Innovation in Motion
TSUBAKI

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*

Fraunhofer IPA TESTED® DEVICE
KABELSCHLEPP GmbH
1455,030,058,052
Report No. KA 1008-531

Fraunhofer IPA TESTED® DEVICE
KABELSCHLEPP GmbH
1455,030,058,052 ESDn
Report No. KA 1008-531

TSUBAKI ECO LINK

* 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

Subject to change.

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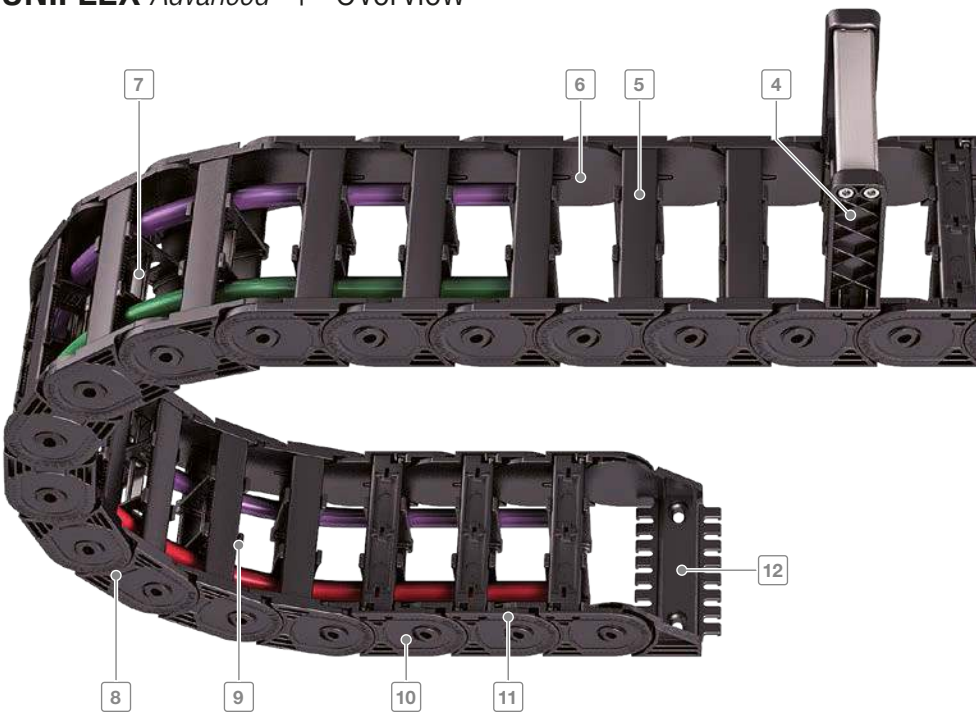
UNIFLEX *Advanced* | Overview



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

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

kabelschlepp.de

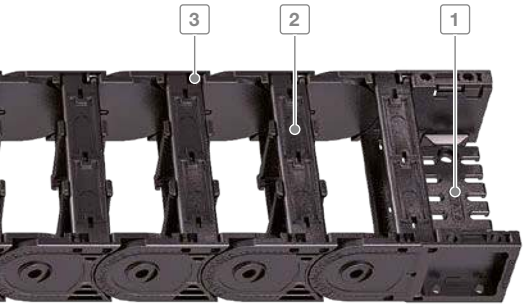
Configure your cable carrier: **onlineengineer.de**

Technical support: **technik@kabelschlepp.de**

OnlineEngineer.de Cable Carrier Configurator

Subject to change.

UNIFLEX *Advanced* | Overview

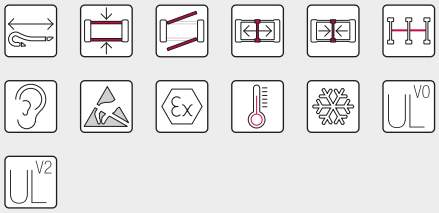


Example of inner distribution

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

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)

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

Subject to change.

UA1320

Pitch
32 mm

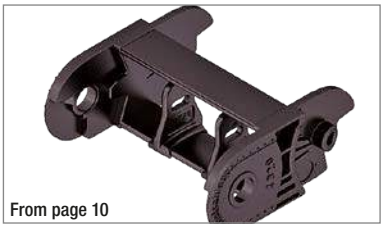
Height
20 mm

Width
15 – 65 mm

Bending radius
28 – 125 mm

Stay variants

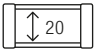
Design 020



From page 10

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

Opening options
outside/inside: Closed.



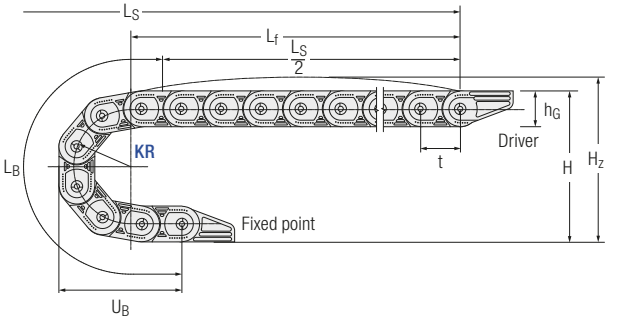
Technical data on p. 8

Subject to change.

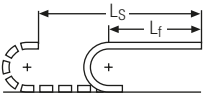
Subject to change.

UA1320 | Installation Dimensions | Unsupported

Unsupported arrangement



Unsupported length L_f



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

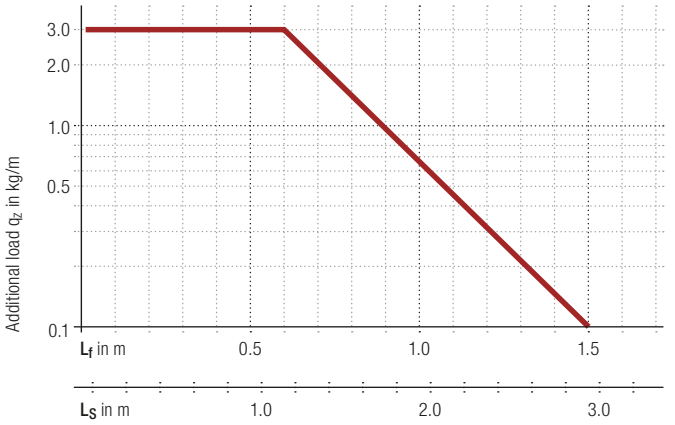
Dynamics of unsupported arrangement		t
v_{max} [m/s]	a_{max} [m/s^2]	[mm]
10	50	32

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



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

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.

Subject to change.

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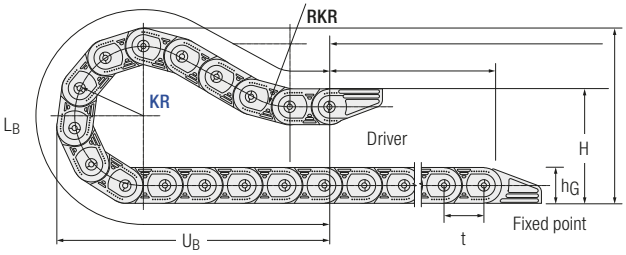
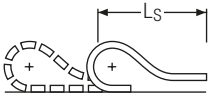
Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator

Gliding arrangement





For more information on gliding arrangement please contact us.

Dynamics of gliding arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[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

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.

Subject to change.

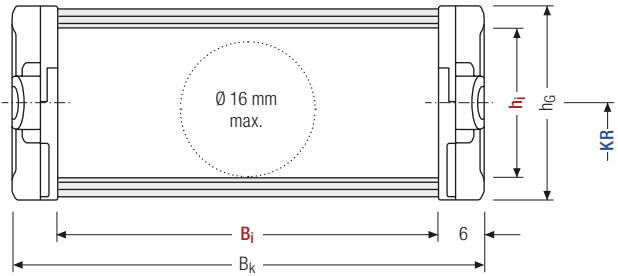
UA1320.020 | Overview

Stay variant 020 – closed frame

- 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 15 – 65 mm



Calculating the cable carrier width

Outer width B_k

$B_k = B_i + 12$ mm

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

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.

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Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator

Subject to change.

UA1320.020 | Dimensions · Technical Data

Pitch, inner height and chain link height

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

Bend radii

KR [mm]					
28	38	48	75	100	125

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

Order example

UA1320	.	020	.	50	.	100	-	960
Type		Stay variant		B_i [mm]		KR [mm]		L_K [mm]

Subject to change.

UA1320 | Inner Distribution | TS0

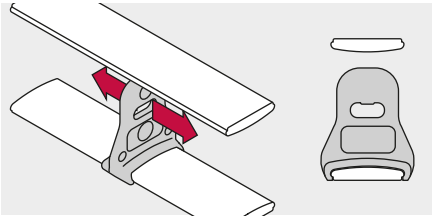
Divider systems

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).**

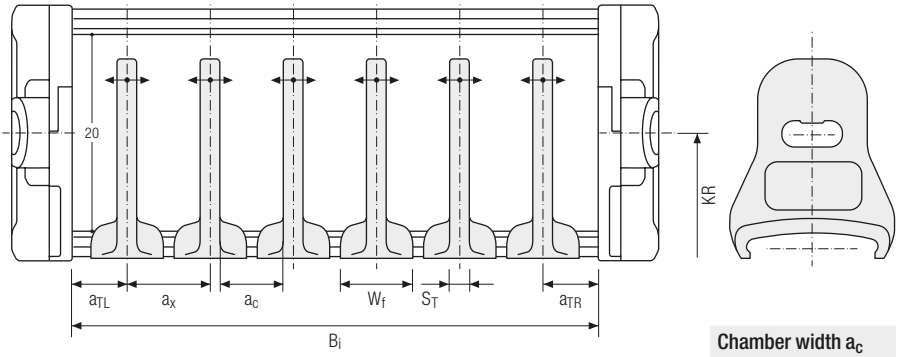
Movable divider

Version A



Divider system TS0 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

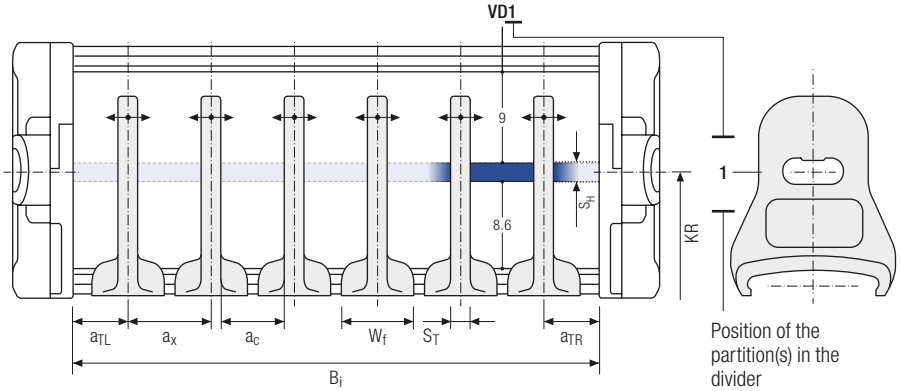
$a_c = a_x - S_T$

Information on the connection dimensions for the cable carrier can be found from page 14 f.

Subject to change.

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



Position of the partition(s) in the divider

Standard height separation with **aluminum profile 9 × 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**

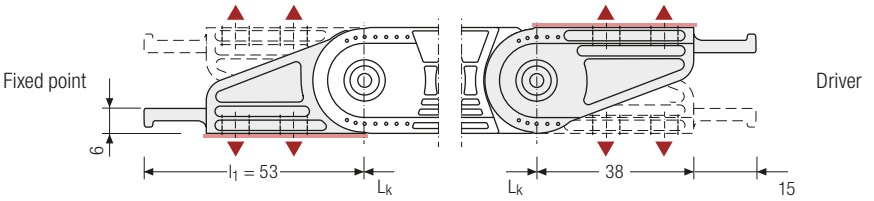
Configure your custom cable carrier: **onlineengineer.de**

Information on the connection dimensions for the cable carrier can be found from page 14.

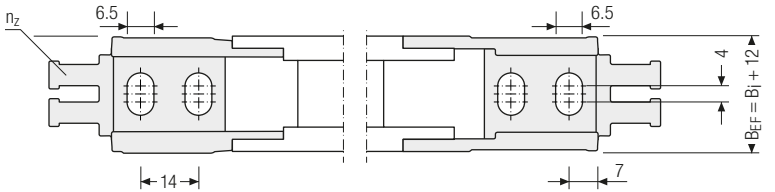
Subject to change.

UA1320 | End Connectors | End Connectors

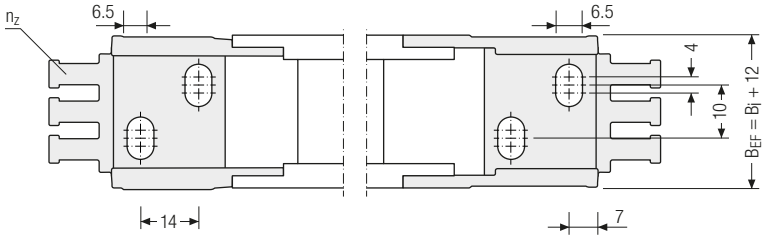
The plastic end connectors can be **connected from above or below**. The connection type can be changed by turning the end connector.



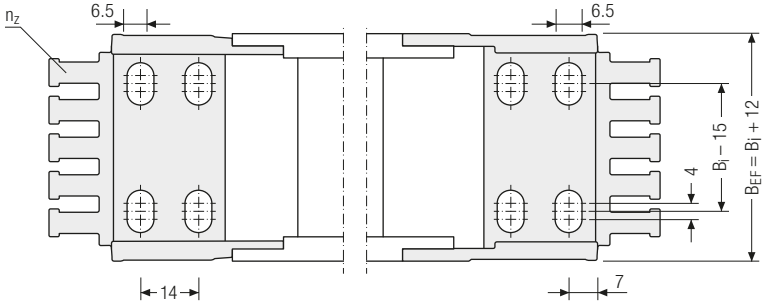
Bi: 15



Bi: 25



Bi: 38/50/65



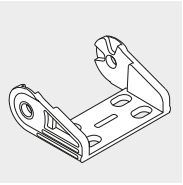
▲ Assembly options

Subject to change.

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

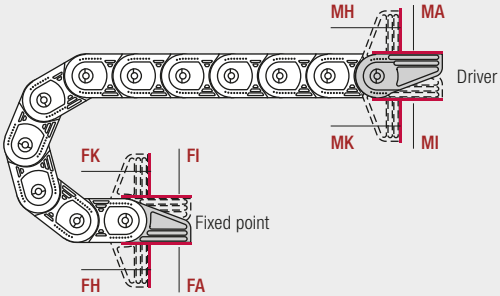
B_i [mm]	B_{EF} [mm]	n_z
15	27	2
25	37	3
38	50	4
50	62	5
65	77	6

The end connectors cannot be swiveled.



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

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

Subject to change.

UA1320 | Order Key

Order

Cable carrier

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

UA1320	.	020	.	50	.	100	-	960
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	Height separation (not for TS0)
TS0		min. 2	VD0
TS1	A	…	VD1

TS1	.	A	.	2	-	VD0
						⋮
					-	VD1
Divider system		Version		n_T		Height separation

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

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

Connection variant

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

End connector	.	F	A
End connector	.	M	A

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

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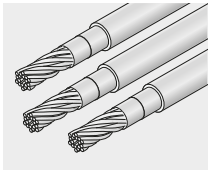
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator

Subject to change.

Accessories

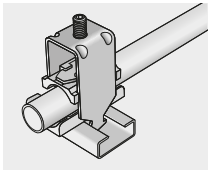
TRAXLINE® cables in motion

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



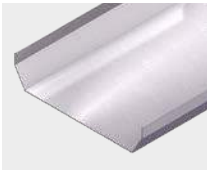
LineFix® clamps

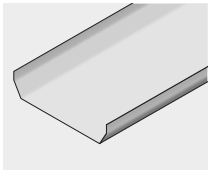
LineFix® clamps are fixed to the C-rail. The serve as a separate strain relief or separate attachment of the cables outside the cable carrier.



Support trays

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





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More product information online

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Configure your custom cable carrier: **onlineengineer.de**

Subject to change.

UA1455

Pitch
45.5 mm

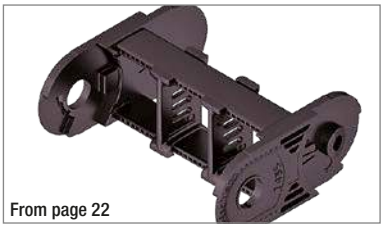
Height
26 mm

Width
25 – 130 mm

Bending radius
52 – 225 mm

Stay variants

Design 020

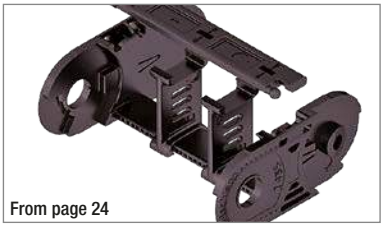


From page 22

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

Opening options
inside/outside: Cannot be opened.

Design 030

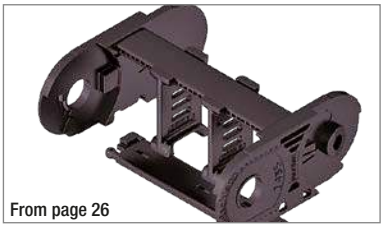


From page 24

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.

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.

Technical data on p. 20

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Configure your cable carrier: onlineengineer.de

Technical support: technik@kabelschlepp.de

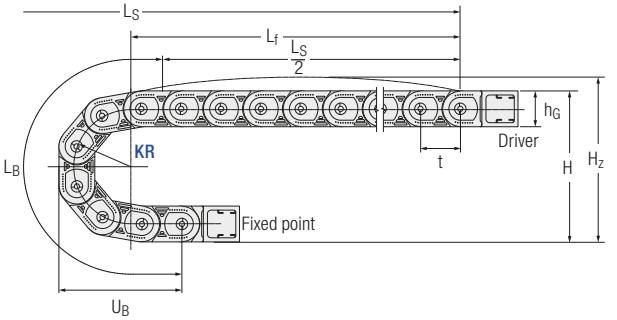
online-engineer.de Cable Carrier Configurator

Subject to change.

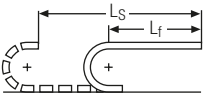
Subject to change.

UA1455 | Installation Dimensions | Unsupported

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/s²]	[mm]
10	50	45.5

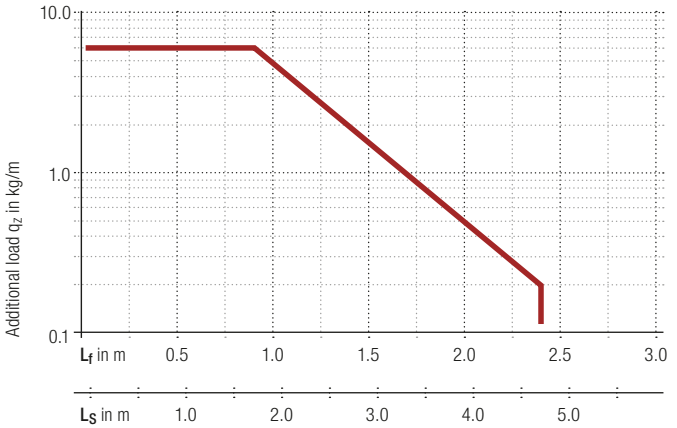
Installation dimensions unsupported

KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
52	140	165	255	116
65	166	191	296	129
95	226	251	390	159
125	286	311	484	189

KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
150	336	361	563	214
180	396	421	657	244
200	436	461	720	264
225	486	511	798	289

Load diagram

for unsupported length depending on additional load



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

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

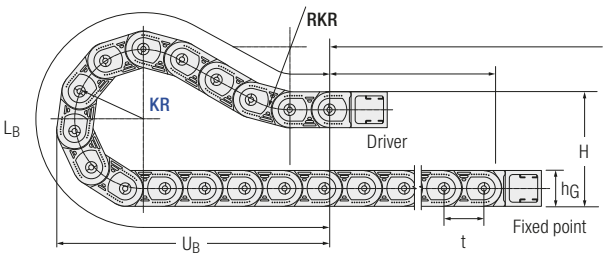
$$L_f = \frac{L_S}{2} + t$$

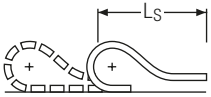
Fixed point offset L_v:
For off-center fixed point connections please contact us.

Subject to change.

kabelschlepp.de/uniflex-advanced
Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator

Gliding arrangement





For more information on gliding arrangement please contact us.

Only designs 020 and 030 may be used for gliding arrangements.

Dynamics of gliding arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[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

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.

Subject to change.

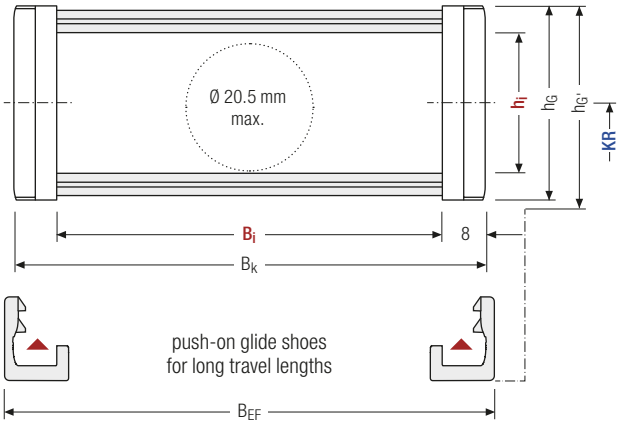
UA1455.020 | Overview

Stay variant 020 – closed frame

- 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 25 – 130 mm



Calculating the cable carrier width

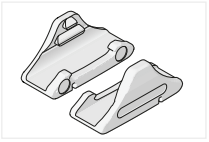
Outer width B_k

$B_k = B_i + 16$ mm

Total width B_{EF}

$B_{EF} = B_i + 19$ 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.

Subject to change.

kabelschlepp.de/uniflex-advanced

Configure your cable carrier: onlineengineer.de

Technical support: technik@kabelschlepp.de

online-engineer.de Cable Carrier Configurator

UA1455.020 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
45.5	26	36	38.5

Bend radii

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

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

Order example

UA1455	.	020	.	78	.	150	-	1,456
Type		Stay variant		B_i [mm]		KR [mm]		L_K [mm]

* on request

Subject to change.

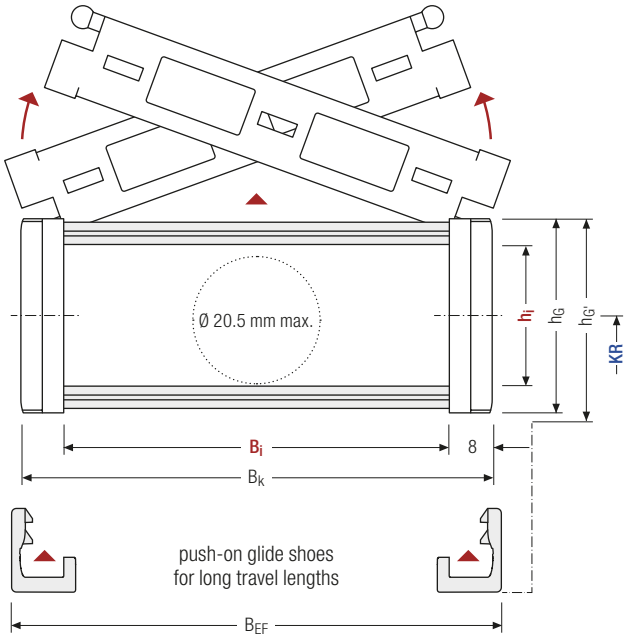
UA1455.030 | Overview

Stay variant 030 – with outside opening and 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.

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

B_i from 25 – 130 mm



Calculating the cable carrier width

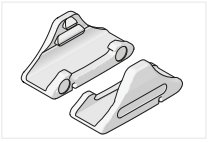
Outer width B_k

$B_k = B_i + 16$ mm

Total width B_{EF}

$B_{EF} = B_i + 19$ 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.

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Configure your cable carrier:
onlineengineer.de

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

Subject to change.

UA1455.020 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
45.5	26	36	38.5

Bend radii

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

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

Order example

UA1455	.	030	.	78	.	150	-	1,456
Type		Stay variant		B_i [mm]		KR [mm]		L_K [mm]

* on request

Subject to change.

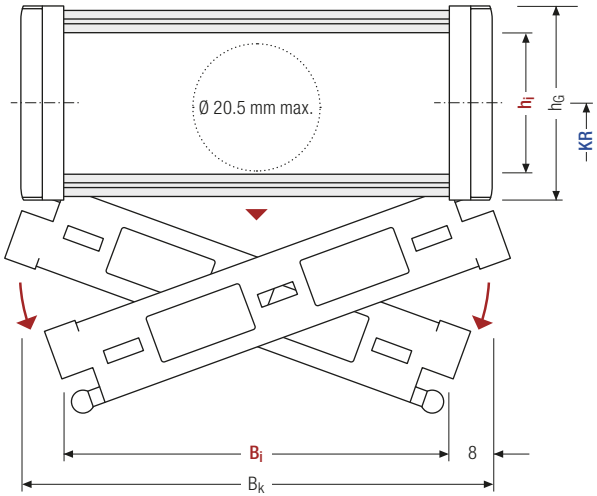
UA1455.040 | Overview

Stay variant 040 – with inside opening and 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.

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

B_i from 25 – 130 mm



Calculating the cable carrier width

Outer width B_k

$B_k = B_i + 16$ 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 28.

Subject to change.

UA1455.040 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]
45.5	26	36

Bend radii

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

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

Order example

UA1455	.	040	.	78	.	150	-	1,456
Type		Stay variant		B_i [mm]		KR [mm]		L_K [mm]

* on request

Subject to change.

UA1455 | Inner Distribution | TS0

Divider systems

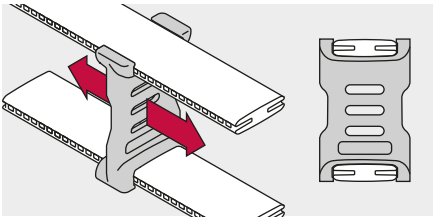
As standard, the divider system is assembled at each 2nd chain link.

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)**.

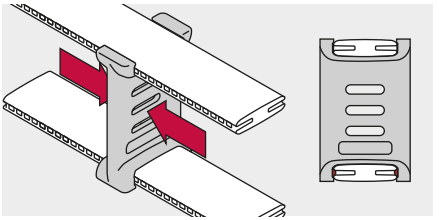
Movable divider

Version A (Standard)



Fixable divider (2.5 mm grid)

Version B

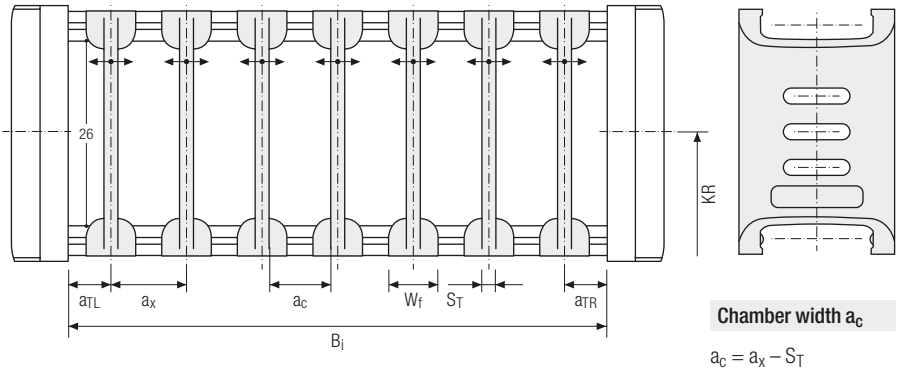


Divider system TS0 without height separation

S_T [mm]	W_f [mm]	$n_{T\,max}$ design 020	Version A: $a_{TL}/a_{TR\,min}$ [mm]	Version A: $a_{x\,min}$ [mm]	Version A: $a_{c\,min}$ [mm]	Version B*: $a_{TL}/a_{TR\,min}$ [mm]	Version B*: $a_{x\,min}$ [mm]	Version B*: $a_{c\,min}$ [mm]	Version B*: $a_{x\,grid}$ [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



Chamber width a_c

$a_c = a_x - S_T$

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

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Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator

Subject to change.

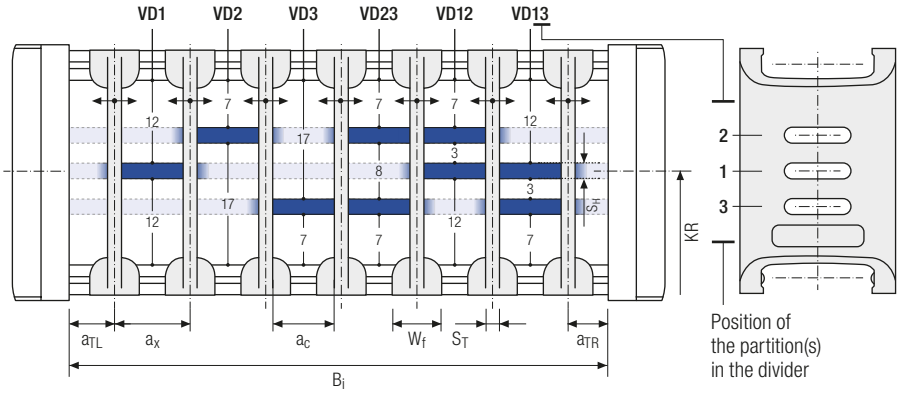
UA1455 | Inner Distribution | TS1

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: $a_{T\ min}$ [mm]	Version A: $a_{x\ min}$ [mm]	Version A: $a_{c\ min}$ [mm]	Version B: $a_{T\ min}$ [mm]	Version B: $a_{x\ min}$ [mm]	Version B: $a_{c\ min}$ [mm]	Version B: $a_{x\ grid}$ [mm]
2	7	2	2	20	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

* not design 020



Position of the partition(s) in the divider

Standard height separation with **aluminum profile 9 × 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.

Inner heights 26
Inner widths 25 – 130
Key for abbreviations on page 74
Assembly instructions on kabelschlepp.de/assembly
Order key on page 34

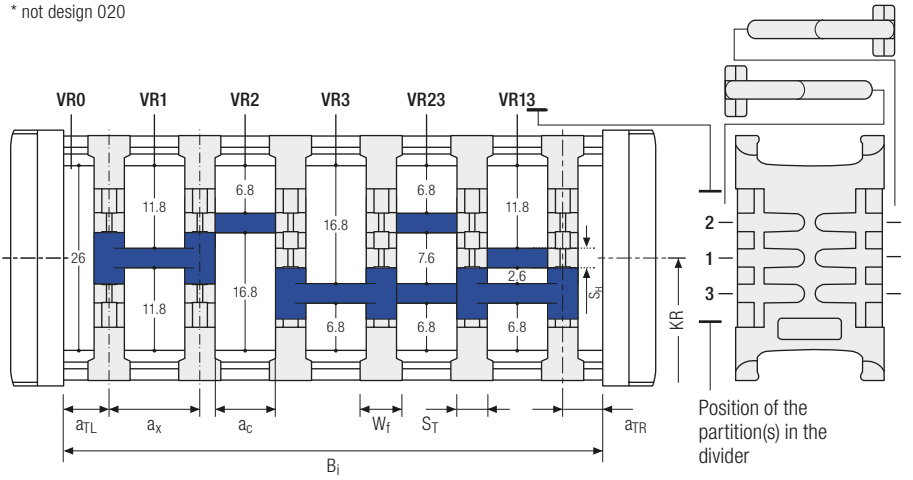
Subject to change.

UA1455 | Inner Distribution | TS3

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

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

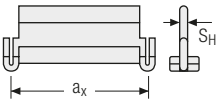
The dividers are fixed by the partitions, the complete divider system is movable in the cross section.

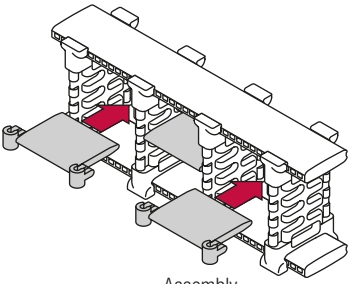
Chamber width a_c

$a_c = a_x - S_T$

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.

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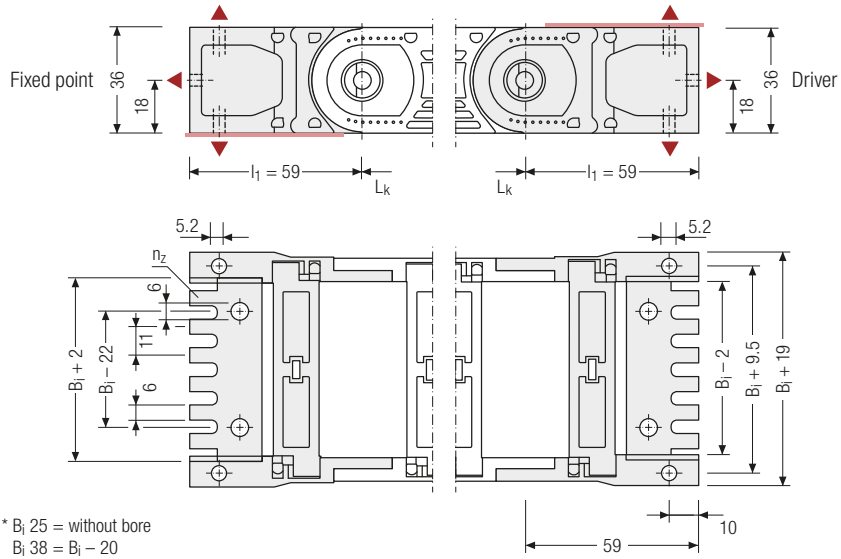
Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator

Subject to change.

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**.

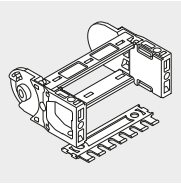


* B_i 25 = without bore
B_i 38 = B_i – 20

▲ Assembly options

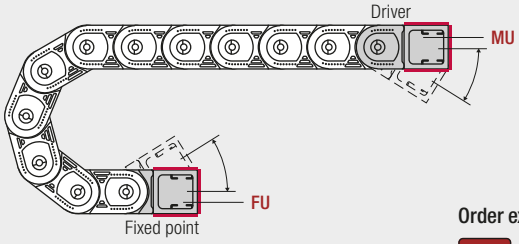
B_i [mm]	n_z
25	2
38	3
58	5
78	7
103	9
130	11

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.

Connection variants



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

Order example

UMB	.	F U
UMB	.	M U

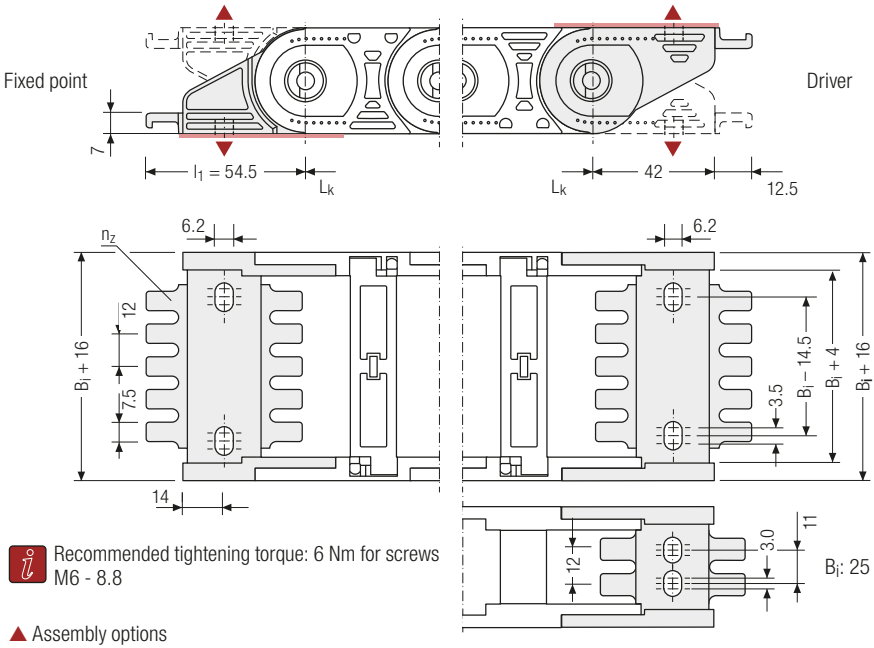
The universal end connectors UMB can be swiveled in KR direction.

Subject to change.

UA1455 | End Connectors | End Connectors

One part end connectors – plastic

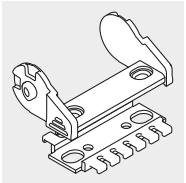
The plastic end connectors can be **connected from above and below**. The connection type can be changed by reconnecting the end connector.



Recommended tightening torque: 6 Nm for screws M6 - 8.8

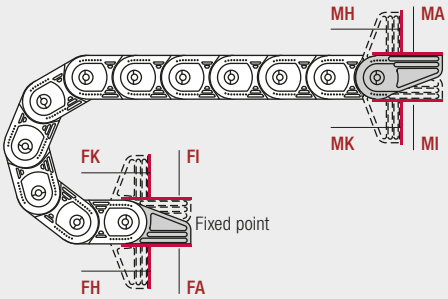
▲ Assembly options

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



Driver

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°

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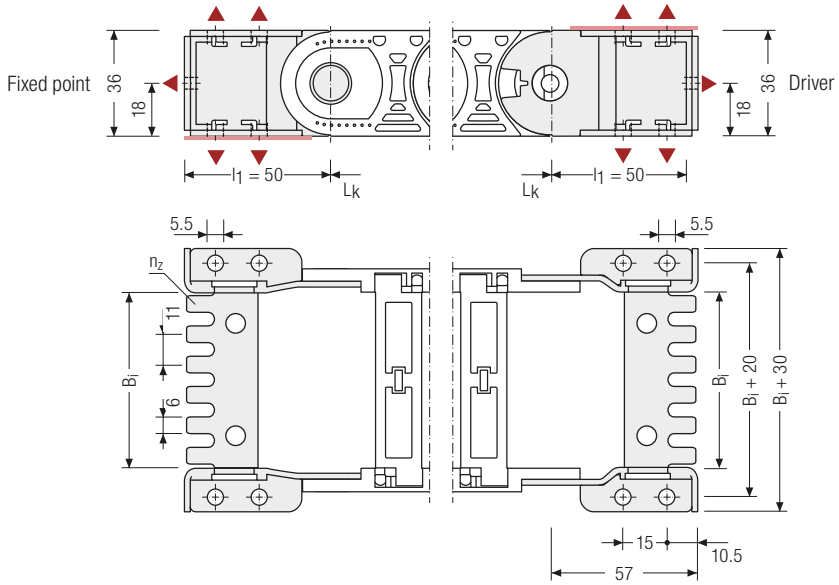
Subject to change.

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

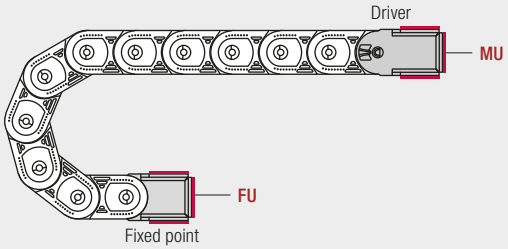
B_i [mm]	n_z
25	2
38	3
58	5
78	7
103	9
130	11

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

Order example

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

Connection variants



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

UNIFLEX Advanced
Inner heights 26
Inner widths 25 – 130
Key for abbreviations on page 74
Assembly instructions on kabelschlepp.de/assembly
Order key on page 34

Subject to change.

UA1455 | Order Key

Order

Cable carrier

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

UA1455	.	030	.	78	.	150	-	1,456
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	.	35	-	VD1
						⋮		⋮		⋮
					.	K5	.	40	-	VD3
Divider system		Version		n_T		Chamber		Assembly distance		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
		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.

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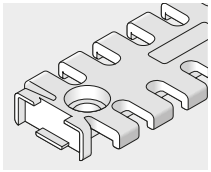
Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator

Subject to change.

Accessories

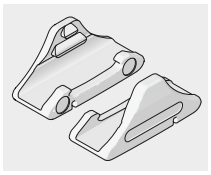
Single-sided strain relief combs

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



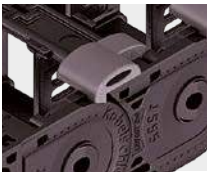
Gliding elements

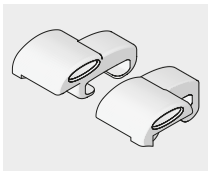
The optional glide shoes ensure a substantially longer service life of the cable carrier in gliding operation.



Outer dampers

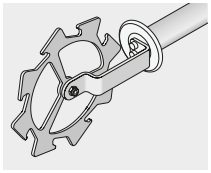
The use of outer dampers effectively reduces uncoiling noise. Particularly recommended for support trays and guide channels.





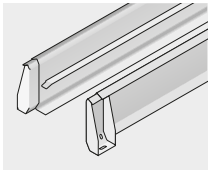
Quick opening tool

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



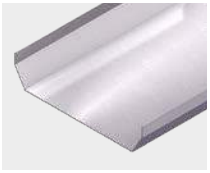
Guide channels

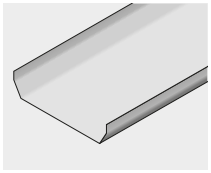
The cable carrier always has to be guided in a channel for gliding applications. This prevents the upper and lower run from slipping.



Support trays

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





Subject to change.

UA1555

Pitch
55.5 mm

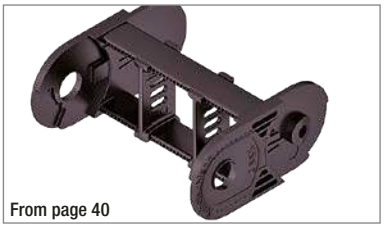
Height
38 mm

Width
50 – 150 mm

Bending radius
63 – 230 mm

Stay variants

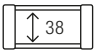
Design 020



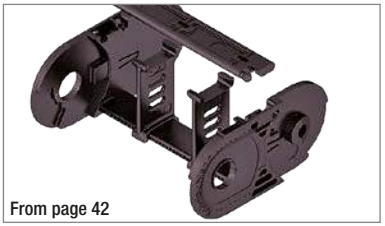
From page 40

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

Opening options
outside/inside: Cannot be opened.



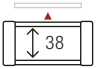
Design 030



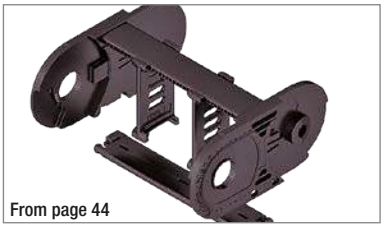
From page 42

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.



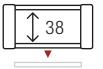
Design 040



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 data on p. 38

Subject to change.

Subject to change.

Order key
on page 52

Assembly instructions on
kabelschlepp.de/assembly

Key for abbreviations
on page 74

50
150
Inner widths

38
Inner heights

UNIFLEX
Advanced

UA1555 | Installation Dimensions | Unsupported

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uniflex-advanced

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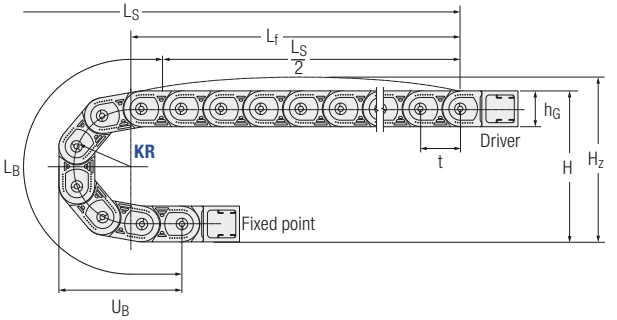
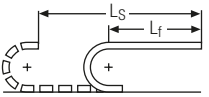
Cable Carrier Configurator

Unsupported arrangement



Unsupported length L_f



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

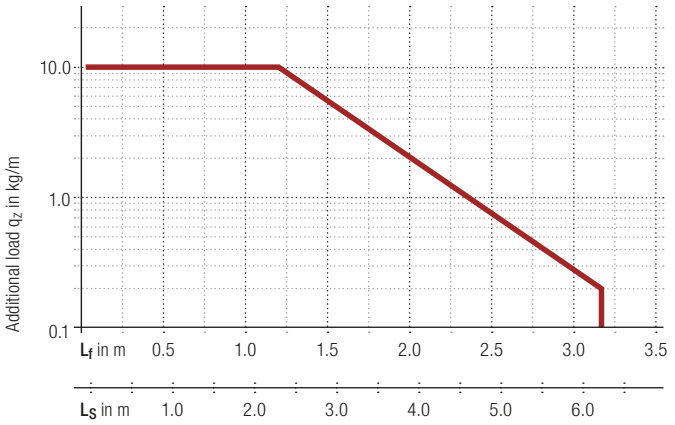
Dynamics of unsupported arrangement		t
v_{max} [m/s]	a_{max} [m/s^2]	[mm]
9	45	55.5

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



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

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

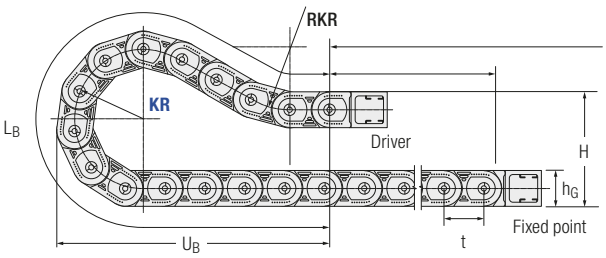
Unsupported length L_f

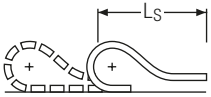
$$L_f = \frac{L_S}{2} + t$$

Fixed point offset L_v:
For off-center fixed point connections please contact us.

Subject to change.

Gliding arrangement





For more information on gliding arrangement please contact us.

Only designs 020 and 030 may be used for gliding arrangements.

Dynamics of gliding arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[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

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.

Subject to change.

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uniflex-advanced

Configure your cable carrier:
onlineengineer.de

Technical support:
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online-engineer.de
Cable Carrier Configurator

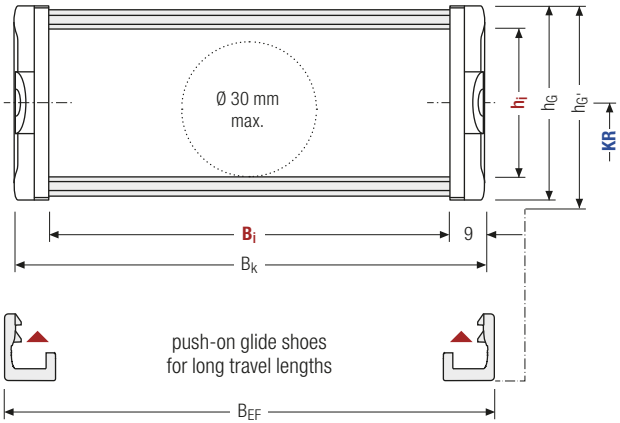
UA1555.020 | Overview

Stay variant 020 – closed frame

- 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



Calculating the cable carrier width

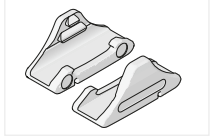
Outer width B_k

$B_k = B_i + 18$ mm

Total width B_{EF}

$B_{EF} = B_i + 22$ 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.

Subject to change.

UA1555.020 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
55.5	38	50	53

Bend radii

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

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

Order example

UA1555	.	020	.	125	.	160	-	1,887
Type		Stay variant		B_i [mm]		KR [mm]		L_K [mm]

* only B_i 100

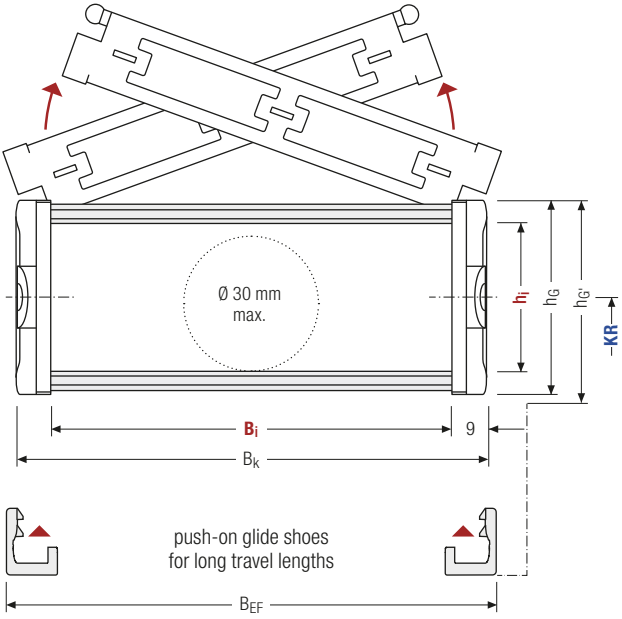
UA1555.030 | Overview

Stay variant 030 – with outside opening and 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.

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

B_i from 50 – 150 mm



Calculating the cable carrier width

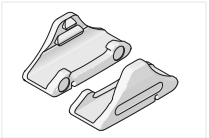
Outer width B_k

$B_k = B_i + 18$ mm

Total width B_{EF}

$B_{EF} = B_i + 22$ 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.

Subject to change.

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onlineengineer.de

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

UA1555.030 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]	$h_{G'}$ [mm]
55.5	38	50	53

Bend radii

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

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

Order example

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

* only B_i 100 ** only KR 63 and 100

Subject to change.

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Configure your cable carrier:
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Technical support:
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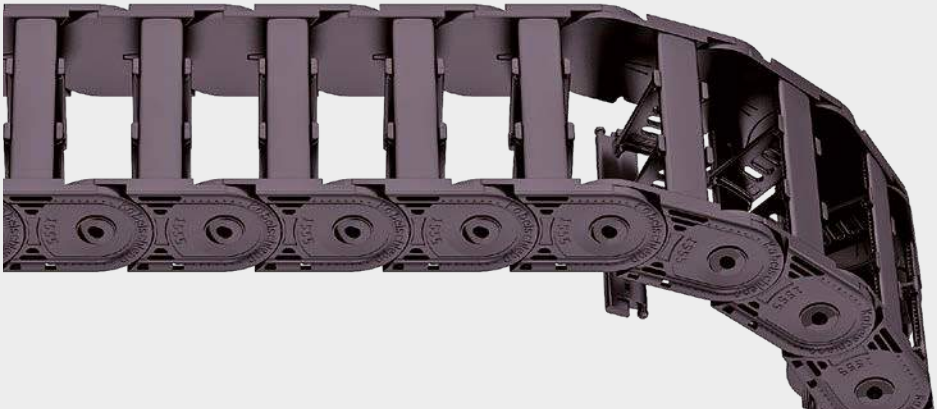
Cable Carrier Configurator

UA1555.040 | Overview

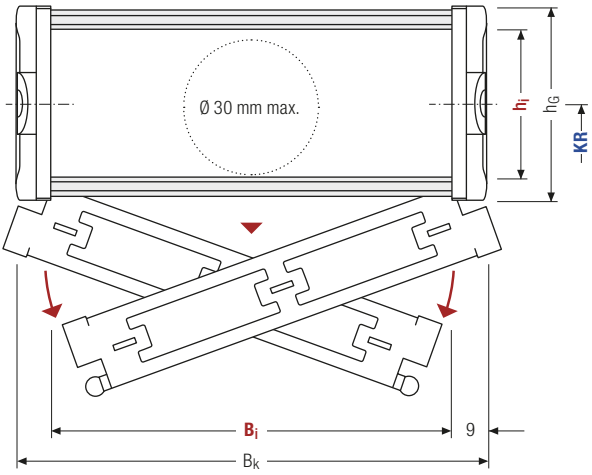
Stay variant 040 – with inside opening and detachable crossbars

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



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

B_i from 50 – 150 mm



Calculating the cable carrier width

Outer width B_k

$B_k = B_i + 18$ 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 46 f.

Subject to change.

UA1555.040 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]
55.5	38	50

Bend radii

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

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

Order example

UA1555	.	040	.	125	.	160	-	1,887
Type		Stay variant		B_i [mm]		KR [mm]		L_K [mm]

* nur B_i 100

Subject to change.

UA1555 | Inner Distribution | TS0

Divider systems

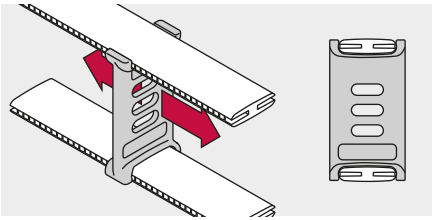
As standard, the divider system is assembled at each 2nd chain link.

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)**.

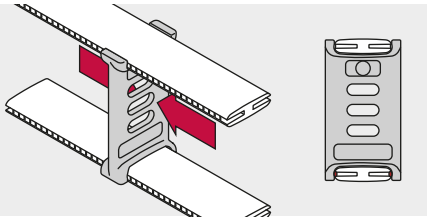
Movable divider

Version A (Standard)



Fixable divider (2.5 mm grid)

Version B

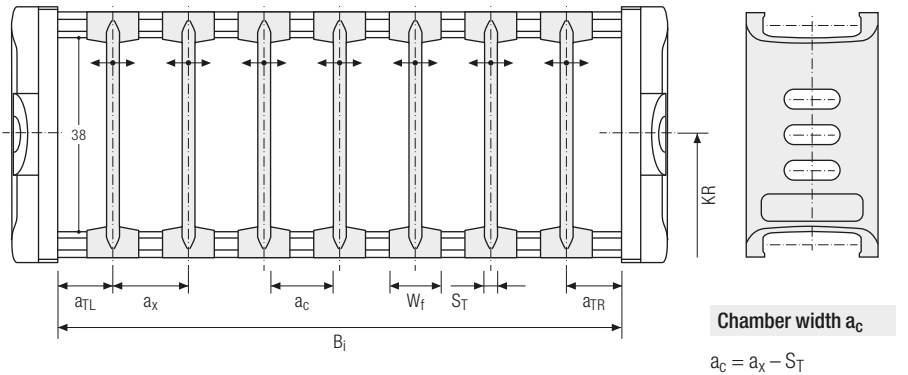


Divider system TS0 without height separation

			Version A			Version B*			
S_T [mm]	W_f [mm]	$n_{T\ max}$ design 020	$a_{TL}/a_{TR\ min}$ [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

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

$a_c = a_x - S_T$

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

Subject to change.

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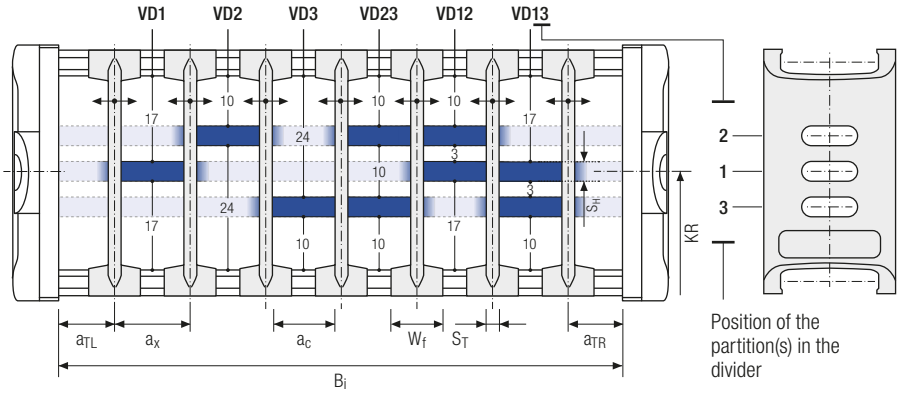
Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator

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 $a_{T\ min}$ [mm]	Version A $a_{x\ min}$ [mm]	Version A $a_{c\ min}$ [mm]	Version B $a_{T\ min}$ [mm]	Version B $a_{x\ min}$ [mm]	Version B $a_{c\ min}$ [mm]	Version B $a_{x\ grid}$ [mm]
2.5	10	4	2	20	5	10	7.5	5	10	7.5	2.5

* not design 020



Position of the partition(s) in the divider

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

Chamber width a_c

$a_c = a_x - S_T$

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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

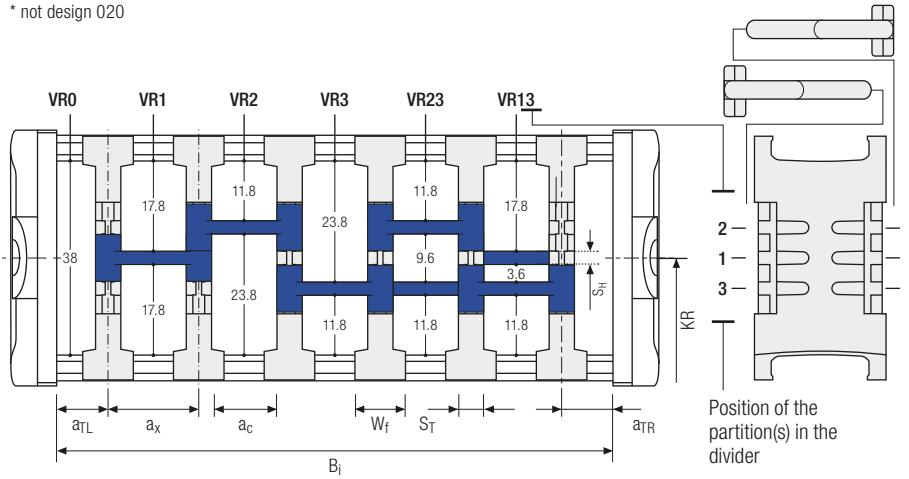
Subject to change.

UA1555 | Inner Distribution | TS3

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

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

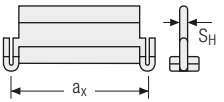
The dividers are fixed by the partitions, the complete divider system is movable in the cross section.

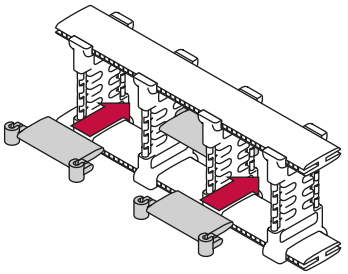
Chamber width a_c

$a_c = a_x - S_T$

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

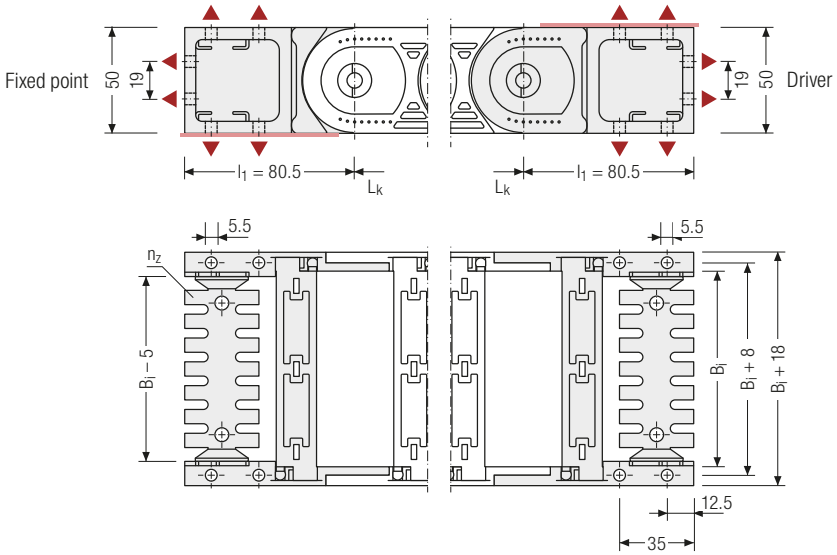
Information on the connection dimensions for the cable carrier can be found on page 49.

Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
kabelschlepp.de/uniflex-advanced
online-engineer.de Cable Carrier Configurator

Subject to change.

Universal end connectors UMB – plastic (standard)

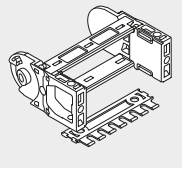
The universal mounting brackets (UMB) are made from plastic and can **be mounted from the top, from the bottom, or face on**.



▲ Assembly options

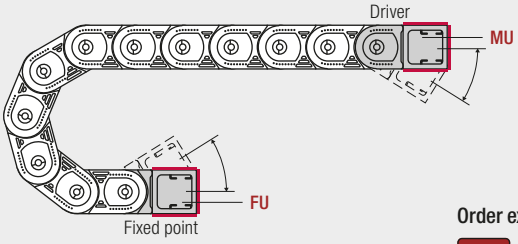
B_i [mm]	n_z
50	2 x 3
75	2 x 5
90	2 x 6
100	2 x 7
125	2 x 9
150	2 x 11

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.

Connection variants



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

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

Order example

UMB	.	F U
UMB	.	M U

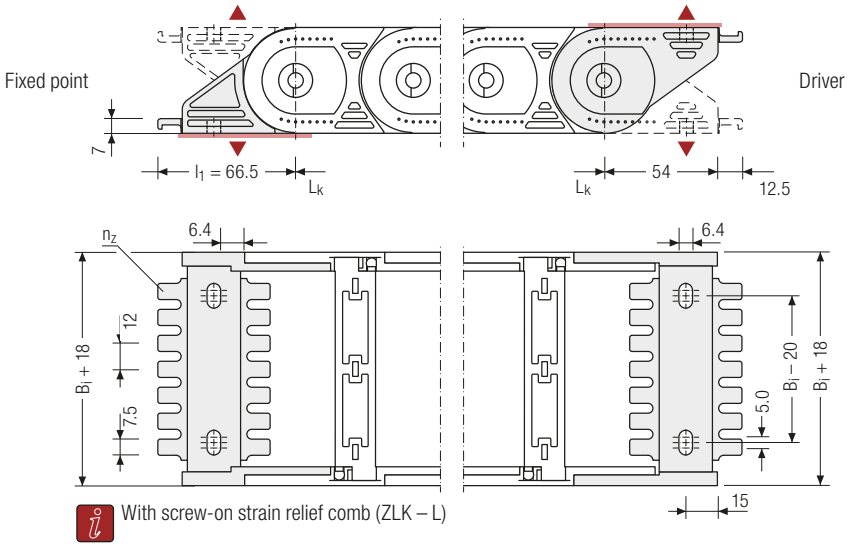
UNIFLEX Advanced
Inner heights 38
Inner widths 50 – 150
Key for abbreviations on page 74
Assembly instructions on kabelschlepp.de/assembly
Order key on page 52

Subject to change.

UA1555 | 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.

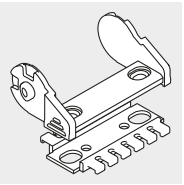


With screw-on strain relief comb (ZLK – L)

▲ Assembly options

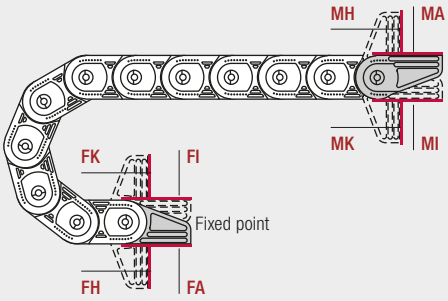
B_i [mm]	n_z
50	2 x 4
75	2 x 6
100	2 x 8
125	2 x 10
150	2 x 12

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



Driver

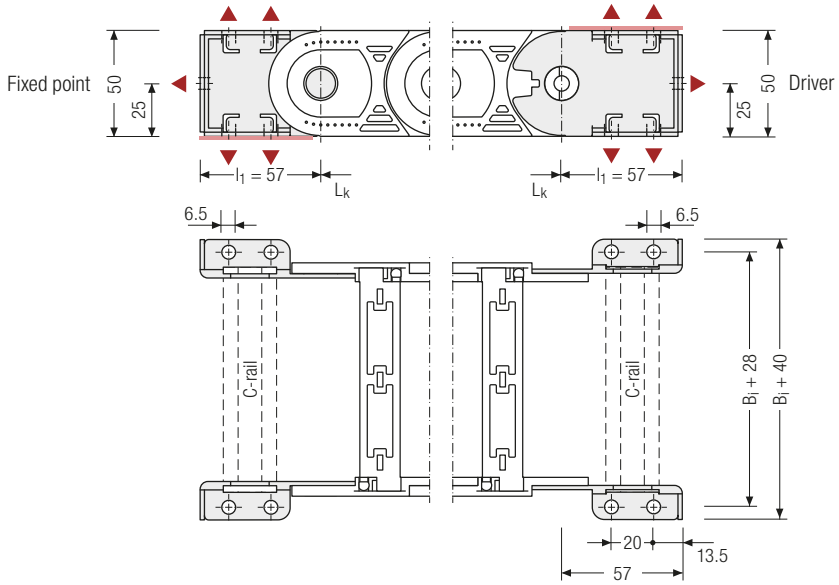
Connection point
- **F** – fixed point
- **M** – driver

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

Subject to change.

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

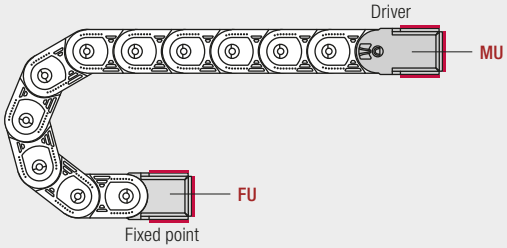
B_i [mm]	B_{EF} [mm]
50	90
75	115
90	130
100	140
125	165
150	190
200	240

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

UNIFLEX Advanced
Inner heights 38
Inner widths 50 – 150
Key for abbreviations on page 74
Assembly instructions on kabelschlepp.de/assembly
Order key on page 52

Subject to change.

UA1555 | Order Key

Order

Cable carrier

Type	Stay variant	B_i [mm]	KR [mm]	L_K [mm]
			63	
		50	80	
		75	100	
		90	125	
	020	100	160	
	030	125	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
						⋮		⋮		⋮
					.	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. 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.

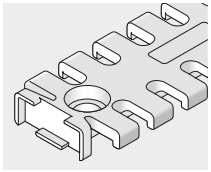
kabelschlepp.de/uniflex-advanced
Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator

Subject to change.

Accessories

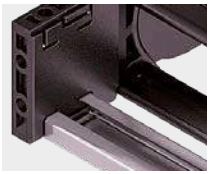
Single-sided strain relief combs

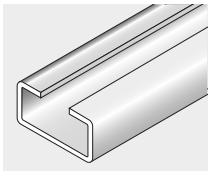
The optional plastic strain relief combs are assembled between the UMB end connectors and require no separate screw fixing.



C-rails for strain relief elements

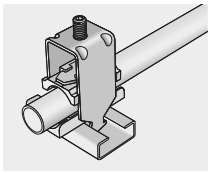
The optional C-rails are secured by the UMB end connectors and do not require separate screw connections.





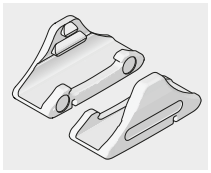
LineFix® clamps

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



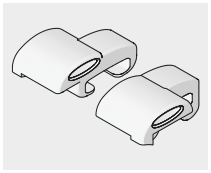
Gliding elements

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



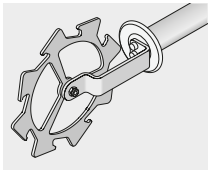
Outer dampers

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.

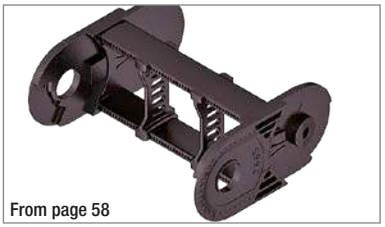


Subject to change.

UA1665

Stay variants

Design 020

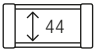


From page 58

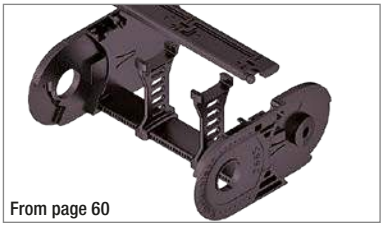
Closed frame

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

Opening options
inside/outside: Cannot be opened.



Design 030

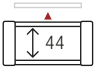


From page 60

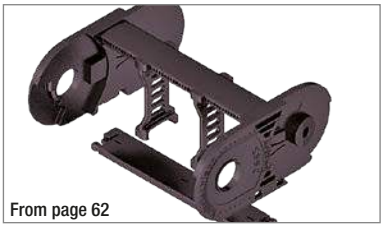
Frame with externally detachable crossbars

- 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

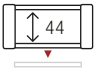


From page 62

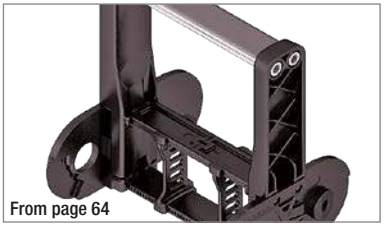
Frame with internally detachable crossbars

- 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

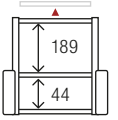


From page 64

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.



Technical data on p. 56

Subject to change.

kabelschlepp.de/uniflex-advanced

Configure your cable carrier: onlineengineer.de

Technical support: technik@kabelschlepp.de

online-engineer.de Cable Carrier Configurator

Pitch
66.5 mm

Height
44 mm

Width
50 – 250 mm

Bending radius
75 – 300 mm

Inner heights
44

Inner widths
50 – 250

Key for abbreviations on page 74

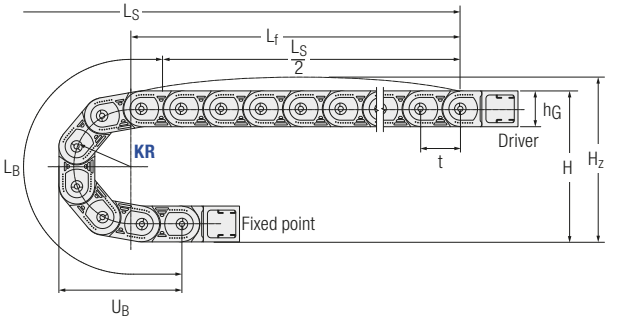
Assembly instructions on kabelschlepp.de/assembly

Order key on page 72

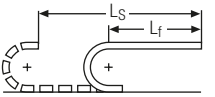
Subject to change.

UA1665 | Installation Dimensions | Unsupported

Unsupported arrangement



Unsupported length L_f



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

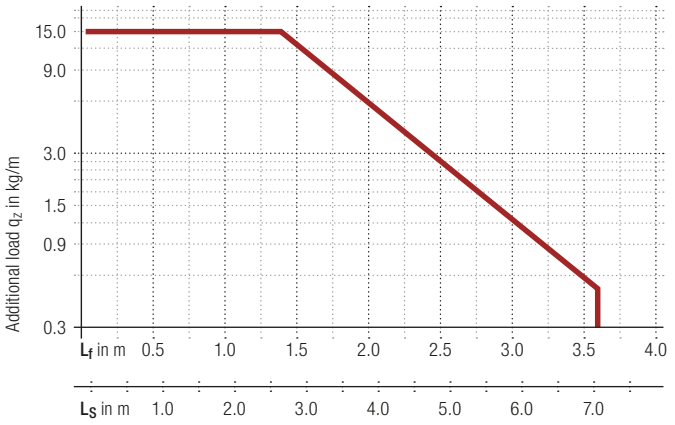
Dynamics of unsupported arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[mm]
8	40	66.5

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



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

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

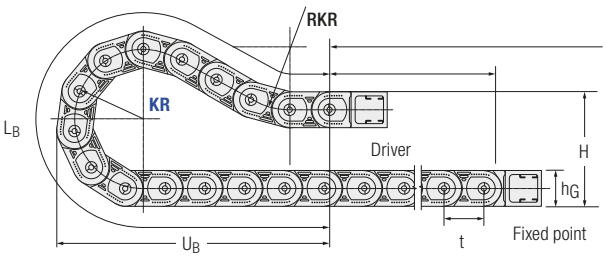
$$L_f = \frac{L_S}{2} + t$$

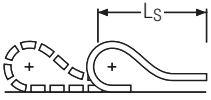
Fixed point offset L_v:
For off-center fixed point connections please contact us.

Subject to change.

kabelschlepp.de/uniflex-advanced
Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator

Gliding arrangement





For more information on gliding arrangement please contact us.

Only designs 020, 030 and RMA may be used for gliding arrangements.

Dynamics of gliding arrangement		t
v_{max} [m/s]	a_{max} [m/s²]	[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

TSUBAKI KABELSCHLEPP Technical Support

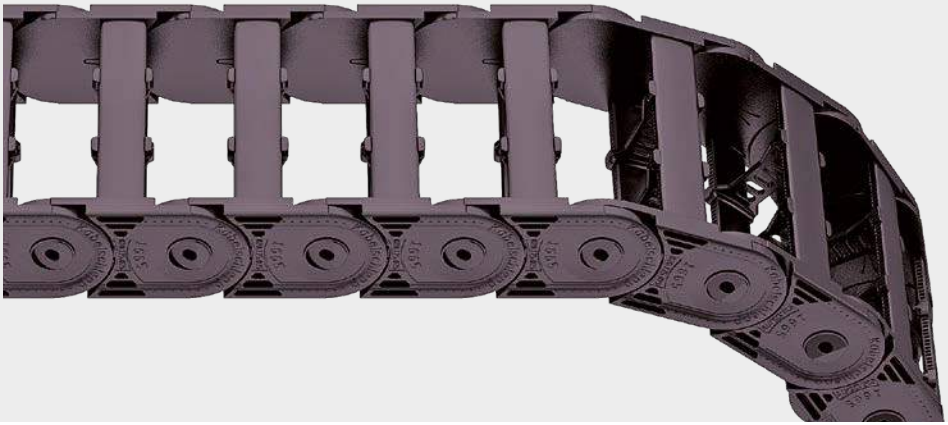
If you have any questions about determining gliding cable carriers or other technical details please contact our technical support service at technik@kabelschlepp.de. We will be happy to help you.

Subject to change.

UA1665.020 | Overview

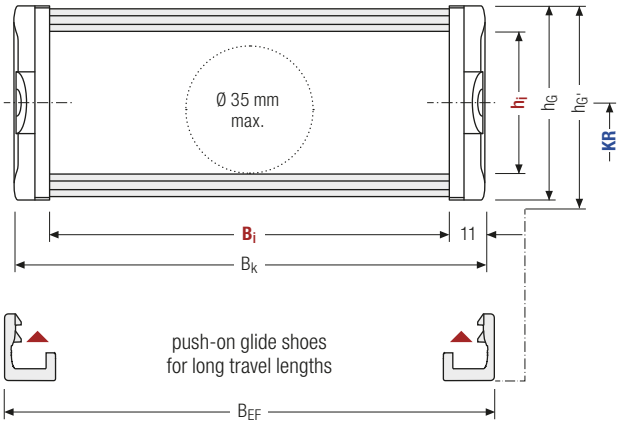
Stay variant 020 – closed frame

- 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 – 250 mm



Calculating the cable carrier width

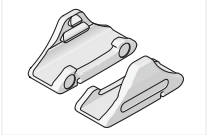
Outer width B_k

$B_k = B_i + 22$ mm

Total width B_{EF}

$B_{EF} = B_i + 27$ 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.

Subject to change.

kabelschlepp.de/uniflex-advanced

Configure your cable carrier: onlineengineer.de

Technical support: technik@kabelschlepp.de

online-engineer.de Cable Carrier Configurator

UA1665.020 | 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

Bend radii

KR [mm]						
75	100	120	140	200	250	300

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

Order example

UA1665	.	020	.	125	.	140	-	2,660
Type		Stay variant		B_i [mm]		KR [mm]		L_K [mm]

Inner heights
44
Inner widths
50 – 250
Key for abbreviations on page 74
Assembly instructions on kabelschlepp.de/assembly
Order key on page 72

Subject to change.

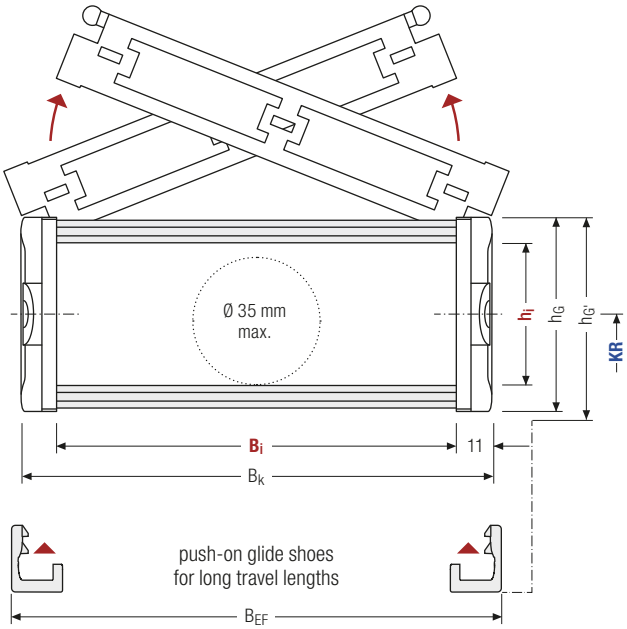
UA1665.030 | Overview

Stay variant 030 – with outside opening and 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.

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

B_i from 50 – 250 mm



Calculating the cable carrier width

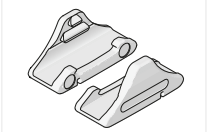
Outer width B_k

$B_k = B_i + 22$ mm

Total width B_{EF}

$B_{EF} = B_i + 27$ 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.

Subject to change.

kabelschlepp.de/
uniflex-advanced

Configure your cable carrier:
onlineengineer.de

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

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

Bend radii

KR [mm]						
75	100	120	140	200	250	300

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

Order example

UA1665	.	030	.	125	.	140	-	2,660
Type		Stay variant		B_i [mm]		KR [mm]		L_K [mm]

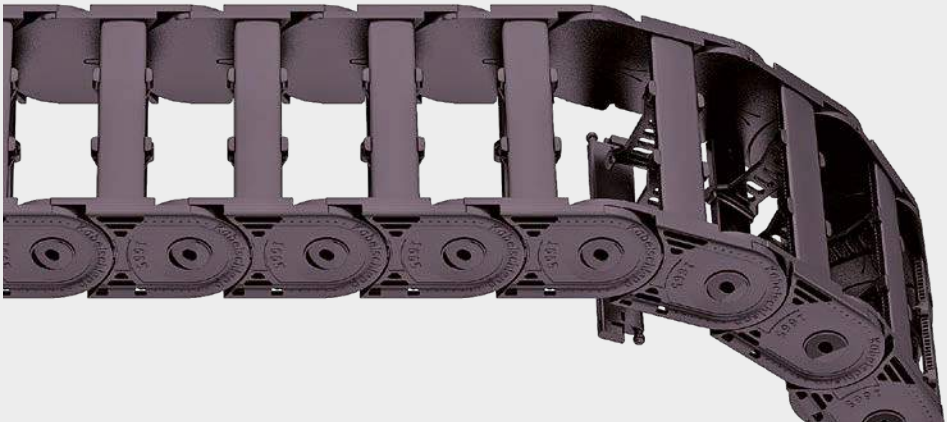
Key for abbreviations on page 74
Assembly instructions on kabelschlepp.de/assembly
Order key on page 72

Subject to change.

UA1665.040 | Overview

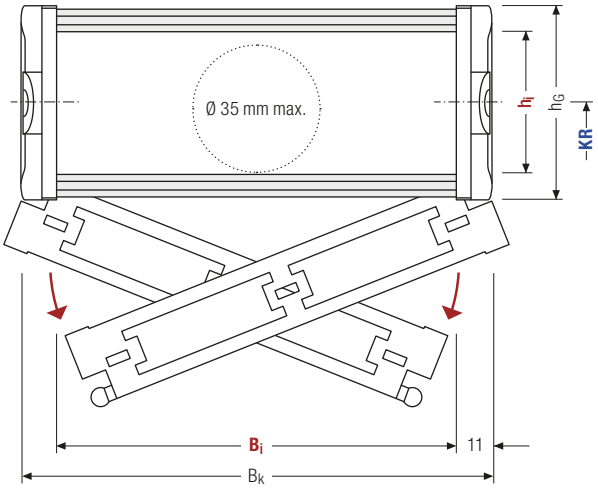
Stay variant 040 – with inside opening and detachable crossbars

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



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

B_i from 50 – 250 mm



Calculating the cable carrier width

Outer width B_k

$B_k = B_i + 22$ 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.

Subject to change.

UA1665.040 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h_i [mm]	h_G [mm]
66.5	44	60

Bend radii

KR [mm]						
75	100	120	140	200	250	300

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

Order example

UA1665	.	040	.	125	.	140	-	2,660
Type		Stay variant		B_i [mm]		KR [mm]		L_K [mm]

Subject to change.

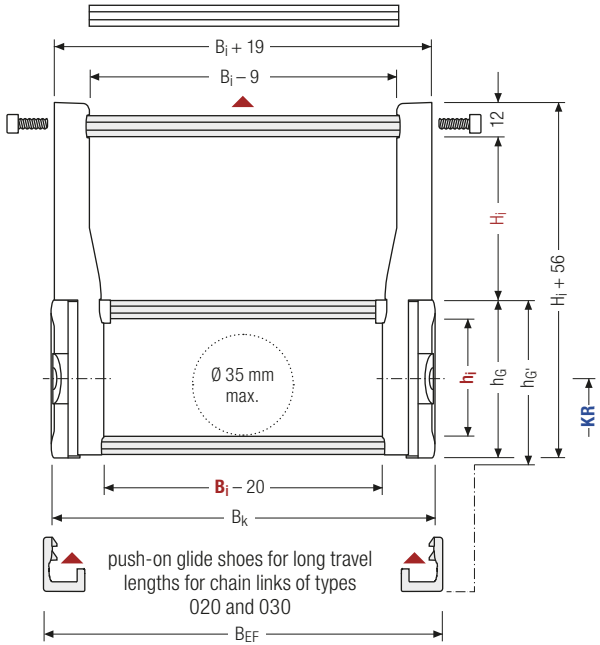
UA1665.RMA | Overview

Stay variant RMA – 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.

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

B_i from 125 – 200 mm



Calculating the cable carrier width

Outer width B_k

$B_k = B_i + 22$ mm

Total width B_{EF}

$B_{EF} = B_i + 27$ 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.

Subject to change.

kabelschlepp.de/uniflex-advanced
Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator

UA1665.RMA | 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

Bend radii

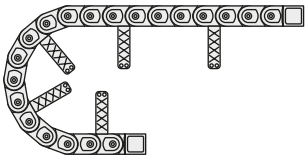
KR [mm]						
75	100	120	140	200	250	300

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

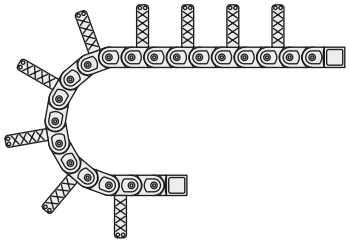
Assembly variants



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.

Subject to change.

UA1665 | Inner Distribution | TS0

Divider systems

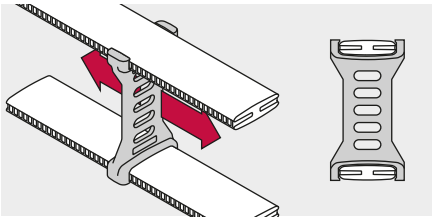
As standard, the divider system is assembled at every 2nd chain link.

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)**.

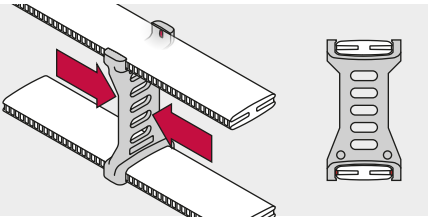
Movable divider

Version A (Standard)



Fixable divider (2.5 mm grid)

Version B

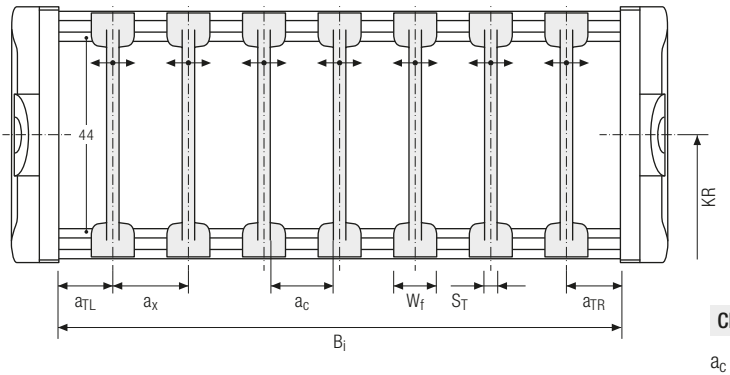


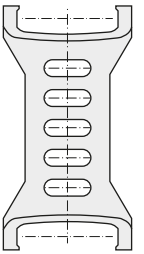
Divider system TS0 without height separation

S_T [mm]	W_f [mm]	$n_{T\,max}$ design 020	Version A $a_{TL}/a_{TR\,min}$ [mm]	Version A $a_{x\,min}$ [mm]	Version A $a_{c\,min}$ [mm]	Version B** $a_{TL}/a_{TR\,min}$ [mm]	Version B** $a_{x\,min}$ [mm]	Version B** $a_{c\,min}$ [mm]	Version B** $a_{x\,grid}$ [mm]
3	10		5	10	7	5	10	7	2.5

B_i [mm]	50	75	100	125	150	175	200	225	250
$n_{T\,max}$ 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.

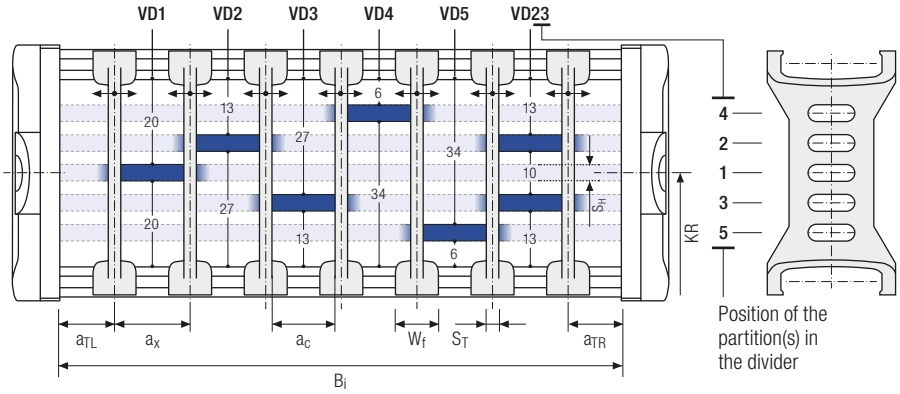
kabelschlepp.de/uniflex-advanced
Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator
Subject to change.

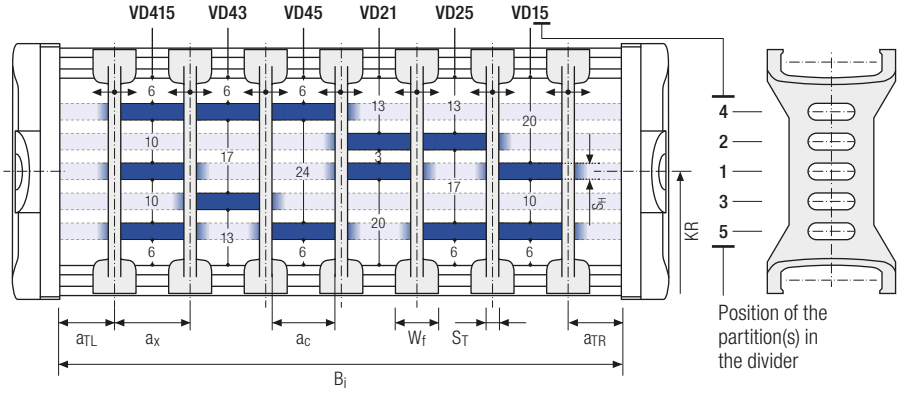
UA1665 | Inner Distribution | TS1

Divider system TS1 with continuous height separation*

					Version A			Version B			
S_T [mm]	W_f [mm]	S_H [mm]	$n_{T\ min}$	$a_{T\ max}$ [mm]	$a_{T\ min}$ [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





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

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.

Inner heights 44
Inner widths 50 – 250
Key for abbreviations on page 74
Assembly instructions on kabelschlepp.de/assembly
Order key on page 72

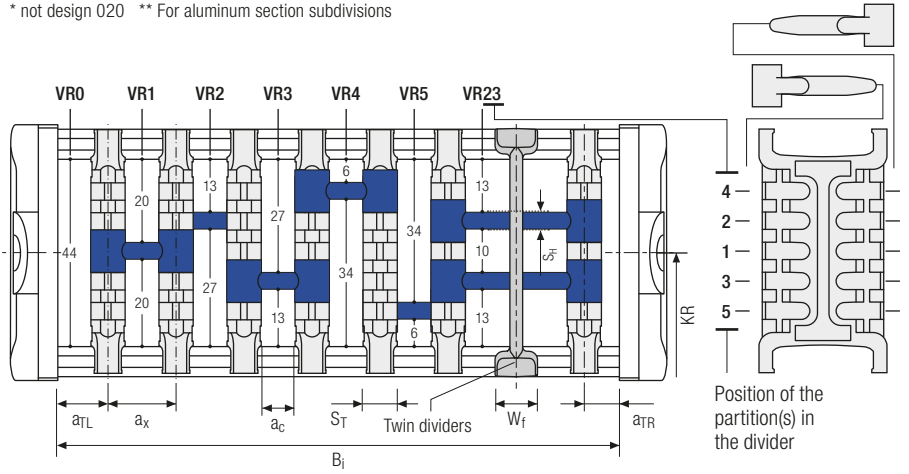
Subject to change.

UA1665 | Inner Distribution | TS3

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

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]	n_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

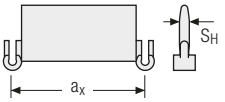
The dividers are fixed by the partitions, the complete divider system is movable in the cross section. Movable twin dividers are optionally available. Twin dividers are also suitable for retrofitting in the section subdivision system.

Chamber width a_c

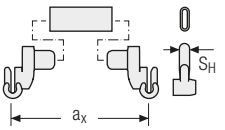
$a_c = a_x - S_T$

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							

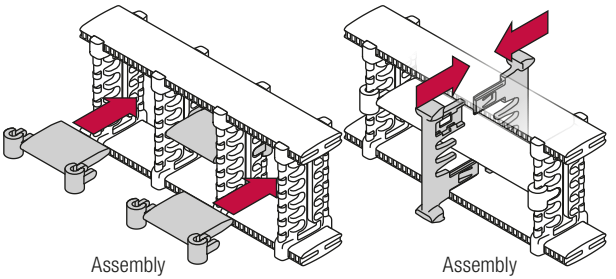
Plastic section subdivisions in a_x increments



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**.



Assembly section subdivision

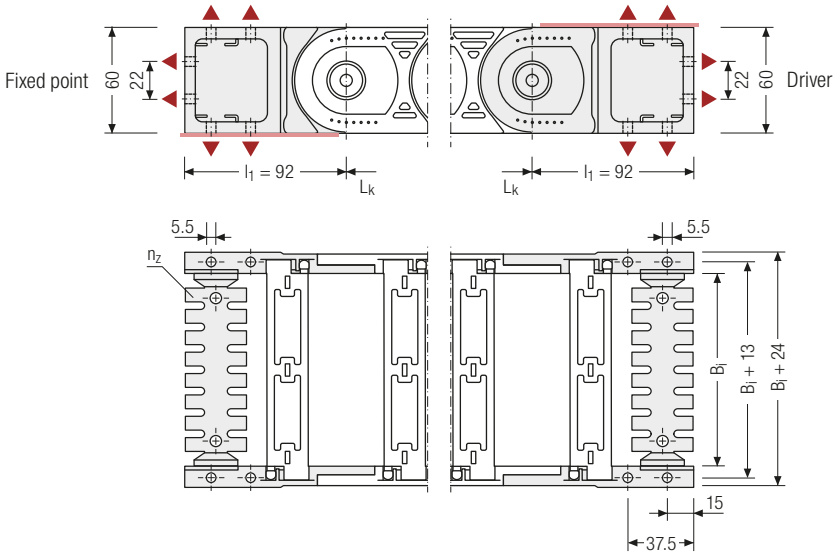
Assembly twin divider

Subject to change.

kabelschlepp.de/uniflex-advanced
Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator

Universal end connectors UMB – plastic (standard)

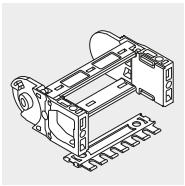
The universal mounting brackets (UMB) are made from plastic and can **be mounted from the top, from the bottom, or face on**.



▲ Assembly options

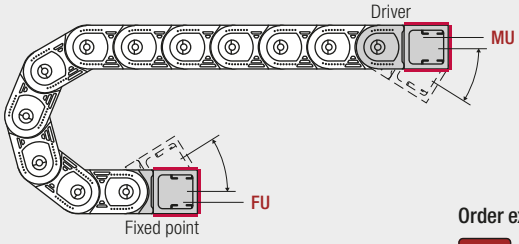
B_i [mm]	n_z
50	2 x 3
75	2 x 5
100	2 x 7
125	2 x 9
150	2 x 11
175	2 x 13

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.

Connection variants



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

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

Order example

UMB	.	F U
UMB	.	M U

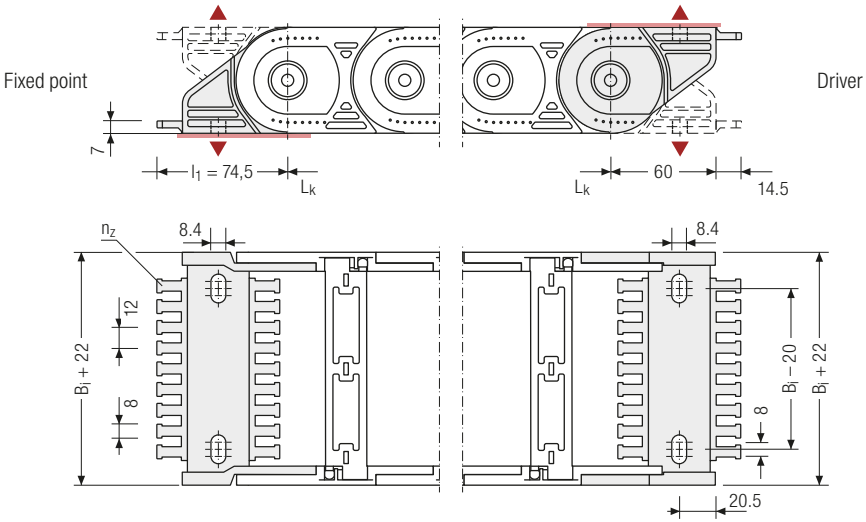
UNIFLEX Advanced
Inner heights 44
Inner widths 50 - 250
Key for abbreviations on page 74
Assembly instructions on kabelschlepp.de/assembly
Order key on page 72

Subject to change.

UA1665 | End Connectors | End Connectors

One part end connectors – plastic

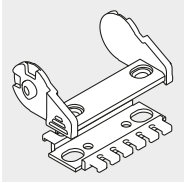
The plastic end connectors can be **connected from above and below**. The connection type can be changed by reconnecting the end connector.



▲ Assembly options

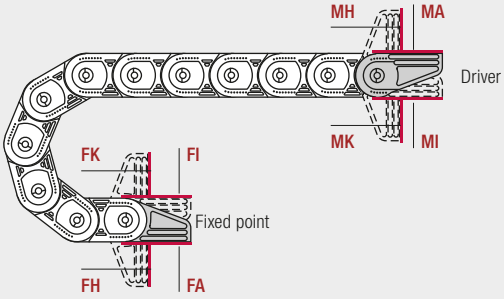
B_i [mm]	n_z
50	2 x 4
75	2 x 6
100	2 x 8
125	2 x 10
150	2 x 12
175	2 x 14
200	2 x 16
225	2 x 18
250	2 x 20

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



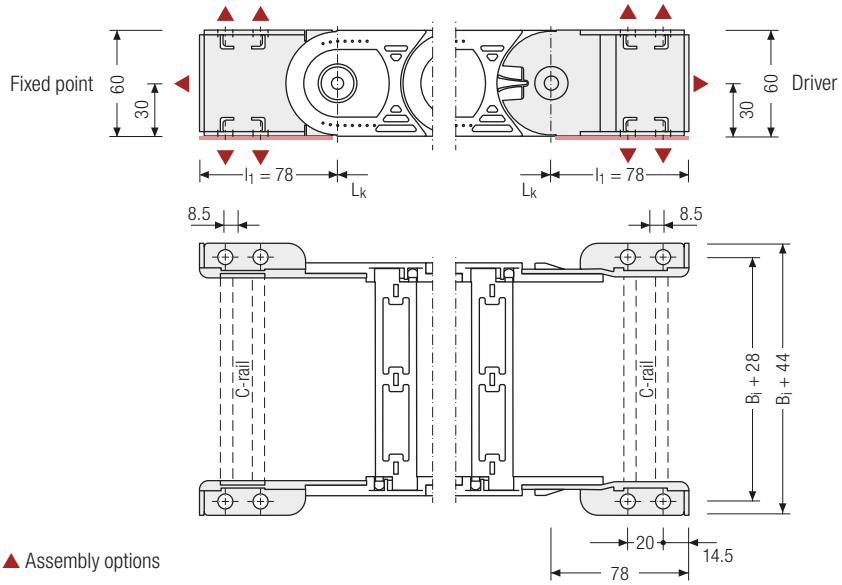
Connection point
- **F** – fixed point
- **M** – driver

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°

Subject to change.

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

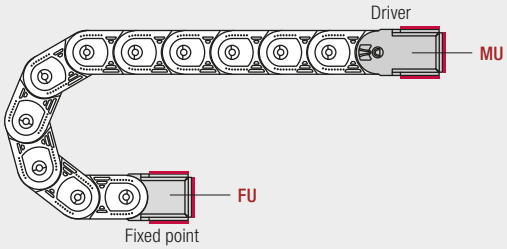
B_i [mm]	B_{EF} [mm]
50	94
75	119
100	144
125	169
150	194
175	219
200	244
225	269
250	294

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

UNIFLEX Advanced
Inner heights 44
Inner widths 50 – 250
Key for abbreviations on page 74
Assembly instructions on kabelschlepp.de/assembly
Order key on page 72

Subject to change.

UA1665 | Order Key

Order

Cable carrier

Type	Stay variant	B_i [mm]	KR [mm]	L_K [mm]
		50		
		75		
		100	75	
		125	100	
		150	120	
	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
UMB		A
End connector	F	I
UMB-St	M	H
		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.

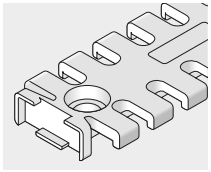
kabelschlepp.de/uniflex-advanced
Configure your cable carrier: onlineengineer.de
Technical support: technik@kabelschlepp.de
online-engineer.de Cable Carrier Configurator

Subject to change.

Accessories

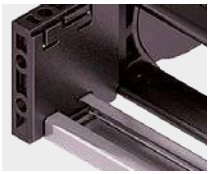
Single-sided strain relief combs

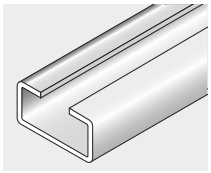
The optional plastic strain relief combs are assembled between the UMB end connectors and require no separate screw fixing.



C-rails for strain relief elements

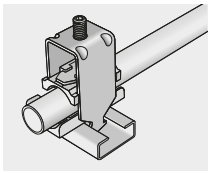
The optional C-rails are secured by the UMB end connectors and do not require separate screw connections.





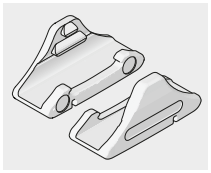
LineFix® clamps

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



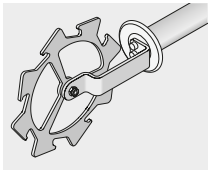
Gliding elements

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



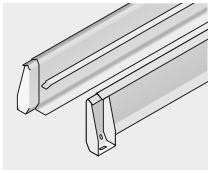
Quick opening tool

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



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.



Subject to change.

General abbreviations

a_1 = Hole distance – side edge
a_2 / a_3 = Hole distance – outer edge
a_c = Nominal width inner chamber
a_{max} = Max. travel acceleration
a_T = Distance lateral tabs inside to center of first divider
a_x = Divider center to center distance
b_1 = Inner width of support tray/guide channel
b_2 = Hole distance – cable gland outside
b_3 = Hole distance – cable gland inside
b_4 = Support width of the support tray
b_A = Distance between connection boreholes
B_A = Outer width of support tray
B_E = Contanct width of roller
B_{EF} = Overall width of cable carrier incl. attachments
B_G = Total width of support
B_i = Inner width
B_k = Outer width
B_{KA} = Outer width of guide channel
B_P = Width of base plate
B_R = Width of roller
B_{St} = Stay width
c = Distance between hole stay bores
d = Cable diameter
D = Bore diameter
D_R = Diameter of support roller
d_R = Pipe diameter
D_S = Diameter of wheel flange
G = Bore hole position
H = Connection height
H_A = Axle height of support roller
h_A = Outer height of support tray
h_G = Chain link height
$h_{G'}$ = Chain link height incl. glide shoe
h_i = Inner height
H_i = Inner height of frame stay assembly
h_{KA} = Outer height of guide channel
h_1 = Channel profile height – support height
h_2 = Channel profile height – run-off height
HS = Half-stayed
H_{SR} = Height of the support roller
H_z = Installation height
I = Height channel opening
KR = Bending radius
l_1 = Connection length
l_{2-5} = Connection dimensions
l_A = Length of end connector
L_A = Length of support tray
L_B = Length of carrier in bend
L_D = Length of permissible sag
L_f = Unsupported length
L_k = Cable carrier length without connection
L_{KA} = Channel length
L_{KA}' = Support length
($\triangleq L_S/2$) for One-sided arrangement
($\triangleq X - 2\ l_1$) for opposite arrangement
L_P = Length of base plate
L_{Z1} = Addition for loop overhang
L_{Z2} = Addition for connection ($\triangleq l_1 + 50$ mm)
L_S = Travel length
L_V = Fixed point offset
n_{RKR} = Number of RKR links
n_T = Number of dividers
n_Z = Number of comb teeth for strain relief
q_k = Intrinsic cable carrier weight
q_z = Additional load
RKR = Reverse bending radius
s / s_1 = Sheet metal thickness
S_H = Thickness of height separation
S_T = Thickness of divider
t = Pitch
T = Slide support width of guide channel
U = Width of U profile
U_B = Loop overhang
VD = Position of continuous height separations in divider
VR = Position of partial height separations in divider
v_{max} = Max. travel speed
VS = Fully-stayed
W_f = Base width of divider
X = Connection distance for opposite arrangement
z = Pretension

Subject to change.

Definitions

driver view = view into the driver connection

Pictographs

Inner height

Outer height

Inner width

Outer width

Inner width (B_i) in x mm increments

Pitch

Bending radius

Long travel length

Travel length unsupported

Travel length gliding

High additional load

High travel acceleration

High travel velocity

Stay arrangement on every 2nd chain link

Stay arrangement on every chain link

Cannot be opened

Opens outward

Opens inward

Opens inward/outward

Covered cable carrier

Sliding dividers

Fixable dividers

Fixable dividers in x mm grid

Height separation possible

Height separation in 1 mm increments

Hole stay available

Guide channel required

Strain relief

Clean room suitable

Quiet running/low noise

Sold by the meter

Low weight

ESD material

Ex-protection-material

Heat-resistant

Cold-resistant

Resistant to hot chips

Flame-resistant V0 (UL94)

Flame-resistant V2 (UL94)

Order code

Important information

Subject to change.