Innovation in Motion
TSUBAKI

KABELSCHLEPP

S/SX series

EXTREMELY ROBUST AND STURDY

FOR ROUGH ENVIRONMENTAL CONDITIONS

EXTENSIVE UNSUPPORTED LENGTHS

S/SX series

Extremely robust and stable steel cable carriers

Subject to change.

Inner heights
26 – 370 mm

Chain widths
70 – 1,500 mm

Pitch
65 – 320 mm

Additional load
up to 150 kg/m

Travel length unsupported
up to 24 m

Travel speed
up to 2.5 m/s

Travel acceleration
up to 5 m/s²

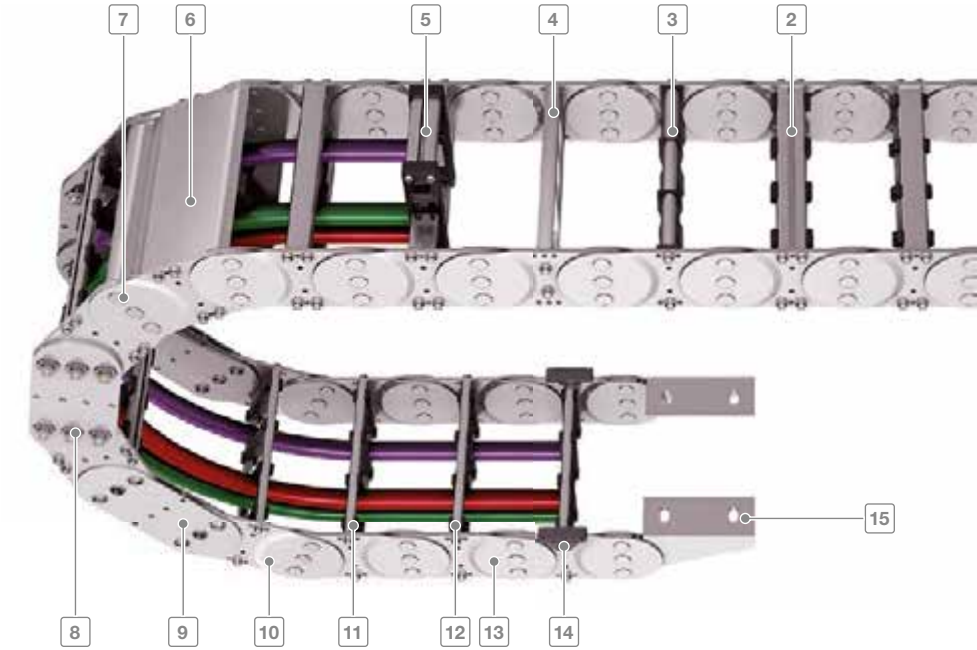
B_i increments
1 mm

All technical data and features depend on application and type.
Let us know your requirements - we are here to help!

Fon: +49 (0) 2762 4003-0 or
e-mail: technik@kabelschlepp.de

* Only S/SX 1252B and S/SX 1802B

S/SX series | Overview



Features

- Extremely robust, sturdy steel cable carriers for heavy mechanical loads and rough environmental conditions
- Side bands made of steel or stainless steel
- Very sturdy link plates, each consisting of two individual plates
- Very extensive unsupported lengths even with large additional loads
- Joint design with multi stroke system and hardened bolt
- Bolted stay systems, solid end connectors
- Explosion protection class EX II 2 GD according to ATEX RL

S series
Side bands made of galvanized steel

STEEL ZINC-PLATED

SX series
Side bands made of steel resistant to rust and acid

STAINLESS STEEL RUST-FREE

The design

Steel cable carriers with extremely sturdy link plates and a joint design with multi stroke system and hardened bolt, proven successful for many years. The extremely sturdy design provides extensive unsupported lengths and allows high additional loads.

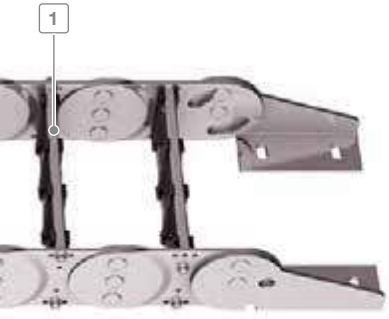
Sandwich design: Link plates consist of two welded plates

Glide shoes available for gliding applications

Stroke systems with hardened bolts and circlips

Also available as covered variants with cover system or steelband cover

S/SX series | Overview

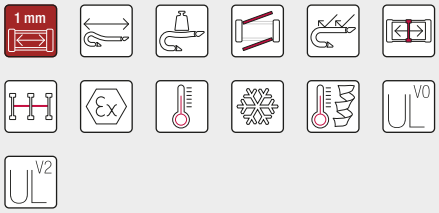


Example of inner distribution

1. All stays available in **1 mm width sections**
2. 4-fold bolted aluminum stays for extreme loads
3. Rolling stays
4. Aluminum hole stays
5. Mounting frame stays
6. Aluminum cover available in **1 mm width sections**
7. Joint design with hardened bolt for a long service life
8. Bolted and riveted joint connections possible
9. Straight link plate design (S/SX1252/1252B and S/SX1802/1802B)
10. Cranked link plate design
11. Different separation options for the cables
12. Can be opened quickly on the inside and the outside for cable laying
13. Extremely robust side bands, galvanized or stainless steel
14. Replaceable glide shoes
15. End connectors for different connection variants

Selection criteria for S/SX series

- If an extensive unsupported length is desired
- If number and size of the cables result in high additional loads
- For dirty environmental conditions
- If a particularly sturdy cable carrier is required
- If a particularly long service life is required
- If a cable carrier has to be adapted to the available space precisely at 1 mm increments
- If an especially wide cable carrier up to 1,800 mm outer width is required

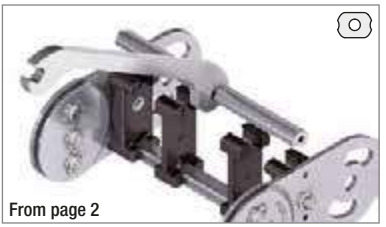


Type	h_i [mm]	B_k [mm]	t [mm]	Page
S/SX0650	26 – 40	70 – 500	65	6
S/SX0950	40 – 48	125 – 600	95	28
S/SX1250	66 – 74	130 – 800	125	54
S/SX1800	104 – 110	180 – 1,000	180	94
S/SX2500	180 – 183	250 – 1,200	250	114
S/SX3200	220	250 – 1,500	320	128

S/SX0650

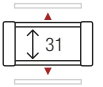
Stay variants

Aluminum stay RS 1

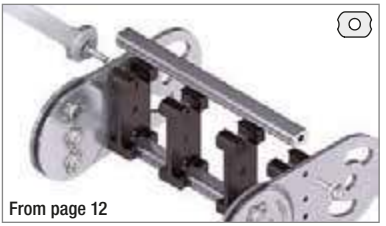

From page 2

Frame stay standard “the standard”
- Extremely quick to open and close.
- Aluminum profile bars for light to medium loads.
- Available customized in **1 mm width sections**.

Opening options
outside: Release by turning by 90°.
inside: Screw connection is easy to release.

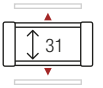


Aluminum stay RS 2


From page 12

Frame stay standard, bolted
- Extremely quick to open and close.
- Aluminum profile bars for light to medium loads. Easy screw connection.
- Available customized in **1 mm width sections**.

Opening options
outside/inside: Screw connection is easy to release.

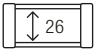


Tube stay RR


From page 16

Frame stay, tube version
- Steel rolling stays with gentle cable support and plastic dividers. Ideal for using media hoses with soft sheathing. Easy screw connection.
- Available customized in **1 mm width sections**.

Opening options
outside/inside: Screw connection detachable.



Technical data on page 8

S/SX0650 | Stay Variants | Overview

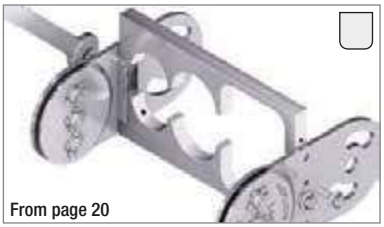
Pitch
65 mm

Height
26 – 40 mm

Chain width
70 – 500 mm

Bending radius
75 – 300 mm

Aluminum stay LG

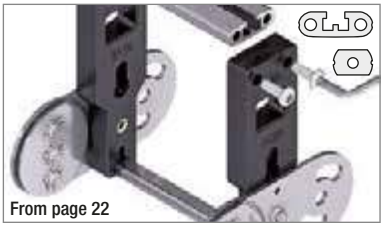


From page 20

Hole stay, split version
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.

Opening options
outside/inside: Screw connection is easy to release.

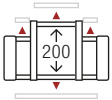
Aluminum stay RMA



From page 22

Mounting frame stay
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- Available customized in **1 mm width sections**.

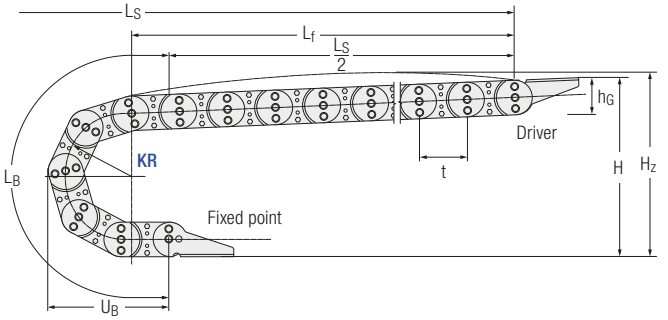
Opening options
outside/inside: Screw connection is easy to release.



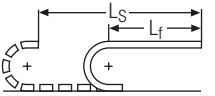
Technical data on page 8

S/SX0650 | Installation Dimensions | Unsupported

Unsupported arrangement



Unsupported length L_f



Dynamics of unsupported arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[mm]
2.5	5	65

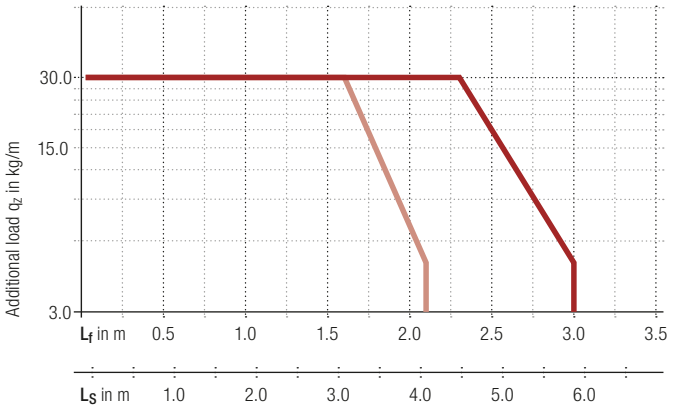
Installation dimensions unsupported

KR [mm]	H [mm]	L_B [mm]	U_B [mm]
75	225	496	230
95	265	558	250
115	305	621	270
125	325	653	280
135	345	684	290
145	365	716	300

KR [mm]	H [mm]	L_B [mm]	U_B [mm]
155	385	747	310
175	425	810	330
200	475	888	355
250	575	1,045	405
300	675	1,202	455

Load diagram

for unsupported length depending on additional load



Intrinsic cable carrier weight q_k = 4.5 kg/m. The maximum additional load decreases if this value is exceeded.

S0650 galvanized steel
SX0650 ER 2
SX0650 ER 1 / ER 1S

Installation height H_Z

$H_Z = H + 10$ mm/m

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

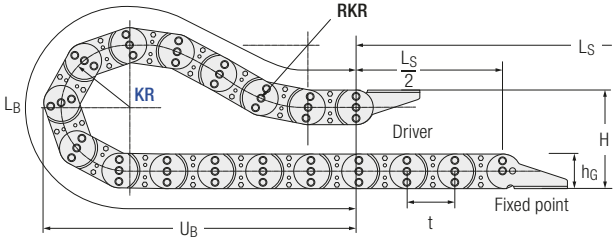
Cable carrier length L_k rounded to pitch t

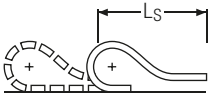
Unsupported length L_f

$$L_f = \frac{L_S}{2} + 2\,t$$

Fixed point offset L_V:
For off-center fixed point connections please contact us.

Gliding arrangement





For more information on gliding arrangement please contact us.

Glide shoes have to be used for gliding applications.

Dynamics of gliding arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[mm]
1	2	65

The gliding cable carrier has to be routed in a channel.
Our engineers will be happy to help with project planning – please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

TSUBAKI KABELSCHLEPP Technical Support

If you have any questions about determining gliding cable carriers or other technical details please contact our technical support service at technik@kabelschlepp.de. We will be happy to help you.

S/SX0650 RS 1 | Overview

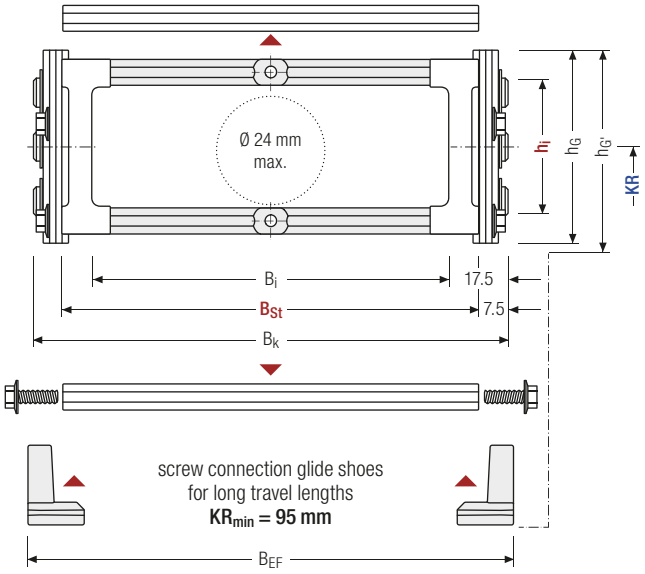
Aluminum stay RS 1 – frame stay standard

- Extremely quick to open and close.
- Aluminum profile bars for light to medium loads.
- Available customized in **1 mm width sections**.
- **Opening options**
  outside: Release by turning by 90°.
  inside: Screw connection is easy to release.
- **Optional:** Screw connection in the outer radius.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm B_k from 100 – 300 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 20$ mm

Outer width B_k

$B_k = B_i + 35$ mm

Total width B_{EF}

$B_{EF} = B_k + 5$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX0650 RS 1 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
65	31	50	56

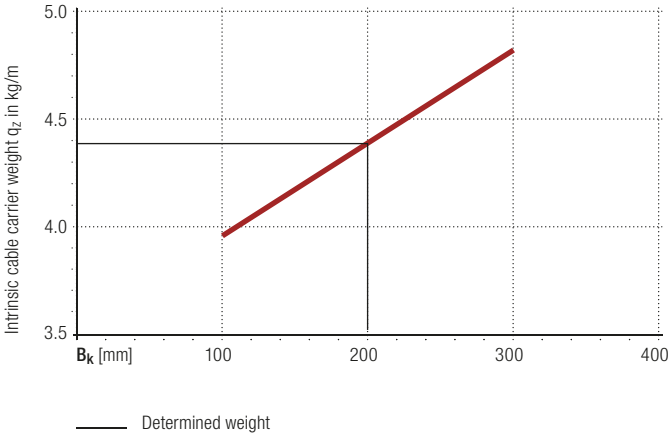
Bend radii

KR [mm]										
75	95	115	125	135	145	155	175	200	250	300

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
65	85	100	105	3.95
90	110	125	130	4.06
115	135	150	155	4.17
140	160	175	180	4.28
165	185	200	205	4.38
190	210	225	230	4.49
215	235	250	255	4.60
240	260	275	180	4.71
265	285	300	305	4.82

The stated values for B_k are sample values in 25 mm sections.
Stay variant RS 1 is available in **1 mm width sections**.



Calculation example

B_k = 200 mm

q_k = 4.38 kg/m

Weight of side bands:
3.6 kg/m (without stays)

S/SX0650 RS 2 | Overview

Aluminum stay RS 2 – frame stay standard, screw-fixed

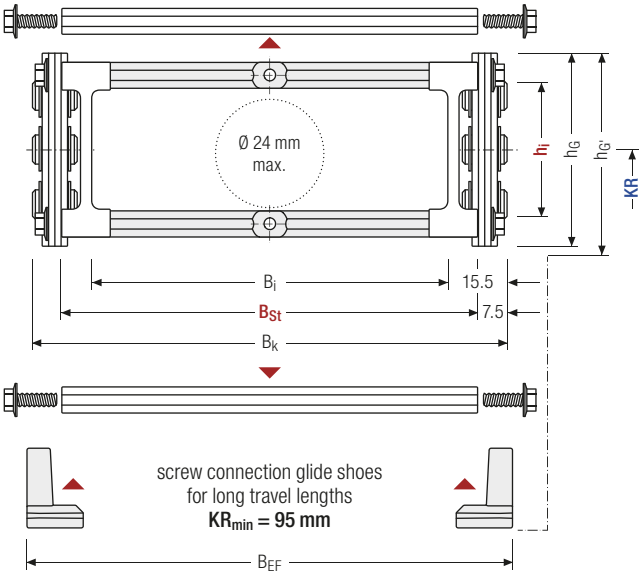
- Quick to open and close.
- Aluminum profile bars for light to medium loads. Easy screw connection.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside:** Screw connection is easy to release.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 100 – 400 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 16$ mm

Outer width B_k

$B_k = B_i + 31$ mm

Total width B_{EF}

$B_{EF} = B_k + 5$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX0650 RS 2 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
65	31	50	56

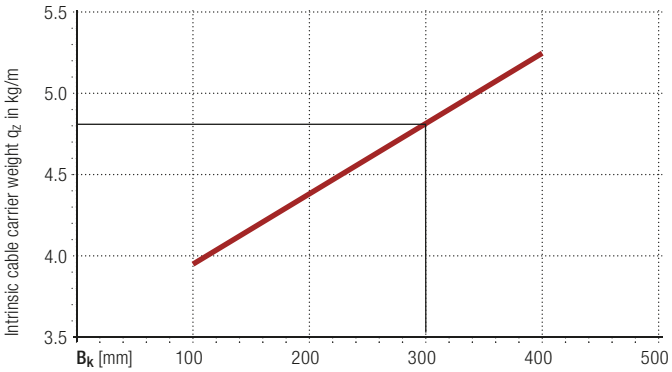
Bend radii

KR [mm]										
75	95	115	125	135	145	155	175	200	250	300

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
69	85	100	105	3.95
94	110	125	130	4.06
119	145	150	155	4.17
144	160	175	180	4.28
169	185	200	205	4.38
194	210	225	230	4.49
219	235	250	255	4.60
244	260	275	180	4.71
269	285	300	305	4.82
294	310	325	330	4.93
319	335	350	355	5.03
344	360	375	380	5.14
369	385	400	405	5.25

The stated values for B_k are sample values in 25 mm sections.
Stay variant RS 2 is available in **1 mm width sections**.



Calculation example

B_k	=	300 mm
q_k	=	4.82 kg/m

Weight of side bands:
3.6 kg/m (without stays)

Inner height
31
Chain widths
100 – 400
Increments
1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 26

S/SX0650 RS | Inner Distribution | TS0

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

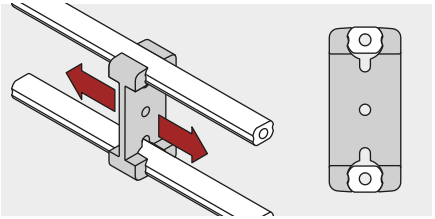
As standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A)**.

For applications with lateral acceleration and lying on the side, the dividers must be able to be attached by simple insertion of a bushing, available as an accessory.

The bushing additionally serves as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm **(version B)**.

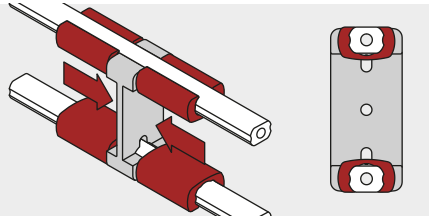
Movable divider

Version A (Standard)



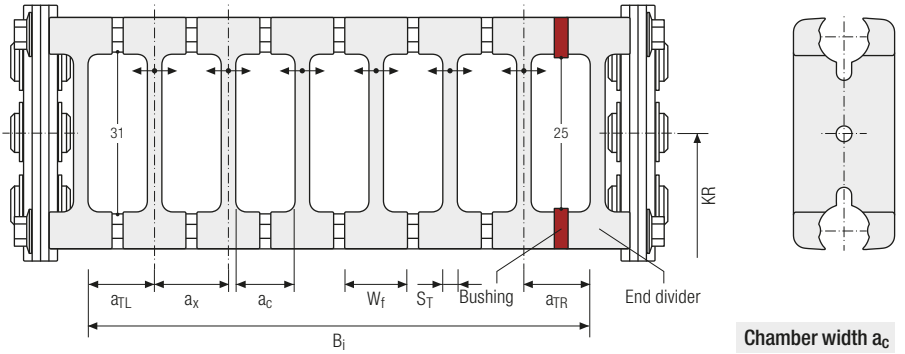
Fixable divider

Version B



Divider system TS0 without height separation

Version A				
S_T [mm]	W_f [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]
3	13	11.5	13	10



Chamber width a_c

$a_c = a_x - S_T$

Order example

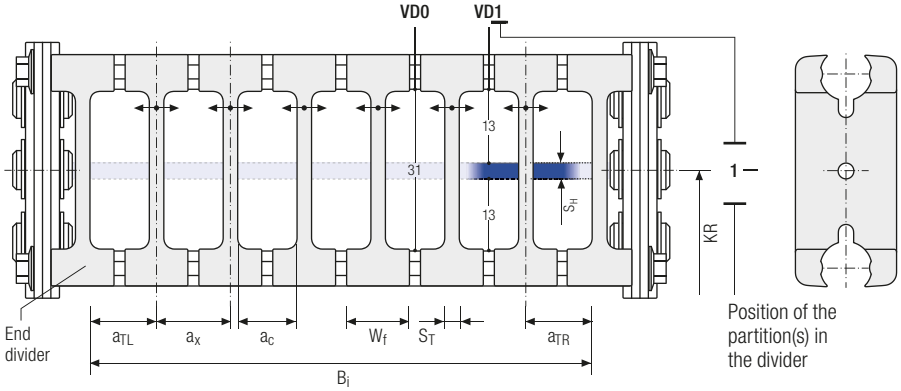
TS0	.	A	.	3
Divider system		Version		n_T

Information on the connection dimensions for the cable carrier can be found on page 25 f.

S/SX0650 RS | Inner Distribution | TS1

Divider system TS1 with continuous height separation

Version A							
S_T [mm]	W_f [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{TL}/a_{TR\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
3	13	5	11.5	40	13	10	2



Standard height separation with **steel tube Ø 5 mm**.
The dividers can be moved in the cross section.

Chamber width a_c

$a_c = a_x - S_T$

TOTALTRAX® complete systems

Benefit from the advantages of a TOTALTRAX complete system. Complete delivery from a single source – with a guarantee certificate on request! Learn more at **kabelschlepp.de/totaltrax**

TRAXLINE® cables in motion

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

More product information online

Assembly instructions etc.: Receive additional info via your smartphone or check online at **kabelschlepp.de/support**

Configure your custom cable carrier: **onlineengineer.de**

Information on the connection dimensions for the cable carrier can be found on page 25 f.

Inner height 31
Chain widths 100 - 400
Increments 1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 26

S/SX0650 RR | Overview

Tube stay RR – frame stay, tube version

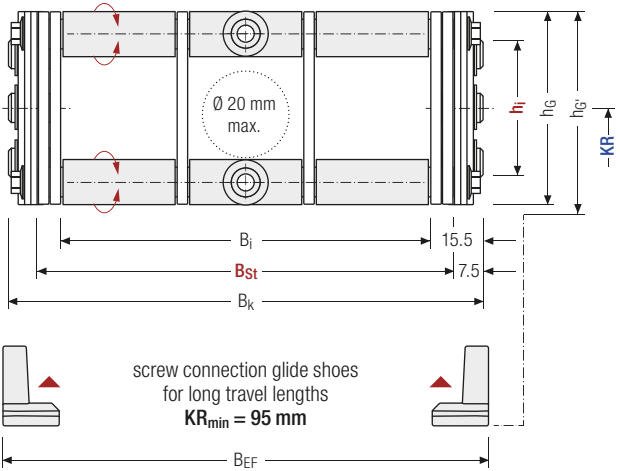
- Steel rolling stays with gentle cable support and plastic dividers. Ideal for using media hoses with soft sheathing. Easy screw connection.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside:** Screw connection detachable.
- **Option:** Axes, tubes and dividers made from steel or stainless steel ER 1, ER 1S

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 100 – 400 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 16$ mm

Outer width B_k

$B_k = B_i + 31$ mm

Total width B_{EF}

$B_{EF} = B_k + 5$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX0650 RR | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
65	26	50	56

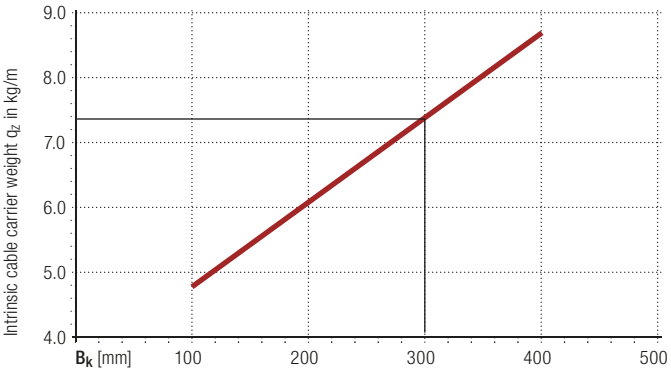
Bend radii

KR [mm]										
75	95	115	125	135	145	155	175	200	250	300

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
69	85	100	105	4.77
94	110	125	130	5.10
119	145	150	155	5.42
144	160	175	180	5.75
169	185	200	205	6.07
194	210	225	230	6.40
219	235	250	255	6.72
244	260	275	180	7.05
269	285	300	305	7.37
294	310	325	330	7.70
319	335	350	355	8.02
344	360	375	380	8.35
369	385	400	405	8.67

The stated values for B_k are sample values in 25 mm sections.
Stay variant RR is available in **1 mm width sections**.



Calculation example

B_k	=	300 mm
q_k	=	7.37 kg/m

Weight of side bands:
3.6 kg/m (without stays)

S/SX0650 RR | Inner Distribution | TS0

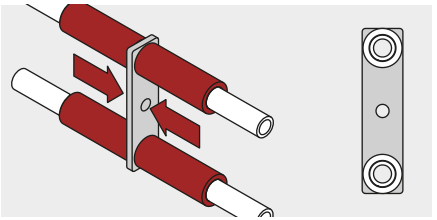
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

The dividers are fixed through the tubes.
The tube additionally serves as a spacer between the dividers **(version B)**.

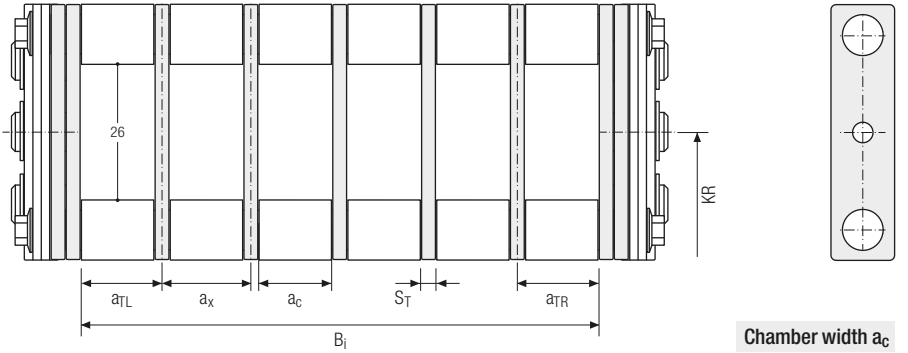
Fixed divider

Version B



Divider system TS0 without height separation

Version B			
S_T [mm]	a_{TL}/a_{TR} min [mm]	a_x min [mm]	a_c min [mm]
4	20	25	21



Chamber width a_c

$a_c = a_x - S_T$

Order example

TS0	.	B	.	3
Divider system		Version		n_T

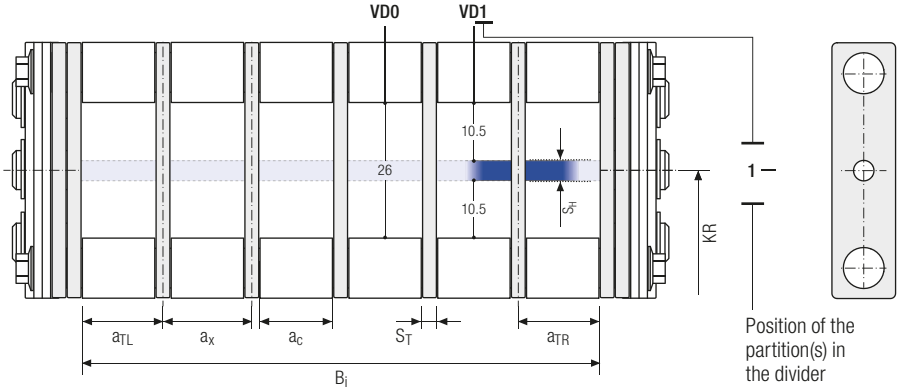
When ordering please state the mounting distances a_T/a_x.
Enclose a sketch with dimensions, if possible.

Information on the connection dimensions for the cable carrier can be found on page 25.

S/SX0650 RR | Inner Distribution | TS1

Divider system TS1 with continuous height separation

Version B						
S_T [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{TL}/a_{TR\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
4	5	20	40	25	21	2



Standard height separation with **steel tube Ø 5 mm**.
The dividers can be moved in the cross section.

Chamber width a_c

$a_c = a_x - S_T$

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More product information online

Assembly instructions etc.: Receive additional info via your smartphone or check online at **kabelschlepp.de/support**

Configure your custom cable carrier: **onlineengineer.de**

Information on the connection dimensions for the cable carrier can be found on page 25.

Inner height 26
Chain widths 100 – 400
Increments 1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 26

S/SX0650 LG | Overview

HEAVY DUTY
TSUBAKI KABELSCHLEPP

Aluminum stay LG – hole stay, split version

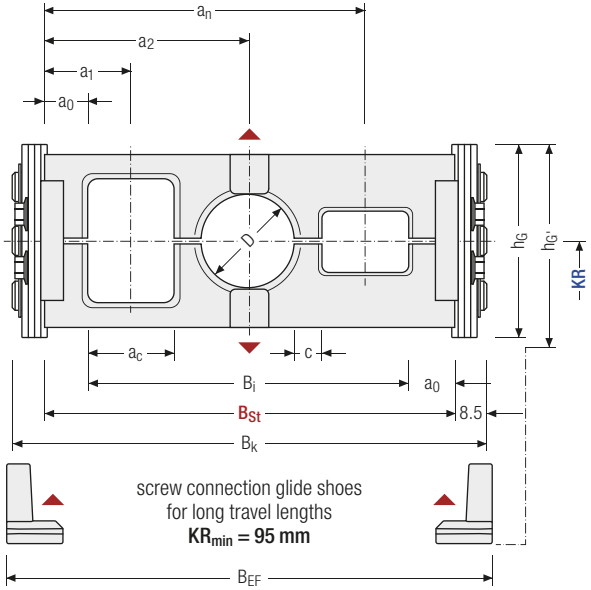
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.
- Order-specific manufacturing of the hole pattern according to your data.
- **Opening options outside/inside:** Screw connection is easy to release.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 70 – 500 mm in **1 mm width sections**



Calculating the cable carrier width

Inner width B_i

$B_i = B_{St} - 2\ a_0$

Stay width B_{St}

$B_{St} = \sum D + \sum c + \sum a_c + 2\ a_0$

Outer width B_k

$B_k = B_{St} + 17$ mm

Total width B_{EF}

$B_{EF} = B_k + 5$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX0650 LG | Dimensions · Technical Data

Pitch, chain link height and hole stay dimensions

t [mm]	h_G [mm]	$h_{G'}$ [mm]	D_{max} [mm]	c_{min} [mm]	$a_{c\ min}$ [mm]	$a_{0\ min}$ [mm]
65	50	56	40	4	10	9

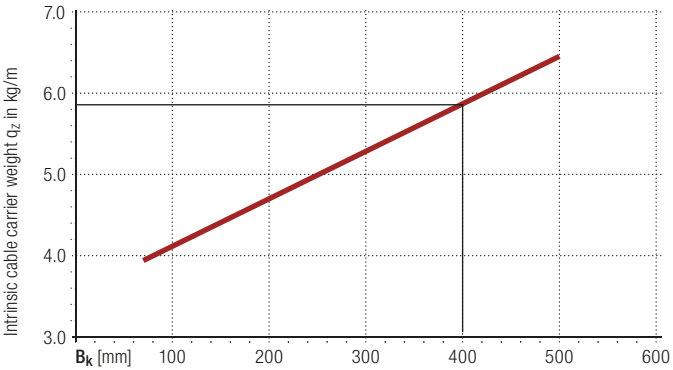
Bend radii

KR [mm]										
75	95	115	125	135	145	155	175	200	250	300

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_K [mm]	B_{EF} [mm]	q_k 50 % [kg/m]
35	53	70	75	3.96
65	83	100	105	4.14
115	133	150	155	4.43
165	183	200	205	4.72
215	233	250	255	5.01
265	283	300	305	5.30
315	333	350	355	5.59
365	383	400	405	5.88
415	433	450	455	6.17
465	483	500	505	6.46

The stated values for B_K are sample values in 50 mm sections.
Stay variant LG is available in **1 mm width sections**.



Calculation example

B_K = 400 mm

q_k = 5.88 kg/m [50 %]

Hole ratio of the hole stay approx. 50 %

Weight of side bands: 3.6 kg/m (without stays)

Information on the connection dimensions for the cable carrier can be found on page 25.

Subject to change.

S/SX0650 RMA | Overview

Aluminum stay RMA – mounting frame stay

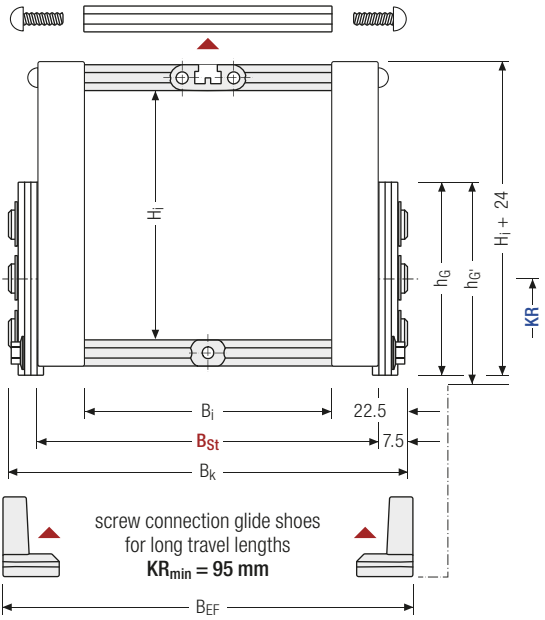
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- The mounting frame stay can be mounted either **inside** or **outside** in the bending radius.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside:** Screw connection is easy to release.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 200 – 400 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 30$ mm

Outer width B_k

$B_k = B_i + 45$ mm

Total width B_{EF}

$B_{EF} = B_k + 5$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

All cable carrier cross sections according to section data in the schematic.

S/SX0650 RMA | Dimensions · Technical Data

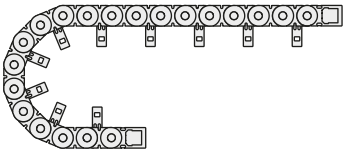
Pitch, inner height and chain link height

t [mm]	H_i [mm]	h_G [mm]	$h_{G'}$ [mm]
65	130/160/200	50	56

Bend radii

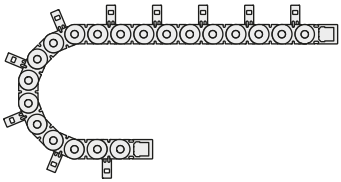
KR [mm]										
75	95	115	125	135	145	155	175	200	250	300

Assembly variants



RMA 1 – assembly to the inside:
Gliding application is not possible when using assembly version RMA 1.

Observe minimum KR:
H_i = 130 mm: KR_{min} = 200 mm
H_i = 160 mm: KR_{min} = 250 mm
H_i = 200 mm: KR_{min} = 300 mm



RMA 2 – assembly to the outside:
The cable carrier has to rest on the side bands and not on the stays.

Guiding in a **channel is required** for support. Please contact our technical support at technik@kabelschlepp.de to find the corresponding guide channel.

Please note the operating and installation height.

Intrinsic cable carrier weight

Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

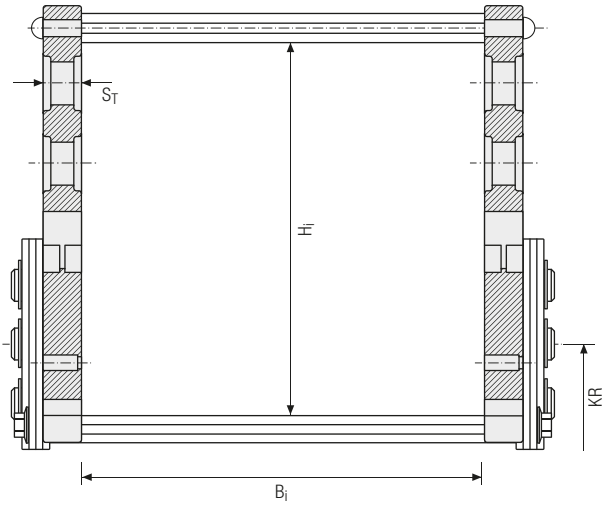
TSUBAKI KABELSCHLEPP Technical Support

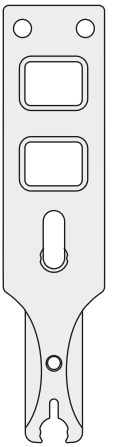
We would like to support you with complex design parameters. Just make use of our technical consultation service.

S/SX0650 RMA | Inner Distribution

Inner distribution

S_T [mm]	H_i [mm]
15	130/160/200





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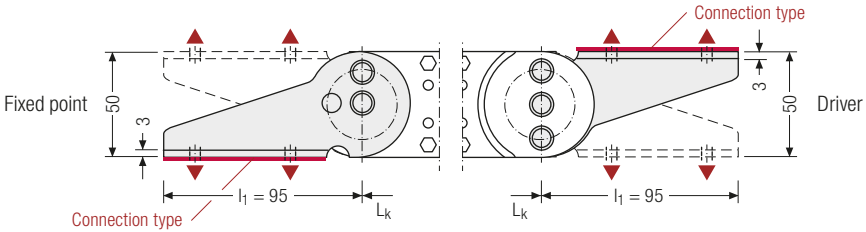
More product information online

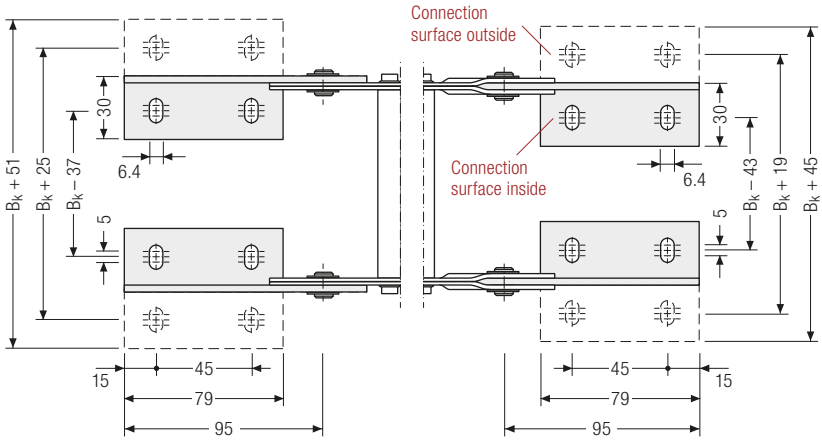
Assembly instructions etc.:
Receive additional info via your smartphone or check online at
kabelschlepp.de/support

Configure your custom cable carrier:
onlineengineer.de

End connectors – steel

End connectors made from steel. The connection variants on the fixed point and on the driver can be combined and, if required, changed subsequently.

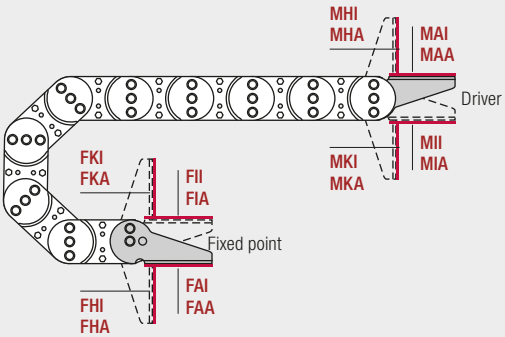




▲ Assembly options

Caution: The standard connection variant FAI/MAI is only possible from B_k of 70 mm.

Connection variants



Connection point
- F – fixed point
- M – driver

Connection type
- A – threaded joint outside (standard)
- I – threaded joint inside
- H – threaded joint outside rotated by 90°
- K – threaded joint inside rotated by 90°

Connection surface
- I – connection surface inside
- A – connection surface outside

S/SX0650 | Order Key

Order

Cable carrier

Type	B_{St} [mm]	Stay variant	KR [mm]	Material	L_k [mm]	Stay arrangement
			75			
			95			
			115			
			125			
			135			
			145			
			155			
		RS 1	175			
		RS 2	200	St		
	53	RR	250	ER 1		
S0650	...	LG	300	ER 1S		HS
SX0650	483	RMA	400	ER 2		VS

S0650	.	180	.	LG	.	135	.	St	-	1430		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Caution: Not all combinations are possible. Please note the information on the individual stay variants.

International order specification INTOK: Information about the International Order Key can be found in the chapter “International Order Key” from page 1.

Divider system

Divider system	Version	n_T	Height separation (not for TS0)
TS0	A	min. 2	VD0
TS1	B	...	VD1

TS0	.	A	.	3	-	VD0
						⋮
					-	VD1
Divider system		Version		n_T		Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T].

Connection

End connector	Connection point	Connection type	Connection surface
		A	
		I	
	F	H	I
Steel	M	K	A

Steel	.	F	A	I
Steel	.	M	A	I

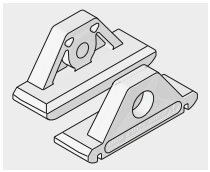
Please state the desired connection variant as well as the desired strain relief type for the fixed point and for the driver.

S/SX0650 | Optional Accessories

Accessories

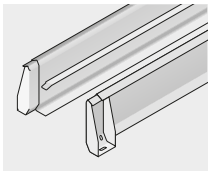
Gliding elements

The use of glide shoes on the side link plates is required for cable carriers in gliding applications.



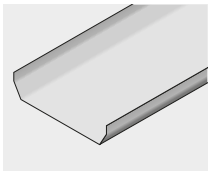
Guide channels

The cable carrier always has to be guided in a channel for gliding applications. This prevents the upper and lower run from slipping.



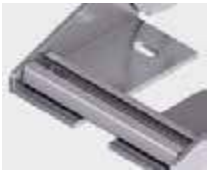
Support trays

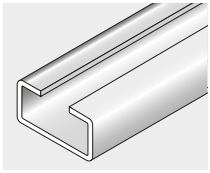
An even surface is required for safe unrolling of the cable carrier. This is ensured by a support tray.



C-rails for strain relief elements

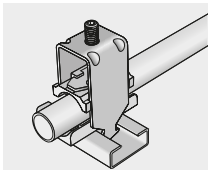
The optional C-rails for mounting strain relief elements are mounted behind the end connectors and have to be bolted separately.





LineFix® clamps

LineFix clamps are fixed to the C-rail. The serve as a separate strain relief or separate attachment of the cables outside the cable carrier.



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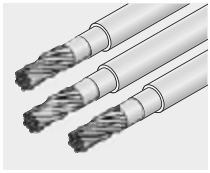


Inner height
26 – 40

Chain widths
70 – 500

Key for abbreviations on page 136

Assembly instructions on kabelschlepp.de/assembly

Order key on page 26

S/SX0950

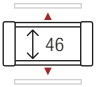
Stay variants

Aluminum stay RS 1

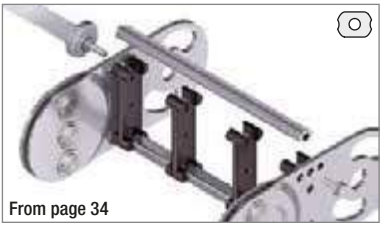

From page 32

Frame stay standard "the standard"
- Extremely quick to open and close.
- Aluminum profile bars for light to medium loads.
- Available customized in **1 mm width sections**.

Opening options
outside: Release by turning by 90°.
inside: Screw connection is easy to release.

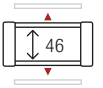


Aluminum stay RS 2


From page 34

Frame stay standard, bolted
- Quick to open and close.
- Aluminum profile bars for light to medium loads. Easy screw connection.
- Available customized in **1 mm width sections**.

Opening options
inside/outside: Screw connection is easy to release.

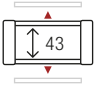


Aluminum stay RM


From page 38

Frame stay solid
- Aluminum profile bars for heavy loads and maximum chain widths. Double screw connections on both sides **"Heavy Duty"**.
- Available customized in **1 mm width sections**.

Opening options
inside/outside: Screw connection is easy to release.

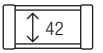


Tube stay RR


From page 42

Frame stay, tube version
- Steel rolling stays with gentle cable support and plastic dividers. Ideal for using media hoses with soft sheathing. Easy screw connection.
- Available customized in **1 mm width sections**.

Opening options
inside/outside: Screw connection detachable.



Technical data on page 30

S/SX0950 | Stay Variants | Overview

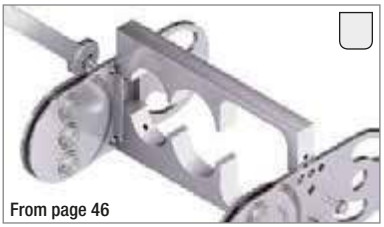
Pitch
95 mm

Height
40 – 48 mm

Chain width
125 – 600 mm

Bending radius
125 – 410 mm

Aluminum stay LG

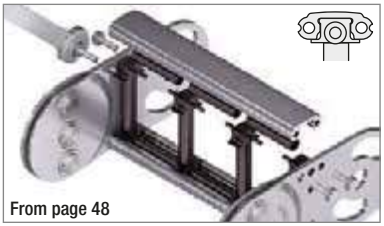


From page 46

Hole stay, split version
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.

Opening options
outside/inside: Screw connection is easy to release.

Aluminum stay RMR



From page 48

Frame rolling stay
- Aluminum profile bars with plastic rolling stay for highest requirements with gentle cable guiding. Double screw connection on both sides.
- Available customized in **1 mm width sections**.

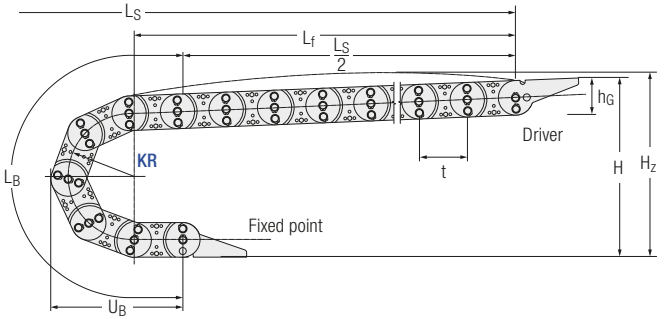
Opening options
outside/inside: Screw connection is easy to release.

S/SX Tubes

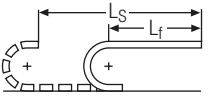
Also available as covered variants with cover system or steelband cover. Find more information in chapter S / SX Tubes, p.18.

S/SX0950 | Installation Dimensions | Unsupported

Unsupported arrangement



Unsupported length L_f



Dynamics of unsupported arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[mm]
2.5	5	95

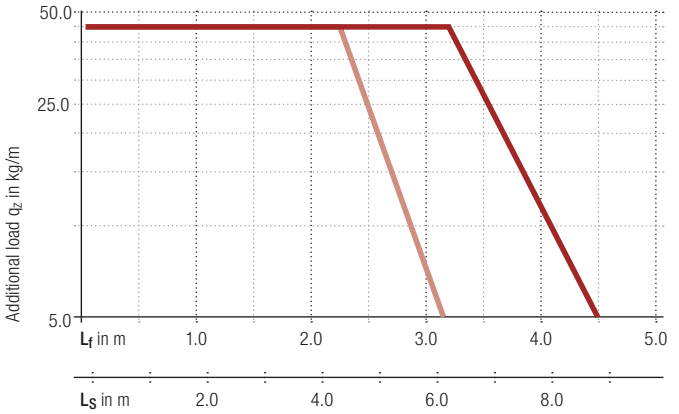
Installation dimensions unsupported

KR [mm]	H [mm]	L_B [mm]	U_B [mm]
125	352	773	350
140	382	820	365
170	442	914	395
200	502	1,008	425
260	622	1,197	485

KR [mm]	H [mm]	L_B [mm]	U_B [mm]
290	682	1,291	515
320	742	1,385	545
350	802	1,480	575
410	922	1,668	635

Load diagram

for unsupported length depending on additional load



Intrinsic cable carrier weight q_k = 7.6 kg/m.
The maximum additional load decreases if this value is exceeded.

S0950 galvanized steel
SX0950 ER 2
SX0950 ER 1 / ER 1S

Installation height H_Z

$H_Z = H + 10$ mm/m

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

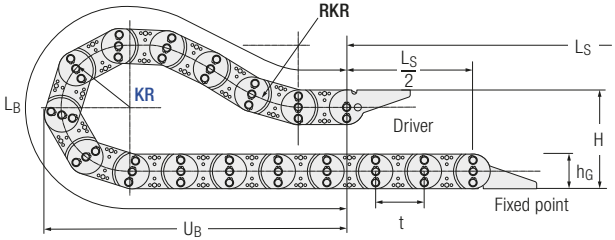
Cable carrier length L_k rounded to pitch t

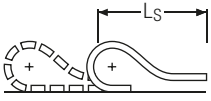
Unsupported length L_f

$$L_f = \frac{L_S}{2} + 2\,t$$

Fixed point offset L_v:
For off-center fixed point connections please contact us.

Gliding arrangement





For more information on gliding arrangement please contact us.

Glide shoes have to be used for gliding applications.

Dynamics of gliding arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[mm]
1	2	95

The gliding cable carrier has to be routed in a channel.
Our engineers will be happy to help with project planning – please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

TSUBAKI KABELSCHLEPP Technical Support

If you have any questions about determining gliding cable carriers or other technical details please contact our technical support service at technik@kabelschlepp.de. We will be happy to help you.

S/SX0950 RS 1 | Overview

Aluminum stay RS 1 – frame stay standard

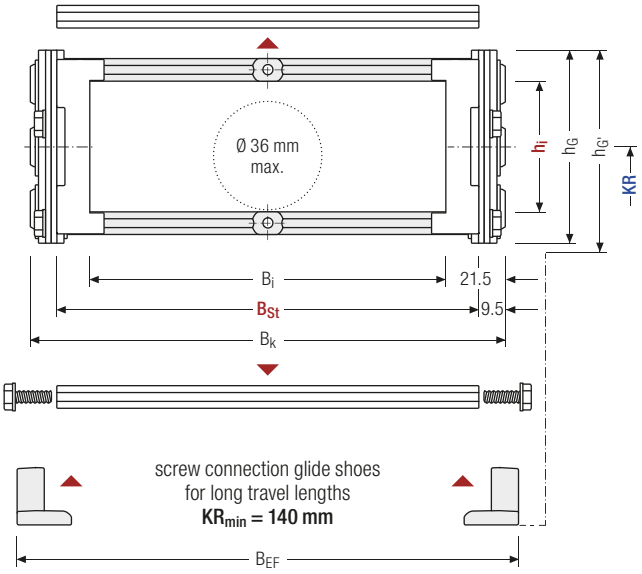
- Extremely quick to open and close.
- Aluminum profile bars for light to medium loads.
- Available customized in **1 mm width sections**.
- **Opening options**
  outside: Release by turning by 90°.
  inside: Screw connection is easy to release.
- **Optional:** Screw connection in the outer radius.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 150 – 300 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 24$ mm

Outer width B_k

$B_k = B_i + 43$ mm

Total width B_{EF}

$B_{EF} = B_k + 9$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX0950 RS 1 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
95	46	68	73

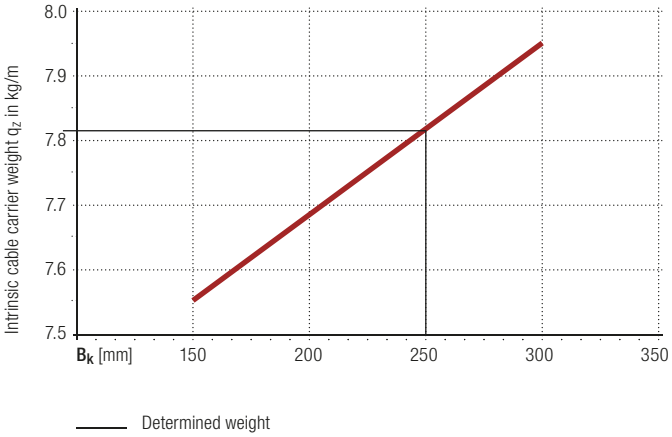
Bend radii

KR [mm]								
125	140	170	200	260	290	320	350	410

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
107	131	150	159	7.55
132	156	175	184	7.62
157	181	200	209	7.68
182	206	225	234	7.75
207	231	250	259	7.81
232	256	275	284	7.88
257	281	300	309	7.95

The stated values for B_k are sample values in 25 mm sections.
Stay variant RS 1 is available in **1 mm width sections**.



Calculation example

B_k = 250 mm

q_k = 7.81 kg/m

Weight of side bands:
7.2 kg/m (without stays)

S/SX0950 RS 2 | Overview

Aluminum stay RS 2 – frame stay standard, screw-fixed

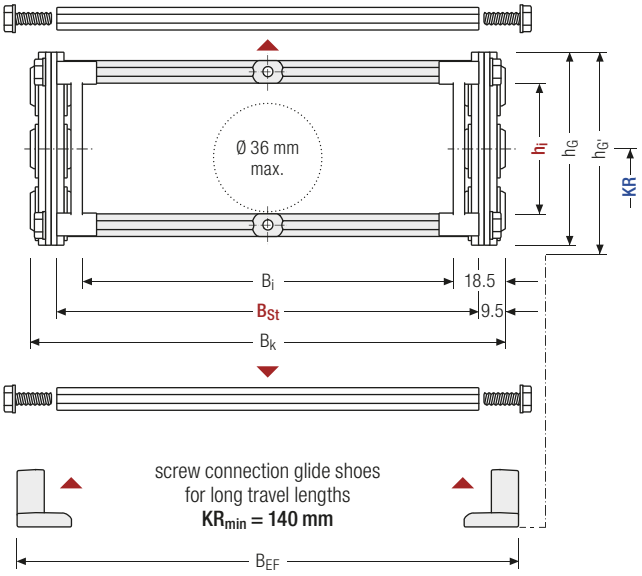
- Quick to open and close.
- Aluminum profile bars for light to medium loads. Easy screw connection.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside:** Screw connection is easy to release.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 150 – 400 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 18$ mm

Outer width B_k

$B_k = B_i + 37$ mm

Total width B_{EF}

$B_{EF} = B_k + 9$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX0950 RS 2 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
95	46	68	73

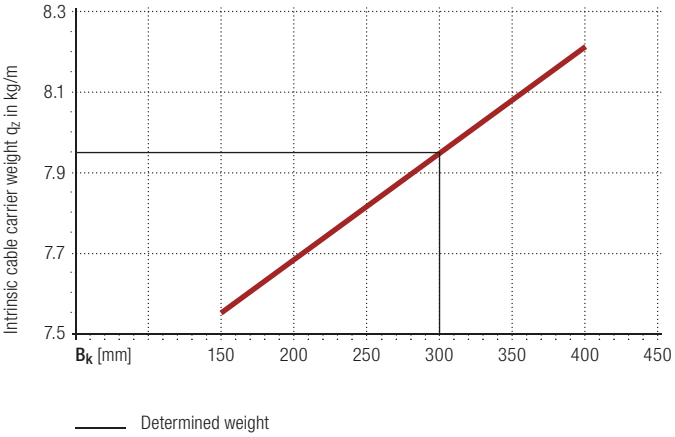
Bend radii

KR [mm]								
125	140	170	200	260	290	320	350	410

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
113	131	150	159	7.55
138	156	175	184	7.62
163	181	200	209	7.68
188	206	225	234	7.75
213	231	250	259	7.81
238	256	275	284	7.88
263	281	300	309	7.95
288	306	325	334	8.01
313	331	350	359	8.08
338	356	375	384	8.14
363	381	400	409	8.21

The stated values for B_k are sample values in 25 mm sections.
Stay variant RS 2 is available in **1 mm width sections**.



Calculation example

B_k = 300 mm

q_k = 7.95 kg/m

Weight of side bands:
7.2 kg/m (without stays)

Inner height 46
Chain widths 150 - 400
Increments 1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 52

S/SX0950 RS | Inner Distribution | TS0

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

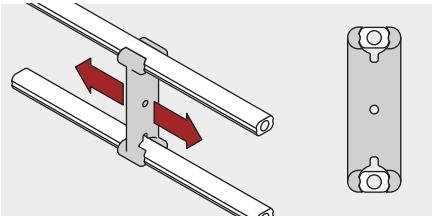
As standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A)**.

For applications with lateral acceleration and lying on the side, the dividers must be able to be attached by simple insertion of a bushing, available as an accessory.

The bushing additionally serves as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm as well as 16.5 and 21.5 mm **(version B)**.

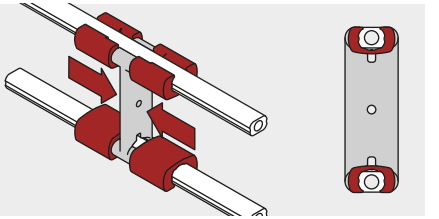
Movable divider

Version A (Standard)



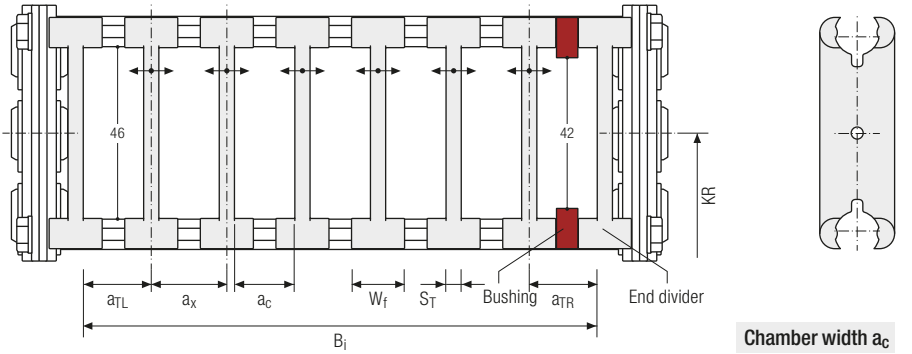
Fixable divider

Version B



Divider system TS0 without height separation

Version A				
S_T [mm]	W_f [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]
4	14	12	14	10



Chamber width a_c

$a_c = a_x - S_T$

Order example

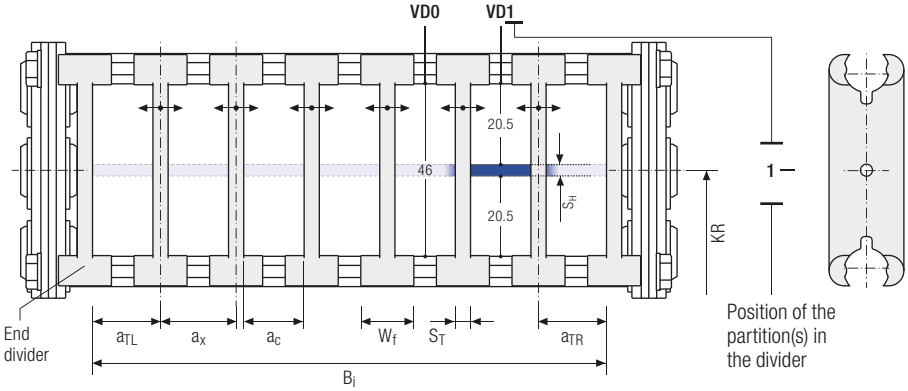
TS0	.	A	.	3
Divider system		Version		n_T

Information on the connection dimensions for the cable carrier can be found on page 50.

S/SX0950 RS | Inner Distribution | TS1

Divider system TS1 with continuous height separation

Version A							
S_T [mm]	W_f [mm]	S_H [mm]	a_{TL}/a_{TR} min [mm]	a_{TL}/a_{TR} max [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
4	14	5	12	25	14	10	2



Standard height separation with **steel tube Ø 5 mm**.
The dividers can be moved in the cross section.

Chamber width a_c

$a_c = a_x - S_T$

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More product information online

Assembly instructions etc.: Receive additional info via your smartphone or check online at **kabelschlepp.de/support**

Configure your custom cable carrier: **onlineengineer.de**

Information on the connection dimensions for the cable carrier can be found on page 50.

S/SX0950 RM | Overview

HEAVY DUTY TSUBAKI KABELSCHLEPP

Aluminum stay RM – frame stay solid

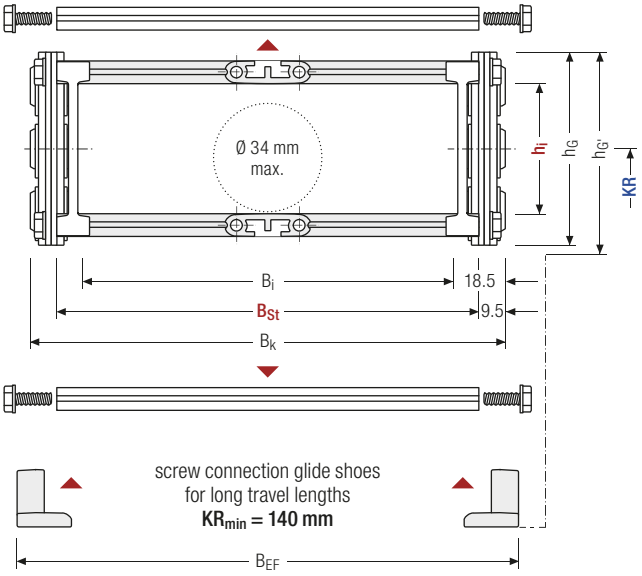
- Aluminum profile bars for heavy loads and maximum chain widths. Double screw connections on both sides **"Heavy Duty"**.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside:** Screw connection is easy to release.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 125 – 600 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 18$ mm

Outer width B_k

$B_k = B_i + 37$ mm

Total width B_{EF}

$B_{EF} = B_k + 9$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX0950 RM | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
95	43	68	73

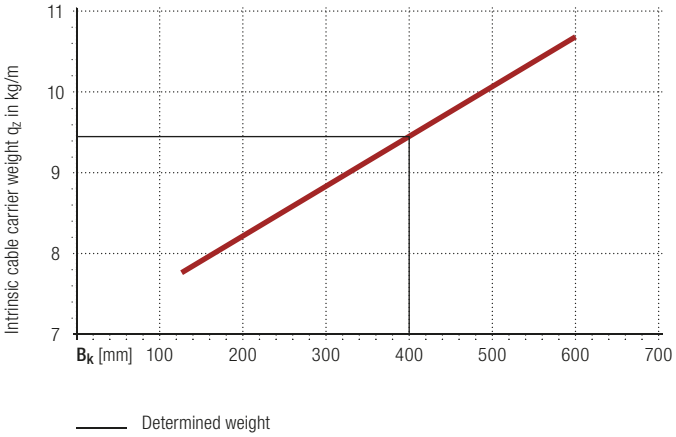
Bend radii

KR [mm]								
125	140	170	200	260	290	320	350	410

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
88	106	125	134	7.78
113	131	150	159	8.00
163	181	200	209	8.30
213	231	250	259	8.60
263	281	300	309	8.89
313	331	350	359	9.19
363	381	400	409	9.49
413	431	450	459	9.79
463	481	500	509	10.08
513	531	550	559	10.38
563	581	600	609	10.68

The stated values for B_k are sample values in 50 mm sections.
Stay variant RM is available in **1 mm width sections**.



Calculation example

B_k = 400 mm

q_k = 9.49 kg/m

Weight of side bands:
7.2 kg/m (without stays)

Inner height
43
Chain widths
125 - 600
Increments
1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 52

S/SX0950 RM | Inner Distribution | TS0

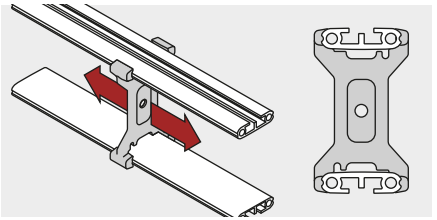
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A)**.

Movable divider

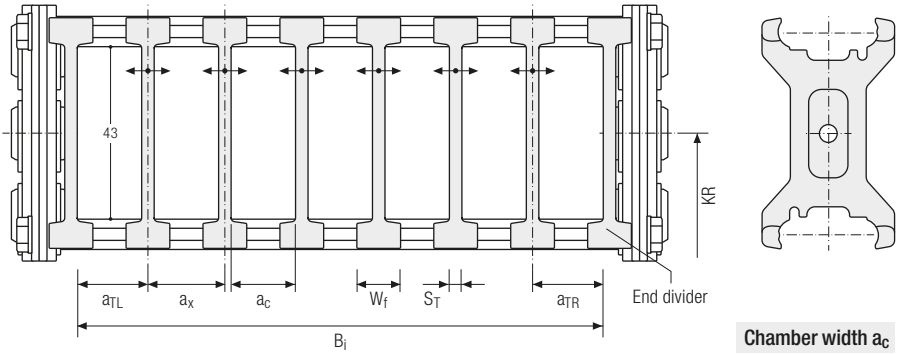
Version A



Divider system TS0 without height separation

Version A

S_T [mm]	W_f [mm]	a_{TL}/a_{TR} min [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]
4	14	10	14	10



Chamber width a_c

$a_c = a_x - S_T$

Order example

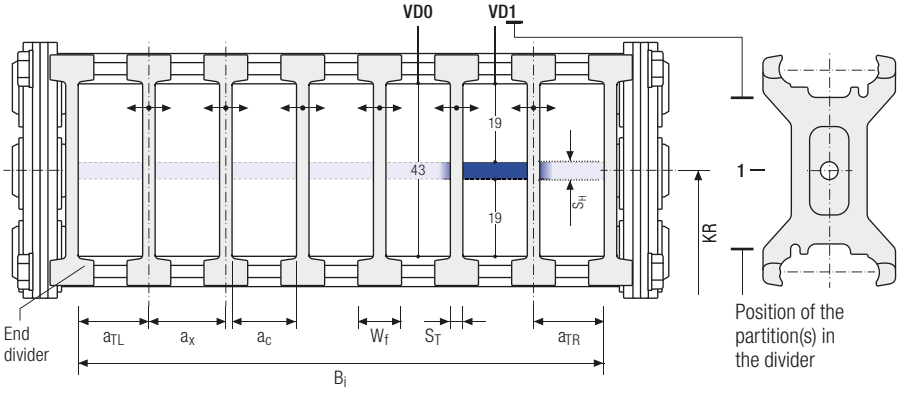
TS0	.	A	.	3
Divider system		Version		n_T

Information on the connection dimensions for the cable carrier can be found on page 50.

S/SX0950 RM | Inner Distribution | TS1

Divider system TS1 with continuous height separation

Version A							
S_T [mm]	W_f [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{TL}/a_{TR\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
4	14	5	10	25	14	10	2



Standard height separation with **steel tube Ø 5 mm**.
The dividers can be moved in the cross section.

Chamber width a_c

$a_c = a_x - S_T$

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More product information online

Assembly instructions etc.: Receive additional info via your smartphone or check online at **kabelschlepp.de/support**

Configure your custom cable carrier: **onlineengineer.de**

Information on the connection dimensions for the cable carrier can be found on page 50.

Inner height 43
Chain widths 125 - 600
Increments 1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 52

S/SX0950 RR | Overview

Tube stay RR – frame stay, tube version

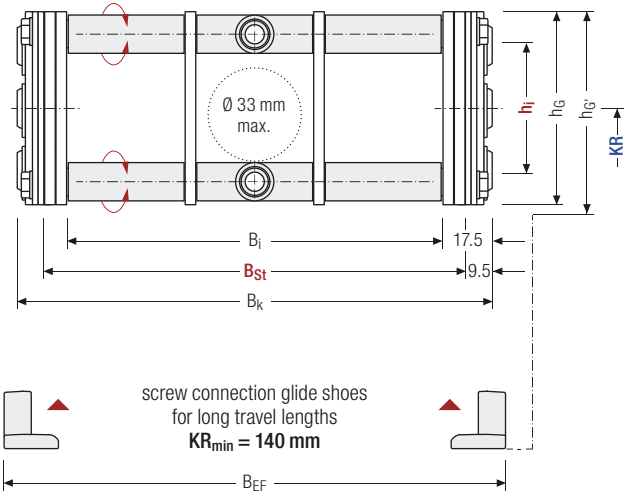
- Steel rolling stays with gentle cable support and plastic dividers. Ideal for using media hoses with soft sheathing. Easy screw connection.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside:** Screw connection detachable.
- **Option:** Axes, tubes and dividers made from steel or stainless steel ER 1, ER 1S.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 150 – 500 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 16$ mm

Outer width B_k

$B_k = B_i + 35$ mm

Total width B_{EF}

$B_{EF} = B_k + 9$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX0950 RR | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
95	42	68	73

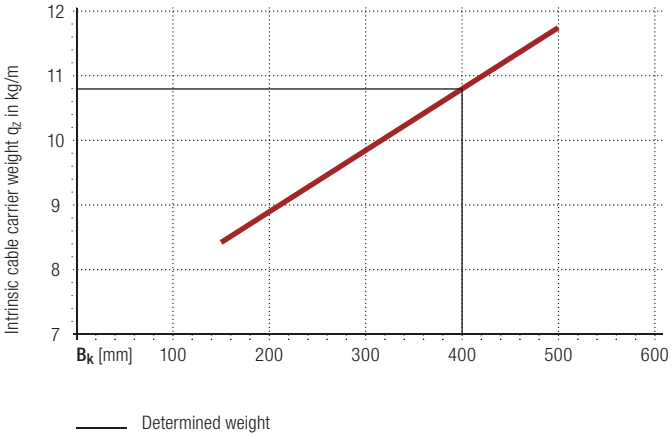
Bend radii

KR [mm]								
125	140	170	200	260	290	320	350	410

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
115	131	150	159	8.42
165	181	200	209	8.90
215	231	250	259	9.37
265	281	300	309	9.85
315	331	350	359	10.32
365	381	400	409	10.80
415	431	450	459	11.27
465	481	500	509	11.75

The stated values for B_k are sample values in 50 mm sections.
Stay variant RR is available in **1 mm width sections**.



Calculation example

B_k = 400 mm

q_k = 10.8 kg/m

Weight of side bands:
7.2 kg/m (without stays)

S/SX0950 RR | Inner Distribution | TS0

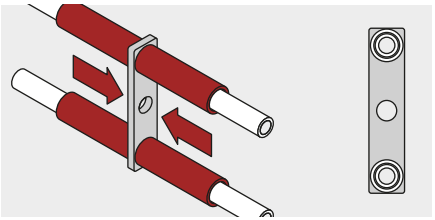
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

The dividers are fixed through the tubes.
The tube additionally serves as a spacer between the dividers **(version B)**.

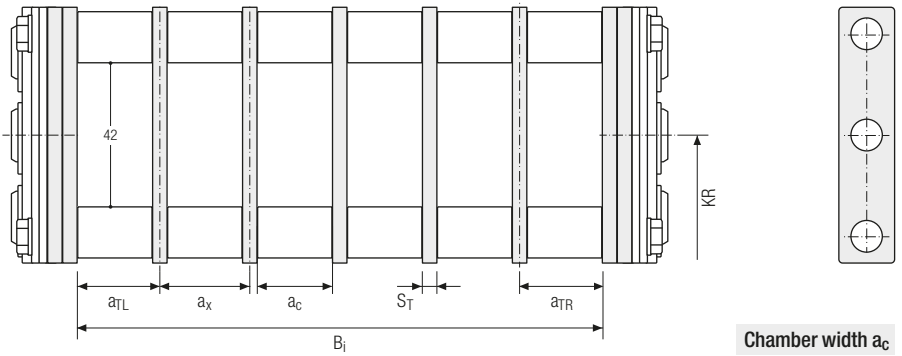
Fixed divider

Version B



Divider system TS0 without height separation

Version B			
S_T [mm]	a_{TL}/a_{TR} min [mm]	a_x min [mm]	a_c min [mm]
4	20	20	16



Chamber width a_c

$a_c = a_x - S_T$

Order example

TS0	.	B	.	3
Divider system		Version		n_T

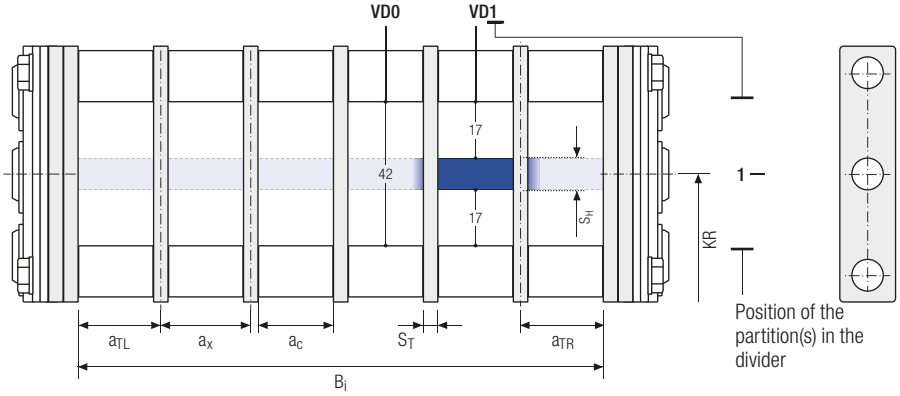
When ordering please state the mounting distances a_T/a_x.
Enclose a sketch with dimensions, if possible.

Information on the connection dimensions for the cable carrier can be found on page 50.

S/SX0950 RR | Inner Distribution | TS1

Divider system TS1 with continuous height separation

Version B						
S_T [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{TL}/a_{TR\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
4	8	20	45	20	16	2



Standard height separation with **steel tube Ø 8 mm**.

Chamber width a_c

$a_c = a_x - S_T$

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More product information online

Assembly instructions etc.: Receive additional info via your smartphone or check online at **kabelschlepp.de/support**

Configure your custom cable carrier: **onlineengineer.de**

Information on the connection dimensions for the cable carrier can be found on page 50.

Inner height 42
Chain widths 150 - 500
Increments 1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 52

S/SX0950 LG | Overview

HEAVY DUTY
TSUBAKI KABELSCHLEPP

Aluminum stay LG – hole stay, split version

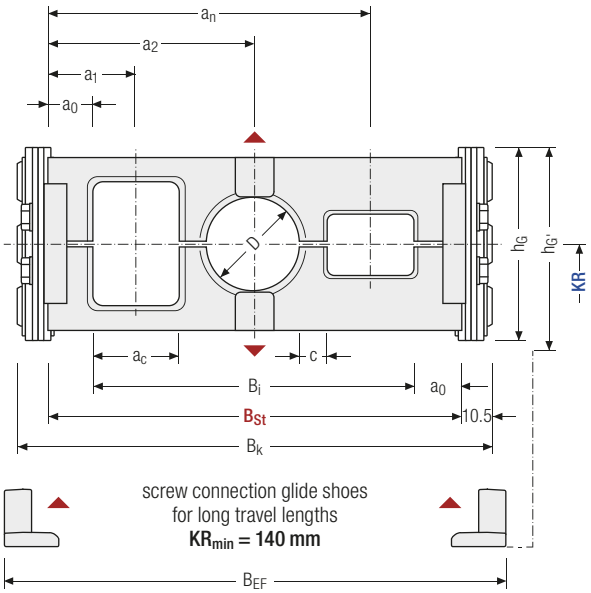
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.
- Order-specific manufacturing of the hole pattern according to your data.
- **Opening options outside/inside:** Screw connection is easy to release.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 125 – 600 mm in **1 mm width sections**



Calculating the cable carrier width

Inner width B_i

$B_i = B_{St} - 2\,a_0$

Stay width B_{St}

$B_{St} = \sum D + \sum c + \sum a_c + 2\,a_0$

Outer width B_k

$B_k = B_{St} + 21$ mm

Total width B_{EF}

$B_{EF} = B_k + 9$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Subject to change.

S/SX0950 LG | Dimensions · Technical Data

Pitch, chain link height and hole stay dimensions

t [mm]	h_G [mm]	$h_{G'}$ [mm]	D_{max} [mm]	c_{min} [mm]	$a_{c\ min}$ [mm]	$a_{0\ min}$ [mm]
95	68	73	48	4	12	11

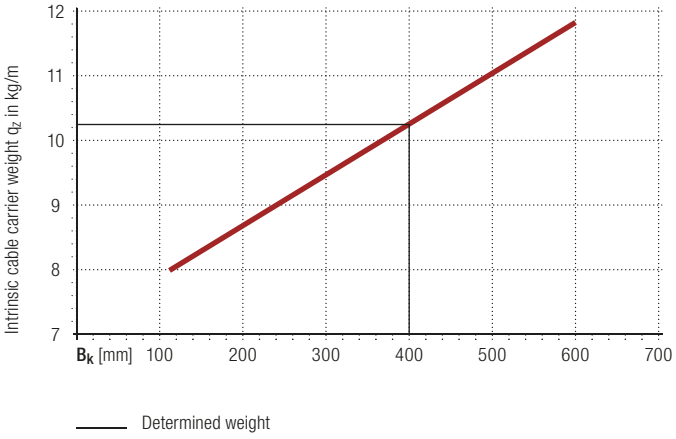
Bend radii

KR [mm]								
125	140	170	200	260	290	320	350	410

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_K [mm]	B_{EF} [mm]	q_k 50 % [kg/m]
82	**104**	125	134	7.97
107	**129**	150	159	8.25
157	**179**	200	209	8.65
207	**229**	250	259	9.04
257	**279**	300	309	9.44
307	**329**	350	359	9.84
357	**379**	400	409	10.23
407	**429**	450	459	10.63
457	**479**	500	509	11.03
507	**529**	550	559	11.42
557	**579**	600	609	11.82

The stated values for B_K are sample values in 50 mm sections.
Stay variant LG is available in **1 mm width sections**.



Calculation example

B_K = 400 mm

q_k = 10.23 kg/m [50 %]

Hole ratio of the hole stay approx. 50 %

Weight of side bands: 7.2 kg/m (without stays)

Information on the connection dimensions for the cable carrier can be found on page 50.

S/SX0950 RMR | Overview

Aluminum stay RMR – frame rolling stay

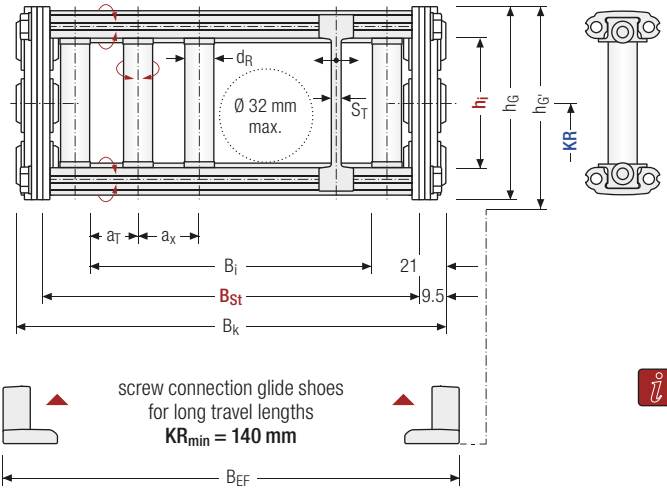
- Aluminum profile bars with plastic rolling stay for highest requirements with gentle cable guiding. Double screw connection on both sides.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside:** Screw connection is easy to release.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 150 – 600 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 23$ mm

Outer width B_k

$B_k = B_i + 42$ mm

Total width B_{EF}

$B_{EF} = B_k + 9$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Configure your cable carrier: **onlineengineer.de**

kabelschlepp.de/s-sx

Technical support: **technik@kabelschlepp.de**

online-engineer.de Cable Carrier Configurator

S/SX0950 RMR | Dimensions · Technical Data

Pitch, inner height, chain link height and rolling stay dimensions

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	d_R [mm]	S_T [mm]	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]
95	40	68	73	10	4	11.5	37

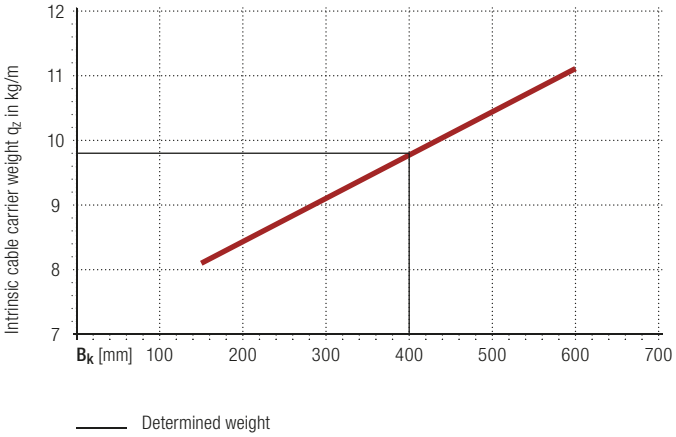
Bend radii

KR [mm]								
125	140	170	200	260	290	320	350	410

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_K [mm]	B_{EF} [mm]	q_K [kg/m]
108	131	150	159	8.16
158	181	200	209	8.49
208	231	250	259	8.82
258	281	300	300	9.15
308	331	350	359	9.48
358	381	400	409	9.82
408	431	450	459	10.15
458	481	500	509	10.48
508	531	550	559	10.82
558	581	600	609	11.14

The stated values for B_K are sample values in 50 mm sections.
Stay variant RMR is available in **1 mm width sections**.



Calculation example

B_K = 400 mm

q_K = 9.82 kg/m

Weight of side bands:
7.2 kg/m (without stays)

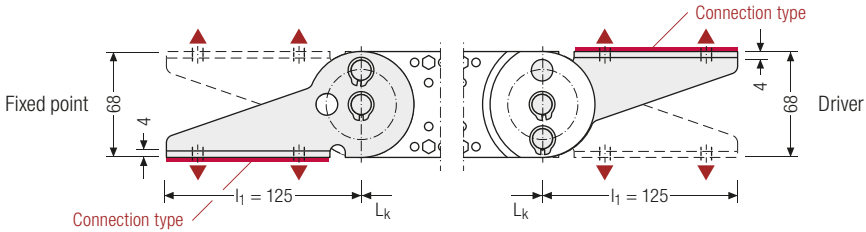
Information on the connection dimensions for the cable carrier can be found on page 50.

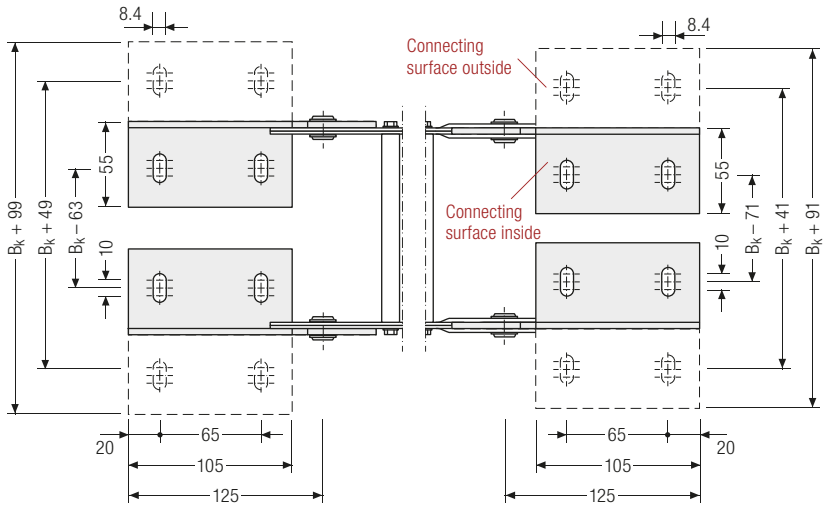
Subject to change.

S/SX0950 | End Connectors | Steel Connectors

End connectors – steel

End connectors made from steel. The connection variants on the fixed point and on the driver can be combined and, if required, changed subsequently.

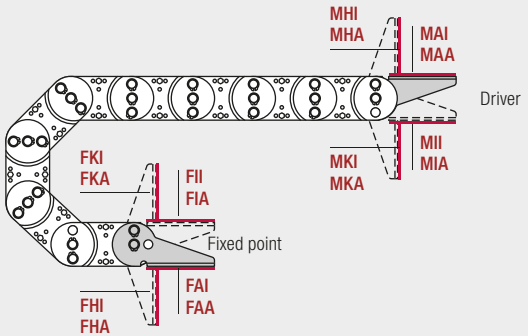




Caution: The standard connection variant FAI/MAI is only possible from B_k of 122 mm.

▲ Assembly options

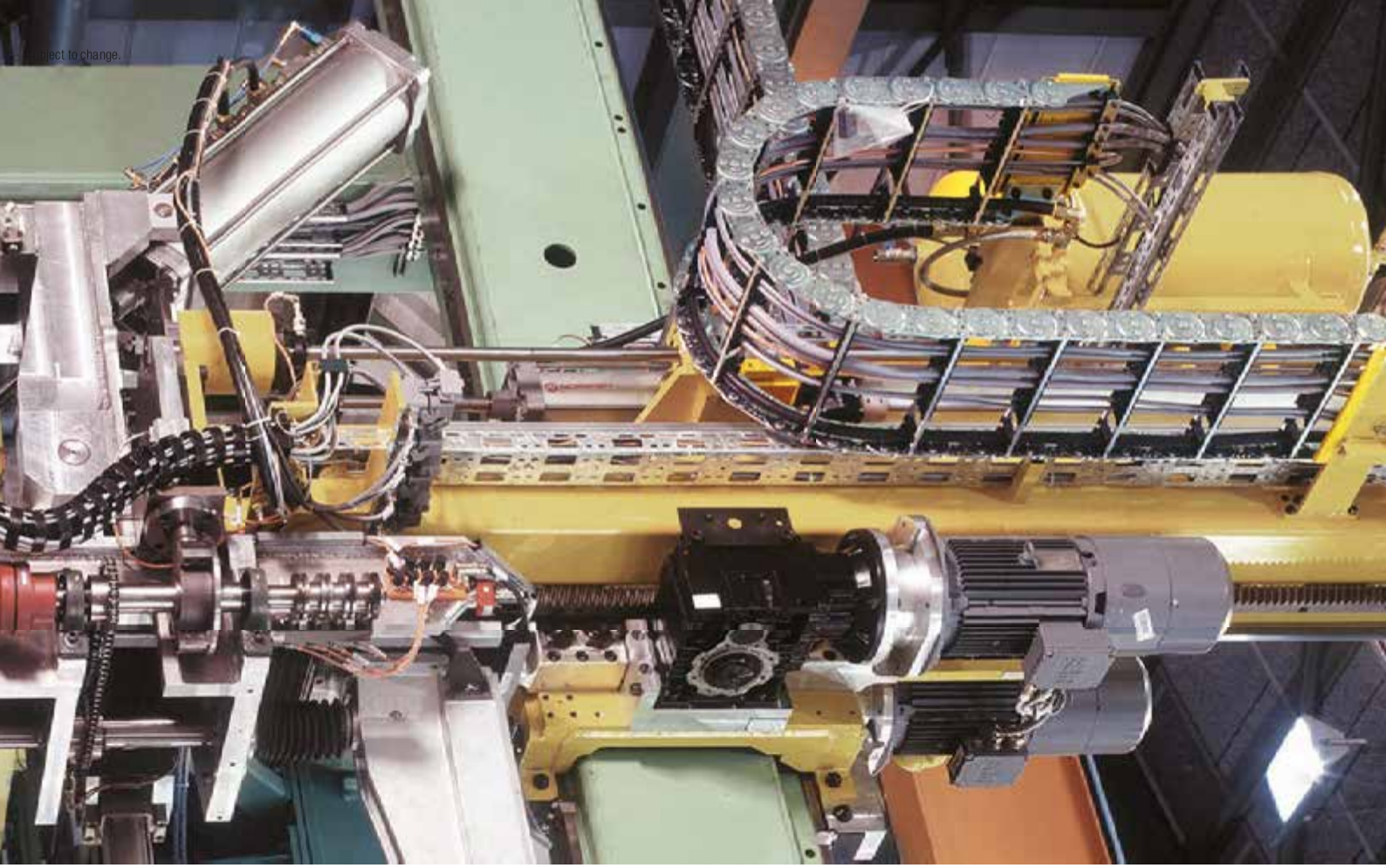
Connection variants



Connection point
- **F** – fixed point
- **M** – driver

Connection type
- **A** – threaded joint outside (standard)
- **I** – threaded joint inside
- **H** – threaded joint outside rotated by 90°
- **K** – threaded joint inside rotated by 90°

Connection surface
- **I** – connection surface inside
- **A** – connection surface outside



S/SX0950 | Order Key

Order

Cable carrier

Type	B_{St} [mm]	Stay variant	KR [mm]	Material	L_k [mm]	Stay arrangement
			125			
			140			
			170			
		RS 1	200			
		RS 2	260			
		RM	290			
		RR	320	St		
	104	LG	350	ER 1		
S0950	...	RMR	410	ER 1S		HS
SX0950	581	RMD	600	ER 2		VS

S0950	.	107	.	RS 1	.	200	.	St	-	2,375		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Caution: Not all combinations are possible. Please note the information on the individual stay variants.

International order specification INTOK: Information about the International Order Key can be found in the chapter “International Order Key” from page 1.

Divider system

Divider system	Version	n_T	Height separation (not for TS0)
TS0	A	min. 2	VD0
TS1	B	...	VD1

TS0	.	A	.	4	-	VD0
						⋮
					-	VD1
Divider system		Version		n_T		Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T].

Connection

End connector	Connection point	Connection type	Connection surface
		A	
		I	
	F	H	I
Steel	M	K	A

Steel	.	F	A	I
Steel	.	M	A	I

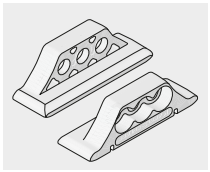
Please state the desired connection variant as well as the desired strain relief type for the fixed point and for the driver.

S/SX0950 | Optional Accessories

Accessories

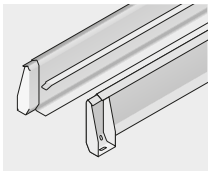
Gliding elements

The use of glide shoes on the side link plates is required for cable carriers in gliding applications.



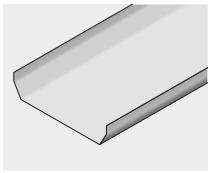
Guide channels

The cable carrier always has to be guided in a channel for gliding applications. This prevents the upper and lower run from slipping.



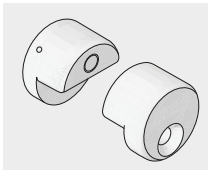
Support trays

An even surface is required for safe unrolling of the cable carrier. This is ensured by a support tray.



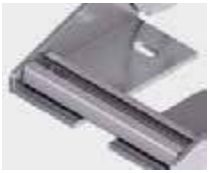
Outer dampers

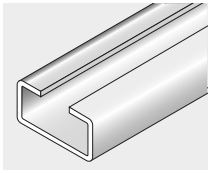
The use of outer dampers effectively reduces uncoiling noise. Particularly recommended for support trays and guide channels.



C-rails for strain relief elements

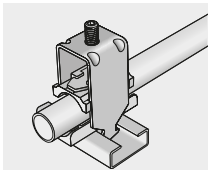
The optional C-rails for mounting strain relief elements are mounted behind the end connectors and have to be bolted separately.





LineFix® clamps

LineFix clamps are fixed to the C-rail. The serve as a separate strain relief or separate attachment of the cables outside the cable carrier.



Inner height
40 - 48

Chain widths
125 - 600

Key for abbreviations on page 136

Assembly instructions on kabelschlepp.de/assembly

Order key on page 52

S/SX1250

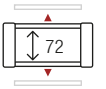
Stay variants

Aluminum stay RS 1

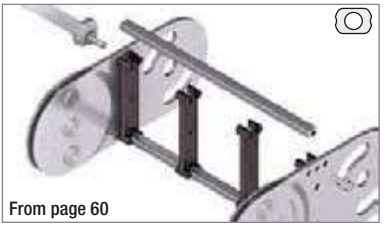

From page 58

Frame stay standard "the standard"
- Extremely quick to open and close.
- Aluminum profile bars for light to medium loads.
- Available customized in **1 mm width sections**.

Opening options
outside: Release by turning by 90°.
inside: Screw connection is easy to release.

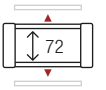


Aluminum stay RS 2

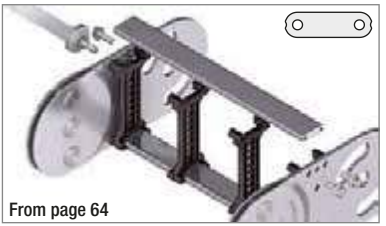

From page 60

Frame stay standard, bolted
- Quick to open and close.
- Aluminum profile bars for light to medium loads. Easy screw connection.
- Available customized in **1 mm width sections**.

Opening options
outside/inside: Screw connection is easy to release.

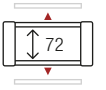


Aluminum stay RV

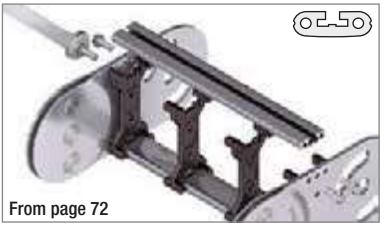

From page 64

Frame stay, reinforced
- Aluminum profile bars with plastic adapter for medium to heavy loads and large chain widths. Double screw connection on both sides.
- Available customized in **1 mm width sections**.

Opening options
outside/inside: Screw connection is easy to release.

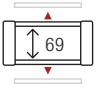


Aluminum stay RM


From page 72

Frame stay solid
- Aluminum profile bars for heavy loads and maximum chain widths. Double screw connections on both sides **"Heavy Duty"**.
- Available customized in **1 mm width sections**.

Opening options
outside/inside: Screw connection is easy to release.



Technical data on page 56

S/SX1250 | Stay Variants | Overview

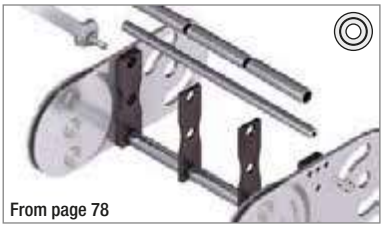
Pitch
125 mm

Height
66 – 74 mm

Chain width
130 – 800 mm

Bending radius
145 – 1000 mm

Tube stay RR

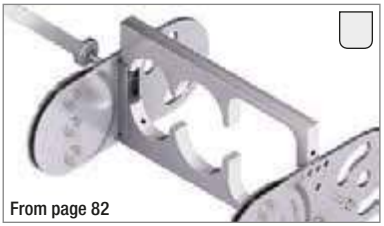


From page 78

Frame stay, tube version
- Steel rolling stays with gentle cable support and plastic dividers. Ideal for using media hoses with soft sheathing. Easy screw connection.
- Available customized in **1 mm width sections**.

Opening options
outside/inside: Screw connection detachable.

Aluminum stay LG

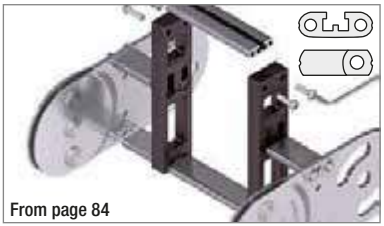


From page 82

Hole stay, split version
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.

Opening options
outside/inside: Screw connection is easy to release.

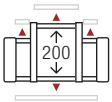
Aluminum stay RMA



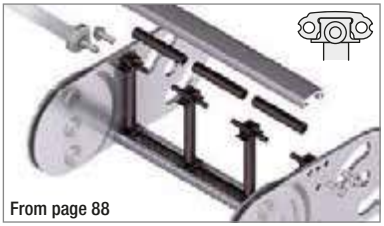
From page 84

Mounting frame stay
- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- Available customized in **1 mm width sections**.

Opening options
outside/inside: Screw connection is easy to release.



Aluminum stay RMR



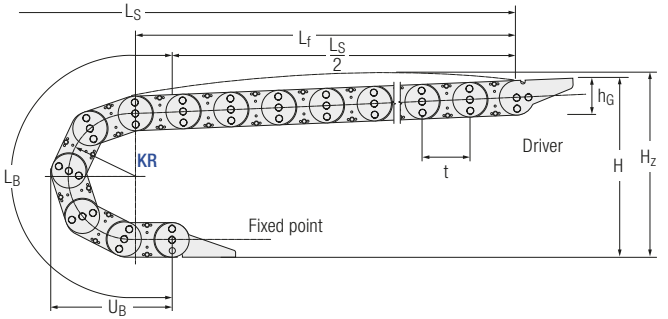
From page 88

Frame rolling stay
- Aluminum profile bars with plastic rolling stay for highest requirements with gentle cable guiding. Double screw connection on both sides.
- Available customized in **1 mm width sections**.

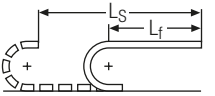
Opening options
outside/inside: Screw connection is easy to release.

S/SX1250 | Installation Dimensions | Unsupported

Unsupported arrangement



Unsupported length L_f



Dynamics of unsupported arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[mm]
2.5	5	125

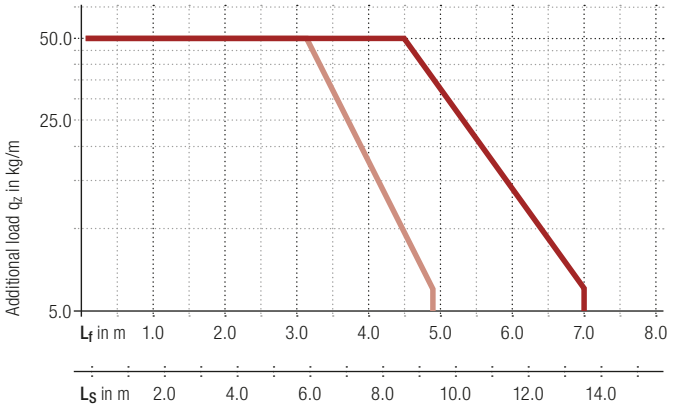
Installation dimensions unsupported

KR [mm]	H [mm]	L_B [mm]	U_B [mm]
145	431	955	442
200	541	1,128	497
220	581	1,191	517
260	661	1,317	557
300	741	1,442	597
340	821	1,568	637
380	901	1,694	677

KR [mm]	H [mm]	L_B [mm]	U_B [mm]
420	981	1,820	717
460	1,061	1,945	757
500	1,141	2,071	797
540	1,221	2,196	837
600	1,341	2,385	897
1000	2,141	3,640	1,297

Load diagram

for unsupported length depending on additional load



Intrinsic cable carrier weight q_k = 13 kg/m. The maximum additional load decreases if this value is exceeded.

S1250 galvanized steel
SX1250 ER 2
SX1250 ER 1 / ER 1S

Installation height H_Z

$H_Z = H + 10$ mm/m

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

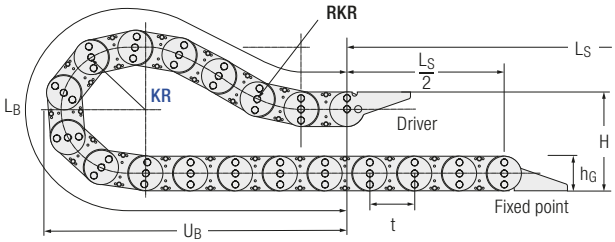
Cable carrier length L_k rounded to pitch t

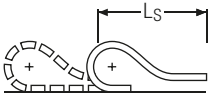
Unsupported length L_f

$$L_f = \frac{L_S}{2} + 2\,t$$

Fixed point offset L_v:
For off-center fixed point connections please contact us.

Gliding arrangement





For more information on gliding arrangement please contact us.

Glide shoes are required for gliding applications.

Dynamics of gliding arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[mm]
1	2	125

The gliding cable carrier has to be routed in a channel.
Our engineers will be happy to help with project planning – please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

S/SX Tubes

Also available as covered variants with cover system or steelband cover. Find more information in chapter S / SX Tubes, p.30.

TSUBAKI KABELSCHLEPP Technical Support

If you have any questions about determining gliding cable carriers or other technical details please contact our technical support service at technik@kabelschlepp.de. We will be happy to help you.

S/SX1250 RS 1 | Overview

Aluminum stay RS 1 – frame stay standard

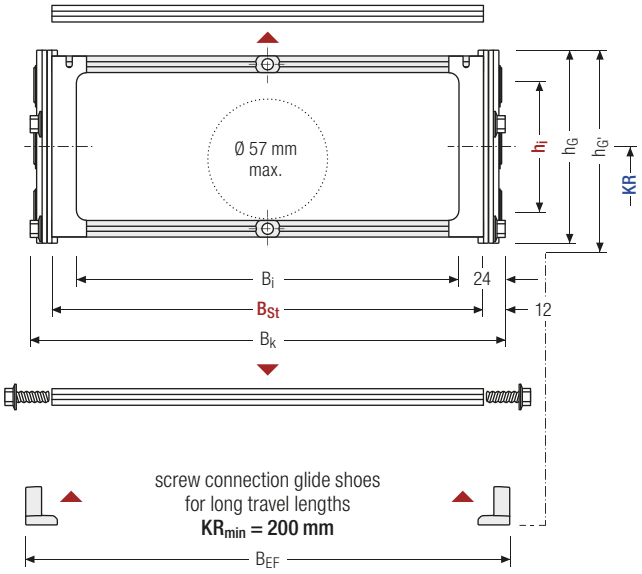
- Extremely quick to open and close.
- Aluminum profile bars for light to medium loads.
- Available customized in **1 mm width sections**.
- **Opening options**
  outside: Release by turning by 90°.
  inside: Screw connection is easy to release.
- **Optional:** Screw connection in the outer radius.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 200 – 400 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 24$ mm

Outer width B_k

$B_k = B_i + 48$ mm

Total width B_{EF}

$B_{EF} = B_k + 6$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX1250 RS 1 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
125	72	94	104

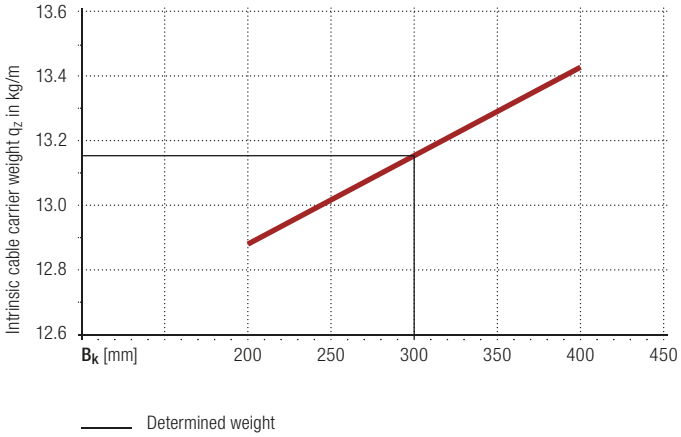
Bend radii

KR [mm]												
145	200	220	260	300	340	380	420	460	500	540	600	1000

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
152	176	200	206	12.88
177	201	225	231	12.95
202	226	250	256	13.02
227	251	275	281	13.09
252	276	300	306	13.16
277	301	325	331	13.23
302	326	350	356	13.30
327	351	375	381	13.36
352	376	400	406	13.43

The stated values for B_k are sample values in 25 mm sections.
Stay variant RS 1 is available in **1 mm width sections**.



Calculation example

B_k = 300 mm

q_k = 13.16 kg/m

Weight of side bands:
12 kg/m (without stays)

S/SX1250 RS 2 | Overview

Aluminum stay RS 2 – frame stay standard, screw-fixed

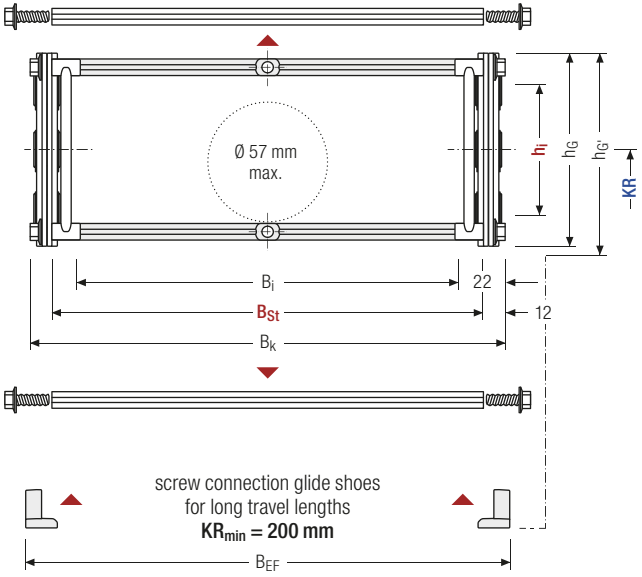
- Quick to open and close.
- Aluminum profile bars for light to medium loads. Easy screw connection.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside**: Screw connection is easy to release.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 200 – 500 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 20$ mm

Outer width B_k

$B_k = B_i + 44$ mm

Total width B_{EF}

$B_{EF} = B_k + 6$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX1250 RS 2 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
125	72	94	104

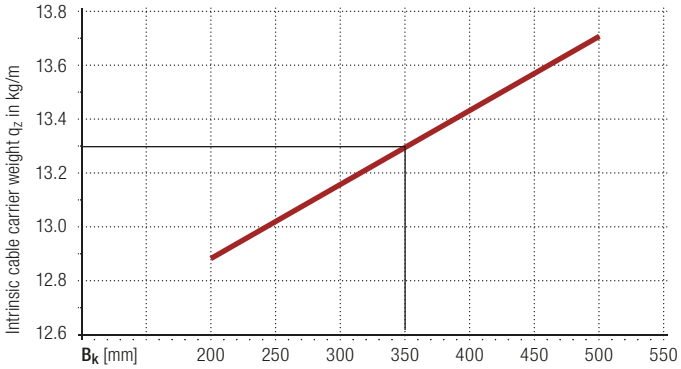
Bend radii

KR [mm]												
145	200	220	260	300	340	380	420	460	500	540	600	1000

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
156	176	200	206	12.88
181	201	225	231	12.95
206	226	250	256	13.02
231	251	275	281	13.09
256	276	300	306	13.16
281	301	325	331	13.23
306	326	350	356	13.30
331	351	375	381	13.36
356	376	400	406	13.43
381	401	425	431	13.50
406	426	450	456	13.57
431	451	475	481	13.64
456	476	500	506	13.71

The stated values for B_k are sample values in 25 mm sections.
Stay variant RS 2 is available in **1 mm width sections**.



Calculation example

B_k = 350 mm

q_k = 13.3 kg/m

Weight of side bands:
12 kg/m (without stays)

Inner height
72
Chain widths
200 – 500
Increments
1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 91

S/SX1250 RS | Inner Distribution | TS0

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

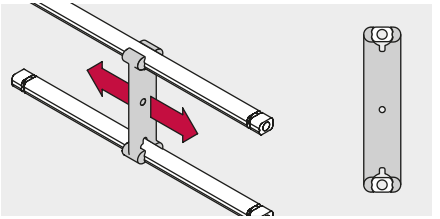
As standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A)**.

For applications with lateral acceleration and lying on the side, the dividers must be able to be attached by simple insertion of a bushing, available as an accessory.

The bushing additionally serves as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm **(version B)**.

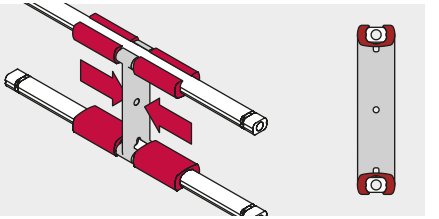
Movable divider

Version A (Standard)



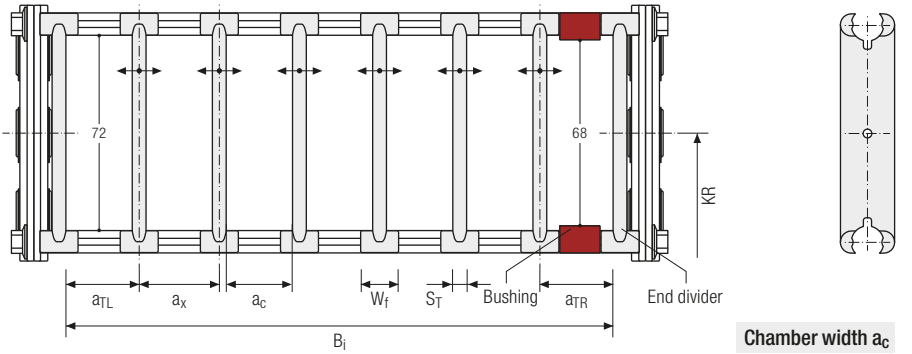
Fixable divider

Version B



Divider system TS0 without height separation

Version A				
S_T [mm]	W_f [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]
5	15	12.5	15	10



Chamber width a_c

$a_c = a_x - S_T$

Order example

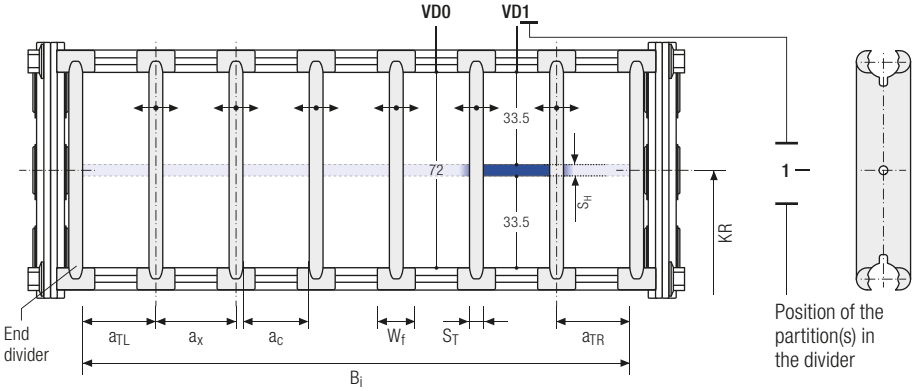
TS0	.	A	.	3
Divider system		Version		n_T

Information on the connection dimensions for the cable carrier can be found on page 90.

S/SX1250 RS | Inner Distribution | TS1

Divider system TS1 with continuous height separation

Version A							
S_T [mm]	W_f [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{TL}/a_{TR\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
5	15	5	12.5	25	15	10	2



Standard height separation with **steel tube Ø 5 mm**.
The dividers can be moved in the cross section.

Chamber width a_c

$a_c = a_x - S_T$

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Assembly instructions etc.: Receive additional info via your smartphone or check online at **kabelschlepp.de/support**

Configure your custom cable carrier: **onlineengineer.de**

Information on the connection dimensions for the cable carrier can be found on page 90.

S/SX1250 RV | Overview

Aluminum stay RV – frame stay reinforced

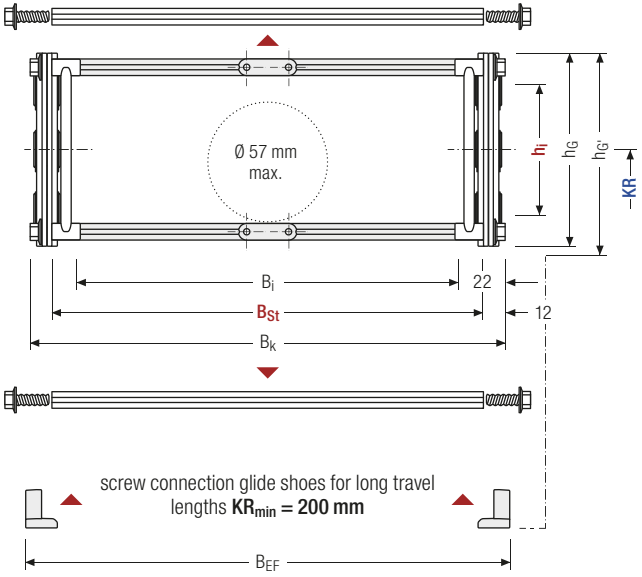
- Aluminum profile bars for medium to heavy loads and large chain widths. Double screw connection on both sides.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside:** Screw connection is easy to release.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 200 – 600 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 22$ mm

Outer width B_k

$B_k = B_i + 46$ mm

Total width B_{EF}

$B_{EF} = B_k + 6$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX1250 RV | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
125	72	94	104

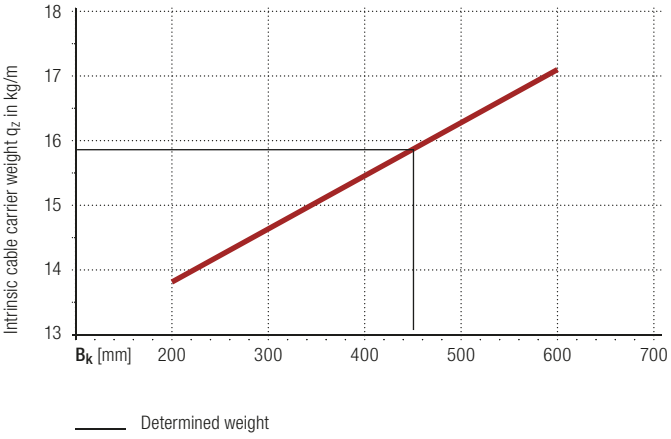
Bend radii

KR [mm]												
145	200	220	260	300	340	380	420	460	500	540	600	1000

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
154	176	200	206	13.83
204	226	250	256	14.24
254	276	300	306	14.65
304	326	350	356	15.06
354	376	400	406	15.47
404	426	450	456	15.88
454	476	500	506	16.29
504	526	550	556	16.70
554	576	600	606	17.11

The stated values for B_k are sample values in 50 mm sections.
Stay variant RV is available in **1 mm width sections**.



Calculation example

B_k = 450 mm

q_k = 15.88 kg/m

Weight of side bands:
12 kg/m (without stays)

Inner height
72
Chain widths
200 – 600
Increments
1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 91

S/SX1250 RV | Inner Distribution | TS0

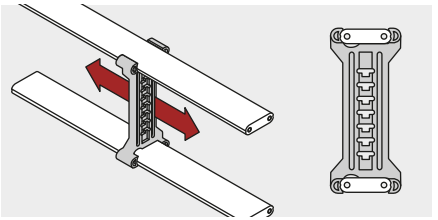
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A)**.

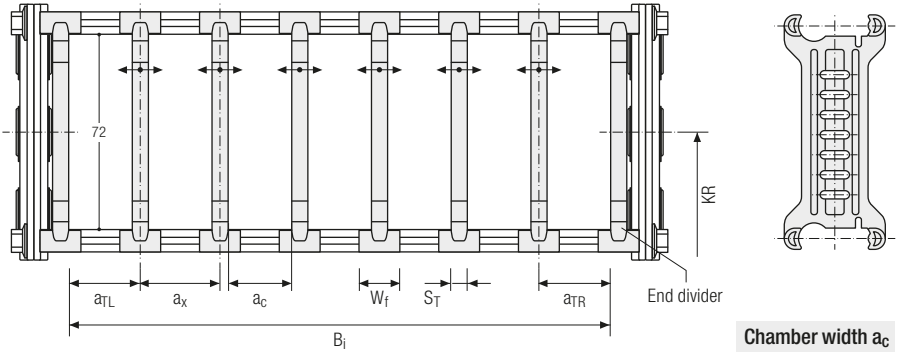
Movable divider

Version A



Divider system TS0 without height separation

Version A				
S_T [mm]	W_f [mm]	a_{TL}/a_{TR} min [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]
6	16	13	16	10



Chamber width a_c

$a_c = a_x - S_T$

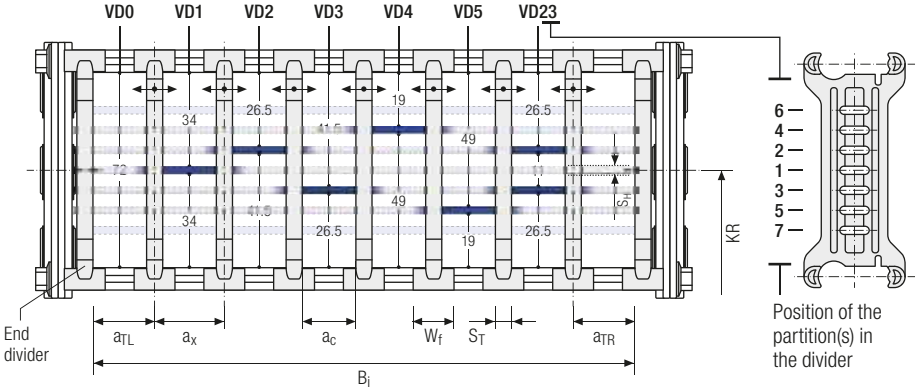
Order example

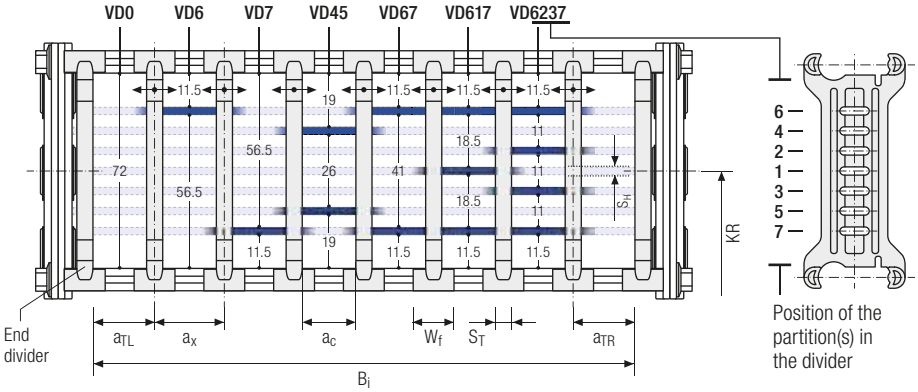
TS0	.	A	.	3
Divider system		Version		n_T

Information on the connection dimensions for the cable carrier can be found on page 90.

Divider system TS1 with continuous height separation

Version A							
S_T [mm]	W_f [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{TL}/a_{TR\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
6	16	4	13	25	16	10	2





Standard height separation with **aluminum profile 11 × 4 mm**.
The dividers can be moved in the cross section.

Chamber width a_c

$a_c = a_x - S_T$

Information on the connection dimensions for the cable carrier can be found on page 90.

S/SX series
Inner height 72
Chain widths 200 – 600
Increments 1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 91

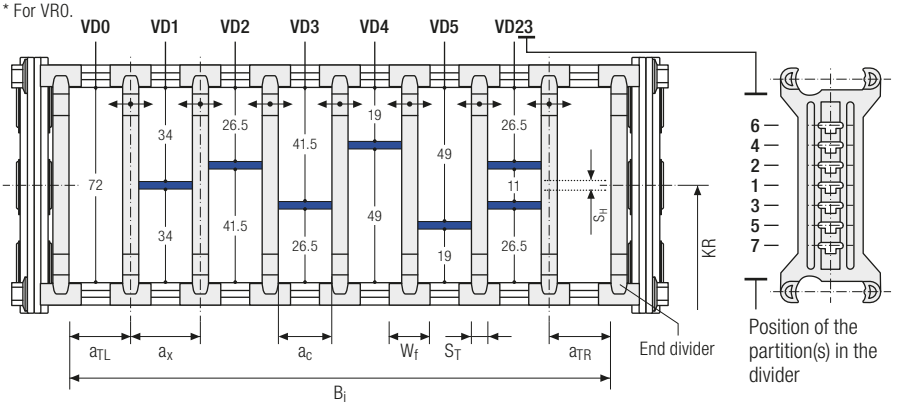
S/SX1250 RV | Inner Distribution | TS2

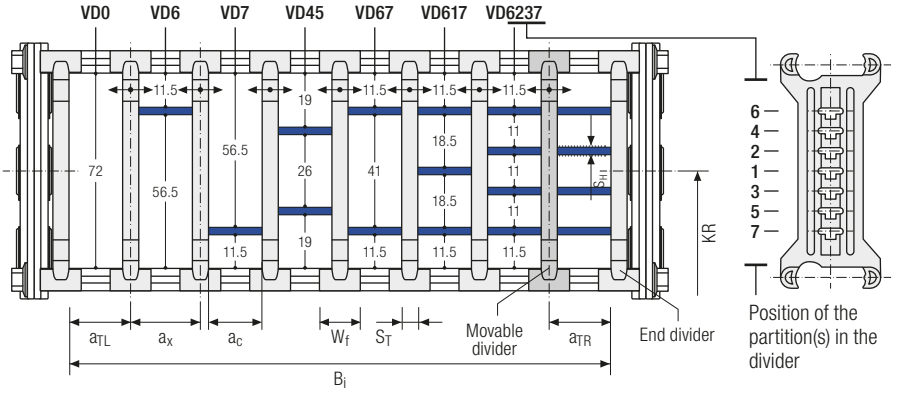
Divider system TS2 with partial height separation

1 mm

Version A						
S_T [mm]	W_f [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
6	16	4	13	16* / 20	10* / 14	2

* For VR0.





With grid distribution **(1 mm grid)**. Standard height separation with **aluminum profile 11 × 4 mm**. The dividers are attached by the height separation, the grid can be moved in the cross section.
Movable TS1 dividers can be used as an option.

Chamber width a_c

$a_c = a_x - S_T$

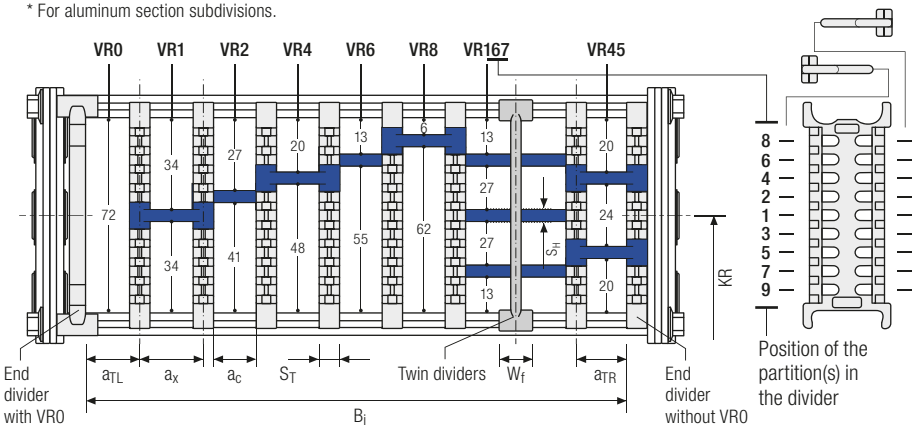
Information on the connection dimensions for the cable carrier can be found on page 90.

S/SX1250 RV | Inner Distribution | TS3

Divider system TS3 with height separation made of plastic section subdivisions

Version A								
S_T [mm]	S_T twin divider [mm]	W_f [mm]	W_f twin divider [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
8	4	8	13	4	4	16 / 42*	8	2

* For aluminum section subdivisions.



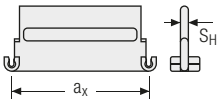
The dividers are fixed by the partitions, the complete divider system is movable in the cross section. Movable twin dividers are optionally available. Twin dividers are also suitable for retrofitting in the section subdivision system.

Chamber width a_c

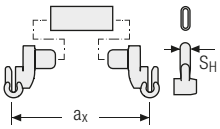
$a_c = a_x - S_T$

a_x (center distance of dividers) [mm]														
a_c (nominal width of inner chamber) [mm]														
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**	**78**	**80**	**88**
8	10	15	20	24	25	30	35	40	50	56	60	70	72	80
96	**112**	**128**	**144**	**160**	**176**	**192**	**208**							
88	104	120	136	152	168	184	200							

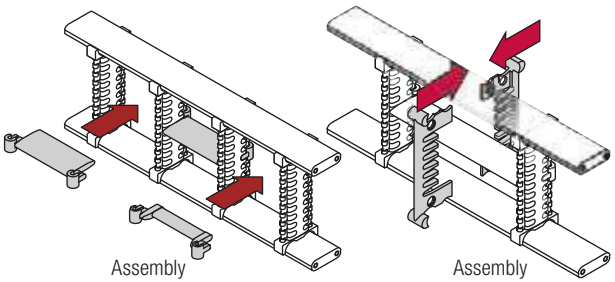
Plastic section subdivisions in a_x increments



Aluminum section subdivisions with plastic adapters in 1 mm increments



When using **section subdivisions with a_x > 112 mm we recommend an additional center support with a twin divider.**
The height separations VR8 and VR9 are not possible when using twin dividers. Aluminum section subdivisions are only available with **a_x > 42 mm**.



Assembly section subdivision

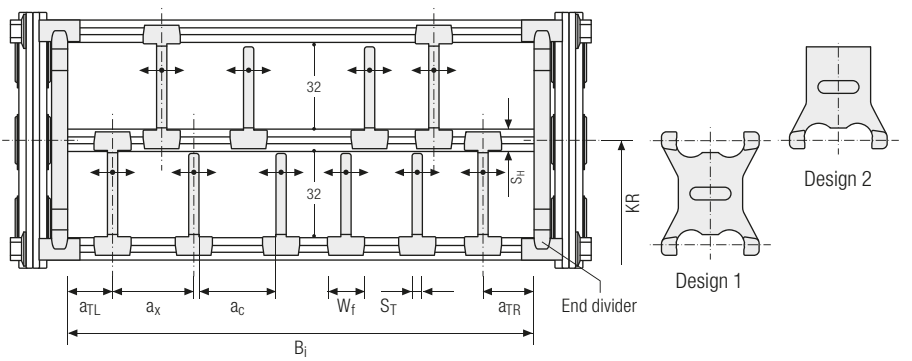
Assembly twin divider

Information on the connection dimensions for the cable carrier can be found on page 90.

S/SX1250 RV | Inner Distribution | TS4

Divider system TS4 with continuous height separation

Version A						
S_T [mm]	W_f [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
4	14.5	8	7.5	15	11	4



Height separation with **aluminum profile 27 × 8 mm**.
At least 2 half dividers with wrap-around design on both sides (design 1) have to be mounted in the upper and lower chamber near the side band.

Chamber width a_c

$a_c = a_x - S_T$

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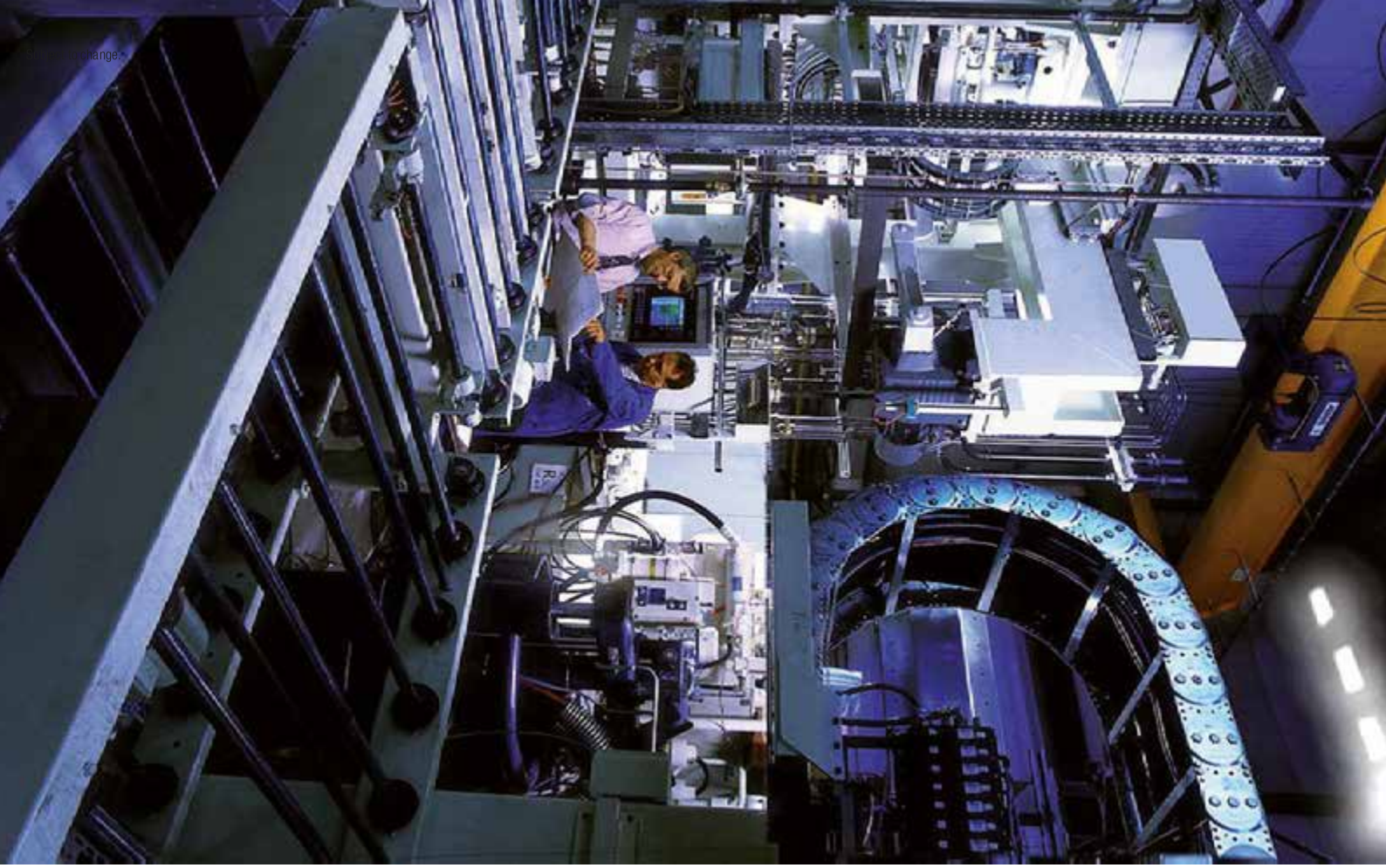
Information on the connection dimensions for the cable carrier can be found on page 90.



S/SX1250 RM | Overview

HEAVY DUTY TSUBAKI KABELSCHLEPP

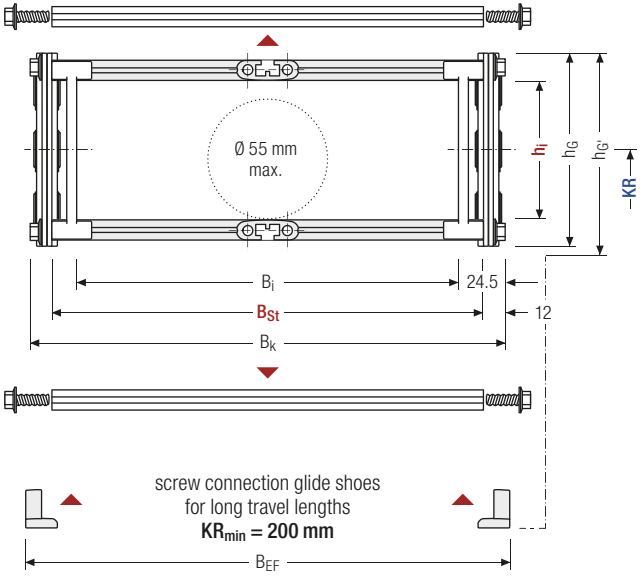
Aluminum stay RM – frame stay solid

- Aluminum profile bars for heavy loads and maximum chain widths. Double screw connections on both sides **"Heavy Duty"**.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside:** Screw connection is easy to release.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

B_k from 200 – 800 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 25$ mm

Outer width B_k

$B_k = B_i + 49$ mm

Total width B_{EF}

$B_{EF} = B_k + 6$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX1250 RM | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
125	69	94	104

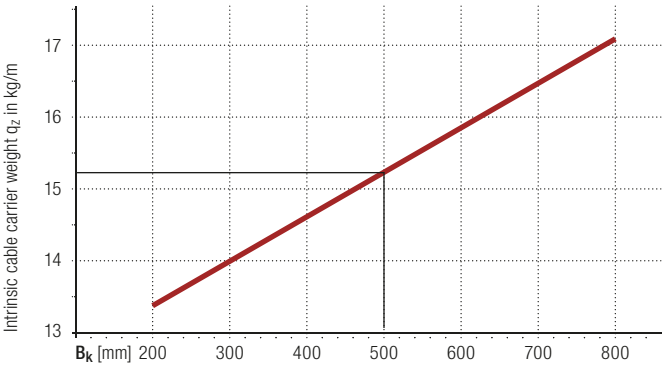
Bend radii

KR [mm]												
145	200	220	260	300	340	380	420	460	500	540	600	1000

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
151	176	200	206	13.42
201	226	250	256	13.72
251	276	300	306	14.02
301	326	350	356	14.32
351	376	400	406	14.62
401	426	450	456	14.92
451	476	500	506	15.22
501	526	550	556	15.51
551	576	600	606	15.81
601	626	650	656	16.11
651	676	700	706	16.41
701	726	750	756	16.71
751	776	800	806	17.01

The stated values for B_k are sample values in 50 mm sections.
Stay variant RM is available in **1 mm width sections**.



Determined weight

Calculation example

B_k = 500 mm

q_k = 15.22 kg/m

Weight of side bands:
12 kg/m (without stays)

Inner height 69
Chain widths 200 – 800
Increments 1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 91

S/SX1250 RM | Inner Distribution | TS0

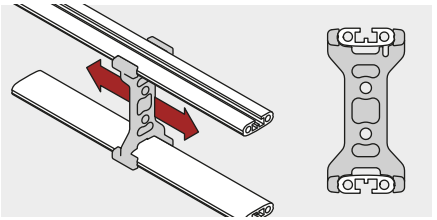
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A)**.

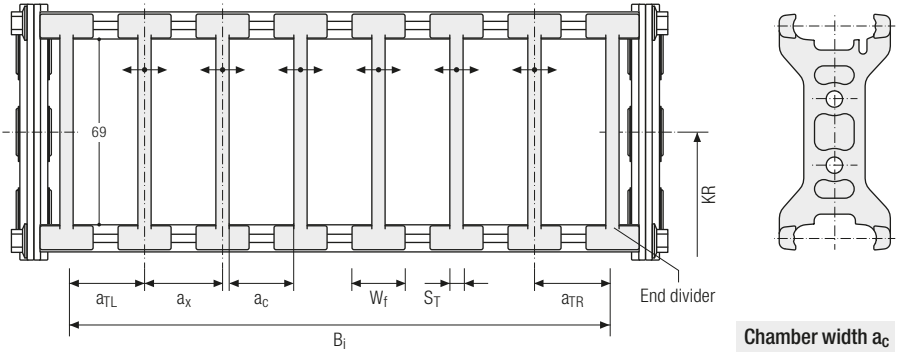
Movable divider

Version A



Divider system TS0 without height separation

Version A				
S_T [mm]	W_f [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]
5	20	17.5	20	15



Chamber width a_c

$a_c = a_x - S_T$

Order example

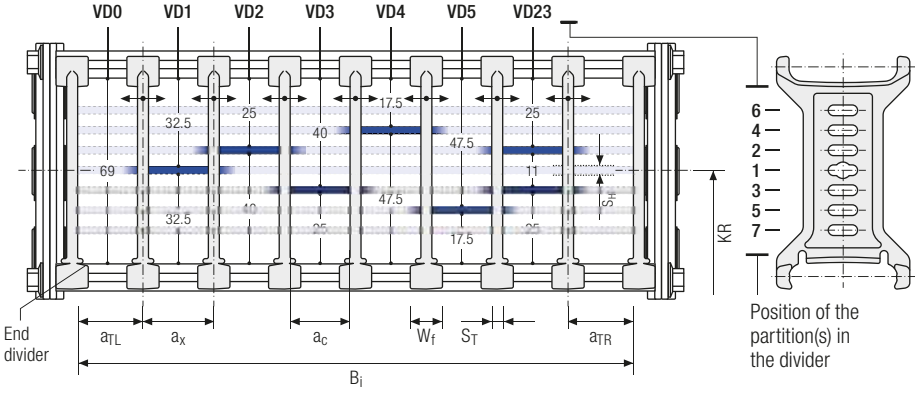
TS0	.	A	.	3
Divider system		Version		n_T

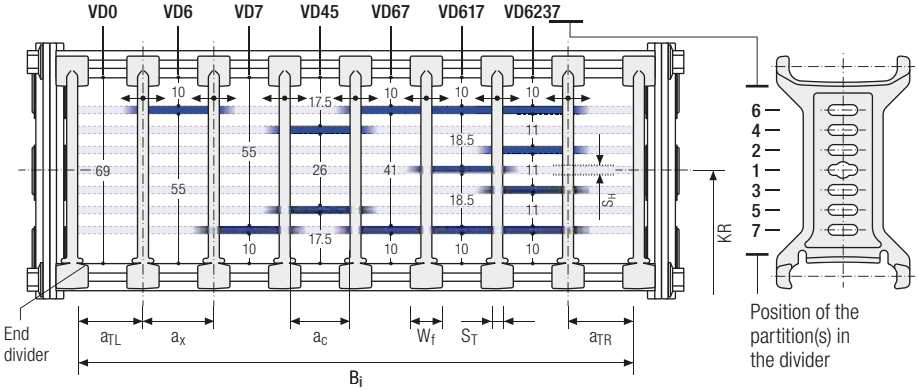
Information on the connection dimensions for the cable carrier can be found on page 90.

S/SX1250 RM | Inner Distribution | TS1

Divider system TS1 with continuous height separation

Version A							
S_T [mm]	W_f [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{TL}/a_{TR\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
4	12	4	13.5	25	12	8	2





Standard height separation with **aluminum profile 11 × 4 mm**.
The dividers can be moved in the cross section.

Chamber width a_c

$a_c = a_x - S_T$

Information on the connection dimensions for the cable carrier can be found on page 90.

Inner height
69
Chain widths
200 - 800
Increments
1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 91

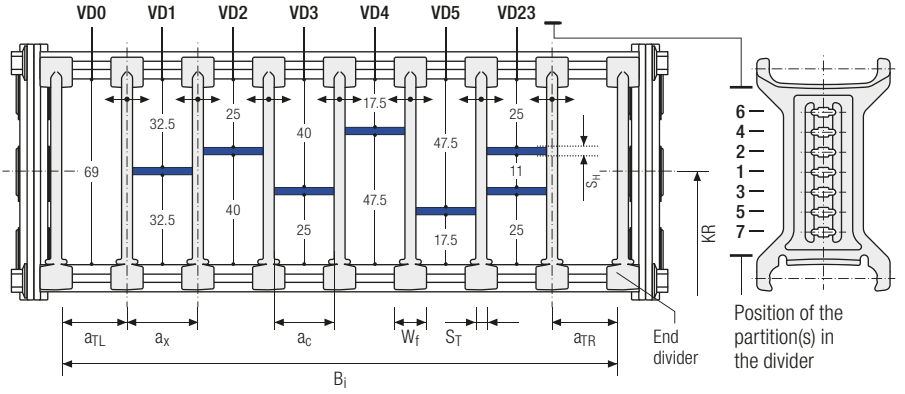
S/SX1250 RM | Inner Distribution | TS2

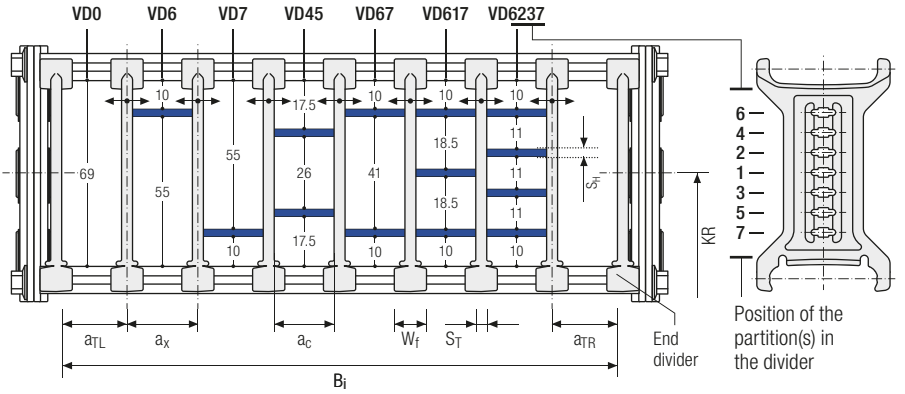
Divider system TS2 with partial height separation

1 mm

Version A						
S_T [mm]	W_f [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
6	14	4	11** / 14,5	14* / 20	14	2

* For VD0 ** For version with height separation to the end divider





With grid distribution **(1 mm grid)**. Standard height separation with **aluminum profile 11 × 4 mm**. The dividers are fixed by the height separation, the complete divider system is movable in the cross section.
Movable TS1 dividers can be used as an option.

Chamber width a_c

$a_c = a_x - S_T$

Information on the connection dimensions for the cable carrier can be found on page 90.

Subject to change

Inner height
69

Chain widths
200 - 800

Incre-ments
1 mm

Key for abbreviations on page 136

Assembly instructions on kabelschlepp.de/assembly

Order key on page 91

S/SX1250 RR | Overview

Tube stay RR – frame stay, tube version

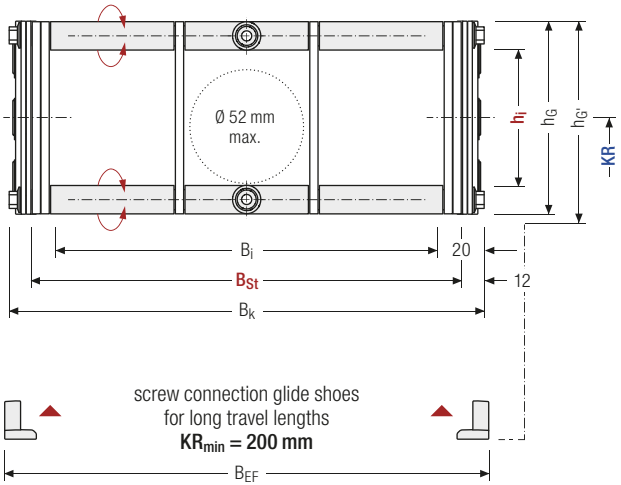
- Steel rolling stays with gentle cable support and plastic dividers. Ideal for using media hoses with soft sheathing. Easy screw connection.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside:** Screw connection detachable.
- **Option:** Axes, tubes and dividers made from steel and stainless steel ER 1, ER 1S.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 200 – 600 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 16$ mm

Outer width B_k

$B_k = B_i + 40$ mm

Total width B_{EF}

$B_{EF} = B_k + 6$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX1250 RR | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
125	66	94	104

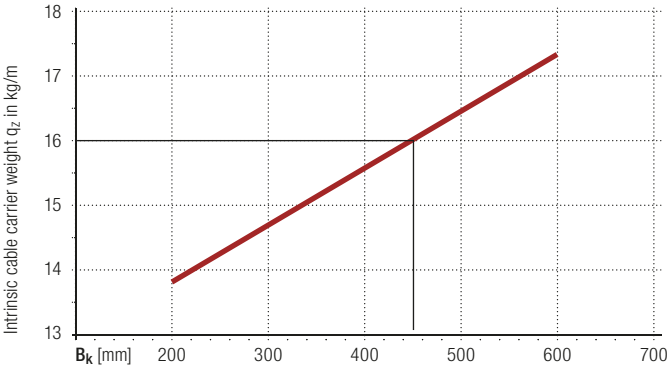
Bend radii

KR [mm]												
145	200	220	260	300	340	380	420	460	500	540	600	1000

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
160	176	200	206	13.82
210	226	250	256	14.26
260	276	300	306	14.69
310	326	350	356	15.13
360	376	400	406	15.56
410	426	450	456	16.00
460	476	500	506	16.43
510	526	550	556	16.87
560	576	600	606	17.30

The stated values for B_k are sample values in 50 mm sections.
Stay variant RR is available in **1 mm width sections**.



Determined weight

Calculation example

B_k = 450 mm

q_k = 16.0 kg/m

Weight of side bands:
12 kg/m (without stays)

Inner height
66
Chain widths
200 – 600
Increments
1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 91

S/SX1250 RR | Inner Distribution | TS0

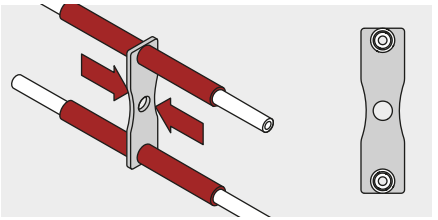
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

The dividers are fixed through the tubes.
The tube additionally serves as a spacer between the dividers **(version B)**.

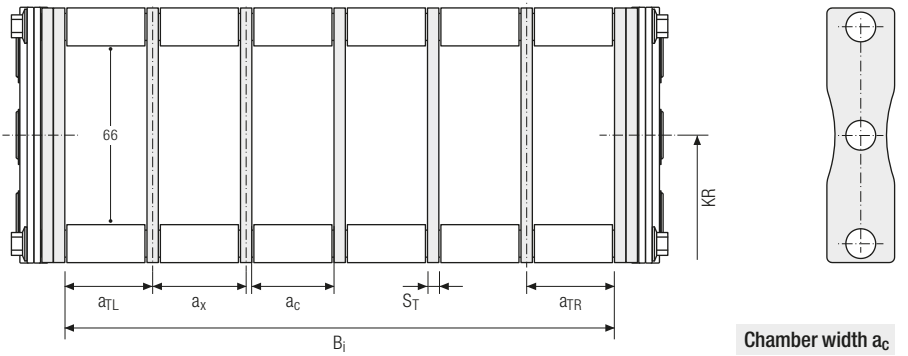
Fixed divider

Version B



Divider system TS0 without height separation

Version B			
S_T [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]
4	30	30	26



Chamber width a_c

$a_c = a_x - S_T$

Order example

TS0	.	B	.	3
Divider system		Version		n_T

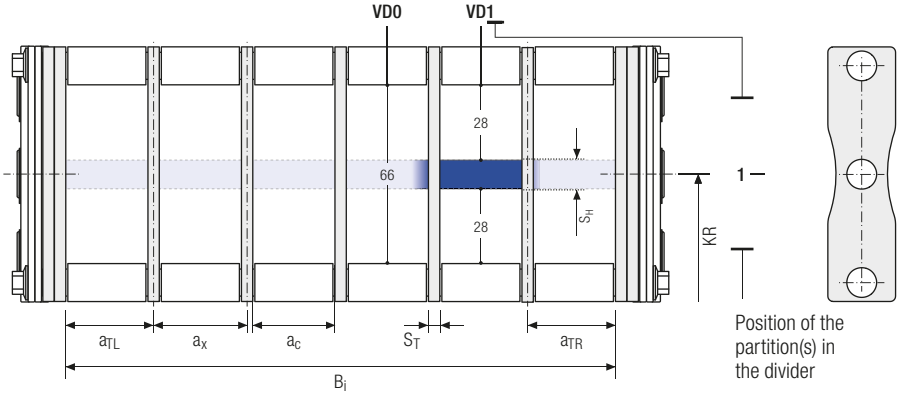
When ordering please state the mounting distances a_T/a_x.
Enclose a sketch with dimensions, if possible.

Information on the connection dimensions for the cable carrier can be found on page 90.

S/SX1250 RR | Inner Distribution | TS1

Divider system TS1 with continuous height separation

Version B						
S_T [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{TL}/a_{TR\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
4	10	30	45	30	26	2



Position of the partition(s) in the divider

Standard height separation with **steel tube Ø 10 mm**.

Chamber width a_c

$a_c = a_x - S_T$

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Assembly instructions etc.: Receive additional info via your smartphone or check online at **kabelschlepp.de/support**

Configure your custom cable carrier: **onlineengineer.de**

Information on the connection dimensions for the cable carrier can be found on page 90.

Inner height 66
Chain widths 200 – 600
Increments 1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 91

S/SX1250 LG | Overview

HEAVY DUTY TSUBAKI KABELSCHLEPP

Aluminum stay LG – hole stay, split version

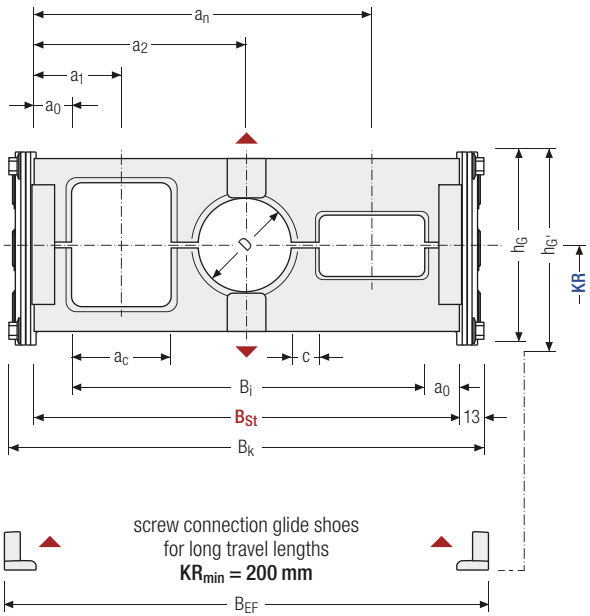
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.
- Order-specific manufacturing of the hole pattern according to your data.
- **Opening options outside/inside:** Screw connection is easy to release.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 130 – 800 mm in **1 mm width sections**



Calculating the cable carrier width

Inner width B_i

$B_i = B_{St} - 2\ a_0$

Stay width B_{St}

$B_{St} = \sum D + \sum c + \sum a_c + 2\ a_0$

Outer width B_k

$B_k = B_{St} + 26$ mm

Total width B_{EF}

$B_{EF} = B_k + 6$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Subject to change.

S/SX1250 LG | Dimensions · Technical Data

Pitch, chain link height and hole stay dimensions

t [mm]	h_G [mm]	$h_{G'}$ [mm]	D_{max} [mm]	c_{min} [mm]	$a_{c\,min}$ [mm]	$a_{0\,min}$ [mm]
125	94	104	74	4	12	11

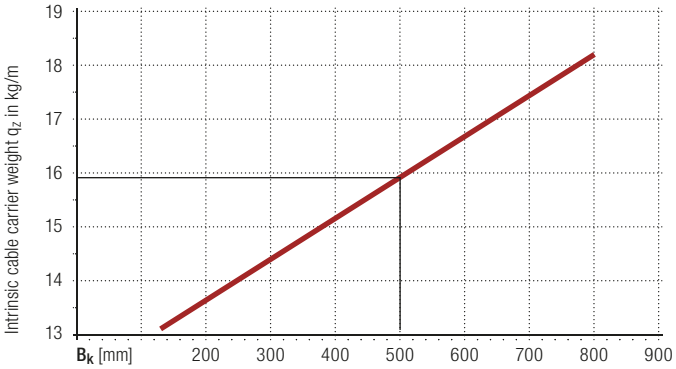
Bend radii

KR [mm]												
145	200	220	260	300	340	380	420	460	500	540	600	1000

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_K [mm]	B_{EF} [mm]	q_K 50 % [kg/m]
82	104	130	136	13.10
152	174	200	206	13.64
252	274	300	306	14.40
352	374	400	406	15.17
452	474	500	506	15.93
552	574	600	606	16.69
652	674	700	706	17.46
752	774	800	806	18.22

The stated values for B_K are sample values in 100 mm sections.
Stay variant LG is available in **1 mm width sections**.



Determined weight

Calculation example

B_K = 500 mm

q_K = 15.93 kg/m [50 %]

Hole ratio of the hole stay approx. 50 %

Weight of side bands: 12 kg/m (without stays)

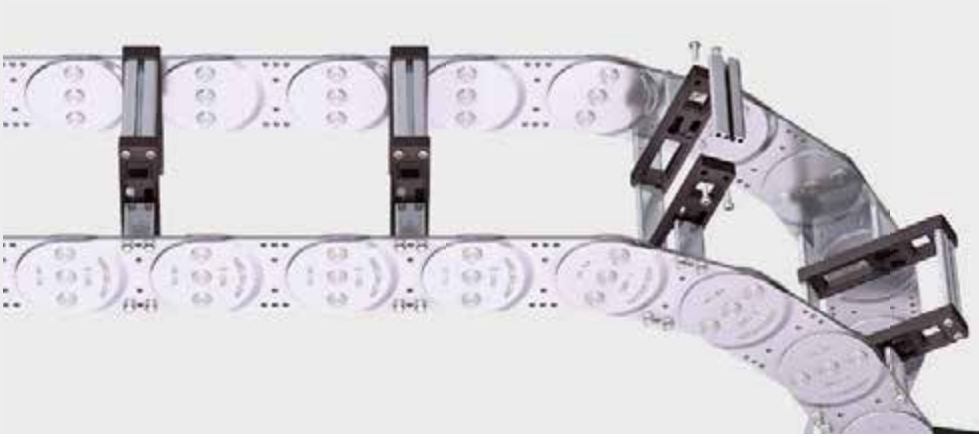
Information on the connection dimensions for the cable carrier can be found on page 90.

Subject to change.

S/SX1250 RMA | Overview

Aluminum stay RMA – mounting frame stay

- Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- The mounting frame stay can be mounted either **inside** or **outside** in the bending radius.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside**: Screw connection is easy to release.

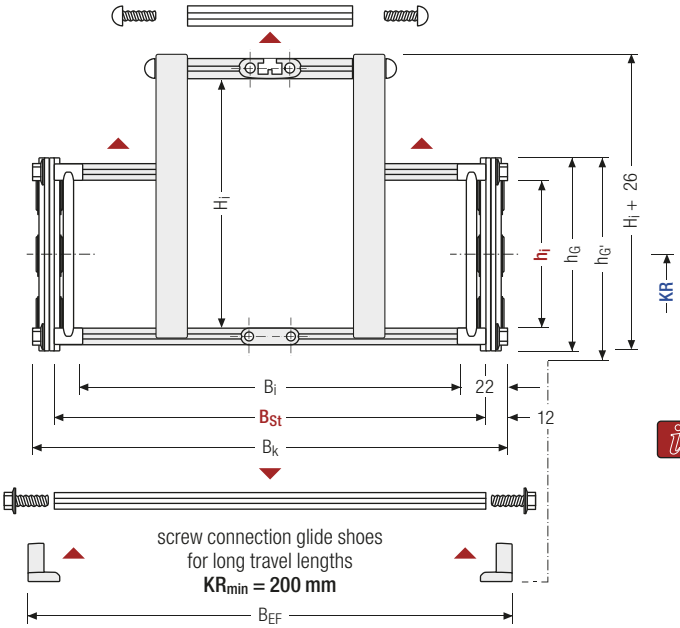


Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 200 – 600 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 22$ mm

Outer width B_k

$B_k = B_i + 46$ mm

Total width B_{EF}

$B_{EF} = B_k + 6$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

All cable carrier cross sections according to section data in the schematic.

S/SX1250 RMA | Dimensions · Technical Data

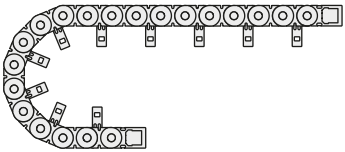
Pitch, inner height and chain link height

t [mm]	H_i [mm]	h_G [mm]	$h_{G'}$ [mm]
125	130 / 160 / 200	94	104

Bend radii

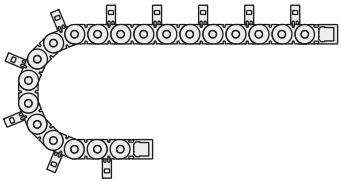
KR [mm]												
145	200	220	260	300	340	380	420	460	500	540	600	1000

Assembly variants



RMA 1 – assembly to the inside:
Gliding application is not possible when using assembly version RMA 1.

Observe minimum KR:
H_i = 130 mm: KR_{min} = 200 mm
H_i = 160 mm: KR_{min} = 260 mm
H_i = 200 mm: KR_{min} = 300 mm



RMA 2 – assembly to the outside:
The cable carrier has to rest on the side bands and not on the stays.

Guiding in a **channel is required** for support. Please contact our technical support at technik@kabelschlepp.de to find the corresponding guide channel.

Please note the operating and installation height.

Intrinsic cable carrier weight

Determining the intrinsic cable carrier weight strongly depends on the selected stay arrangement. Please contact us.

TSUBAKI KABELSCHLEPP Technical Support

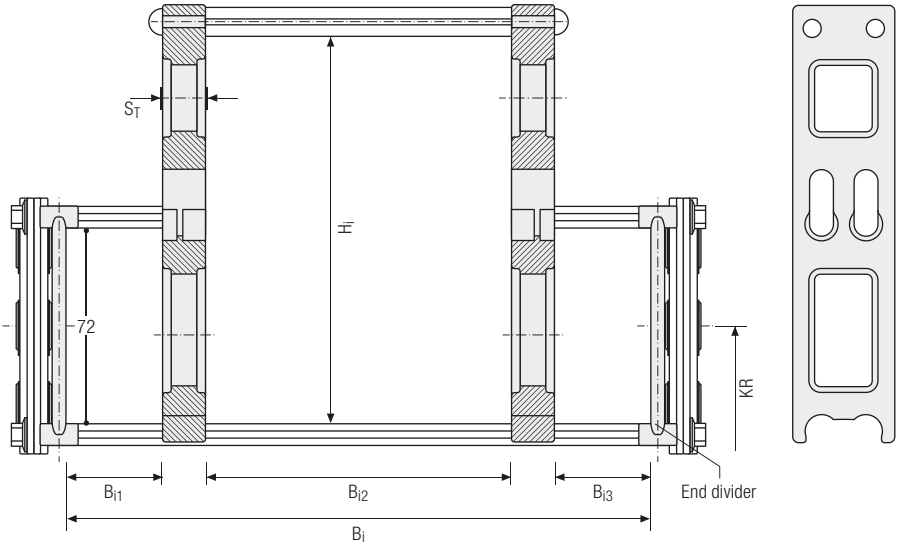
We would like to support you with complex design parameters. Just make use of our technical consultation service.

Information on the connection dimensions for the cable carrier can be found on page 90.

S/SX1250 RMA | Overview

Inner distribution

S_T [mm]	H_i [mm]	$B_{i1\ min}$ [mm]	$B_{i2\ min}$ [mm]	$B_{i3\ min}$ [mm]
15	130 / 160 / 200	24	128	24



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More product information online

Assembly instructions etc.:
Receive additional info via your smartphone or check online at
kabelschlepp.de/support

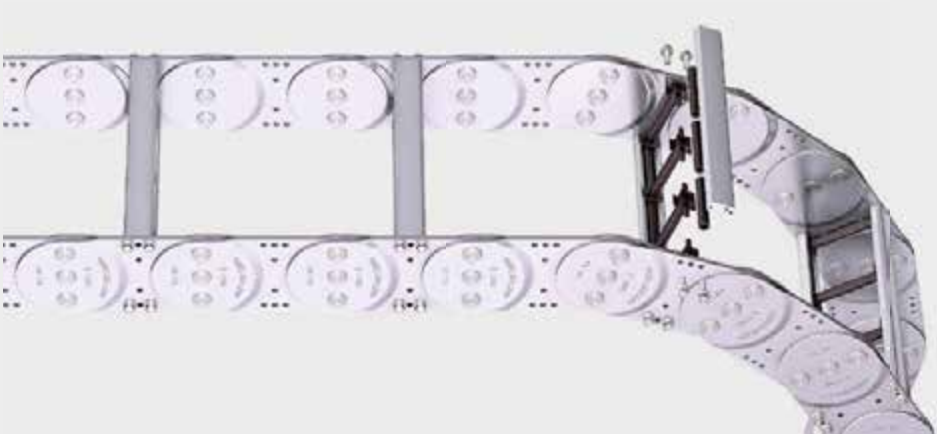
Configure your custom cable carrier:
onlineengineer.de

Subject to change.

S/SX1250 RMR | Overview

Aluminum stay RMR – frame rolling stay

- Aluminum profile bars with plastic rolling stay for highest requirements with gentle cable guiding. Double screw connection on both sides.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside:** Screw connection is easy to release.

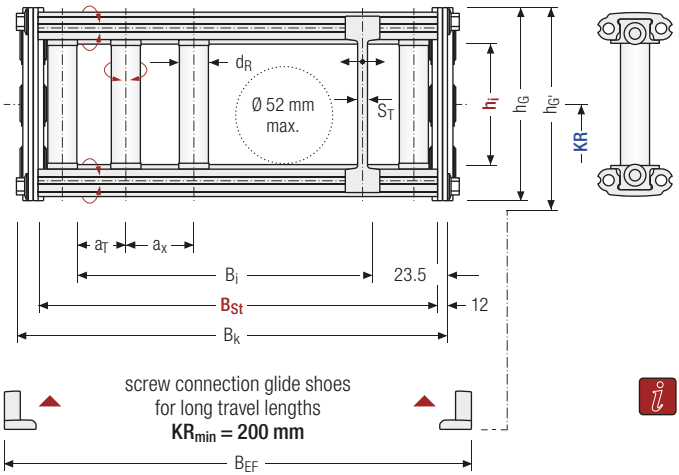


Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_i from 200 – 800 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 24$ mm

Outer width B_k

$B_k = B_i + 47$ mm

Total width B_{EF}

$B_{EF} = B_k + 6$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX1250 RMR | Dimensions · Technical Data

Pitch, inner height, chain link height and rolling stay dimensions

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	d_R [mm]	S_T [mm]	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]
125	66	94	104	10	4	11.5	37

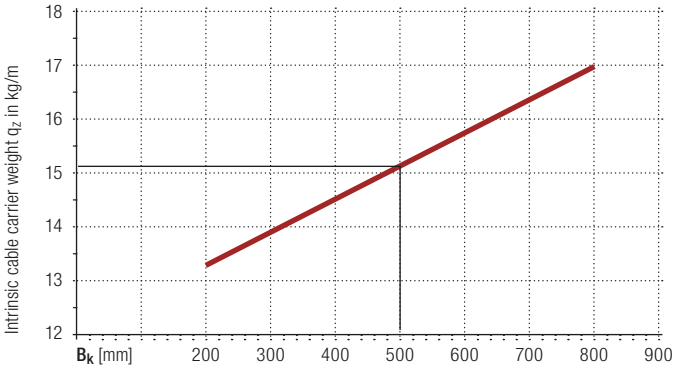
Bend radii

KR [mm]												
145	200	220	260	300	340	380	420	460	500	540	600	1000

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
153	177	200	206	13.28
203	227	250	256	13.59
253	277	300	306	13.90
303	327	350	356	14.21
353	377	400	406	14.51
403	427	450	456	14.82
453	477	500	506	15.13
503	527	550	556	15.44
553	577	600	606	15.75
603	627	650	656	16.06
653	677	700	706	16.36
703	727	750	756	16.67
753	777	800	806	16.98

The stated values for B_k are sample values in 50 mm sections.
Stay variant RMR is available in **1 mm width sections**.



Determined weight

Calculation example

B_k = 500 mm

q_k = 15.13 kg/m

Weight of side bands:
12 kg/m (without stays)

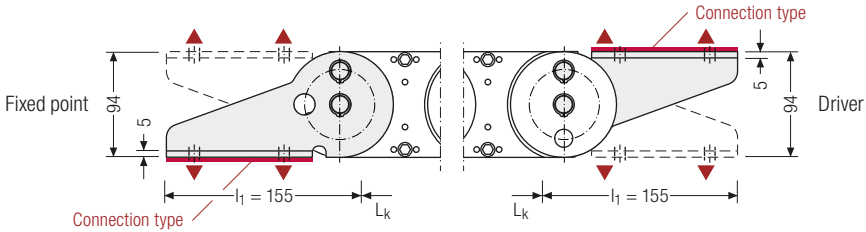
Information on the connection dimensions for the cable carrier can be found on page 90.

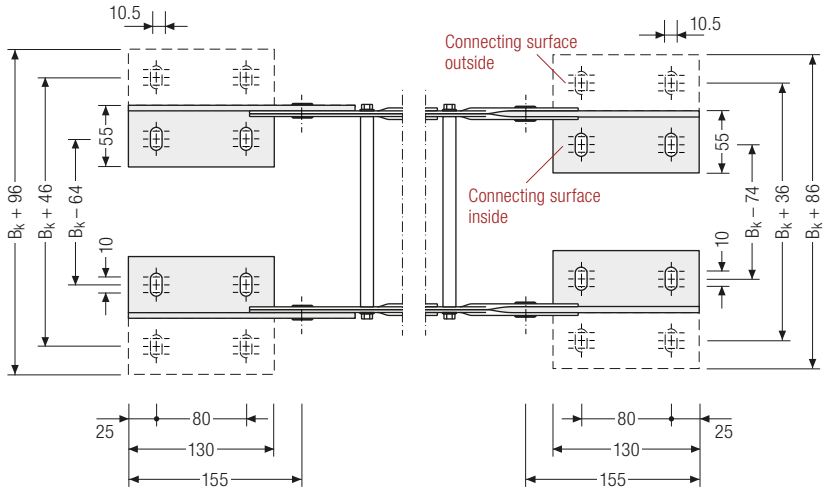
Inner height 66
Chain widths 200 – 800
Increments 1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 91

S/SX1250 | End Connectors | Steel Connectors

End connectors – steel

End connectors made from steel. The connection variants on the fixed point and on the driver can be combined and, if required, changed subsequently.

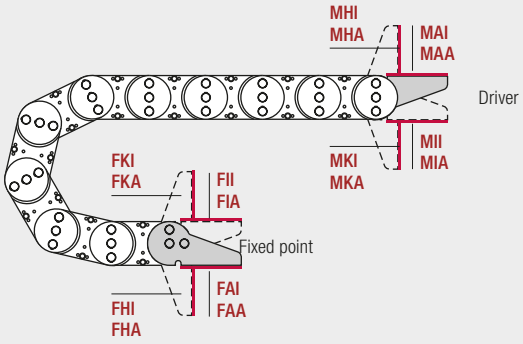




Caution: The standard connection variant FAI/MAI is only possible from B_k of 125 mm.

▲ Assembly options

Connection variants



Connection point
- **F** – fixed point
- **M** – driver

Connection type
- **A** – threaded joint outside (standard)
- **I** – threaded joint inside
- **H** – threaded joint outside rotated by 90°
- **K** – threaded joint inside rotated by 90°

Connection surface
- **I** – connection surface inside
- **A** – connection surface outside

S/SX1250 | Order Key

Order

Cable carrier

Type	B_{St} [mm]	Stay variant	KR [mm]	Material	L_k [mm]	Stay arrangement
			145			
			200			
			220			
			260			
			300			
			340			
		RS 1	380			
		RS 2	420			
		RV	460			
		RM	500	St		
	82	RR	540	ER 1		
S1250	...	LG	600	ER 1S		HS
SX1250	753	RMR	1000	ER 2		VS

S1250	.	352	.	RV	.	260	.	St	-	4750		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Caution: Not all combinations are possible. Please note the information on the individual stay variants.

International order specification INTOK: Information about the International Order Key can be found in the chapter "International Order Key" from page 1.

Divider system

Divider system	Version	n_T	Chamber	a_x [mm]	Height separation (not for TS0)
TS0			K1		VD0
...	A	min. 2	K2	min. 14	VD1
TS4	B	...	...	...	...

TS3	.	A	.	3	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K5	.	38	-	VD3
Divider system		Version		n_T		Chamber		Assembly distance		Height separation

Please state the designation of the divider system **(TS0, TS1 ...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

If using divider systems with height separation **(TS1 – TS4)** please also state the positions [e.g. VD23] viewed from the left carrier belt. When using divider system **TS3** please provide us with the additional twin dividers in writing. You are welcome to add a sketch to your order.

Connection

End connector	Connection point	Connection type	Connection surface
		A	
		I	
	F	H	I
Steel	M	K	A

Steel	.	F	A	I
Steel	.	M	A	I

Please state the desired connection variant as well as the desired strain relief type for the fixed point and for the driver.

Inner height 66 – 74
Chain widths 130 – 800
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 91

S/SX1252 / S/SX1252 B | Special Designs

Special designs

S/SX1252 – with closed stroke system and straight link plates

- Closed stroke system protected between link plates mounted on both sides
- Symmetrical sideband design
- Long service life even under most adverse conditions, e.g. large amounts of foundry sand, corundum or scale through optimized chain geometry.
- The optimized, “self-cleaning” geometry prevents blockage of the stroke system caused by dirt deposits.

S/SX1252B – with internal stroke system and straight link plates

- Open stroke system
- Link plates on the sidebands are mounted with an offset.
- Long service life even under most adverse conditions, e.g. large amounts of foundry sand, corundum or scale through optimized chain geometry.
- The optimized, “self-cleaning” geometry prevents blockage of the stroke system caused by dirt deposits.
- Version with bolted sidebands.

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More product information online

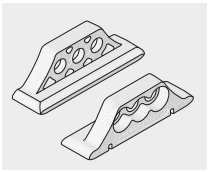
Assembly instructions etc.: Receive additional info via your smartphone or check online at **kabelschlepp.de/support**

Configure your custom cable carrier: **onlineengineer.de**

Accessories

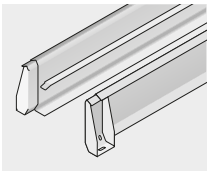
Gliding elements

The use of glide shoes on the side link plates is required for cable carriers in gliding applications.



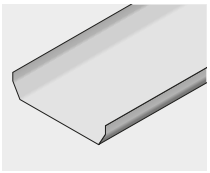
Guide channels

The cable carrier always has to be guided in a channel for gliding applications. This prevents the upper and lower run from slipping.



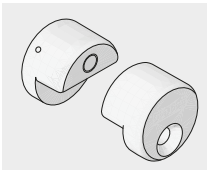
Support trays

An even surface is required for safe unrolling of the cable carrier. This is ensured by a support tray.



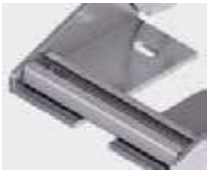
Outer dampers

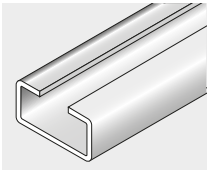
The use of outer dampers effectively reduces uncoiling noise. Particularly recommended for support trays and guide channels.



C-rails for strain relief elements

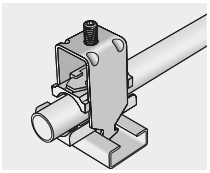
The optional C-rails for mounting strain relief elements are mounted behind the end connectors and have to be bolted separately.





LineFix® clamps

LineFix clamps are fixed to the C-rail. The serve as a separate strain relief or separate attachment of the cables outside the cable carrier.



Key for abbreviations on page 136

Assembly instructions on kabelschlepp.de/assembly

Order key on page 91

S/SX1800 | Stay Variants | Overview

S/SX1800

Pitch
180 mm

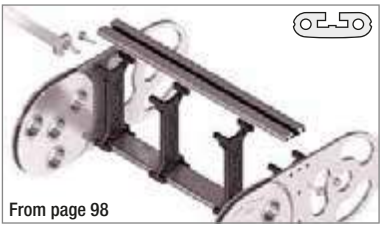
Height
104 – 110 mm

Chain width
180 – 1,000 mm

Bending radius
265 – 1300 mm

Stay variants

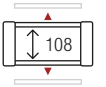
Aluminum stay RM



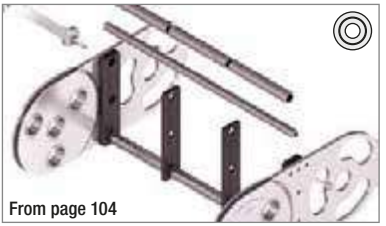
From page 98

Frame stay solid
- Aluminum profile bars for heavy loads and maximum Chain widths. Double screw connections on both sides **"Heavy Duty"**.
- Available customized in **1 mm width sections**.

Opening options
inside/outside: Screw connection is easy to release.



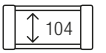
Tube stay RR



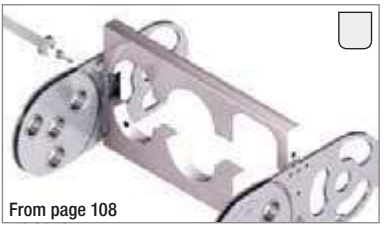
From page 104

Frame stay, tube version
- Steel rolling stays with gentle cable support and plastic dividers. Ideal for using media hoses with soft sheathing. Easy screw connection.
- Available customized in **1 mm width sections**.

Opening options
inside/outside: Screw connection detachable.



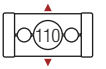
Aluminum stay LG



From page 108

Hole stay, split version
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.

Opening options
inside/outside: Screw connection is easy to release.

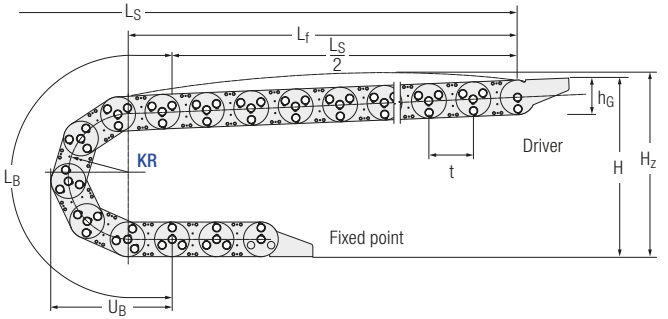


Technical data on page 96

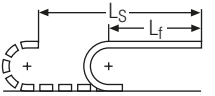
Subject to change.

S/SX1800 | Installation Dimensions | Unsupported

Unsupported arrangement



Unsupported length L_f



Dynamics of unsupported arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[mm]
2	3	180

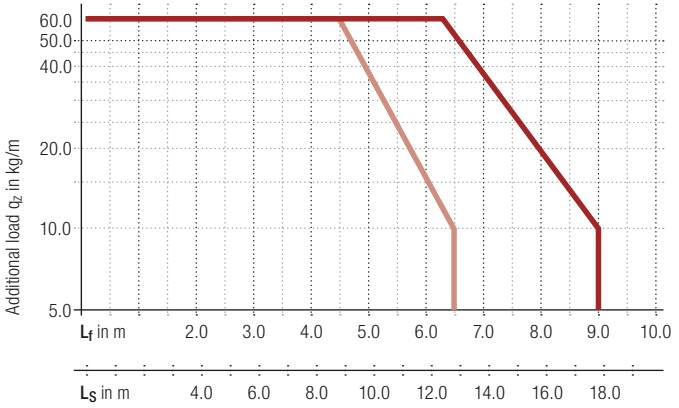
Installation dimensions unsupported

KR [mm]	H [mm]	L_B [mm]	U_B [mm]
265	740	1,552	695
320	850	1,725	750
375	960	1,898	805
435	1,080	2,087	865
490	1,190	2,259	920

KR [mm]	H [mm]	L_B [mm]	U_B [mm]
605	1,420	2,620	1,035
720	1,650	2,982	1,150
890	1,990	3,516	1,320
1175	2,560	4,411	1,605
1300	2,810	4,804	1,730

Load diagram

for unsupported length depending on additional load



Intrinsic cable carrier weight q_k = 26 kg/m.
The maximum additional load decreases if this value is exceeded.

S1800 galvanized steel
SX1800 ER 2
SX1800 ER 1 / ER 1S

Installation height H_Z

$H_Z = H + 10$ mm/m

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

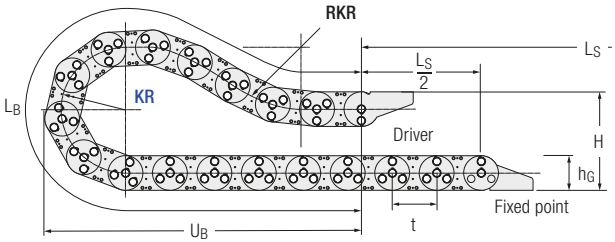
Cable carrier length L_k rounded to pitch t

Unsupported length L_f

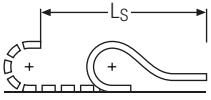
$$L_f = \frac{L_S}{2} + 2\,t$$

Fixed point offset L_v:
For off-center fixed point connections please contact us.

Gliding arrangement



Glide shoes are required for gliding applications.



For more information on gliding arrangement please contact us.

Dynamics of gliding arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[mm]
0.8	2	180

The gliding cable carrier has to be routed in a channel.
Our engineers will be happy to help with project planning – please contact us.

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

TSUBAKI KABELSCHLEPP Technical Support

If you have any questions about determining gliding cable carriers or other technical details please contact our technical support service at technik@kabelschlepp.de. We will be happy to help you.

S/SX1800 RM | Overview

HEAVY DUTY
TSUBAKI KABELSCHLEPP

Aluminum stay RM – frame stay solid

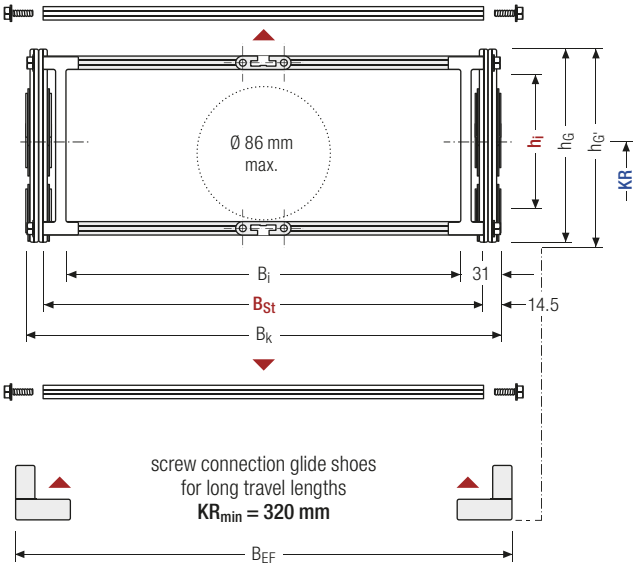
- Aluminum profile bars for heavy loads and maximum chain widths. Double screw connections on both sides **"Heavy Duty"**.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside**: Screw connection is easy to release.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 250 – 1,000 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 33$ mm

Outer width B_k

$B_k = B_i + 62$ mm

Total width B_{EF}

$B_{EF} = B_k + 11$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX1800 RM | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
180	108	140	155

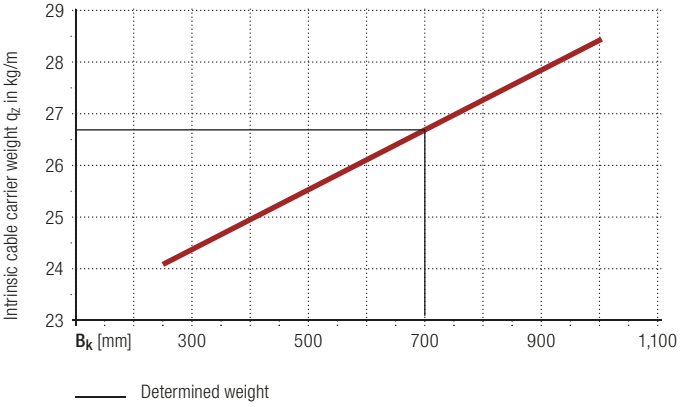
Bend radii

KR [mm]									
265	320	375	435	490	605	720	890	1175	1300

Inner/outer width and intrinsic cable carrier weight

Bi [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
188	221	250	258	24.08
238	271	300	308	24.37
288	321	350	358	24.66
338	371	400	408	24.96
388	421	450	458	25.25
438	471	500	508	25.54
488	521	550	558	25.83
538	571	600	608	26.12
588	621	650	658	26.42
638	671	700	708	26.71
688	721	750	758	27.00
738	771	800	808	27.29
788	821	850	858	27.58
838	871	900	908	27.88
888	921	950	958	28.17
938	971	1,000	1,008	28.46

The stated values for B_k are sample values in 50 mm sections.
Stay variant RM is available in **1 mm width sections**.



Calculation example

B_k = 700 mm

q_k = 26.71 kg/m

Weight of side bands:
22.8 kg/m (without stays)

Inner height 108
Chain widths 250 – 1000
Increments 1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 111

S/SX1800 RM | Inner Distribution | TS0

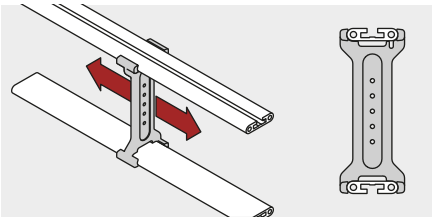
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A)**.

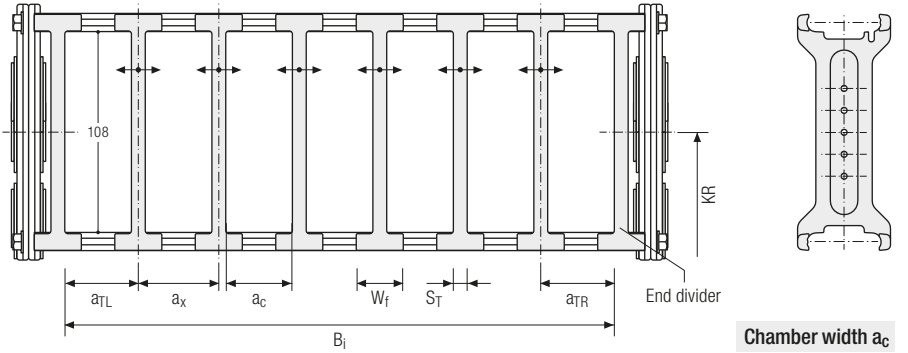
Movable divider

Version A



Divider system TS0 without height separation

Version A				
S_T [mm]	W_f [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]
7.5	25	21.5	25	17.5



Chamber width a_c

$a_c = a_x - S_T$

Order example

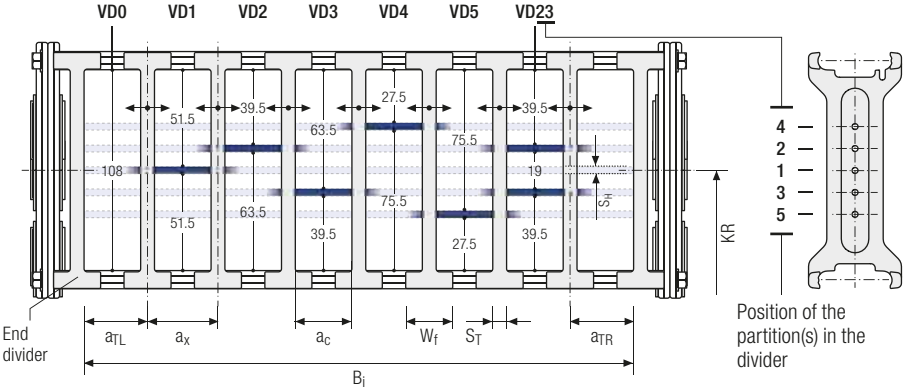
TS0	.	A	.	3
Divider system		Version		n_T

Information on the connection dimensions for the cable carrier can be found on page 110.

S/SX1800 RM | Inner Distribution | TS1

Divider system TS1 with continuous height separation

Version A							
S_T [mm]	W_f [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{TL}/a_{TR\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
7.5	25	5	21.5	25	25	17.5	2



Standard height separation with **steel tube Ø 5 mm**.
The dividers can be moved in the cross section.

Chamber width a_c

$a_c = a_x - S_T$

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More product information online

Assembly instructions etc.: Receive additional info via your smartphone or check online at **kabelschlepp.de/support**

Configure your custom cable carrier: **onlineengineer.de**

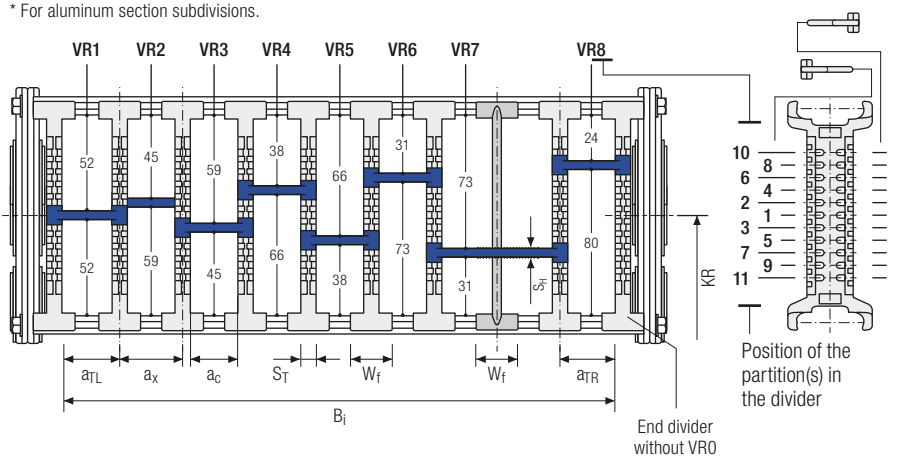
Inner height 108
Chain widths 250 - 1000
Increments 1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 111

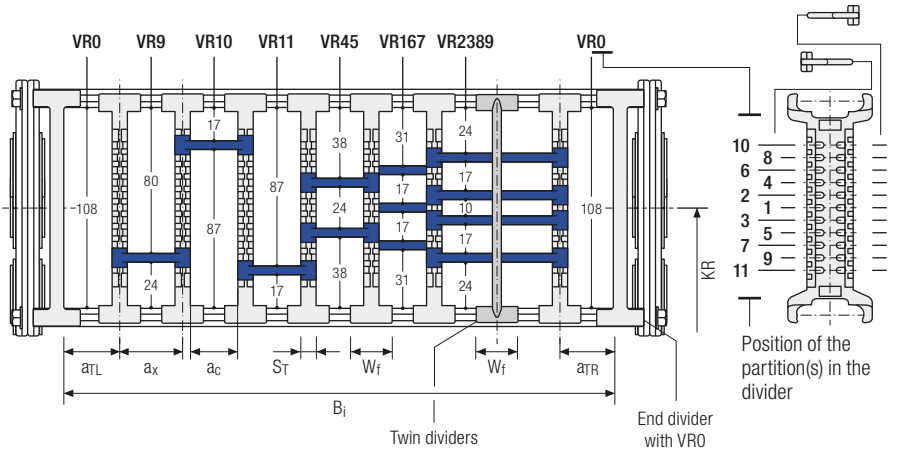
S/SX1800 RM | Inner Distribution | TS3

Divider system TS3 with height separation made of plastic section subdivisions

Version A								
S_T [mm]	S_T twin divider [mm]	W_f [mm]	W_f twin divider [mm]	S_H [mm]	a_{TL}/a_{TR} min [mm]	a_x min [mm]	a_c min [mm]	n_T min
8	5	15	15	4	1	16 / 42*	8	2

* For aluminum section subdivisions.





The dividers are fixed by the partitions, the complete divider system is movable in the cross section. Movable twin dividers are optionally available. Twin dividers are also suitable for retrofitting in the section subdivision system.

Chamber width a_c

$a_c = a_x - S_T$

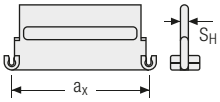
Information on the connection dimensions for the cable carrier can be found on page 110.

S/SX1800 RM | Inner Distribution | TS3

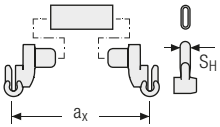
Divider system TS3 with height separation made of plastic section subdivisions

a_x (center distance of dividers) [mm]														
a_C (nominal width of inner chamber) [mm]														
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**	**78**	**80**	**88**
8	10	15	20	24	25	30	35	40	50	56	60	70	72	80
96	**112**	**128**	**144**	**160**	**176**	**192**	**208**							
88	104	120	136	152	168	184	200							

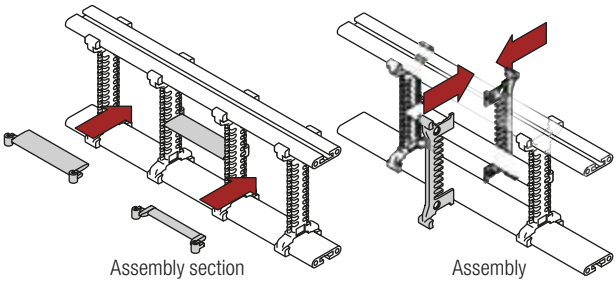
Plastic section subdivisions in a_x increments



Aluminum section subdivisions with plastic adapters in 1 mm increments



When using **section subdivisions with a_x > 112 mm** we recommend an additional center support with a **twin divider.**
Aluminum section subdivisions are only available with **a_x > 42 mm**.



Assembly section subdivision

Assembly twin divider

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Configure your custom cable carrier: **onlineengineer.de**

Inner height 108
Chain widths 250 – 1000
Incre-ments 1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 111

S/SX1800 RR | Overview

Tube stay RR – frame stay, tube version

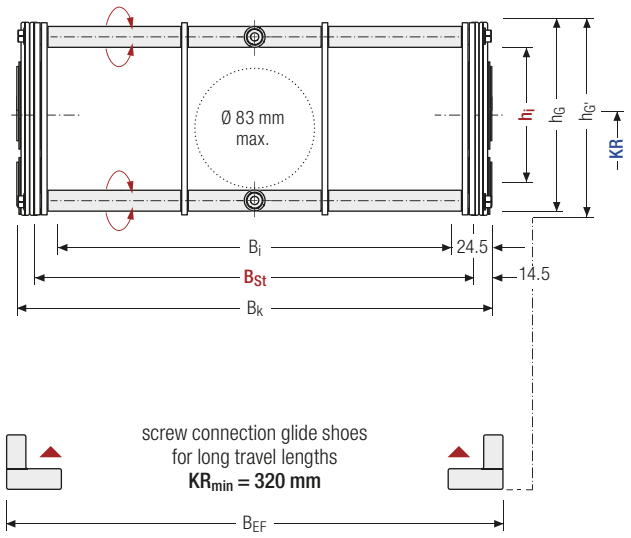
- Steel rolling stays with gentle cable support and plastic dividers. Ideal for using media hoses with soft sheathing. Easy screw connection.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside:** Screw connection detachable.
- **Option:** Axes, tubes and dividers made from steel or stainless steel ER 1, ER 1S.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 250 – 800 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 20$ mm

Outer width B_k

$B_k = B_i + 49$ mm

Total width B_{EF}

$B_{EF} = B_k + 11$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX1800 RR | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
180	104	140	155

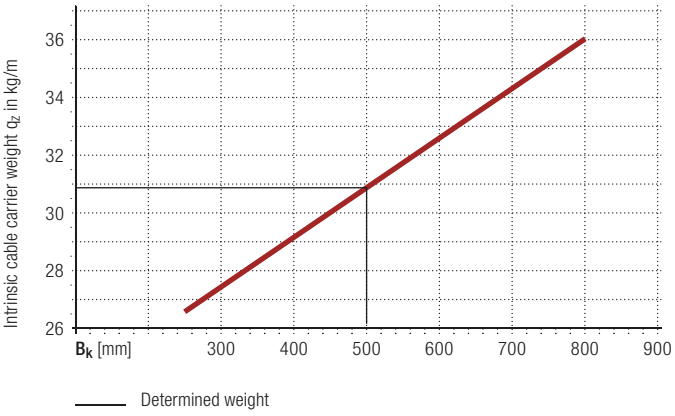
Bend radii

KR [mm]									
265	320	375	435	490	605	720	890	1175	1300

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k [kg/m]
201	221	250	258	26.57
251	271	300	308	27.43
301	321	350	358	28.29
351	371	400	408	29.16
401	421	450	458	30.02
451	471	500	508	30.88
501	521	550	558	31.74
551	571	600	608	32.60
601	621	650	658	33.46
651	671	700	708	34.33
701	721	750	758	35.19
751	771	800	808	36.05

The stated values for B_k are sample values in 50 mm sections.
Stay variant RR is available in **1 mm width sections**.



Calculation example

B_k	=	500 mm
q_k	=	30.88 kg/m

Weight of side bands:
22.8 kg/m (without stays)

Inner height
104
Chain widths
250 – 800
Incre-ments
1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 111

S/SX1800 RR | Inner Distribution | TS0

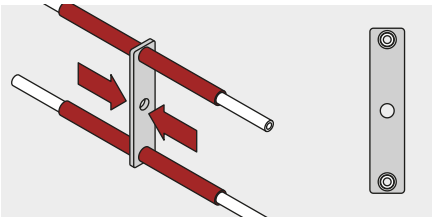
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

The dividers are fixed through the tubes.
The tube additionally serves as a spacer between the dividers **(version B)**.

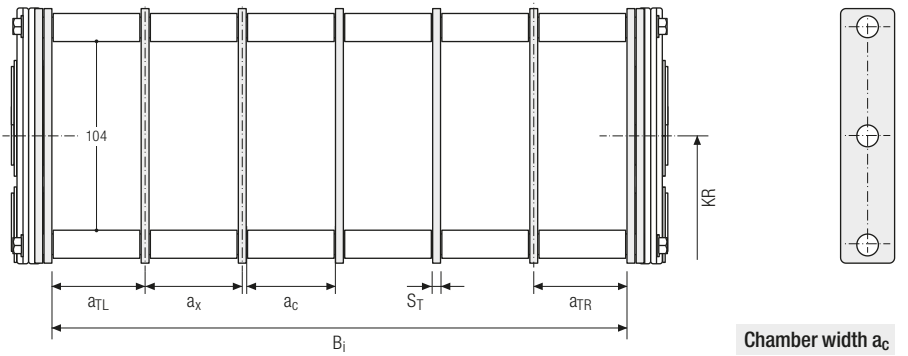
Fixed divider

Version B



Divider system TS0 without height separation

Version B			
S_T [mm]	a_{TL}/a_{TR} min [mm]	a_{x} min [mm]	a_{c} min [mm]
5	45	45	40



Chamber width a_c

$a_c = a_x - S_T$

Order example

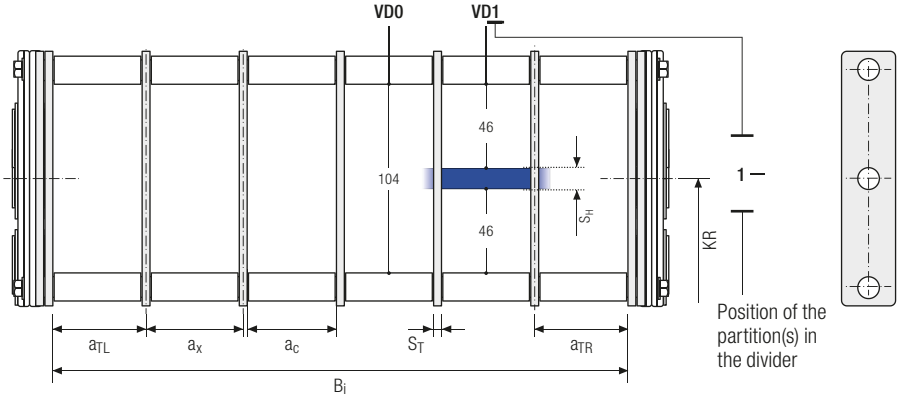
TS0	.	B	.	3
Divider system		Version		n_T

When ordering please state the mounting distances a_T/a_x.
Enclose a sketch with dimensions, if possible.

Information on the connection dimensions for the cable carrier can be found on page 110.

Divider system TS1 with continuous height separation

Version B						
S_T [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{TL}/a_{TR\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
5	12	45	45	45	40	2



Standard height separation with **steel tube Ø 12 mm**.

Chamber width a_c

$a_c = a_x - S_T$

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More product information online

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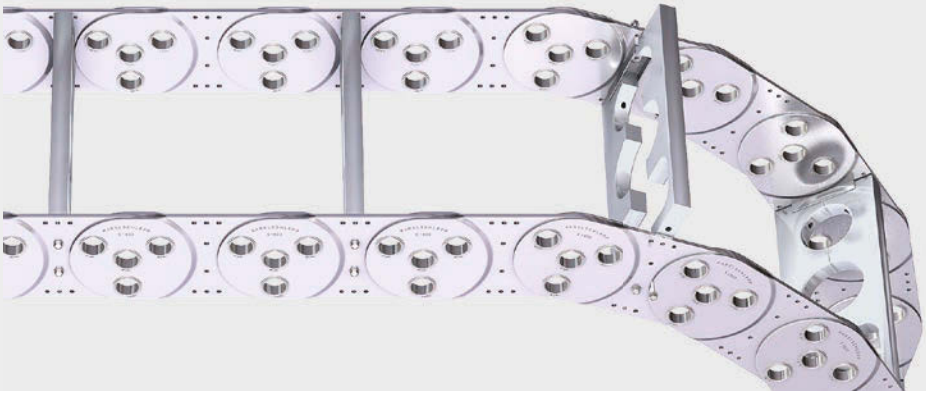
Configure your custom cable carrier here: **onlineengineer.de**

S/SX1800 LG | Overview

HEAVY DUTY
TSUBAKI KABELSCHLEPP

Aluminum stay LG – hole stay, split version

- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.
- Order-specific manufacturing of the hole pattern according to your data.
- **Opening options outside/inside:** Screw connection is easy to release.

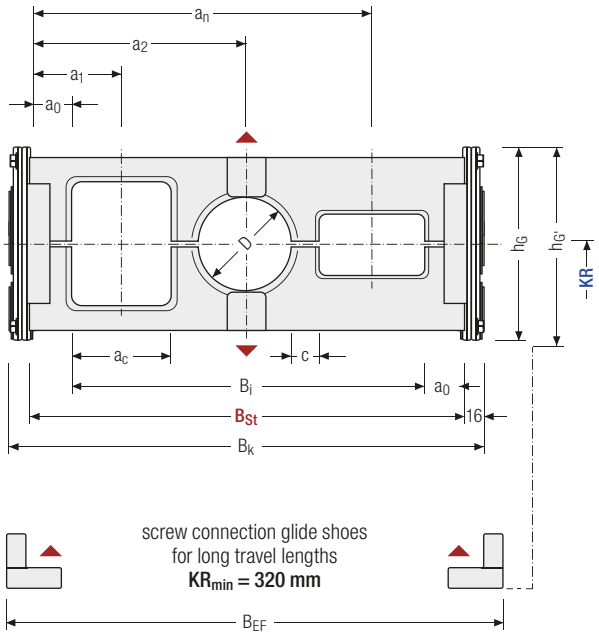


Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 180 – 1,000 mm in **1 mm width sections**



Calculating the cable carrier width

Inner width B_i

$B_i = B_{St} - 2\,a_0$

Stay width B_{St}

$B_{St} = \sum D + \sum c + \sum a_c + 2\,a_0$

Outer width B_k

$B_k = B_{St} + 32$ mm

Total width B_{EF}

$B_{EF} = B_k + 11$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX1800 LG | Dimensions · Technical Data

Pitch, chain link height and hole stay dimensions

t [mm]	h_G [mm]	D_{max} [mm]	c_{min} [mm]	$a_{c\ min}$ [mm]	$a_{0\ min}$ [mm]
180	140	110	4	12	13.5

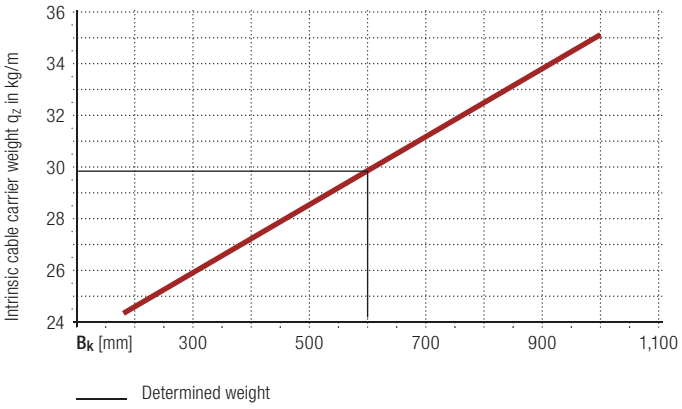
Bend radii

KR [mm]									
265	320	375	435	490	605	720	890	1175	1300

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	B_{EF} [mm]	q_k 50 % [kg/m]
121	**148**	180	188	24.38
141	**168**	200	208	24.60
241	**268**	300	308	25.91
341	**368**	400	408	27.22
441	**468**	500	508	28.53
541	**568**	600	608	29.84
641	**668**	700	708	31.15
741	**768**	800	808	32.46
841	**868**	900	908	33.77
941	**968**	1,000	1,008	35.08

The stated values for B_k are sample values in 100 mm sections.
Stay variant LG is available in **1 mm width sections**.



Calculation example

B_k = 600 mm

q_k = 29.84 kg/m

Hole ratio of the hole stay approx. 50 %

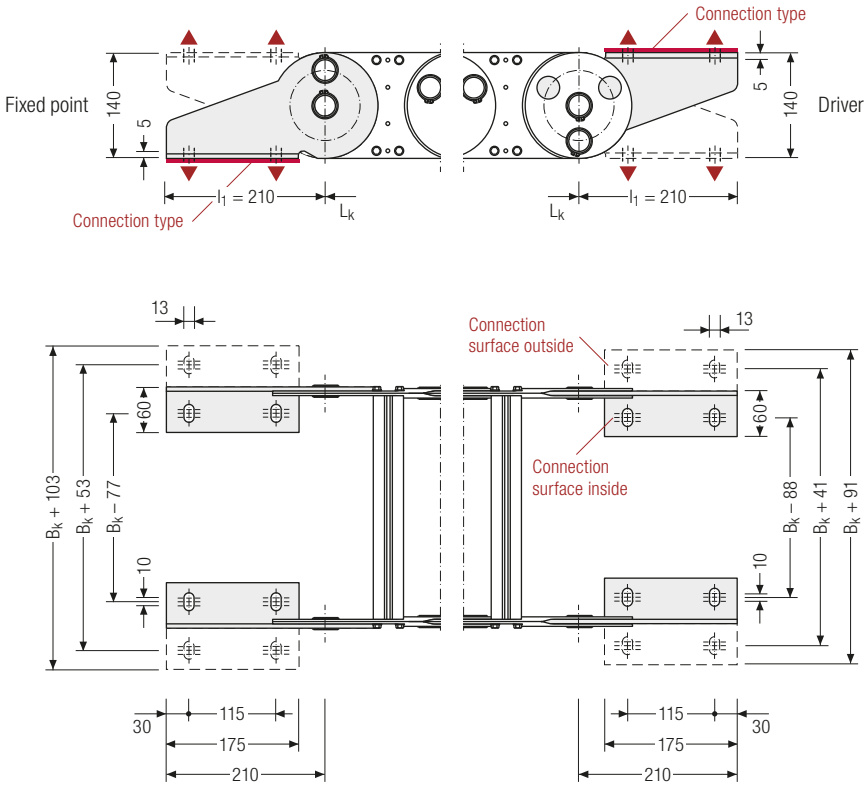
Weight of side bands: 22.8 kg/m (without stays)

Information on the connection dimensions for the cable carrier can be found on page 110.

S/SX1800 | End Connectors | Steel Connectors

End connectors – steel

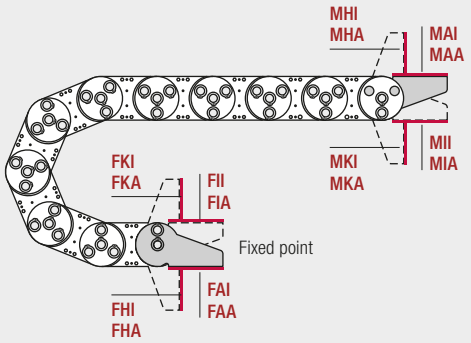
End connectors made from steel. The connection variants on the fixed point and on the driver can be combined and, if required, changed subsequently.



Caution: The standard connection variant FAI/MAI is only possible from B_k of 139 mm.

▲ Assembly options

Anschlussvarianten



Connection point
- **F** – fixed point
- **M** – driver

Connection type
- **A** – threaded joint outside (standard)
- **I** – threaded joint inside
- **H** – threaded joint outside rotated by 90°
- **K** – threaded joint inside rotated by 90°

Connection surface
- **I** – connection surface inside
- **A** – connection surface outside

Subject to change.

S/SX1800 | Order Key

Order

Cable carrier

Type	B_{St} [mm]	Stay variant	KR [mm]	Material	L_k [mm]	Stay arrangement
			265			
			320			
			375			
			435			
			490			
			605			
			720	St		
	148	RM	890	ER 1		
S1800	…	RR	1175	ER 1S		HS
SX1800	971	LG	1300	ER 2		VS

S1800	.	417	.	RM	.	375	.	St	-	5940		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Caution: Not all combinations are possible. Please note the information on the individual stay variants.

International order specification INTOK: Information about the International Order Key can be found in the chapter "International Order Key" from page 1.

Divider system

Divider system	Version	n_T	Chamber	a_x [mm]	Height separation (not for TS0)
TS0			K1		VD0
TS1	A	min. 2	K2	min. 25	VD1
TS3	B	…	…	…	…

TS3	.	A	.	3	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K5	.	38	-	VD3
Divider system		Version		n_T		Chamber		Assembly distance		Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

If using divider systems with height separation **(TS1 – TS3)** please also state the positions [e.g. VD23] viewed from the left carrier belt. If using the divider system **TS3**, please also state the required twin dividers. You are welcome to add a sketch to your order.

Connection

End connector	Connection point	Connection type	Connection surface
		A	
		I	
	F	H	I
Steel	M	K	A

Steel	.	F	A	I
Steel	.	M	A	I

Please state the desired connection variant for the fixed point and for the driver.

Inner height 104 – 110

Chain widths 180 – 1000

Key for abbreviations on page 136

Assembly instructions on kabelschlepp.de/assembly

Order key on page 111

S/SX1802 / S/SX1802 B | Special Designs

Special designs

S/SX1802 – with closed stroke system and straight link plates

- Closed stroke system protected between link plates mounted on both sides
- Symmetrical sideband design
- Long service life even under most adverse conditions, e.g. large amounts of foundry sand, corundum or scale through optimized chain geometry.
- The optimized, “self-cleaning” geometry prevents blockage of the stroke system caused by dirt deposits.

S/SX1802B – with internal stroke system and straight link plates

- Open stroke system
- Link plates on the sidebands are mounted with an offset.
- Long service life even under most adverse conditions, e.g. large amounts of foundry sand, corundum or scale through optimized chain geometry.
- The optimized, “self-cleaning” geometry prevents blockage of the stroke system caused by dirt deposits.
- Version with bolted sidebands.

TOTALTRAX® complete systems

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More product information online

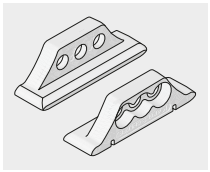
Assembly instructions etc.: Receive additional info via your smartphone or check online at **kabelschlepp.de/support**

Configure your custom cable carrier: **onlineengineer.de**

Accessories

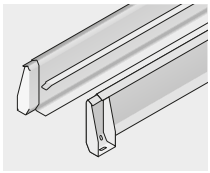
Gliding elements

The use of glide shoes on the side link plates is required for cable carriers in gliding applications.



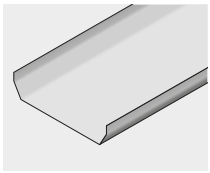
Guide channels

The cable carrier always has to be guided in a channel for gliding applications. This prevents the upper and lower run from slipping.



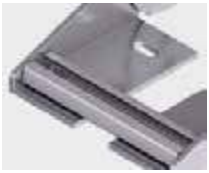
Support trays

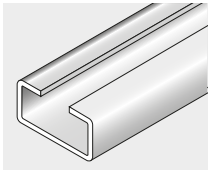
An even surface is required for safe unrolling of the cable carrier. This is ensured by a support tray.



C-rails for strain relief elements

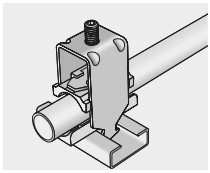
The optional C-rails for mounting strain relief elements are mounted behind the end connectors and have to be bolted separately.





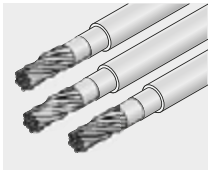
LineFix® clamps

LineFix clamps are fixed to the C-rail. The serve as a separate strain relief or separate attachment of the cables outside the cable carrier.



TRAXLINE® cables in motion

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers.



S/SX2500

Pitch
250 mm

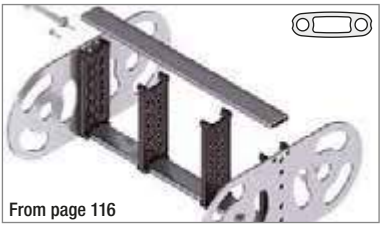
Height
180 – 183 mm

Chain width
250 – 1,200 mm

Bending radius
365 – 1395 mm

Stay variants

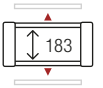
Aluminum stay RM



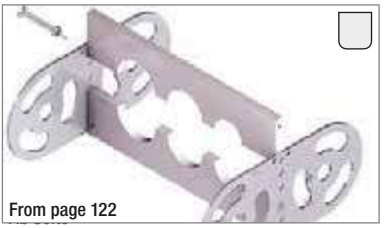
From page 116

Frame stay solid
- Aluminum profile bars for heavy loads and maximum chain widths. Double screw connections on both sides **"Heavy Duty"**.
- Available customized in **1 mm width sections**.

Opening options
inside/outside: Screw connection is easy to release.



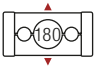
Aluminum stay LG



From page 122

Hole stay, split version
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.

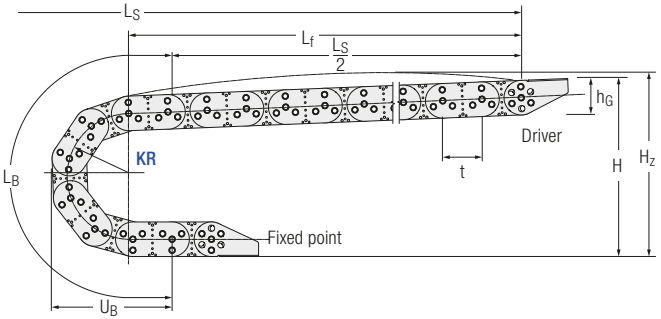
Opening options
inside/outside: Screw connection is easy to release.



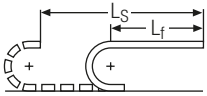
Technical data on page 115

S/SX2500 | Installation Dimensions | Unsupported

Unsupported arrangement



Unsupported length L_f



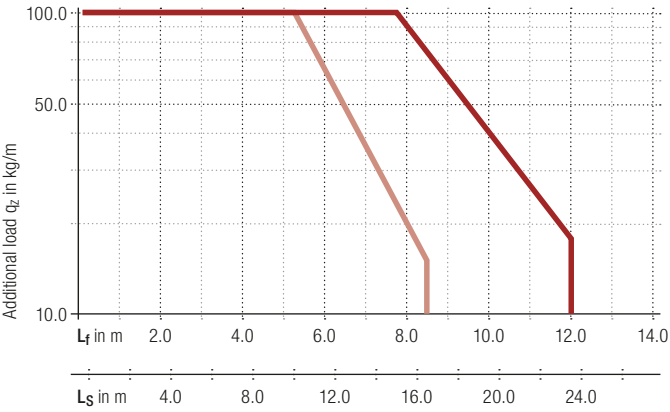
Dynamics of unsupported arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[mm]
1	3	250

Installation dimensions unsupported

KR [mm]	H [mm]	L_B [mm]	U_B [mm]	KR [mm]	H [mm]	L_B [mm]	U_B [mm]
365	1,060	2,147	975	920	2,170	3,890	1,530
445	1,220	2,398	1,055	1075	2,480	4,377	1,685
600	1,530	2,885	1,210	1235	2,800	4,880	1,845
760	1,850	3,388	1,370	1395	3,120	5,383	2,005

Load diagram

for unsupported length depending on additional load



Intrinsic cable carrier weight q_k = 41 kg/m.
The maximum additional load decreases if this value is exceeded.

- S2500 galvanized steel
- SX2500 ER 2
- SX2500 ER 1 / ER 1S

Installation height H_Z

$H_Z = H + 10$ mm/m

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Unsupported length L_f

$$L_f = \frac{L_S}{2} + 2\,t$$

Fixed point offset L_v:
For off-center fixed point connections please contact us.

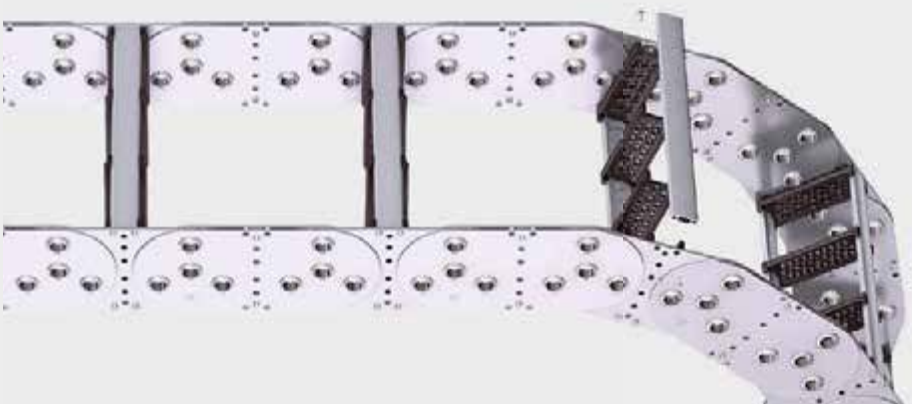
Inner height 180 – 183
Chain widths 250 – 1200
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 126

S/SX2500 RM | Overview

HEAVY DUTY TSUBAKI KABELSCHLEPP

Aluminum stay RM – frame stay solid

- Aluminum profile bars for heavy loads and maximum chain widths. Double screw connections on both sides **"Heavy Duty"**.
- Available customized in **1 mm width sections**.
- **Opening options outside/inside:** Screw connection is easy to release.

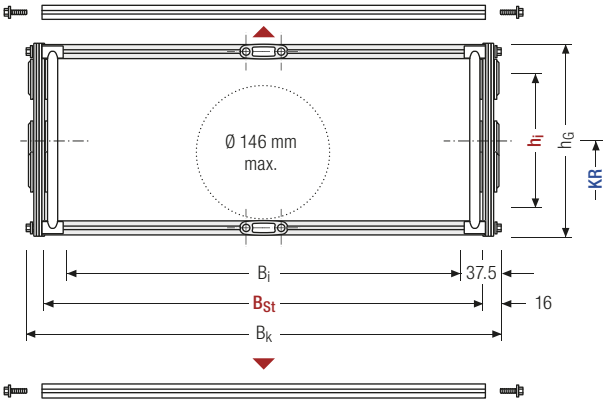


Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 250 – 1,200 mm in **1 mm width sections**



Calculating the cable carrier width

Stay width B_{St}

$B_{St} = B_i + 43$ mm

Outer width B_k

$B_k = B_i + 75$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX2500 RM | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]
250	183	220

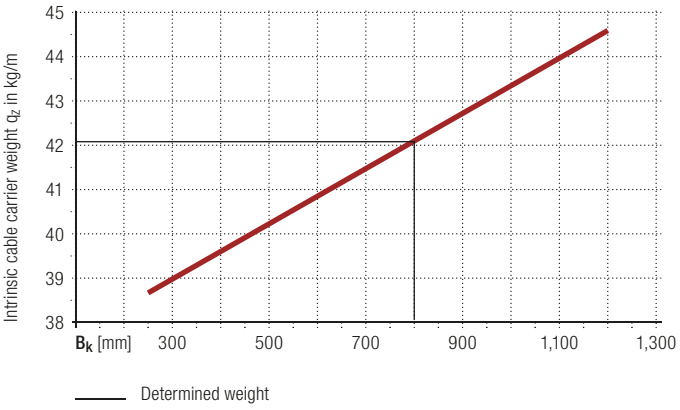
Bend radii

KR [mm]							
365	445	600	760	920	1075	1235	1395

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	q_k [kg/m]
175	218	250	38.68
225	268	300	38.98
325	368	400	39.60
425	468	500	40.22
525	568	600	40.85
625	668	700	41.47
725	768	800	42.09
825	868	900	42.71
925	968	1,000	43.34
1,025	1,068	1,100	43.96
1,125	1,168	1,200	44.58

The stated values for B_k are sample values in 100 mm sections.
Stay variant RM is available in **1 mm width sections**.



Calculation example

B_k = 800 mm

q_k = 42.09 kg/m

Weight of side bands:
36 kg/m (without stays)

Inner height 183
Chain widths 250 – 1200
Increments 1 mm
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 126

S/SX2500 RM | Inner Distribution | TS0

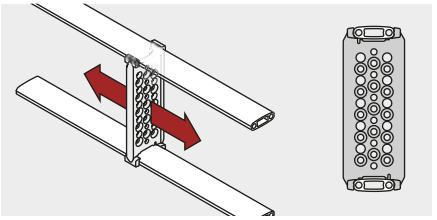
Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

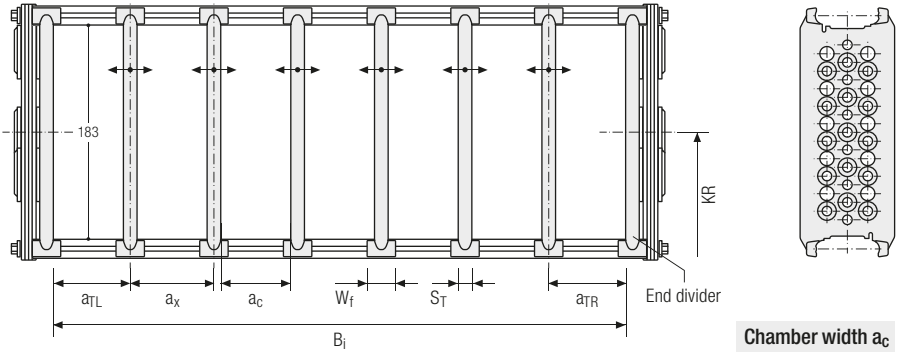
Movable divider

Version A



Divider system TS0 without height separation

Version A				
S_T [mm]	W_f [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]
12	25	19	25	13



Chamber width a_c

$a_c = a_x - S_T$

Order example

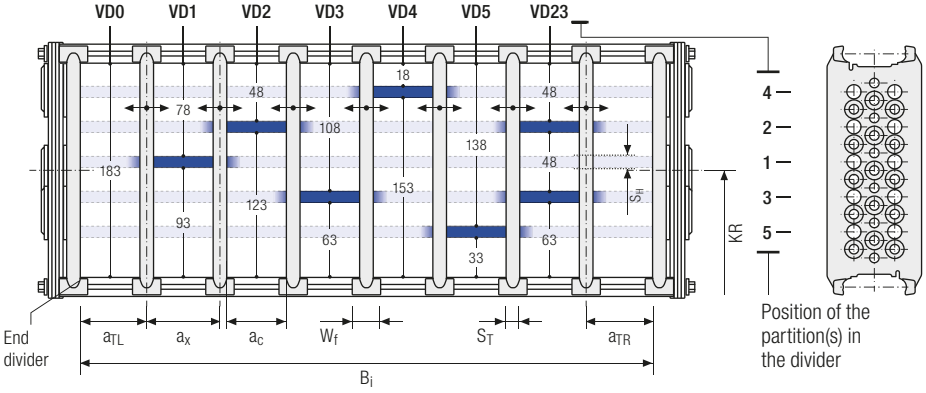
TS0	.	A	.	3
Divider system		Version		n_T

Information on the connection dimensions for the cable carrier can be found on page 124.

S/SX2500 RM | Inner Distribution | TS1

Divider system TS1 with continuous height separation

Version A							
S_T [mm]	W_f [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{TL}/a_{TR\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
12	25	12	19	45	25	13	2



Standard height separation with **tube Ø 12 mm.**
The dividers can be moved in the cross section.

Chamber width a_c

$a_c = a_x - S_T$

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TRAXLINE® cables in motion

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More product information online

Assembly instructions etc.: Receive additional info via your smartphone or check online at **kabelschlepp.de/support**

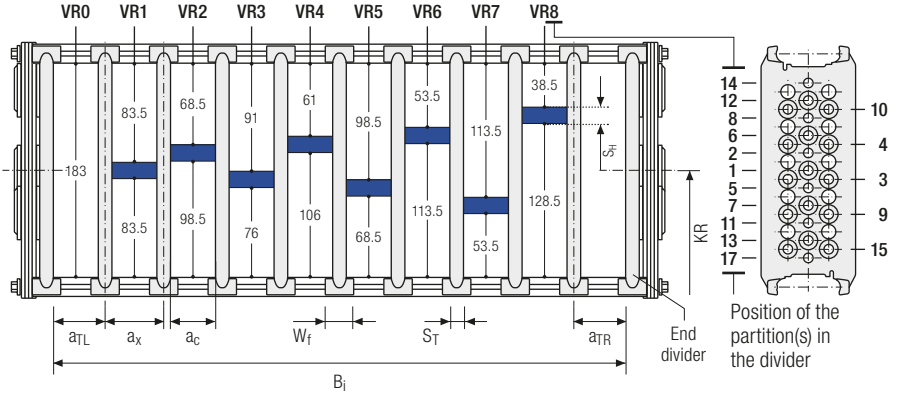
Configure your custom cable carrier: **onlineengineer.de**

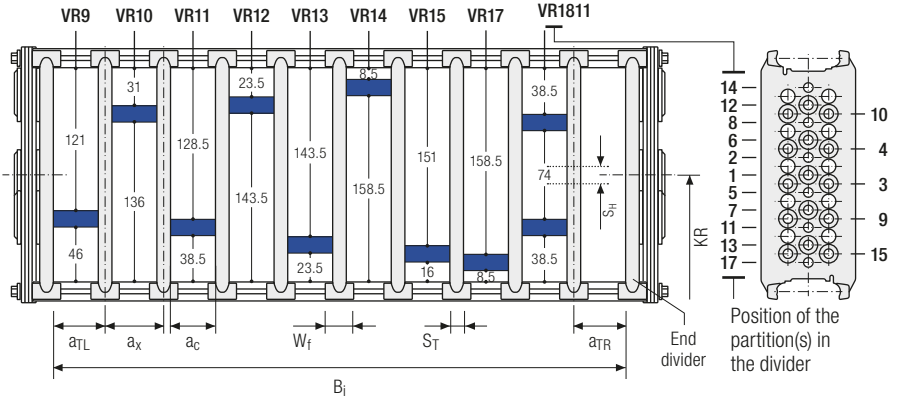
Information on the connection dimensions for the cable carrier can be found on page 124.

S/SX2500 RM | Inner Distribution | TS2

Divider system TS2 with partial height separation

Version A							
S_T [mm]	W_f [mm]	S_H [mm]	$a_{TL}/a_{TR\ min}$ [mm]	$a_{TL}/a_{TR\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$n_{T\ min}$
12	25	16	19	65	25	7	2





With grid distribution **(1 mm grid)**. Standard height separation with **tube Ø 16 mm.** The dividers are attached by the height separation, the grid can be moved in the cross section.

Chamber width a_c

$a_c = a_x - S_T$

Information on the connection dimensions for the cable carrier can be found on page 124.

S/SX2500 LG | Overview

HEAVY DUTY
TSUBAKI KABELSCHLEPP

Aluminum stay LG – hole stay, split version

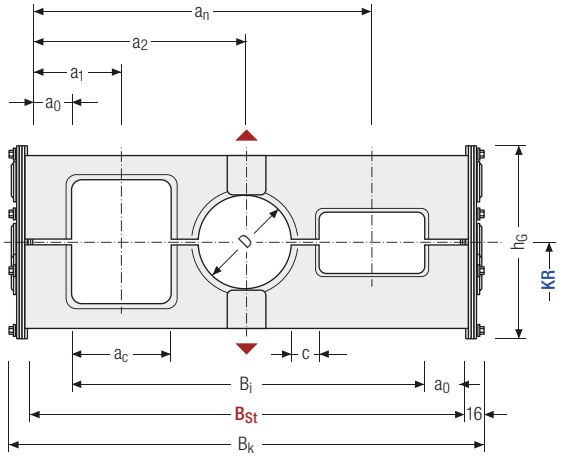
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.
- Order-specific manufacturing of the hole pattern according to your data.
- **Opening options outside/inside**: Screw connection is easy to release.

Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm

B_k from 250 – 1,200 mm in **1 mm width sections**



Calculating the cable carrier width

Inner width B_i

$B_i = B_{St} - 2\ a_0$

Stay width B_{St}

$B_{St} = \sum D + \sum c + \sum a_c + 2\ a_0$

Outer width B_k

$B_k = B_{St} + 32$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

S/SX2500 LG | Dimensions · Technical Data

Pitch, chain link height and hole stay dimensions

t [mm]	h_G [mm]	D_{max} [mm]	c_{min} [mm]	$a_{c\ min}$ [mm]	$a_{0\ min}$ [mm]
250	220	180	4	12	22

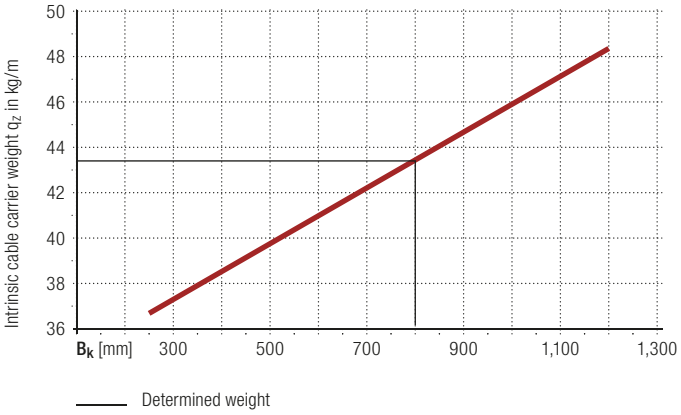
Bend radii

KR [mm]							
365	445	600	760	920	1075	1235	1395

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	q_k 50 % [kg/m]
174	218	250	36.66
224	268	300	37.27
324	368	400	38.50
424	468	500	39.73
524	568	600	40.97
624	668	700	42.20
724	768	800	43.43
824	868	900	44.66
924	968	1,000	45.90
1,024	1,068	1,100	47.13
1,124	1,168	1,200	48.36

The stated values for B_k are sample values in 100 mm sections.
Stay variant LG is available in **1 mm width sections**.



Calculation example

B_k	=	800 mm
q_k	=	43.43 kg/m

Hole ratio of the hole stay approx. 50 %

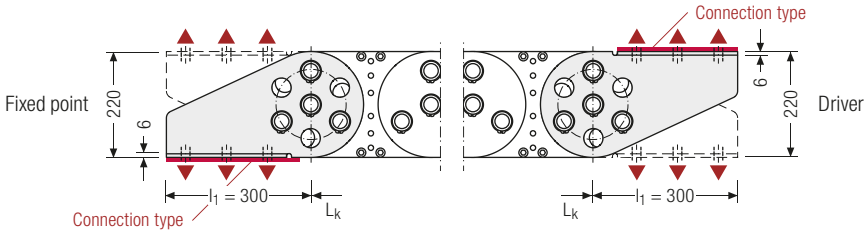
Weight of side bands: 36 kg/m (without stays)

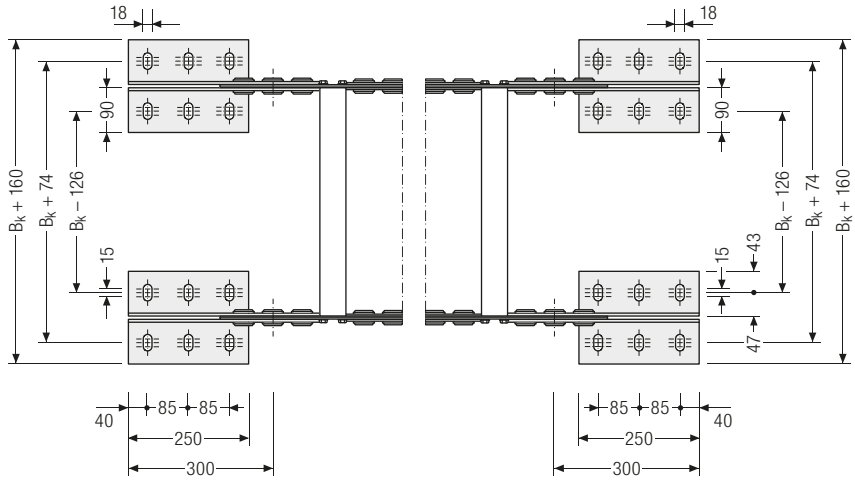
Information on the connection dimensions for the cable carrier can be found on page 124 f.

S/SX2500 | End Connectors | Steel Connectors

End connectors – steel

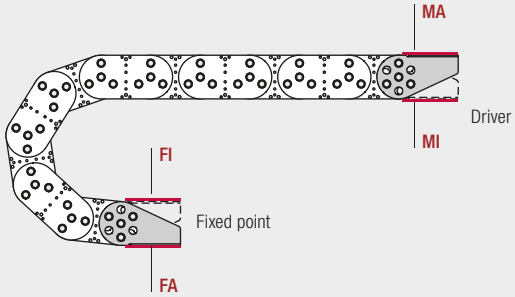
End connectors made from steel. The connection variants on the fixed point and on the driver can be combined and, if required, changed subsequently.





▲ Assembly options

Connection variants



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside

Subject to change.

S/SX2500 | Order Key

Order

Cable carrier

Type	B_{St} [mm]	Stay variant	KR [mm]	Material	L_k [mm]	Stay arrangement
			365			
			445			
			600			
			760			
			920	St		
	218		1075	ER 1		
S2500	…	RM	1235	ER 1S		HS
SX2500	1,168	LG	1395	ER 2		VS

S2500	.	806	.	LG	.	760	.	ER 1	-	9250		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Caution: Not all combinations are possible. Please note the information on the individual stay variants.

The cable carrier can only be ordered with an even quantity of link plates.

International order specification INTOK: Information about the International Order Key can be found in the chapter “International Order Key” from page 1.

Divider system

Divider system	Version	n_T	Chamber	a_x [mm]	Height separation (not for TS0)
TS0			K1		VD0
TS1		min. 2	K2	min. 25	VD1
TS2	A	…	…	…	…

TS2	.	A	.	4	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K5	.	38	-	VD3
Divider system		Version		n_T		Chamber		Assembly distance		Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

If using divider systems with height separation **(TS1 – TS2)** please also state the positions [e.g. VD23] viewed from the left carrier belt.

Connection

End connector	Connection point	Connection type
	F	A
Steel	M	I

Steel	.	F	A
Steel	.	M	A

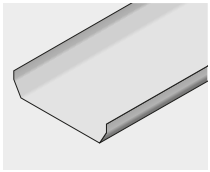
Please state the desired connection variant for the fixed point and for the driver.

S/SX2500 | Optional Accessories

Accessories

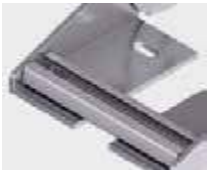
Support trays

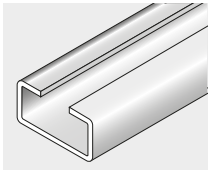
An even surface is required for safe unrolling of the cable carrier. This is ensured by a support tray.



C-rails for strain relief elements

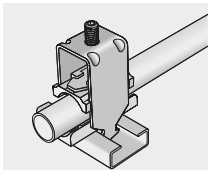
The optional C-rails for mounting strain relief elements are mounted behind the end connectors and have to be bolted separately.





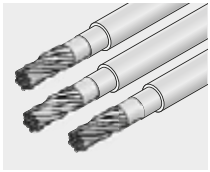
LineFix® clamps

LineFix clamps are fixed to the C-rail. The serve as a separate strain relief or separate attachment of the cables outside the cable carrier.



TRAXLINE® cables in motion

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers.



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More product information online

Assembly instructions etc.: Receive additional info via your smartphone or check online at **kabelschlepp.de/support**

Configure your custom cable carrier: **onlineengineer.de**

Inner height
180 – 183

Chain widths
250 – 1200

Key for abbreviations on page 136

Assembly instructions on kabelschlepp.de/assembly

Order key on page 126

S/SX3200

Pitch
320 mm

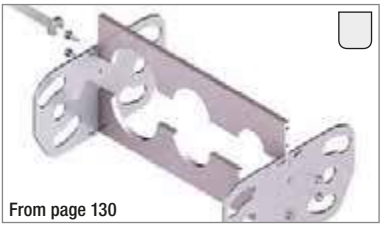
Height
220 mm

Chain width
250 – 1,500 mm

Bending radius
470 – 1785 mm

Stay variants

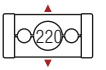
Aluminum stay LG



From page 130

Hole stay, split version
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.

Opening options
inside/outside: Screw connection is easy to release.

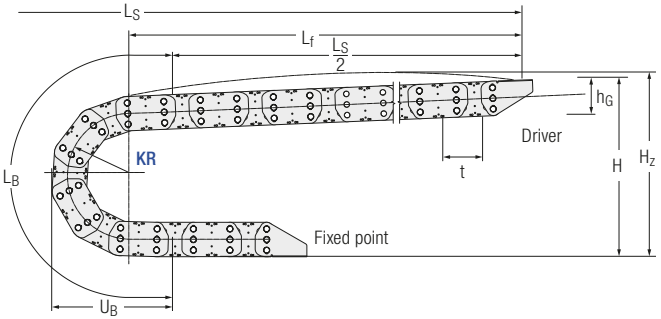


Stay variant RR possible as custom product. Please contact us.

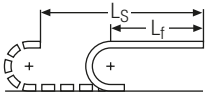
Technical data on page 129

S/SX3200 | Installation Dimensions | Unsupported

Unsupported arrangement



Unsupported length L_f



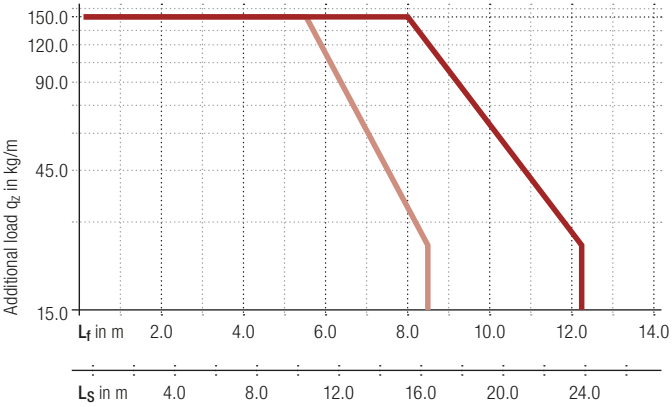
Dynamics of unsupported arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[mm]
1	2.5	320

Installation dimensions unsupported

KR [mm]	H [mm]	L_B [mm]	U_B [mm]
470	1,390	2,757	1,260
670	1,790	3,385	1,460
870	2,190	4,013	1,660
1075	2,600	4,657	1,865
1275	3,000	5,286	2,065
1480	3,410	5,930	2,270
1785	4,020	6,888	2,575

Load diagram

for unsupported length depending on additional load



Intrinsic cable carrier weight q_k = 62 kg/m.
The maximum additional load decreases if this value is exceeded.

S3200 galvanized steel
SX3200 ER 2
SX3200 ER 1 / ER 1S

Installation height H_Z

$H_Z = H + 10$ mm/m

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L_k rounded to pitch t

Unsupported length L_f

$$L_f = \frac{L_S}{2} + 2\,t$$

Fixed point offset L_v:
For off-center fixed point connections please contact us.

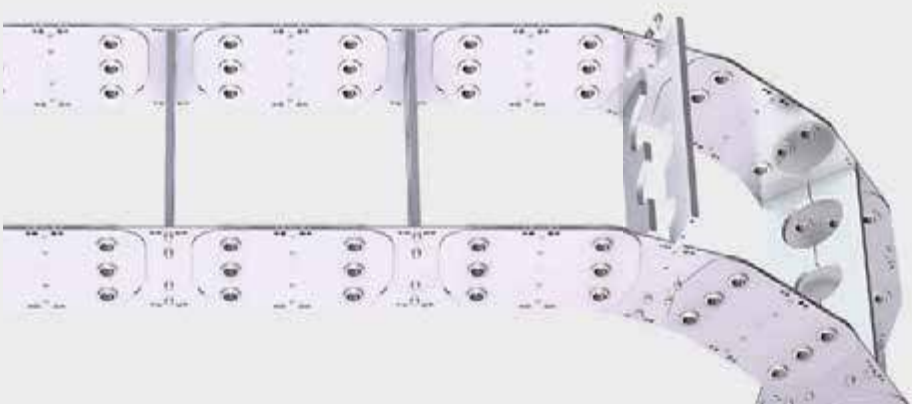
Inner height 220
Chain widths 250 – 1500
Key for abbreviations on page 136
Assembly instructions on kabelschlepp.de/assembly
Order key on page 134

S/SX3200 LG | Overview

HEAVY DUTY TSUBAKI KABELSCHLEPP

Aluminum stay LG – hole stay, split version

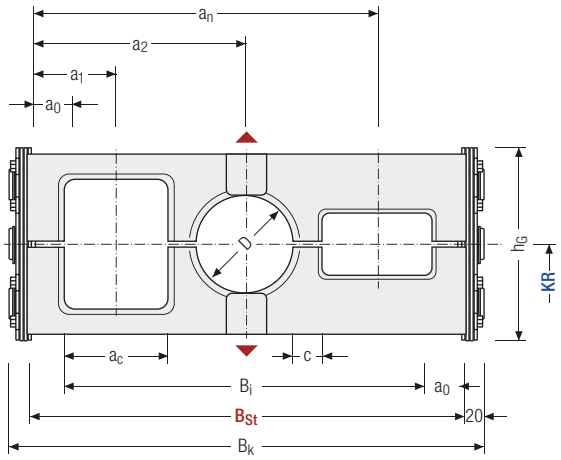
- Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- Available customized in **1 mm width sections**.
- Order-specific manufacturing of the hole pattern according to your data.
- **Opening options outside/inside:** Screw connection is easy to release.



Stay arrangement on every 2nd chain link **(HS)**, standard

Stay arrangement on every chain link **(VS)**

1 mm B_k from 250 – 1,500 mm in **1 mm width sections**



Calculating the cable carrier width

Inner width B_i

$B_i = B_{St} - 2\,a_0$

Stay width B_{St}

$B_{St} = \sum D + \sum c + \sum a_c + 2\,a_0$

Outer width B_k

$B_k = B_{St} + 40$ mm

The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

Information on the connection dimensions for the cable carrier can be found on page 132.

S/SX3200 LG | Dimensions · Technical Data

Pitch, chain link height and hole stay dimensions

t [mm]	h_G [mm]	D_{max} [mm]	c_{min} [mm]	$a_{c\ min}$ [mm]	$a_{0\ min}$ [mm]
320	300	220	4	12	22

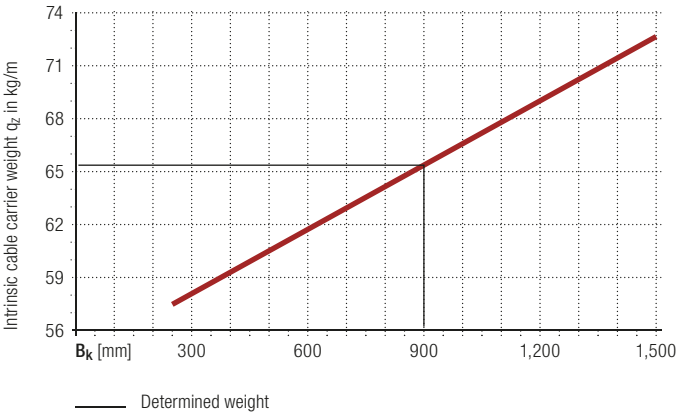
Bend radii

KR [mm]						
470	670	870	1075	1275	1480	1785

Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_{St} [mm]	B_k [mm]	q_k 50 % [kg/m]
166	210	250	57.48
216	260	300	58.08
316	360	400	59.30
416	460	500	60.51
516	560	600	61.73
616	660	700	62.94
716	760	800	64.16
816	860	900	65.37
916	960	1,000	66.59
1,016	1,060	1,100	67.80
1,116	1,160	1,200	69.02
1,216	1,260	1,300	70.23
1,316	1,360	1,400	71.45
1,416	1,460	1,500	72.66

The stated values for B_k are sample values in 100 mm sections.
Stay variant LG is available in **1 mm width sections**.



Calculation example

B_k = 900 mm

q_k = 65.37 kg/m

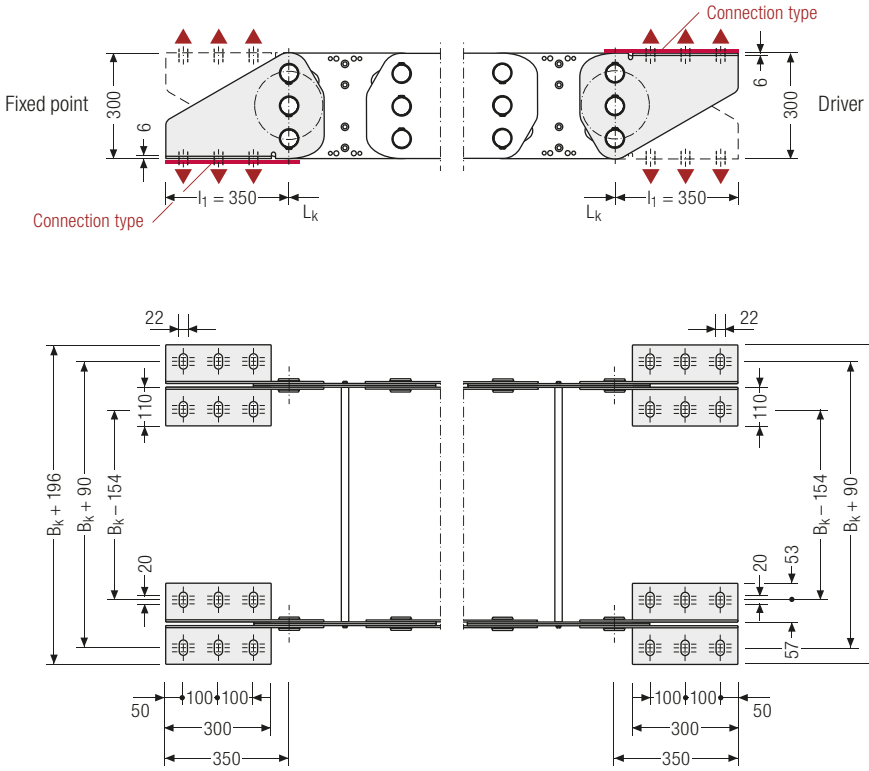
Hole ratio of the hole stay approx. 50 %

Weight of side bands: 55 kg/m (without stays)

S/SX3200 | End Connectors | Steel Connectors

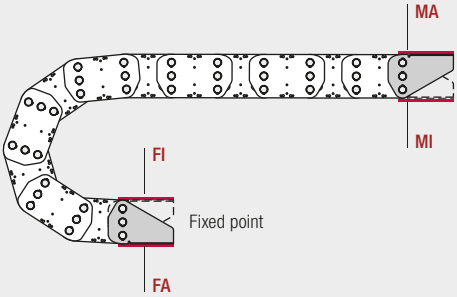
End connectors – steel

End connectors made from steel. The connection variants on the fixed point and on the driver can be combined and, if required, changed subsequently.



▲ Assembly options

Connection variants



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside

Subject to change.

S/SX3200 | Order Key

Order

Cable carrier

Type	B_{St} [mm]	Stay variant	KR [mm]	Material	L_k [mm]	Stay arrangement
			470			
			670			
			870			
	166		1075	St		
S3200	...		1275	ER 1		HS
SX3200	1,460	LG	1480	ER 1S		VS
			1780	ER 2		

S3200	.	776	.	LG	.	1075	.	ER 1	-	9280		HS
Type		B_{St} [mm]		Stay variant		KR [mm]		Material		L_k [mm]		Stay arrangement

Caution: Not all combinations are possible. Please note the information on the individual stay variants.

International order specification INTOK: Information about the International Order Key can be found in the chapter “International Order Key” from page 1.

Connection

End connector	Connection point	Connection type
	F	A
Steel	M	I

Steel	.	F	A
Steel	.	M	A

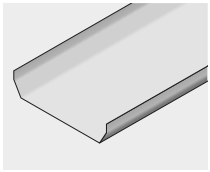
Please state the desired connection variant for the fixed point and for the driver.

S/SX3200 | Optional Accessories

Accessories

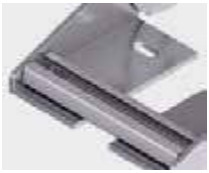
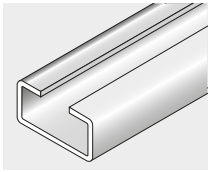
Support trays

An even surface is required for safe unrolling of the cable carrier. This is ensured by a support tray.

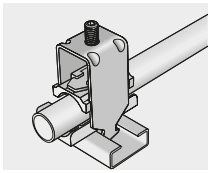
C-rails for strain relief elements

The optional C-rails for mounting strain relief elements are mounted behind the end connectors and have to be bolted separately.

LineFix® clamps

LineFix clamps are fixed to the C-rail. The serve as a separate strain relief or separate attachment of the cables outside the cable carrier.

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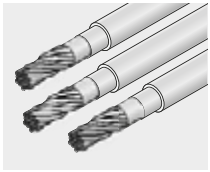
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers.

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More product information online

Assembly instructions etc.: Receive additional info via your smartphone or check online at **kabelschlepp.de/support**

Configure your custom cable carrier: **onlineengineer.de**

Inner height 220

Chain widths 250 – 1500

Key for abbreviations on page 136

Assembly instructions on kabelschlepp.de/assembly

Order key on page 134

S/SX series | General abbreviations

General abbreviations

a_c = nominal width inner chamber
a_{max} = max. travel acceleration
a_{TL} = distance lateral tabs inside to center of first divider
a_{TR} = distance lateral tabs inside to center of last divider
a_x = divider center to center distance
b_1 = inner width of guide channel
b_A = distance between connection boreholes
B_{EF} = overall width of cable carrier incl. attachments
B_i = inner width
B_k = outer width
B_{KA} = outer width of guide channel
B_p = width of hole stay inserts
B_{St} = stay width
c = distance between hole stay bores
d = diameter
D = bore diameter
d_R = pipe diameter
H = connection height
H' = reduced connection height
h_G = chain link height
$h_{G'}$ = chain link height incl. glide shoe
h_i = inner height
H_i = inner height of frame stay assembly
h_{KA} = outer height of guide channel
HS = half-stayed
H_z = installation height
KR = bending radius
l_1 = connection length
l_{2-5} = connection dimensions
l_A = length of end connector
L_B = length of carrier in bend
L_D = length of permitted sag
L_f = unsupported length
L_{ES} = length of energy conduit
L_k = cable carrier length without connection
L_S = travel length
L_V = fixed point offset
n_p = number of hole stay inserts
n_{RKR} = number of RKR links
n_T = number of dividers
n_Z = number of comb teeth for strain relief
q_k = intrinsic cable carrier weight
q_z = additional load
RKR = reverse bending radius
s = sheet metal thickness
S_H = thickness of height separation
S_T = thickness of divider
t = pitch
U_B = loop overhang
VD = position of continuous height separations in divider
VR = position of partial height separations in divider
v_{max} = max. travel speed
VS = fully-stayed
W_f = base width of divider
z = pretension

Definitions

Driver view = view into the driver connection

Pictographs


inner height


inner width

inner width (B_i) in x mm increments


pitch


bending radius


long travel length


travel length unsupported


travel length gliding


high additional load


high travel acceleration


high travel velocity


stay arrangement on every 2nd chain link


stay arrangement on every chain link


cannot be opened


opens outward


opens inward


opens inward/outward


covered cable carrier


sliding dividers


fixable dividers

fixable dividers in x mm grid


height separation possible

height separation in 1 mm increments


guide channel required


strain relief

clean room suitable


quiet running/low noise


sold by the meter


ESD material


suitable for explosive atmospheres


heat-resistant


cold-resistant


resistant to hot chips

flame-resistant V0 (UL94)

flame-resistant V2 (UL94)


order code


important information