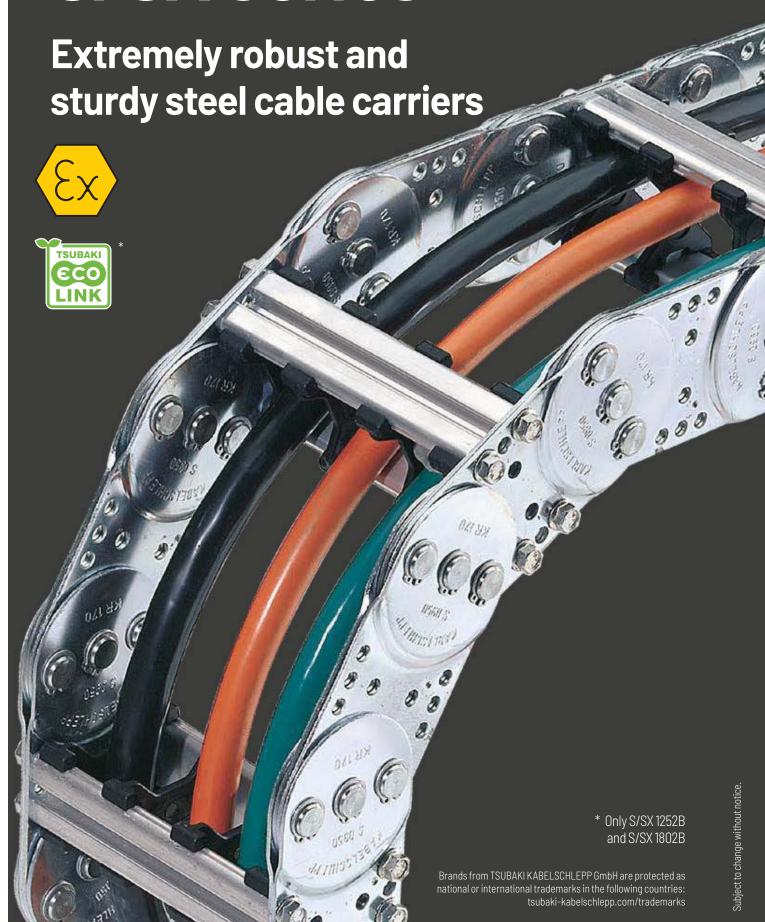
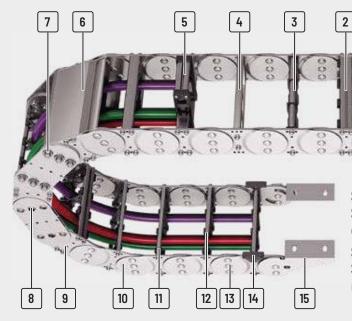
S/SX series



TRAXLINE®



S series

Side bands made of galvanized steel

SX series

Side bands made of steel resistant to rust and acid





- 1 All stays available in 1 mm width sections
- 2 Aluminum stays with 4 screw-fixing points for extreme loads
- **3** Roller stays
- 4 Aluminum hole stays
- **5** Mounting frame stays

- 6 Aluminum cover available in 1 mm width sections
- 7 Joint design with hardened bolts for long service life
- 8 Bolted and riveted joint connections possible
- 9 Straight link plate design (S/SX1252/ 1252B and S/SX1802/1802B)
- 10 Cranked link plate design
- 11 Different separation options for the cables
- **12** Opening inside and outside
- **13** Extremely robust side bands
- **14** Replaceable glide shoes
- **15** End connectors for different connection variants

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: ER1/ER1S and ER2
- » 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



Sandwich design: Link plates consist of two plates



Glide shoes available for gliding applications

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.



























Stroke system with hardened bolt and circlips



Also available as covered variants with cover system or steel band cover, p. 808 and p. 920

MT series	Туре	Opening variant	Stay variant	h _i [mm]	h _G [mm]	B _i [mm]	B _k [mm]	B _{i-} grid [mm]	t [mm]	KR [mm]	$\begin{array}{c} \textbf{Addi-} \\ \textbf{tional} \\ \textbf{load} \\ \leq [kg/m] \end{array}$	Cable- d _{max} [mm]
		do					$\stackrel{\longleftrightarrow}{ }$	X mm			S	
XLT series	S/SX0650											
× se			RS1	31	50	65 - 265	100 – 300	1	65	75 – 400	30	24
_			RS 2	31	50	69 – 369	100 – 400	1	65	75 – 400	30	24
ROBOTRAX® System	(等)(等):		RR	26	50	69 - 369	100 - 400	1	65	75 - 400	30	20
ROE			LG	_	50	35 - 465	70 - 500	1	65	75 – 400	30	26
© W			RMA	31 (200)	50 (224)	155 – 355	200 - 400	1	65	75 - 400	30	_
FLATVEYOR®	S/SX0950											
FLA	8 X 8 X 8		RS1	46	68	107 – 257	150 – 300	1	95	125 – 600	45	36
0R®		A V	RS2	46	68	113 - 363	150 - 400	1	95	125 - 600	45	36
CLEANVEYOR®			RM	43	68	88 - 563	125 - 600	1	95	125 - 600	45	34
- IJ			RR	42	68	115 - 465	150 – 500	1	95	125 – 600	45	33
SX			LG	-	68	82 - 557	125 - 600	1	95	125 - 600	45	38
LS/LSX series			RMR	40	68	108 - 558	150 - 600	1	95	125 - 600	45	32
	S/SX1250											
S/SX series			RS1	72	94	152 – 352	200 - 400	1	125	145 – 1000	50	57
Sel			RS2	72	94	156 – 456	200 - 500	1	125	145 – 1000	50	57
	(181) (181)		RV	72	94	154 - 554	200 - 600	1	125	145 – 1000	50	57
S/SX-Tubes series			RM	69	94	151 – 751	200 - 800	1	125	145 – 1000	50	55
8/8			RR	66	94	160 - 560	200 - 600	1	125	145 – 1000	50	52
ies			LG	-	94	82 - 752	130 - 800	1	125	145 – 1000	50	59
Accessories			RMA	72 (200)	94 (226)	154 - 554	200 - 600	1	125	145 – 1000	50	_
Δ			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

Page		ovemen	M	1	tributior	nner Dis	l	ment	g arrange	Glidin	ngement	rted arrai	Unsuppo
<u>~</u>	rotating arrangement**	lying on the side**	vertical hanging or standing	TS3	TS2	TS1	TS0	a_{max} ≤[m/s ²]	v _{max} ≤[m/s]		a_{max} ≤[m/s ²]	v _{max} ≤[m/s]	$ \begin{array}{l} \textbf{Travel} \\ \textbf{length} \\ \leq [m] \end{array} $
	arrand	<u>S</u>	vertica or										
734	•	•	•	-	***	•	•	2	1	***	5	2,5	5,8
736	•	•	•	-	***	•	•	2	1	***	5	2,5	5,8
738	•	•	•	-	-	•	•	2	1	***	5	2,5	5,8
740	•	•	•	-	-	-	-	2	1	***	5	2,5	5,8
*	-	•	•	-	-	-	•	2	1	***	5	2,5	5,8
744	•	•	•	-	***	•	•	2	1	***	5	2,5	8,8
746	•	•	•	-	***	•	•	2	1	***	5	2,5	8,8
748	•	•	•	-	-	•	•	2	1	***	5	2,5	8,8
750	•	•	•	-	-	•	•	2	1	***	5	2,5	8,8
752	•	•	•	-	-	-	-	2	1	***	5	2,5	8,8
*	•	•	•	-	-	-	•	2	1	***	5	2,5	8,8
758	•	•	•	•	-	•	•	2	1	***	5	2,5	13,5
762	•	•	•	•	-	•	•	2	1	***	5	2,5	13,5
766	•	•	•	•	•	•	•	2	1	***	5	2,5	13,5
770	•	•	•	-	•	•	•	2	1	***	5	2,5	13,5
772	•	•	•	_	_	•	•	2	1	***	5	2,5	13,5
774	•	•	•	_	_	_	_	2	1	***	5	2,5	13,5
*	_	•	•	_	_	_	•	2	1	***	5	2,5	13,5
*	•	•	•	_	_	_	•	2	1	***	5	2,5	13,5

TRAXLINE®

ROBOTRAX® System

S/SX-Tubes series

Accessories

	Туре	Opening variant	Stay variant	h _i [mm]	h _G [mm]	B i [mm]	$B_{\mathbf{k}}$ [mm]	B _i - grid [mm] Xmm ←	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable- d _{max} [mm]
	S/SX1800											
Ž	650 650		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
	(20)(20)		LG	-	140	121 – 941	180 – 1000	1	180	265 – 1300	60	88
	S/SX2500											
٥	,		RM	183	220	175 – 1125	250 - 1200	1	250	365 – 1395	100	146
			LG	-	220	174 – 1124	250 – 1200	1	250	365 – 1395	100	144
	, 35 (35 t											
	S/SX3200											
100			LG	-	300	166 – 1416	250 - 1500	1	320	470 – 1785	150	176
_	3_ 6/3_50 JL											
	S/SX5000											
			***	150	200	133 – 1083	250 – 1200	1	200	500 – 1200	100	_
	S/SX6000											
			***	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.

S/SX series | Overview

	Unsuppo Travel length ≤[m]	rted arran v _{max} ≤[m/s]	a _{max} ≤ [m/s ²]	Travel length	g arrange v _{max} ≤[m/s]	ment $\mathbf{a}_{\text{max}} \leq [\text{m/s}^2]$	TS0	nner Dis TS1	tribution	n TS3		lying on the side**	otating number 1	Page		MT series
	≤[M] ⇔			≤[m] ←→					H		vertical hanging or standing	lying	rotating arrangement**			
																_ SS
	17,8	2	3	***	0,8	2	•	•	-	•	•	•	•	780		XLT series
	17,8	2	3	***	0,8	2	•	•	-	-	•	•	•	782		
	17,8	2	3	***	0,8	2	-	-	-	-	•	•	•	784		ROBOTRAX® System
																8
	23,7	1	3	-	-	-	•	•	•	-	•	•	•	788	_	(a)
	23,7	1	3	-	-	-	-	-	-	-	•	•	•	792		FLATVEYOR®
	24	1	2,5	-	-	-	-	-	-	-	•	•	•	796		CLEANVEYOR®
																LS/LSX series
	12	2	3	-	-	-	-	•	-	-	•	•	•	800		91 S
																S/SX series
																S Se
	16,7	1,5	2	-	-	-	-	•	-	-	•	•	•	801		S/SX-Tubes series
ige without notice.																Accessories

Subject to change witho

TRAXLINE®

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



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. 808.

Subject to change without notice.

Addi-

tional

load

 \leq [kg/m]

600

800

KR

Cable-

 d_{max}

[mm]

Accessories

S/SX-Tubes series

S/SX series | Overview

Unsuppo	rted arrai	ngement	Glidin	g arrange	ment	l	nner Dis	tributior	1	M	ovemen		Page
	v _{max} ≤[m/s]	a_{max} ≤[m/s ²]	$ \begin{array}{l} \textbf{Travel} \\ \textbf{length} \\ \leq [m] \end{array} $	v max ≤[m/s]	a_{max} ≤[m/s ²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side**	rotating arrangement**	Ра
										vertica	Ŋ	arran	
24,9	0,5	0,3	-	-	-	-	•	-	_	•	•	•	802
24,9	0,5	0,3	-	-	-	-	•	-	-	•	•	•	803
													806

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 1page 734

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 736

Frame stay narrow, bolted

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



Aluminum stay RRpage 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.

Additional stay variants on request



Aluminum stay RMAFor guiding very large cable diameters



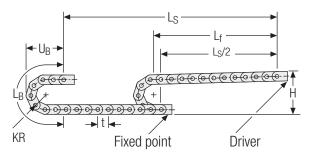
S/SX tubes

Also available as covered variants with cover system or steel band cover. More information can be found in chapter "S/SX tubes" from p. 808.

ROBOTRAX® System

CLEANVEYOR®

Unsupported arrangement



KR	Н	L_B	U_B
[mm]	[mm]	[mm]	[mm]
7 5	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 Hz

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

Load diagram for unsupported length depending on the additional load.

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



Speed up to 2.5 m/s



Acceleration up to 5 m/s²



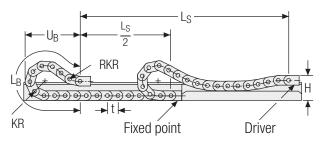
Travel length up to 5.8 m



Additional load up to 30 kg/m

30.0 15.0 Additional load q_z in kg/m 3.0 1.0 1.5 2.0 2.5 3.0 **L**f in m 0.5 3.5 L_S in m 1.0 2.0 3.0 4.0 5.0 6.0

Gliding arrangement



The gliding cable carrier must be guided in a channel. See p. 850.

Glide shoes have to be used for gliding applications.



Speed up to 1 m/s



Acceleration up to 2 m/s²



Travel length on request



Additional load up to 30 kg/m

RAXLINE

S/SX-Tubes series

Accessories

XLT series

ROBOTRAX® System

-LATVEYOR®

CLEANVEYOR®

LS/LSX series

> S/SX series

S/SX-Tubes series

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.





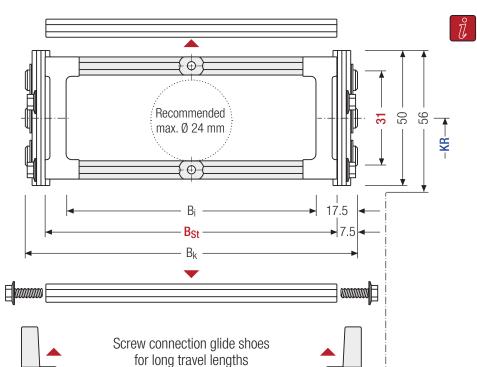
Stay arrangement on every 2nd chain link standard (**HS: half-stayed**)



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



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



 $KR_{min} = 95 \text{ mm}$

- B_{EF}

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]	h _{Gʻ} [mm]	B _i [mm]	B _{St} [mm]*	B _k [mm]	B _{EF} [mm]			K [m	i R m]			q _k [kg/m]
31	50	56	65	85	R ₀₊ ⊥ 15	B ₀₊ ⊥ 20	75	95	115	125	135	145	3.95 - 4.82
01	30	30	265	285	D2[+ 10	D2[+ 20	155	175	200	250	300	400	4.82

^{*} in 1 mm width sections

SX0650 Type	180 B _{St} [mm]	. RS 1 . Stay variant	135 KR [mm]	St -	1430 L _k [mm]	HS Stay arrangement
**		*				, ,

MT

ROBOTRAX® System

CLEANVEYOR®

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd 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).

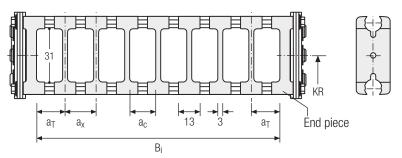
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

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 TS0 without height separation

Vers.	a _{T min} [mm]			n _{T min}
Α	11.5	13	10	_

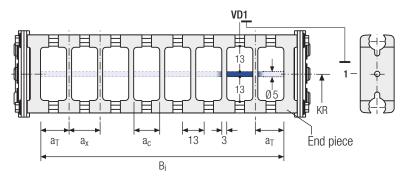
The dividers can be moved in the cross section.



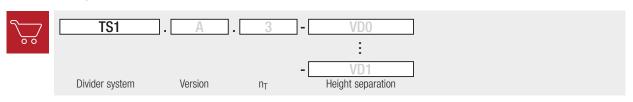
Divider system TS1 with continuous height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]	a_{c min} [mm]	n _{T min}
Α	11.5	13	10	2

The dividers can be moved in the cross section.



Order example



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

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.

| RAXLINE® |

Accessories

S/SX-Tubes series

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.





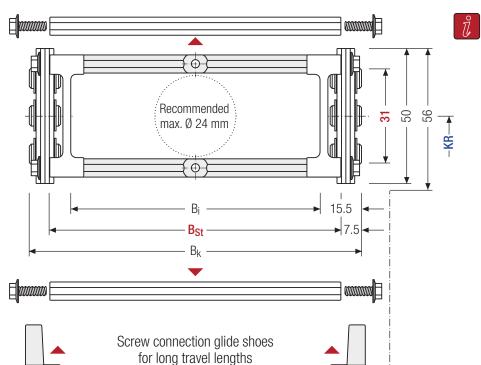
Stay arrangement on every 2nd chain link standard (**HS: half-stayed**)



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



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



 $KR_{min} = 95 \text{ mm}$

- B_{EF}

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

$$L_{k} \approx \frac{L_{S}}{2} + L_{B}$$

 $\begin{array}{c} \text{Cable carrier length } L_{k} \\ \text{rounded to pitch } t \end{array}$

h _i [mm]	h _G [mm]	h _{Gʻ} [mm]	B _i [mm]	B _{St} [mm]*	B _k [mm]	B _{EF} [mm]			K [m	R m]			q _k [kg/m]
21	50	56	69	85	Po. 1 15		75	95	115	125	135	145	3.95
JI	30	30	369	385	DSt + 13	DSt + 20	155	175	200	250	300	400	5.25

^{*} in 1 mm width sections

	S0650 .	180	. RS 2 .	135 .	St -	1430	HS
00	Туре	B _{St} [mm]	Stay variant	KR [mm]	Material	L _k [mm]	Stay arrangement

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd 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).

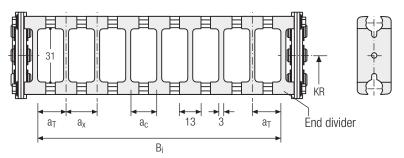
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

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 TS0 without height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]	•	n _{T min}
Α	11.5	13	10	<u> </u>

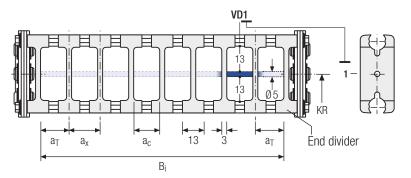
The dividers can be moved in the cross section.



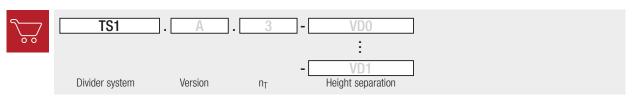
Divider system TS1 with continuous height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]	a_{c min} [mm]	n _{T min}
Α	11.5	13	10	2

The dividers can be moved in the cross section.



Order example



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

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.

TRAXLINE®

XLT series

ROBOTRAX® System

'LATVEY0R®

CLEANVEYOR®

LS/LSX series

S/SX series

XLINE®

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.





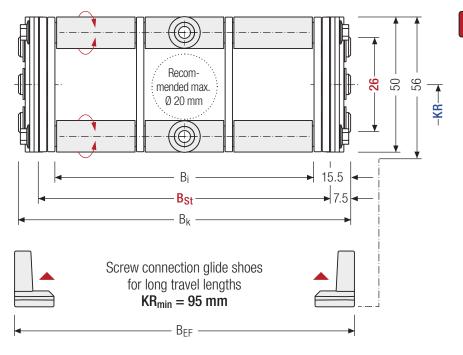
Stay arrangement on every 2nd chain link standard (**HS: half-stayed**)



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



 B_k 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_k

$$L_{k} \approx \frac{L_{S}}{2} + L_{B}$$

 $\begin{array}{c} \text{Cable carrier length L_{k}} \\ \text{rounded to pitch t} \end{array}$

h _i [mm]	h _G [mm]	h gʻ [mm]	B _i [mm]	B _{St} [mm]*	B _k [mm]	B _{EF} [mm]			K [m	R m]			q _k [kg/m]
26	50	56	69 _	85	Rc+ ± 15			95					
20	00	00	369	385	DS[1 10	DS[1 Z0	155	175	200	250	300	400	8.67

^{*} in 1 mm width sections

	S0650	180	. RR	135	. St	1430	HS Stay arrangement
0.0	Type	B _{St} [mm]	Stay variant	KR [mm]	Material	L _k [mm]	Stay arrangement

ROBOTRAX® System

CLEANVEYOR®

Divider systems

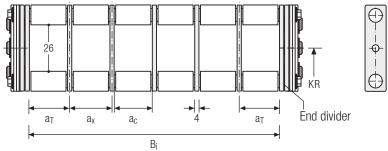
As a standard, the divider system is mounted on each crossbar - for stay mounting on every 2nd chain link (HS).

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

Divider system TS0 without height separation

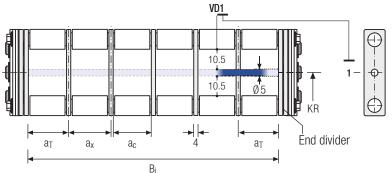
S/SX0650 RR | Inner distribution | TS0 · TS1





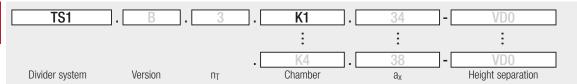
Divider system TS1 with continuous height separation





Order example





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).



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

Accessories

S/SX-Tubes series

XLT series

ROBOTRAX[®] System

FLATVEYOR®

CLEANVEYOR®

LS/LSX series

S/SX

S/SX-Tubes series

Accessories

AC AC

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



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

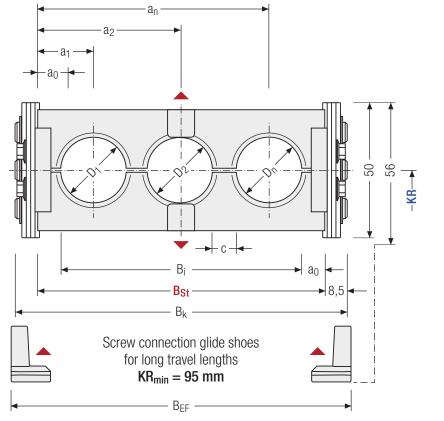


Stay arrangement on each chain link (VS: fully-stayed)



 $B_i 70 - 500 \text{ mm}$ 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}

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

		[kg/m]
34 10 50 56 - 	95 115 125 145 155 175 250 300 400	3.90

\sim	S0650 Type	. 180 B _{St} [mm]	. LG Stay variant	. 135 KR [mm]	. St Material	- 1430 L _k [mm]	HS Stay arrangement

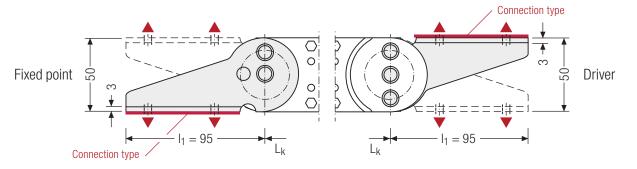
ROBOTRAX® System

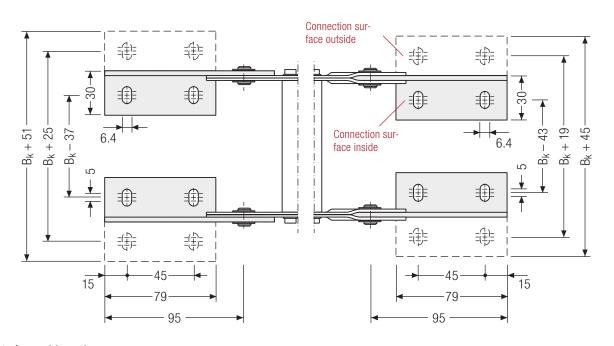
CLEANVEYOR®

S/SX0650 | End connectors | Steel connectors

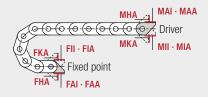
End connectors - steel

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



Caution: The standard connection

variant FAI/MAI is only possible from

Connection point

F – fixed point

M – driver

Connection type

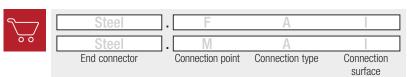
- A threaded joint to outside (standard)
- threaded joint to inside
- H threaded joint, rotated 90° to the outside
- K threaded joint, rotated 90° to the inside

Connection surface

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

Order example

B_k of 70 mm.





We recommend the use of strain reliefs at the driver and fixed point. See from p. 908.

TRAXLINE®

S/SX-Tubes series

Accessories

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 1page 744

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 2page 746

Frame stay narrow, bolted

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



Aluminum stay RMpage 748

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 750

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 752

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. 808.

Subject to change without notice.

ROBOTRAX® System

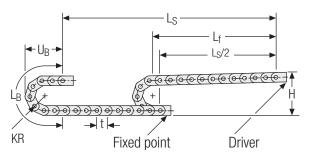
CLEANVEYOR®

LS/LSX series

S/SX-Tubes series

Accessories

Unsupported arrangement



KR [mm]	H [mm]	L _B [mm]	U_B [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_z

 $H_7 = H + 10 \text{ mm/m}$

Load diagram for unsupported length depending on the additional load.

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



Speed up to 2.5 m/s

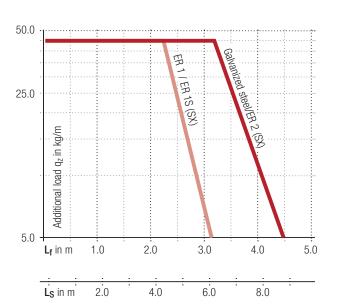


Acceleration up to 5 m/s²

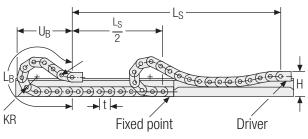




Additional load up to 45 kg/m



Gliding arrangement



The gliding cable carrier must be guided in a channel. See p. 850.

Glide shoes have to be used for gliding applications.



Speed up to 1 m/s



Acceleration up to 2 m/s²



Travel length on request



Additional load up to 45 kg/m

XLT series

ROBOTRAX® System

FLATVEY0R®

CLEANVEYOR®

LS/LSX series

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





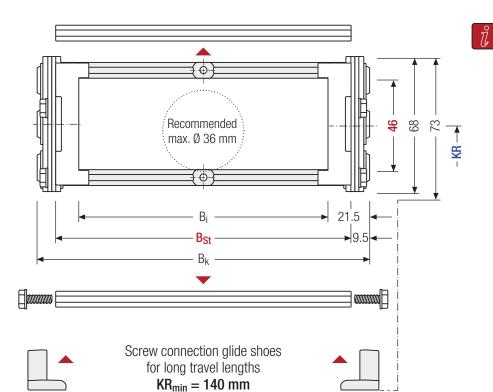
Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**



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



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



- B_{EF} -

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

$$L_{k} \approx \frac{L_{S}}{2} + L_{B}$$

 $\begin{array}{c} \text{Cable carrier length } L_{k} \\ \text{rounded to pitch } t \end{array}$

[mm] [r	ing [mm]	nG ʻ	Di [mm]	imm]*	[mm]	mm]			[mm]			4k [kg/m]
46	68	73	1 <u>0</u> 7	1 <u>3</u> 1	B _{St} + 19	B _{St} + 28	125 290	140 320	170 350	200 410	260 600	7. <u>5</u> 5 7.95

^{*} in 1 mm width sections

	S0950 .	150	. RS 1 .	200 .	St -	2375	HS
00	Type	B _{St} [mm]	Stay variant	KR [mm]	Material	L _k [mm]	Stay arrangement

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd 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).

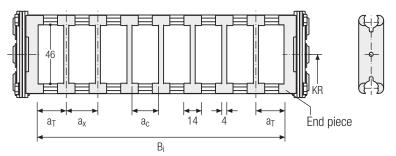
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

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 TS0 without height separation

Vers.	a _{T min} [mm]			n _{T min}
Α	12	14	10	_

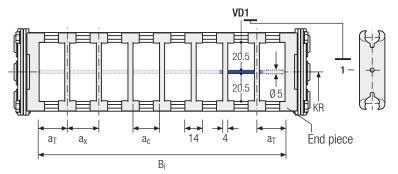
The dividers can be moved in the cross section.



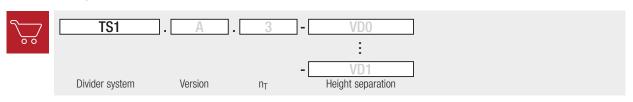
Divider system TS1 with continuous height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]	a_{c min} [mm]	n _{T min}
Α	12	14	10	2

The dividers can be moved in the cross section.



Order example



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

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

XLT

ROBOTRAX® System

LATVEYOR®

CLEANVEYOR®

LS/LSX series

RAXI INF

XLT series

ROBOTRAX® System

CLEANVEYOR®

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.





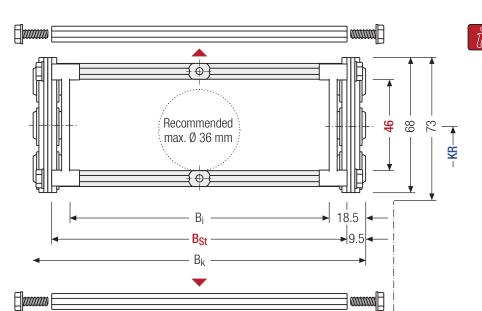
Stay arrangement on every 2nd chain link, standard (HS: half-stayed)



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



 B_k from 150 – 400 mm in 1 mm width sections



Screw connection glide shoes for long travel lengths $KR_{min} = 140 \text{ mm}$

– B_{EF} –

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

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

Cable carrier length Lk rounded to pitch t

$L_{k} \approx \frac{1}{2}$	+ LB
Cahla carri	iar lanat

h _i [mm]	h _G [mm]	h _{Gʻ} [mm]	B _i [mm]	B _{St} [mm]*	B _k [mm]	B _{EF} [mm]			KR [mm]			q_k [kg/m]
46	68	73	113	131	B _{St} + 19	B _{St} + 28	125	140	170	200	260	7.55
			303	38 I			290	320	350	410	טטט	8.21

^{*} in 1 mm width sections

5	Т	S0950	٦.[150	٦.	RS 2].[200	٦. [St	7-1	2375		HS
		Туре		B _{St} [mm]		Stay variant		KR [mm]		Material		L _k [mm]	П	Stay arrangement

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd 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).

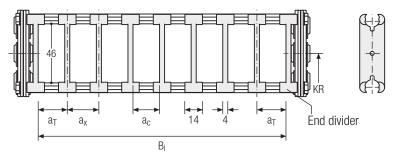
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

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 TS0 without height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]	a _{c min} [mm]	n _{T min}
Α	12	14	10	_

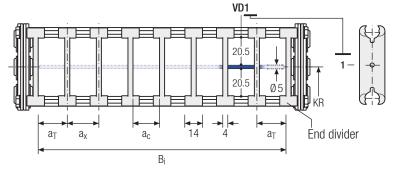
The dividers can be moved in the cross section.



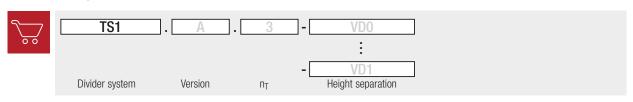
Divider system TS1 with continuous height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]	a_{c min} [mm]	n _{T min}
Α	12	14	10	2

The dividers can be moved in the cross section.



Order example



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

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.

AXI INF®

XLT series

ROBOTRAX® System

CLEANVEYOR®

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.

TSUBAKI KABELSCHLEPP



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

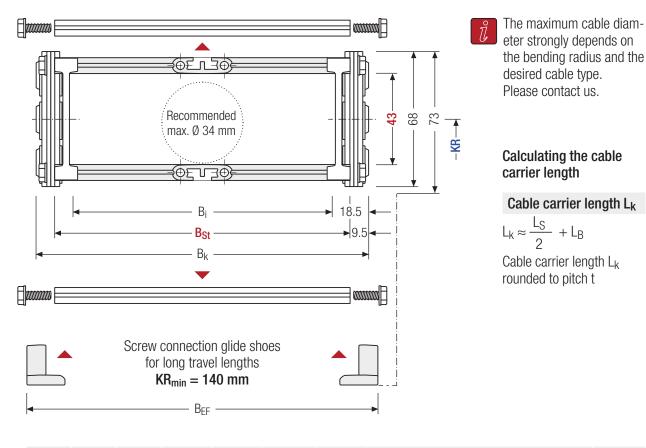


Stay arrangement on each chain link (VS: fully-stayed)



 B_k from 125 – 600 mm in 1 mm width sections





h i [mm]	h _G [mm]	h gʻ [mm]	B i [mm]	B _{St} [mm]*	B _k [mm]	B EF [mm]	KR [mm]				q k [kg/m]	
/ /2	68	72	88	1 <u>0</u> 6	Ro 10	Ro. ⊥ 28	125	140	170	200	260	7 <u>.7</u> 8
 40	00	73	563	581	DS[+ 13	DSI + 20	290	320	350	410	600	10.68

^{*} in 1 mm width sections

S0950 Type	. 150 B _{St} [mm]	. RM . Stay variant	200 KR [mm]	. St Material	- 2375 L _k [mm]	HS Stay arrangement
Туро	D9([iiiiii]	Otay variant	rar [mm]	Matorial	∠K []	Otay arrangement

MT

Divider systems

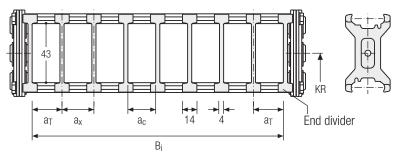
The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

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 _{T min} [mm]	a _{x min} [mm]	a_{c min} [mm]	n _{T min}
Α	10	14	10	<u> </u>

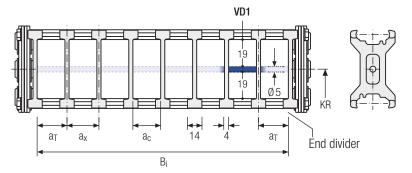
The dividers can be moved in the cross section.



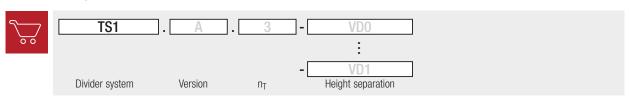
Divider system TS1 with continuous height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]	a _{c min} [mm]	n _{T min}
Α	10	14	10	2

The dividers can be moved in the cross section.



Order example



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

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.

"RAXLINE®

XLT eries

ROBOTRAX® System

-LATVEYOR®

CLEANVEYOR®

-S/LSX series

S/SX series

® AL

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.





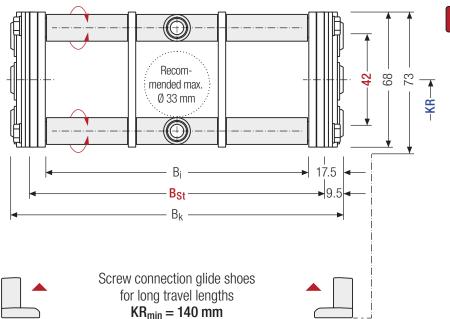
Stay arrangement on every 2nd chain link standard (**HS: half-stayed**)



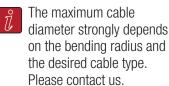
Stay arrangement on each chain link (VS: fully-stayed)



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



— В_{ЕБ} -



Calculating the cable carrier length

Cable carrier length L_k

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

 $\begin{array}{c} \text{Cable carrier length } L_k \\ \text{rounded to pitch } t \end{array}$

hį	hG	hgʻ	Bi	B _{St}	B_k	B _{EF}			KR			q_k
[mm]	[mm]	[mm]	[mm]	[mm]*	[mm]	[mm]			[mm]			[kg/m]
40	60	70	115	131	B _{St} + 19	Do. 1 20	125	140	170	200	260	8.42
42	00	73	465	4 8 1	DSt + 19	DSt + 20	290	320	170 350	410	600	11.75

^{*} in 1 mm width sections

	<u>\$0950</u> .	150	. RR .	200 .	St -	2375	HS
0 0	Туре	B _{St} [mm]	Stay variant	KR [mm]	Material	L _k [mm]	Stay arrangement

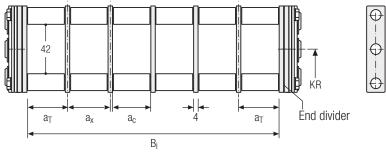
Divider systems

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

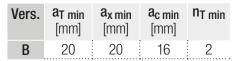
The dividers are fixed through the tubes. The tube additionally serves as a spacer between the dividers **(version B)**.

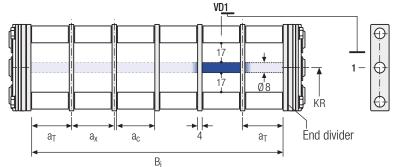
Divider system TS0 without height separation





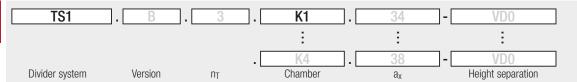
Divider system TS1 with continuous height separation





Order example





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).



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

XLT series

ROBOTRAX® System

CLEANVEYOR®

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.

TSUBAKI KABELSCHLEPP





Stay arrangement on every



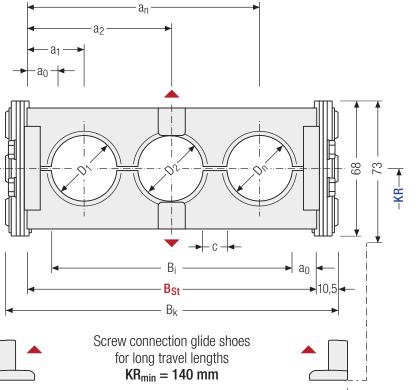
Stay arrangement on each chain link (VS: fully-stayed)



 $B_i 125 - 600 \text{ mm}$ in 1 mm width sections

2nd chain link standard (HS: half-stayed)





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 Lk 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]	$\begin{array}{c} a_{0 \; min} \\ [\text{mm}] \end{array}$	KR [mm]			q_k 50 %** [kg/m]	
				82	104	B _{St}	B _{St}	•		125	140	170	200	7.97
50	12	68	73	<u> </u>	- 1	+	+	4	11	260	290	320	350	<u> </u>
				557	579	21	30			410	600	:		11.82

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

Order example

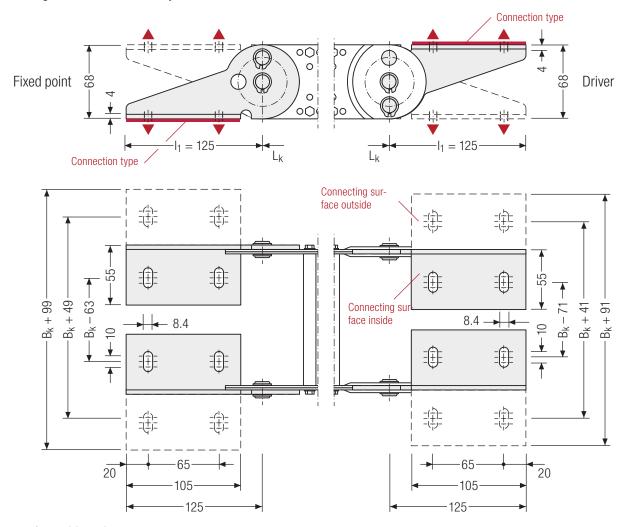


Accessories

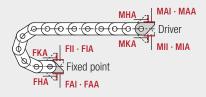
S/SX0950 | End connectors | Steel connectors

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



Caution: The standard connection

variant FAI/MAI is only possible from

Connection point

F – fixed point

M – driver

Connection type

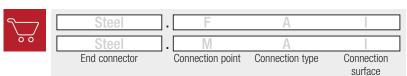
- A threaded joint to outside (standard)
- threaded joint to inside
- H threaded joint, rotated 90° to the outside
- K threaded joint, rotated 90° to the inside

Connection surface

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

Order example

B_k of 122 mm.





We recommend the use of strain reliefs at the driver and fixed point. See from p. 908.

TRAXLINE®

Jas – Sel

S/SX1250



Pitch 125 mm



Inner heights 66 – 76 mm



Chain widths 130 – 800 mm



Bending radii 145 – 1000 mm

Stay variants



Aluminum stay RS 1page 758

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 2page 762

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 766

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 RMpage 770

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**.

Aluminum stay RRpage 772

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.



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. 808.

Additional stay variants on request



Aluminum stay RMA For guiding very large cable diameters



Aluminum stay RMR Gentle cable guiding with rollers.

ROBOTRAX® System

CLEANVEYOR®

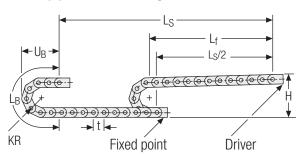
LS/LSX series

S/SX-Tubes series

Accessories

S/SX1250 | Installation dim. | Unsupported · Gliding

Unsupported arrangement



KR [mm]	H [mm]	L _B [mm]	U _B [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 Hz

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

Load diagram for unsupported length depending on the additional load.

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



Speed up to 2.5 m/s



Acceleration up to 5 m/s²



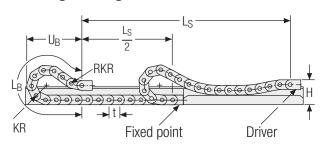
Travel length up to 13.5 m



Additional load up to 50 kg/m

50.0 25.0 Additional load q_z in kg/m 5.0 **L**f in m 1.0 3.0 8.0 **L**_S in m 2.0 4.0 6.0 8.0 10.0 12.0 14.0

Gliding arrangement



The gliding cable carrier must be guided in a 🖳 channel. See p. 850.

Glide shoes have to be used for gliding applications.



Speed up to 1 m/s



Acceleration up to 2 m/s²



Travel length on request



Additional load up to 50 kg/m

Subject to change without notice.

XLT series

@

ROBOTRAX® System

FLATVEYOR®

CLEANVEYOR®

LS/LSX series

S/SX series

S/SX-Tubes series

Accessories

TRAXLINE®

XLT series

ROBOTRAX® System

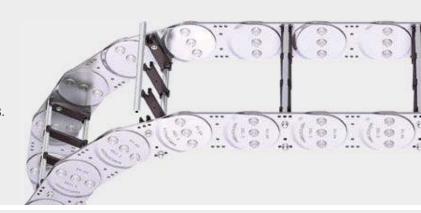
-LATVEYOR®

CLEANVEYOR®

LS/LSX series

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.





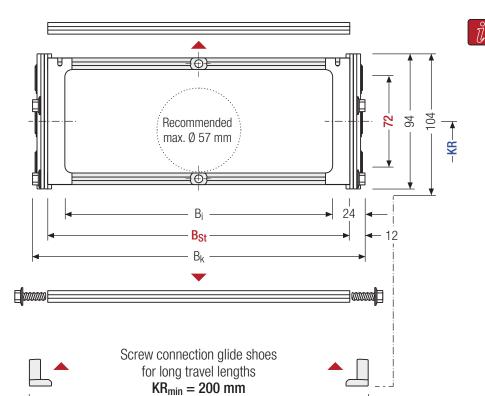
Stay arrangement on every 2nd chain link, standard **(HS: half-stayed)**



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



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



— В_{ЕБ} -

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

$$L_{k} \approx \frac{L_{S}}{2} + L_{B}$$

 $\begin{array}{c} \text{Cable carrier length } L_{k} \\ \text{rounded to pitch } t \end{array}$

h _i	h _G	h _{Gʻ}	B _i	B _{St}	B _k	B _{EF}	KR	q k
[mm]	[mm]	[mm]	[mm]	[mm]*	[mm]	[mm]	[mm]	[kg/m]
72	94	104	1 <u>5</u> 2 352	1 <u>7</u> 6 376	B _{St} + 24	B _{St} + 30	145 200 220 260 300 340 420 460 500 540 600 1000	380 12,88 13,43

^{*} in 1 mm width sections

S	C1250	400	DC 1	200	C+	1750	ПС
	\$1250	P [mm]	Otaviorations	VD [mm]	Material	4/30	Ctour owner a research
0 0	lype	B _{St} [mm]	Stay variant	KR [mm]	Material	L _k [mm]	Stay arrangement

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2^{nd} 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).

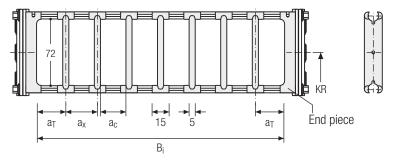
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

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 TS0 without height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]		n _{T min}
Α	12.5	15	10	_

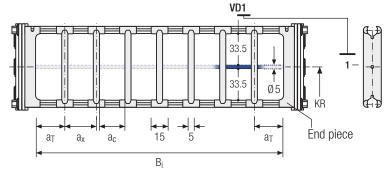
The dividers can be moved in the cross section.



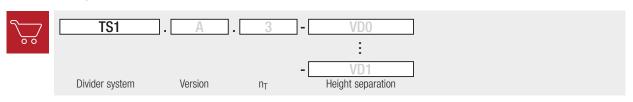
Divider system TS1 with continuous height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]	a_{c min} [mm]	n _{T min}
Α	12.5	15	10	2

The dividers can be moved in the cross section.



Order example



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

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

ROBOTRAX® System

TVEYOR®

CLEANVEYOR®

LS/LSX series

S/SX ceries

S/SX-Tubes series

Accessories

NXI INF®

S/SX1250 RS 1 | Inner distribution | TS3

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

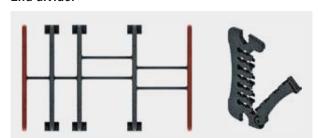
XLT series

ROBOTRAX® System

S/SX-Tubes

Divider version A

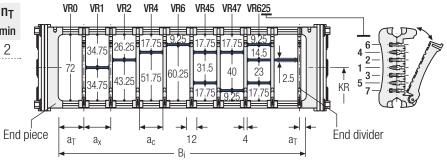
End divider

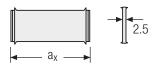


Vers.	a _{T min} [mm]	a _{x min} [mm]	a _{c min} [mm]	n _T min			
Α	7*/11	14	10	2			
* For End dividor							

For End divider

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

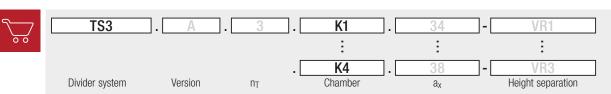




				;	a _x (ce	enter	dista	nce o	f divi	ders)	[mm]					
a _c (nominal width of inner chamber) [mm]																
14	16	19	23	24	28	29	32	33	34	38	39	43	44	48	49	54
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	59	64	68	69	74	78	79	80	84	88	89	94	96	99	112	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

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

Order example



Please state the designation of the divider system (TSO, 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.

XLT series

ROBOTRAX® System

FLATVEYOR®

CLEANVEYOR®

LS/LSX series

S/SX series

S/SX-Tubes series

Accessories

TRAXLINE®



XLT series

ROBOTRAX® System

LATVEYOR®

CLEANVEYOR®

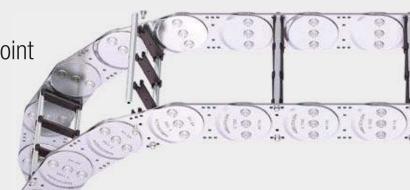
LS/LSX series

NE®

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.





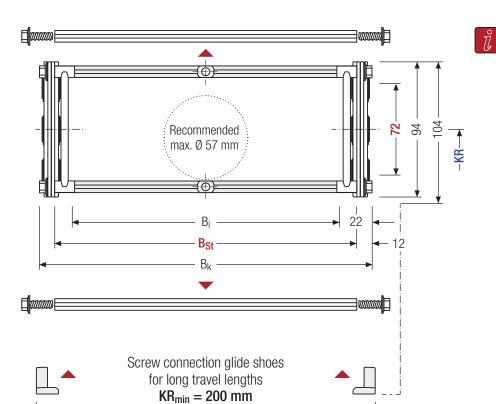
Stay arrangement on every 2nd chain link, standard (**HS: half-staved**)



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



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



— В_{ЕБ} -

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

$$L_{k} \approx \frac{L_{S}}{2} + L_{B}$$

 $\begin{array}{c} \text{Cable carrier length } L_{k} \\ \text{rounded to pitch } t \end{array}$

72 94 104 156 476 B _{St} + 24 B _{St} + 30 145 200 220 260 300 340 380 12	[h i [mm]	h _G [mm]	hgʻ [mm]	B _i [mm]	B _{St} [mm]*	B _k [mm]	B _{EF} [mm]				KR [mm]				q _k [kg/m]
12 : 07 : 107 : 450 : 470 : 105(1 27: 105(1 00 : 400 : 600 : 600 : 600 : 1000		72	94	104	156	176	B _{St} + 24	B _{St} + 30	145	200	220	260	300	340 38	30	12.88

^{*} in 1 mm width sections

S	C1250	400	DC 2	200	C+	4750	не
	Type	B _{St} [mm]	Stay variant	KR [mm]	Material	L _k [mm]	Stay arrangement

MT

ROBOTRAX® System

CLEANVEYOR®

Divider systems

The divider system is mounted on each crossbar as a standard – on every 2nd 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).

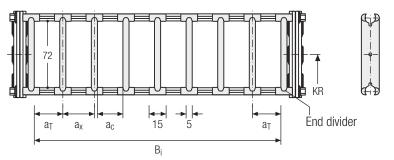
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

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 TS0 without height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]		n _{T min}
Α	12.5	15	10	_

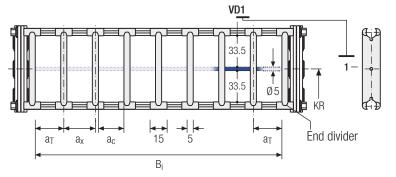
The dividers can be moved in the cross section.



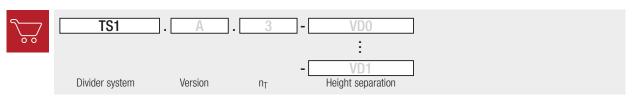
Divider system TS1 with continuous height separation

Vers.	a_{T min} [mm]	a _{x min} [mm]	a_{c min} [mm]	n _{T min}
Α	12.5	15	10	2

The dividers can be moved in the cross section.



Order example



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

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.

Accessories

S/SX-Tubes series

XLT series

ROBOTRAX® System

S/SX-Tubes

S/SX1250 RS 2 | Inner distribution | TS3

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.

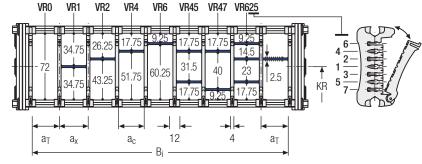
Divider version A

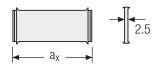


Vers.	a _{T min}	a _{x min}	a _{c min}	n _T
	[mm]	[mm]	[mm]	min
Α	10*/12	14	10	2

* For VR0

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

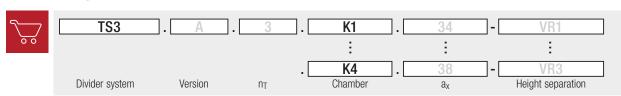




	a _x (center distance of dividers) [mm]															
a _c (nominal width of inner chamber) [mm]																
14	16	19	23	24	28	29	32	33	34	38	39	43	44	48	49	54
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	59	64	68	69	74	78	79	80	84	88	89	94	96	99	112	
54	55	60	64	65	70	74	75	76	80	84	85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

When using **partitions with a_x > 49 mm** we recommended an additional preferential central support.

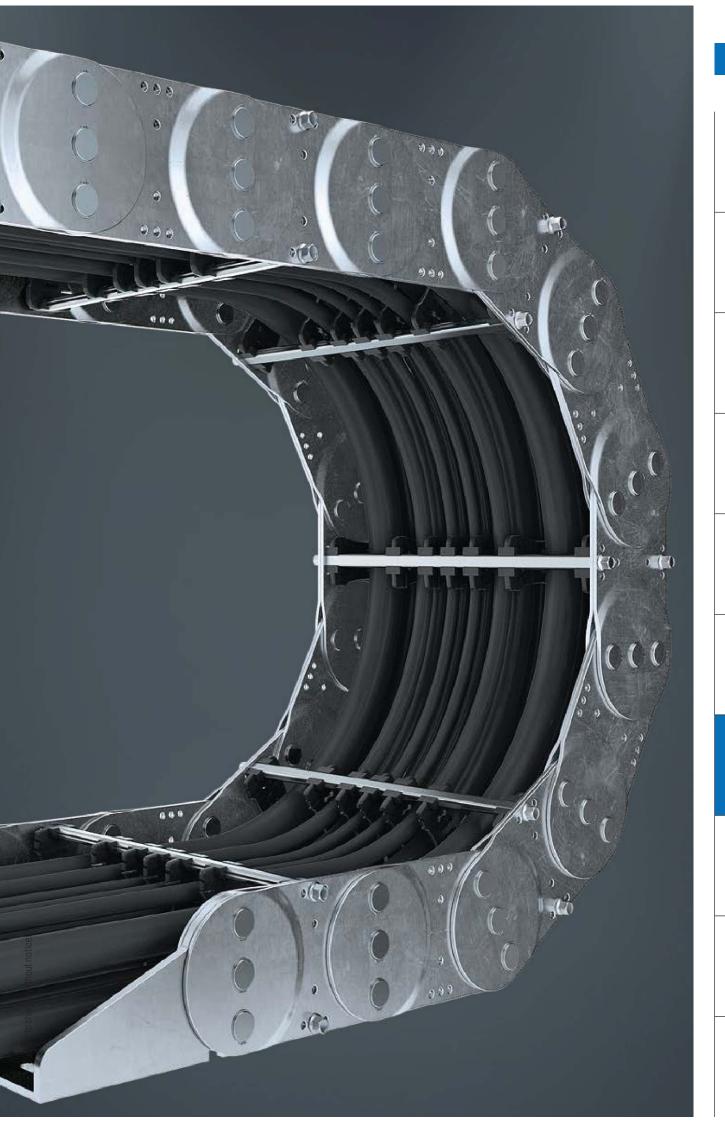
Order example



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.

TRAXLINE®



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.





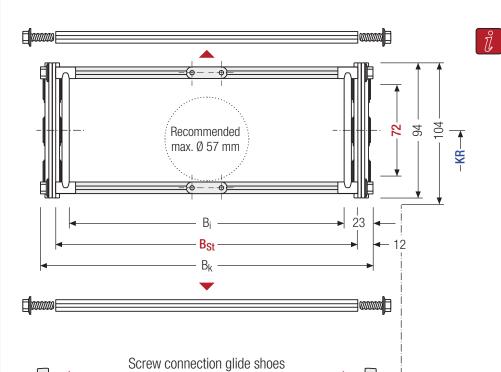
Stay arrangement on every 2nd chain link, standard (**HS: half-staved**)



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



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



for long travel lengths $KR_{min} = 200 \text{ mm}$

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

$$L_{k} \approx \frac{L_{S}}{2} + L_{B}$$

 $\begin{array}{c} \text{Cable carrier length } L_k \\ \text{rounded to pitch } t \end{array}$

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	1 <u>5</u> 4 554	1 <u>7</u> 6 576	B _{St} + 24	B _{St} + 30	145 420	200 460	220 500	260 540	300 600	340 3 1000	880	13 <u>.</u> 83 17.11

^{*} in 1 mm width sections

Order example



MT series

XLT series

ROBOTRAX® System

FLATVEYOR®

CLEANVEYOR®

LS/LSX series

S/SX corioc

S/SX-Tubes series

Accessories

Divider systems

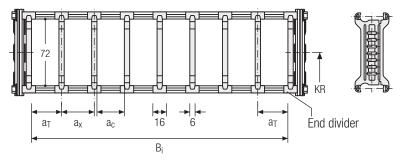
The divider system is mounted on each crossbar as a standard — on every 2nd chain link for stay mounting (HS).

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 _{T min} [mm]	a _{x min} [mm]		n _{T min}
Α	13	16	10	_

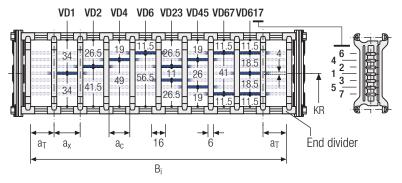
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]	a _{c min} [mm]	n _{T min}
Α	13	16	10	2

The dividers can be moved in the cross section.

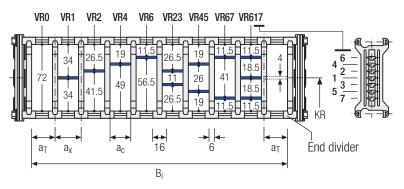


Divider system TS2 with partial height separation

Vers.	a _{T min}	a _{x min}	a _{c min}	n _T
	[mm]	[mm]	[mm]	min
Α	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).



More product information online



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



Configure your custom cable carrier here: online-engineer.de

TRAXI INF®

XLT series

ROBOTRAX® System

CLEANVEYOR®

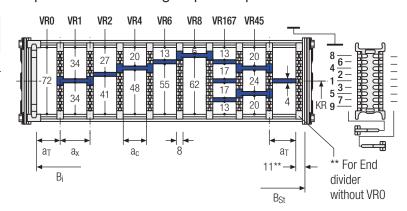
S/SX1250 RV | Inner distribution | TS3

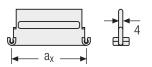
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a _{T min} [mm]	a _{x min} [mm]		n _{T min}
Α	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.



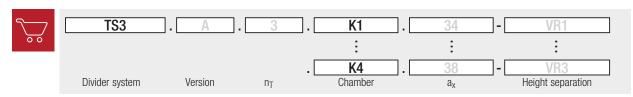


Aluminum partitions in 1 mm width increments with $a_x > 42 \text{ mm}$ are also available.

	a _x (center distance of dividers) [mm]												
	a _c (nominal width of inner chamber) [mm]												
16	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



Please state the designation of the divider system (TSO, 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



Configure your custom cable carrier here: online-engineer.de

Subject to change without notice.

Accessories

S/SX-Tubes

TRAXLINE®



XLT series

ROBOTRAX® System

FLATVEY0R®

CLEANVEYOR®

LS/LSX series

ME® A

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



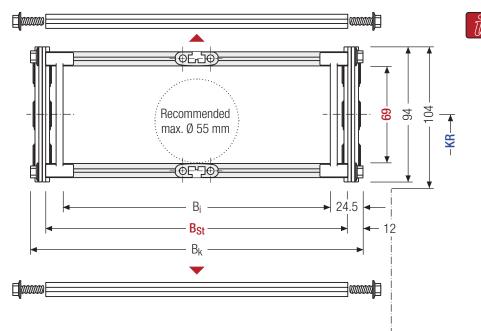
Stay arrangement on every 2nd chain link, standard (**HS: half-staved**)



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



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



Screw connection glide shoes for long travel lengths $\frac{KR_{min} = 200 \text{ mm}}{B_{EF}}$

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

$$L_{k} \approx \frac{L_{S}}{2} + L_{B}$$

 $\begin{array}{c} \text{Cable carrier length } L_k \\ \text{rounded to pitch } t \end{array}$

h _i	h _G	h _{Gʻ}	B _i	B _{St} [mm]*	B _k	B _{EF}	KR	q _k
[mm]	[mm]	[mm]	[mm]		[mm]	[mm]	[mm]	[kg/m]
69	94	104	1 <u>5</u> 1 751	1 <u>7</u> 6 776	B _{St} + 24	B _{St} + 30	145 200 220 260 300 340 380 420 460 500 540 600 1000	13 <u>.</u> 42 17.01

^{*} in 1 mm width sections

1		S1250	. 400	. RM	. 200	. St	- 4750	HS
	<u> </u>	Туре	B _{St} [mm]	Stay variant	KR [mm]	Material	L _k [mm]	Stay arrangement

MT

ROBOTRAX® System

CLEANVEYOR®

S/SX-Tubes series

Accessories

Divider systems

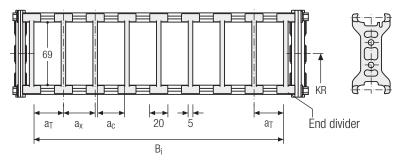
The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

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 _{T min} [mm]	$\begin{array}{c} a_{x\;min}\\ [mm] \end{array}$		n _{T min}
Α	17.5	20	15	-

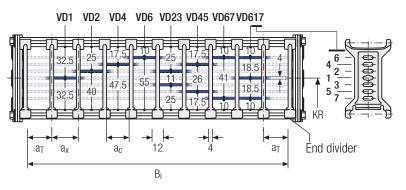
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]	a _{c min} [mm]	n _{T min}
Α	10	12	8	2

The dividers can be moved in the cross section.

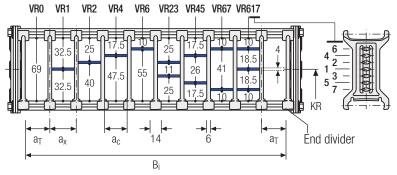


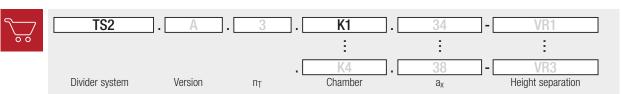
Divider system TS2 with partial height separation

Vers.	a _{T min}	a _{x min}	a _{c min}	n _T
	[mm]	[mm]	[mm]	min
Α	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).





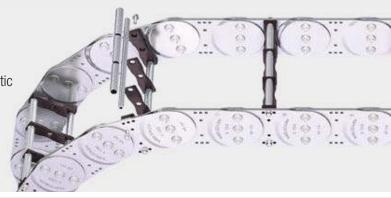
ROBOTRAX® System

CLEANVEYOR®

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.





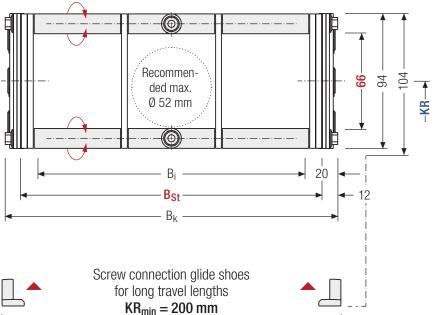
Stay arrangement on every 2nd chain link, standard (HS: half-stayed)



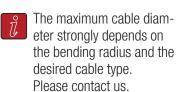
Stay arrangement on each chain link (VS: fully-stayed)



 B_k from 200 – 800 mm in 1 mm width sections



- B_{EF} -



Calculating the cable carrier length

Cable carrier length L_k

$$L_{k} \approx \frac{L_{S}}{2} + L_{B}$$

Cable carrier length Lk

		!	
		į	rounded to pitch t
Screw connection glide shoes			rounded to pitch t
for long troughton		1	

h _i [mm]	h _G [mm]	h _{Gʻ} [mm]	B _i [mm]	B _{St} [mm]*	B _k [mm]	B _{EF} [mm]				KR [mm]				q _k [kg/m]
66	94	104	1 <u>6</u> 0	1 <u>7</u> 6	B _{St} + 24	B _{St} + 30	145 420	200 460	220 500	260 540	300 600	340 1000	380	13.82 17.30

^{*} in 1 mm width sections

7	7	S1250	400].	RR].[200].[St]-[4750	HS
00		Type	B _{St} [mm]		Stay variant		KR [mm]		Material		L _k [mm]	Stay arrangement



Divider systems

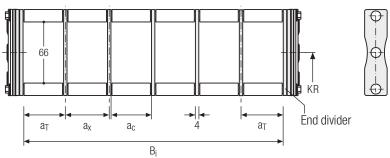
As a standard, the divider system is mounted on each crossbar - for stay mounting on every 2nd chain link (HS).

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

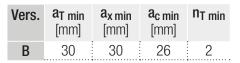
Divider system TS0 without height separation

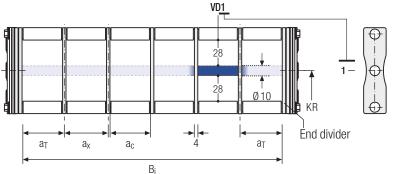
S/SX1250 RR | Inner distribution | TS0 · TS1 · TS2





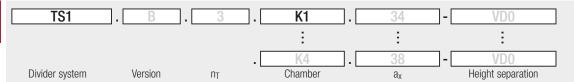
Divider system TS1 with continuous height separation





Order example





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).



TRAXLINE® cables for cable carriers

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MT series

ROBOTRAX® System

CLEANVEYOR®

S/SX-Tubes series

Accessories

XLT series

ROBOTRAX® System

FLATVEYOR®

CLEANVEYOR®

-V/L>X series

S/SX

S/SX-Tubes series

Accessories

NE®

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.

TSUBAKI KABELSCHLEPP



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

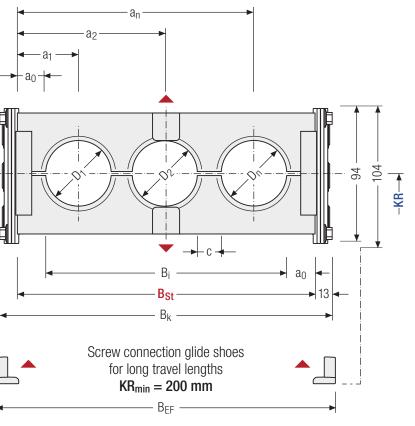


Stay arrangement on each chain link (VS: fully-stayed)



 B_i 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}

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

		[mm]	[mm]		B _{St} [mm]*		[mm]	[mm]	a _{0 min} [mm]	KR [mm]			q_k 50 %** [kg/m]		
				82	1 <u>0</u> 4	B _{St}	B _{St}			145	200	220	260	300	13.10
76	12	94	104	750	774	+	+	4	11	340	380	420	460	500	<u> </u>
				752	//4	26	32			540	600	1000			18.22

 $^{^{\}star}$ in 1 mm width sections $\,$ $\,$ ** Hole ratio of the hole stay approx. 50 %

S1250 Type	. 400 B _{St} [mm]	LG Stay variant	200 KR [mm]	. St - Material	4750 L _k [mm]	HS Stay arrangement

,

XLT series

ROBOTRAX® System

FLATVEYOR®

CLEANVEYOR®

LS/LSX series

> S/SX series

S/SX-Tubes series

Accessories

TRAXLINE®

XLT series

ROBOTRAX® System

CLEANVEYOR®

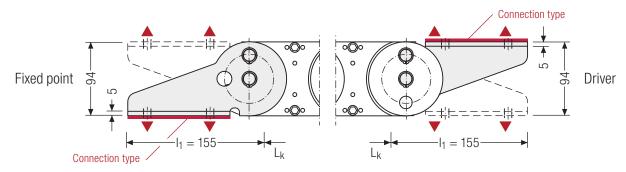
S/SX-Tubes series

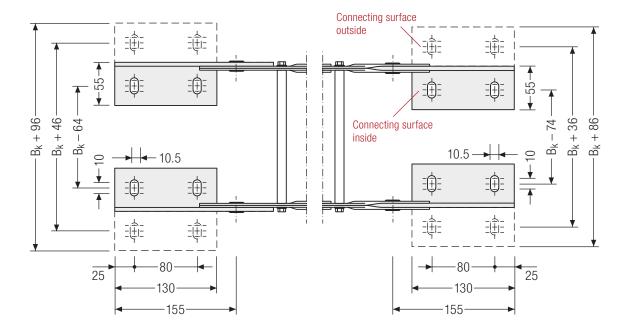
Accessories

S/SX1250 | End connectors | Steel connectors

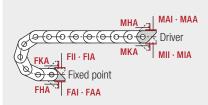
End connectors - steel

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



Caution: The standard connection

variant FAI/MAI is only possible from

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

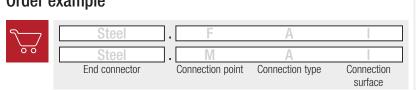
Connection surface

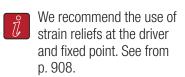
– connection surface inside (standard)

A - connection surface outside

Order example

 B_k of 125 mm.





Subject to change without notice.

Special designs

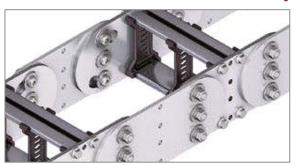
S/SX1252 – with closed stroke system and straight link plates

S/SX1252 / S/SX1252 B | Special designs



- 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.



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MT

ROBOTRAX® System

CLEANVEYOR®

S/SX-Tubes series

Accessories

S/SX1800



Pitch 180 mm



Inner height 104 - 110 mm



Chain widths 180 - 1000 mm



Bending radii 265 - 1300 mm

Stay variants



Aluminum stay RMpage 780

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 RRpage 782

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 784

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

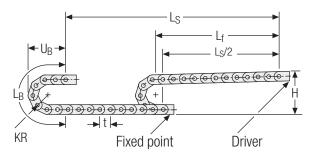
Also available as covered variants with cover system or steel band cover. More information can be found in chapter "S/SX tubes" from p. 808.

MT

ROBOTRAX® System

CLEANVEYOR®

Unsupported arrangement



KR [mm]	H [mm]	L _B [mm]	U_B [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 Hz

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

Load diagram for unsupported length depending on the additional load.

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



Speed up to 2 m/s

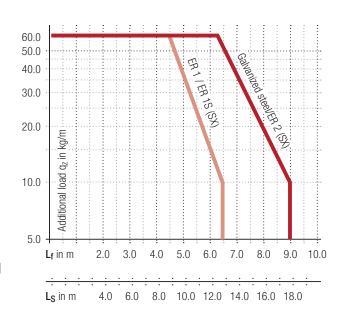


Acceleration up to 3 m/s²

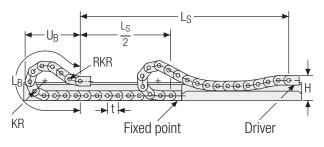




Additional load up to 60 kg/m



Gliding arrangement



The gliding cable carrier must be guided in a channel. See p. 850.

Glide shoes have to be used for gliding applications.



Speed up to 0.8 m/s



Acceleration up to 2 m/s²



Travel length on request



Additional load up to 60 kg/m

Subject to change without notice.

RAXLINE

S/SX-Tubes series

Accessories

XLT series

ROBOTRAX® System

CLEANVEYOR®

S/SX-Tubes series

Accessories

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)

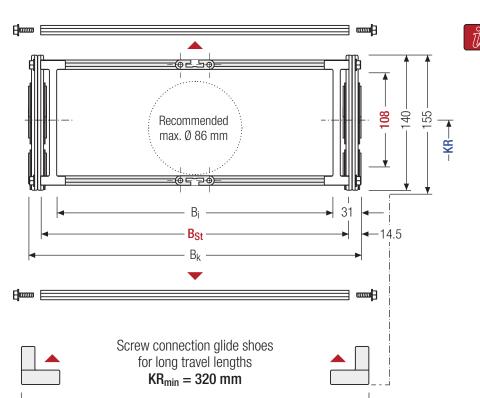


Stay arrangement on each chain link (VS: fully-stayed)



 B_k from 250 – 1000 mm in 1 mm width sections





- B_{EF} -

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 Lk

$$L_{k} \approx \frac{L_{S}}{2} + L_{B}$$

Cable carrier length Lk rounded to pitch t for odd number of chain links

[r	h_i nm]	h _G [mm]	h gʻ [mm]	B i [mm]	B _{St} [mm]*	B _k [mm]	B _{EF} [mm]			KR [mm]			q k [kg/m]
_	108	140	155	1 <u>8</u> 8	<u>22</u> 1	Rc+ + 29	Po 40	265	320	375	435	490	24.08
	100	140	100	938	971	DSt + 29	B _{St} + 40	605	720	890	1175	1300	28.46

^{*} in 1 mm width sections

$\overline{}$	SX1800	. 417	. RM	. 375	. St	- 5940	HS
	Туре	B _{St} [mm]	Stay variant	KR [mm]	Material	L _k [mm]	Stay arrangement

Divider systems

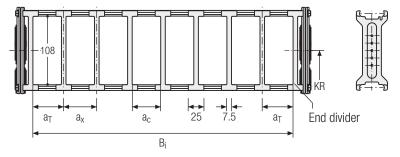
The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

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 _{T min} [mm]			n _{T min}
Α	21.5	25	17.5	_

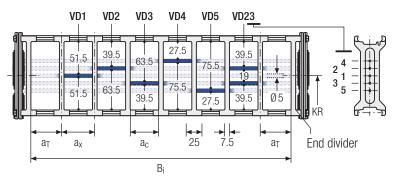
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]	a _{c min} [mm]	n _{T min}
Α	21.5	25	17.5	2

The dividers can be moved in the cross section.

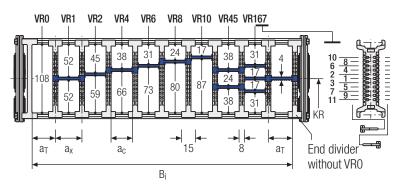


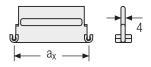
Divider system TS3 with height separation consisting of plastic partitions

Vers.		a _{x min} [mm]		n _{T min}
Α	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 $a_x > 42$ 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											
 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.

RAXLINE®

LT ries

ROBOTRAX® System

-LATVEYOR®

CLEANVEYOR®

Series

S/SX corios

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.





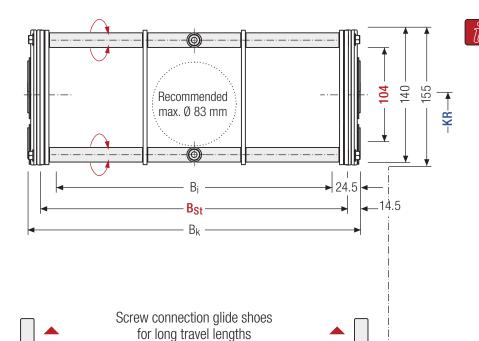
Stay arrangement on every 2nd chain link, standard (**HS: half-stayed**)



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



 B_k from 250 - 800 mm in 1 mm width sections



 $KR_{min} = 320 \text{ mm}$

– B_{EF} -

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 Lk

$$L_{k} \approx \frac{L_{S}}{2} + L_{B}$$

Cable carrier length L_k rounded to pitch t

n _i ng [mm] [mm	h gʻ [mm]	B i [mm]	B _{St} [mm]*	[mm]	[mm] BEF		KK [mm]		q k [kg/m]
104 140	155	2 <u>0</u> 1 751	221	B _{St} + 29	B _{St} + 40	 • •		435 1175	 26 <u>,</u> 57 36,05

^{*} in 1 mm width sections

S1800 Type	. 417 B _{St} [mm]	. RR . Stay variant	375 . [St -	5940 L _k [mm]	HS Stay arrangement
Турс	BSt [IIIIII]	Otay variant	VU [IIIII]	Matorial	rk [iiiiii]	otay arrangement

Divider systems

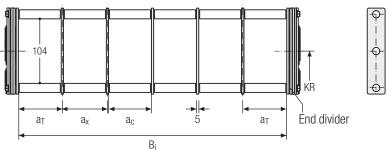
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2^{nd} chain link (HS).

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

Divider system TS0 without height separation



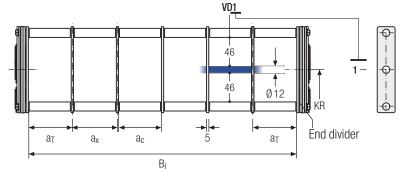
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

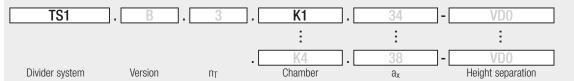
Vers.	a _{T min} [mm]	a _{x min} [mm]	a _{c min} [mm]	n _{T min}
В	45	45	40	2

The dividers can be moved in the cross section.



Order example





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).



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PRAXI INF®

XLT series

ROBOTRAX® System

FLATVEY0R®

CLEANVEYOR®

LS/LSX series

S/SX

S/SX-Tubes series

Accessories

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



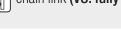
Stay arrangement on every 2nd chain link standard (**HS: half-stayed**)

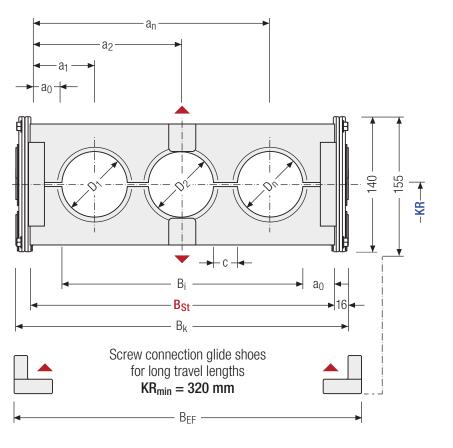


Stay arrangement on each chain link (VS: fully-stayed)



 B_i 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 _{Gʻ} [mm]	B _i [mm]	B _{St} [mm]*	B _k [mm]	B _{EF} [mm]	C _{min} [mm]	a _{0 min} [mm]	K [m		q_k 50 %** [kg/m]
				121	148	B _{St}	B _{St}			 320	 	24.38
110	12	140	155	941	968	+ 32	+ 43	4		 605 1300	 890	35.08

 $^{^{\}star}$ in 1 mm width sections $\quad^{\star\star}$ Hole ratio of the hole stay approx. 50 %

	S1800 Type	417 B _{St} [mm]	. LG Stay variant	375 KR [mm]	St Material	5940 L _k [mm]	HS Stay arrangement
--	-------------------	-----------------------------	----------------------	----------------	----------------	-----------------------------	------------------------

TRAXLINE®



XLT series

ROBOTRAX® System

FLATVEY0R®

XLT series

ROBOTRAX® System

CLEANVEYOR®

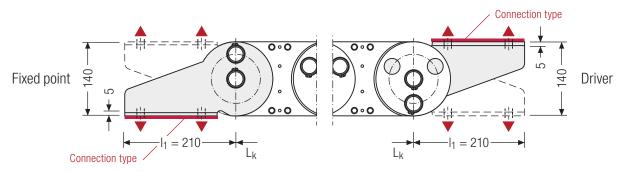
S/SX-Tubes series

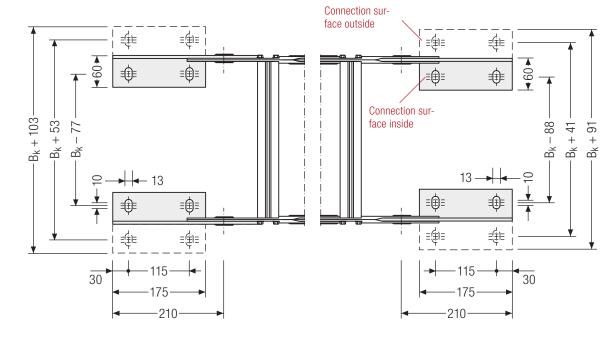
Accessories

S/SX1800 | End connectors | Steel connectors

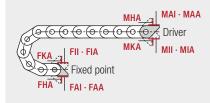
End connectors - steel

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



Caution: The standard connection

variant FAI/MAI is only possible from

Connection point

F – fixed point

M – driver

Connection type

A – threaded joint to outside (standard)

- threaded joint to inside

H - threaded joint, rotated 90° to the outside

K - threaded joint, rotated 90° to the inside

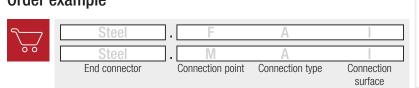
Connection surface

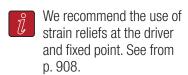
– connection surface inside (standard)

A - connection surface outside

Order example

 B_k of 139 mm.





Special designs

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

S/SX1802 / S/SX1802 B | Special designs



- 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.



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MT

ROBOTRAX® System

CLEANVEYOR®

S/SX-Tubes series

Accessories

S/SX2500



Pitch 250 mm



Inner height 180 - 183 mm



Chain widths 250 - 1200 mm



Bending radii 365 - 1395 mm

Stay variants



Aluminum stay RMpage 790

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 792

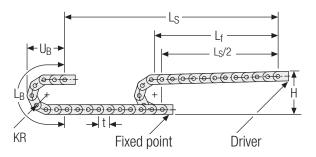
- Frame stay, split Optimum cable routing in the neutral bending line. Split version for easy cable routing.
- Inside/outside: Threaded joint easy to release.



Steel band cover

Also available as covered variants with steel band cover. More information can be found in chapter "steel band cover" from p. 920.

Unsupported arrangement



KR	, H	LB	U_{B}
[mm]	[mm]	[mm]	[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_{z}

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

Load diagram for unsupported length depending on the additional load.

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



Speed up to 1 m/s



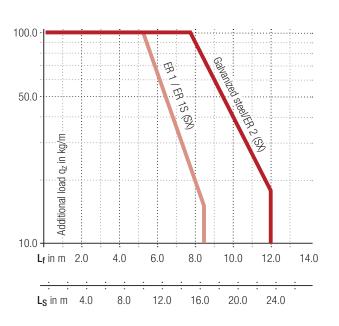
Acceleration up to 3 m/s²



Travel length up to 23.7 m



Additional load up to 100 kg/m



XLT series

ROBOTRAX® System

CLEANVEYOR®

S/SX-Tubes series

Accessories

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



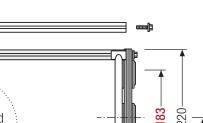
Stay arrangement on every 2nd chain link, standard (HS: half-stayed)



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



B_i 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 Lk rounded to pitch t for odd number of chain links

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	B _i → 37.	ō ←	
	→ B _{St} →	← 16	
•	B _k	•	
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h _i [mm]	h G [mm]	B i [mm]	B _{St} [mm]*	B_k [mm]	KR [mm]			q_k [kg/m]	
183	220	1 <u>7</u> 5	2 <u>1</u> 8	D ₂ , 20	365	445	600	760	38.68
100	220	1125	1168	DSt + 32	920	1075	1235	1395	44.58

^{*} in 1 mm width sections



Divider systems

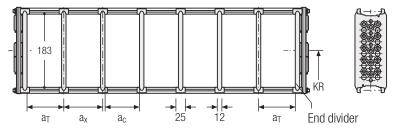
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

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

Divider system TS0 without height separation

Vers.	a _{T min} [mm]			n _{T min}
Α	19	25	13	_

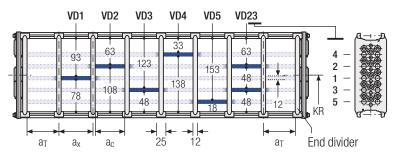
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]	a _{c min} [mm]	n _{T min}
Α	19	25	13	2

The dividers can be moved in the cross section.

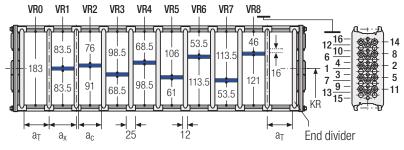


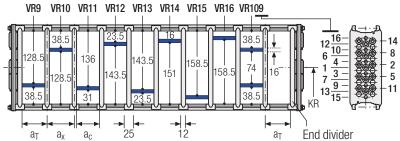
Divider system TS2 with partial height separation

Vers.	a _{T min} [mm]	a _{x min} [mm]	a_{c min} [mm]	n _{T min}
Α	40	46	34	2

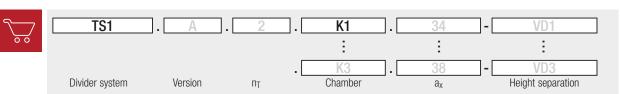
Standard height separation with **tube Ø 16 mm.**

The dividers can be moved in the cross section.





Order example



MT series

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



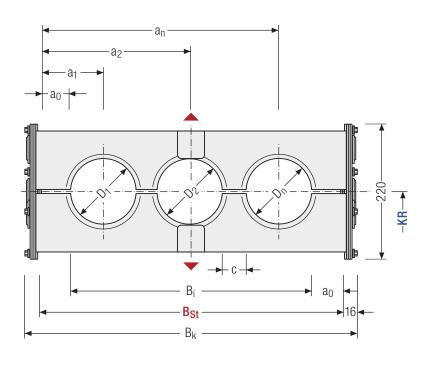
Stay arrangement on every 2nd chain link standard (**HS: half-stayed**)



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



 B_i 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]		K [m	R m]		q_k 50 %** [kg/m]
180	12	220	1 <u>7</u> 4	2 <u>1</u> 8	B _{St} + 32	1	22	365	445	600	760	36.66
100	12	220	1124	1168	D2[+ 02	7	<i></i>	920	1075	1235	1395	48.36

Order example



XLT series

ROBOTRAX® System

FLATVEYOR®

CLEANVEYOR®

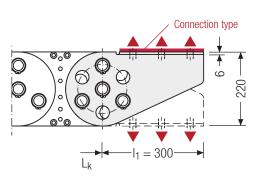
.S/LSX series

S/SX

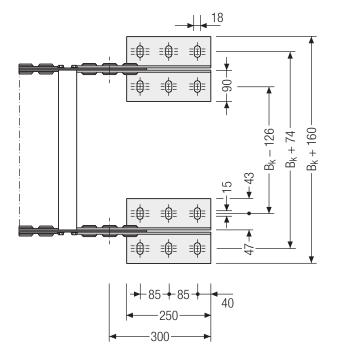
S/SX-Tubes series

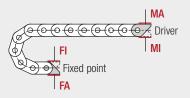
Accessories

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

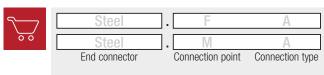
M – driver

Connection type

A – threaded joint outside (standard)

threaded joint inside

Order example





We recommend the use of strain reliefs at the driver and fixed point. See from p. 908.

More product information online



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



Configure your custom cable carrier here: online-engineer.de

MT series

S/SX3200



Pitch 320 mm



Inner height 220 mm

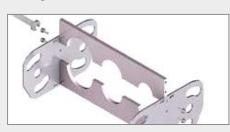


Chain widths 250 - 1500 mm



Bending radii 470 – 1785 mm

Stay variants



Aluminum stay LG page 796

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

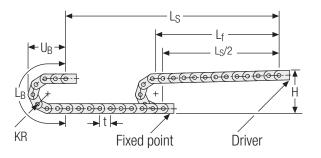
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at tsubaki-kabelschlepp.com/totaltrax



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

Unsupported arrangement



KR	Н	L_B	U_B
[mm]	[mm]	[mm]	[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 Hz

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

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

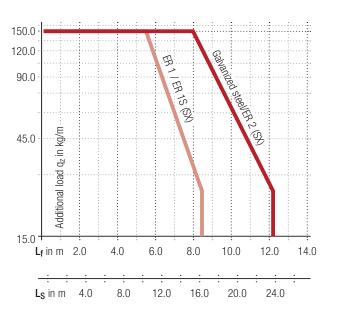


Acceleration up to 2.5 m/s²





Additional load up to 150 kg/m



More product information online



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



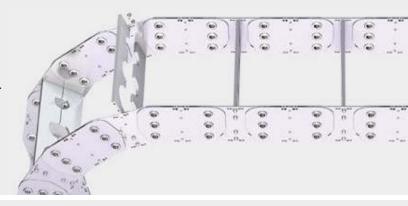
Configure your custom cable carrier here: online-engineer.de

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





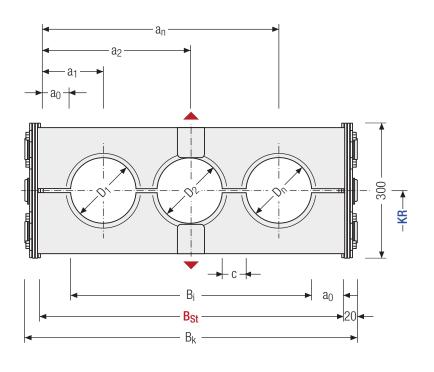
Stay arrangement on every 2nd chain link, standard (**HS: half-staved**)



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



 B_i 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}

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

Subject to change without notice.

	D _{max} [mm]	D _{min} [mm]	h _G [mm]	B _i [mm]	B _{St} [mm]*	B _k [mm]	c _{min} [mm]	$\begin{array}{c} a_{0\;min}\\ [\text{mm}] \end{array}$	KR [mm]			q_k 50 %** [kg/m]
	220	10	300	1 <u>6</u> 6	2 <u>1</u> 0	Bc+ + 40	4	22	470 670	870	1075	57 <u>.</u> 48
	220	12	300	1416	1460	BSt + 40			1275 1480	1785		72.66

Order example



MT series

XLT series

FLATVEY0R®

CLEANVEYOR®

.S/LSX series

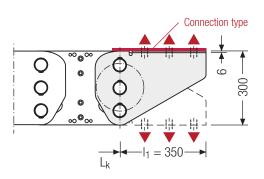
/SX

S/SX-Tubes series

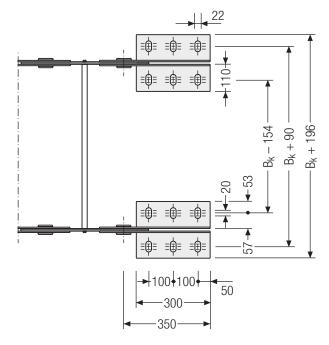
Accessories

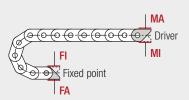
End connectors - steel

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

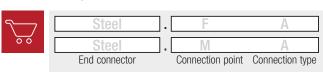
M - driver

Connection type

A – threaded joint outside (standard)

threaded joint inside

Order example





We recommend the use of strain reliefs at the driver and fixed point. See from p. 908.

More product information online



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



Configure your custom cable carrier here: online-engineer.de

RAXLINE®

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 800

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**



TRAXLINE® cables for cable carriers

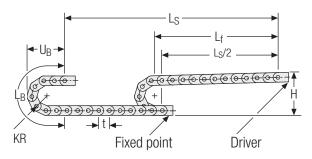
Hi-flex electric cables which were especially developed, o ptimized and tested for use in cable carriers can be found at tsubaki-kabelschlepp.com/traxline

MT

ROBOTRAX® System

CLEANVEYOR®

Unsupported arrangement



Туре	KR [mm]	H [mm]	L _B [mm]	U B [mm]
S/SX5000	min. 500	1200	1970	800
3/3/3000	max. 1200	2600	4170	1500
S/SX6000	min. 700	1700	2840	1170
3/3/0000	max. 1500	3300	5350	1970
S/SX7000	min. 900	2250	3725	1575
9/9Y/000	max. 2400	5250	8435	3075
S/SX8000	min. 900	2400	3925	1750
3/3/0000	max. 2400	5400	8635	3250

Installation height Hz

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

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.



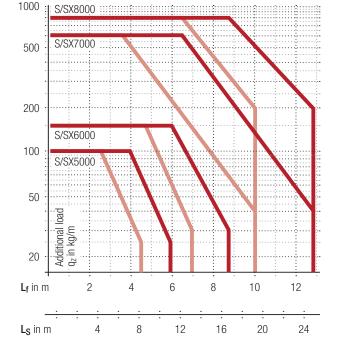
Speed

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/s² S/SX6000 up to 2.0 m/s² S/SX7000 up to 0.3 m/s² S/SX8000 up to 0.3 m/s²



S5000/6.../7.../8... galvanized steel SX5000/6.../7.../8... ER 2 SX5000/6.../7.../8... ER 1 / ER 1S



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



Configure your custom cable carrier here: online-engineer.de

S/SX-Tubes series

Accessories

MT series

XLT series

ROBOTRAX® System

CLEANVEYOR®

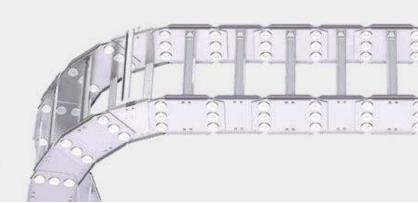
LS/LSX series

S/SX-Tubes series

Accessories

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.



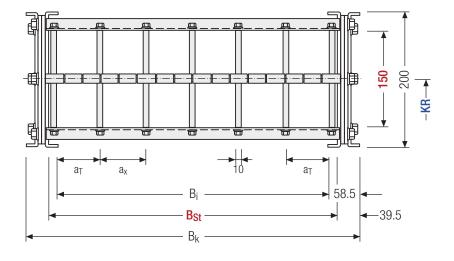


Stay arrangement on each chain link (VS: fully-stayed)



B_i 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	h _G	B i	B _{St}	B_k	a _{T max}	a _{x max}	n _{T min}	KR	q_k
[mm]	[mm]	[mm]	[mm]*	[mm]	[mm]	[mm]		[mm]**	[kg/m]
150	200	1 <u>3</u> 3 1083	1 <u>7</u> 1 1121	B _{St} + 79	150	150	2	5 <u>0</u> 0 1200	42.5 52.0

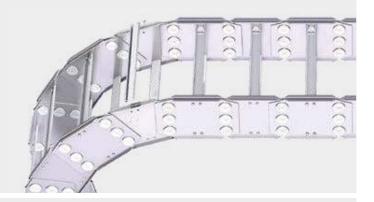
^{*} in 1 mm width sections

^{**} individual intermediate sizes available

S/SX6000 | Dimensions · Technical data

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.

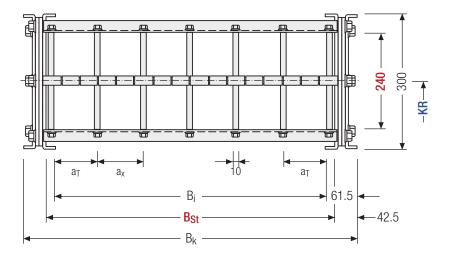




Stay arrangement on each chain link (VS: fully-stayed)



 $B_i 300 - 1500 \text{ mm}$ 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	h_G	B i	B _{St}	B_k	a _{T max}	a _{x max}	n _{T min}	KR	q_k
[mm]	[mm]	[mm]	[mm]*	[mm]	[mm]	[mm]		[mm]**	[kg/m]
240	300	1 <u>7</u> 7 1377	2 <u>1</u> 5 1415	B _{St} + 85	200	200	2	7 <u>0</u> 0 1500	55 79

^{*} in 1 mm width sections

^{**} individual intermediate sizes available

MT series

XLT series

ROBOTRAX® System

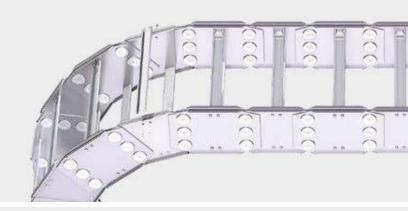
CLEANVEYOR®

S/SX-Tubes series

Accessories

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.

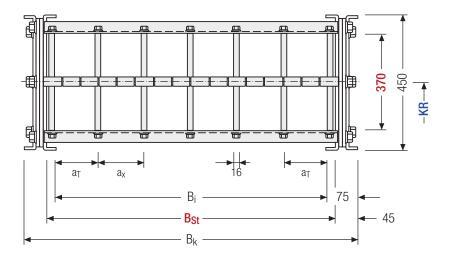




Stay arrangement on each chain link (VS: fully-stayed)



B_k 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_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	h _G	B _i	B _{St}	B_k	a _{T max}	a _{x max}	n _{T min}	KR	q_k
[mm]	[mm]	[mm]	[mm]*	[mm]	[mm]	[mm]		[mm]**	[kg/m]
370	450	2 <u>0</u> 0 1650	2 <u>6</u> 0 1710	B _{St} + 90	250	250	2	9 <u>0</u> 0 2400	1 <u>3</u> 5 164

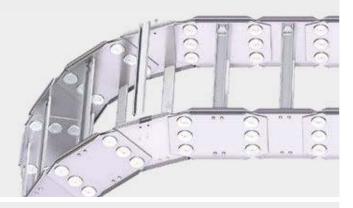
^{*} in 1 mm width sections

^{**} individual intermediate sizes available

803

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.



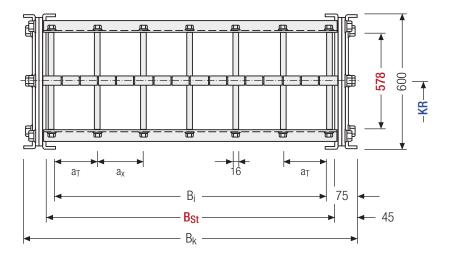


Stay arrangement on each chain link (VS: fully-stayed)



S/SX8000 | Dimensions · Technical data

 $B_i 350 - 1800 \text{ mm}$ 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	h G	B i	B _{St}	B_k	a _{T max}	a _{x max}	n _{T min}	KR	q_k
[mm]	[mm]	[mm]	[mm]*	[mm]	[mm]	[mm]		[mm]**	[kg/m]
578	600	2 <u>0</u> 0 1650	2 <u>6</u> 0 1710	B _{St} + 90	300	300	2	9 <u>0</u> 0 2400	1 <u>9</u> 8 255

^{*} in 1 mm width sections

MT series

ROBOTRAX® System

CLEANVEYOR®

^{**} individual intermediate sizes available

XLT series

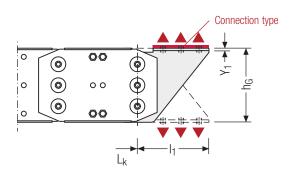
ROBOTRAX® System

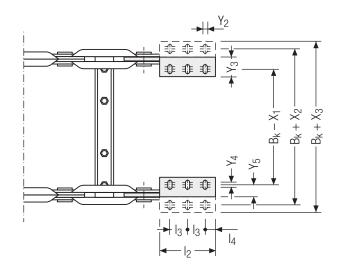
CLEANVEYOR®

S/SX5000 / 6... / 7... / 8... | End connectors

End connectors - steel

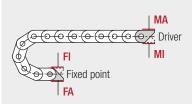
End connectors made of steel. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.





Assembly options

	Туре	l ₁ [mm]	l ₂ [mm]	l ₃ [mm]	l ₄ [mm]	X ₁ [mm]	X₂ [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



Configure your custom cable carrier here: online-engineer.de

Subject to change without notice.

Accessories

S/SX-Tubes series



S/SX9000

Custom sizes



Cable carrier width from 350 mm

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. We will be happy to help you.



TRAXLINE® AC

