Ridge version:

0 PA full-ridged with bias
1 PA full-ridged without bias
2* PA half-ridged with bias
3* PA half-ridged without bias
4 Alu full-ridged with bias
5 Alu full-ridged without bias
6 Alu half-ridged with bias
7 Alu half-ridged without bias
9 Custom version

Version:

0 Standard (PA/black)
5 Polypropylene (PP/blue)
7 ESD (PA/light grey)
9 Custom version

Sample order:

0622 118 150 0000

Internal width = 118 mm
Radius = 150 mm
Ridge version = 0
Version = 0

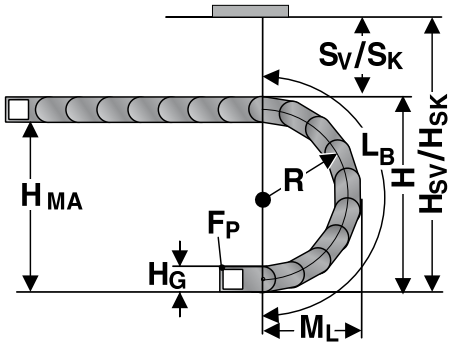
Ideal operating conditions:

- Extreme accelerations
- Extreme speeds
- Very high additional loads
- Both sides must be opened
- Aluminium frame bridge in variable lengths
- Flexible internal separation
- Version with/without bias

Alternative chain type:

- MP 65 G closed series
- MP 66 easier to use
- MP 62.1 greater unsupported length

Installation dimensions (in mm)



Radius R	150	200	250	300	350	400	500
Outside height of chain link (H_G)	94	94	94	94	94	94	94
Height of bend (H)	424	524	624	724	824	924	1124
Height of moving end connection (H_{MA})	330	430	530	630	730	830	1030
Safety margin with bias (S_V)	50	50	50	50	50	50	50
Installation height with bias (H_{SV})	474	574	674	774	874	974	1174
Safety margin without bias (S_K)	20	20	20	20	20	20	20
Installation height without bias (H_{SK})	444	544	644	744	844	944	1144
Arc projection (M_L)	312	362	412	462	512	562	662
Bend length (L_B)	766	923	1080	1237	1394	1551	1865

Order variants

Performance (order code)

Ridge version (order code) *= standard

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

Internal width (order code)
in mm

Outside width
in mm

MP 72 118	150	118	118				
MP 72 143	175	143	143				
MP 72 168	200	168	168				
MP 72 193	225	193	193				
MP 72 218	250	218	218				
MP 72 243	275	243	243				
MP 72 268	300	268	268				
MP 72 293	325	293	293				
MP 72 318	350	318	318				
MP 72 343	375	343	343				
MP 72 368	400	368	368	150	150		
MP 72 418	450	418	418	200	200	0	
MP 72 468	500	468	468	250	250	2*	
MP 72 518	550	518	518	300	300	4	
MP 72 xxx	inside + 32	>118-600	Alu	400	400	6	0
				500	500	9	9

Order-Number:	0720			0			0

Ridge version:

0 PA full-ridged with bias
2* PA half-ridged with bias
4 Alu full-ridged with bias
6 Alu half-ridged with bias
9 Custom version

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0720 118 150 0000

Internal width = 118 mm
Radius = 150 mm
Ridge version = 0
Version = 0

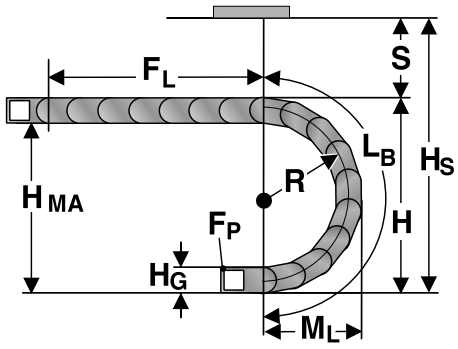
Ideal operating conditions:

- Extreme accelerations
- Extreme speeds
- Extreme self supporting lengths
- Very high additional loads
- Both sides must be opened
- Aluminium frame bridge in variable lengths
- Flexible internal separation
- Rotated 90°, unsupported
- Rotated 90°, horizontal
- Version with/without bias

Alternative chain type:

- MP 62.2/MP 82.2 simpler assembly

Installation dimensions (in mm)



Radius R	150	200	250	300	400	500
Outside height of chain link (H_G)	102	102	102	102	102	102
Height of bend (H)	422	522	622	722	922	1122
Height of moving end connection (H_{MA})	320	420	520	620	820	1020
Safety margin (S)	20	20	20	20	20	20
Installation height (H_s)	442	542	642	742	942	1142
Arc projection (M_L)	311	361	411	461	561	661
Bend length (L_B)	763	920	1077	1234	1548	1862

MP 82.2 - PowerLine 2nd generation

Order variants

Performance (order code)	Outside width in mm	Internal width (order code) in mm	Radius (order code) in mm (The radii can be combined with any internal width)	Ridge version (order code) *= standard	Version (order code)
MP 82.2 118	163	118	118		
MP 82.2 143	188	143	143		
MP 82.2 168	213	168	168		
MP 82.2 193	238	193	193		
MP 82.2 218	263	218	218		
MP 82.2 243	288	243	243		
MP 82.2 268	313	268	268		
MP 82.2 293	338	293	293	0	
MP 82.2 318	363	318	318	150 / 150 1	
MP 82.2 343	388	343	343	200 / 200 2*	
MP 82.2 368	413	368	368	250 / 250 3*	
MP 82.2 418	463	418	418	300 / 300 4	
MP 82.2 468	513	468	468	350 / 350 5	0
MP 82.2 518	563	518	518	400 / 400 6	5
MP 82.2 xxx	inside + 45	>118-600	Alu	500 / 500 7	7
				650 / 650 9	9

Order-Number: 0822 [ ] [ ] 0 [ ] [ ] 0

Ridge version:

0 PA full-ridged with bias
1 PA full-ridged without bias
2* PA half-ridged with bias
3* PA half-ridged without bias
4 Alu full-ridged with bias
5 Alu full-ridged without bias
6 Alu half-ridged with bias
7 Alu half-ridged without bias
9 Custom version

Version:

0 Standard (PA/black)
5 Polypropylene (PP/blue)
7 ESD (PA/light grey)
9 Custom version

Sample order:

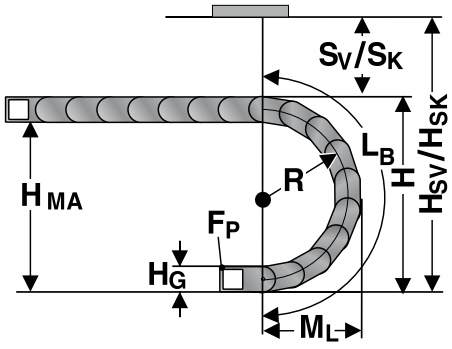
0822 118 150 0000

Internal width = 118 mm
Radius = 150 mm
Ridge version = 0
Version = 0

Ideal operating conditions:

- Extreme accelerations
- Extreme speeds
- Very high additional loads
- Both sides must be opened
- Aluminium frame bridge in variable lengths
- Flexible internal separation
- Version with/without bias

Installation dimensions (in mm)



Radius R	150	200	250	300	350	400	500	650
Outside height of chain link (H_G)	112	112	112	112	112	112	112	112
Height of bend (H)	422	522	622	722	822	922	1122	1422
Height of moving end connection (H_{MA})	310	410	510	610	710	810	1010	1310
Safety margin with bias (S_V)	50	50	50	50	50	50	50	50
Installation height with bias (H_{SV})	472	572	672	772	872	972	1172	1472
Safety margin without bias (S_K)	30	30	30	30	30	30	30	30
Installation height without bias (H_{SK})	452	552	652	752	852	952	1152	1452
Arc projection (M_L)	329	379	429	479	529	579	679	829
Bend length (L_B)	781	938	1095	1252	1409	1566	1880	2351

MP 102.2 - HeavyLine 2nd generation

Order variants

Performance (order code)

Ridge version (order code) *= standard

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

in mm

Internal width (order code)

in mm

Outside width
in mm

MP102.2 118	164	118	118				
MP102.2 143	189	143	143				
MP102.2 168	214	168	168				
MP102.2 192	239	193	193				
MP102.2 218	264	218	218				
MP102.2 243	289	243	243				
MP102.2 268	314	268	268				
MP102.2 293	339	293	293				
MP102.2 318	364	318	318				
MP102.2 343	389	343	343				
MP102.2 368	414	368	368				
MP102.2 418	464	418	418			0	
MP102.2 468	514	468	468	250	250	2*	
MP102.2 518	564	518	518	300	300	4	
MP102.2 xxx	inside + 46	>118-600	Alu	400	400	6	0
				500	500	9	9

Order-Number:	1022			0			0

Ridge version:

0 PA full-ridged with bias
2* PA half-ridged with bias
4 Alu full-ridged with bias
6 Alu half-ridged with bias
9 Custom version

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

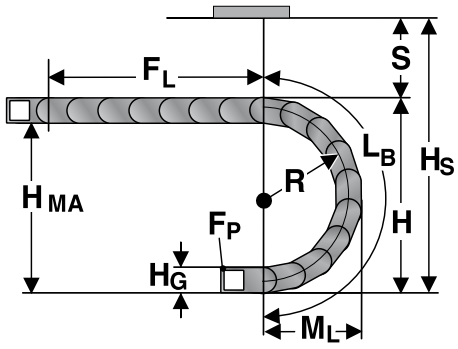
1022 118 250 0000

Internal width = 118 mm
Radius = 250 mm
Ridge version = 0
Version = 0

Ideal operating conditions:

- Extreme accelerations
- Extreme speeds
- Extreme self supporting lengths
- Very high additional loads
- Both sides must be opened
- Aluminium frame bridge in variable lengths
- Flexible internal separation
- Rotated 90°, unsupported
- Rotated 90°, horizontal
- version with bias (RV) for greater self supporting length
- Version with bias (RV) for gliding arrangement

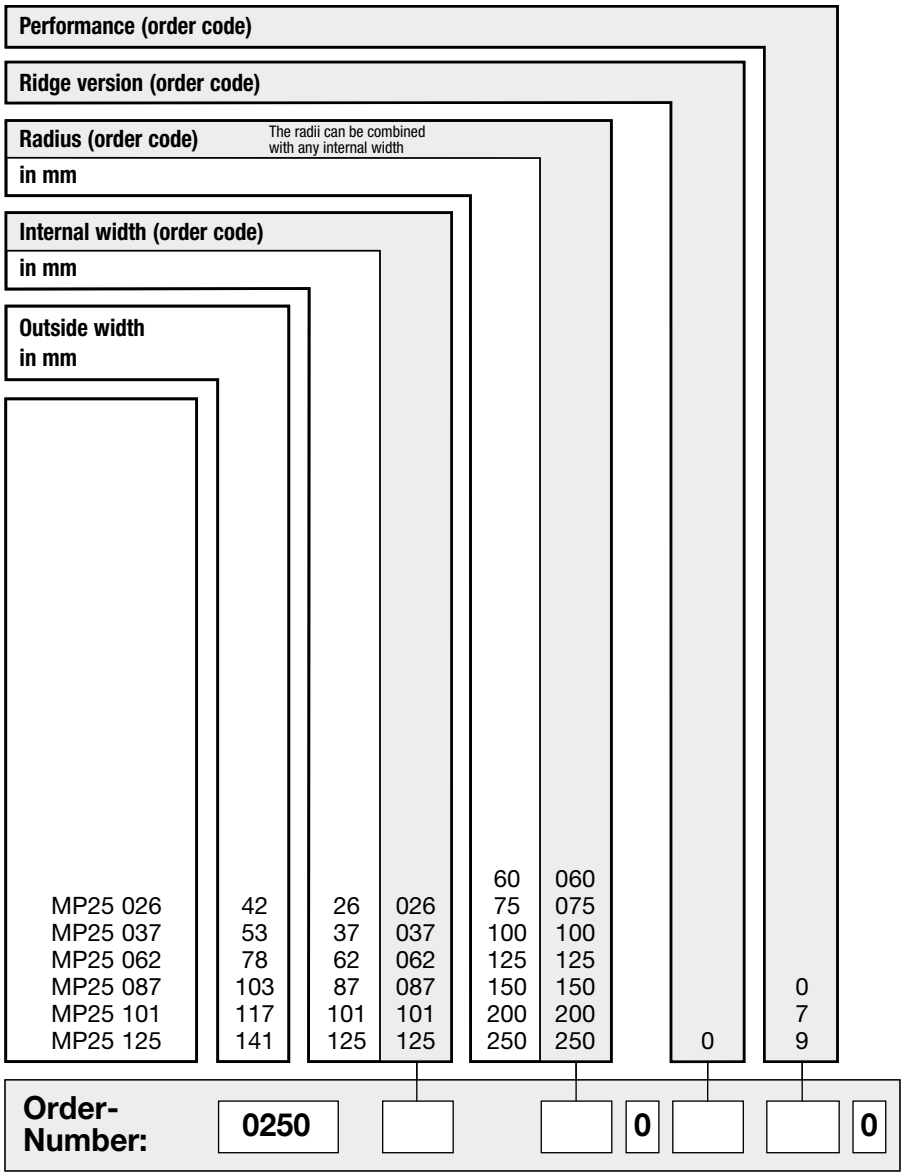
Installation dimensions (in mm)



Radius R	250	300	400	500
Outside height of chain link (H_G)	135	135	135	135
Height of bend (H)	655	755	955	1155
Height of moving end connection (H_{MA})	520	620	820	1020
Safety margin (S)	50	50	50	50
Installation height (H_s)	705	805	1005	1205
Arc projection (M_L)	468	518	618	718
Bend length (L_B)	1169	1326	1640	1954

MP 25 G - SafeLine

Order variants



Ridge version:

0 PA full-ridged with bias

Version:

0 Standard (PA/black)
7 ESD (PA/light grey)
9 Custom version

Sample order:

0250 026 060 0000

Internal width = 26 mm
Radius = 60 mm
Ridge version = 0
Version = 0

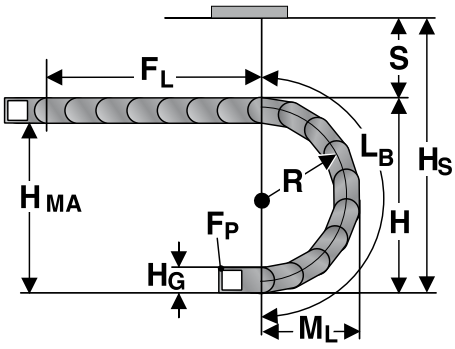
Ideal operating conditions:

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

Alternative chain type:

- MP 3000/MP 26 open version
- MP 36 G Flange connection

Installation dimensions (in mm)



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 connection (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)	108	124	148	174	198	248	298
Bend length (L_B)	276	324	402	481	559	716	873

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

MP32.3G 071	97	71	071				
MP32.3G 084	110	84	084				
MP32.3G 096	122	96	096				
MP32.3G 107	133	107	107				
MP32.3G 121	147	121	121				
MP32.3G 133	159	133	133				
MP32.3G 144	170	144	144				
MP32.3G 146	172	146	146				
MP32.3G 158	184	158	158				
MP32.3G 171	197	171	171				
MP32.3G 182	208	182	182				
MP32.3G 196	222	196	196				
MP32.3G 220	246	220	220				
MP32.3G 246	272	246	246				
MP32.3G 296	322	296	296	120	120		
MP32.3G 346	372	346	346	150	150		
MP32.3G xxx	inside + 26	>96–600	Alu	200	200		
				250	250	4	0 9

Order-Number:	0323			0			0

Ridge version:

4 Alu full-ridged with bias

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0323 071 120 0400

Internal width = 71 mm
Radius = 120 mm
Ridge version = 4
Version = 0

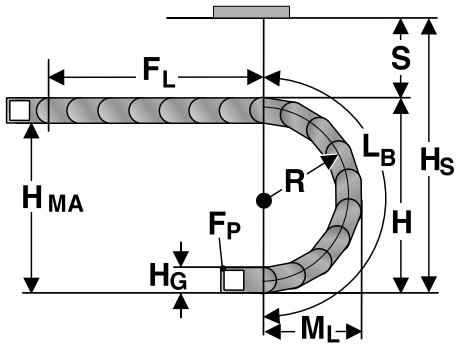
Ideal operating conditions:

- Extremely high accelerations
- Extremely high speeds
- Very high additional loads
- Long travel distances
- Extreme self supporting lengths

Alternative chain type:

- MP 32.2 open series
- MP 36G for easier applications, opens toward inner bend

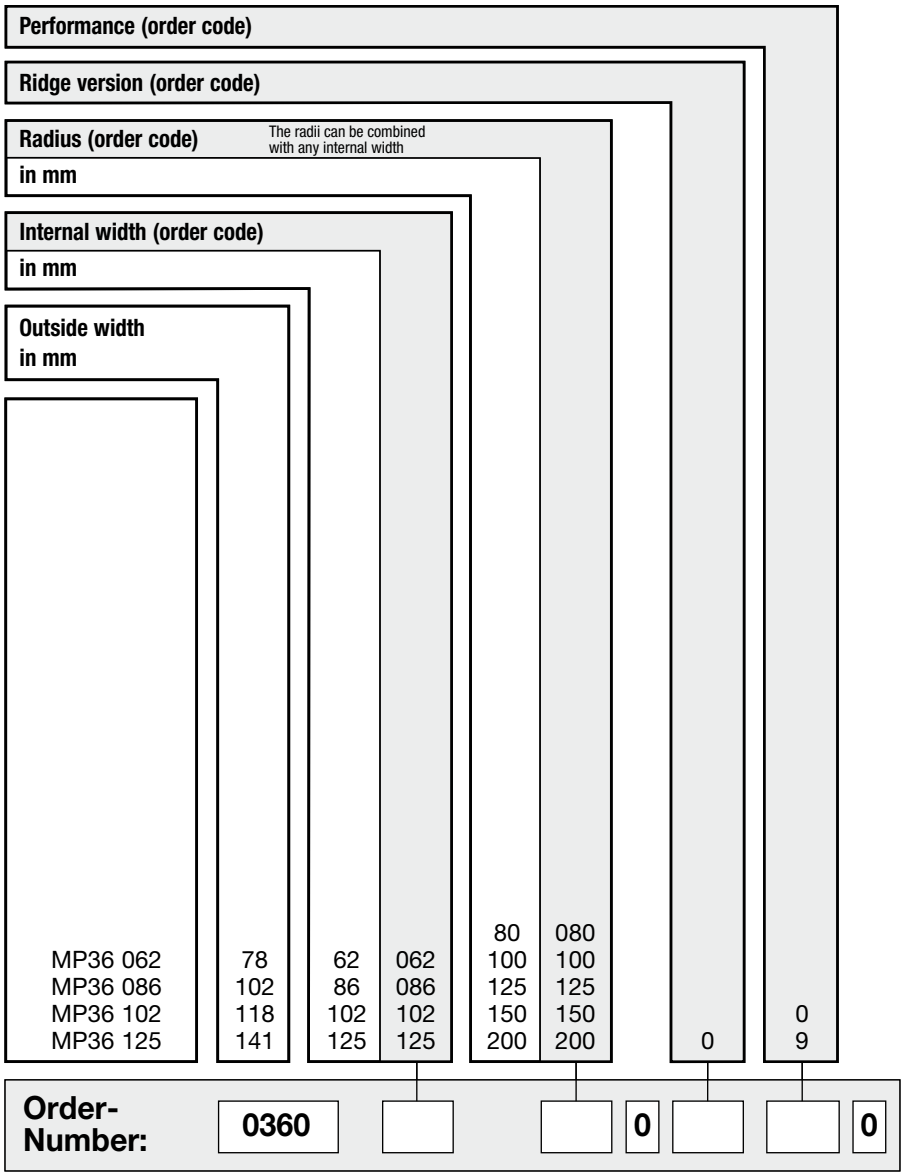
Installation dimensions (in mm)



Radius R	120	150	200	250
Outside height of chain link (H_G)	53	53	53	53
Height of bend (H)	313	373	473	573
Height of moving end connection (H_{MA})	260	320	420	520
Safety margin (S)	30	30	30	30
Installation height (H_S)	343	403	503	603
Arc projection (M_L)	221	251	301	351
Bend length (L_B)	556	650	807	964

MP 36 G - SafeLine

Order variants



Ridge version:

0 PA full-ridged with bias

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0360 062 080 0000

Internal width = 62 mm
Radius = 80 mm
Ridge version = 0
Version = 0

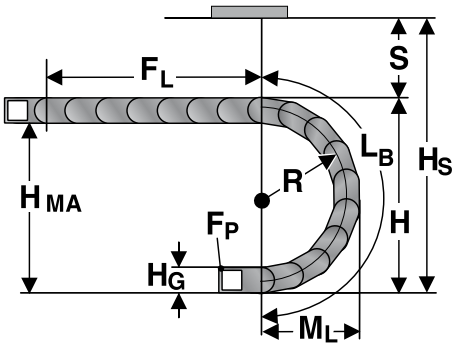
Ideal operating conditions:

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

Alternative chain type:

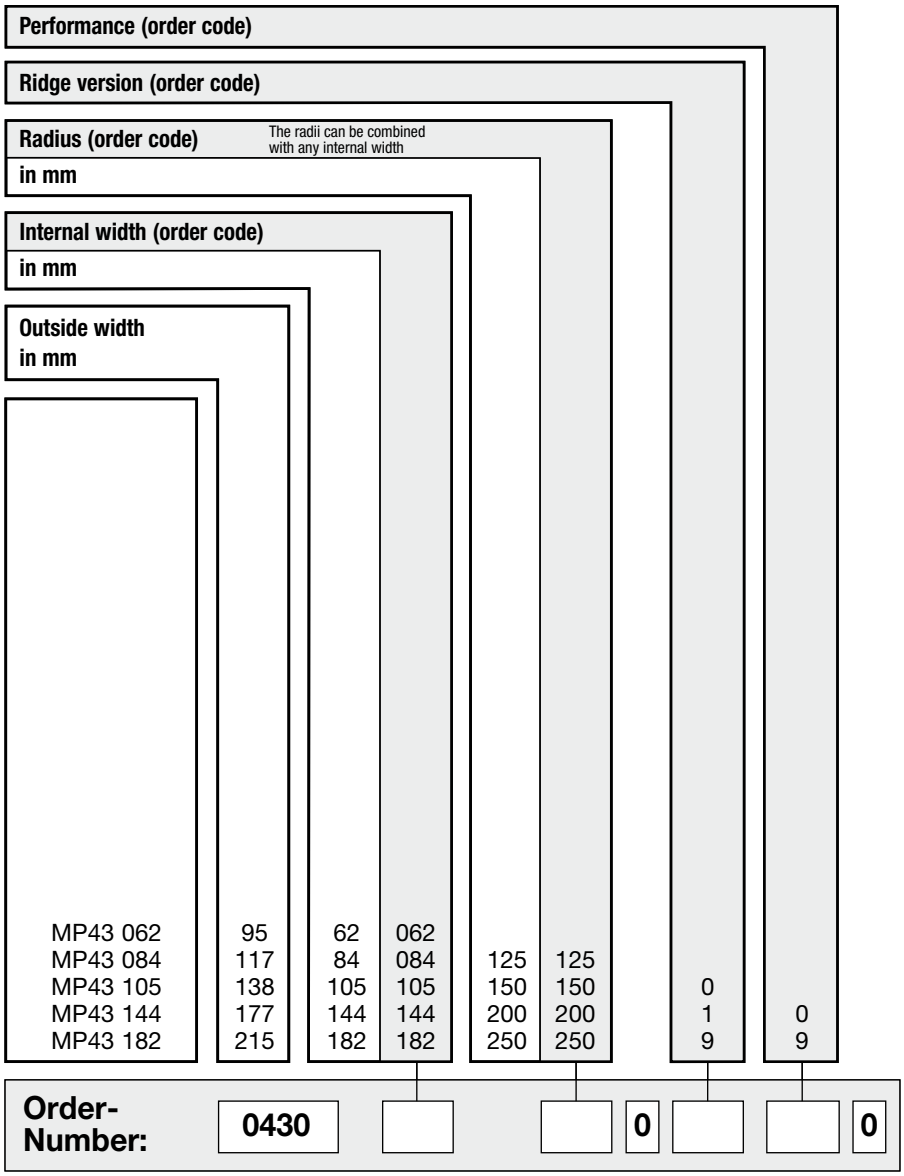
- MP 35 open version

Installation dimensions (in mm)



Radius R	80	100	125	150	200
Outside height of chain link (H_G)	48	48	48	48	48
Height of bend (H)	208	248	298	348	448
Height of moving end connection (H_{MA})	160	200	250	300	400
Safety margin (S)	32	32	32	32	32
Installation height (H_S)	240	280	330	380	480
Arc projection (M_L)	144	164	189	214	264
Bend length (L_B)	367	429	508	586	743

Order variants



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

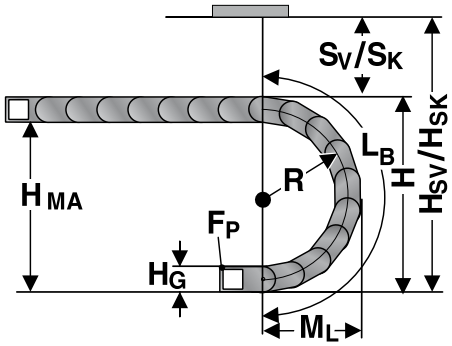
Ideal operating conditions:

- 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

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

MP 41.3 G - ClosedLine

Order variants

Outside width in mm	Internal width (order code) in mm # also available with plastic cover	Radius (order code) in mm The radii can be combined with any internal width	Ridge version (order code) *= standard	Performance (order code)
MP41.3G 071	103	71	071			
MP41.3G 084	116	84	084#			
MP41.3G 096	128	96	096#			
MP41.3G 107	139	107	107			
MP41.3G 121	153	121	121#			
MP41.3G 133	165	133	133			
MP41.3G 144	176	144	144			
MP41.3G 146	178	146	146#			
MP41.3G 158	190	158	158			
MP41.3G 171	203	171	171			
MP41.3G 182	214	182	182			
MP41.3G 196	228	196	196#			
MP41.3G 220	252	220	220			
MP41.3G 246	278	246	246#			
MP41.3G 296	328	296	296#	150	150	
MP41.3G 346	378	346	346	200	200	
MP41.3G xxx	inside + 32	>96–600	Alu	250	250	4*
				300	300	5*

Order-Number:	0413			0			0

Ridge version:

0 PA full-ridged with bias
1 PA full-ridged without bias
4* Alu full-ridged with bias
5* Alu full-ridged without bias

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0413 071 150 0000

Internal width = 71 mm
Radius = 150 mm
Ridge version = 0
Version = 0

Ideal operating conditions:

- Extremely high accelerations
- Extremely high speeds
- Very high additional loads
- Long travel distances
- Extreme self supporting lengths

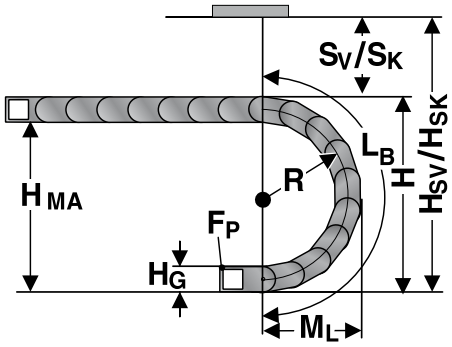
Alternative chain type:

- MP 41.2 open series
- MP 43G for easier use

Note:

- Plastic cover available from 1st Quarter 2008

Installation dimensions (in mm)



Radius R	150	200	250	300
Outside height of chain link (H_G)	62	62	62	62
Height of bend (H)	372	472	572	672
Height of moving end connection (H_{MA})	310	410	510	610
Safety margin with bias (S_V)	46	46	46	46
Installation height with bias (H_{SV})	418	518	618	718
Safety margin without bias (S_K)	16	16	16	16
Installation height without bias (H_{SK})	388	488	588	688
Arc projection (M_L)	263	313	363	413
Bend length (L_B)	661	818	975	1132

Order variants

Performance (order code)

Ridge version (order code) *= standard

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

Internal width (order code) # also available with plastic cover
in mm

Outside width
in mm

MP52.3G 071	103	71	071	150	150		
MP52.3G 084	116	84	084	175	175		
MP52.3G 096	128	96	096#	200	200	0	
MP52.3G 107	139	107	107	250	250	1	
MP52.3G 121	153	121	121#	300	300	4*	0
MP52.3G 133	165	133	133	350	350	5*	9
MP52.3G 144	176	144	144				
MP52.3G 146	178	146	146#				
MP52.3G 158	190	158	158				
MP52.3G 171	203	171	171				
MP52.3G 182	214	182	182				
MP52.3G 196	228	196	196#				
MP52.3G 220	252	220	220				
MP52.3G 246	278	246	246#				
MP52.3G 296	328	296	296#				
MP52.3G 346	378	346	346#				
MP52.3G xxx	Inside +32	>96–600	Alu				

Order-Number:	0523			0			0

Ridge version:

0 PA full-ridged with bias
1 PA full-ridged without bias
4* Alu full-ridged with bias
5* Alu full-ridged without bias

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0523 071 150 0000

Internal width = 71 mm
Radius = 150 mm
Ridge version = 0
Version = 0

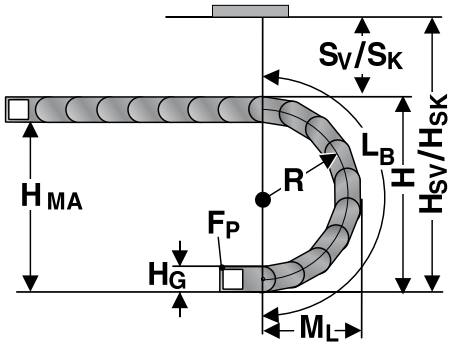
Ideal operating conditions:

- Extremely high accelerations
- Extremely high speeds
- Very high additional loads
- Long travel distances
- Extreme self supporting lengths

Alternative chain type:

- MP 52.2 open series
- MP 65G for easier use

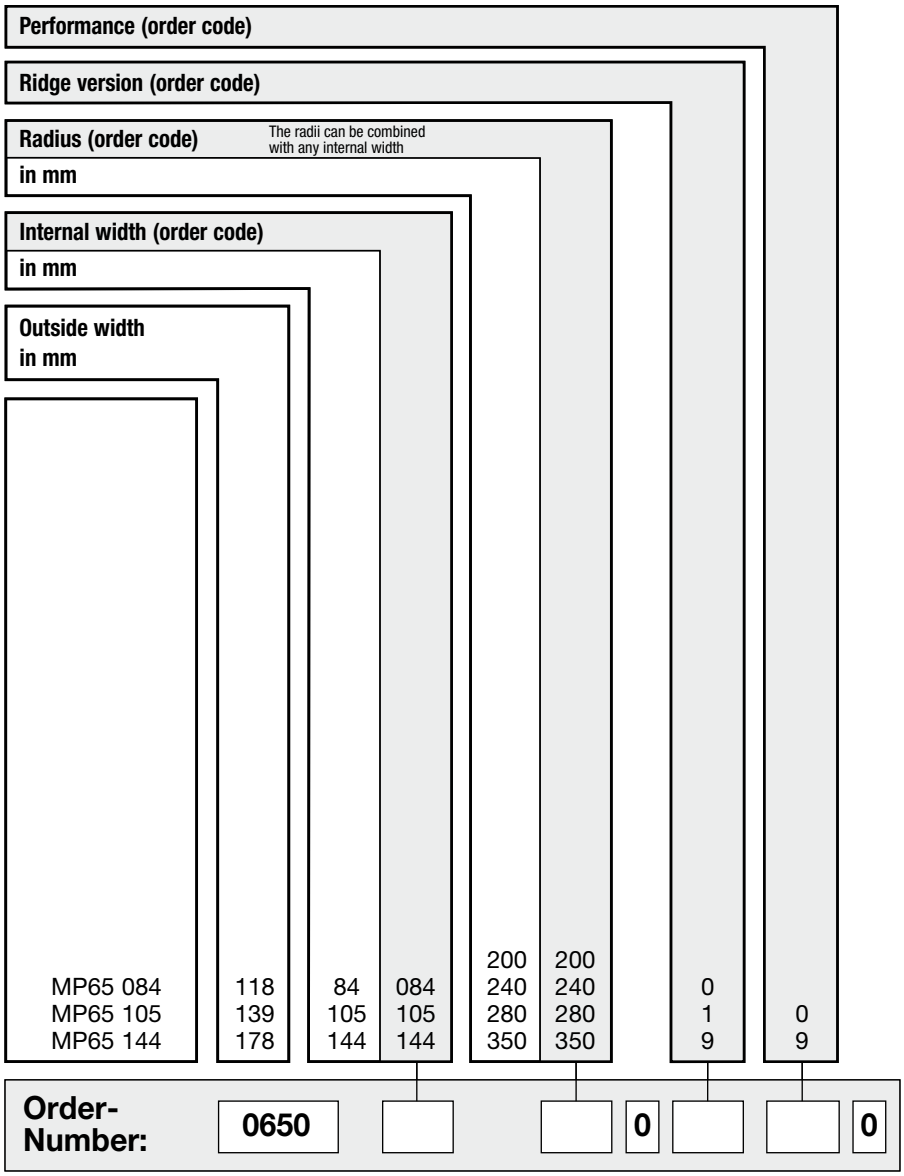
Installation dimensions (in mm)



Radius R	150	175	200	250	300	350
Outside height of chain link (H_G)	75	75	75	75	75	75
Height of bend (H)	405	455	505	605	705	805
Height of moving end connection (H_{MA})	330	380	430	530	630	730
Safety margin with bias (S_V)	50	50	50	50	50	50
Installation height with bias (H_{SV})	455	505	555	655	755	855
Safety margin without bias (S_K)	20	20	20	20	20	20
Installation height without bias (H_{SK})	425	475	525	625	725	825
Arc projection (M_L)	294	318	344	394	444	494
Bend length (L_B)	727	805	884	1041	1198	1355

MP 65 G - MultiLine

Order variants



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:

0650 084 200 0000

Internal width = 84 mm
Radius = 200 mm
Ridge version = 0
Version = 0

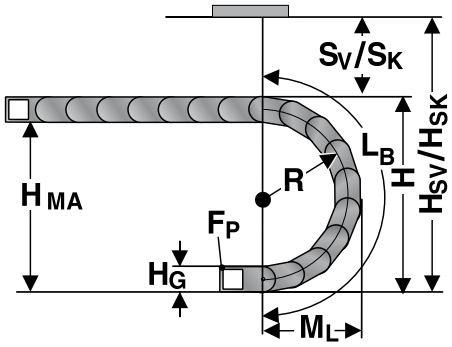
Ideal operating conditions:

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

Alternative chain type:

- MP 66 open version

Installation dimensions (in mm)



Radius R	200	240	280	350
Outside height of chain link (H_G)	80	80	80	80
Height of bend (H)	480	560	640	780
Height of moving end connection (H_{MA})	400	480	560	700
Safety margin with bias (S_V)	50	50	50	50
Installation height with bias (H_{SV})	530	610	690	830
Safety margin without bias (S_K)	15	15	15	15
Installation height without bias (H_{SK})	495	575	655	795
Arc projection (M_L)	332	372	412	482
Bend length (L_B)	845	971	1096	1316

Order variants

Performance (order code)	Outside width in mm	Internal width (order code) in mm	Radius (order code) in mm		Ridge version (order code) *= standard	Version (order code)
		# also available with plastic cover	The radii can be combined with any internal width			
MP62.3G 118	150	118	118#	200	200	0
MP62.3G 143	175	143	143#	250	250	1
MP62.3G 168	200	168	168	300	300	4*
MP62.3G 193	225	193	193#	350	350	5*
MP62.3G 218	250	218	218	400	400	9
MP62.3G 243	275	243	243#	500	500	
MP62.3G 268	300	268	268			
MP62.3G 293	325	293	293#			
MP62.3G 318	350	318	318			
MP62.3G 343	375	343	343#			
MP62.3G 368	400	368	368			
MP62.3G 418	450	418	418#			
MP62.3G xxx	inside + 32	>118-600	Alu			

Order-Number:	0623			0			0

Ridge version:

0 PA full-ridged with bias
1 PA full-ridged without bias
4* Alu full-ridged with bias
5* Alu full-ridged without bias

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

0623 118# 200 0000

Internal width = 118 mm
Radius = 200 mm
Ridge version = 0
Version = 0

Ideal operating conditions:

- Extremely high accelerations
- Extremely high speeds
- Very high additional loads
- Long travel distances
- Extreme self supporting lengths

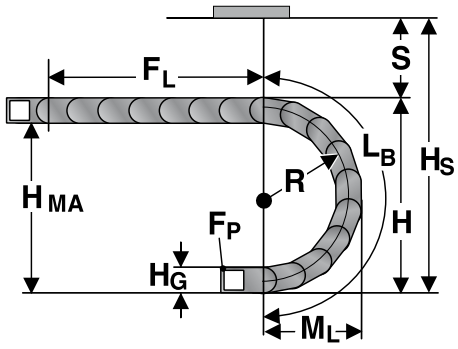
Alternative chain type:

- MP 62.2 open series
- MP 65G for easier use

Note:

- Plastic cover available from 1st Quarter 2008

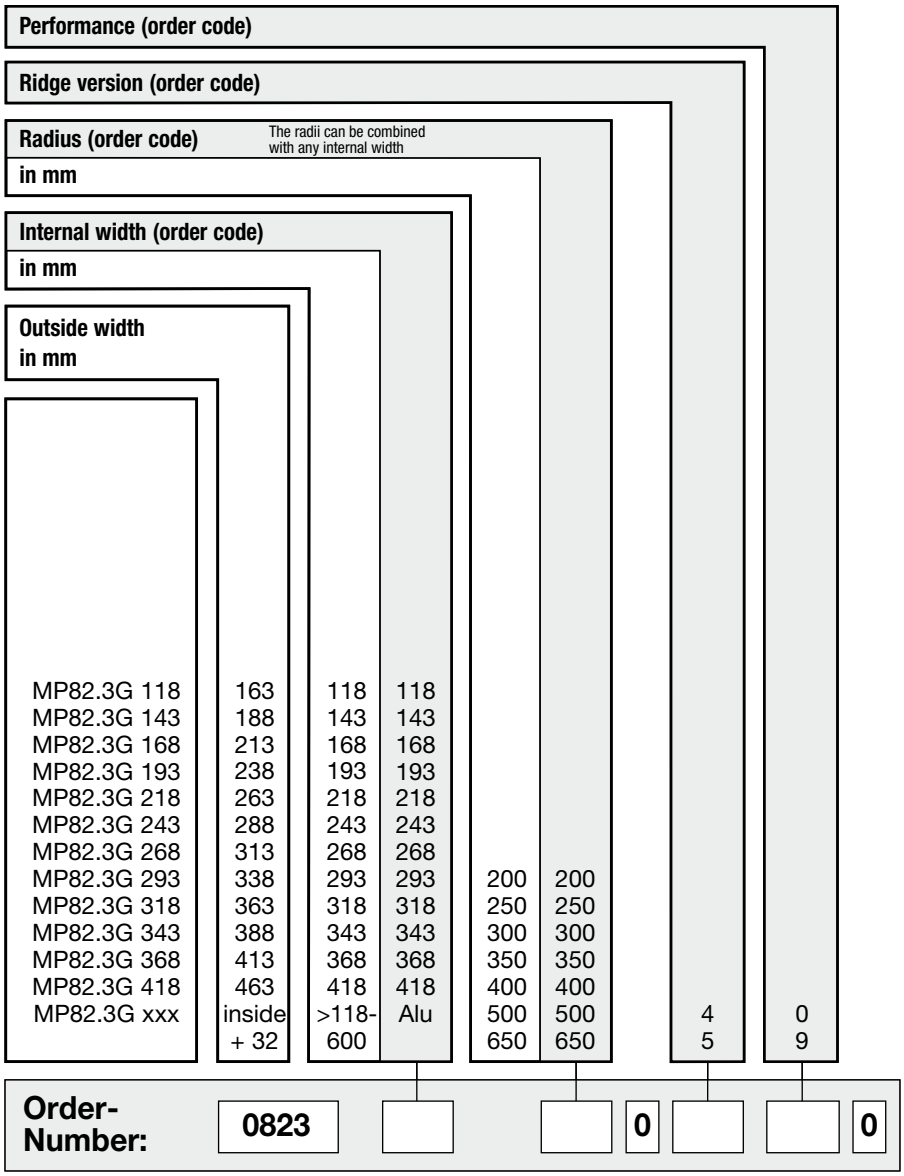
Installation dimensions (in mm)



Radius R	200	250	300	350	400	500
Outside height of chain link (H_G)	94	94	94	94	94	94
Height of bend (H)	524	624	724	824	924	1124
Height of moving end connection (H_{MA})	430	530	630	730	830	1030
Safety margin with bias (S_V)	50	50	50	50	50	50
Installation height with bias (H_{SV})	574	674	774	874	974	1174
Safety margin without bias (S_K)	20	20	20	20	20	20
Installation height without bias (H_{SK})	544	644	744	844	944	1144
Arc projection (M_L)	362	412	462	512	562	662
Bend length (L_B)	923	1080	1237	1394	1551	1865

MP 82.3 G - ClosedLine

Order variants



Ridge version:

4 Alu full-ridged with bias
5 Alu full-ridged without bias

Version:

0 Standard (PA/black)
9 Custom version

Sample order:

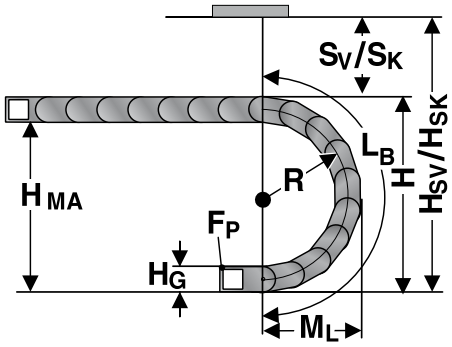
0823 118 200 0400

Internal width = 118 mm
Radius = 200 mm
Ridge version = 4
Version = 0

Ideal operating conditions:

- Extremely high accelerations
- Extremely high speeds
- Very high additional loads
- Long travel distances
- Extreme self supporting lengths

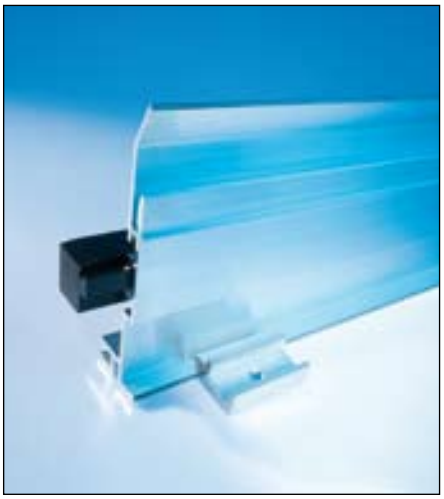
Installation dimensions (in mm)

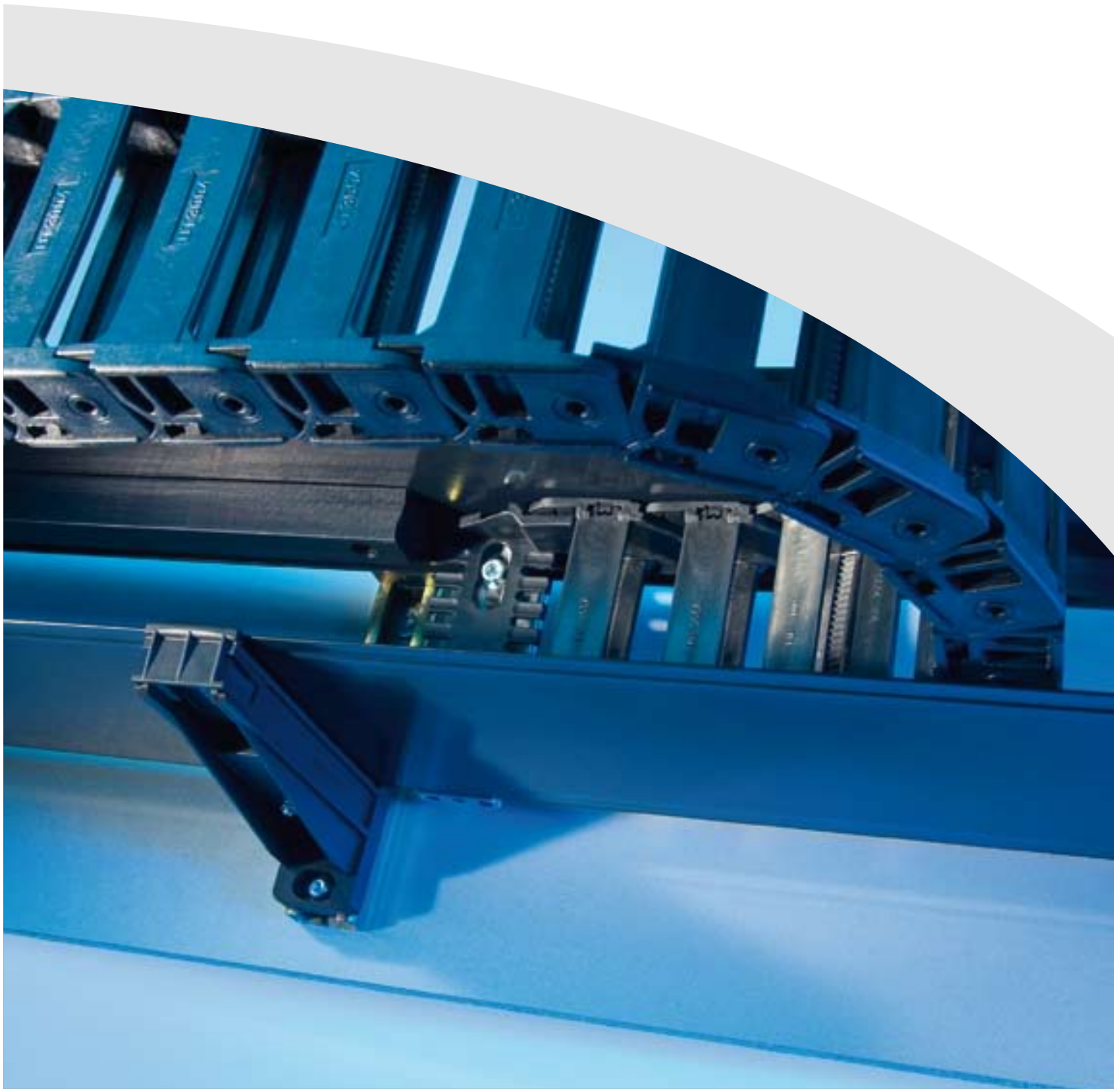


Radius R	200	250	300	350	400	500	650
Outside height of chain link (H_G)	112	112	112	112	112	112	112
Height of bend (H)	522	622	722	822	922	1122	1422
Height of moving end connection (H_{MA})	410	510	610	710	810	1010	1310
Safety margin with bias (S_V)	50	50	50	50	50	50	50
Installation height with bias (H_{SV})	572	672	772	872	972	1172	1472
Safety margin without bias (S_K)	30	30	30	30	30	30	30
Installation height without bias (H_{SK})	552	652	752	852	952	1152	1452
Arc projection (M_L)	379	429	479	529	579	679	829
Bend length (L_B)	938	1095	1252	1409	1566	1880	2351

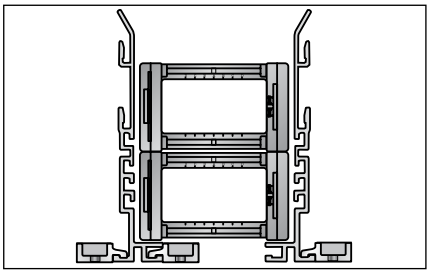
EFK

VARIABLE GUIDE CHANNEL SYSTEMS

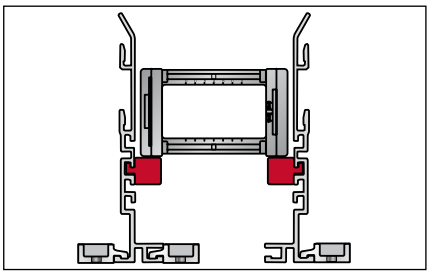




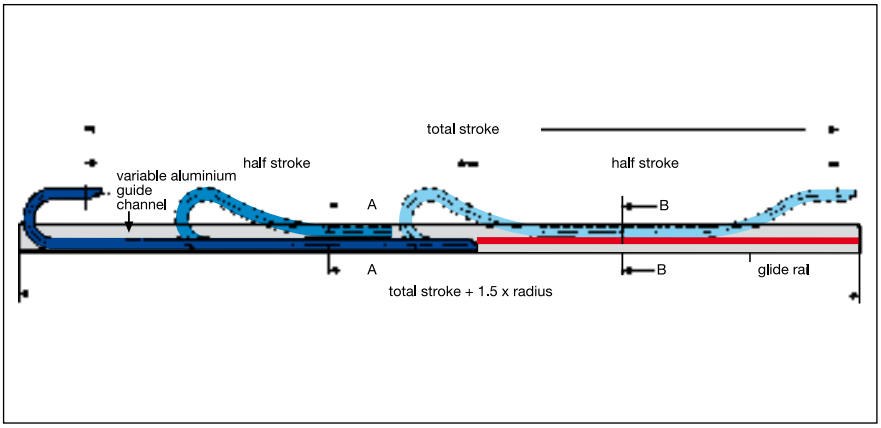
Guide channel systems for cable drag chains serve as trays for short travel distances and at the same time as guides for long travel distances. If no guide channel is used it is possible that the chain links may lay and move incorrectly. Especially for large bend radii as the side guidance does not exist. 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 continued to the right, then 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.



Section A-A:
The cable drag chain glides on itself



Section B-B:
The cable drag chain runs on the glide rail



Simple, quick and secure installation ...

... of the Murrplastik guide channel.

The combination of the groove system on the individual aluminium channel sides and the glide rail sections forms an extremely variable guide channel system which provides a safe, stable and very attractive chain guide system requiring few accessories.

The glide rails are simply pushed into the groove provided in the aluminium section. The only fastening required is a screw at the beginning and the end of the last glide rail.

It is incredibly simple to install the channel. Special clamping pieces are used to secure the system in the desired position. The channel sections are perfectly aligned thanks to special plastic longitudinal connectors which are placed in a groove specially provided for that purpose.

There are no welded seams or screw parts jutting out into the chain's area of movement with the Murrplastik guide channel system.

The use of highly durable aluminium obviates the need for any corrosion prevention.

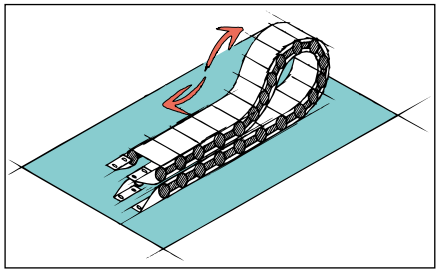
Economic solution

The use of standard components saves cost in this case. Design and manufacture are entirely taken care of.
Other methods of producing guide channels involve the following:

- Measuring and drawing the installation
- Obtaining the various components
- Cutting the plate to size
- Punching the plate
- Plate-edge bending
- Drilling the attachment holes
- Mounting the channel
- Welding and sanding down channel connections
- Lacquering

When the costs of the components and assembly time are added together, it soon becomes apparent that the Murrplastik VAW system is a very cost effective solution.

Lowered fixing point



It is sometimes necessary to lower the height of the moving attachment point.

In such cases, modifications to the chain layout should be noted (e.g. extension of chain).
Please consult with our engineers.

STRAIN RELIEF SYSTEMS

The ZL strain relief plate is used to securely hold cables on machines and other installations.
The cables are held on either side of the plate tongue with wide bodied type KB 28 cable ties.
The undercut on the tongues prevent the cable ties from slipping off, even when the cable diameter is larger than the plate tongue itself. The use of the ZL plate, and two wide ties for each cable, is ideal.

Wide, highly flexible power cable ties increase the surface pressure and ensure longer service life. When using a shelf system, two plates are installed on top of each other. DH distance bushes are used to this end. Washers come delivered with the strain relief plates. However, we do recommend our ELB insert bushing.
This prevents the cold flowing of the plastic. The ZL strain relief plates should be mounted at a minimum distance of 20 to 30x the cable diameter from where the cable bends.

Durable fastening with metal bush

Strain relief plate mounted in chain mounting bracket.

Murrplastik recommendations

The strain relief plate should be fitted with two power cable ties on each side of the cable and secured approx. 20 to 30 x cable diameter from the last moving chain link.

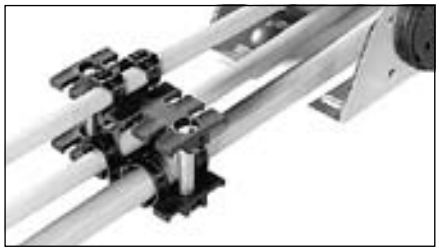
The strain relief is suitable for cables up to 40 mm diameter.

All electric cables must be relieved of strain at both the moving and fixed end. For longer travel distances (gliding application) a strain relief on one side at the moving end is recommended. Care must be taken to ensure the pressure only be applied to a wide surface of the cable outer jacket.

The clamping must be executed in such a way that the individual cores in the cable are not squashed, but the cable should still be held tightly.

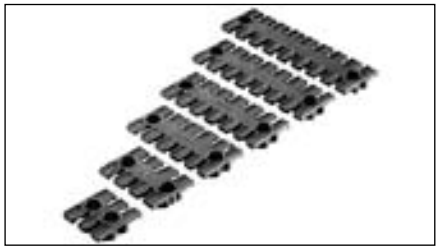
Hydraulic and pneumatic conduits only have to be strain relieved at one end.

Double strain relief plates



Strain relief for the cables entered into the cable drag chain can also be achieved through a doubled setup using spacer sleeves. This variation of strain relief allows for an increased packing density.

Strain relief plate ZL



ZL...

Type	Order no.	Fits cable drag chain type	Pack
ZL 39	87701014	MP 25037G/MP 44045/MP 66045	1
ZL 60	87701016	MP 25062G/MP 35032/MP 36062/MP 43062	1
		MP 44062 / MP 66062	
ZL 80	87701015	MP 43082/MP 44082/MP 66082	1
ZL 87	87701018	MP 25087G/MP 35086/MP 36086	1
ZL 103	87701020	MP 25101G/MP 35102/MP 36102/MP 43107	1
		MP 44107 / MP 66107	
ZL 121	87701022	MP 25125G/MP 35125/MP 36125	1
ZL 140	87701024	MP 35150/MP 43142/MP 44142/MP 66142	1
ZL 180/6	87701026	MP 43182 / MP 44182	1
ZL 180/8	87701027	MP 66182	1

If the strain relief plate is to be fitted directly on the chain bracket, the hole dimensions of the strain relief plate should be taken as the basis.

Sales agencies

Sales agencies/Germany

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20095 - 32609
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36304 - 36399
40210 - 42929
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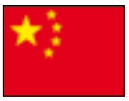

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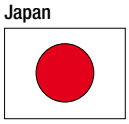
Kitagawa Industries Co. Ltd.
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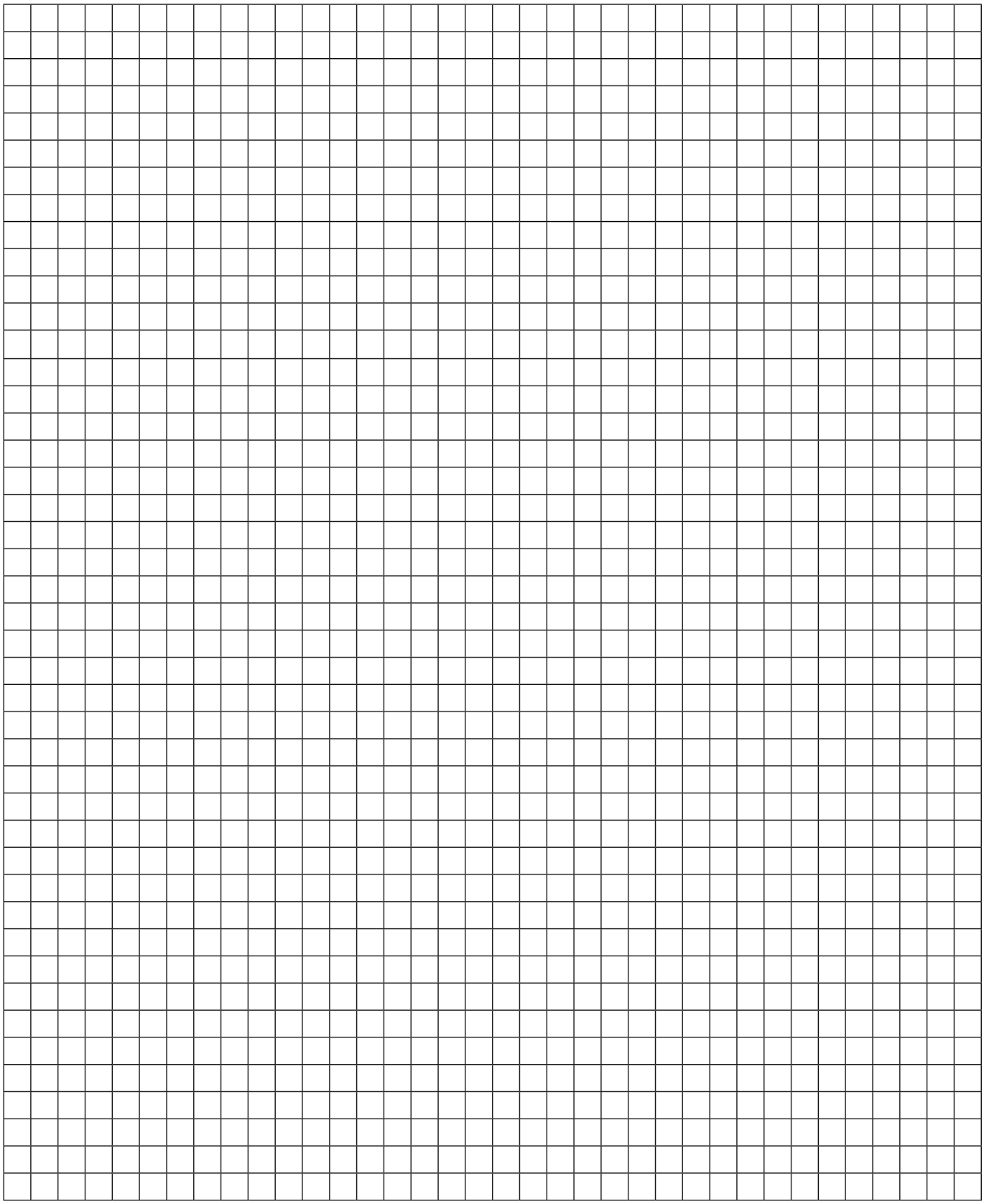

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