

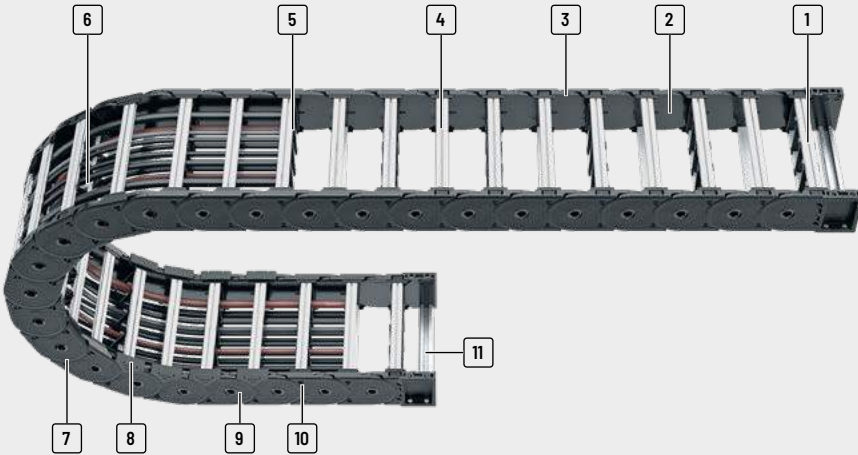
UNIFLEX *Advanced* series

Light and quiet all-rounder



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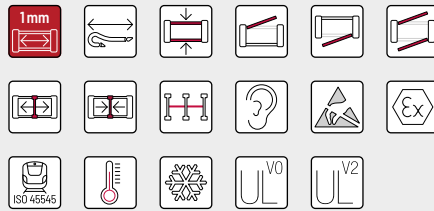
Subject to change without notice.



- 1 Aluminum stays available in **1 mm width sections**
- 2 Favourable ratio of inner to outer width
- 3 Chain link plates made of at least 35 % pure regrgranulate
- 4 Quick and easy opening to the inside or outside for cable laying
- 5 Fixable dividers
- 6 Many separation options for the cables
- 7 Robust double-stroke system for long unsupported lengths
- 8 Replaceable glide shoes
- 9 Very quiet through integrated noise damping
- 10 Lateral wear surfaces
- 11 C-rail for strain relief elements

Features

- » Four designs: closed, and openable to the inner or outer side or to both sides
- » Good ratio of inner to outer width
- » Easy assembly and fast cable laying
- » UMB connectors made of sturdy plastic (strengths comparable to aluminium)
- » Low-wear, cable-friendly design with smooth surface
- » Polygon-optimized bending radii for smooth and low-wear chain running



Replaceable glide shoes - optionally with automatic wear monitoring



UMB connectors made of sturdy plastic (strengths comparable to aluminium)



Lateral wear surfaces - for long service life for applications where the carrier is rotated through 90°



Rear grips at stopper for better force transmission and higher strengths

| 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 \leq [kg/m] | Cable- d_{max} [mm] |
|---------------|-----------------|--------------|---------------|---------------|---------------|---------------|-------------------------|-----------|------------|-------------------------------------|-----------------------------|
| | | | | | | | | | | | |
| UA1995 | | | | | | | | | | | |
| | | RSH 020 | 80 | 110 | 66 - 600 | 96 - 630 | 1 | 99.5 | 150 - 500 | 50 | 64 |
| | | RSH 030 | 80 | 110 | 66 - 600 | 96 - 630 | 1 | 99.5 | 150 - 500 | 50 | 64 |
| | | RSH 040 | 80 | 110 | 66 - 600 | 96 - 630 | 1 | 99.5 | 150 - 500 | 50 | 64 |
| | | RSH 070 | 80 | 110 | 66 - 600 | 96 - 630 | 1 | 99.5 | 150 - 500 | 50 | 64 |

PROLUN®
seriesK
seriesUNIFLEX
Advanced
seriesM
seriesTKHD
seriesXL
seriesQUANTUM®
seriesTKR
seriesTKA
seriesUAT
series

| Unsupported arrangement | | | Gliding arrangement | | | Inner Distribution | | | | Movement | | | Page |
|--------------------------|----------------------|------------------------|--------------------------|----------------------|------------------------|--------------------|-----|-----|-----|------------------------------|-------------------|----------------------|------|
| Travel length $\leq [m]$ | $v_{max} \leq [m/s]$ | $a_{max} \leq [m/s^2]$ | Travel length $\leq [m]$ | $v_{max} \leq [m/s]$ | $a_{max} \leq [m/s^2]$ | TS0 | TS1 | TS2 | TS3 | vertical hanging or standing | lying on the side | rotating arrangement | |
| | | | | | | | | | | | | | |
| 9 | 10 | 25 | 200 | 8 | 20 | • | - | - | • | • | • | • | 340 |
| 9 | 10 | 25 | 200 | 8 | 20 | • | • | - | • | • | • | • | 341 |
| 9 | 10 | 25 | 200 | 8 | 20 | • | • | - | • | • | • | • | 342 |
| 9 | 10 | 25 | 200 | 8 | 200 | • | • | - | • | • | • | • | 343 |

PROTUM® series

K series

UNIFLEX Advanced series

M series

TKHD series

XL series

QUANTUM® series

TKR series

TKA series

UAT series

UA1995



Pitch
99.5 mm



Inner height
80 mm



Inner widths
66 – 600 mm



Bending radii
150 – 500 mm

Stay variants



Design RSH 020 page 340

Closed frame

- » Aluminum profile bars for light to medium loads.
Assembly without screws.
- » **Outside/inside:** not openable.



Design RSH 030 page 341

Frame with outside detachable stays

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



Design RSH 040 page 342

Frame with inside detachable stays

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

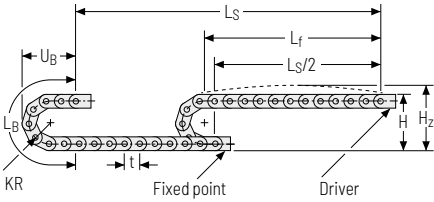


Design RSH 070 page 343

Frame with outside and inside detachable stays

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

Unsupported arrangement

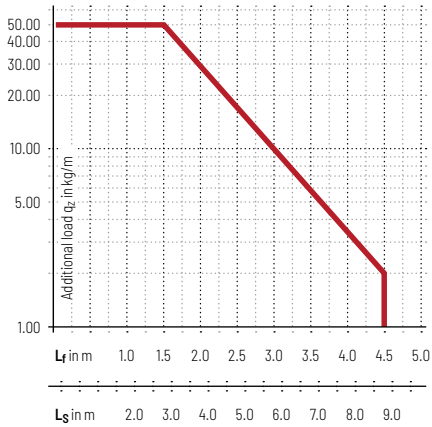


| KR [mm] | H [mm] | H ₂ [mm] | L _B [mm] | U _B [mm] |
|---------|--------|---------------------|---------------------|---------------------|
| 150 | 410 | 440 | 680 | 250 |
| 210 | 530 | 560 | 860 | 310 |
| 250 | 610 | 640 | 990 | 350 |
| 300 | 710 | 740 | 1150 | 400 |
| 350 | 810 | 840 | 1300 | 450 |
| 400 | 910 | 940 | 1460 | 500 |
| 500 | 1110 | 1140 | 1770 | 600 |

Load diagram for unsupported length depending on the additional load.

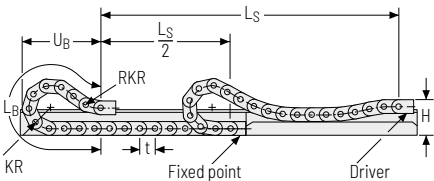
Sagging of the cable carrier is technically permitted for extended travel lengths, depending on the specific application.

Intrinsic cable carrier weight $q_k = 3.85 \text{ kg/m}$ with B_i 196 mm. For other inner widths, the maximum additional load changes.



- Speed**
up to 10 m/s
- Acceleration**
up to 25 m/s²
- Travel length**
up to 9 m
- Additional load**
up to 50 kg/m

Gliding arrangement | GO module with chain links optimized for gliding*



| KR [mm] | H [mm] | GO-Modul RKR [mm] | L _B [mm] | U _B [mm] |
|---------|--------|-------------------|---------------------|---------------------|
| 150 | 330 | 400 | 1805 | 890 |
| 210 | 330 | 400 | 2180 | 1010 |
| 250 | 330 | 400 | 2390 | 1070 |
| 300 | 330 | 400 | 2690 | 1160 |
| 350 | 330 | 400 | 3090 | 1310 |
| 400 | 330 | 400 | 3490 | 1450 |
| 500 | 330 | 400 | 4280 | 1740 |

- Speed**
up to 8 m/s
- Acceleration**
up to 20 m/s²
- Travel length**
up to 200 m
- Additional load**
up to 50 kg/m

The gliding cable carrier must be guided in a channel. See p. 842.

The GO module mounted on the driver is a defined sequence of 5 adapted KR/RKR link plates.

Glide shoes must be used for gliding applications.

* only design 070

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

PROTUM®
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seriesM
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seriesQUANTUM®
seriesTKR
seriesTKA
seriesUAT
series

Stay variant RSH 020 – closed frame

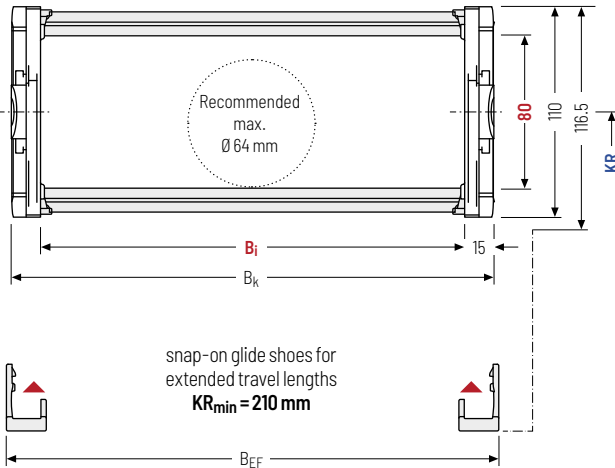
- » Aluminum profile bars for light to medium loads. Assembly without screws.
- » Available customized in **1 mm grid**.
- » **Outside/inside:** not openable.



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



1mm B_i 66 – 600 mm
in 1 mm width sections



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

Calculating the cable carrier length

Cable carrier length L_k

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

Cable carrier length L_k rounded to pitch t

| h_i [mm] | h_G [mm] | h_G' [mm] | B_i [mm]* | B_k [mm] | B_{EF} [mm] | KR [mm] | | | | | | q_k [kg/m] | |
|---------------|---------------|----------------|----------------|---------------|------------------|--------------|-----|-----|-----|-----|-----|-----------------|---------------|
| 80 | 110 | 116.5 | 66 – 600 | $B_i + 30$ | $B_i + 36$ | 150 | 210 | 250 | 300 | 350 | 400 | 500 | 4,168 – 4,173 |

* in 1 mm width sections

Order example



UA1995
Type

150
 B_i [mm]

RSH 020
Stay variant

210
 KR [mm]


3582
 L_k [mm]

VS
Stay arrangement

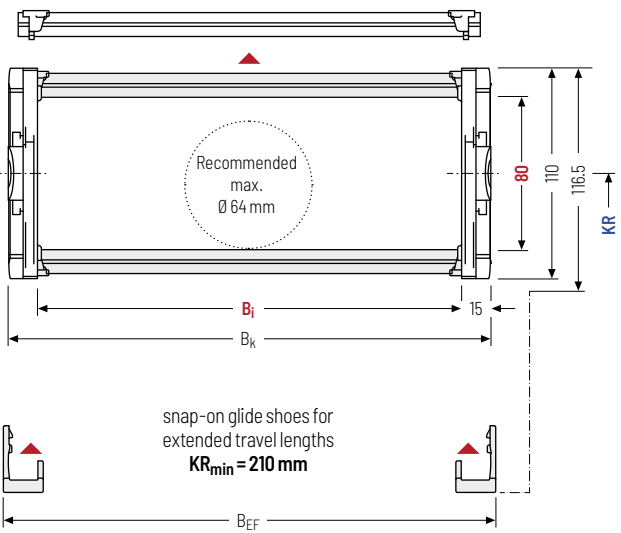
Stay variant RSH 030 -
with outside detachable stays


- » Aluminum profile bars for light to medium loads. Assembly without screws.
- » Available customized in **1 mm grid**.
- » **Outside:** release by rotating 90°.



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

 **1mm** B_i 66 - 600 mm in 1 mm width sections



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

Calculating the cable carrier length

Cable carrier length L_k

$$L_k \approx \frac{L_S}{2} + L_B$$
 Cable carrier length L_k rounded to pitch t

| h _i [mm] | h _G [mm] | h _G ' [mm] | B _i [mm]* | B _k [mm] | B _{EF} [mm] | KR [mm] | | | | | | | q _k [kg/m] |
|------------------------|------------------------|--------------------------|-------------------------|------------------------|-------------------------|------------|-----|-----|-----|-----|-----|-----|--------------------------|
| 80 | 110 | 116.5 | 66 - 600 | B _i + 30 | B _i + 36 | 150 | 210 | 250 | 300 | 350 | 400 | 500 | 4,192 - 4,197 |

* in 1 mm width sections

Order example

 **UA1995** Type · **150** B_i [mm] · **RSH 030** Stay variant · **210** KR [mm] · **3582** L_k [mm] · **VS** Stay arrangement

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

Stay variant RSH 040 – with inside detachable stays

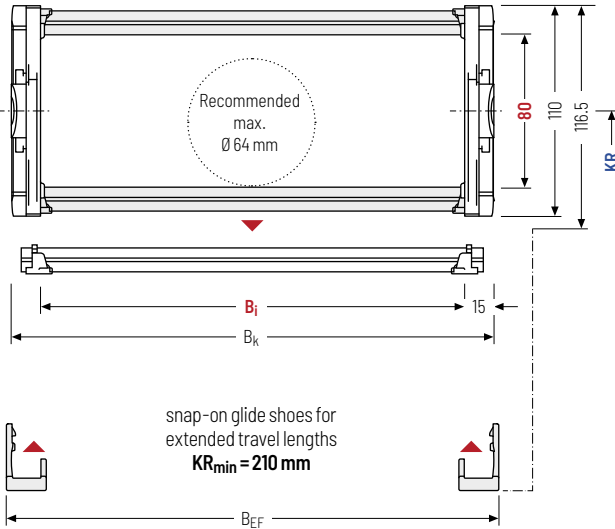
- » Aluminum profile bars for light to medium loads.
Assembly without screws.
- » Available customized in **1 mm grid**.
- » **Inside:** release by rotating 90°.



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



1 mm B_i 66 – 600 mm
in 1 mm width sections



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

Design RSH 040 is not suitable for a gliding arrangements without the use of gliding shoes.

Calculating the cable carrier length

Cable carrier length L_k

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

Cable carrier length L_k
rounded to pitch t

| h _i [mm] | h _G [mm] | h _G ' [mm] | B _i [mm]* | B _k [mm] | B _{EF} [mm] | KR [mm] | | | | | | | q _k [kg/m] |
|------------------------|------------------------|--------------------------|-------------------------|------------------------|-------------------------|------------|-----|-----|-----|-----|-----|-----|--------------------------|
| 80 | 110 | 116.5 | 66 – 600 | B _i + 30 | B _i + 36 | 150 | 210 | 250 | 300 | 350 | 400 | 500 | 4,192 – 4,197 |

* in 1 mm width sections

Order example



UA1995
Type

150
B_i [mm]

RSH 040
Stay variant

210
KR [mm]

3582
L_k [mm]

VS
Stay arrangement

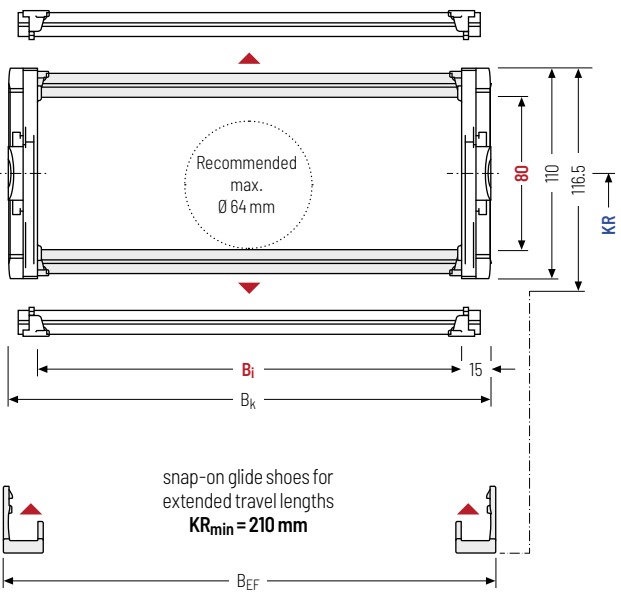
Stay variant RSH 070 – with outside and inside detachable stays

- » Aluminum profile bars for light to medium loads. Assembly without screws.
- » Available customized in **1 mm grid**.
- » **Outside/Inside:** release by rotating 90°.



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

1mm B_i 66 – 600 mm in 1 mm width sections



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

Design RSH 070 is not suitable for a gliding arrangements without the use of gliding shoes.

Calculating the cable carrier length

Cable carrier length L_k

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

Cable carrier length L_k rounded to pitch t

| h _i [mm] | h _g [mm] | h _g ' [mm] | B _i [mm]* | B _k [mm] | B _{EF} [mm] | KR [mm] | | | | | q _k [kg/m] | | |
|------------------------|------------------------|--------------------------|-------------------------|------------------------|-------------------------|------------|-----|-----|-----|-----|--------------------------|-----|---------------|
| 80 | 110 | 116.5 | 66 - 600 | B _i + 30 | B _i + 36 | 150 | 210 | 250 | 300 | 350 | 400 | 500 | 4,211 - 4,216 |

* in 1 mm width sections

Order example

UA1995 · 150 · RSH 070 · 210 · 3582 · VS

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

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

Divider systems

The divider system is mounted on every 2nd chain link as a standard.

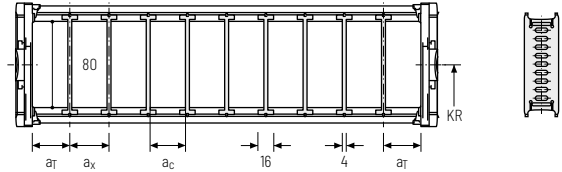
For applications with lateral acceleration and lying on the side, the dividers can be attached by a fixing profile, available as an accessory (**version B**). The fixing profile must be installed at the factory.

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

Divider system TSO without height separation

| Vers. | a _T min [mm] | a _X min [mm] | a _C min [mm] | a _X grid [mm] | n _T min |
|-------|-------------------------|-------------------------|-------------------------|--------------------------|--------------------|
| A | 10 | 16 | 12 | - | - |
| B | 10 | 17.5 | 13.5 | 2.5 | - |

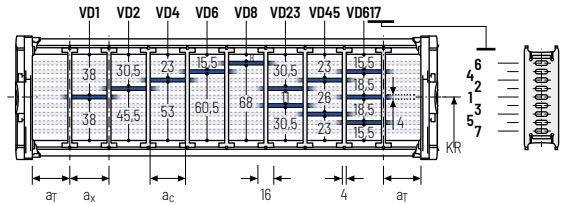
Number of dividers for design 020 depending on B;




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 | 10 | 16 | 12 | - | 2 |
| B | 10 | 17.5 | 13.5 | 2.5 | 2 |

* not for design 020



Order example


TS1 · A · 3 - V00
 :
 - VD1
 Divider system Version n_T Height separation

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

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

Divider system TS3 with height separation consisting of plastic partitions

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

Divider version A

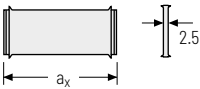
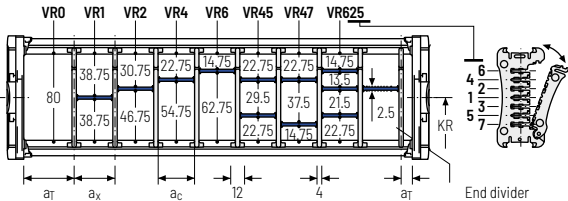
End divider



| Vers. | a _T min [mm] | a _x min [mm] | a _c min [mm] | n _T min |
|-------|-------------------------|-------------------------|-------------------------|--------------------|
| A | 8 / 4* | 14 | 10 | 2 |

Number of dividers for design D20 depending on B;
 * 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 | |

An additional central support is required when using plastic partitions with a_x > 49 mm.

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).

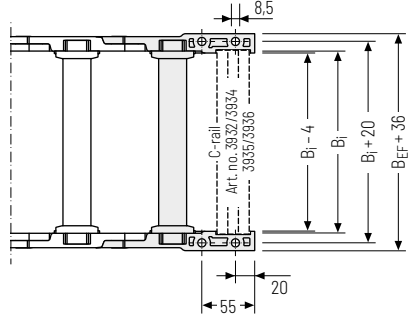
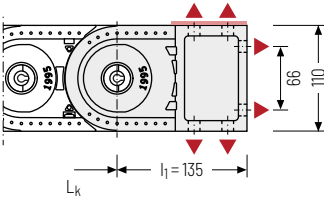
If using divider systems with height separation (**TS1, TS3**) please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

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


PROTUM®
seriesK
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seriesM
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series

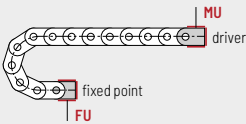
Universal end connectors UMB – plastic (standard)

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



▲ Assembly options

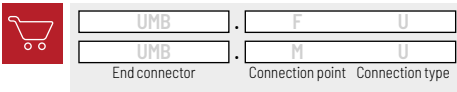
 Recommended tightening torque:
27 Nm for screws M8




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. 902.

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 |
| TKHD series |
| XL series |
| QUANTUM® series |
| TKR series |
| TKA series |
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