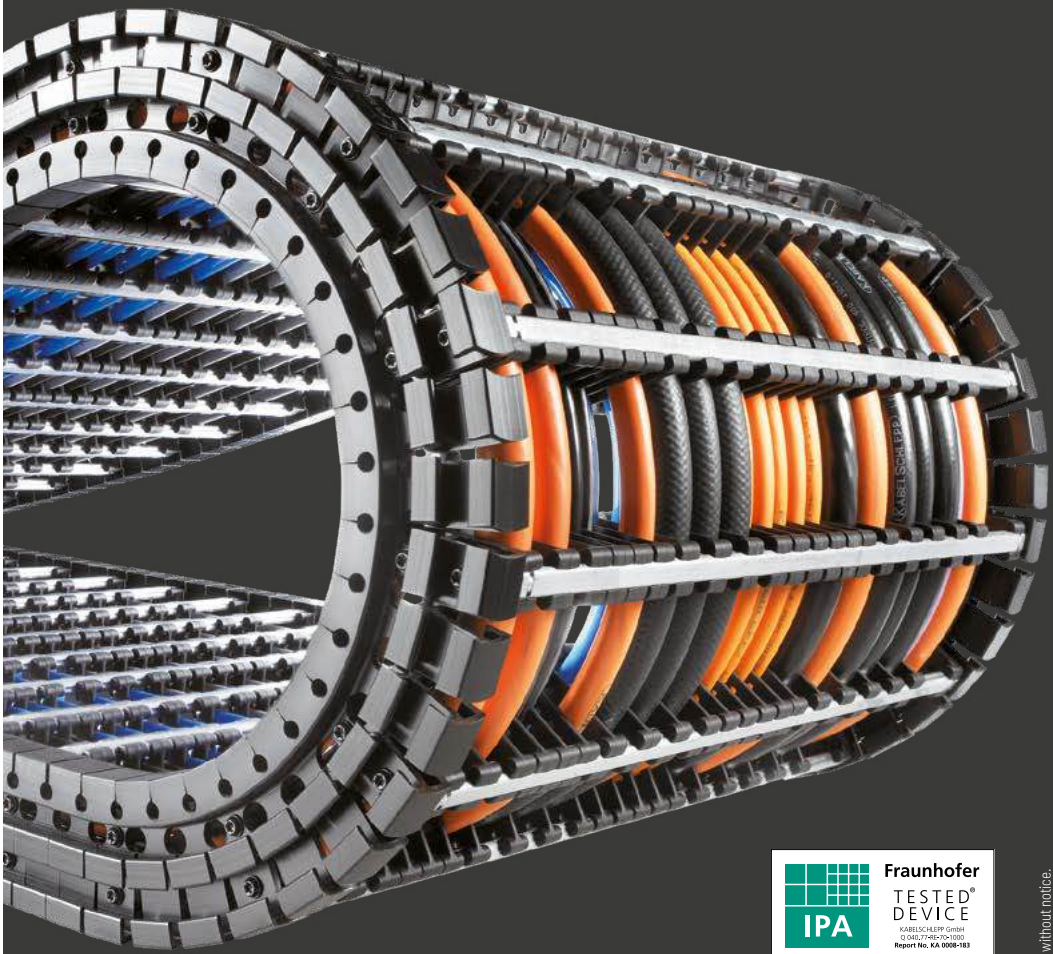
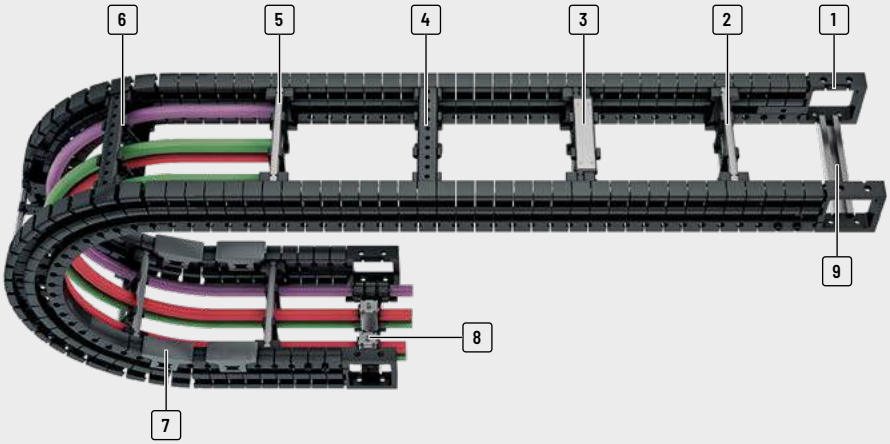
QUANTUM® series

Light, extremely quiet and low-vibration for high speeds and accelerations



Fraunhofer IPA
TESTED® DEVICE
KABELSCHLEPP GmbH
Q 041,7-ME-75-1000
Report No. KA 0008-183



1 Universal end connectors (UMB)
2 Aluminum stays available in **1 mm width sections**
3 Aluminum stays in reinforced design
4 Plastic stays available in **8** or **16 mm width sections**
5 Can be opened quickly on the inside and the outside for cable laying
6 Fixable dividers
7 Replaceable glide shoes
8 Strain relief combs
9 C-rail for strain relief elements

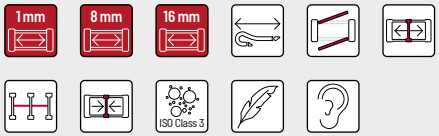
Virtually no polygon effect

QUANTUM® Low-vibration operation

Cable carrier with polygon effect

Features

» Cleanroom compatible: no links, no link wear
» Extremely quiet, 31 db (A)*
» Extremely light
» For high accelerations up to 300 m/s^2
» For high operating speeds up to 40 m/s
» Extremely long service life: ≥ 25 million motion cycles
» TÜV type tested as per 2PfG 1036/10.97
» Large selection of stay systems and separating options for cables



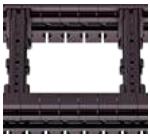
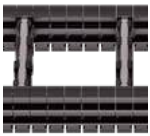
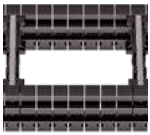
* Tested: Q060.100.100 by TÜV Rheinland. The sound pressure level for the measured area was measured at a distance of 0.5 m for smooth and jerky movements.

Ideal for highly dynamic applications

3D movements: the driver connection can be moved laterally and can be rotated by up to ±30°

Side bands made from special plastic and steel cables in the support floor for an extremely long service life

QUANTUM® series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
Q040											
		RE	28	40	28 – 284	68 – 324	8	15	60 – 180	2.5	22
Q060											
		RS	38	60	38 – 500	90 – 552	1	20	100 – 300	5	30
		RE	42	60	68 – 276	120 – 328	8	20	100 – 300	5	33
Q080											
		RS	58	80	50 – 600	122 – 672	1	25	170 – 500	8	46
		RV	58	80	50 – 600	122 – 672	1	25	170 – 500	8	46
		RE	58	80	58 – 570	130 – 642	16	25	170 – 500	8	46
Q100											
		RS	72	98	70 – 600	152 – 682	1	30	180 – 600	12	57
		RV	72	98	70 – 600	152 – 682	1	30	180 – 600	12	57
		RE	72	98	74 – 570	156 – 652	16	30	180 – 600	12	57

Cleanroom compatible and long service life

Continuous side bands are used. In contrast to conventional hole-and-bolt connections, hardly any wear occurs (link abrasion), which makes QUANTUM® ideal for use in cleanrooms.

Extremely long service life through

» No link abrasion due to absence of hole-and-bolt connections

» Continuous side bands made from special plastic with integrated steel cables

Ideal for highly dynamic applications – extruded side bands

The QUANTUM® runs extremely quietly and with low vibrations. The absence of links and the very small pitch means that the so-called polygon effect is reduced to a minimum. Due to the very quiet running, the QUANTUM® cable carrier system is ideal for applications with low-vibration linear drives.

QUANTUM® series | Overview

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
3.2	40	300	30	2	3	•	•	•	–	•	•	–	508
5	30	160	50	3	2 – 3	•	•	•	•	•	•	–	514
5	30	160	50	3	2 – 3	•	•	–	•	•	•	–	518
6.4	25	100	80	3	2 – 3	•	•	•	•	•	•	–	524
6.4	25	100	80	3	2 – 3	•	•	•	•	•	•	–	528
6.4	25	100	80	3	2 – 3	•	•	•	•	•	•	–	532
7.8	20	70	95	3	2 – 3	•	•	–	•	•	•	–	538
7.8	20	70	95	3	2 – 3	•	•	•	•	•	•	–	542
7.8	20	70	95	3	2 – 3	•	•	•	•	•	•	–	546

Q040

Pitch
15 mm

Inner height
28 mm

Inner widths
28 – 284 mm

Bending radii
60 – 180 mm

Stay variants

Plastic stay RE ..... page **508**

Frame screw-in stay

- Plastic profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

TOTALTRAX® complete systems

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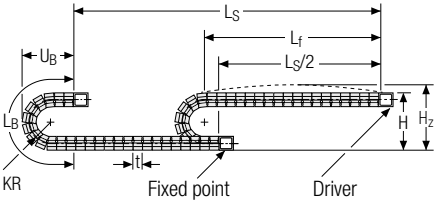
TRAXLINE® cables for cable carriers

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

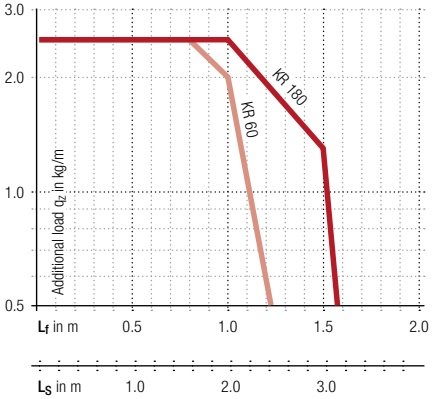


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
60	175	369	178
75	205	416	193
90	235	463	208
110	275	526	228
150	355	651	268
180	415	746	298

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 0.8 kg/m. For other inner widths, the maximum additional load changes.



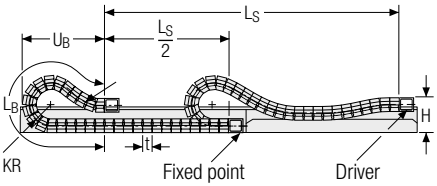
Speed
up to 40 m/s

Acceleration
up to 300 m/s²

Travel length
up to 3.2 m

Additional load
up to 2.5 kg/m

Gliding arrangement



Speed
up to 2 m/s

Acceleration
up to 3 m/s²

The gliding cable carrier has to be routed in a channel. See p. 866.

Travel length
up to 30 m

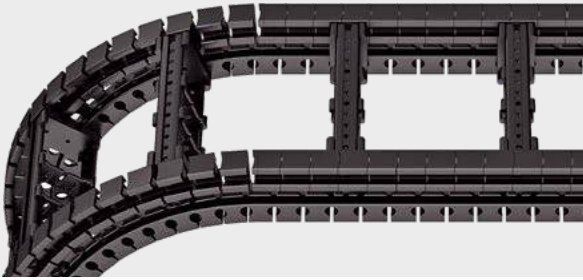
Additional load
up to 2.5 kg/m

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Q040 RE | Dimensions · Technical data

Plastic stay RE – screw-in frame stay

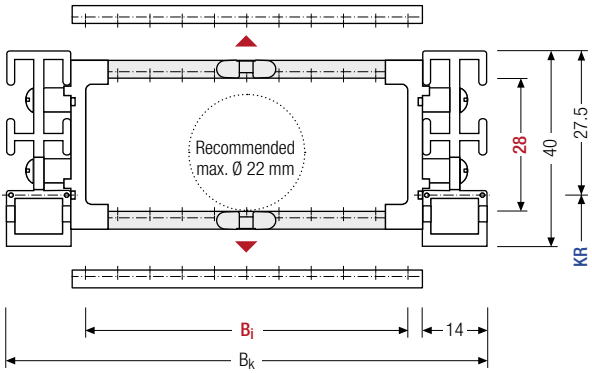
- Plastic profile bars for light to medium loads. Assembly without screws.
- Available customized in **8 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 6th section, **standard (HS: half-stayed)**

Stays on every 3rd section **(VS: fully-stayed)**

8 mm — B_i 28 – 284 mm in **8 mm width sections**



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

Calculating the cable carrier length

Cable carrier length L_k

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

Cable carrier length L_k rounded to pitch t

h_i [mm]	h_G [mm]	B_i [mm]											B_k [mm]	KR [mm]		q_k [kg/m]
28	40	28	36	44	52	60	68	76	84	92	100	108	B_i + 40	60	75	0.63 – 0.98
		116	124	132	140	148	156	164	172	180	188	196		90	110	
		204	212	220	228	236	244	252	260	268	276	284		150	180	

Order example

Q040	.	108	.	RE	.	150	-	1290		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Divider systems

The divider system is mounted on each crossbar as a standard – on every 6th section for stay mounting (HS).

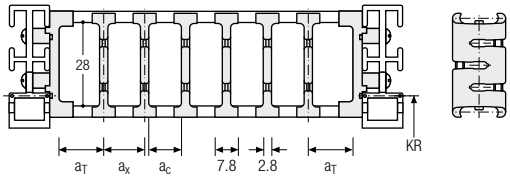
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(version B)**. The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	8	8	5.2	–	–
B	14	8	5.2	8	–

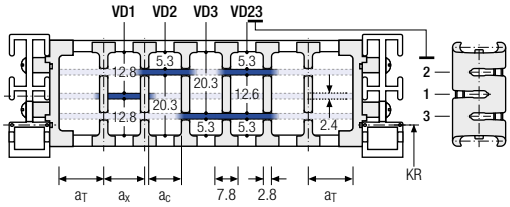
The dividers are movable within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_T max [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
A	8	20	8	5.2	–	2
B	14	22	8	5.2	8	2

The dividers are movable within the cross section (version A) or fixed (version B).

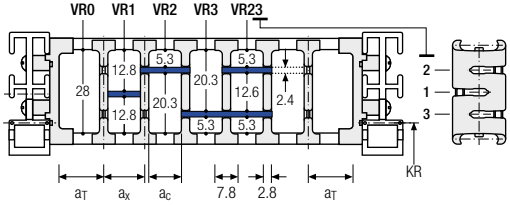


Divider system TS2 with partial height separation

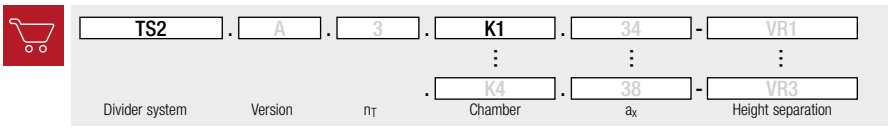
Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	a_x grid [mm]	n_T min
B	14	8*/24	5.2*/21.2	8	2

* for VR0

With grid distribution **(8 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section (version A) or fixed (version B).

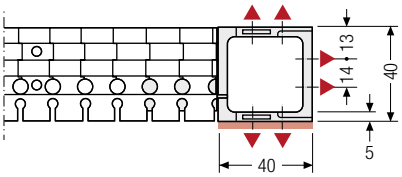


Order example

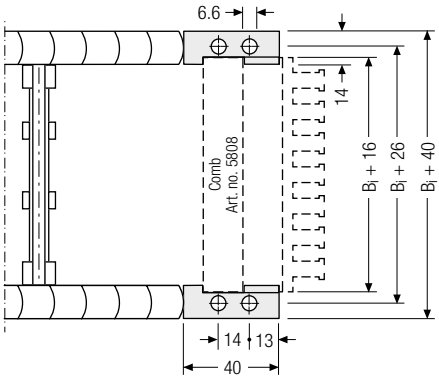


Universal end connectors UMB – **plastic** (standard)

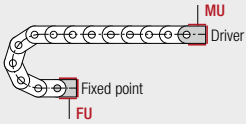
The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.



▲ Assembly options



Recommended tightening torque:
5 Nm for screws M5 - 8.8



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

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**

Q060

Pitch
20 mm

Inner heights
38 – 42 mm

Inner widths
38 – 500 mm

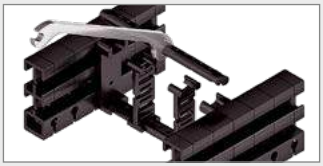
Bending radii
100 – 300 mm

Stay variants

Aluminum stay RS page 514

Frame stay, narrow "The standard"

- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Plastic stay RE page 518

Frame screw-in stay

- Plastic profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

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TRAXLINE® cables for cable carriers

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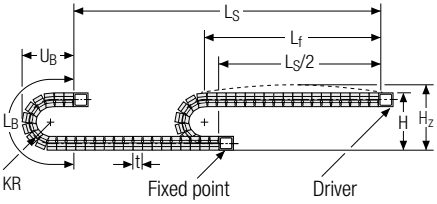
Unsupported arrangement

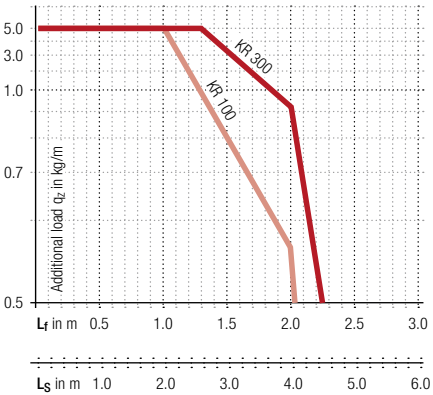


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
100	288	554	264
120	328	617	284
150	388	711	314
190	468	837	354
250	588	1025	414
300	688	1182	464

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 1.5 kg/m. For other inner widths, the maximum additional load changes.



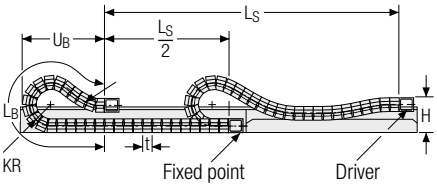
Speed
up to 30 m/s

Acceleration
up to 160 m/s²

Travel length
up to 5 m

Additional load
up to 5 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 2 – 3 m/s²

Travel length
up to 50 m

Additional load
up to 5 kg/m

The gliding cable carrier has to be routed in a channel. See p. 866.

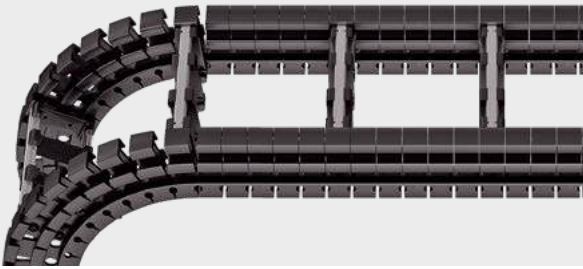
Glide shoes have to be used for gliding applications.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Q060 RS | Dimensions · Technical data

Aluminum stay RS – frame stay narrow

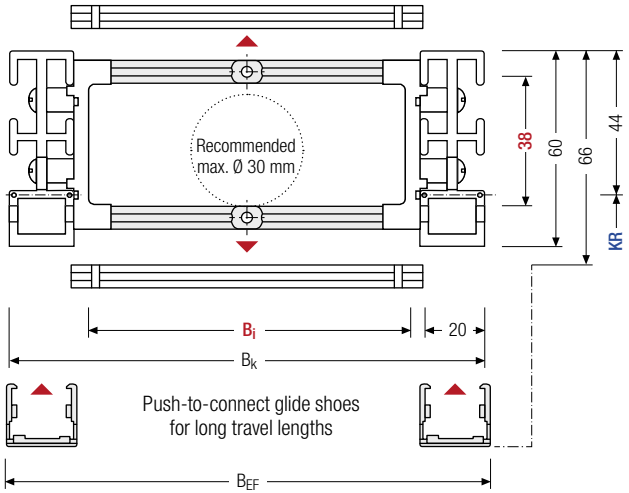
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 6th section, **standard (HS: half-stayed)**

Stays on every 3rd section **(VS: fully-stayed)**

1 mm — B_i 38 – 500 mm in **1 mm width sections**



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

Calculating the cable carrier length

Cable carrier length L_k

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

Cable carrier length L_k rounded to pitch t

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{3} \times 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_K [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
38	60	66	38 – 500	B_i + 52	B_i + 56	100	120	150	190	250	300	1.25 – 2.40

* in 1 mm width sections

Order example

Q060	.	200	.	RS	.	150	-	1540		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Divider systems

The divider system is mounted on each crossbar as a standard – on every 6th section 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)**.

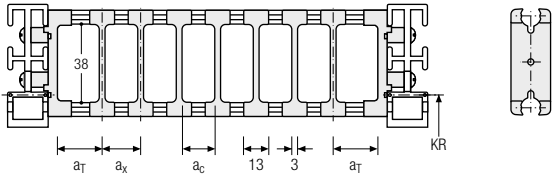
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

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

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13.5	13	10	2

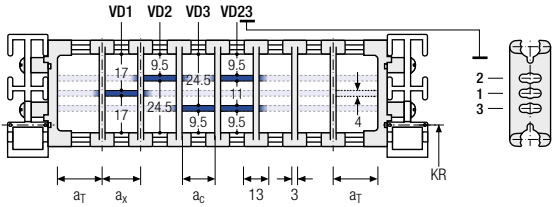
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13.5	20	13	10	2

The dividers can be moved in the cross section.

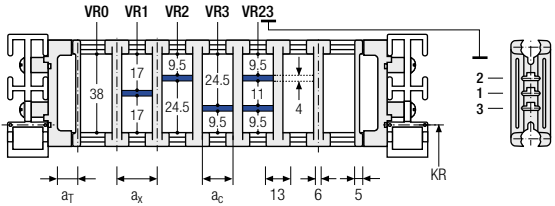


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	8.5	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 = 3 mm).



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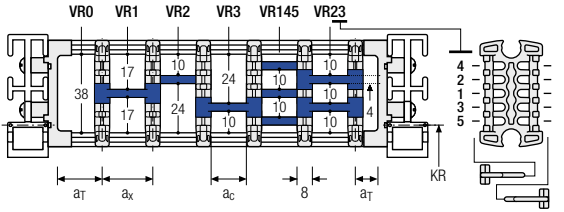
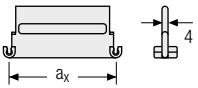
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	11	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 increments with **a_x > 42 mm** are also available.

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

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

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR5
Divider system		Version		n_T		Chamber		a_x		Height separation

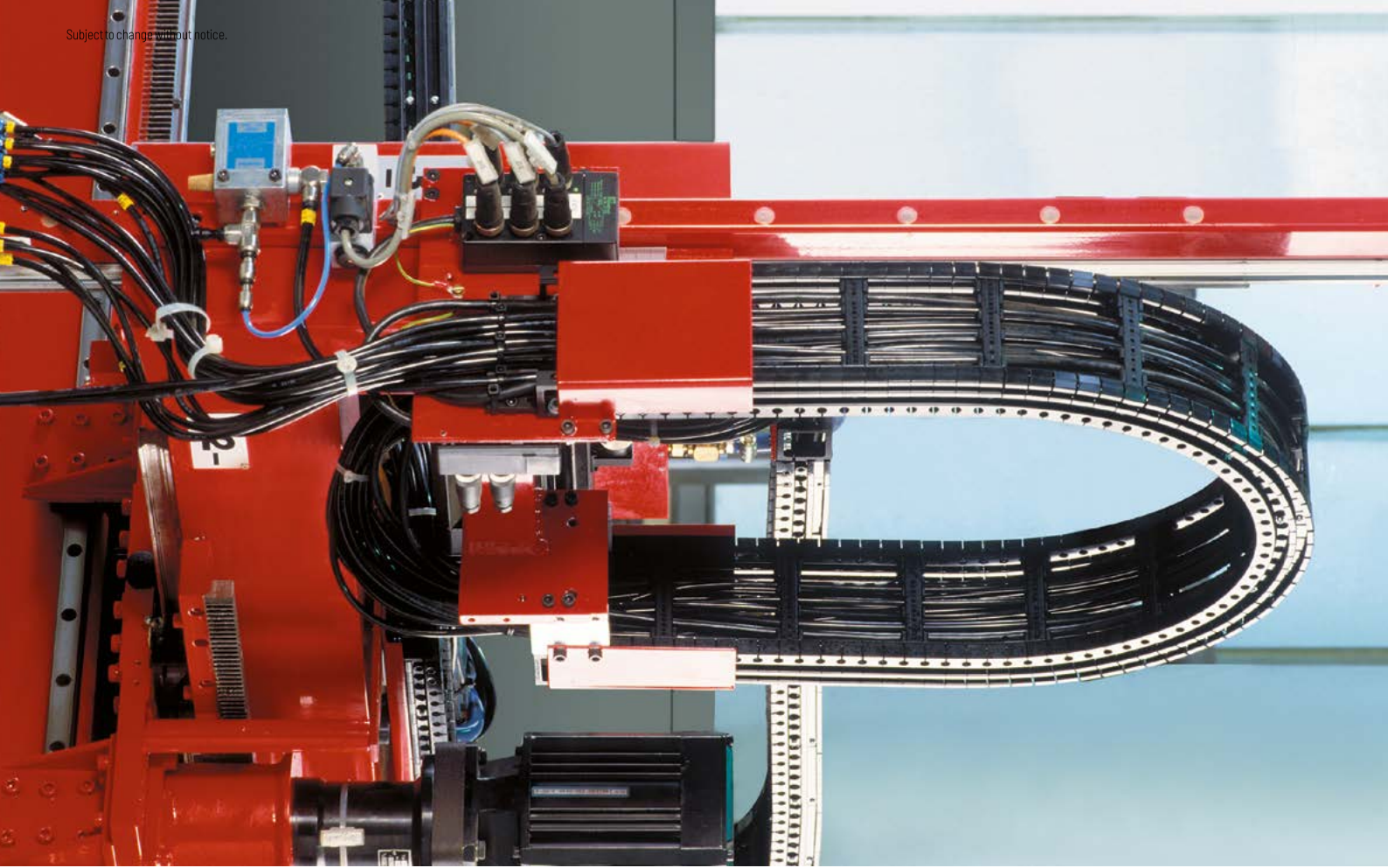
Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

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

More product information online

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

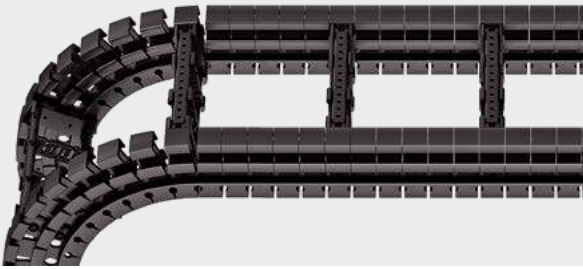
Configure your custom cable carrier here: **online-engineer.de**



Q060 RE | Dimensions · Technical data

Plastic stay RE – frame screw-in stay

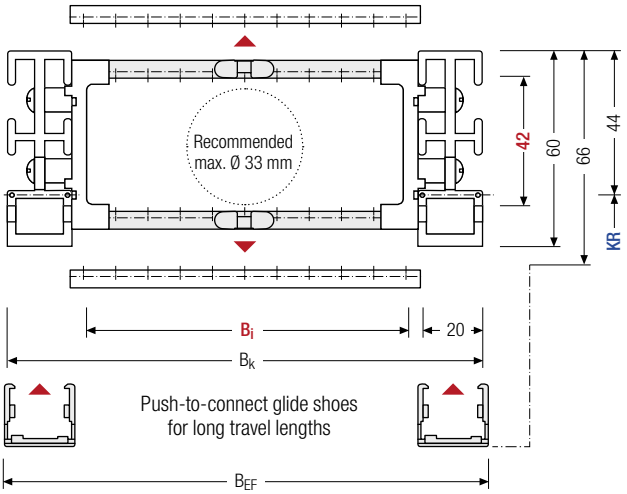
- Plastic profile bars for light to medium loads. Assembly without screws.
- Available customized in **8 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 6th section, **standard (HS: half-stayed)**

Stays on every 3rd section **(VS: fully-stayed)**

8 mm — B_i 68 – 276 mm in **8 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

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{3} \times 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]									B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
42	60	66	68	76	84	92	100	108	116	124	132	B_i + 52	B_i + 56	100	120	1.16 – 1.54
			140	148	156	164	172	180	188	196	204			150	190	
			212	220	228	236	244	252	260	268	276			250	300	

Order example

Q060	.	196	.	RE	.	150	-	1540		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Divider systems

The divider system is mounted on each crossbar as a standard – on every 6th section for stay mounting (HS).

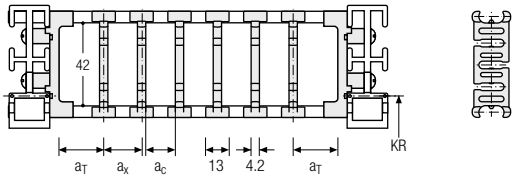
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(version B)**. The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	14	13	8.8	–	–
B	14	16	11.8	8	–

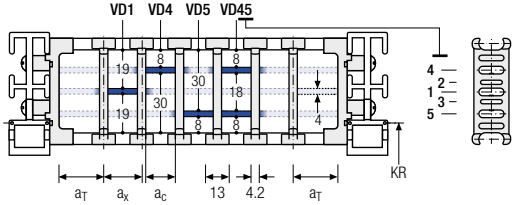
The dividers are movable within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_T max [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	14	25	13	8.8	–	2

The dividers can be moved in the cross section.



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**

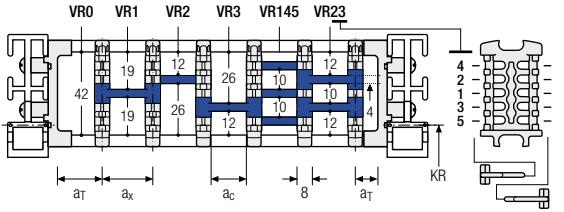
TRAXLINE® cables for cable carriers

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

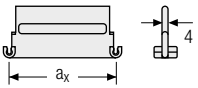
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	11	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.

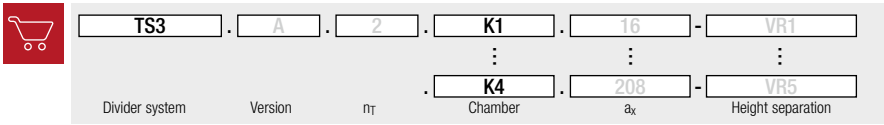


Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

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

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system. The height separations VR4 and VR5 are not possible when using twin dividers.

Order example

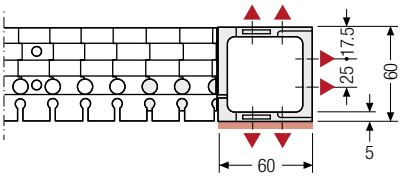


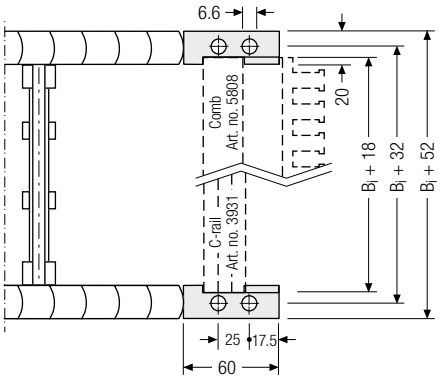
Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

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

Universal end connectors UMB – plastic (standard)

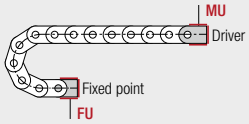
The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.





▲ Assembly options

Recommended tightening torque:
10 Nm



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

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**

Q080

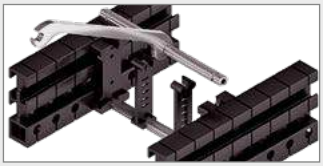
Pitch
25 mm

Inner height
58 mm

Inner widths
50 – 600 mm

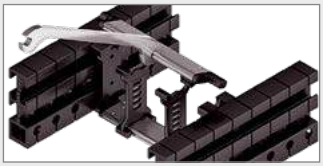
Bending radii
170 – 500 mm

Stay variants



Aluminum stay RS ..... page **524**

Frame stay, narrow "The standard"
- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Aluminum stay RV ..... page **528**

Frame stay, reinforced
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

Plastic stay RE ..... page **532**

Frame screw-in stay
- Plastic profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

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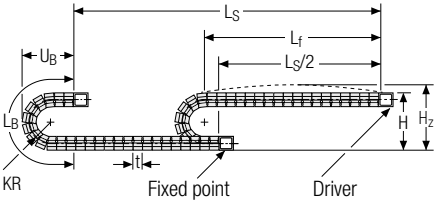
Unsupported arrangement

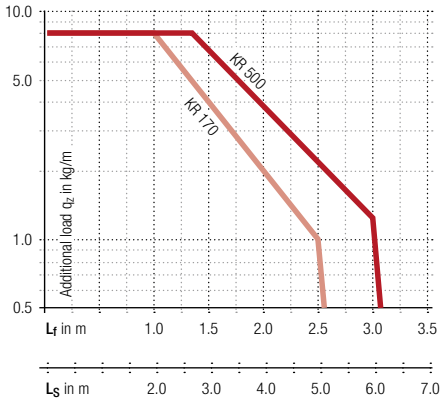


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
170	457	834	379
200	517	928	409
250	617	1085	459
320	757	1305	529
420	957	1619	629
500	1117	1870	709

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 2.5 kg/m. For other inner widths, the maximum additional load changes.



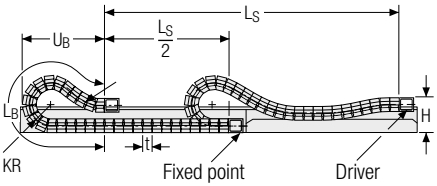
Speed
up to 25 m/s

Acceleration
up to 100 m/s²

Travel length
up to 6.4 m

Additional load
up to 8 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 2 – 3 m/s²

Travel length
up to 80 m

Additional load
up to 8 kg/m

The gliding cable carrier has to be routed in a channel. See p. 866.

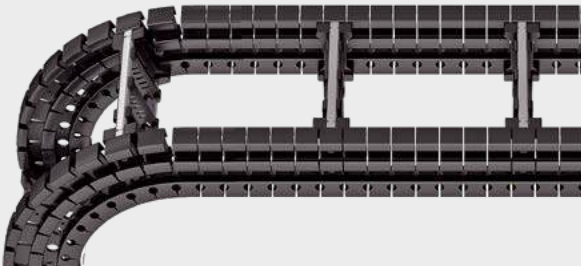
Glide shoes have to be used for gliding applications.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Q080 RS | Dimensions · Technical data

Aluminum stay RS – frame stay narrow

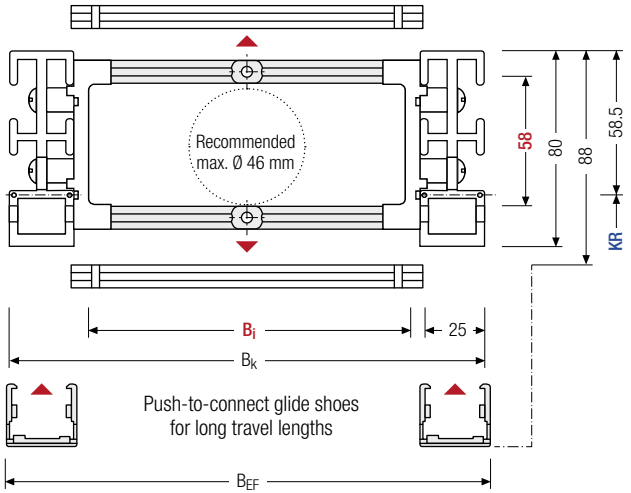
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 8th section. **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

1 mm — B_i 50 – 600 mm in **1 mm width sections**



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

Calculating the cable carrier length

Cable carrier length L_k

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

Cable carrier length L_k rounded to pitch t

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{4} \times 2 - 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
58	80	88	50 – 600	B_i + 72	B_i + 79.5	170	200	250	320	420	500	1.90 – 2.25

* in 1 mm width sections

Order example

Q080	.	400	.	RS	.	250	-	1600		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Divider systems

The divider system is mounted on each crossbar as a standard – on every 8th section 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)**.

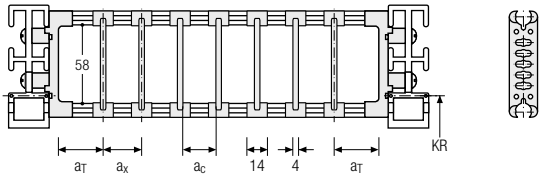
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

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]	$n_{T\,min}$
A	11	14	10	2

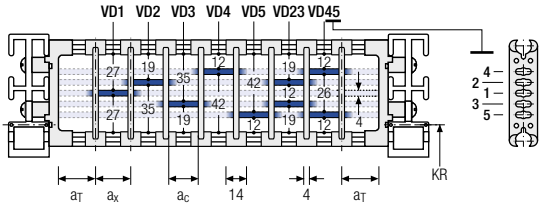
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	11	25	14	10	2

The dividers can be moved in the cross section.

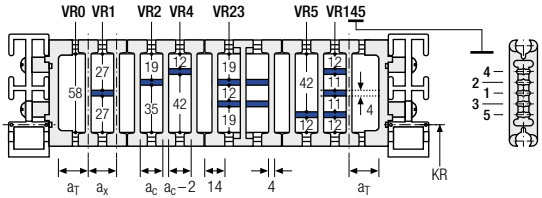


Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	11	23	19	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).



Please note that the real dimensions may deviate slightly from the values indicated here.

TRAXLINE® cables for cable carriers

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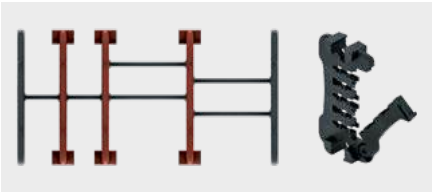
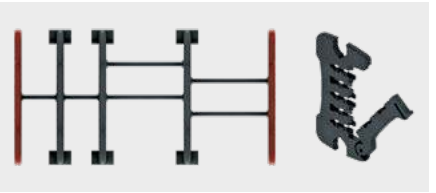
Divider system TS3 with height separation consisting of plastic partitions

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

Divider version A



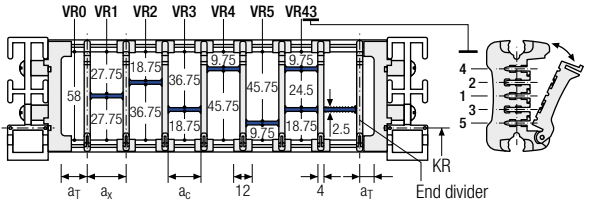
End divider

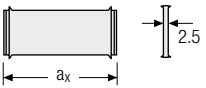


Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	n_T min
A	10.5 / 6.5*	14	10	2

* For End divider

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





a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

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

Order example

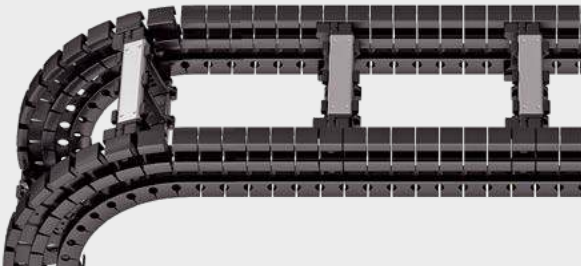
TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

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

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

Aluminum stay RV –
Frame stay reinforced

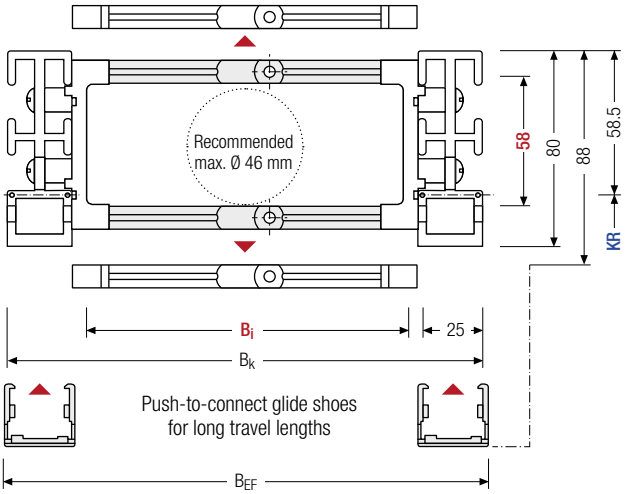
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 8th section. **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

1 mm
B_i 50 – 600 mm in **1 mm width sections**



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

Calculating the cable carrier length

Cable carrier length L_k

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

Cable carrier length L_k rounded to pitch t

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{4} \times 2 - 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
58	80	88	50 – 600	B_i + 72	B_i + 79.5	170	200	250	320	420	500	2.10 – 2.90

* in 1 mm width sections

Order example

Q080	.	400	.	RV	.	250	-	1600	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Divider systems

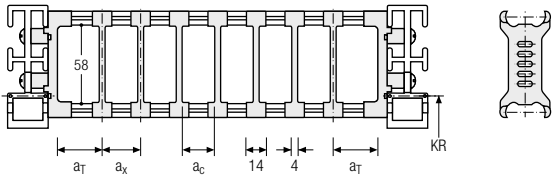
The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

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]	$n_{T\ min}$
A	11	14	10	2

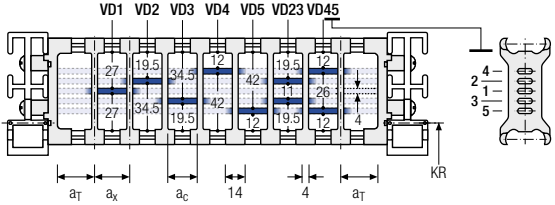
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	11	25	14	10	2

The dividers can be moved in the cross section.

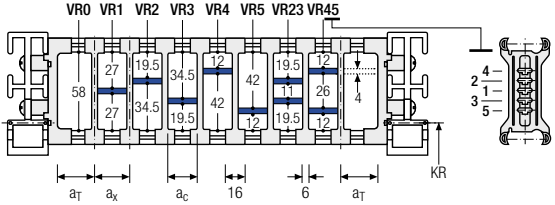


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	12	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.

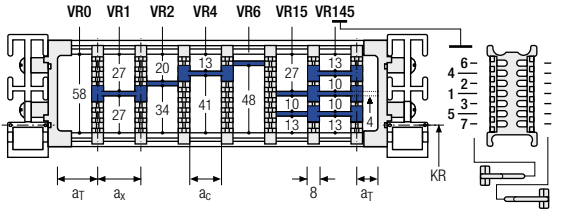
Sliding dividers are optionally available (thickness of divider = 4 mm).



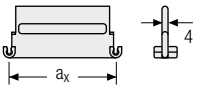
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	8	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 increments with **a_x > 42 mm** are also available.

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

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system. The height separations VR6 and VR7 are not possible when using twin dividers.

Order example

TS3	. A	. 3	. K1	. 16	- VR1
			⋮	⋮	⋮
			. K4	. 208	- VR7
Divider system	Version	n_T	Chamber	a_x	Height separation

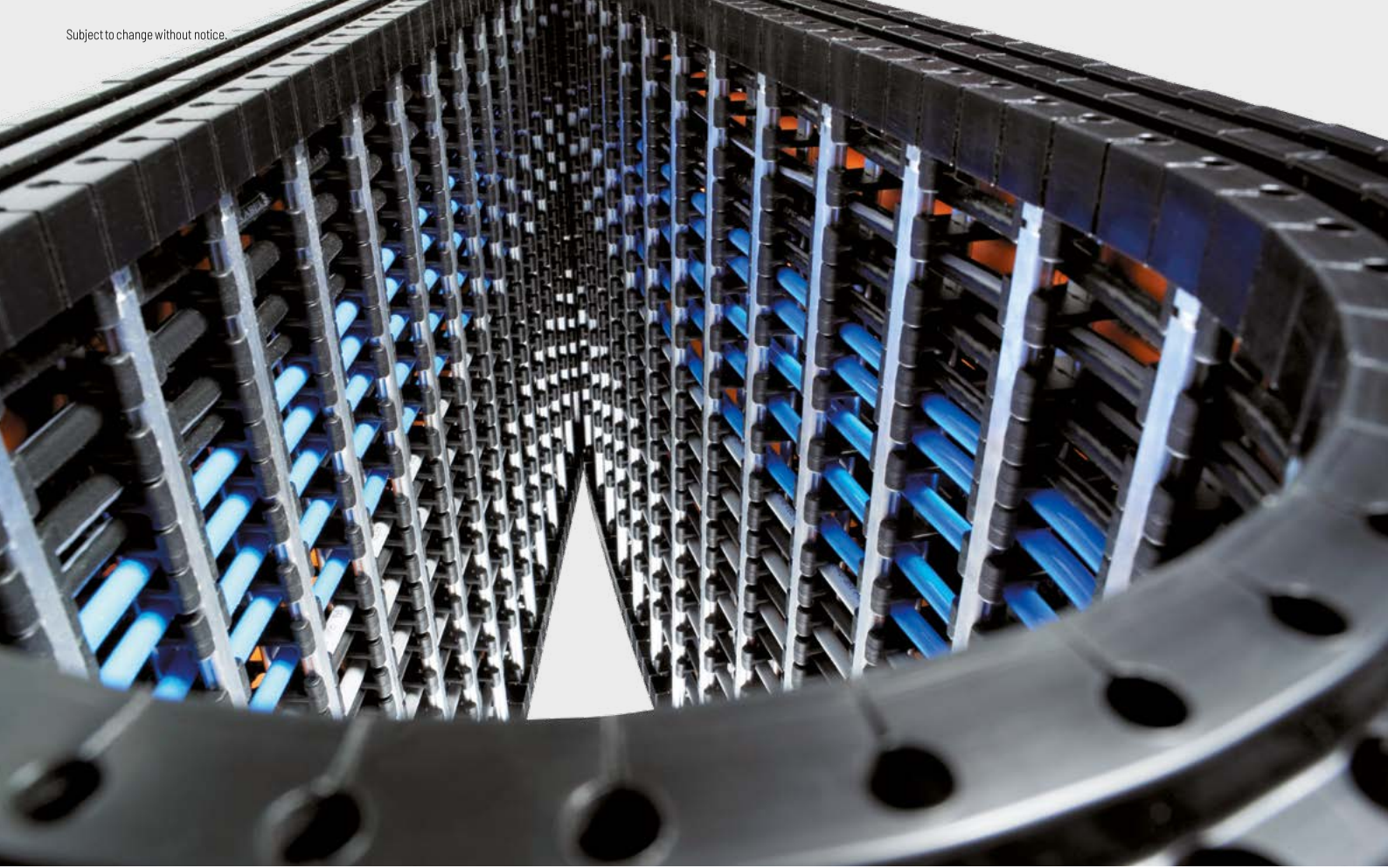
Please state the designation of the divider system **(TS0, TS1....)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

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

More product information online

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

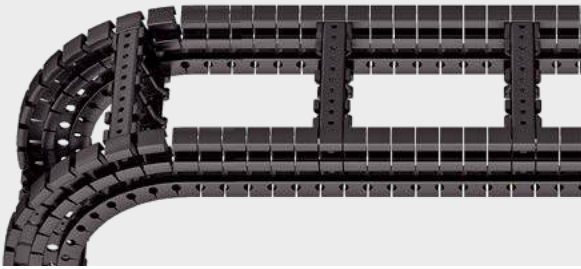
Configure your custom cable carrier here: **online-engineer.de**



Q080 RE | Dimensions · Technical data

Plastic stay RE –
frame screw-in stay

- Plastic profile bars for light to medium loads. Assembly without screws.
- Available customized in **16 mm sections**.
- **Outside/inside:** release by rotating 90°.

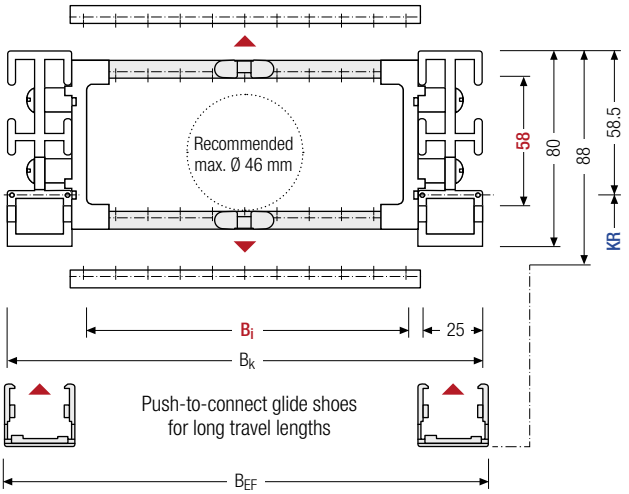


Stays on every 8th section. **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

8 mm

B_i 58 – 570 mm in **16 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

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{4} \times 2 - 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]									B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
58	80	88	58	74	90	106	122	138	154	170	186	$B_i + 72$	$B_i + 79.5$	170	200	1.93 – 2.70
			202	218	234	250	266	282	298	314	330			250	320	
			346	362	378	394	410	426	442	458	474			420	500	
			490	506	522	538	554	570								

Order example

Q080	.	196	.	RE	.	250	-	1600	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Divider systems

The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

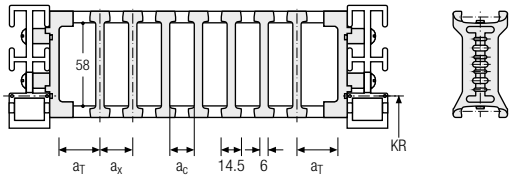
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(version B)**. The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
A	12	14.5	8.5	–	–
B	13	16	10	16	–

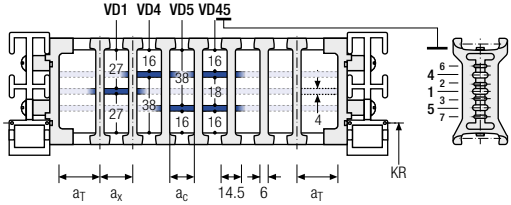
The dividers are movable within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [grid]	$n_{T\ min}$
A	12	25	14.5	8.5	–	2
B	13	25	16	10	16	2

The dividers are movable within the cross section (version A) or fixed (version B).

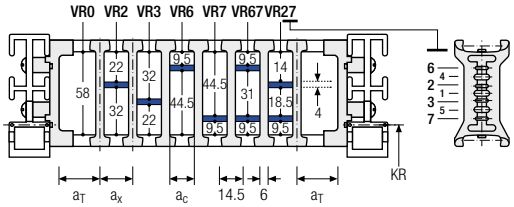


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	12	14.5*/21	8.5*/15	2
B	13	16*/32	10*/26	2

* for VR0

With grid distribution **(8 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section (version A) or fixed (version B).



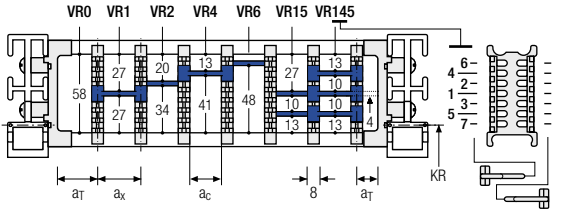
TOTALTRAX® complete systems

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**

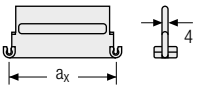
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	8	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 increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

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

Order example

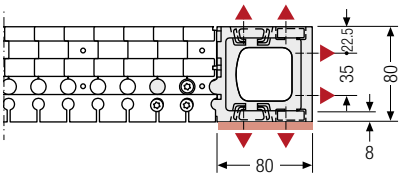
TS3	.	A	.	2	.	K1	.	16	-	VR1
						⋮		⋮		⋮
					.	K4	.	208	-	VR5
Divider system		Version		n_T		Chamber		a_x		Height separation

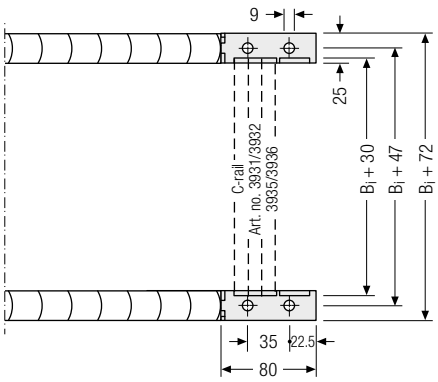
Please state the designation of the divider system **(TS0, TS1....)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

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

Universal end connectors UMB – plastic (standard)

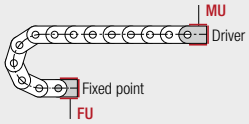
The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.





▲ Assembly options

Recommended tightening torque:
30 Nm for screws M8 - 8.8
18 Nm for screws M8 - 12.9



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

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**

Q100

Pitch
30 mm

Inner height
72 mm

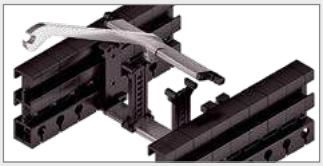
Inner widths
70 – 600 mm

Bending radii
180 – 600 mm

Stay variants

Aluminum stay RS page 538

Frame stay, narrow "The standard"
- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Aluminum stay RV page 542

Frame stay, reinforced
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

Plastic stay RE page 546

Frame screw-in stay
- Plastic profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

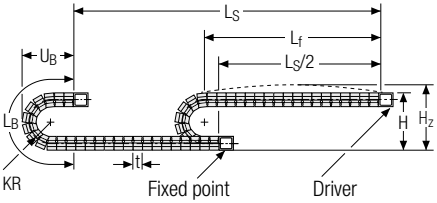
TOTALTRAX® complete systems

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

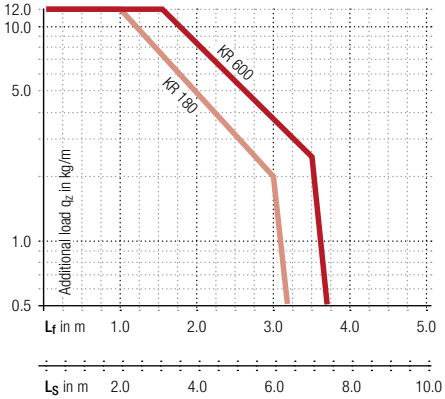


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
180	503	926	432
250	643	1145	502
300	743	1302	552
370	883	1522	622
460	1063	1805	712
600	1343	2244	852

Load diagram for unsupported length depending on the additional load.

Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight q_k = 3.25 kg/m. For other inner widths, the maximum additional load changes.



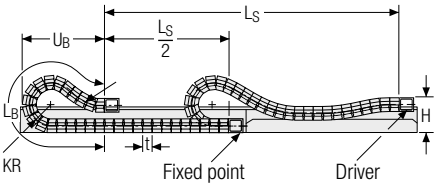
Speed
up to 20 m/s

Acceleration
up to 70 m/s²

Travel length
up to 7.8 m

Additional load
up to 12 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 2 – 3 m/s²

Travel length
up to 95 m

Additional load
up to 12 kg/m

The gliding cable carrier has to be routed in a channel. See p. 866.

Glide shoes have to be used for gliding applications.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

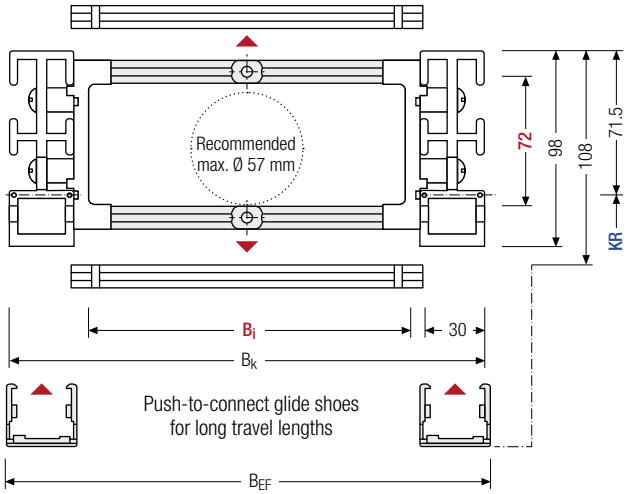
Aluminum stay RS –
frame stay narrow

- Extremely quick to open and close.
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.

Stays on every 8th section, **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

1 mm — B_i 70 – 600 mm in **1 mm width sections**



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

Calculating the cable carrier length

Cable carrier length L_k

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

Cable carrier length L_k rounded to pitch t

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{4} \times 2 - 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
72	98	108	70 – 600	B_i + 82	B_i + 89.5	180	250	300	370	460	600	2.6 – 3.4

* in 1 mm width sections

Order example

Q100	.	400	.	RS	.	370	-	1860		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Divider systems

The divider system is mounted on each crossbar as a standard – on every 8th section 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)**.

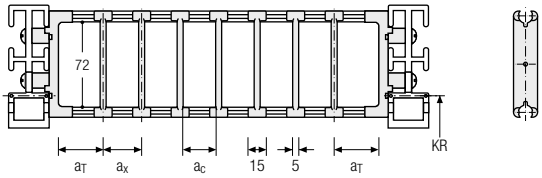
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

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

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	11	15	10	2

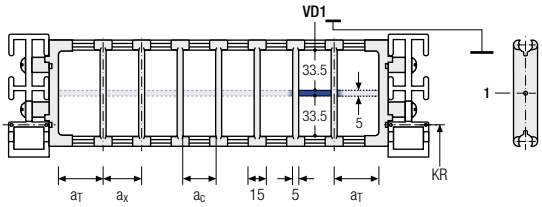
The dividers can be moved in the cross section.



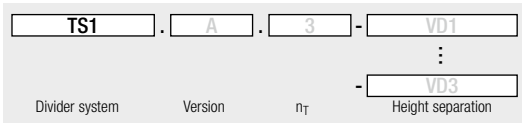
Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	11	25	15	10	2

The dividers can be moved in the cross section.



Order example



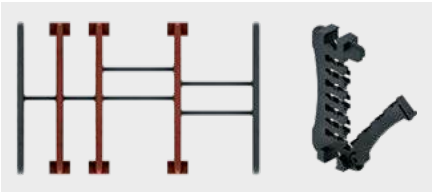
Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T].

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

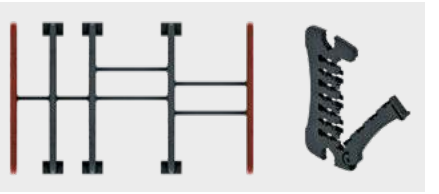
Divider system TS3 with height separation consisting of plastic partitions

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

Divider version A



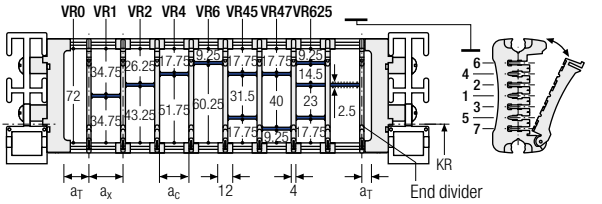
End divider

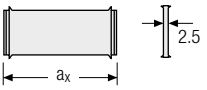


Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	n_T min
A	10.5 / 6.5*	14	10	2

* For End divider

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





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

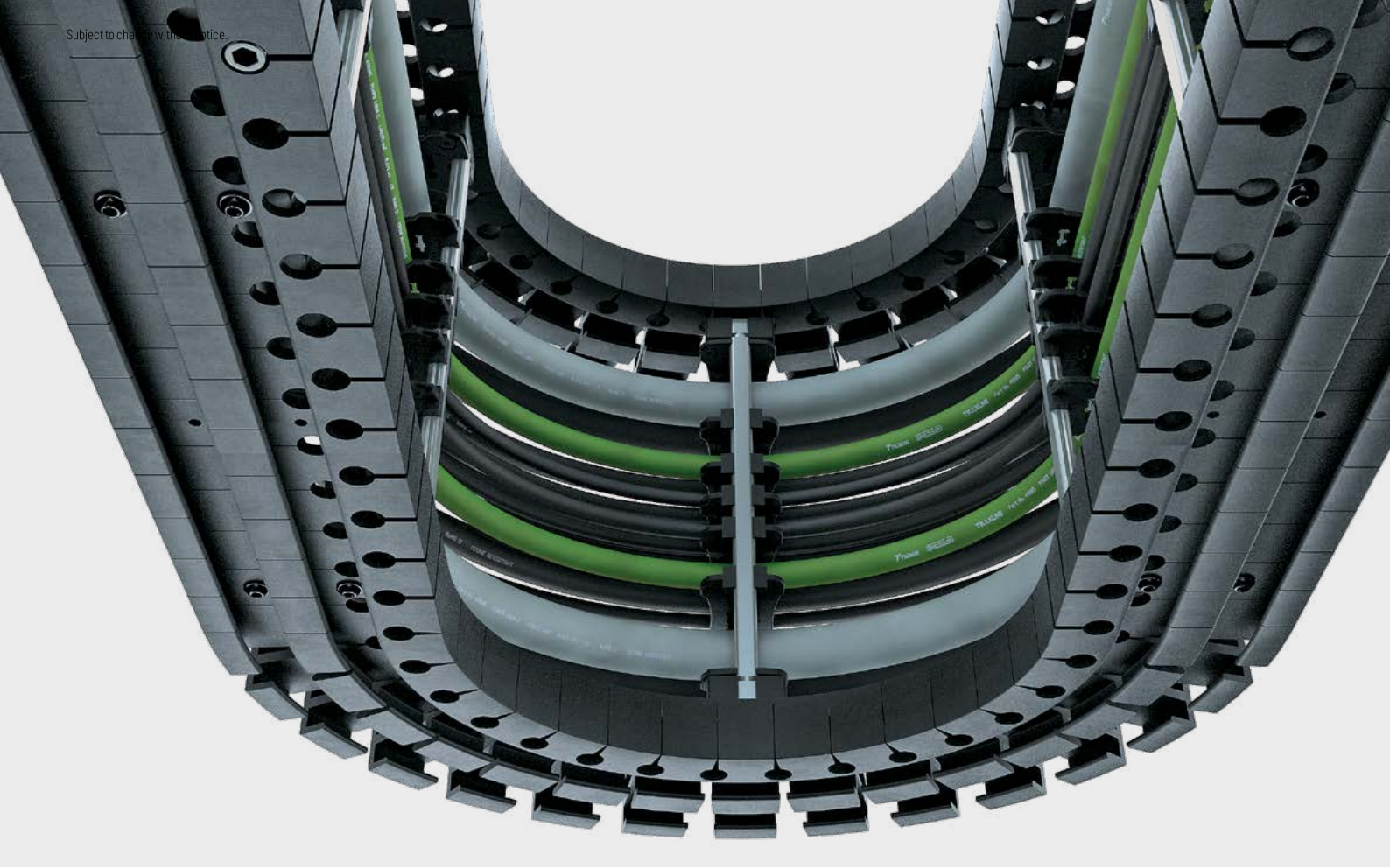
When using **partitions with a_x > 49 mm** we recommended an additional preferential central support.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K4	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

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

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



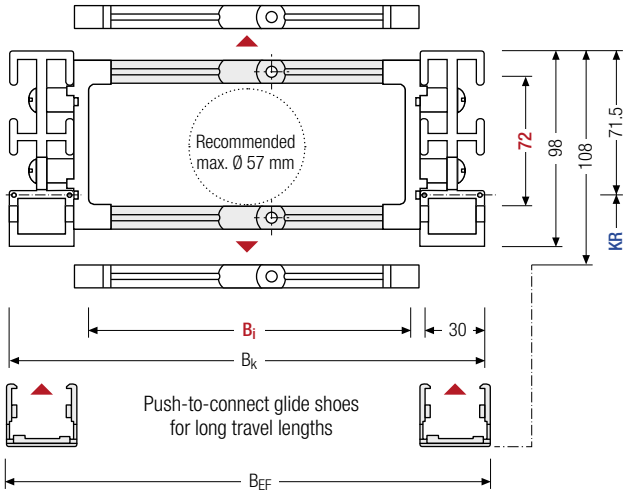
Aluminum stay RV –
Frame stay reinforced

- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.

Stays on every 8th section, **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

1 mm
B_i 70 – 600 mm in **1 mm width sections**



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

Calculating the cable carrier length

Cable carrier length L_k

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

Cable carrier length L_k rounded to pitch t

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{4} \times 2 - 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
72	98	108	70 – 600	B_i + 82	B_i + 89.5	180	250	300	370	460	600	2.8 – 4.6

* in 1 mm width sections

Order example

Q100	.	400	.	RV	.	370	-	1860		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Divider systems

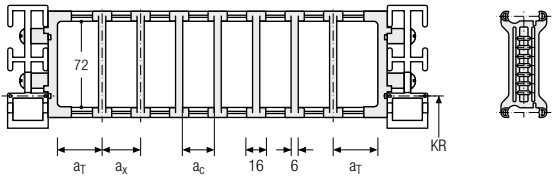
The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

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]	$n_{T\ min}$
A	13	16	10	2

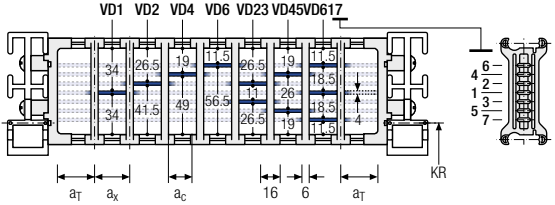
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13	25	16	10	2

The dividers can be moved in the cross section.

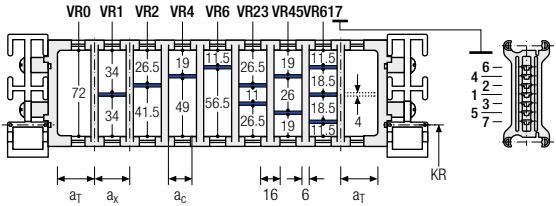


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13	21	15	2

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

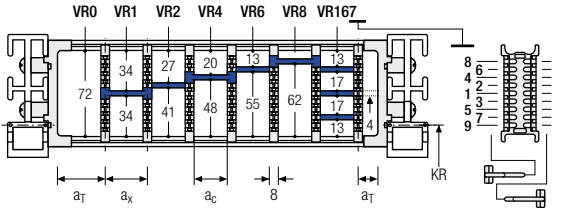
Sliding dividers are optionally available (thickness of divider = 6 mm).



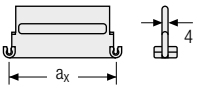
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	8	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 increments with **a_x > 42 mm** are also available.

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

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system. The height separations VR8 and VR9 are not possible when using twin dividers.

Order example

TS3	. A	. 3	. K1	. 16	- VR1
			⋮	⋮	⋮
			. K4	. 208	- VR9
Divider system	Version	n_T	Chamber	a_x	Height separation

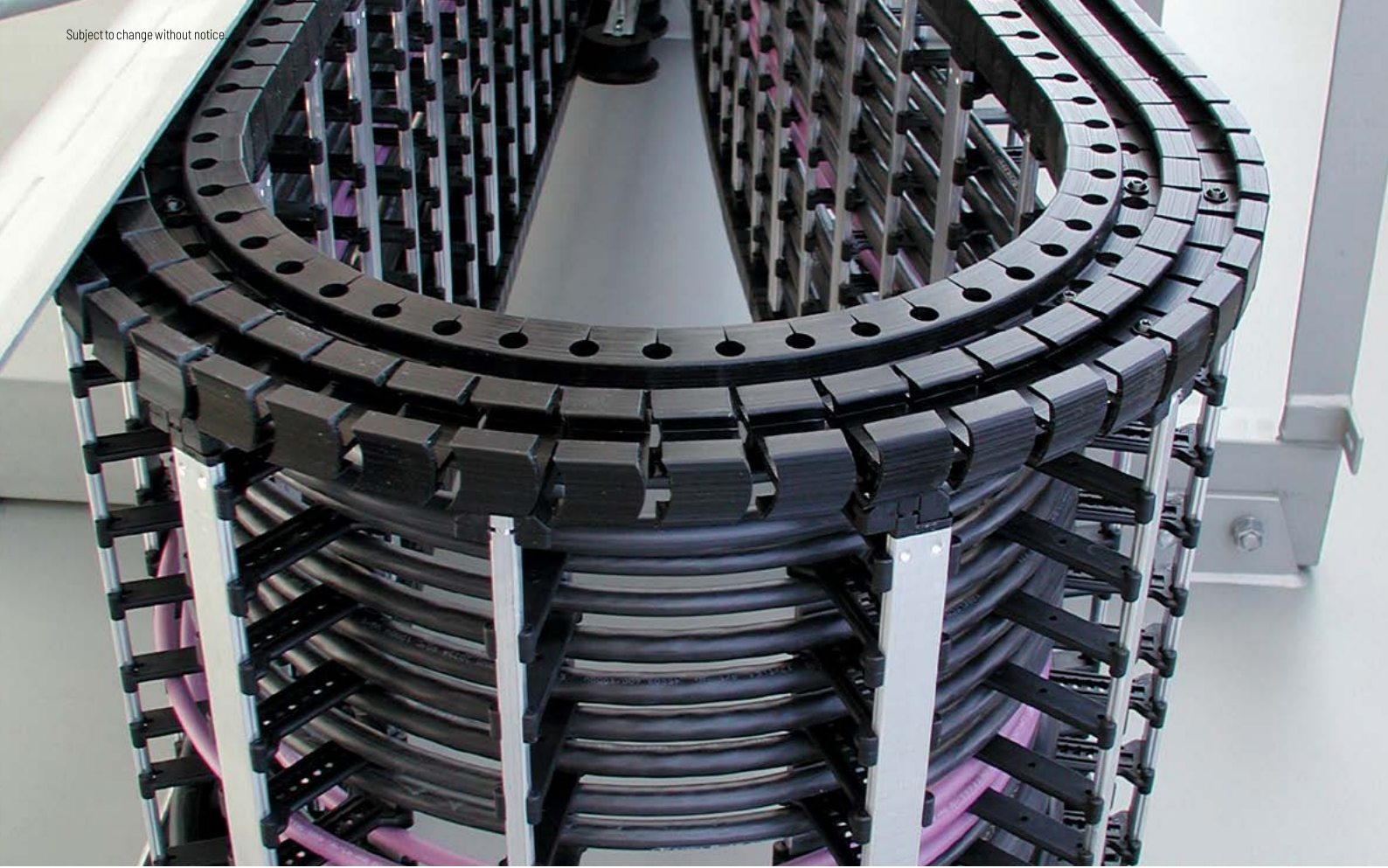
Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

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

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**



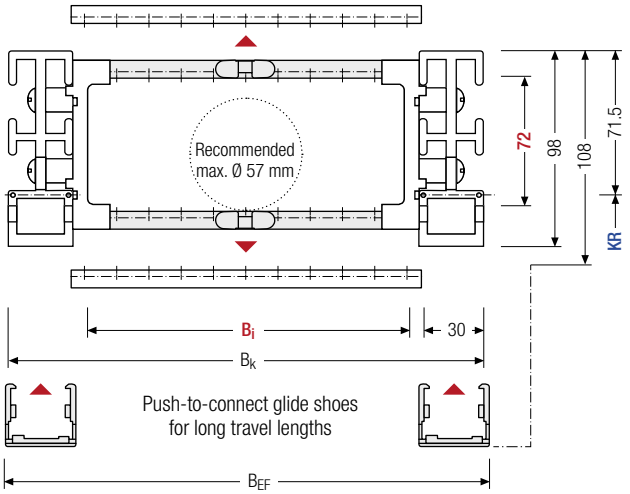
Plastic stay RE – frame screw-in stay

- Plastic profile bars for light and medium loads. Assembly without screws.
- Available customized in **16 mm sections**.
- **Outside/inside:** release by rotating 90°.

Stays on every 8th section, **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

8 mm — B_i 74 – 570 mm in **16 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

Number of glide shoes

$$\frac{\text{Pitch per cable carrier length}}{4} \times 2 - 2$$

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]									B_k [mm]	B_{EF} [mm]	KR [mm]		q_k [kg/m]
72	98	108	74	90	106	122	138	154	170	186	202	$B_i + 82$	$B_i + 89.5$	180	250	2.74 – 3.67
			218	234	250	266	282	298	314	330	346			300	370	
			362	378	394	410	426	442	458	474	490			460	600	
			506	522	538	554	570									

Order example

Q100	.	346	.	RE	.	370	-	1860		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Divider systems

The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

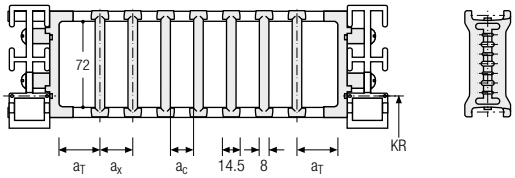
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(version B)**.
The groove in the frame stay faces outwards.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	12	14.5	6.5	–	–
B	13	16	8	16	–

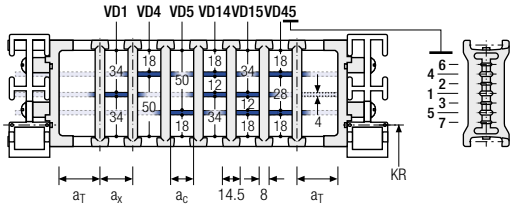
The dividers are movable within the cross section (version A) or fixed (version B).



Divider system TS1 with continuous height separation

Vers.	a_T min [mm]	a_T max [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	12	25	14.5	6.5	–	2
B	13	29	16	8	16	2

The dividers are movable within the cross section (version A) or fixed (version B).

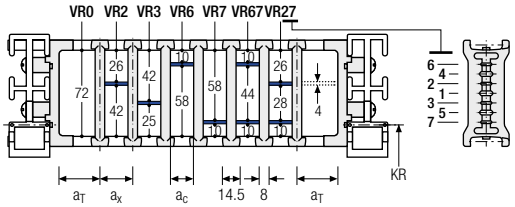


Divider system TS2 with partial height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	a_X grid [mm]	n_T min
A	12	14.5*/20	6.5*/12	–	2
B	13	16*/32	8*/24	16	2

* for VR0

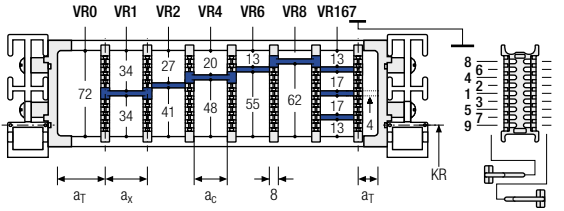
With grid distribution **(16 mm grid)**. The dividers are fixed by the height separation; the grid is movable in the cross section (version A) or fixed (version B).



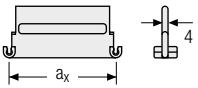
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	8	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.

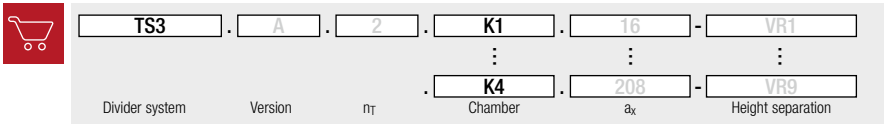


Aluminum partitions in 1 mm increments with **a_x > 42 mm** are also available.

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

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system. The height separations VR8 and VR9 are not possible when using twin dividers.

Order example

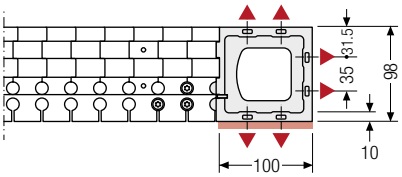


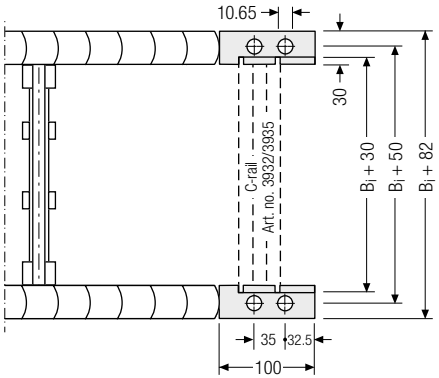
Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

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

Universal end connectors UMB – plastic (standard)

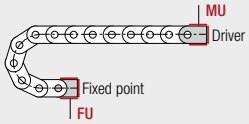
The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.





▲ Assembly options

Recommended tightening torque:
49 Nm for screws M10 - 8.8
55 Nm for screws M10 - 12.9



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs at the driver and fixed point. See from p. 924.

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**