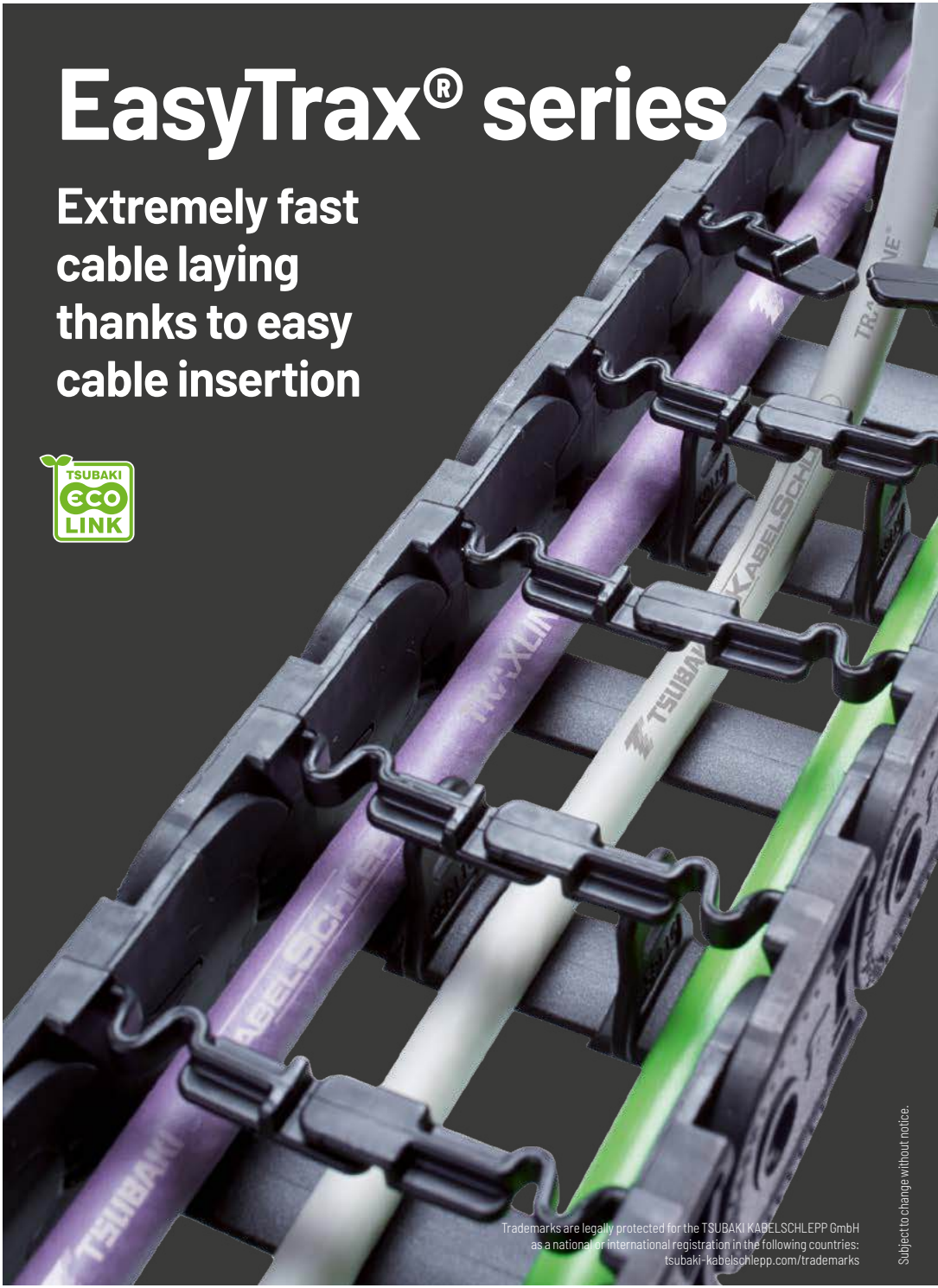
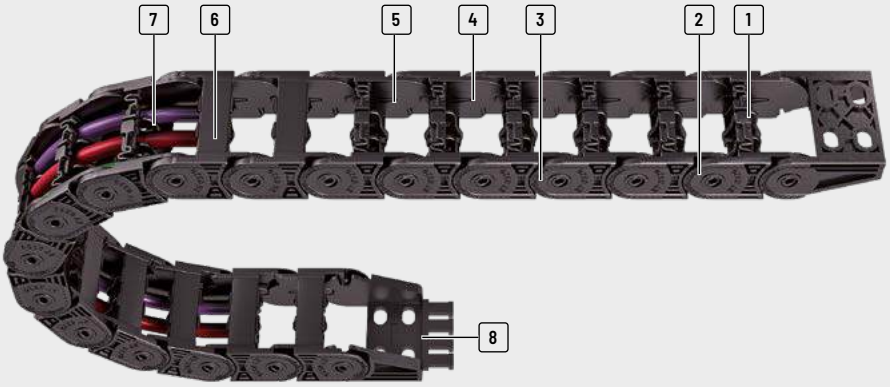
EasyTrax® series

Extremely fast cable laying thanks to easy cable insertion





1 Sturdy 2-component design: solid chain body, flexible film hinge

2 Plastic chain links

3 Extensive unsupported length

4 Inside space is gentle on the cables – no interfering edges

5 Very quiet through integrated noise damping

6 Inside or outside openable

7 Dividers for cable separation

8 Single-part end connectors with integratable strain relief

Features

» Very fast cable laying by simply pressing in the cables

» Very high fill level through lateral swivelling of the lamella – lamellae do not swivel into the cable space

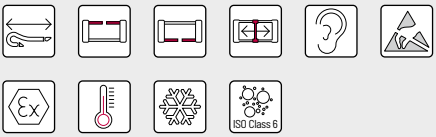
» Each chain link consists of two different materials:
- Hard chain body made of glass-fibre reinforced material
- Lamellae with flexible film hinge made of special elastic plastic

» Sturdy cable carrier design

» High torsional rigidity

» Extensive unsupported length

» Very quiet through integrated noise damping



Fast and easy installation of cables

Very high fill level

High side stability

Divider systems for reliable cable separation

Cable carrier design

Solid plastic cable carriers: chain links and end connectors made of plastic

Each chain link consists of two different materials:

» Hard cable carrier body made of glass fiber-reinforced material

» Flexible lamellae made of elastic plastic

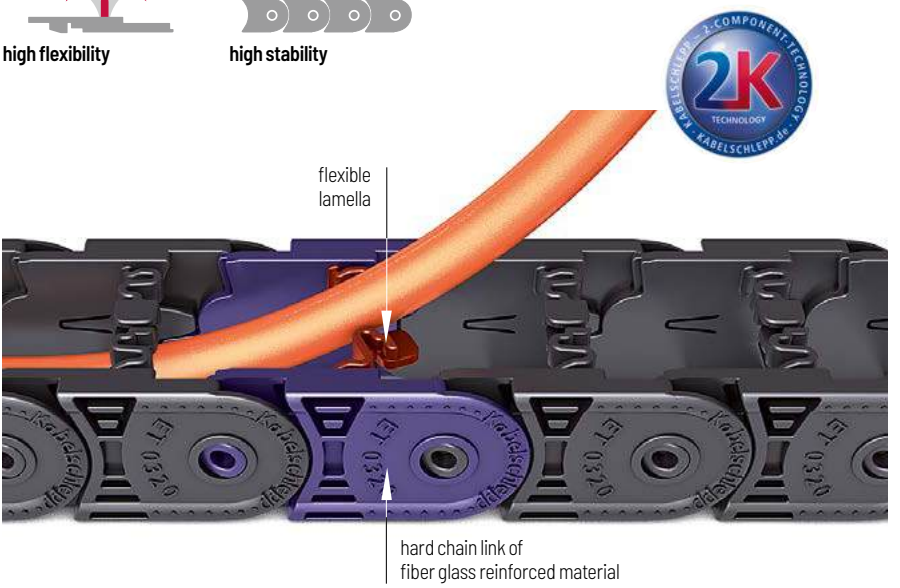
The two-component technology

The two-component technology of the EasyTrax® 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 EasyTrax® meets these requirements thanks to its innovative design and material combination of a hard cable carrier body made from fiber glass reinforced material and lamellae made of elastic plastic.

high flexibility

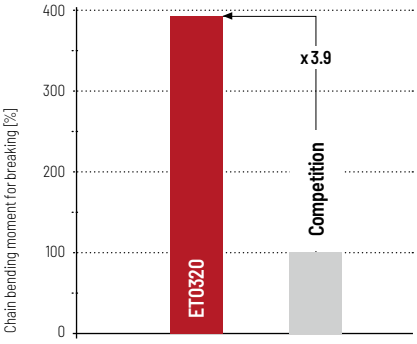
high stability



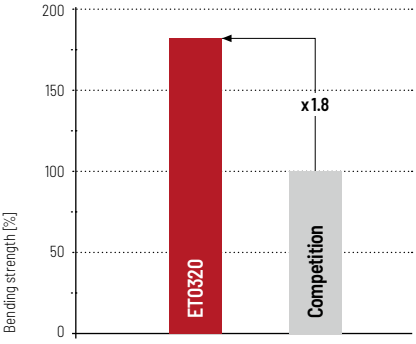
Comparison of dimensions

Manufacturer	h_i [mm]	h_G [mm]	t [mm]	Identical connection hole pattern
ET0320	18	25.5	32	yes
Competitive product	19	25	30.5	yes

Comparison of bending moment

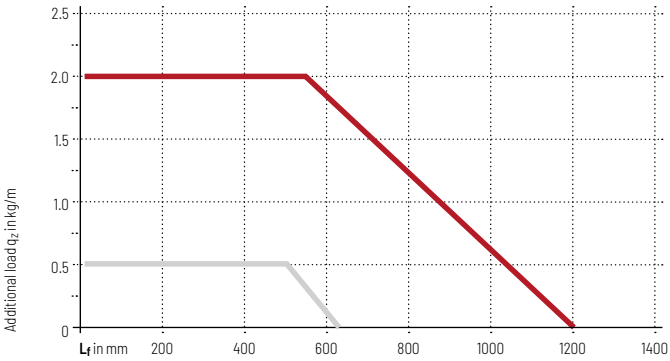


Comparison of bending strength

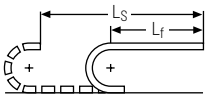


Load diagram

for unsupported length depending on additional load



Unsupported length L_f

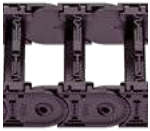


ET0320
Competitive product

Advantages over competitive product

- 4 times bigger additional load compared to competitive product
- Double unsupported length compared to competitive product
- Faster cable laying at a higher utilization faktor
- Low noise operation due to internal damping system
- High side stability through locking in the stroke system
- Dividers can be used for cable separation

EasyTrax® series | Overview

Type	Opening variant	Stay variant	h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	$B_{i\text{-}grid}$ [mm] X mm	t [mm]	KR [mm]	Additional load ≤ [kg/m]	Cable-d_{max} [mm]
ET0115											
		040	4.6	8	7	11	–	11.5	10	0.4	3.5
ET0250											
		030	16.5	23	30 – 50	60	–	25	28 – 100	4	13
		040	16.5	23	30 – 50	60	–	25	28 – 100	4	13
ET0320											
		030	18	25.5	15 – 65	27 – 77	–	32	28 – 125	1.2	14
		040	18	25.5	15 – 65	27 – 77	–	32	28 – 125	1.2	14
ET1455											
		030	25	36	25 – 78	94	–	45.5	52 – 200	6	20
		040	25	36	25 – 78	94	–	45.5	52 – 200	6	20

EasyTrax® series | Overview

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	
0.68	3	10	–	–	–	–	–	–	–	•	–	–	244
1.6	10	50	60	3	30	•	–	–	–	•	–	•	248
1.6	10	50	–	–	–	•	–	–	–	•	–	•	249
2.90	10	50	80	2.5	25	•	–	–	–	•	–	•	254
2.90	10	50	–	–	–	•	–	–	–	•	–	•	255
4.80	10	50	–	–	–	–	–	–	–	•	–	•	260
4.80	10	50	–	–	–	–	–	–	–	•	–	•	261

ET0115

Pitch
11.5 mm

Inner height
4.6 mm

Inner width
7 mm

Bending radius
10 mm

Stay variants

Design 040 ..... page **244**

Frame with lamellae in the inner radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Swivelling at any position on one side.
» **Inside:** swivelling.

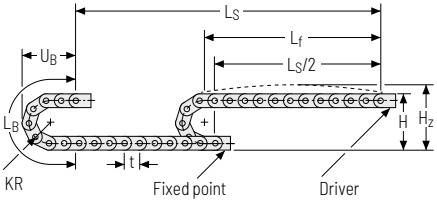
TOTALTRAX® complete systems

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

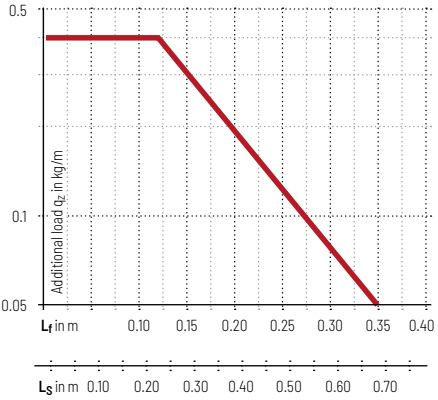
Unsupported arrangement



KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
10	28	38	54.5	25.5

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight q_K = 0.044 kg/m with B_i 7 mm. For other inner widths, the maximum additional load changes.



Speed
up to 3 m/s

Acceleration
up to 10 m/s²

Travel length
up to 0.68 m

Additional load
up to 0.4 kg/m

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**

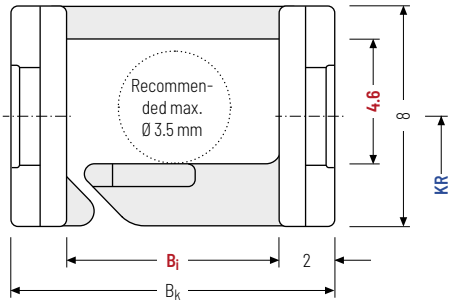
ET0115.040 | Dimensions · Technical data

Stay variant 040 – with lamella in the inner radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Can be swivelled at any position on one side.
» **Inside:** swivelling.

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

B_i 7 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

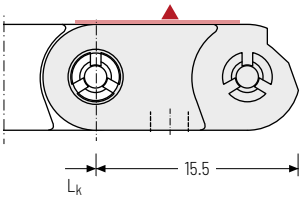
h_i [mm]	h_G [mm]	B_i [mm]	B_k [mm]	KR [mm]	q_k [kg/m]
4.6	8	**7**	$B_i + 4$	**10**	0.044

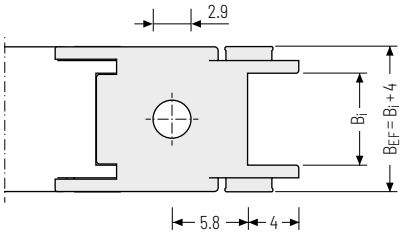
Order example

ET0115	.	040	.	7	.	10	-	1,280	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

End connector – plastic

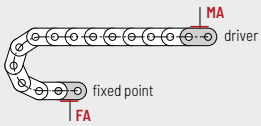
The plastic end connectors can be connected **from above or below**.





▲ Assembly options

The end connectors can be swivelled in the KR direction.



Connection point
F – fixed point
M – driver

Connection type
A – threaded joint outside (standard)

Order example

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

ET0250

Pitch
25 mm

Inner height
16.5 mm

Inner widths
30 – 50 mm

Bending radii
28 – 100 mm

Stay variants

Design 030 ..... page **248**

Frame with lamellae in the outer radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side.
» **Outside:** swivelling.

Design 040 ..... page **249**

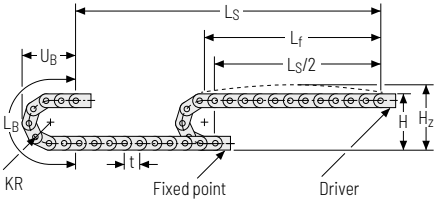
Frame with lamellae in the inner radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side.
» **Inside:** swivelling.

UNIFLEX Advanced

For a non-opening cable carrier with 17.5 mm inner height we recommend the series UNIFLEX Advanced
UA1250 from page 150.

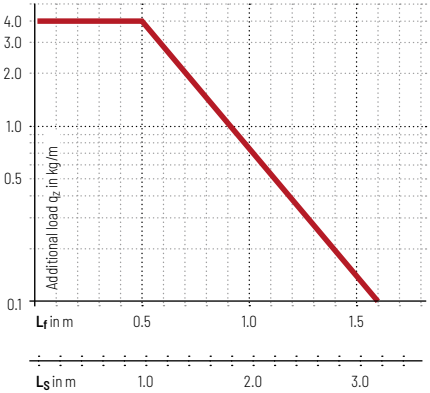
Unsupported arrangement



KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
28	79	104	138	65
38	99	124	169	75
45	113	138	191	82
60	143	168	238	97
75	173	198	286	112
100	223	248	364	137

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight q_K = 0.36 kg/m with B_i 50 mm. For other inner widths, the maximum additional load changes.



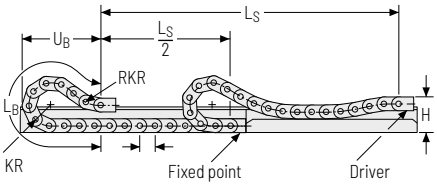
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 1.6 m

Additional load
up to 4 kg/m

Gliding arrangement



Speed
up to 3 m/s

Acceleration
up to 30 m/s²

Travel length
up to 60 m

Additional load
up to 4 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

Only design 030 can be used for a gliding arrangement.

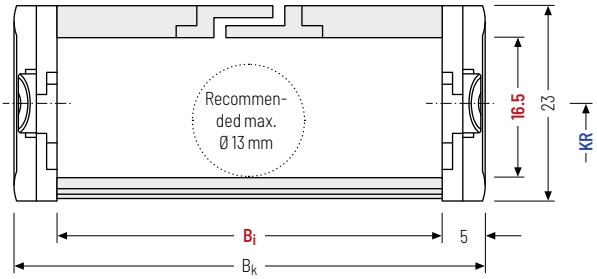
ET0250.030 | Dimensions · Technical data

Stay variant 030 – with lamellae in the outer radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side
» **Outside:** swivelling.

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

B_i 30 – 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]
16.5	23	**30**	**50**	B_i + 10	**28**	**38**	**45**	**60**	**75**	**100**	0.32 – 0.36

Order example

ET0250	.	030	.	50	.	75	-	1,110	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

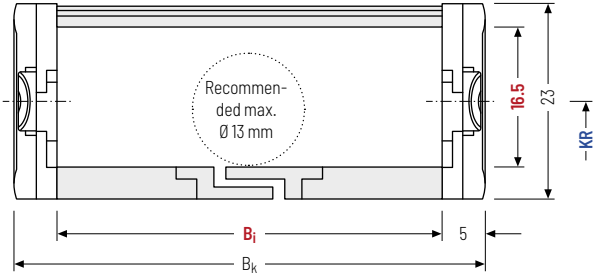
ET0250.040 | Dimensions · Technical data

Stay variant 040 – with lamellae in the inner radius

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Lamellae can be swivelled at any position on one side
- **Inside:** swivelling.

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

B_i 30 – 50 mm



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

Design 040 is not suitable for gliding arrangements.

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]
16.5	23	30	50	B_i + 10	28	38	45	60	75	100	0.32 – 0.36

Order example

ET0250	.	040	.	50	.	75	-	1,100	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

ET0250 | Inner distribution | TS0

Divider systems

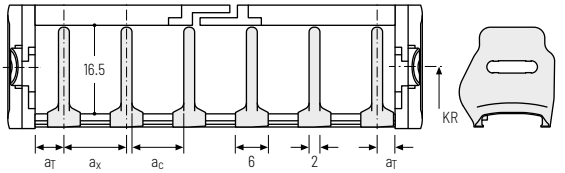
The divider system is mounted on every 2nd chain link as a standard.

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	3	6	4	2	–



Order example

TS0	.	A	.	3
Divider system		Version		n_T

Please state the designation of the divider system (TS0), the version, and the number of dividers per cross section [n_T]. You are welcome to add a sketch to your order.

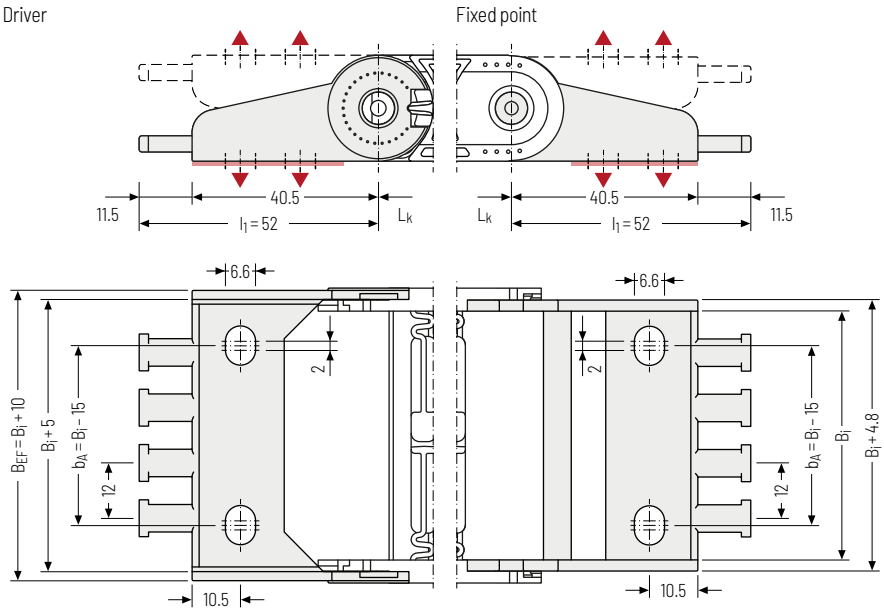
Additional product information online

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

Configure your cable carrier here:
online-engineer.de

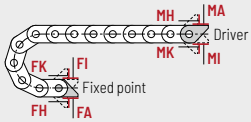
Single-part end connectors – plastic (with integrated strain relief)

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



▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
30	40	2
50	60	4



Connection point
F – fixed point
M – driver

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

Order example

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

ET0320

Pitch
32 mm

Inner height
18 mm

Inner widths
15 – 65 mm

Bending radii
28 – 125 mm

Stay variants

Design 030 ..... page **254**

Frame with lamellae in the outer radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side.
» **Outside:** swivelling.

Design 040 ..... page **255**

Frame with lamellae in the inner radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side.
» **Inside:** swivelling.

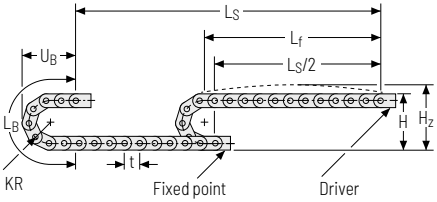
TOTALTRAX® complete systems

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

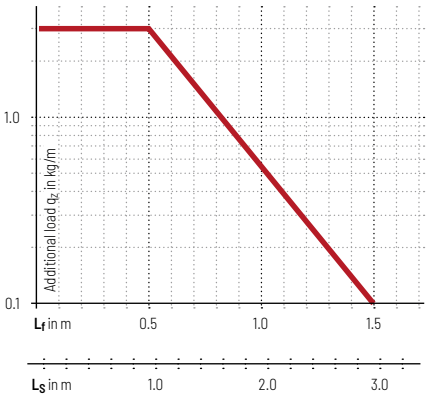
Unsupported arrangement



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 the additional load.

Intrinsic cable carrier weight q_K = 0.40 kg/m with B_i 38 mm. For other inner widths, the maximum additional load changes.



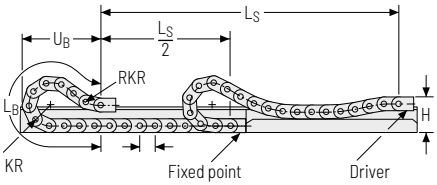
Speed
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 2.9 m

Additional load
up to 1.2 kg/m

Gliding arrangement



Speed
up to 2.5 m/s

Acceleration
up to 25 m/s²

Travel length
up to 80 m

Additional load
up to 1.2 kg/m

The gliding cable carrier must be guided in a channel. See p. 866.

Only design 030 can be used for a gliding arrangement.

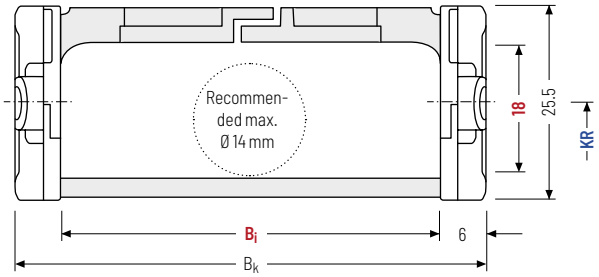
ET0320.030 | Dimensions · Technical data

Stay variant 030 – with lamellae in the outer radius

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Lamellae can be swivelled at any position on one side
- **Outside:** swivelling.

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

B_i 15 – 65 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]
18	25.5	15	25	38	50	65	B_i + 12	28	38	48	75	100	125	0.35 – 0.45

Order example

ET0320	.	030	.	50	.	100	-	1,280		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

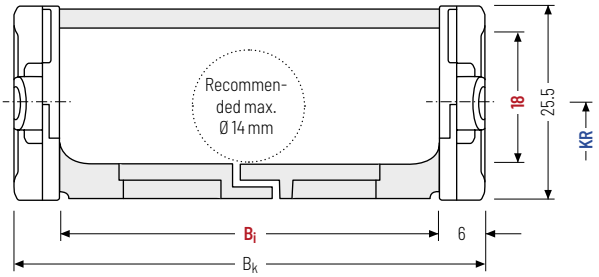
ET0320.040 | Dimensions · Technical data

Stay variant 040 – with lamellae in the inner radius

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Lamellae can be swivelled at any position on one side
- **Inside:** swivelling.

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

B_i 15 – 65 mm



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

Design 040 is not suitable for gliding arrangements.

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]
18	25.5	15	25	38	50	65	B_i + 12	28	38	48	75	100	125	0.35 – 0.45

Order example

ET0320	.	040	.	50	.	100	-	1,280	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

ET0320 | Inner distribution | TS0

Divider systems

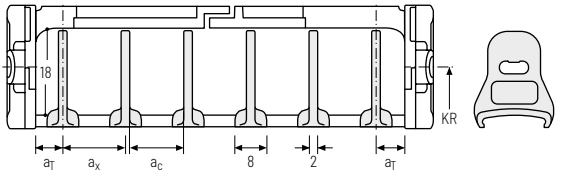
The divider system is mounted on every 2nd chain link as a standard.

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

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	4	8	6	–

The dividers can be moved in the cross section.



Order example

TS0 . A . 3

Divider system | Version | n_T

Please state the designation of the divider system (TS0), the version, and the number of dividers per cross section [n_T]. You are welcome to add a sketch to your order.

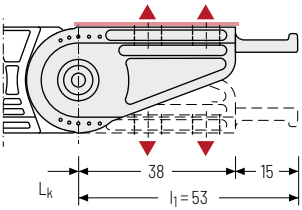
Additional product information online

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

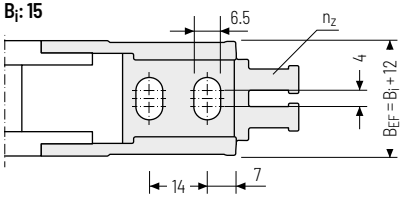
Configure your cable carrier here: **online-engineer.de**

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

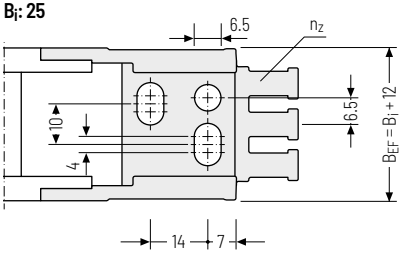
The plastic end connectors can be **connected from above or below**. The connection type can be changed by altering the position of the end connector.



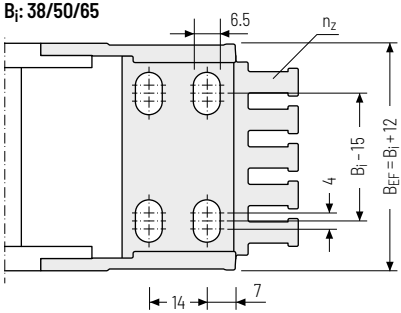
B_i: 15



B_i: 25

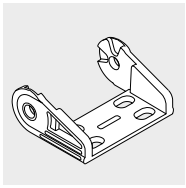


B_i: 38/50/65

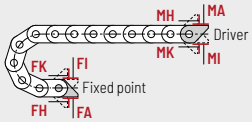


▲ Assembly options

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.



Connection point
- **F** – fixed point
- **M** – driver

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

Order example

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

ET1455

Pitch
45.5 mm

Inner height
25 mm

Inner width
25 – 78 mm

Bending radii
52 – 200 mm

Stay variants

Design 030 ..... page **260**

Frame with lamellae in the outer radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side.
» **Outside:** swivelling.

Design 040 ..... page **261**

Frame with lamellae in the inner radius

» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side.
» **Inside:** swivelling.

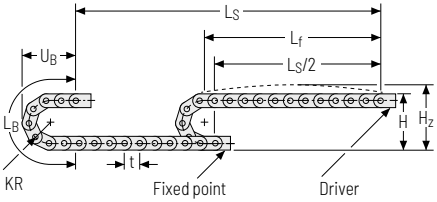
TOTALTRAX® complete systems

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

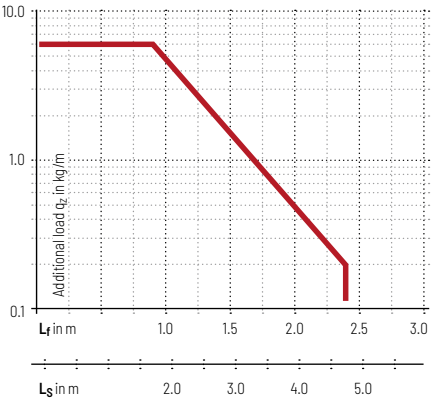
Unsupported arrangement



KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
52	140	165	255	116
65	166	191	296	129
95	226	251	390	159
125	286	211	484	189
150	336	361	563	214
180	396	421	657	244
200	436	461	720	264

Load diagram for unsupported length depending on the additional load.

Intrinsic cable carrier weight q_K = 0.75 kg/m with B_i 38 mm. For other inner widths, the maximum additional load changes.



Speed
up to 10 m/s

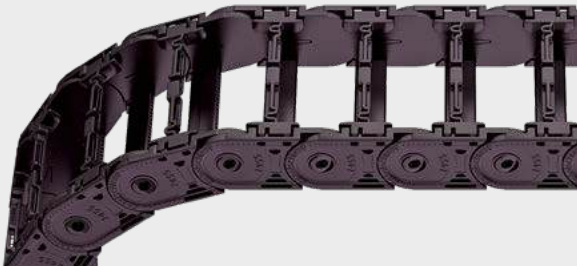
Acceleration
up to 50 m/s²

Travel length
up to 4.8 m

Additional load
up to 6.0 kg/m

ET1455.030 | Dimensions · Technical data

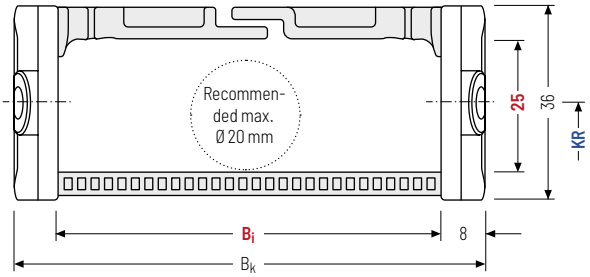
Stay variant 030 – with lamellae in the outer radius



» Weight-optimised plastic frame with particularly high torsional rigidity.
» Lamellae can be swivelled at any position on one side
» **Outside:** swivelling.

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

B_i 25 – 78 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]
25	36	25	38	58	78	B_i + 16	52	65	95	125	0.65 – 0.80
							150	180	200		

Order example

ET1455	.	030	.	78	.	150	-	1,456		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

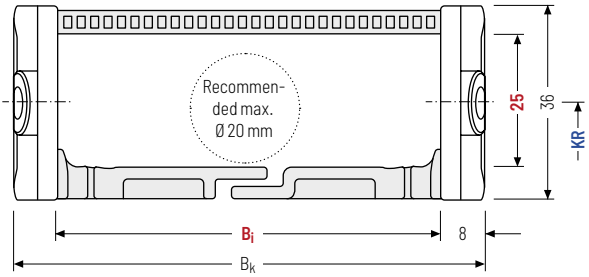
ET1455.040 | Dimensions · Technical data

Stay variant 040 – with lamellae in the inner radius

- Weight-optimised plastic frame with particularly high torsional rigidity.
- Lamellae can be swivelled at any position on one side
- **Inside:** swivelling.

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

B_i 25 – 78 mm



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

Design 040 is not suitable for gliding arrangements.

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]
25	36	25	38	58	78	B_i + 16	52	65	95	125	0.65 – 0.80
							150	180	200		

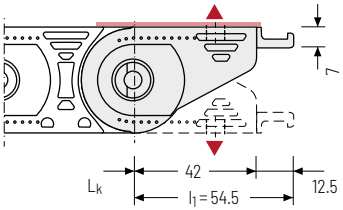
Order example

ET1455	.	040	.	78	.	150	-	1,456	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

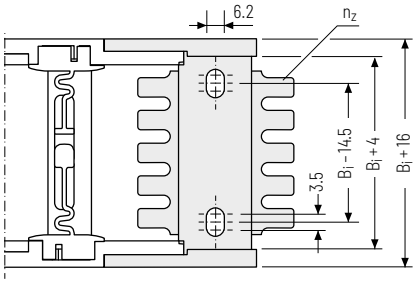
ET1455 | End connectors

Single-part end connectors – plastic

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.

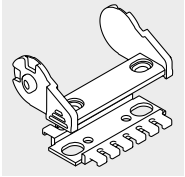


▲ Assembly options

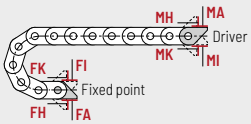


Recommended tightening torque:
6 Nm for screws M6 - 8.8

B_i [mm]	n_z
25	2 x 2
38	2 x 3
58	2 x 4
78	2 x 6



The end connectors are optionally also available **without** strain relief comb.
Please state when ordering.



Connection point
F – fixed point
M – driver

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

Order example

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