

PROTUM[®] 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

- 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

tsubaki-kabelschlepp.com/protum

Features

- 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 60

 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]	Cable- d_{max} [mm]
P0160											
		010	15	25	15–30	19–34	–	16	18–48	0.26	12
P0240											
		010	20	31	20–40	25–45	–	24	27–72	0.50	16
P0240 GS											
		010	10	23	50	54	–	24	–	–	8


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.

PROTUM® series | Overview

PROTUM®
series

Unsupported arrangement			Gliding arrangement			Inner distribution				Installation variants			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s ²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s ²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
1.18	25	200	-	-	-	-	-	-	-	●	-	-	228
1.50	25	200	-	-	-	-	-	-	-	●	-	-	232
-	-	-	-	-	-	-	-	-	-	●	-	-	235

Inner heights



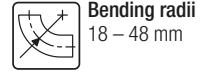
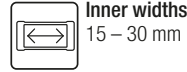
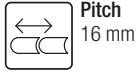
Inner widths



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P0160

Key for abbreviations
on page 12



Stay variants

Design guidelines
from page 60



Design 010 page 228

Frame with lamellae in the outer radius

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

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator



TOTALTRAX® complete systems

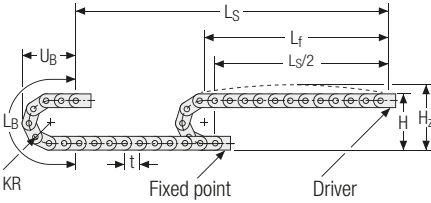
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at tsubaki-kabelschlepp.com/totaltrax



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.

Unsupported arrangement



KR [mm]	H [mm]	H _z [mm]	L _B [mm]	U _B [mm]
18	76	91	89	54
28	96	111	120	64
38	116	131	152	74
48	136	151	183	84

Inner heights

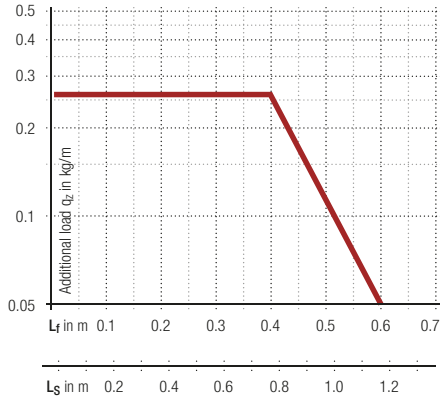


Inner widths



Load diagram for unsupported length depending on the additional load.

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



tsubaki-kabelschlepp.com/
protum

 **Speed**
up to 25 m/s

 **Acceleration**
up to 200 m/s²

 **Travel length**
up to 1.18 m

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

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

Stay variant 010 – with lamellae in the outer radius

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



Key for abbreviations on page 12

Design guidelines from page 60

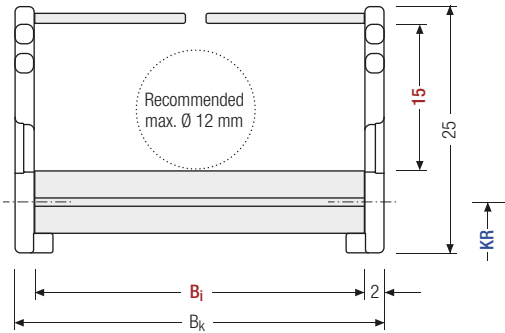
Technical support: technik@kabelschlepp.de



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

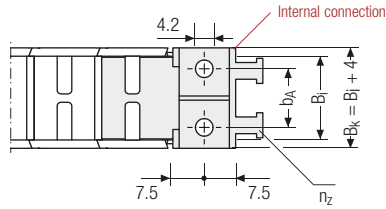
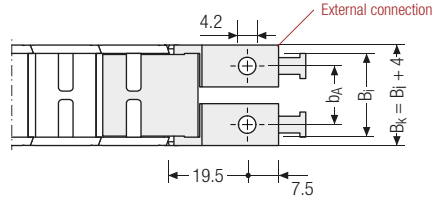
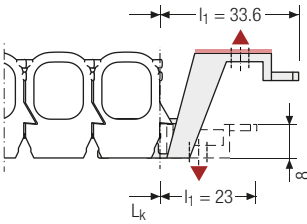
h_i [mm]	h_G [mm]	B_i [mm]			B_k [mm]	KR [mm]				q_k [kg/m]
15	25	15	20	30	$B_i + 4$	18	28	38	48	0.14 – 0.21

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.



▲ Assembly options

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


Inner heights

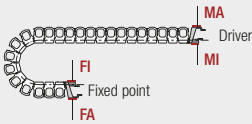


Inner widths



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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

Key for abbreviations
on page 12



Pitch
24 mm



Inner height
20 mm



Inner widths
20 – 40 mm



Bending radii
27 – 72 mm

Stay variants



Design 010 page 232

Frame with lamellae in the outer radius

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

Design guidelines
from page 60



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

Technical support:
technik@kabelschlepp.de

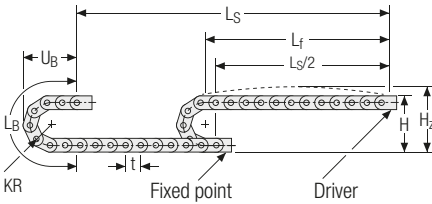


TRAXLINE® cables for cable carriers

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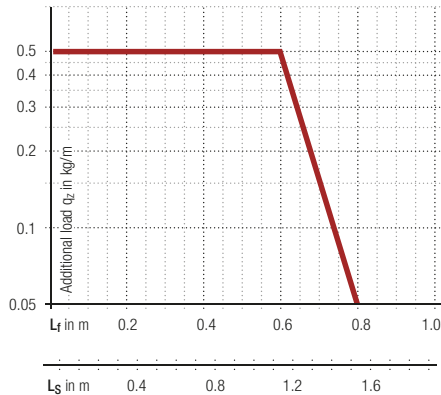
Unsupported arrangement



KR [mm]	H [mm]	H _z [mm]	L _B [mm]	U _B [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.

Intrinsic cable carrier weight $q_k = 0.27 \text{ kg/m}$ with $B_1 40 \text{ mm}$. For other inner widths, the maximum additional load changes.



Speed
up to 25 m/s



Acceleration
up to 200 m/s²



Travel length
up to 1.5 m



Additional load
up to 0.5 kg/m

Inner heights



Inner widths



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Additional product information online



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



Configure your cable carrier here:
online-engineer.de

Stay variant 010 – with lamellae in the outer radius

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



Key for abbreviations on page 12

Design guidelines from page 60

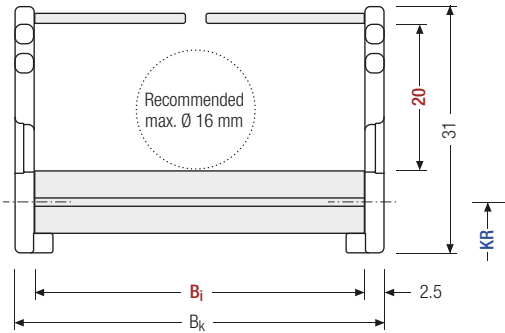
Technical support: technik@kabelschlepp.de



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

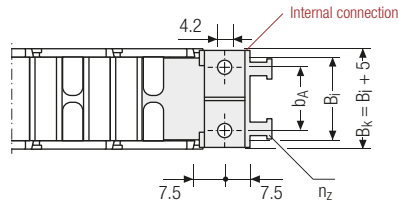
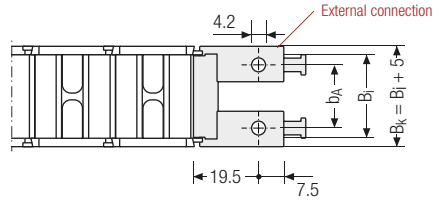
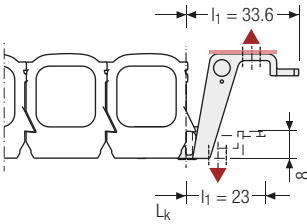
P0240
Type ·
 010
Stay variant ·
 30
 B_i [mm] ·
 42
 KR [mm] ·
 440
 L_k [mm] ·
 VS
Stay arrangement

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

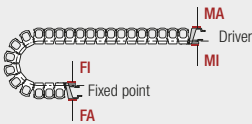


Inner widths



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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



Pitch
24 mm



Inner height
10 mm



Inner width
50 mm

Design guidelines
from page 60

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 an elegant silver-grey optic.

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

Stay variants



Design 010 page 235

Frame with lamellae 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 lamellae in the outer radius

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



Inner heights



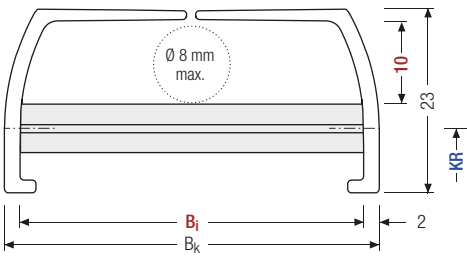
Inner widths



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



B_i 50 mm



The maximum cable diameter depends on the bending radius of the inserted cable type.

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protum

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

Standard colours



Silver-grey

Black

White

Subject to change.



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

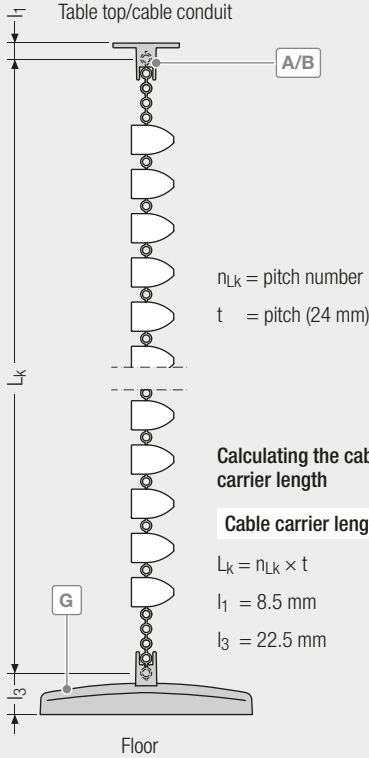
Depending on the design of your office furniture, different combination options are possible for the end connectors. They can be attached underneath table tops/cable conduits, to round or square table legs or to the floor.

Key for abbreviations
on page 12

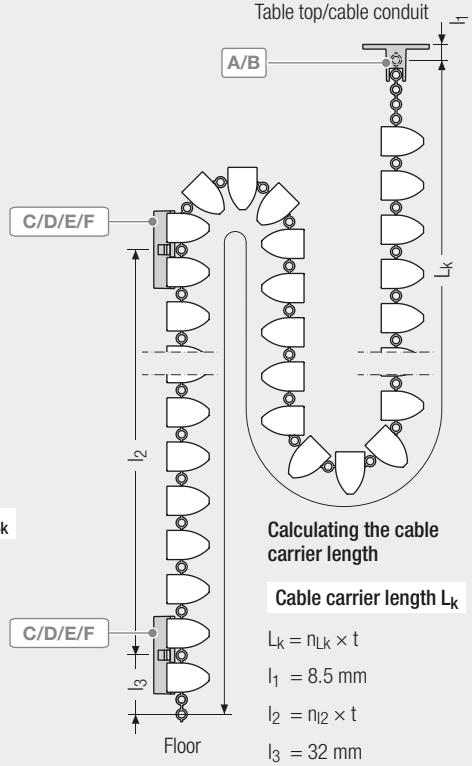
Design guidelines
from page 60

Technical support:
technik@kabelschlepp.de

Combination options for tables without height adjustment



Combination options for tables with height adjustment



End connectors



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Page 237



Page 238



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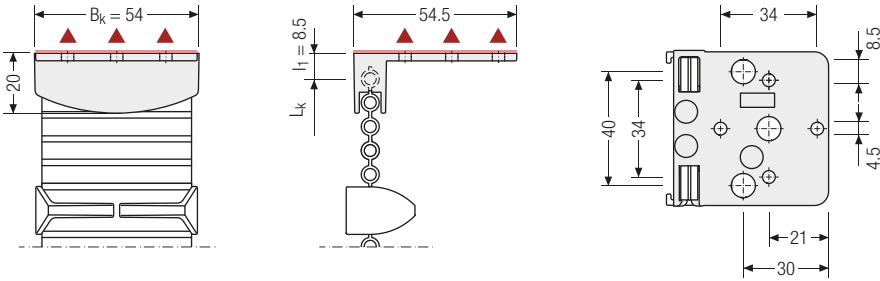
All connections and cable carriers can be combined with each other and are available in the colour variants silver-grey, black and white.

P0240 GS | End connectors · Table top

PROTUM®
series

Connection A – angled for table top

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



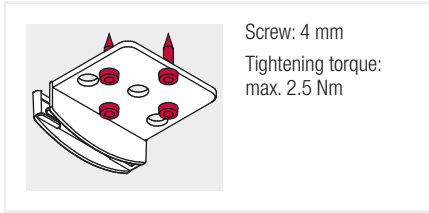
Inner heights



Inner widths



Fixing variant

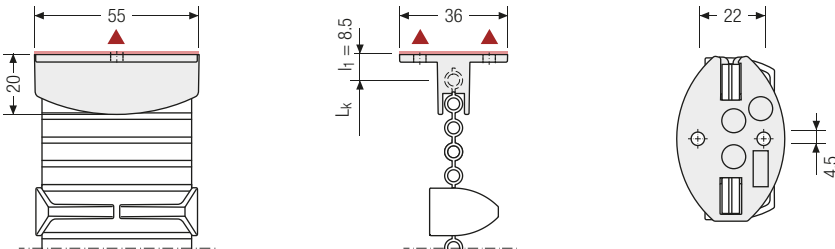


▲ Installation options

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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



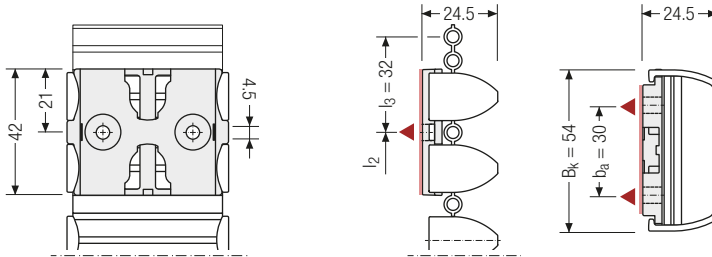
▲ Installation options

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

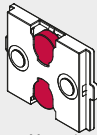


Fixing variants

▲ Installation options

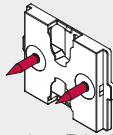
Design guidelines
from page 60

Connection E



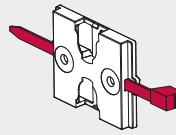
Magnets, Magnetic retention
force: max. 40 N

Connection C



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

Connection C

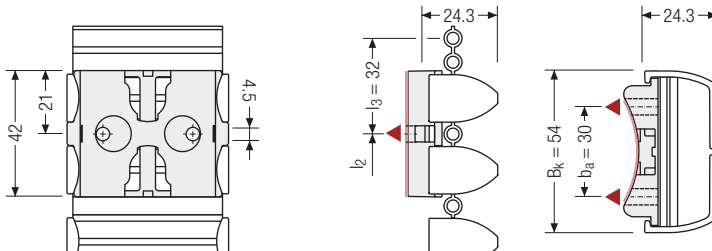


Cable tie: 5 mm

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.

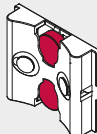
Technical support:
technik@kabelschlepp.de



Fixing variants

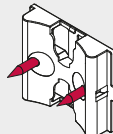
▲ Installation options

Connection F



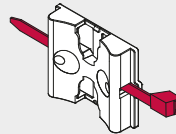
Magnets, Magnetic retention
force: max. 40 N

Connection D



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

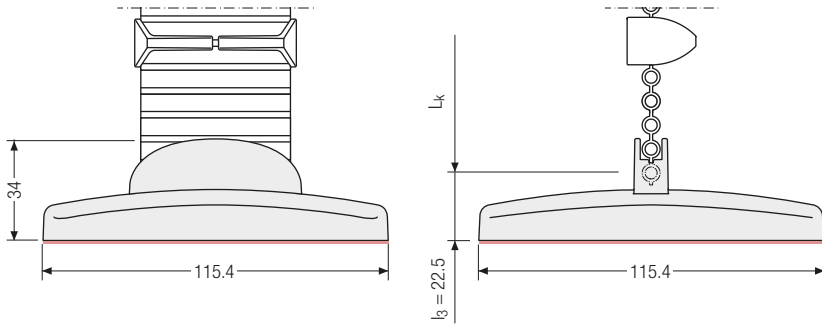
Connection D



Cable tie: 5 mm

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.