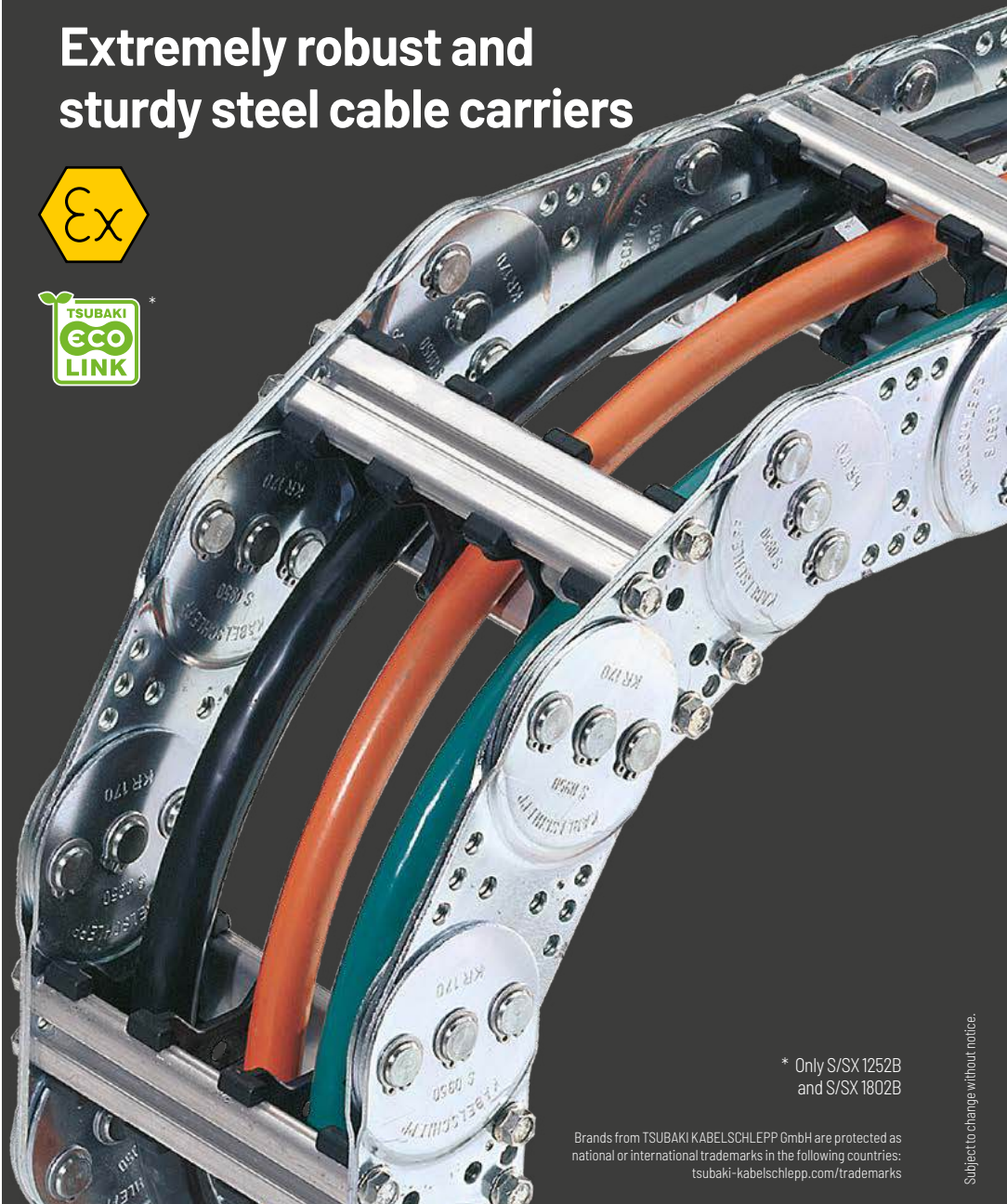


# S/SX series

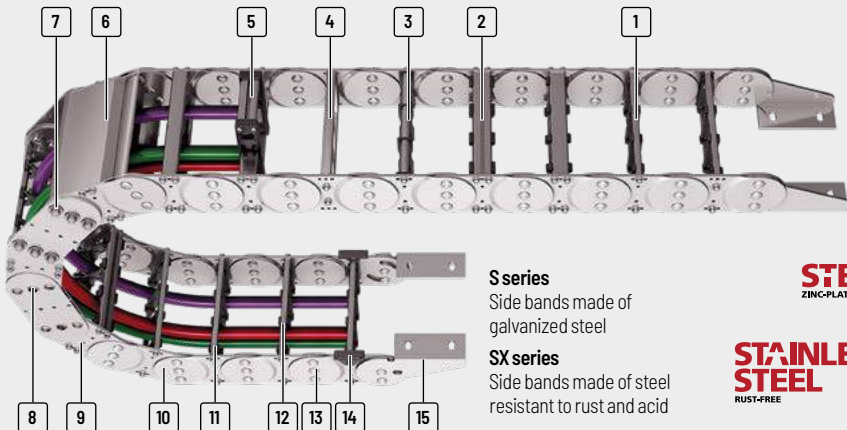
Extremely robust and sturdy steel cable carriers



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

Brands from TSUBAKI KABELSCHLEPP GmbH are protected as national or international trademarks in the following countries: [tsubaki-kabelschlepp.com/trademarks](http://tsubaki-kabelschlepp.com/trademarks)

Subject to change without notice.



- |                                                                                                                                                                                                                                                     |                                                                                                                                                                                                             |                                                                                                                                                                                        |                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>1</b> All stays available in <b>1 mm width sections</b></p> <p><b>2</b> Aluminum stays with 4 screw-fixing points for extreme loads</p> <p><b>3</b> Roller stays</p> <p><b>4</b> Aluminum hole stays</p> <p><b>5</b> Mounting frame stays</p> | <p><b>6</b> Aluminum cover available in <b>1 mm width sections</b></p> <p><b>7</b> Joint design with hardened bolts for long service life</p> <p><b>8</b> Bolted and riveted joint connections possible</p> | <p><b>9</b> Straight link plate design (S/SX1252/1252B and S/SX1802/1802B)</p> <p><b>10</b> Cranked link plate design</p> <p><b>11</b> Different separation options for the cables</p> | <p><b>12</b> Opening inside and outside</p> <p><b>13</b> Extremely robust side bands</p> <p><b>14</b> Replaceable glide shoes</p> <p><b>15</b> End connectors for different connection variants</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**S series**  
Side bands made of galvanized steel

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

**STEEL**  
ZINC-PLATED

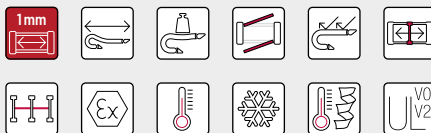
**STAINLESS STEEL**  
RUST-FREE

## Features

- » Extremely robust, sturdy steel cable carriers for heavy mechanical loads and rough environmental conditions
- » Side bands made of galvanized steel (S series) or corrosion-resistant and acid-resistant steel (SX series) in three qualities: ER 1/ ER 1S and ER 2
- » Very sturdy link plates, each consisting of two individual plates
- » Very extensive unsupported lengths even with large additional loads
- » Bolted stay systems, solid end connectors
- » Joint design with multi stroke system and hardened bolt
- » Explosion protection with classification EX II 2 GD as per ATEX RL

### The design

Proven steel cable carriers with extremely sturdy link plates and dedicated joint design with multi stroke system and hardened bolt. The extremely sturdy design allows extensive unsupported lengths and high possible additional loads.



**Sandwich design:**  
Link plates consist of two plates



**Glide shoes available for gliding applications**



**Stroke system with hardened bolt and circlips**



**Also available as covered variants with cover system or steel band cover, p. 802 and p. 916**

Type	Opening variant	Stay variant	$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]	$B_k$ [mm]	$B_i$ - grid [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable- $d_{max}$ [mm]
MT series											
XLT series	<b>S/SX0650</b>										
ROBOTRAX® System		RS1	31	50	65 - 265	100 - 300	1	65	75 - 400	30	24
		RS2	31	50	69 - 369	100 - 400	1	65	75 - 400	30	24
		RR	26	50	69 - 369	100 - 400	1	65	75 - 400	30	20
		LG	34	50	35 - 465	70 - 500	1	65	75 - 400	30	26
		RMA	31 (200)	50 (224)	155 - 355	200 - 400	1	65	75 - 400	30	-
FLATVEYOR®	<b>S/SX0950</b>										
CLEANVEYOR®		RS1	46	68	107 - 257	150 - 300	1	95	125 - 600	45	36
		RS2	46	68	113 - 363	150 - 400	1	95	125 - 600	45	36
		RM	43	68	88 - 563	125 - 600	1	95	125 - 600	45	34
		RR	42	68	115 - 465	150 - 500	1	95	125 - 600	45	33
		LG	50	68	82 - 557	125 - 600	1	95	125 - 600	45	38
		RMR	40	68	108 - 558	150 - 600	1	95	125 - 600	45	32
LS/SX series											
S/SX series	<b>S/SX1250</b>										
S/SX-Tubes series		RS1	72	94	152 - 352	200 - 400	1	125	145 - 1000	50	57
		RS2	72	94	156 - 456	200 - 500	1	125	145 - 1000	50	57
		RV	72	94	154 - 554	200 - 600	1	125	145 - 1000	50	57
		RM	69	94	151 - 751	200 - 800	1	125	145 - 1000	50	55
		RR	66	94	160 - 560	200 - 600	1	125	145 - 1000	50	52
Accessories		LG	76	94	82 - 752	130 - 800	1	125	145 - 1000	50	59
		RMA	72 (200)	94 (226)	154 - 554	200 - 600	1	125	145 - 1000	50	-
		RMR	66	94	153 - 753	200 - 800	1	125	145 - 1000	50	52

\* More information can be found in our technical manual.

\*\* Depending on the specific application, additional gliding elements or rollers are required.

\*\*\* Application-specific, values on request.

# S/SX series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	$v_{max}$ ≤ [m/s]	$a_{max}$ ≤ [m/s <sup>2</sup> ]	Travel length ≤ [m]	$v_{max}$ ≤ [m/s]	$a_{max}$ ≤ [m/s <sup>2</sup> ]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side**	rotating arrangement***	
5,8	2,5	5	***	1	2	•	•	***	-	•	•	•	700
5,8	2,5	5	***	1	2	•	•	***	-	•	•	•	702
5,8	2,5	5	***	1	2	•	•	-	-	•	•	•	704
5,8	2,5	5	***	1	2	-	-	-	-	•	•	•	706
5,8	2,5	5	***	1	2	•	-	-	-	•	•	-	*
8,8	2,5	5	***	1	2	•	•	***	-	•	•	•	710
8,8	2,5	5	***	1	2	•	•	***	-	•	•	•	712
8,8	2,5	5	***	1	2	•	•	-	-	•	•	•	714
8,8	2,5	5	***	1	2	•	•	-	-	•	•	•	716
8,8	2,5	5	***	1	2	-	-	-	-	•	•	•	718
8,8	2,5	5	***	1	2	•	-	-	-	•	•	•	*
13,5	2,5	5	***	1	2	•	•	-	•	•	•	•	724
13,5	2,5	5	***	1	2	•	•	-	•	•	•	•	728
13,5	2,5	5	***	1	2	•	•	•	•	•	•	•	732
13,5	2,5	5	***	1	2	•	•	•	-	•	•	•	736
13,5	2,5	5	***	1	2	•	•	-	-	•	•	•	738
13,5	2,5	5	***	1	2	-	-	-	-	•	•	•	740
13,5	2,5	5	***	1	2	•	-	-	-	•	•	-	*
13,5	2,5	5	***	1	2	•	-	-	-	•	•	•	*

Subject to change without notice.

MT series

XLT series

ROBOTRAX® System

FLATVEVOR®

CLEANVEVOR®

LS/LSX series

S/SX series

S/SX-Tubes series

Accessories

TRAXLINE®

Type	Opening variant	Stay variant	$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]	$B_k$ [mm]	$B_i$ - grid [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable- $d_{max}$ [mm]
<b>S/SX1800</b>											
	RM		108	140	188 - 938	250 - 1000	1	180	265 - 1300	60	86
	RR		104	140	201 - 751	250 - 800	1	180	265 - 1300	60	83
	LG		110	140	121 - 941	180 - 1000	1	180	265 - 1300	60	88
<b>S/SX2500</b>											
	RM		183	220	175 - 1125	250 - 1200	1	250	365 - 1395	100	146
	LG		180	220	174 - 1124	250 - 1200	1	250	365 - 1395	100	144
<b>S/SX3200</b>											
	LG		220	300	181 - 1416	250 - 1500	1	320	470 - 1785	150	176
<b>S/SX5000</b>											
	***		150	200	133 - 1083	250 - 1200	1	200	500 - 1200	100	-
<b>S/SX6000</b>											
	***		240	300	177 - 1377	300 - 1500	1	320	700 - 1500	150	-

\* More information can be found in our technical manual.

\*\* Depending on the specific application, additional gliding elements or rollers are required.

\*\*\* Application-specific.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	$v_{max} \leq [m/s]$	$a_{max} \leq [m/s^2]$	Travel length ≤ [m]	$v_{max} \leq [m/s]$	$a_{max} \leq [m/s^2]$	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side**	rotating arrangement***	
										•	•	•	746
17,8	2	3	***	0,8	2	•	•	-	•	•	•	•	746
17,8	2	3	***	0,8	2	•	•	-	-	•	•	•	748
17,8	2	3	***	0,8	2	-	-	-	-	•	•	•	750
23,7	1	3	-	-	-	•	•	•	-	•	•	•	754
23,7	1	3	-	-	-	-	-	-	-	•	•	•	758
24	1	2,5	-	-	-	-	-	-	-	•	•	•	762
12	2	3	-	-	-	-	•	-	-	•	•	•	766
16,7	1,5	2	-	-	-	-	•	-	-	•	•	•	767

Subject to change without notice.

MT series

XLT series

ROBOTRAX® System

FLATVEYOR®

CLEANVEYOR®

LS/LSX series

S/SX series

S/SX-Tubes series

Accessories

TRAXLINE®

Type	Opening variant	Stay variant	$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]	$B_k$ [mm]	$B_i$ - grid [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable- $d_{max}$ [mm]

## S/SX7000



\*\*\*

370

450

200 - 1650

350 - 1800

1

450

900 - 2400

600

-

XLT  
seriesROBOTRAX®  
System

## S/SX8000



\*\*\*

578

600

200 - 1650

350 - 1800

1

550

900 - 2400

800

-

FLATVEYOR®

CLEANVEYOR®

## S/SX9000



\*\*\*

Custom sizes from a cable carrier width of 350 mm

LS/LSX  
seriesS/SX  
seriesS/SX-Tubes  
series

Accessories

TRAXLINE®



## S/SX tubes

Also available as covered variants with cover system or steel band cover.  
More information can be found in chapter "S/SX tubes" from p. 802.

# S/SX series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	$v_{max} \leq [m/s]$	$a_{max} \leq [m/s^2]$	Travel length ≤ [m]	$v_{max} \leq [m/s]$	$a_{max} \leq [m/s^2]$	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side**	rotating arrangement***	

24,9	0,5	0,3	-	-	-	-	•	-	-	•	•	•	768
------	-----	-----	---	---	---	---	---	---	---	---	---	---	-----

24,9	0,5	0,3	-	-	-	-	•	-	-	•	•	•	769
------	-----	-----	---	---	---	---	---	---	---	---	---	---	-----

772

MT series

XLT series

ROBOTRAX® System

FLATVEVOR®

CLEANVEVOR®

LS/LSX series

S/SX series

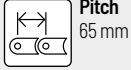
S/SX-Tubes series

Accessories

TRAXLINE®



# S/SX0650



**Pitch**  
65 mm



**Inner height**  
26 - 34 mm



**Chain widths**  
70 - 500 mm



**Bending radii**  
75 - 400 mm

## Stay variants



**Aluminum stay RS 1** ..... page **700**

### Frame stay narrow "The standard"

- » Aluminum profile bars for light to medium loads.
- » **Outside:** release by turning by 90°.
- » **Inside:** Threaded joints easy to release.



**Aluminum stay RS 2** ..... page **702**

### Frame stay narrow, bolted

- » Aluminum profile bars for light to medium loads. Simple threaded joint.
- » **Outside/inside:** Threaded joints easy to release.



**Aluminum stay RR** ..... page **704**

### Frame stay, tube version

- » Steel rolling stays with gentle cable support and steel dividers. Ideal for using media hoses with soft sheathing.
- » **Inside/outside:** Screw connection detachable.



**Aluminum stay LG** ..... page **706**

### Frame stay, split

- » Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- » **Inside/outside:** Threaded joint easy to release.

## Additional stay variants on request



### Aluminum stay RMA

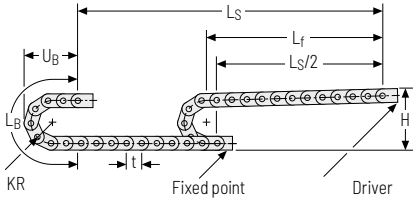
For guiding very large cable diameters



### S/SX tubes

Also available as covered variants with cover system or steel band cover. More information can be found in chapter "S/SX tubes" from p. 802.

### Unsupported arrangement



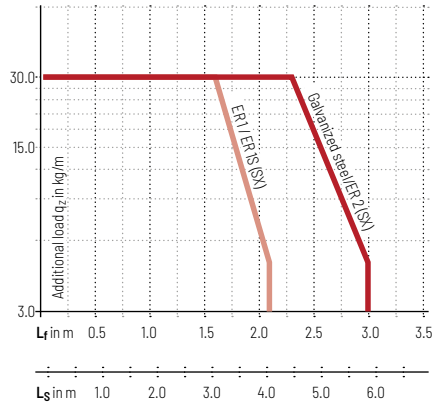
KR [mm]	H [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [mm]
75	225	496	230
95	265	558	250
115	305	621	270
125	325	653	280
135	345	684	290
145	365	716	300
155	385	747	310
175	425	810	330
200	475	888	355
250	575	1045	405
300	675	1202	455
400	875	1516	555





#### Installation height H<sub>z</sub>

$H_z = H + 10 \text{ mm/m}$

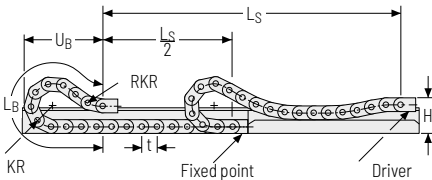
**Load diagram for unsupported length** depending on the additional load.


Intrinsic cable carrier weight  $q_k = 4.5 \text{ kg/m}$ . For other inner widths, the maximum additional load changes.



-  **Speed**  
up to 2.5 m/s
-  **Acceleration**  
up to 5 m/s<sup>2</sup>
-  **Travel length**  
up to 5.8 m
-  **Additional load**  
up to 30 kg/m

### Gliding arrangement



 The gliding cable carrier must be guided in a channel. See p. 844.

Glide shoes have to be used for gliding applications.

-  **Speed**  
up to 1 m/s
-  **Acceleration**  
up to 2 m/s<sup>2</sup>
-  **Travel length**  
on request
-  **Additional load**  
up to 30 kg/m

MT series
XLT series
ROBOTRAX® System
FLATVEYOR®
CLEANVEYOR®
LS/LSX series
S/SX series
S/SX-Tubes series
Accessories
TRAXLINE®

## Aluminum stay RS1 - frame stay narrow

- » Extremely quick to open and close
- » Aluminum profile bars for light to medium loads.
- » Available customized in **1 mm width sections**.
- » **Outside:** release by rotating 90°.
- » **Inside:** Threaded joint easy to release.



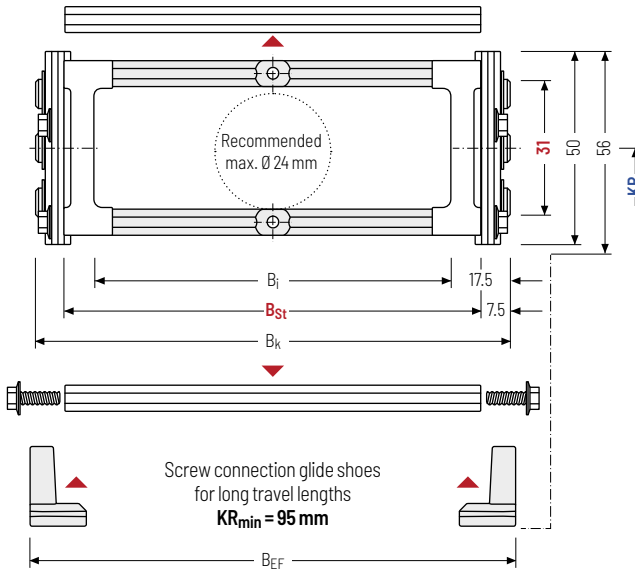
Stay arrangement on every  
2nd chain link standard  
**(HS: half-stayed)**



Stay arrangement on each  
chain link **(VS: fully-stayed)**



**1mm** B<sub>k</sub> from 100 - 300 mm  
in **1 mm width sections**



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

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

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

Cable carrier length L<sub>k</sub>  
rounded to pitch t

h <sub>i</sub> [mm]	h <sub>G</sub> [mm]	h <sub>G'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	KR [mm]				q <sub>k</sub> [kg/m]		
31	50	56	65 265	85 285	B <sub>St</sub> + 15	B <sub>St</sub> + 20	75 155	95 175	115 200	125 250	135 300	145 400	3.95 4.82

\* in 1 mm width sections

### Order example



**SX0650** · **180** · **RS1** · **135** · **St** · **1430** · **HS**

Type

B<sub>St</sub> [mm]

Stay variant

KR [mm]

Material

L<sub>k</sub> [mm]

Stay arrangement

**Divider systems**

The divider system is mounted on each crossbar as a standard – on every 2<sup>nd</sup> chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section (**version A**).

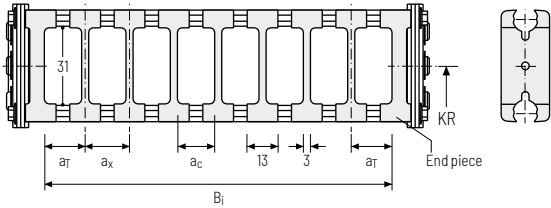
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

The socket additionally acts as a spacer between the dividers and is available in 1 mm increments between 3 – 50 mm (**version B**).

**Divider system TSO without height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	11.5	13	10	-

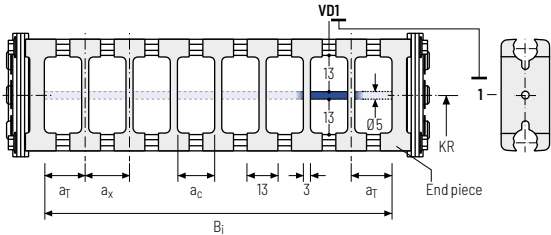
The dividers can be moved in the cross section.



**Divider system TS1 with continuous height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	11.5	13	10	2

The dividers can be moved in the cross section.



**Order example**

TS1 · 
 A · 
 3 - 
 VD0  
 :  
 - VD1

Divider system
Version
n<sub>T</sub>
Height separation

Please state the designation of the divider system (**TS0, TS1...**), version and number of dividers per cross section [n<sub>T</sub>].

If using divider systems with height separation (**TS1**) please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

The end pieces are part of the divider system and don't have to be ordered separately.

- MT series
- XLT series
- ROBOTRAX® System
- FLATVEVOR®
- CLEANVEVOR®
- LS/LSX series
- S/SX series
- S/SX-Tubes series
- Accessories
- TRAXLINE®

## Aluminum stay RS 2 – frame stay narrow, threaded joint

- » Quick to open and close
- » Aluminum profile bars for light to medium loads. Simple threaded joint
- » Available customized in **1 mm width sections**.
- » **Outside/inside:** Threaded joint easy to release.



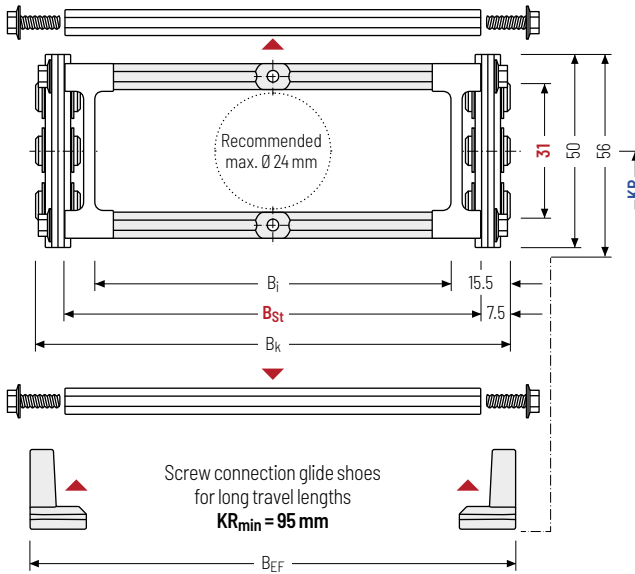
Stay arrangement on every  
2nd chain link standard  
**(HS: half-stayed)**



Stay arrangement on each  
chain link **(VS: fully-stayed)**



**1 mm** B<sub>k</sub> from 100 – 400 mm  
in **1 mm width sections**



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

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

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

Cable carrier length L<sub>k</sub>  
rounded to pitch t

h <sub>i</sub> [mm]	h <sub>G</sub> [mm]	h <sub>G'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	KR [mm]						q <sub>k</sub> [kg/m]
31	50	56	69 369	85 385	B <sub>St</sub> + 15	B <sub>St</sub> + 20	75	95	115	125	135	145	3.95
							155	175	200	250	300	400	

\* in 1 mm width sections

### Order example



S0650

Type

180

B<sub>St</sub>[mm]

RS 2

Stay variant

135

KR [mm]

St

Material

1430

L<sub>k</sub>[mm]

HS

Stay arrangement

### Divider systems

The divider system is mounted on each crossbar as a standard – on every 2<sup>nd</sup> chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section (**version A**).

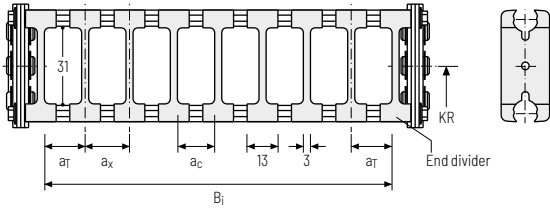
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

The socket additionally acts as a spacer between the dividers and is available in 1 mm increments between 3 – 50 mm (**version B**).

### Divider system TSO without height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	11.5	13	10	-

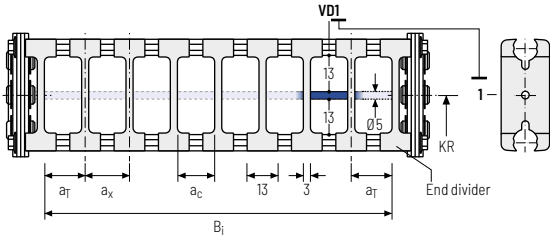
The dividers can be moved in the cross section.



### Divider system TS1 with continuous height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	11.5	13	10	2

The dividers can be moved in the cross section.



### Order example

TS1

A

3

VD0

⋮

VD1

Divider system
Version
n<sub>T</sub>
Height separation

Please state the designation of the divider system (**TS0, TS1...**), version and number of dividers per cross section [n<sub>T</sub>].

If using divider systems with height separation (**TS1**) please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

The end dividers are part of the divider system and don't have to be ordered separately.

	MT series
	XLT series
	ROBOTRAX® System
	FLATVEVOR®
	CLEANVEVOR®
	LS/LSX series
	S/SX series
	S/SX-Tubes series
	Accessories
	TRAXLINE®

## 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**.
- » **Inside/outside:** Screw connection detachable
- » **Option:** Divider systems made from steel and stainless steel ER 1, ER 1S.



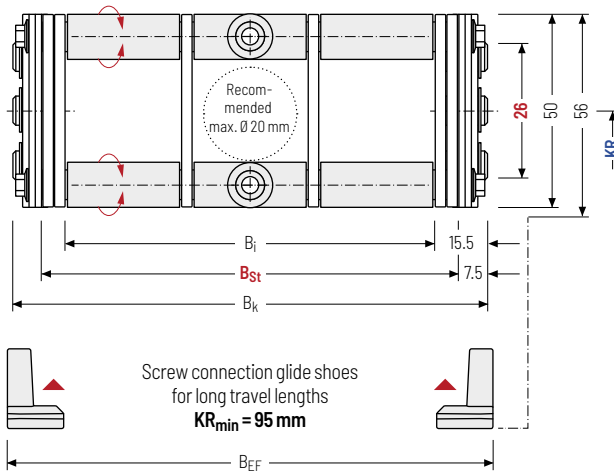
Stay arrangement on every 2nd chain link standard  
**(HS: half-stayed)**



Stay arrangement on each chain link **(VS: fully-stayed)**



**1 mm** B<sub>k</sub> from 100 – 400 mm  
in **1 mm width sections**



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

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

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

Cable carrier length L<sub>k</sub>  
rounded to pitch t

h <sub>i</sub> [mm]	h <sub>G</sub> [mm]	h <sub>G'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	KR [mm]						q <sub>k</sub> [kg/m]
26	50	56	69	85	B <sub>St</sub> + 15	B <sub>St</sub> + 20	75	95	115	125	135	145	4.77
			369	385			155	175	200	250	300	400	8.67

\* in 1 mm width sections

### Order example



S0650

Type

180

B<sub>St</sub>[mm]

RR

Stay variant

135

KR [mm]

St

Material

1430

L<sub>k</sub>[mm]

HS

Stay arrangement

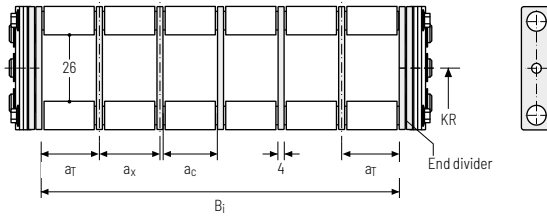
### Divider systems

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

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

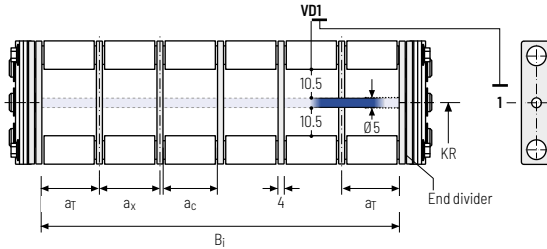
### Divider system TSO without height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	20	25	21	-



### Divider system TS1 with continuous height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	20	25	21	2



### Order example

TS1	·	B	·	3	·	K1	·	34	-	V00	
				⋮			⋮			⋮	
				·	K4		·		38	-	V00
Divider system		Version		n <sub>T</sub>		Chamber		a <sub>x</sub>		Height separation	

Please state the designation of the divider system (**TS0, TS1...**), version and number of dividers per cross section [n<sub>T</sub>]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a<sub>T</sub>/a<sub>x</sub>] (as seen from the driver).

Subject to change without notice.

**TRAXLINE® cables for cable carriers**  
 Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at [tsubaki-kabelschlepp.com/traxline](http://tsubaki-kabelschlepp.com/traxline)

MT series
XLT series
ROBOTRAX® System
FLATVEVOR®
CLEANVEVOR®
LS/LSX series
S/SX series
S/SX-Tubes series
Accessories
TRAXLINE®



## 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 grid**.
- » **Inside/outside:** Threaded joint easy to release.

**HEAVY DUTY**  
TSUBAKI KABELSCHLEPP



Stay arrangement on every  
2nd chain link standard  
**(HS: half-stayed)**

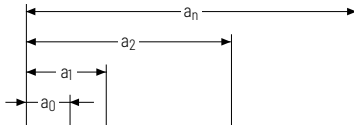


Stay arrangement on each  
chain link **(VS: fully-stayed)**

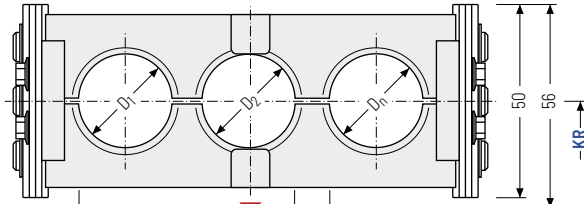


**1mm**  $B_i$  70 - 500 mm  
in **1 mm width sections**

FLATVEYOR®

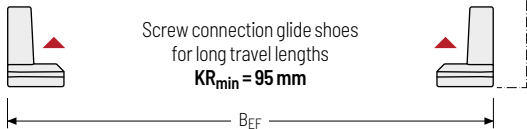


CLEANVEYOR®



LS/LSX series

S/SX series



The maximum cable diameter strongly depends on the bending radius and the desired cable type. 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  $t$

### Calculating the stay width

#### Stay width $B_{St}$

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

D <sub>max</sub> [mm]	D <sub>min</sub> [mm]	h <sub>G</sub> [mm]	h <sub>G'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	c <sub>min</sub> [mm]	a <sub>0 min</sub> [mm]	KR [mm]				q <sub>k</sub> 50%** [kg/m]
34	10	50	56	35	53	B <sub>St</sub>	B <sub>St</sub>	4	9	75	95	115	125	3.96
				-	-	+	+			135	145	155	175	-
				465	483	17	22			200	250	300	400	6.46

\* in 1 mm width sections \*\* Hole ratio of the hole stay approx. 50 %

### Order example



S0650

Type

180

 $B_{St}$  [mm]

LG

Stay variant

135

KR [mm]

St

Material

1430

 $L_k$  [mm]

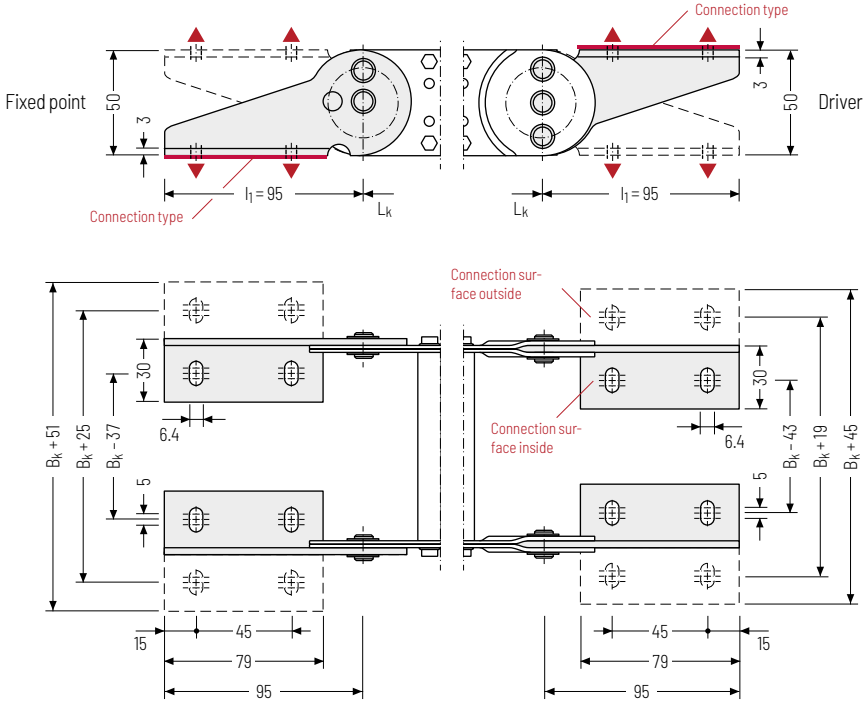
HS

Stay arrangement

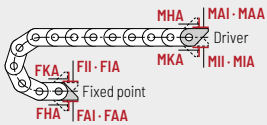
TRAXLINE®

**End connectors - steel**

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



▲ Assembly options



**Connection point**

- F - fixed point
- M - driver

**Connection type**

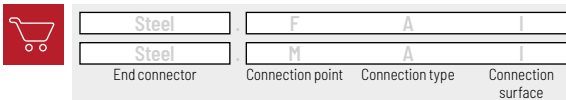
- A - threaded joint to outside (standard)
- I - threaded joint to inside
- H - threaded joint, rotated 90° to the outside
- K - threaded joint, rotated 90° to the inside

**Connection surface**

- I - connection surface inside (standard)
- A - connection surface outside

**Caution:** The standard connection variant FAI/MAI is only possible from B<sub>k</sub> of 70 mm.

**Order example**



**Caution:** We recommend the use of strain reliefs at the driver and fixed point. See from p. 904.

MT series
XLT series
ROBOTRAX® System
FLATVEYOR®
CLEANVEYOR®
LS/LSX series
<b>S/SX series</b>
S/SX-Tubes series
Accessories
TRAXLINE®

# S/SX0950



**Pitch**  
95 mm



**Inner heights**  
42 – 50 mm



**Chain widths**  
125 – 600 mm



**Bending radii**  
125 – 600 mm

## Stay variants



**Aluminum stay RS 1** ..... page 710

### Frame stay narrow "The standard"

- » Aluminum profile bars for light to medium loads.
- » **Outside:** release by turning by 90°.
- » **Inside:** Threaded joints easy to release.



**Aluminum stay RS 2** ..... page 712

### Frame stay narrow, bolted

- » Aluminum profile bars for light to medium loads. Simple threaded joint.
- » **Outside/inside:** Threaded joints easy to release.



**Aluminum stay RM** ..... page 714

### Frame stay, solid

- » Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides "Heavy Duty".
- » **Inside/outside:** Threaded joints easy to release.



**Tube stay RR** ..... page 716

### Frame stay, tube version

- » Steel rolling stays with gentle cable support and steel dividers. Ideal for using media hoses with soft sheathing.
- » **Inside/outside:** Screw connection detachable.



**Aluminum stay LG** ..... page 718

### Frame stay, split

- » Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- » **Inside/outside:** Threaded joint easy to release.

## Additional stay variants on request

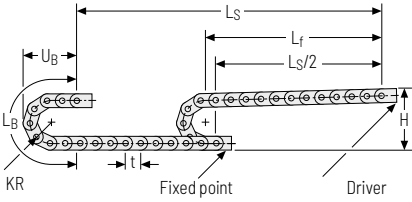
### Aluminum stay RMR

Gentle cable guiding with rollers.

### S/SX tubes

Also available as covered variants with cover system or steel band cover. More information can be found in chapter "S/SX tubes" from p. 802.

Unsupported arrangement



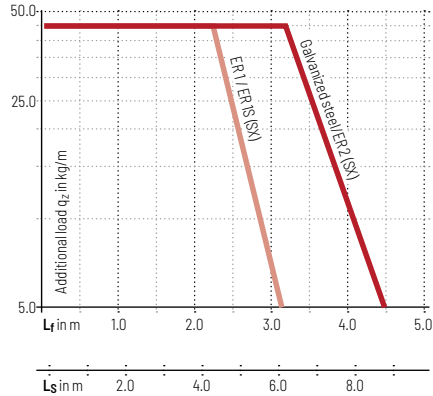
KR [mm]	H [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [mm]
125	352	773	350
140	382	820	365
170	442	914	395
200	502	1008	425
260	622	1197	485
290	682	1291	515
320	742	1385	545
350	802	1480	575
410	922	1668	635
600	1302	2264	825





Installation height H<sub>z</sub>

$H_z = H + 10 \text{ mm/m}$

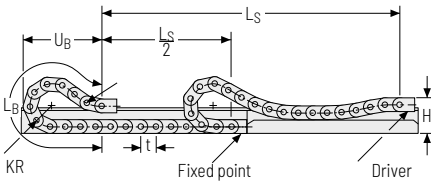
Load diagram for unsupported length depending on the additional load.


Intrinsic cable carrier weight  $q_k = 7.6 \text{ kg/m}$ . For other inner widths, the maximum additional load changes.



-  **Speed**  
up to 2.5 m/s
-  **Acceleration**  
up to 5 m/s<sup>2</sup>
-  **Travel length**  
up to 8.8 m
-  **Additional load**  
up to 45 kg/m

Gliding arrangement



 The gliding cable carrier must be guided in a channel. See p. 844.

Glide shoes have to be used for gliding applications.

-  **Speed**  
up to 1 m/s
-  **Acceleration**  
up to 2 m/s<sup>2</sup>
-  **Travel length**  
on request
-  **Additional load**  
up to 45 kg/m

MT series
XLT series
ROBOTRAX® System
FLATVEYOR®
CLEANVEYOR®
LS/LSX series
S/SX series
S/SX-Tubes series
Accessories
TRAXLINE®

## Aluminum stay RS1 - frame stay narrow

- » Extremely quick to open and close
- » Aluminum profile bars for light to medium loads.
- » Available customized in **1 mm width sections**.
- » **Outside:** release by rotating 90°.
- » **Inside:** Threaded joint easy to release



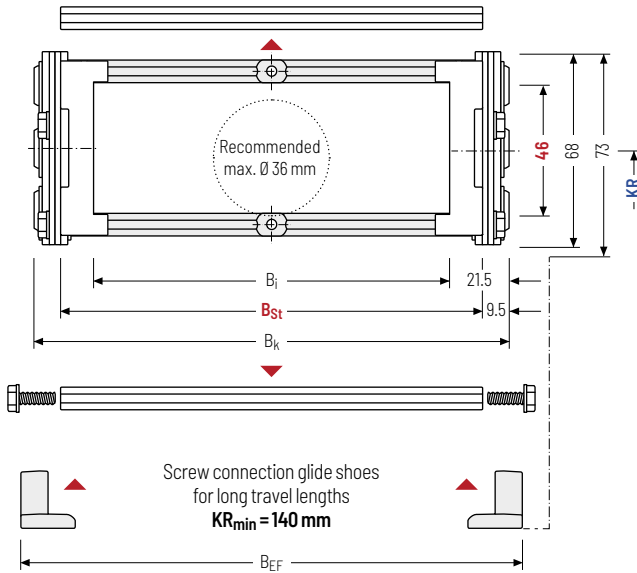
Stay arrangement on every  
2nd chain link, standard  
**(HS: half-stayed)**



Stay arrangement on each  
chain link **(VS: fully-stayed)**



**1 mm** B<sub>k</sub> from 150 - 300 mm  
in **1 mm width sections**



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

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

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

Cable carrier length L<sub>k</sub>  
rounded to pitch t

h <sub>i</sub> [mm]	h <sub>G</sub> [mm]	h <sub>G'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	KR [mm]				q <sub>k</sub> [kg/m]	
46	68	73	107 257	131 281	B <sub>St</sub> + 19	B <sub>St</sub> + 28	125	140	170	200	260	7.55
							290	320	350	400	600	7.95

\* in 1 mm width sections

### Order example



S0950

Type

150

B<sub>St</sub>[mm]

RS1

Stay variant

200

KR[mm]

St

Material

2375

L<sub>k</sub>[mm]

HS

Stay arrangement

### Divider systems

The divider system is mounted on each crossbar as a standard – on every 2<sup>nd</sup> chain link for stay mounting (HS). As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section (**version A**).

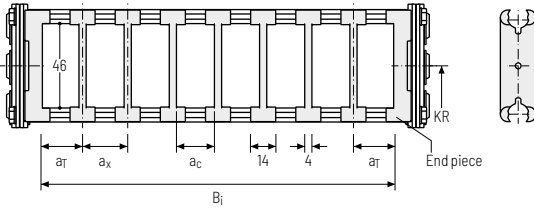
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

This socket additionally acts as a spacer between the dividers and is available in a 1 mm grid between 3 – 50 mm, as well as 16.5 and 21.5 mm (**version B**).

### Divider system TSO without height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	12	14	10	-

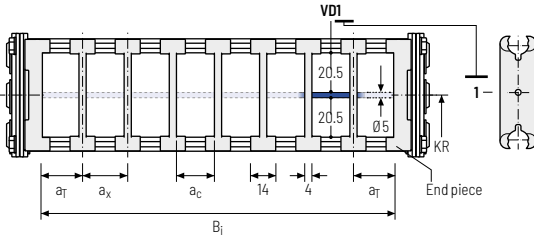
The dividers can be moved in the cross section.




### Divider system TS1 with continuous height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	12	14	10	2

The dividers can be moved in the cross section.



### Order example


TS1 · A · 3 - VD0  
VD1  
 Divider system      Version      n<sub>T</sub>      Height separation

Please state the designation of the divider system (**TS0, TS1...**), version and number of dividers per cross section [n<sub>T</sub>].

If using divider systems with height separation (**TS1**) please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

The end pieces are part of the divider system and don't have to be ordered separately.

MT series
XLT series
ROBOTRAX® System
FLATVEVOR®
CLEANVEVOR®
LS/LSX series
S/SX series
S/SX-Tubes series
Accessories
TRAXLINE®

## Aluminum stay RS 2 – frame stay narrow, threaded joint

- » Quick to open and close
- » Aluminum profile bars for light to medium loads.  
Simple threaded joint
- » Available customized in **1 mm width sections**.
- » **Outside/inside:** Threaded joint easy to release.



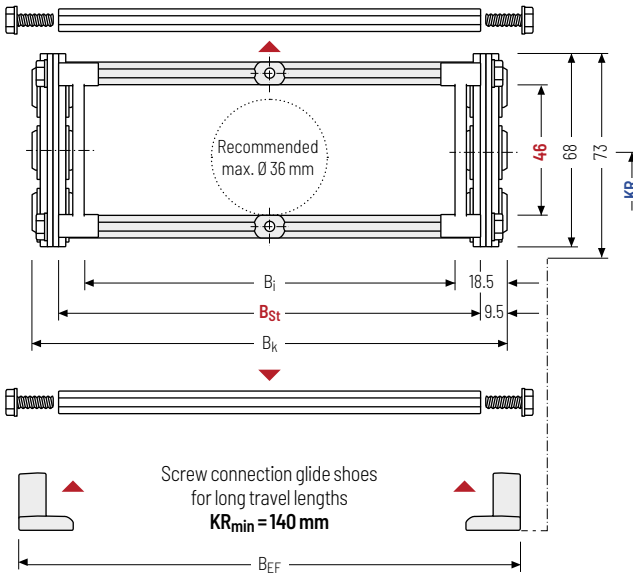
Stay arrangement on every  
2nd chain link, standard  
**(HS: half-stayed)**



Stay arrangement on each  
chain link **(VS: fully-stayed)**



**1 mm** B<sub>k</sub> from 150 – 400 mm  
in **1 mm width sections**



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

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

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

Cable carrier length L<sub>k</sub>  
rounded to pitch t

h <sub>i</sub> [mm]	h <sub>G</sub> [mm]	h <sub>G'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	KR [mm]					q <sub>k</sub> [kg/m]
46	68	73	113 363	131 381	B <sub>St</sub> + 19	B <sub>St</sub> + 28	125	140	170	200	260	7.55
							290	320	350	400	600	8.21

\* in 1 mm width sections

### Order example



S0950

Type

150

B<sub>St</sub> [mm]

RS 2

Stay variant

200

KR [mm]

St

Material

2375

L<sub>k</sub> [mm]

HS

Stay arrangement

**Divider systems**

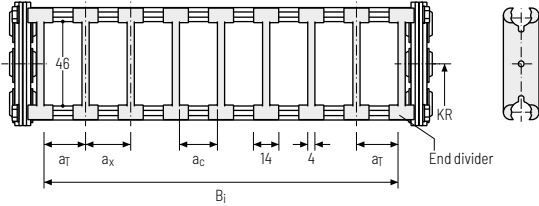
The divider system is mounted on each crossbar as a standard – on every 2<sup>nd</sup> chain link for stay mounting (HS). As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section (**version A**).

For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory). This socket additionally acts as a spacer between the dividers and is available in a 1 mm grid between 3 – 50 mm, as well as 16.5 and 21.5 mm (**version B**).

**Divider system TSO without height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	12	14	10	-

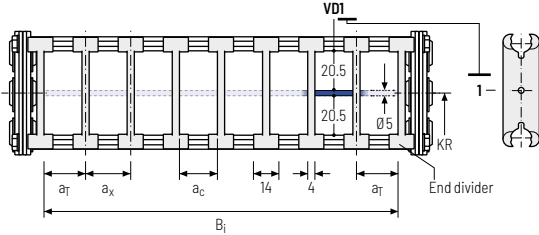
The dividers can be moved in the cross section.



**Divider system TS1 with continuous height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	12	14	10	2

The dividers can be moved in the cross section.



**Order example**

TS1 · 
 A · 
 3 - 
 V D0  
 :  
 - V D1

Divider system
Version
n<sub>T</sub>
Height separation

Please state the designation of the divider system (**TS0, TS1...**), version and number of dividers per cross section [n<sub>T</sub>].

If using divider systems with height separation (**TS1**) please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

The end dividers are part of the divider system and don't have to be ordered separately.

	MT series
	XLT series
	ROBOTRAX® System
	FLATVEVOR®
	CLEANVEVOR®
	LS/LSX series
	S/SX series
	S/SX-Tubes series
	Accessories
	TRAXLINE®



## Aluminum stay RM – frame stay, solid

- » Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides “Heavy Duty”.
- » Available customized in 1 mm grid.
- » **Inside/outside:** Threaded joints easy to release.

**HEAVY DUTY**  
TSUBAKI KABELSCHLEPP



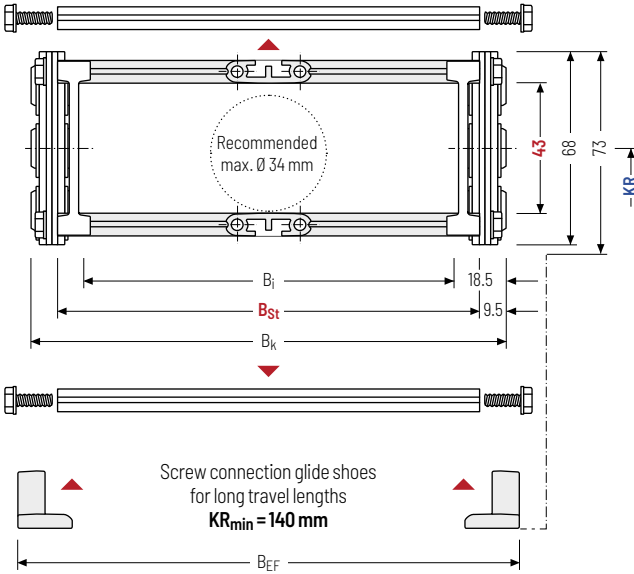
Stay arrangement on every  
2nd chain link, standard  
(HS: half-stayed)



Stay arrangement on each  
chain link (VS: fully-stayed)



1 mm B<sub>k</sub> from 125 – 600 mm  
in 1 mm width sections



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

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

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

Cable carrier length L<sub>k</sub>  
rounded to pitch t

h <sub>i</sub> [mm]	h <sub>g</sub> [mm]	h <sub>g'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	KR [mm]				q <sub>k</sub> [kg/m]	
43	68	73	88	106	B <sub>St</sub> + 19	B <sub>St</sub> + 28	125	140	170	200	260	7.78
			563	581			290	320	350	400	600	10.68

\* in 1 mm width sections

### Order example



S0950

Type

150

B<sub>St</sub>[mm]

RM

Stay variant

200

KR[mm]

St

Material

2375

L<sub>k</sub>[mm]

HS

Stay arrangement

**Divider systems**

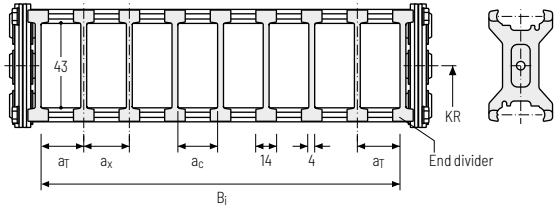
The divider system is mounted on each crossbar as a standard – on every 2<sup>nd</sup> chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section (**version A**).

**Divider system TSO without height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	10	14	10	-

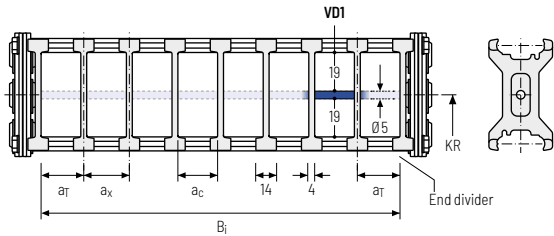
The dividers can be moved in the cross section.



**Divider system TS1 with continuous height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	10	14	10	2

The dividers can be moved in the cross section.



**Order example**

TS1 · 
 A · 
 3 - 
 VD0  
 :  
 - VD1

Divider system
Version
n<sub>T</sub>
Height separation

Please state the designation of the divider system (**TS0, TS1...**), version and number of dividers per cross section [n<sub>T</sub>].

If using divider systems with height separation (**TS1**) please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

The end dividers are part of the divider system and don't have to be ordered separately.

MT series
XLT series
ROBOTRAX® System
FLATVEVOR®
CLEANVEVOR®
LS/LSX series
S/SX series
S/SX-Tubes series
Accessories
TRAXLINE®

## 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**.
- » **Inside/outside:** Screw connection detachable
- » **Option:** Divider systems made from steel and stainless steel ER 1, ER 1S.



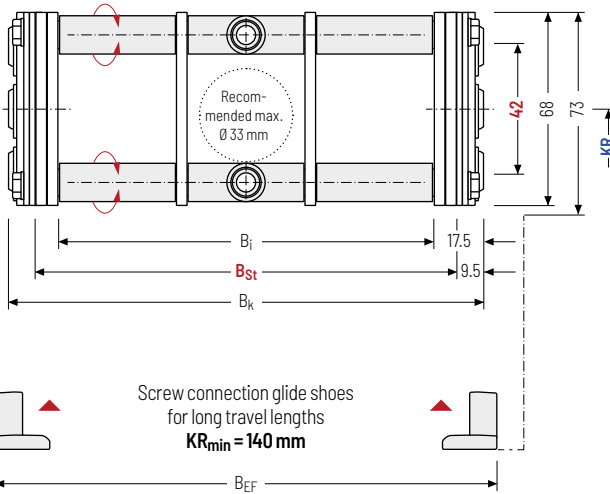
Stay arrangement on every  
2nd chain link standard  
**(HS: half-stayed)**



Stay arrangement on each  
chain link **(VS: fully-stayed)**



**1 mm**  $B_i$  150 – 500 mm  
in **1 mm width sections**



**i** The maximum cable diameter strongly depends on the bending radius and the desired cable type. 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  $t$

$h_i$ [mm]	$h_G$ [mm]	$h_G'$ [mm]	$B_i$ [mm]	$B_{St}$ [mm]*	$B_k$ [mm]	$B_{EF}$ [mm]	KR [mm]					$q_k$ [kg/m]
42	68	73	115 465	131 481	$B_{St} + 19$	$B_{St} + 28$	125	140	170	200	260	8.42
							290	320	350	410	600	11.75

\* in 1 mm width sections

### Order example



S0950

Type

150

$B_{St}$  [mm]

RR

Stay variant

200

KR [mm]

St

Material

2375

$L_k$  [mm]

HS

Stay arrangement

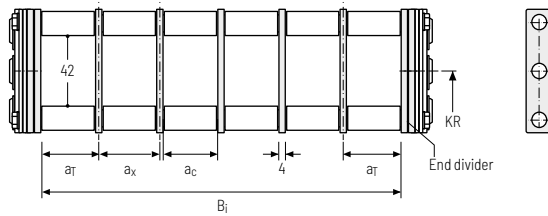
### Divider systems

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

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

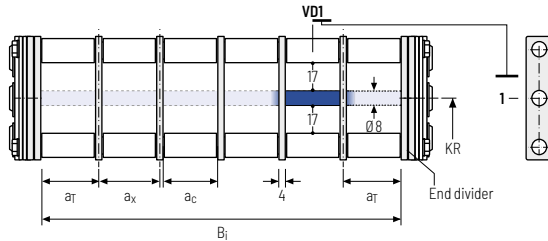
### Divider system TSO without height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
B	20	20	16	-



### Divider system TS1 with continuous height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
B	20	20	16	2



### Order example

TS1

B

3

K1

34

V00

·

K4

38

V00

Divider system
Version
n<sub>T</sub>
Chamber
a<sub>x</sub>
Height separation

Please state the designation of the divider system (**TS0, TS1...**), version and number of dividers per cross section [n<sub>T</sub>]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a<sub>T</sub>/a<sub>x</sub>] (as seen from the driver).

**TRAXLINE® cables for cable carriers**

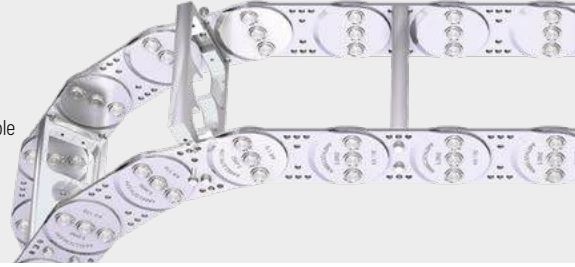
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at [tsubaki-kabelschlepp.com/traxline](http://tsubaki-kabelschlepp.com/traxline)

MT series
XLT series
ROBOTRAX® System
FLATVEVOR®
CLEANVEVOR®
LS/LSX series
S/SX series
S/SX-Tubes series
Accessories
TRAXLINE®

## 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 grid**.
- » **Inside/outside:** Threaded joint easy to release.

**HEAVY DUTY**  
TSUBAKI KABELSCHLEPP



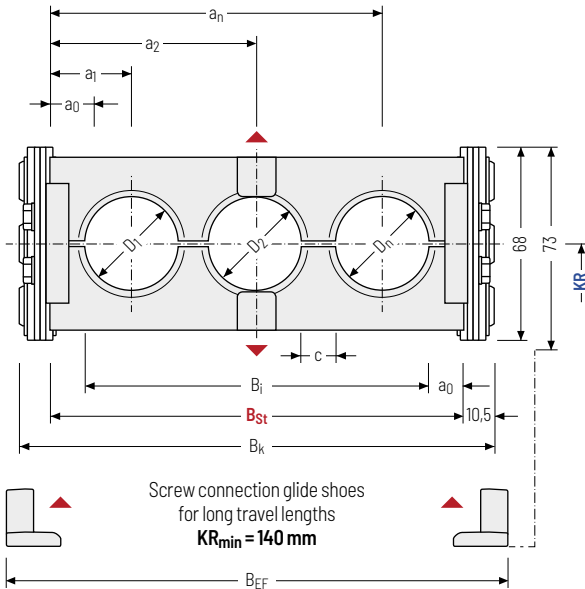
Stay arrangement on every  
2nd chain link standard  
**(HS: half-stayed)**



Stay arrangement on each  
chain link **(VS: fully-stayed)**



**1mm** B<sub>i</sub> 125 – 600 mm  
in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. 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  $t$

### Calculating the stay width

#### Stay width $B_{St}$

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

D <sub>max</sub> [mm]	D <sub>min</sub> [mm]	h <sub>G</sub> [mm]	h <sub>G'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	c <sub>min</sub> [mm]	a <sub>0</sub> min [mm]	KR [mm]				q <sub>k</sub> 50%** [kg/m]
50	12	68	73	82	104	B <sub>St</sub> +	B <sub>St</sub> +	4	11	125	140	170	200	7.97
				-	-	21	30			260	290	320	350	-
				557	579					410	600			11.82

\* in 1 mm width sections \*\* Hole ratio of the hole stay approx. 50 %

### Order example



S0950

Type

150

B<sub>St</sub> [mm]

LG

Stay variant

200

KR [mm]

St

Material

2375

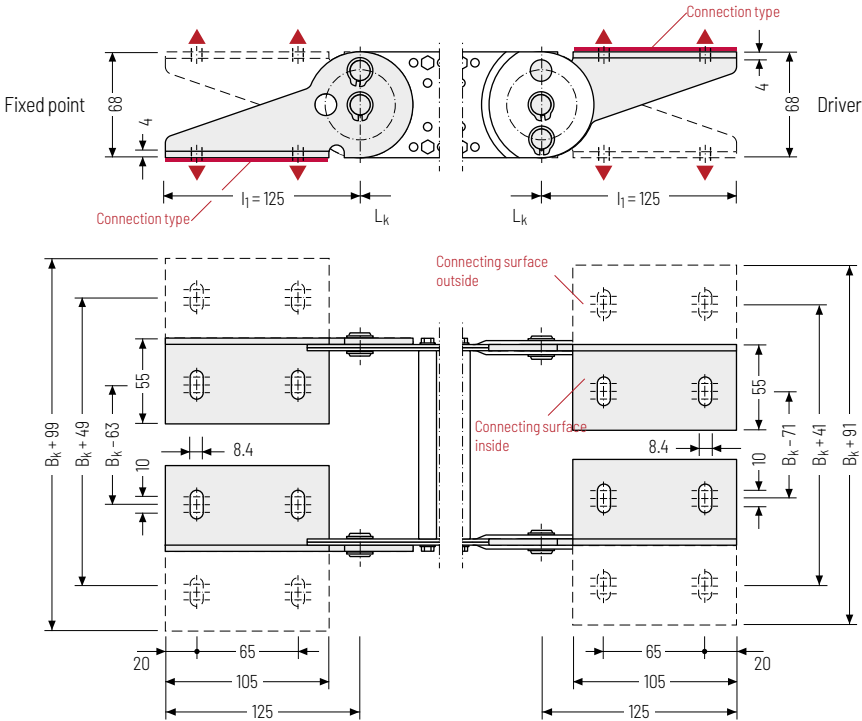
L<sub>k</sub> [mm]

HS

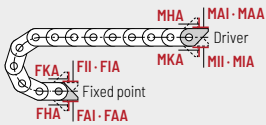
Stay arrangement

**End connectors - steel**

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



▲ Assembly options



**Connection point**

- F - fixed point
- M - driver

**Connection type**

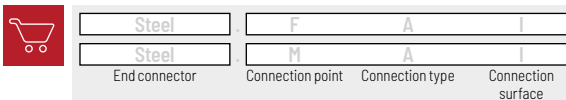
- A - threaded joint to outside (standard)
- I - threaded joint to inside
- H - threaded joint, rotated 90° to the outside
- K - threaded joint, rotated 90° to the inside

**Connection surface**

- I - connection surface inside (standard)
- A - connection surface outside

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

**Order example**



**Caution:** We recommend the use of strain reliefs at the driver and fixed point. See from p. 904.

MT series
XLT series
ROBOTRAX® System
FLATVEYOR®
CLEANVEYOR®
LS/LSX series
<b>S/SX series</b>
S/SX-Tubes series
Accessories
TRAXLINE®

# S/SX1250

MT  
seriesXLT  
seriesROBOTRAX®  
System

FLATVEYOR®

CLEANVEYOR®

LS/LSX  
seriesS/SX  
seriesS/SX-Tubes  
series

Accessories

TRAXLINE®



**Pitch**  
125 mm



**Inner heights**  
66 – 76 mm



**Chain widths**  
130 – 800 mm



**Bending radii**  
145 – 1000 mm

## Stay variants



**Aluminum stay RS 1** ..... page **724**

### Frame stay narrow "The standard"

- » Aluminum profile bars for light to medium loads.
- » **Outside:** release by turning by 90°.
- » **Inside:** Threaded joints easy to release.



**Aluminum stay RS 2** ..... page **728**

### Frame stay narrow, bolted

- » Aluminum profile bars for light to medium loads. Simple threaded joint.
- » **Outside/inside:** Threaded joints easy to release.



**Aluminum stay RV** ..... page **732**

### Frame stay, reinforced

- » Aluminum profile bars for medium to heavy loads and large cable carrier widths. Double threaded joint on both sides.
- » **Inside/outside:** Threaded joints easy to release.



**Aluminum stay RM** ..... page **736**

### Frame stay, solid

- » Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides "**Heavy Duty**".
- » **Inside/outside:** Threaded joints easy to release.



### TRAXLINE® cables for cable carriers

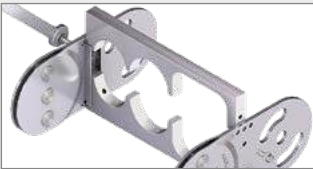
Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at [tsubaki-kabelschlepp.com/traxline](http://tsubaki-kabelschlepp.com/traxline).



### Aluminum stay RR ..... page 738

#### Frame stay, tube version

- » Steel rolling stays with gentle cable support and steel dividers. Ideal for using media hoses with soft sheathing.
- » **Inside/outside:** Screw connection detachable.



### Aluminum stay LG ..... page 740

#### Frame stay, split

- » Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- » **Inside/outside:** Threaded joint easy to release.



### S/SX tubes

Also available as covered variants with cover system or steel band cover. More information can be found in chapter "S/SX tubes" from p. 802.

## Additional stay variants on request



### Aluminum stay RMA

For guiding very large cable diameters

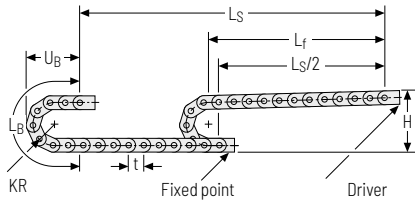


### Aluminum stay RMR

Gentle cable guiding with rollers.



## Unsupported arrangement



KR [mm]	H [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [mm]
145	431	955	442
200	541	1128	497
220	581	1191	517
260	661	1317	557
300	741	1442	597
340	821	1568	637
380	901	1694	677
420	981	1820	717
460	1061	1945	757
500	1141	2071	797
540	1221	2196	837
600	1341	2385	897
1000	2141	3640	1297

### Installation height H<sub>Z</sub>

$$H_z = H + 10 \text{ mm/m}$$

**Load diagram for unsupported length** depending on the additional load.

Intrinsic cable carrier weight  $q_k = 13 \text{ kg/m}$ . For other inner widths, the maximum additional load changes.



**Speed**  
up to 2.5 m/s



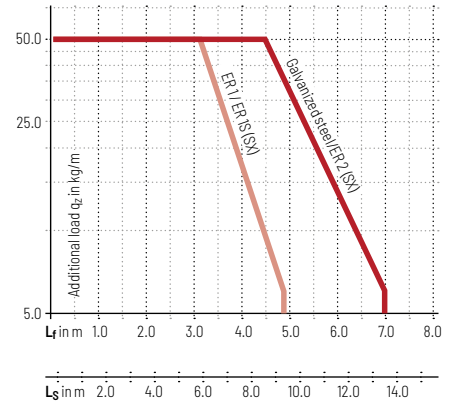
**Acceleration**  
up to 5 m/s<sup>2</sup>



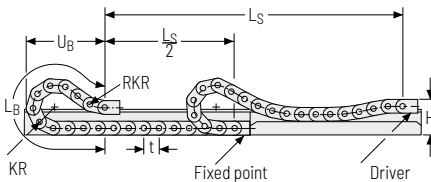
**Travel length**  
up to 13.5 m



**Additional load**  
up to 50 kg/m



## Gliding arrangement



The gliding cable carrier must be guided in a channel.  
See p. 844.

Gliding shoes have to be used for gliding applications.



**Speed**  
up to 1 m/s



**Acceleration**  
up to 2 m/s<sup>2</sup>



**Travel length**  
on request



**Additional load**  
up to 50 kg/m

MT  
seriesXLT  
seriesROBOTRAX®  
System

FLATVEYOR®

CLEANVEYOR®

LS/LSX  
seriesS/SX  
seriesS/SX-Tubes  
series

Accessories

TRAXLINE®

## Aluminum stay RS 1 - frame stay narrow

- » Extremely quick to open and close
- » Aluminum profile bars for light to medium loads.
- » Available customized in **1 mm width sections**.
- » **Outside:** release by rotating 90°.
- » **Inside:** Threaded joint easy to release.



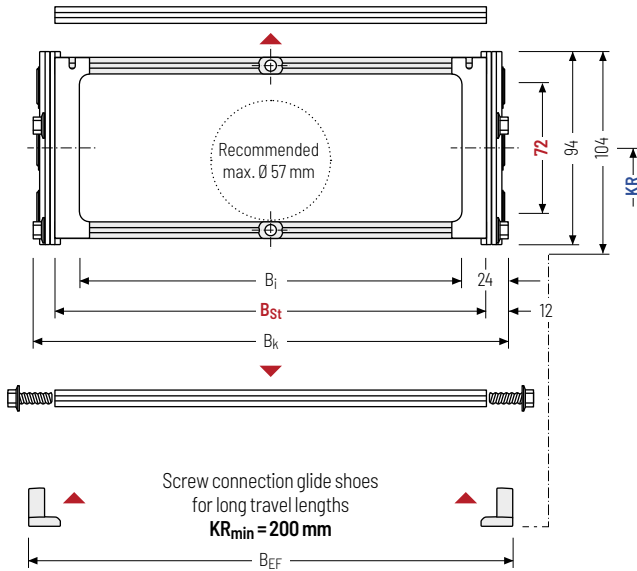
Stay arrangement on every  
2nd chain link, standard  
**(HS: half-stayed)**



Stay arrangement on each  
chain link **(VS: fully-stayed)**



**1 mm** B<sub>k</sub> from 200 – 400 mm  
in **1 mm width sections**



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

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

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

Cable carrier length L<sub>k</sub>  
rounded to pitch t

h <sub>1</sub> [mm]	h <sub>G</sub> [mm]	h <sub>G'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	KR [mm]						q <sub>k</sub> [kg/m]	
72	94	104	152	176	B <sub>St</sub> + 24	B <sub>St</sub> + 30	145	200	220	260	300	340	380	12.88
			352	376			420	460	500	540	600	1000	13.43	

\* in 1 mm width sections

### Order example



S1250

Type

400

B<sub>St</sub>[mm]

RS 1

Stay variant

200

KR[mm]

St

Material

4750

L<sub>k</sub>[mm]

HS

Stay arrangement

### Divider systems

The divider system is mounted on each crossbar as a standard – on every 2<sup>nd</sup> chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section (**version A**).

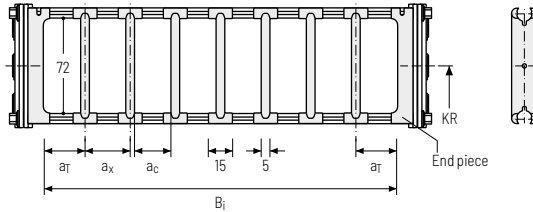
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

The socket additionally acts as a spacer between the dividers and is available in 1 mm increments between 3 – 50 mm (**version B**).

### Divider system TSO without height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	12.5	15	10	-

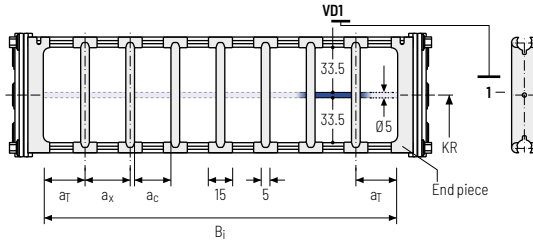
The dividers can be moved in the cross section.



### Divider system TS1 with continuous height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	12.5	15	10	2

The dividers can be moved in the cross section.



### Order example

TS1

A

3

VD0

⋮

VD1

Divider system

Version

n<sub>T</sub>

Height separation

Please state the designation of the divider system (**TS0, TS1...**), version and number of dividers per cross section [n<sub>T</sub>].

If using divider systems with height separation (**TS1**) please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

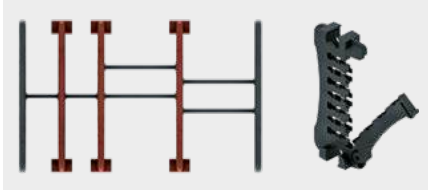
The end pieces are part of the divider system and don't have to be ordered separately.

MT series
XLT series
ROBOTRAX® System
FLATVEVOR®
CLEANVEVOR®
LS/LSX series
S/SX series
S/SX-Tubes series
Accessories
TRAXLINE®

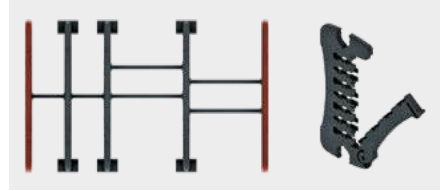
## Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider version A is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Divider version A



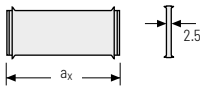
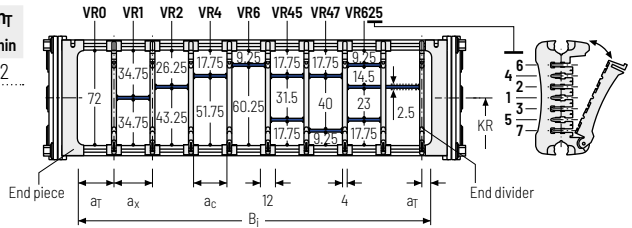
End divider



Vers.	$a_T$ min [mm]	$a_x$ min [mm]	$a_c$ min [mm]	$n_T$ min
A	7*/11	14	10	2

\* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.



$a_x$ (center distance of dividers) [mm]																
$a_c$ (nominal width of inner chamber) [mm]																
14	16	19	23	24	28	29	32	33	34	38	39	43	44	48	49	54
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	59	64	68	69	74	78	79	80	84	88	89	94	96	99	112	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

When using partitions with  $a_x > 49$  mm we recommend an additional preferential central support.

### Order example



TS3	A	3	K1	34	VR1
			:	:	:
			K4	38	VR3
Divider system	Version	$n_T$	Chamber	$a_x$	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 [ $a_T/a_x$ ] (as seen from the driver).

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



Subject to change without notice.

MT  
series

XLT  
series

ROBOTRAX®  
System

FLATVEYOR®

CLEANVEYOR®

LS/LSX  
series

S/SX  
series

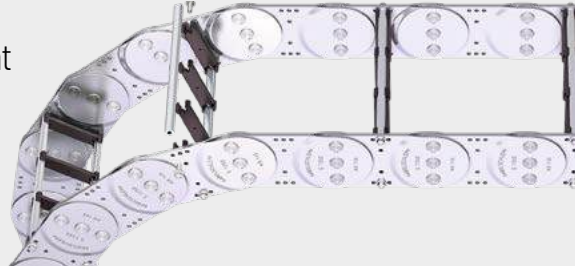
S/SX-Tubes  
series

Accessories

TRAXLINE®

## Aluminum stay RS 2 – frame stay narrow, threaded joint

- » Quick to open and close
- » Aluminum profile bars for light to medium loads.  
Simple threaded joint
- » Available customized in **1 mm width sections**.
- » **Outside/inside:** Threaded joint easy to release.



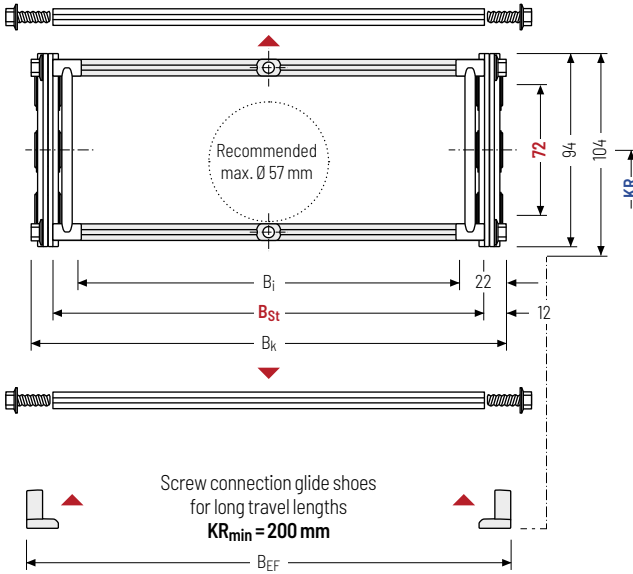
Stay arrangement on every  
2nd chain link, standard  
**(HS: half-stayed)**



Stay arrangement on each  
chain link **(VS: fully-stayed)**



**1 mm** B<sub>k</sub> from 200 – 500 mm  
in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. 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  $t$

$h_i$ [mm]	$h_g$ [mm]	$h_g'$ [mm]	$B_i$ [mm]	$B_{St}$ [mm]*	$B_k$ [mm]	$B_{EF}$ [mm]	KR [mm]				$q_k$ [kg/m]			
72	94	104	156	176	B <sub>St</sub> + 24	B <sub>St</sub> + 30	145	200	220	260	300	340	380	12.88
			456	476			420	460	500	540	600	1000	13.71	

\* in 1 mm width sections

### Order example



S1250

Type

400

B<sub>St</sub>[mm]

RS 2

Stay variant

200

KR[mm]

St

Material

4750

L<sub>k</sub>[mm]

HS

Stay arrangement

### Divider systems

The divider system is mounted on each crossbar as a standard – on every 2<sup>nd</sup> chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section (**version A**).

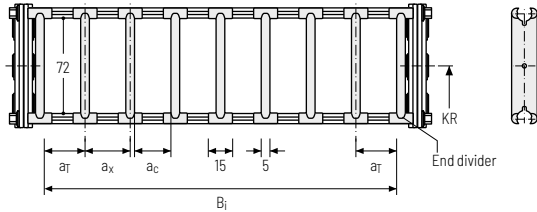
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

The socket additionally acts as a spacer between the dividers and is available in 1 mm increments between 3 – 50 mm (**version B**).

### Divider system TSO without height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	12.5	15	10	-

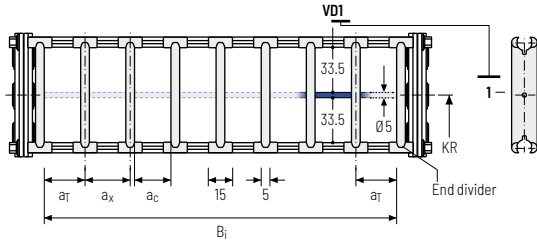
The dividers can be moved in the cross section.



### Divider system TS1 with continuous height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
A	12.5	15	10	2

The dividers can be moved in the cross section.



### Order example

TS1

A

3

VD0

⋮

VD1

Divider system

Version

n<sub>T</sub>

Height separation

Please state the designation of the divider system (**TS0, TS1...**), version and number of dividers per cross section [n<sub>T</sub>].

If using divider systems with height separation (**TS1**) please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

The end dividers are part of the divider system and don't have to be ordered separately.

	MT series
	XLT series
	ROBOTRAX® System
	FLATVEVOR®
	CLEANVEVOR®
	LS/LSX series
	S/SX series
	S/SX-Tubes series
	Accessories
	TRAXLINE®



## Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider version A is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

MT series

XLT series

ROBOTRAX® System

FLATVEYOR®

CLEANVEYOR®

LS/LSX series

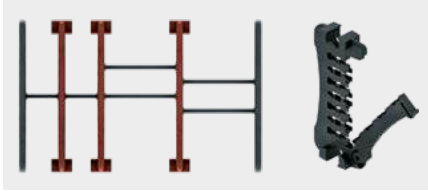
S/SX series

S/SX-Tubes series

Accessories

TRAXLINE®

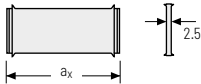
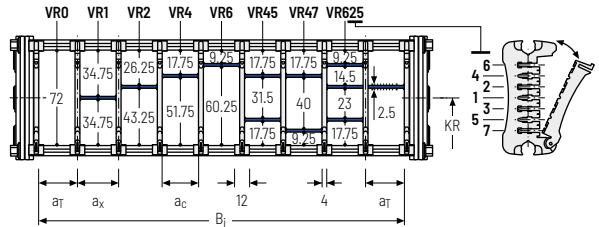
### Divider version A



Vers.	$a_T$ min [mm]	$a_x$ min [mm]	$a_c$ min [mm]	$n_T$ min
A	10*/12	14	10	2

\* For VR0

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.



$a_x$ (center distance of dividers) [mm]																
$a_c$ (nominal width of inner chamber) [mm]																
14	16	19	23	24	28	29	32	33	34	38	39	43	44	48	49	54
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	59	64	68	69	74	78	79	80	84	88	89	94	96	99	112	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

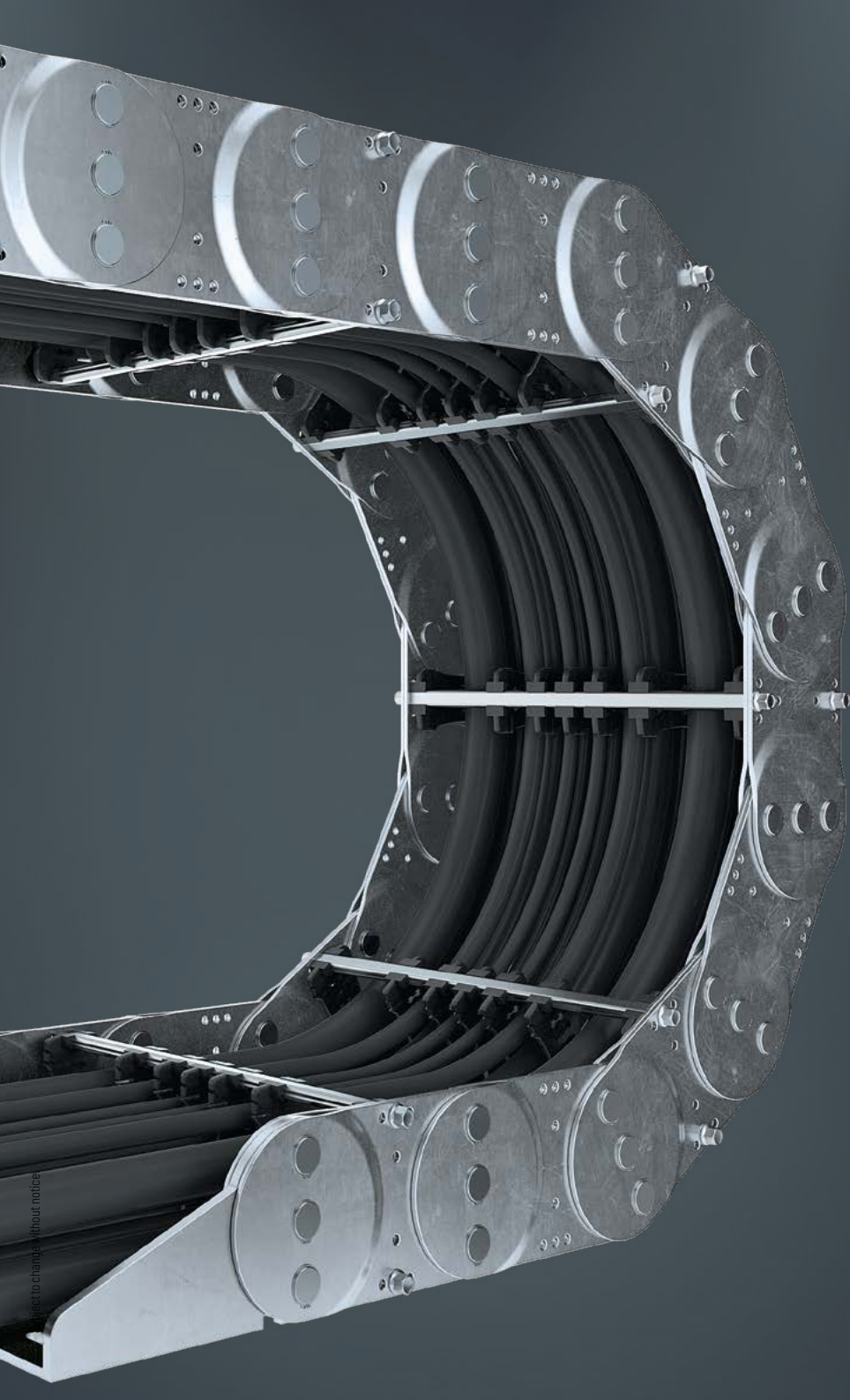
When using partitions with  $a_x > 49$  mm we recommend an additional preferential central support.

### Order example

	TS3	.	A	.	3	.	K1	.	34	-	VR1
							:		:		:
							K4	.	38	-	VR3
	Divider system		Version		$n_T$		Chamber		$a_x$		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 [ $a_T/a_x$ ] (as seen from the driver).

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



Subject to change without notice

TRAXLINE®

Accessories

S/SX-Tubes series

S/SX series

LS/LSX series

CLEANVEYOR®

FLATVEYOR®

ROBOTRAX® System

XLT series

MT series

## Aluminum stay RV – reinforced frame stay

- » Aluminum profile bars for medium to heavy loads and large cable carrier widths. Double threaded joint on both sides.
- » Available customized in **1 mm grid**.
- » **Inside/outside:** Threaded joints easy to release.



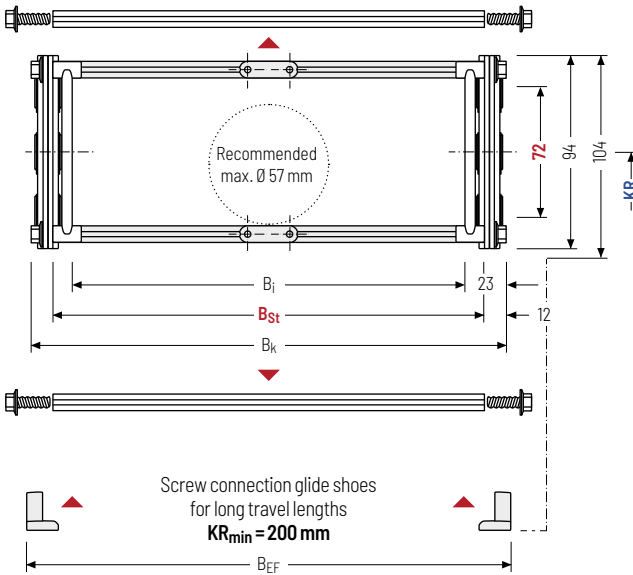
Stay arrangement on every 2nd chain link, standard  
**(HS: half-stayed)**



Stay arrangement on each chain link **(VS: fully-stayed)**



**1 mm** B<sub>k</sub> from 200 – 600 mm  
in **1 mm width sections**



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

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

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

Cable carrier length L<sub>k</sub>  
rounded to pitch t

h <sub>1</sub> [mm]	h <sub>g</sub> [mm]	h <sub>g'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	KR [mm]						q <sub>k</sub> [kg/m]	
72	94	104	154	176	B <sub>St</sub> + 24	B <sub>St</sub> + 30	145	200	220	260	300	340	380	13.83
			554	576			420	460	500	540	600	1000	17.11	

\* in 1 mm width sections

### Order example



S1250

Type

400

B<sub>St</sub>[mm]

RV

Stay variant

200

KR[mm]

St

Material

4750

L<sub>k</sub>[mm]

HS

Stay arrangement

**Divider systems**

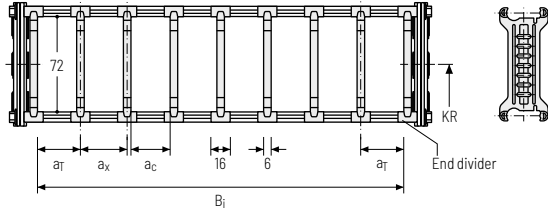
The divider system is mounted on each crossbar as a standard – on every 2<sup>nd</sup> chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section (**version A**).

**Divider system TS0 without height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	π <sub>T</sub> min
A	13	16	10	-

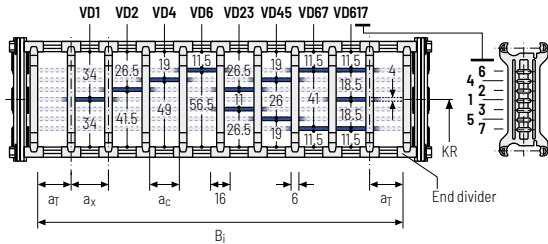
The dividers can be moved in the cross section.



**Divider system TS1 with continuous height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	π <sub>T</sub> min
A	13	16	10	2

The dividers can be moved in the cross section.

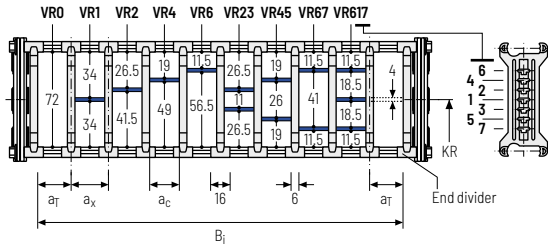


**Divider system TS2 with partial height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	π <sub>T</sub> min
A	13	21	15	2

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

Sliding dividers are optionally available (thickness of divider = 6 mm).



MT series
XLT series
ROBOTRAX® System
FLATVEVOR®
CLEANVEVOR®
LS/LSX series
S/SX series
S/SX-Tubes series
Accessories
TRAXLINE®

**More product information online**



Assembly instructions etc.: Additional info via your smartphone or check online at [tsubaki-kabelschlepp.com/downloads](http://tsubaki-kabelschlepp.com/downloads)



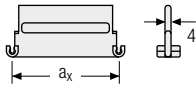
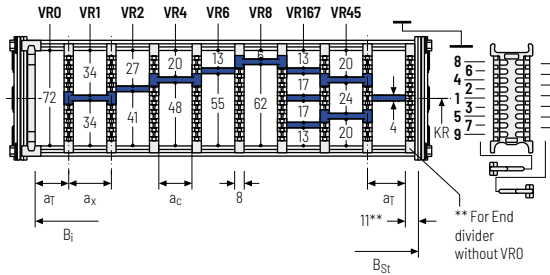
Configure your custom cable carrier here: [online-engineer.de](http://online-engineer.de)

## Divider system TS3 with height separation consisting of plastic partitions

Vers.	$a_T$ min [mm]	$a_x$ min [mm]	$a_c$ min [mm]	$n_T$ min
A	4	16 / 42*	8	2

\* For aluminum partitions

The dividers are fixed with the partitions.  
The entire divider system can be moved in the cross section.



Aluminum partitions in 1 mm width increments with  $a_x > 42$  mm are also available.

$a_x$ (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
8	10	15	20	24	25	30	35	40	50	56	60
78	80	88	96	112	128	144	160	176	192	208	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with  $a_x > 112$  mm**, we recommend an additional center support with a **twin divider** ( $S_T = 4$  mm). Twin dividers are also suitable for retrofitting in the partition system.

### Order example



TS3	A	3	K1	34	VR1
			:	:	:
			K4	38	VR3
Divider system	Version	$n_T$	Chamber	$a_x$	Height separation

Please state the designation of the divider system (TS0, TS1,...), the version, and the 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 [ $a_T/a_x$ ].

When using divider systems with height separation (TS1 – TS3), please additionally state the positions (e.g. VD23) viewed from the left driver belt. You are welcome to add a sketch to your order.

The end dividers are part of the divider system and don't have to be ordered separately.

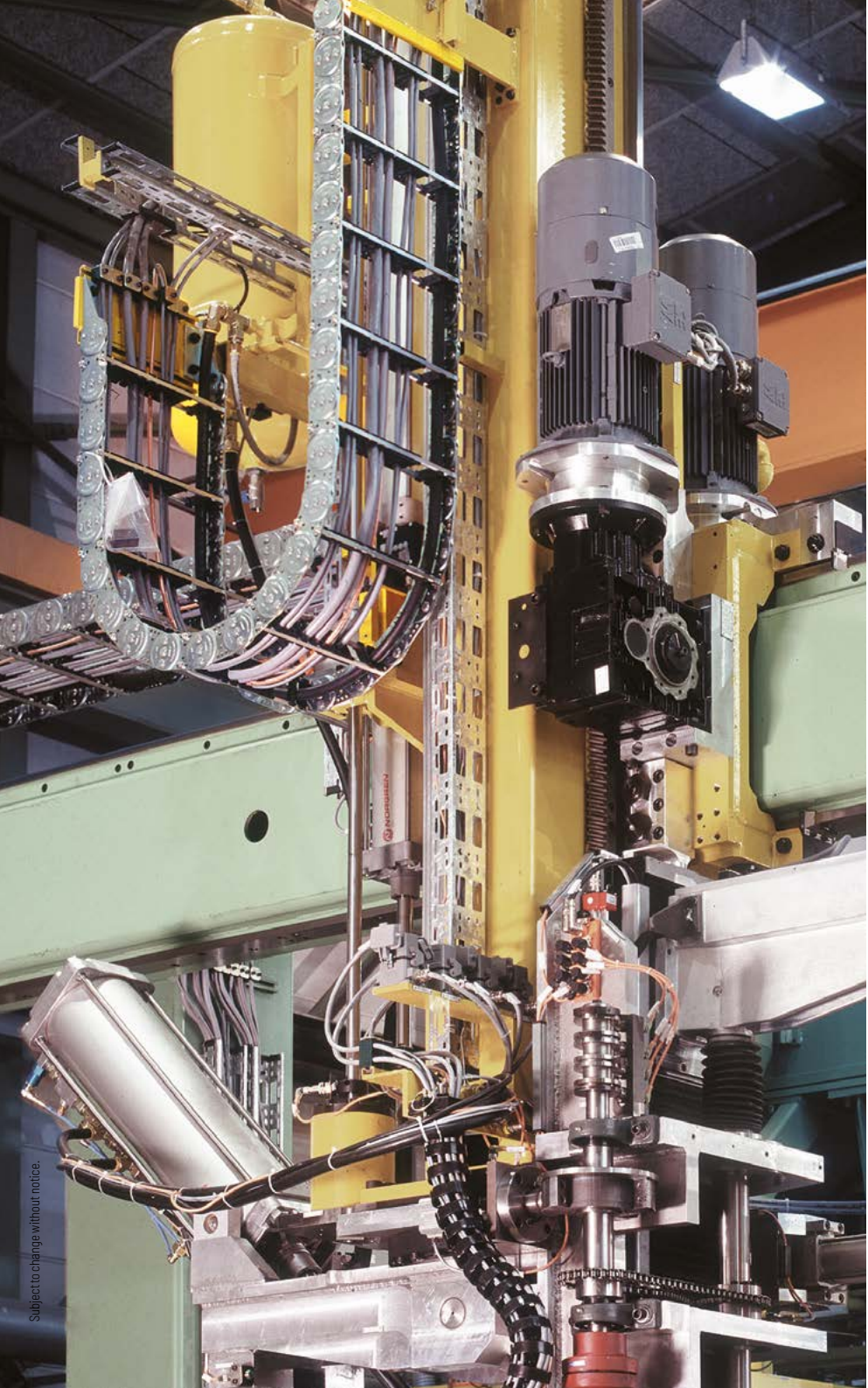
### More product information online



Assembly instructions etc.:  
Additional info via your smartphone or check online at [tsubaki-kabelschlepp.com/downloads](http://tsubaki-kabelschlepp.com/downloads)



Configure your custom cable carrier here:  
[online-engineer.de](http://online-engineer.de)



Subject to change without notice.

735

MT  
series

XLT  
series

ROBOTRAX®  
System

FLATVEYOR®

CLEANVEYOR®

LS/LSX  
series

S/SX  
series

S/SX-Tubes  
series

Accessories

TRAXLINE®

## Aluminum stay RM -

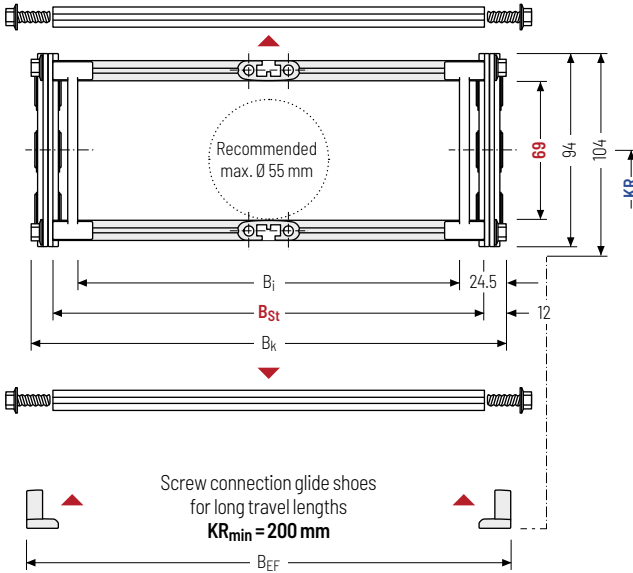
=

- Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides "Heavy Duty".
- Available customized in 1 mm grid.
- Inside/outside:** Threaded joints easy to release.

**HEAVY DUTY**  
 TSUBAKI KABELSCHLEPP

 Stay arrangement on every  
 2nd chain link, standard  
 (HS: half-stayed)

 Stay arrangement on each  
 chain link (VS: fully-stayed)

 1 mm B<sub>k</sub> from 200 - 800 mm  
 in 1 mm width sections


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

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

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

 Cable carrier length L<sub>k</sub>  
 rounded to pitch t

h <sub>i</sub> [mm]	h <sub>g</sub> [mm]	h <sub>g'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	KR [mm]						q <sub>k</sub> [kg/m]	
69	94	104	151	176	B <sub>St</sub> + 24	B <sub>St</sub> + 30	145	200	220	260	300	340	380	13.42
			751	776			420	460	500	540	600	1000	17.01	

\* in 1 mm width sections

### Order example



S1250

Type

400

B<sub>St</sub>[mm]

RM

Stay variant

200

KR[mm]

St

Material

4750

L<sub>k</sub>[mm]

HS

Stay arrangement

**Divider systems**

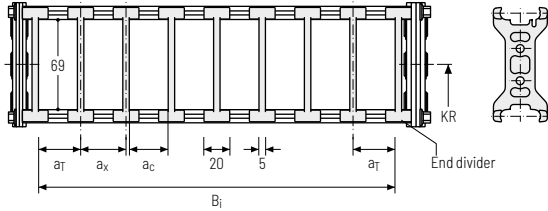
The divider system is mounted on each crossbar as a standard – on every 2<sup>nd</sup> chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section (**version A**).

**Divider system TSO without height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	π <sub>T</sub> min
A	17.5	20	15	-

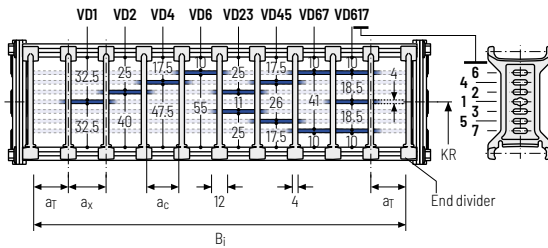
The dividers can be moved in the cross section.



**Divider system TS1 with continuous height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	π <sub>T</sub> min
A	10	12	8	2

The dividers can be moved in the cross section.

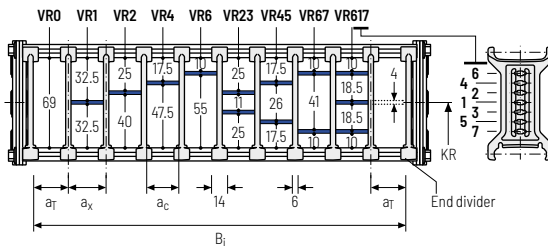


**Divider system TS2 with partial height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	π <sub>T</sub> min
A	17	21	15	2

With grid distribution (1 mm grid). The dividers are attached by the height separation, the grid can be moved in the cross section.

Sliding dividers are optionally available (thickness of divider = 4 mm).



**Order example**



TS2	A	3	K1	34	VR1
			⋮	⋮	⋮
			K4	38	VR3
Divider system	Version	π <sub>T</sub>	Chamber	a <sub>x</sub>	Height separation

MT series
XLT series
ROBOTRAX® System
FLATVEVOR®
CLEANVEVOR®
LS/LSX series
S/SX series
S/SX-Tubes series
Accessories
TRAXLINE®



## 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**.
- » **Inside/outside:** Screw connection detachable
- » **Option:** Divider systems made from steel and stainless steel ER 1, ER 1S.



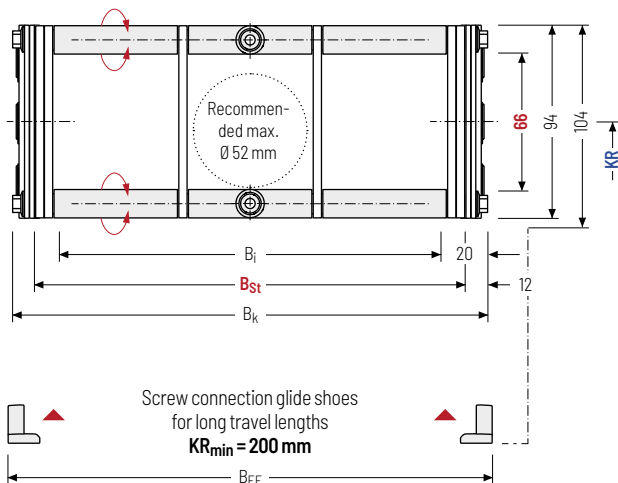
Stay arrangement on every  
2nd chain link, standard  
**(HS: half-stayed)**



Stay arrangement on each  
chain link **(VS: fully-stayed)**



**1 mm** B<sub>k</sub> from 200 – 800 mm  
in **1 mm width sections**



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

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

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

Cable carrier length L<sub>k</sub>  
rounded to pitch t

MT  
seriesXLT  
seriesROBOTRAX®  
System

FLATVEYOR®

CLEANVEYOR®

LS/LSX  
seriesS/SX  
seriesS/SX-Tubes  
series

Accessories

TRAXLINE®

h <sub>i</sub> [mm]	h <sub>g</sub> [mm]	h <sub>g'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	KR [mm]				q <sub>k</sub> [kg/m]			
66	94	104	160 560	176 576	B <sub>St</sub> + 24	B <sub>St</sub> + 30	145	200	220	260	300	340	380	13.82
							420	460	500	540	600	1000		17.30

\* in 1 mm width sections

### Order example



S1250

Type

400

B<sub>St</sub>[mm]

RR

Stay variant

200

KR [mm]

St

Material

4750

L<sub>k</sub>[mm]

HS

Stay arrangement

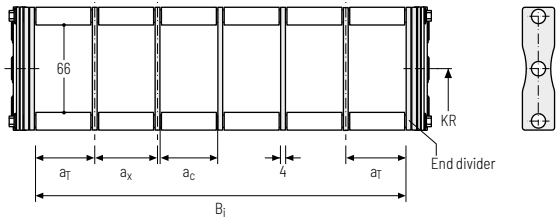
**Divider systems**

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

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

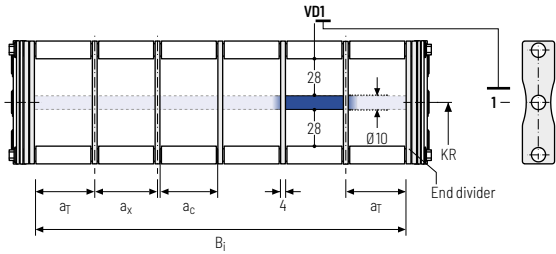
**Divider system TSO without height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
B	30	30	26	-



**Divider system TS1 with continuous height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
B	30	30	26	2



**Order example**

TS1

B

3

K1

34

VDD

·

K4

·

38

·

VDD

Divider system

Version

n<sub>T</sub>

Chamber

a<sub>x</sub>

Height separation

Please state the designation of the divider system (**TS0, TS1...**), version and number of dividers per cross section [n<sub>T</sub>]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a<sub>T</sub>/a<sub>x</sub>] (as seen from the driver).

Subject to change without notice.

**TRAXLINE® cables for cable carriers**

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at [tsubaki-kabelschlepp.com/traxline](http://tsubaki-kabelschlepp.com/traxline)

MT series
XLT series
ROBOTRAX® System
FLATVEVOR®
CLEANVEVOR®
LS/LSX series
S/SX series
S/SX-Tubes series
Accessories
TRAXLINE®

## 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 grid**.
- » **Inside/outside:** Threaded joint easy to release.

**HEAVY DUTY**  
TSUBAKI KABELSCHLEPP



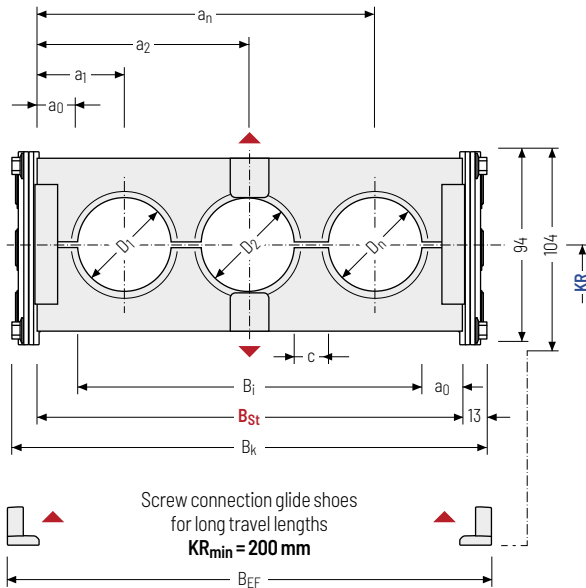
Stay arrangement on every  
2nd chain link standard  
**(HS: half-stayed)**



Stay arrangement on each  
chain link **(VS: fully-stayed)**



**1mm** B<sub>i</sub> 130 – 800 mm  
in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. 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  $t$

### Calculating the stay width

#### Stay width $B_{St}$

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

$D_{max}$ [mm]	$D_{min}$ [mm]	$h_g$ [mm]	$h_g'$ [mm]	$B_i$ [mm]	$B_{St}$ [mm]*	$B_k$ [mm]	$B_{EF}$ [mm]	$c_{min}$ [mm]	$a_0_{min}$ [mm]	KR [mm]				$q_k$ 50%** [kg/m]	
76	12	94	104	82	<b>104</b>	$B_{St} +$	$B_{St} +$	4	11	145	200	220	260	300	13.10
				-	-	26	32			340	380	420	460	500	-
				752	<b>774</b>	26	32			540	600	1000	18.22		

\* in 1 mm width sections \*\* Hole ratio of the hole stay approx. 50 %

### Order example



**S1250**

Type

**400**

$B_{St}$  [mm]

**LG**

Stay variant

**200**

KR [mm]

**St**

Material

**4750**

$L_k$  [mm]

**HS**

Stay arrangement



Subject to change without notice.

a Y 51 b  
fahren  
ab Y 51 kippen

MT series

XLT series

ROBOTRAX® System

FLATVEYOR®

CLEANVEYOR®

LS/LSX series

S/SX series

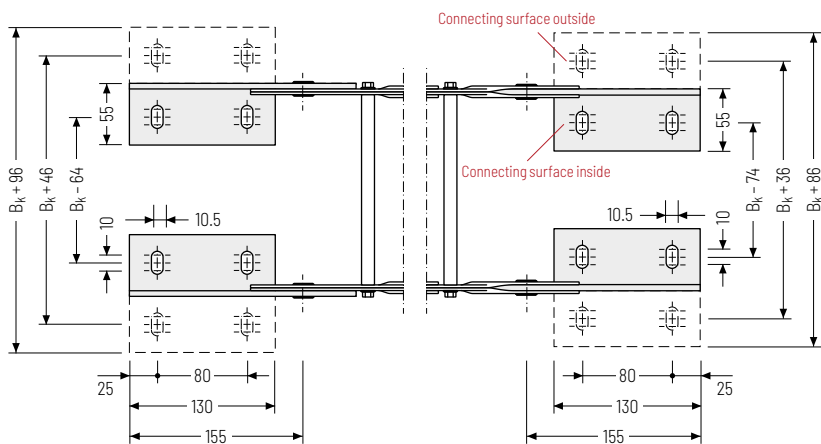
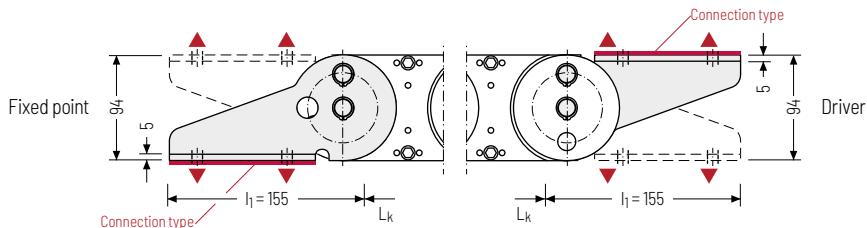
S/SX-Tubes series

Accessories

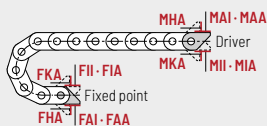
TRAXLINE®

## End connectors - steel

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



## ▲ Assembly options



## Connection point

**F** - fixed point  
**M** - driver

## Connection type

**A** - threaded joint to outside (standard)  
**I** - threaded joint to inside  
**H** - threaded joint, rotated 90° to the outside  
**K** - threaded joint, rotated 90° to the inside

## Connection surface

**I** - connection surface inside (standard)  
**A** - connection surface outside

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

## Order example



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



We recommend the use of strain reliefs at the driver and fixed point. See from p. 904.

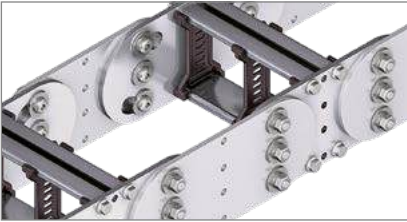
## Special designs

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



- » Closed stroke system protected between link plates mounted on both sides.
- » Symmetrical side band design.
- » Long service life even under the toughest conditions, e.g. large amounts of foundry sand, emery or scale thanks to optimized cable carrier geometry.

### S/SX1252 B – with internal stroke system and straight link plates



- » Open stroke system.
- » Link plates of the side bands are mounted offset.
- » Long service life even under the toughest conditions, e.g. large amounts of foundry sand, emery or scale thanks to optimized cable carrier geometry.
- » The optimized, "self-cleaning" geometry prevents blocking of the stops through dirt.
- » Version with bolted side bands.

MT series

XLT series

ROBOTRAX® System

FLATVEYOR®

CLEANVEYOR®

LS/LSX series

S/SX series

S/SX-Tubes series

Accessories

TRAXLINE®



#### TOTALTRAX® complete systems

Benefit from the advantages of a TOTALTRAX complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at [tsubaki-kabelschlepp.com/totaltrax](http://tsubaki-kabelschlepp.com/totaltrax)



#### TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at [tsubaki-kabelschlepp.com/traxline](http://tsubaki-kabelschlepp.com/traxline)

# S/SX1800



**Pitch**  
180 mm



**Inner height**  
104 – 110 mm



**Chain widths**  
180 – 1000 mm



**Bending radii**  
265 – 1300 mm

## Stay variants



**Aluminum stay RM**..... page **746**

### Frame stay, solid

- » Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides "**Heavy Duty**".
- » **Inside/outside:** Threaded joints easy to release.



**Aluminum stay RR**..... page **748**

### Frame stay, tube version

- » Steel rolling stays with gentle cable support and steel dividers. Ideal for using media hoses with soft sheathing.
- » **Inside/outside:** Screw connection detachable.



**Aluminum stay LG**..... page **750**

### Frame stay, split

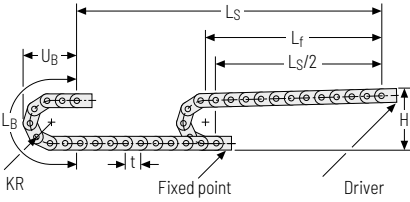
- » Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- » **Inside/outside:** Threaded joint easy to release.



### S/SX tubes

Also available as covered variants with cover system or steel band cover. More information can be found in chapter "S/SX tubes" from p. 802.

Unsupported arrangement



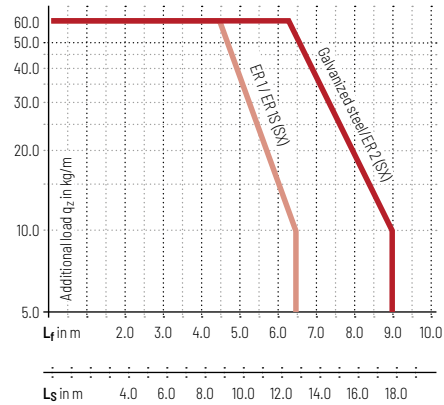
KR [mm]	H [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [mm]
265	740	1552	695
320	850	1725	750
375	960	1898	805
435	1080	2087	865
490	1190	2259	920
605	1420	2620	1035
720	1650	2982	1150
890	1990	3516	1320
1175	2560	4411	1605
1300	2810	4804	1730

Installation height H<sub>z</sub>

$H_z = H + 10 \text{ mm/m}$

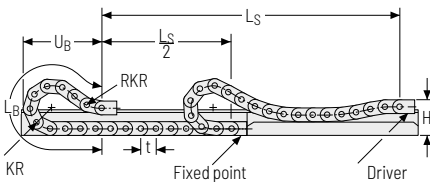
Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight  $q_k = 26 \text{ kg/m}$ . For other inner widths, the maximum additional load changes.



- Speed**  
up to 2 m/s
- Acceleration**  
up to 3 m/s<sup>2</sup>
- Travel length**  
up to 17.8 m
- Additional load**  
up to 60 kg/m

Gliding arrangement



The gliding cable carrier must be guided in a channel. See p. 844.

Glide shoes have to be used for gliding applications.

- Speed**  
up to 0.8 m/s
- Acceleration**  
up to 2 m/s<sup>2</sup>
- Travel length**  
on request
- Additional load**  
up to 60 kg/m



## Aluminum stay RM – frame stay, solid

- » Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides “Heavy Duty”.
- » Available customized in **1 mm grid**.
- » **Inside/outside:** Threaded joints easy to release.

**HEAVY DUTY**  
TSUBAKI KABELSCHLEPP



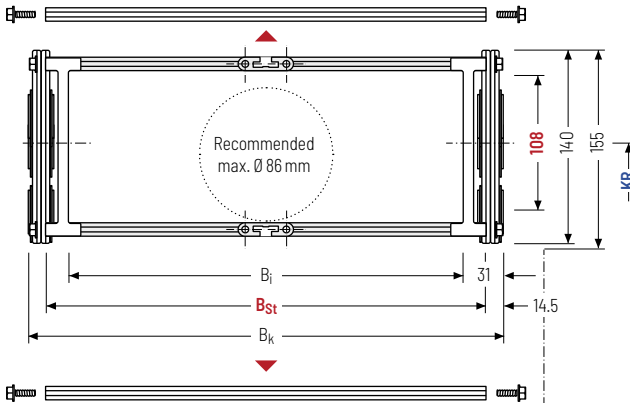
Stay arrangement on every  
2nd chain link, standard  
(HS: half-stayed)



Stay arrangement on each  
chain link (VS: fully-stayed)



**1mm** B<sub>k</sub> from 250 – 1000 mm  
in **1 mm width sections**



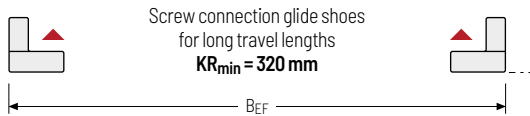
The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

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

Cable carrier length L<sub>k</sub>  
rounded to pitch t



h <sub>i</sub> [mm]	h <sub>G</sub> [mm]	h <sub>G'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	KR [mm]			q <sub>k</sub> [kg/m]		
108	140	155	188	221	B <sub>St</sub> + 29	B <sub>St</sub> + 40	265	320	375	435	490	24.08
			938	971			605	720	890	1175	1300	28.46

\* in 1 mm width sections

### Order example



SX1800

Type

417

B<sub>St</sub> [mm]

RM

Stay variant

375

KR [mm]

St

Material

5940

L<sub>k</sub> [mm]

HS

Stay arrangement

**Divider systems**

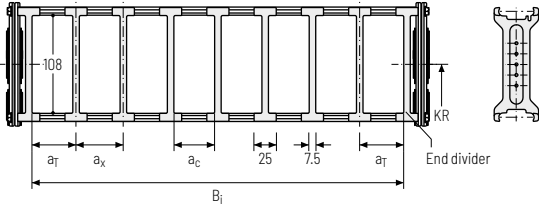
The divider system is mounted on each crossbar as a standard – on every 2<sup>nd</sup> chain link for stay mounting (HS).

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section (**version A**).

**Divider system TSO without height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	Π <sub>T</sub> min
A	21.5	25	17.5	–

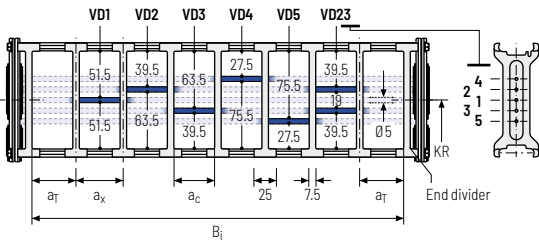
The dividers can be moved in the cross section.



**Divider system TS1 with continuous height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	Π <sub>T</sub> min
A	21.5	25	17.5	2

The dividers can be moved in the cross section.

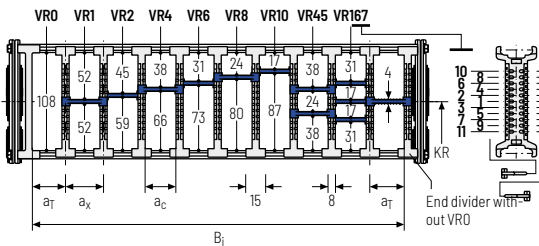


**Divider system TS3 with height separation consisting of plastic partitions**

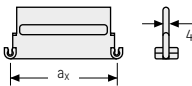
Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	Π <sub>T</sub> min
A	11.5	16 / 42*	8	2

\* For aluminum partitions

The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.



Aluminum partitions in 1 mm width increments with a<sub>x</sub> > 42 mm are also available.



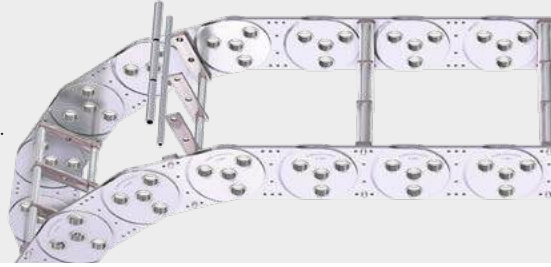
a <sub>x</sub> (center distance of dividers) [mm]											
a <sub>c</sub> (nominal width of inner chamber) [mm]											
16	18	23	28	32	33	38	43	48	58	64	68
8	10	15	20	24	25	30	35	40	50	56	60
78	80	88	96	112	128	144	160	176	192	208	
70	72	80	88	104	120	136	152	168	184	200	

When using plastic partitions with a<sub>x</sub> > 112 mm, we recommend an additional center support with a twin divider (S<sub>T</sub> = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

MT series
XLT series
ROBOTRAX® System
FLATVEVOR®
CLEANVEVOR®
LS/LSX series
S/SX series
S/SX-Tubes series
Accessories
TRAXLINE®

## Tube stay RR – frame stay, tube version

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



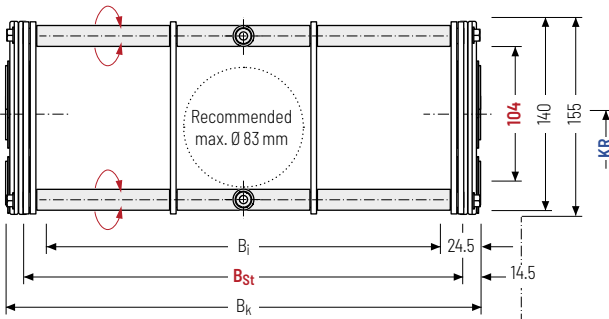
Stay arrangement on every 2nd chain link, standard  
**(HS: half-stayed)**



Stay arrangement on each chain link **(VS: fully-stayed)**



**1 mm** B<sub>k</sub> from 250 – 800 mm  
in **1 mm width sections**



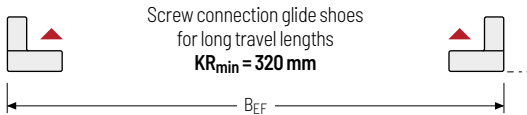
The maximum cable diameter strongly depends on the bending radius and the desired cable type. Please contact us.

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

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

Cable carrier length L<sub>k</sub>  
rounded to pitch t



h <sub>i</sub> [mm]	h <sub>G</sub> [mm]	h <sub>G'</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	KR [mm]					q <sub>k</sub> [kg/m]
104	140	155	201 751	221 771	B <sub>St</sub> + 29	B <sub>St</sub> + 40	265	320	375	435	490	26.57
							605	720	890	1175	1300	36.05

\* in 1 mm width sections

### Order example



**S1800**

Type

**417**

B<sub>St</sub> [mm]

**RR**

Stay variant

**375**

KR [mm]

**St**

Material

**5940**

L<sub>k</sub> [mm]

**HS**

Stay arrangement

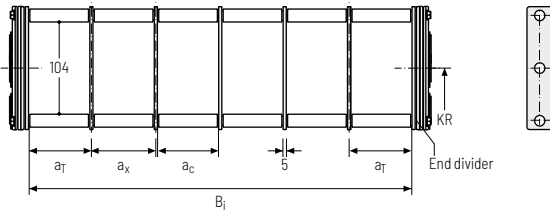
### Divider systems

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

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

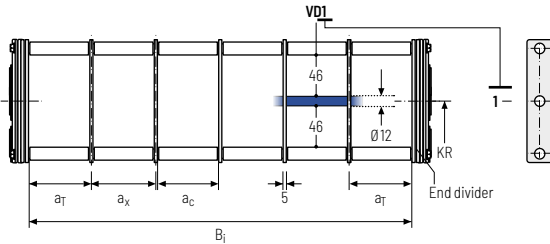
### Divider system TSO without height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
B	45	45	40	-



### Divider system TS1 with continuous height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	n <sub>T</sub> min
B	45	45	40	2



### Order example

TS1

B

3

K1

34

V00

⋮

⋮

⋮

K4

38

V00

Divider system
Version
n<sub>T</sub>
Chamber
a<sub>x</sub>
Height separation

Please state the designation of the divider system (**TS0, TS1...**), version and number of dividers per cross section [n<sub>T</sub>]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a<sub>T</sub>/a<sub>x</sub>] (as seen from the driver).

**TRAXLINE® cables for cable carriers**

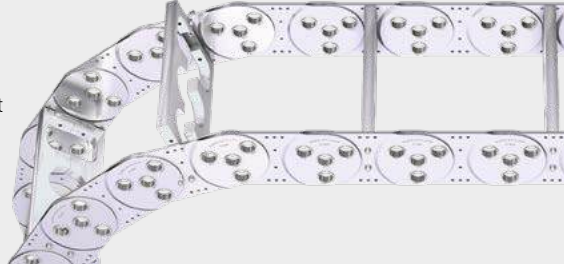
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at [tsubaki-kabelschlepp.com/traxline](http://tsubaki-kabelschlepp.com/traxline)

MT series
XLT series
ROBOTRAX® System
FLATVEVOR®
CLEANVEVOR®
LS/LSX series
S/SX series
S/SX-Tubes series
Accessories
TRAXLINE®

## 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 grid**.
- » **Inside/outside:** Threaded joint easy to release.

**HEAVY DUTY**  
TSUBAKI KABELSCHLEPP



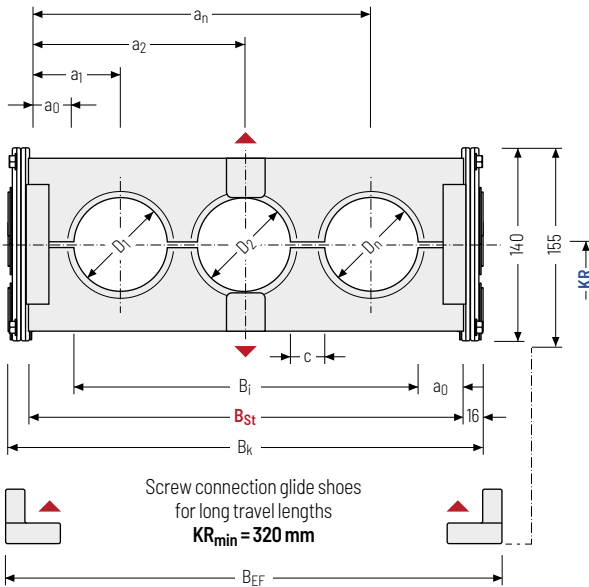
Stay arrangement on every  
2nd chain link standard  
**(HS: half-stayed)**



Stay arrangement on each  
chain link **(VS: fully-stayed)**



**1mm** B<sub>i</sub> 180 - 1000 mm  
in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. 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  $t$

### Calculating the stay width

#### Stay width $B_{St}$

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

$D_{max}$ [mm]	$D_{min}$ [mm]	$h_g$ [mm]	$h_g'$ [mm]	$B_i$ [mm]	$B_{St}$ [mm]*	$B_k$ [mm]	$B_{EF}$ [mm]	$c_{min}$ [mm]	$a_0_{min}$ [mm]	KR [mm]				$q_k$ 50%** [kg/m]
110	12	140	155	121	148	$B_{St}$	$B_{St}$	4	13.5	265	320	375	435	24,38
				-	-	+	+			490	605	720	890	-
				941	968	32	43			1175	1300		35,08	

\* in 1 mm width sections \*\* Hole ratio of the hole stay approx. 50 %

### Order example



**S1800**

Type

**417**

$B_{St}$  [mm]

**LG**

Stay variant

**375**

KR [mm]

**St**

Material

**5940**

$L_k$  [mm]

**HS**

Stay arrangement



MT  
series

XLT  
series

ROBOTRAX®  
System

FLATVEVOR®

CLEANVEVOR®

LS/LSX  
series

S/SX  
series

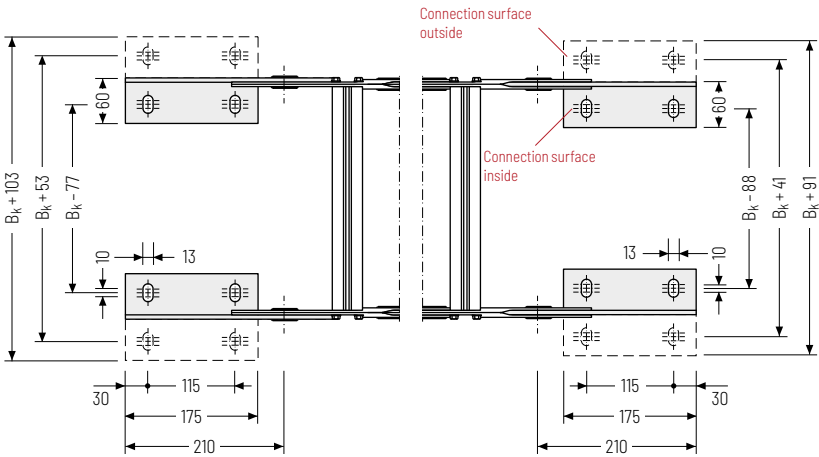
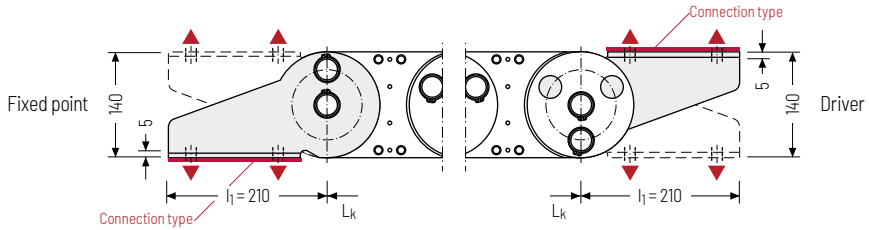
S/SX-Tubes  
series

Accessories

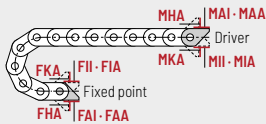
TRAXLINE®

## End connectors - steel

End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and changed later on, if necessary.



### ▲ Assembly options



### Connection point

**F** - fixed point  
**M** - driver

### Connection type

**A** - threaded joint to outside (standard)  
**I** - threaded joint to inside  
**H** - threaded joint, rotated 90° to the outside  
**K** - threaded joint, rotated 90° to the inside

### Connection surface

**I** - connection surface inside (standard)  
**A** - connection surface outside

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

### Order example



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



We recommend the use of strain reliefs at the driver and fixed point. See from p. 904.

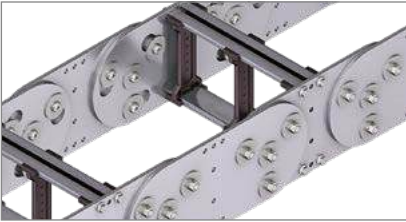
## Special designs

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



- » Closed stroke system protected between link plates mounted on both sides.
- » Symmetrical side band design.
- » Long service life even under the toughest conditions, e.g. large amounts of foundry sand, emery or scale thanks to optimized cable carrier geometry.

### S/SX1802 B – with internal stroke system and straight link plates



- » Open stroke system.
- » Link plates of the side bands are mounted offset.
- » Long service life even under the toughest conditions, e.g. large amounts of foundry sand, emery or scale thanks to optimized cable carrier geometry.
- » The optimized, "self-cleaning" geometry prevents blocking of the stops through dirt.
- » Version with bolted side bands.

MT series

XLT series

ROBOTRAX® System

FLATVEYOR®

CLEANVEYOR®

LS/LSX series

S/SX series

S/SX-Tubes series

Accessories

TRAXLINE®



#### TOTALTRAX® complete systems

Benefit from the advantages of a TOTALTRAX complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at [tsubaki-kabelschlepp.com/totaltrax](http://tsubaki-kabelschlepp.com/totaltrax)



#### TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at [tsubaki-kabelschlepp.com/traxline](http://tsubaki-kabelschlepp.com/traxline)



# S/SX2500



**Pitch**  
250 mm



**Inner height**  
180 - 183 mm



**Chain widths**  
250 - 1200 mm



**Bending radii**  
365 - 1395 mm

## Stay variants



**Aluminum stay RM**..... page **756**

### Frame stay, solid

- » Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides "**Heavy Duty**".
- » **Inside/outside:** Threaded joint easy to release.



**Aluminum stay LG**..... page **758**

### Frame stay, split

- » Optimum cable routing in the neutral bending line. Split version for easy cable routing.
- » **Inside/outside:** Threaded joint easy to release.



### Steel band cover

Also available as covered variants with steel band cover. More information can be found in chapter "steel band cover" from p. 916.

MT  
seriesXLT  
seriesROBOTRAX®  
System

FLATVEYOR®

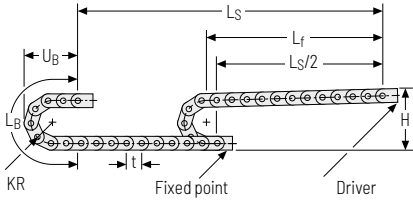
CLEANVEYOR®

LS/LSX  
seriesS/SX  
seriesS/SX-Tubes  
series

Accessories

TRAXLINE®

Unsupported arrangement



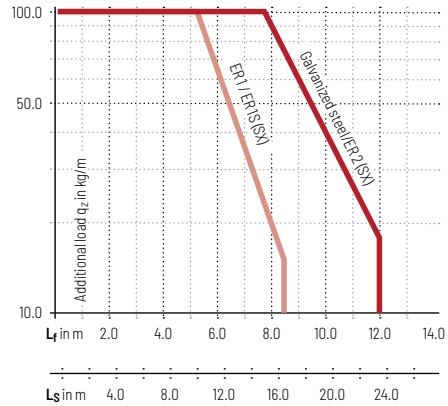
KR [mm]	H [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [mm]
365	1060	2147	975
445	1220	2398	1055
600	1530	2885	1210
760	1850	3388	1370
920	2170	3890	1530
1075	2480	4377	1685
1235	2800	4880	1845
1395	3120	5383	2005

Installation height H<sub>z</sub>

$H_z = H + 10 \text{ mm/m}$

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight  $q_k = 41 \text{ kg/m}$ . For other inner widths, the maximum additional load changes.



**Speed**  
up to 1 m/s

**Acceleration**  
up to 3 m/s<sup>2</sup>

**Travel length**  
up to 23.7 m

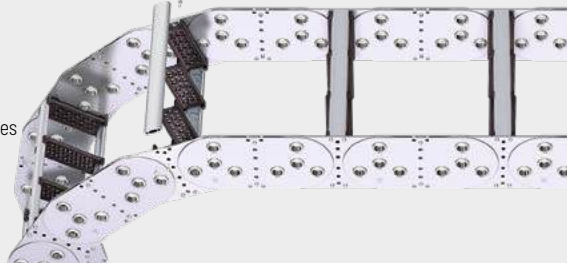
**Additional load**  
up to 100 kg/m

- MT series
- XLT series
- ROBOTRAX® System
- FLATVEYOR®
- CLEANVEYOR®
- LS/LSX series
- S/SX series
- S/SX-Tubes series
- Accessories
- TRAXLINE®

## Aluminum stay RM – frame stay, solid

- ▶ Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joint on both sides "Heavy Duty".
- ▶ Available customized in **1 mm grid**.
- ▶ **Inside/outside:** Threaded joint easy to release.

**HEAVY DUTY**  
TSUBAKI KABELSCHLEPP



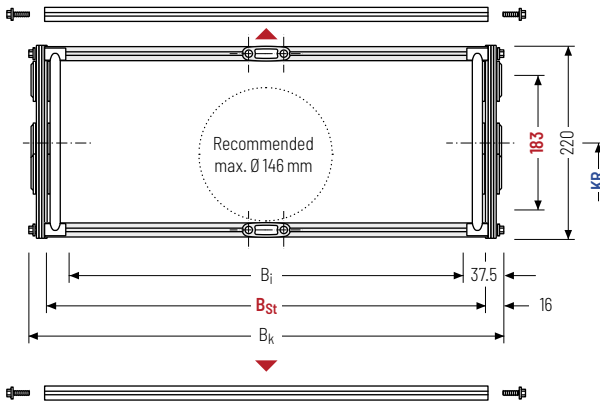
Stay arrangement on every  
2nd chain link, standard  
(HS: half-stayed)



Stay arrangement on each  
chain link (VS: fully-stayed)



**1 mm** B<sub>i</sub> 250 – 1200 mm  
in 1 mm width sections



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

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

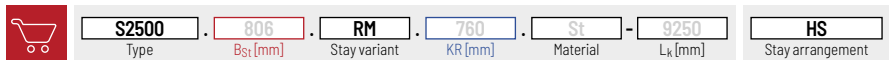
$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L<sub>k</sub>  
rounded to pitch t for odd  
number of chain links

h <sub>i</sub> [mm]	h <sub>G</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	KR [mm]				q <sub>k</sub> [kg/m]
183	220	175 1125	218 1168	B <sub>St</sub> + 32	365 920	445 1075	600 1235	760 1395	38.68 44.58

\* in 1 mm width sections

### Order example



**Divider systems**

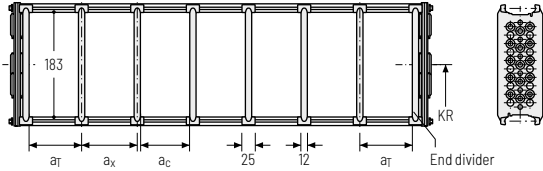
As a standard, the divider system is mounted on each crossbar - for stay mounting on every 2<sup>nd</sup> chain link (HS).

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

**Divider system TSO without height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	π <sub>T</sub> min
A	19	25	13	-

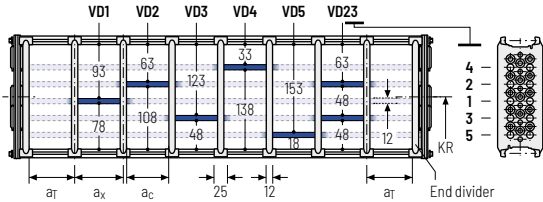
The dividers can be moved in the cross section.



**Divider system TS1 with continuous height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>c</sub> min [mm]	a <sub>x</sub> min [mm]	π <sub>T</sub> min
A	19	13	25	2

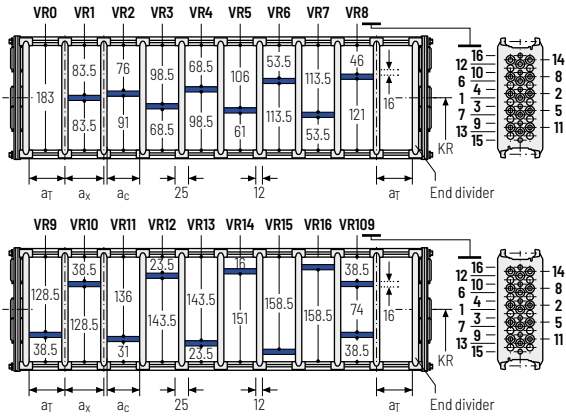
The dividers can be moved in the cross section.



**Divider system TS2 with partial height separation**

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	π <sub>T</sub> min
A	40	46	34	2

Standard height separation with tube Ø 16 mm. The dividers can be moved in the cross section.



**Order example**



TS1	A	2	K1	34	VD1
			:	:	:
			K3	38	VD3
Divider system	Version	π <sub>T</sub>	Chamber	a <sub>x</sub>	Height separation

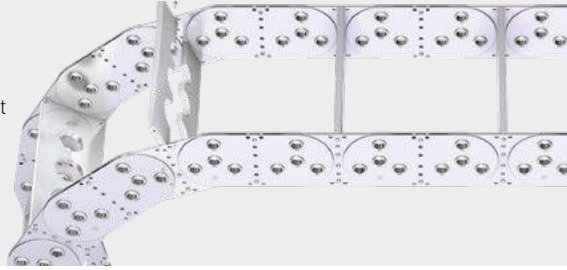
Subject to change without notice.

MT series
XLT series
ROBOTRAX® System
FLATVEVOR®
CLEANVEVOR®
LS/LSX series
S/SX series
S/SX-Tubes series
Accessories
TRAXLINE®

## Aluminum stay LG - hole stay, split version

- » Optimum cable routing in the neutral bending line. Split version for easy cable routing.
- » Available customized in **1 mm grid**.
- » **Inside/outside:** Threaded joint easy to release.

**HEAVY DUTY**  
TSUBAKI KABELSCHLEPP



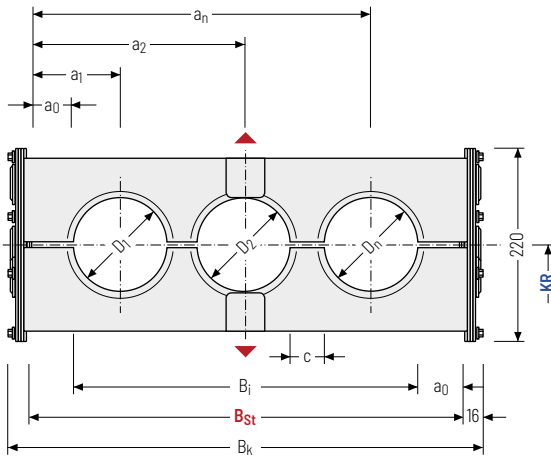
Stay arrangement on every 2nd chain link standard  
**(HS: half-stayed)**



Stay arrangement on each chain link **(VS: fully-stayed)**



**1mm** B<sub>i</sub> 250 – 1200 mm  
in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. 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  $t$  for odd number of chain links

### Calculating the stay width

#### Stay width $B_{St}$

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

$D_{max}$ [mm]	$D_{min}$ [mm]	$h_g$ [mm]	$B_i$ [mm]	$B_{St}$ [mm]*	$B_k$ [mm]	$c_{min}$ [mm]	$a_0_{min}$ [mm]	KR [mm]				$q_k$ 50%** [kg/m]
180	12	220	174 1124	218 1168	$B_{St} + 32$	4	22	365 920	445 1075	600 1235	760 1395	36.66 48.36

\* in 1 mm width sections \*\* Hole ratio of the hole stay approx. 50 %

### Order example



**SX2500**

Type

**806**

$B_{St}$  [mm]

**LG**

Stay variant

**760**

KR [mm]

**St**

Material

**9250**

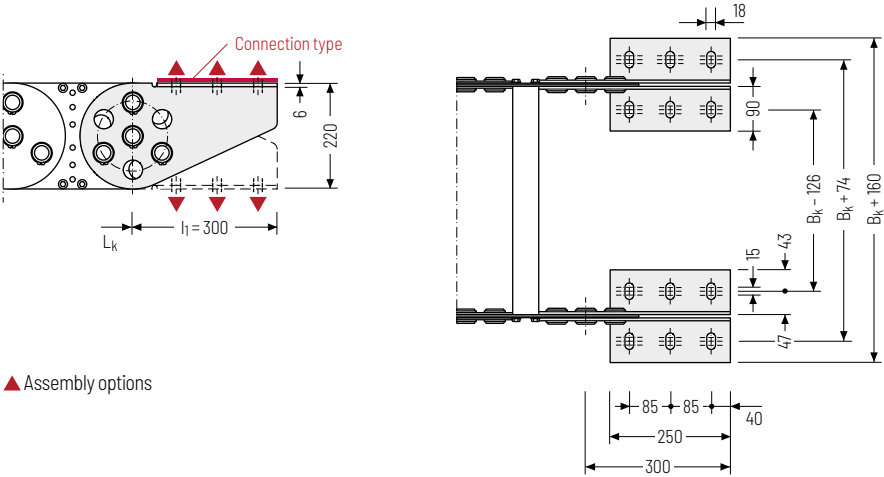
$L_k$  [mm]

**HS**

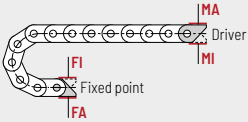
Stay arrangement

**End connectors - steel**

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



▲ Assembly options



**Connection point**

- F** - fixed point
- M** - driver

**Connection type**

- A** - threaded joint outside (standard)
- I** - threaded joint inside

**Order example**

	Steel	F	A
	Steel	M	A
	End connector	Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 904.

**More product information online**



Assembly instructions etc.: Additional info via your smartphone or check online at [tsubaki-kabelschlepp.com/downloads](http://tsubaki-kabelschlepp.com/downloads)



Configure your custom cable carrier here: [online-engineer.de](http://online-engineer.de)

MT series
XLT series
ROBOTRAX® System
FLATVEYOR®
CLEANVEYOR®
LS/LSX series
<b>S/SX series</b>
S/SX-Tubes series
Accessories
TRAXLINE®

# S/SX3200



**Pitch**  
320 mm



**Inner height**  
220 mm



**Chain widths**  
250 - 1500 mm



**Bending radii**  
470 - 1785 mm

## Stay variants



**Aluminum stay LG** ..... page **762**

### Frame stay, split

- » Optimum cable routing in the neutral bending line. Split version for easy cable routing.
- » **Inside/outside:** Threaded joint easy to release.

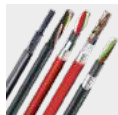


Stay variant RR available as a customized design.  
Please contact us.



### TOTALTRAX® complete systems

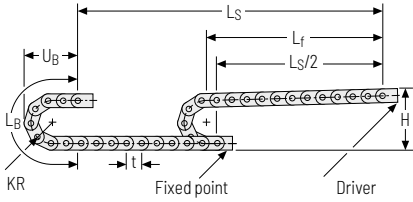
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source - with a warranty certificate on request! Learn more at [tsubaki-kabelschlepp.com/totaltrax](http://tsubaki-kabelschlepp.com/totaltrax)



### TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at [tsubaki-kabelschlepp.com/traxline](http://tsubaki-kabelschlepp.com/traxline)

Unsupported arrangement



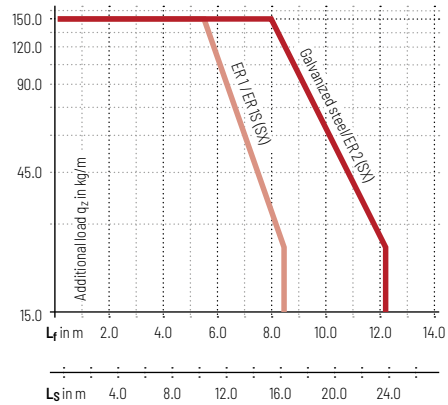
KR [mm]	H [mm]	LB [mm]	UB [mm]
470	1390	2757	1260
670	1790	3385	1460
870	2190	4013	1660
1075	2600	4657	1865
1275	3000	5286	2065
1480	3410	5930	2270
1785	4020	6888	2575

Installation height  $H_z$

$H_z = H + 10 \text{ mm/m}$

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight  $q_k = 41 \text{ kg/m}$ . For other inner widths, the maximum additional load changes.



**Speed**  
up to 1 m/s

**Acceleration**  
up to 2.5 m/s<sup>2</sup>

**Travel length**  
up to 24 m

**Additional load**  
up to 150 kg/m

MT series

XLT series

ROBOTRAX® System

FLATVEYOR®

CLEANVEYOR®

LS/LSX series

S/SX series

S/SX-Tubes series

Accessories

TRAXLINE®

More product information online



Assembly instructions etc.: Additional info via your smartphone or check online at [tsubaki-kabelschlepp.com/downloads](http://tsubaki-kabelschlepp.com/downloads)

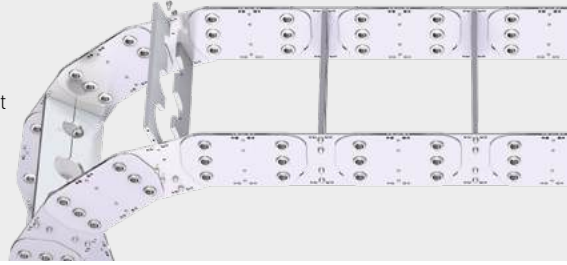


Configure your custom cable carrier here: [online-engineer.de](http://online-engineer.de)



## Aluminum stay LG - hole stay, split version

- » Optimum cable routing in the neutral bending line. Split version for easy cable routing.
- » Available customized in **1 mm grid**.
- » **Inside/outside:** Threaded joint easy to release.



**HEAVY DUTY**  
TSUBAKI KABELSCHLEPP



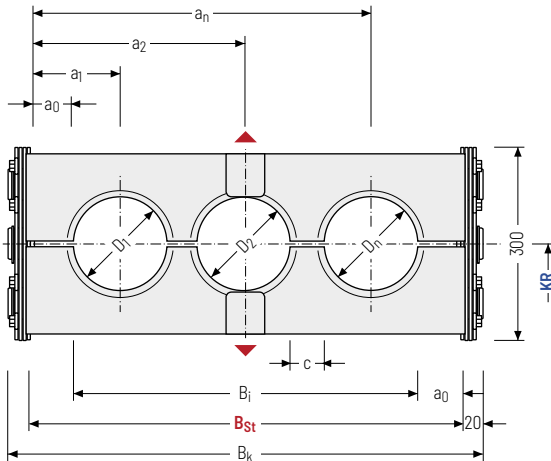
Stay arrangement on every 2nd chain link, standard  
**(HS: half-stayed)**



Stay arrangement on each chain link **(VS: fully-stayed)**



**1 mm** B<sub>i</sub> 250 – 1500 mm  
in **1 mm width sections**



The maximum cable diameter strongly depends on the bending radius and the desired cable type. 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  $t$  for odd number of chain links

### Calculating the stay width

#### Stay width $B_{St}$

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

D <sub>max</sub> [mm]	D <sub>min</sub> [mm]	h <sub>G</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	c <sub>min</sub> [mm]	a <sub>0 min</sub> [mm]	KR [mm]				q <sub>k 50 %**</sub> [kg/m]
220	12	300	181 1416	225 1460	B <sub>St</sub> + 40	4	22	470	670	870	1075	57.48
								1275	1480	1785		72.66

\* in 1 mm width sections

\*\* Hole ratio of the hole stay approx. 50 %

### Order example



**SX3200**

Type

**776**

B<sub>St</sub> [mm]

**LG**

Stay variant

**1075**

KR [mm]

**ER 1**

Material

**9280**

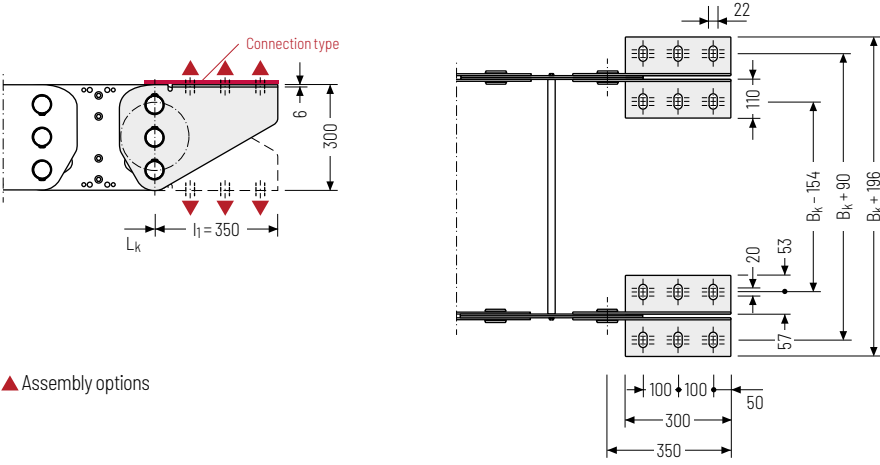
L<sub>k</sub> [mm]

**HS**

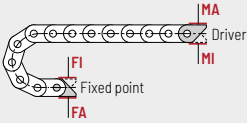
Stay arrangement

**End connectors – steel**

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



▲ Assembly options



**Connection point**

- F** - fixed point
- M** - driver

**Connection type**

- A** - threaded joint outside (standard)
- I** - threaded joint inside

**Order example**

	Steel	F	A
	Steel	M	A
	End connector	Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 904.

**More product information online**



Assembly instructions etc.: Additional info via your smartphone or check online at [tsubaki-kabelschlepp.com/downloads](http://tsubaki-kabelschlepp.com/downloads)



Configure your custom cable carrier here: [online-engineer.de](http://online-engineer.de)

MT series
XLT series
ROBOTRAX® System
FLATVEYOR®
CLEANVEYOR®
LS/LSX series
<b>S/SX series</b>
S/SX-Tubes series
Accessories
TRAXLINE®

# S/SX

# 5000 – 8000



**Pitch**  
200 – 550 mm



**Inner heights**  
150 – 578 mm



**Chain widths**  
250 – 1800 mm



**Bending radii**  
min. 500 mm

## Stay variants



**Steel stay special design**..... from page 766

### Steel frame stay, bolted

- » Steel profile bars for extremely high additional loads and very large cable carrier widths. Double threaded joint on both sides.
- » **Inside/outside:** Threaded joint can be released.



Cable carriers of types 5000 – 8000 are **customized products** for special applications, e.g. offshore use.



### TOTALTRAX® complete systems

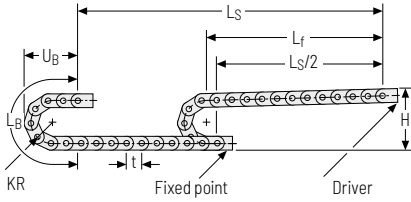
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at [tsubaki-kabelschlepp.com/totaltrax](http://tsubaki-kabelschlepp.com/totaltrax)



### TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at [tsubaki-kabelschlepp.com/traxline](http://tsubaki-kabelschlepp.com/traxline)

## Unsupported arrangement



### Installation height $H_z$

$$H_z = H + 10 \text{ mm/m}$$

**Load diagram for unsupported length** depending on the additional load.

Intrinsic cable carrier weight  $q_k$

50 kg/m for S/SX5000

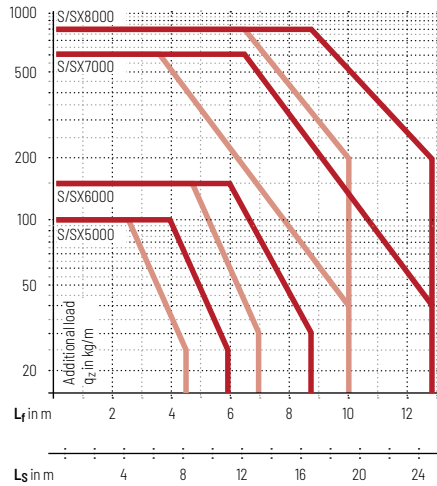
75 kg/m for S/SX6000

150 kg/m for S/SX7000

230 kg/m for S/SX8000

For other inner widths, the maximum additional load changes.

Type	KR [mm]	H [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [mm]
S/SX5000	min. 500	1200	1970	800
	max. 1200	2600	4170	1500
S/SX6000	min. 700	1700	2840	1170
	max. 1500	3300	5350	1970
S/SX7000	min. 900	2250	3725	1575
	max. 2400	5250	8435	3075
S/SX8000	min. 900	2400	3925	1750
	max. 2400	5400	8635	3250



- S5000/6.../7.../8... galvanized steel
- SX5000/6.../7.../8... ER2
- SX5000/6.../7.../8... ER1/ER1S



### Speed

S/SX5000 up to 2.0 m/s

S/SX6000 up to 1.5 m/s

S/SX7000 up to 0.5 m/s

S/SX8000 up to 0.5 m/s



### Acceleration

S/SX5000 up to 3.0 m/s<sup>2</sup>

S/SX6000 up to 2.0 m/s<sup>2</sup>

S/SX7000 up to 0.3 m/s<sup>2</sup>

S/SX8000 up to 0.3 m/s<sup>2</sup>



### Travel length

S/SX5000 up to 11.0 m

S/SX6000 up to 16.7 m

S/SX7000 up to 24.9 m

S/SX8000 up to 24.9 m



### Additional load

S/SX5000 up to 100 kg/m

S/SX6000 up to 150 kg/m

S/SX7000 up to 600 kg/m

S/SX8000 up to 800 kg/m

## More product information online



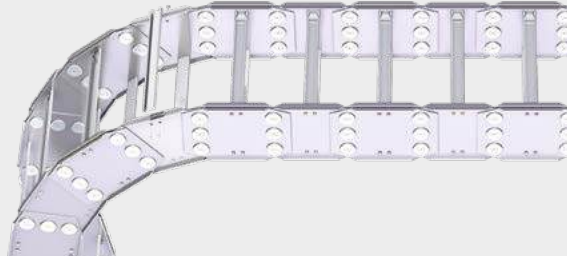
Assembly instructions etc.:  
Additional info via your  
smartphone or check online at  
[tsubaki-kabelschlepp.com/  
downloads](http://tsubaki-kabelschlepp.com/downloads)



Configure your custom  
cable carrier here:  
[online-engineer.de](http://online-engineer.de)

## Steel stay - steel frame stay, bolted

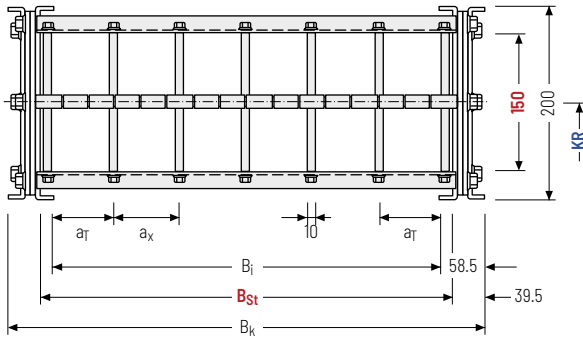
- » Steel profile bars for extremely high additional loads and very large cable carrier widths.
- » Double threaded joint on both sides.
- » Available customized in **1 mm grid**.
- » **Inside/outside:** Threaded joint can be released.



Stay arrangement on each chain link (**VS: fully-stayed**)



**1 mm** B<sub>i</sub>: 250 - 1200 mm  
in 1 mm width sections



The maximum cable diameter strongly depends on the bending radius and the desired cable type. 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  $t$  for odd number of chain links

$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]	$B_{St}$ [mm]*	$B_k$ [mm]	$a_T$ max [mm]	$a_x$ max [mm]	$n_T$ min	$KR$ [mm]**	$q_k$ [kg/m]
150	200	133 - 1083	171 - 1121	$B_{St} + 79$	150	150	2	500 - 1200	42.5 - 52.0

\* in 1 mm width sections

\*\* individual intermediate sizes available

MT  
seriesXLT  
seriesROBOTRAX®  
System

FLATVEYOR®

CLEANVEYOR®

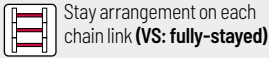
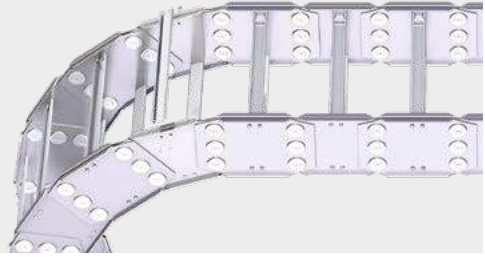
LS/SX  
seriesS/SX  
seriesS/SX-Tubes  
series

Accessories

TRAXLINE®

## Steel stay - steel frame stay, bolted

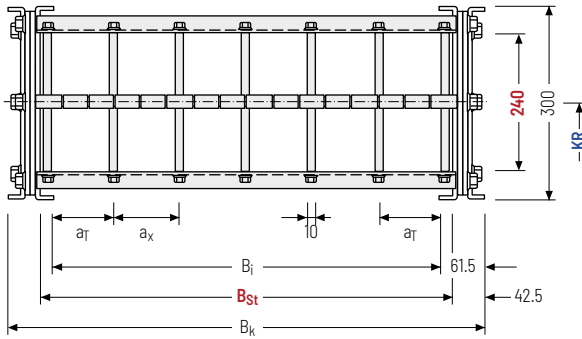
- » Steel profile bars for extremely high additional loads and very large cable carrier widths.  
Double threaded joint on both sides.
- » Available customized in **1 mm grid**.
- » **Inside/outside:** Threaded joint can be released.



Stay arrangement on each chain link (VS: fully-stayed)



1mm B<sub>i</sub> 300 - 1500 mm  
in 1 mm width sections



The maximum cable diameter strongly depends on the bending radius and the desired cable type. 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  $t$  for odd number of chain links

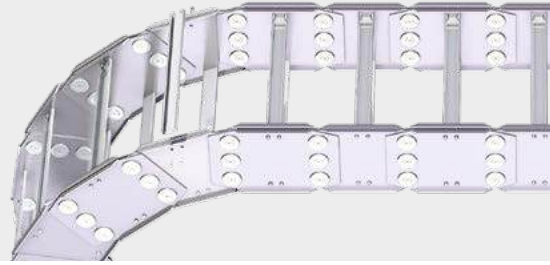
$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]	$B_{St}$ [mm]*	$B_k$ [mm]	$a_T$ max [mm]	$a_x$ max [mm]	$nT$ min	$KR$ [mm]**	$q_k$ [kg/m]
240	300	177 - 1377	215 - 1415	$B_{St} + 85$	200	200	2	700 - 1500	55 - 79

\* in 1 mm width sections

\*\* individual intermediate sizes available

## Steel stay - steel frame stay, bolted

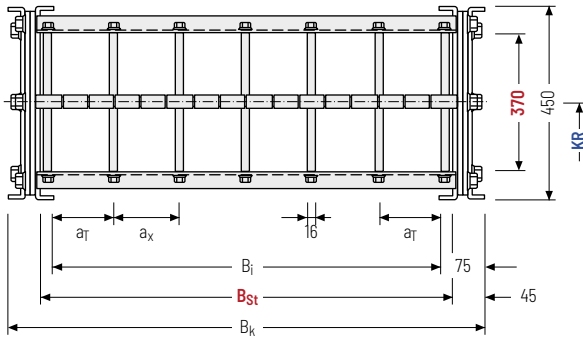
- » Steel profile bars for extremely high additional loads and very large cable carrier widths.
- » Double threaded joint on both sides.
- » Available customized in **1 mm grid**.
- » **Inside/outside:** Threaded joint can be released.



Stay arrangement on each chain link (**VS: fully-stayed**)



**1 mm** B<sub>k</sub> from 350 - 1800 mm  
in 1 mm width sections



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

### Calculating the cable carrier length

#### Cable carrier length L<sub>k</sub>

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

Cable carrier length L<sub>k</sub> rounded to pitch t for odd number of chain links

h <sub>i</sub> [mm]	h <sub>G</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	a <sub>T</sub> max [mm]	a <sub>x</sub> max [mm]	n <sub>T</sub> min	KR [mm]**	q <sub>k</sub> [kg/m]
370	450	200 - 1650	260 - 1710	B <sub>St</sub> + 90	250	250	2	900 - 2400	135 - 164

\* in 1 mm width sections

\*\* individual intermediate sizes available

MT  
seriesXLT  
seriesROBOTRAX®  
System

FLATVEYOR®

CLEANVEYOR®

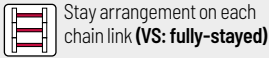
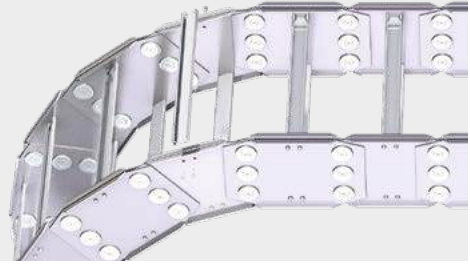
LS/SX  
seriesS/SX  
seriesS/SX-Tubes  
series

Accessories

TRAXLINE®

## Steel stay - steel frame stay, bolted

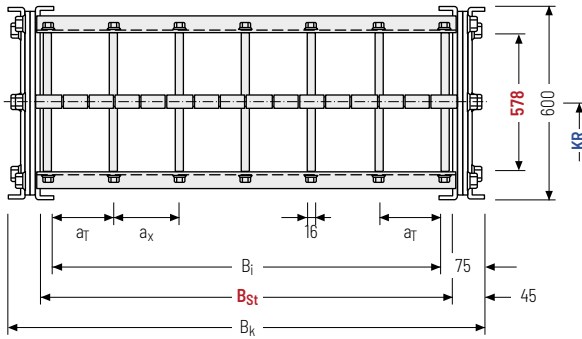
- » Steel profile bars for extremely high additional loads and very large cable carrier widths.
- » Double threaded joint on both sides.
- » Available customized in **1 mm grid**.
- » **Inside/outside:** Threaded joint can be released.



Stay arrangement on each chain link (**VS: fully-stayed**)



**1mm** B<sub>i</sub> 350 - 1800 mm  
in 1 mm width sections



The maximum cable diameter strongly depends on the bending radius and the desired cable type. 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  $t$  for odd number of chain links

$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]	$B_{St}$ [mm]*	$B_k$ [mm]	$a_T$ max [mm]	$a_x$ max [mm]	$nT$ min	KR [mm]**	$q_k$ [kg/m]
578	600	200 - 1650	260 - 1710	$B_{St} + 90$	300	300	2	900 - 2400	198 - 255

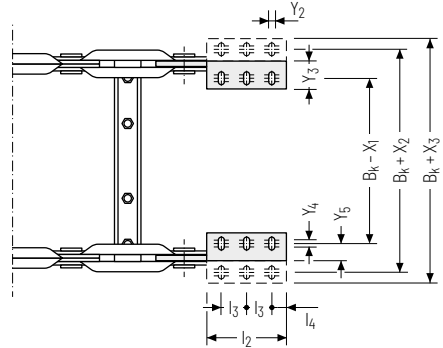
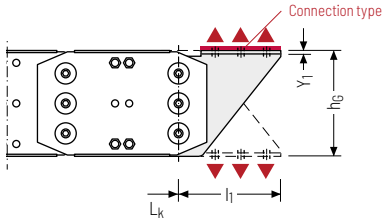
\* in 1 mm width sections

\*\* individual intermediate sizes available



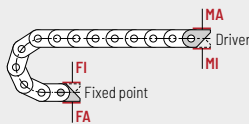
## End connectors - steel

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



▲ Assembly options

Type	$l_1$ [mm]	$l_2$ [mm]	$l_3$ [mm]	$l_4$ [mm]	$X_1$ [mm]	$X_2$ [mm]	$X_3$ [mm]	$Y_1$ [mm]	$Y_2$ [mm]	$Y_3$ [mm]	$Y_4$ [mm]	$Y_5$ [mm]
S/SX5000	300	200	75	25	130	210	290	12	18	90	15	50
S/SX6000	400	300	100	50	130	210	290	12	18	90	15	50
S/SX7000	400	300	100	50	140	220	300	12	22	90	15	50
S/SX8000	400	300	100	50	140	220	300	12	22	90	15	50



### Connection point

**F** - fixed point  
**M** - driver

### Connection type

**A** - threaded joint outside (standard)  
**I** - threaded joint inside

## More product information online



Assembly instructions etc.:  
Additional info via your  
smartphone or check online at  
[tsubaki-kabelschlepp.com/  
downloads](http://tsubaki-kabelschlepp.com/downloads)



Configure your custom  
cable carrier here:  
[online-engineer.de](http://online-engineer.de)



Subject to change without notice.

MT series

XLT series

ROBOTRAX® System

FLATVEYOR®

CLEANVEYOR®

LS/LSX series

SYSX series

SYSX-Tubes series

Accessories

TRAXLINE®

# S/SX9000

## Custom sizes



For over 65 years, TSUBAKI KABELSCHLEPP has been developing and manufacturing steel cable carriers which are used in a great variety of applications, from steel works and shipbuilding to offshore oil rigs. We comply with the required quality and industry standards and are happy to develop customized solutions for your individual projects. We can manufacture special sizes in different materials as per your requirements.

- » Individual problem solutions from an experienced engineering team
- » Maintenance-free systems with a high level of reliability and availability
- » Different materials adapted to the area of application
- » Resistant to temperature, corrosion, chemicals and UV
- » Suitable for use with salt water
- » Explosion protection with classification EX II 2 GD as per ATEX RL
- » Linear and rotating travel paths possible
- » Easy and flexible assembly with modular design
- » Cable weights of over 1000 kg/m possible
- » Long service life



### TSUBAKI KABELSCHLEPP technical support

If you have any questions about the configuration of cable carriers or other technical details please contact our technical support at [technik@kabelschlepp.de](mailto:technik@kabelschlepp.de). We will be happy to help you.





Subject to change without notice.

773

MT  
series

XLT  
series

ROBOTRAX®  
System

FLATVEYOR®

CLEANVEYOR®

LS/LSX  
series

S/SX  
series

S/SX-Tubes  
series

Accessories

TRAXLINE®