

KABELSCHLEPP

UNIFLEX Advanced series



PLASTIC CABLE CARRIERS
UNIVERSAL AND WITH MANY VARIANTS
WITH BALL JOINT

UNIFLEX *Advanced* series

Light, quiet all-rounder
with a wide range of applications*



* Some features can be
different for certain types for
design reasons.

Subject to change.



Inner heights
20 – 44 mm



Inner widths
15 – 250 mm



Pitch
32.0 – 66.5 mm



Additional load
up to 15 kg/m



Travel length unsupported
up to 7 m



Travel length gliding
up to 150 m



Travel speed
up to 10 m/s



Travel acceleration
up to 50 m/s²

All technical data and features depend on application and type. Let us know your requirements – we are here to help!

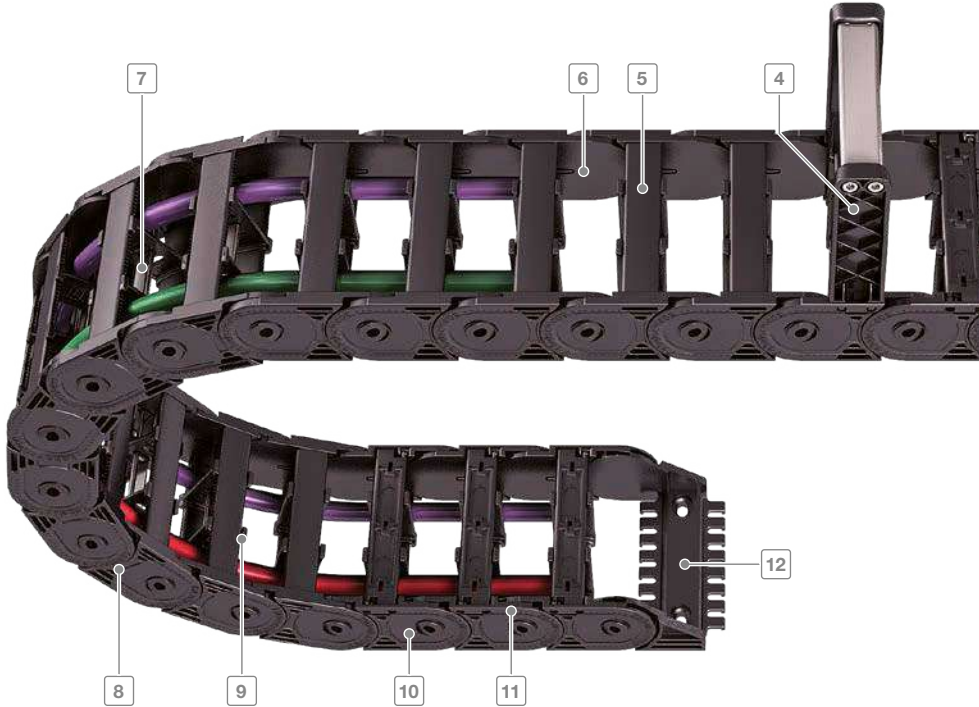
Fon: +49 2762 4003-0 or

E-mail: technik@kabelschlepp.de

Trademarks are legally protected for the TSUBAKI KABELSCHLEPP GmbH as a national or international registration in the following countries: kabelschlepp.de/Trademarks

kabelschlepp.de

Configure your cable carrier:
onlineengineer.de



Technical support:
technik@kabelschlepp.de

Features

- Universal connection options
- Extensive unsupported lengths
- High torsional rigidity
- Good ratio of inner to outer width
- Low noise emissions
- Numerous custom material types for custom applications available
- Easy assembly
- Fast cable laying
- Assembly tools available
- Stays with ball joint, opening on both sides
- Strain relief integrated into the end connector
- Many possibilities for internal subdivision
- Optionally with C-rail integrated in the end connector
- Wear surfaces for gliding applications involving long travel lengths
- Fixable dividers

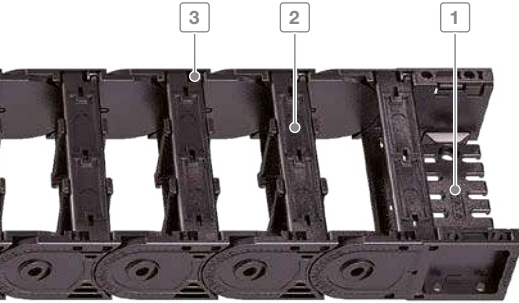
OnlineEngineer.de
Cable Carrier Configurator



Fixable dividers for arrangement laying on its side and applications with high lateral Travel accelerations – no additional spacers required

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

Simple fixing of strain relief comb or C-Rail in the connector



Example of inner distribution

- 1 Universal Mounting Bracket (UMB) with integratable strain relief comb
- 2 Designs with inward or outward opening crossbars
- 3 Extremely fast and easy to open due to ball joint mechanism
- 4 Frame stay
- 5 Single-part links (design 020)
- 6 Favorable ratio of inner to outer width
- 7 Many separation options for the cables
- 8 Robust, double stroke system for long unsupported lengths
- 9 Easy divider fixing
- 10 Extremely low noise due to internal noise damping
- 11 Lateral wear surfaces
- 12 Single-part end connectors with integratable strain relief comb

Inner heights



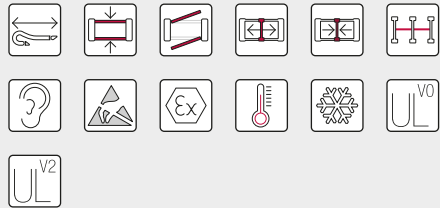
Inner widths



Key for abbreviations on page 74

Selection criteria for UNIFLEX *Advanced*

- If easy, single-sided opening of the crossbars from inside or outside is required
- If cables have to be assembled quickly
- If an optional divider fixing should be available (e.g. for cable carrier laying on its side)
- If a gliding arrangement should be optionally available
- If additional loads up to 10 kg/m are required
- If a plastic crossbar is required
- If an integrated strain relief is required
- If horizontal cable partitioning is desired



- If a frame stay is required (e.g. for large hose diameters)

Assembly instructions on kabelschlepp.de/assembly

Type	h_i [mm]	B_i [mm]	t [mm]	Page
UA1320	20	15 – 65	32.0	6
UA1455	26	25 – 103	45.5	18
UA1555	38	50 – 200	55.5	36
UA1665	44	50 – 250	66.5	54

UA1320

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uniflex-advanced



Pitch
32 mm



Height
20 mm



Width
15 - 65 mm



Bending radius
28 - 125 mm

Configure your cable carrier:
onlineengineer.de

Stay variants

Design 020



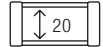
From page 10

Closed frame

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

Opening options

outside/inside: Closed.



Technical support:
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Inner heights



Inner widths



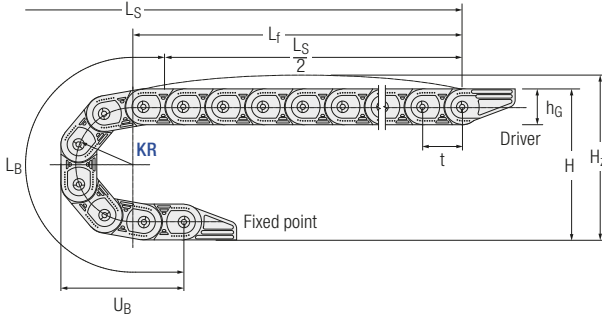
Key for abbreviations
on page 74

Assembly instructions on
kabelschlepp.de/assembly

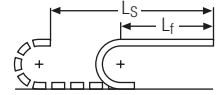
Order key
on page 16



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

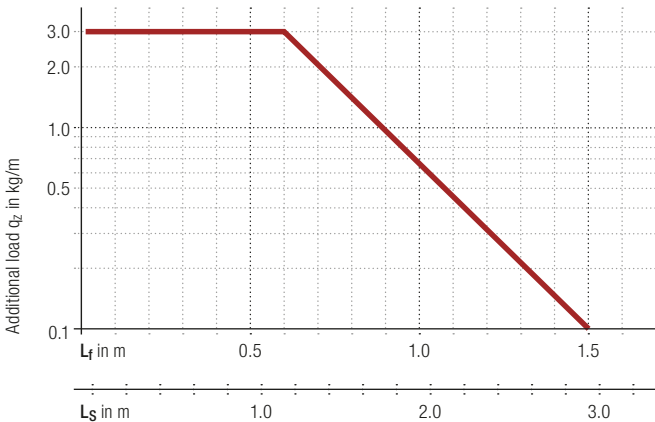
v_{max} [m/s]	a_{max} [m/s ²]	t [mm]
10	50	32

Installation dimensions unsupported

KR [mm]	H [mm]	H _z [mm]	L _B [mm]	U _B [mm]
28	81.5	98.5	152	73
38	101.5	118.5	184	83
48	121.5	138.5	215	93
75	175.5	192.5	300	120
100	225.5	242.5	379	145
125	275.5	292.5	457	170

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

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



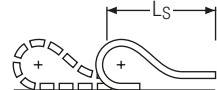
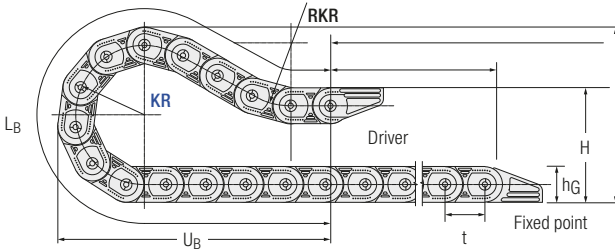
Fixed point offset L_f :


For off-center fixed point connections please contact us.



Intrinsic cable carrier weight $q_k = 0.40$ kg/m with B_i 50 mm. For other inner widths the maximum additional load changes.

Gliding arrangement



 For more information on gliding arrangement please contact us.

Inner heights

20

Inner widths

15
65

Dynamics of gliding arrangement		t
v _{max} [m/s]	a _{max} [m/s ²]	[mm]
2.5	25	32



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 74



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.

Assembly instructions on kabelschlepp.de/assembly

Order key on page 16



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

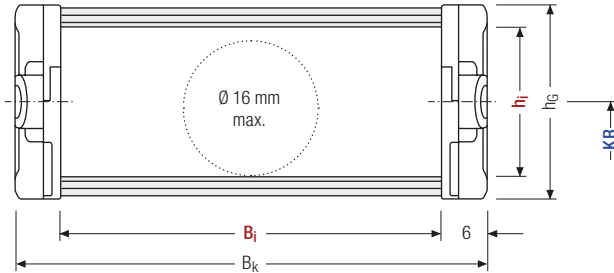


Stay arrangement on every chain link (VS)



B_i from 15 – 65 mm

Technical support:
technik@kabelschlepp.de



Calculating the cable carrier width

Outer width B_k

$$B_k = B_i + 12 \text{ mm}$$



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

online-engineer.de
Cable Carrier Configurator



QuickTrax® | EasyTrax®

For openable cable carriers with inner height 18 – 20 mm we recommend the series QuickTrax® 0320 or EasyTrax® 0320 QT0320 from page 8 and ET0320 from page 24.



Information on the inner distribution of the cable carrier can be found on page 12 f.

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]
32	20	25.5

Inner heights



Bend radii

KR [mm]					
28	38	48	75	100	125

Inner widths



Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_k [mm]	q_k [kg/m]
15	27	0.36
25	37	0.39
38	50	0.42
50	62	0.44
65	77	0.48

Key for abbreviations
on page 74

Order example



UA1320	·	020	·	50	·	100	·	960
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 16



Divider systems

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

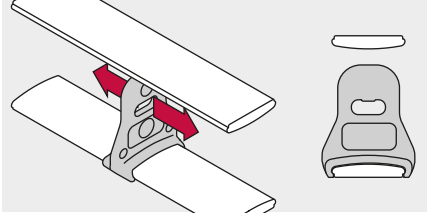
As standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section (**version A**).

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uniflex-advanced

Configure your cable carrier:
onlineengineer.de

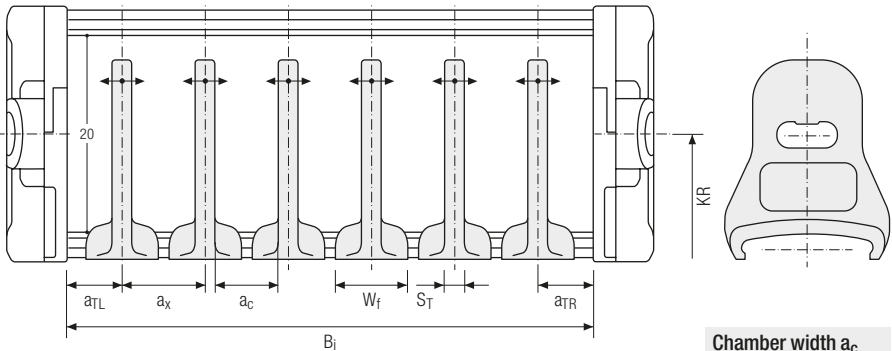
Movable divider

Version A



Divider system TSO without height separation

Version A				
S_T [mm]	W_f [mm]	a_{TL}/a_{TR} min [mm]	a_x min [mm]	a_c min [mm]
2	8	4	8	6



Chamber width a_c

$$a_c = a_x - S_T$$

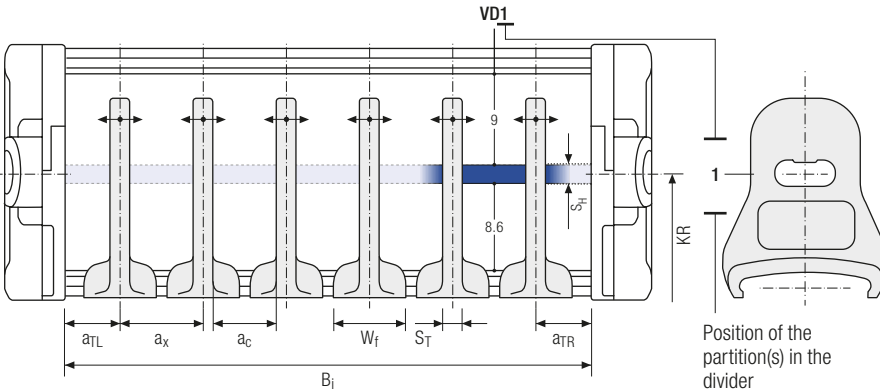
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online-engineer.de
Cable Carrier Configurator



Divider system TS1 with continuous height separation

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
2	8	2.4	4	8	6	2



Inner heights



Inner widths



Key for abbreviations
on page 74

Standard height separation with **aluminum profile 9 x 2 mm**.
The dividers can be moved in the cross section.

Chamber width a_c

$$a_c = a_x - S_T$$



TOTALTRAX® complete systems

Benefit from the advantages of a TOTALTRAX® complete system. Complete delivery from a single source – with a guarantee certificate on request! Learn more at kabelschlepp.de/totaltrax



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

Assembly instructions on
kabelschlepp.de/assembly

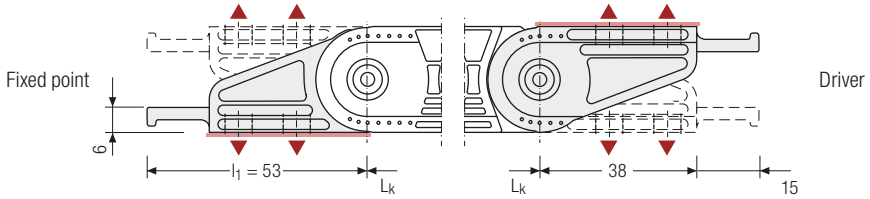
Order key
on page 16



UA1320 | End Connectors | End Connectors

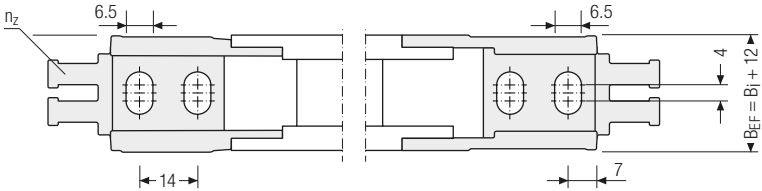
kabelschlepp.de/
uniflex-advanced

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

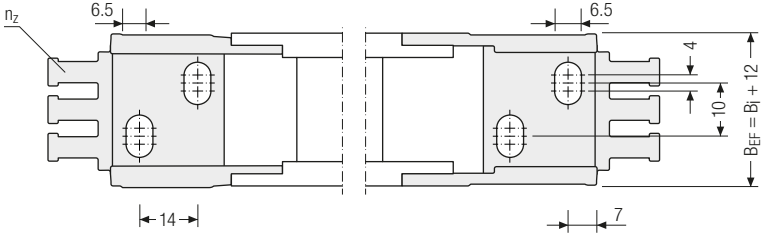


Configure your cable carrier:
onlineengineer.de

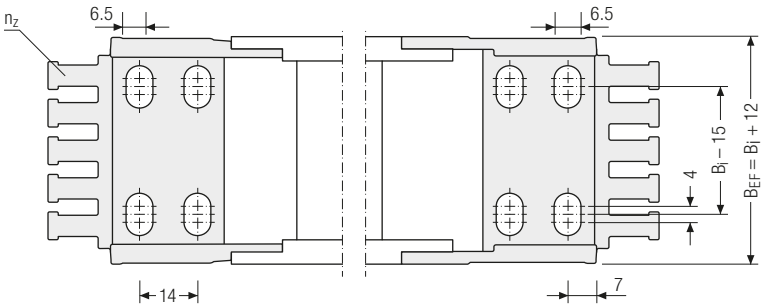
Bi: 15



Bi: 25



Bi: 38/50/65




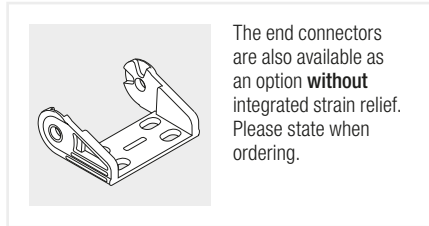
Technical support:
technik@kabelschlepp.de

▲ Assembly options

One part end connectors – plastic (with integrated strain relief)

B_i [mm]	B_{EF} [mm]	n_z
15	27	2
25	37	3
38	50	4
50	62	5
65	77	6

 The end connectors cannot be swiveled.



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

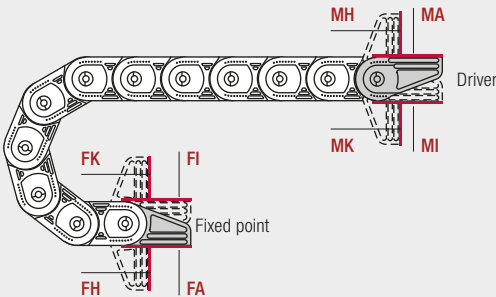
Inner heights



Inner widths



Connection variants



Connection point

F – fixed point
M – driver

Connection type

A – threaded joint outside (standard)
I – threaded joint inside
H – threaded joint, rotated through 90° to the outside
K – threaded joint, rotated through 90° to the inside

Key for abbreviations
on page 74

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 16



Order

kabelschlepp.de/
uniflex-advanced

Cable carrier

Type	Stay variant	B_i [mm]	KR [mm]	L_K [mm]
UA1320	020	15	28	960
		25	38	
		38	48	
		50	75	
		50	100	
		65	125	



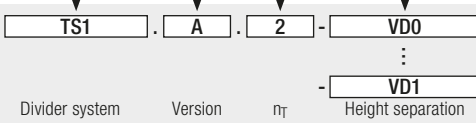
International order specification INTOK:

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

Configure your cable carrier:
onlineengineer.de

Divider system

Divider system	Version	n_T	Height separation (not for TS0)
TS0		min. 2	VD0
TS1	A	...	VD1



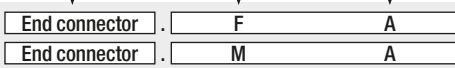
Please state the designation of the divider system (**TS0**, **TS1**), version and number of dividers per cross section [n_T].

If using divider systems with height separation (**TS1**) please also state the positions [e.g. VD23] viewed from the left driver belt.

Technical support:
technik@kabelschlepp.de

Connection variant

End connector	Connection point	Connection type
End connector	F	A
		I
		H
End connector	M	A
		A

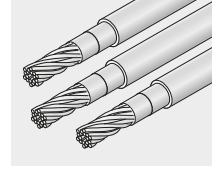


Please state the desired connection variant as well as the desired strain relief type for the fixed point and for the driver.

Accessories

TRAXLINE® cables in motion

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers.



Inner heights

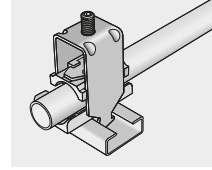


Inner widths



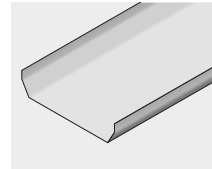
LineFix® clamps

LineFix® clamps are fixed to the C-rail. They serve as a separate strain relief or separate attachment of the cables outside the cable carrier.



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 74

Assembly instructions on
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Order key
on page 16



TOTALTRAX® complete systems

Benefit from the advantages of a TOTALTRAX® complete system. Complete delivery from a single source – with a guarantee certificate on request! Learn more at kabelschlepp.de/totaltrax

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

UA1455

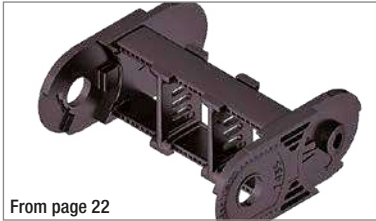
kabelschlepp.de/
uniflex-advanced



Configure your cable carrier:
onlineengineer.de

Stay variants

Design 020



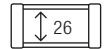
From page 22

Closed frame

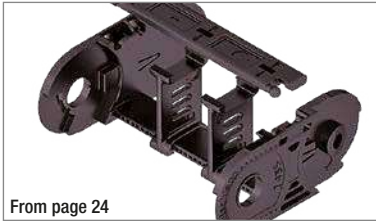
- Weight-optimized, closed plastic frame with particularly high torsional rigidity.

Opening options

inside/outside: Cannot be opened.



Design 030



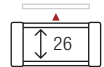
From page 24

Frame with externally detachable crossbars

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

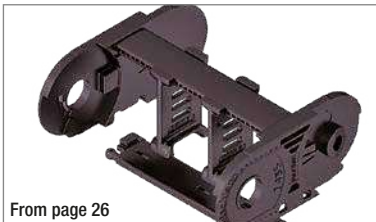
Opening options

outside: Swivable and detachable.



Technical support:
technik@kabelschlepp.de

Design 040



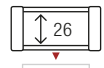
From page 26

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



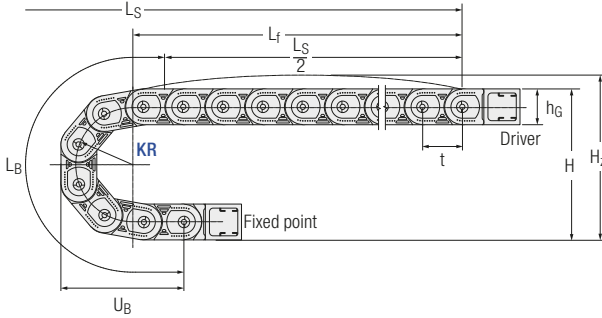
Key for abbreviations
on page 74

Assembly instructions on
kabelschlepp.de/assembly

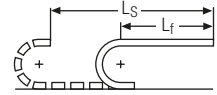
Order key
on page 34



Unsupported arrangement



Unsupported length L_f



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

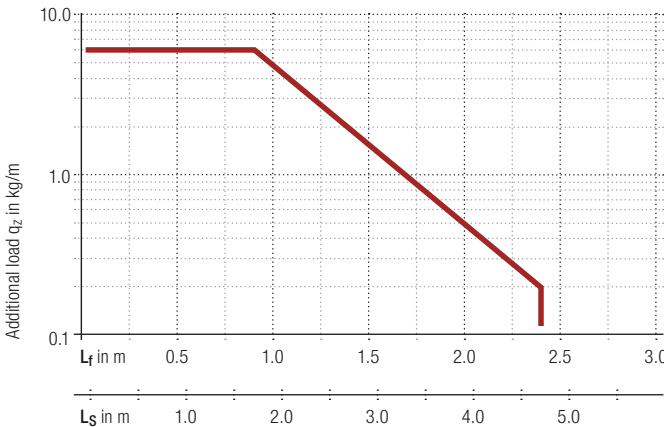
Dynamics of unsupported arrangement		t
v_{max} [m/s]	a_{max} [m/s ²]	[mm]
10	50	45.5

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

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



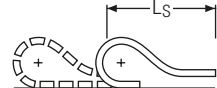
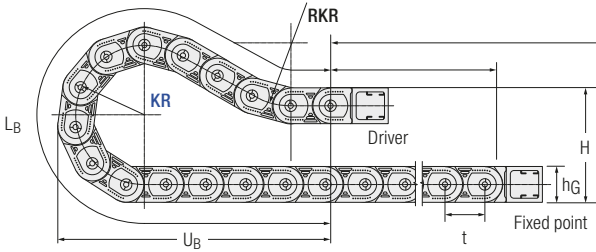
Fixed point offset L_f :

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 74

Assembly instructions on kabelschlepp.de/assembly

Order key on page 34



TSUBAKI KABELSCHLEPP Technical Support

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Stay variant 020 – closed frame

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

kabelschlepp.de/
uniflex-advanced

Configure your cable carrier:
onlineengineer.de

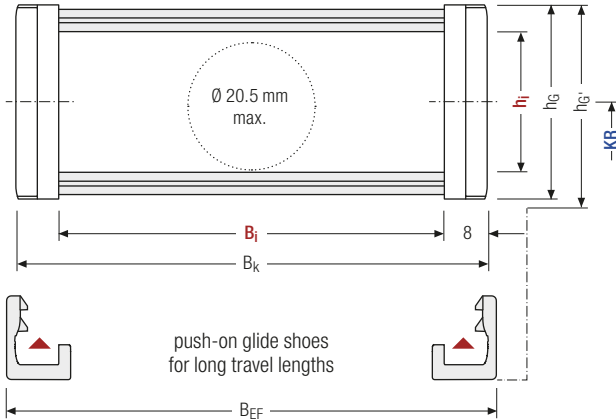


Stay arrangement on every chain link (VS)



B_i from 25 – 130 mm

Technical support:
technik@kabelschlepp.de



Calculating the cable carrier width

Outer width B_k

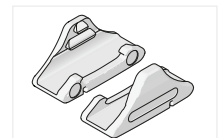
$$B_k = B_i + 16 \text{ mm}$$

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 28.

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 74

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 34



Stay variant 030 – with outside opening and detachable crossbars

kabelschlepp.de/
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.

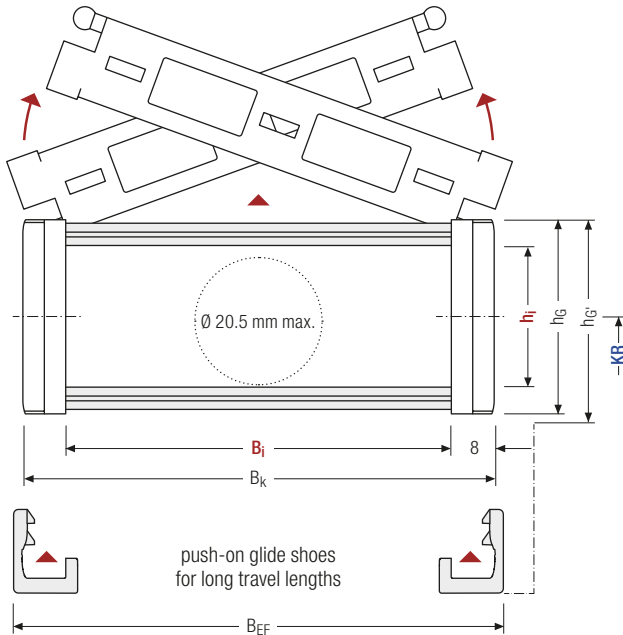


Stay arrangement on every chain link (VS)



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 28.

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 74

Order example



UA1455	·	030	·	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 34



Stay variant 040 – with inside opening and detachable crossbars

kabelschlepp.de/
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.

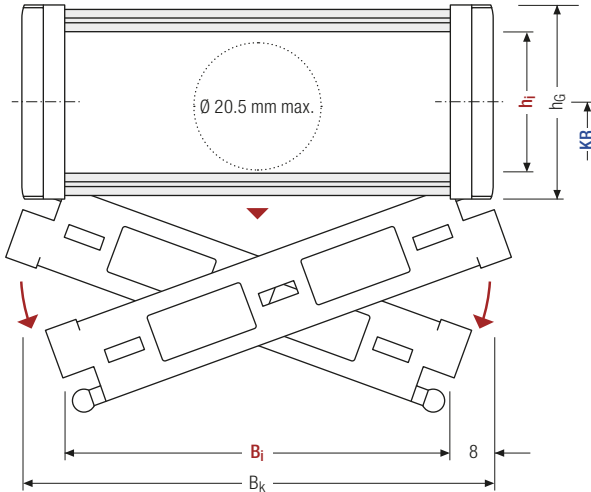


Stay arrangement on every chain link (**VS**)



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 74

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 34



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**).

For applications with lateral acceleration and lying on the side, divider with arresting cams are available.

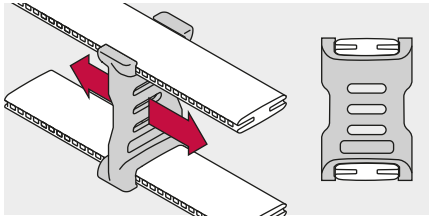
The locking cams click into place in the locking grids in the crossbars (**version B**).

kabelschlepp.de/
uniflex-advanced

Configure your cable carrier:
onlineengineer.de

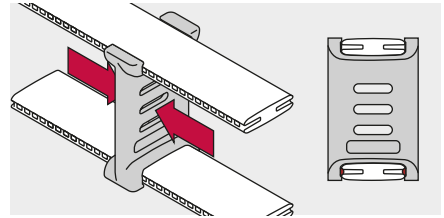
Movable divider

Version A (Standard)



Fixable divider (2.5 mm grid)

Version B

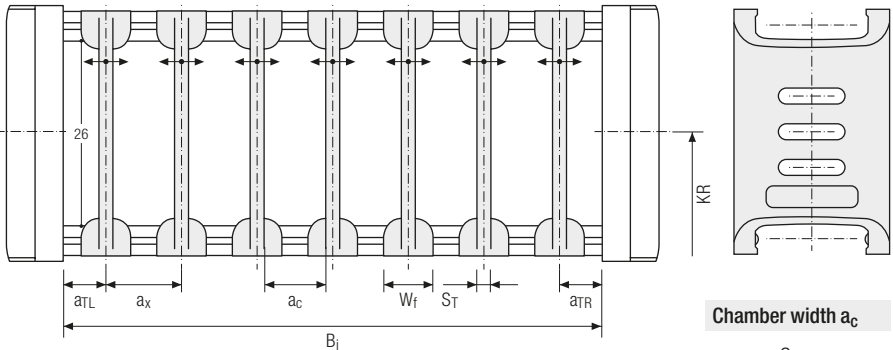


Divider system TSO without height separation

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

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

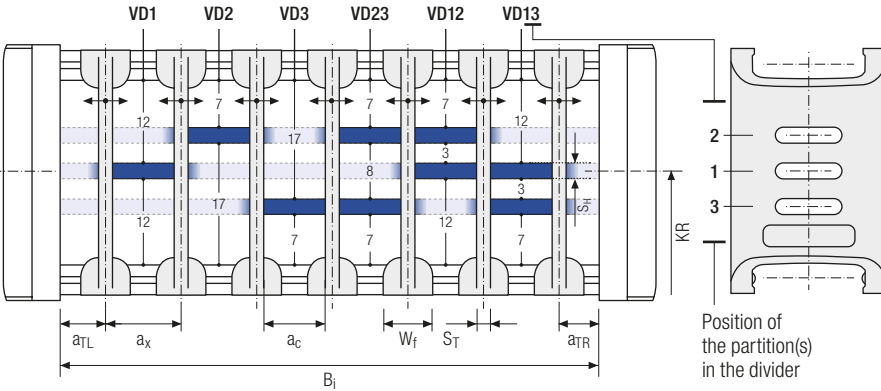


Technical support:
technik@kabelschlepp.de

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



Inner heights
26

Inner widths
25
130

Key for abbreviations
on page 74

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 34



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 31.

UA1455 | Inner Distribution | TS3

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

kabelschlepp.de/
uniflex-advanced

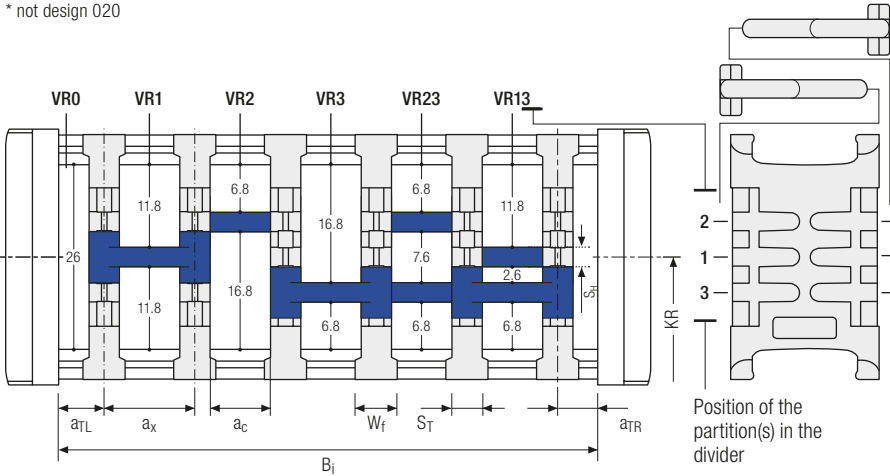
Configure your cable carrier:
onlineengineer.de

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



Position of the partition(s) in the divider

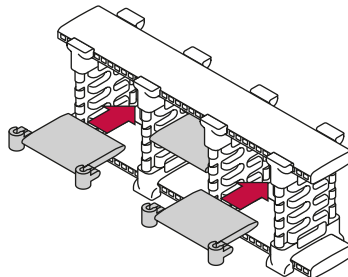
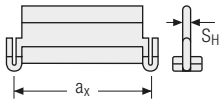
The dividers are fixed by the partitions, the complete divider system is movable in the cross section.

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

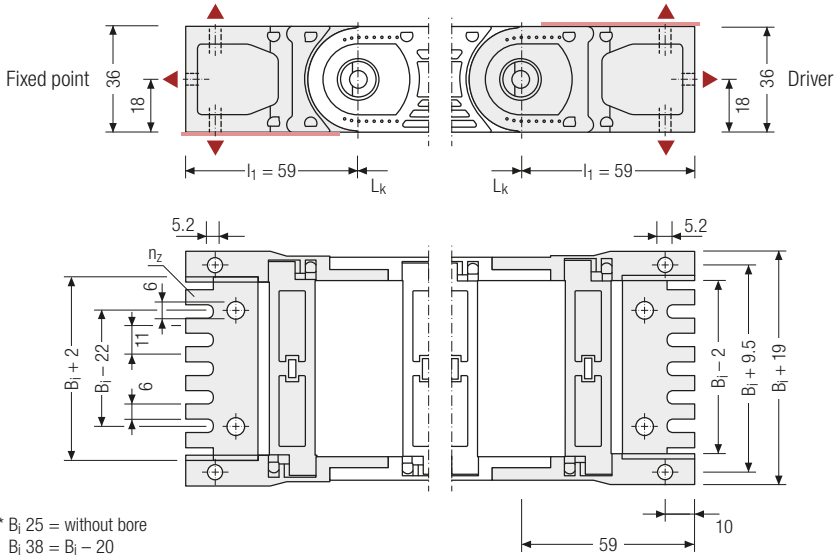


Assembly section subdivision

Information on the connection dimensions for the cable carrier can be found on page 31.

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 74

▲ Assembly options

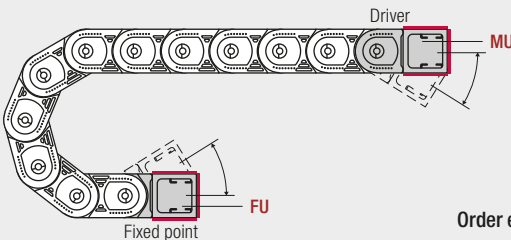
B_1 [mm]	n_Z
25	2
38	3
58	5
78	7
103	9
130	11

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

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

Order key
on page 34



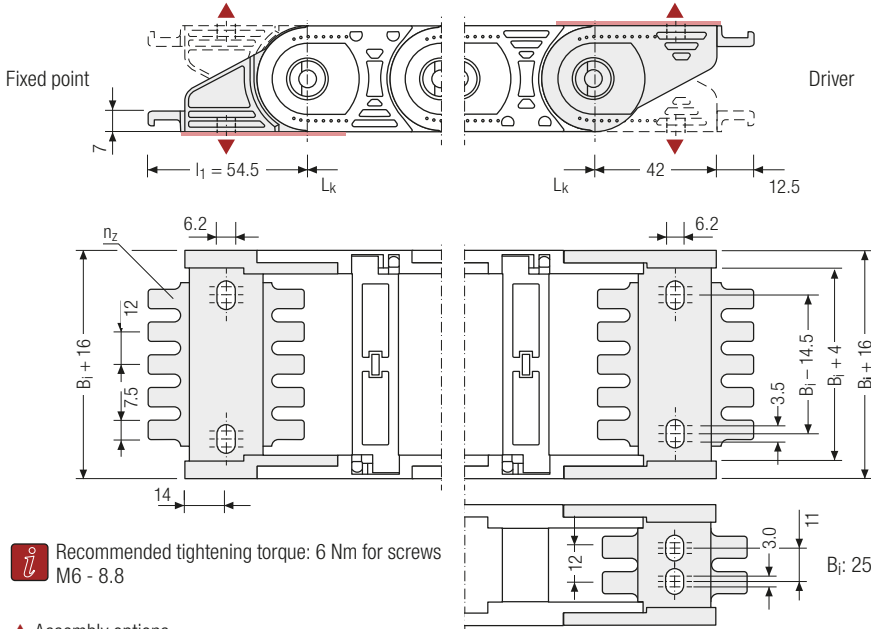
One part end connectors – plastic

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

kabelschlepp.de/
uniflex-advanced

Configure your cable carrier:
onlineengineer.de

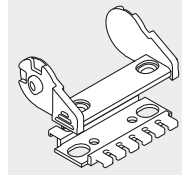
Technical support:
technik@kabelschlepp.de



Recommended tightening torque: 6 Nm for screws M6 - 8.8

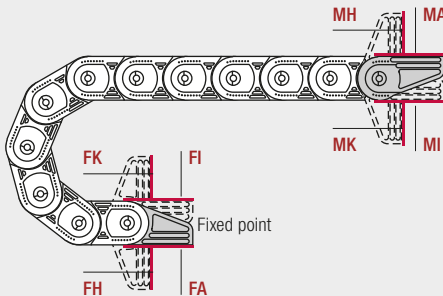
▲ Assembly options

B_i [mm]	n_z
25	2 x 2
38	2 x 3
58	2 x 4
78	2 x 6
103	2 x 8
130	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

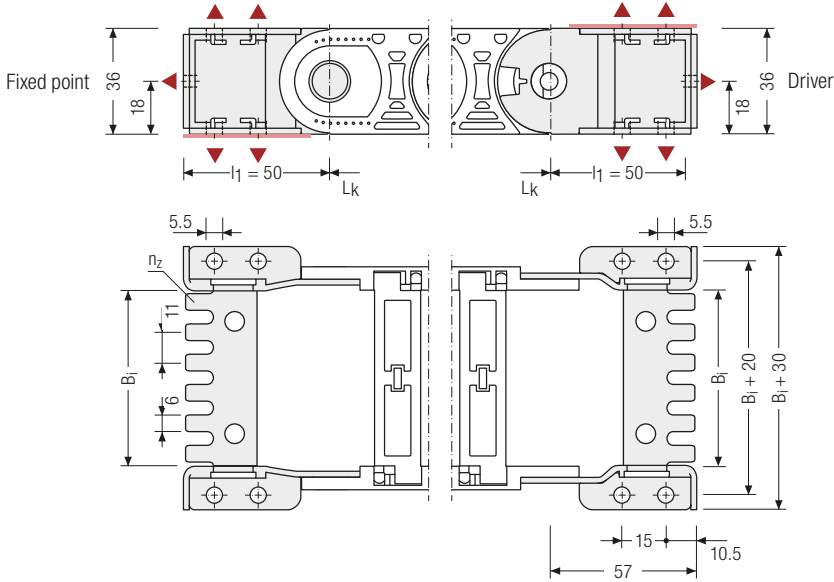
Driver

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



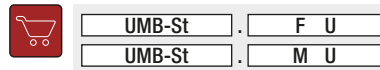
Key for abbreviations
on page 74

▲ Assembly options

B_1 [mm]	n_z
25	2
38	3
58	5
78	7
103	9
130	11

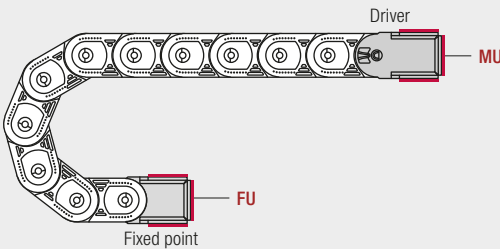
The end connectors are also available as an option **without** strain relief comb. Please state when ordering.

Order example



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 34



UA1455 | Order Key

Order

kabelschlepp.de/
uniflex-advanced

Cable carrier

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



Configure your cable carrier:
onlineengineer.de

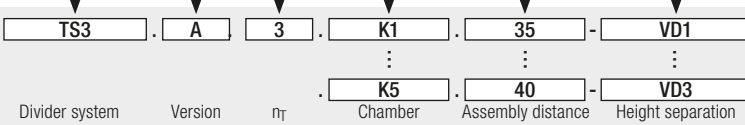


International order specification INTOK:

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

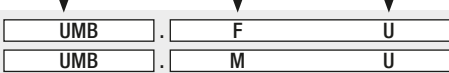


Please state the designation of the divider system (TS0, TS1 ...), version and number of dividers per cross section [n_T]. Additionally, please enter the chambers [K] from left to right (driver view).

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

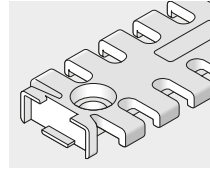


Please state the desired connection variant as well as the desired strain relief type for the fixed point and for the driver.

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

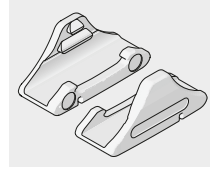


Inner widths



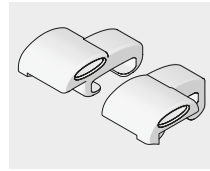
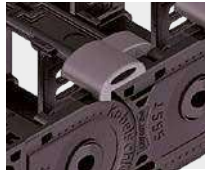
Gliding elements

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



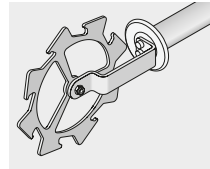
Outer dampers

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



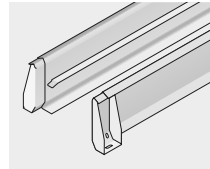
Quick opening tool

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



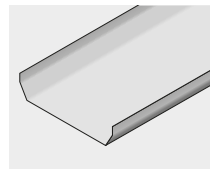
Guide channels

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 74

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 34



UA1555

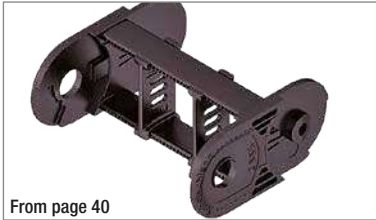
kabelschlepp.de/
uniflex-advanced



Configure your cable carrier:
onlineengineer.de

Stay variants

Design 020



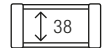
From page 40

Closed frame

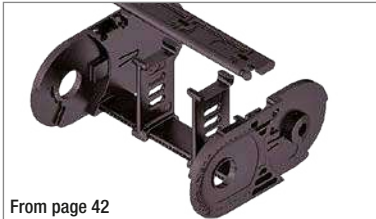
- Weight-optimized, closed plastic frame with particularly high torsional rigidity.

Opening options

outside/inside: Cannot be opened.



Design 030



From page 42

Frame with externally detachable crossbars

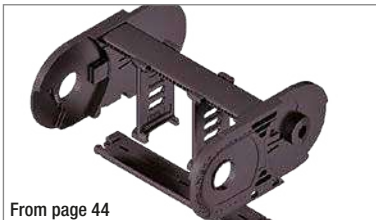
- Weight-optimized plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.

Opening options

outside: Swivable and detachable.



Design 040



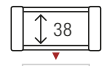
From page 44

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.



Technical support:
technik@kabelschlepp.de



Inner heights



Inner widths



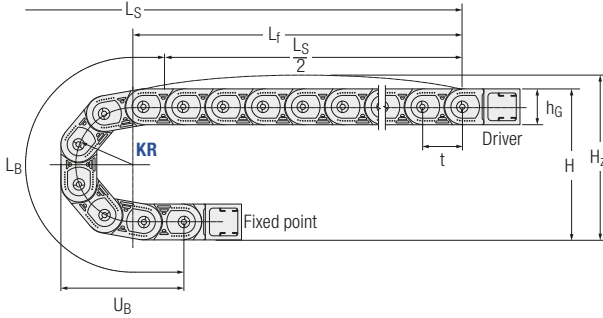
Key for abbreviations
on page 74

Assembly instructions on
kabelschlepp.de/assembly

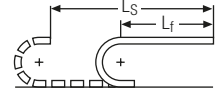
Order key
on page 52



Unsupported arrangement



Unsupported length L_f



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

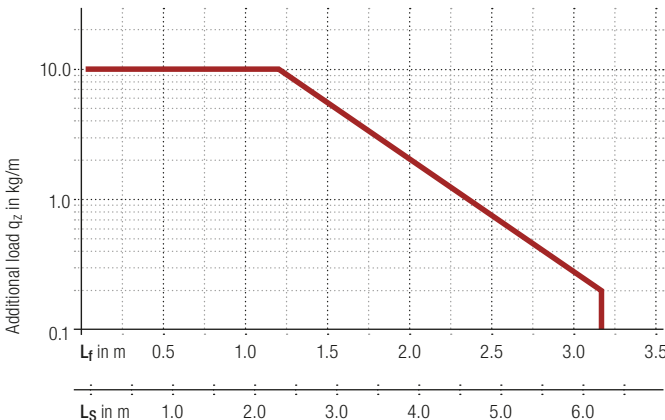
Dynamics of unsupported arrangement		t
v_{max} [m/s]	a_{max} [m/s ²]	[mm]
9	45	55.5

Installation dimensions unsupported

KR [mm]	H [mm]	H _z [mm]	L _B [mm]	U _B [mm]
63	176	216	309	145
80	210	240	362	165
100	250	280	425	185
125	300	330	504	210
160	370	400	614	245
200	450	480	740	285
230	510	540	834	315

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

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



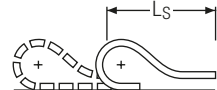
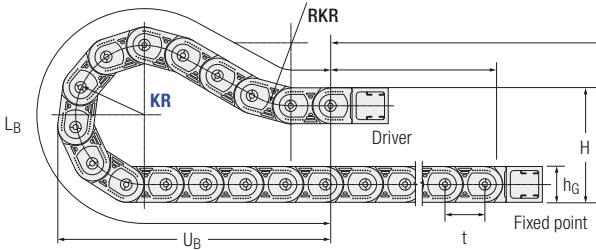
Fixed point offset L_f :

For off-center fixed point connections please contact us.



Intrinsic cable carrier weight $q_k = 1.32$ kg/m with B_i 100 mm. For other inner widths the maximum additional load changes.

Gliding arrangement



For more information on gliding arrangement please contact us.

Inner heights
38

Inner widths
50
150

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]
3	20	55.5

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 74

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 52



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.



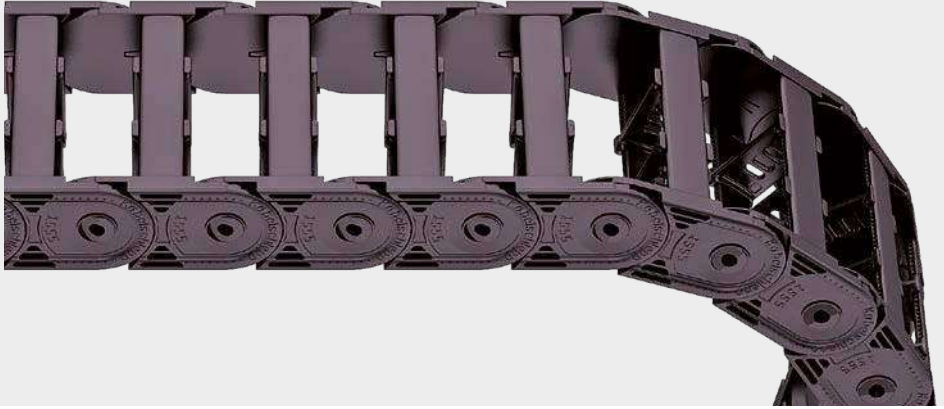
Stay variant 020 – closed frame

kabelschlepp.de/
uniflex-advanced

Configure your cable carrier:
onlineengineer.de

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

- **Opening options**
outside/inside: Cannot be opened.

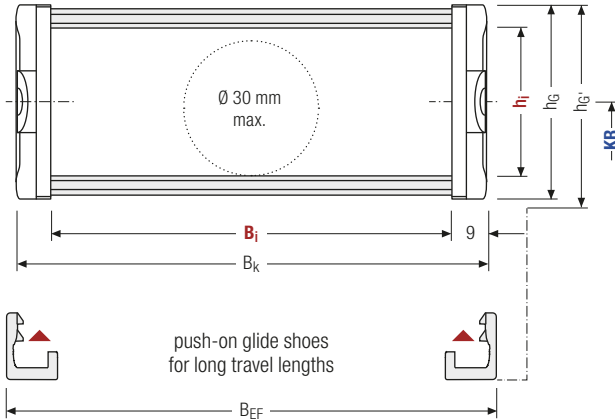


Stay arrangement on every chain link (VS)



B_i from 50 – 150 mm

Technical support:
technik@kabelschlepp.de



Calculating the cable carrier width

Outer width B_k

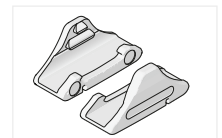
$$B_k = B_i + 18 \text{ mm}$$

Total width B_{EF}

$$B_{EF} = B_i + 22 \text{ mm}$$



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 46 f.

Pitch, inner height and chain link height

t [mm]	h _i [mm]	h _G [mm]	h _G * [mm]
55.5	38	50	53

Inner heights



Bend radii

KR [mm]						
63	80	100	125	160	200	230*

Inner widths



Inner/outer width and intrinsic cable carrier weight

B _i [mm]	B _k [mm]	B _{EF} [mm]	q _k [kg/m]
50	68	72	1.13
75	93	97	1.23
100	118	122	1.33
125	143	147	1.42
150	168	172	1.52

Key for abbreviations
on page 74

Order example



UA1555	·	020	·	125	·	160	·	1,887
Type		Stay variant		B _i [mm]		KR [mm]		L _k [mm]

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 52

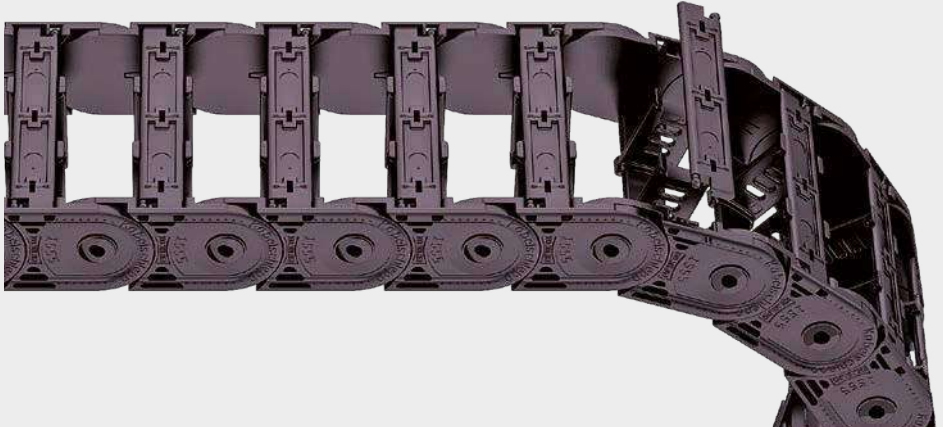


Stay variant 030 – with outside opening and detachable crossbars

kabelschlepp.de/
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.

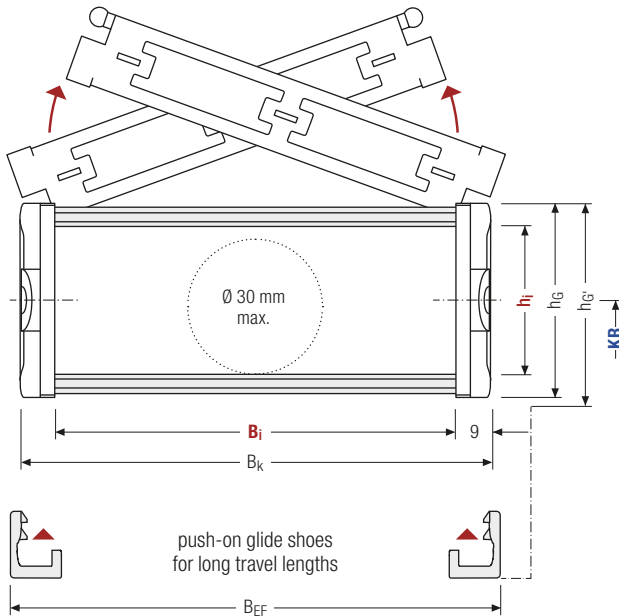


Stay arrangement on every chain link (VS)



B_i from 50 – 150 mm

Technical support:
technik@kabelschlepp.de



Calculating the cable carrier width

Outer width B_k

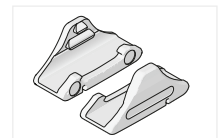
$$B_k = B_i + 18 \text{ mm}$$

Total width B_{EF}

$$B_{EF} = B_i + 22 \text{ mm}$$



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 46 f.

Pitch, inner height and chain link height

t [mm]	h _i [mm]	h _G [mm]	h _G [*] [mm]
55.5	38	50	53

Inner heights



Bend radii

KR [mm]						
63	80	100	125	160	200	230*

Inner widths



Inner/outer width and intrinsic cable carrier weight

B _i [mm]	B _k [mm]	B _{EF} [mm]	q _k [kg/m]
50	68	72	1.13
75	93	97	1.23
90**	108	112	1.30
100	118	122	1.32
125	143	147	1.42
150	168	172	1.51

Key for abbreviations
on page 74

Order example



UA1555	030	125	160	1,887
Type	Stay variant	B _i [mm]	KR [mm]	L _K [mm]

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 52

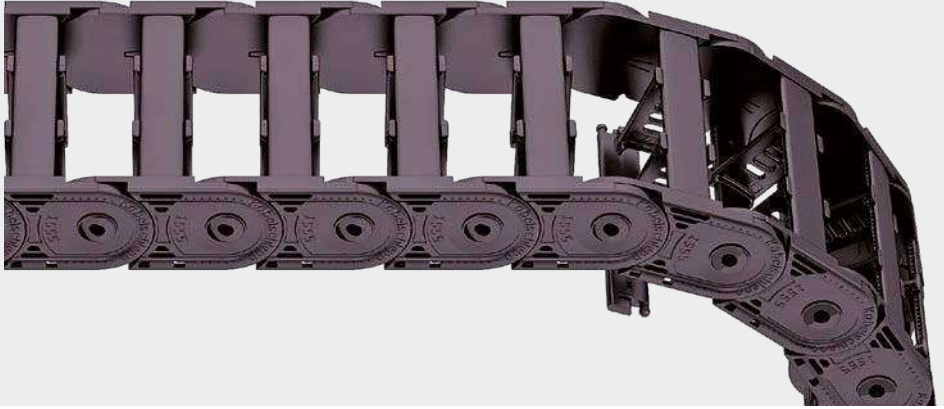


Stay variant 040 – with inside opening and detachable crossbars

kabelschlepp.de/
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.

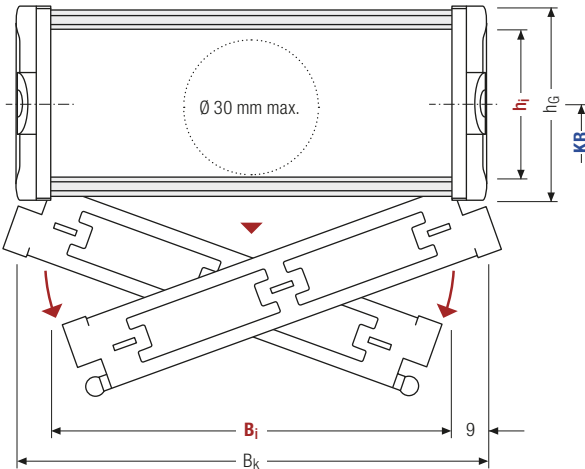


Stay arrangement on every chain link (VS)



B_i from 50 – 150 mm

Technical support:
technik@kabelschlepp.de



Calculating the cable carrier width

Outer width B_k

$$B_k = B_i + 18 \text{ mm}$$

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]
55.5	38	50

Inner heights



Bend radii

KR [mm]						
63	80	100	125	160	200	230*

Inner widths



Inner/outer width and intrinsic cable carrier weight

B _i [mm]	B _k [mm]	q _k [kg/m]
50	68	1.13
75	93	1.23
100	118	1.32
125	143	1.42
150	168	1.52

Key for abbreviations
on page 74

Order example



UA1555	·	040	·	125	·	160	·	1,887
Type		Stay variant		B _i [mm]		KR [mm]		L _k [mm]

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 52



Divider systems

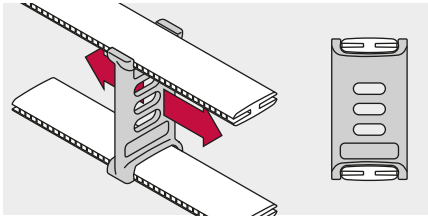
As standard, the divider system is assembled at each 2nd chain link.

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

For applications with lateral acceleration and lying on the side, divider with arresting cams are available. The locking cams click into place in the locking grids in the crossbars (**version B**).

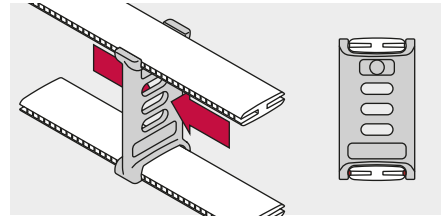
Movable divider

Version A (Standard)



Fixable divider (2.5 mm grid)

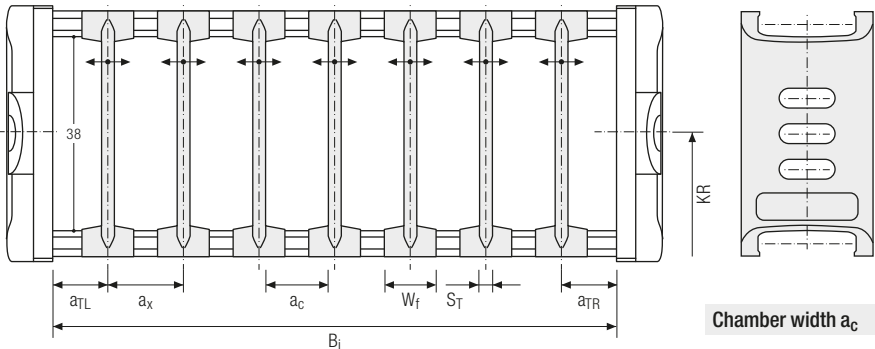
Version B



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]														
2.5	10		5	10	7.5	5	10	7.5	2.5														
<table border="1"> <thead> <tr> <th>B_i [mm]</th> <th>50</th> <th>75</th> <th>90</th> <th>100</th> <th>125</th> <th>150</th> </tr> </thead> <tbody> <tr> <td>n_T max design 020</td> <td>2</td> <td>4</td> <td>6</td> <td>7</td> <td>9</td> <td>12</td> </tr> </tbody> </table>			B_i [mm]	50	75	90	100	125	150	n_T max design 020	2	4	6	7	9	12							
B_i [mm]	50	75	90	100	125	150																	
n_T max design 020	2	4	6	7	9	12																	

* not design 020



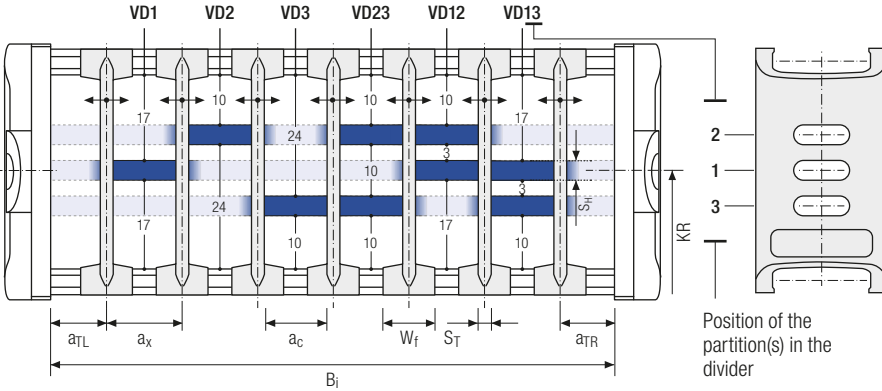
Chamber width a_c

$$a_c = a_x - S_T$$

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]
2.5	10	4	2	20	5	10	7.5	5	10	7.5	2.5

* not design 020



Standard height separation with aluminum profile 11 × 4 mm.

Chamber width a_c

$$a_c = a_x - S_T$$

Inner heights



Inner widths



Key for abbreviations
on page 74

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 52



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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 49

UA1555 | Inner Distribution | TS3

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

kabelschlepp.de/
uniflex-advanced

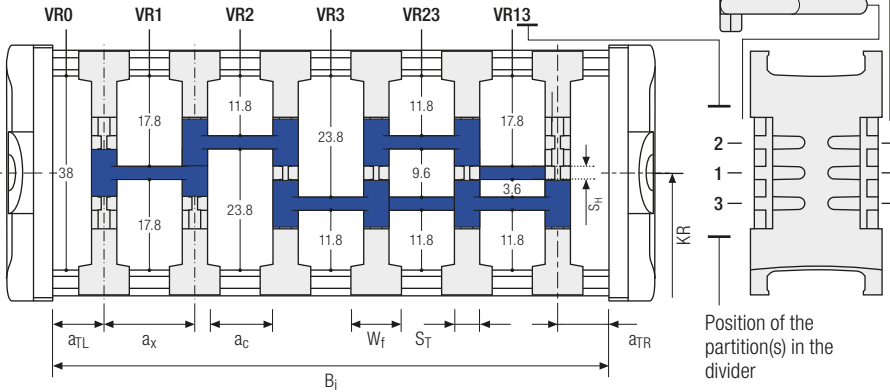
Configure your cable carrier:
onlineengineer.de

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	10	2.4	3.5	15	10	2

* not design 020



Position of the partition(s) in the divider

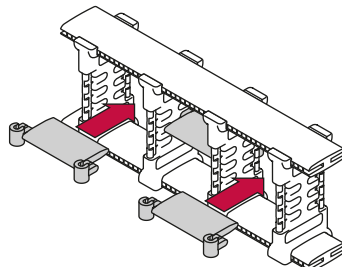
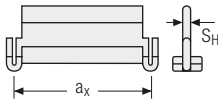
The dividers are fixed by the partitions, the complete divider system is movable in the cross section.

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

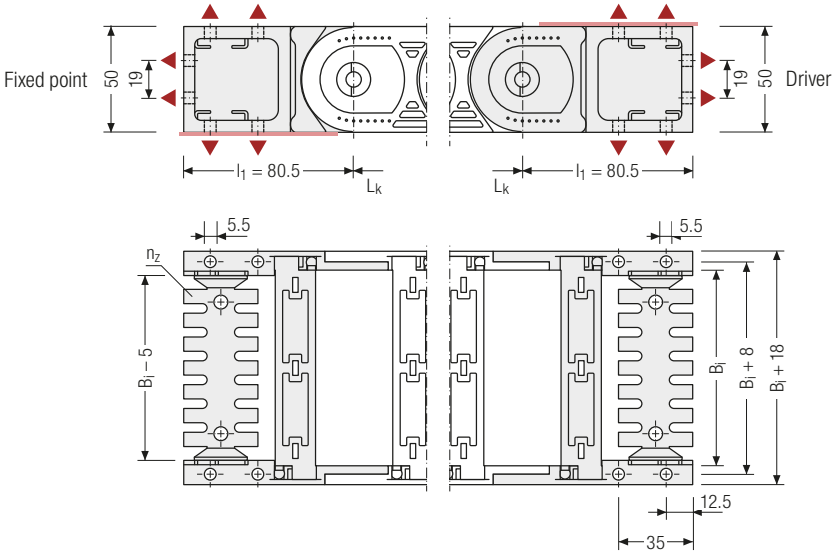


Assembly section subdivision

Information on the connection dimensions for the cable carrier can be found on page 49.

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 74

▲ Assembly options

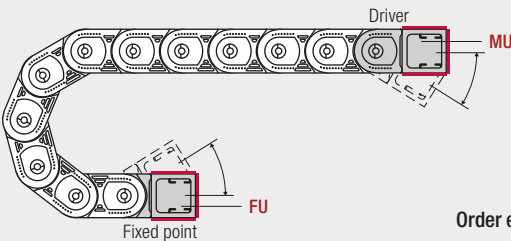
B_i [mm]	n_z
50	2 x 3
75	2 x 5
90	2 x 6
100	2 x 7
125	2 x 9
150	2 x 11

Recommended tightening torque:
5 Nm for screws M5 - 8.8

The end connectors are optionally also available **without** strain relief comb or **with** C-rail (1 per side) for clamps. 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 52



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

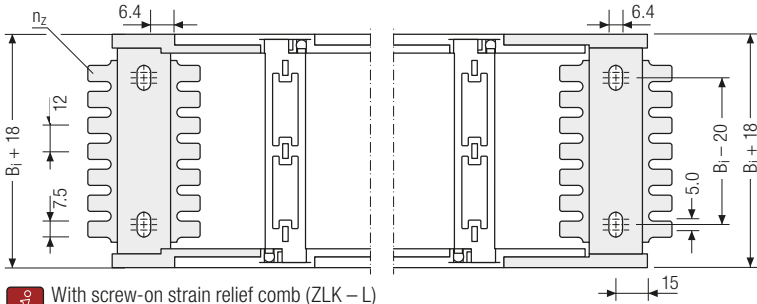
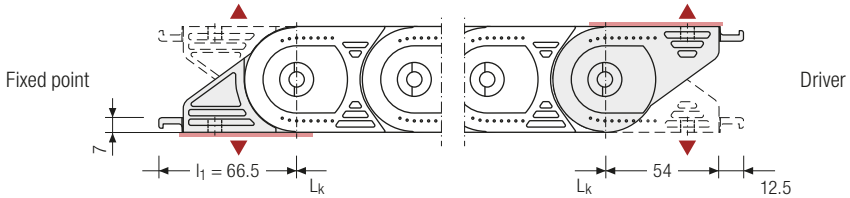
One part end connectors – plastic

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

kabelschlepp.de/
uniflex-advanced

Configure your cable carrier:
onlineengineer.de


Technical support:
technik@kabelschlepp.de

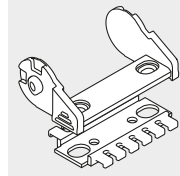


 With screw-on strain relief comb (ZLK – L)

▲ Assembly options

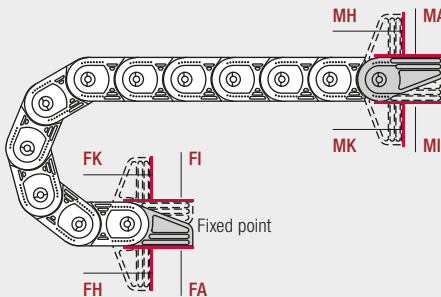
B_1 [mm]	n_z
50	2 x 4
75	2 x 6
100	2 x 8
125	2 x 10
150	2 x 12

 Recommended tightening torque:
6 Nm for screws M6 – 8.8



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

Connection variants



Connection point

F – fixed point
M – driver

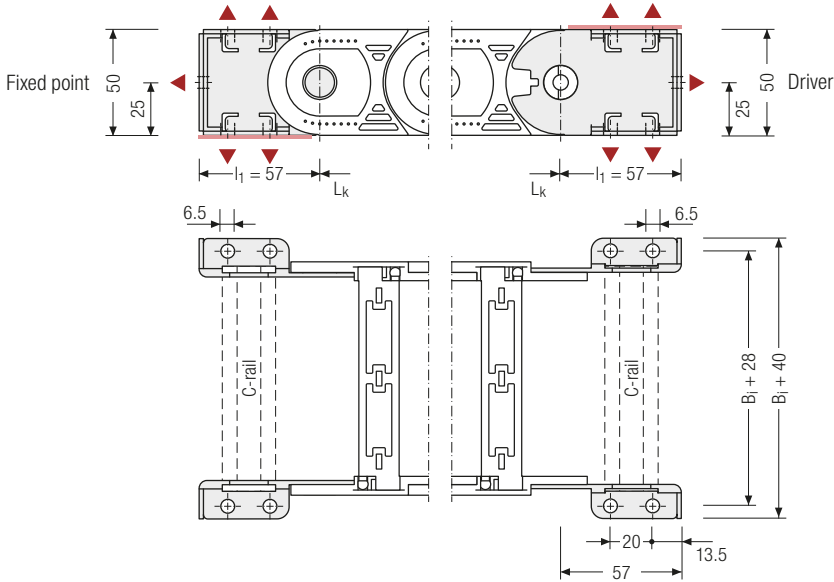
Driver

Connection type

A – threaded joint outside (standard)
I – threaded joint inside
H – threaded joint, rotated through 90° to the outside
K – threaded joint, rotated through 90° to the inside

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.



▲ Assembly options

B_i [mm]	B_{EF} [mm]
50	90
75	115
90	130
100	140
125	165
150	190
200	240

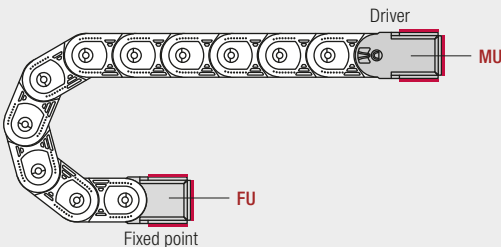
The end connectors are also available as an option **with C-rail** for clamps. Please state when ordering.

Order example



UMB-St	F U
UMB-St	M U

Connection variants



Connection point

- F – fixed point
- M – driver

Connection type

- U – universal mounting bracket

Inner heights



Inner widths



Key for abbreviations
on page 74

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 52



UA1555 | Order Key

Order

Cable carrier

Type	Stay variant	B_i [mm]	KR [mm]	L_K [mm]
UA1555	030	50	63	1,887
		75	80	
		90	100	
		100	125	
		125	160	
		150	200	
UA1555	040	150	230	


UA1555	030	125	160	1,887
Type	Stay variant	B_i [mm]	KR [mm]	L_K [mm]

 **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	...	...	...	...


TS3	A	3	K1	34	VD1
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]. 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
		J
End connector	M	H
UMB-St		K

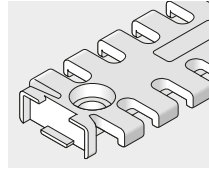
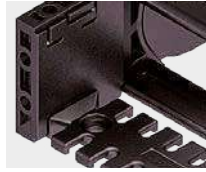
UMB	F	U
UMB	M	U

 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

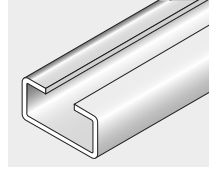
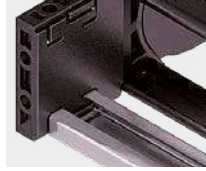


Inner widths



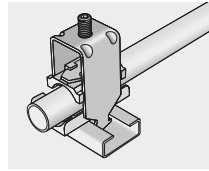
C-rails for strain relief elements

The optional C-rails are secured by the UMB end connectors and do not require separate screw connections.



LineFix® clamps

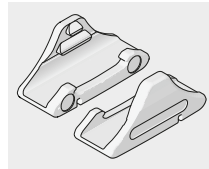
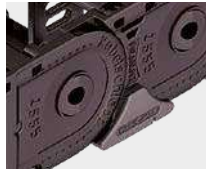
LineFix® clamps are fixed to the C-rail. They serve as a separate strain relief or separate attachment of the cables outside the cable carrier.



Key for abbreviations
on page 74

Gliding elements

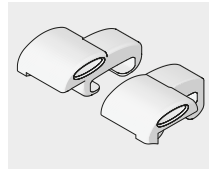
The optional glide shoes ensure a substantially longer service life of the cable carrier in gliding operation.



Assembly instructions on
kabelschlepp.de/assembly

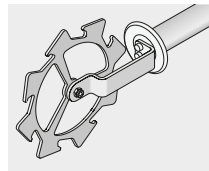
Outer dampers

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.



Order key
on page 52



UA1665

Stay variants

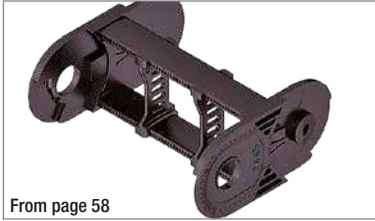
kabelschlepp.de/
uniflex-advanced

Configure your cable carrier:
onlineengineer.de

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

Design 020



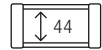
From page 58

Closed frame

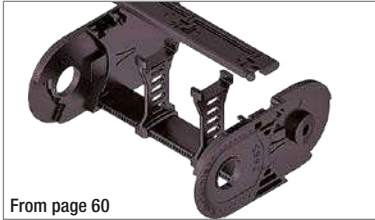
- Weight-optimized, closed plastic frame with particularly high torsional rigidity.

Opening options

inside/outside: Cannot be opened.



Design 030



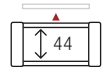
From page 60

Frame with externally detachable crossbars

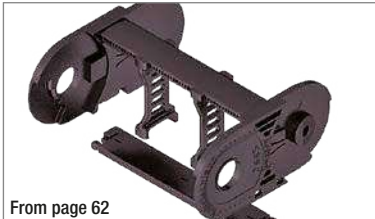
- Weight-optimized plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.

Opening options

outside: Swivable and detachable.



Design 040



From page 62

Frame with internally detachable crossbars

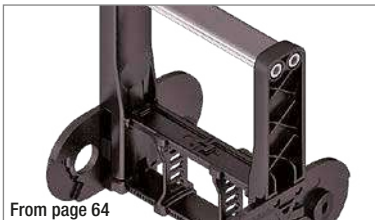
- Weight-optimized plastic frame with particularly high torsional rigidity.
- Swivable and detachable left or right in any position.

Opening options

inside: Swivable and detachable.



Design RMA



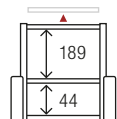
From page 64

Mounting frame stay

- Weight-optimized plastic frame with particularly high torsional rigidity.
- Plastic crossbars and aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.

Opening options

outside or inside: Screw connection of the aluminum profile bars is easy to release.





Pitch
66.5 mm



Height
44 mm



Width
50 – 250 mm



Bending radius
75 – 300 mm



Inner heights



Inner widths



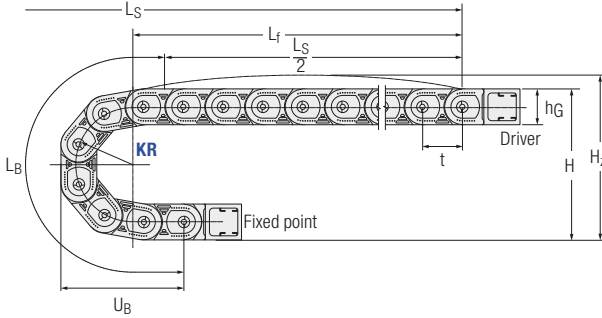
Key for abbreviations
on page 74

Assembly instructions on
kabelschlepp.de/assembly

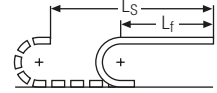
Order key
on page 72



Unsupported arrangement



Unsupported length L_f



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

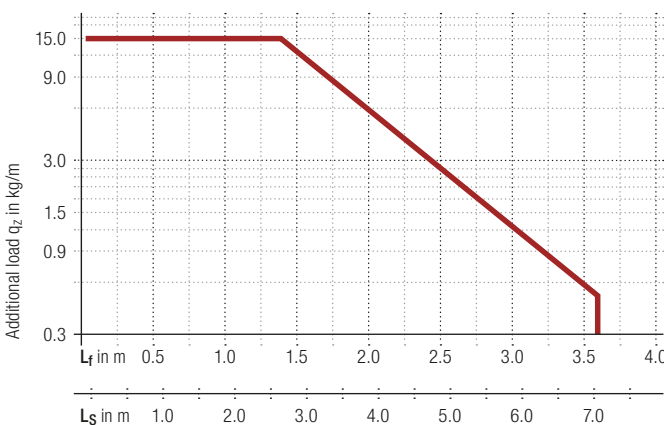
Dynamics of unsupported arrangement		t
v_{max} [m/s]	a_{max} [m/s ²]	[mm]
8	40	66.5

Installation dimensions unsupported

KR [mm]	H [mm]	H _z [mm]	L _B [mm]	U _B [mm]
75	210	245	369	172
100	260	295	448	197
120	300	335	511	217
140	340	375	574	237
200	460	495	762	297
250	560	595	919	347
300	660	695	1,076	397

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

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



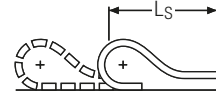
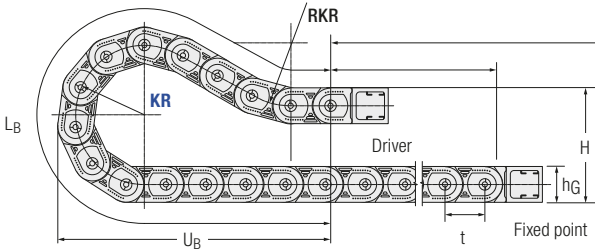
Fixed point offset L_v :


For off-center fixed point connections please contact us.



Intrinsic cable carrier weight $q_k = 2.43$ kg/m with B_i 200 mm. For other inner widths the maximum additional load changes.

Gliding arrangement




 For more information on gliding arrangement please contact us.

Inner heights


44

Inner widths

50
250

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

Dynamics of gliding arrangement		t
v _{max} [m/s]	a _{max} [m/s ²]	[mm]
3	15	66.5

 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 74

Assembly instructions on kabelschlepp.de/assembly

Order key on page 72



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.

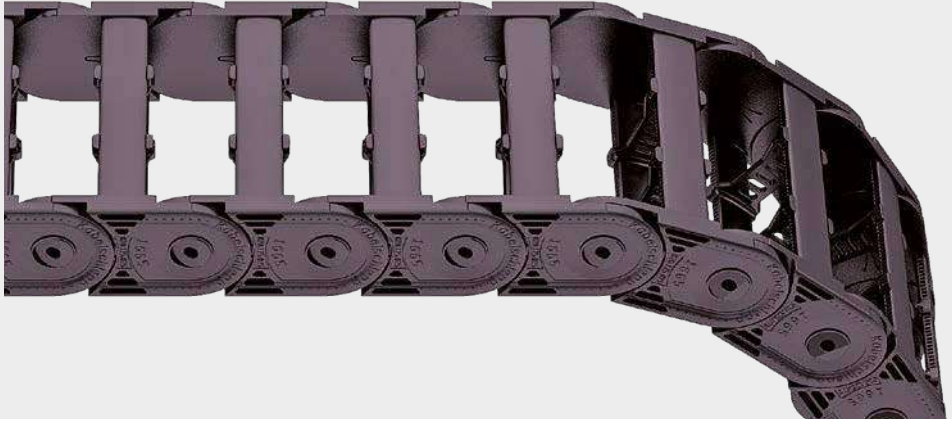


Stay variant 020 – closed frame

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

kabelschlepp.de/
uniflex-advanced

Configure your cable carrier:
onlineengineer.de

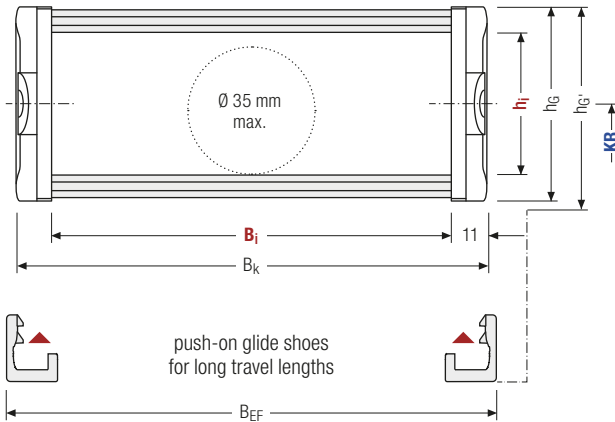


Stay arrangement on every chain link (VS)



B_i from 50 – 250 mm

Technical support:
technik@kabelschlepp.de



Calculating the cable carrier width

Outer width B_k

$$B_k = B_i + 22 \text{ mm}$$

Total width B_{EF}

$$B_{EF} = B_i + 27 \text{ mm}$$



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 66 f.

Pitch, inner height and chain link height

t [mm]	h _i [mm]	h _G [mm]	h _{G'} [mm]
66.5	44	60	63

Inner heights



Bend radii

KR [mm]						
75	100	120	140	200	250	300

Inner widths



Inner/outer width and intrinsic cable carrier weight

B _i [mm]	B _k [mm]	B _{EF} [mm]	q _k [kg/m]
50	72	77	1.67
75	97	102	1.82
100	122	127	1.95
125	147	152	2.09
150	172	177	2.22
175	197	202	2.36
200	222	227	2.49
225	247	252	2.63
250	272	277	2.76

Key for abbreviations
on page 74

Order example

	UA1665	·	020	·	125	·	140	·	2,660
	Type		Stay variant		B _i [mm]		KR [mm]		L _k [mm]

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 72



Stay variant 030 – with outside opening and detachable crossbars

kabelschlepp.de/
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.

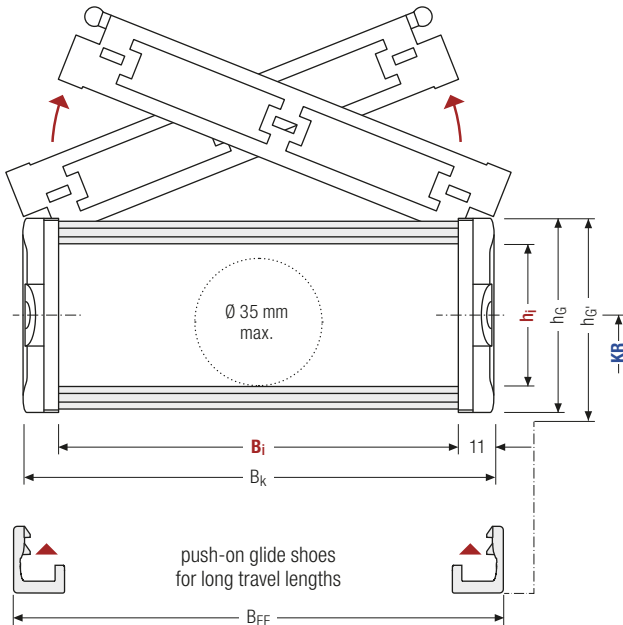


Stay arrangement on every chain link (VS)



B_i from 50 – 250 mm

Technical support:
technik@kabelschlepp.de



Calculating the cable carrier width

Outer width B_k

$$B_k = B_i + 22 \text{ mm}$$

Total width B_{EF}

$$B_{EF} = B_i + 27 \text{ mm}$$



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 66 f.

UA1665.030 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h _i [mm]	h _G [mm]	h _{G'} [mm]
66.5	44	60	63

Inner heights



Bend radii

KR [mm]						
75	100	120	140	200	250	300

Inner widths



Inner/outer width and intrinsic cable carrier weight

B _i [mm]	B _k [mm]	B _{EF} [mm]	q _k [kg/m]
50	72	77	1.67
75	97	102	1.80
100	122	127	1.92
125	147	152	2.06
150	172	177	2.18
175	197	202	2.31
200	222	227	2.43
225	247	252	2.57
250	272	277	2.70

Key for abbreviations
on page 74

Order example

	UA1665	·	030	·	125	·	140	·	2,660
	Type		Stay variant		B _i [mm]		KR [mm]		L _k [mm]

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 72

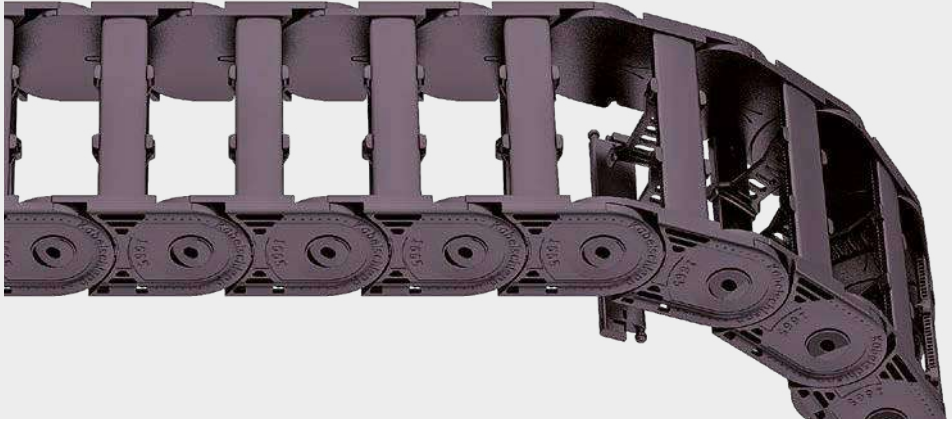


Stay variant 040 – with inside opening and detachable crossbars

kabelschlepp.de/
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.

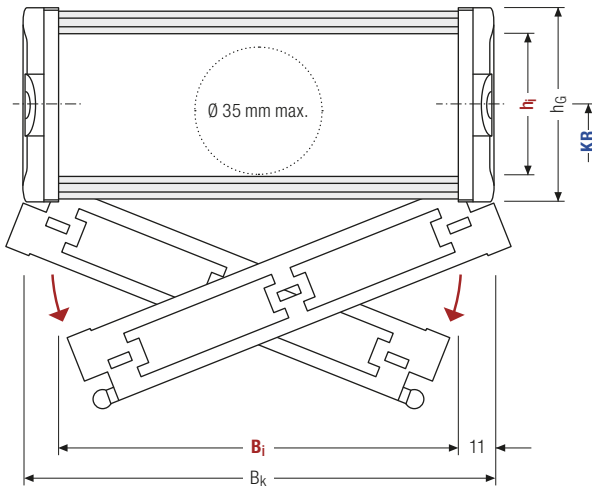


Stay arrangement on every chain link (VS)



B_i from 50 – 250 mm

Technical support:
technik@kabelschlepp.de



Calculating the cable carrier width

Outer width B_k

$$B_k = B_i + 22 \text{ mm}$$



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]
66.5	44	60

Inner heights



Bend radii

KR [mm]						
75	100	120	140	200	250	300

Inner widths



Inner/outer width and intrinsic cable carrier weight

B _i [mm]	B _k [mm]	q _k [kg/m]
50	72	1.67
75	97	1.80
100	122	1.92
125	147	2.06
150	172	2.18
175	197	2.31
200	222	2.43
225	247	2.57
250	272	2.70

Key for abbreviations
on page 74

Order example

	UA1665	·	040	·	125	·	140	·	2,660
	Type		Stay variant		B _i [mm]		KR [mm]		L _k [mm]

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 72



Stay variant RMA – mounting frame stay

kabelschlepp.de/
uniflex-advanced

Configure your cable carrier:
onlineengineer.de

- Weight-optimized plastic frame with particularly high torsional rigidity.
- Plastic crossbars and aluminum profile bars with plastic mounting frame stays for guiding very large cable diameters.
- **Opening options outside or inside:** Screw connection of the aluminum profile bars is easy to release.



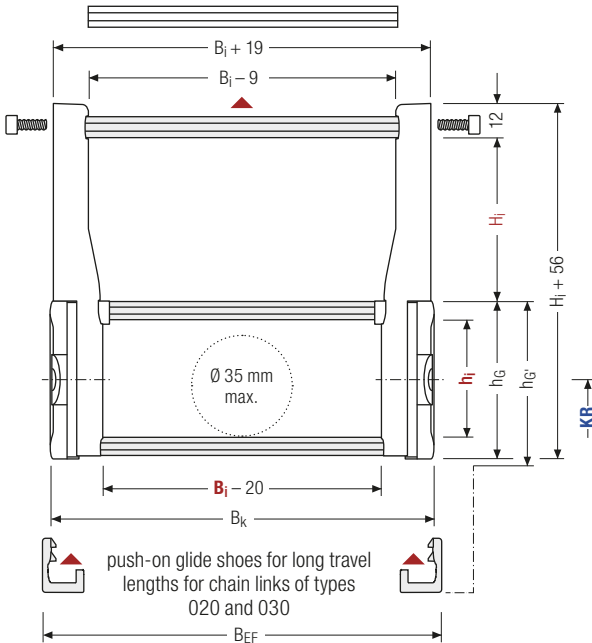
Stay arrangement on every chain link (VS)



B_i from 125 – 200 mm

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator



Calculating the cable carrier width

Outer width B_k

$$B_k = B_i + 22 \text{ mm}$$

Total width B_{EF}

$$B_{EF} = B_i + 27 \text{ mm}$$

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.



Information on the inner distribution of the cable carrier can be found on page 66 f.

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	h_G' [mm]
66.5	44	60	63

Inner heights



Bend radii

KR [mm]						
75	100	120	140	200	250	300

Inner widths



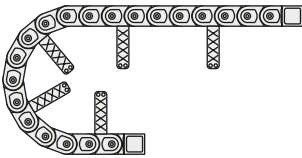
Inner/outer width and intrinsic cable carrier weight

B_i [mm]	B_k [mm]	B_{EF} [mm]	Locking bar [mm]	H_i [mm]	q_k (RVAI)* [kg/m]	q_k (RVAO)* [kg/m]
125	147	152	100	114	3.10	3.58
150	172	177	125	139	3.38	3.94
175	197	202	150	164	3.67	4.30
200	222	227	???	189	3.95	4.66

* indicated according to standard pitch

Key for abbreviations
on page 74

Assembly variants



RVAI – assembly to the inside:

standard pitch, mounting frame stay on every 4th stay, no screw fixing.

Gliding application is not possible when using assembly version RVAI.

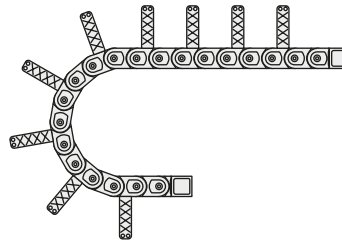
Observe minimum KR:

$H_i = 114$ mm: $KR_{min} = 200$ mm

$H_i = 139$ mm: $KR_{min} = 250$ mm

$H_i = 164$ mm: $KR_{min} = 300$ mm

$H_i = 189$ mm: $KR_{min} = 300$ mm



RVAO – assembly to the outside:

standard pitch, mounting frame stay on every 2nd stay, no screw fixing.

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

Guiding in a **channel is required** for support.

Please contact our technical support at technik@kabelschlepp.de to find the corresponding guide channel.

Please note the operating and installation height.

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 72



Divider systems

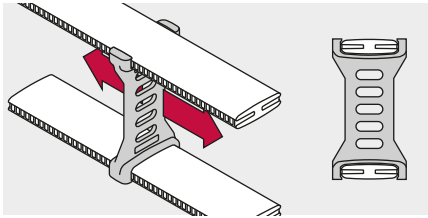
As standard, the divider system is assembled at every 2nd chain link.

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

For applications with lateral acceleration and lying on the side, divider with arresting cams are available. The locking cams click into place in the locking grids in the crossbars (**version B**).

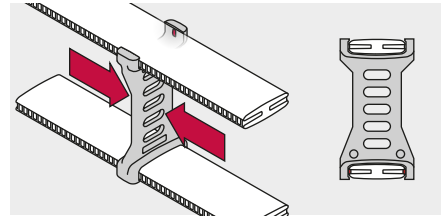
Movable divider

Version A (Standard)



Fixable divider (2.5 mm grid)

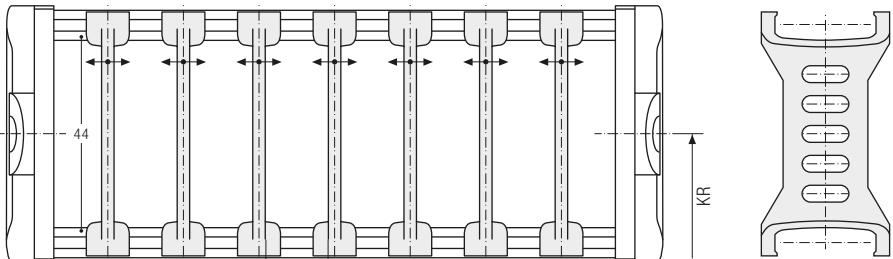
Version B



Divider system TSO without height separation

S _T [mm]	W _f [mm]	r _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]		
3	10		5	10	7	5	10	7	2.5		
B _i [mm]			50	75	100	125	150	175	200	225	250
r _T max design 020			0	4	6	9	11	14	16	19	21

** not design 020



Chamber width a_c

$$a_c = a_x - S_T$$

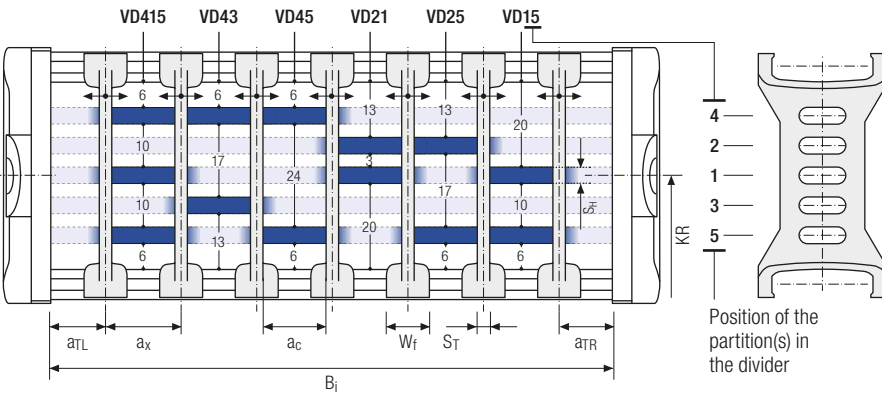
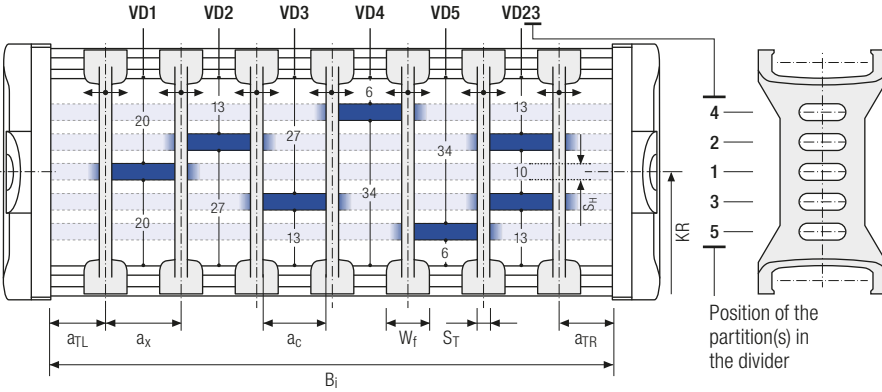


Information on the connection dimensions for the cable carrier can be found on page 69 f.

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]
3	10	4	2	20	5	10	7	5	10	7	2.5

* not design 020



Inner heights

44

Inner widths

50
250

Key for abbreviations
on page 74

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 72



Standard height separation with **aluminum profile 11 × 4 mm**.

Chamber width a_c

$$a_c = a_x - S_T$$

UA1665 | Inner Distribution | TS3

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

kabelschlepp.de/
uniflex-advanced

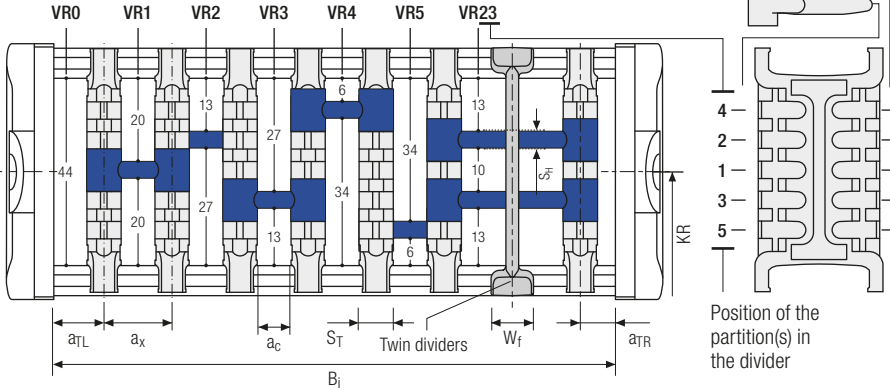
Configure your cable carrier:
onlineengineer.de

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

Version A								
S _T [mm]	S _T twin divider [mm]	W _f [mm]	W _f twin divider [mm]	S _H [mm]	a _{TL} /a _{TR} min [mm]	a _x min [mm]	a _c min [mm]	Π _T min
8	3	8	10	4	4	16 / 40*	8	2

* not design 020 ** For aluminum section subdivisions



Position of the partition(s) in the divider

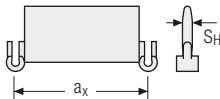
The dividers are fixed by the partitions, the complete divider system is movable in the cross section. Movable twin dividers are optionally available. Twin dividers are also suitable for retrofitting in the section subdivision system.

Chamber width a_c

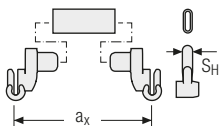
$$a_c = a_x - S_T$$

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

Plastic section subdivisions in a_x increments

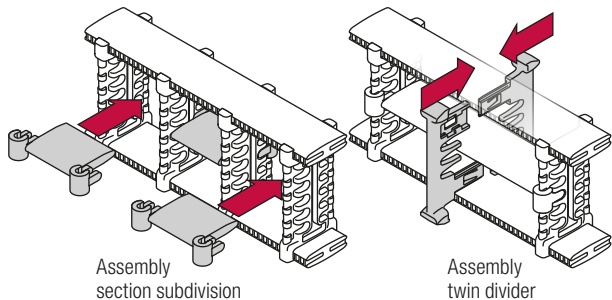


Aluminum section subdivisions with plastic adapters in 1 mm increments



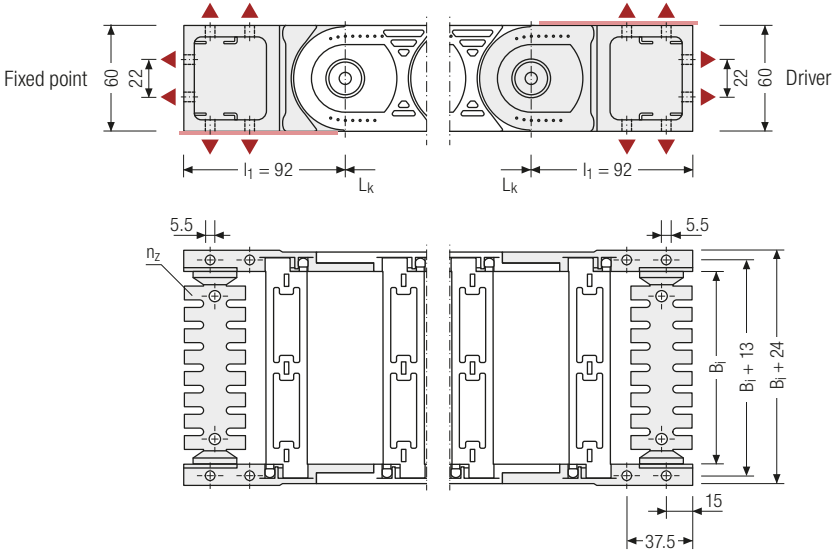
When using section subdivisions with a_x > 112 mm we recommend an additional center support with a twin divider.

When using twin dividers, the height separations VD4 and VD5 are not possible. Aluminum section subdivisions are only available with a_x > 42 mm.



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 74

▲ Assembly options

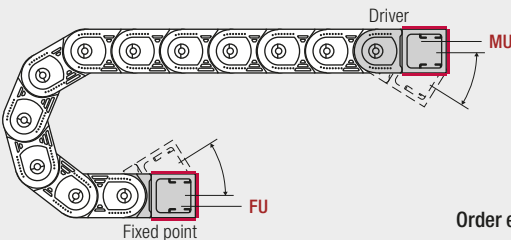
B_i [mm]	n_z
50	2 x 3
75	2 x 5
100	2 x 7
125	2 x 9
150	2 x 11
175	2 x 13

Recommended tightening torque:
5 Nm for screws M5 - 8.8

The end connectors are optionally also available **without** strain relief comb or **with** C-rail (1 per side) for clamps. 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 72



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

UA1665 | End Connectors | End Connectors

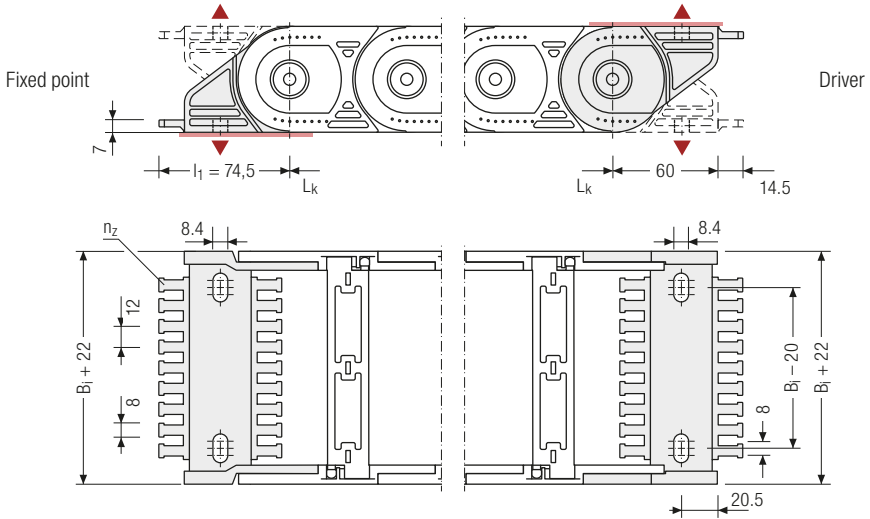
One part end connectors – plastic

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

kabelschlepp.de/
uniflex-advanced

Configure your cable carrier:
onlineengineer.de

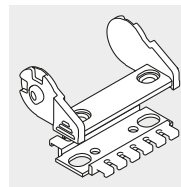
Technical support:
technik@kabelschlepp.de



▲ Assembly options

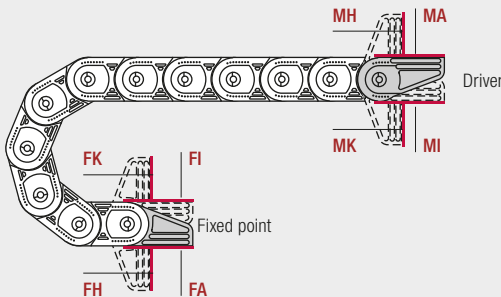
B_1 [mm]	n_z
50	2 x 4
75	2 x 6
100	2 x 8
125	2 x 10
150	2 x 12
175	2 x 14
200	2 x 16
225	2 x 18
250	2 x 20

Recommended tightening torque:
15 Nm for screws M8 - 8.8



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

Connection variants



Connection point

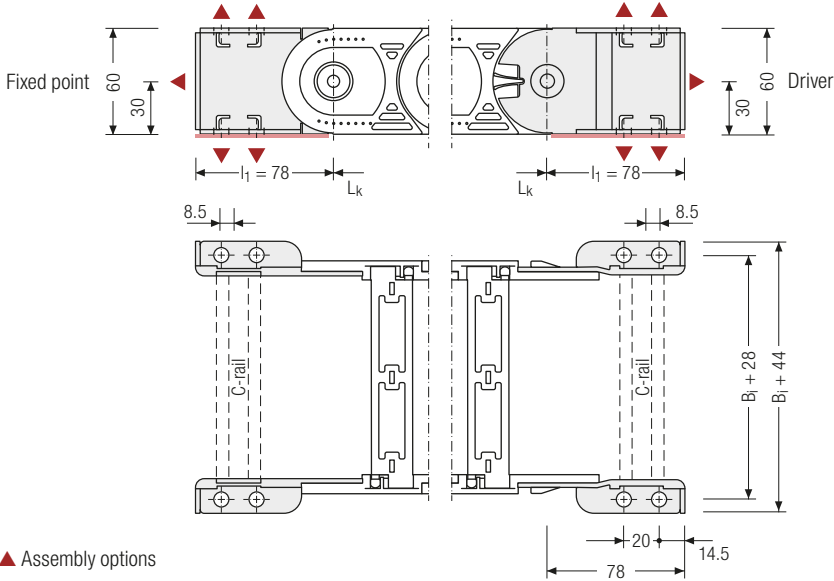
F – fixed point
M – driver

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.



▲ Assembly options

B_i [mm]	B_{EF} [mm]
50	94
75	119
100	144
125	169
150	194
175	219
200	244
225	269
250	294

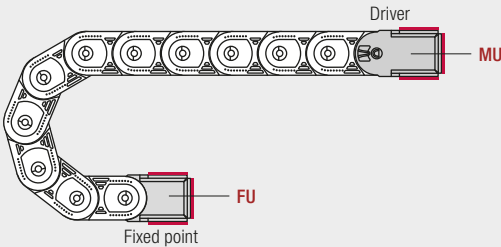
The end connectors are also available as an option with C-rail for clamps. Please state when ordering.

Order example



UMB-St	F U
UMB-St	M U

Connection variants



Connection point

- F – fixed point
- M – driver

Connection type

- U – universal mounting bracket

Inner heights



Inner widths



Key for abbreviations on page 74

Assembly instructions on kabelschlepp.de/assembly

Order key on page 72



UA1665 | Order Key

Order

Cable carrier

Type	Stay variant	B _i [mm]	KR [mm]	L _K [mm]
		50	75	
		75		
		100		
		125		
		150		
		175		
020	175	140		
030	200	200		
030	225	250		
UA1665	RMA	250	300	

▼ ▼ ▼ ▼ ▼

UA1665	030	150	200	3,990
Type	Stay variant	B _i [mm]	KR [mm]	L _K [mm]

 **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	...	...	...	...

▼ ▼ ▼ ▼ ▼

TS3	A	3	K1	34	VD1
...
...	...	...	K5	38	VD3
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]. 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. If using the divider system **TS3**, please also state the required twin dividers. You are welcome to add a sketch to your order.

Connection variant

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

▼ ▼ ▼

UMB	F	U
UMB	M	U

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

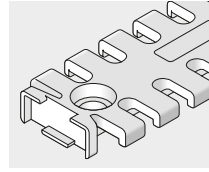
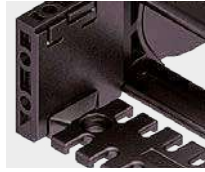
Configure your cable carrier:
onlineengineer.de

Technical support:
technik@kabelschlepp.de

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

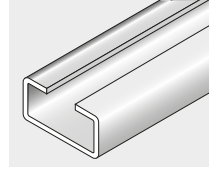


Inner widths



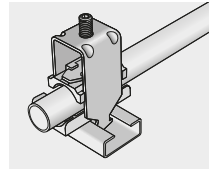
C-rails for strain relief elements

The optional C-rails are secured by the UMB end connectors and do not require separate screw connections.



LineFix® clamps

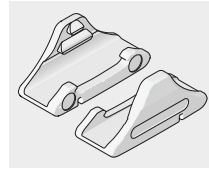
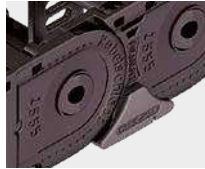
LineFix® clamps are fixed to the C-rail. They serve as a separate strain relief or separate attachment of the cables outside the cable carrier.



Key for abbreviations
on page 74

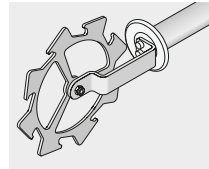
Gliding elements

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



Quick opening tool

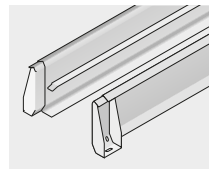
Opening tools can be used to open cable carriers quickly and gently for installation and inspection of cables and hoses.



Assembly instructions on
kabelschlepp.de/assembly

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.



Order key
on page 72



General abbreviations

kabelschlepp.de/
uniflex-advanced

Configure your cable carrier:
onlineengineer.de

Technical support:
technik@kabelschlepp.de










































 **online-engineer.de**
Cable Carrier Configurator

a₁ = Hole distance – side edge	l₁ = Connection length
a₂ / a₃ = Hole distance – outer edge	l₂₋₅ = Connection dimensions
a_c = Nominal width inner chamber	l_A = Length of end connector
a_{max} = Max. travel acceleration	l_A = Length of support tray
a_T = Distance lateral tabs inside to center of first divider	l_B = Length of carrier in bend
a_x = Divider center to center distance	l_D = Length of permissible sag
b₁ = Inner width of support tray/guide channel	l_f = Unsupported length
b₂ = Hole distance – cable gland outside	l_k = Cable carrier length without connection
b₃ = Hole distance – cable gland inside	l_{KA} = Channel length
b₄ = Support width of the support tray	l_{KA'} = Support length ($\triangleq L_S/2$) for One-sided arrangement ($\triangleq X - 2 l_1$) for opposite arrangement
b_A = Distance between connection boreholes	l_P = Length of base plate
B_A = Outer width of support tray	l_{Z1} = Addition for loop overhang
B_E = Contact width of roller	l_{Z2} = Addition for connection ($\triangleq l_1 + 50$ mm)
B_{EF} = Overall width of cable carrier incl. attachments	l_S = Travel length
B_G = Total width of support	l_V = Fixed point offset
B_i = Inner width	n_{RKR} = Number of RKR links
B_k = Outer width	n_T = Number of dividers
B_{KA} = Outer width of guide channel	n_Z = Number of comb teeth for strain relief
B_P = Width of base plate	q_k = Intrinsic cable carrier weight
B_R = Width of roller	q_Z = Additional load
B_{St} = Stay width	RKR = Reverse bending radius
c = Distance between hole stay bores	s / s₁ = Sheet metal thickness
d = Cable diameter	S_H = Thickness of height separation
D = Bore diameter	S_T = Thickness of divider
D_R = Diameter of support roller	t = Pitch
d_R = Pipe diameter	T = Slide support width of guide channel
D_S = Diameter of wheel flange	U = Width of U profile
G = Bore hole position	U_B = Loop overhang
H = Connection height	VD = Position of continuous height separations in divider
H_A = Axle height of support roller	VR = Position of partial height separations in divider
h_A = Outer height of support tray	v_{max} = Max. travel speed
h_G = Chain link height	VS = Fully-stayed
h_{G'} = Chain link height incl. glide shoe	W_f = Base width of divider
h_i = Inner height	X = Connection distance for opposite arrangement
H_i = Inner height of frame stay assembly	z = Pretension
h_{KA} = Outer height of guide channel	
h₁ = Channel profile height – support height	
h₂ = Channel profile height – run-off height	
HS = Half-stayed	
H_{SR} = Height of the support roller	
H_Z = Installation height	
l = Height channel opening	
KR = Bending radius	

Definitions

driver view = view into the driver connection

Pictographs

	Inner height		Stay arrangement on every 2 nd chain link		Clean room suitable
	Outer height		Stay arrangement on every chain link		Quiet running/low noise
	Inner width		Cannot be opened		Sold by the meter
	Outer width		Opens outward		Low weight
	Inner width (B _i) in x mm increments		Opens inward		ESD material
	Pitch		Opens inward/outward		Ex-protection-material
	Bending radius		Covered cable carrier		Heat-resistant
	Long travel length		Sliding dividers		Cold-resistant
	Travel length unsupported		Fixable dividers		Resistant to hot chips
	Travel length gliding		Fixable dividers in x mm grid		Flame-resistant V0 (UL94)
	High additional load		Height separation possible		Flame-resistant V2 (UL94)
	High travel acceleration		Height separation in 1 mm increments		Order code
	High travel velocity		Hole stay available		Important information
			Guide channel required		
			Strain relief		

Inner heights



Inner widths



Key for abbreviations
on page 74

Assembly instructions on
kabelschlepp.de/assembly