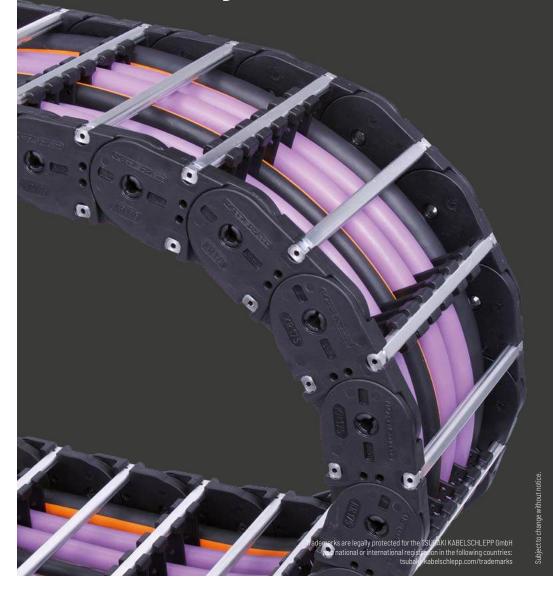
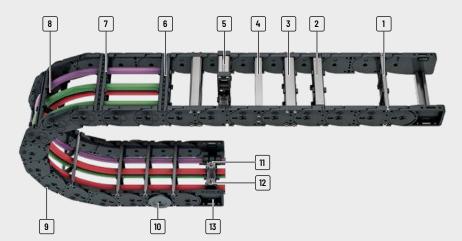
# **K** series

Cost-effective, robust cable carrier - suitable for large additional loads



UAT series



- Aluminum stays available in 1 mm width sections
- 2 Aluminum stays in reinforced version
- **3** Aluminum stays with 4 screw-fixing points for extreme loads
- 4 Aluminum hole stays
- 5 Mounting frame stays
- 6 Plastic stays available in 8 or 16 mm width sections
- 7 Can be opened quickly on the inside and the outside for cable laying
- 8 Fixable dividers
- 9 Molded slide runners
- 10 Slide discs
- 11 C-rail for strain relief elements
- 12 Strain relief elements
- 13 Universal end connectors (UMB)

### **Features**

- » Stable sidebands through robust link plate design
- » Encapsulated, dirt-resistant stroke system
- » Long service due to minimized hinge wear owing to the "life extending 2 disc principle"
- » Versions with aluminum stays available in 1 mm width sections up to 700 mm inner width
- » Versions with plastic stays available in 8 or 16 mm width sections
- » Large selection of vertical and horizontal stay separation options for your cables





















Minimized hinge wear owing to the "life extending 2 disc principle"



Slide discs for long service life for applications where the carrier is rotated through 90°



Molded slide runners for long service life in sliding arrangement



Many separation options for the cables

UAT	series
	٠,

Туре	Opening variant	Stay variant	h <sub>i</sub> [mm]	h <sub>G</sub> [mm]	B <sub>i</sub> [mm]	B <sub>k</sub> [mm]	B <sub>i</sub> - grid [mm] Xmm ├──	t [mm] ₩	KR [mm]	Additional load ≤ [kg/m]	Cable- d <sub>max</sub> [mm]
K0650			7.0		FF 400	407 (00		0.5	FF. 700		
		RS	38	57.5	75 – 400	103 – 428	1	65	75 – 300	20	30
		LG	36	57.5	75 - 600	103 - 628	1	65	75 - 300	20	32
-::	áÜb	RMAI	38 (200)	57,5 (224)	200 - 400	234 - 428	1	65	175 - 300	20	160
	ظلِّكُ	RMA0	38 (200)	57,5 (224)	200 - 400	234 - 428	1	65	75 – 300	20	160
		RE	42	57.5	68 - 268	96 - 296	8	65	75 – 300	20	33
K0900											
		RS	58	78.5	100 - 400	131 - 431	1	90	130 - 385	30	46
		RV	58	78.5	100 - 500	131 - 531	1	90	130 - 385	30	46
<u> </u>		RM	54	78.5	100 - 600	131 – 631	1	90	130 - 385	30	43
		LG	50	78.5	100 - 700	131 - 731	1	90	130 - 385	30	42
	άÜb	RMAI	58 (200)	78,5 (224)	200 - 500	231 - 531	1	90	150 - 385	30	160
	ظلِّكُ	RMA0	58 (200)	78,5 (224)	200 - 500	231 - 531	1	90	130 - 385	30	160
		RMR	51	78.5	100 - 600	131 – 631	1	90	130 - 385	30	41
		RE	58	78.5	81 - 561	112 - 592	16	90	130 - 385	30	46

<sup>\*</sup> Further information on request.

### **K series** | Overview

Unsupported arrangement			Glidin	g arrange	ment	I	nner Dis	tributio	n	Movement			Page
$\begin{array}{c} \textbf{Travel} \\ \textbf{length} \\ \leq [m] \end{array}$	<b>v</b> max ≤[m/s]	$\mathbf{a}_{\text{max}}$ $\leq [\text{m/s}^2]$	$\begin{array}{c} \textbf{Travel} \\ \textbf{length} \\ \leq [m] \end{array}$	v <sub>max</sub> ≤[m/s]	$\mathbf{a}_{\text{max}}$ $\leq [\text{m/s}^2]$	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	g.
								H		vertic	lying	ä	
4.8	8	40	220	2	3	•	•	•	•	•	•	•	308
4.8	8	40	220	2	3	-	-	-	-	•	•	•	312
4.8	8	40	220	2	3	•	-	-	-	•	•	-	314
4.8	8	40	220	2	3	•	-	-	-	•	•	-	316
4.8	8	40	220	2	3	•	•	-	•	•	•	•	318
8.4	6	30	260	2	3								326
8.4	6	30	260	2	3	•	•	•		•	•	•	330
8.4	6	30	260	2	3	•	•	-	-	•	•	•	*
8.4	6	30	260	2	3	-	-	-	-	•	•	•	334
8.4	6	30	260	2	3	•	-	-	-	•	•	-	336
8.4	6	30	260	2	3	•	_	_	-	•	•	_	338
8.4	6	30	260	2	3	•	-	-	-	•	•	•	*
8.4	6	30	260	2	3	•	•	•	•	•	•	•	340

M series

# K0650



Pitch 65 mm



Inner heights 36 - 42 mm



Inner widths 68 - 600 mm



**Bending radii** 75 – 300 mm

#### Stay variants



Aluminum stay RS ......page 308

#### Frame stay, narrow "The standard"

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



Aluminum stay LG ......page 312

#### Hole stay, split version

- » Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- » Outside/inside: Screw-fixing easy to release.



Aluminum stay RMAI......page 314

#### Mounting frame stay

- » Aluminum profile bars with plastic mounting frame stays for quiding very large cable diameters.
- » Inside: Screw-fixing easy to release.



Aluminum stay RMAO......page 316

#### Mounting frame stay

- » Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- » Outside: Screw-fixing easy to release.



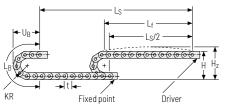
Plastic stay RE page 318

#### Frame screw-in stay

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

UAT series

#### **Unsupported arrangement**



[mm] [mm] [mm] [mm]	
<b>75</b> 205 245 366 168	
<b>115</b> 285 325 492 208	
<b>145</b> 345 385 586 238	
<b>175</b> 405 445 680 268	
<b>220</b> 495 535 822 313	
<b>300</b> 655 695 1073 393	

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

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

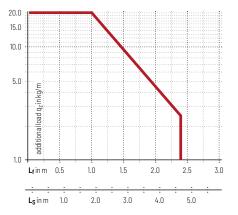
Intrinsic cable carrier weight  $q_k = 2.5$  kg/m. For other inner widths, the maximum additional load changes.



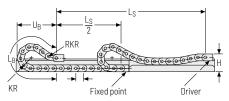








#### **Gliding arrangement**





### Speed up to 2 m/s

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





The gliding cable carrier must be guided in a channel. See p. 866.

If the cable carrier is positioned so it is rotated by  $90^\circ$  (gliding on the outside of the side band), slide discs snapped onto the side optimize the friction and wear situation.

PR0TUM® series

UNIFLEX Advanced series

> M series

TKHP® series

#### **KC0650 RS** | Dimensions · Technical Data

### Aluminum stay RS -

frame stay narrow

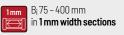
- » Extremely quick to open and close
- » Aluminum profile bars for light to medium loads. Assembly without screws.
- » Available customized in 1 mm width sections.
- » Outside/inside: to open by rotating 90°.

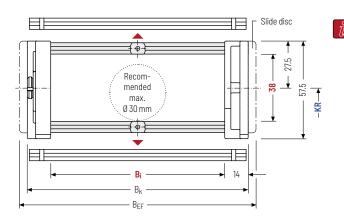




Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)** 







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

### Calculating the cable carrier length

#### Cable carrier length Lk

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

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

XL series

QUANTUM® series

TKR series

TKA

h <sub>i</sub>	h <sub>G</sub>	<b>B</b> i	B <sub>k</sub>	B <sub>EF</sub>	KR	<b>q</b> k
[mm]	[mm]	[mm]*	[mm]	[mm]	[mm]	[kg/m]
38	57,5	75 - 400	B <sub>i</sub> + 28	B <sub>i</sub> + 36	75 115 145 175 220 30	

<sup>\*</sup> in 1 mm width sections

#### Order example



#### **Divider systems**

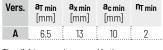
The divider system is mounted on each crossbar as a standard - on every 2<sup>nd</sup> chain link for stay mounting (HS - halfstayed).

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

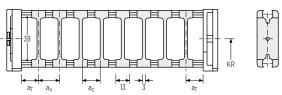
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping on a socket (available as an accessory).

This socket additionally acts as a spacer between the dividers and is available in a 1 mm grid between 3 - 50 mm. The inner height is reduced to 32 mm (version B).

#### **Divider system TS0** without height separation



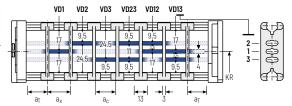
The dividers can be moved in the cross section.



#### Divider system TS1 with continuous height separation

Ver	s.		a <sub>T max</sub> [mm]			
Α		6.5	25	13	10	2

The dividers can be moved in the cross section.



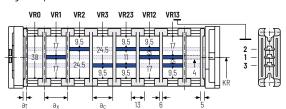
#### **Divider system TS2** with partial height separation

Vers.	a <sub>T min</sub> [mm]	a <sub>x min</sub> [mm]	a <sub>c min</sub> [mm]	n <sub>T min</sub>
Α	3.5	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).



#### Additional product information online



Subject to change without notice

Installation instructions, etc.: Additional info via your smartphone or check online at

tsubaki-kabelschlepp.com/ downloads



Configure your cable carrier here: online-engineer.de

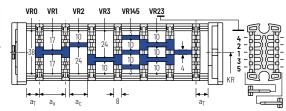
#### UAT series

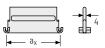
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a <sub>T min</sub> [mm]	a <sub>x min</sub> [mm]	a <sub>c min</sub> [mm]	n <sub>T min</sub>
Α	4	16 / 42*	8	2
* For olup	ninum norti	iono		•

\* For aluminum partitions

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



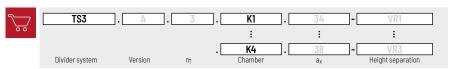


Aluminum partitions in 1 mm increments with  $a_x > 42$  mm are also available.

			a <sub>x</sub> (c	center (	distanc	e of divi	<b>iders)</b> [r	nm]						
	a <sub>c</sub> (nominal width of inner chamber) [mm]													
16	16         18         23         28         32         33         38         43         48         58         64         68													
8	8 10 15 20 24 25 30 35 40 50 56 60										60			
78	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 \text{ mm}**, we recommend an additional center support with a **twin divider** ( $S_T = 4 \text{ mm}$ ). Twin dividers are also suitable for retrofitting in the partition system.

#### Order example



Please state the designation of the divider system **(TSO, TS1,...)**, the version, and the number of dividers per cross section  $[n_{\overline{1}}]$ . In addition, please also enter the chambers [K] from left to right, as well as the assembly distances  $[a_{\overline{1}}/a_{\nu}]$ .

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.



#### 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

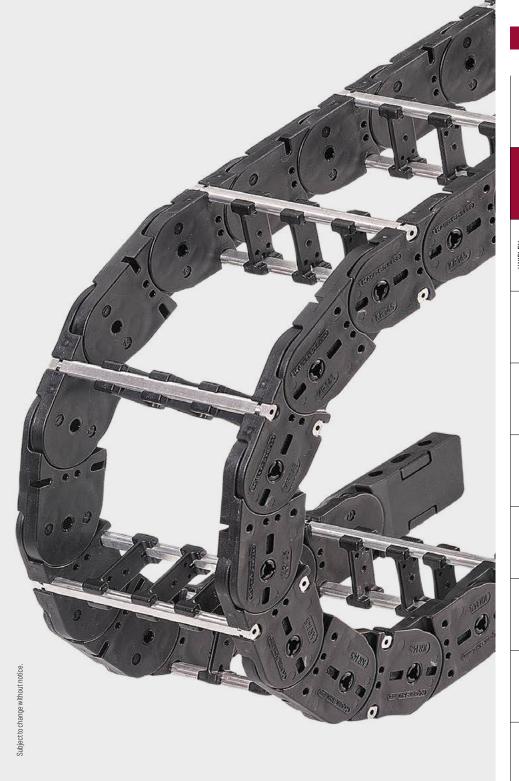


#### TRAXLINE® cables for cable carriers

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

tsubaki-kabelschlepp.com/traxline

TKA series



### **KC0650 LG** | Dimensions · Technical Data

### Aluminum stay LG -

Hole stay, split version

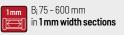
- » Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- » Available customized in 1 mm width sections.
- » Outside/inside: Screw-fixing easy to release.

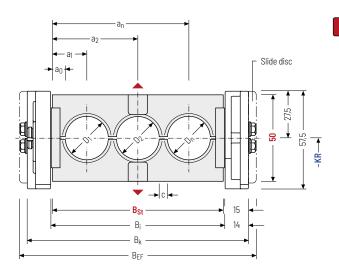




Stay arrangement on every 2nd chain link, **standard** (HS: half-stayed)







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

### Calculating the cable carrier length

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

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

Cable carrier length  $L_k$  rounded to pitch t

#### Calculating the stay width

#### Stay width B<sub>St</sub>

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

D <sub>max</sub> [mm]	D <sub>min</sub> [mm]	h <sub>G</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	c <sub>min</sub> [mm]	<b>a</b> <sub>0 min</sub> [mm]		KR [mm]		<b>q<sub>k</sub> 50 %**</b> [kg/m]
36	9	57.5	75 – 600	73 - 598	B <sub>St</sub> + 30	B <sub>St</sub> + 38	4	9	75 175	115 220	145 300	2.20 - 5.15

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

dimension BFF for stay variant LG.

The outer width of the cable carrier corresponds to

#### Order example



PR0TUM® series

UNIFLEX Advanced series

> M series

TKHP® series

XL series

QUANTUM® series

TKR series

TKA

UAT



PROTUM® series

> K series

UNIFLEX Advanced series

M series

TKHP® series

...

XL series

QUANTUM® series

TKR series

TKA series



#### **KC0650 RMAI** | Dimensions · Technical data

## **Aluminum stay RMAI –** mounting frame stay

- » Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- » The mounting frame stay is mounted on the inside in the bending radius.
- » Available customized in 1 mm width sections.
- » Inside: Screw-fixing easy to release.

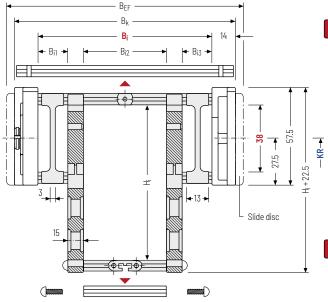




Stay arrangement on every 2nd chain link, **standard** (HS: half-stayed)







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

### Calculating the cable carrier length

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

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

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

### Intrinsic cable carrier weight

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

h <sub>i</sub> [mm]	H <sub>i</sub> [mm]	h <sub>G</sub> [mm]	B <sub>i</sub> [mm]	B <sub>i1 min</sub> [mm]	B <sub>i3 min</sub> [mm]	<b>B</b> <sub>k</sub> [mm]	B <sub>EF</sub> [mm]		KR [mm]	
38	130 160 200	57.5	200 - 400	18	18	B <sub>i</sub> + 28	B <sub>i</sub> + 36	175	220	300

#### Order example



PROTUM® series

UNIFLEX Advanced series

> M series

TKHP® series

XL series

QUANTUM® series

TKR

TKA

#### **KC0650 RMAI** | Dimensions · Technical data

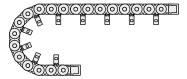
#### RMAI - assembly to the inside:

Gliding application is not possible when using assembly version RMAI.

Observe minimum KR:

 $H_i = 130 \text{ mm}$ :  $KR_{min} = 175 \text{ mm}$ 

 $H_i = 160 \text{ mm}$ :  $KR_{min} = 220 \text{ mm}$  $H_i = 200 \text{ mm}$ :  $KR_{min} = 300 \text{ mm}$ 



#### TOTALTRAX® complete systems

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#### TRAXLINE® cables for cable carriers

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

UAT

### **KC0650 RMA0** | Dimensions · Technical data

## **Aluminum stay RMA0 –** mounting frame stay

- » Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- » The mounting frame stay is mounted on the outside in the bending radius.
- » Available customized in 1 mm width sections.
- » Outside: Screw-fixing easy to release.





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

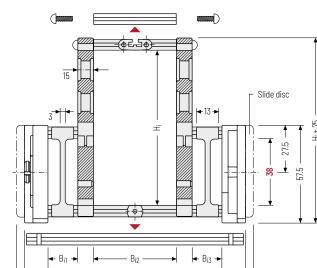


Stay arrangement on each chain link (VS: fully-stayed)



B<sub>i</sub> 200 – 400 mm

in 1 mm width sections



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

### Calculating the cable carrier length

#### Cable carrier length Lk

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

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

### Ű

### Intrinsic cable carrier weight

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

h <sub>i</sub> [mm]	H [m	<b>l<sub>i</sub></b> m]	h <sub>G</sub> [mm]	<b>B</b> i [mm]	B <sub>i1 min</sub> [mm]	B <sub>i3 min</sub> [mm]	<b>B<sub>k</sub></b> [mm]	B <sub>EF</sub> [mm]		KR [mm]	
38	130	160	E7 E	200 - 400	18	18	B <sub>i</sub> + 28	B <sub>i</sub> + 36	75	115	145
30	200		5/.5	200 - 400	10	10	Dj + 20	Dj + 30	175	220	300

#### Order example



PROTUM® series

UNIFLEX Advanced series

> M series

TKHP® series

XL series

QUANTUM® series

TKR series

TKA

UAT

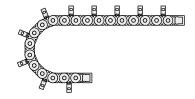
### KC0650 RMA0 | Dimensions · Technical data

#### RMAO - assembly to the outside:

The cable carrier has to rest on the side bands and not on the stays.

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

Please note the operating and installation height.





PROTUM® series

K series

UNIFLEX Advanced series

> M series

TKHP® series

XL series

QUANTUM® series

TKR series

TKA series

PR0TUM® series

UNIFLEX Advanced series

> M series

TKHP® series

#### **KE0650 RE** | Dimensions · Technical Data

### Plastic stay RE -

screw-in frame stay

- » Plastic profile bars for light and medium loads. Assembly without screws.
- » Available customized in 8 mm grid.
- » Outside/inside: to open by rotating 90°.

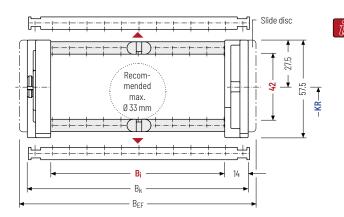




Stay arrangement on every 2nd chain link, **standard** (HS: half-stayed)







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

Calculating the cable carrier length

Cable carrier length Lk

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

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

XL series

QUANTUM® series

TKR series

TKA

h <sub>i</sub> [mm]	h <sub>G</sub> [mm]		B <sub>i</sub> [mm]						B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	<b>K</b> [m	R m]	<b>q</b> k [kg/m]		
		68	76	84	92	100	108	116	124	132			75	115	1.75
42	57.5	140	148	156	164	172	180	188	196	204	B <sub>i</sub> + 28	B <sub>i</sub> + 36	145	175	-
		212	220	228	236	244	252	260					220	300	2.71

#### Order example



#### **Divider systems**

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

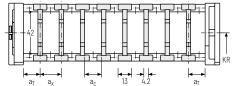
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section (version A).

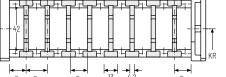
For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar (version B). The groove in the frame stay faces outwards.

#### Divider system TSO without height separation

Vers.				a <sub>x grid</sub> [mm]	n <sub>T</sub> min
Α	6.5	13	8.8	-	2
В	13	16	11.8	8	2

The dividers can be moved in the cross section.

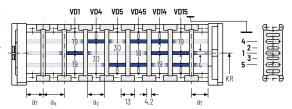




#### Divider system TS1 with continuous height separation

Vers.				<b>a<sub>x grid</sub></b> [mm]	
Α	6.5	13	8.8	-	2

The dividers can be moved in the cross section.



#### Additional product information online



Subject to change without notice

Installation instructions, etc.: Additional info via your smartphone or check online at

tsubaki-kabelschlepp.com/ downloads



Configure your cable carrier here: online-engineer.de

PROTUM® series

UNIFLEX Advanced series

> XL eries

QUANTUM® series

TKR eries

TKA

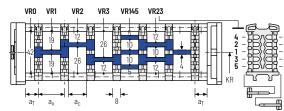
### **KE0650 RE** | Inner distribution | TS3

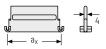
#### Divider system TS3 with height separation consisting of plastic partitions



\* For aluminum partitions

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



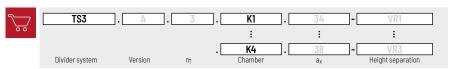


Aluminum partitions in 1 mm increments with  $\mathbf{a_x} > 42 \text{ mm}$  are also available.

	a <sub>x</sub> (center distance of dividers) [mm]										
			a <sub>c</sub> (no	minal w	idth of	inner ch	amber)	[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 \text{ mm}**, we recommend an additional center support with a **twin divider** ( $S_T = 4 \text{ mm}$ ). Twin dividers are also suitable for retrofitting in the partition system.

#### Order example



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

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.



#### 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



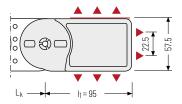
#### TRAXLINE® cables for cable carriers

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

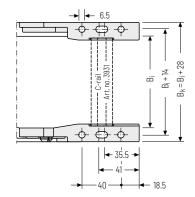
M eries

#### Universal end connectors UMB - plastic (standard)

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



▲ Assembly options





#### Connection point

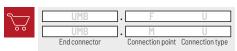
F - fixed point

M - driver

#### Connection type

U - Universal mounting bracket

#### Order example



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

#### Additional product information online



Installation instructions, etc.: Additional info via your smartphone or check online at

tsubaki-kabelschlepp.com/ downloads



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

# K0900









#### Stay variants



#### Aluminum stay RS ......page 326

#### Frame stay, narrow "The standard"

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



#### Aluminum stay RV ......page 330

#### Frame stay, reinforced

- » Aluminum profile bars plastic adapter for medium to high loads and large cable carrier widths. Assembly without
- » Outside/inside: to open by rotating 90°.



#### Aluminum stay LG ......page 334

#### Hole stay, split version

- » Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- » Outside/inside: Screw-fixing easy to release.



#### Aluminum stay RMAI page 336

#### Mounting frame stay

- » Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- » Inside: Screw-fixing easy to release.



#### Aluminum stay RMA0.....page 338

#### Mounting frame stay

- » Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- » Outside: Screw-fixing easy to release.

### Stay variants



#### Plastic stay RE page 340

#### Frame screw-in stay

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

#### Additional stay variants on request

Aluminum stay RM

Aluminum profile bars for high loads.

Aluminum stay RMR

Gentle cable guiding with rollers.



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Benefit from the advantages of the TOTALTRAX $^{\circ}$  complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax** 

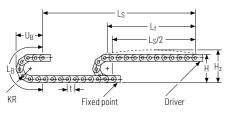


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#### **Unsupported arrangement**



KR	. Н	Hz	L <sub>B</sub>	UB
[mm]	[mm]	[mm]	[mm]	[mm]
130	336	386	589	258
150	376	426	652	278
190	456	506	777	318
245	566	616	950	373
300	676	726	1123	428
385	846	896	1390	513

Load diagram for unsupported length depending on the additional load.

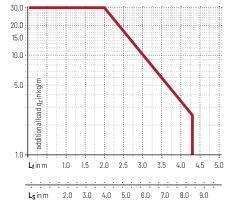
Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific applica-

Intrinsic cable carrier weight  $q_k = 4.05 \text{ kg/m}$ . For other inner widths, the maximum additional load changes.

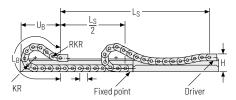








#### Gliding arrangement





Speed up to 2 m/s







The gliding cable carrier must be guided in a channel. See p. 866.

If the cable carrier is positioned so it is rotated by 90° (gliding on the outside of the side band), slide discs snapped onto the side optimize the friction and wear situation.

PR0TUM® series

UNIFLEX Advanced series

> M series

#### **KC0900 RS** | Dimensions · Technical Data

### Aluminum stay RS -

frame stay narrow

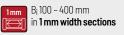
- » Extremely quick to open and close
- » Aluminum profile bars for light to medium loads. Assembly without screws.
- » Available customized in 1 mm width sections.
- » **Outside/inside:** to open by rotating 90°.

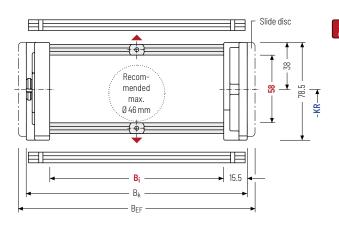




Stay arrangement on every 2nd chain link, **standard** (HS: half-stayed)







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

### Calculating the cable carrier length

#### Cable carrier length Lk

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

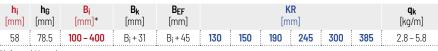
Cable carrier length L<sub>k</sub> rounded to pitch t

QUANTUM® series

XL series

TKR

TKA



<sup>\*</sup> in 1 mm width sections

#### Order example



#### **KC0900 RS** | Inner distribution | TS0 · TS1 · TS2

#### **Divider systems**

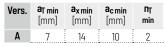
The divider system is mounted on each crossbar as a standard – on every 2<sup>nd</sup> chain link for stay mounting (HS – half-stayed).

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

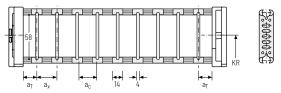
For applications with lateral acceleration and rotated by  $90^{\circ}$ , the dividers can be attached by simply clipping on a socket (available as an accessory).

The socket additionally serves as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm. The inner height is reduced to 54 mm (version B)

#### Divider system TSO without height separation



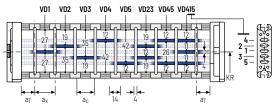
The dividers can be moved in the cross section.



#### Divider system TS1 with continuous height separation



The dividers can be moved in the cross section.



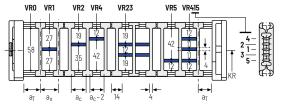
#### Divider system TS2 with partial height separation

Vers.	<b>a<sub>T min</sub></b>	a <sub>x min</sub>	a <sub>c min</sub>	<b>n</b> T
	[mm]	[mm]	[mm]	min
A	7	23	19	2

With grid distribution (1 mm grid).

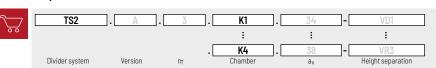
The dividers are attached by the height separation, the grid can be moved in the cross section.

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



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

#### Order example



PROTUM® series

UNIFLEX dvanced series

> M series

TKHP® series

XL series

QUANTUM® series

TKR series

TKA

UAT series

Subject to change without notice.

#### 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.

ç,

PROTUM® series

> K series

UNIFLEX Advanced series

> M series

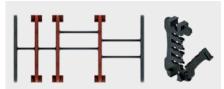
TKHP® series

XL series

QUANTUM® series

TKR series

TKA series Divider version A



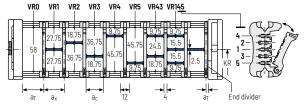
#### End divider

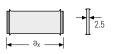


Vers.	at <sub>min</sub>	<b>a<sub>x min</sub></b>	a <sub>c min</sub>	<b>n</b> t
	[mm]	[mm]	[mm]	min
A	6/2*	14	10	2

\* For End divider

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

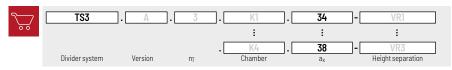




					a <sub>x</sub> (ce	nter	dista	nce o	f divi	ders)	[mm]	]				
				a	(nom	ninal v	vidth	of inn	er ch	ambe	r) [mr	n]				
14	16	19	23	24	28	29	32	33	34	38	39	43	44	48	49	54
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	59	64	68	69	74	78	79	80	84	88	89	94	96	99	112	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

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

#### Order example



Please state the designation of the divider system **(TS0, TS1,...)**, version and number of dividers per cross section  $[n_{\overline{1}}]$ . In addition, please also enter the chambers [K] from left to right, as well as the assembly distances  $[a_{\overline{1}}/a_{\chi}]$  (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.

TKA series



PR0TUM® series

UNIFLEX Advanced series

> M series

#### **KC0900 RV** | Dimensions · Technical Data

### Aluminum stay RV -

frame stay reinforced

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

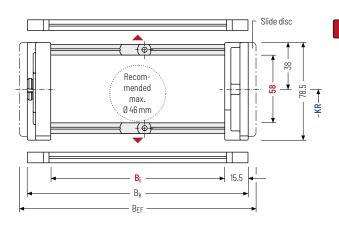




Stay arrangement on every 2nd chain link, **standard** (HS: half-stayed)







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

Calculating the cable carrier length

Cable carrier length Lk

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

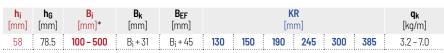
Cable carrier length L<sub>k</sub> rounded to pitch t

∀	series

QUANTUM® series

TKR series

TKA series



<sup>\*</sup> in 1 mm width sections

#### Order example



#### **Divider systems**

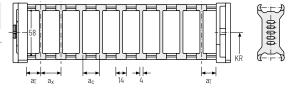
The divider system is mounted on each crossbar as a standard – on every  $2^{nd}$  chain link for stay mounting (HS – half-stayed).

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.	<b>a<sub>T min</sub></b>	a <sub>x min</sub>	a <sub>c min</sub>	n <sub>T</sub>
	[mm]	[mm]	[mm]	min
Α	7	14	10	-

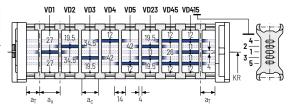
The dividers can be moved in the cross section.



#### Divider system TS1 with continuous height separation

Vers.		a <sub>T max</sub> [mm]			
Α	7	25	14	10	2

The dividers can be moved in the cross section.

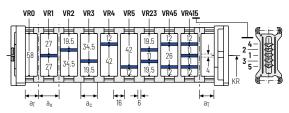


#### Divider system TS2 with partial height separation

Vers.	<b>a<sub>T min</sub></b>	a <sub>x min</sub>	a <sub>c min</sub>	<b>n</b> T
	[mm]	[mm]	[mm]	min
Α	8	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).



#### Additional product information online



Subject to change without notice.

Installation instructions, etc.: Additional info via your smartphone or check online at

tsubaki-kabelschlepp.com/ downloads



Configure your cable carrier here: online-engineer.de

#### PROTUM® series

#### K eries

UNIFLEX	dvanced	series
$\overline{}$	¥	





XL series

QUANTUM® series

TKR series

TKA series

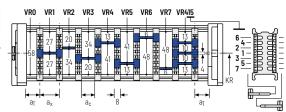
## UAT series

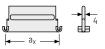
#### **Divider system TS3** with height separation consisting of plastic partitions



\* For aluminum partitions

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



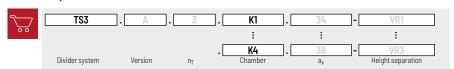


Aluminum partitions in 1 mm increments with  $\mathbf{a_x} > 42$  mm are also available.

	a <sub>x</sub> (center distance of dividers) [mm]											
	a <sub>c</sub> (nominal width of inner chamber) [mm]											
16												
8	8 10 15 20 24 25 30 35 40 50 56 60											
78	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 \text{ mm}**, we recommend an additional center support with a **twin divider** ( $S_T = 4 \text{ mm}$ ). Twin dividers are also suitable for retrofitting in the partition system.

#### 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  $[a_T/a_x]$ .

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.

#### Additional product information online

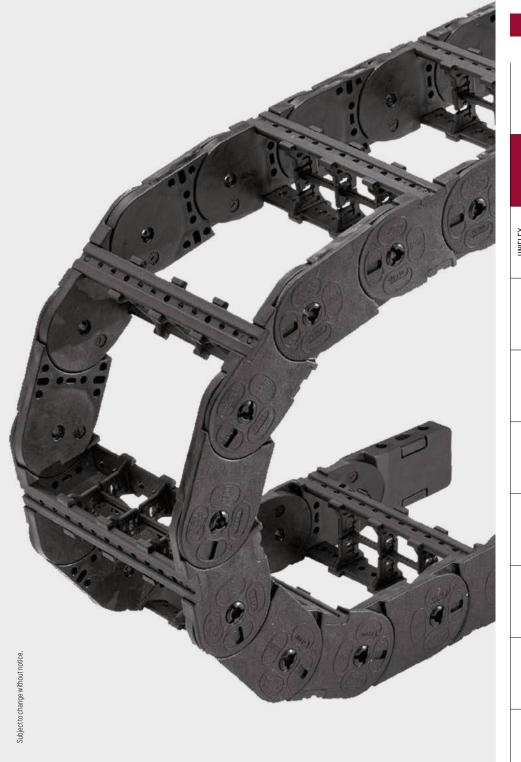


Installation instructions, etc.: Additional info via your smartphone or check online at

tsubaki-kabelschlepp.com/ downloads



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



### **KC0900 LG** | Dimensions · Technical Data

PROTUM® series

> K series

UNIFLEX Advanced series

> M series

TKHP® series

XL series

QUANTUM® series

TKR

TKA series

UAT

Aluminum stay LG -

Hole stay, split version

- » Optimum cable routing in the neutral bending line. Split version for easy cable routing. Stays also available unsplit.
- » Available customized in 1 mm width sections.
- » Outside/inside: Screw-fixing easy to release.



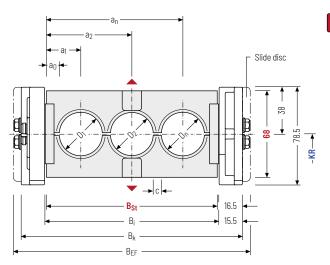


Stay arrangement on every 2nd chain link, **standard** (HS: half-stayed)



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





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

### Calculating the cable carrier length

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

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

Cable carrier length  $L_k$  rounded to pitch t

#### Calculating the stay width

#### Stay width B<sub>St</sub>

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

D <sub>max</sub> [mm]	$\begin{array}{c} \textbf{D}_{\text{min}} \\ [\text{mm}] \end{array}$	h <sub>G</sub> [mm]	B <sub>i</sub> [mm]	B <sub>St</sub> [mm]*	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]		a <sub>0 min</sub> [mm]	KR [mm]	<b>q<sub>k</sub> 50 %**</b> [kg/m]
50	10	78.5	100 - 700	98 - 698	B <sub>St</sub> + 33	B <sub>St</sub> + 45	4	11	130 150 190 245 300 385	4.79 - 9.83

dimension BFF for stay variant LG.

The outer width of the cable carrier corresponds to

#### Order example





PR0TUM® series

K series

UNIFLEX Advanced series

M series

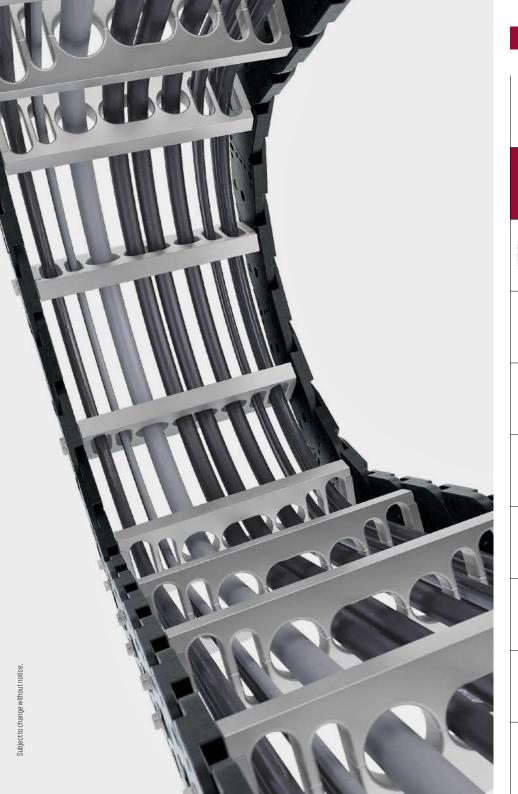
TKHP® series

XL series

QUANTUM® series

TKR series

TKA series



#### **KC0900 RMAI** | Dimensions · Technical Data

## **Aluminum stay RMAI –** mounting frame stay

- » Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- » The mounting frame stay is mounted on the inside in the bending radius.
- » Available customized in 1 mm width sections.
- » Inside: Screw-fixing easy to release.

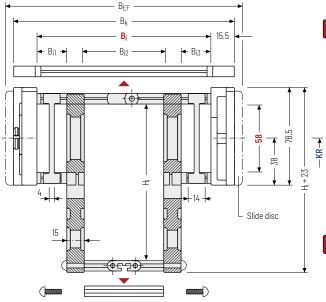




Stay arrangement on every 2nd chain link, **standard** (HS: half-stayed)







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

### Calculating the cable carrier length

#### Cable carrier length Lk

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

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

### Intrinsic cable carrier weight

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

h <sub>i</sub> [mm]	<b>H<sub>i</sub></b> [mm]	h <sub>G</sub> [mm]	B <sub>i</sub> [mm]	B <sub>i1min</sub> [mm]	B <sub>i3 min</sub> [mm]	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]		KR [mm]	
58	130 160 200	78.5	200 - 500	40	40	B <sub>i</sub> + 31	B <sub>i</sub> + 45	150 300	190 385	245

#### Order example



PR0TUM® series

UNIFLEX Advanced series

> M series

TKHP® series

XL series

QUANTUM® series

TKR series

TKA

#### **KC0900 RMAI** | Dimensions · Technical Data

#### RMAI - assembly to the inside:

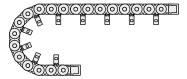
Gliding application is not possible when using assembly version RMAI.

Observe minimum KR:

 $H_i = 130 \text{ mm}$ :  $KR_{min} = 150 \text{ mm}$ 

 $H_i = 160 \text{ mm}$ :  $KR_{min} = 190 \text{ mm}$ 

 $H_i = 200 \text{ mm}$ :  $KR_{min} = 245 \text{ mm}$ 





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#### **KC0900 RMA0** | Dimensions · Technical Data

## **Aluminum stay RMA0 –** mounting frame stay

- » Aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- » The mounting frame stay is mounted on the outside in the bending radius.
- » Available customized in 1 mm width sections.
- » Outside: Screw-fixing easy to release.





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



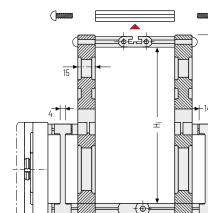
Stay arrangement on each chain link (VS: fully-stayed)

Slide disc



B<sub>i</sub> 200 – 500 mm

in 1 mm width sections



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

### Calculating the cable carrier length

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

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

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

## Intrinsic cable carrier weight

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

h <sub>i</sub> [mm]	H <sub>i</sub> [mm]	h <sub>G</sub> [mm]	B <sub>i</sub> [mm]	B <sub>i1 min</sub> [mm]	B <sub>i3 min</sub> [mm]	B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]		KR [mm]	
58	130 160	78.5	200 - 500	40	40	B <sub>i</sub> + 31	B <sub>i</sub> + 45	130	150	190
50	200	70.5	200 - 300	40	40	וטדןט	D  + 40	245	300	385

→ B<sub>i3</sub> →

#### Order example

← B<sub>i1</sub> →



PROTUM® series

UNIFLEX Advanced series

> M series

TKHP® series

XL series

QUANTUM® series

TKR series

TKA

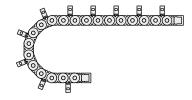
### KC0900 RMAO | Dimensions · Technical Data

#### RMAO - assembly to the outside:

The cable carrier has to rest on the side bands and not on the stays.

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

Please note the operating and installation height.





PROTUM® series

series

UNIFLEX Advanced series

> M series

TKHP® series

XL series

QUANTUM® series

TKR series

TKA series

#### **KE0900 RE** | Dimensions · Technical Data

## PROTUM® series

## UNIFLEX Advanced series



XL eries

QUANTUM® series

TKR series

TKA

Plastic stay RE -

frame screw-in stay

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

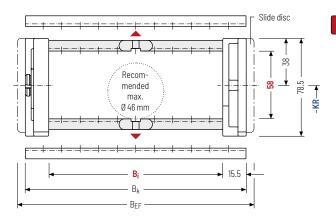




Stay arrangement on every 2nd chain link, standard (HS: half-stayed)







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

Calculating the cable carrier length

Cable carrier length Lk

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

Cable carrier length Lk rounded to pitch t

h <sub>i</sub> [mm]	h <sub>G</sub> [mm]		<b>B</b> i [mm]						B <sub>k</sub> [mm]	B <sub>EF</sub> [mm]	<b>K</b> [m	<b>R</b> m]	<b>q</b> <sub>k</sub> [kg/m]			
		81	97	113	129	145	161	177	193	209	225			130	150	2.95
58	78.5	241	257	273	289	305	321	337	353	369	385	B <sub>i</sub> + 31	B <sub>i</sub> + 45	190	245	-
		401	417	433	449	465	481	497	513	545	561			300	385	5.95

#### Order example



#### **Divider systems**

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

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

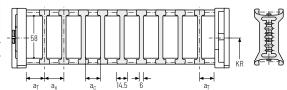
#### (version B).

The groove in the frame stay faces outwards.

#### **Divider system TS0** without height separation

Vers.				a <sub>x grid</sub> [mm]	<b>n</b> T min
Α	7.5	14.5	8.5	-	-
В	8.5	16	10	16	-

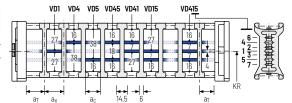
The dividers can be moved within the cross section (version A) or fixed (version B).



#### Divider system TS1 with continuous height separation

Ve	ers.				a <sub>x grid</sub> [mm]	<b>n</b> T min
	A	7.5	14.5	8.5	-	2
	В	8.5	16	10	16	2

The dividers can be moved within the cross section (version A) or fixed (version B).



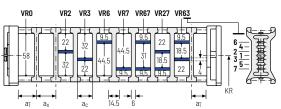
#### Divider system TS2 with partial height separation

Vers.	[mm]		[mm]	[mm]	<b>n</b> T min
Α	7.5	14.5*/21	8.5*/15	-	2
В	8.5	16*/32	10*/26	16	2

\* for VRO

Subject to change without notice

With grid distribution (16 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).



#### Additional product information online



Installation instructions, etc.: Additional info via your smartphone or check online at

tsubaki-kabelschlepp.com/ downloads



Configure your cable carrier here: online-engineer.de

PROTUM® series

> K series

UNIFLEX Advanced series

> M series

TKHP® series

XL series

QUANTUM® series

TKR series

TKA series

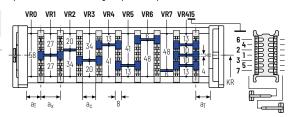
UAT eries

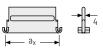
#### Divider system TS3 with height separation consisting of plastic partitions

Vers.	a <sub>T min</sub> [mm]	a <sub>x min</sub> [mm]	a <sub>c min</sub> [mm]	n <sub>T min</sub>							
Α	4	16 / 42*	8	2							
* English and a second second second											

\* For aluminum partitions

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



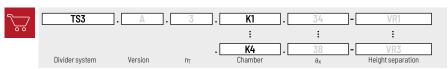


Aluminum partitions in 1 mm increments with  $a_x > 42$  mm are also available.

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

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

#### Order example



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

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.



#### 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



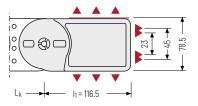
#### TRAXLINE® cables for cable carriers

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

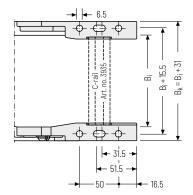
M eries

#### Universal end connectors UMB - plastic (standard)

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



▲ Assembly options





#### Connection point

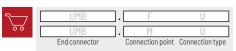
F - fixed point

M - driver

#### Connection type

U - Universal mounting bracket

#### Order example



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

#### Additional product information online



Installation instructions, etc.: Additional info via your smartphone or check online at

tsubaki-kabelschlepp.com/ downloads



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