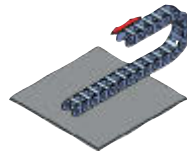
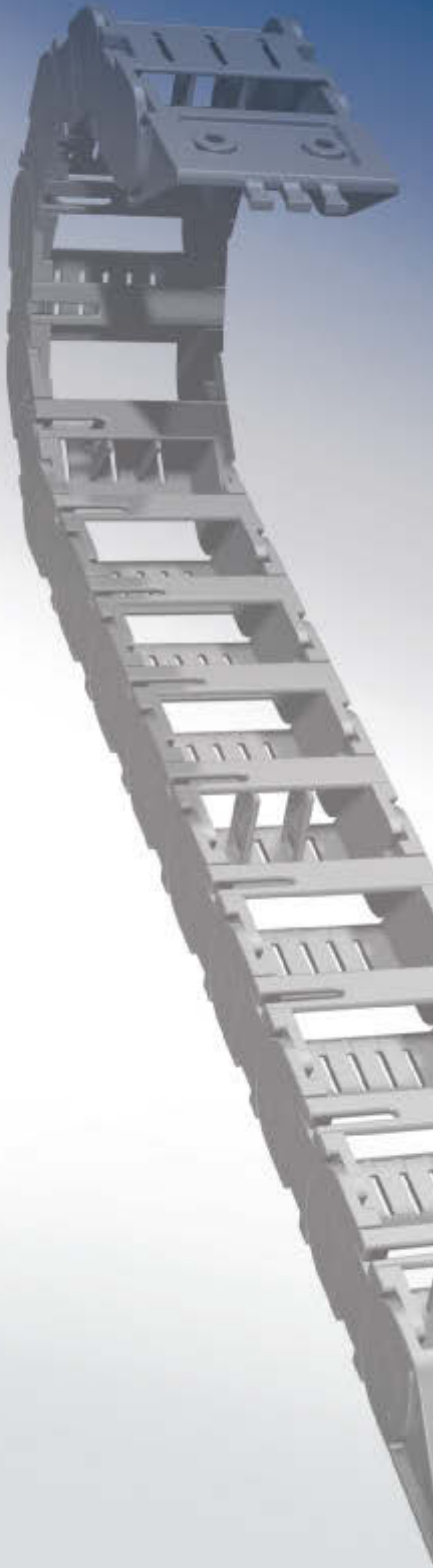




GUIDE CHAIN

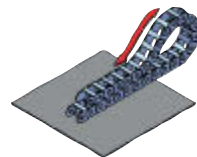




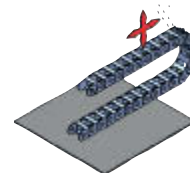
Standard -
free carrying



Circular



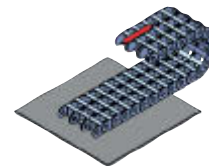
standard -
gliding



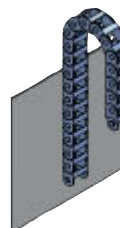
combined -
vertical and
horizontal
motions



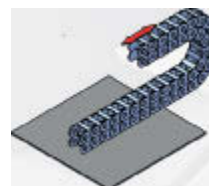
vertical
hanging



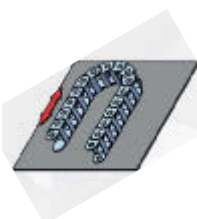
standard
side-by-side



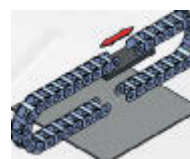
vertical
standing



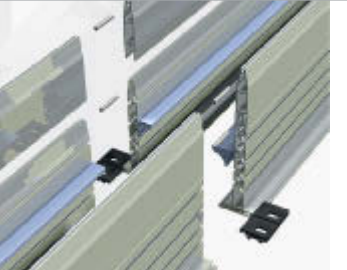
standard
adjacent

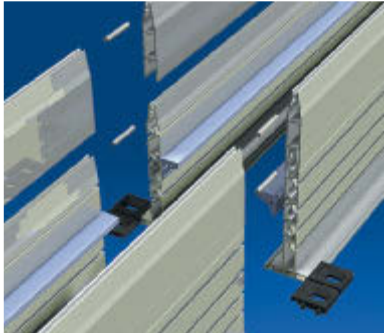
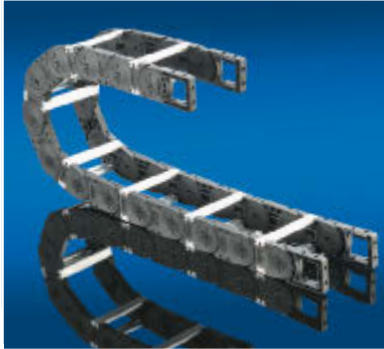


sideways



counter-rotating

	PL plastic guide chains
	PH plastic guide chains
	Channel system
Technical data	





Application

- Automation
- (Special-purpose) machines
- Plant construction
- Doors
- Elevators

Plastic guide chains standard

Material

PA6 GFK plastics

Properties

- hinged
- to be opened manually – quick and easy
- optimized wall thickness/interior ratio
- economical
- extended lifetime
- loadable across entire inner chain width
- delivered in sections of 1 mtr. (standard)

Prestressed

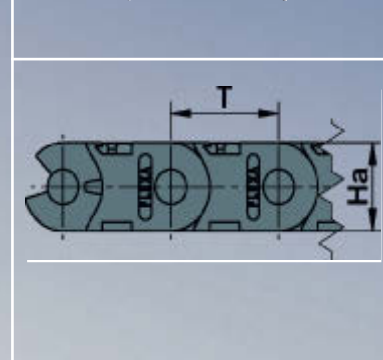
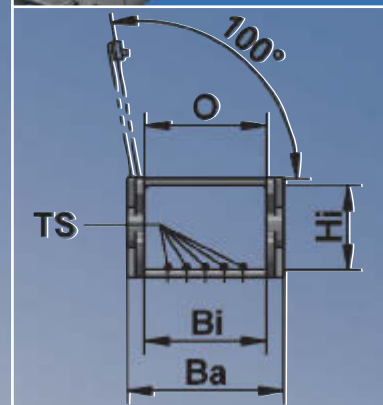
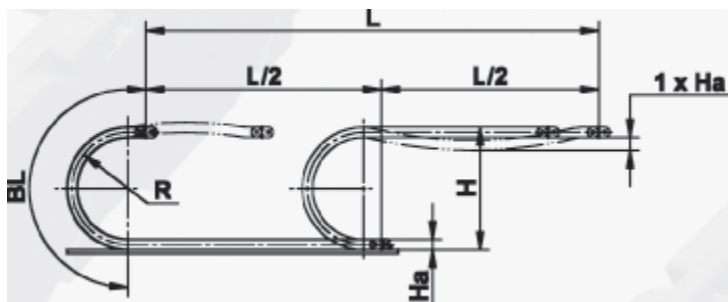
The FLEXA guide chains are prestressed in order to achieve the longest possible free carrying length. This length is also determined through other parameters such as the weight of the guide chain load. We also supply our range as prestress-free guide chains, if requested.

Additional load [Cables] for the guide chain

In order to determine the additional weight of the guide chain it is necessary to determine the particular weight of such wires, cables, and hoses. This information is provided in the technical data issued by the particular manufacturer. Please check with the relevant tables in our catalogue concerning the permissible FLEXA guide chain gross weight.

Technical data

Inner height	Hi	18 mm
Outer height	Ha	22 mm
Number of chain links/mtr.		31
Pitch	T	32 mm
Guide chain length		appr. ca. L/2 + BL
Total height	H	appr. ca. 2 x R + 22 mm
Free carrying length		max. 1750 mm
Travel standard	L	max. 35 m
Travel in channel		max. 60 m
Load		max. 4,0 kg/m
Speed		max. 10 m/sec ²
Acceleration		max. 10 m/sec ²
Tensile strength		max. 1350 N
Separator thickness		1,25 mm

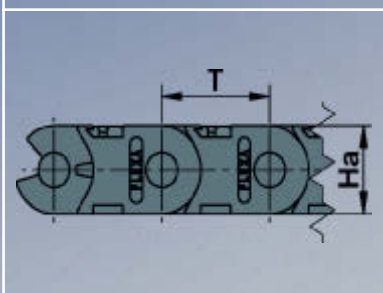
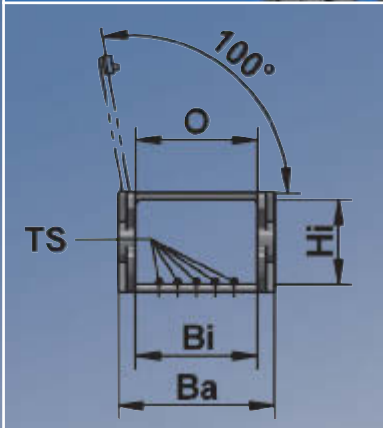


Bi	Inner width
Ba	Outer width
BL	Bow length
H	Total height
Ha	Outer height
Hi	Inner height
L	Travel length
O	Opening
R	Radius
T	Pitch
	Separators

Part No.	Article					TS		
black		Bi mm	R mm	Ba mm	BL mm	St./pcs. max.	kg/m	m*
6023.031.003	PL3-31-3F	31	35	41	140	4	0,350	1
6023.031.005	PL3-31-5F	31	50	41	200	4	0,350	1
6023.031.007	PL3-31-7F	31	70	41	280	4	0,350	1
6023.031.010	PL3-31-10F	31	100	41	400	4	0,350	1

* with 31 guide links pre-assembled



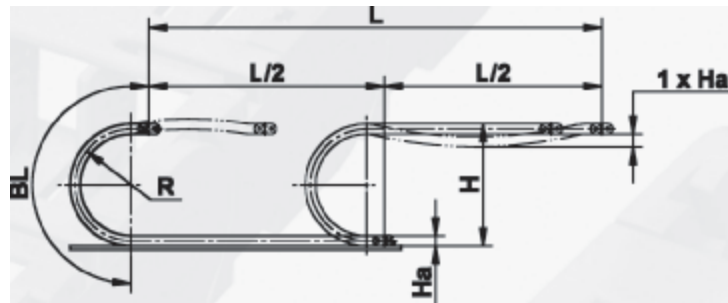


Bi Inner width
Ba Outer width
BL Bow length
H Total height
Ha Outer height
Hi Inner height
L Travel length
O Opening
R Radius
T Pitch
TS Separators



Technical data

Inner height	Hi	25 mm
Outer height	Ha	30 mm
Number of chain links/mtr.		22
Pitch	T	45 mm
Guide chain length		appr. ca. L/2 + BL
Total height	H	appr. ca. 2 x R + Ha
Free carrying length		max. 2300 mm
Travel standard	L	max. 50 m
Travel in channel		max. 100 m
Load		max. 7,5 kg/m
Speed		max. 10 m/sec ²
Acceleration		max. 10 m/sec ²
Tensile strength		max. 2200 N
Separator thickness		2 mm



Part No.

Article



TS



black		Bi mm	R mm	Ba mm	BL mm	St./pcs. max.	kg/m	m*
6024.038.005	PL4-38-5F	38	50	50	200	3	0,500	1
6024.038.007	PL4-38-7F	38	75	50	300	3	0,500	1
6024.038.010	PL4-38-10F	38	100	50	400	3	0,500	1
6024.038.015	PL4-38-15F	38	150	50	600	3	0,500	1
6024.038.020	PL4-38-20F	38	200	50	800	3	0,500	1
6024.048.005	PL4-48-5F	48	50	60	200	5	0,530	1
6024.048.007	PL4-48-7F	48	75	60	300	5	0,530	1
6024.048.010	PL4-48-10F	48	100	60	400	5	0,530	1
6024.048.015	PL4-48-15F	48	150	60	600	5	0,530	1
6024.048.020	PL4-48-20F	48	200	60	800	5	0,530	1
6024.068.005	PL4-68-5F	68	50	80	200	7	0,590	1
6024.068.007	PL4-68-7F	68	75	80	300	7	0,590	1
6024.068.010	PL4-68-10F	68	100	80	400	7	0,590	1
6024.068.015	PL4-68-15F	68	150	80	600	7	0,590	1
6024.068.020	PL4-68-20F	68	200	80	800	7	0,590	1
6024.083.005	PL4-83-5F	83	50	95	200	9	0,630	1
6024.083.007	PL4-83-7F	83	75	95	300	9	0,630	1
6024.083.010	PL4-83-10F	83	100	95	400	9	0,630	1
6024.083.015	PL4-83-15F	83	150	95	600	9	0,630	1
6024.083.020	PL4-83-20F	83	200	95	800	9	0,630	1
6024.113.005	PL4-113-5F	113	50	125	200	13	0,700	1
6024.113.007	PL4-113-7F	113	75	125	300	13	0,700	1
6024.113.010	PL4-113-10F	113	100	125	400	13	0,700	1
6024.113.015	PL4-113-15F	113	150	125	600	13	0,700	1
6024.113.020	PL4-113-20F	113	200	125	800	13	0,700	1

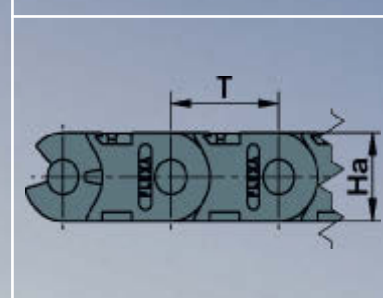
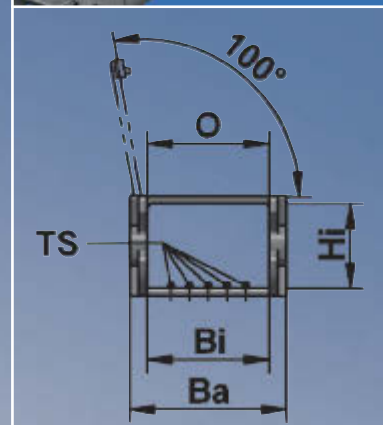
* with 22 guide links pre-assembled

Technical data

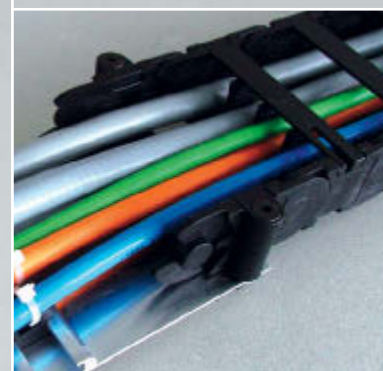
Inner height	Hi	34 mm
Outer height	Ha	40 mm
Number of chain links/mtr.		18
Pitch	T	55 mm
Guide chain length		appr. ca. L/2 + BL
Total height	H	appr. ca. 2 x R + Ha
Free carrying length		max. 3100 mm
Travel standard	L	max. 75 m
Travel in channel		max. 120 m
Load		max. 8,0 kg/m
Speed		max. 10 m/sec ²
Acceleration		max. 10 m/sec ²
Tensile strength		max. 4300 N
Separator thickness		2 mm

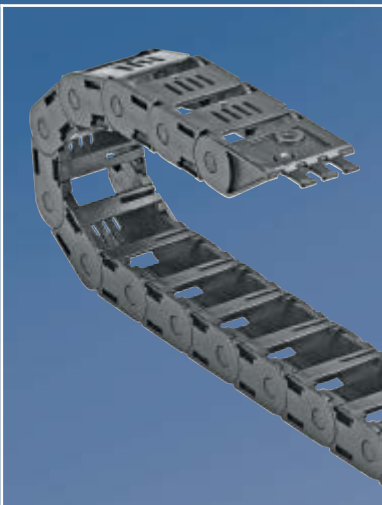
Part No.	Article					TS		
black		Bi mm	R mm	Ba mm	BL mm	St./pcs. max.	kg/m	m*
6025.049.006	PL5-49-6F	49	60	63	240	5	0,950	1
6025.049.010	PL5-49-10F	49	100	63	400	5	0,950	1
6025.049.012	PL5-49-12F	49	125	63	500	5	0,950	1
6025.049.015	PL5-49-15F	49	150	63	600	5	0,950	1
6025.049.020	PL5-49-20F	49	200	63	800	5	0,950	1
6025.049.025	PL5-49-25F	49	250	63	1000	5	0,950	1
6025.061.006	PL5-61-6F	61	60	75	240	7	0,980	1
6025.061.010	PL5-61-10F	61	100	75	400	7	0,980	1
6025.061.012	PL5-61-12F	61	125	75	500	7	0,980	1
6025.061.015	PL5-61-15F	61	150	75	600	7	0,980	1
6025.061.020	PL5-61-20F	61	200	75	800	7	0,980	1
6025.061.025	PL5-61-25F	61	250	75	1000	7	0,980	1
6025.081.006	PL5-81-6F	81	60	95	240	9	1,050	1
6025.081.010	PL5-81-10F	81	100	95	400	9	1,050	1
6025.081.012	PL5-81-12F	81	125	95	500	9	1,050	1
6025.081.015	PL5-81-15F	81	150	95	600	9	1,050	1
6025.081.020	PL5-81-20F	81	200	95	800	9	1,050	1
6025.081.025	PL5-81-25F	81	250	95	1000	9	1,050	1
6025.111.006	PL5-111-6F	111	60	125	240	13	1,120	1
6025.111.010	PL5-111-10F	111	100	125	400	13	1,120	1
6025.111.012	PL5-111-12F	111	125	125	500	13	1,120	1
6025.111.015	PL5-111-15F	111	150	125	600	13	1,120	1
6025.111.020	PL5-111-20F	111	200	125	800	13	1,120	1
6025.111.025	PL5-111-25F	111	250	125	1000	13	1,120	1
6025.135.006	PL5-135-6F	135	60	149	240	15	1,180	1
6025.135.010	PL5-135-10F	135	100	149	400	15	1,180	1
6025.135.012	PL5-135-12F	135	125	149	500	15	1,180	1
6025.135.015	PL5-135-15F	135	150	149	600	15	1,180	1
6025.135.020	PL5-135-20F	135	200	149	800	15	1,180	1
6025.135.025	PL5-135-25F	135	250	149	1000	15	1,180	1
6025.177.006	PL5-177-6F	177	60	191	240	21	1,290	1
6025.177.010	PL5-177-10F	177	100	191	400	21	1,290	1
6025.177.012	PL5-177-12F	177	125	191	500	21	1,290	1
6025.177.015	PL5-177-15F	177	150	191	600	21	1,290	1
6025.177.020	PL5-177-20F	177	200	191	800	21	1,290	1
6025.177.025	PL5-177-25F	177	250	191	1000	21	1,290	1

* with 18 guide links pre-assembled

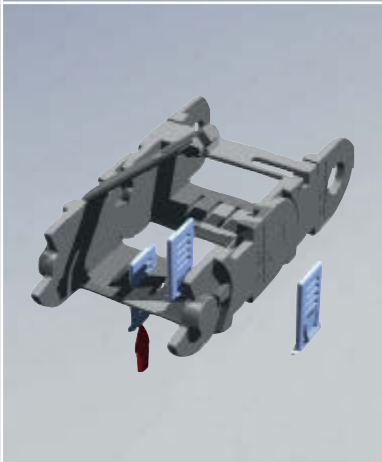


Bi Inner width
Ba Outer width
BL Bow length
H Total height
Ha Outer height
Hi Inner height
L Travel length
O Opening
R Radius
T Pitch
TS Separators



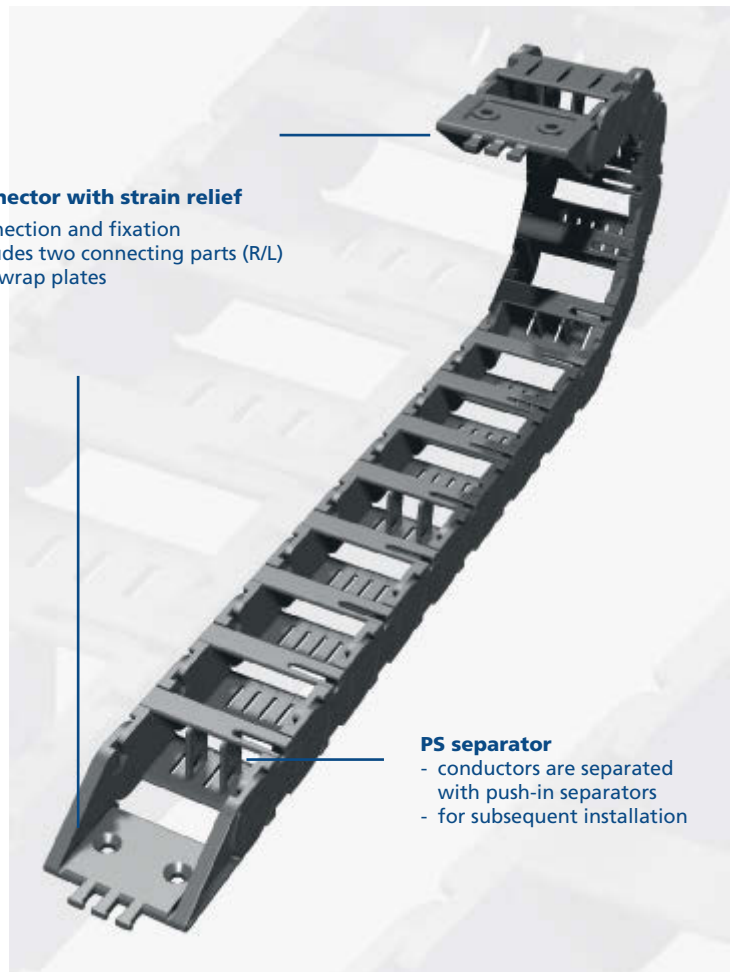


- Connection parts are very variable and do not depend on the inside width
- Can be combined with a strain relief system
- Favorably priced connection system



PBZ connector with strain relief

- for connection and fixation
- set includes two connecting parts (R/L)
- with tie-wrap plates



PS separator

- conductors are separated with push-in separators
- for subsequent installation

PS separator

Material PA6 GFK plastics

- conductors are separated with push-in separators
- also applicable for subsequent installation
- best applied in every second chain link

Part No.	Article	Type	Width	 pcs.
black			mm	
6143.000.000	PS3SN	PL3	2	25
6144.000.000	PS4N	PL4	2	25
6145.000.000	PS5N	PL5	2	25

PBZ connector with strain relief

Material: PA6 GFK plastics

- connection and fixation of the PL guide chains
- set includes two connecting parts (R/L)
- with tiwrap plates
- slot-mounting holes for easier fixation

Part No.	Article	Type					Tiewrap plate 	Set
black			Bi mm	E0 mm	G mm	F mm	number	
6153.031.000	PBZ3-31	PL3	31	41	6,5	10	3	1
6154.038.000	PBZ4-38	PL4	38	50	6,1	22	3	1
6154.048.000	PBZ4-48	PL4	48	60	6,1	30	5	1
6154.068.000	PBZ4-68	PL4	68	80	6,1	44	7	1
6155.061.000	PBZ5-61	PL5	61	75	6,1	45	5	1
6155.081.000	PBZ5-81	PL5	81	95	6,1	55	7	1
6155.111.000	PBZ5-111	PL5	111	125	6,1	80	9	1

Bi = Inner width

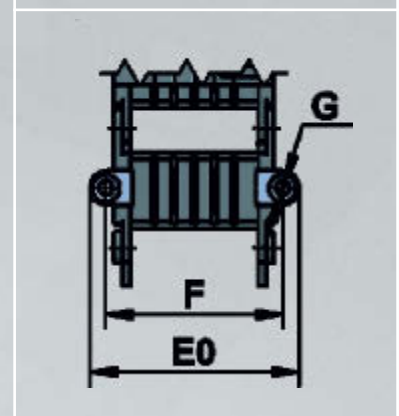
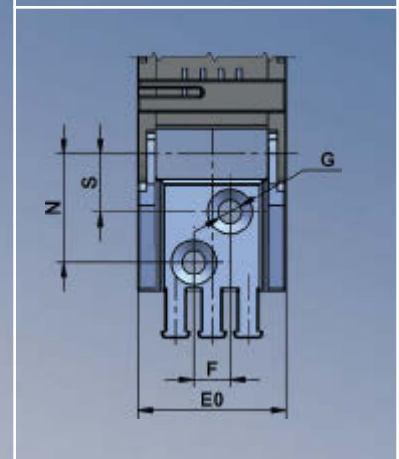
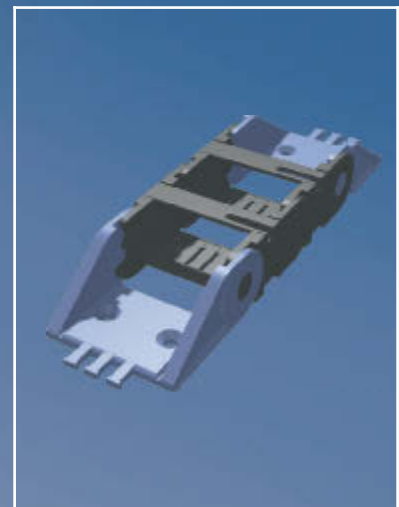
PB standard connector

Material: PA6 GFK plastics

- for lateral fixation of the PL guide chains
- stabilizes the guide

Part No.	Article	Type				
black			E0 mm	F mm	G mm	Set
6154.000.002	PB4	PL4	Bi + 30,5	Bi + 18,5	5,5	1
6155.000.002	PB5	PL5	Bi + 35,5	Bi + 21,5	5,5	1

Bi = Innenbreite
Bi = Inner width





PB-L flat connector

Material PA6 GFK plastics

- applied to fix the PL guide chains on the front side - slack side
- optimal mounting with M5 countersunk screw

Part No.	Article	Type						
black			E0 mm	F mm	G mm	S mm	U mm	St. pcs.
6154.000.102	PB4 L	PL4	Bi + 16	Bi + 6	5,2	19,5	30,0	2
6155.000.100	PB5 L	PL5	Bi + 19	Bi + 7	5,2	26,0	40,0	2
A Bi = Inner width								

PB-R flat connector

Material PA6 GFK plastics

- applied to fix the PL guide chains on the front side - radial side
- optimal mounting with M5 countersunk screw

Part No.	Article	Type						
black			E0 mm	F mm	G mm	S mm	U mm	St. pcs.
6154.000.202	PB4 R	PL4	Bi + 16	Bi + 6	5,2	19,5	30,0	2
6155.000.200	PB5 R	PL5	Bi + 19	Bi + 7	5,2	26,0	40,0	2
B Bi = Inner width								

PB-V heavy-duty flat connector

Material PA6 GFK plastics

- applied to fix the PL guide chains on the front side
- optimal mounting with M5 countersunk screw

Part No.	Article	Type						
black			E0 mm	F mm	G mm	M mm	N mm	St. pcs.
6154.000.109	PB4 LV	PL4	Bi + 16	Bi + 6	5,2	13,0	15,5	2
6154.000.209	PB4 RV	PL4	Bi + 16	Bi + 6	5,2	13,0	15,5	2
6155.000.104	PB5 LV	PL5	Bi + 19	Bi + 7	5,2	13,5	19,0	2
6155.000.204	PB5 RV	PL5	Bi + 19	Bi + 7	5,2	13,5	19,0	2
C Bi = Inner width								

Opening and Closing

To **open** the guide chain squeeze the hinged bridge on the slotted side and release the bridge by lifting the profile sideways. Guide chains are accessible across the entire inner width.

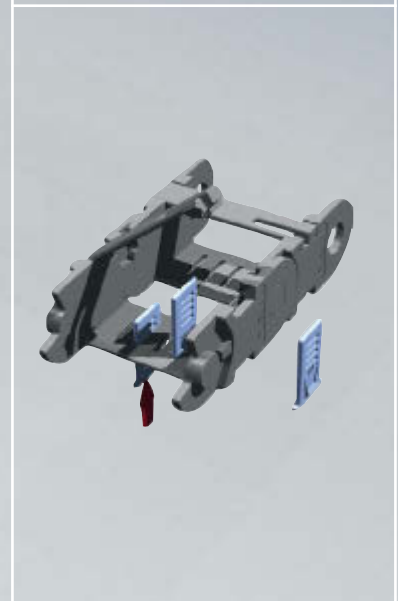
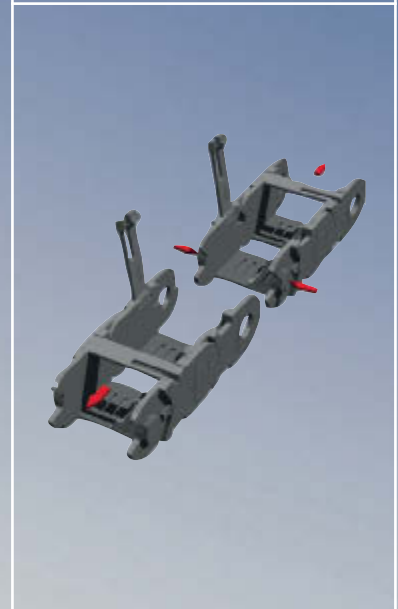
To **close** the profile proceed in reverse order.

Lengthening and Shortening

To **lengthen** or **shorten** the chain open the particular chain section at the neighbouring chain link(s). Then loosen or stick together both chain ends by pressing the base body.

Mounting the separators

Conductors will be separated with push-in **separators**. The separators have to be pushed from the outside through the bottom of the guide chain until they lock. The separator can be removed by unlocking the locking device.





Application

- Automation
- (Special-purpose) machines
- Plant Construction

Plastic guide chains

variable, highly stressable

Material

Link plates: PA6 GFK plastics

Frame bar: aluminium

Properties

- easy to mount
- economical
- designed for extended lifetime
- inner/outer widths up to approx. 600 mm available
- compatible connections
- simple handling with standard tools

Prestressed

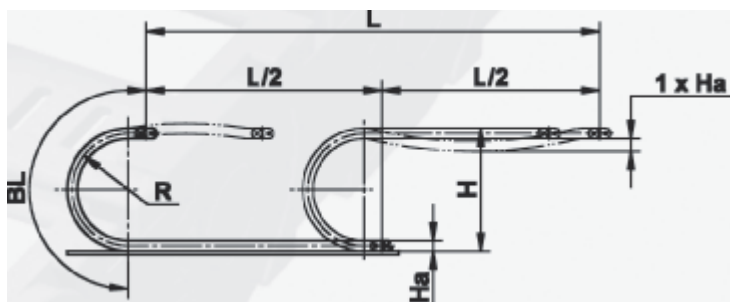
The FLEXA guide chains are prestressed in order to achieve the longest possible free carrying length. This length is also determined through other parameters such as the weight of the guide chain load. We also supply our range as prestress-reduced guide chains, if requested.

Additional load [Cables] for the guide chain

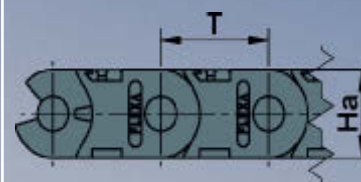
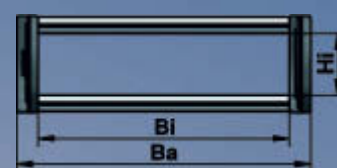
In order to determine the additional weight of the guide chain it is necessary to determine the particular weight of such wires, cables, and hoses. This information is provided in the technical data issued by the particular manufacturer. Please check with the relevant tables in our catalogue concerning the permissible FLEXA guide chain gross weight.

Technical data

Inner height	Hi	34 mm
Outer height	Ha	52 mm
Chain links assembled/mtr.		14
Pitch	T	70 mm
Guide chain length		appr. ca. L/2 + BL
Total height	H	appr. ca. 2 x R + Ha
Free carrying length		max. 3500 mm
Travel standard	L	max. 35 m
Travel in channel		max. 60 m
Load		max. 20 kg/m
Speed		max. 10 m/sec ²
Acceleration		max. 15 m/sec ²
Tensile strength		max. 1350 N
Separator thickness		4 mm

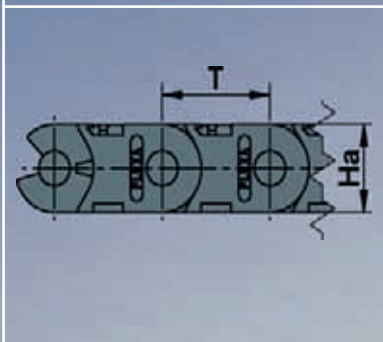
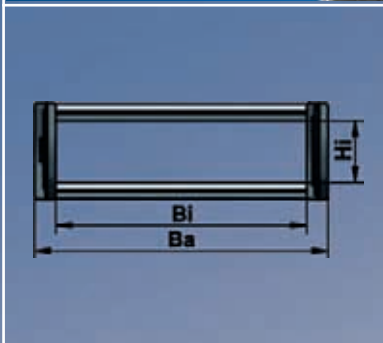


Part No.	Article					TS		
			R					
black		Bi mm	R mm	Ba mm	BL mm	St./pcs. max.	kg/m	m*
6097.050.007	PH7-50A-7F	50	75	76	300	3	1,670	1
6097.050.010	PH7-50A-10F	50	100	76	400	3	1,670	1
6097.050.015	PH7-50A-15F	50	150	76	600	3	1,670	1
6097.050.020	PH7-50A-20F	50	200	76	800	3	1,670	1
6097.050.030	PH7-50A-30F	50	300	76	1200	3	1,670	1
6097.065.007	PH7-65A-7F	65	75	91	300	4	1,720	1
6097.065.010	PH7-65A-10F	65	100	91	400	4	1,720	1
6097.065.015	PH7-65A-15F	65	150	91	600	4	1,720	1
6097.065.020	PH7-65A-20F	65	200	91	800	4	1,720	1
6097.065.030	PH7-65A-30F	65	300	91	1200	4	1,720	1
6097.100.007	PH7-100A-7F	100	75	126	300	7	1,850	1
6097.100.010	PH7-100A-10F	100	100	126	400	7	1,850	1
6097.100.015	PH7-100A-15F	100	150	126	600	7	1,850	1
6097.100.020	PH7-100A-20F	100	200	126	800	7	1,850	1
6097.100.030	PH7-100A-30F	100	300	126	1200	7	1,850	1
6097.150.007	PH7-150A-7F	150	75	176	300	10	2,030	1
6097.150.010	PH7-150A-10F	150	100	176	400	10	2,030	1
6097.150.015	PH7-150A-15F	150	150	176	600	10	2,030	1
6097.150.020	PH7-150A-20F	150	200	176	800	10	2,030	1
6097.150.030	PH7-150A-30F	150	300	176	1200	10	2,030	1
6097.200.007	PH7-200A-7F	200	75	226	300	14	2,200	1
6097.200.010	PH7-200A-10F	200	100	226	400	14	2,200	1
6097.200.015	PH7-200A-15F	200	150	226	600	14	2,200	1
6097.200.020	PH7-200A-20F	200	200	226	800	14	2,200	1
6097.200.030	PH7-200A-30F	200	300	226	1200	14	2,200	1
Further widths on request		* with 14 guide links pre-assembled						



Bi	Inner width
Ba	Outer width
BL	Bow length
H	Total height
Ha	Outer height
Hi	Inner height
L	Travel length
O	Opening
R	Radius
T	Pitch
TS	Separators





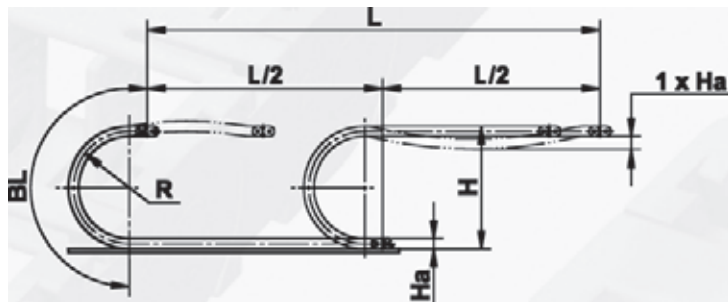
- Bi Inner width
- Ba Outer width
- BL Bow length
- H Total height
- Ha Outer height
- Hi Inner height
- L Travel length
- O Opening
- R Radius
- T Pitch
- TS Separators



Technische Daten

Technical data

Innenhöhe	Hi	Inner height	49 mm
Außenhöhe	Ha	Outer height	77 mm
Kettenglieder montiert/m		Chain links assembled/mtr.	10
Teilung	T	Pitch	100 mm
Kettenlänge		Guide chain length	appr. ca. L/2 + BL
Bauhöhe	H	Total height	appr. ca. 2 x R + Ha
Freitragende Länge		Free carrying length	max. 4600 mm
Verfahrweg Standard	L	Travel standard	max. 50 m
Verfahrweg in Rinne		Travel in channel	max. 100 m
Zusatzgewicht		Load	max. 35 kg/m
Geschwindigkeit		Speed	max. 10 m/sec ²
Beschleunigung		Acceleration	max. 15 m/sec ²
Zugbelastbarkeit		Tensile strength	max. 2200 N
Trennstegdicke		Separator thickness	4 mm



Part No.

Article



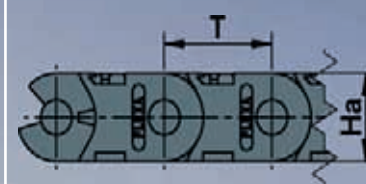
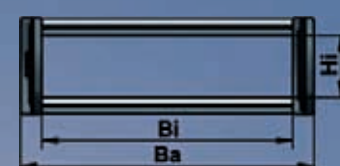
black		Bi mm	R mm	Ba mm	BL mm	St./pcs. max.	kg/m	m*
6091.075.010	PH10-75A-10F	75	100	109	400	4	2,970	1
6091.075.015	PH10-75A-15F	75	150	109	600	4	2,970	1
6091.075.020	PH10-75A-20F	75	200	109	800	4	2,970	1
6091.075.030	PH10-75A-30F	75	300	109	1200	4	2,970	1
6091.100.010	PH10-100A-10F	100	100	134	400	5	3,110	1
6091.100.015	PH10-100A-15F	100	150	134	600	5	3,110	1
6091.100.020	PH10-100A-20F	100	200	134	800	5	3,110	1
6091.100.030	PH10-100A-30F	100	300	134	1200	5	3,110	1
6091.150.010	PH10-150A-10F	150	100	184	400	8	3,390	1
6091.150.015	PH10-150A-15F	150	150	184	600	8	3,390	1
6091.150.020	PH10-150A-20F	150	200	184	800	8	3,390	1
6091.150.030	PH10-150A-30F	150	300	184	1200	8	3,390	1
6091.200.010	PH10-200A-10F	200	100	234	400	11	3,670	1
6091.200.015	PH10-200A-15F	200	150	234	600	11	3,670	1
6091.200.020	PH10-200A-20F	200	200	234	800	11	3,670	1
6091.200.030	PH10-200A-30F	200	300	234	1200	11	3,670	1
6091.250.010	PH10-250A-10F	250	100	284	400	13	3,950	1
6091.250.015	PH10-250A-15F	250	150	284	600	13	3,950	1
6091.250.020	PH10-250A-20F	250	200	284	800	13	3,950	1
6091.250.030	PH10-250A-30F	250	300	284	1200	13	3,950	1
6091.300.010	PH10-300A-10F	300	100	334	400	16	4,230	1
6091.300.015	PH10-300A-15F	300	150	334	600	16	4,230	1
6091.300.020	PH10-300A-20F	300	200	334	800	16	4,230	1
6091.300.030	PH10-300A-30F	300	300	334	1200	16	4,230	1

Further widths on request

* with 10 guide links pre-assembled

Technical data

Inner height	Hi	80 mm
Outer height	Ha	108 mm
Chain links assembled/mtr.		8
Pitch	T	125 mm
Guide chain length		appr. ca. L/2 + BL
Total height	H	appr. ca. 2 x R + Ha
Free carrying length		max. 6600 mm
Travel standard	L	max. 75 m
Travel in channel		max. 120 m
Load		max. 80 kg/m
Speed		max. 10 m/sec ²
Acceleration		max. 15 m/sec ²
Tensile strength		max. 4300 N
Separator thickness		4 mm



Part No.	Article					TS		
black		Bi mm	R mm	Ba mm	BL mm	St./pcs. max.	kg/m	m*
6096.100.015	PH12-100A-15F	100	150	142	600	5	4,880	1
6096.100.020	PH12-100A-20F	100	200	142	800	5	4,880	1
6096.100.025	PH12-100A-25F	100	250	142	1000	5	4,880	1
6096.100.030	PH12-100A-30F	100	300	142	1200	5	4,880	1
6096.100.050	PH12-100A-50F	100	500	142	2000	5	4,880	1
6096.150.015	PH12-150A-15F	150	150	192	600	8	5,110	1
6096.150.020	PH12-150A-20F	150	200	192	800	8	5,110	1
6096.150.025	PH12-150A-25F	150	250	192	1000	8	5,110	1
6096.150.030	PH12-150A-30F	150	300	192	1200	8	5,110	1
6096.150.050	PH12-150A-50F	150	500	192	2000	8	5,110	1
6096.200.015	PH12-200A-15F	200	150	242	600	11	5,330	1
6096.200.020	PH12-200A-20F	200	200	242	800	11	5,330	1
6096.200.025	PH12-200A-25F	200	250	242	1000	11	5,330	1
6096.200.030	PH12-200A-30F	200	300	242	1200	11	5,330	1
6096.200.050	PH12-200A-50F	200	500	242	2000	11	5,330	1
6096.250.015	PH12-250A-15F	250	150	292	600	13	5,560	1
6096.250.020	PH12-250A-20F	250	200	292	800	13	5,560	1
6096.250.025	PH12-250A-25F	250	250	292	1000	13	5,560	1
6096.250.030	PH12-250A-30F	250	300	292	1200	13	5,560	1
6096.250.050	PH12-250A-50F	250	500	292	2000	13	5,560	1
6096.300.015	PH12-300A-15F	300	150	342	600	16	5,780	1
6096.300.020	PH12-300A-20F	300	200	342	800	16	5,780	1
6096.300.025	PH12-300A-25F	300	250	342	1000	16	5,780	1
6096.300.030	PH12-300A-30F	300	300	342	1200	16	5,780	1
6096.300.050	PH12-300A-50F	300	500	342	2000	16	5,780	1
6096.350.015	PH12-350A-15F	350	150	392	600	19	6,000	1
6096.350.020	PH12-350A-20F	350	200	392	800	19	6,000	1
6096.350.025	PH12-350A-25F	350	250	392	1000	19	6,000	1
6096.350.030	PH12-350A-30F	350	300	392	1200	19	6,000	1
6096.350.050	PH12-350A-50F	350	500	392	2000	19	6,000	1

Further widths on request

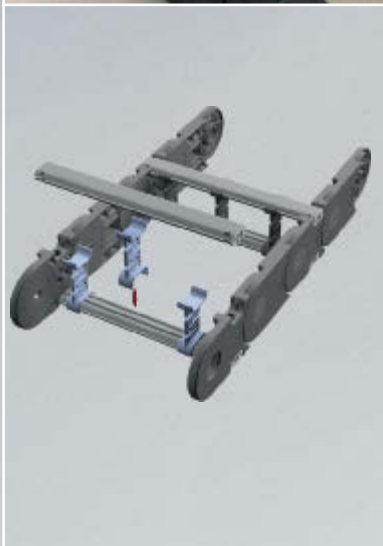
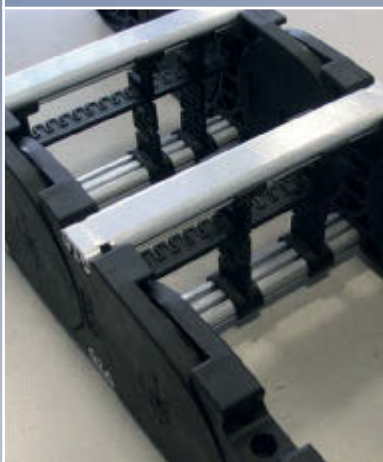
* with 8 guide links pre-assembled

Bi Inner width
Ba Outer width
BL Bow length
H Total height
Ha Outer height
Hi Inner height
L Travel length
O Opening
R Radius
T Pitch
TS Separators





- easy to mount
- highly stable
- prepared for additional integrated strain relief system
- mountable on three sides



LP layer stay
separates the cables in
the height

PS separator
conductors will be separated
with push-in separators

PB standard connector for
connection and fixation of
the PH guide chain

locking bolt

SRP2 sliding fixture
for fixing the cables with cable ties

SCSRN strain relief bar
for strain relief purposes

PS separator

Material PA6 GFK plastics

- conductors will be separated with push-in separators
- applicable for subsequent installation
- optimal for every chain link

Part No.	Article	Type	Width	St. pcs.
			mm	
black				
6327.000.000	PS7-PH	PH7	4	25
6321.000.000	PS10-PH	PH10	4	25
6326.000.000	PS12-PH	PH12	4	25

LP layer stay

Material PA6 GFK plastics

- separates the cables in the height
- can be installed subsequently in the PS separators
- can be mounted in various heights

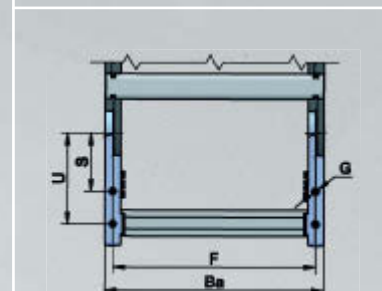
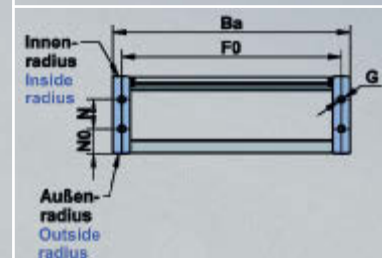
Part No.	Article	Type	Width	Length	
			mm	mm	St. pcs.
6316.000.009	LP150	PH7/10/12	4	153	10



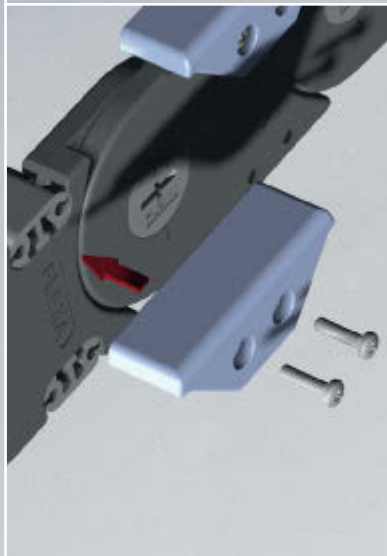
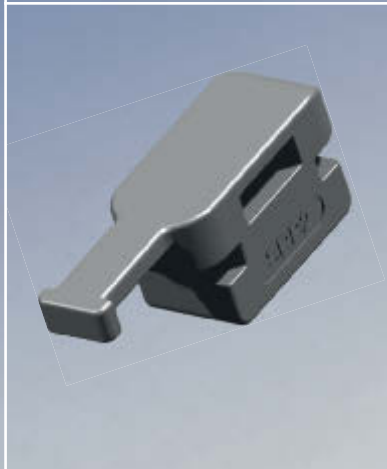
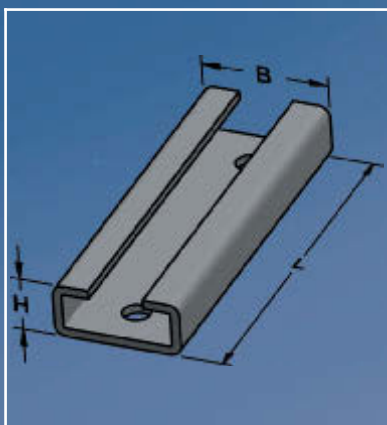
PB standard connector

Material PA6 GFK plastics

- for connection and fixation of the PH guide chains
- set includes two connecting parts
- to be combined with SCSRN strain relief module



Part No.	Article	Type	F	F0	G	N	N0	S	U	St. pce.
			mm	mm	mm	mm	mm	mm	mm	
6157.000.009	PB7-PH	PH7	Bi + 13	Bi + 13	5,5	22	16	41,5	64,0	1
6151.000.009	PB10-PH	PH10	Bi + 17	Bi + 17	6,5	29	25	62,0	97,0	1
6156.000.009	PB12-PH	PH12	Bi + 21	Bi + 21	10,5	46	32	83,0	118,0	1



SCSRN strain relief bar

Material galvanized steel

- for heavy-duty applications
- for mounting to PB standard connector

Part No.	Article	Type	C-Profile	Length				
black				H mm	B mm	L mm	St. pce.	
6277.050.000	SCSRN7-50	PH 7	11	10	25	50	1	
6277.065.000	SCSRN7-65	PH 7	11	10	25	65	1	
6277.100.000	SCSRN7-100	PH 7	11	10	25	100	1	
6277.150.000	SCSRN7-150	PH 7	11	10	25	150	1	
6277.200.000	SCSRN7-200	PH 7	11	10	25	200	1	
6271.075.000	SCSRN10-75	PH 10/12	12	12	28	75	1	
6271.100.000	SCSRN10-100	PH 10/12	12	12	28	100	1	
6271.150.000	SCSRN10-150	PH 10/12	12	12	28	150	1	
6271.200.000	SCSRN10-200	PH 10/12	12	12	28	200	1	
6271.250.000	SCSRN10-250	PH 10/12	12	12	28	250	1	
6271.300.000	SCSRN10-300	PH 10/12	12	12	28	300	1	
6271.350.000	SCSRN10-350	PH 10/12	12	12	28	350	1	

SPR2 sliding fixture

Material PA6 GFK plastics

- for fixing the cables with cable ties
- free positioning on SCSR rail

Part No.	Article	Type	C-profile	
black			mm	St. pcs.
6170.000.003	SRP2-7	PH7	11	25
6170.000.002	SRP2-10	PH10/12	12	25

PH-G glider

Material PA6 GFK plastics

- for long travel distances
- for heavy-duty applications
- can be mounted to each link plate into the holes of the frame stays with 2 screws at the inside radius

Part No.	Article	Type	Glider/m	
black			Pcs./m	pcs.
6407.000.000	PH7-G	PH7	28	25
6401.000.000	PH10-G	PH10	20	25
6406.000.000	PH12-G	PH12	16	25

Mounting the separators

Push the separators onto the aluminium bars until they lock in completely. The arrows on the separators have to be aligned upwards and have to show in the same direction.

Mounting the layer stays

After the separators and the aluminium bars have been mounted, the layer stays can be locked into the appropriate screens. (Push the separators into their final positions).

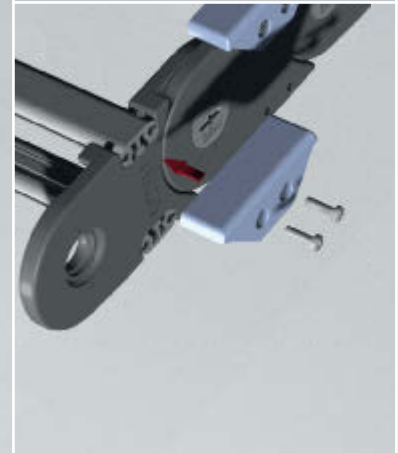
Mounting the strain relief

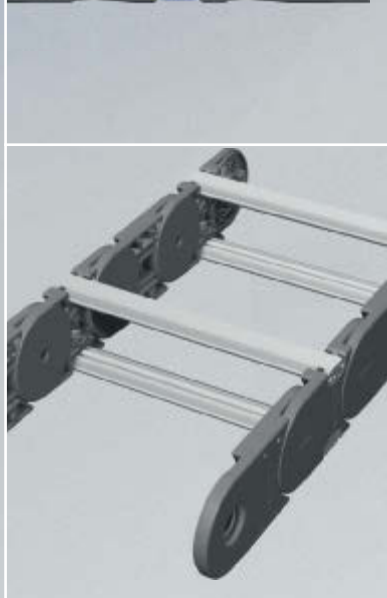
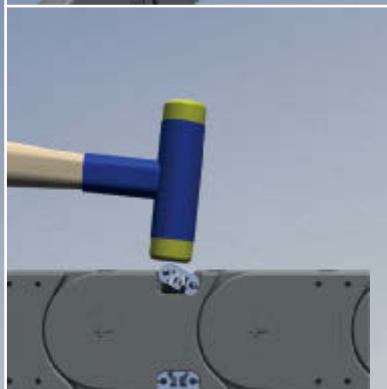
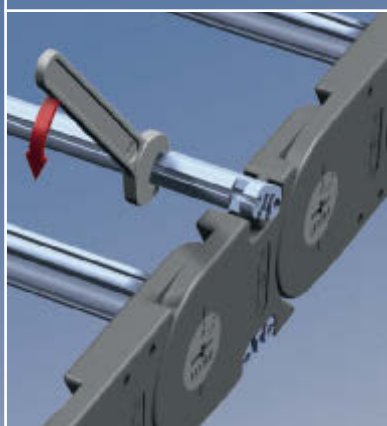
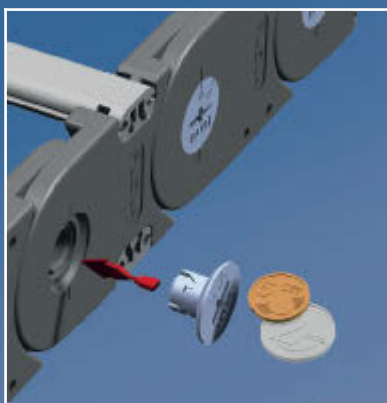
Position the SRP2 push holder on the SCSRN strain relief profile and jam the strain relief between two PB(7/10/12) connection parts by using the special noses.

Mounting the gliders

For long travel distances gliders can be screwed on each link plate into the holes of the frame stays and also directly into the holes of the link plate. The screws are included in the delivery.

For standard deliveries, the gliders have already been mounted at the inner radius.





Lengthen / Shorten

Mount the link plates up to the desired length and screw in the locking bolts. Lock the bolts by turning them clockwise.

Assembly and Disassembly of the aluminium frame bars

Begin with the installation of the first and the last frame bar to stabilize the system. Then mount the remaining bars. The bars must click twice for perfect positioning and secure locking.

If you wish to remove the frame bar, use a spanner.

Push in the frame bars into the accommodation of the link plate until it settles at the stop. Then use a plastic hammer for final fixing (the stay has two pawls). For standard deliveries, the stays are already mounted at the outside radius.

ARAW channel system

Easy and flexible to install revealing a professional visual effect.

A channel system can be useful or indispensable for extended travel distances, high travel speeds, high acceleration, or small guide chains with big radii. A channel system is to prevent the guide chain from overturning and from lateral deflection.

Material aluminium

Properties

- quick mounting without displacement
- attachment link can be installed inside and outside
- the channel system fits both the PL and the PH guide chains
- resistant to seawater and corrosion
- extendible

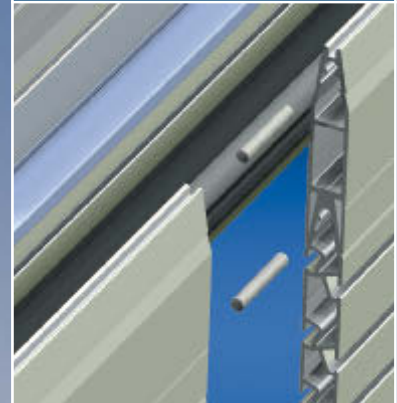
Delivery length

Delivery in sections up to 3 mtr. of length. Fixing screws are not included in delivery.

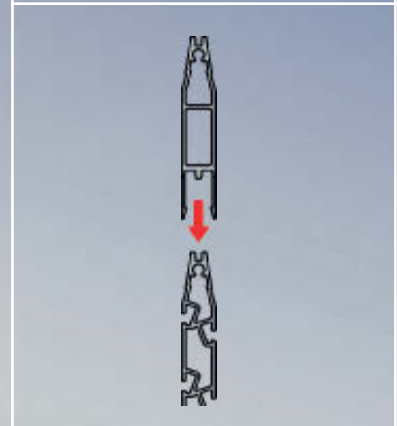
Variable in height and width

The aluminium guide channel can be raised by several **top parts**. Also the inside width of the channel system can be heightened very easily. We recommend the use of spacers made of simple construction material. The **grooved pin** ensures mounting without displacement in the grain direction. The alignment of the channel system can be practiced by chalk line or a laser. Please ensure alignment to be made in parallel to the travel direction of the movable carrier.

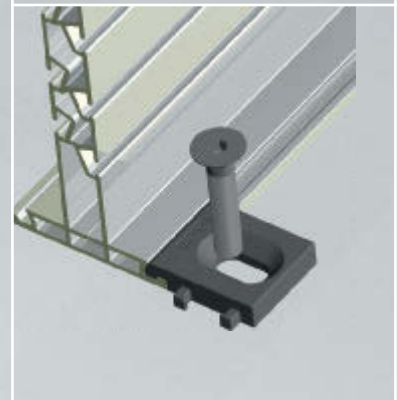
Prefasten **attachment link**. The link can be attached either inside or outside the channel system. For heavy-duty applications mount the link to the inside and to the outside. In the grain direction the attachment link is slideable. Recommended distance: 1,000 mm. Fix attachment link with M8 countersunk screw according to DIN7991 (4.50 Nm of torque).



Lengthening the channel

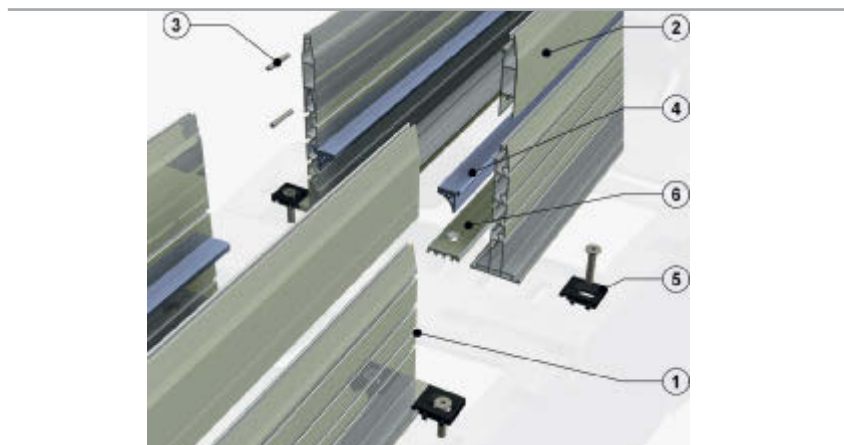
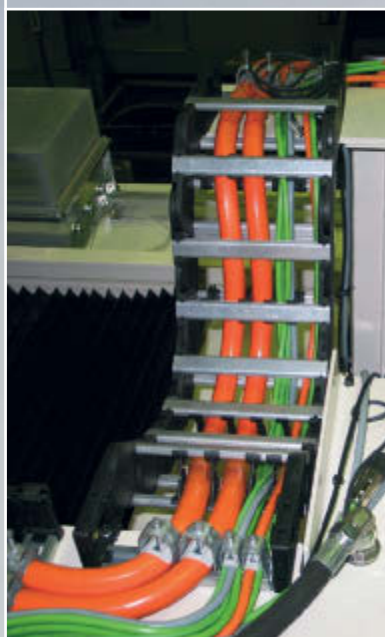
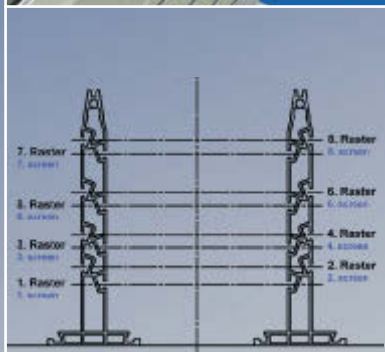
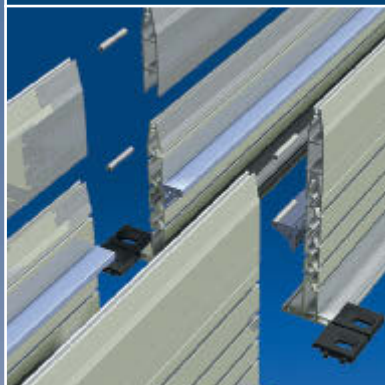


Extending the system



Fixing the attachment link

ARAW channel system



1. ARAW15 guide channel made of aluminium, length of 3000 mm, mounting plates incl.
2. ARAW15-A top part for guide channel
3. SKS 5x25 grooved pin (included in delivery)
4. ARAW15-G slide bar made of special plastic
5. ARKP mounting plate (2 units/mtr.)
6. ARAW15-V widening profile

type	Radius mm	longer than travel distance m	channel	top part	mounting plate	total height mm	screen/position
PL4	50	2,30	ARAW15		ARKP	153	1
	75	2,30	ARAW15		ARKP	153	1
	100	2,30	ARAW15		ARKP	153	1
	150	2,30	ARAW15		ARKP	153	1
	200	2,30	ARAW15		ARKP	153	1
PL5	60	3,10	ARAW15		ARKP	153	1
	100	3,10	ARAW15		ARKP	153	1
	125	3,10	ARAW15		ARKP	153	1
	150	3,10	ARAW15		ARKP	153	2
	200	3,10	ARAW15	ARAW15-A	ARKP	214	2
	250	3,10	ARAW15	ARAW15-A	ARKP	214	2
PH7	75	3,50	ARAW15		ARKP	153	3
	100	3,50	ARAW15		ARKP	153	3
	150	3,50	ARAW15		ARKP	153	3
	200	3,50	ARAW15	ARAW15-A	ARKP	214	3
	300	3,50	ARAW15	2 x ARAW15-A	ARKP	275	3
PH10	100	4,60	ARAW15		ARKP	153	5
	150	4,60	ARAW15		ARKP	153	5
	200	4,60	ARAW15	ARAW15-A	ARKP	214	5
	300	4,60	ARAW15	2 x ARAW15-A	ARKP	275	5
PH12	150	6,60	ARAW15		ARKP	153	7
	200	6,60	ARAW15		ARKP	153	7
	250	6,60	ARAW15	ARAW15-A	ARKP	214	7
	300	6,60	ARAW15	2 x ARAW15-A	ARKP	275	7
	500	6,60	ARAW15	3 x ARAW15-A	ARKP	336	7

Additional weight will reduce the free carrying length

ARAW15 guide channel

Material aluminium

- for PL and PH guide chains
- fast and perfectly aligned assembly
- mounting plate can be mounted both inside and outside
- gutter profiles resistant to sea water and to corrosion
- expandable with fixing pins
- special lengths available on request
- for lengths longer than 3 mtr, pins to extend the profiles are included

Part No.	Article	For type	Height	Length	
			mm	mm	St. pce.
6127.150.000	ARAW-15	PL/PH	153	3000	1

ARAW15-A top part

Material aluminium

- for PL and PH guide chains
- easy mounting to the ARAW15 guide channel
- special lengths available on request
- for lengths longer than 3 mtr, pins to extend the profiles are included

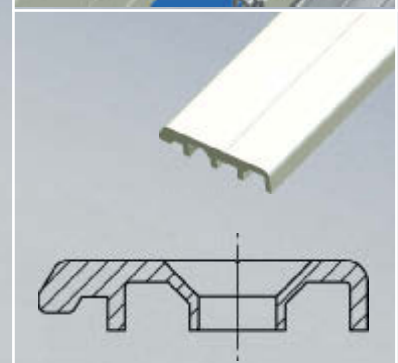
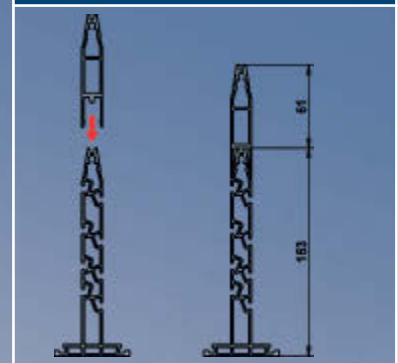
Part No.	Article	For type	Height	Length	
			mm	mm	St. pce.
6127.150.002	ARAW15-A	PL / PH	61	3000	1

ARAW15-V widening profile

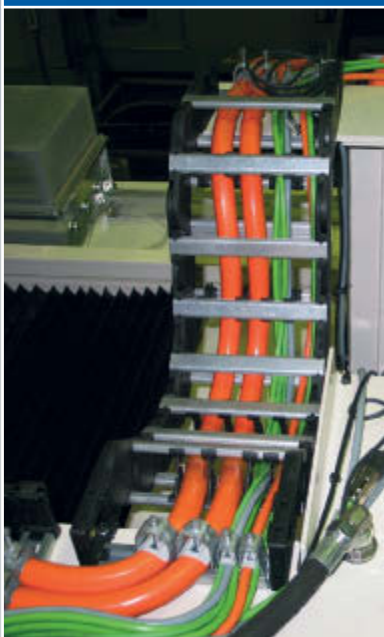
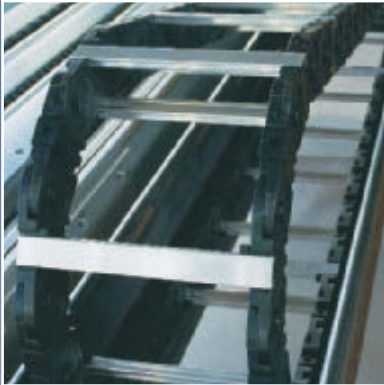
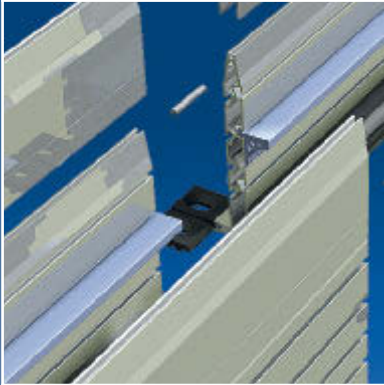
Material aluminium

- for heavy-duty installations of PH10 / PH12 guide chains
- stabilizes the ARAW15 guide channel
- without mounting bores (customer)

Part No.	Article	For type	Height	Length	
				mm	St. pce.
6127.150.003	ARAW15-V	PL / PH		3000	1



ARAW channel system



ARAW15-G slide bar

Material plastics mod.

- for PL and PH guide chains
- improves the sliding properties over long travel distances
- simply insert into the ARAW15 guide rail
- fixing screw included in delivery

Part No.	Article	For type	Length	
			mm	St. pce.
6127.150.001	ARAW15-G	PL/PH	3000	1

ARKP mounting plate

Material PC plastics

- to fix the ARAW15 guide channel
- optimal mounting with M8 countersunk screw
- recommendation: fixing distance of 1 mtr.

Part No.	Article	For type	ARKP/m	
			Pcs./mtr.	St. pcs.
6129.150.000	ARKP	PL/PH	2	10

1. Dimensioning the guide chain / the content respectively

Determination of the right cross-section with regard to the wires, cables, and hoses to be laid.

2. Determining the bending radius

Determination of the bending radius with regard to the outside diameter of wires, cables, and hoses. Please also refer to the manufacturer's specifications.

The bending radius **R** is determined through factor **f** against the largest outside diameter **D** of the wires applied.

Common factors (F) for wires for energy guide chains are between 5 and 10 x D. Please refer to the manufacturer's specifications!

$$R = f \times D$$

Example:

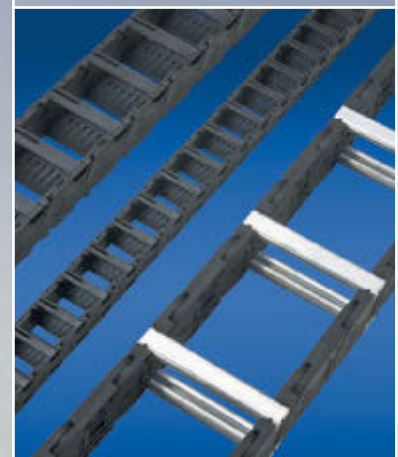
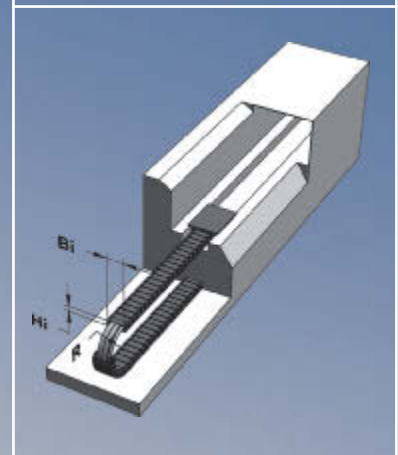
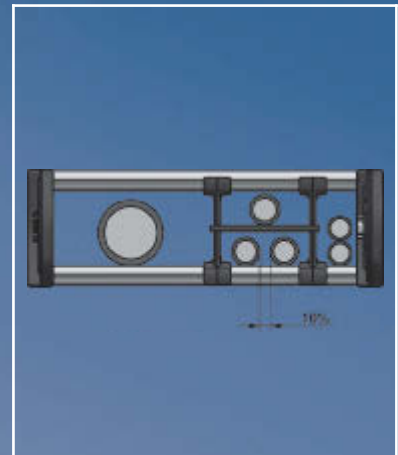
largest cable: D = 18 mm
result: 10 x 18 = 180 mm
→ R = 200 mm

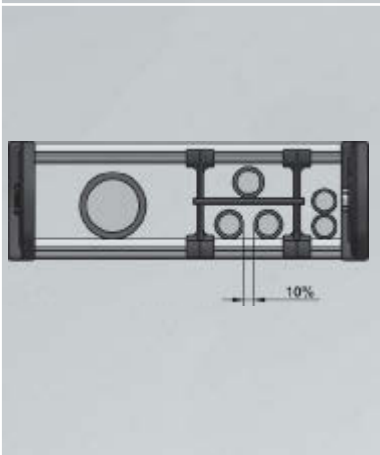
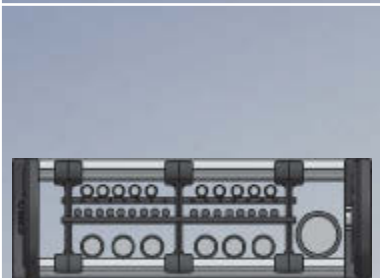
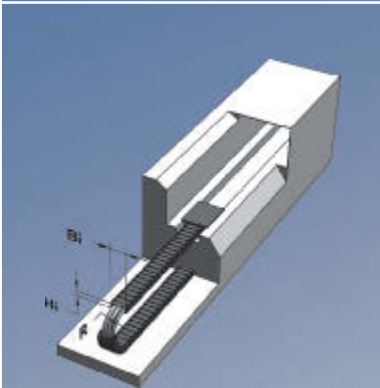
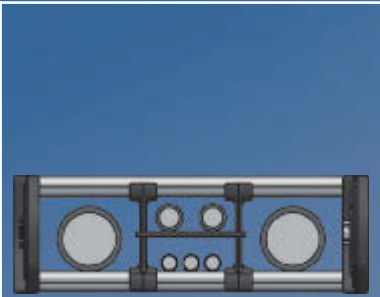
3. Determining the additional weight

The additional weight due to wires, cables, and hoses is listed in the manufacturer's specifications.

4. Selecting the guide chain

Choose the appropriate guide chain by considering the range, the size, and the travel speed. This information is provided in the "Properties" tables contained in our catalogue.





5. Calculating the length of a guide chain

Fixing point in the middle of the travel length? Fixing point not in the middle of the travel length?

Fixing point in the middle of the travel length L

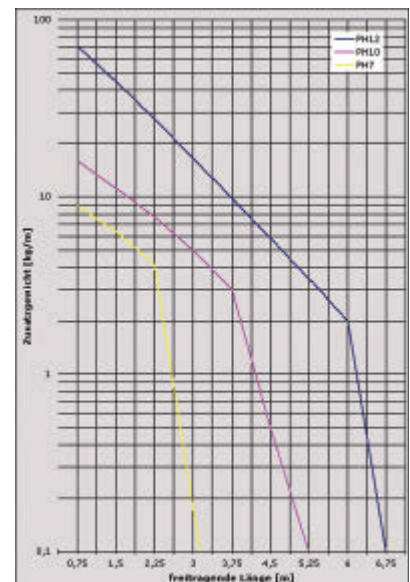
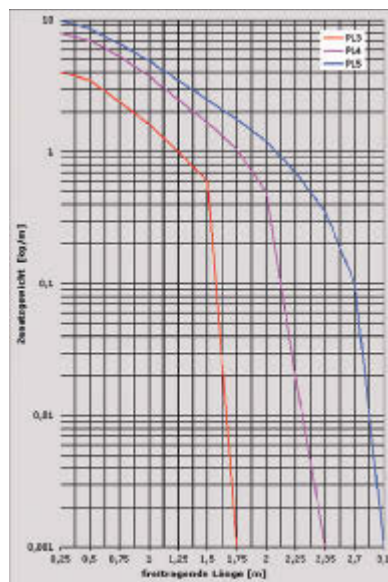
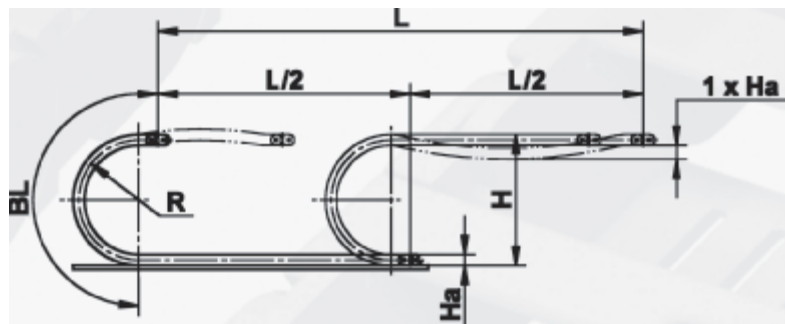
$$LK = L/2 + BL$$

LK Guide chain length
BL Bow length (4 x R)

Fixing point not in the middle of the travel length L

$$LK = L/2 + BL + DL$$

DL Length between fixing point and the middle of the travel length



6. Determining the free carrying length

Please determine the free carrying length taking the additional weights of the wires, cables, and hoses into consideration by means of the product specification tables.

7. The strain relief system

Cables and hoses should be relieved on both ends of the chain, but at least on one side. If the travel length exceeds 30 mtr., we recommend to relieve the cables also within the chain.

8. Loading

Please always use flexible wires and cables! Cables and hoses must have enough space for free movement.

The following guidelines have to be met:

space for round cables:

- + 10% of outer diameter

space for flat cables:

- + 10% of width/thickness space

for conduits/hoses:

- + 20% of outside diameter

For hydraulic hoses and air hoses please follow manufacturer's specifications concerning space for movement. Cables with different diameters have to be laid separately.

The weight of the cables and hoses should be distributed symmetrical onto the guide chain.

Heavy-weight cables and hoses should be preferably laid close to the outer walls. Please make sure that the jackets of different wires and cables do not stick together. Use separators, if required.

