

KABELSCHLEPP

QuickTrax[®] series



PLASTIC CABLE CARRIER

QUICK OPENING

WITH FILM HINGE

TWO-COMPONENT TECHNOLOGY



QuickTrax® series

Compact and cost-effective
cable carriers in two-component
technology





Inner height
20 mm



Inner widths
15 – 65 mm



Pitch
32 mm



Additional load
up to 3 kg/m



**Travel length
unsupported**
up to 3 m



**Travel length
gliding**
up to 80 m



Travel speed
up to 10 m/s

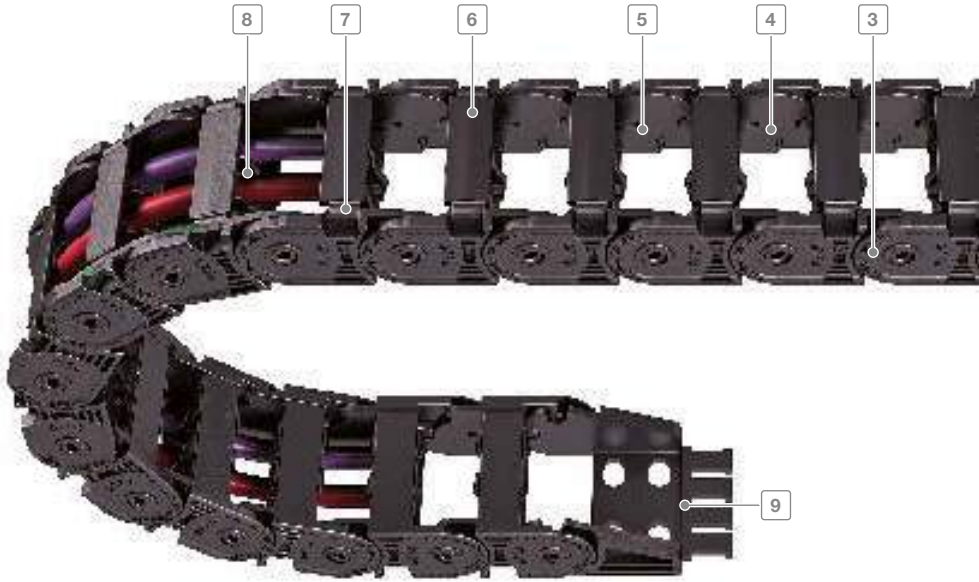


**Travel
acceleration**
up to 50 m/s²

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



Features

- Extremely fast and easy cable laying thanks to crossbar with film hinge
- Extremely low noise due to integrated noise damping
- Extensive unsupported length
- Each chain link consists of two different materials:
 - Hard cable carrier body made of glass fiber-reinforced material
 - Crossbar with flexible film hinge made of elastic special plastic
- Sturdy chain design
- High torsional rigidity



Easy to open ...



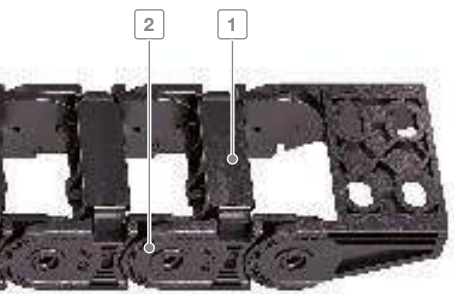
... even without tools



High side stability



Reliable cable separation



Example of inner distribution

- 1 Sturdy two-component design: Hard cable carrier body, flexible film hinge
- 2 Chain links made of plastic
- 3 Extensive unsupported length
- 4 Inside space is gentle on the cables – no interfering edges
- 5 Extremely low noise due to integrated noise damping
- 6 Quick and easy to open
- 7 For inward/outward opening
- 8 Dividers and height separations for cable separation
- 9 Single-part end connectors with and without integratable strain relief

Inner heights

20

Inner widths

15

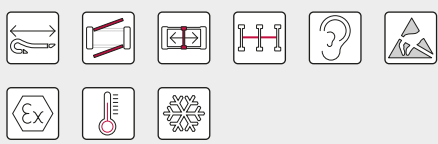
65

Key for abbreviations on page 22

Assembly instructions on kabelschlepp.de/assembly

Selection criteria for QuickTrax®

- Where extremely fast cable laying is required
- For high fill levels
- Where an extensive unsupported length is required
- Where rigidity is required
- For low noise applications



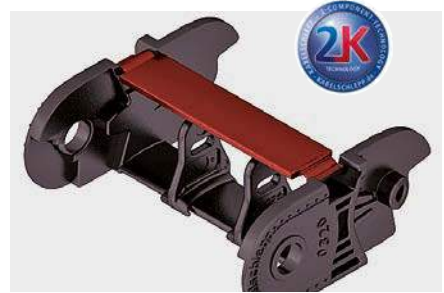
Type	h _i [mm]	B _i [mm]	t [mm]	Page
QT0320	20	15 – 65	32	8

Cable carrier design

Solid plastic cable carriers: Side bands and end connectors made of plastic

Each chain link consists of two different materials:

- Hard cable carrier body made of glass fiber-reinforced material
- Crossbar with flexible film hinge made of elastic special plastic



The two-component technology of the QT0320

The two-component technology of the **QT0320** combines two seemingly incompatible features: **Stability and flexibility.**

Cable carriers need to be extremely sturdy, with extensive unsupported length. At the same time, cables need to be inserted easily for fast cable laying.

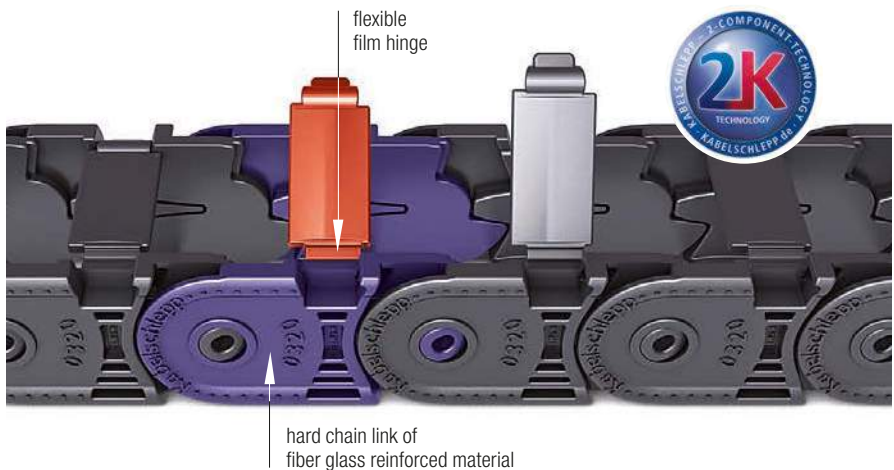
The **QT0320** meets these requirements thanks to its innovative design and material combination of a hard cable carrier body made from glass fiber-reinforced material and crossbars with a film hinge made from rigid special plastic.



high flexibility



high stability

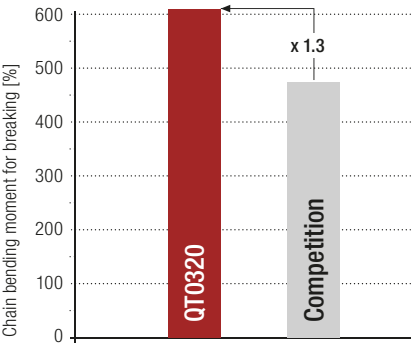


Comparison of dimensions

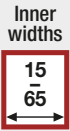
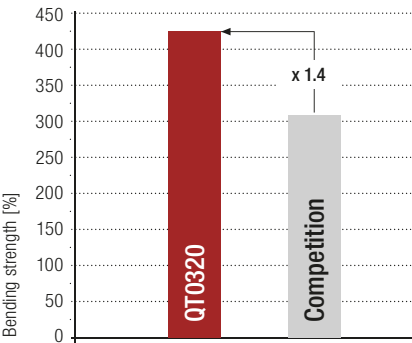
Manufacturer	h _i [mm]	h _G [mm]	t [mm]	Identical connection hole pattern
QT0320	20.0	25.5	32.0	yes
Competitive product	17.5	23.0	30.5	yes



Comparison of bending moment



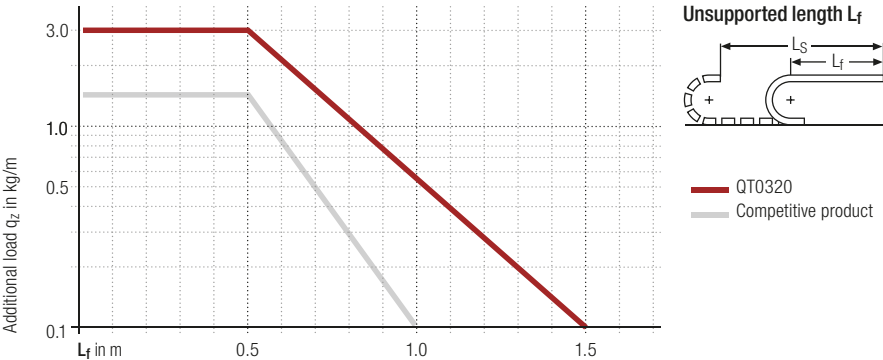
Comparison of bending strength



Key for abbreviations
on page 22

Load diagram

for unsupported length depending on additional load



Assembly instructions on
kabelschlepp.de/assembly

Advantages over competitive product

- 20 % longer unsupported length compared to competitive product
- 33 % greater additional load through use of fiber glass reinforced plastic
- Greater inner height
- Low noise operation due to internal damping system
- High side stability through locking in the stroke system
- Dividers can be used for cable separation

QT0320



kabelschlepp.de/
quicktrax

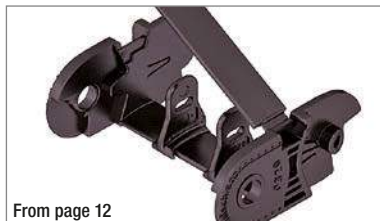
Configure your cable carrier:
onlineengineer.de

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

Stay variants

Design 030



From page 12

Frame with outside opening crossbars

- Weight-optimized plastic frame with particularly high torsional rigidity.
- Swivable slats on one side in any position.

Opening options
outside: Swivable.



Design 040



From page 14

Frame with inside opening crossbars

- Weight-optimized plastic frame with particularly high torsional rigidity.
- Swivable slats on one side in any position.

Opening options
inside: Swivable.





Inner heights



Inner widths



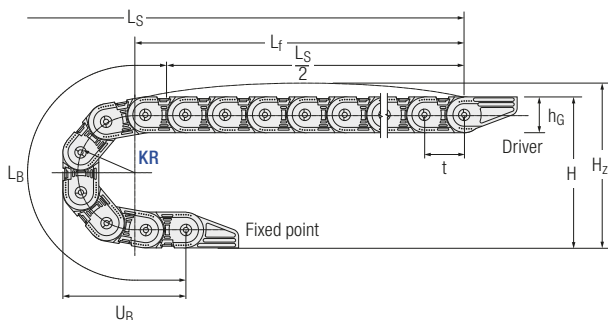
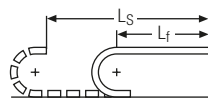
Key for abbreviations
on page 22

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 20



Unsupported arrangement

Unsupported length L_f 

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

Dynamics of unsupported arrangement

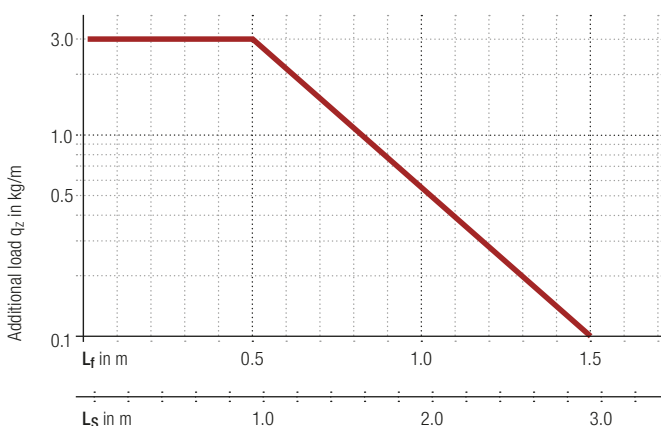
v_{max} [m/s]	a_{max} [m/s ²]	t [mm]
10	50	32

Installation dimensions unsupported

KR [mm]	H [mm]	H _z [mm]	L _B [mm]	U _B [mm]
28	81,5	101,5	152	73
38	101,5	121,5	184	83
48	121,5	141,5	215	93
75	175,5	195,5	300	120
100	225,5	245,5	379	145
125	275,5	295,5	457	170

Load diagram

for unsupported length depending on additional load



Calculating the cable carrier length

Cable carrier length L_k

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

Cable carrier length L_k
rounded to pitch t

Unsupported length L_f

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

Fixed point
offset L_f :

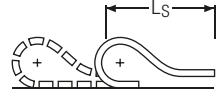
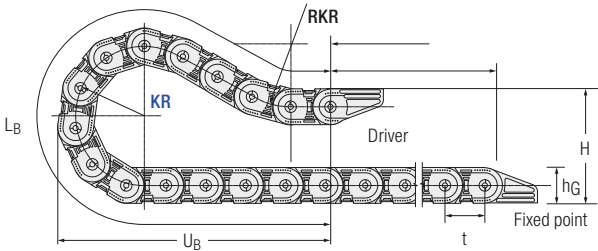
For off-center fixed
point connections
please contact us.



Intrinsic cable carrier weight $q_k = 0.40$ kg/m with B_i 38 mm.

For other inner widths the maximum additional load changes.

Gliding arrangement



 For more information on gliding arrangement please contact us.

Inner heights
20

Inner widths
15
65

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

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

Calculating the cable carrier length

Cable carrier length L_k

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

Cable carrier length L_k
rounded to pitch t

Key for abbreviations
on page 22

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 20



TSUBAKI KABELSCHLEPP Technical Support

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



Stay variant 030 – with outside opening crossbars

- Weight-optimized plastic frame with particularly high torsional rigidity.
- Swivable slats on one side in any position.
- **Opening options outside:** Swivable.



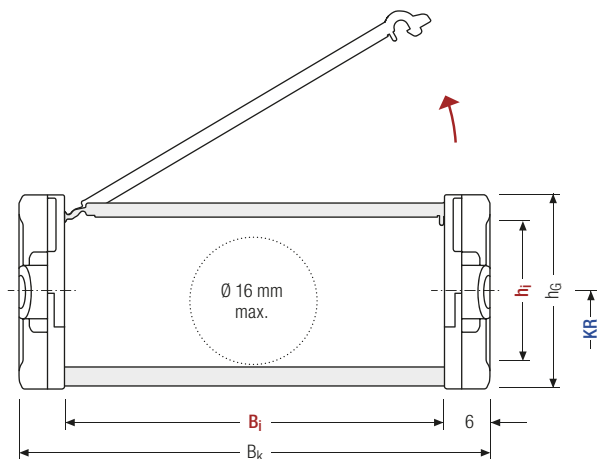
Stay arrangement on every chain link (**VS**)



B_i from 15 – 65 mm

Technical support:
technik@kabelschlepp.de

[online-engineer.de](https://www.online-engineer.de)
Cable Carrier Configurator



Calculating the cable carrier width

Outer width B_k

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



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



Information on the inner distribution of the cable carrier can be found on page 16 f.

QT0320.030 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h _i [mm]	h _G [mm]
32	20	25.5

Inner heights



Bend radii

KR [mm]					
28	38	48	75	100	125

Inner widths



Inner/outer width and intrinsic cable carrier weight

B _i [mm]	B _k [mm]	q _k [kg/m]
15	27	0.35
25	37	0.38
38	50	0.40
50	62	0.43
65	77	0.45

Key for abbreviations
on page 22

Order example



QT0320	030	50	100	1,280
Type	Stay variant	B _i [mm]	KR [mm]	L _k [mm]

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 20



Stay variant 040 – with inside opening crossbars

- Weight-optimized plastic frame with particularly high torsional rigidity.
- Swivable slats on one side in any position.
- Opening options
inside: Swivable.

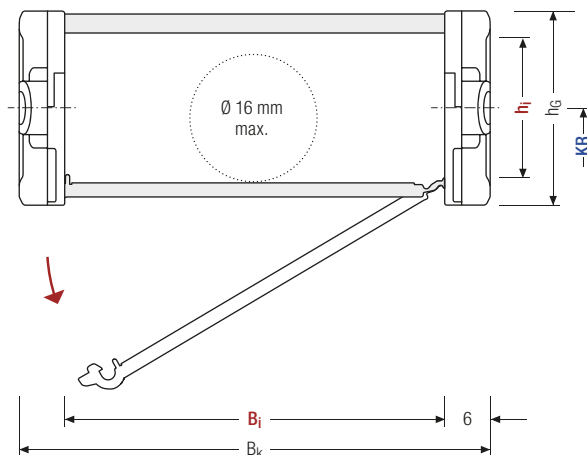


Stay arrangement on every chain link (VS)



B_i from 15 – 65 mm

Technical support:
technik@kabelschlepp.de



Calculating the cable carrier width

Outer width B_k

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



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



QT0320.040 | Dimensions · Technical Data

Pitch, inner height and chain link height

t [mm]	h _i [mm]	h _G [mm]
32	20	25.5

Inner heights
20

Bend radii

KR [mm]					
28	38	48	75	100	125

Inner widths
15
65

Inner/outer width and intrinsic cable carrier weight

B _i [mm]	B _k [mm]	q _k [kg/m]
15	27	0.35
25	37	0.38
38	50	0.40
50	62	0.43
65	77	0.45

Key for abbreviations
on page 22

Order example



QT0320	040	50	100	1,280
Type	Stay variant	B _i [mm]	KR [mm]	L _k [mm]

Assembly instructions on
kabelschlepp.de/assembly

Order key
on page 20



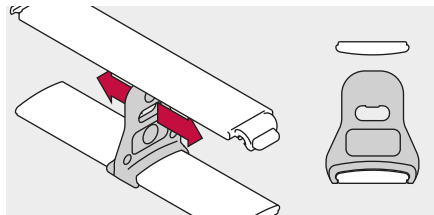
Divider systems

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**).

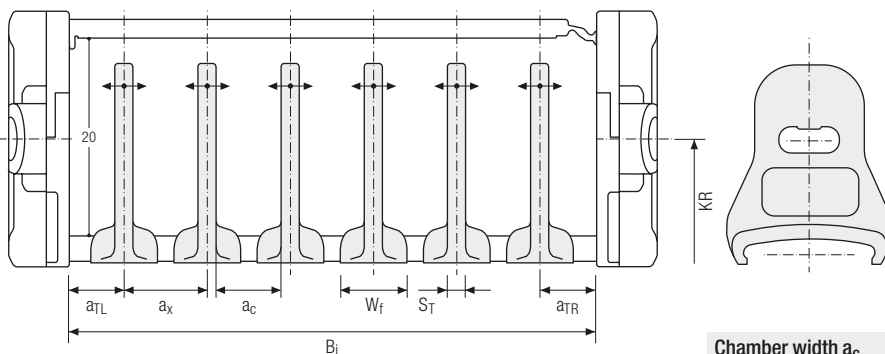
Movable divider

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

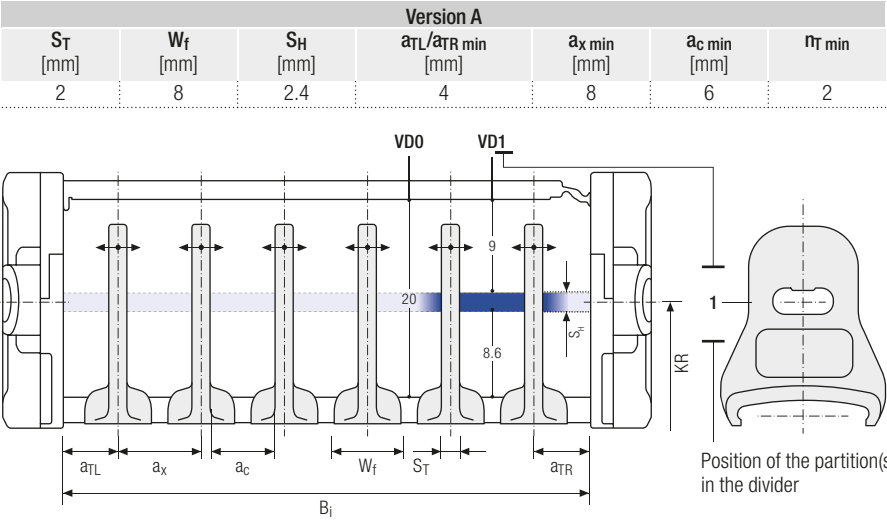


Chamber width a_c

$$a_c = a_x - S_T$$

QT0320 | Inner Distribution | TS1

Divider system TS1 with continuous height separation



Standard height separation with **aluminum profile 6 × 2.4 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

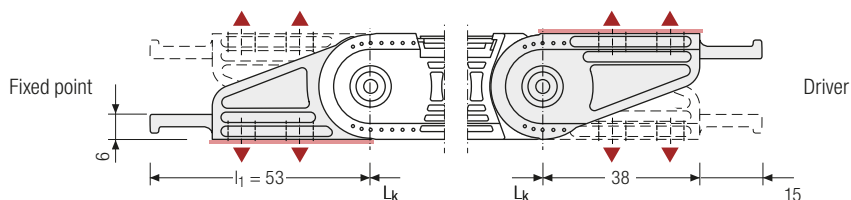


Configure your custom
cable carrier:
onlineengineer.de

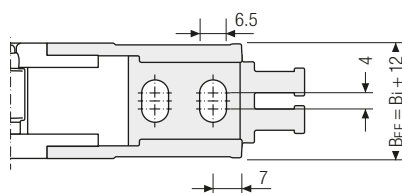
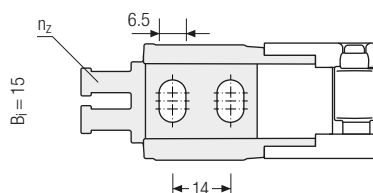
Information on the connection dimensions for the cable carrier can be found on page 18.

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

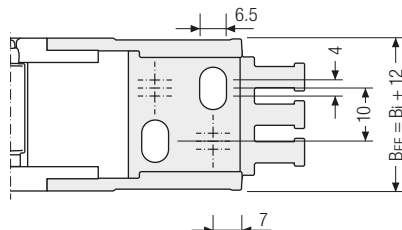
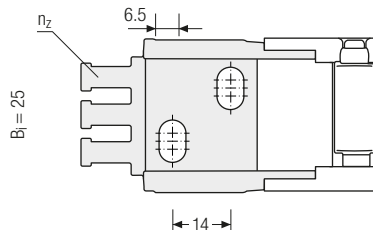
The plastic end connectors can be **connected from above or below**. The connection type can be changed by reconnecting the end connector.



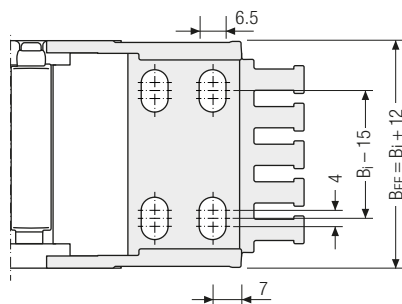
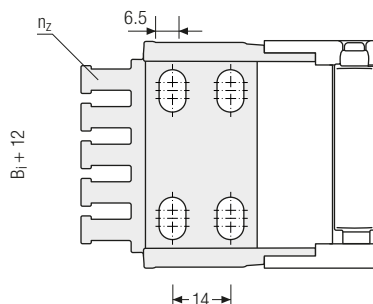
Bi: 15



Bi: 25



Bi: 38/50/65



▲ Assembly options

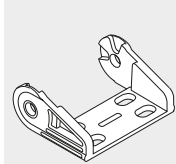
kabelschlepp.de/
quicktrax

Configure your cable carrier:
onlineengineer.de

Technical support:
technik@kabelschlepp.de

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

Inner heights

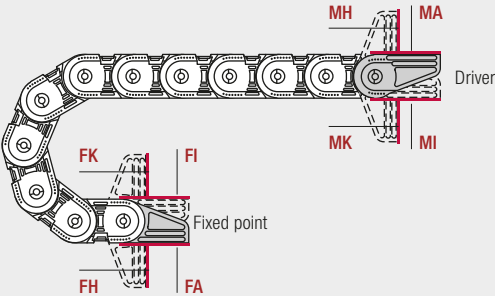


Inner widths



 The end connectors cannot be swiveled.

Connection variants



Connection point

- F – fixed point
- M – driver

Connection type

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

Key for abbreviations on page 22

Assembly instructions on kabelschlepp.de/assembly

Order key on page 20



QT0320 | Order Key

Order

Cable carrier

Type	Stay variant	B _i [mm]	KR [mm]	L _K [mm]
QT0320		15	28	
		25	38	
		38	48	
		50	75	
	030	50	100	
	040	65	125	

QT0320	030	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].

Connection variant

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

End connector	F	A
End connector	M	A

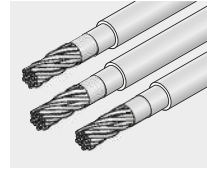


Please state the desired connection variant as well as the desired strain relief type for the fixed point and for the driver.

Accessories

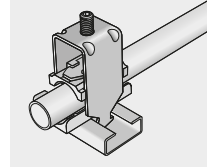
TRAXLINE® cables in motion

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



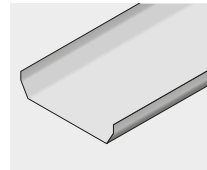
LineFix® clamps

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



Support trays

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



Inner heights



Inner widths



Key for abbreviations on page 22

Assembly instructions on kabelschlepp.de/assembly

Order key on page 20



TOTALTRAX® complete systems

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

More product information online



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



Configure your custom cable carrier:
onlineengineer.de

General abbreviations

a_c	= nominal width inner chamber	l_{2-5}	= connection dimensions
a_{max}	= max. travel acceleration	l_A	= length of end connector
a_{TL}	= distance lateral tabs inside to center of first divider	L_B	= length of carrier in bend
a_{TR}	= distance lateral tabs inside to center of last divider	L_D	= length of permitted sag
a_x	= divider center to center distance	L_f	= unsupported length
b_1	= inner width of guide channel	L_{ES}	= length of energy conduit
b_A	= distance between connection boreholes	L_k	= cable carrier length without connection
B_{EF}	= overall width of cable carrier incl. attachments	L_S	= travel length
B_i	= inner width	L_v	= fixed point offset
B_k	= outer width	n_p	= number of hole stay inserts
B_{KA}	= outer width of guide channel	n_{RKR}	= number of RKR links
B_p	= width of hole stay inserts	n_T	= number of dividers
B_{St}	= stay width	n_Z	= number of comb teeth for strain relief
c	= distance between hole stay bores	q_k	= intrinsic cable carrier weight
d	= diameter	q_z	= additional load
D	= bore diameter	RKR	= reverse bending radius
d_R	= pipe diameter	s	= sheet metal thickness
H	= connection height	S_H	= thickness of height separation
H'	= reduced connection height	S_T	= thickness of divider
h_G	= chain link height	t	= pitch
$h_{G'}$	= chain link height incl. glide shoe	U_B	= loop overhang
h_i	= inner height	VD	= position of continuous height separations in divider
H_i	= inner height of frame stay assembly	VR	= position of partial height separations in divider
h_{KA}	= outer height of guide channel	v_{max}	= max. travel speed
HS	= half-stayed	VS	= fully-stayed
H_z	= installation height	W_f	= base width of divider
KR	= bending radius	z	= pretension
l_1	= connection length		

Definitions

Driver view = view into the driver connection

Pictographs

	inner height		stay arrangement on every 2 nd chain link		clean room suitable
	inner width		stay arrangement on every chain link		quiet running/low noise
	inner width (B _i) in x mm increments		cannot be opened		sold by the meter
	pitch		opens outward		ESD material
	bending radius		opens inward		suitable for explosive atmospheres
	long travel length		opens inward/outward		heat-resistant
	travel length unsupported		covered cable carrier		cold-resistant
	travel length gliding		sliding dividers		resistant to hot chips
	high additional load		fixable dividers		flame-resistant V0 (UL94)
	high travel acceleration		fixable dividers in x mm grid		flame-resistant V2 (UL94)
	high travel velocity		height separation possible		order code
			height separation in 1 mm increments		important information
			hole stay available		
			guide channel required		
			strain relief		

Inner heights



Inner widths



Key for abbreviations on page 22

Assembly instructions on kabelschlepp.de/assembly