

# UNIFLEX Advanced

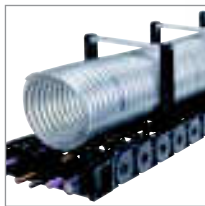
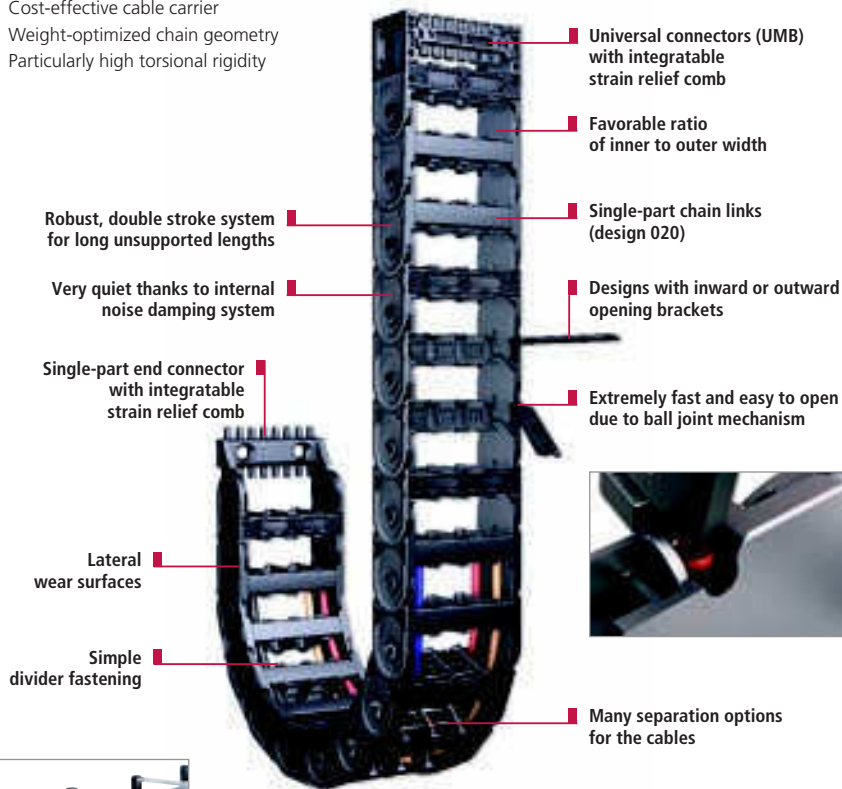
The power to innovate



# UNIFLEX *Advanced*

Light, quiet all-rounder with wide range of applications

- Cost-effective cable carrier
- Weight-optimized chain geometry
- Particularly high torsional rigidity



### UNIFLEX Advanced 1665 with mounting frame stay

The mounting frame stay can be used to reliably route cables with a very large diameter such as extraction hoses, which diameters are greater than the clearance height of the chain links can be routed.



Dividers can be fixed for installations where the carrier is rotated through 90° and applications with high transverse accelerations – no additional spacers are needed



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

**UNIFLEX**  
*Advanced*

Selection

BASIC LINE

Inside heights



Inside widths



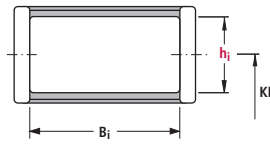
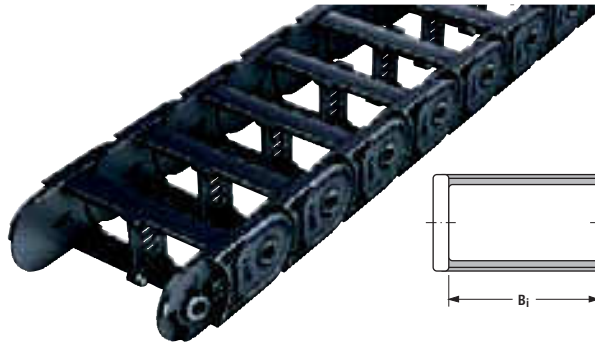
Overview UNIFLEX *Advanced*

**Design 020 with enclosed frame**

Inside heights



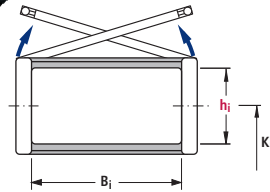
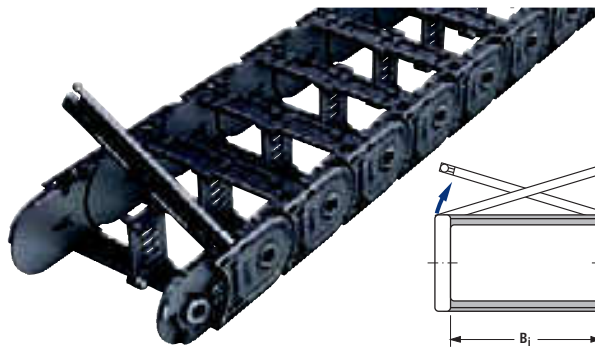
Inside widths



Type	$h_i$	$B_i$	Maximum travel length in m	Dynamics of unsupported arrangement		Page
				Travel speed $v_{max}$ in m/s	Travel acceleration $a_{max}$ in $m/s^2$	
1455.020	26	25-103	120	10	50	86
1555.020	38	50-150	125	9	45	86
1665.020	44	50-250	150	8	40	86

Dimensions in mm

**Design 030 with outward opening and detachable brackets**



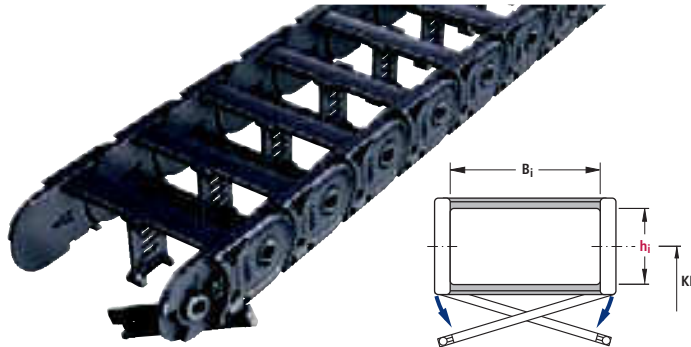
Type	$h_i$	$B_i$	Maximum travel length in m	Dynamics of unsupported arrangement		Page
				Travel speed $v_{max}$ in m/s	Travel acceleration $a_{max}$ in $m/s^2$	
1455.030	26	25-103	120	10	50	86
1555.030	38	50-150	125	9	45	86
1665.030	44	50-250	150	8	40	86

Dimensions in mm

Use our free project planning service.

Overview UNIFLEX *Advanced*

## Design 040 with inward opening and detachable brackets



Type	h <sub>i</sub>	B <sub>i</sub>	Maximum travel length in m	Dynamics of unsupported arrangement		Page
				Travel speed v <sub>max</sub> in m/s	Travel acceleration a <sub>max</sub> in m/s <sup>2</sup>	
1455.040	26	25-103	120	10	50	86
1555.040	38	50-150	125	9	45	86
1665.040	44	50-250	150	8	40	86

Dimensions in mm

**UNIFLEX**  
*Advanced*

Selection  
BASIC LINE

Inside heights

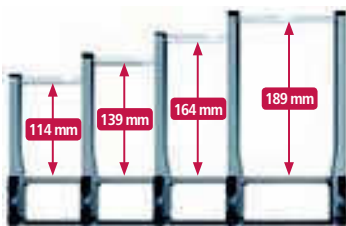


Inside widths



## UNIFLEX Advanced 1665 with mounting frame stay

The mounting frame stay can be used to reliably route cables with a very large diameter, such as extraction hoses, which diameters are greater than the clearance height of the chain links can be routed.



■ Different inside heights for different cable diameters



### Additional chambers for further cables

Routing of additional cables with small diameters such as electrical or hydraulic cables is possible in the chambers under the main chamber. Dividers can be used for additional separation of the cables.



Subject to change.

**Do you need further information?**  
Please do get in touch with us, we will be pleased to help you.

## Types 1455, 1555 and 1665

Inside heights

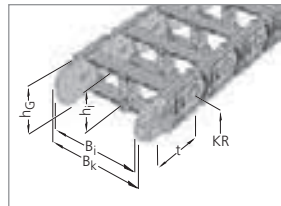


Inside widths



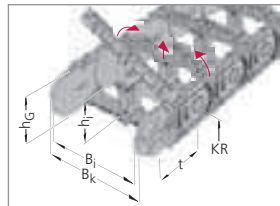
### Design 020

Inside/Outside:  
Not to be opened



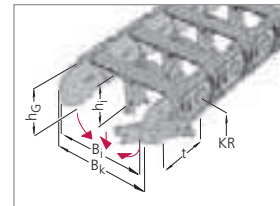
### Design 030

Outside: Hinged, openable (on the right/left) and detachable brackets



### Design 040

Inside: Hinged, openable (on the right/left) and detachable brackets



### Dimensions and intrinsic chain weight

Type	h <sub>i</sub>	h <sub>G</sub>	Inside widths B <sub>i</sub>							B <sub>k</sub>		
			Intrinsic chain weight									
1455	26	36	25	38	58	78	103	–	–	–	B <sub>i</sub> + 16	
			0.73	0.75	0.80	0.88	0.98	–	–	–		
1555	38	50	50	75	90*	100	125	150	–	–	B <sub>i</sub> + 18	
			1.13	1.23	1.29	1.32	1.42	1.51	–	–		
1665	44	60	50	75	100	125	150	175	200**	225	250	B <sub>i</sub> + 22
			1.67	1.80	1.92	2.06	2.18	2.31	2.43	2.57	2.70	

\* Design 020 available on request \*\* on request

Dimensions in mm/Weights in kg/m

### Bend radius and pitch

Type	Bend radii KR mm							
1455	52	65	95	125	150	180	200	225*
1555	63	80	100	125	160	200	230**	–
1665	75	100	120	140	200	250	300	–

Pitch:

1455: t = 45.5 mm

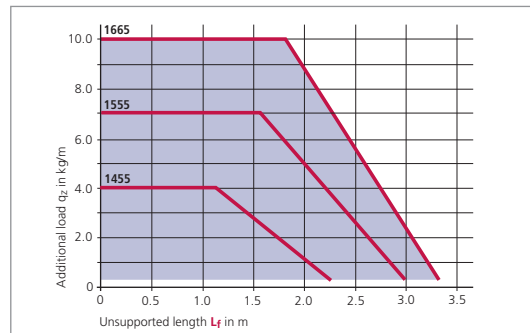
1555: t = 55.5 mm

1665: t = 66.5 mm

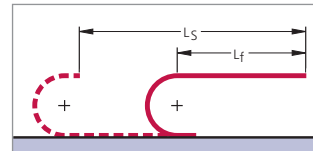
\* on request \*\* B<sub>i</sub> 50 and 75 mm on request

### Load diagram

for unsupported length L<sub>f</sub> depending on the additional load



Unsupported length L<sub>f</sub>



In the case of longer travel lengths, sag of the cable carriers is technically permissible depending on the application.

In a gliding arrangement, even longer travel lengths are possible (see page 295). We are at your service to advise on these applications.

Use our free project planning service.

### Example of ordering

Cable carrier					Divider system		Connection
1555	030	100	125	1332	TS 0	3	FU/MU
Type	Design	Inside width B <sub>i</sub> in mm	Bend radius KR in mm	Chain length L <sub>k</sub> in mm (without connection)	Divider system	Number of dividers n <sub>T</sub>	Connection Fixed point/Driver

#### Ordering divider systems:

Please state the designation of the divider system (TS 0, TS 1 ...) and the number of dividers. Possibly attach a sketch with the dimensions.

## Types 1455, 1555 and 1665

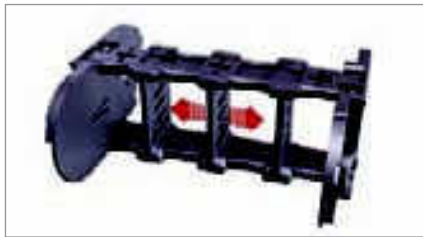
### Fixing of the dividers

In the standard version, dividers or the complete divider system (dividers with height separation) can be moved in the cross section (**Version A**).

Fixed dividers are available for applications with transverse accelerations and where the carrier is rotated through 90° (**Version B**).  
If the fixed installation version is desired, please state this on the order.

### Version A (Standard)

Divider movable



### Version B

Divider fixed in 2.5 mm steps  
With fixed dividers, fixing is by means of arresting cams in the foot of the divider.



■ Locking profile in the crossbar

■ Divider with arresting cams

Inside heights



Inside widths



### Divider system TS 0

Type	h <sub>i</sub> mm	Version A			Version B			
		S <sub>T</sub> mm	a <sub>T</sub> min mm	a <sub>x</sub> min mm	S <sub>T</sub> mm	a <sub>T</sub> min mm	a <sub>x</sub> min mm	a <sub>x</sub> section mm
1455	26	2.0	3.5	7	2.0	4/5*	7.5	2.5
1555	38	2.5	5.0	10	2.5	5	10	2.5
1665	44	3.0	5.0	10	3.0	5	10	2.5

\* a<sub>T</sub> min = 4 mm for B<sub>i</sub> = 38, 58, 78, 103    a<sub>T</sub> min = 5 mm for B<sub>i</sub> = 25



### Divider system TS 1 for Design 030/040 with continuous height subdivision made of aluminium

Type	h <sub>i</sub> mm	Version A				Version B				S <sub>H</sub> mm	h <sub>1</sub> mm	h <sub>2</sub> mm
		S <sub>T</sub> mm	a <sub>T</sub> min mm	a <sub>x</sub> min mm	S <sub>T</sub> mm	a <sub>T</sub> min mm	a <sub>x</sub> min mm	a <sub>x</sub> section mm				
1455	26	2.0	4/5*	7.5	2.0	4/5*	7.5	2.5	2	10	—	
1555	38	2.5	5	10	2.5	5	10	2.5	4	14	—	
1665	44	3.0	5	10	3.0	5	10	2.5	4	14	28	

\* a<sub>T</sub> min = 4 mm for B<sub>i</sub> = 38, 58, 78, 103    a<sub>T</sub> min = 5 mm for B<sub>i</sub> = 25



Subject to change.



## Types 1455, 1555 and 1665

Divider system TS 3 with section subdivision, partitions made of plastic

Inside heights

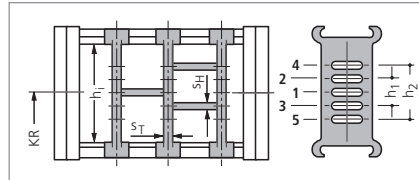
26
44

Inside widths

25
250

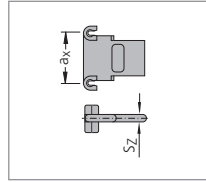
Type	$h_i$ mm	$S_T$ mm	$S_H$ mm	$h_1$ mm	$h_2$ mm
1455	26	5	2.4	10	–
1555	38	5	2.4	12	–
1665	44	8	4.0	14	28

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



In the standard version, the divider systems are mounted on every second chain link.

### Dimensions of the plastic partitions for TS 3



#### Types 1455 and 1555

$S_z$	$a_x$ (Center to center distance, dividers)									
2.4	15	20	25	30	35	40	45	55	65	75

#### Type 1665

$S_z$	$a_x$ (Center to center distance, dividers)									
4	16	18	23	28	32	33	38	43	48	58
	64	68	78	80	88	96	112	128	144	160

Dimensions in mm

For type 1665, aluminium partitions in 1 mm width sections are available.

When using partitions with  $a_x > 112$  mm, there should be an additional central support with a twin divider ( $S_T = 3$  mm).

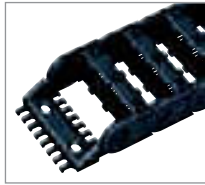
Twin dividers are designed for subsequent fitting in the partition system.

## Types 1455, 1555 and 1665

### Strain relief devices for plastic connectors

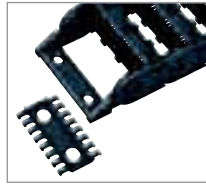
#### ZLK - A

Connecting elements with integrated strain relief combs on both sides (ZLK - A)



#### ZLK - L

Connecting elements with screw-on type strain relief combs (ZLK - L)



The strain relief combs are generally supplied with the connecting elements. The combs are either clipped to the end connectors and bolted together with them, or screwed on at the desired intervals by using additional boreholes, behind the connecting elements.

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Selection

BASIC  
LINE

Inside heights

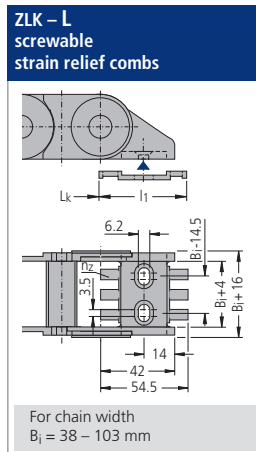
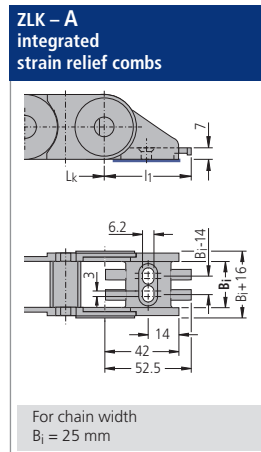


Inside widths



### Connection dimensions for Type 1455

Connecting elements with strain relief combs on both sides



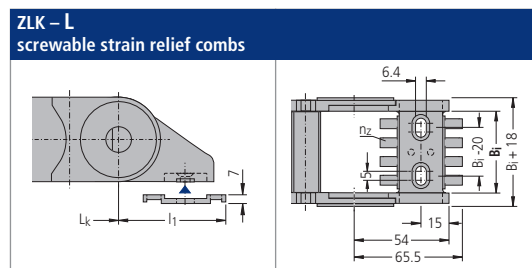
Type	$B_1$	$B_k$	$n_z$
1455. ....25	25	41	2
1455. ....38	38	54	3
1455. ....58	58	74	4
1455. ....78	78	94	6
1455. ....103	103	119	8

Dimensions in mm

The dimensions of the fixed point and driver connections are identical.

### Connection dimensions for Type 1555

Connecting elements with strain relief combs on both sides



Type	$B_1$	$B_k$	$n_z$
1555. ....50	50	68	4
1555. ....75	75	93	6
1555. ....100	100	118	8
1555. ....125	125	143	10
1555. ....150	150	168	12

Dimensions in mm

For chain width  $B_1$  90 mm connectors made of steel are available.

Subject to change.

The dimensions of the fixed point and driver connections are identical.



Inside heights

26  
44

Inside widths

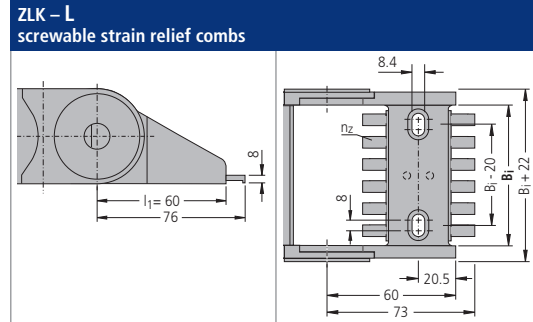
25  
250

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## Types 1455, 1555 and 1665

### Connection dimensions for Type 1665

Connecting elements with strain relief combs on both sides



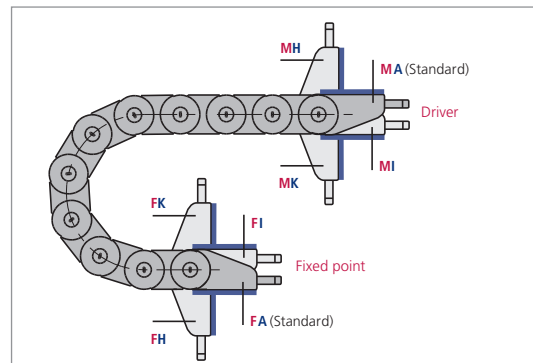
Type	B <sub>i</sub>	B <sub>k</sub>	n <sub>Z</sub>
1665. ... .50	50	72	4
1665. ... .75	75	97	6
1665. ... .100	100	122	8
1665. ... .125	125	147	10
1665. ... .150	150	172	12
1665. ... .175	175	197	14
1665. ... .200*	200	222	16
1665. ... .225	225	247	18
1665. ... .250	250	272	20

\* on request

Dimensions in mm

The dimensions of the fixed point and driver connections are identical.

### Connection variants



#### Connection point

- M** – Driver
- F** – Fixed point

#### 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

In the standard version, the connectors are mounted with the threaded joint outwards (**FA/MA**).

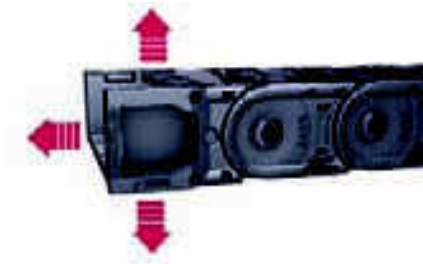
When ordering please specify the desired connection type (see ordering key on page 334).

The connection type can subsequently be altered simply by varying the connectors.

## Types 1455, 1555 and 1665

### Universal mounting brackets

With plastic UMBS (Universal Mounting Brackets), you can easily connect the UNIFLEX from above, from below, or at head height.



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Selection

BASIC  
LINE

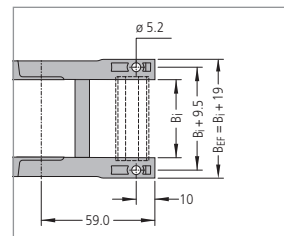
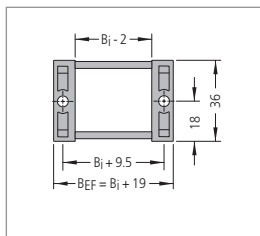
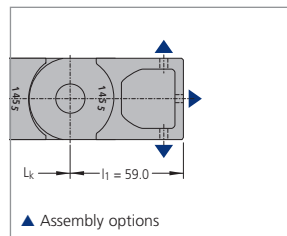
Inside heights

26  
44

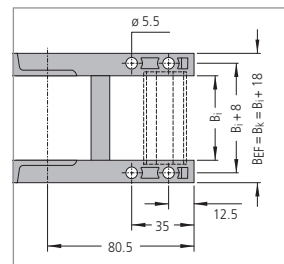
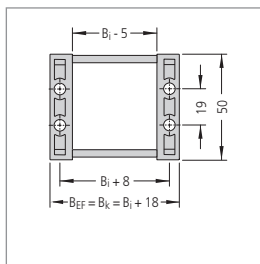
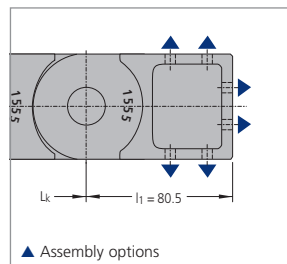
Inside widths

25  
250

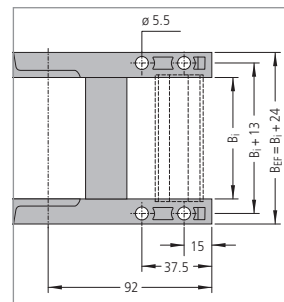
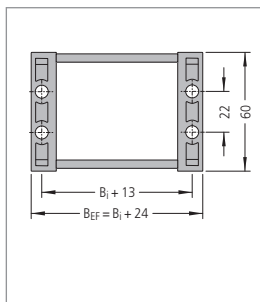
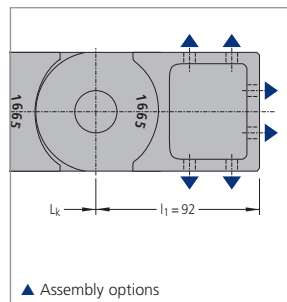
#### UNIFLEX 1455



#### UNIFLEX 1555



#### UNIFLEX 1665



The dimensions of the fixed point and driver connections are identical.  
When ordering please specify the connection type FU/MU (see ordering key on page 334).

Subject to change.

Inside heights



Inside widths



## Types 1455, 1555 and 1665

### Strain relief devices

#### One-sided strain relief combs made of plastic (UNIFLEX 1455)

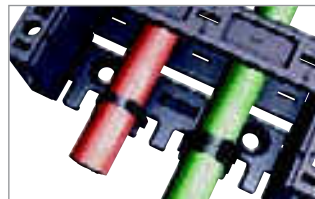
The cables can be fixed securely and simply using the **optional strain relief combs**.

The strain relief combs are installed between the UMBs, and do not need to be bolted on separately or mounted on a C-Rail.

Please state on the order whether strain relief combs are needed.



■ Universal mounting bracket with strain relief comb



■ One-sided strain relief comb



■ Fixing in the UMB

Type	B <sub>i</sub> mm	n <sub>z</sub>
1455. ... .25	25	2
1455. ... .38	38	3
1455. ... .58	58	5
1455. ... .78	78	7
1455. ... .103	103	9

n<sub>z</sub> = Number of teeth

#### Both-sided strain relief combs made of plastic (UNIFLEX 1555/1665)

The cables can be fixed securely and simply using the **optional strain relief combs**.

The strain relief combs are installed between the UMBs, and do not need to be bolted on separately or mounted on a C-Rail.

Please state on the order whether strain relief combs are needed.



■ Universal mounting bracket with strain relief comb



■ Both-sided strain relief comb



■ Fixing in the UMB

Type	B <sub>i</sub> mm	n <sub>z</sub>	Type	B <sub>i</sub> mm	n <sub>z</sub>
1555. ... .50	50	3	1665. ... .50	50	3
1555. ... .75	75	5	1665. ... .75	75	5
1555. ... .90	90*	7	1665. ... .100	100	7
1555. ... .100	100	7	1665. ... .115	115	8
1555. ... .125	125	9	1665. ... .125	125	9
1555. ... .150	150	11	1665. ... .150	150	11
			1665. ... .175	175	13
			1665. ... .225	225*	17
			1665. ... .250	250*	19

n<sub>z</sub> = Number of teeth on one side of the comb

\* on request

Subject to change.

## Types 1455, 1555 and 1665

### Strain relief devices

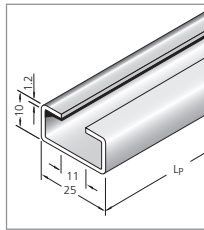
#### C-rails for LineFix bracket clamps, SZL strain reliefs and clamps (UNIFLEX 1555/1665)

The optional C-rails are fixed by means of the universal mounting brackets and do not have to be screwed separately.

Please state in your order whether C-rails are needed.



■ Universal mounting bracket with C-rail

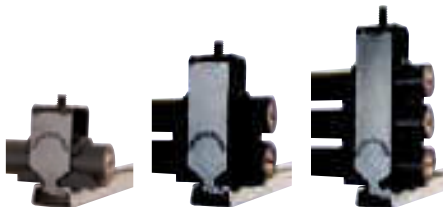


■ Integrable C-rail  
25 x 10 mm,  
slit width 11 mm,  
material steel,  
Item-No. 3931

Our LineFix strain reliefs are optimally suited for the C-rails (LineFix bracket clamps and other strain relief devices – see Accessories chapter, from page 302 onwards).



■ C-rail with LineFix strain relief



Guide channels  
➤ from page 295



Strain relief devices  
➤ from page 302



Cables for cable carrier systems  
➤ from page 344



Subject to change.

**UNIFLEX**  
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Selection  
BASIC  
LINE

Inside heights



Inside widths

