

# TKA series

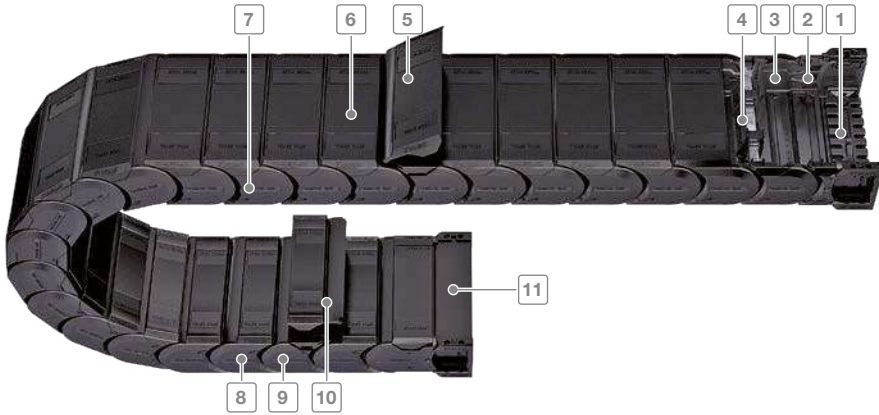
## Chip-tight right to the end



\* Refers to type TKA55 with B; 50 – 175. More information on certification can be found at: [tsubaki-kabelschlepp.com/tka-ip54](http://tsubaki-kabelschlepp.com/tka-ip54)

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Subject to design



Inner heights



Inner widths

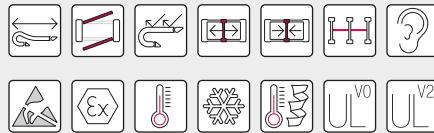


- 1 End connectors with optional strain relief
- 2 Interior gentle on the cables without projecting edges
- 3 Integrated noise damping
- 4 Dividers and height separations for separating the cables
- 5 Quick and easy opening from any position
- 6 Secure cover attachment even under severe stresses (e.g. from hydraulic lines)
- 7 Chain links made of glass-fiber reinforced plastic
- 8 Bolt/hole connection and stroke system covered completely
- 9 Designs with inward or outward opening crossbars
- 10 Covers completely detachable on one side
- 11 Cover sheet for universal end connectors

[tsubaki-kabelschlepp.com/tka](http://tsubaki-kabelschlepp.com/tka)

## Features

- Excellent cable protection in the connector area
- Chip and dirt resistant due to smooth surfaces
- Extensive unsupported length
- High torsional rigidity
- Low noise emission
- Optional: On request, special material with protection against hot chips up to 850 °C
- Numerous custom material types for custom applications available
- Easy-to-open cover with simultaneously high retention force on the chain link during operation
- Measurement scale for easy alignment of the dividers
- TKA55: IP54 tested and certified\*



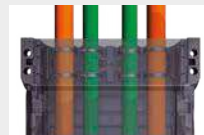
Optimized utilization of the interior space; vertical and horizontal inner distribution possible



Easy-open covers from any position offer secure fastening



Triple-stroke system for extensive unsupported length



Universal end connector with option for integrating strain relief elements

Key for abbreviations  
on page 16Design guidelines  
from page 62Technical support:  
technik@kabelschlepp.de

Type	Opening variant	Stay variant	$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]	$B_k$ [mm]	$B_i$ - grid [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable- $d_{max}$ [mm]
<b>TKA30</b>											
		060	20.5	28.5	15–65	28–78	–	30.5	55–180	3	16
		080	20.5	28.5	15–65	28–78	–	30.5	55–180	3	16
<b>TKA38</b>											
		060	26	36	25–130	41–146	–	38.5	70–230	5	20
		080	26	36	25–130	41–146	–	38.5	70–230	5	20
<b>TKA45</b>											
		060	36	50	50–150	66–166	–	45.5	82–230	6	28,5
		080	36	50	50–150	66–166	–	45.5	82–230	6	28,5
<b>TKA55</b>											
		060	45	64	50–250	70–270	–	55.5	100–300	15	36
		080	45	64	50–250	70–270	–	55.5	100–300	15	36

**Technical manual**

Do you need additional information on the TKA series?  
Our technical manual at [tsubaki-kabelschlepp.com/download](https://www.tsubaki-kabelschlepp.com/download)  
contains all information for selecting your cable carrier.

# TKA series | Overview

Unsupported arrangement			Gliding arrangement			Inner distribution				Installation variants			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	
3.5	10	50	80	2.5	25	●	●	–	–	●	●	–	492
3.5	10	50	80	2.5	25	●	●	–	–	●	●	–	493
3.9	10	50	120	2.5	20	●	●	–	–	●	●	–	498
3.9	10	50	120	2.5	20	●	●	–	–	●	●	–	499
4.7	9	45	125	3	20	●	●	–	●	●	●	–	504
4.7	9	45	125	3	20	●	●	–	●	●	●	–	505
6.5	8	40	150	3	15	●	●	–	●	●	●	–	512
6.5	8	40	150	3	15	●	●	–	●	●	●	–	513

Inner heights



Inner widths



# TKA30

Key for abbreviations  
on page 16



**Pitch**  
30.5 mm



**Inner height**  
20.5 mm



**Inner widths**  
15 – 65 mm



**Bending radii**  
55 – 180 mm

## Stay variants



**Design 060** ..... page 492

**Covered on both sides with inside detachable cover**

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.



**Design 080** ..... page 493

**Covered on both sides with outside detachable cover**

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.

Design guidelines  
from page 62

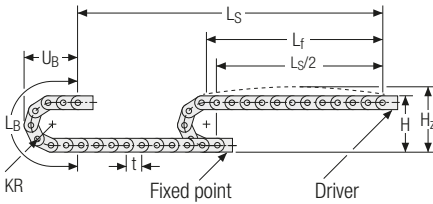
Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)



### Optional: protection against chips up to 850 °C

On request, we also produce all TKA types in designs for protection against hot chips. The special material used protects the cables from hot chips up to 850 °C. This practically excludes downtimes due to hot chips that could destroy the cables.

Unsupported arrangement



KR [mm]	H [mm]	H <sub>z</sub> [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [mm]
55	139	164	234	100
75	179	204	297	120
95	219	244	359	140
125	279	304	454	170
145	319	344	516	190
180	389	414	626	225

Inner heights



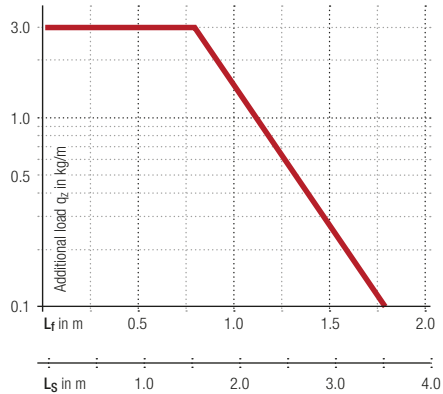
Inner widths



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  $q_k = 0.67 \text{ kg/m}$  at B<sub>1</sub> 50 mm. For other inner widths, the maximum additional load changes.



**Speed**  
up to 10 m/s



**Acceleration**  
up to 50 m/s<sup>2</sup>



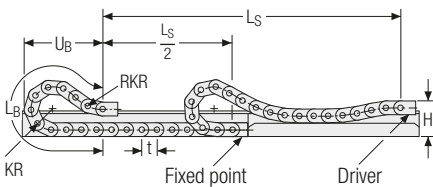
**Travel length**  
up to 3.5 m



**Additional load**  
up to 3 kg/m

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Gliding arrangement



**Speed**  
up to 2.5 m/s



**Acceleration**  
up to 25 m/s<sup>2</sup>



The gliding cable carrier has to be routed in a channel. See p. 732.



**Travel length**  
up to 80 m



**Additional load**  
up to 3 kg/m

## Stay variant 060 – covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.



Key for abbreviations  
on page 16

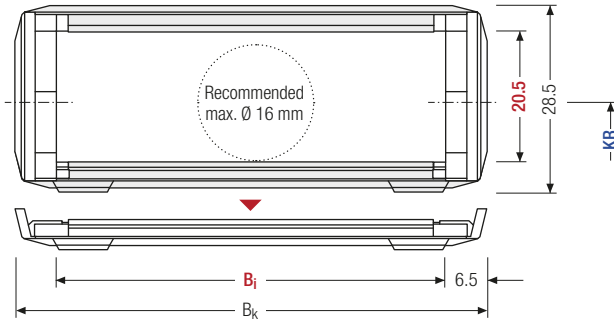


Stay arrangement on each chain link (**VS: fully-stayed**)



$B_i$  15 – 65 mm

Design guidelines  
from page 62



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  $t$

Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)

[online-engineer.de](http://online-engineer.de)  
Cable Carrier Configurator

$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]						$B_k$ [mm]	$KR$ [mm]						$q_k$ [kg/m]
20.5	29.15	15	20	25	38	50	65	$B_i + 13$	55	75	95	125	145	180	0.48 – 0.76

### Order example



TKA30

Type

060

Stay variant

50

 $B_i$  [mm]

125

 $KR$  [mm]

915

 $L_k$  [mm]

VS

Stay arrangement

## Stay variant 080 – covered on both sides with outside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.





Inner heights

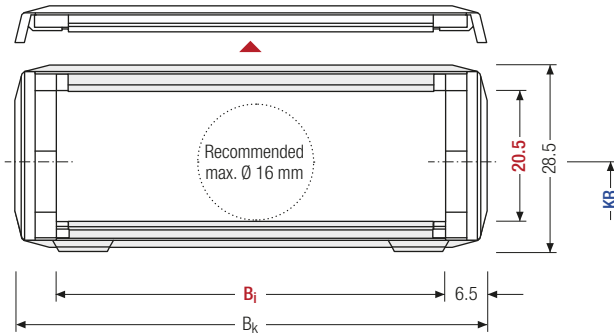



Inner widths



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

  $B_i$  15 – 65 mm



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

### Calculating the cable carrier length


#### Cable carrier length $L_k$

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

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]						
20.5	29.15	15	20	25	38	50	65	$B_i + 13$	55	75	95	125	145	180	0.48 – 0.76

### Order example


TKA30 · 
 080 · 
 50 · 
 125 · 
 915 · 
 VS  
Type      Stay variant       $B_i$  [mm]       $KR$  [mm]       $L_k$  [mm]      Stay arrangement



## Divider systems

As a standard, the divider system is mounted on every 2<sup>nd</sup> chain link.

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

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.

The locking cams click into place in the locking grids in the covers (**version B**).

Key for abbreviations  
on page 16

Design guidelines  
from page 62

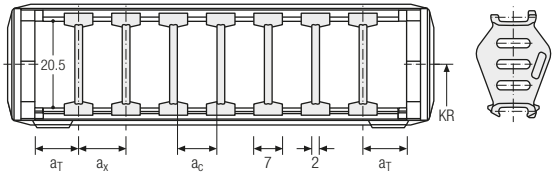
Technical support:  
technik@kabelschlepp.de

### Divider system TS0 without height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	a <sub>x</sub> grid [mm]	n <sub>T</sub> min
A	3.5	7	5	—	—
B	8	8	6	2	—

B <sub>i</sub> [mm]	15	20	25	38	50	65
a <sub>T</sub> min [mm]	7.5	8	8.5	9	9	8.5

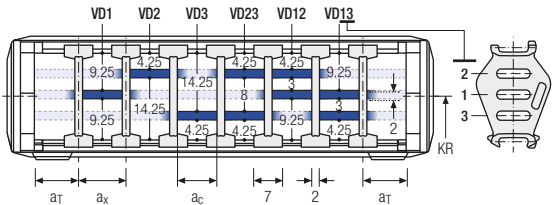


### Divider system TS1 with continuous height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	a <sub>x</sub> grid [mm]	n <sub>T</sub> min
A	3.5	7	5	—	2
B	8	8	6	2	2

B <sub>i</sub> [mm]	15	20	25	38	50	65
a <sub>T</sub> min [mm]	7.5	8	8.5	9	9	8.5



### Order example



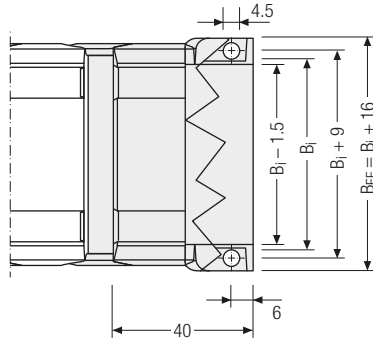
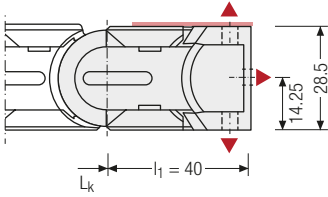
TS1	.	A	.	3	-	VD0
						⋮
						VD1
Divider system		Version		n <sub>T</sub>		Height separation

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

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

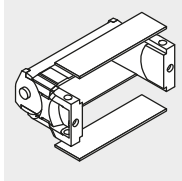
Universal end connectors UMB – plastic (standard)

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

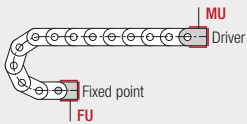


▲ Assembly options

 Recommended tightening torque: 3 Nm for cheese-head screws ISO 4762 - M4 x 12




The end connectors are also available as an option **without** cover sheets. Please state when ordering.



**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 before driver and fixed point. See from p. 794.

Inner heights



Inner widths



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# TKA38

Key for abbreviations  
on page 16



**Pitch**  
38.5 mm



**Inner height**  
26 mm



**Inner widths**  
25 – 130 mm



**Bending radii**  
70 – 230 mm

## Stay variants

Design guidelines  
from page 62



**Design 060** ..... page 498

**Covered on both sides with inside detachable cover**

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.



**Design 080** ..... page 499

**Covered on both sides with outside detachable cover**

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.

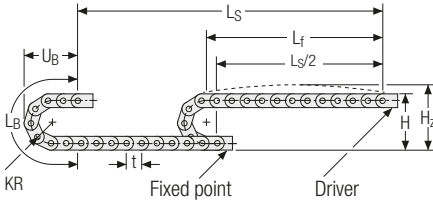
Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)



### Optional: protection against chips up to 850 °C

On request, we also produce all TKA types in designs for protection against hot chips. The special material used protects the cables from hot chips up to 850 °C. This practically excludes downtimes due to hot chips that could destroy the cables.

Unsupported arrangement



KR [mm]	H [mm]	H <sub>z</sub> [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [mm]
70	176	201	297	127
95	226	251	375	152
120	276	301	454	177
145	326	351	532	202
170	376	401	611	227
195	426	451	689	252
230	496	521	799	287

Inner heights



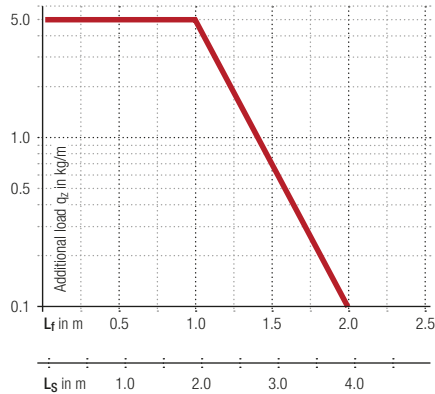
Inner widths



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  $q_k = 1.13 \text{ kg/m}$  at B<sub>3</sub> 78 mm. For other inner widths, the maximum additional load changes.



**Speed**  
up to 10 m/s

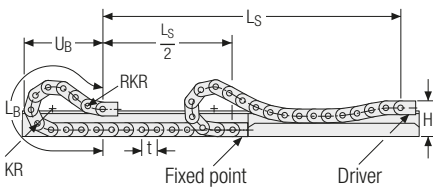
**Acceleration**  
up to 50 m/s<sup>2</sup>

**Travel length**  
up to 3.9 m

**Additional load**  
up to 5 kg/m

[tsubaki-kabelschlepp.com/tka](http://tsubaki-kabelschlepp.com/tka)

Gliding arrangement



**Speed**  
up to 2.5 m/s

**Acceleration**  
up to 20 m/s<sup>2</sup>

The gliding cable carrier has to be routed in a channel. See p. 732.

**Travel length**  
up to 120 m

**Additional load**  
up to 5 kg/m

## Stay variant 060 – covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.



Key for abbreviations  
on page 16

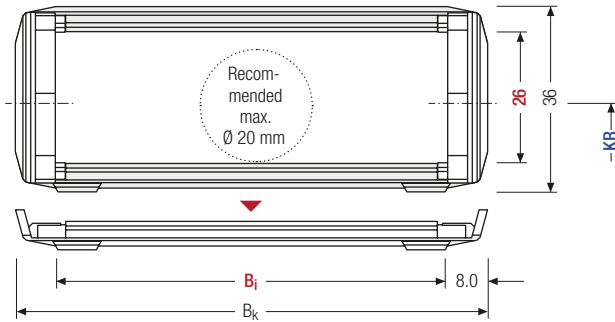


Stay arrangement on each chain link (**VS: fully-stayed**)



$B_i$  25 – 130 mm

Design guidelines  
from page 62



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

### Calculating the cable carrier length

#### Cable carrier length $L_k$

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

Cable carrier length  $L_k$   
rounded to pitch  $t$

Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)

$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]							$B_k$ [mm]	$KR$ [mm]							$q_k$ [kg/m]
26	36.75	25	38	58	78	103	130	$B_i + 16$	70	95	120	145	170	195	230	0.77 – 1.47	

### Order example

	TKA38 Type	·	060 Stay variant	·	78 $B_i$ [mm]	·	145 $KR$ [mm]	·	1155 $L_k$ [mm]	·	VS Stay arrangement
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**Stay variant 080** – covered on both sides with outside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.



Inner heights



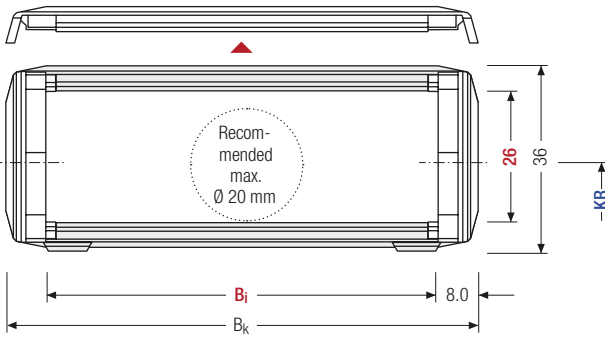
Inner widths



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



$B_i$  25 – 130 mm



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

**Calculating the cable carrier length**

**Cable carrier length  $L_k$**

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

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]
26	36.75	25	38	58	78	103	130	$B_i + 16$	70	95	120	145	170	195	230	0.77 – 1.47				

**Order example**

TKA38
080
78
145
1155
VS

Type · Stay variant ·  $B_i$  [mm] · KR [mm] ·  $L_k$  [mm] · Stay arrangement

## Divider systems

As a standard, the divider system is mounted on every 2<sup>nd</sup> chain link.

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

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.

The locking cams click into place in the locking grids in the covers (**version B**).

Key for abbreviations  
on page 16

Design guidelines  
from page 62

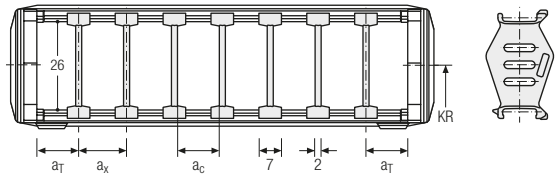
Technical support:  
technik@kabelschlepp.de

### Divider system TS0 without height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	a <sub>x</sub> grid [mm]	n <sub>T</sub> min
A	3.5	7	5	—	—
B	3.5	8	6	2	—

B <sub>i</sub> [mm]	25	38	58	78	103	130
a <sub>T</sub> min [mm]	8.5	9	9	9	7.5	9

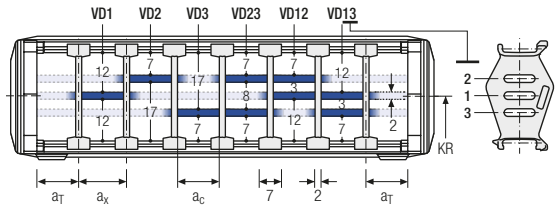


### Divider system TS1 with continuous height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	a <sub>x</sub> grid [mm]	n <sub>T</sub> min
A	3.5	7	5	—	2
B	3.5	8	6	2	2

B <sub>i</sub> [mm]	25	38	58	78	103	130
a <sub>T</sub> min [mm]	8.5	9	9	9	7.5	9



### Order example



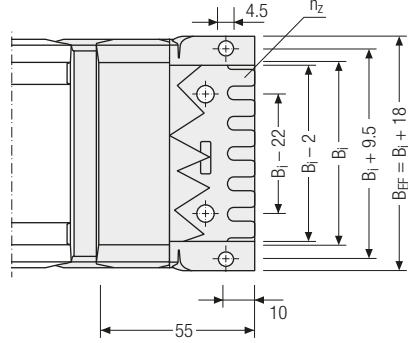
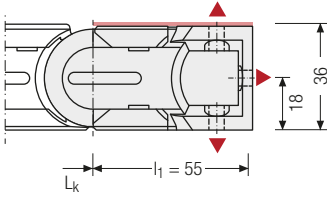
TS1	.	A	.	3	-	VD0
						⋮
						VD1
Divider system		Version		n <sub>T</sub>		Height separation

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

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

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.



Inner heights



Inner widths

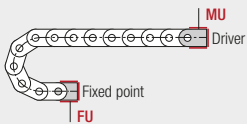


▲ Assembly options

Recommended tightening torque: 3 Nm for cheese-head screws ISO 4762 - M4 x 20

$B_i$ [mm]	$B_{EF}$ [mm]	$n_z$
25	43	2
38	56	3
58	76	5
78	96	7
103	121	9
130	148	13

The end connectors are also available as an option **without** cover sheets. Please state when ordering.



Connection point

F – fixed point  
M – driver

Connection type

U – universal end connector

Order example

Subject to change.

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



# TKA45

Key for abbreviations  
on page 16



**Pitch**  
45.5 mm



**Inner height**  
36 mm



**Inner widths**  
50 – 150 mm



**Bending radii**  
82 – 230 mm

## Stay variants



**Design 060** ..... page 504

**Covered on both sides with inside detachable cover**

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.



**Design 080** ..... page 505

**Covered on both sides with outside detachable cover**

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.

Design guidelines  
from page 62

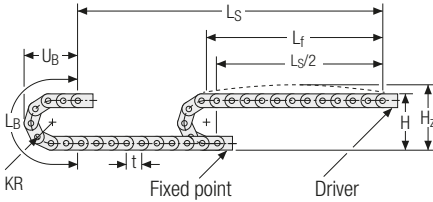
Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)



### Optional: protection against chips up to 850 °C

On request, we also produce all TKA types in designs for protection against hot chips. The special material used protects the cables from hot chips up to 850 °C. This practically excludes downtimes due to hot chips that could destroy the cables.

Unsupported arrangement



KR [mm]	H [mm]	H <sub>z</sub> [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [mm]
82	214	249	348	153
95	240	275	389	166
125	300	335	483	196
145	340	375	546	216
170	390	425	625	241
200	450	485	719	271
230	520	555	814	301

Inner heights



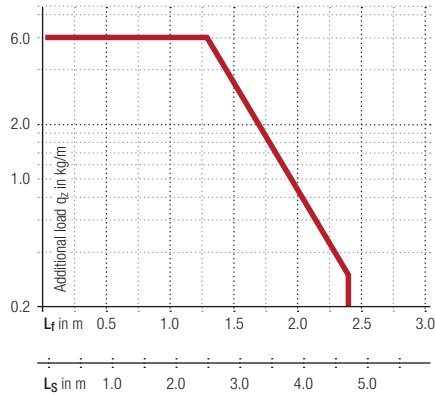
Inner widths



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  $q_k = 2.29 \text{ kg/m}$  at  $B_i 150 \text{ mm}$ . For other inner widths, the maximum additional load changes.



**Speed**  
up to 9 m/s

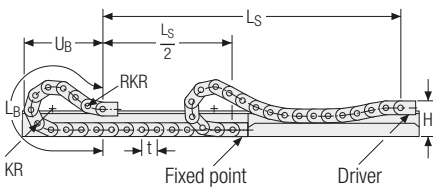
**Acceleration**  
up to 45 m/s<sup>2</sup>

**Travel length**  
up to 4.7 m

**Additional load**  
up to 6 kg/m

[tsubaki-kabelschlepp.com/TKA](http://tsubaki-kabelschlepp.com/TKA)

Gliding arrangement



**Speed**  
up to 3 m/s

**Acceleration**  
up to 20 m/s<sup>2</sup>

The gliding cable carrier has to be routed in a channel. See p. 732.

**Travel length**  
up to 125 m

**Additional load**  
up to 6 kg/m

## Stay variant 060 – covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.



Key for abbreviations  
on page 16

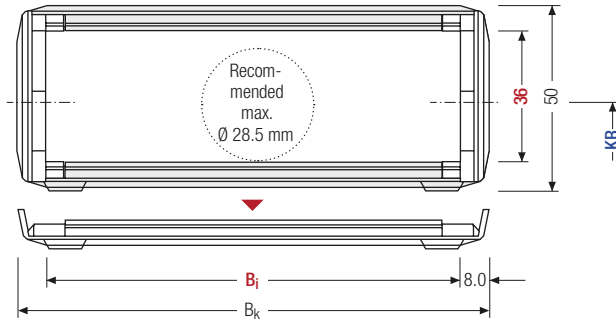


Stay arrangement on each chain link (**VS: fully-stayed**)



$B_i$  50 – 150 mm

Design guidelines  
from page 62



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  $t$

Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)

[online-engineer.de](http://online-engineer.de)  
Cable Carrier Configurator

$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]			$B_k$ [mm]	$KR$ [mm]					$q_k$ [kg/m]				
36	51	50	75	100	125	150	$B_i + 16$	82	95	125	145	170	200	230	1.34 – 2.29

### Order example



TKA45

Type

060

Stay variant

125

$B_i$  [mm]

170

$KR$  [mm]

1456

$L_k$  [mm]

VS

Stay arrangement

**Stay variant 080** – covered on both sides with outside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.



Inner heights

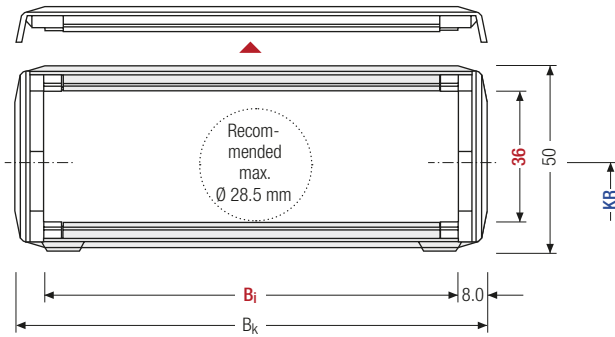


Inner widths



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

$B_i$  50 – 150 mm



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

**Calculating the cable carrier length**

**Cable carrier length  $L_k$**

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

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]
36	51	50	75	100	125	150	$B_i + 16$	82	95	125	145	170	200	230	1.34 – 2.29

**Order example**

**TKA45** (Type) · **080** (Stay variant) · **125** ( $B_i$  [mm]) · **170** ( $KR$  [mm]) · **1456** ( $L_k$  [mm]) · **VS** (Stay arrangement)

## Divider systems

The divider system is mounted on every 2<sup>nd</sup> chain link as a standard.

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

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.

The locking cams click into place in the locking grids in the covers (**version B**).

Key for abbreviations  
on page 16

Design guidelines  
from page 62

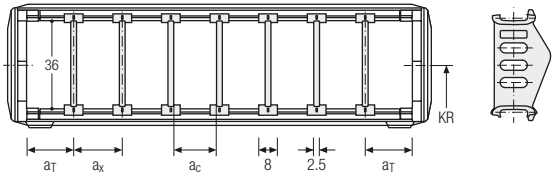
Technical support:  
technik@kabelschlepp.de

### Divider system TS0 without height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	a <sub>x</sub> grid [mm]	n <sub>T</sub> min
A	4	8	5.5	—	—
B	↑	8	5.5	2	—

B <sub>i</sub> [mm]	50	75	100	125	150
a <sub>T</sub> min [mm]	11	11.5	12	12.5	11

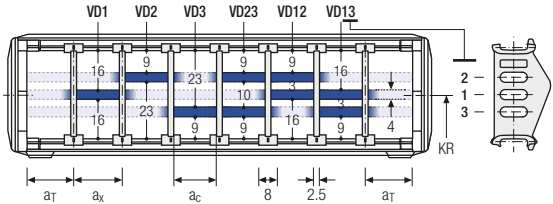


### Divider system TS1 with continuous height separation

Vers.	a <sub>T</sub> min [mm]	a <sub>x</sub> min [mm]	a <sub>c</sub> min [mm]	a <sub>x</sub> grid [mm]	n <sub>T</sub> min
A	4	8	5.5	—	2
B	↑	8	5.5	2	2

B <sub>i</sub> [mm]	50	75	100	125	150
a <sub>T</sub> min [mm]	11	11.5	12	12.5	11



### Order example



TS1	A	3	V00
			⋮
			V01
Divider system	Version	n <sub>T</sub>	Height separation

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

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

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

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

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them. The locking cams click into place in the locking grids in the covers (**version B**).

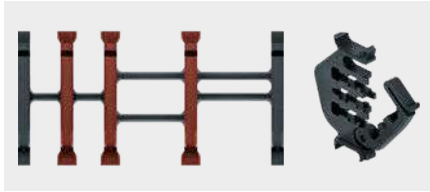
Inner heights



Inner widths



Divider version A



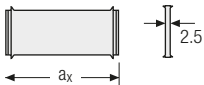
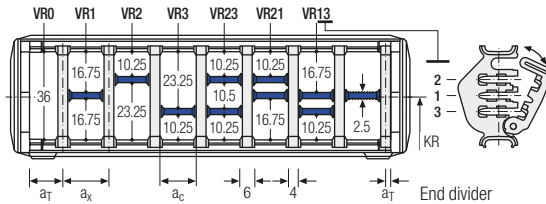
End divider



Vers.	$a_T$ min [mm]	$a_x$ min [mm]	$a_c$ min [mm]	$n_T$ min
A	4 / 2*	14	10	2

\* For End divider

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



$a_x$ (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

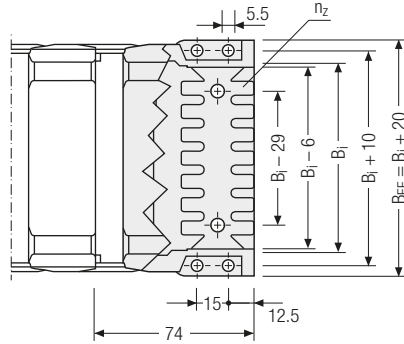
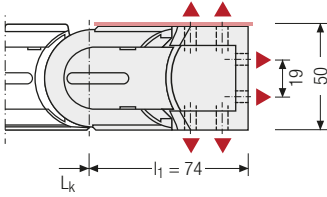
Please state the designation of the divider system (**TS0, TS1...**), version and number of dividers per cross section [ $n_T$ ]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [ $a_T/a_x$ ] (as seen from the driver).

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.




## Universal end connectors UMB – plastic (standard)

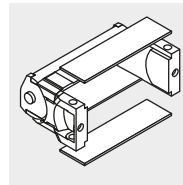
The universal end connectors (UMB) are made from plastic and can be mounted from the top, from the bottom, or face on.



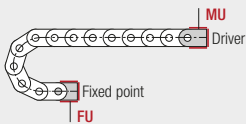
▲ Assembly options

 Recommended tightening torque: 5 Nm for cheese-head screws ISO 4762 - M5 x 8.8

$B_1$ [mm]	$B_{EF}$ [mm]	$n_z$
50	70	2 x 3
75	95	2 x 5
100	120	2 x 7
125	145	2 x 9
150	170	2 x 11



The end connectors are also available as an option **without** cover sheets. Please state when ordering.



### 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

Inner heights



Inner widths





# TKA55

Key for abbreviations  
on page 16



**Pitch**  
55.5 mm



**Inner height**  
45 mm



**Inner widths**  
50 – 250 mm



**Bending radii**  
100 – 300 mm

## Stay variants



**Design 060** ..... page 512

**Covered on both sides with inside detachable cover**

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.



**Design 080** ..... page 513

**Covered on both sides with outside detachable cover**

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.

Design guidelines  
from page 62

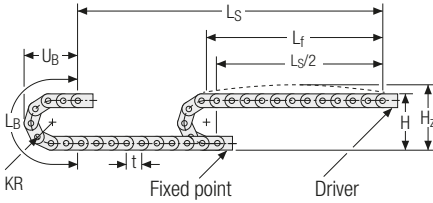
Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)



### Optional: protection against chips up to 850 °C

On request, we also produce all TKA types in designs for protection against hot chips. The special material used protects the cables from hot chips up to 850 °C. This practically excludes downtimes due to hot chips that could destroy the cables.

Unsupported arrangement



KR [mm]	H [mm]	H <sub>z</sub> [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [mm]
100	264	304	425	188
120	304	344	488	208
140	344	384	551	228
170	414	454	645	258
195	454	494	725	283
225	514	554	818	313
250	564	604	896	338
300	664	704	1211	388

Inner heights



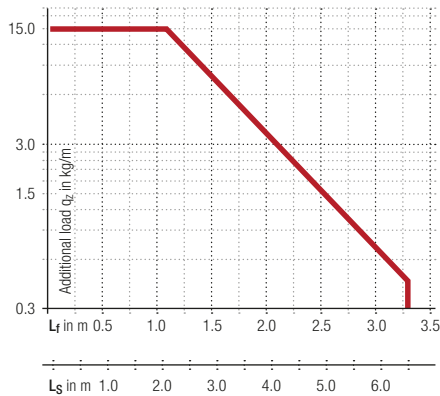
Inner widths



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  $q_k = 1.95 \text{ kg/m}$  at B<sub>i</sub> 50 mm. For other inner widths, the maximum additional load changes.



**Speed**  
up to 8 m/s

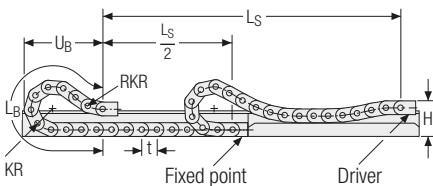
**Acceleration**  
up to 40 m/s<sup>2</sup>

**Travel length**  
up to 6.5 m

**Additional load**  
up to 15 kg/m

tsubaki-kabelschlepp.com/tka

Gliding arrangement



**Speed**  
up to 3 m/s

**Acceleration**  
up to 15 m/s<sup>2</sup>

The gliding cable carrier has to be routed in a channel. See p. 732.

**Travel length**  
up to 150 m

**Additional load**  
up to 15 kg/m

## Stay variant 060 – covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.



Key for abbreviations  
on page 16

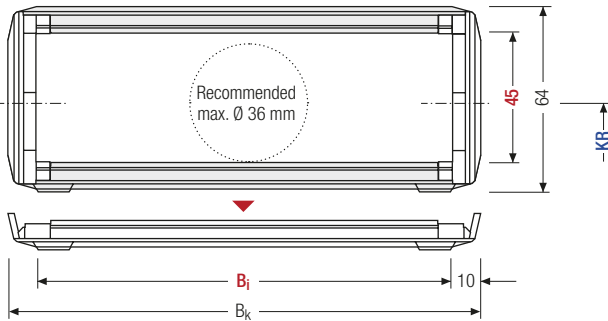


Stay arrangement on each chain link (**VS: fully-stayed**)



$B_i$  50 – 250 mm

Design guidelines  
from page 62



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  $t$

Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)

$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]					$B_k$ [mm]	$KR$ [mm]				$q_k$ [kg/m]
45	65	50	75	100	125	150	$B_i + 20$	100	120	140	170	1.95
		175	200	225	250	195		225	250	300	4.28	

### Order example



TKA55

Type

060

Stay variant

200

 $B_i$  [mm]

225

 $KR$  [mm]

2553

 $L_k$  [mm]

VS

Stay arrangement

**Stay variant 080** – covered on both sides with outside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.



Inner heights

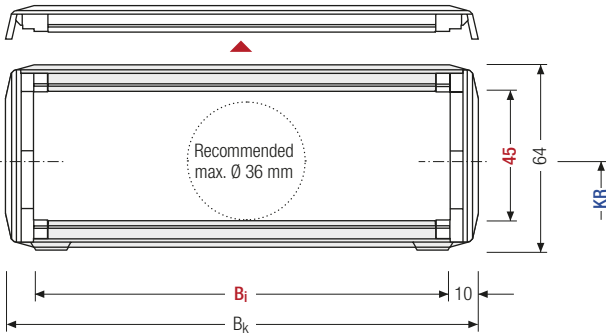


Inner widths



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

$B_i$  50 – 150 mm



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

**Calculating the cable carrier length**

**Cable carrier length  $L_k$**

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

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]
45	65	50	75	100	125	150	$B_i + 20$	100	120	140	170	1.95
		175	200	225	250	195		225	250	300	4.28	

**Order example**

**TKA55** · **080** · **200** · **225** · **2553** · **VS**  
 Type Stay variant  $B_i$  [mm]  $KR$  [mm]  $L_k$  [mm] Stay arrangement

## Divider systems

As a standard, the divider system is mounted on every 2<sup>nd</sup> chain link.

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

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.

The locking cams click into place in the locking grids in the covers (**version B**).

Key for abbreviations  
on page 16

Design guidelines  
from page 62

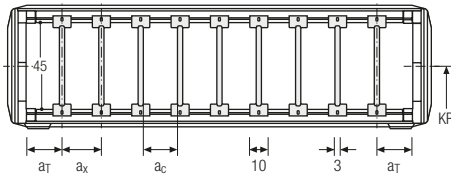
Technical support:  
technik@kabelschlepp.de

### Divider system TS0 without height separation

Vers.	$a_T$ min [mm]	$a_x$ min [mm]	$a_c$ min [mm]	$a_x$ grid [mm]	$n_T$ min
A	5	10	7	—	—
B	5	10	7	2	—

$B_i$ [mm]	50	75	100	125	150
$a_T$ min [mm]	13	11.5	12	12.5	13
$B_i$ [mm]	175	200	225	250	
$a_T$ min [mm]	11.5	12	12.5	13	

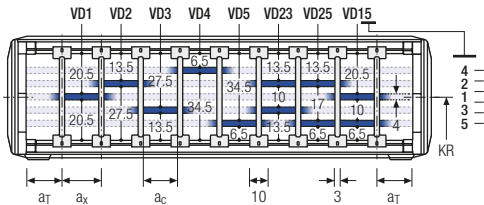


### Divider system TS1 with continuous height separation

Vers.	$a_T$ min [mm]	$a_x$ min [mm]	$a_c$ min [mm]	$a_x$ grid [mm]	$n_T$ min
A	5	10	7	—	2
B	5	10	7	2	2

$B_i$ [mm]	50	75	100	125	150
$a_T$ min [mm]	13	11.5	12	12.5	13
$B_i$ [mm]	175	200	225	250	
$a_T$ min [mm]	11.5	12	12.5	13	



### Order example



TS1	A	3	V00
			⋮
			V01
Divider system	Version	$n_T$	Height separation

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

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

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

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

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them. The locking cams click into place in the locking grids in the covers (**version B**).

Inner heights



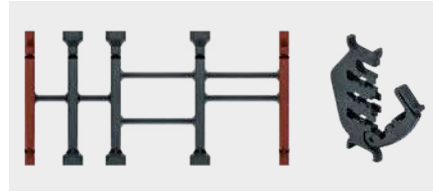
Inner widths



Divider version A



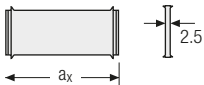
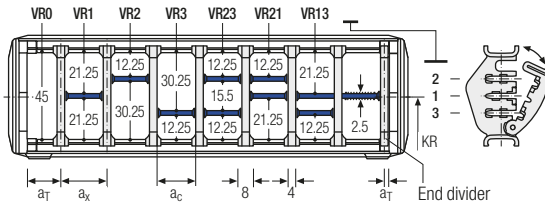
End divider



Vers.	$a_T$ min [mm]	$a_x$ min [mm]	$a_c$ min [mm]	$n_T$ min
A	4 / 2*	14	10	2

\* For End divider

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



$a_x$ (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

.  .  .  .  -

⋮

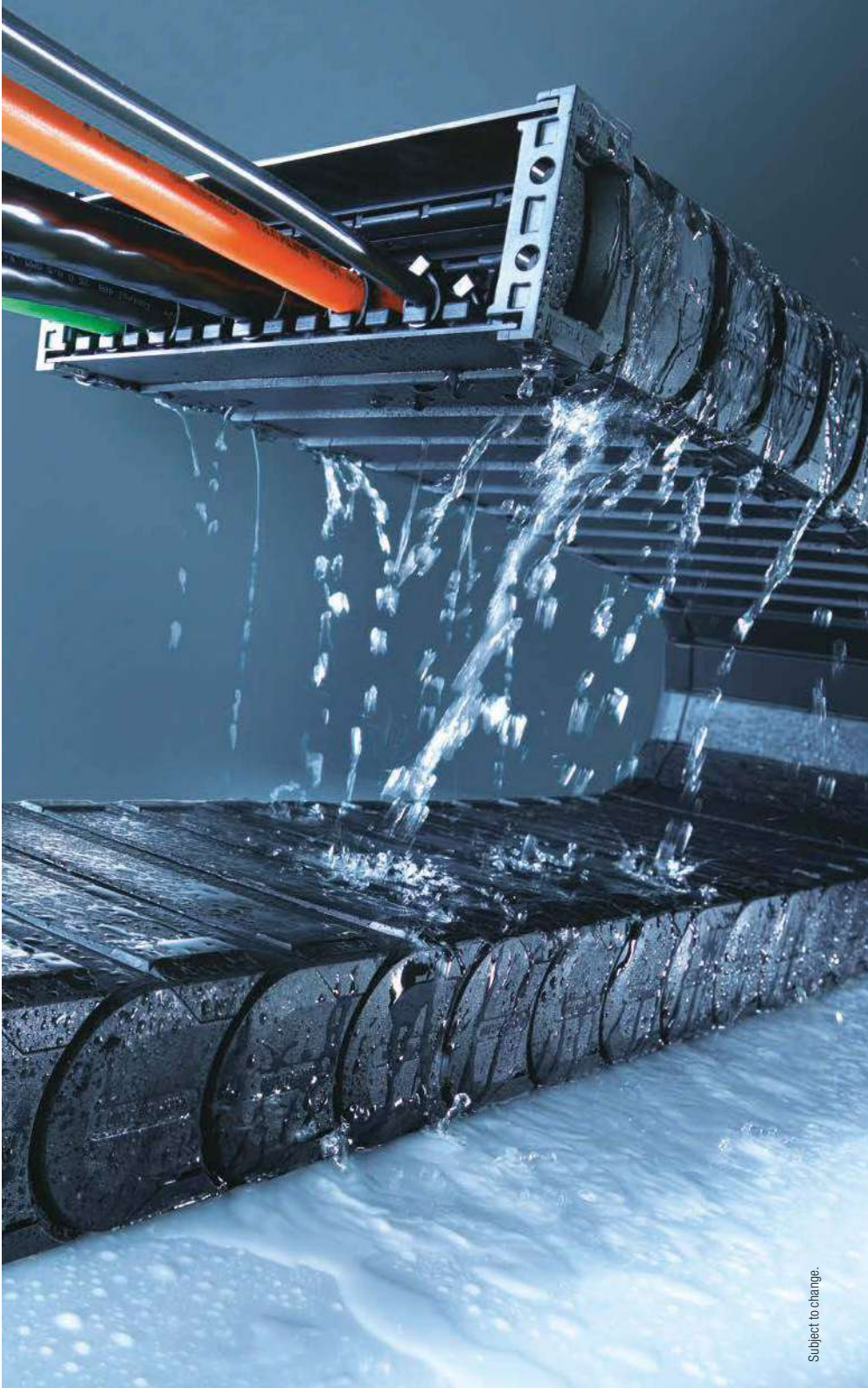
.  -

⋮

Divider system      Version       $n_T$       Chamber       $a_x$       Height separation

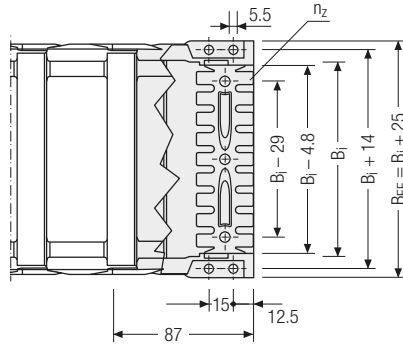
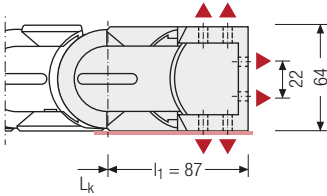
Please state the designation of the divider system (**TS0, TS1...**), version and number of dividers per cross section [ $n_T$ ]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [ $a_T/a_x$ ] (as seen from the driver).

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.



## 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

Inner heights

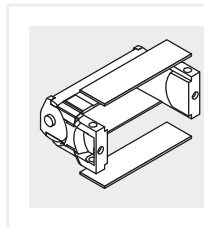


Inner widths

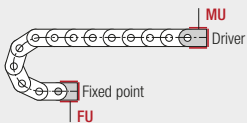


Recommended tightening torque: 5 Nm for cheese-head screws ISO 4762 - M5 x 8.8

$B_i$ [mm]	$B_{EF}$ [mm]	$n_z$
50	74	2 x 3
75	99	2 x 5
100	124	2 x 7
125	149	2 x 9
150	174	2 x 11
175	199	2 x 13
200	224	-
225	249	-
250	274	-



The end connectors are also available as an option **without** cover sheets. Please state when ordering.



### 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