

# PROTUM<sup>®</sup> series

Small, light cable carriers  
for unsupported applications

P0240 GS



product  
design award

2015

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Subject to change.



Inner heights

10  
25

Inner widths

15  
50

[tsubaki-kabelschlepp.com/protum](http://tsubaki-kabelschlepp.com/protum)

- 1 End connectors with strain relief comb
- 2 Very long service life – no links and therefore no link wear
- 3 Very good ratio of usable space to outer dimensions
- 4 Variant for office use
- 5 Solid plastic cable carrier
- 6 Cables are simply pressed in

## Characteristics

- Quiet running through short pitch
- Low-vibration operation
- Ideal for short travel lengths and high travel speeds
- Gentle on the cables due to virtually no polygon effect
- Cost savings through easy cable installation
- Installation of pre-assembled cables also possible
- Belt with clip-on side parts
- Easy adaptation of the chain length
- Low weight, good ratio between inner and outer width



End connectors with integrated strain relief comb



Cables are simply pressed in



The basic structure: belt with clip-on side parts



PROTUM OFFICE for office furniture and interiors

Key for abbreviations  
on page 12

 Design guidelines  
from page 38

 Technical support:  
technik@kabelschlepp.de

 online-engineer.de  
Cable Carrier Configurator

Type	Opening variant	Stay variant	$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]	$B_k$ [mm]	$B_i$ - grid [mm]	t [mm]	KR [mm]	Additional load ≤ [kg/m]	$d_{max}$ [mm]
<b>P0160</b>		010	15	25	15–30	19–34	–	16	18–48	0.26	12
<b>P0240</b>		010	20	31	20–40	25–45	–	24	27–72	0.5	16
<b>P0240 GS</b>		010	10	23	50	54	–	24	–	–	8
<b>P0300</b>		010	25	43	25–45	31–51	–	30	34–90	0.8	20


**Technical manual**

Do you need more information on the PROTUM® series?  
Our technical manual with all information on configuring your cable carrier can be found at [tsubaki-kabelschlepp.com/download](https://tsubaki-kabelschlepp.com/download).

# PROTUM® series | Overview

Unsupported arrangement			Gliding arrangement			Inner distribution				Installation variants			Page
Travel length ≤ [m]	$v_{max} \leq [m/s]$	$a_{max} \leq [m/s^2]$	Travel length ≤ [m]	$v_{max} \leq [m/s]$	$a_{max} \leq [m/s^2]$	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
										●	-	-	194
1.18	25	200	-	-	-	-	-	-	-	-	-	-	
1.5	25	200	-	-	-	-	-	-	-	●	-	-	198
-	-	-	-	-	-	-	-	-	-	(●)	-	-	201
1.85	25	200	-	-	-	-	-	-	-	●	-	-	208

Inner heights



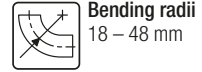
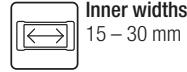
Inner widths



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# P0160

Key for abbreviations  
on page 12



## Stay variants

Design guidelines  
from page 38



**Design 010** ..... page 194

**Frame with lamella crossbars in the inner radius**

- Belt with clip-on side parts.
- **Outside:** for pressing in.

Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)

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



### TOTALTRAX® complete systems

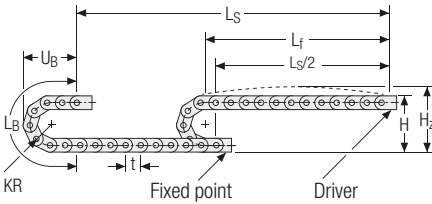
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at [tsubaki-kabelschlepp.com/totaltrax](http://tsubaki-kabelschlepp.com/totaltrax)



### TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at [traxline.de](http://traxline.de).

## Unsupported arrangement



KR [mm]	H [mm]	H <sub>z</sub> [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [mm]
18	76	91	89	54
28	96	111	120	64
38	116	131	152	74
48	136	151	183	84

Inner heights



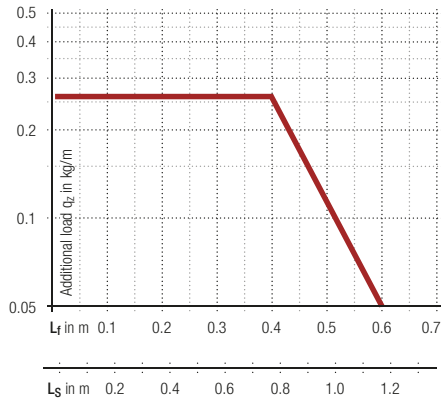
Inner widths



**Load diagram for unsupported length** depending on the additional load.

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

Intrinsic cable carrier weight  $q_k = 0.21$  kg/m with B<sub>i</sub> 30 mm. For other inner widths, the maximum additional load changes.



**Speed**  
up to 25 m/s



**Acceleration**  
up to 200 m/s<sup>2</sup>



**Travel length**  
up to 1.18 m



**Additional load**  
up to 0.26 kg/m

[tsubaki-kabelschlepp.com/protum](http://tsubaki-kabelschlepp.com/protum)

### Additional product information online



Installation instructions, etc.:  
Additional info via your smartphone  
or check online at  
[tsubaki-kabelschlepp.com/support](http://tsubaki-kabelschlepp.com/support)



Configure your cable carrier here:  
[online-engineer.de](http://online-engineer.de)

**Stay variant 010 –**  
with crossbars in the outer radius

- Belt with clip-on side parts.
- **Outside:** for pressing in.



Key for abbreviations  
on page 12

Design guidelines  
from page 38

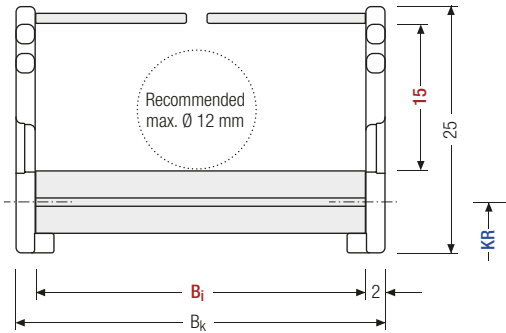
Technical support:  
technik@kabelschlepp.de



Stay arrangement on each chain link (**VS: fully stayed**)



$B_i$  15 – 30 mm



The maximum cable diameter strongly depends on the bending radius and the desired cable type. 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  $t$

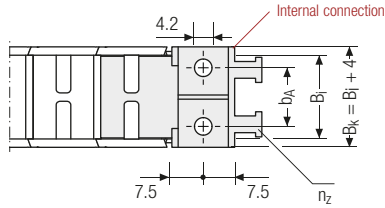
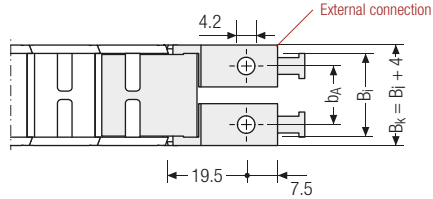
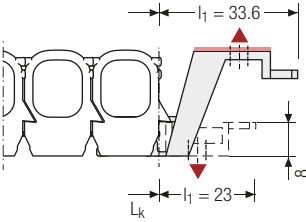
$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]			$B_k$ [mm]	$KR$ [mm]				$q_k$ [kg/m]
15	25	15	20	30	$B_i + 4$	18	28	38	48	0.14 – 0.21

**Order example**

P0160
Type
·
010
Stay variant
·
20
 $B_i$  [mm]
·
38
 $KR$  [mm]
·
440
 $L_k$  [mm]
·
VS
Stay arrangement

Single-part end connectors – plastic (with integrated strain relief)

The plastic end connectors can be **connected from above or below**. The correct end connector has to be chosen in each case.



Inner heights



Inner widths

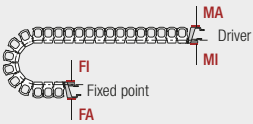


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protum

▲ Assembly options

$B_i$ [mm]	$b_A$ [mm]	$n_z$
15	11	2
20	14	2
30	22	3

The end connectors cannot be swivelled.



Connection point

- F – fixed point
- M – driver

Connection type

- A – threaded joint outside (standard)
- I – threaded joint inside

Order example

	Ext. connection	F	A
	Int. connection	M	A
	End connector	Connection point	Connection type



# P0240

Key for abbreviations  
on page 12



## Stay variants

Design guidelines  
from page 38



**Design 010** ..... page 198

**Frame with crossbars in the outer radius**

- Belt with clip-on side parts.
- **Outside:** for pressing in.

Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)

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



### TOTALTRAX® complete systems

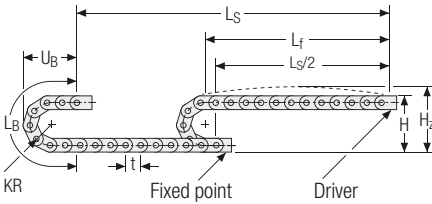
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at [tsubaki-kabelschlepp.com/totaltrax](http://tsubaki-kabelschlepp.com/totaltrax)



### TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at [traxline.de](http://traxline.de).

## Unsupported arrangement

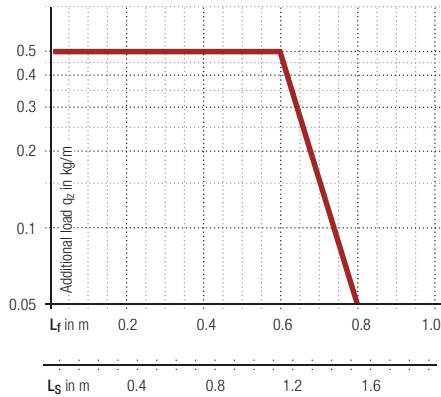


KR [mm]	H [mm]	H <sub>z</sub> [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [mm]
27	106	126	133	77
42	136	156	180	92
57	166	186	227	107
72	196	216	275	122

**Load diagram for unsupported length** depending on the additional load.

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

Intrinsic cable carrier weight  $q_k = 0.27$  kg/m with B<sub>1</sub> 40 mm. For other inner widths, the maximum additional load changes.



**Speed**  
up to 25 m/s



**Acceleration**  
up to 200 m/s<sup>2</sup>



**Travel length**  
up to 1.5 m



**Additional load**  
up to 0.5 kg/m

Inner heights



Inner widths



[tsubaki-kabelschlepp.com/protum](http://tsubaki-kabelschlepp.com/protum)

### Additional product information online



Installation instructions, etc.:  
Additional info via your smartphone  
or check online at  
[tsubaki-kabelschlepp.com/support](http://tsubaki-kabelschlepp.com/support)



Configure your cable carrier here:  
[online-engineer.de](http://online-engineer.de)

**Stay variant 010 – with cross-bars in the outer radius**

- Belt with clip-on side parts.
- **Outside:** for pressing in.



Key for abbreviations on page 12

Design guidelines from page 38

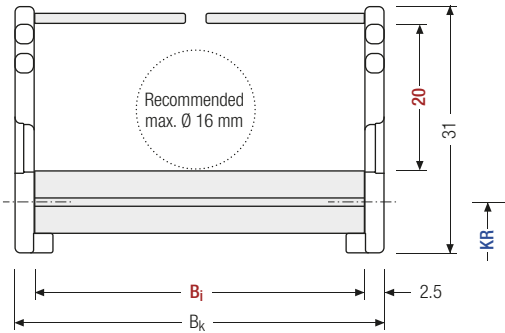
Technical support: technik@kabelschlepp.de



Stay arrangement on each chain link (**VS: fully stayed**)



$B_i$  20 – 40 mm



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

$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]			$B_k$ [mm]	$KR$ [mm]				$q_k$ [kg/m]
20	31	20	30	40	$B_i + 5$	27	42	57	72	0.18 – 0.27

**Order example**

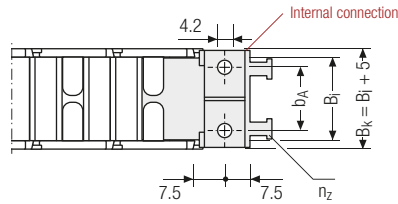
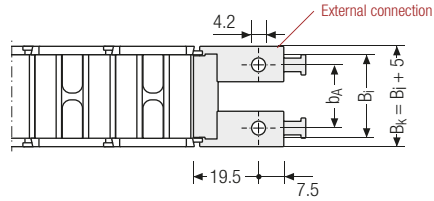
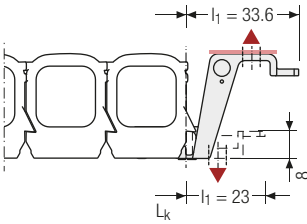
P0240
Type · 
 010
Stay variant · 
 30
 $B_i$  [mm] · 
 42
 $KR$  [mm] · 
 440
 $L_k$  [mm] · 
 VS
Stay arrangement

# P0240 | End connectors | End connectors

**PROTUM®**  
series

## Single-part end connectors – plastic (with integrated strain relief)

The plastic end connectors can be **connected from above or below**. The correct end connector has to be chosen in each case.



### ▲ Assembly options

$B_i$ [mm]	$b_A$ [mm]	$n_z$
20	11	2
30	22	3
40	32	3

Inner heights

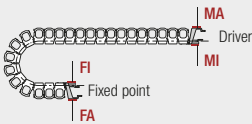


Inner widths



[tsubaki-kabelschlepp.com/](http://tsubaki-kabelschlepp.com/)  
protum

 The end connectors cannot be swivelled.



### Connection point

**F** – fixed point  
**M** – driver

### Connection type

**A** – threaded joint outside (standard)  
**I** – threaded joint inside

## Order example



Ext. connection	.	F	A
Int. connection	.	M	A
End connector		Connection point	Connection type

# P0240 GS

## PROTUM OFFICE

Key for abbreviations  
on page 12



Design guidelines  
from page 38

This variant for office use is based on the PROTUM® cable carrier system.

With an inner width of 50 mm and cable installation on both sides, PROTUM OFFICE offers sufficient space for telecommunication, energy and data cables in modern offices.

The linkless design can blend into the environment as a design element, e.g. with elegant silver-grey side walls.

### Small, light cable carrier

- Long service life – no links and therefore no link wear
- Good ratio of usable space to outer dimensions
- Easy installation by pressing in the cables
- Easy to install and fill
- Suitable for retrofitting
- Clean, space-saving installation
- Can be filled on one or both sides

### Easy and fast installation

- Connections for all smooth surfaces
- Standard connection for table frame, round and square
- Up to 4 installation options, depending on connection (magnets, screws, cable ties and adhesive tape)
- Floor connection for sturdy positioning and floor connection

Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)

## Stay variants



### Design 010 ..... page 201

#### Frame with crossbars in the outer radius

- Belt with clip-on side parts.
- **Outside:** for pressing in.

# P0240 GS.010 | Dimensions · Technical data

**PROTUM®**  
series

## Stay variant 010 – with cross-bars in the outer radius

- Belt with clip-on side parts.
- **Outside:** for pressing in.



Inner heights



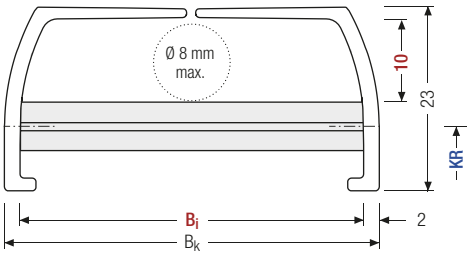
Inner widths



Stay arrangement on each chain link (**fully stayed**)



$B_i$  50 mm



The maximum cable diameter greatly depends on the bending radius and the desired cable type.

$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]	$B_k$ [mm]	$q_k$ [kg/m]
10	23	50	$B_i + 4$	0.28

## Colour variants



Silver-grey

Black

White



For bulk buyers, the colour variants of the belt, the tabs and the connections can be individually combined on request.

## Combination options for end connectors

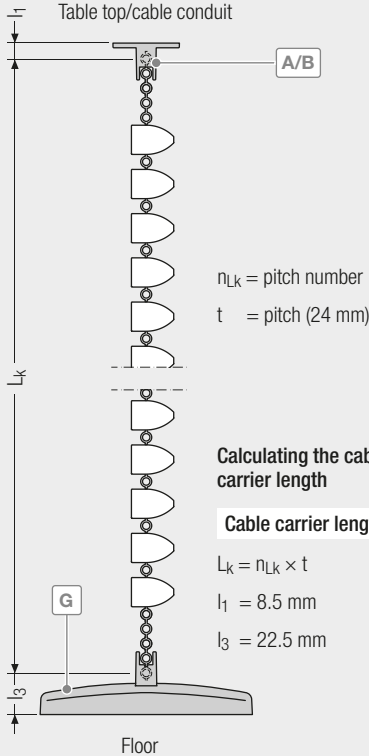
Depending on the design of your office furniture, different combination options are possible for the end connectors. They can be attached underneath table tops/cable conduits, to round or square table legs or to the floor.

Key for abbreviations  
on page 12

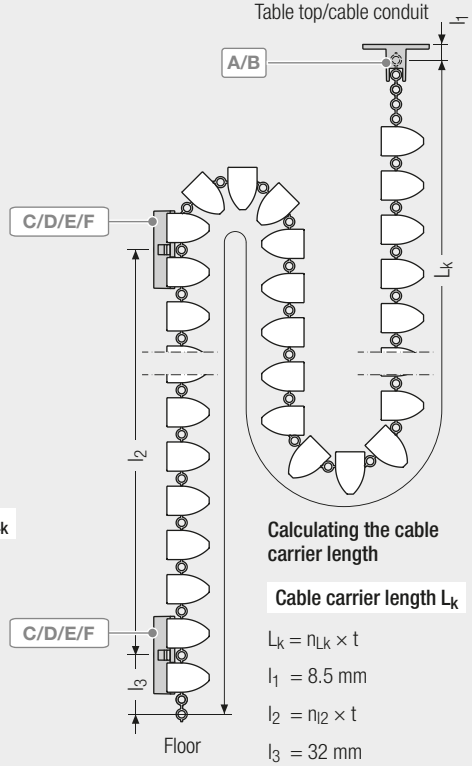
Design guidelines  
from page 38

Technical support:  
technik@kabelschlepp.de

### Combination options for tables without height adjustment



### Combination options for tables with height adjustment



## End connectors

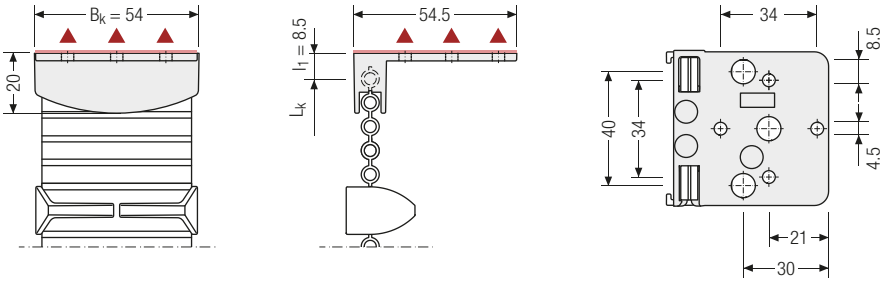


All connections and cable carriers can be combined with each other and are available in the colour variants silver-grey, black and white.

# P0240 GS | End connectors · Table top

## Connection A – angled for table top

Table connection for screw-fixing the cable routing underneath the table top or on a cable conduit.



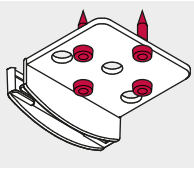
Inner heights



Inner widths



### Fixing variant

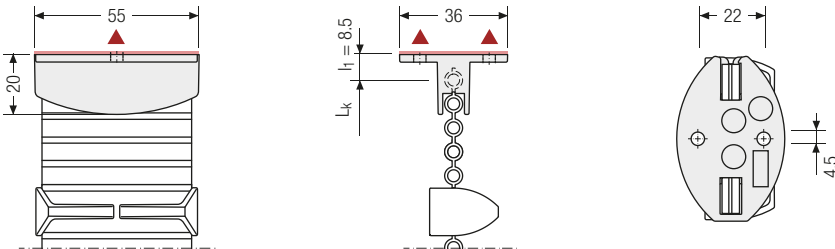


Please state the fixing variant when ordering.  
Screw: 4 mm  
Tightening torque:  
max. 2.5 Nm

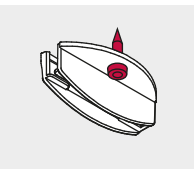
▲ Installation options

## Connection B – oval for table top

Table connection for screw-fixing the cable routing underneath the table top or on a cable conduit.



### Fixing variant



Please state the fixing variant when ordering.  
Screw: 4 mm  
Tightening torque:  
max. 2.5 Nm

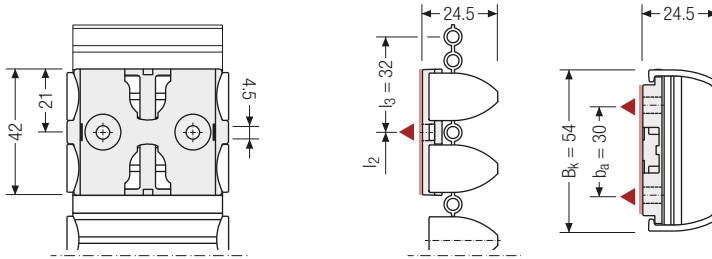
▲ Installation options



# P0240 GS | End connectors · Table frame

## Connection C/E – for flat table frame

Connection for installing the cable routing on a square table frame.  
Fixing with integrated magnets, screws or cable ties.



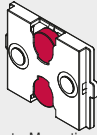
Key for abbreviations  
on page 12

Design guidelines  
from page 38

### Fixing variants

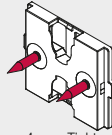
▲ Installation options

#### Connection E



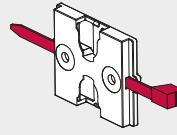
Magnets, Magnetic retention  
force: max. 40 N

#### Connection C



Screw: 4 mm, Tightening  
torque: max. 2.5 Nm

#### Connection C



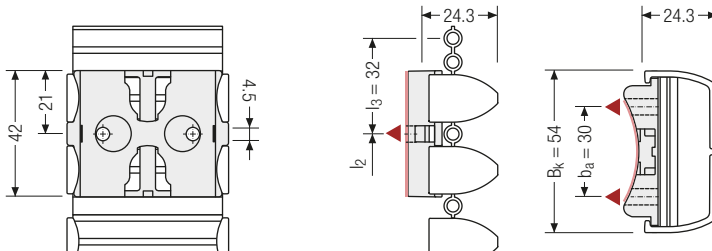
Cable tie: 5 mm

Please state the fixing  
variant when ordering.

Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)

## Connection D/F – for round table frame

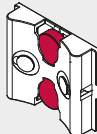
Connection for installing the cable routing on a table frame with 70 mm diameter.  
Fixing with integrated magnets, screws or cable ties.



### Fixing variants

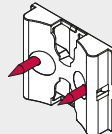
▲ Installation options

#### Connection F



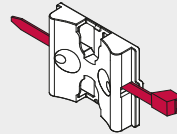
Magnets, Magnetic retention  
force: max. 40 N

#### Connection D



Screw: 4 mm, Tightening  
torque: max. 2.5 Nm

#### Connection D

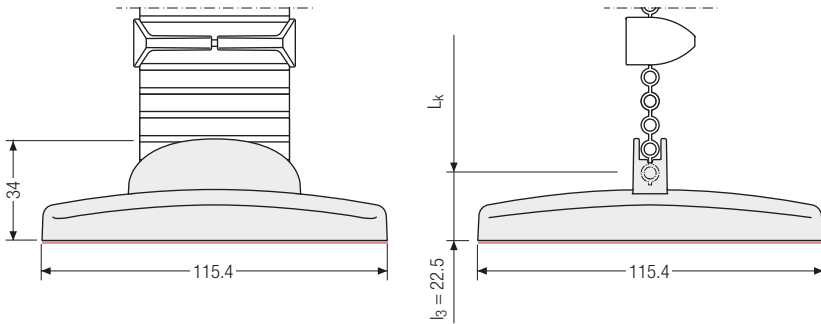


Cable tie: 5 mm

Please state the fixing  
variant when ordering.

## Connection G – floor connection

Floor connection for a clean transition of the cable routing to the floor



Inner heights



Inner widths



## Order

### Standard sets for height-adjustable tables (standing/seated work stations)

	Colour	Order no. SU
Standard set Protum Office for standing/seated work station, total length 1347 mm incl. 1 connection B and 2 connections F for installation underneath a table top and on a round table frame (D=70 mm)	black/ silver-grey	75908
Standard set Protum Office for standing/seated work station, total length 1347 mm incl. 1 connection B and 2 connections F for installation underneath a table top and on a round table frame (D=70 mm)	white	75907
Standard set Protum Office for standing/seated work station, total length 1347 mm incl. 1 connection B and 2 connections F for installation underneath a table top and on a round table frame (D=70 mm)	silver-grey	75906
Standard set Protum Office for standing/seated work station, total length 1347 mm incl. 1 connection B and 2 connections F for installation underneath a table top and on a round table frame (D=70 mm)	black	75905

Standard set Protum Office for standing/seated work station, total length 1347 mm incl. 1 connection B and 2 connections E for installation underneath a table top and on a flat table frame	black/ silver-grey	75904
Standard set Protum Office for standing/seated work station, total length 1347 mm incl. 1 connection B and 2 connections E for installation underneath a table top and on a flat table frame	white	75903
Standard set Protum Office for standing/seated work station, total length 1347 mm incl. 1 connection B and 2 connections E for installation underneath a table top and on a flat table frame	silver-grey	75902
Standard set Protum Office for standing/seated work station, total length 1347 mm incl. 1 connection B and 2 connections E for installation underneath a table top and on a flat table frame	black	75901

### Standard sets for non-height adjustable tables (standard work stations)

	Colour	Order no. SU
Standard set Protum Office for standard work station, total length 823 mm incl. 1 connection B and 1 connection G for installation underneath a table top and the floor transition	black/ silver-grey	75900
Standard set Protum Office for standard work station, total length 823 mm incl. 1 connection B and 1 connection G for installation underneath a table top and the floor transition	white	75898
Standard set Protum Office for standard work station, total length 823 mm incl. 1 connection B and 1 connection G for installation underneath a table top and the floor transition	silver-grey	75897
Standard set Protum Office for standard work station, total length 823 mm incl. 1 connection B and 1 connection G for installation underneath a table top and the floor transition	black	75896

All sets are delivered packaged in a box including fixing materials and installation instructions.

The order number applies for 1 sales unit (SU) = 50 sets. Individual sets only for bulk buyers on request.

# P0300

Key for abbreviations  
on page 12



## Stay variants

Design guidelines  
from page 38



**Design 010** ..... page 208

**Frame with crossbars in the outer radius**

- Belt with clip-on side parts.
- **Outside:** for pressing in.

Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)

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



### TOTALTRAX® complete systems

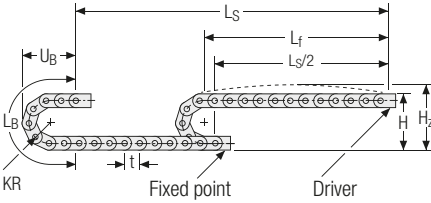
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at [tsubaki-kabelschlepp.com/totaltrax](http://tsubaki-kabelschlepp.com/totaltrax)



### TRAXLINE® cables for cable carriers

Hi-flex electric cables which were specially developed, optimised and tested for use in cable carriers can be found at [traxline.de](http://traxline.de).

## Unsupported arrangement

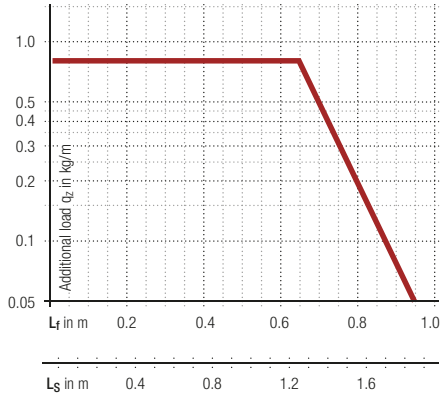


KR [mm]	H [mm]	H <sub>z</sub> [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [mm]
34	174	204	158	69
53	212	242	218	78.5
72	250	280	277	88
90	286	316	337	97

**Load diagram for unsupported length** depending on the additional load.

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

Intrinsic cable carrier weight  $q_k = 0.5 \text{ kg/m}$  with B<sub>1</sub> 45 mm. For other inner widths, the maximum additional load changes.



 **Speed**  
up to 25 m/s

 **Acceleration**  
up to 200 m/s<sup>2</sup>

 **Travel length**  
up to 1.85 m

 **Additional load**  
up to 0.8 kg/m

Inner heights

25

Inner widths

25  
45

[tsubaki-kabelschlepp.com/](http://tsubaki-kabelschlepp.com/)  
protum

### Additional product information online



Installation instructions, etc.:  
Additional info via your smartphone  
or check online at  
[tsubaki-kabelschlepp.com/  
support](http://tsubaki-kabelschlepp.com/support)



Configure your cable carrier here:  
[online-engineer.de](http://online-engineer.de)

**Stay variant 010 – with cross-bars in the outer radius**

- Belt with clip-on side parts.
- **Outside:** for pressing in.



Key for abbreviations  
on page 12

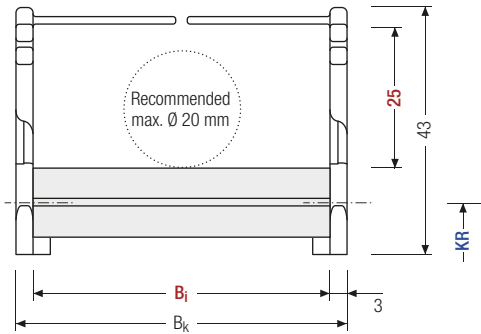


Stay arrangement on each chain link (**VS: fully stayed**)



$B_i$  25 – 45 mm

Design guidelines  
from page 38



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

Technical support:  
[technik@kabelschlepp.de](mailto:technik@kabelschlepp.de)

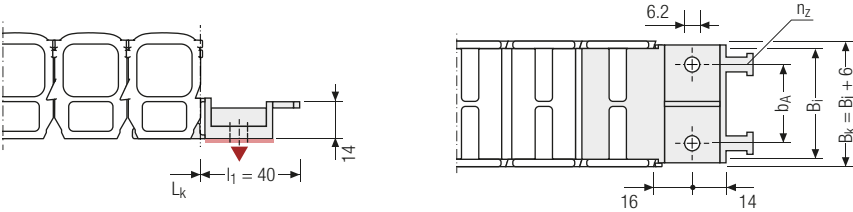
$h_i$ [mm]	$h_G$ [mm]	$B_i$ [mm]			$B_k$ [mm]	$KR$ [mm]				$q_k$ [kg/m]
25	43	25	35	45	$B_i + 6$	34	53	72	90	0.32 – 0.47

**Order example**

P0300
Type
·
010
Stay variant
·
35
 $B_i$  [mm]
·
53
 $KR$  [mm]
·
600
 $L_k$  [mm]
·
VS
Stay arrangement

Single-part end connectors – plastic (with integrated strain relief)

The plastic end connectors can be **connected from above or below**. The correct end connector has to be chosen in each case.



Inner heights



Inner widths

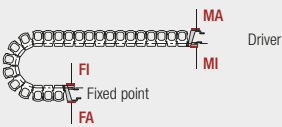


▲ Assembly options

$B_i$ [mm]	$b_A$ [mm]	$n_z$
25	14	2
35	17	2
45	22	3

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protum

The end connectors cannot be swivelled.



Connection point

- F – fixed point
- M – driver

Connection type

- I – threaded joint inside

Order example

