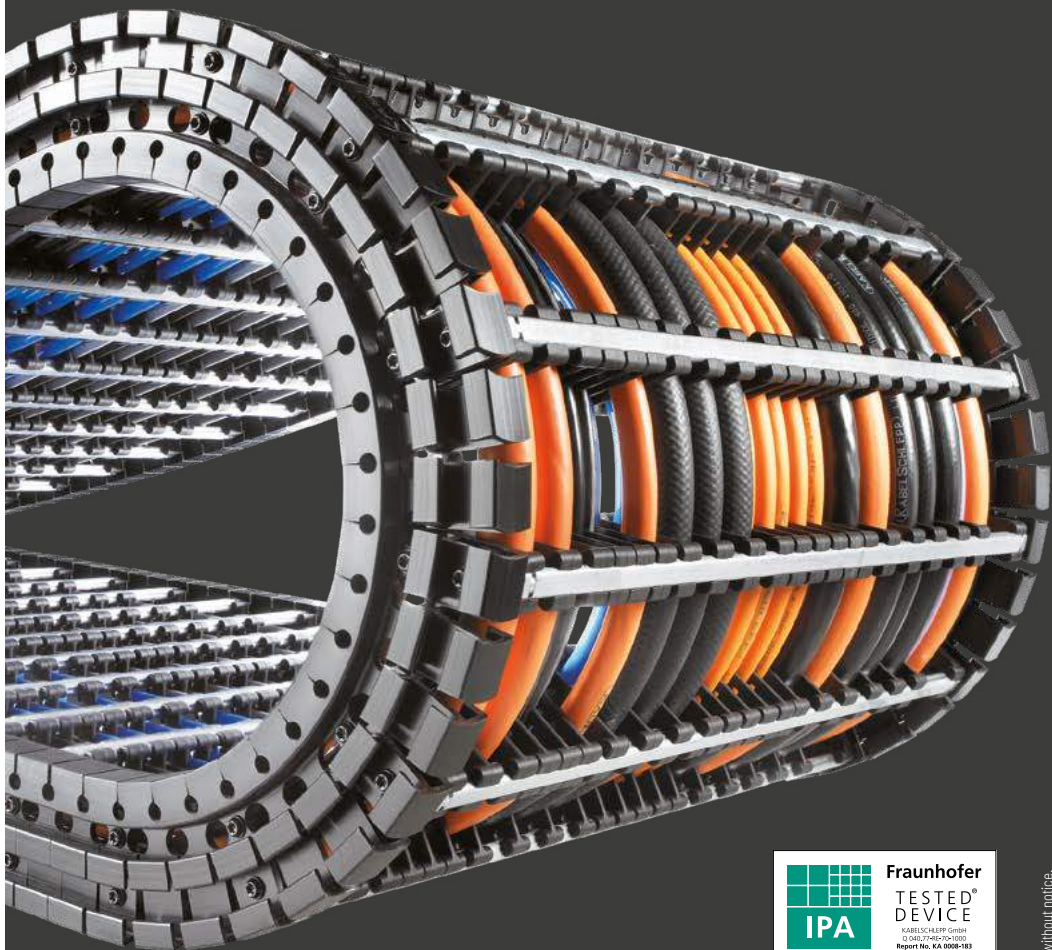


QUANTUM[®] series

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

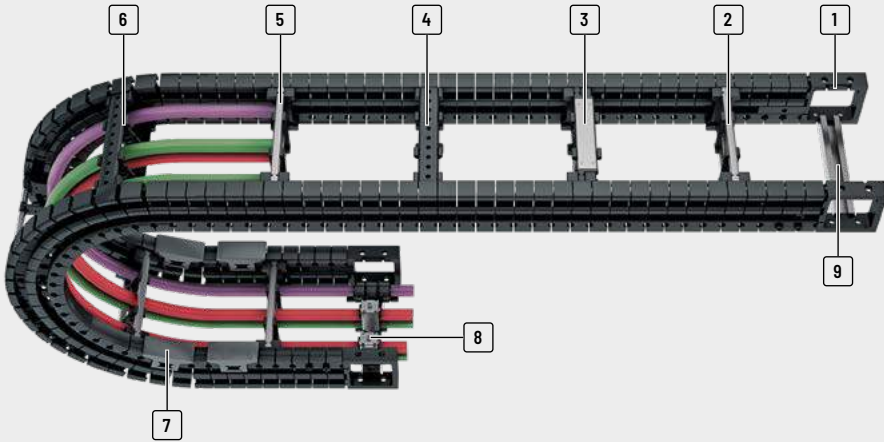


Fraunhofer

TESTED[®]
DEVICE
KABELSCHLEPP GmbH
© 2016, 27. April 2016
Report No. KA 0008-183

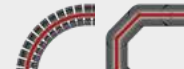
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as a national or international registration in the following countries:
tsubaki-kabelschlepp.com/trademarks

Subject to change without notice.



- 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/s²
- » 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

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	B_i - grid [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable- d_{max} [mm]
PROTUM® series											
K series											
Q040											
		RE	28	40	28 - 284	68 - 324	8	15	60 - 180	2.5	22
UNIFLEX Advanced series											
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
M series											
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
TKHD series											
XL series											
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
QUANTUM® series											
TKR series											
TKA series											
UAT series											

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.

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	$v_{max} \leq [m/s]$	$a_{max} \leq [m/s^2]$	Travel length ≤ [m]	$v_{max} \leq [m/s]$	$a_{max} \leq [m/s^2]$	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
3.2	40	300	30	2	3	•	•	•	-	•	•	-	490
<hr/>													
<hr/>													
5	30	160	50	3	2-3	•	•	•	•	•	•	-	496
5	30	160	50	3	2-3	•	•	-	•	•	•	-	500
<hr/>													
<hr/>													
6.4	25	100	80	3	2-3	•	•	•	•	•	•	-	506
6.4	25	100	80	3	2-3	•	•	•	•	•	•	-	510
6.4	25	100	80	3	2-3	•	•	•	•	•	•	-	514
<hr/>													
<hr/>													
7.8	20	70	95	3	2-3	•	•	-	•	•	•	-	520
7.8	20	70	95	3	2-3	•	•	•	•	•	•	-	524
7.8	20	70	95	3	2-3	•	•	•	•	•	•	-	528

PROTUM® series

K series

UNIFLEX Advanced series

M series

TKHD series

XL series

QUANTUM® series

TKR series

TKA series

UAT series

Q040



Pitch
15 mm



Inner height
28 mm



Inner widths
28 – 284 mm



Bending radii
60 – 180 mm

Stay variants



Plastic stay RE page 490

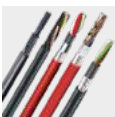
Frame screw-in stay

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



TOTALTRAX® complete systems

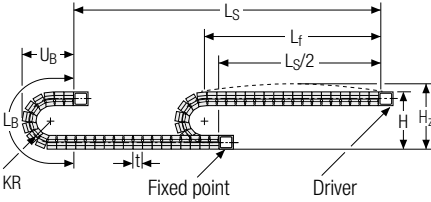
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at tsubaki-kabelschlepp.com/totaltrax



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

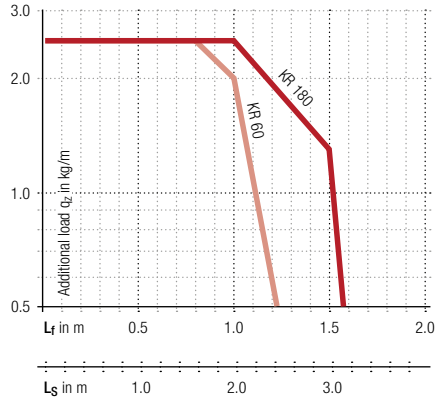


KR [mm]	H [mm]	L _B [mm]	U _B [mm]
60	175	369	178
75	205	416	193
90	235	463	208
110	275	526	228
150	355	651	268
180	415	746	298

Load diagram for unsupported length depending on the additional load.

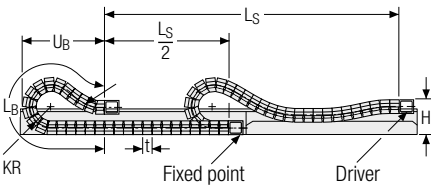
Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight $q_k = 0.8 \text{ kg/m}$. 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
 - Travel length**
up to 30 m
 - Additional load**
up to 2.5 kg/m
- The gliding cable carrier has to be routed in a channel. See p. 842.

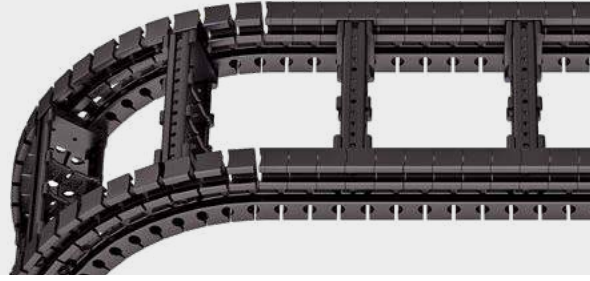
Our technical support can provide help for gliding arrangements: technik@kabelschlepp.de

Subject to change without notice.

PROTUM® series
K series
UNIFLEX Advanced series
M series
TKHD series
XL series
QUANTUM® series
TKR series
TKA series
UAT series

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°.



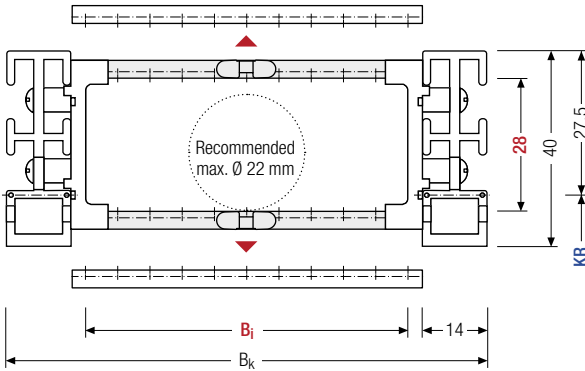
Stays on every 6th section,
standard (HS: half-stayed)



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
		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	0.98

Order example



Q040

Type

108

 B_i [mm]

RE

Stay variant

150

 KR [mm]

1290

 L_k [mm]

HS

Stay arrangement

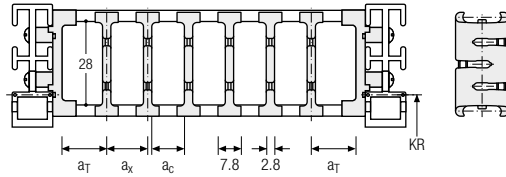
Divider systems

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 TSO without height separation

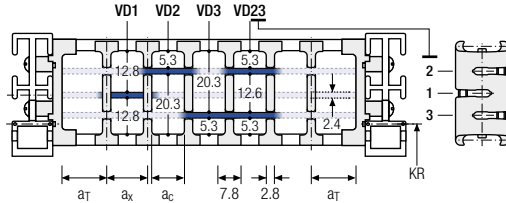
Vers.	a _T min [mm]	a _x min [mm]	a _c min [mm]	a _x grid [mm]	n _T min
A	8	8	5.2	–	–
B	14	8	5.2	8	–



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

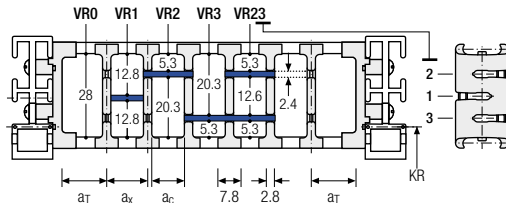


The dividers are movable within the cross section (version A) or fixed (version B).

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

TS2

.

A

.

3

.

K1

.

34

-

VR1

⋮

⋮

⋮

K4

.

38

-

VR3

Divider system
Version
n_T
Chamber
a_x
Height separation

- PROTUM® series
- K series
- UNIFLEX Advanced series
- M series
- TKHD series
- XL series
- QUANTUM® series
- TKR series
- TKA series
- UAT series

PROTUM®
series

K
series

UNIFLEX
Advanced
series

M
series

TKHD
series

XL
series

QUANTUM®
series

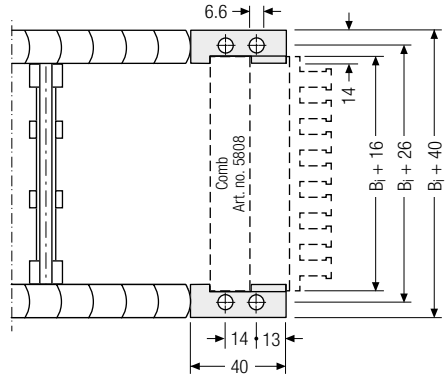
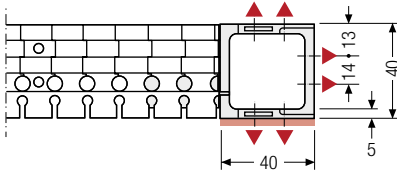
TKR
series

TKA
series

UAT
series

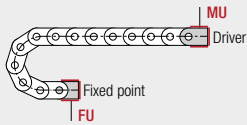
Universal end connectors UMB – plastic (standard)

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



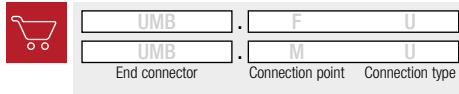
Connection point

F – fixed point
M – driver

Connection type

U – universal end connector

Order example



We recommend the use of strain reliefs at the driver and fixed point. See from p. 902.

More product information online



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



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



PROTUM®
series

K
series

UNIFLEX
Advanced
series

M
series

TKHD
series

XL
series

QUANTUM®
series

TKR
series

TKA
series

UAT
series

Q060



Pitch
20 mm



Inner heights
38 – 42 mm



Inner widths
38 – 500 mm



Bending radii
100 – 300 mm

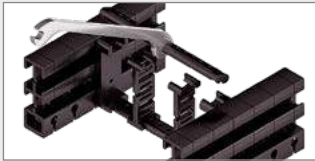
Stay variants



Aluminum stay RS page 496

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 500

Frame screw-in stay

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



TOTALTRAX® complete systems

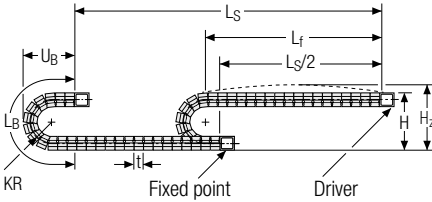
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TRAXLINE® cables for cable carriers

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

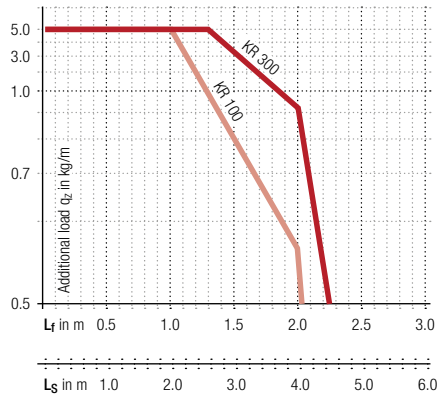


KR [mm]	H [mm]	L _B [mm]	U _B [mm]
100	288	554	264
120	328	617	284
150	388	711	314
190	468	837	354
250	588	1025	414
300	688	1182	464

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 $q_k = 1.5 \text{ kg/m}$. For other inner widths, the maximum additional load changes.



Speed
up to 30 m/s



Acceleration
up to 160 m/s²

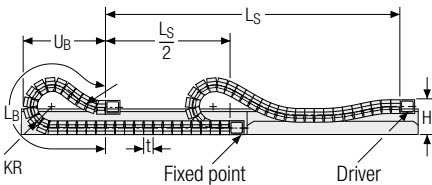


Travel length
up to 5 m



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. 842.

Glide shoes have to be used for gliding applications.



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

PROTUM®
series

K
series

UNIFLEX
Advanced
series

M
series

TKHD
series

XL
series

QUANTUM®
series

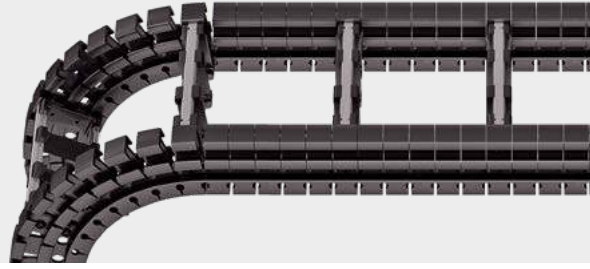
TKR
series

TKA
series

UAT
series

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°.



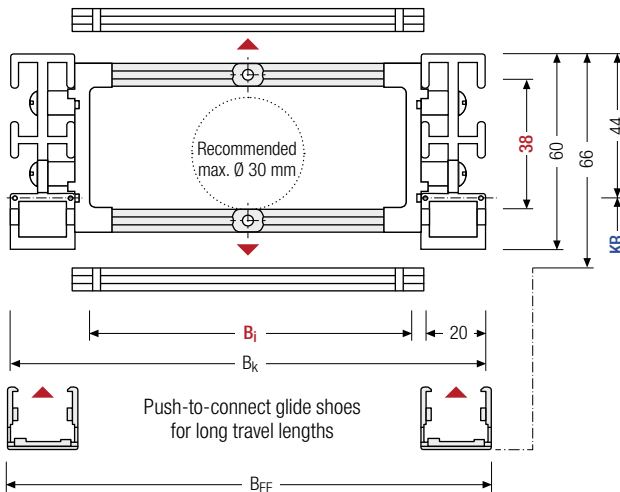
Stays on every 6th section,
standard (HS: half-stayed)



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

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

Type

200

B_i [mm]

RS

Stay variant

150

KR [mm]

1540

L_k [mm]

HS

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**).

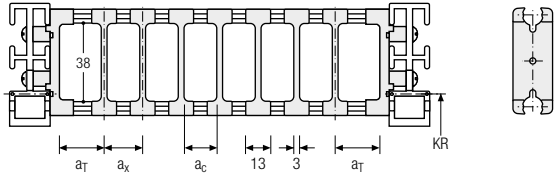
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping into a socket (available as an accessory).

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

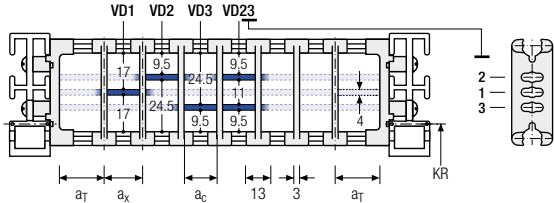
The dividers can be moved in the cross section.



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.

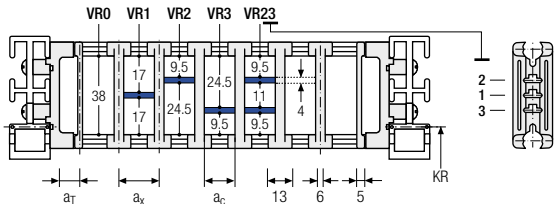


Divider system TS2 with partial height separation


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).



PROTUM® series
K series
UNIFLEX Advanced series
M series
TKHD series
XL series
QUANTUM® series
TKR series
TKA series
UAT series



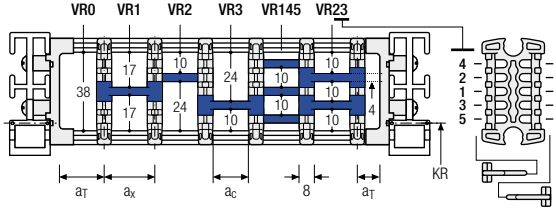
TRAXLINE® cables for cable carriers

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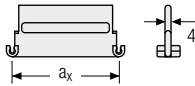
Divider system TS3 with height separation consisting of plastic partitions

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.

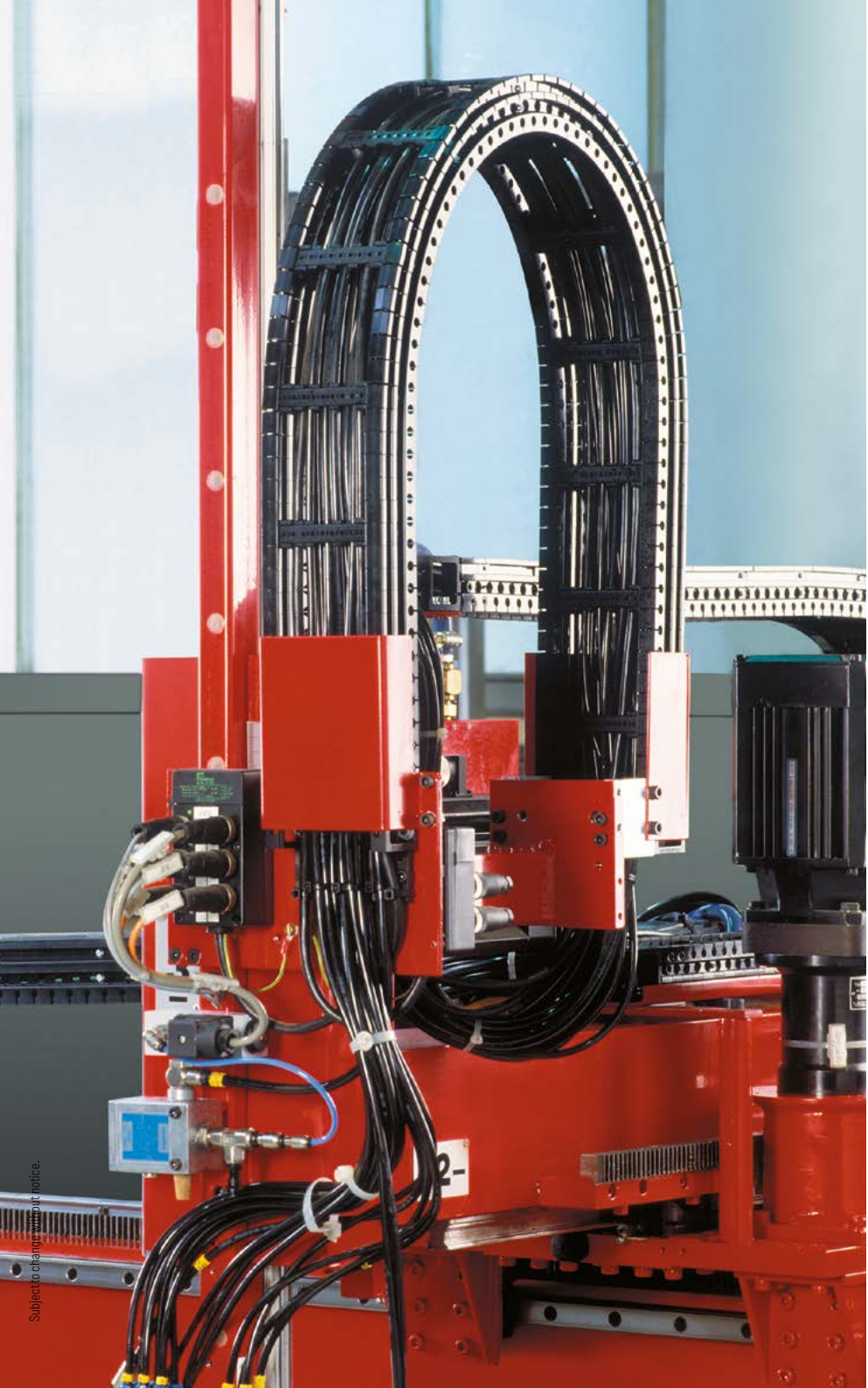
More product information online



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



Subject to change without notice.

PROTUM®
series

K
series

UNIFLEX
Advanced
series

M
series

TKHD
series

XL
series

QUANTUM®
series

TKR
series

TKA
series

UAT
series

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°.



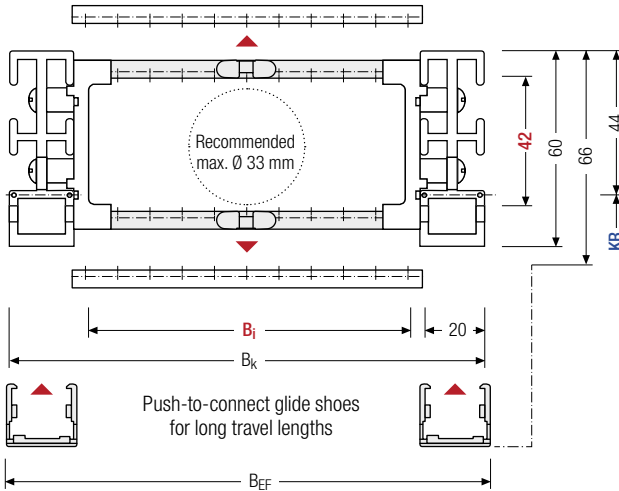
Stays on every 6th section,
standard (HS: half-stayed)



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

TKR series	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
			140	148	156	164	172	180	188	196	204			150	190	–
			212	220	228	236	244	252	260	268	276			250	300	1.54

Order example



Q060

Type

196

B_i [mm]

RE

Stay variant

150

KR [mm]

1540

L_k [mm]

HS

Stay arrangement

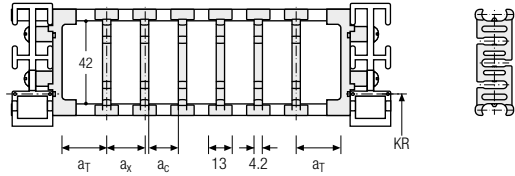
Divider systems

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 TSO without height separation

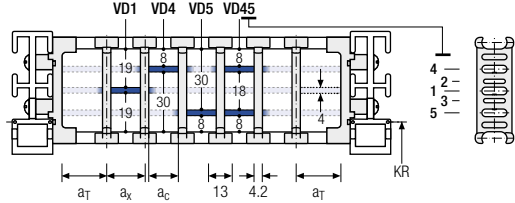
Vers.	a _T min [mm]	a _x min [mm]	a _c min [mm]	a _x grid [mm]	π _T min
A	14	13	8.8	–	–
B	14	16	11.8	8	–



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 Raster [mm]	π _T min
A	14	25	13	8.8	–	2



The dividers can be moved in the cross section.

PROTUM® series
K series
UNIFLEX Advanced series
M series
TKHD series
XL series
QUANTUM® series
TKR series
TKA series
UAT series



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 tsbaki-kabelschlepp.com/totaltrax



TRAXLINE® cables for cable carriers

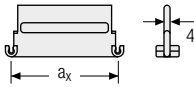
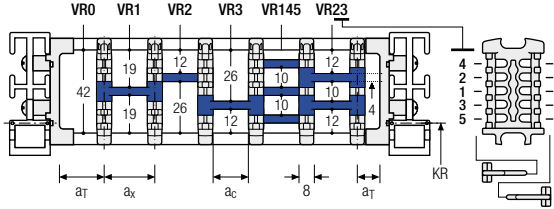
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at tsbaki-kabelschlepp.com/traxline

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



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

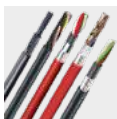
Please state the designation of the divider system (**TS0, TS1, ...**), the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

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.



TOTALTRAX® complete systems

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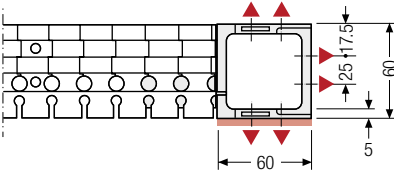


TRAXLINE® cables for cable carriers

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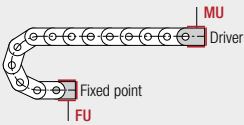
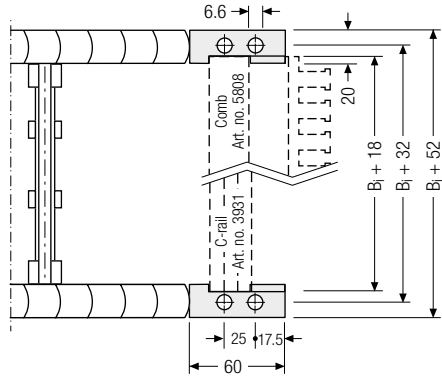
Universal end connectors UMB – plastic (standard)

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



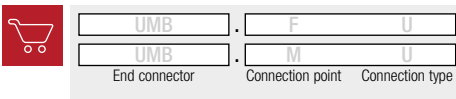
Connection point

F – fixed point
M – driver

Connection type

U – universal end connector

Order example



We recommend the use of strain reliefs at the driver and fixed point. See from p. 902.

PROTUM® series
K series
UNIFLEX Advanced series
M series
TKHD series
XL series
QUANTUM® series
TKR series
TKA series
UAT series

More product information online

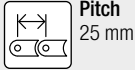


Assembly instructions etc.: Additional info via your smartphone or check online at tsubaki-kabelschlepp.com/downloads



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

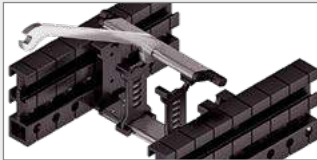
Stay variants



Aluminum stay RS page 506

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 510

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 514

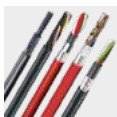
Frame screw-in stay

- 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

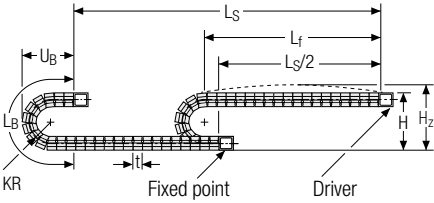


TRAXLINE® cables for cable carriers

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tsubaki-kabelschlepp.com/traxline

Unsupported arrangement

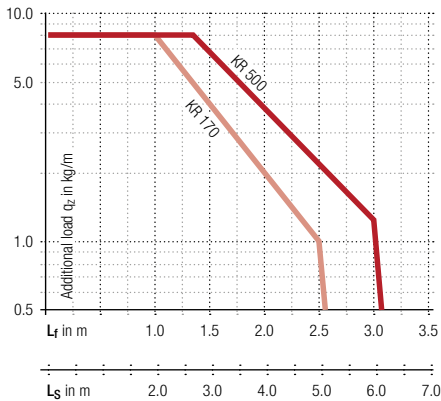


KR [mm]	H [mm]	L _B [mm]	U _B [mm]
170	457	834	379
200	517	928	409
250	617	1085	459
320	757	1305	529
420	957	1619	629
500	1117	1870	709

Load diagram for unsupported length depending on the additional load.

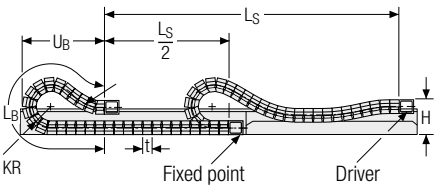
Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight $q_k = 2.5 \text{ kg/m}$. 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. 842.
Glide shoes have to be used for gliding applications.

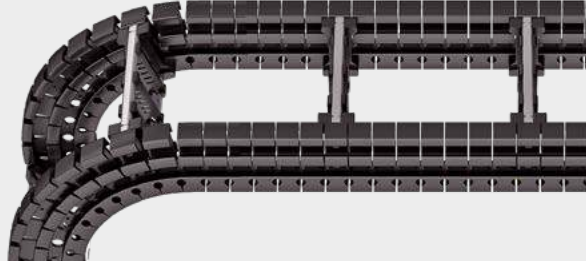
Our technical support can provide help for gliding arrangements: technik@kabelschlepp.de

Subject to change without notice.

PROTUM® series
K series
UNIFLEX Advanced series
M series
TKHD series
XL series
QUANTUM® series
TKR series
TKA series
UAT series

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°.



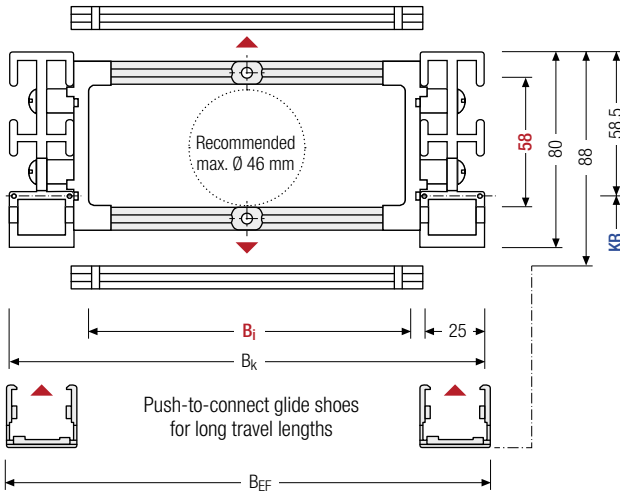
Stays on every 8th section.
standard (HS: half-stayed)



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

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

Type

400

B_i [mm]

RS

Stay variant

250

KR [mm]

1600

L_k [mm]

HS

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**).

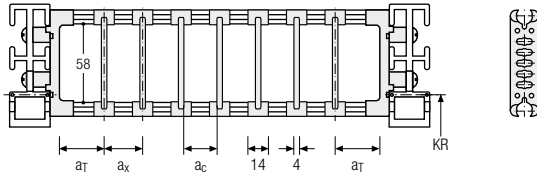
For applications with lateral acceleration and rotated by 90°. the dividers can be attached by simply clipping into a socket (available as an accessory).

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

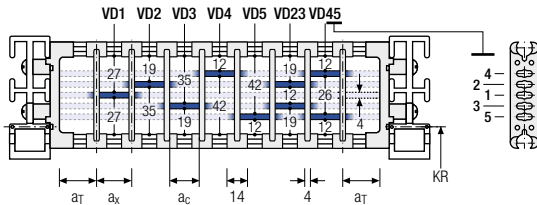
The dividers can be moved in the cross section.



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.

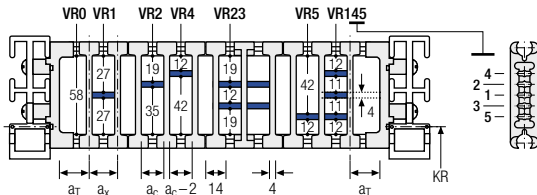


Divider system TS2 with partial height separation

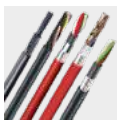
Vers.	a _T min [mm]	a _x min [mm]	a _c min [mm]	n _T min
A	11	23	19	2

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

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

PROTUM® series
K series
UNIFLEX Advanced series
M series
TKHD series
XL series
QUANTUM® series
TKR series
TKA series
UAT series

Divider system TS3 with height separation consisting of plastic partitions

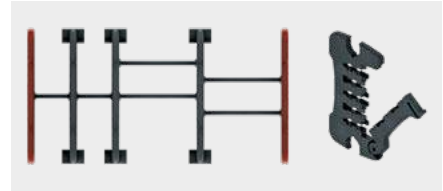
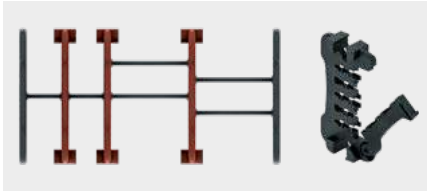
As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

PROLUM® series

K series

Divider version A

End divider



UNIFLEX Advanced series

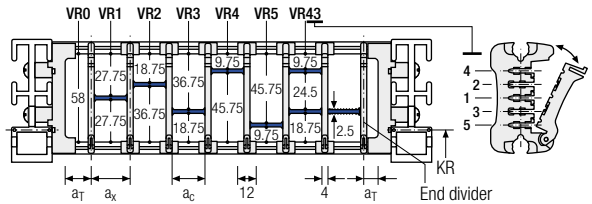
M series

Vers.	a _T min [mm]	a _x min [mm]	a _c min [mm]	n _T min
A	10.5 / 6.5	14	10	2

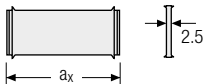
* For End divider

TKHD series

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



XL series



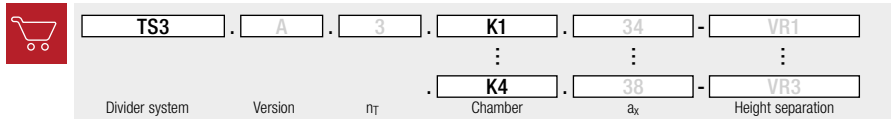
a _x (center distance of dividers) [mm]																
a _c (nominal width of inner chamber) [mm]																
14	16	19	23	24	28	29	32	33	34	38	39	43	44	48	49	54
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	59	64	68	69	74	78	79	80	84	88	89	94	96	99	112	
54	55	60	64	65	70	74	75	76	80	84	85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

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

QUANTUM® series

Order example

TKR series



TKA series

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.

UAT series



Subject to change without notice.

PROTUM®
series

K
series

UNIFLEX
Advanced
series

M
series

TKHD
series

XL
series

QUANTUM®
series

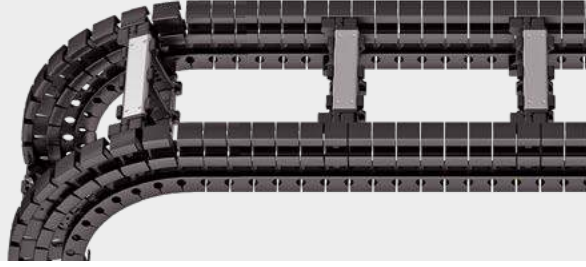
TKR
series

TKA
series

UAT
series

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°.



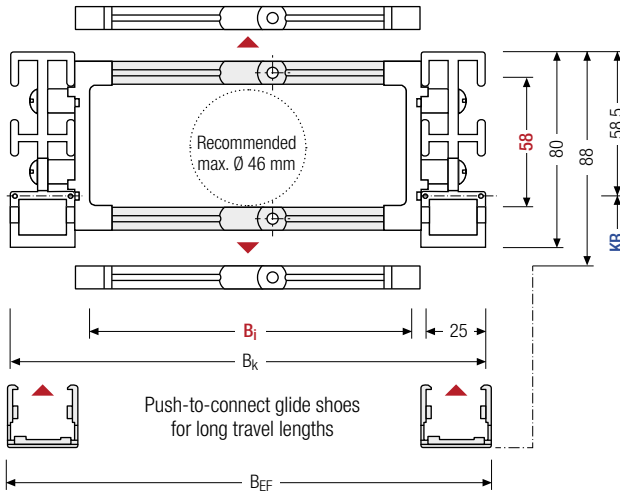
Stays on every 8th section.
standard (HS: half-stayed)



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

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

Type

400

B_i [mm]

RV

Stay variant

250

KR [mm]

1600

L_k [mm]

HS

Stay arrangement

Divider systems

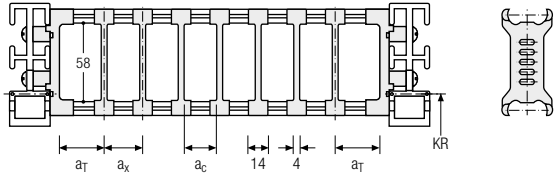
The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

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

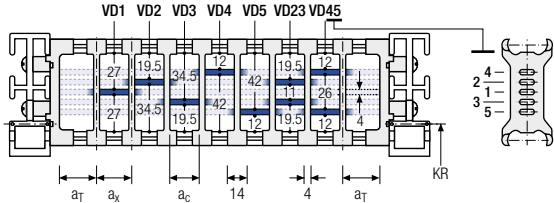
The dividers can be moved in the cross section.



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.

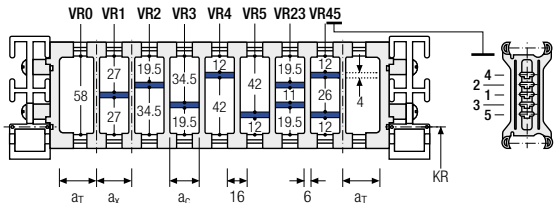


Divider system TS2 with partial height separation

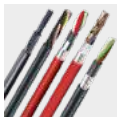
Vers.	a _T min [mm]	a _x min [mm]	a _c min [mm]	n _T min
A	12	21	15	2

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).



PROTUM® series
K series
UNIFLEX Advanced series
M series
TKHD series
XL series
QUANTUM® series
TKR series
TKA series
UAT series



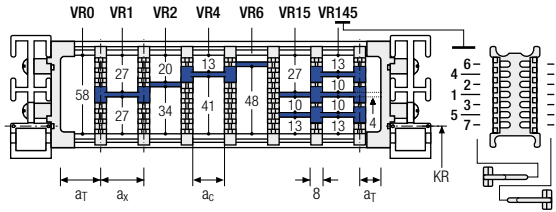
TRAXLINE® cables for cable carriers

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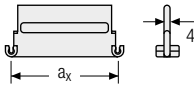
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	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](https://www.tsubaki-kabelschlepp.com/downloads)



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



Subject to change without notice.

PROTUM®
series

K
series

UNIFLEX
Advanced
series

M
series

TKHD
series

XL
series

QUANTUM®
series

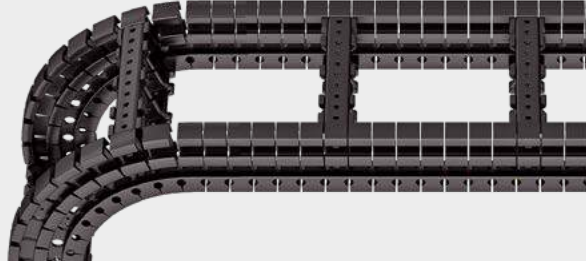
TKR
series


TKA
series

UAT
series


Plastic stay RE – frame screw-in stay

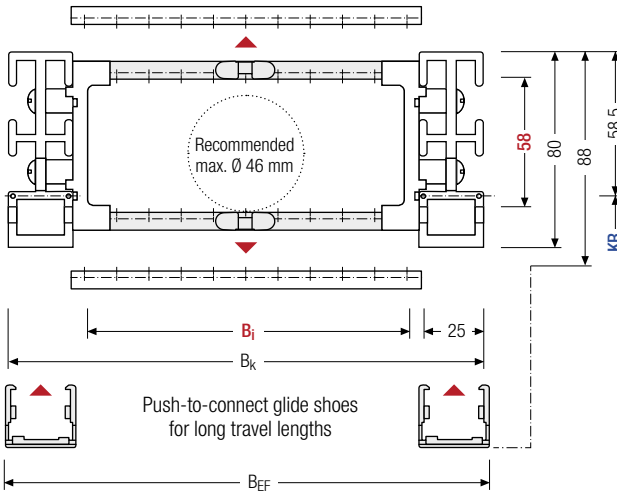
- Plastic profile bars for light to medium loads.
Assembly without screws.
- Available customized in **16 mm sections**.
- **Outside/inside:** release by rotating 90°.




 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

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	
			202	218	234	250	266	282	298	314	330			250	320		
			346	362	378	394	410	426	442	458	474			420	500		2.70
			490	506	522	538	554	570									

Order example


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

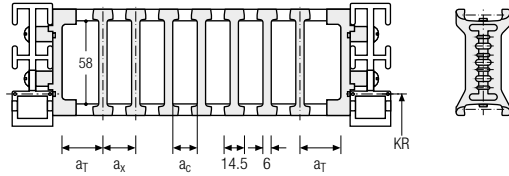
Divider systems

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

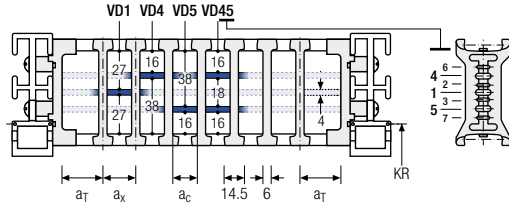
Vers.	a _T min [mm]	a _x min [mm]	a _c min [mm]	a _x grid [mm]	π _T min
A	12	14.5	8.5	–	–
B	13	16	10	16	–



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 Raster [grid]	π _T min
A	12	25	14.5	8.5	–	2
B	13	25	16	10	16	2

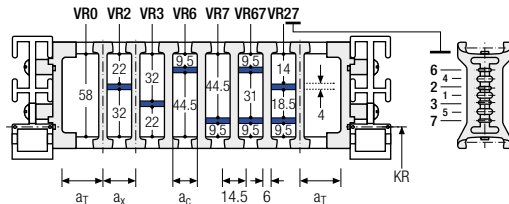


The dividers are movable within the cross section (version A) or fixed (version B).

Divider system TS2 with partial height separation


Vers.	a _T min [mm]	a _x min [mm]	a _c min [mm]	π _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).

PROTUM® series
K series
UNIFLEX Advanced series
M series
TKHD series
XL series
QUANTUM® series
TKR series
TKA series
UAT series



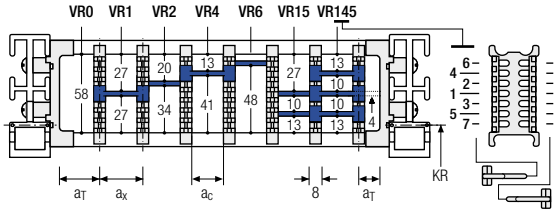
TOTALTRAX® complete systems

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

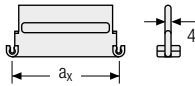
Divider system TS3 with height separation consisting of plastic partitions

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

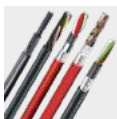
Please state the designation of the divider system (**TS0, TS1....**), the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

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.



TOTALTRAX® complete systems

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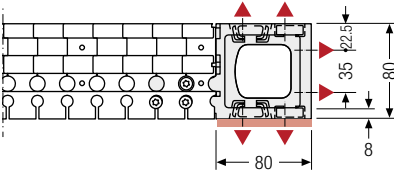


TRAXLINE® cables for cable carriers

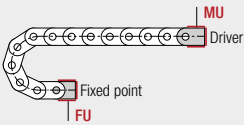
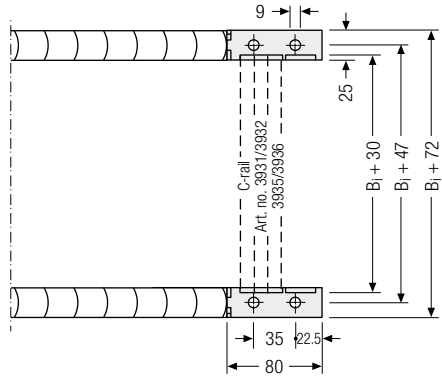
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at tsubaki-kabelschlepp.com/traxline

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



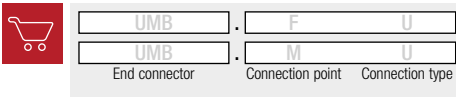
Connection point


- F** – fixed point
- M** – driver

Connection type

- U** – universal end connector

Order example



 We recommend the use of strain reliefs at the driver and fixed point. See from p. 902.

More product information online



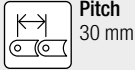
Assembly instructions etc.: Additional info via your smartphone or check online at tsubaki-kabelschlepp.com/downloads



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

PROTUM® series
K series
UNIFLEX Advanced series
M series
TKHD series
XL series
QUANTUM® series
TKR series
TKA series
UAT series

Q100



Pitch
30 mm



Inner height
72 mm

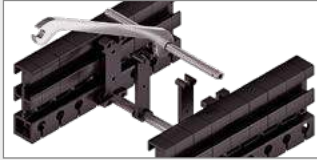


Inner widths
70 – 600 mm



Bending radii
180 – 600 mm

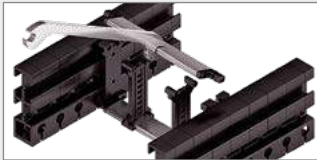
Stay variants



Aluminum stay RS page 520

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 524

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 528

Frame screw-in stay

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



TOTALTRAX® complete systems

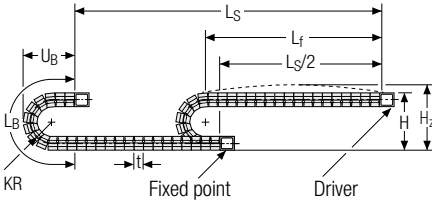
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at tsubaki-kabelschlepp.com/totaltrax



TRAXLINE® cables for cable carriers

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Unsupported arrangement

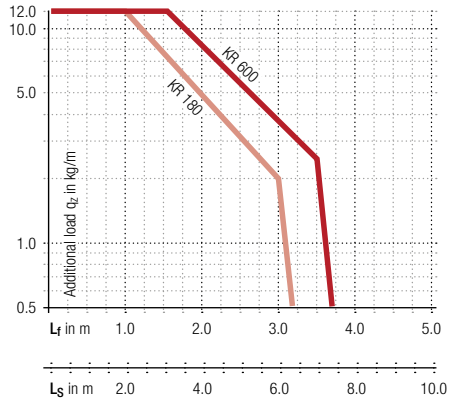


KR [mm]	H [mm]	L _B [mm]	U _B [mm]
180	503	926	432
250	643	1145	502
300	743	1302	552
370	883	1522	622
460	1063	1805	712
600	1343	2244	852

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 $q_k = 3.25 \text{ kg/m}$. For other inner widths, the maximum additional load changes.



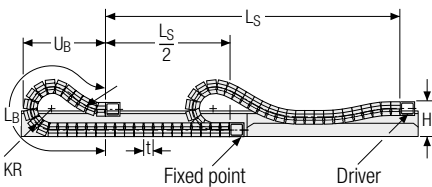
Speed
up to 20 m/s

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

The gliding cable carrier has to be routed in a channel. See p. 842.

Glide shoes have to be used for gliding applications.

Travel length
up to 95 m

Additional load
up to 12 kg/m

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

PROTUM® series

K series

UNIFLEX Advanced series

M series

TKHD series

XL series

QUANTUM® series

TKR series

TKA series

UAT series

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°.



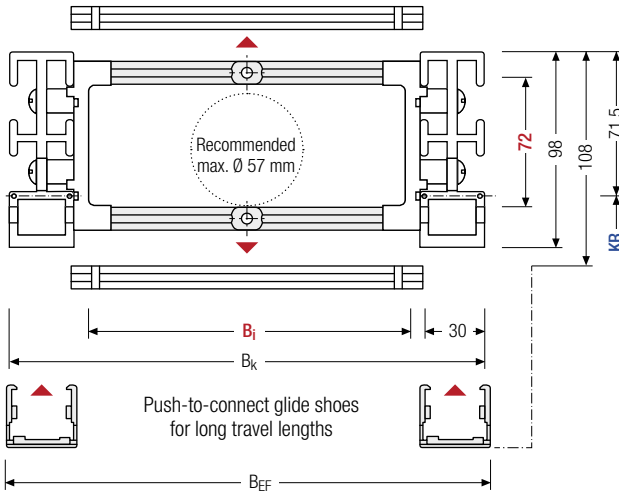
Stays on every 8th section,
standard (HS: half-stayed)



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

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

Type

400

B_i [mm]

RS

Stay variant

370

KR [mm]

1860

L_k [mm]

HS

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**).

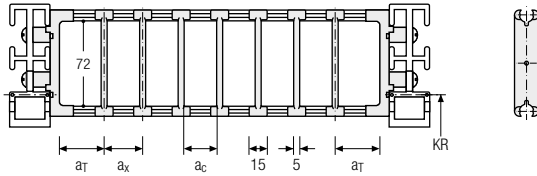
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping into a socket (available as an accessory).

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 TSO without height separation

Vers.	a _T min [mm]	a _x min [mm]	a _c min [mm]	n _T min
A	11	15	10	2

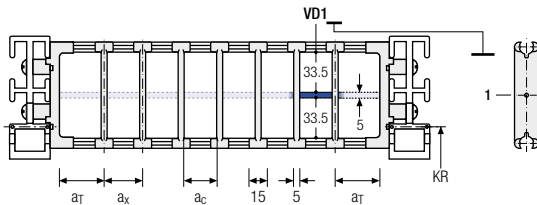
The dividers can be moved in the cross section.



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

TS1

A

3

VD1

-

VD3

Divider system

Version

n_T

Height separation

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.

QUANTUM® series	TKR series
UNIFLEX Advanced series	TKA series
K series	TKHD series
M series	XL series
PROTUM® series	UAT series

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.

PROTUM® series

K series

UNIFLEX Advanced series

M series

TKHD series

XL series

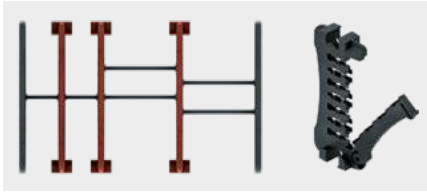
QUANTUM® series

TKR series

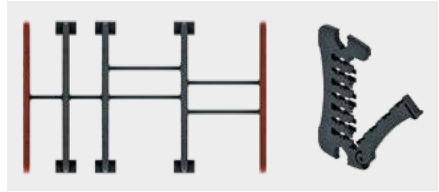
TKA series

UAT series

Divider version A



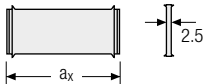
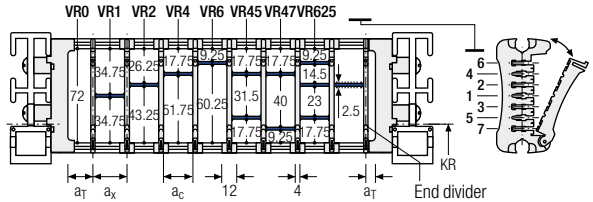
End divider



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.

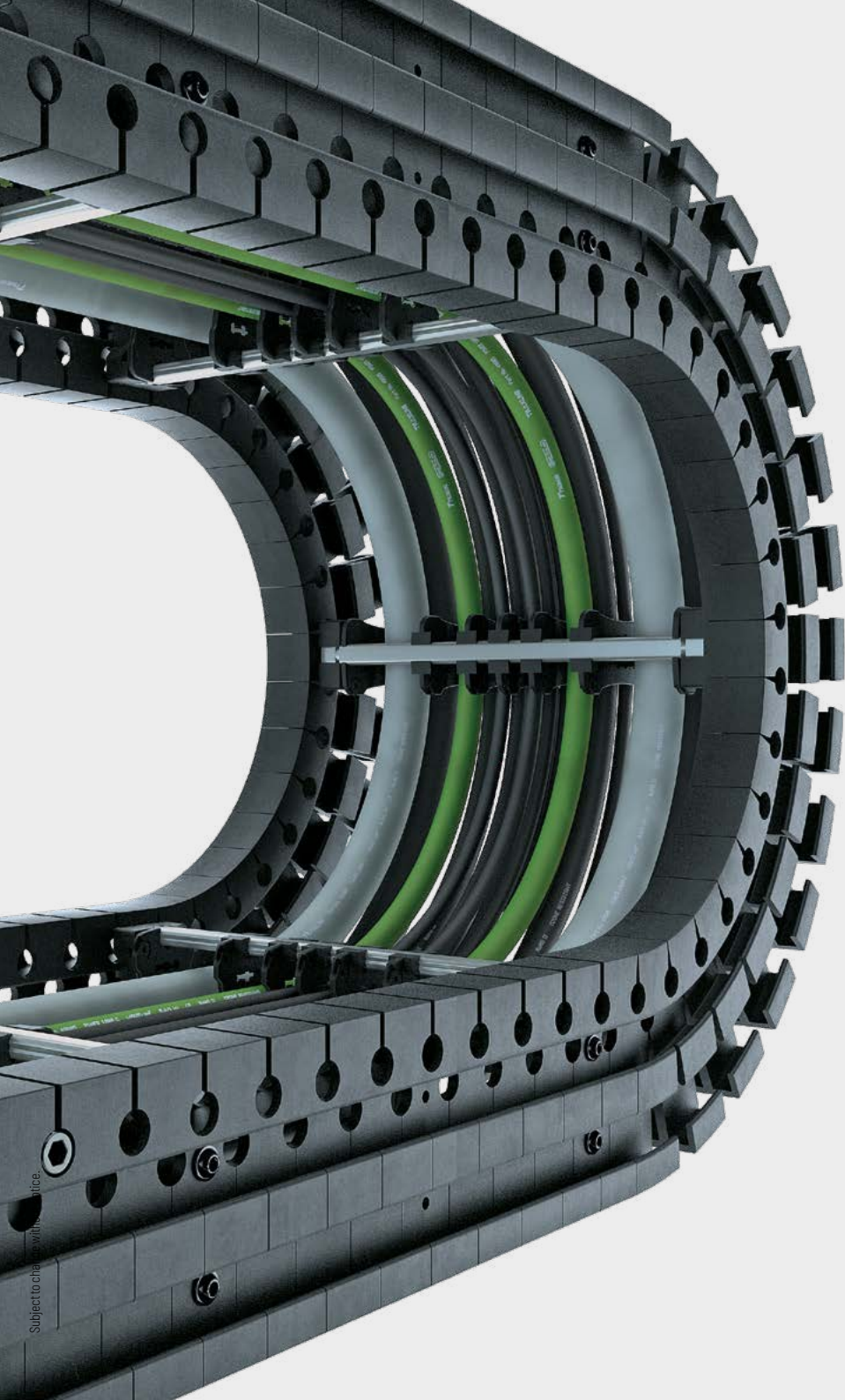
Order example

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.



Subject to change without notice.

PROTUM®
series

K
series

UNIFLEX
Advanced
series

M
series

TKHD
series

XL
series

QUANTUM®
series

TKR
series

TKA
series

UAT
series

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°.



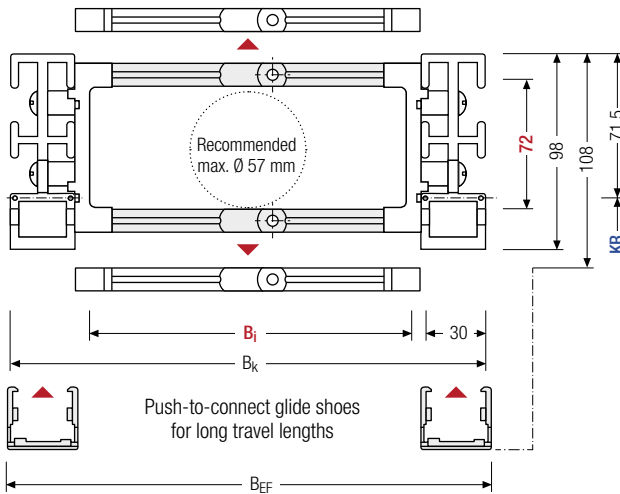
Stays on every 8th section,
standard (HS: half-stayed)



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

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

Type

400

B_i [mm]

RV

Stay variant

370

KR [mm]

1860

L_k [mm]

HS

Stay arrangement

Divider systems

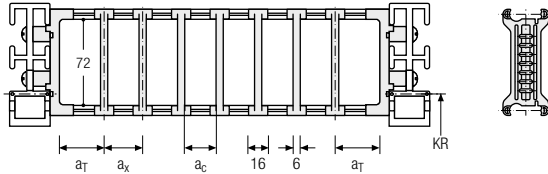
The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

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

Divider system TSO without height separation

Vers.	a _T min [mm]	a _x min [mm]	a _c min [mm]	n _T min
A	13	16	10	2

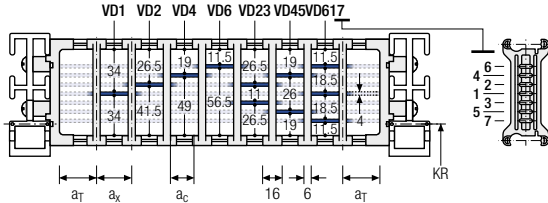
The dividers can be moved in the cross section.



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.

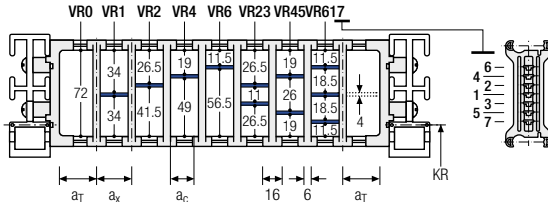


Divider system TS2 with partial height separation

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).



PROTUM® series
K series
UNIFLEX Advanced series
M series
TKHD series
XL series
QUANTUM® series
TKR series
TKA series
UAT series

Subject to change without notice.



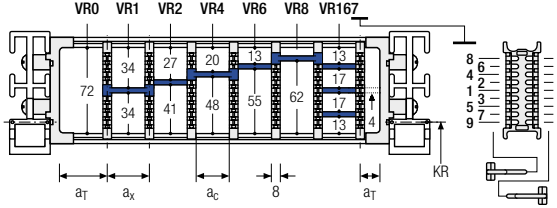
TRAXLINE® cables for cable carriers

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

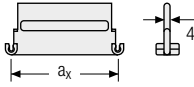
Divider system TS3 with height separation consisting of plastic partitions

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.

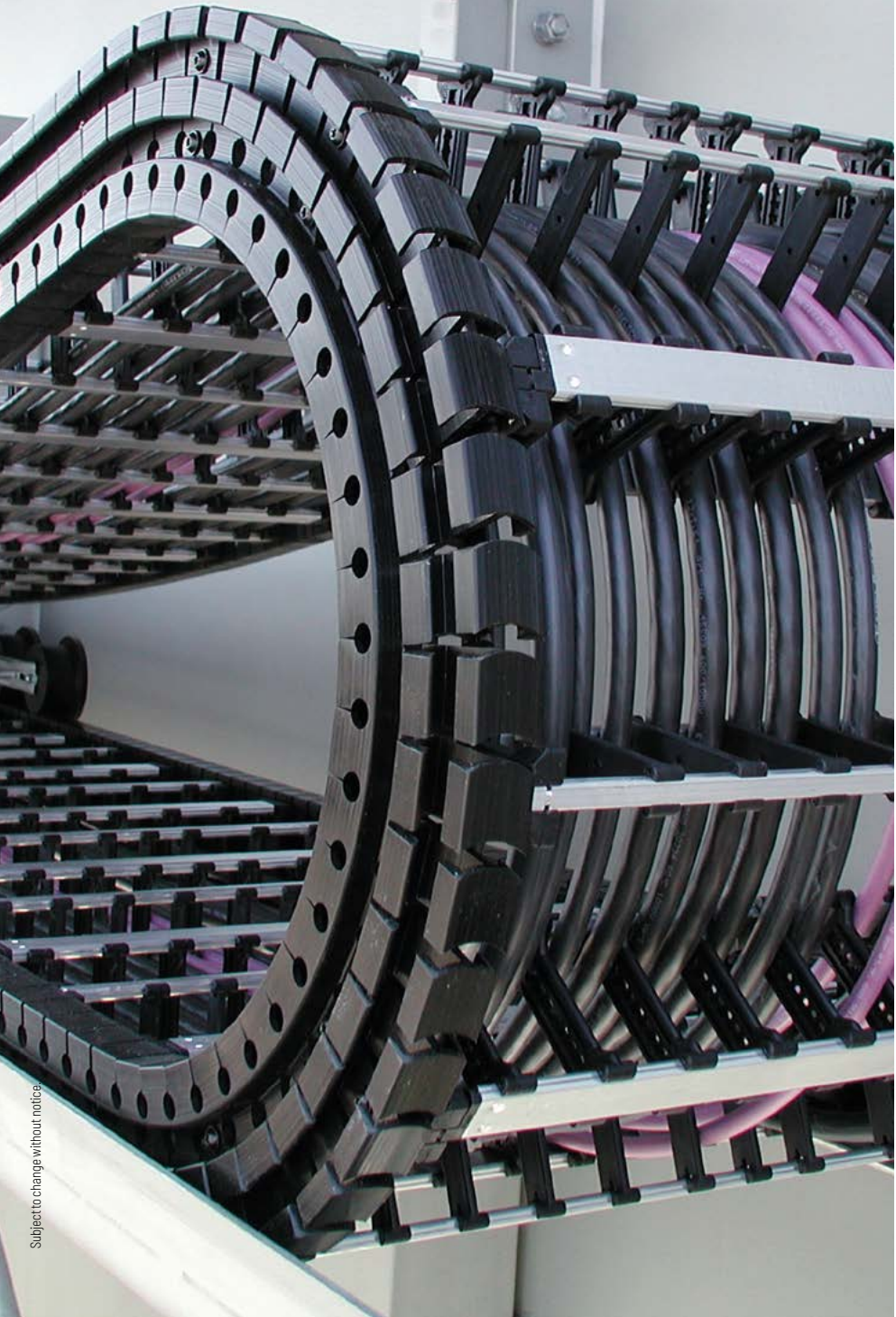
More product information online



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



Configure your custom
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Subject to change without notice.

PROTUM®
series

K
series

UNIFLEX
Advanced
series

M
series

TKHD
series

XL
series

QUANTUM®
series

TKR
series

TKA
series

UAT
series

Plastic stay RE – frame screw-in stay

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



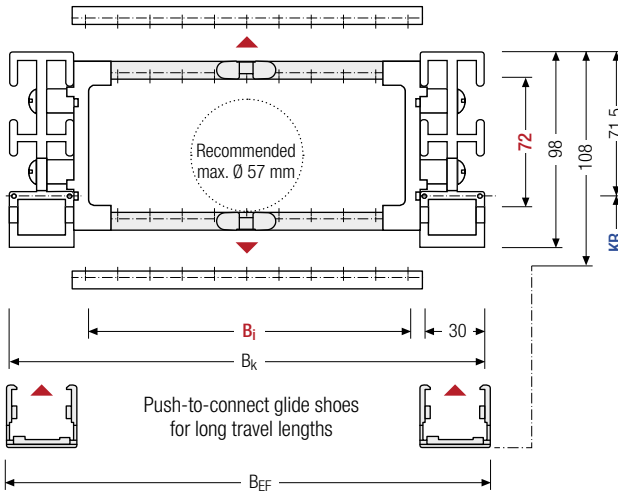
Stays on every 8th section, **standard (HS: half-stayed)**



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

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	
			218	234	250	266	282	298	314	330	346			300	370		
			362	378	394	410	426	442	458	474	490			460	600		3.67
			506	522	538	554	570										

Order example

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

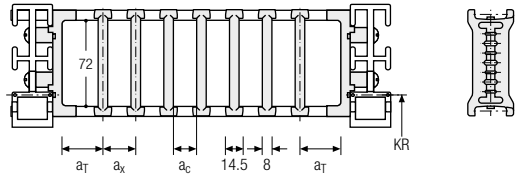
Divider systems

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 TSO without height separation

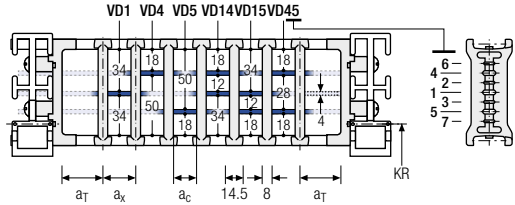
Vers.	a _T min [mm]	a _x min [mm]	a _c min [mm]	a _x grid [mm]	n _T min
A	12	14.5	6.5	–	–
B	13	16	8	16	–



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

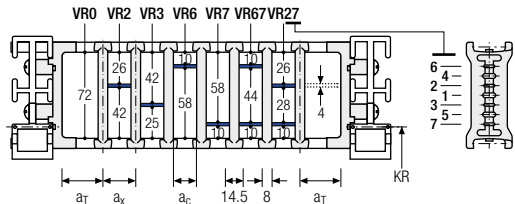


The dividers are movable within the cross section (version A) or fixed (version B).

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 VRO



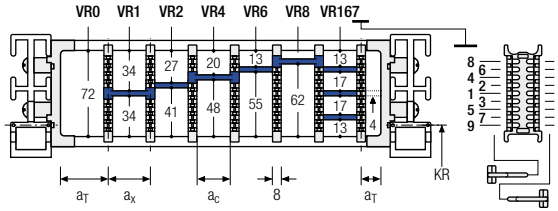
With grid distribution (16 mm grid). The dividers are fixed by the height separation; the grid is movable in the cross section (version A) or fixed (version B).

PROTUM® series
K series
UNIFLEX Advanced series
M series
TKHD series
XL series
QUANTUM® series
TKR series
TKA series
UAT series

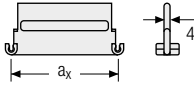
Divider system TS3 with height separation consisting of plastic partitions

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

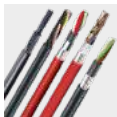
Please state the designation of the divider system (**TS0, TS1,...**), the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

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.



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

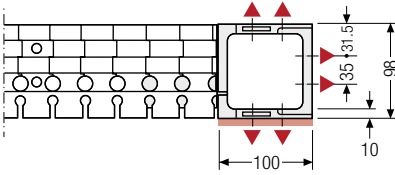


TRAXLINE® cables for cable carriers

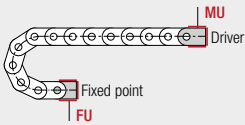
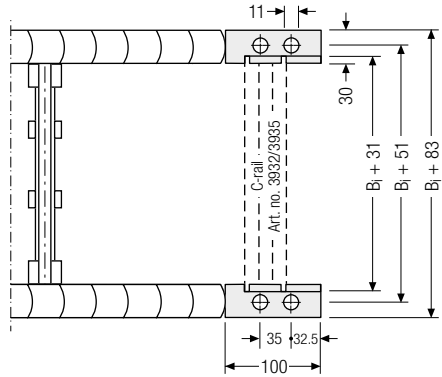
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at tsubaki-kabelschlepp.com/traxline

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



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. 902.

More product information online



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



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