

UA1455

kabelschlepp.de/
uniflex-advanced



Pitch
45.5 mm



Height
26 mm



Width
25 – 130 mm

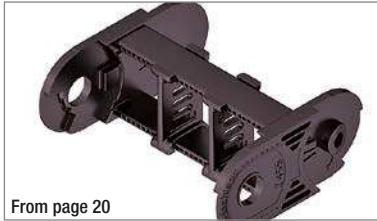


Bending radius
52 – 225 mm

Configure your cable carrier:
onlineengineer.de

Stay variants

Design 020



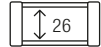
From page 20

Closed frame

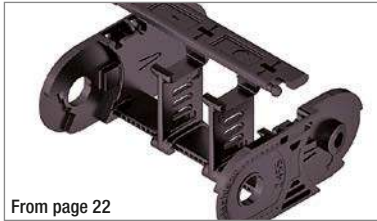
- Weight-optimized, closed plastic frame with particularly high torsional rigidity.

Opening options

inside/outside: Cannot be opened.



Design 030



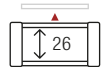
From page 22

Frame with externally detachable crossbars

- Weight-optimized plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.

Opening options

outside: Swivable and detachable.



Technical support:
technik@kabelschlepp.de

Design 040



From page 24

Frame with internally detachable crossbars

- Weight-optimized plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.

Opening options

inside: Swivable and detachable.





Inner heights



Inner widths



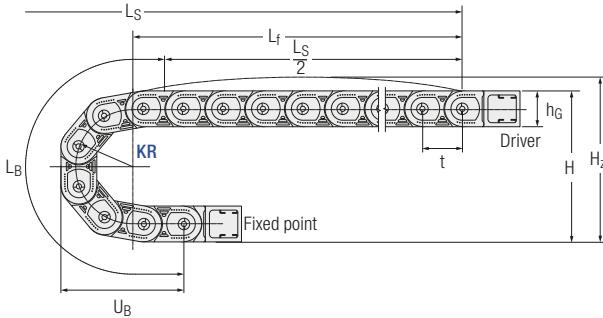
Key for abbreviations
on page 72

Assembly instructions on
kabelschlepp.de/assembly

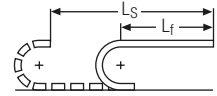
Order key
on page 32



Unsupported arrangement



Unsupported length L_f



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

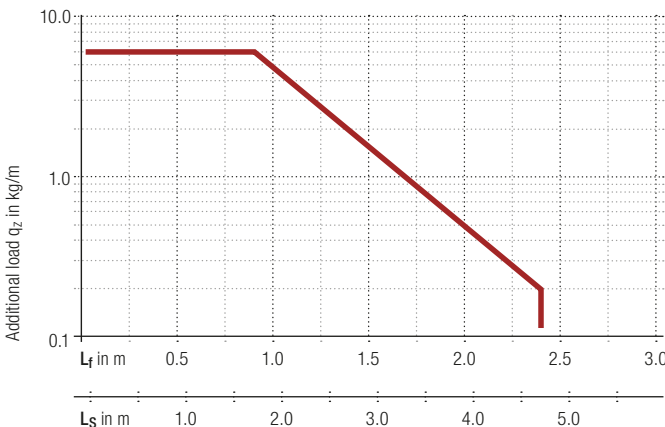
Dynamics of unsupported arrangement		t
v_{max} [m/s]	a_{max} [m/s ²]	[mm]
10	50	45.5

Installation dimensions unsupported

KR [mm]	H [mm]	H _z [mm]	L _B [mm]	U _B [mm]	KR [mm]	H [mm]	H _z [mm]	L _B [mm]	U _B [mm]
52	140	165	255	116	150	336	361	563	214
65	166	191	296	129	180	396	421	657	244
95	226	251	390	159	200	436	461	720	264
125	286	311	484	189	225	486	511	798	289

Load diagram

for unsupported length depending on additional load



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

Unsupported length L_f

$$L_f = \frac{L_s}{2} + t$$



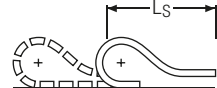
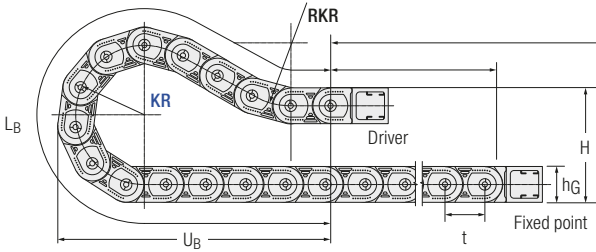
Fixed point offset L_f :


For off-center fixed point connections please contact us.



Intrinsic cable carrier weight $q_k = 0.75$ kg/m with B_i 38 mm.
For other inner widths the maximum additional load changes.

Gliding arrangement




 For more information on gliding arrangement please contact us.

Inner heights


26

Inner widths

25
130

 Only designs O20 and O30 may be used for gliding arrangements.

Dynamics of gliding arrangement		t
v _{max} [m/s]	a _{max} [m/s ²]	[mm]
2.5	20	45.5

 The gliding cable carrier has to be routed in a channel. Our engineers will be happy to help with project planning – 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

Key for abbreviations on page 72

Assembly instructions on kabelschlepp.de/assembly

Order key on page 32



TSUBAKI KABELSCHLEPP Technical Support

If you have any questions about determining gliding cable carriers or other technical details please contact our technical support service at technik@kabelschlepp.de. We will be happy to help you.



Stay variant 020 – closed frame

- Weight-optimized, closed plastic frame with particularly high torsional rigidity.
- Opening options **outside/inside**: Cannot be opened.

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uniflex-advanced

Configure your cable carrier:
onlineengineer.de

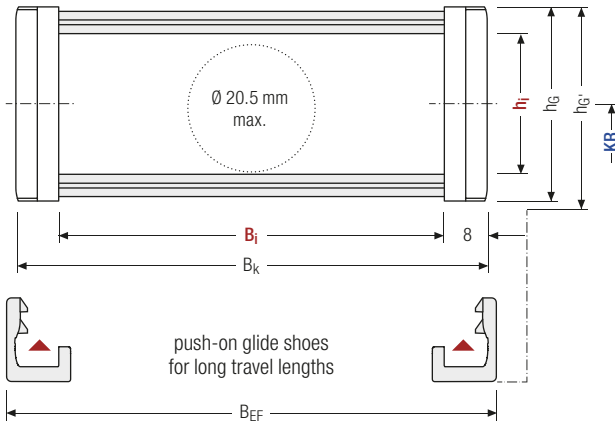


Stay arrangement on every chain link (VS)



B_i from 25 – 130 mm

Technical support:
technik@kabelschlepp.de



Calculating the cable carrier width

Outer width B_k

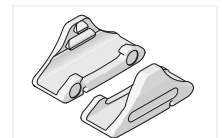
$$B_k = B_i + 16 \text{ mm}$$

Total width B_{EF}

$$B_{EF} = B_i + 19 \text{ mm}$$



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



Replaceable glide shoes



Information on the inner distribution of the cable carrier can be found on page 26.

Pitch, inner height and chain link height

t [mm]	h _i [mm]	h _G [mm]	h _G [*] [mm]
45.5	26	36	38.5

Inner heights



Bend radii

KR [mm]							
52	65	95	125	150	180	200	225*

Inner widths



Inner/outer width and intrinsic cable carrier weight

B _i [mm]	B _k [mm]	B _{EF} [mm]	q _k [kg/m]
25	41	44	0.71
38	54	57	0.75
58	74	77	0.80
78	94	97	0.88
103	119	122	1.00
130*	146	147	1.12

Key for abbreviations
on page 72

Order example



UA1455	·	020	·	78	·	150	·	1,456
Type		Stay variant		B _i [mm]		KR [mm]		L _k [mm]

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 32



Stay variant 030 – with outside opening and detachable crossbars

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uniflex-advanced

Configure your cable carrier:
onlineengineer.de

- Weight-optimized plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.
- **Opening options outside:** Swivable and detachable.

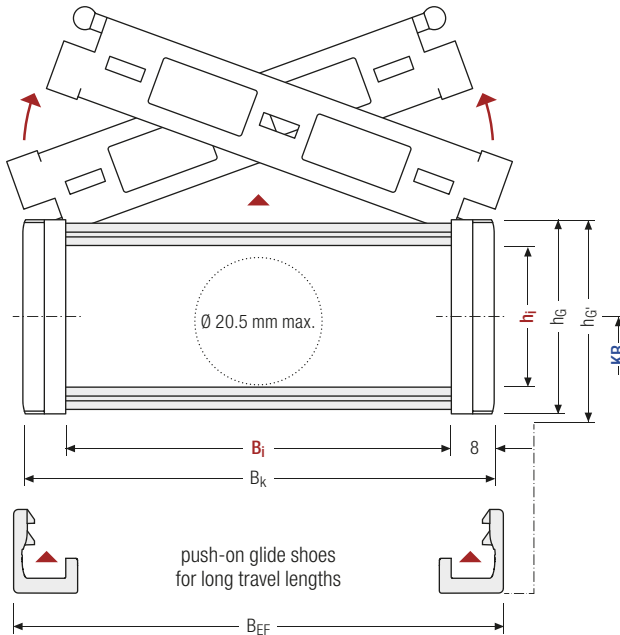


Stay arrangement on every chain link (VS)



B_i from 25 – 130 mm

Technical support:
technik@kabelschlepp.de



Calculating the cable carrier width

Outer width B_k

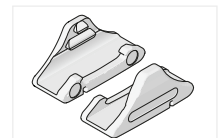
$$B_k = B_i + 16 \text{ mm}$$

Total width B_{EF}

$$B_{EF} = B_i + 19 \text{ mm}$$



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



Replaceable glide shoes



Information on the inner distribution of the cable carrier can be found on page 26.

Pitch, inner height and chain link height

t [mm]	h _i [mm]	h _G [mm]	h _G [*] [mm]
45.5	26	36	38.5

Inner heights



Bend radii

KR [mm]							
52	65	95	125	150	180	200	225*

Inner widths



Inner/outer width and intrinsic cable carrier weight

B _i [mm]	B _k [mm]	B _{EF} [mm]	q _k [kg/m]
25	41	44	0.73
38	54	57	0.75
58	74	77	0.80
78	94	97	0.88
103	119	122	0.98
130*	146	147	1.10

Key for abbreviations
on page 72

Order example



UA1455	·	030	·	78	·	150	·	1,456
Type		Stay variant		B _i [mm]		KR [mm]		L _k [mm]

Assembly instructions on
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Order key
on page 32



Stay variant 040 – with inside opening and detachable crossbars

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uniflex-advanced

Configure your cable carrier:
onlineengineer.de

- Weight-optimized plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.
- **Opening options**
inside: Swivable and detachable.

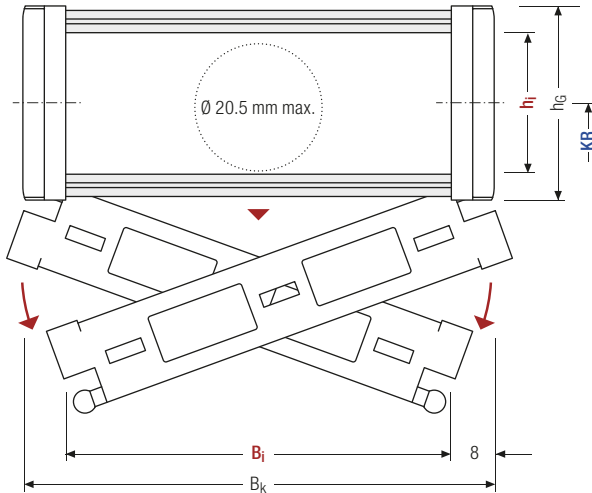


Stay arrangement on every chain link (**VS**)



B_i from 25 – 130 mm

Technical support:
technik@kabelschlepp.de



Calculating the cable carrier width

Outer width B_k

$$B_k = B_i + 16 \text{ mm}$$



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



Design 040 is not suitable for gliding arrangement.



Pitch, inner height and chain link height

t [mm]	h _i [mm]	h _G [mm]
45.5	26	36

Inner heights



Bend radii

KR [mm]							
52	65	95	125	150	180	200	225*

Inner widths



Inner/outer width and intrinsic cable carrier weight

B _i [mm]	B _k [mm]	q _k [kg/m]
25	41	0.73
38	54	0.75
58	74	0.80
78	94	0.88
103	119	0.98
130*	146	1.10

Key for abbreviations
on page 72

Order example

	UA1455	.	040	.	78	.	150	.	1,456
	Type		Stay variant		B _i [mm]		KR [mm]		L _k [mm]

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 32



Divider systems

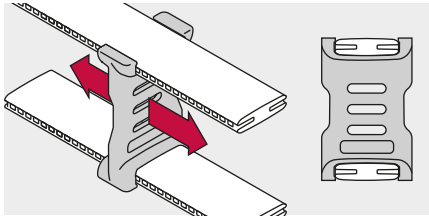
As standard, the divider system is assembled at each 2nd chain link.

As standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section (**version A**).

The dividers are easily attached to the stay for applications with transverse acceleration and for laterally recumbent applications by simply turning them. The locking cams click into place in the locking grids in the crossbars (**version B**).

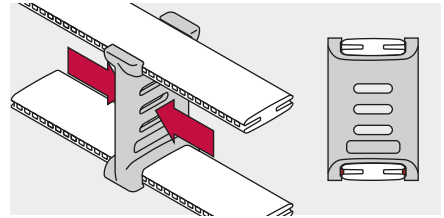
Movable divider

Version A (Standard)



Fixable divider (2.5 mm grid)

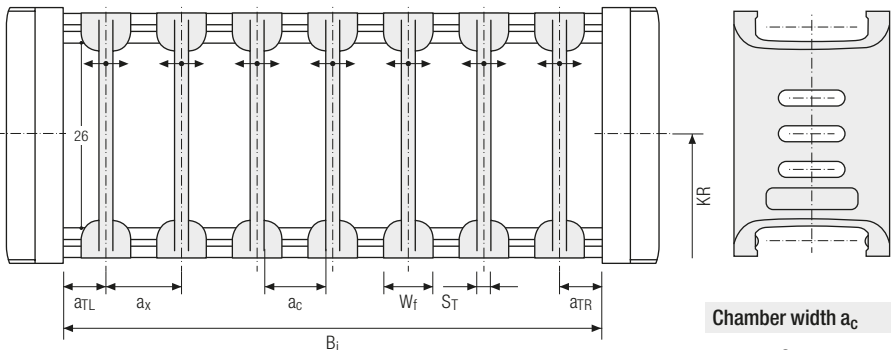
Version B



Divider system TSO without height separation

S_T [mm]	W_f [mm]	n_T max design 020	Version A			Version B*																								
			a_{TL}/a_{TR} min [mm]	a_x min [mm]	a_c min [mm]	a_{TL}/a_{TR} min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]																					
2	7		3.5	7	5		7.5	5.5	2.5																					
			<table border="1"> <thead> <tr> <th>B_i [mm]</th> <th>25</th> <th>38</th> <th>58</th> <th>78</th> <th>103</th> <th>130</th> </tr> </thead> <tbody> <tr> <td>a_{TL}/a_{TR} min [mm]</td> <td>5</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>5</td> </tr> <tr> <td>n_T max design 020</td> <td>0</td> <td>2</td> <td>5</td> <td>7</td> <td>11</td> <td>15</td> </tr> </tbody> </table>							B_i [mm]	25	38	58	78	103	130	a_{TL}/a_{TR} min [mm]	5	4	4	4	4	5	n_T max design 020	0	2	5	7	11	15
B_i [mm]	25	38	58	78	103	130																								
a_{TL}/a_{TR} min [mm]	5	4	4	4	4	5																								
n_T max design 020	0	2	5	7	11	15																								

* not design 020

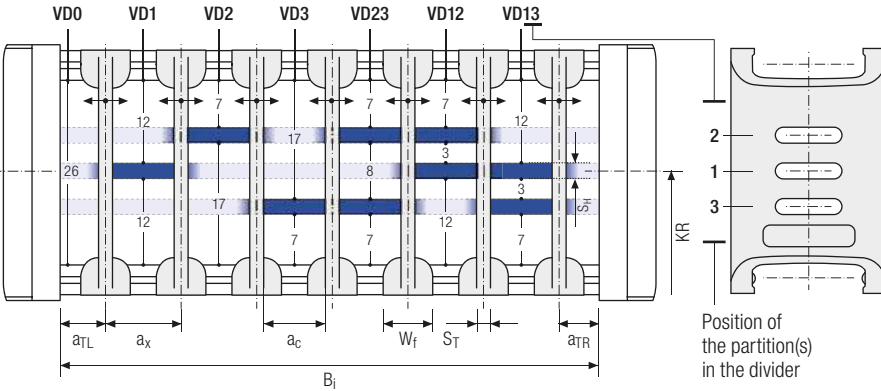


Chamber width a_c
 $a_c = a_x - S_T$

Divider system TS1 with continuous height separation*

S_T [mm]	W_f [mm]	S_H [mm]	n_T min	a_T max [mm]	Version A			Version B																	
					a_T min [mm]	a_x min [mm]	a_c min [mm]	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]														
2	7	2	2	20	3.5	7	5		7.5	5.5	2.5														
					<table border="1"> <thead> <tr> <th>B_i [mm]</th> <th>25</th> <th>38</th> <th>58</th> <th>78</th> <th>103</th> <th>130</th> </tr> </thead> <tbody> <tr> <td>a_{TL}/a_{TR} min [mm]</td> <td>5</td> <td>4</td> <td>4</td> <td>4</td> <td>4</td> <td>5</td> </tr> </tbody> </table>							B_i [mm]	25	38	58	78	103	130	a_{TL}/a_{TR} min [mm]	5	4	4	4	4	5
B_i [mm]	25	38	58	78	103	130																			
a_{TL}/a_{TR} min [mm]	5	4	4	4	4	5																			

* not design 020



Position of the partition(s) in the divider

Inner heights
26

Inner widths
25
130

Key for abbreviations on page 72

Assembly instructions on kabelschlepp.de/assembly

Order key on page 32



Standard height separation with aluminum profile 9 x 2 mm.

Chamber width a_c

$$a_c = a_x - S_T$$



TRAXLINE® cables in motion

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

More product information online



Assembly instructions etc.:
Receive additional info via your smartphone or check online at kabelschlepp.de/support



Configure your custom cable carrier:
onlineengineer.de

Information on the connection dimensions for the cable carrier can be found on page 29.

UA1455 | Inner Distribution | TS3

Divider system TS3 with height separation made of plastic section subdivisions*

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uniflex-advanced

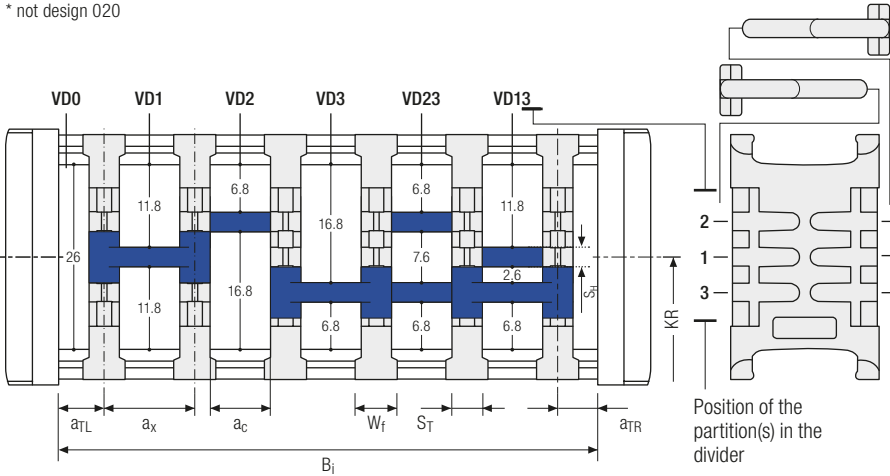
Configure your cable carrier:
onlineengineer.de

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

Version A						
S_T [mm]	W_f [mm]	S_H [mm]	a_{TL}/a_{TR} min [mm]	a_x min [mm]	a_c min [mm]	n_T min
5	7	2.4	3.5	15	10	2

* not design 020



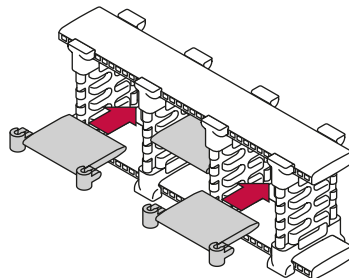
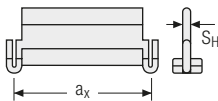
The dividers are fixed by the partitions, the complete divider system is movable in the cross section.

Chamber width a_c

$$a_c = a_x - S_T$$

a_x (center distance of dividers) [mm]									
a_c (nominal width of inner chamber) [mm]									
15	20	25	30	35	40	45	55	65	75
10	15	20	25	30	35	40	50	60	70

Plastic section subdivisions in a_x increments

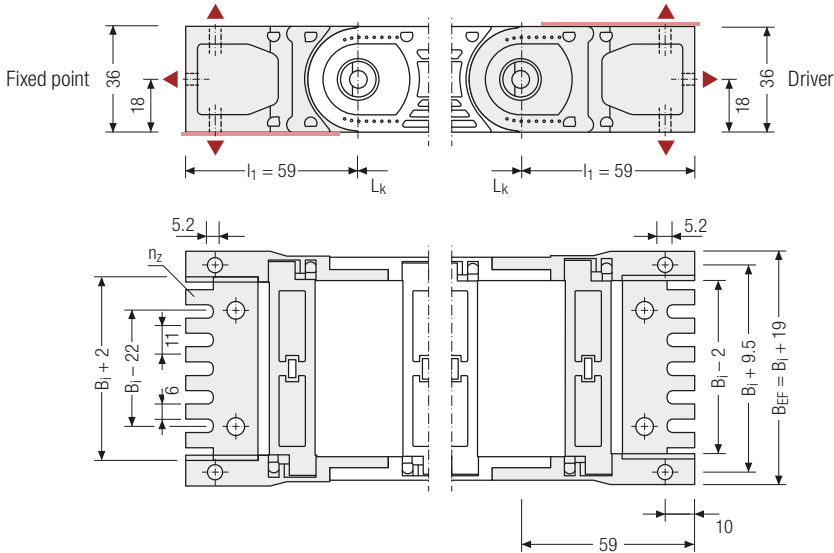


Assembly section subdivision

Information on the connection dimensions for the cable carrier can be found on page 29.

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.



Inner heights



Inner widths

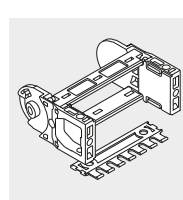


Key for abbreviations on page 72

▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
25	44	2
38	57	3
58	77	5
78	97	7
103	122	9
130	149	11

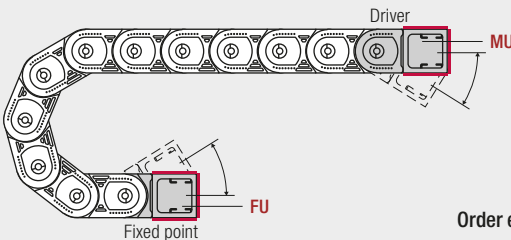
i Recommended tightening torque:
5 Nm for screws M5 - 8.8



The end connectors are optionally also available **without** strain relief comb (1 per side). Please state when ordering.

Assembly instructions on kabelschlepp.de/assembly

Connection variants



Connection point

F – fixed point
M – driver

Connection type

U – universal mounting bracket

Order example



UMB	.	F U
UMB	.	M U

Order key on page 32



i The universal end connectors UMB can be swiveled in KR direction.

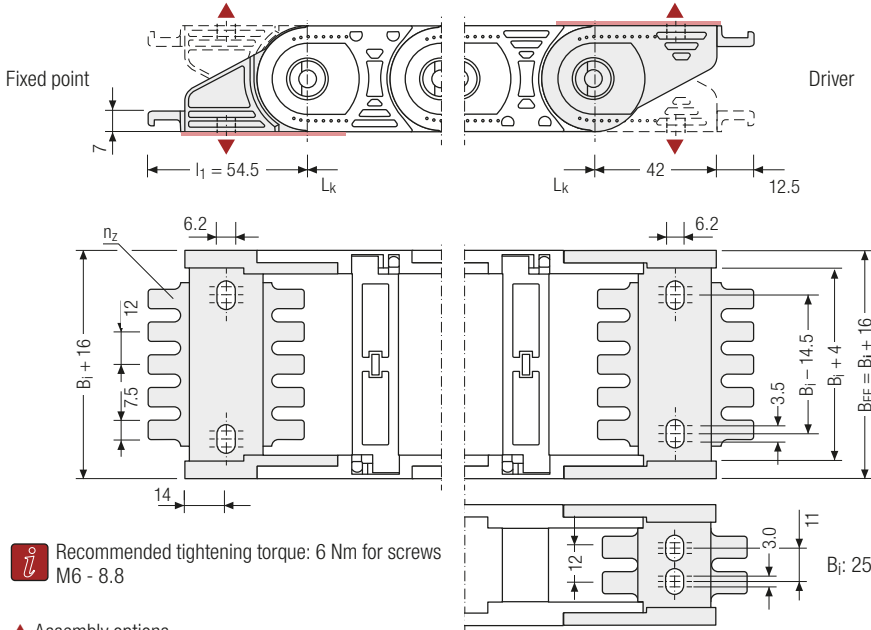
One part end connectors – plastic

The plastic end connectors can be **connected from above and below**. The connection type can be changed by reconnecting the end connector.

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uniflex-advanced

Configure your cable carrier:
onlineengineer.de

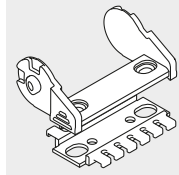
Technical support:
technik@kabelschlepp.de



Recommended tightening torque: 6 Nm for screws M6 - 8.8

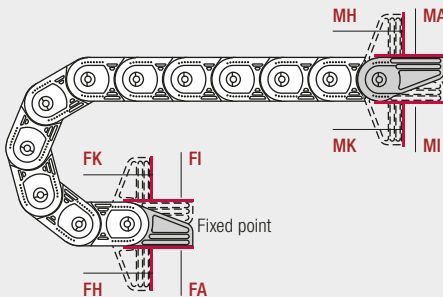
▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
25	41	2 x 2
38	54	2 x 3
58	74	2 x 4
78	94	2 x 6
103	117	2 x 8
130	146	2 x 10



The end connectors are optionally also available **without** strain relief comb (except B_i 25). Please state when ordering.

Connection variants



Connection point

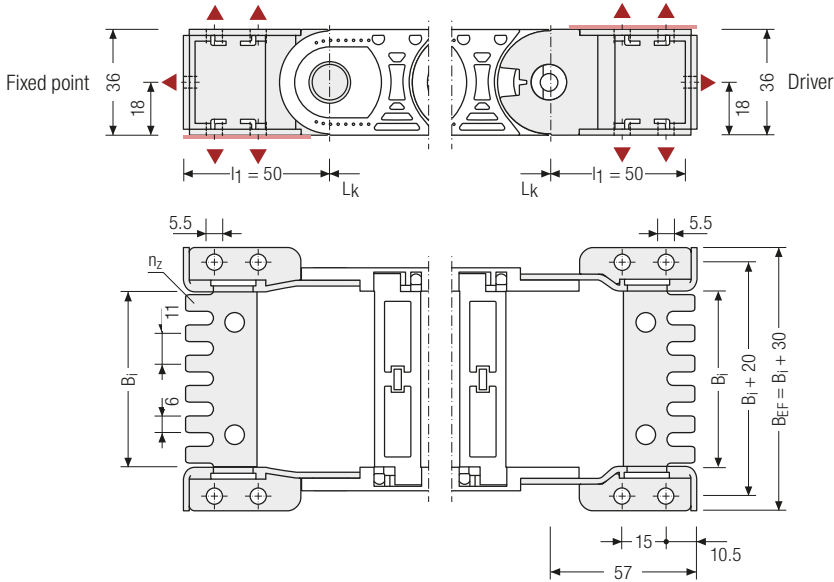
- F – fixed point
- M – driver

Connection type

- A – threaded joint outside (standard)
- I – threaded joint inside
- H – threaded joint outside rotated by 90°
- K – threaded joint inside rotated by 90°

Universal end connectors UMB-St – steel

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



Inner heights



Inner widths



Key for abbreviations
on page 72

▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
25	55	2
38	68	3
58	88	5
78	108	7
103	133	9
130	160	11

The end connectors are also available as an option **without** strain relief comb. Please state when ordering.

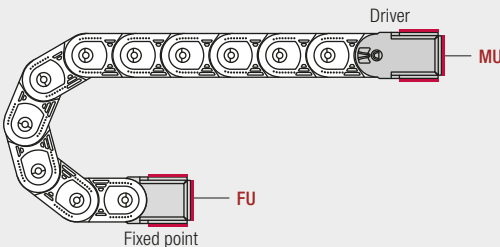
Order example



UMB-St	.	F U
UMB-St	.	M U

Assembly instructions on
kabelschlepp.de/assembly

Connection variants



Connection point

F – fixed point
M – driver

Connection type

U – universal mounting bracket

Order key
on page 32



Note: The end connectors UMB-St offer the same connection dimensions as the previous universal end connectors UMB from UNIFLEX 0455.

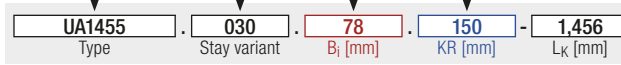
UA1455 | Order Key

Order

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uniflex-advanced

Cable carrier

Type	Stay variant	B_i [mm]	KR [mm]	L_K [mm]
UA1455	020		52	
			65	
		25	95	
		38	125	
		58	150	
		78	180	
		103	200	
030	130	225		
040				

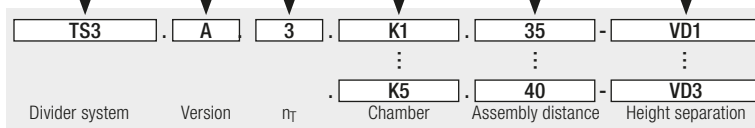


Configure your cable carrier:
onlineengineer.de

International order specification INTOK:
Information about the International Order Key can be found in the chapter "International Order Key" from page 1.

Divider system

Divider system	Version	n_T	Chamber	a_x [mm]	Height separation (not for TS0)
TS0			K1		VD0
TS1	A	min. 2	K2	min. 7.0	VD1
TS3	B



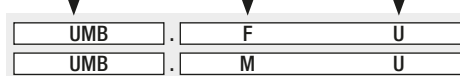
Technical support:
technik@kabelschlepp.de

Please state the designation of the divider system (**TS0, TS1 ...**), version and number of dividers per cross section [n_T]. Additionally, please enter the chambers [K] from left to right (driver view).

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

Connection variant

End connector	Connection point	Connection type
UMB	F	U
		A
		I
UMB-St	M	H
		K

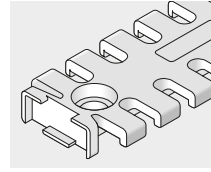


Please state the desired connection variant as well as the desired strain relief type for the fixed point and for the driver.

Accessories

Single-sided strain relief combs

The optional plastic strain relief combs are assembled between the UMB end connectors and require no separate screw fixing.



Inner heights

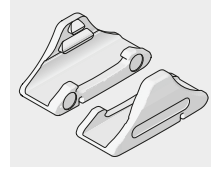


Inner widths



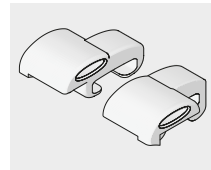
Gliding elements

The optional glide shoes ensure a substantially longer service life of the cable carrier in gliding operation.



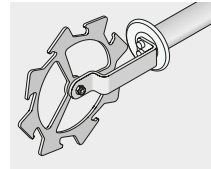
Outer dampers

The use of outer dampers effectively reduces uncoiling noise. Particularly recommended for support trays and guide channels.



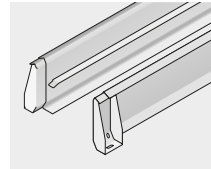
Quick opening tool

Opening tools can be used to open cable carriers quickly and gently for installation and inspection of cables and hoses.



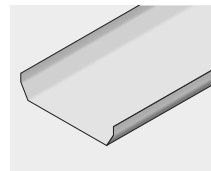
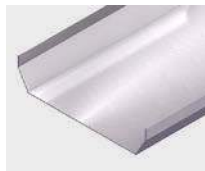
Guide channels

The cable carrier always has to be guided in a channel for gliding applications. This prevents the upper and lower run from slipping.



Support trays

An even surface is required for safe unrolling of the cable carrier. This is ensured by a support tray.



Key for abbreviations
on page 72

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 32

