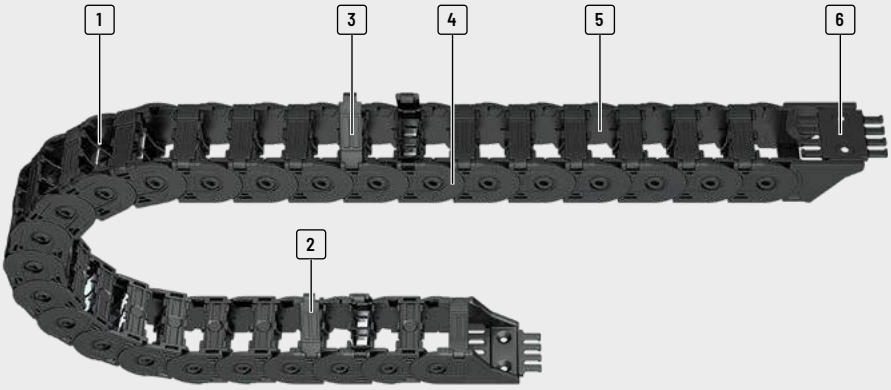
# TKP35 series

## Robust all-rounder with variable inner distribution




**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] | $B_{i\text{-}grid}$ [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 | – | – | – | • | • | – | – | • | • | • | 220 |
| 2.3 | 5 | 20 | – | – | – | • | • | – | – | • | • | • | 221 |

# TKP35

**Pitch**
35 mm

**Inner height**
32 mm

**Inner widths**
16 – 50 mm

**Bending radii**
48 – 125 mm

## Stay variants

### Design 030 ..... page **220**

**Frame with outside opening crossbars on both sides**

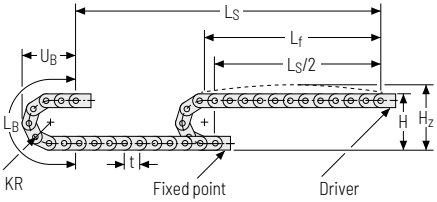
» Weight-optimised plastic frame with particularly high torsional rigidity.
» Can be opened at any position on both sides.
» **Outside:** opening and detachable crossbars.

### Design 040 ..... page **221**

**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.

## Unsupported arrangement

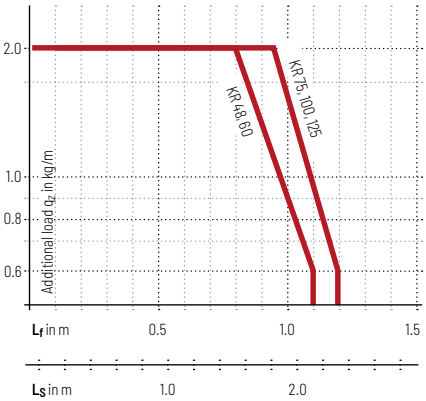



| KR [mm] | H [mm] | $H_z$ [mm] | $L_B$ [mm] | $U_B$ [mm] |
|---|---|---|---|---|
| 48 | 146 | 176 | 220 | 103 |
| 60 | 170 | 200 | 258 | 115 |
| 75 | 200 | 230 | 306 | 130 |
| 100 | 250 | 280 | 384 | 155 |
| 125 | 300 | 330 | 463 | 180 |

**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/s²

**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**

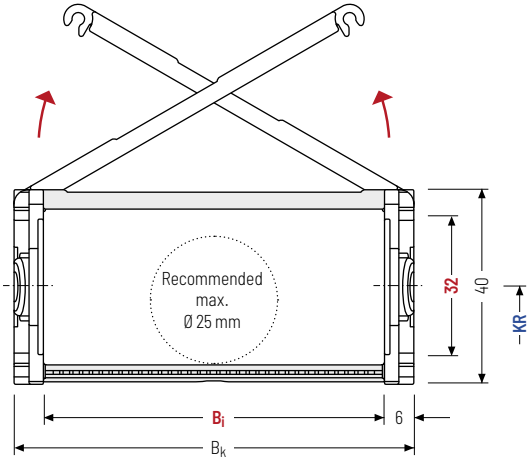
# TKP35.030 | Dimensions · Technical data

## **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




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 |

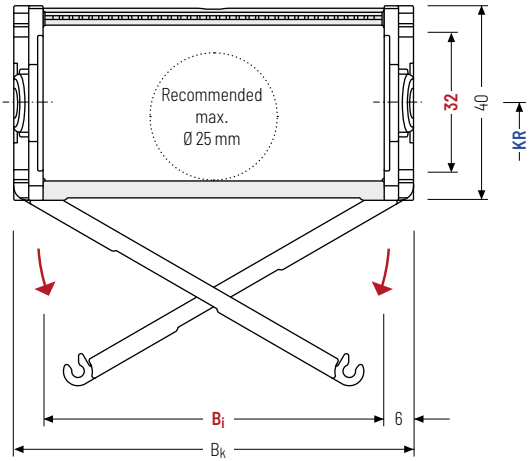
# TKP35.040 | Dimensions · Technical data

## 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




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] | | | | | 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 |

## Divider systems

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

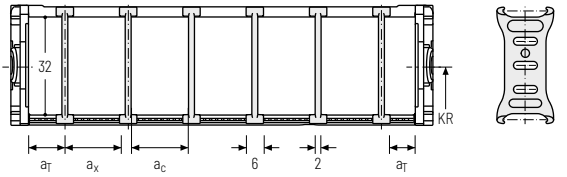
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

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 $B_i$ 25

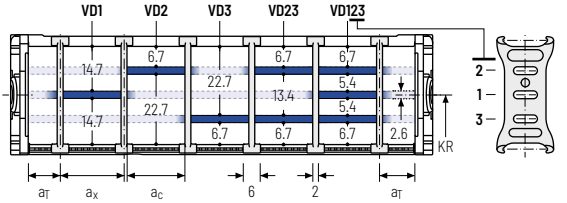



## Divider system TS1 with continuous height separation

| 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 $B_i$ 25

The dividers can be moved in the cross section.




## Order example

TS1 . A . 3 - VD1
⋮
- VD3

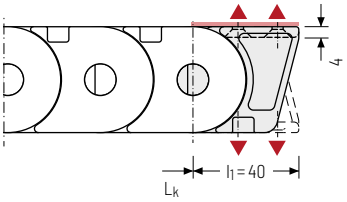
Divider system | Version | $n_T$ | Height separation

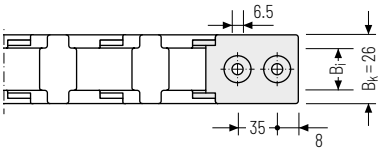
Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [$n_T$].

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.

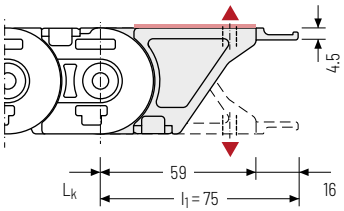


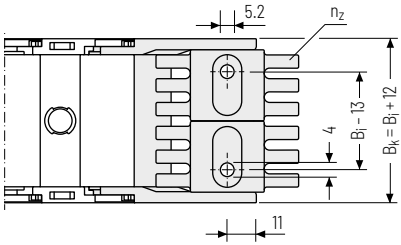




▲ Assembly options

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

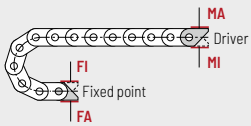
The plastic end connectors can be **connected from above or below**. The connection type can be changed by altering the position of the end connector.




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 |




**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 |