TKP35 series

Robust all-rounder
with variable inner distribution

TSUBAKI **ECO** LINK

Subject to change without notice.
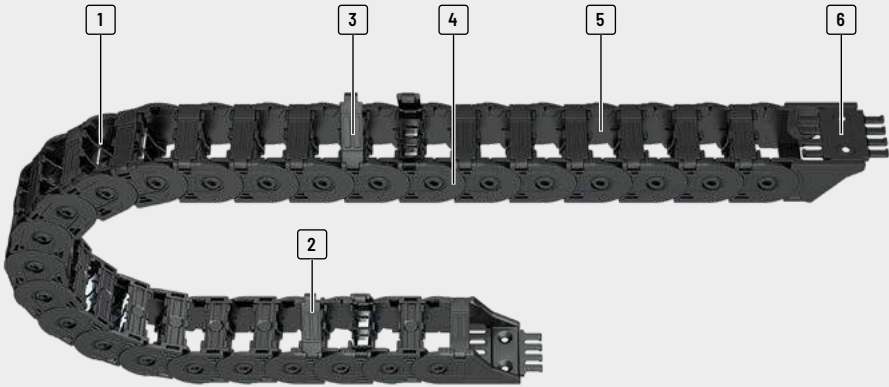
1 Dividers and height partitions for cable separation

2 Designs with inward or outward opening crossbars

3 Easy and quick to open at any position

4 Integrated noise damping

5 Interior space is gentle on the cables without sharp edges

6 End connectors with optional strain relief

Features

» Robust and extremely rigid stroke system
» Quiet operation due to internal dampening system
» Weight-optimized cable carrier geometry
» Interior without sharp edges, design that protects the cable
» Variable inner distribution
» Vertical moveable dividers or with arresting cams, can be attached at 2-mm increments (not B_i 16)

» Easy-to-open versions, left or right (not B_i 16)
» Quick and easy to open
» Optional strain relief can be fully integrated into the end connector
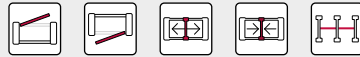
Reliable cable separation through fixable dividers

Design 030 with outside opening and detachable crossbars on both sides

Design 040 with inside opening and detachable crossbars on both sides

Optimised utilisation of the interior space; vertical and horizontal inner distribution possible

TKP35 series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	B_i-grid [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
TKP35											
		030	32	40	16 – 50	26 – 62	–	35	48 – 125	2	25
		040	32	40	25 – 50	37 – 62	–	35	48 – 125	2	25

Unsupported arrangement			Gliding arrangement			Inner Distribution				Movement			Page
Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	Travel length ≤ [m]	v_{max} ≤ [m/s]	a_{max} ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	
2.3	5	20	–	–	–	•	•	–	–	•	•	•	218
2.3	5	20	–	–	–	•	•	–	–	•	•	•	219

Cable carrier

Cable carrier configuration

Configuration guidelines

Materials information

MONO series

QuickTrax® series

UNIFLEX Advanced series

TKP35 series

TKK series

EasyTrax® series

TKP35

Pitch
35 mm

Inner height
32 mm

Inner widths
16 – 50 mm

Bending radii
48 – 125 mm

Stay variants

Design 030... page **218**

Frame with outside opening crossbars on both sides
» Weight-optimised plastic frame with particularly high torsional rigidity.
» Can be opened at any position on both sides.
» **Outside:** opening and detachable crossbars.

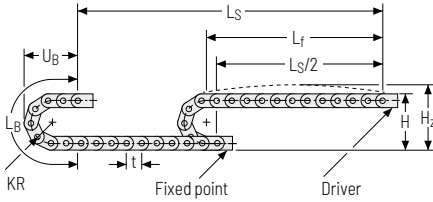**Design 040**... page **219**

Frame with inside opening crossbars on both sides
» Weight optimised plastic frame with high torsional rigidity.
» Can be opened at any position on both sides.
» **Inside:** opening and detachable crossbars.

Subject to change without notice.

Unsupported arrangement

KR [mm]	H [mm]	H$_Z$ [mm]	L$_B$ [mm]	U$_B$ [mm]
48	146	176	220	103
60	170	200	258	115
75	200	230	306	130
100	250	280	384	155
125	300	330	463	180

Load diagram for unsupported length depending on the additional load.

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

Intrinsic cable carrier weight q_k = 0.5 kg/m with B$_i$ 16 mm. For other inner widths, the maximum additional load changes.
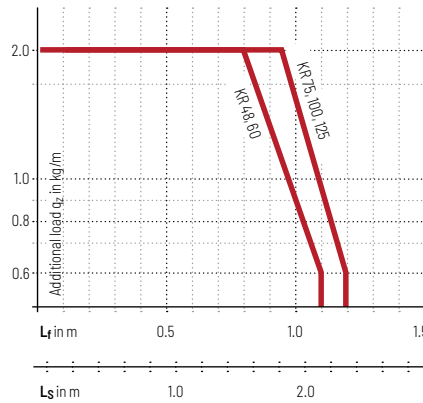
Speed
up to 5 m/s

Acceleration
up to 20 m/s^2

Travel length
up to 2.3 m

Additional load
up to 2 kg/m

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 **tsubaki-kabelschlepp.com/traxline**.

Additional product information online

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

Configure your cable carrier here:
online-engineer.de

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TKK series

EasyTrax® series

TKP35.030 | Dimensions · Technical data

Stay variant 030 – with outside opening and detachable crossbars
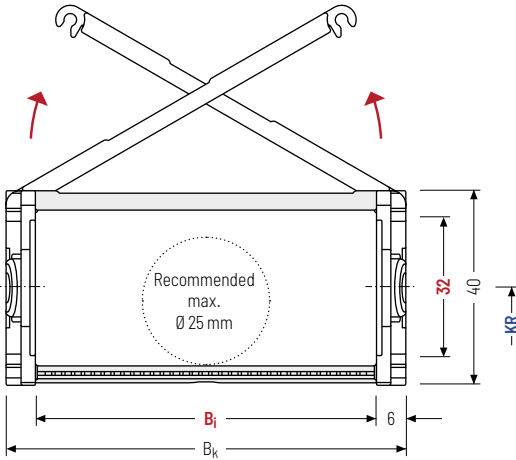
» Weight-optimised plastic frame with particularly high torsional rigidity.
» Can be opened at any position on both sides.
» **Outside:** opening and detachable crossbars.

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

B_i 16 – 50 mm

Recommended max. Ø 25 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]
32	40	16	25	38	50	B_i + 12*	48	60	75	100	125	0.5 – 0.8

*For B_i 16 = B_i + 10

Order example

TKP35	.	030	.	50	.	100	–	700	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

TKP35.040 | Dimensions · Technical data

Stay variant 040 – with inside opening and detachable crossbars
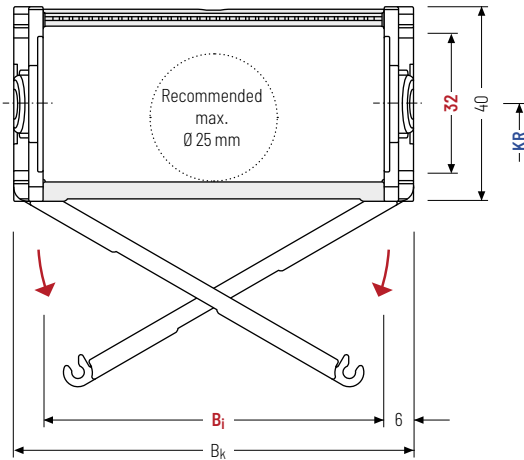
» Weight-optimised plastic frame with particularly high torsional rigidity.
» Can be opened at any position on both sides.
» **Inside:** opening and detachable crossbars.

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

B_i 25 – 50 mm

Cable carrier

Cable carrier configuration

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MONO series

QuickTrax® series

UNIFLEX Advanced series

TKP35 series

TKK series

EasyTrax® series

Recommended max. Ø 25 mm

32

40

– KR

B_i

6

B_k

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]	hG [mm]	B_i [mm]			Bk [mm]	KR [mm]					qk [kg/m]
32	40	25	38	50	Bi + 12	48	60	75	100	125	0.6 – 0.8

Order example

TKP35	.	040	.	50	.	100	-	700		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

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EasyTrax® series

Divider systems

The divider system is mounted on every 2nd chain link as a standard.

As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.
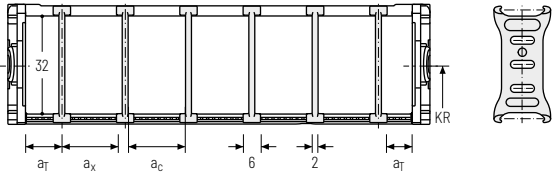
For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed on the stay through rotation.
The arresting cams snap into the catch profiles in the covers **(version B).**

Divider system TS0 without height separation

Vers.	a$_{T min}$ [mm]	a$_{x min}$ [mm]	a$_{c min}$ [mm]	a$_{x grid}$ [mm]	n$_T$ min
A	3	6	4	–	–
B	4.5* / 5	6	4	2	–

* Only B¡25

Divider system TS1 with continuous height separation

Vers.	a$_{T min}$ [mm]	a$_{x min}$ [mm]	a$_{c min}$ [mm]	a$_{x grid}$ [mm]	n$_T$ min
A	3	6	4	–	2
B	4.5* / 5	6	4	2	2

* Only B¡25
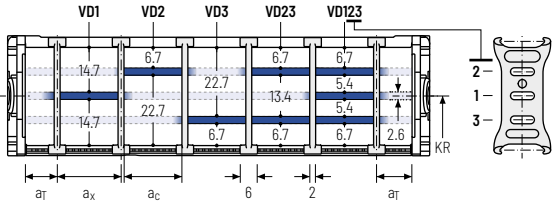
The dividers can be moved in the cross section.

Order example

TS1	.	A	.	3	-	VD1
					⋮	
					-	VD3
Divider system		Version		n$_T$		Height separation

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

When using divider systems with height separation (TS1), please additionally state the position (e.g. VD1) viewed from the left driver belt. You are welcome to add a sketch to your order.

## Single-part end connectors – plastic
(suitable for B_i 16)

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


$l_1 = 40$

L_k

4

6.5

B_i

$B_k = 26$

35

8
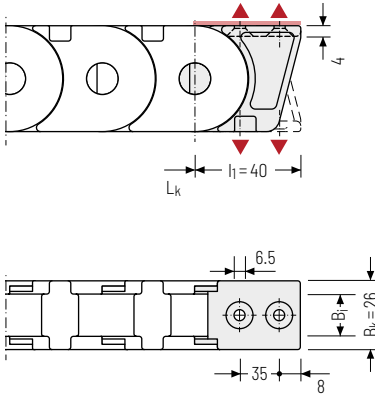
▲ Assembly options

Single-part end connectors – plastic
(suitable for B_i 25 – 50)

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

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$l_1 = 75$

16

L_k

4.5

5.2

n_z

$B_i - 13$

4

$B_k = B_i + 12$

11
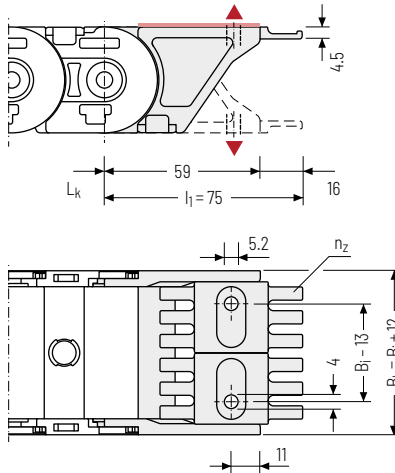
> ⓘ The end connectors are optionally also available without strain relief comb.

B_i [mm]	B_{EF} [mm]	n_z
25	37	2
38	50	4
50	62	6

MA
Driver
MI

FI
Fixed point
FA
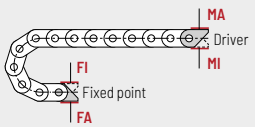
Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)
I – threaded joint inside

Order example

End connector	.	F	A
End connector	.	M	A
End connector		Connection point	Connection type