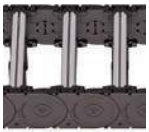
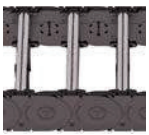
MASTER series | Overview

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]
H33											
		RSH	33	51	50 – 400	B_i + 22	1	56	60 – 300	11	26
H46											
		RSH	46	64	50 – 400	B_i + 26	1	67	75 – 350	20	36
L60											
		RSH	60	88	75 – 600	B_i + 28	1	91	135 – 500	20	48
		RE	60	88	85 – 250	B_i + 28	–	91	135 – 500	20	48
L80											
		RSH	80	110	100 – 800	B_i + 32	1	111	150 – 500	25	64
		RE	80	110	85 – 250	B_i + 32	–	111	150 – 500	25	64

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

Unsupported arrangement			Gliding arrangement			Inner distribution				Installation variants			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	
3.5	10	50	60	2	2-3	●	●	–	●	●	●	–	244
6.4	8	40	80	2	2-3	●	●	–	●	●	●	–	250
7	6	30	–	–	–	●	●	–	●	●	●	–	256
7	6	30	–	–	–	●	●	–	●	●	●	–	260
7.9	5	25	–	–	–	●	●	–	●	●	●	–	266
7.9	5	25	–	–	–	●	●	–	●	●	●	–	270

H33

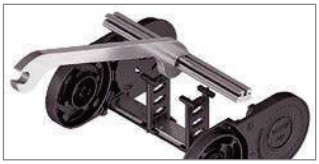
Pitch
56 mm

Inner height
33 mm

Inner widths
50 – 400 mm

Bending radii
60 – 300 mm

Stay variants



Aluminum stay RSH ..... page **244**

Frame screw-in stay

- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

Key for abbreviations on page 12

Design guidelines from page 38

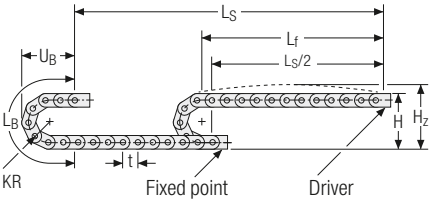
TOTALTRAX® complete systems

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 especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

Unsupported arrangement

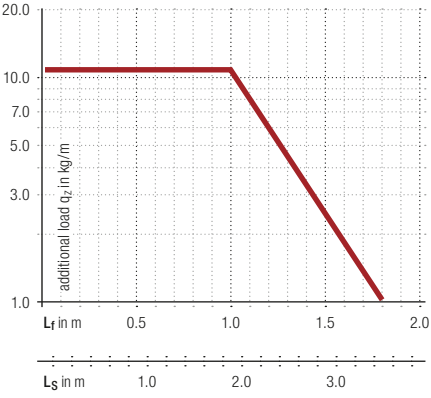


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
60	171	211	301	142
75	201	241	348	157
100	251	291	427	182
125	301	341	505	207
150	351	391	584	232
175	401	441	662	257
200	451	491	741	282
220	491	531	804	302
250	551	591	898	332
300	651	691	1055	382

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 = 2.08 kg/m. For other inner widths, the maximum additional load changes.



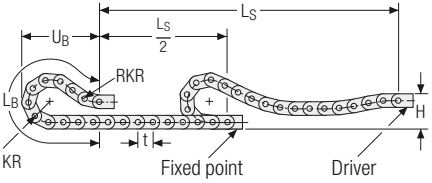
Velocity
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 3.5 m

Additional load
up to 11 kg/m

Gliding arrangement



We recommend the use of glide shoes for gliding applications.

The gliding cable carrier must be guided in a channel.
See p. 654.

Velocity
up to 2 m/s

Acceleration
up to 2 - 3 m/s²

Travel length
up to 60 m

Additional load
up to 11 kg/m

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Key for abbreviations on page 12

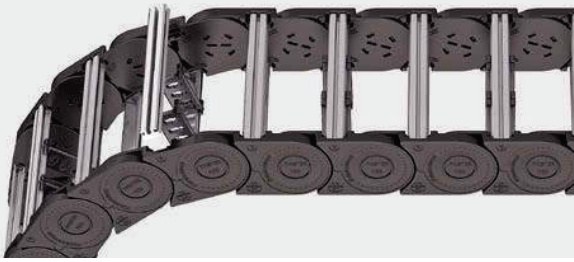
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

HC33 RSH | Dimensions · Technical data

Plastic stay RSH –
screw-in frame stay

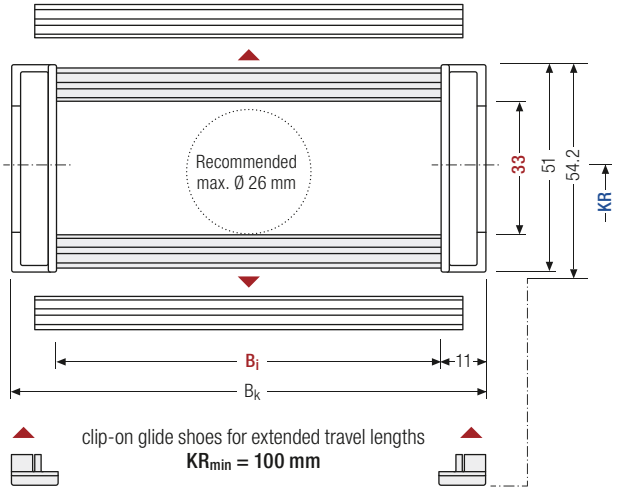
- Aluminum profile bars for light and medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by rotating.



Stays mounted on each chain link **(VS: fully-stayed)**

1 mm

B_i 50 – 400 mm in **1 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	KR [mm]										q_k [kg/m]
33	51	54,2	**50 – 400**	B_i + 22	**60**	**75**	**100**	**125**	**150**	**175**	**200**	**220**	**250**	**300**	1,37 – 3,99

* in 1 mm width sections

Order example

HC 33	.	330	.	RSH	.	150	-	1960	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Divider systems

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

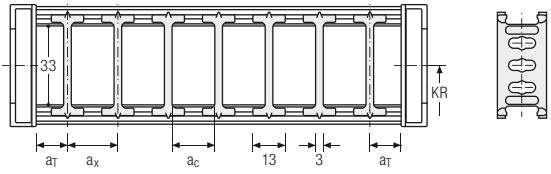
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

For applications with lateral acceleration and lying on the side, the dividers can be attached by simple insertion of a fixing profile into the RSH stay, available as an accessory **(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	7	13	10	–	–
B	7	13	10	2	–

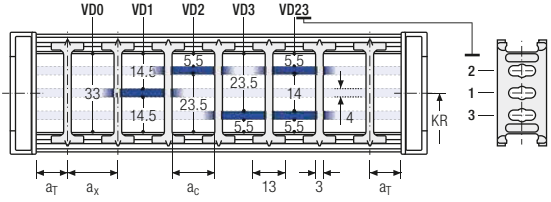
The dividers can be moved within the cross section (version A) or fixed (version B).



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	7	13	10	–	2
B	7	13	10	2	2

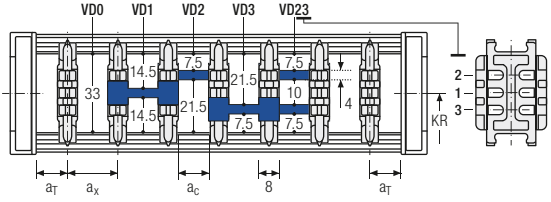
The dividers can be moved within the cross section (version A) or fixed (version B).

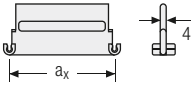


Divider system TS3 with height separation consisting of plastic partitions

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	4	16	8	2

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

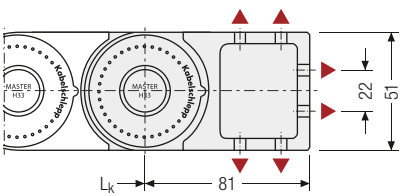
a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

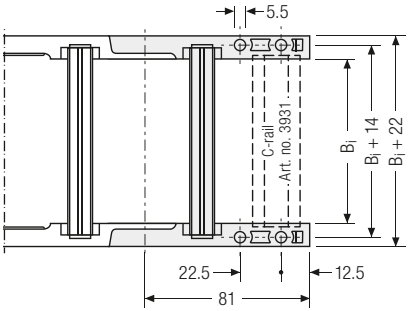
When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 3 mm). Twin dividers are also suitable for retrofitting in the partition system.

H33 | End connectors

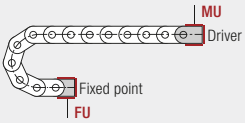
Universal end connectors UMB – plastic (standard)

The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side**.





▲ Assembly options



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

More product information online

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

Configure your cable carrier here: **onlineengineer.de**

Key for abbreviations on page 12

Design guidelines from page 38

Technical support: **technik@kabelschlepp.de**

H46

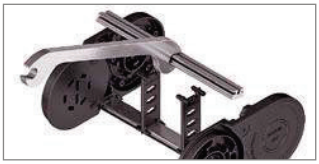

Pitch
67 mm


Inner height
46 mm


Inner widths
50 – 400 mm


Bending radii
75 – 350 mm

Stay variants



Aluminum stay RSH ..... page **250**

Frame screw-in stay

- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

Key for abbreviations on page 12

Design guidelines from page 38

TOTALTRAX® complete systems

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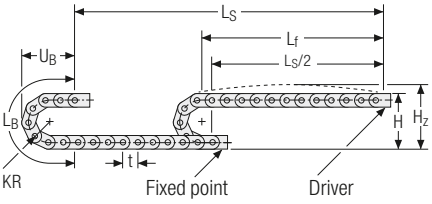
TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

Unsupported arrangement

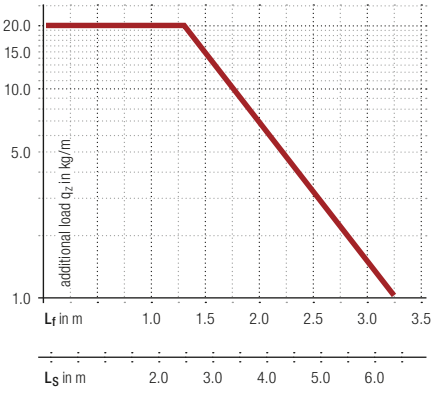


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
75	214	262	370	174
100	264	312	448	199
125	314	362	527	224
150	364	412	605	249
175	414	462	684	274
200	464	512	762	299
220	504	552	825	319
250	564	612	919	349
300	664	712	1076	399
350	764	812	1234	449

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 = 2.4 kg/m. For other inner widths, the maximum additional load changes.



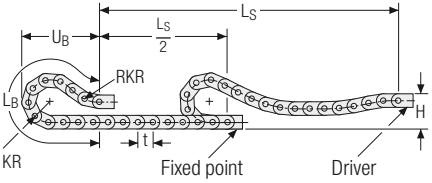
Velocity
up to 8 m/s

Acceleration
up to 40 m/s²

Travel length
up to 6.4 m

Additional load
up to 20 kg/m

Gliding arrangement



We recommend the use of glide shoes for gliding applications.

The gliding cable carrier must be guided in a channel. See p. 654.

Velocity
up to 2 m/s

Acceleration
up to 2 – 3 m/s²

Travel length
up to 80 m

Additional load
up to 20 kg/m

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Key for abbreviations on page 12

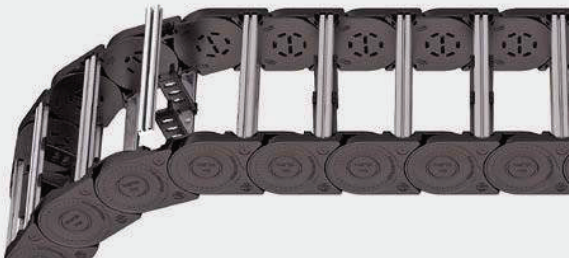
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

HC46 RSH | Dimensions · Technical data

Plastic stay RSH –
screw-in frame stay

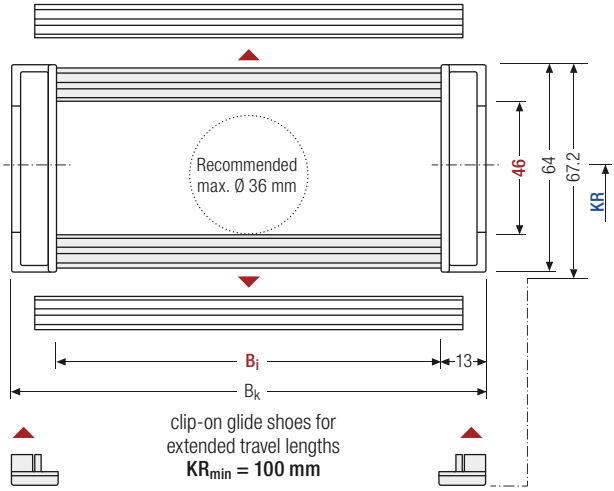
- Aluminum profile bars for light and medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by rotating.



Stays mounted on each chain link **(VS: fully-stayed)**

1 mm

B_i 50 – 400 mm in **1 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	KR [mm]										q_k [kg/m]
46	64	67,2	**50 – 400**	B_i + 26	**75**	**100**	**125**	**150**	**175**	**200**	**220**	**250**	**300**	**350**	1,83 – 4,01

* in 1 mm width sections

Order example

HC 46	.	200	.	RSH	.	170	-	2010		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Divider systems

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

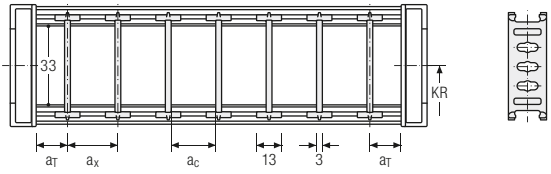
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

For applications with lateral acceleration and lying on the side, the dividers can be attached by simple insertion of a fixing profile into the RSH stay, available as an accessory **(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	7	13	10	–	–
B	7	13	10	2	–

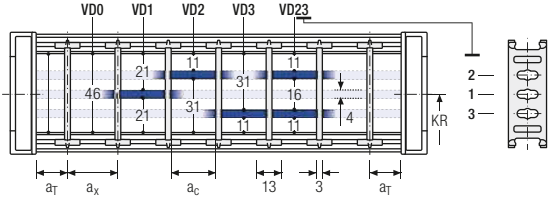
The dividers can be moved within the cross section (version A) or fixed (version B).



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	7	13	10	–	2
B	7	13	10	2	2

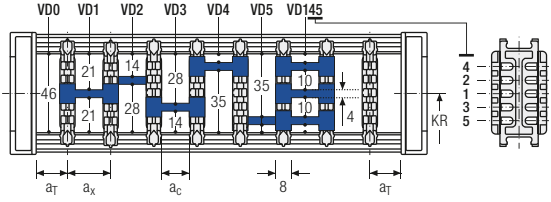
The dividers can be moved within the cross section (version A) or fixed (version B).

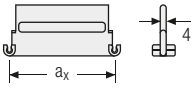


Divider system TS3 with height separation consisting of plastic partitions

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	4	16	8	2

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

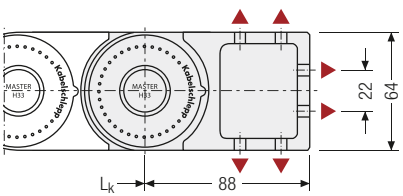
a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

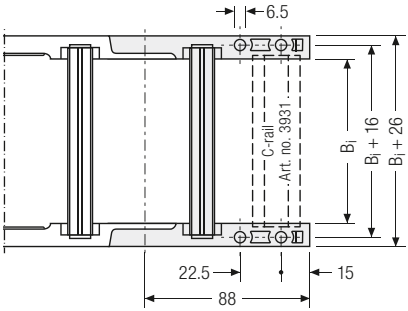
When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 3 mm). Twin dividers are also suitable for retrofitting in the partition system.

H46 | End connectors

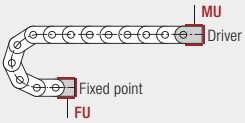
Universal end connectors UMB – plastic (standard)

The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side**.





▲ Assembly options



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

More product information online

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

Configure your cable carrier here: **onlineengineer.de**

Key for abbreviations on page 12

Design guidelines from page 38

Technical support: **technik@kabelschlepp.de**

L60 | Stay variants | Overview

L60

Pitch
91 mm

Inner height
60 mm

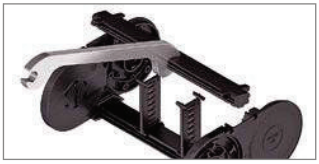
Inner widths
75 – 600 mm

Bending radii
135 – 500 mm

Stay variants

Aluminum stay RSH page 256

Frame screw-in stay
- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Plastic stay RE page 260

Frame screw-in stay
- Plastic profile bars for light and medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

TOTALTRAX® complete systems

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TRAXLINE® cables for cable carriers

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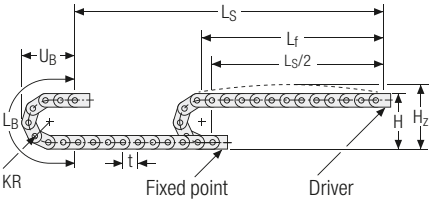
Unsupported arrangement

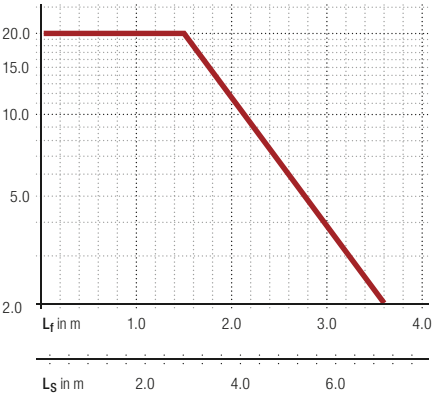


KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
135	358	408	607	271
150	388	438	654	286
175	441	491	732	312
200	488	538	811	336
250	588	638	968	386
300	688	738	1125	436
350	788	838	1282	486
400	888	938	1439	536
500	1088	1138	1753	636

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 = 3.6 kg/m. For other inner widths, the maximum additional load changes.



Velocity
up to 6 m/s

Acceleration
up to 30 m/s²

Travel length
up to 7 m

Additional load
up to 20 kg/m

More product information online

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

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

Key for abbreviations on page 12

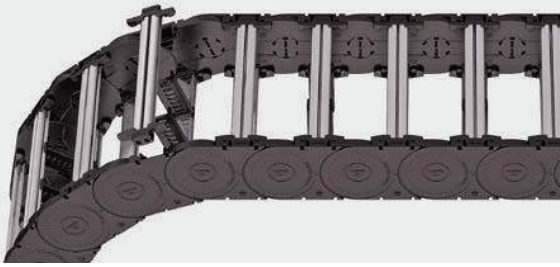
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

LC60 RSH | Dimensions · Technical data

Plastic stay RSH –
screw-in frame stay

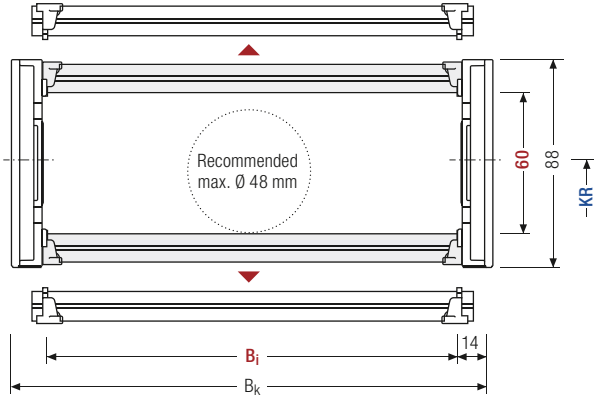
- Aluminum profile bars for light and medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by rotating.



Stays mounted on each chain link **(VS: fully-stayed)**

1 mm

B_i 75 – 600 mm in **1 mm width sections**



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]
60	88	75 – 600	B_i + 28	135	150	175	200	250	300	350	400	500	2,78 – 7,10

* in 1 mm width sections

Order example

LC 60	.	400	.	RSH	.	250	-	2184	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Divider systems

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

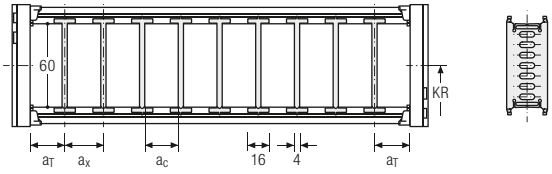
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

For applications with lateral acceleration and lying on the side, the dividers can be attached by simple insertion of a fixing profile into the RSH stay, available as an accessory **(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	8	13	9	–	–
B	10	13	9	2	–

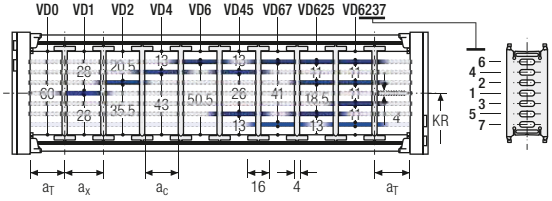
The dividers can be moved within the cross section (version A) or fixed (version B).



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	8	13	9	–	2
B	10	13	9	2	2

The dividers can be moved within the cross section (version A) or fixed (version B).



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LC60 RSH | Inner distribution | TS3

Divider system TS3 with height separation consisting of plastic partitions

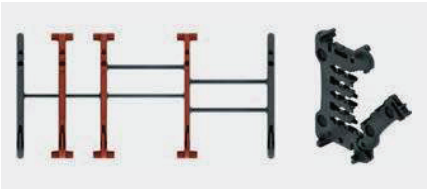
As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Key for abbreviations on page 12

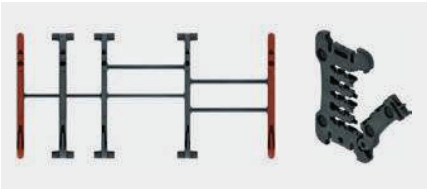
Design guidelines from page 38

Technical support: technik@kabelschlepp.de

Divider version A



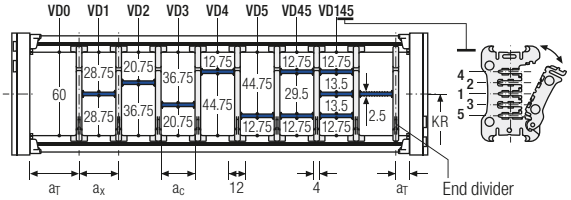
End divider

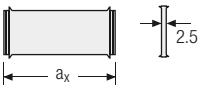


Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	19.5 / 4,5*	14	10	2

* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.

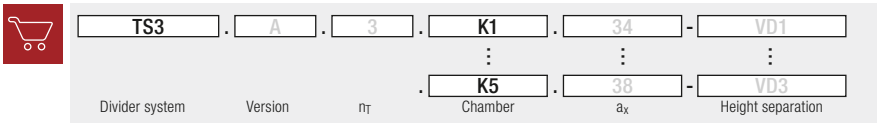




a_x (center distance of dividers) [mm]																
a_c (nominal width of inner chamber) [mm]																
14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

An additional central support is required when using **plastic partitions with a_x > 49 mm**.

Order example



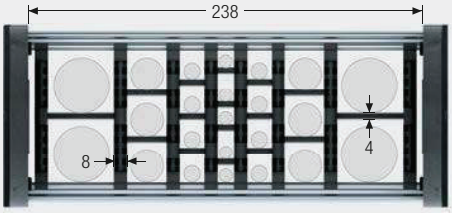
Please state the designation of the divider system **(TS0, TS1,...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] as viewed from the left carrier belt. You are welcome to add a sketch to your order.

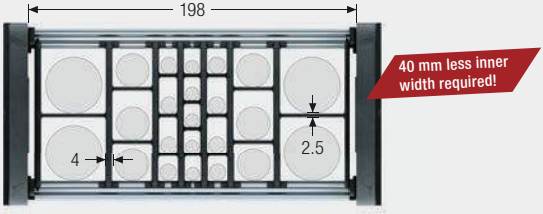
The next generation of the TS3 divider system

Width optimized and ready for Industry 4.0

Width comparison

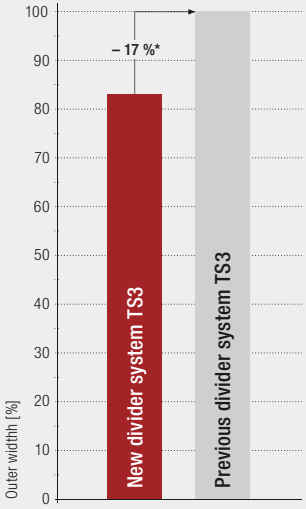


Previous divider system TS3 with stay variant RE



Significatn space saving with same filling capacity through the new divider system TS3 with stay variant RE

Width optimization through adapted dividers



*For inner width B_i = 238 mm with stay variant RE

Easy-to-assemble cable separation on the smallest footprint

1 Insert cables, open dividers and insert first height separator

2 Insert additional cables, insert height separators

3 Insert cables, complete height separators

4 Close dividers

Key for abbreviations on page 12

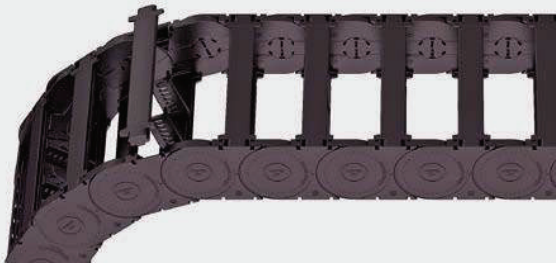
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

LE60 RE | Dimensions · Technical data

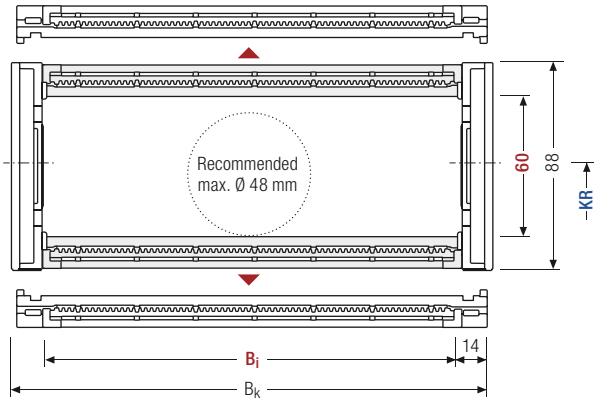
Plastic stay RE – frame screw-in stay

- Plastic profile bars for light and medium loads. Assembly without screws.
- **Outside/inside:** release by rotating.



Stays mounted on each chain link **(VS: fully-stayed)**

B_i 85 – 250 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]
60	88	85	125	138	150	B_i + 28	135	150	175	200	250	2,78 – 7,10
		180	196	225	250		300	350	400	500		

Order example

LE 60	.	180	.	RE	.	250	-	2184		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change.

Divider systems

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

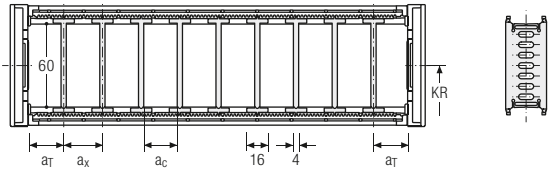
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

For applications with lateral acceleration and lying on the side, divider with arresting cams are available. These can be fixed in the latching profile of the stays **(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	8	13	9	–	–
B	10	13	9	2.5	–

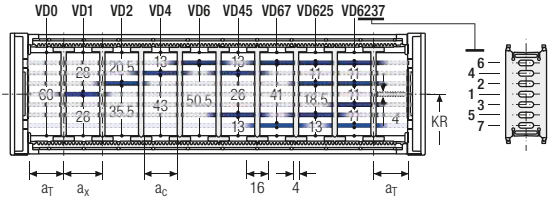
The dividers can be moved within the cross section (version A) or fixed (version B).



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	8	13	9	–	2
B	10	13	9	2.5	2

The dividers can be moved within the cross section (version A) or fixed (version B).



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TRAXLINE® cables for cable carriers

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LE60 RE | Inner distribution | TS3

Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

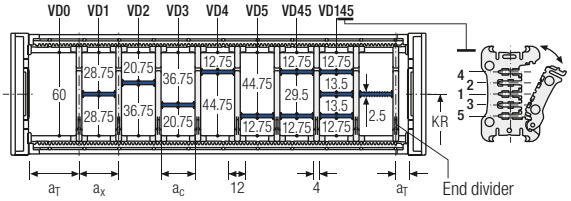
Divider version A

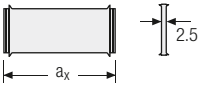
End divider

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	n_T min
A	19.5 / 4,5*	14	10	2

* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





a_X (center distance of dividers) [mm]

a_C (nominal width of inner chamber) [mm]

14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

An additional central support is required when using **plastic partitions with a_X > 49 mm**.

Order example

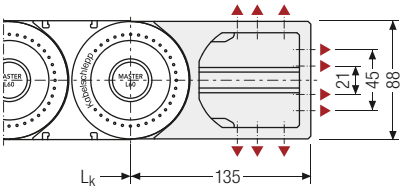
TS3	.	A	.	3	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K5	.	38	-	VD3
Divider system		Version		n_T		Chamber		a_X		Height separation

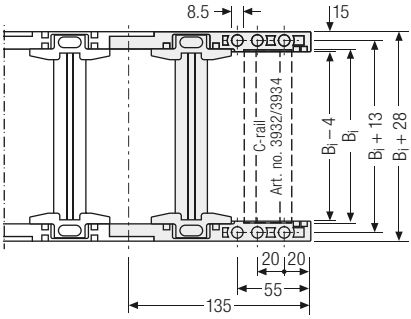
Please state the designation of the divider system **(TS0, TS1,...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_X] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] as viewed from the left carrier belt. You are welcome to add a sketch to your order.

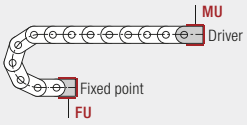
Universal end connectors UMB – plastic (standard)

The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side**.





▲ Assembly options



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

More product information online

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

Configure your cable carrier here: **onlineengineer.de**

L80 | Stay variants | Overview

L80

Pitch
111 mm

Inner height
80 mm

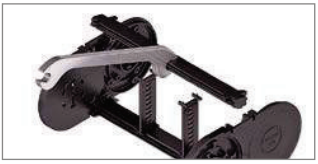
Inner widths
100 – 800 mm

Bending radii
150 – 500 mm

Stay variants

Aluminum stay RSH page 266

Frame screw-in stay
- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Plastic stay RE page 270

Frame screw-in stay
- Plastic profile bars for light and medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

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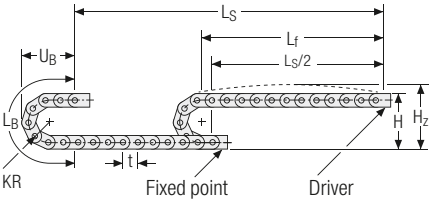
Unsupported arrangement



KR [mm]	H [mm]	Hz [mm]	LB [mm]	UB [mm]
150	410	470	694	316
200	510	570	851	366
250	610	670	1008	416
300	710	770	1165	466
350	810	870	1322	516
400	910	970	1479	566
500	1110	1170	1793	666

Inner heights

80

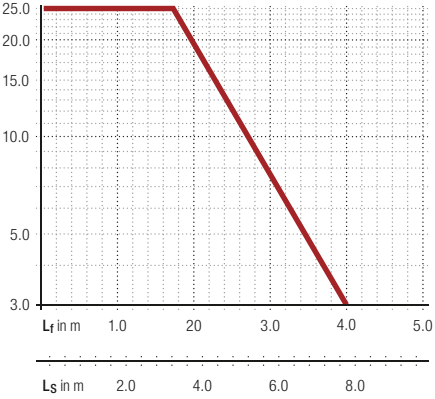
Inner widths

100 – 800

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 = 5.63 kg/m. For other inner widths, the maximum additional load changes.



Velocity
up to 5 m/s

Acceleration
up to 25 m/s²

Travel length
up to 7.9 m

Additional load
up to 25 kg/m

tsubaki-kabelschlepp.com/master

More product information online

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

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

Key for abbreviations on page 12

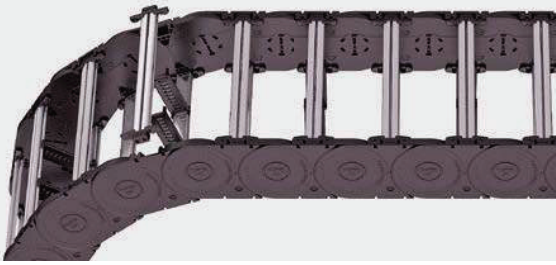
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

LC80 RSH | Dimensions · Technical data

Plastic stay RSH –
screw-in frame stay

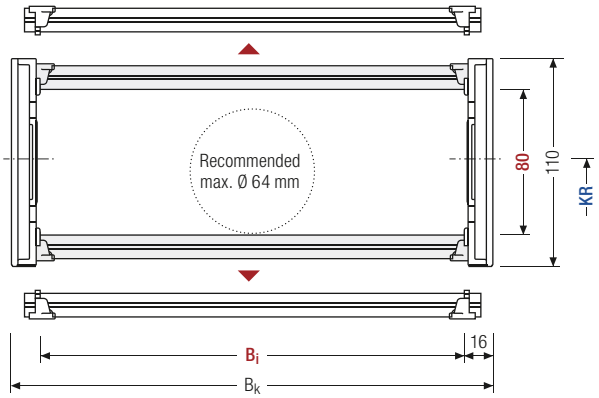
- Aluminum profile bars for light and medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by rotating.



Stays mounted on each chain link **(VS: fully-stayed)**

1 mm

B_i 100 – 800 mm in **1 mm width sections**



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]
80	110	100 – 800	B_i + 32	150	200	250	300	350	400	500	3,89 – 10,01

* in 1 mm width sections

Order example

LC 80	.	500	.	RSH	.	300	-	2442		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Subject to change.

Divider systems

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

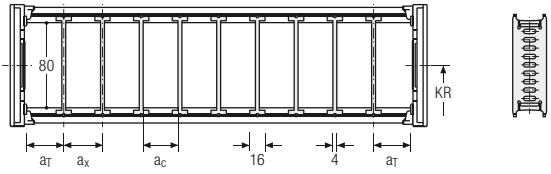
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

For applications with lateral acceleration and lying on the side, the dividers can be attached by simple insertion of a fixing profile into the RSH stay, available as an accessory **(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	10	16	12	–	–
B	11	16	12	3	–

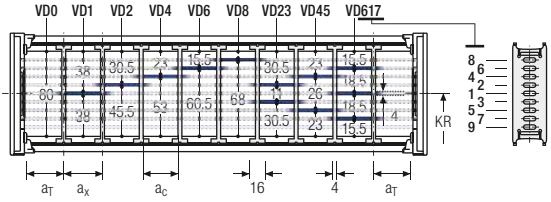
The dividers can be moved within the cross section (version A) or fixed (version B).



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	10	16	12	–	2
B	11	16	12	3	2

The dividers can be moved within the cross section (version A) or fixed (version B).

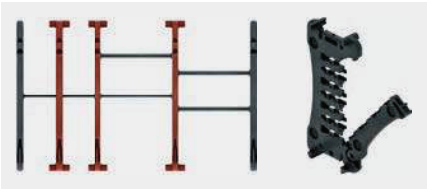


LC80 RSH | Inner distribution | TS3

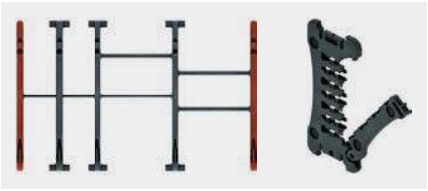
Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Divider version A



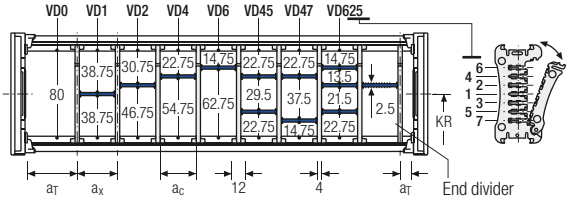
End divider

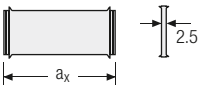


Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	19.5 / 4,5*	14	10	2

* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





a_x (center distance of dividers) [mm]																
a_C (nominal width of inner chamber) [mm]																
14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

An additional central support is required when using **plastic partitions with a_x > 49 mm**.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K5	.	38	-	VD3
Divider system		Version		n_T		Chamber		a_x		Height separation

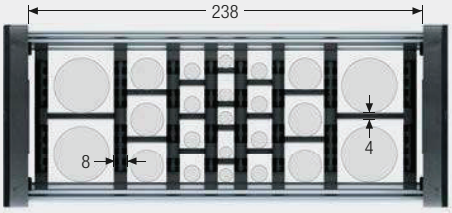
Please state the designation of the divider system **(TS0, TS1,...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] as viewed from the left carrier belt. You are welcome to add a sketch to your order.

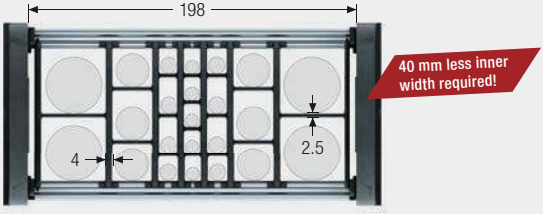
The next generation of the TS3 divider system

Width optimized and ready for Industry 4.0

Width comparison

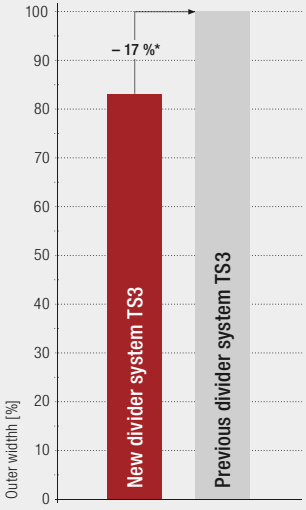


Previous divider system TS3 with stay variant RE



Significatn space saving with same filling capacity through the new divider system TS3 with stay variant RE

Width optimization through adapted dividers



*For inner width B_i = 238 mm with stay variant RE

Easy-to-assemble cable separation on the smallest footprint

1 Insert cables, open dividers and insert first height separator

2 Insert additional cables, insert height separators

3 Insert cables, complete height separators

4 Close dividers

Key for abbreviations on page 12

Design guidelines from page 38

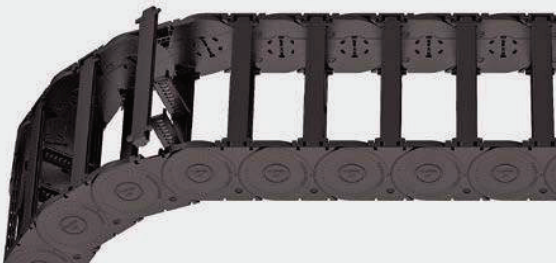
Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

LE80 RE | Dimensions · Technical data

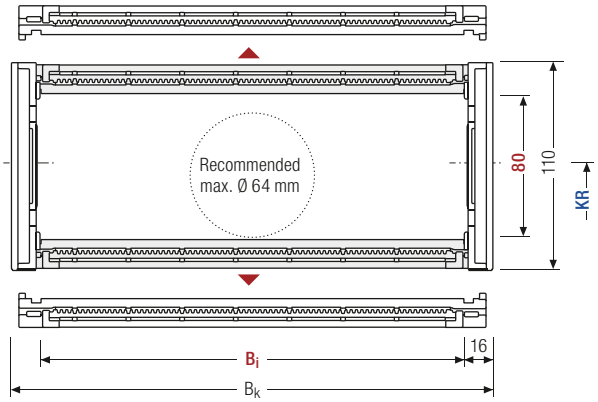
Plastic stay RE – frame screw-in stay

- Plastic profile bars for light and medium loads. Assembly without screws.
- **Outside/inside:** release by rotating.



Stays mounted on each chain link **(VS: fully-stayed)**

B_i 85 – 250 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]
80	110	85	125	138	150	B_i + 32	150	200	300	3,89 – 10,01
		180	196	225	250		350	400	500	

Order example

LE 80	.	250	.	RE	.	300	-	2442	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Subject to change.

Divider systems

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

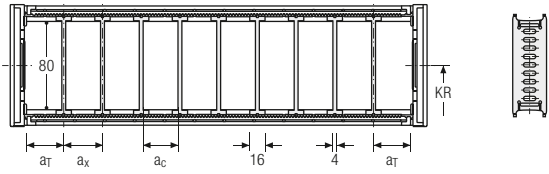
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

For applications with lateral acceleration and lying on the side, divider with arresting cams are available. These can be fixed in the latching profile of the stays **(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	8	16	12	–	–
B	10	16	12	2.5	–

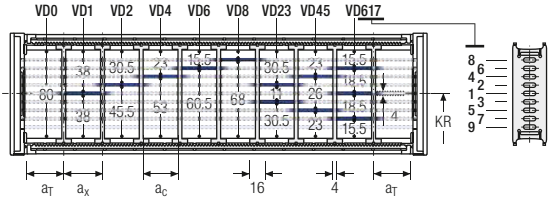
The dividers can be moved within the cross section (version A) or fixed (version B).



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	8	16	12	–	2
B	10	16	12	2.5	2

The dividers can be moved within the cross section (version A) or fixed (version B).



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

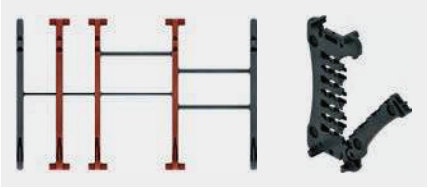
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

LE80 RE | Inner distribution | TS3

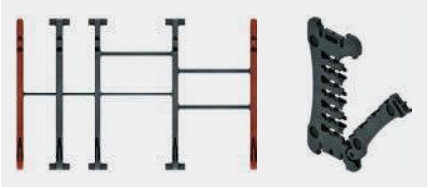
Divider system TS3 with height separation consisting of plastic partitions

As a standard, the divider **version A** is used for vertical partitioning within the cable carrier. The complete divider system can be moved within the cross section.

Divider version A



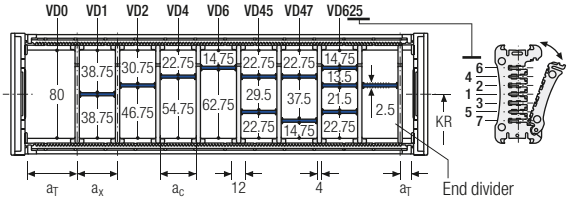
End divider

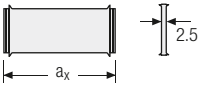


Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	19.5 / 4,5*	14	10	2

* For End divider

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





a_x (center distance of dividers) [mm]																
a_C (nominal width of inner chamber) [mm]																
14	**16**	**19**	**23**	**24**	**28**	**29**	**32**	**33**	**34**	**38**	**39**	**43**	**44**	**48**	**49**	**54**
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	**59**	**64**	**68**	**69**	**74**	**78**	**79**	**80**	**84**	**88**	**89**	**94**	**96**	**99**	**112**	
54	55	60	64	65	70	74	75	76	80	84	85	90	92	95	108	

An additional central support is required when using **plastic partitions with a_x > 49 mm**.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K5	.	38	-	VD3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] as viewed from the left carrier belt. You are welcome to add a sketch to your order.

Key for abbreviations on page 12

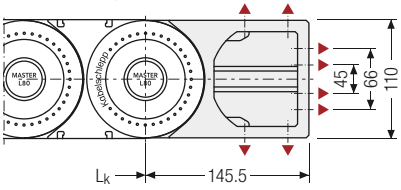
Design guidelines from page 38

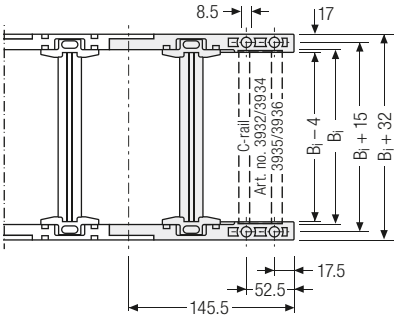
Technical support:
technik@kabelschlepp.de

Universal end connectors UMB – plastic (standard)

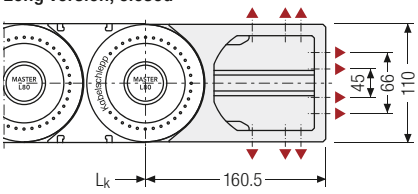
The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side**.

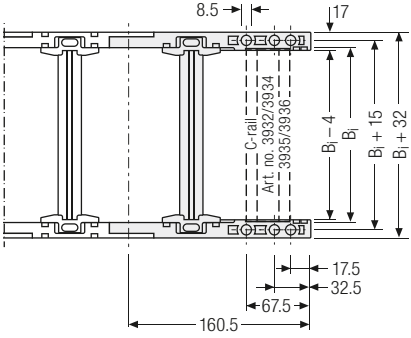
Short version, closed





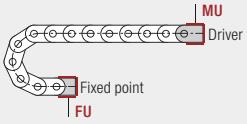
Long version, closed





Optionally, the end connectors are available in an **open** version for easy mounting. Please state when ordering.

▲ Assembly options



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

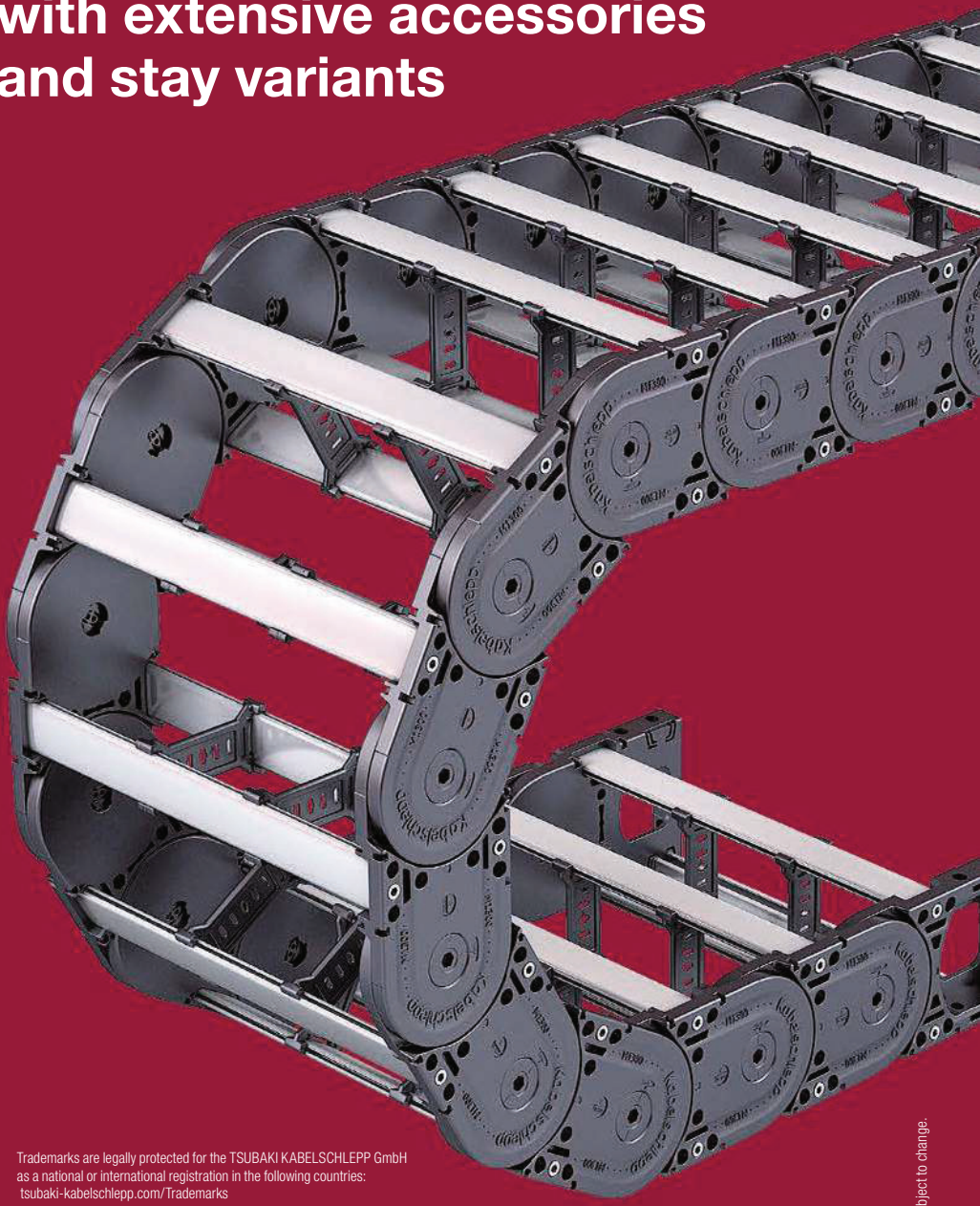
Order example

UMB	.	F	U	
UMB	.	M	U	
End connector		Connection point	Connection type	

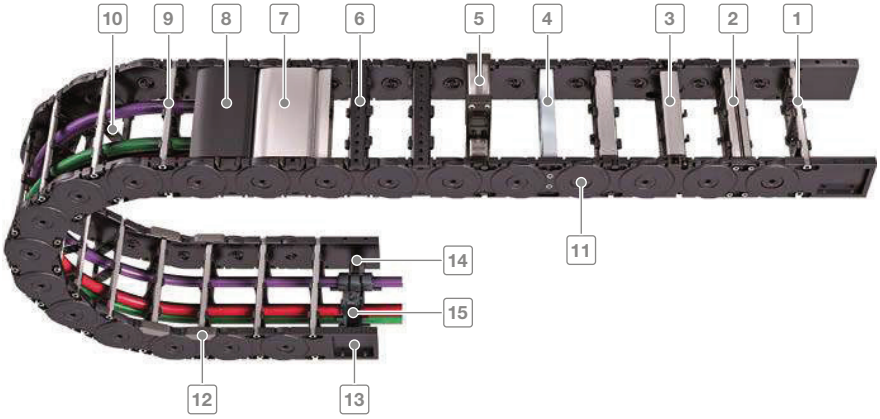
We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

M series

Variable cable carrier with extensive accessories and stay variants



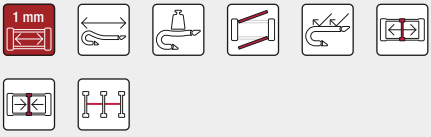
M series | Overview



1 Aluminum stays available in **1 mm width sections**
2 4-fold bolted aluminum stays for extreme loads
3 Aluminum stays with ball joint
4 Aluminum hole stays
5 Mounting frame stays
6 Plastic stays available in **4, 8** or **16 mm width sections**
7 Aluminum cover available in **1 mm width sections**
8 Plastic cover available in **8** or **16 mm width sections**
9 Can be opened quickly on the inside and the outside for cable laying
10 Fixable dividers
11 Locking bolts
12 Replaceable glide shoes
13 Universal end connectors (UMB)
14 C-rail for strain relief elements
15 Strain relief combs

Features

- Encapsulated, dirt-resistant stroke system
- Durable sidebands through robust link plate design
- Easy assembly of side bands through bars with easy-to-assemble locking bolts
- Long service life due to minimized hinge wear owing to the “life extending 2 disc principle“
- Large selection of vertical and horizontal stay systems and dividing options for your cables
- Versions with aluminum stays in 1 mm width sections up to 800 mm inner width
- Versions with plastic stays available in 4, 8 or 16 mm width sections



Minimized hinge wear owing to the “life extending 2 disc principle“

Sturdy link plate design, encapsulated stroke system

Easy to assemble through locking bolts

Replaceable glide shoes for long service life for gliding applications

M series | Overview

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]
M0320											
		RS 01	19	27.5	25 – 275	36 – 286	1	32	37 – 200	2.5	15
		RS 02	19	27.5	25 – 275	36 – 286	1	32	37 – 200	2.5	15
		RE	19	27.5	25 – 149	36 – 160	4	32	37 – 200	2.5	15
M0475											
		RD 1	28	39	24 – 280	41 – 297	8	47.5	55 – 300	3.0	22
		RD 2	28	39	24 – 280	41 – 297	8	47.5	55 – 300	3.0	22
M0650											
		RS	38	57	75 – 400	109 – 434	1	65	75 – 350	35	30
		LG	–	57	75 – 500	109 – 534	1	65	75 – 350	35	29
		RMA	38 (200)	57 (224)	200 – 400	234 – 434	1	65	75 – 350	35	–
		RE	42	57	50 – 266	84 – 300	8	65	75 – 350	35	33
		RD	42	57	50 – 266	84 – 300	8	65	75 – 350	35	33
M0950											
		RS	58	80	75 – 400	114 – 439	1	95	140 – 380	36	46
		RV	58	80	75 – 500	114 – 539	1	95	140 – 380	36	46
		RM	54	80	75 – 600	114 – 639	1	95	140 – 380	36	43
		LG	–	80	75 – 600	114 – 639	1	95	140 – 380	36	38
		RMA	58 (200)	80 (224)	200 – 500	239 – 539	1	95	140 – 380	36	–
		RMR	51	80	75 – 600	114 – 639	1	95	140 – 380	36	46
		RE	58	80	45 – 557	84 – 596	16	95	140 – 380	36	46
		RD	58	80	45 – 557	84 – 596	16	95	140 – 380	36	46

* Additional information can be found in our technical manual.

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

M series | Overview

Unsupported arrangement			Gliding arrangement			Inner distribution				Installation variants			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	
2.8	10	50	80	2.5	25	●	●	–	–	●	●	●	282
2.8	10	50	80	2.5	25	●	●	–	–	●	●	●	282
2.8	10	50	80	2.5	25	●	●	–	–	●	●	●	284
2.7	10	50	–	–	–	●	●	●	–	●	●	●	290
2.7	10	50	–	–	–	●	●	●	–	●	●	●	292
4.8	8	40	60	2	2 – 3	●	●	●	●	●	●	●	298
4.8	8	40	60	2	2 – 3	–	–	–	–	●	●	●	*
4.8	8	40	60	2	2 – 3	●	–	–	–	●	●	–	*
4.8	8	40	60	2	2 – 3	●	●	●	●	●	●	●	302
4.8	8	40	60	2	2 – 3	●	●	●	●	●	●	●	*
8.8	6	30	80	2	2 – 3	●	●	●	–	●	●	●	308
8.8	6	30	80	2	2 – 3	●	●	●	●	●	–	●	310
8.8	6	30	80	2	2 – 3	●	●	●	–	●	●	●	314
8.8	6	30	80	2	2 – 3	–	–	–	–	●	●	●	*
8.8	6	30	80	2	2 – 3	●	–	–	–	●	●	–	*
8.8	6	30	80	2	2 – 3	●	–	–	–	●	●	●	*
8.8	6	30	80	2	2 – 3	●	●	●	●	●	●	●	316
8.8	6	30	80	2	2 – 3	●	●	●	●	●	●	●	*

Subject to change.

M series | Overview

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

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]
M1250											
		RS	72	96	75 – 400	120 – 445	1	125	180 – 500	65	61
		RV	72	96	100 – 600	145 – 645	1	125	180 – 500	65	61
		RM	69	96	100 – 800	145 – 845	1	125	180 – 500	65	59
		LG	–	96	100 – 800	145 – 845	1	125	180 – 500	65	59
		RMA	72 (200)	96 (226)	200 – 800	245 – 845	1	125	180 – 500	65	–
		RMR	66	96	100 – 800	145 – 845	1	125	180 – 500	65	54
		RE	72	96	71 – 551	116 – 596	16	125	180 – 500	65	61
		RD	72	96	71 – 551	116 – 596	16	125	180 – 500	65	61
M1300											
		RMF	87	120	100 – 800	150 – 850	1	130	150 – 500	70	75
		RMS	87	120	100 – 800	150 – 850	1	130	150 – 500	70	75
		RM	87	120	100 – 800	150 – 850	1	130	150 – 500	70	75
		LG	–	120	100 – 800	150 – 850	1	130	150 – 500	70	74

* Additional information can be found in our technical manual.

Technical manual

Do you need more information on the M series?
Our technical manual with all information on configuring your cable carrier can be found at **tsubaki-kabelschlepp.com/download**.

Unsupported arrangement			Gliding arrangement			Inner distribution				Installation variants			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	
9.7	5	25	100	2	2 – 3	●	●	–	–	●	●	●	322
9.7	5	25	100	2	2 – 3	●	●	●	●	●	–	●	324
9.7	5	25	100	2	2 – 3	●	●	●	–	●	●	●	328
9.7	5	25	100	2	2 – 3	–	–	–	–	●	●	●	*
9.7	5	25	100	2	2 – 3	●	–	–	–	●	●	–	*
9.7	5	25	100	2	2 – 3	●	–	–	–	●	●	●	*
9.7	5	25	100	2	2 – 3	●	●	●	●	●	●	●	330
9.7	5	25	100	2	2 – 3	●	●	●	●	●	●	●	*
10.8	5	25	120	2	2 – 3	●	●	–	●				336
10.8	5	25	120	2	2 – 3	●	●	–	●	●	●	●	338
10.8	5	25	120	2	2 – 3	●	●	–	●	●	●	●	*
10.8	5	25	120	2	2 – 3	–	–	–	–	●	●	●	*

M0320 | Stay variants | Overview

M0320

Pitch
32 mm

Inner height
19 mm

Inner widths
25 – 275 mm

Bending radii
37 – 200 mm

Stay variants

Aluminum stay 01 ..... page 282

Frame stay detachable inside
- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Inside:** release by turning by 90°.

Aluminum stay 02 ..... page 282

Frame stay detachable outside "the standard"
- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside:** release by turning by 90°.

Plastic stay RE ..... page 284

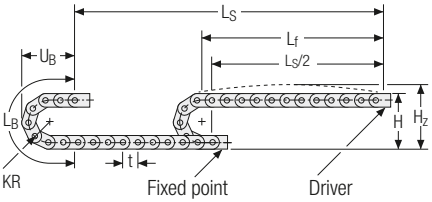
Frame screw-in stay
- Plastic profile bars for light and medium loads. Assembly without screws.
- **Inside/outside:** release by turning by 90°.

More product information online

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

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

Unsupported arrangement

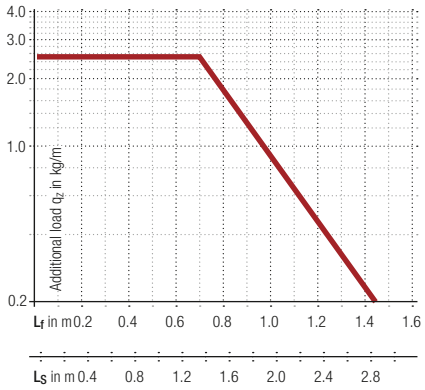


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
37	101.5	121.5	181	83
47	121.5	141.5	212	93
77	181.5	201.5	306	123
100	227.5	247.5	379	146
200	427.5	427.5	693	246

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 = 0.54 kg/m. For other inner widths, the maximum additional load changes.



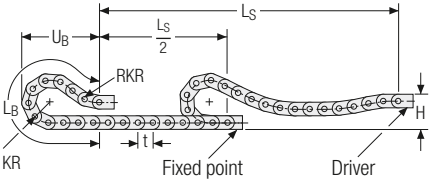
Velocity
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 2.8 m

Additional load
up to 2.5 kg/m

Gliding arrangement



The gliding cable carrier has to be routed in a channel.
See p. 654.

Velocity
up to 2.5 m/s

Acceleration
up to 25 m/s²

Travel length
up to 80 m

Additional load
up to 2.5 kg/m

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Key for abbreviations on page 12

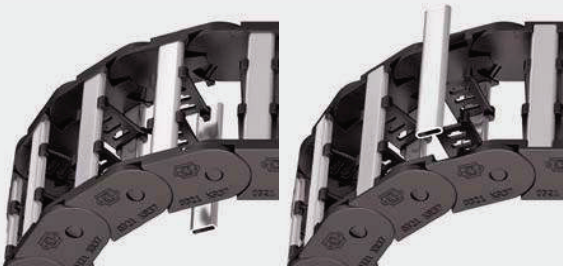
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

MC0320 01/02 | Dimensions · Technical data

Aluminum stay 01/02 – frame stay detachable outside

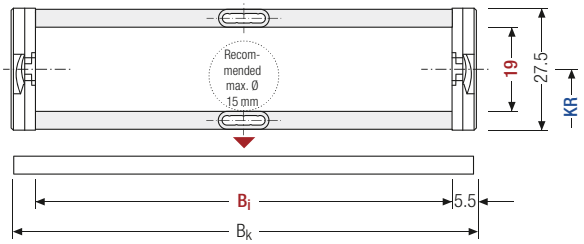
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by turning by 90°.



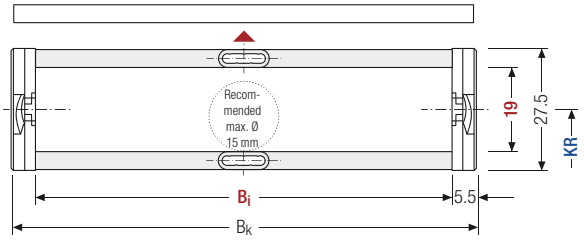
Stay arrangement on each chain link **(VS: fully-stayed)**

1 mm B_i 25 – 275 mm in **1 mm width sections**

Aluminum stay 01 frame stay detachable inside



Aluminum stay 02 frame stay detachable outside



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]
19	27.5	25 – 275	B_i + 11	37	47	77	100	200	0.47 – 1.70

* in 1 mm width sections

Order example

MC0320	200	01	100	1152	VS
Type	B_i [mm]	Stay variant	KR [mm]	L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Divider systems

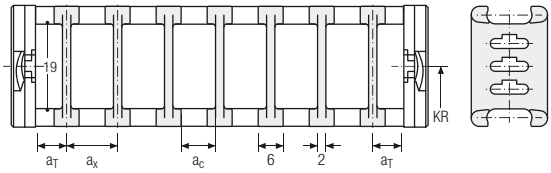
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved 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	3	6	4	–

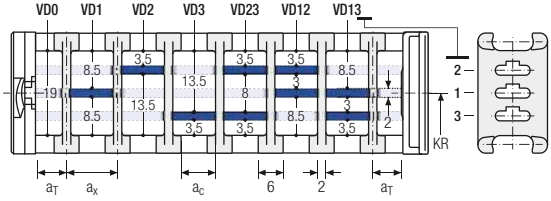
The dividers can be moved in the cross section.



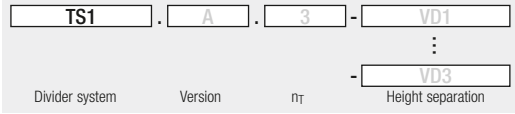
Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	n_T min
A	3	20	6	4	2

The dividers can be moved in the cross section.



Order example



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

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

ME0320 RE | Dimensions · Technical data

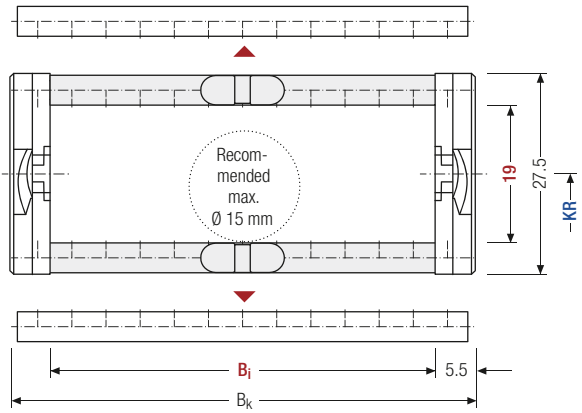
Plastic stay RE – screw-in frame stay

- Plastic profile bars for light and medium loads. Assembly without screws.
- Available customized in **4 mm grid**.
- **Outside/inside:** release by turning by 90°.

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

4 mm

B_i 25 – 149 mm in **4 mm width sections**



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]
19	27.5	**25 – 149**	B_i + 11	**37**	**47**	**77**	**100**	**200**	0.46 – 0.85

* in 4 mm width sections

Order example

ME0320	.	105	.	RE	.	100	-	1152	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

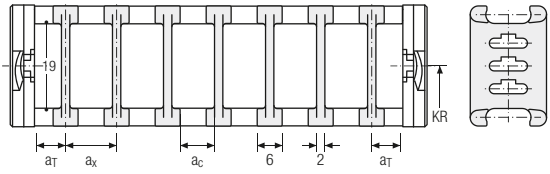
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

The dividers are easily attached to the stay for applications with lateral acceleration and for applications laying on their side by simply turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbars **(Version B)**.
The groove in the frame stay faces outwards.

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	8	6	4	–

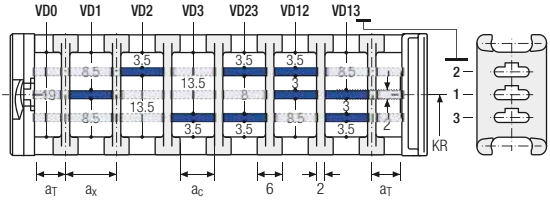
The dividers can be moved in the cross section.



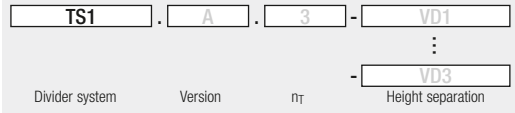
Divider system TS1 with continuous height separation

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	8	6	4	2

The dividers can be moved in the cross section.



Order example



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

If using divider systems with height separation **(TS1)**, please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

M0320 | End connectors

Key for abbreviations on page 12

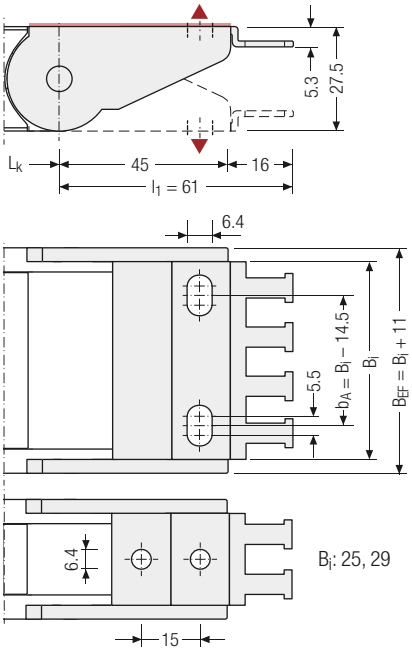
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

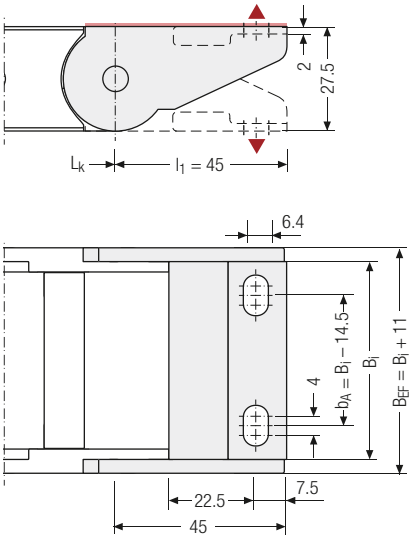
One part end connectors – plastic/aluminum (with integrated strain relief)

The plastic/aluminum end connectors can be **connected from above or below**. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.



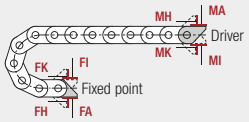
One-part end connectors – plastic/aluminum

The plastic/aluminum end connectors can be **connected from above or below**. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.



▲ Assembly options

B_i [mm]	n_z	B_i [mm]	n_z	B_i [mm]	n_z	B_i [mm]	n_z
25	2	39	4	89	7	149	11
29	2	49	4	109	8		
37	3	69	5	124	10		



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

Plastic/aluminum	.	F	A
Plastic/aluminum	.	M	A
End connector		Connection point	Connection type

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

Inner heights

19

Inner widths

25 – 275

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

M0475

Pitch
47.5 mm

Inner height
28 mm

Inner widths
24 – 280 mm

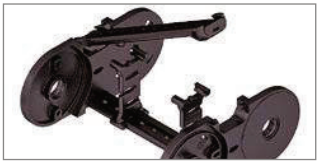
Bending radii
55 – 300 mm

Stay variants

Plastic stay 01 page 290

Frame stay with hinge in the inner radius

- Plastic profile bars with hinge for light and medium loads. Assembly without screws.
- **Outside:** release by turning by 90°.
- **Inside:** swivable to both sides.



Plastic stay 02 page 292

Frame stay with hinge in the outer radius

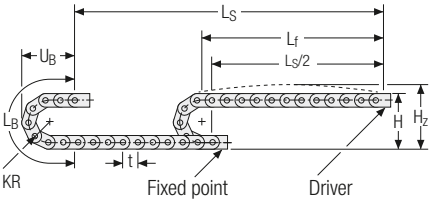
- Plastic profile bars with hinge for light and medium loads. Assembly without screws.
- **Inside:** swivable to both sides.
- **Inside:** release by turning by 90°.

More product information online

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

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

Unsupported arrangement

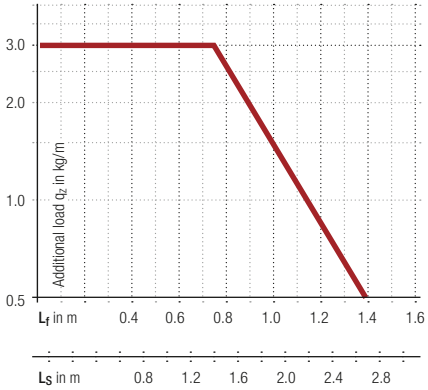


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
55	149	174	268	122
75	189	214	331	142
100	239	264	410	167
130	299	324	504	197
160	359	384	598	227
200	439	464	724	267
250	539	564	881	317
300	639	664	1038	367

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 = 1.7 kg/m. For other inner widths, the maximum additional load changes.



Velocity
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 2.7 m

Additional load
up to 3.0 kg/m

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

MK0475 RD 1 | Dimensions · Technical data

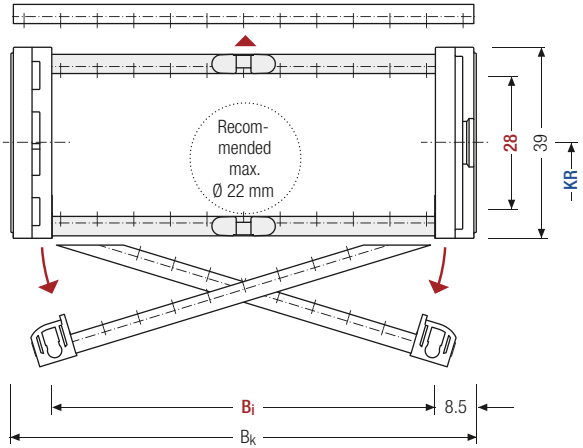
Plastic stay 01 – frame stay with hinge in the inner radius

- Plastic profile bars with hinge for light and medium loads. Assembly without screws.
- Available customized in **8 mm grid**.
- **Outside:** release by turning by 90°.
  Inside: swivable to both sides.

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

8 mm

B_i 24 – 280 mm in **8 mm width sections**



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]
28	39	24 – 280	B_i + 17	55	75	100	130	160	200	250	300	0.79 – 3.03

* in 8 mm width sections

Order example

MK0475	.	128	.	RD 1	.	100	-	1425		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

MK0475 RD 1 | Inner distribution | TS0 · TS1 · TS2

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

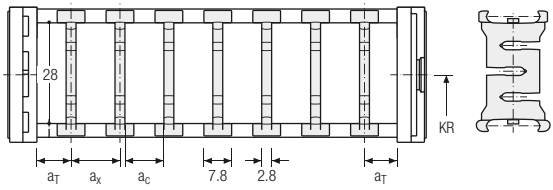
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

The dividers are easily attached to the stay for applications with lateral acceleration and for applications laying on their side by simply turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbars **(Version B)**.
The groove in the frame stay faces outwards.

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	6	7.8	5	–	–
B	12	8	5.2	8	–

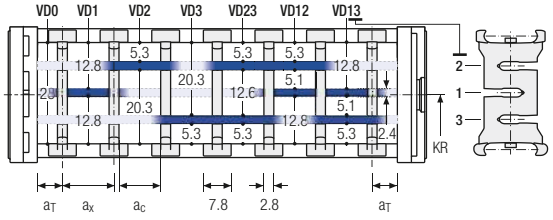
The dividers can be moved within the cross section (version A) or fixed (version B).



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	6	7.8	5	–	2
B	12	8	5.2	8	2

The dividers can be moved within the cross section (version A) or fixed (version B).

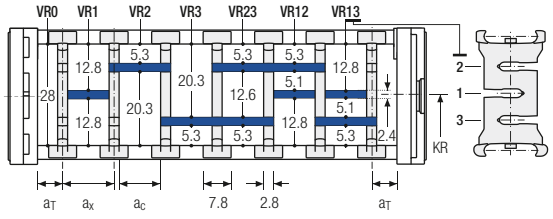


Divider system TS2 with partial height separation

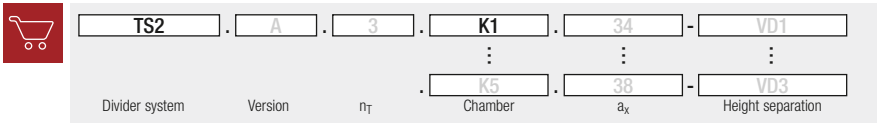
Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
B	12	8*/ 24	5.2*/ 21.2	8	2

* for VR0

With grid distribution **(8 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section (version A) or fixed (version B).



Order example



Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

MK0475 RD 2 | Dimensions · Technical data

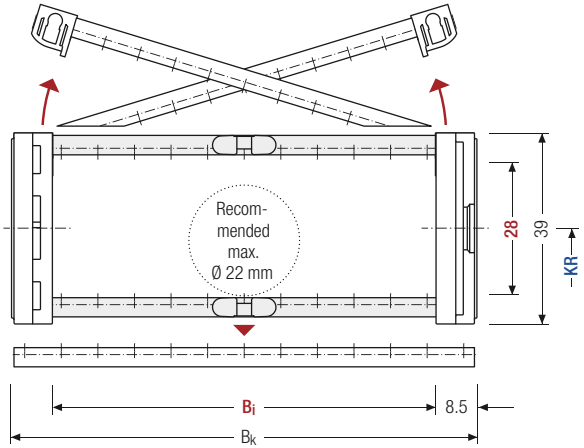
Plastic stay 02 – frame stay with hinge in the outer radius

- Plastic profile bars with hinge for light and medium loads. Assembly without screws.
- Available customized in **8 mm grid**.
- **Outside:** swivable to both sides.
  Inside: release by turning by 90°.

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

8 mm

B_i 24 – 280 mm in **8 mm width sections**



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]
28	39	24 – 280	B_i + 17	55	75	100	130	160	200	250	300	0.79 – 3.03

* in 8 mm width sections

Order example

MK0475	.	128	.	RD 2	.	100	-	1425		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

MK0475 RD 2 | Inner distribution | TS0 · TS1 · TS2

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

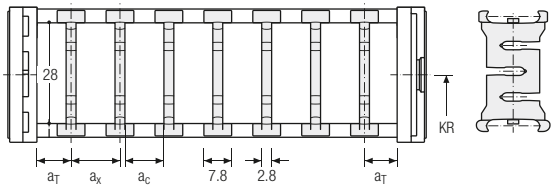
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

The dividers are easily attached to the stay for applications with lateral acceleration and for applications laying on their side by simply turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbars **(Version B)**.
The groove in the frame stay faces outwards.

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	6	7.8	5	–	–
B	12	8	5.2	8	–

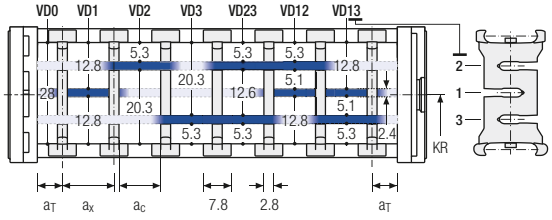
The dividers can be moved within the cross section (version A) or fixed (version B).



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	6	7.8	5	–	2
B	12	8	5.2	8	2

The dividers can be moved within the cross section (version A) or fixed (version B).

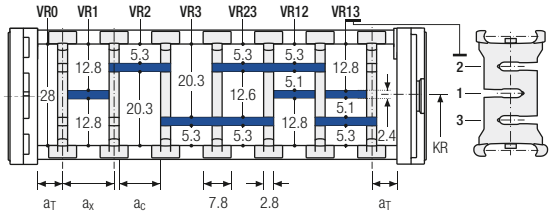


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
B	12	8*/ 24	5.2*/ 21.2	8	2

* for VR0

With grid distribution **(8 mm grid)**. The dividers are fixed by the height separation, the complete divider system is movable in the cross section (version A) or fixed (version B).



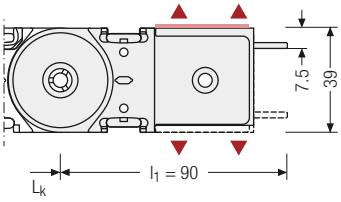
Order example

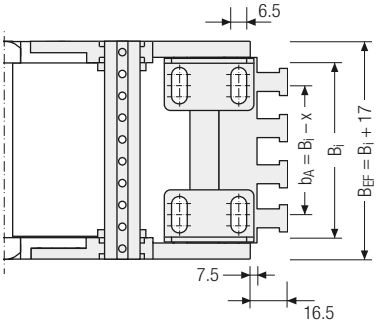
TS2	.	A	.	3	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K5	.	38	-	VD3
Divider system		Version		n_T		Chamber		a_x		Height separation

M0475 | End connectors | Plastic/Steel

End connectors – plastic/steel (with strain relief)

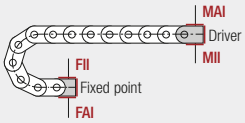
Link end connector made of plastic, end connector made of sheet steel with screw-fixed aluminum strain relief.
The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.





▲ Assembly options

B_i [mm]	x [mm]	n_z
40	17.5	3
56	21.5	4
80	17.5	6
104	19.0	8
128	19.5	9
152	17.5	11
192	18.5	14



Connection point
F – fixed point
M – driver

Connection surface
I – connection surface inside

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

Order example

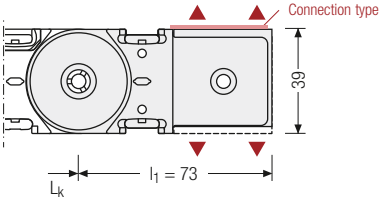
Plastic/steel	.	F	A	I
Plastic/steel	.	M	A	I
End connector		Connection point	Connection type	Connection surface

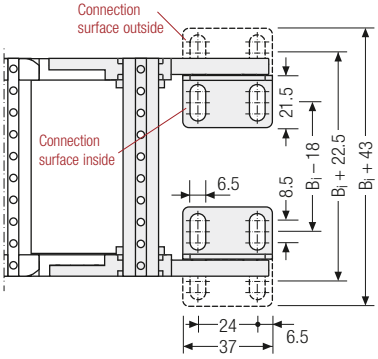
Key for abbreviations on page 12
Design guidelines from page 38

M0475 | End connectors | Plastic/Steel

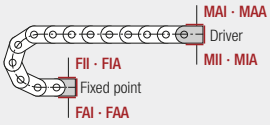
End connectors – plastic/steel

Plastic link end connector, steel end connector. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.





▲ Assembly options



Connection point
F – fixed point
M – driver

Connection surface
I – connection surface inside
A – connection surface outside

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

Order example

Plastic/steel	.	F	A	A
Plastic/steel	.	M	U	
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

M0650 | Stay variants | Overview

M0650

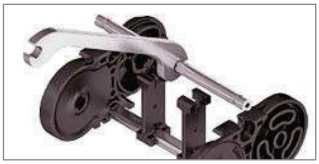
Pitch
65 mm

Inner heights
38 – 42 mm

Inner widths
50 – 400 mm

Bending radii
75 – 350 mm

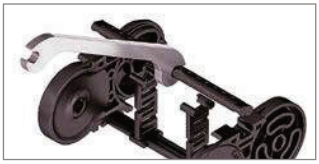
Stay variants



Aluminum stay RS ..... page 298

Standard frame stay "The standard"

- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by turning by 90°.

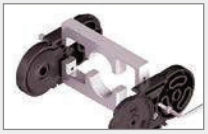


Plastic stay RE ..... page 302

Frame screw-in stay

- Plastic profile bars for light and medium loads. Assembly without screws.
- **Outside/inside:** release by turning by 90°.

Additional stay variants on request



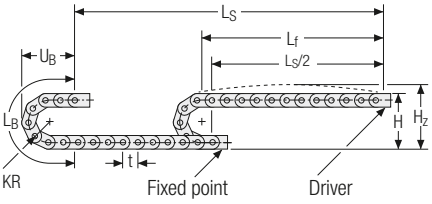
Aluminum stay LG
Optimum cable routing in the neutral bending line.

Aluminum stay RMA
For guiding very large cable diameters.

Plastic stay RD
Plastic profile bars with hinge.

M0650 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

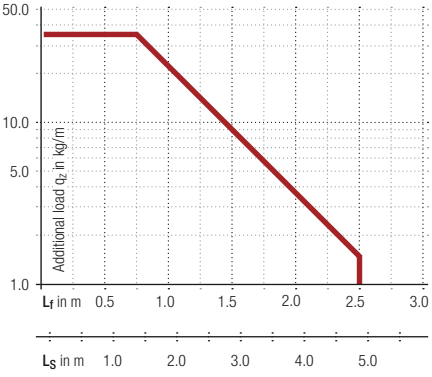


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
75	207	242	366	169
95	247	282	429	189
115	287	322	492	209
145	347	382	586	239
175	407	442	680	269
220	497	532	822	314
260	577	612	948	354
275	607	642	994	369
300	657	692	1073	394
350	757	792	1230	444

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 $q_k = 2.4$ kg/m. For other inner widths, the maximum additional load changes.



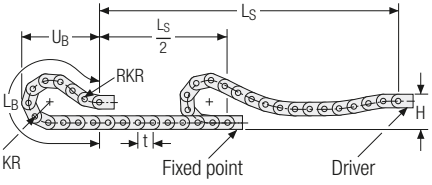
Velocity
up to 8 m/s

Acceleration
up to 40 m/s²

Travel length
up to 4.8 m

Additional load
up to 35 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	n_{RKR}	L_B [mm]	U_B [mm]
145	171	5	1625	691
175	171	5	1690	718
220	171	5	1950	810
260	171	5	2275	926
275	171	5	2405	973
300	171	5	2535	1014
350	171	5	2925	1152

Velocity
up to 2 m/s

Acceleration
up to 2-3 m/s²

Travel length
up to 60 m

Additional load
up to 35 kg/m

The GO module mounted on the driver is a defined sequence of 5 different KR/RKR link plates.

Glide shoes have to be used for gliding applications.

The gliding cable carrier has to be routed in a channel.
See p. 654.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Key for abbreviations on page 12

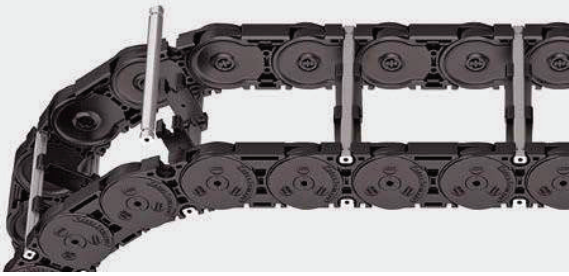
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

MC0650 RS | Dimensions · Technical data

Aluminum stay RS – standard frame stay

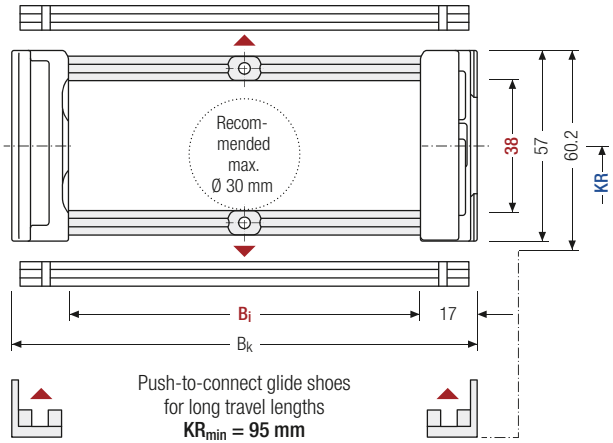
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

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

1 mm
B_i 75 – 400 mm in **1 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	KR [mm]										q_k [kg/m]
38	57	60.2	75 – 400	B_i + 34	75	95	115	145	175	220	260	275	300	350	1.98 – 3.85

* in 1 mm width sections

Order example

MC0650	300	RS	175	1430	HS
Type	B_i [mm]	Stay variant	KR [mm]	L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

MC0650 RS | Inner distribution | TS0 · TS1 · TS2

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

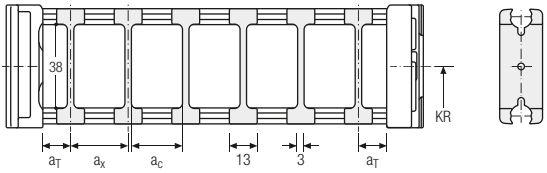
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping on a socket (available as an accessory).

The bushing additionally serves as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm **(Version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	6.5	13	10	–

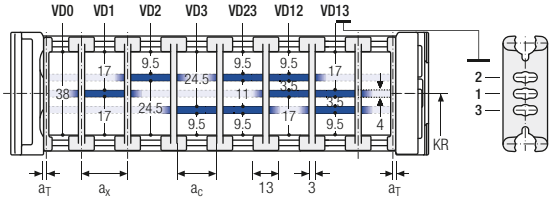
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	1.5	40	13	10	2

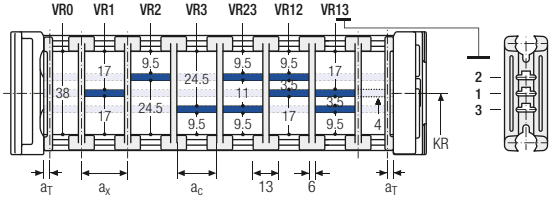
The dividers can be moved in the cross section.



Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	4	21	15	2

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.



TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

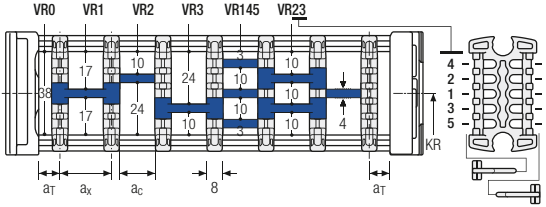
MC0650 RS | Inner distribution | TS3

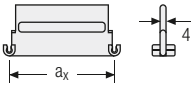
Divider system TS3 with height separation made of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	4	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_c (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K5	.	38	-	VR3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] as viewed from the left carrier belt. You are welcome to add a sketch to your order.

More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

Key for abbreviations on page 12
Design guidelines from page 38

Technical support: **technik@kabelschlepp.de**

Inner heights

38

Inner widths

75 – 400

Increments

1 mm

tsubaki-kabelschlepp.com/m

Key for abbreviations on page 12

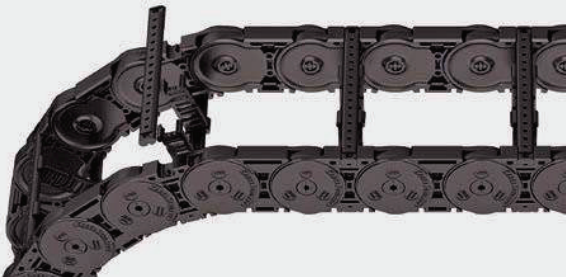
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

ME0650 RE | Dimensions · Technical data

Plastic stay RE – screw-in frame stay

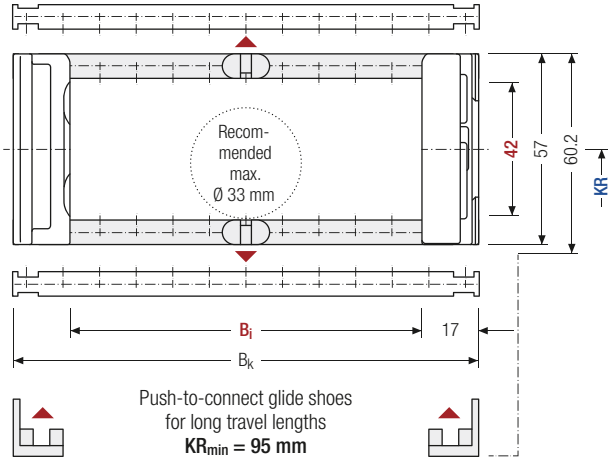
- Plastic profile bars for light and medium loads. Assembly without screws.
- Available customized in **8 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

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

8 mm
B_i 50 – 266 mm in **8 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	KR [mm]										q_k [kg/m]
42	57	60.2	50 – 266	B_i + 34	75	95	115	145	175	220	260	275	300	350	2.00 – 2.84

* in 8 mm width sections

Order example

ME0650	.	210	.	RE	.	175	-	1430		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

ME0650 RE | Inner distribution | TS0 · TS1 · TS2

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

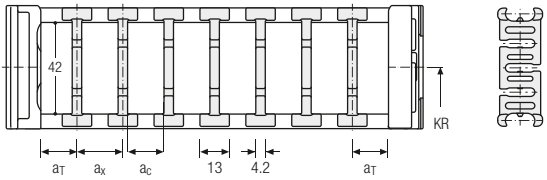
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

The dividers are easily attached to the stay for applications with lateral acceleration and for applications laying on their side by simply turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbars **(Version B)**.
The groove in the frame stay faces outwards.

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	6.5	13	8.8	–	–
B	13	16	11.8	8	–

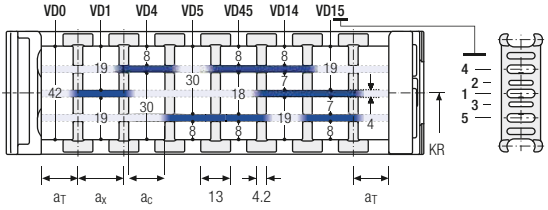
The dividers can be moved within the cross section (version A) or fixed (version B).



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	6.5	13	8.8	–	2

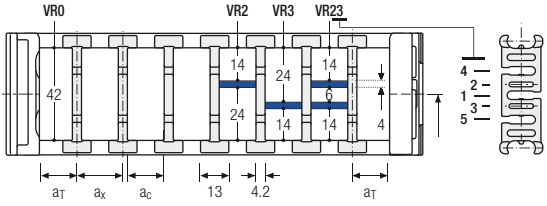
The dividers can be moved within the cross section.



Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
A	6.5	13	8.8	–	2
B	13	16	11.8	8	2

With grid distribution **(8 mm grid)**. The dividers are fixed by the height separation, the complete divider system is movable in the cross section (version A) or fixed (version B).



TOTALTRAX® complete systems

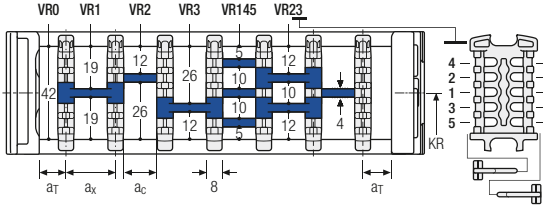
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**

ME0650 RE | Inner distribution | TS3

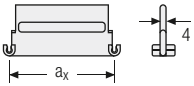
Divider system TS3 with height separation made of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	4	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed by the partitions, the complete divider system is movable in the cross section.



Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 3 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	2	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K5	.	38	-	VD3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] as viewed from the left carrier belt. You are welcome to add a sketch to your order.

More product information online

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

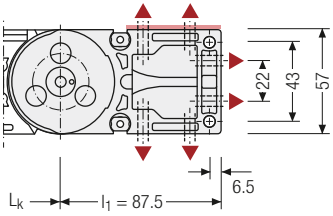
Configure your custom cable carrier: here **onlineengineer.de**

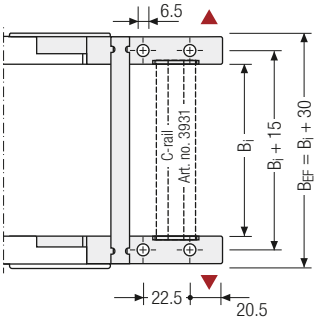
Key for abbreviations on page 12
Design guidelines from page 38

Technical support: **technik@kabelschlepp.de**

Universal end connectors UMB – plastic (standard)

The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side.**

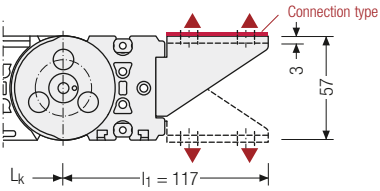


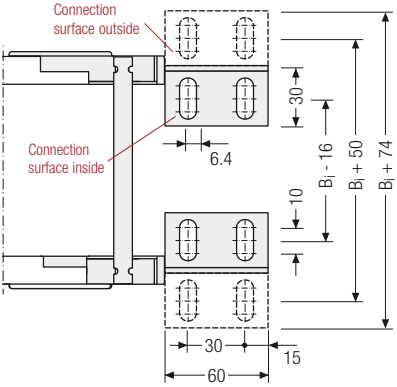


Recommended tightening torque: 11 Nm for cheese-head screws ISO 4762 - M6 - 8.8

End connectors – plastic/steel

Plastic link end connector, steel end connector. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.

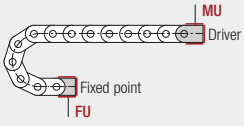




▲ Assembly options

Connection point
F – fixed point
M – driver

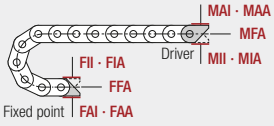
Connection type
U – universal mounting bracket



Connection point
F – fixed point
M – driver

Connection surface
I – connection surface inside
A – connection surface outside

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



Order example

Plastic/steel	.	F	A	A
UMB	.	M	U	
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

M0950

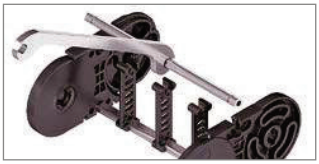
Pitch
95 mm

Inner heights
54 – 58 mm

Inner widths
45 – 600 mm

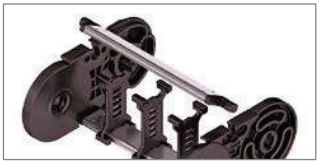
Bending radii
140 – 380 mm

Stay variants



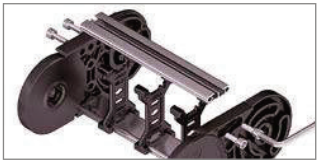
Aluminum stay RS ..... page 308

Standard frame stay "The standard"
- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by turning by 90°.



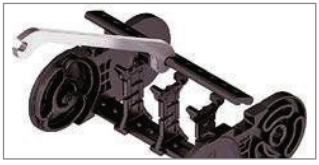
Aluminum stay RV ..... page 310

Frame stay, reinforced
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- **Outside/inside:** release by turning by 90°.



Aluminum stay RM ..... page 314

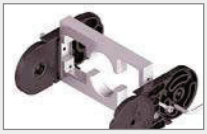
Frame stay, solid
- Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joints on both sides **"Heavy Duty"**.
- **Inside/outside:** Threaded joint easy to release.



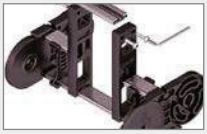
Plastic stay RE ..... page 316

Frame screw-in stay
- Plastic profile bars for light and medium loads. Assembly without screws.
- **Outside/inside:** release by turning by 90°.

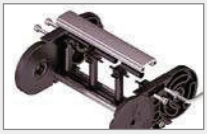
Additional stay variants on request



Aluminum stay LG
Optimum cable routing in the neutral bending line.



Aluminum stay RMA
For guiding very large cable diameters.



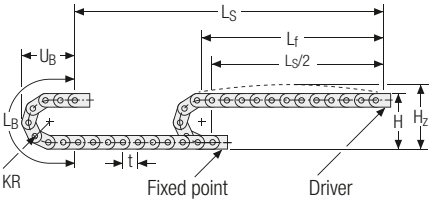
Aluminum stay RMR
Gentle cable guiding with rollers.

Plastic stay RD
Plastic profile bars with hinge.

Subject to change.

M0950 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

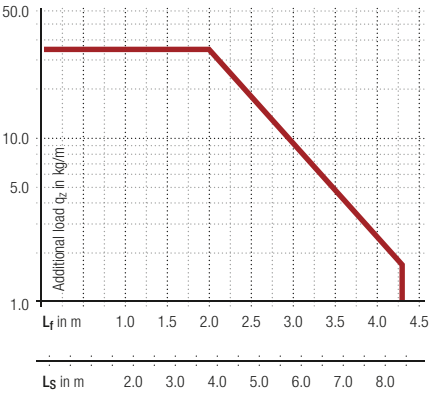


KR [mm]	H [mm]	Hz [mm]	LB [mm]	UB [mm]
140	360	405	630	275
170	420	465	725	305
200	480	525	819	335
260	600	645	1007	395
290	660	705	1102	425
320	720	765	1196	445
380	840	885	1384	515

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 = 4.5 kg/m. For other inner widths, the maximum additional load changes.



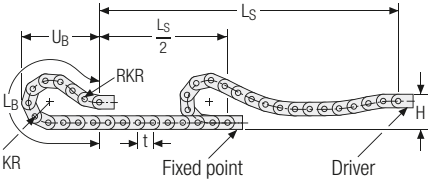
Velocity
up to 6 m/s

Acceleration
up to 30 m/s²

Travel length
up to 8.8 m

Additional load
up to 35 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	nRKR	LB [mm]	UB [mm]
170	240	4	1710	773
200	240	4	1995	888
260	240	4	2565	1114
290	240	4	2755	1183
320	240	4	3040	1296
380	240	4	3610	1523

Velocity
up to 2 m/s

Acceleration
up to 2-3 m/s²

Travel length
up to 80 m

Additional load
up to 35 kg/m

The GO module mounted on the driver is a defined sequence of 4 different KR/RKR link plates.

Glide shoes have to be used for gliding applications.

The gliding cable carrier has to be routed in a channel.
See p. 654.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Key for abbreviations on page 12

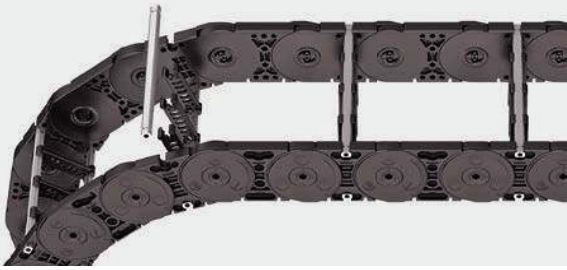
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

MC0950 RS | Dimensions · Technical data

Aluminum stay RS – standard frame stay

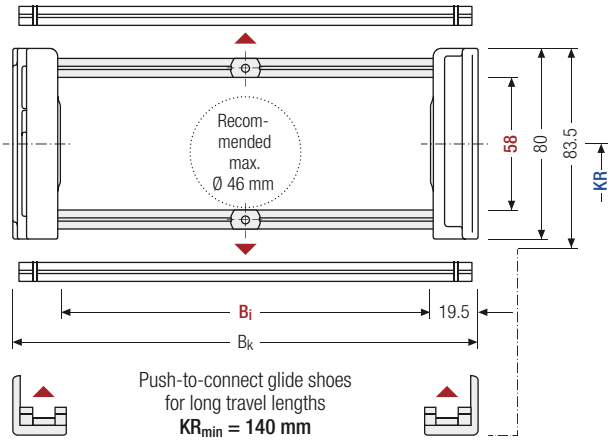
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

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

1 mm
B_i 75 – 400 mm in **1 mm width sections**



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

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

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]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	KR [mm]							q_k [kg/m]
58	80	83.5	86	75 – 400	B_i + 39	140	170	200	260	290	320	380	2.93 – 4.71

* in 1 mm width sections

Order example

MC0950	.	400	.	RS	.	200	-	2850		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

MC0950 RS | Inner distribution | TS0 · TS1 · TS2

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

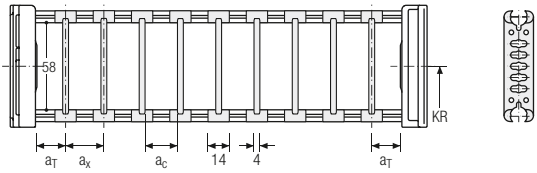
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping on a socket (available as an accessory).

The socket additionally serves as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm as well as 16.5 and 21.5 mm **(Version B)**

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	4.5	14	10	–

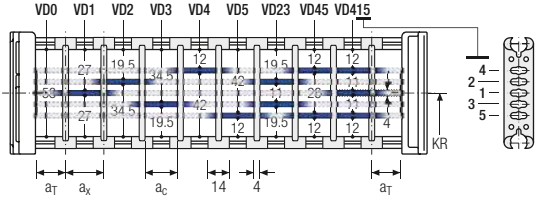
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	n_T min
A	4.5	25	14	10	2

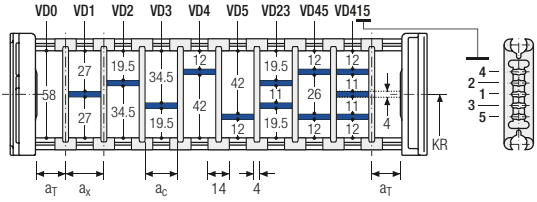
The dividers can be moved in the cross section.



Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	4.5	14	10	2

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.



Order example

TS2	.	A	.	3	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K5	.	38	-	VD3
Divider system		Version		n_T		Chamber		a_x		Height separation

Key for abbreviations on page 12

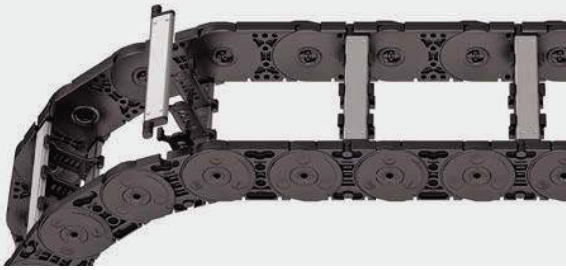
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

MC0950 RV | Dimensions · Technical data

Aluminum stay RV – frame stay reinforced

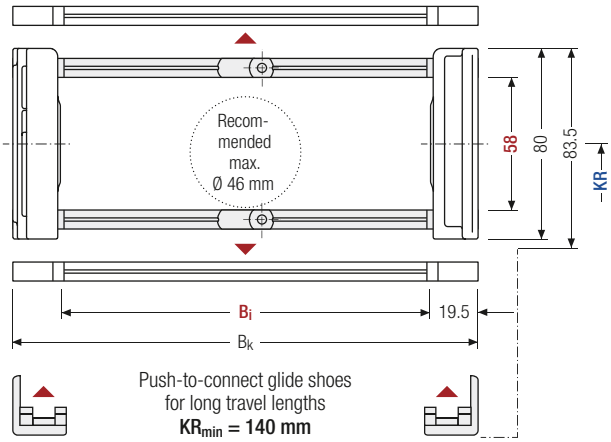
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

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

1 mm
B_i 75 – 500 mm in **1 mm width sections**



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

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

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]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	KR [mm]							q_k [kg/m]
58	80	83.5	86	75 – 500	B_i + 39	140	170	200	260	290	320	380	3.32 – 6.02

* in 1 mm width sections

Order example

MC0950	.	400	.	RV	.	200	-	2850		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

MC0950 RV | Inner distribution | TS0 · TS1 · TS2

Divider systems

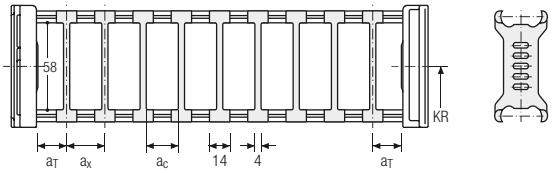
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved 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	4.5	14	10	2

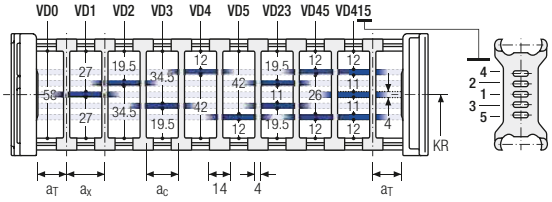
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	4.5	25	14	10	2

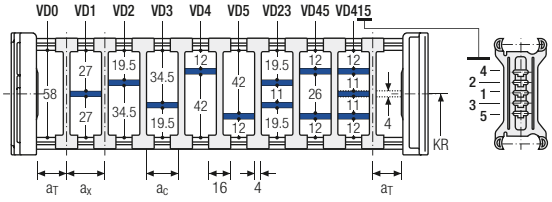
The dividers can be moved in the cross section.



Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	4.5	14	10	2

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.



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 especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

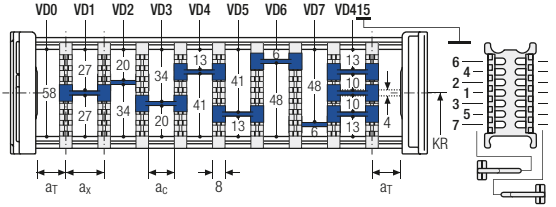
MC0950 RV | Inner distribution | TS3

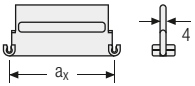
Divider system TS3 with height separation made of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	4	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_c (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K5	.	38	-	VD3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] as viewed from the left carrier belt. You are welcome to add a sketch to your order.

More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

Key for abbreviations on page 12
Design guidelines from page 38

Technical support: technik@kabelschlepp.de

Inner heights

58

Inner widths

75 - 500

Incre-ments

1 mm

Key for abbreviations on page 12

Design guidelines from page 38

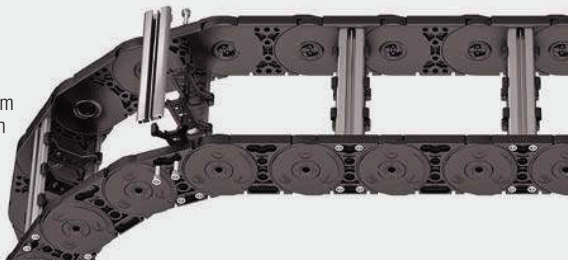
Technical support:
technik@kabelschlepp.de

MC0950 RM | Dimensions · Technical data

Aluminum stay RM – frame stay solid

- Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joints on both sides **"Heavy Duty"**.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.

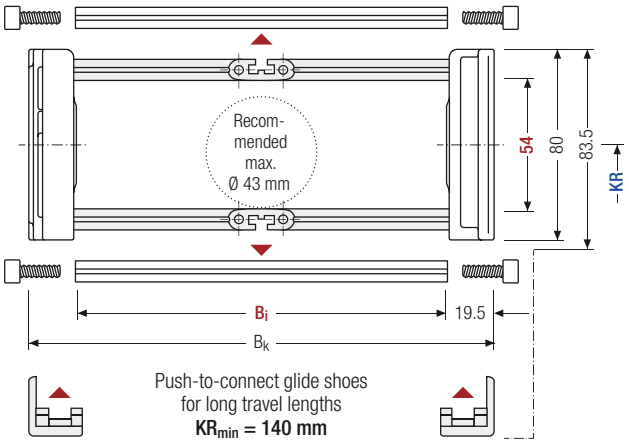
HEAVY DUTY
TSUBAKI KABELSCHLEPP



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

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

1 mm
B_i 75 – 600 mm in **1 mm width sections**



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

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

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]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	KR [mm]							q_k [kg/m]
54	80	83.5	86	75 – 600	B_i + 39	140	170	200	260	290	320	380	3.63 – 6.55

* in 1 mm width sections

Order example

MC0950	400	RM	200	2850	HS
Type	B_i [mm]	Stay variant	KR [mm]	L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

MC0950 RM | Inner distribution | TS0 · TS1 · TS2

Divider systems

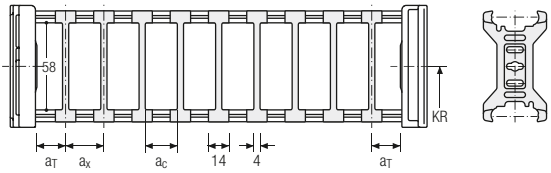
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved 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	7	14	10	–

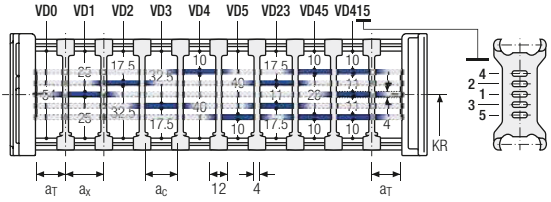
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	n_T min
A	6	25	12	8	2

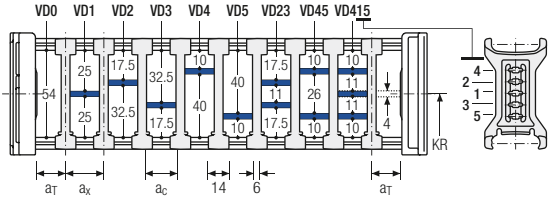
The dividers can be moved in the cross section.



Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	7	16	10	2

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.



Order example

TS2	. A	. 3	. K1	. 34	- VD1
			⋮	⋮	⋮
			. K5	. 38	- VD3
Divider system	Version	n_T	Chamber	a_x	Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS2)** please also state the positions [e.g. VD23] as viewed from the left carrier belt. You are welcome to add a sketch to your order.

Key for abbreviations on page 12

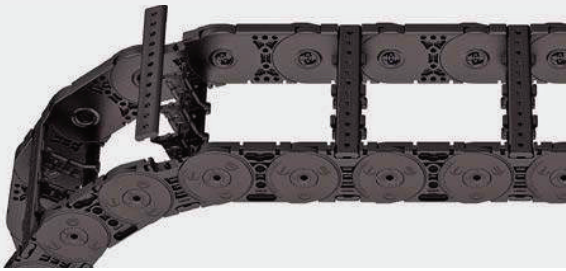
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

ME0950 RE | Dimensions · Technical data

Plastic stay RE – screw-in frame stay

- Plastic profile bars for light and medium loads. Assembly without screws.
- Available customized in **16 mm grid**.
- **Outside/inside:** release by turning by 90°.

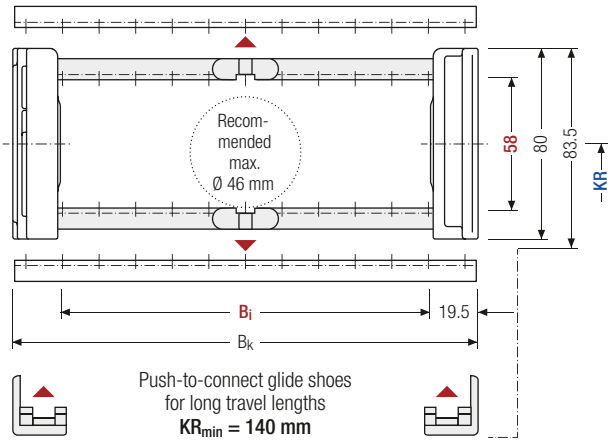


Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

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

1 mm

B_i 45 – 557 mm in **16 mm width sections**



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

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

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]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	KR [mm]							q_k [kg/m]
58	80	83.5	86	**45 – 557**	B_i + 39	**140**	**170**	**200**	**260**	**290**	**320**	**380**	3.00 – 6.20

* in 16 mm width sections

Order example

ME0950	413	RE	200	2850	HS
Type	B_i [mm]	Stay variant	KR [mm]	L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

ME0950 RE | Inner distribution | TS0 · TS1 · TS2

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

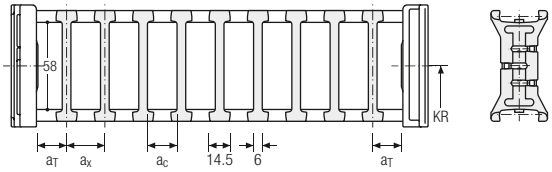
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

The dividers are easily attached to the stay for applications with lateral acceleration and for applications laying on their side by simply turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbars **(Version B)**.
The groove in the frame stay faces outwards.

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	7.5	14.5	8.5	–	2
B	22.5	16	10	16	2

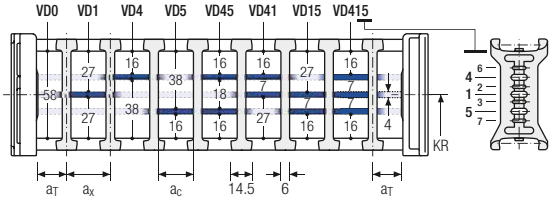
The dividers can be moved within the cross section (version A) or fixed (version B).



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	7.25	14.5	8.5	–	2
B	22.5	16	10	16	2

The dividers can be moved within the cross section (version A) or fixed (version B).

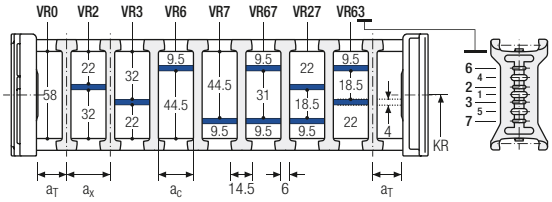


Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	9	14.5*/20	8.5*/14	–	2
B	22.5	16*/32	10*/26	16	2

* for VR0

With grid distribution **(16 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.



More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

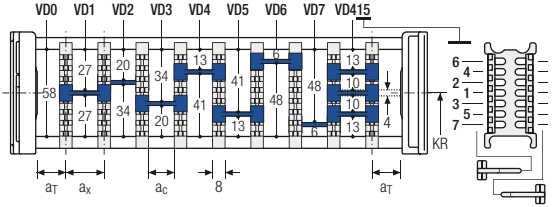
ME0950 RE | Inner distribution | TS3

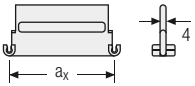
Divider system TS3 with height separation made of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	4	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K5	.	38	-	VD3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] as viewed from the left carrier belt. You are welcome to add a sketch to your order.

More product information online

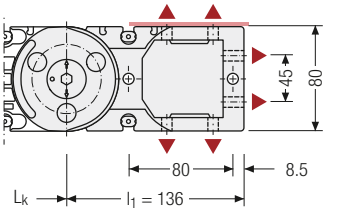
Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/support**

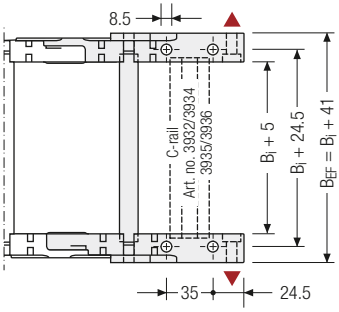
Configure your custom cable carrier here: **onlineengineer.de**

M0950 | End connectors

Universal end connectors UMB – plastic (standard)

The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side.**

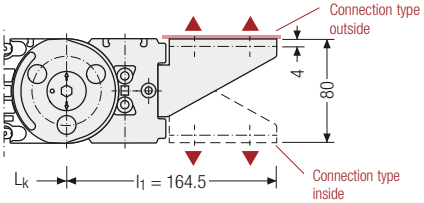


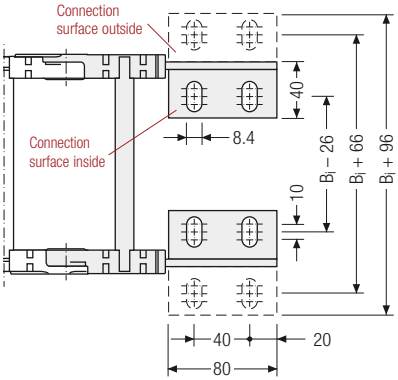


Recommended tightening torque: 27 Nm for cheese-head screws ISO 4762 - M8 - 8.8

End connectors – plastic/steel

Plastic link end connector, steel end connector. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.

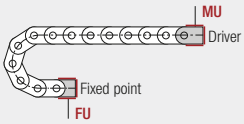




▲ Assembly options

Connection point
F – fixed point
M – driver

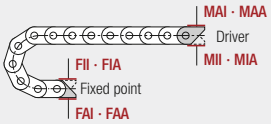
Connection type
U – universal mounting bracket



Connection point
F – fixed point
M – driver

Connection surface
I – connection surface inside
A – connection surface outside

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



Order example

Plastic/steel	.	F	A	A
UMB	.	M	U	
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

M1250

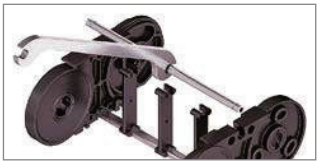
Pitch
125 mm

Inner heights
69 – 72 mm

Inner widths
71 – 800 mm

Bending radii
180 – 500 mm

Stay variants

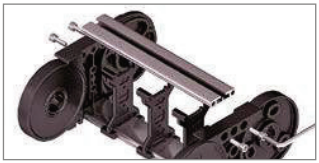


Aluminum stay RS ..... page 322

Standard frame stay "The standard"
- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by turning by 90°.

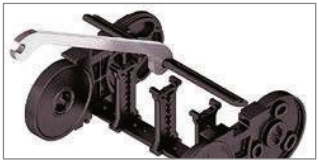
Aluminum stay RV ..... page 324

Frame stay, reinforced
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- **Outside/inside:** release by turning by 90°.



Aluminum stay RM ..... page 328

Frame stay, solid
- Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joints on both sides **"Heavy Duty"**.
- **Inside/outside:** Threaded joint easy to release.

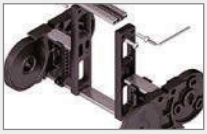


Plastic stay RE ..... page 330

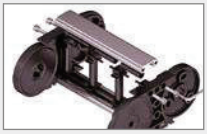
Frame screw-in stay
- Plastic profile bars for light and medium loads. Assembly without screws.
- **Outside/inside:** release by turning by 90°.

Additional stay variants on request

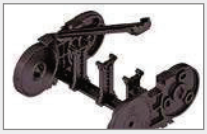
Aluminum stay LG
Optimum cable routing in the neutral bending line.



Aluminum stay RMA
For guiding very large cable diameters.



Aluminum stay RMR
Gentle cable guiding with rollers.

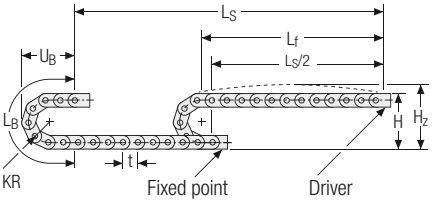


Plastic stay RD
Plastic profile bars with hinge.

Subject to change.

M1250 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

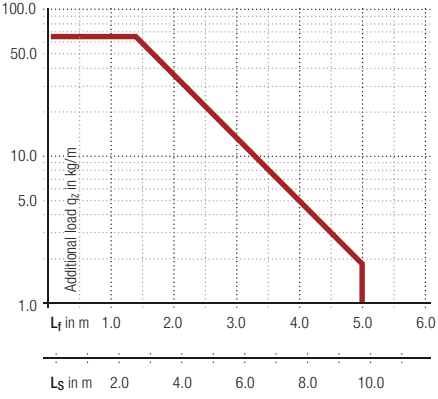


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
180	456	506	816	353
220	536	586	942	393
260	616	666	1067	433
300	696	746	1193	473
340	776	826	1319	513
380	856	906	1444	553
500	1096	1146	1821	673

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 = 4.5 kg/m. For other inner widths, the maximum additional load changes.



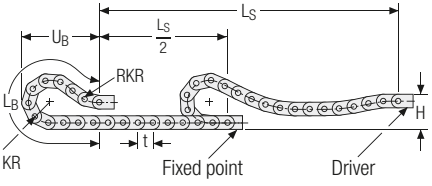
Velocity
up to 5 m/s

Acceleration
up to 25 m/s²

Travel length
up to 9.7 m

Additional load
up to 65 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	n_{RKR}	L_B [mm]	U_B [mm]
220	288	4	2500	1088
260	288	4	2625	1140
300	288	4	2750	1177
340	288	4	3125	1318
380	288	4	3375	1403
500	288	4	4375	1770

Velocity
up to 2 m/s

Acceleration
up to 2-3 m/s²

Travel length
up to 100 m

Additional load
up to 65 kg/m

The GO module mounted on the driver is a defined sequence of 4 different KR/RKR link plates.

Glide shoes have to be used for gliding applications.

The gliding cable carrier has to be routed in a channel. See p. 654.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

MC1250 RS | Dimensions · Technical data

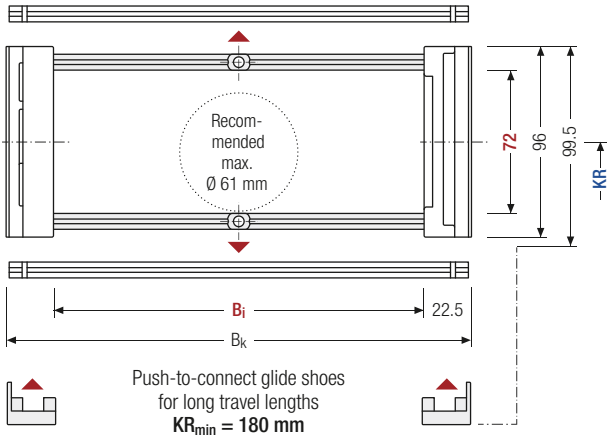
Aluminum stay RS – standard frame stay

- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by turning by 90°.

Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

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

1 mm
B_i 75 – 400 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 180 mm

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

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

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]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	KR [mm]							q_k [kg/m]
72	96	99.5	103	**75 – 400**	B_i + 45	**180**	**220**	**260**	**300**	**340**	**380**	**500**	4.10 – 4.97

* in 1 mm width sections

Order example

MC1250	.	400	.	RS	.	300	-	4250		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

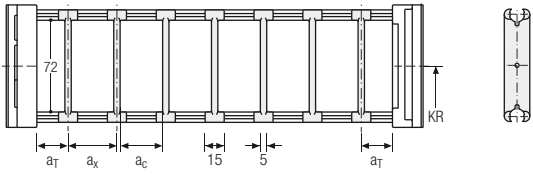
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping on a socket (available as an accessory).

The bushing additionally serves as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm **(Version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	7.5	15	10	–

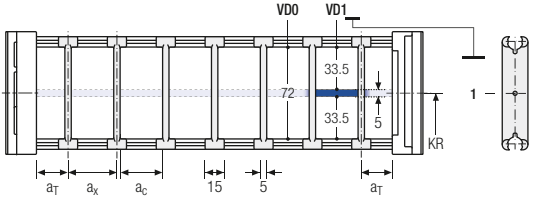
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$n_{T\,min}$
A	7.5	25	15	10	2

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 …)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

Key for abbreviations on page 12

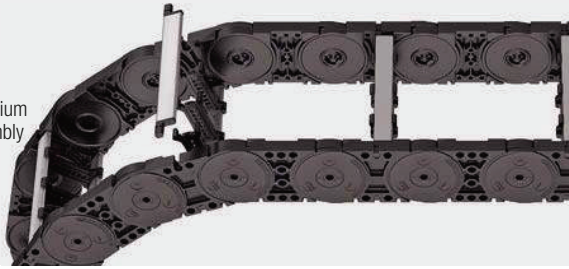
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

MC1250 RV | Dimensions · Technical data

Aluminum stay RV – frame stay reinforced

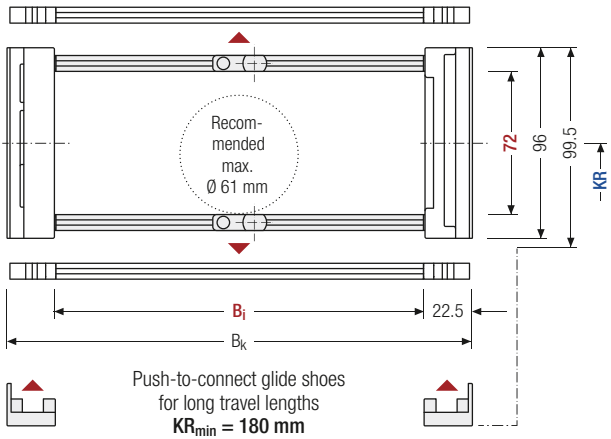
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- Available customized in **1 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

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

1 mm
B_i 100 – 600 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 180 mm

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

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

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]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	KR [mm]							q_k [kg/m]
72	96	99.5	103	100 – 600	B_i + 45	180	220	260	300	340	380	500	4.40 – 6.18

* in 1 mm width sections

Order example

MC1250	.	400	.	RV	.	300	-	4250	HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Divider systems

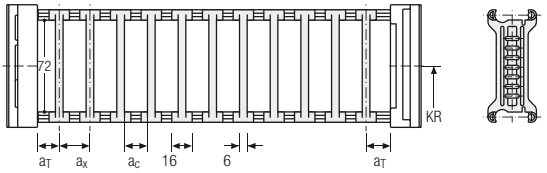
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved 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	8	16	10	2

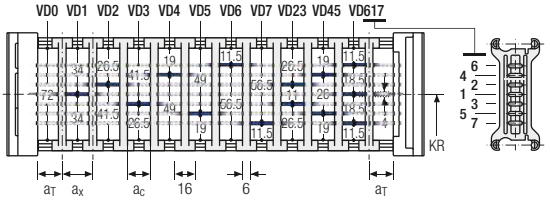
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	8	25	16	10	2

The dividers can be moved in the cross section.

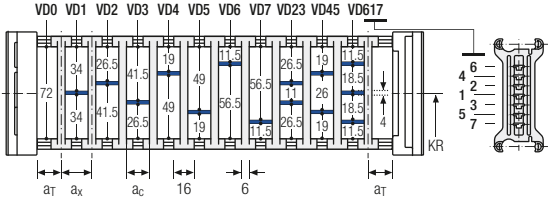


Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	8	16*/20	10*/14	2

* for VR0

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.



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 especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

Key for abbreviations on page 12

Design guidelines from page 38

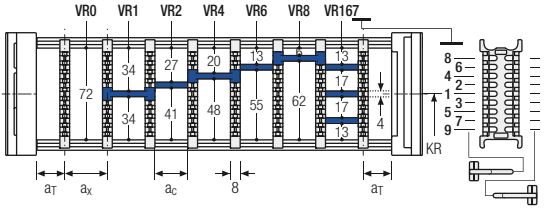
Technical support:
technik@kabelschlepp.de

MC1250 RV | Inner distribution | TS3

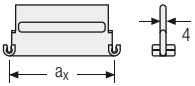
Divider system TS3 with height separation made of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	4	16/42**	8	2

* For aluminum partitions



The dividers are fixed by the partitions, the complete divider system is movable in the cross section.



Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_c (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K5	.	38	-	VD3
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] as viewed from the left carrier belt. You are welcome to add a sketch to your order.

More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

Subject to change

Key for abbreviations on page 12

Design guidelines from page 38

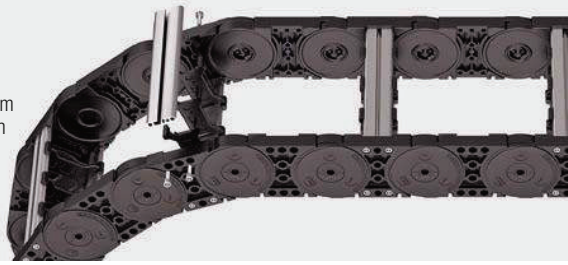
Technical support:
technik@kabelschlepp.de

MC1250 RM | Dimensions · Technical data

Aluminum stay RM – frame stay solid

- Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joints on both sides **"Heavy Duty"**.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.

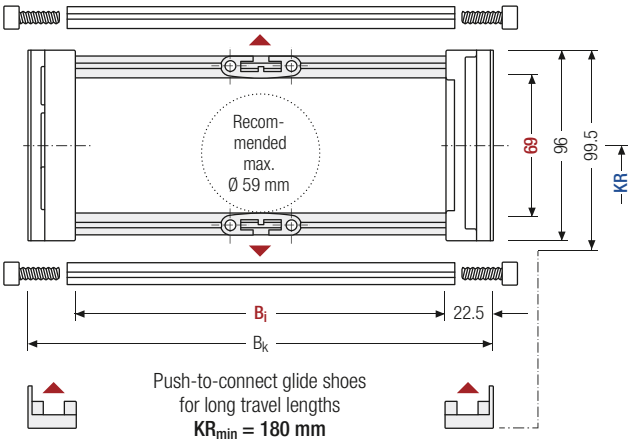
HEAVY DUTY
TSUBAKI KABELSCHLEPP



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

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

1 mm
B_i 100 – 800 mm in **1 mm width sections**



Push-to-connect glide shoes for long travel lengths
KR_{min} = 180 mm

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

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

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]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]*	B_k [mm]	KR [mm]							q_k [kg/m]
69	96	99.5	103	100 – 800	B_i + 45	180	220	260	300	340	380	500	4.14 – 8.48

* in 1 mm width sections

Order example

MC1250	.	400	.	RM	.	300	-	4250		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

MC1250 RM | Inner distribution | TS0 · TS1 · TS2

Divider systems

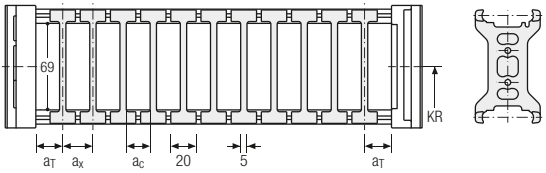
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

As a standard, dividers and the complete divider system (dividers with height separations) can be moved 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	10	20	15	–

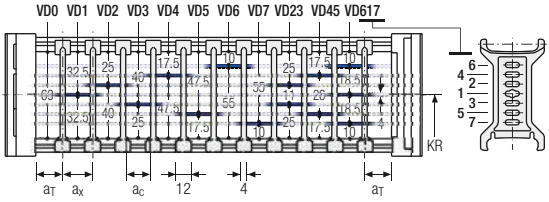
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	6	25	12	8	2

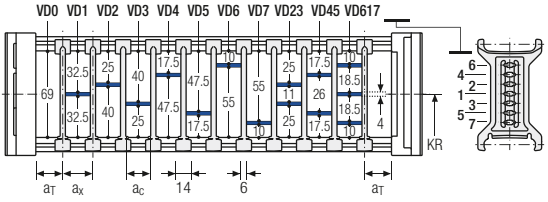
The dividers can be moved in the cross section.



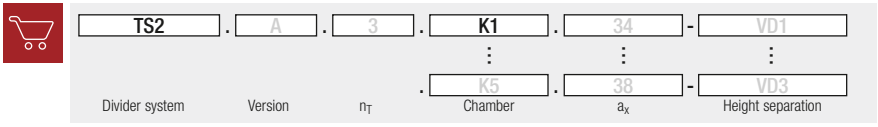
Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	7	14	8	2

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section. Movable TS1 dividers can be used as an option.



Order example



Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1 – TS2)** please also state the positions [e.g. VD23] as viewed from the left carrier belt. You are welcome to add a sketch to your order.

Key for abbreviations on page 12

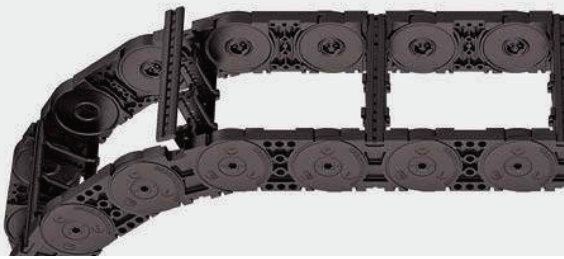
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

ME1250 RE | Dimensions · Technical data

Plastic stay RE – screw-in frame stay

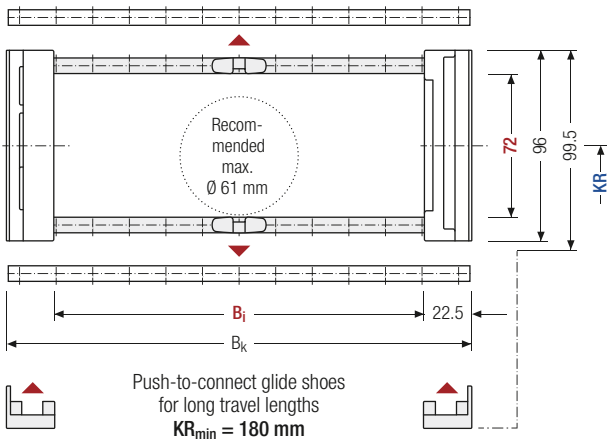
- Plastic profile bars for light and medium loads. Assembly without screws.
- Available customized in **16 mm grid**.
- **Outside/inside:** release by turning by 90°.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

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

16 mm B_i 71 – 557 mm in **16 mm width sections**



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

For rough environmental conditions, we recommend the use of OFFROAD glide shoes with 80 % higher wear volume.

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]	$h_{G'}$ [mm]	$h_{G'}$ Offroad [mm]	B_i [mm]	B_k [mm]	KR [mm]							q_k [kg/m]
72	96	99.5	103	71 – 551	B_i + 45	180	220	260	300	340	380	500	4.30 – 5.80

* in 16 mm width sections

Order example

ME1250	.	407	.	RE	.	300	-	4250		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

MC1250 RE | Inner distribution | TS0 · TS1 · TS2

Divider systems

As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS).

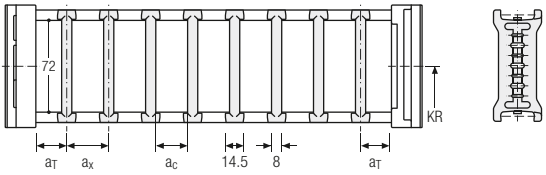
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

The dividers are easily attached to the stay for applications with lateral acceleration and for applications laying on their side by simply turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbars **(Version B)**.
The groove in the frame stay faces outwards.

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	5	14.5	6.5	–	–
B	19.5	16	8	16	–

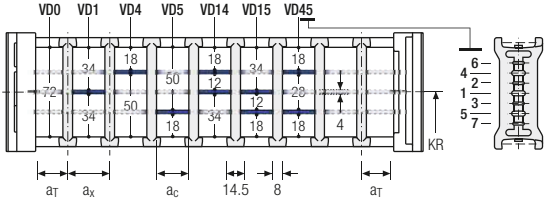
The dividers can be moved within the cross section (version A) or fixed (version B).



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	5	14.5	6.5	–	2
B	19.5	16	8	16	2

The dividers can be moved within the cross section (version A) or fixed (version B).

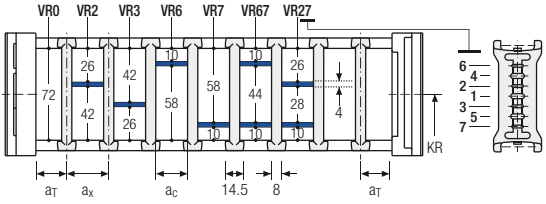


Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	5	14.5*/ 20	6.5*/ 12	–	2
B	19.5	16*/ 32	8*/ 24	16	2

* for VR0

With grid distribution **(16 mm grid)**. The dividers are fixed by the height separation, the complete divider system is movable in the cross section (version A) or fixed (version B).



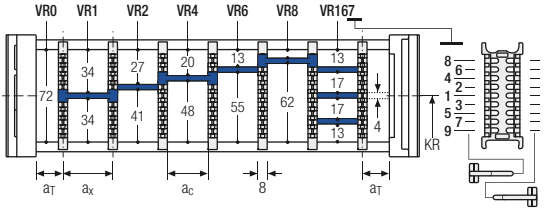
ME1250 RE | Inner distribution | TS3

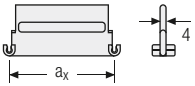
Divider system TS3 with height separation made of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	4	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.





Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_c (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	. A	. 3	. K1	. 34	- VD1
			⋮	⋮	⋮
			. K5	. 38	- VD3
Divider system	Version	n_T	Chamber	a_x	Height separation

Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x] (as seen from the driver).

If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] as viewed from the left carrier belt. You are welcome to add a sketch to your order.

More product information online

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

Configure your custom cable carrier: here **onlineengineer.de**

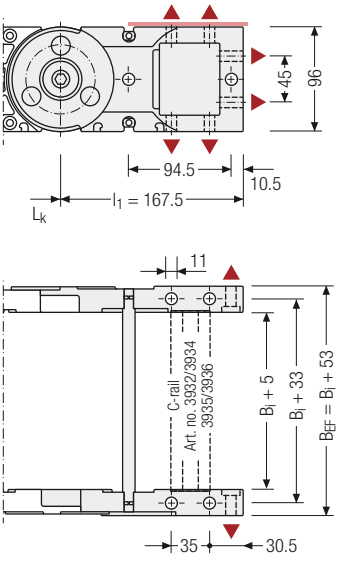
Key for abbreviations on page 12
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

M1250 | End connectors

Universal end connectors UMB – plastic (standard)

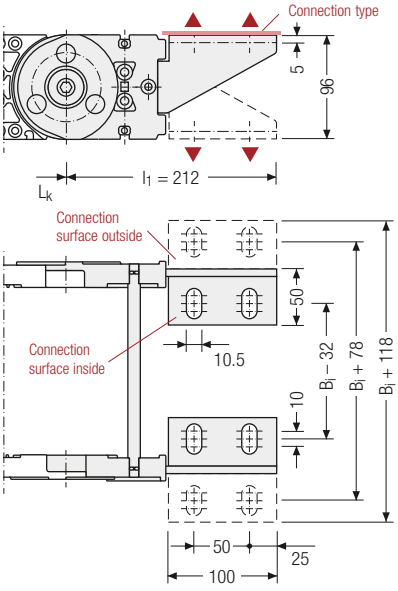
The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side.**



Recommended tightening torque: 54 Nm for cheese-head screws ISO 4762 - M10 - 8.8

End connectors – plastic/steel

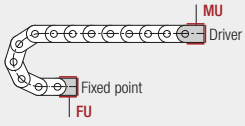
Plastic link end connector, steel end connector. The connection variants on the fixed point and on the driver can be combined and, if required, changed afterwards.



▲ Assembly options

Connection point
F – fixed point
M – driver

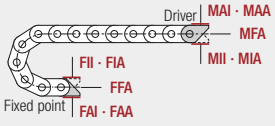
Connection type
U – universal mounting bracket



Connection point
F – fixed point
M – driver

Connection surface
I – connection surface inside
A – connection surface outside

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



Order example

Plastic/steel	.	F	A	A
UMB	.	M	U	
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

M1300

Pitch
130 mm

Inner height
87 mm

Inner widths
100 – 800 mm

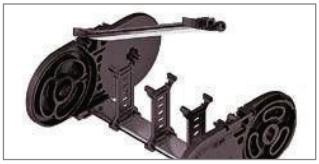
Bending radii
150 – 500 mm

Stay variants

Aluminum stay RMF page 336

Frame stay, solid

- Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
- **Inside/outside:** Threaded joint easy to release.

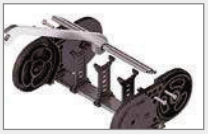


Aluminum stay RMS page 338

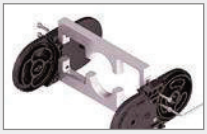
Frame stay solid with ball joint

- Aluminum profile bars with plastic ball joint for heavy loads and large cable carrier widths. Assembly without screws.
- **Inside/outside:** Swivable and detachable.

Additional stay variants on request

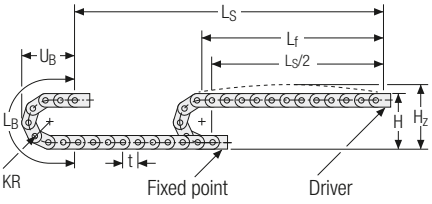


Aluminum stay RM
Aluminum profile bars for high loads.



Aluminum stay LG
Optimum cable routing in the neutral bending line.

Unsupported arrangement

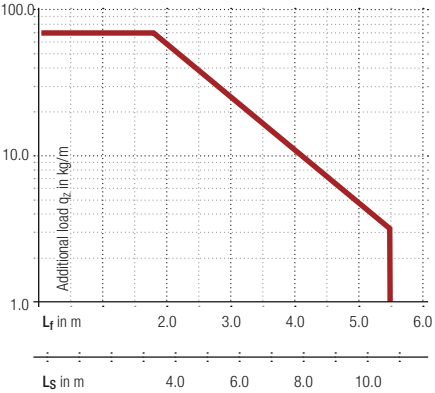


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
150	480	540	732	340
195	570	630	873	385
240	660	720	1014	430
280	740	800	1140	470
320	820	880	1266	510
360	900	960	1391	550
400	980	1040	1517	590
500	1180	1240	1831	690

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 = 8.0 kg/m. For other inner widths, the maximum additional load changes.



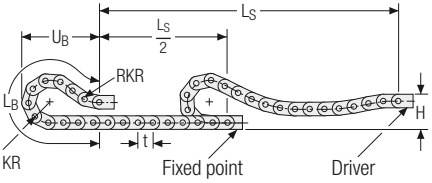
Velocity
up to 5 m/s

Acceleration
up to 25 m/s²

Travel length
up to 10.8 m

Additional load
up to 70 kg/m

Gliding arrangement | GO module with chain links optimized for gliding



KR [mm]	H [mm]	n_{RKR}	L_B [mm]	U_B [mm]
240	360	4	2730	1180
280	360	4	2750	1190
320	360	4	2880	1240
360	360	4	3140	1331
400	360	4	3530	1477
500	360	4	4310	1756

Velocity
up to 2 m/s

Acceleration
up to 2-3 m/s²

Travel length
up to 120 m

Additional load
up to 70 kg/m

The GO module mounted on the driver is a defined sequence of 4 different KR/RKR link plates.

Glide shoes are required for gliding applications.

The gliding cable carrier has to be routed in a channel. See p. 654.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Key for abbreviations on page 12

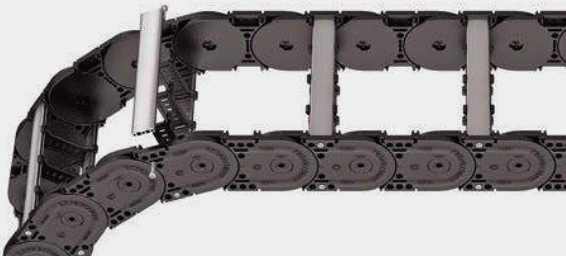
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

MC1300 RMF | Dimensions · Technical data

Aluminum stay RMF –
frame stay solid

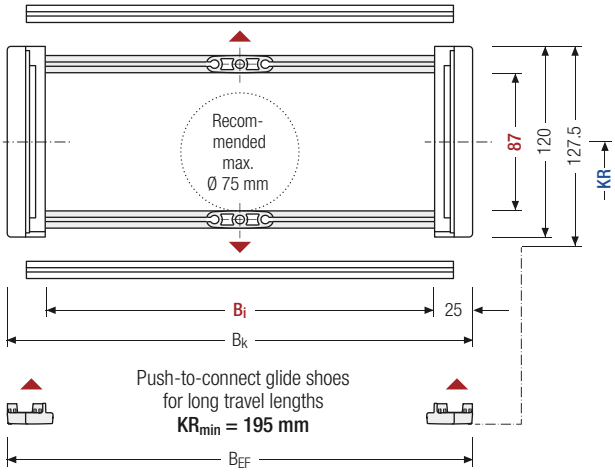
- Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

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

1 mm
B_i 100 – 800 mm in **1 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	KR [mm]								q_k [kg/m]
87	120	127.5	100 – 800	B_i + 50	150	195	240	280	320	360	400	500	6.24 – 9.59

* in 1 mm width sections

Order example

MC1300	.	400	.	RMF	.	360	-	6500		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

MC1300 RMF | Inner distribution | TS0 · TS1 · TS3

Divider systems

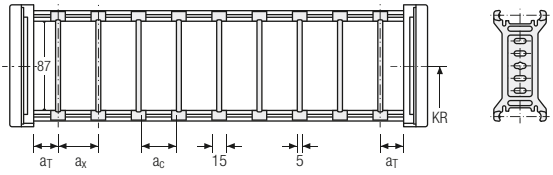
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS). As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

For applications with lateral acceleration and lying on the side, the dividers can be attached by simple insertion of a fixing profile into the RMF stay, available as an accessory **(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	7.5	15	10	–	–
B	10	15	10	5	–

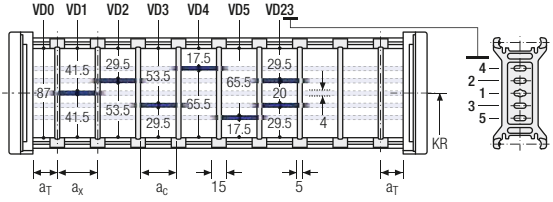
The dividers can be moved within the cross section (version A) or fixed (version B).



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	7.5	15	10	–	2
B	10	15	10	5	2

The dividers can be moved within the cross section (version A) or fixed (version B).

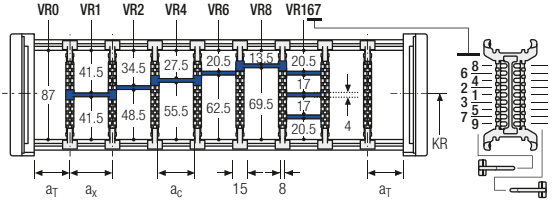


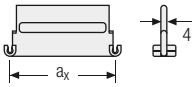
Divider system TS3 with partial height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	n_T min
A	7.5	16/42*	8	2

* For aluminum partitions

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.





Aluminum partitions with 1 mm increments with **a_X > 42 mm** are also available.

a_X (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_X > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 5 mm). Twin dividers are also suitable for retrofitting in the partition system.

Key for abbreviations on page 12

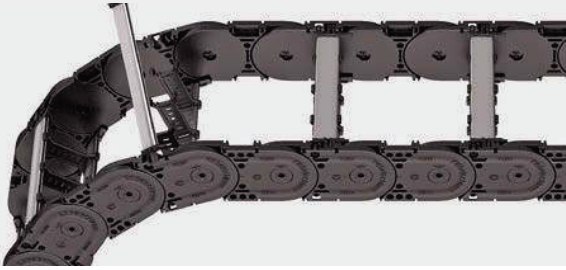
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

MC1300 RMS | Dimensions · Technical data

Aluminum stay RMS –
frame stay reinforced

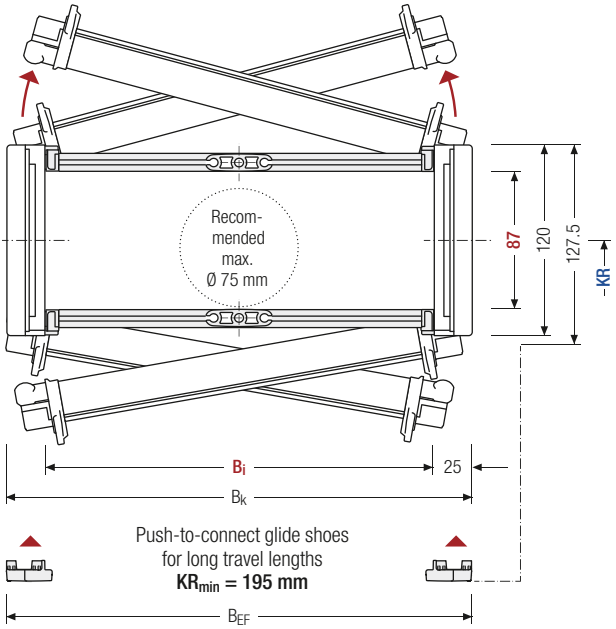
- Aluminum profile bars with plastic ball joint for heavy loads and large cable carrier widths. Assembly without screws.
- Available customized in **1 mm grid**.
- **Inside/outside:** Swivable and detachable.



Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

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

1 mm
B_i 100 – 800 mm in **1 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	KR [mm]								q_k [kg/m]
87	120	127.5	100 – 800	B_i + 50	150	195	240	280	320	360	400	500	6.31 – 9.65

* in 1 mm width sections

Order example

MC1300	.	400	.	RMS	.	360	-	6500		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Divider systems

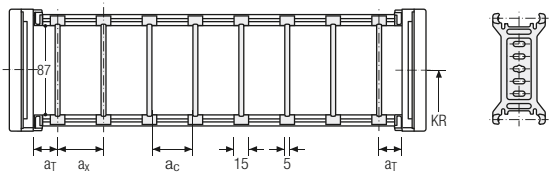
As a standard, the divider system is mounted on each crossbar – for stay mounting on every 2nd chain link (HS). As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

For applications with lateral acceleration and lying on the side, the dividers can be attached by simple insertion of a fixing profile into the RMF stay, available as an accessory **(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	15.5	15	10	–	–
B	18.5	15	10	5	–

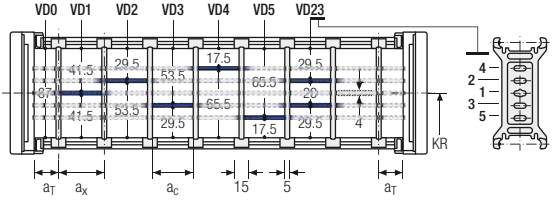
The dividers can be moved within the cross section (version A) or fixed (version B).



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	15.5	15	10	–	2
B	18.5	15	10	5	2

The dividers can be moved within the cross section (version A) or fixed (version B).

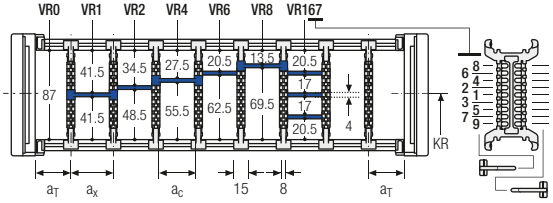


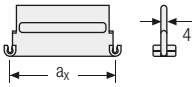
Divider system TS3 with partial height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	15.5	16/42*	8	2

* For aluminum partitions

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation, the grid can be moved in the cross section.





Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

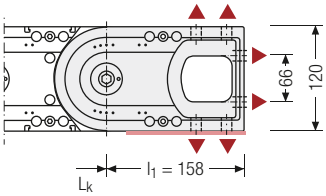
a_x (center distance of dividers) [mm]											
a_c (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

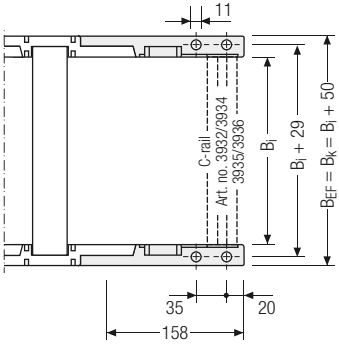
When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 5 mm). Twin dividers are also suitable for retrofitting in the partition system.

M1300 | End connectors

Universal end connectors UMB – plastic (standard)

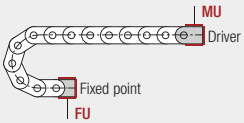
The universal mounting brackets (UMB) are made from plastic and can be mounted **from the top, from the bottom, face on or from the side.**





▲ Assembly options

Recommended tightening torque: 54 Nm
for cheese-head screws ISO 4762 - M10 - 8.8



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

Order example

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

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

Key for abbreviations on page 12
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

Inner heights

87

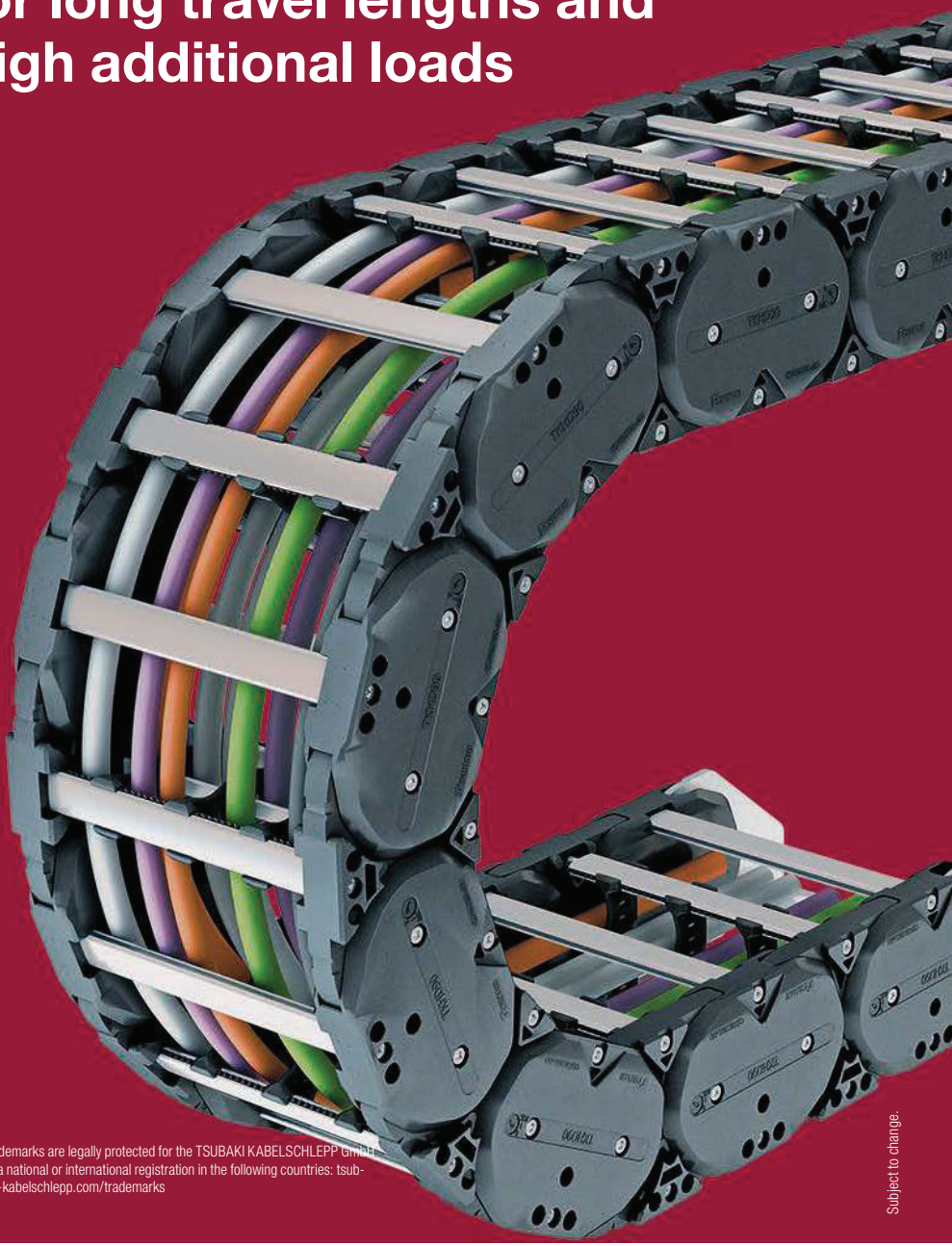
Inner widths

100 - 800

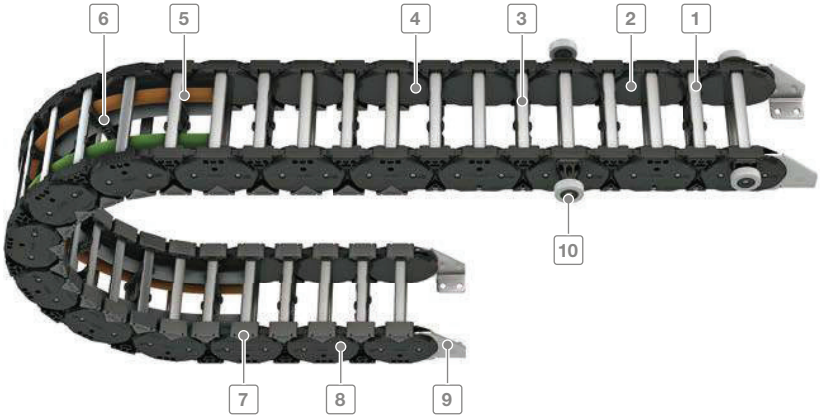
tsubaki-kabelschlepp.com/m

TKHD series

Heavy duty cable carriers for long travel lengths and high additional loads



TKHD series | Overview

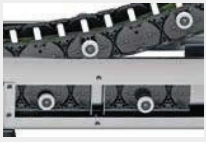


1 Aluminum stays available in **1 mm width sections**
2 Plastic chain link plates
3 Quick and easy opening to the inside or outside for cable laying
4 Cable-friendly interior – no interfering edges
5 Fixable dividers
6 Dividers and subdivision for separating the cables
7 Replaceable glide shoes for increased service life in gliding application
8 Robust, multiple stop system
9 Steel installation brackets
10 RSC-system (roller supported system)

Features

- Massive, enclosed, stain-repellend stop system
- Massive sidebands through robust double fork-bracket-construction
- Sidebands easy to assemble
- Reinforced pin bore connection
- Integrated noise damping
- Integrated brake
- Quick and easy opening to the inside or outside for cable laying
- Soil-resistant outer contour
- Easy change of components
- Maintenance-free
- Symmetrical force curve in the sideband
- Quiet and low-wear operating through polygon-optimized contour and radii

Variable vertical and horizontal inner distribution optional with fixable dividers



Suitable also for roller-mounted application (RSC)

Replaceable glide shoes for longer service life in gliding applications

TKHD series | Overview

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]
TKHD90											
		RMF	87	117	100 – 800	170 – 870	1	90	250 – 360	100	69

Key for abbreviations on page 38

Design guidelines from page 12

Technical support:
technik@kabelschlepp.de

TKHD series | Overview

Unsupported arrangement			Gliding arrangement			Inner distribution				Installation variants			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	
13.5	5	2.5	200	2	2.5	●	●	–	–	●	–	–	348

Inner heights
87

Inner widths
100 - 800

tsubaki-kabelschlepp.com/tkhd

TKHD90 | Stay variants | Overview

TKHD90

Pitch
90 mm

Inner height
87 mm

Inner widths
100 – 800 mm

Bending radii
250 – 360 mm

Stegbauarten

Aluminum stay RMF ..... page 348

Frame stay, solid

- Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
- **Inside/outside:** Threaded joint easy to release.

TOTALTRAX® complete systems

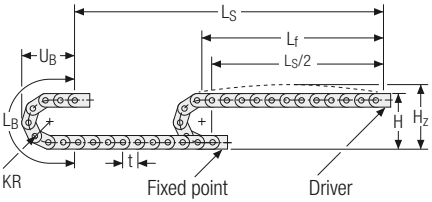
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com**

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**.

TKHD90 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

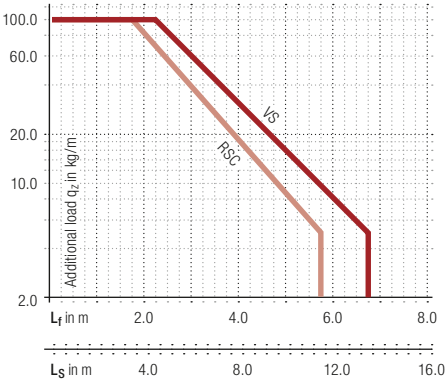


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
250	680	860	965	510
310	800	980	1154	570
360	900	1080	1311	620

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 = 10 kg/m. For other inner widths, the maximum additional load changes.



Pre-tensioning of the cable carrier for unsupported arrangement, maximum H_z dimension.

Decreased pre-tensioning of the cable carrier for RSC (rolling system) application, reduced H_z dimension.

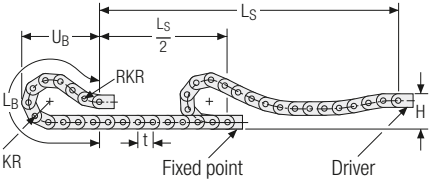
Velocity
up to 5 m/s

Acceleration
up to 2.5 m/s²

Travel length
up to 13.5 m

Additional load
up to 100 kg/m

Gliding arrangement



Glide shoes must be used for gliding applications.

The gliding cable carrier must be guided in a channel.
See p. 654.

Velocity
up to 2 m/s

Acceleration
up to 2.5 m/s²

Travel length
up to 200 m

Additional load
up to 100 kg/m

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Key for abbreviations on page 38

Design guidelines from page 12

Technical support:
technik@kabelschlepp.de

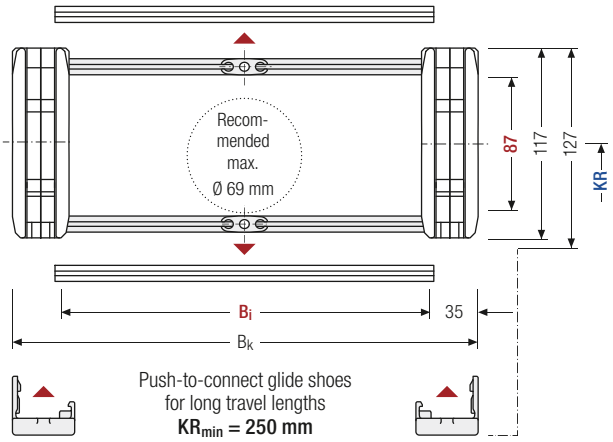
TKHD90 RMF | Dimensions · Technical data

Aluminum stay RMF –
frame stay solid

- Aluminum profile bars for heavy loads and large cable carrier widths. Easy threaded connection.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joint easy to release.

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

1 mm B_i 100 – 800 mm in **1 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	KR [mm]			q_k [kg/m]
87	117	127	100 – 800	B_i + 70	250	310	360	10.37 – 17.67

* in 1 mm width sections

Order example

TKHD90	.	400	.	RMF	.	310	-	2700	VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

TKHD90 RMF | Inner distribution | TS0 · TS1

Divider systems

As a standard, the divider system is mounted on every 2nd chain link on the center bracket.

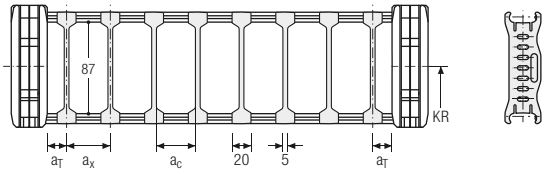
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A)**.

For applications with lateral acceleration and free hanging on the side, the dividers can be attached by simple insertion of a fixing profile into the RMF stay, available as an accessory **(Version B)**.

Divider system TS0 without height separation

Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	a_X Raster [mm]	n_T min
A	10	20	15	–	–
B	12.5	20	15	2.5	–

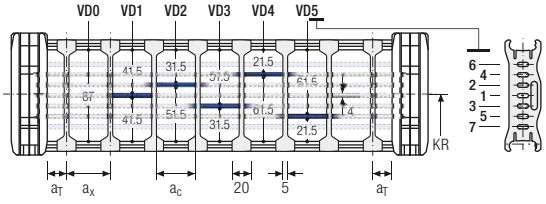
The dividers can be moved within the cross section (version A) or fixed (version B).

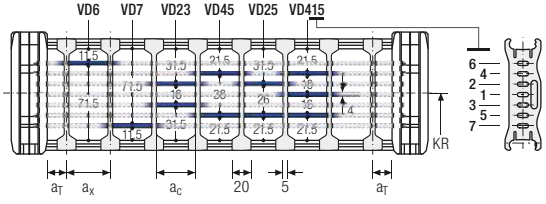


Divider system TS1 with continuous height separation

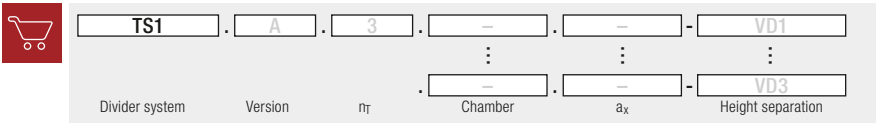
Vers.	a_T min [mm]	a_X min [mm]	a_C min [mm]	a_X Raster [mm]	n_T min
A	10	20	15	–	2
B	12.5	20	15	2.5	2

The dividers can be moved within the cross section (version A) or fixed (version B).





Order example

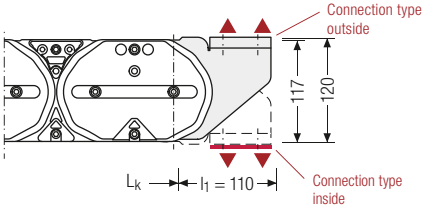


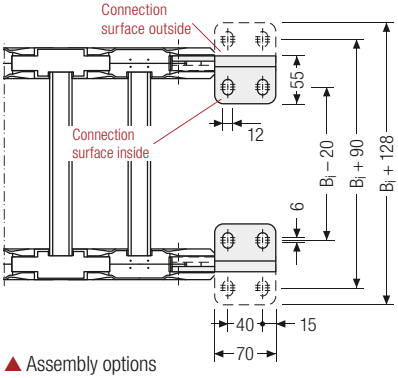
Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_X] (as seen from the driver).

TKHD90 | End connectors

End connectors – steel

The connection variants on the fixed point and on the driver an be combined and changed later on, if necessary.



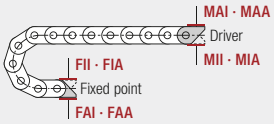


▲ Assembly options

Connection point
F – fixed point
M – driver

Connection surface
I – connection surface inside
A – connection surface outside

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



Order example

Steel	.	F	A	I
Steel	.	M	A	I
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

Key for abbreviations on page 38
Design guidelines from page 12

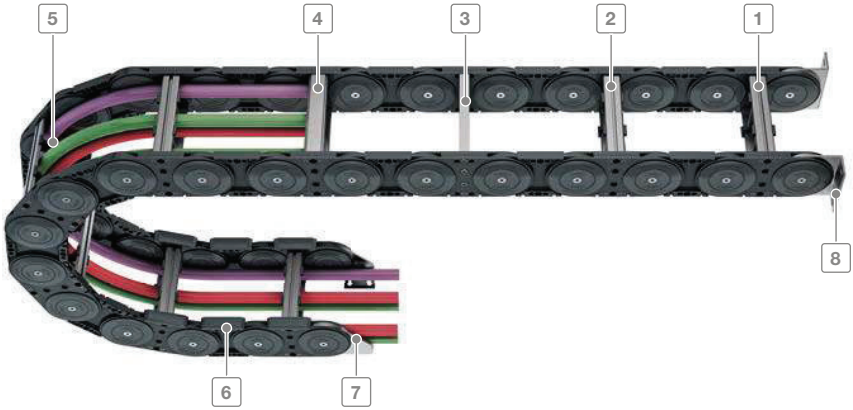
Technical support: **technik@kabelschlepp.de**


TKHD50

XL series

Cable carrier with large inside height

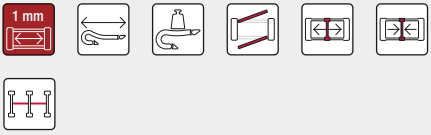
XL series | Overview



1 Aluminum stays available in **1 mm width sections**
2 Aluminum stays with 4 screw-fixing points for extreme loads
3 Aluminum hole stays
4 Plastic rolling stays
5 Can be opened on the inside and the outside for installation of cables and hoses
6 Replaceable glide shoes
7 Sturdy end connectors made of steel
8 Flange connection

Features

- Sizes/dimensions
- Low intrinsic weight
- Optimum force transmission via the large-surface stroke system (2 disc principle)
- Plastic side bands in combination with aluminum stays
- Versions with aluminum stays available in 1 mm width sections up to 1000 mm inner width
- Can be opened on both sides
- Large selection of stay systems and separating options for cables
- Optionally with strain relief



Bolted stays for maximum stability even for large cable carrier widths

Replaceable glide shoes for long service life for gliding applications

Sturdy end connectors made of steel (different connection variants)

Many separation options for the cables

XL series | Overview

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]
XLC 1650											
		RM	108	140	200 – 1000	$B_i + 68$	1	165	250 – 550	65	86
		LG	110	140	200 – 1000	$B_i + 68$	1	165	250 – 550	65	88
		RMR	108	140	200 – 1000	$B_i + 68$	1	165	250 – 550	65	84

* Further information on request.

XLT series

Also available as covered versions with covers system. More information can be found in chapter “XLT series” from page 510.

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

Unsupported arrangement			Gliding arrangement			Inner distribution				Installation variants			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	
11.75	4	25	350	2	2 – 3	●	–	–	●	●	●	●	358
11.75	4	25	350	2	2 – 3	–	–	–	–	●	●	●	*
11.75	4	25	350	2	2 – 3	●	–	–	–	●	●	●	*

XL1650

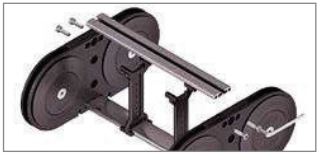
Pitch
165 mm

Inner height
108 mm

Inner widths
200 – 1000 mm

Bending radii
250 – 550 mm

Stay variants



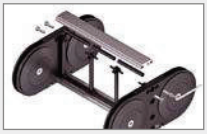
Aluminum stay RM ..... page 358

Frame stay, solid

- Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joints on both sides **"Heavy Duty"**.
- **Inside/outside:** Threaded joints easy to release.

Additional stay variants on request

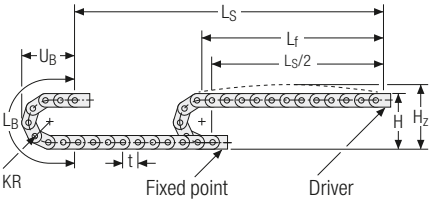
Aluminum stay LG
Optimum cable routing in the neutral bending line.



Aluminum stay RMR
Gentle cable guiding with rollers.

XL1650 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

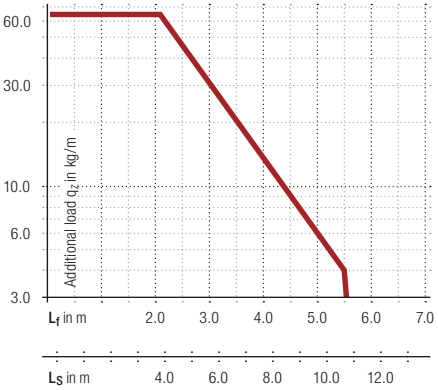


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
250	640	740	950	403
300	740	840	1107	453
350	840	940	1264	503
400	940	1040	1421	553
450	1040	1140	1578	603
500	1140	1240	1735	653
550	1240	1340	1892	703

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 = 13 kg/m. For other inner widths, the maximum additional load changes.



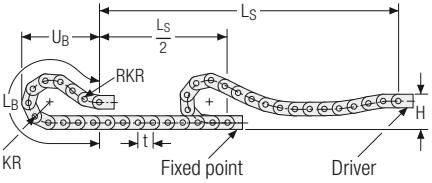
Velocity
up to 4 m/s

Acceleration
up to 25 m/s²

Travel length
up to 11.75 m

Additional load
up to 65 kg/m

Gliding arrangement



Velocity
up to 2 m/s

Acceleration
up to 2 – 3 m/s²

Travel length
up to 350 m

Additional load
up to 65 kg/m

We recommend the use of glide shoes for gliding applications.

The gliding cable carrier must be guided in a channel. See p. 654.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

XLC1650 RM | Dimensions · Technical data

Aluminum stay RM –
Frame stay, solid

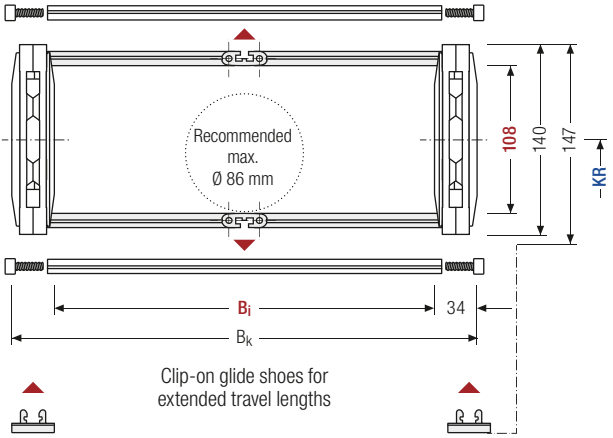
- Aluminum profile bars for heavy loads and maximum cable carrier widths. Double threaded joints on both sides **"Heavy Duty"**.
- Available customized in **1 mm grid**.
- **Inside/outside:** Threaded joints easy to release.

HEAVY DUTY
TSUBAKI KABELSCHLEPP

Stay arrangement on every 2nd chain link, **standard (HS: half-stayed)**

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

1 mm
B_i 200 – 1000 mm in **1 mm width sections**



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 for odd number of chain links

h_i [mm]	h_G [mm]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	KR [mm]							q_k [kg/m]
108	140	147	200 – 1000	B_i + 68	250	300	350	400	450	500	550	10.5 – 15.3

* in 1 mm width sections

Order example

XLC1650	600	RM	350	4125	HS
Type	B_i [mm]	Stay variant	KR [mm]	L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

XLC1650 RM | Inner distribution | TS0 · TS3

Divider systems

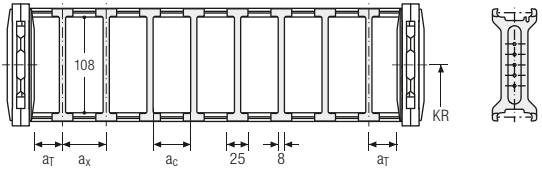
The divider system is mounted on each crossbar as a standard – on every 2nd chain link for stay mounting (HS).

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	6	25	17	–

The dividers can be moved in the cross section.

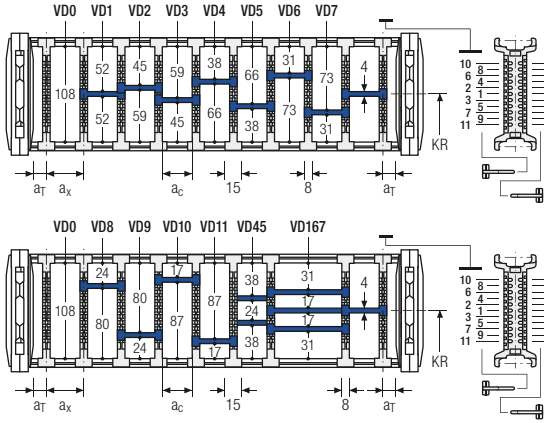


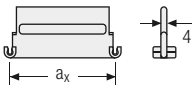
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	1	16 / 42*	8	2

* For aluminum partitions

The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.





Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 5 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	. A	. 3	. K1	. 34	- VD1
			⋮	⋮	⋮
			. K9	. 38	- VD2389
Divider system	Version	n_T	Chamber	a_x	Height separation

Please state the designation of the divider system **(TS0, TS3)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

Key for abbreviations on page 12

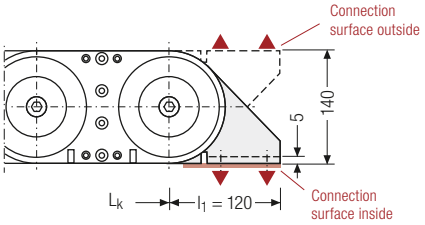
Design guidelines from page 38

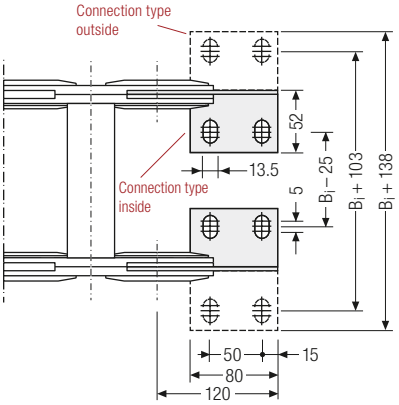
Technical support:
technik@kabelschlepp.de

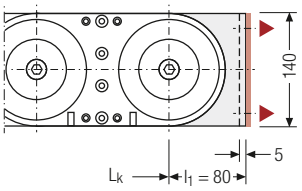
XL1650 | End connectors

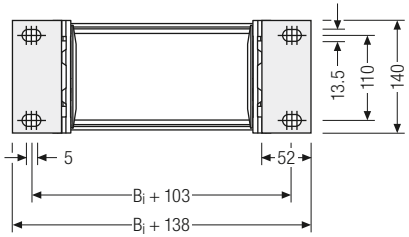
End connectors – steel

End connectors made of steel. The connection variants on the fixed point and on the driver an be combined and changed later on, if necessary.

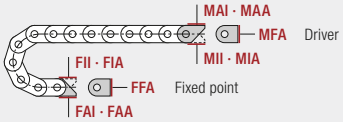








▲ Assembly options



Connection point
F – fixed point
M – driver

Connection surface
I – connection surface inside
A – connection surface outside

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

Order example

Steel	.	F	A	I
Steel	.	M	A	I
End connector		Connection point	Connection type	Connection surface

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

Subject to change.

XL series

Inner heights

108

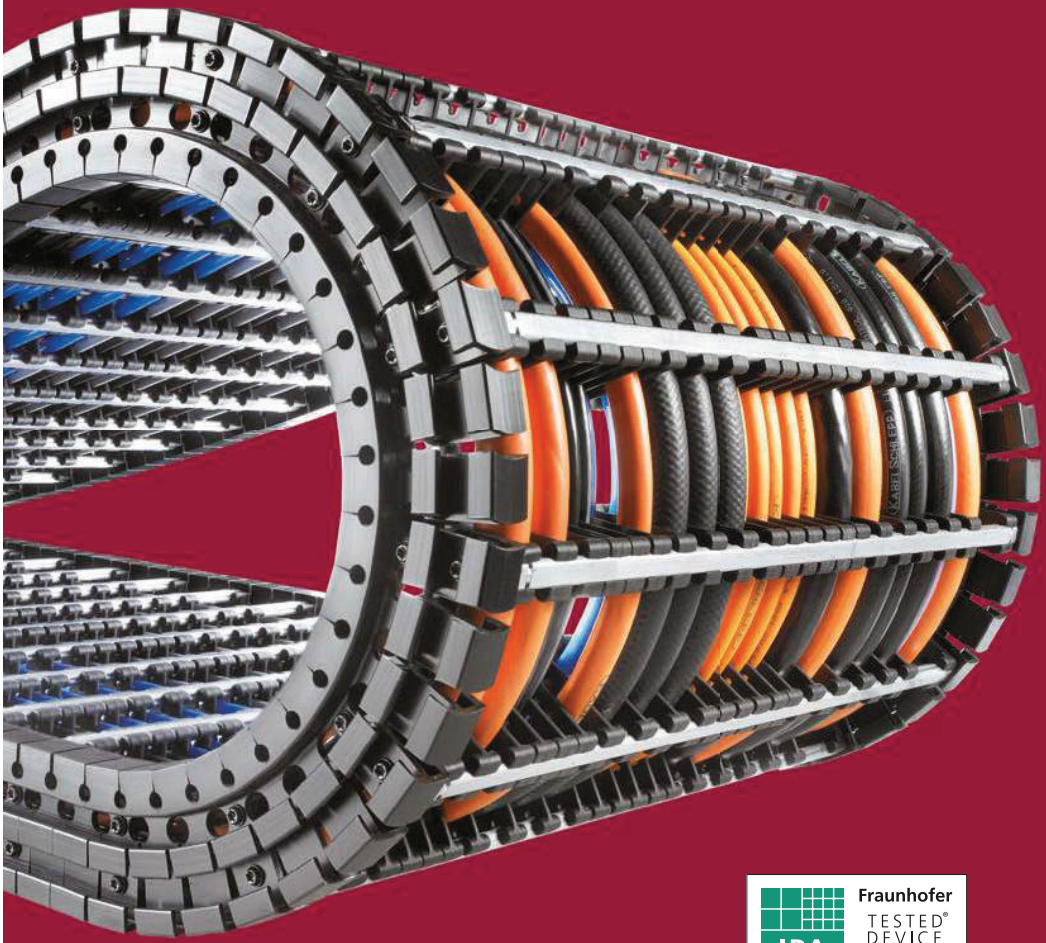
Inner widths

200 – 1000

tsubaki-kabelschlepp.com/xl

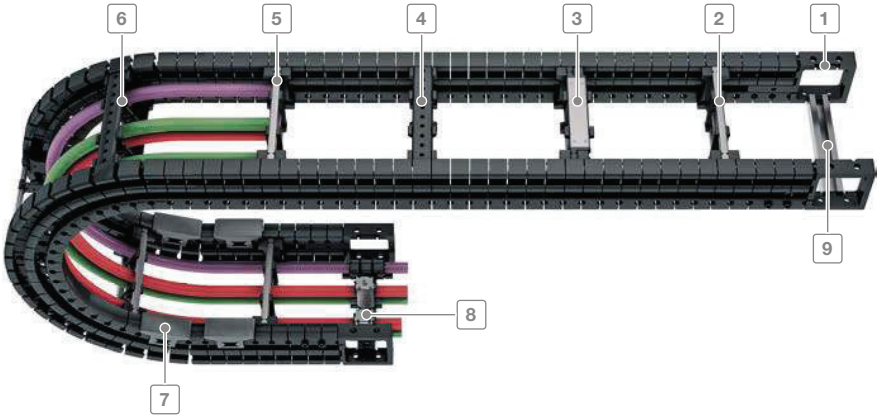
QUANTUM® series

Light, extremely quiet and low-vibration for high speeds and accelerations



Fraunhofer IPA TESTED® DEVICE
KABELSCHLEPP GmbH
Q 040.27-RE-70-1000
Report No. KA 0008-183

QUANTUM® series | Overview



1 Universal end connectors (UMB)
2 Aluminum stays available in **1 mm width sections**
3 Aluminum stays in reinforced design
4 Plastic stays available in **8** or **16 mm width sections**
5 Can be opened quickly on the inside and the outside for cable laying
6 Fixable dividers
7 Replaceable glide shoes
8 Strain relief combs
9 C-rail for strain relief elements

Virtually no polygon effect

QUANTUM® Low-vibration operation | Cable carrier with polygon effect

Features

- Cleanroom compatible: Cleanroom class 1 possible – no links, no link wear
- Extremely quiet, 31 db (A)*
- Extremely light
- For high accelerations up to 300 m/s^2
- For high operating speeds up to 40 m/s
- Extremely long service life: ≥ 25 million motion cycles
- TÜV type tested as per 2PfG 1036/10.97
- Large selection of stay systems and separating options for cables

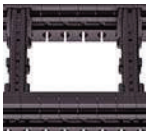
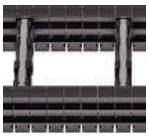
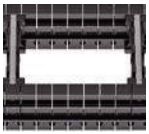
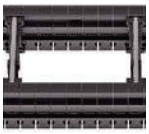
* Tested: Q060.100.100 by TÜV Rheinland. The sound pressure level for the measured area was measured at a distance of 0.5 m for smooth and jerky movements.

Ideal for highly dynamic applications

3D movements: the driver connection can be moved laterally and can be rotated by up to ± 30°

Side bands made from special plastic and steel cables in the support floor for an extremely long service life

QUANTUM® series | Overview

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]
Q040											
		RE	28	40	28 – 284	B_i + 40	8	15	60 – 180	2.5	22
Q060											
		RS	38	60	38 – 500	B_i + 52	1	20	100 – 300	5	30
		RE	42	60	68 – 276	B_i + 52	8	20	100 – 300	5	33
Q080											
		RS	58	80	50 – 600	B_i + 72	1	25	170 – 500	8	46
		RV	58	80	50 – 600	B_i + 72	1	25	170 – 500	8	46
		RE	58	80	58 – 570	B_i + 72	16	25	170 – 500	8	46
Q100											
		RS	72	98	70 – 600	B_i + 82	1	30	180 – 600	12	57
		RV	72	98	70 – 600	B_i + 82	1	30	180 – 600	12	57
		RE	72	98	74 – 570	B_i + 82	16	30	180 – 600	12	57

Cleanroom compatible and long service life

Continuous side bands are used. In contrast to conventional hole-and-bolt connections, hardly any wear occurs (link abrasion), which makes QUANTUM® ideal for use in cleanrooms.

Extremely long service life through

- No link abrasion due to absence of hole-and-bolt connections
- Continuous side bands made from special plastic with integrated steel cables

Ideal for highly dynamic applications – extruded side bands

The QUANTUM® runs extremely quietly and with low vibrations. The absence of links and the very small pitch means that the so-called polygon effect is reduced to a minimum. Due to the very quiet running, the QUANTUM® cable carrier system is ideal for applications with low-vibration linear drives.

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

QUANTUM® series | Overview

Unsupported arrangement			Gliding arrangement			Inner distribution				Installation variants			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	
3,2	40	300	100	20	7	●	●	●	–	●	●	–	368
5	30	160	150	15	7	●	●	●	●	●	●	–	374
5	30	160	150	15	7	●	●	●	●	●	●	–	378
6.4	25	100	180	12	6	●	●	●	●	●	●	–	384
6.4	25	100	180	12	6	●	●	●	●	●	●	–	386
6.4	25	100	180	12	6	●	●	●	●	●	●	–	390
7.8	20	70	200	10	5	●	●	●	●	●	●	–	396
7.8	20	70	200	10	5	●	●	●	●	●	●	–	398
7.8	20	70	200	10	5	●	●	●	●	●	●	–	402

Inner heights 28 – 72

Inner widths 28 – 600

tsubaki-kabelschlepp.com/quantum

Q040

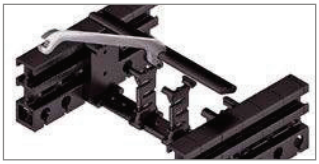
Pitch
15 mm

Inner height
28 mm

Inner widths
28 – 284 mm

Bending radii
60 – 180 mm

Stay variants



Plastic stay RE ..... page 368

Frame screw-in stay

- Plastic profile bars for light and medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

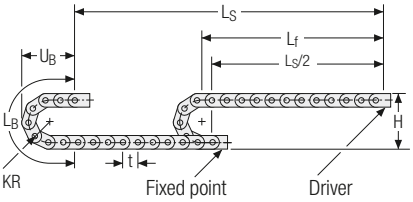
TOTALTRAX® complete systems

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 especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

Unsupported arrangement

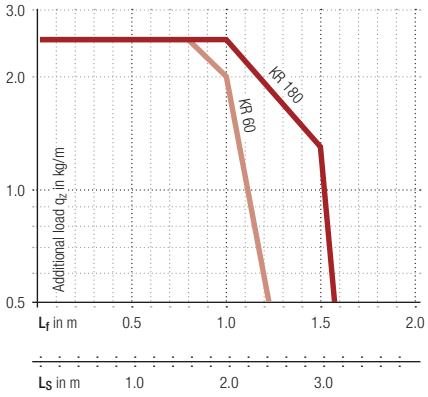


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
60	175	369	178
75	205	416	193
90	235	463	208
110	275	526	228
150	355	651	268
180	415	746	298

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 = 0.8 kg/m. For other inner widths, the maximum additional load changes.



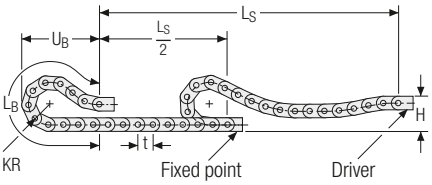
Velocity
up to 40 m/s

Acceleration
up to 300 m/s²

Travel length
up to 3.2 m

Additional load
up to 2.5 kg/m

Gliding arrangement



Velocity
up to 20 m/s

Acceleration
up to 15 m/s²

Travel length
up to 100 m

Additional load
up to 2.5 kg/m

Glide shoes have to be used for gliding applications.

The gliding cable carrier has to be routed in a channel.
See p. 654.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Key for abbreviations on page 12

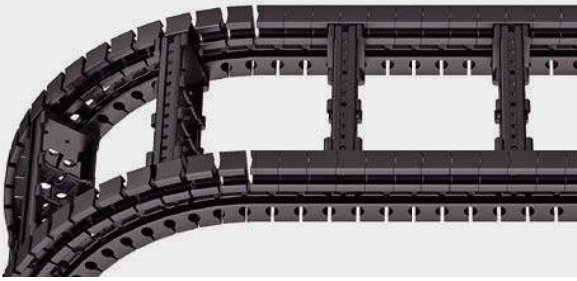
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

Q040 RE | Dimensions · Technical data

Plastic stay RE – screw-in frame stay

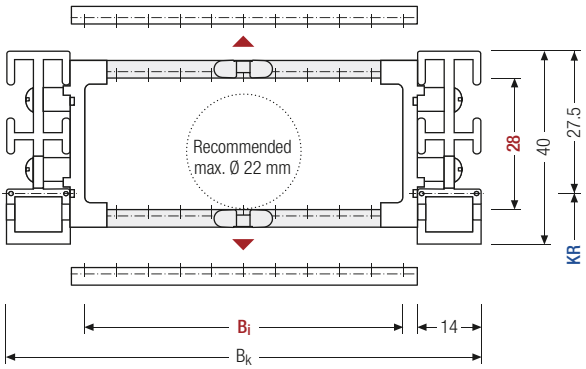
- Plastic profile bars for light and medium loads. Assembly without screws.
- Available customized in **8 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 6th section, **standard (HS: half-stayed)**

Stays on every 3rd section **(VS: fully-stayed)**

8 mm — B_i 28 – 284 mm in **8 mm width sections**



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]
28	40	28 – 284	B_i + 40	60	75	90	110	150	180	0.63 – 0.98

* in 8 mm width sections

Order example

Q040	.	108	.	RE	.	150	-	1290		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Q040 RE | Inner distribution | TS0 · TS1 · TS2

Divider systems

The divider system is mounted on each crossbar as a standard – on every 6th section for stay mounting (HS).

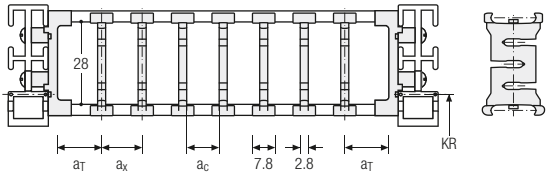
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(Version B)**. The groove in the frame stay faces outwards.

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	8	8	5.2	–	–
B	14	8	5.2	8	–

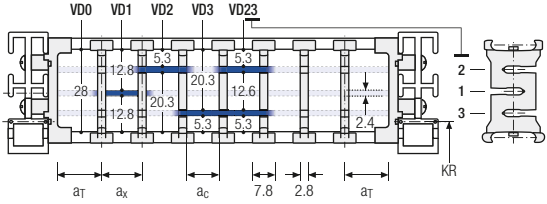
The dividers are movable within the cross section (version A) or fixed (version B).



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	8	8	5.2	–	2
B	14	8	5.2	8	2

The dividers are movable within the cross section (version A) or fixed (version B).

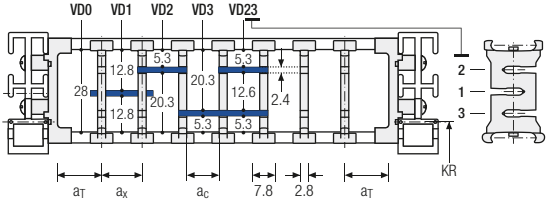


Divider system TS2 with partial height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
B	12	8*/ 24	5.2*/ 21.2	8	2

* for VR0

With grid distribution **(8 mm grid)**. The dividers are fixed by the height separation, the complete divider system is fixed (version B).



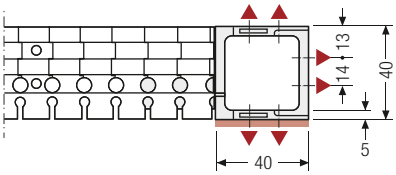
Order example

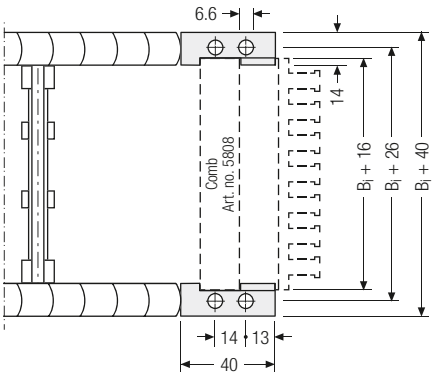
TS2	.	A	.	3	.	K1	.	34	-	VD1
						⋮		⋮		⋮
					.	K5	.	38	-	VD3
Divider system		Version		n_T		Chamber		a_x		Height separation

Q040 | End connectors

Universal end connectors UMB – plastic (standard)

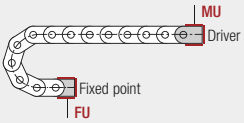
The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.





▲ Assembly options

Recommended tightening torque:
5 Nm for screws M5 - 8.8



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

Key for abbreviations on page 12

Design guidelines from page 38

Technical support: **technik@kabelschlepp.de**

QUANTUM® series

Inner heights

28

Inner widths

28 – 284

Increments

8 mm

tsubaki-kabelschlepp.com/quantum

Q060

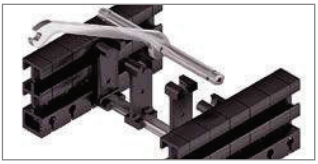
Pitch
20 mm

Inner heights
38 – 42 mm

Inner widths
38 – 500 mm

Bending radii
100 – 300 mm

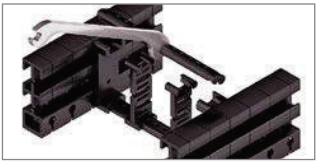
Stay variants



Aluminum stay RS page 374

Standard frame stay "The standard"

- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Plastic stay RE page 378

Frame screw-in stay

- Plastic profile bars for light and medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

Key for abbreviations on page 12

Design guidelines from page 38

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TRAXLINE® cables for cable carriers

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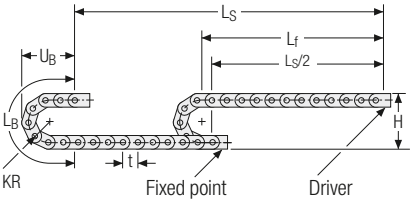
Unsupported arrangement

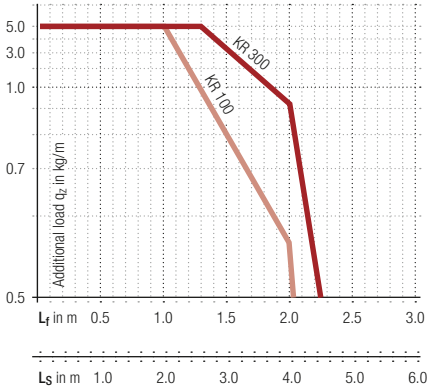


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
100	288	554	264
120	328	617	284
150	388	711	314
190	468	837	354
250	588	1025	414
300	688	1182	464

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 = 1.5 kg/m. For other inner widths, the maximum additional load changes.



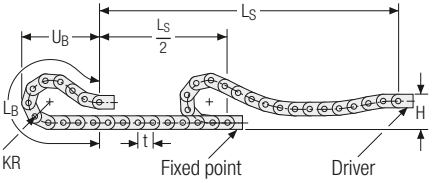
Velocity
up to 30 m/s

Acceleration
up to 160 m/s²

Travel length
up to 5 m

Additional load
up to 5 kg/m

Gliding arrangement



Velocity
up to 15 m/s

Acceleration
up to 7 m/s²

Travel length
up to 150 m

Additional load
up to 5 kg/m

Glide shoes have to be used for gliding applications.

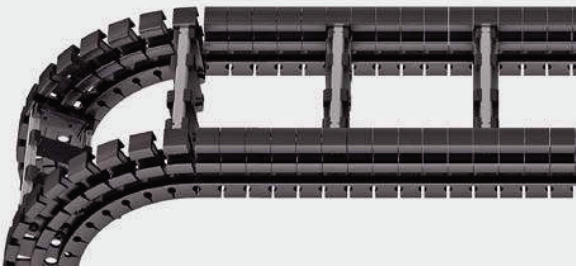
The gliding cable carrier has to be routed in a channel.
See p. 654.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Q060 RS | Dimensions · Technical data

Aluminum stay RS – standard frame stay

- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 6th section, **standard (HS: half-stayed)**

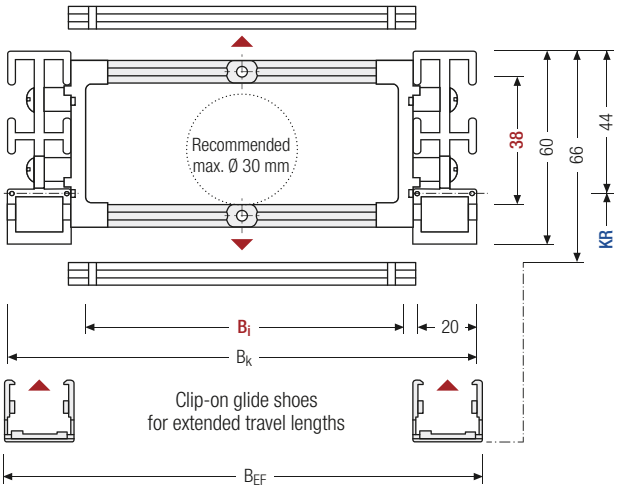
Stays on every 3rd section **(VS: fully-stayed)**

1 mm — B_i 38 – 500 mm in **1 mm width sections**

Key for abbreviations on page 12

Design guidelines from page 38

Technical support: technik@kabelschlepp.de



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
38	60	66	**38 – 500**	$B_i + 52$	$B_i + 56$	**100**	**120**	**150**	**190**	**250**	**300**	1.25 – 2.40

* in 1 mm width sections

online-engineer.de Cable Carrier Configurator

Order example

Q060	.	200	.	RS	.	150	-	1540		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Divider systems

The divider system is mounted on each crossbar as a standard – on every 6th section for stay mounting (HS).

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

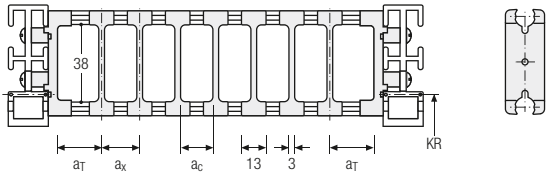
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

The socket additionally acts as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm **(Version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13.5	13	10	–

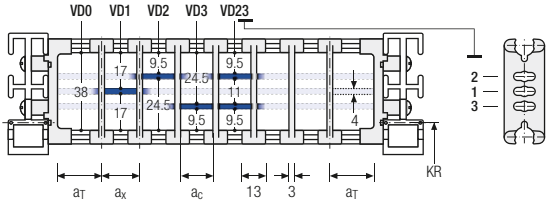
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13.5	40	13	10	2

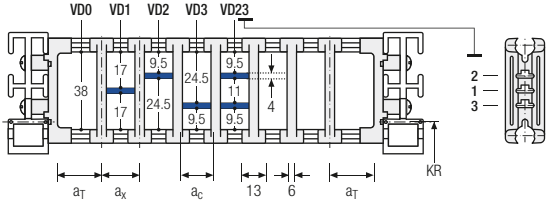
The dividers can be moved in the cross section.



Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13.5	13	7	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation; the grid can be moved in the cross section.



TRAXLINE® cables for cable carriers

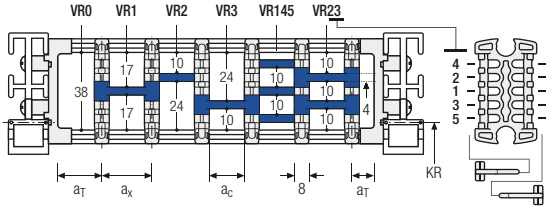
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

Q060 RS | Inner distribution | TS3

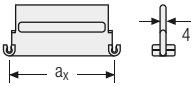
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	11	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.



Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	34	-	VR1
						⋮		⋮		⋮
					.	K5	.	38	-	VR5
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_X].

When using divider systems with height separation **(TS1 – TS3)**, please additionally state the positions (e.g. VD23) as seen from the left driver belt. You are welcome to add a sketch to your order.

More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

Key for abbreviations on page 12
Design guidelines from page 38

Technical support: **technik@kabelschlepp.de**

QUANTUM® series

Inner heights

38

Inner widths

38 – 500

Incre-ments

1 mm

tsubaki-kabelschlepp.com/quantum

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

Q060 RE | Dimensions · Technical data

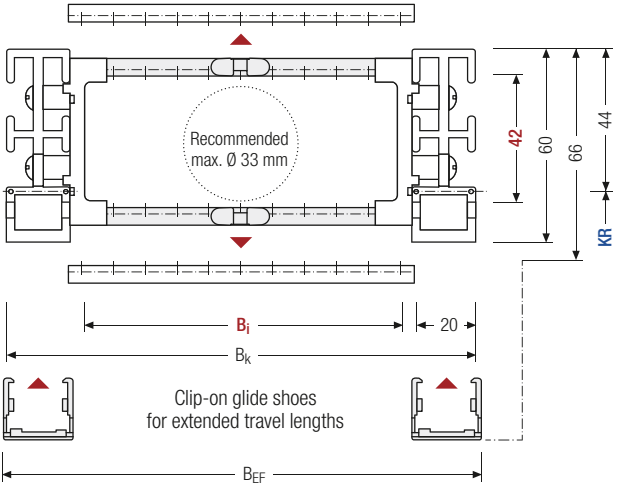
Plastic stay RE – frame screw-in stay

- Plastic profile bars for light and medium loads. Assembly without screws.
- Available customized in **8 mm sections**.
- **Outside/inside:** release by rotating 90°.

Stays on every 6th section, **standard (HS: half-stayed)**

Stays on every 3rd section **(VS: fully-stayed)**

8 mm B_i 68 – 276 mm in **8 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
42	60	66	**68 – 276**	$B_i + 52$	$B_i + 56$	100	120	150	190	250	300	1.16 – 1.54

* in 8 mm width sections

Order example

Q060	.	196	.	RE	.	150	-	1540		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

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Divider systems

The divider system is mounted on each crossbar as a standard – on every 6th section for stay mounting (HS).

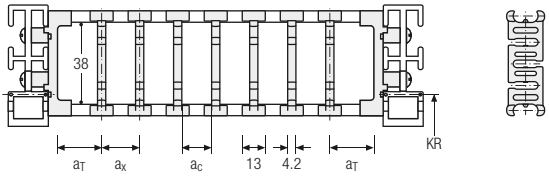
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(Version B)**. The groove in the frame stay faces outwards.

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	14	13	8.8	–	–
B	14	16	11.8	8	–

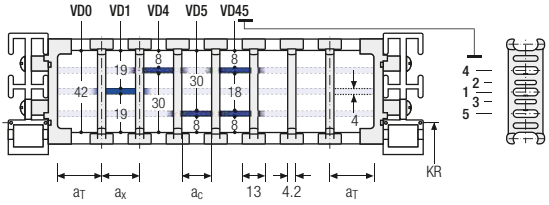
The dividers are movable within the cross section (version A) or fixed (version B).



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	14	13	8.8	–	2

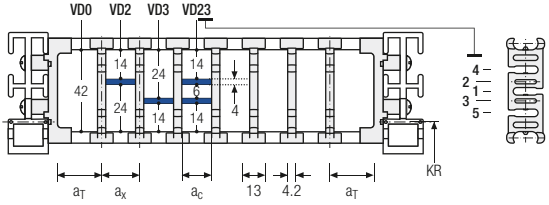
The dividers can be moved in the cross section.



Divider system TS2 with partial height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	n_T min
A	14	13	8.8	2
B	14	16	11.8	2

With grid distribution **(8 mm grid)**.
The dividers are attached by the height separation; the grid can be moved in the cross section.



TOTALTRAX® complete systems

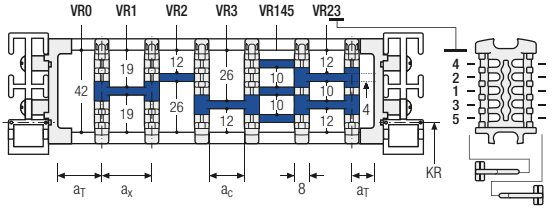
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**

Q060 RE | Inner distribution | TS3

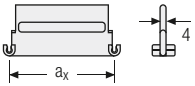
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	11	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.



Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	2	.	K1	.	16	-	VD1
						⋮		⋮		⋮
					.	K5	.	208	-	VD5
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

When using divider systems with height separation **(TS1 – TS3)**, please additionally state the positions (e.g. VD23) as seen from the left driver belt. You are welcome to add a sketch to your order.

Key for abbreviations on page 12

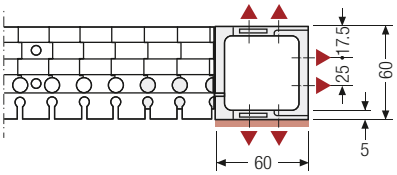
Design guidelines from page 38

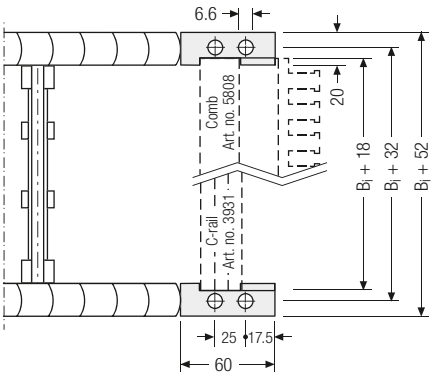
Technical support: technik@kabelschlepp.de

Q060 | End connectors

Universal end connectors UMB – plastic (standard)

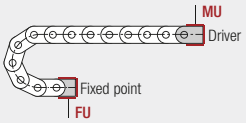
The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.





▲ Assembly options

Recommended tightening torque: 10 Nm



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

Q080

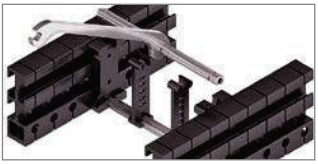
Pitch
20 mm

Inner height
58 mm

Inner widths
50 – 600 mm

Bending radii
170 – 500 mm

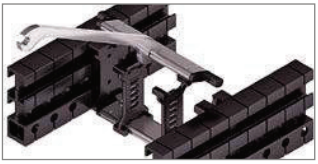
Stay variants



Aluminum stay RS page 384

Standard frame stay "The standard"

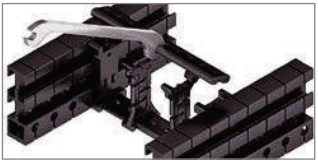
- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Aluminum stay RV page 386

Frame stay, reinforced

- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Plastic stay RE page 390

Frame screw-in stay

- Plastic profile bars for light and medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

TOTALTRAX® complete systems

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TRAXLINE® cables for cable carriers

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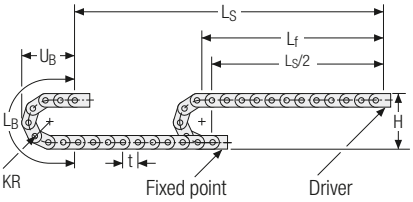
Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

Unsupported arrangement

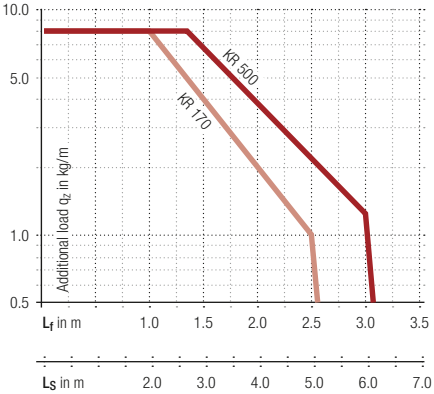


KR [mm]	H [mm]	L_B [mm]	U_B [mm]
170	457	834	379
200	517	928	409
250	617	1085	459
320	757	1305	529
420	957	1619	629
500	1117	1870	709

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 = 2.5 kg/m. For other inner widths, the maximum additional load changes.



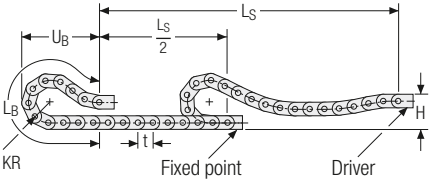
Velocity
up to 25 m/s

Acceleration
up to 100 m/s²

Travel length
up to 6.4 m

Additional load
up to 8 kg/m

Gliding arrangement



Velocity
up to 12 m/s

Acceleration
up to 6 m/s²

Travel length
up to 180 m

Additional load
up to 8 kg/m

Glide shoes have to be used for gliding applications.

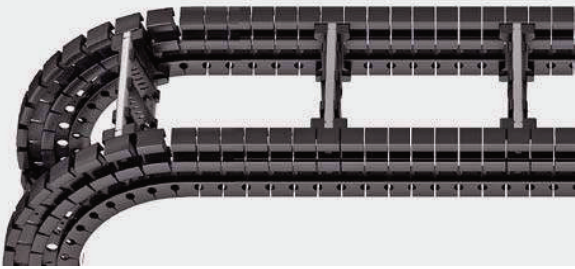
The gliding cable carrier has to be routed in a channel.
See p. 654.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Q080 RS | Dimensions · Technical data

Aluminum stay RS – standard frame stay

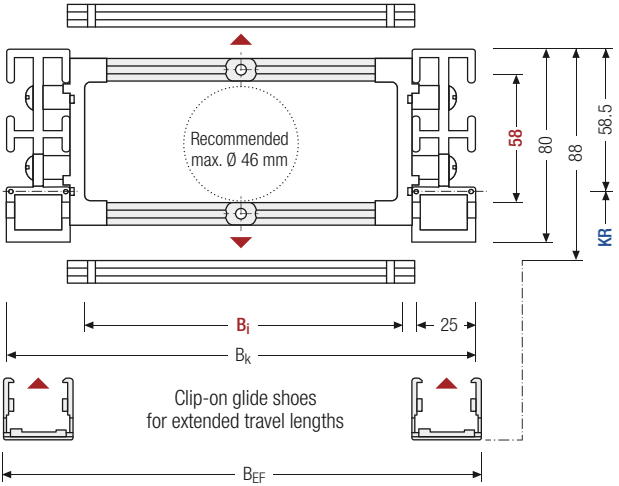
- Extremely quick to open and close
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 8th section, **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

1 mm — B_i 50 – 600 mm in **1 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
58	80	88	**50 – 600**	$B_i + 72$	$B_i + 79.5$	**170**	**200**	**250**	**320**	**420**	**500**	1.90 – 2.25

* in 1 mm width sections

Order example

Q080	.	400	.	RS	.	250	-	1600		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Key for abbreviations on page 12

Design guidelines from page 38

Technical support: **technik@kabelschlepp.de**

Divider systems

The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

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

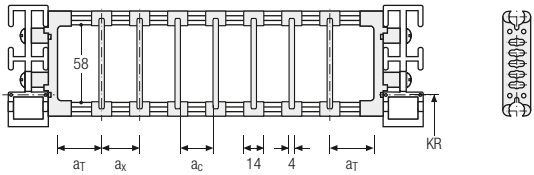
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

This socket additionally acts as a spacer between the dividers and is available in a 1 mm grid between 3 – 50 mm, as well as 16.5 and 21.5 mm **(Version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	11	14	10	–

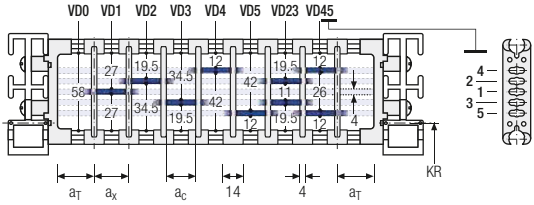
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	11	25	14	10	2

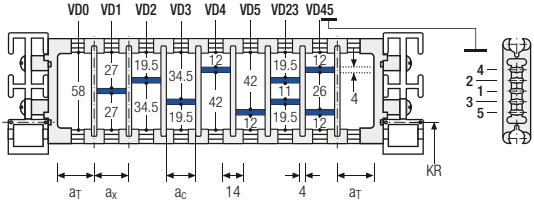
The dividers can be moved in the cross section.



Divider system TS2 with partial height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	11	14	10	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation; the grid can be moved in the cross section.



TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

Key for abbreviations on page 12

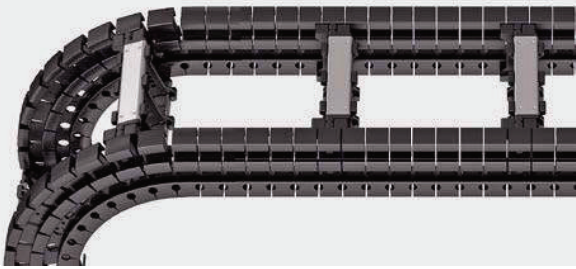
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

Q080 RV | Dimensions · Technical data

Aluminum stay RV –
Frame stay reinforced

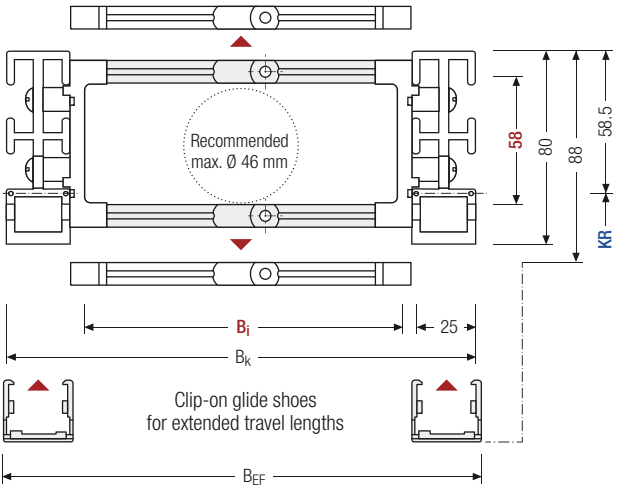
- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 8th section, **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

1 mm
B_i 50 – 600 mm in **1 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
58	80	88	**50 – 600**	$B_i + 72$	$B_i + 79.5$	**170**	**200**	**250**	**320**	**420**	**500**	2.10 – 2.90

* in 1 mm width sections

Order example

Q080	.	400	.	RV	.	250	-	1600		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Divider systems

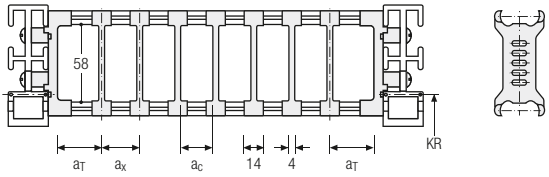
The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

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	11	14	10	2

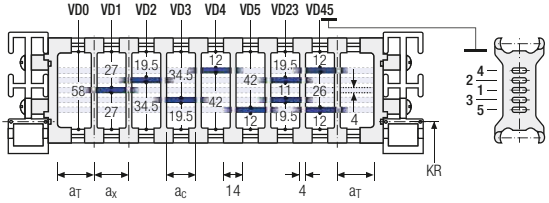
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	11	25	14	10	2

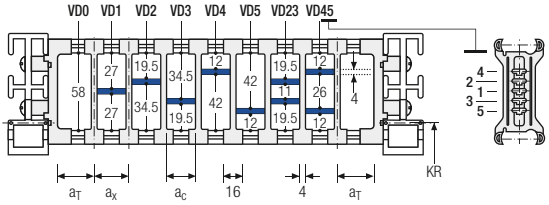
The dividers can be moved in the cross section.



Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	12	20	16	2

With grid distribution **(1 mm grid)**.
The dividers are attached by the height separation; the grid can be moved in the cross section.



TRAXLINE® cables for cable carriers

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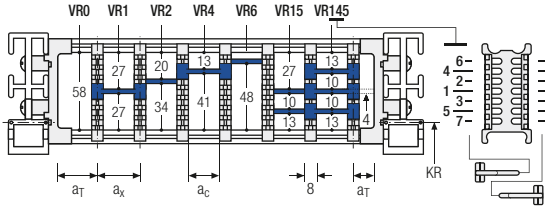
Q080 RV | Inner distribution | TS3

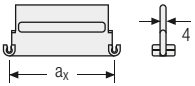
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	8	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.



Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	3	.	K1	.	16	-	VR1
						⋮		⋮		⋮
					.	K5	.	208	-	VR7
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

When using divider systems with height separation **(TS1 – TS3)**, please additionally state the positions (e.g. VD23) as seen from the left driver belt. You are welcome to add a sketch to your order.

More product information online

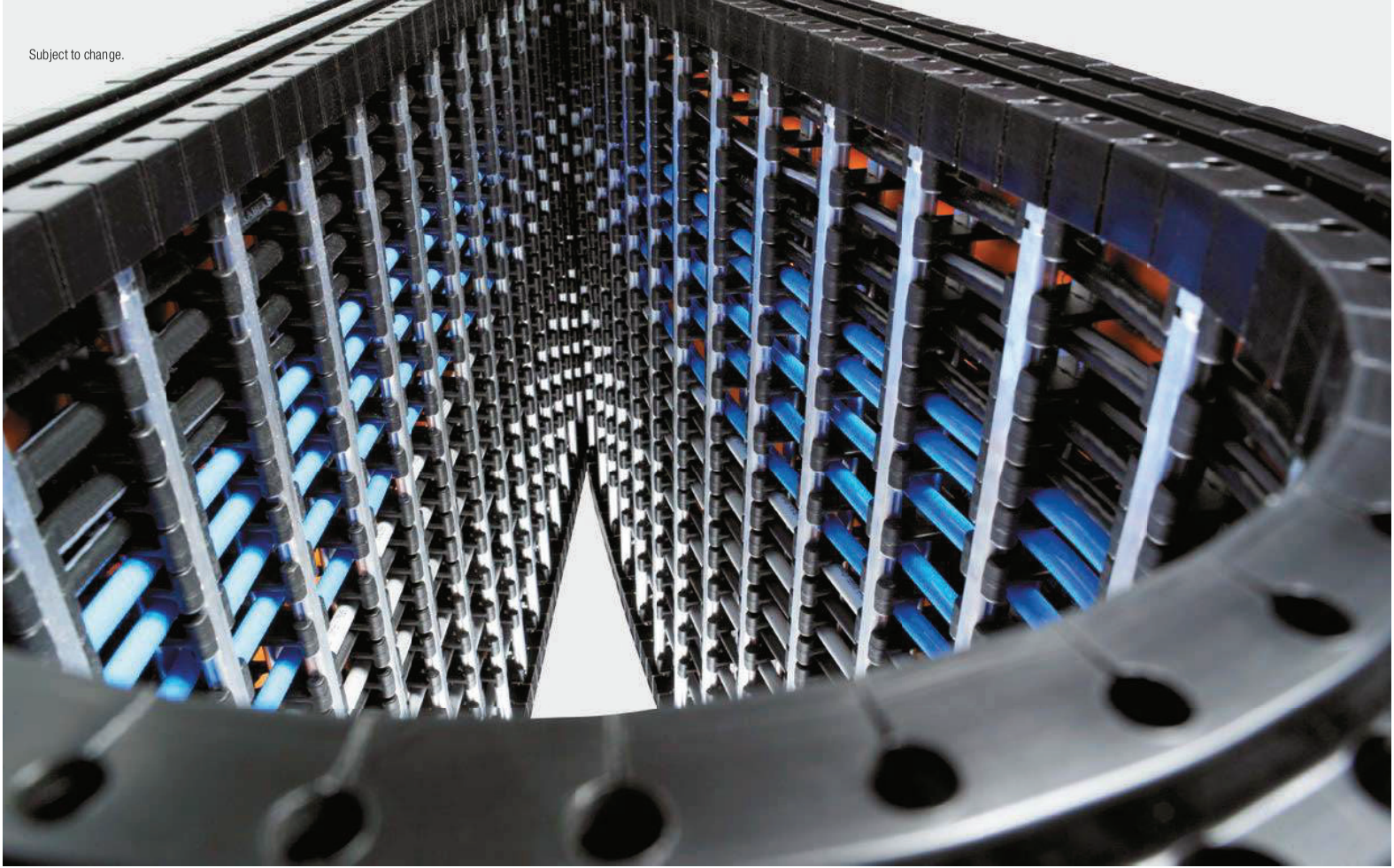
Assembly instructions etc.: Additional info via your smartphone or check online at **tsubaki-kabelschlepp.com/support**

Configure your custom cable carrier here: **onlineengineer.de**

Key for abbreviations on page 12
Design guidelines from page 38

Technical support: **technik@kabelschlepp.de**

Subject to change.



tsubaki-kabelschlepp.com/
quantum

1 mm
Incre-
ments

50
-
600
Inner
widths

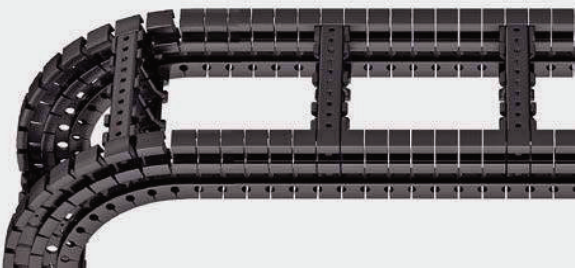
58
Inner
heights

QUANTUM®
series

Q080 RE | Dimensions · Technical data

Plastic stay RE – frame screw-in stay

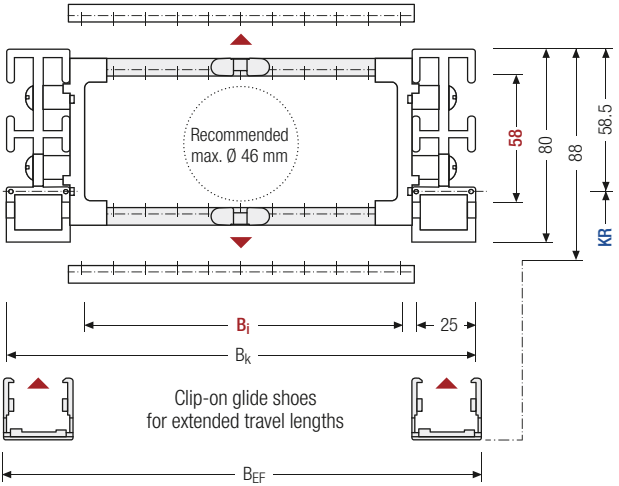
- Plastic profile bars for light and medium loads. Assembly without screws.
- Available customized in **16 mm sections**.
- **Outside/inside:** release by rotating 90°.



Stays on every 8th section, **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

8 mm — B_i 58 – 570 mm in **16 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
58	80	88	**58 – 570**	$B_i + 72$	$B_i + 79.5$	**170**	**200**	**250**	**320**	**420**	**500**	1.93 – 2.70

* in 16 mm width sections

Order example

Q080	.	196	.	RE	.	250	-	1600		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Key for abbreviations on page 12

Design guidelines from page 38

Technical support: **technik@kabelschlepp.de**

Divider systems

The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

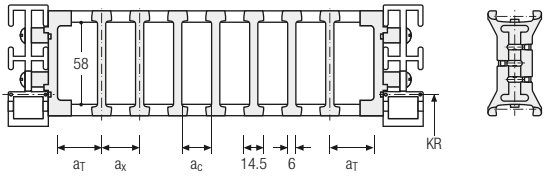
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(Version B)**. The groove in the frame stay faces outwards.

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	12	14.5	8.5	–	–
B	13	16	10	16	–

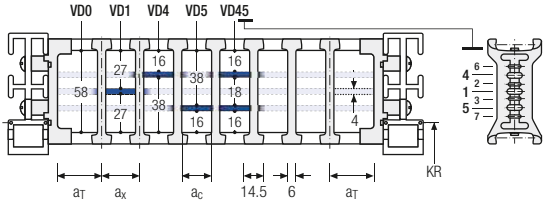
The dividers are movable within the cross section (version A) or fixed (version B).



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	12	14.5	8.5	–	2
B	13	16	10	16	2

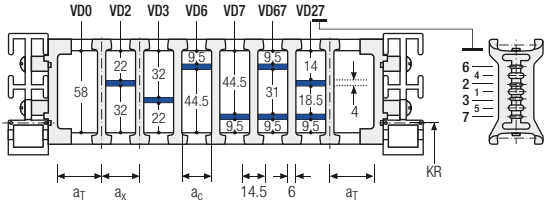
The dividers are movable within the cross section (version A) or fixed (version B).



Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	12	16	10	2
B	13	16	10	2

With grid distribution **(8 mm grid)**. The dividers are attached by the height separation; the grid can be moved in the cross section.

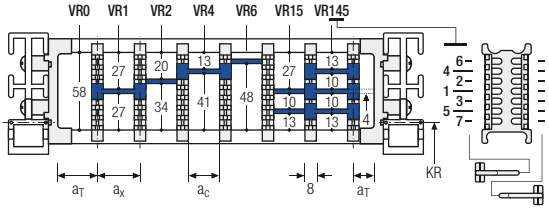


Q080 RE | Inner distribution | TS3

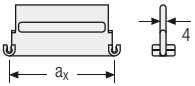
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	8	16 / 42*	8	2

* For aluminum partitions



The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.



Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	2	.	K1	.	16	-	VD1
						⋮		⋮		⋮
					.	K5	.	208	-	VD5
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

When using divider systems with height separation **(TS1 – TS3)**, please additionally state the positions (e.g. VD23) as seen from the left driver belt. You are welcome to add a sketch to your order.

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 especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

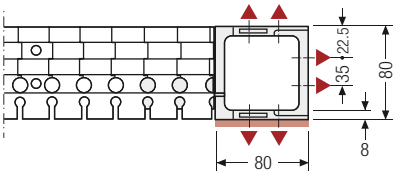
Key for abbreviations on page 12
Design guidelines from page 38

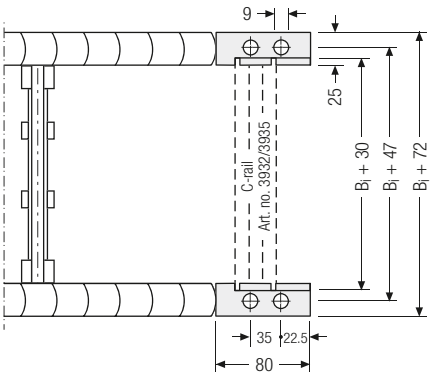
Technical support:
technik@kabelschlepp.de

Q080 | End connectors

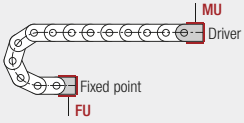
Universal end connectors UMB – plastic (standard)

The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.





▲ Assembly options



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

Q100

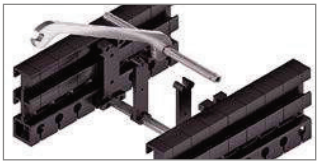
Pitch
30 mm

Inner height
72 mm

Inner widths
70 – 600 mm

Bending radii
180 – 600 mm

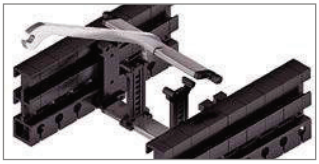
Stay variants



Aluminum stay RS page 396

Standard frame stay "The standard"

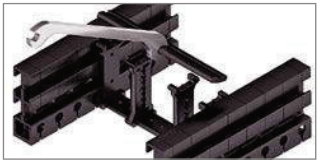
- Aluminum profile bars for light to medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Aluminum stay RV page 398

Frame stay, reinforced

- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- **Outside/inside:** release by rotating 90°.



Plastic stay RE page 402

Frame screw-in stay

- Plastic profile bars for light and medium loads. Assembly without screws.
- **Outside/inside:** release by rotating 90°.

TOTALTRAX® complete systems

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TRAXLINE® cables for cable carriers

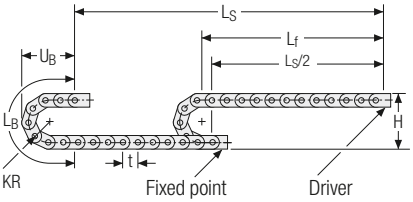
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

Unsupported arrangement

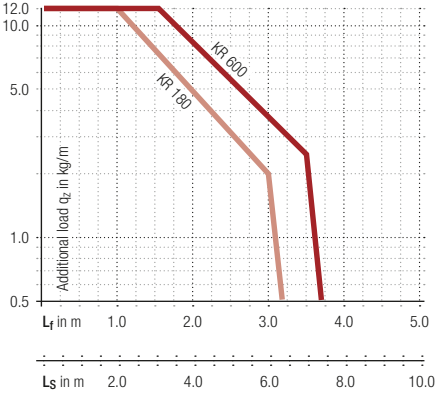


KR [mm]	H [mm]	LB [mm]	UB [mm]
180	503	926	432
250	643	1145	502
300	743	1302	552
370	883	1522	622
460	1063	1805	712
600	1343	2244	852

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 = 3.25 kg/m. For other inner widths, the maximum additional load changes.



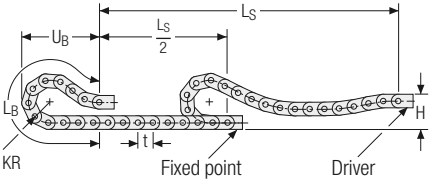
Velocity
up to 20 m/s

Acceleration
up to 70 m/s²

Travel length
up to 7.8 m

Additional load
up to 12 kg/m

Gliding arrangement



Velocity
up to 10 m/s

Acceleration
up to 5 m/s²

Travel length
up to 200 m

Additional load
up to 12 kg/m

Glide shoes have to be used for gliding applications.

The gliding cable carrier has to be routed in a channel.
See p. 654.

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

Q100 RS | Dimensions · Technical data

Aluminum stay RS – standard frame stay

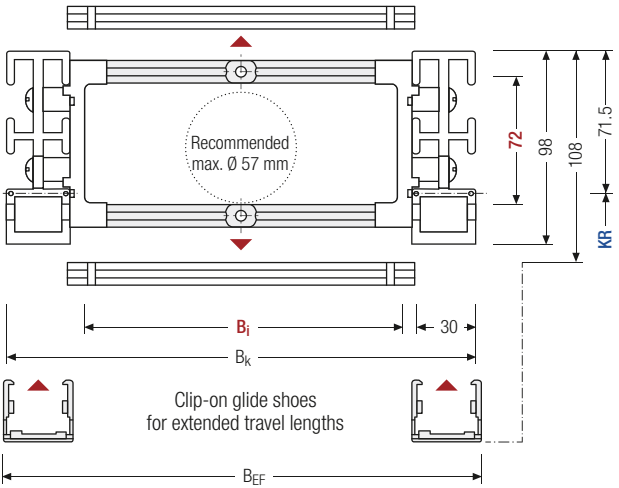
- Extremely quick to open and close.
- Aluminum profile bars for light to medium loads. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.

Stays on every 8th section, **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

1 mm

B_i 70 – 600 mm in **1 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
72	98	108	**70 – 600**	$B_i + 82$	$B_i + 89.5$	180	250	300	370	460	600	2.6 – 3.4

* in 1 mm width sections

Order example

Q100	.	400	.	RS	.	370	-	1860		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Divider systems

The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

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

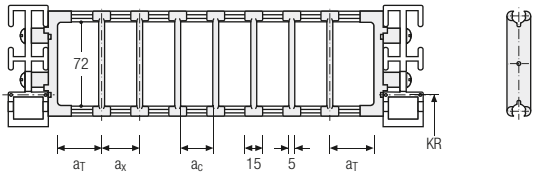
For applications with lateral acceleration and rotated by 90°, the dividers can be attached by simply clipping onto a socket (available as an accessory).

The socket additionally acts as a spacer between the dividers and is available in 1 mm sections between 3 – 50 mm **(Version B)**.

Divider system TS0 without height separation

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	7.5	15	10	–

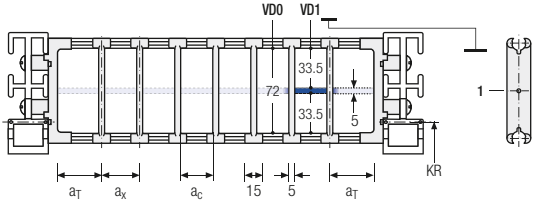
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\,min}$ [mm]	$a_{T\,max}$ [mm]	$a_{x\,min}$ [mm]	$a_{C\,min}$ [mm]	$n_{T\,min}$
A	7.5	25	15	10	2

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 positions (e.g. VD1) as seen from the left driver belt. You are welcome to add a sketch to your order.

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

Q100 RV | Dimensions · Technical data

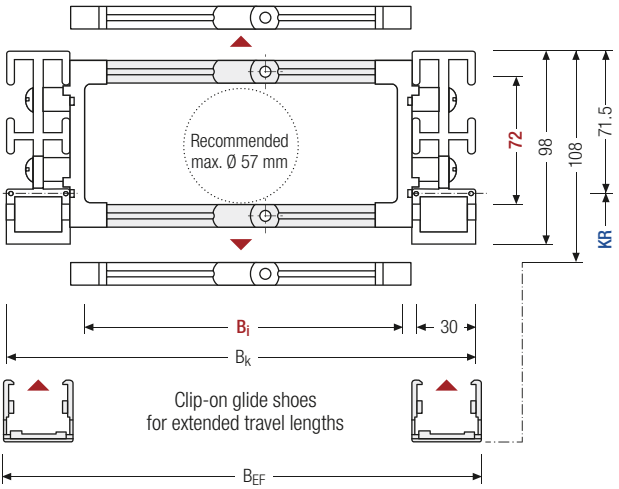
Aluminum stay RV –
Frame stay reinforced

- Aluminum profile bars with plastic adapter for medium to high loads and large cable carrier widths. Assembly without screws.
- Available customized in **1 mm sections**.
- **Outside/inside:** release by rotating 90°.

Stays on every 8th section, **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

1 mm — B_i 70 – 600 mm in **1 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
72	98	108	**70 – 600**	$B_i + 82$	$B_i + 89.5$	180	250	300	370	460	600	2.8 – 4.6

* in 1 mm width sections

Order example

Q100	.	400	.	RV	.	370	-	1860		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Q100 RV | Inner distribution | TS0 · TS1 · TS2

Divider systems

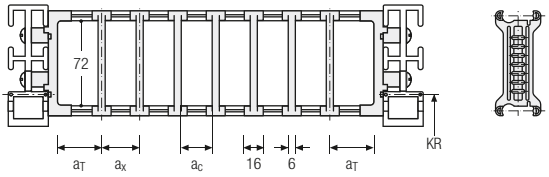
The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

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	13	16	10	2

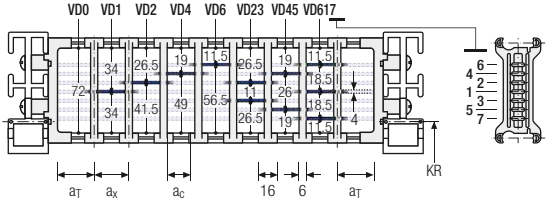
The dividers can be moved in the cross section.



Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{T\ max}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13	25	16	10	2

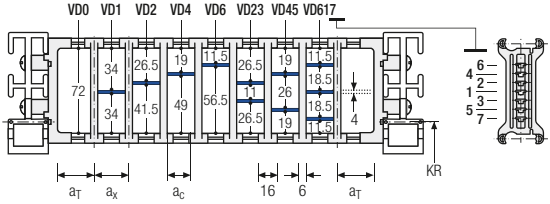
The dividers can be moved in the cross section.



Divider system TS2 with partial height separation

Vers.	$a_{T\ min}$ [mm]	$a_{X\ min}$ [mm]	$a_{C\ min}$ [mm]	$n_{T\ min}$
A	13	20	14	2

With grid distribution **(1 mm grid)**. The dividers are attached by the height separation; the grid can be moved in the cross section.



TRAXLINE® cables for cable carriers

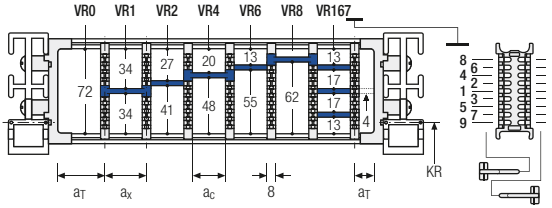
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

Q100 RV | Inner distribution | TS3

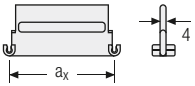
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	4	16/42*	8	2

* For aluminum partitions



The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.



Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a twin divider (**S_T = 4 mm**). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	. A	. 3	. K1	. 16	- VR1
			⋮	⋮	⋮
			. K8	. 208	- VR9
Divider system	Version	n_T	Chamber	a_x	Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

When using divider systems with height separation **(TS1 – TS3)**, please additionally state the positions (e.g. VD23) as seen from the left driver belt. You are welcome to add a sketch to your order.

More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

Key for abbreviations on page 12
Design guidelines from page 38

Technical support: **technik@kabelschlepp.de**

Subject to change.

QUANTUM® series

Inner heights

72

Inner widths

70 – 600

Incre-ments

1 mm

tsubaki-kabelschlepp.com/quantum

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

Q100 RE | Dimensions · Technical data

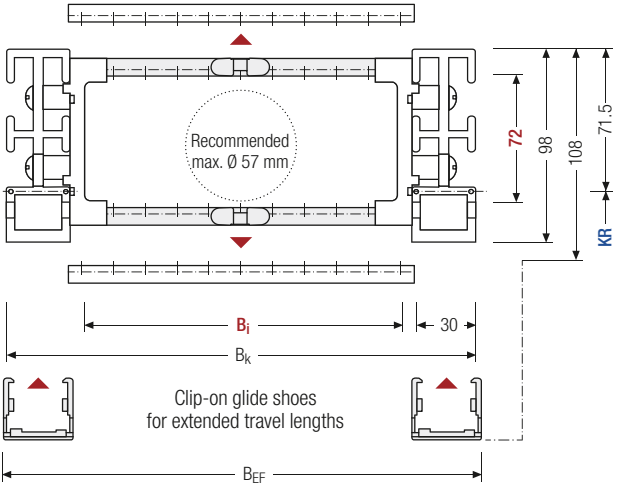
Plastic stay RE – frame screw-in stay

- Plastic profile bars for light and medium loads. Assembly without screws.
- Available customized in **16 mm sections**.
- **Outside/inside:** release by rotating 90°.

Stays on every 8th section, **standard (HS: half-stayed)**

Stays on every 4th section **(VS: fully-stayed)**

8 mm — B_i 74 – 570 mm in **16 mm width sections**



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]	$h_{G'}$ [mm]	B_i [mm]*	B_k [mm]	B_{EF} [mm]	KR [mm]						q_k [kg/m]
72	98	108	**74 – 570**	$B_i + 82$	$B_i + 89.5$	**180**	**250**	**300**	**370**	**460**	**600**	2.74 – 3.67

* in 16 mm width sections

Order example

Q100	.	346	.	RE	.	370	-	1860		HS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Q100 RE | Inner distribution | TS0 · TS1 · TS2

Divider systems

The divider system is mounted on each crossbar as a standard – on every 8th section for stay mounting (HS).

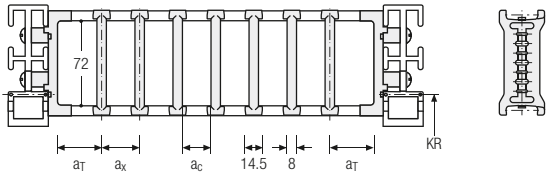
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

For applications with lateral accelerations and applications with the cable carrier rotated by 90°, the dividers can easily be fixed by turning the frame stay by 180°. The arresting cams click into place in the locking grids in the crossbar **(Version B)**.
The groove in the frame stay faces outwards.

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	12	14.5	6.5	–	–
B	13	16	8	16	–

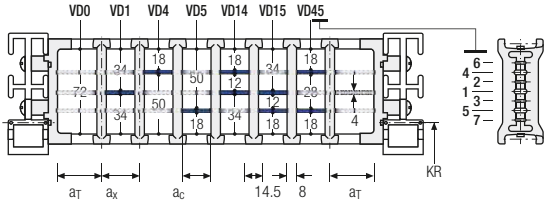
The dividers are movable within the cross section (version A) or fixed (version B).



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	12	14.5	6.5	–	2
B	13	16	8	16	2

The dividers are movable within the cross section (version A) or fixed (version B).

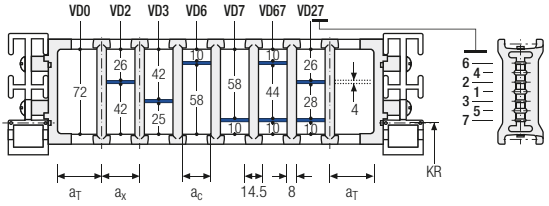


Divider system TS2 with partial height separation

Vers.	a_T min [mm]	a_x min [mm]	a_c min [mm]	a_x grid [mm]	n_T min
A	12	14.5*/ 20	6.5*/ 12	–	2
B	13	16*/ 32	8*/ 24	16	2

* for VR0

With grid distribution **(16 mm grid)**. The dividers are fixed by the height separation; the grid is movable in the cross section (version A) or fixed (version B).

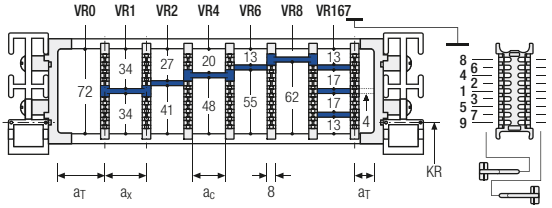


Q100 RE | Inner distribution | TS3

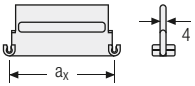
Divider system TS3 with height separation consisting of plastic partitions

Vers.	a_T min [mm]	a_x min [mm]	a_C min [mm]	n_T min
A	4	16/42*	8	2

* For aluminum partitions



The dividers are fixed with the partitions. The entire divider system can be moved in the cross section.



Aluminum partitions with 1 mm increments with **a_x > 42 mm** are also available.

a_x (center distance of dividers) [mm]											
a_C (nominal width of inner chamber) [mm]											
16	**18**	**23**	**28**	**32**	**33**	**38**	**43**	**48**	**58**	**64**	**68**
8	10	15	20	24	25	30	35	40	50	56	60
78	**80**	**88**	**96**	**112**	**128**	**144**	**160**	**176**	**192**	**208**	
70	72	80	88	104	120	136	152	168	184	200	

When using **plastic partitions with a_x > 112 mm**, we recommend an additional center support with a **twin divider** (S_T = 4 mm). Twin dividers are also suitable for retrofitting in the partition system.

Order example

TS3	.	A	.	2	.	K1	.	16	-	VD1
						⋮		⋮		⋮
					.	K5	.	208	-	VD9
Divider system		Version		n_T		Chamber		a_x		Height separation

Please state the designation of the divider system **(TS0, TS1,...)**, the version, and the number of dividers per cross section [n_T]. In addition, please also enter the chambers [K] from left to right, as well as the assembly distances [a_T/a_x].

When using divider systems with height separation **(TS1 – TS3)**, please additionally state the positions (e.g. VD23) as seen from the left driver belt. You are welcome to add a sketch to your order.

Key for abbreviations on page 12

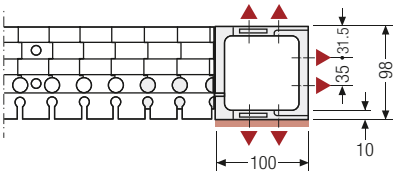
Design guidelines from page 38

Technical support: technik@kabelschlepp.de

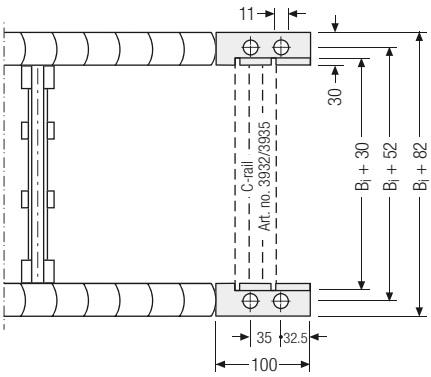
Q100 | End connectors

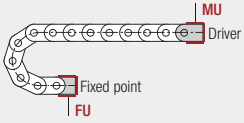
Universal end connectors UMB – plastic (standard)

The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.



▲ Assembly options





Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

TKR series

Extremely quiet and low-vibration for highly dynamic applications*

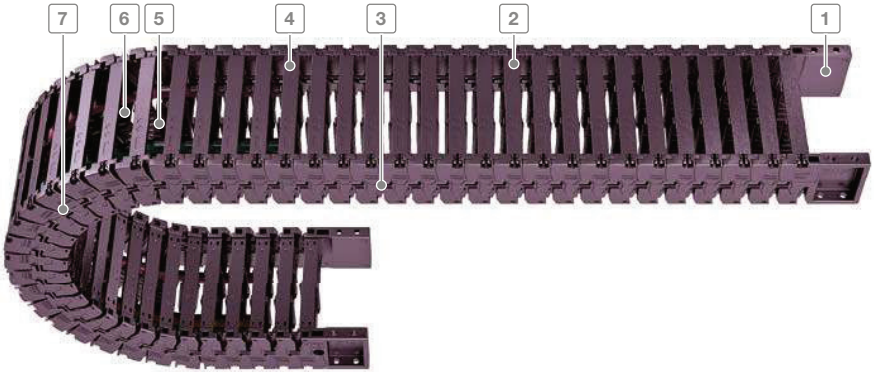
Fraunhofer IPA TESTED® DEVICE
TSUBAKI MOTO CHAIN CO.
TKR200W50R53
Report No. KA 1008-531

iF product design award 2006

TSUBAKI ECO LINK

* Some features can be different for certain types for design reasons.

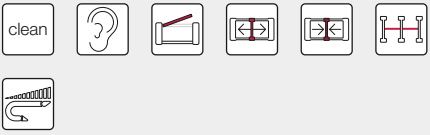
TKR series | Overview

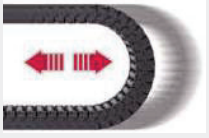


1. Variable connection for quick assembly
2. Easy and quick to open
3. Extremely quiet and low-vibration operation
4. Can be opened at any position
5. Fixable dividers
6. Many separation options for the cables
7. Chain link and joint connection with captive connection

Features

- Long service life
- Ideal for highly dynamic applications
- High side stability
- Cleanroom compatible
- Modular design allows easy shortening and extending





Ideal for highly dynamic applications

UMB end connector to the connection from the face side, from the top or from the bottom

Molded, captive connecting elements

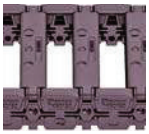
TKR series | Overview

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]
TKR0150											
		030	22	27.5	20 – 60	34 – 74	–	15	40 – 75	2	17.5
TKR0200											
		030	28	37	40 – 120	56 – 136	–	20	55 – 150	2.5	22
TKR0260											
		030	40	54	50 – 200	76 – 226	–	26	75 – 150	8	32
TKR0280											
		030	52	66	50 – 200	80 – 130	–	28	75 – 200	10	41

Cleanroom compatible and long service life

The movable connectors are directly molded on the chain links. In contrast to conventional bore-hole bolt connections, hardly any wear occurs (link abrasion), which makes the TKR type excellent for use in clean rooms.

The special design of the connecting elements additionally increases the service life of the system.

Ideal for highly dynamic applications

The TKR features extremely quiet and low-vibration operation. The so-called polygon effect is reduced to a minimum.

Ideal areas of application are in particular in handling and assembly systems, robots, metrology devices, pick-and-place machines, printing and textile machines. Due to the very quiet running, the low-vibration TKR types are ideal for applications with linear drives.

Subject to change.

TKR series | Overview

Unsupported arrangement			Gliding arrangement			Inner distribution				Installation variants			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	
1.75	5	200*	–	–	–	●	●	–	–	●	–	–	412
2.75	5	200*	–	–	–	●	●	–	–	●	–	–	418
3.9	5	200*	–	–	–	●	●	–	●	●	–	–	424
4.9	5	200*	–	–	–	●	●	–	●	●	–	–	430

* For values > 20 m/s², please contact us, we are happy to advise you.

Technical manual

Do you require additional information on the TKR type?
Our technical manual at **tsubaki-kabelschlepp.com/download** provides all information for configuring your cable carrier.

TKR0150 | Stay variants | Overview

TKR0150

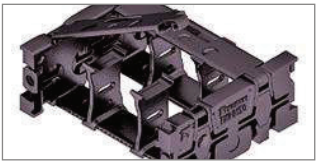
Pitch
15 mm

Inner height
22 mm

Inner widths
20 – 60 mm

Bending radii
40 – 75 mm

Stay variants



Design 030 ..... page **412**

Frame with externally detachable crossbars

- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- **Outside:** Swivable and detachable.

TOTALTRAX® complete systems

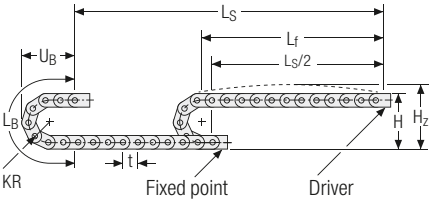
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**

TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

TKR0150 | Installation dim. | Unsupported

Unsupported arrangement

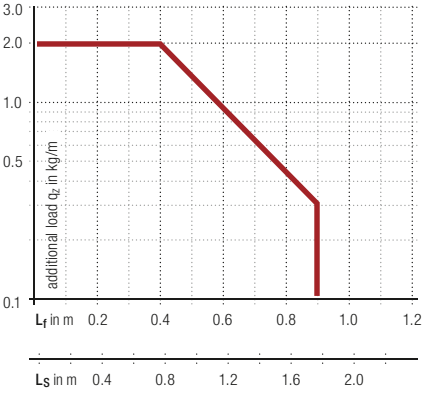


KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
40	130	140	156	70
50	150	160	187	80
75	200	210	266	105

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 = 0.3 kg/m at B_i 20 mm. For other inner widths, the maximum additional load changes.



Velocity
up to 5 m/s

Acceleration
up to 200 m/s²*

Travel length
up to 1.75 m

Additional load
up to 2.0 kg/m

* For values > 20 m/s², please contact us, we are happy to advise you!

More product information online

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

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

Key for abbreviations on page 12

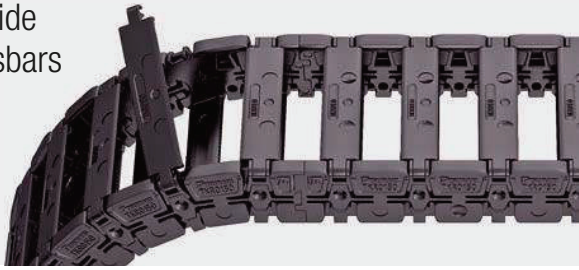
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

TKR0150.030 | Dimensions · Technical data

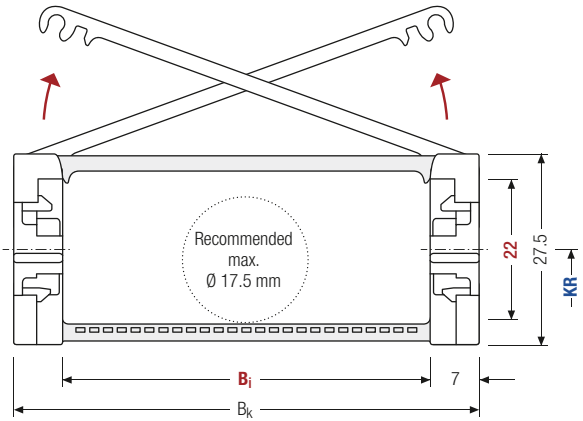
Stay variant 030 – with outside opening and detachable crossbars

- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- Swivable and detachable on one side in any position.
- **Outside:** Swivable and detachable.



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

B_i 20 – 60 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 for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]			B_k [mm]	KR [mm]			q_k [kg/m]
22	27.5	20	40	60	B_i + 14	40	50	75	0.3 – 0.5

Order example

TKR0150	.	60	.	030	.	75	-	800		VS
Type		B_i [mm]		Stay variant		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

TKR0150.030 | Inner distribution | TS0 · TS1

Divider systems

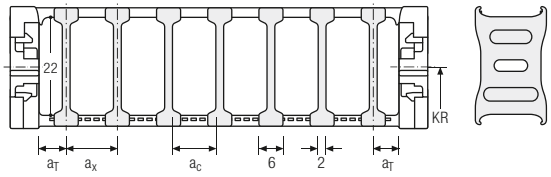
As standard, the divider system is mounted on every 2nd chain link

As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.
The arresting cams click into place in the locking grids in the crossbars **(Version B)**.

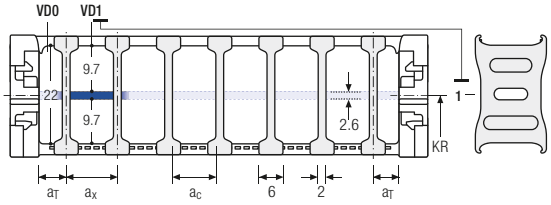
Divider system TS0 without height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
A	5	6	4	–	–
B	6	6	4	2	–

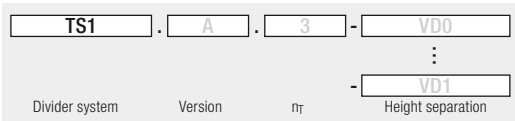


Divider system TS1 with continuous height separation

Vers.	$a_{T\ min}$ [mm]	$a_{x\ min}$ [mm]	$a_{c\ min}$ [mm]	$a_{x\ grid}$ [mm]	$n_{T\ min}$
A	5	6	4	–	2
B	6	6	4	2	2



Order example



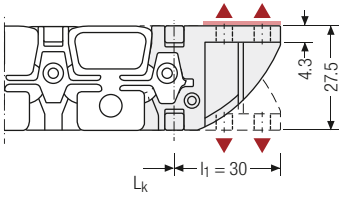
Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T].

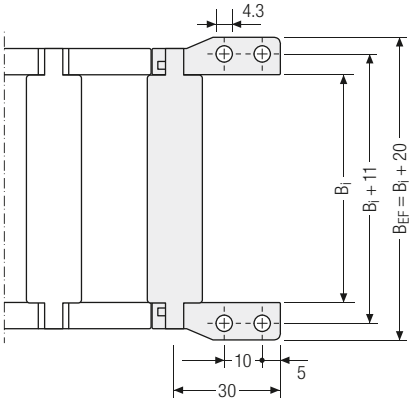
If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

TKR0150 | End connectors

One-part end connectors – plastic

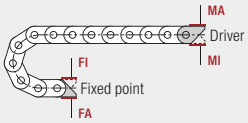
The plastic end connectors can be **connected from above or from below**. The connection type can be changed by changing the orientation of the end connector.





▲ Assembly options

Recommended tightening torque:
0,6 Nm for screws M4



Connection point
F – fixed point
M – driver

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

Order example

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

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

Key for abbreviations on page 12
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

Subject to change.

TKR0200 | Stay variants | Overview

TKR0200

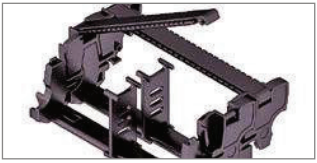
Pitch
20 mm

Inner height
28 mm

Inner widths
40 – 120 mm

Bending radii
55 – 150 mm

Stay variants



Design 030 ..... page **418**

Frame with externally detachable crossbars

- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- **Outside:** Swivable and detachable
- **Inside:** detachable

Fraunhofer IPA TESTED® DEVICE
TSUBAKIMOTO CHAIN CO.
TKR0200WS0805
Report No. KA 1008-531

TOTALTRAX® complete systems

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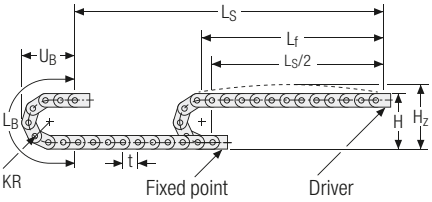
TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

TKR0200 | Installation dim. | Unsupported

Unsupported arrangement

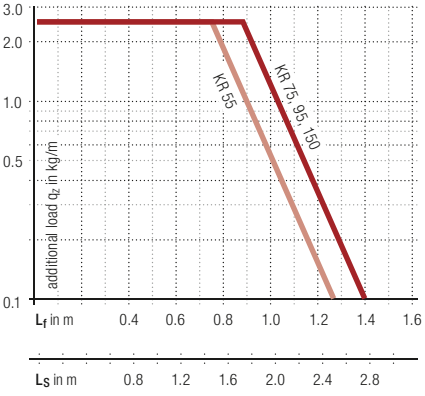


KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
55	192	252	213	96
75	232	292	276	116
95	272	332	339	136
150	382	442	512	191

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 = 0.6 kg/m at B_i 40 mm. For other inner widths, the maximum additional load changes.



Velocity
up to 5 m/s

Acceleration
up to 200 m/s²*

Travel length
up to 2.75 m

Additional load
up to 2.5 kg/m

* For values > 20 m/s², please contact us, we are happy to advise you!

More product information online

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

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

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

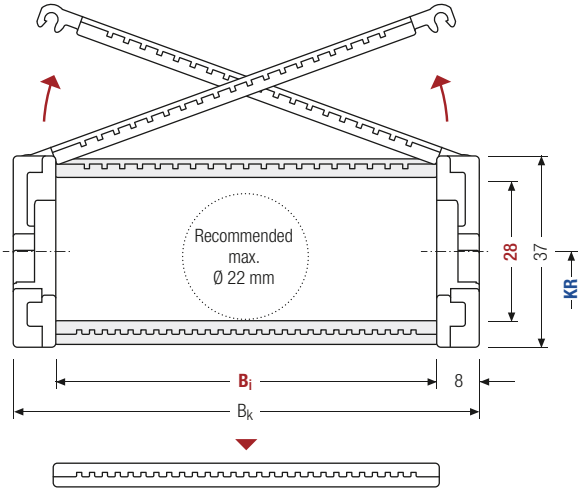
TKR0200.030 | Dimensions · Technical data

Stay variant 030 – with outside opening and detachable crossbars

- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- Swivable and detachable on one side in any position.
- **Outside:** Swivable and detachable
- **Inside:** detachable

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

B_i 40 – 120 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 for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]						B_k [mm]	KR [mm]				q_k [kg/m]
28	37	40	50	60	80	100	120	B_i + 16	55	75	95	150	0.6 – 1.0

Order example

TKR0200	80	030	95	800	VS
Type	B_i [mm]	Stay variant	KR [mm]	L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

TKR0200.030 | Inner distribution | TS0 · TS1

Divider systems

As standard, the divider system is mounted on every 2nd chain link.

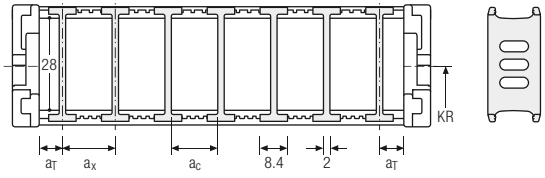
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

Fixable dividers are available for applications with lateral accelerations and for applications lying on the side. The arresting cams click into place in the locking grids in the crossbars **(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	4	8	6	–	–
B	•	8	6	4	–

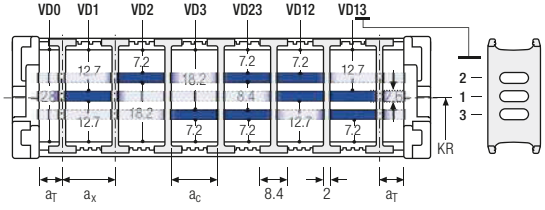
B_i [mm]	40	50	60	80	100	120
$a_{T\ min}$ [mm]	4	5	6	4	6	6



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	4	8	6	–	2
B	•	8	6	4	2

B_i [mm]	40	50	60	80	100	120
$a_{T\ min}$ [mm]	4	5	6	4	6	6



Order example

TS1 . A . 3 - VD0
⋮
- VD1

Divider system | Version | n_T | Height separation

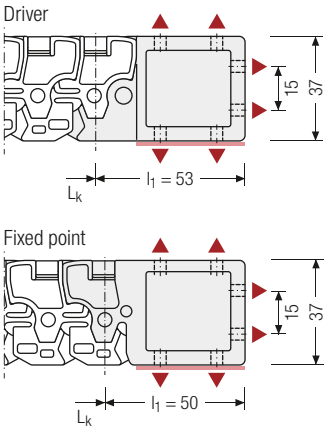
Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T].

If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

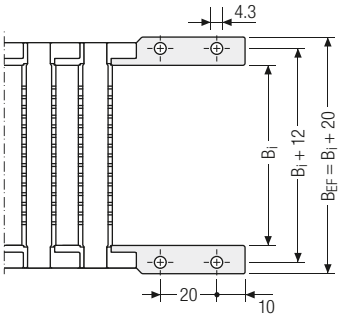
TKR0200 | End connectors | UMB

UMB end connectors UMB – plastic

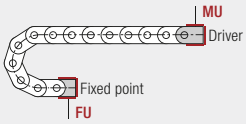
The universal mounting brackets (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.



▲ Assembly options



Recommended tightening torque: 0,6 Nm for screws M4



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

More product information online

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

Configure your custom cable carrier here: **onlineengineer.de**

Key for abbreviations on page 12
Design guidelines from page 38

Technical support: **technik@kabelschlepp.de**

Inner heights

28

Inner widths

40
120

TKR0260 | Stay variants | Overview

TKR0260

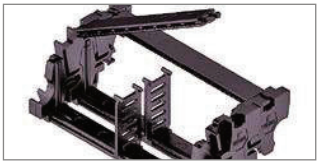
Pitch
26 mm

Inner height
40 mm

Inner widths
50 – 200 mm

Bend radii
75 – 150 mm

Stay variants



Design 030 ..... page **424**

Frame with externally detachable crossbars

- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- **Outside:** Swivable and detachable
- **Inside:** detachable

TOTALTRAX® complete systems

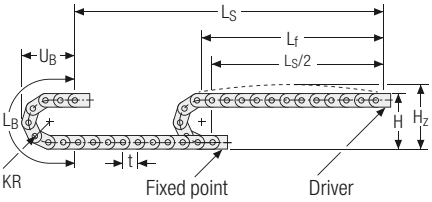
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source – with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax**

TRAXLINE® cables for cable carriers

Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **traxline.de**

TKR0260 | Installation dim | Unsupported

Unsupported arrangement



KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
75	248	308	288	130
100	298	358	366	155
125	348	408	445	180
150	398	458	523	205

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 = 1.5 kg/m at B_i 50 mm. For other inner widths, the maximum additional load changes.

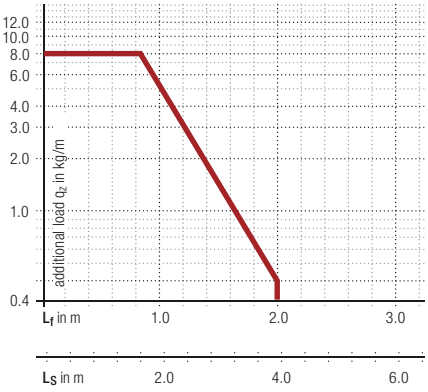
Velocity
up to 5 m/s

Acceleration
up to 200 m/s²*

Travel length
up to 3.9 m

Additional load
up to 8.0 kg/m

* For values > 20 m/s², please contact us, we are happy to advise you!



More product information online

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

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

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

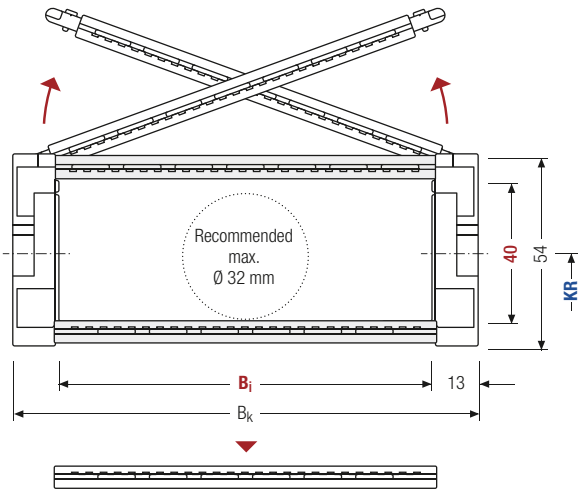
TKR0260.030 | Dimensions · Technical data

Stay variant 030 – with outside opening and detachable crossbars

- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- Swivable and detachable on one side in any position.
- **Outside:** Swivable and detachable
- **Inside:** detachable

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

B_i 50 – 200 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 for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]						B_k [mm]	KR [mm]				q_k [kg/m]
40	54	50	75	100	125	150	200	B_i + 26	75	100	125	150	1.5 – 2.7

Order example

TKR0260	100	030	125	800	VS
Type	B_i [mm]	Stay variant	KR [mm]	L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

TKR0260.030 | Inner distribution | TS0 · TS1 · TS3

Divider systems

As standard, the divider system is mounted on every 2nd chain link.

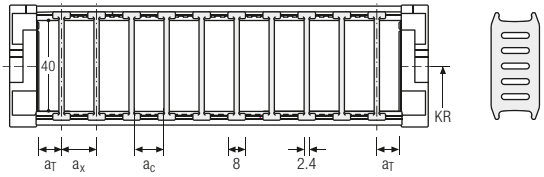
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(Version A).**

Fixable dividers are available for applications with lateral accelerations and for applications lying on the side. The arresting cams click into place in the locking grids in the crossbars **(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	8	5.6	–	–
B	•	8	5.6	4	–

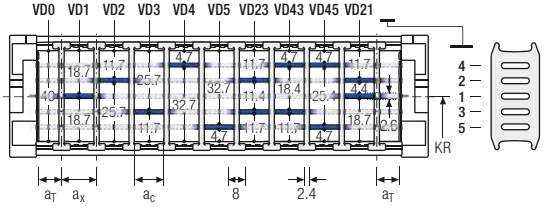
B_i [mm]	50	75	100	125	150	200
$a_{T\,min}$ [mm]	5	5.5	6	6.5	7	4



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	8	5.6	–	2
B	•	8	5.6	4	2

B_i [mm]	50	75	100	125	150	200
$a_{T\,min}$ [mm]	5	5.5	6	6.5	7	4

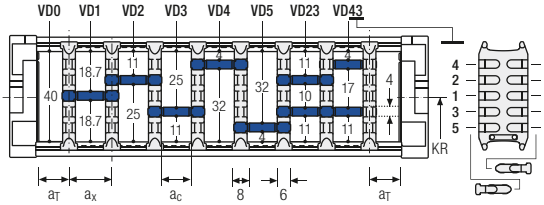


Divider system TS3 with height separation made of aluminum partitions

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	3	26	20	–	2
B	•	28	22	4	2

B_i [mm]	50	75	100	125	150	200
$a_{T\,min}$ [mm]	5	5.5	6	6.5	7	4

The dividers are fixed by the partitions, the complete divider system is movable in the cross section.

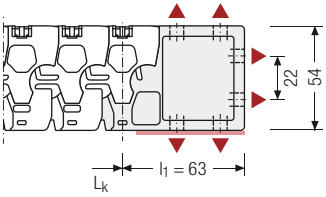


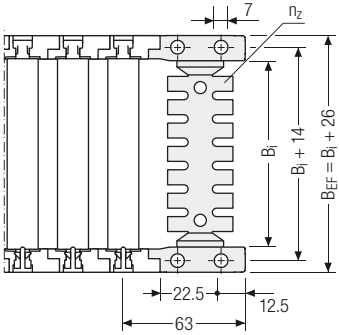
Aluminum section subdivisions are only available with $a_x > 26$ mm .

TKR0260 | End connectors | UMB

UMB end connectors UMB – plastic

The universal mounting brackets (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.

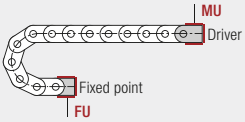




▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
50	76	2 x 3
75	101	2 x 5
100	126	2 x 7
125	151	2 x 9
150	176	2 x 11
200	226	–

Recommended tightening torque: 0,6 Nm for screws M4



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

Key for abbreviations on page 12
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

Complete range

Inner heights

40

Inner widths

50 - 200

TKR0280 | Stay variants | Overview

TKR0280

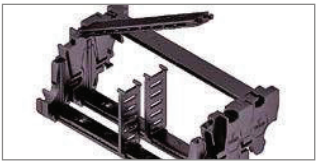
Pitch
28 mm

Inner height
52 mm

Inner widths
50 – 200 mm

Bending radii
75 – 200 mm

Stay variants



Design 030 ..... page **430**

Frame with externally detachable crossbars

- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- **Outside:** Swivable and detachable
- **Inside:** detachable

TOTALTRAX® complete systems

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TRAXLINE® cables for cable carriers

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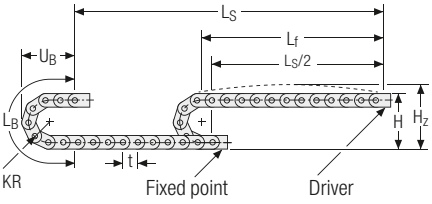
TKR0280 | Installation dim. | Unsupported

Unsupported arrangement



KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
75	262	322	292	139
100	312	372	370	164
150	412	472	527	214
200	512	572	684	264

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 = 2.0 kg/m at B_i 50 mm. For other inner widths, the maximum additional load changes.

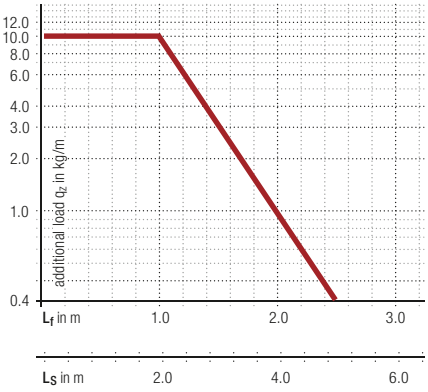
Velocity
up to 5 m/s

Acceleration
up to 200 m/s²*

Travel length
up to 4.9 m

Additional load
up to 10.0 kg/m

* For values > 20 m/s², please contact us, we are happy to advise you!



More product information online

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

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

Key for abbreviations on page 12

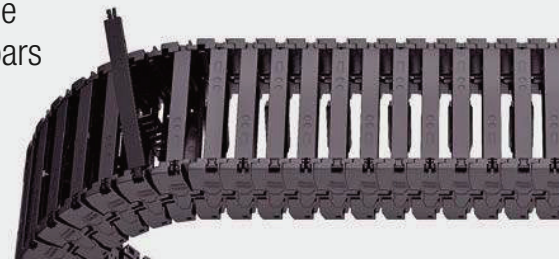
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

TKR0280.030 | Dimensions · Technical data

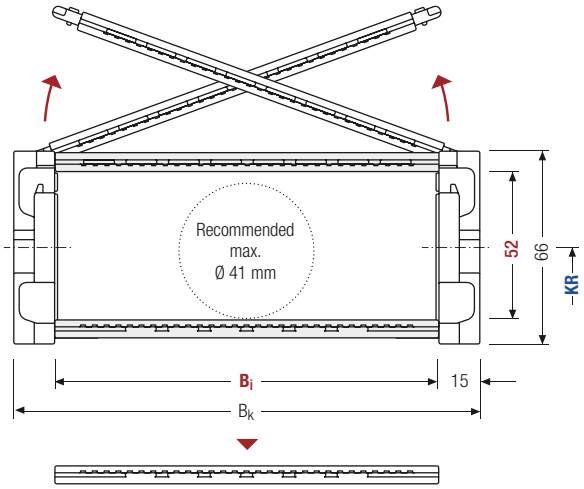
Stay variant 030 – with outside opening and detachable crossbars

- Low-vibration plastic frame with particularly long service life thanks to molded chain links.
- Swivable and detachable on one side in any position.
- **Outside:** Swivable and detachable
- **Inside:** detachable



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

B_i 50 – 200 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 for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]						B_k [mm]	KR [mm]				q_k [kg/m]
52	66	50	75	100	125	150	200	B_i + 30	75	100	150	200	2.0 – 3.2

Order example

TKR0280	100	030	150	840	VS
Type	B_i [mm]	Stay variant	KR [mm]	L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

TKR0280.030 | Inner distribution | TS0 · TS1 · TS3

Divider systems

As standard, the divider system is mounted on every 2nd chain link.

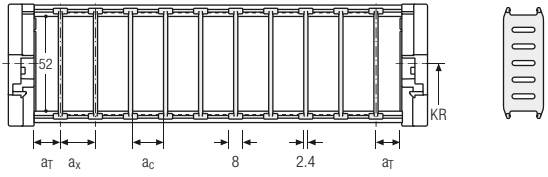
As a standard, dividers and the complete divider system (dividers with height separations) can be moved in the cross section **(version A).**

Fixable dividers are available for applications with lateral accelerations and for applications lying on the side. The arresting cams click into place in the locking grids in the crossbars **(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	8	5.6	–	–
B		8	5.6	4	–

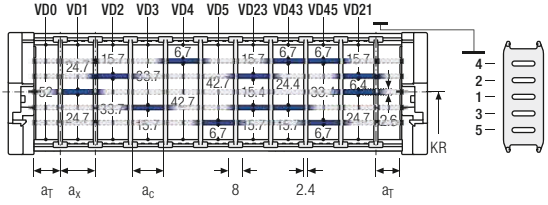
B_i [mm]	50	75	100	125	150	200
$a_{T\,min}$ [mm]	5	5.5	6	6.5	7	4



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	8	5.6	–	2
B		8	5.6	4	2

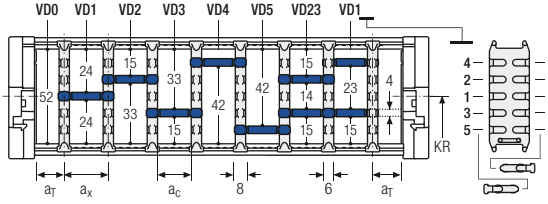
B_i [mm]	50	75	100	125	150	200
$a_{T\,min}$ [mm]	5	5.5	6	6.5	7	4



Divider system TS3 with height separation made of aluminum partitions

Vers.	$a_{T\,min}$ [mm]	$a_{x\,min}$ [mm]	$a_{c\,min}$ [mm]	$a_{x\,grid}$ [mm]	$n_{T\,min}$
A	3	26	20	–	2
B		28	22	4	2

B_i [mm]	50	75	100	125	150	200
$a_{T\,min}$ [mm]	5	5.5	6	6.5	7	4



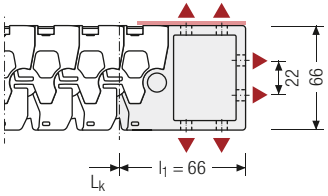
The dividers are fixed by the partitions, the complete divider system is movable in the cross section.

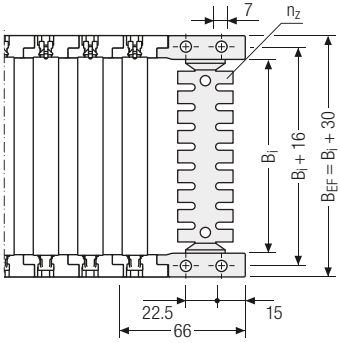
Aluminum section subdivisions are only available with $a_x > 26$ mm .

TKR0280 | End connectors | UMB

UMB end connectors UMB – plastic

The universal mounting brackets (UMB) are made from plastic and can **be mounted from the top, from the bottom or face on**.

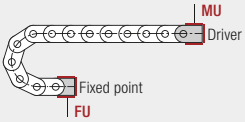




▲ Assembly options

B_i [mm]	B_{EF} [mm]	n_z
50	80	2 x 3
75	105	2 x 5
100	130	2 x 7
125	155	2 x 9
150	180	2 x 11
200	230	–

Recommended tightening torque: 0,6 Nm for screws M4



Connection point
F – fixed point
M – driver

Connection type
U – universal mounting bracket

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

Key for abbreviations on page 12
Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

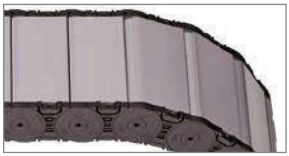
Subject to change.

TUBES-PLASTIC

Covered solid plastic and hybrid cable carriers

These covered product types ensure optimum protection of the cables and hoses against chips and other dirt. Variable separations within the cable carrier allow reliable and efficient partitioning. Hoses ans cables with larger diameters can also be accommodated and guided.

- Covered cable carriers with plastic or aluminum cover systems
- Aluminum cover systems in 1 mm width sections
- To protect cables and hoses against chips or dirt
- Easy and quick to open inside and outside



Subject to change.

TKA series

Chip-tight right to the end

TSUBAKI ECO LINK

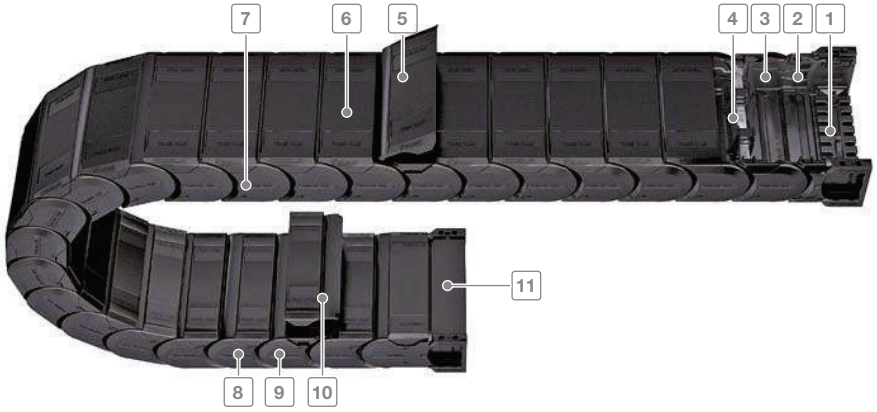
TKA55 if product design award 2013

TKA55* IP54 getestet & bescheinigt tested & attested TÜV NORD

TKA55 German Design Award NOMINEE 2014

* Refers to type TKA55 with B_i 50 – 175. More information on certification can be found at: tsubaki-kabelschlepp.com/tka-ip54

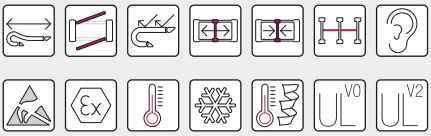
TKA series | Overview



1 End connectors with optional strain relief
2 Interior gentle on the cables without projecting edges
3 Integrated noise damping
4 Dividers and height separations for separating the cables
5 Quick and easy opening from any position
6 Secure cover attachment even under severe stresses (e.g. from hydraulic lines)
7 Chain links made of glass-fiber reinforced plastic
8 Bolt/hole connection and stroke system covered completely
9 Designs with inward or outward opening crossbars
10 Covers completely detachable on one side
11 Cover sheet for universal end connectors

Features

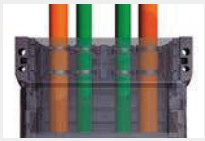
- Excellent cable protection in the connector area
- Chip and dirt resistant due to smooth surfaces
- Extensive unsupported length
- High torsional rigidity
- Low noise emission
- Optional: On request, special material with protection against hot chips up to 850 °C
- Numerous custom material types for custom applications available
- Easy-to-open cover with simultaneously high retention force on the chain link during operation
- Measurement scale for easy alignment of the dividers
- TKA55: IP54 tested and certified*



Optimized utilization of the interior space; vertical and horizontal inner distribution possible

Easy-open covers from any position offer secure fastening

Triple-stroke system for extensive unsupported length



Universal end connector with option for integrating strain relief elements

Subject to change.

TKA series | Overview

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]
TKA30											
		060	20.5	28,5	15 – 65	28 – 78	–	30.5	55 – 180	3	16
		080	20.5	28,5	15 – 65	28 – 78	–	30.5	55 – 180	3	16
TKA38											
		060	26	36	25 – 130	41 – 146	–	38.5	70 – 230	5	20
		080	26	36	25 – 130	41 – 146	–	38.5	70 – 230	5	20
TKA45											
		060	36	50	50 – 150	66 – 166	–	45.5	82 – 230	6	28,5
		080	36	50	50 – 150	66 – 166	–	45.5	82 – 230	6	28,5
TKA55											
		060	45	64	50 – 250	70 – 270	–	55.5	100 – 300	15	36
		080	45	64	50 – 250	70 – 270	–	55.5	100 – 300	15	36

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

Technical manual

Do you need additional information on the TKA series?
Our technical manual at **tsubaki-kabelschlepp.com/download** contains all information for selecting your cable carrier.

TKA series | Overview

Unsupported arrangement			Gliding arrangement			Inner distribution				Installation variants			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	
3.5	10	50	80	2.5	25	●	●	–	–	●	●	–	442
3.5	10	50	80	2.5	25	●	●	–	–	●	●	–	443
3.9	10	50	120	2.5	20	●	●	–	–	●	●	–	448
3.9	10	50	120	2.5	20	●	●	–	–	●	●	–	449
4.7	9	45	125	3	20	●	●	–	–	●	●	–	454
4.7	9	45	125	3	20	●	●	–	–	●	●	–	455
6.5	8	40	150	3	15	●	●	–	–	●	●	–	460
6.5	8	40	150	3	15	●	●	–	–	●	●	–	461

Inner heights 20.5 – 45

Inner widths 15 – 250

tsubaki-kabelschlepp.com/tka

TKA30 | Stay variants | Overview

TKA30

Pitch
30.5 mm

Inner height
20.5 mm

Inner widths
15 – 65 mm

Bending radii
55 – 180 mm

Stay variants

Design 060 ..... page **442**

Covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.

Design 080 ..... page **443**

Covered on both sides with outside detachable cover

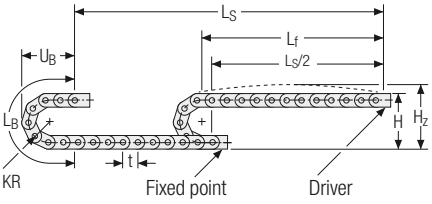
- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.

Optional: protection against chips up to 850 °C

On request, we also produce all TKA types in designs for protection against hot chips.
The special material used protects the cables from hot chips up to 850 °C.
This practically excludes downtimes due to hot chips that could destroy the cables.

TKA30 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

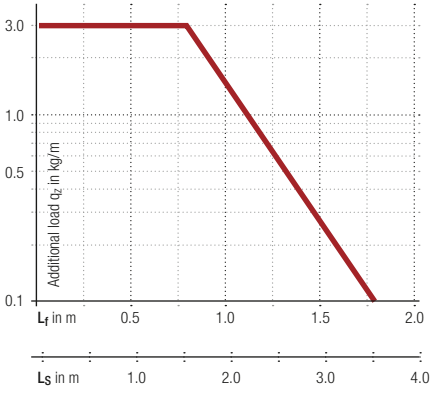


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
55	139	164	234	100
75	179	204	297	120
95	219	244	359	140
125	279	304	454	170
145	319	344	516	190
180	389	414	626	225

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 = 0.67 kg/m at B_i 50 mm. For other inner widths, the maximum additional load changes.



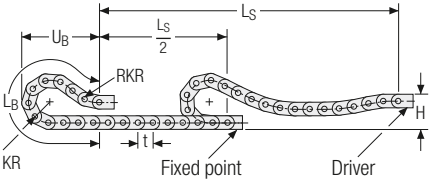
Velocity
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 3.5 m

Additional load
up to 3.0 kg/m

Gliding arrangement



The gliding cable carrier has to be routed in a channel.
See p. 654.

Velocity
up to 2.5 m/s

Acceleration
up to 25 m/s²

Travel length
up to 80 m

Additional load
up to 3.0 kg/m

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Inner heights
20.5

Inner widths
15 – 65

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

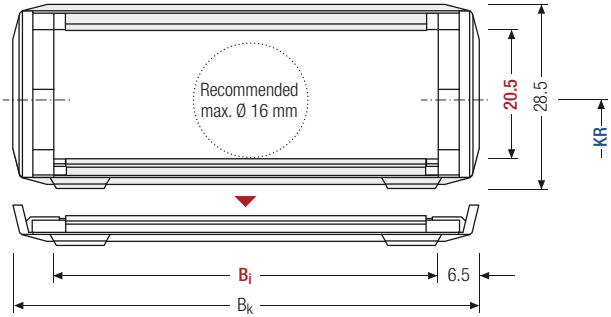
TKA30.060 | Dimensions · Technical data

Stay variant 060 – covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.

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 for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]						B_k [mm]	KR [mm]						q_k [kg/m]
20.5	28.5	15	20	25	38	50	65	$B_i + 13$	55	75	95	125	145	180	0.48 – 0.76

Order example

TKA30	.	060	.	50	.	125	-	915		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

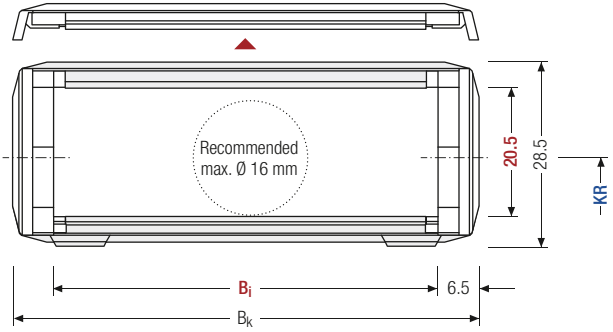
TKA30.080 | Dimensions · Technical data

Stay variant 080 – covered on both sides with outside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside: very quick release.**

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 for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]						B_k [mm]	KR [mm]						q_k [kg/m]
20.5	28.5	15	20	25	38	50	65	B_i + 13	55	75	95	125	145	180	0.48 – 0.76

Order example

TKA30	.	080	.	50	.	125	-	915		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

TKA30 | Inner distribution | TS0 · TS1

Divider systems

As a standard, the divider system is mounted on every 2nd chain link.

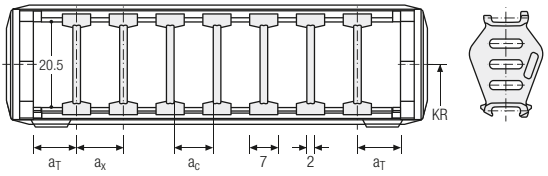
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.
The locking cams click into place in the locking grids 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	3.5	7	5	–	–
B		8	6	2	–

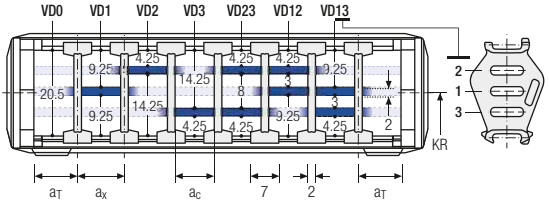
B_i [mm]	15	20	25	38	50	65
$a_{T\ min}$ [mm]	7.5	8	8.5	9	9	8.5



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	3.5	7	5	–	2
B		8	6	2	2

B_i [mm]	15	20	25	38	50	65
$a_{T\ min}$ [mm]	7.5	8	8.5	9	9	8.5



Order example

TS1 . A . 3 - VD0
⋮
- VD1

Divider system | Version | n_T | Height separation

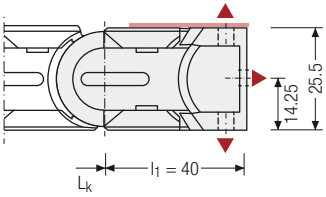
Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T].

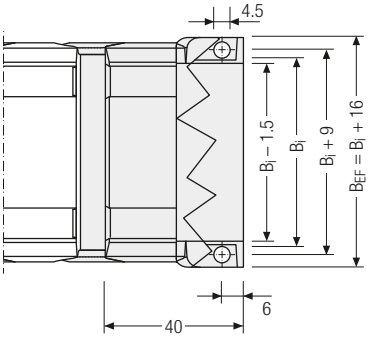
If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

TKA30 | End connectors | UMB

Universal end connectors UMB – plastic (standard)

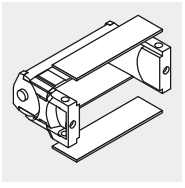
The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom, or face on**.



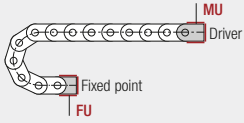


▲ Assembly options

Recommended tightening torque: 3 Nm for cheese-head screws ISO 4762 - M4 x 12



The end connectors are also available as an option **without** cover sheet. Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

We recommend the use of strain reliefs before driver and fixed point. See from p. 706.

TKA38 | Stay variants | Overview

TKA38

Pitch
38.5 mm

Inner height
26 mm

Inner widths
25 – 130 mm

Bending radii
70 – 230 mm

Stay variants

Design 060 ..... page **448**

Covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.

Design 080 ..... page **449**

Covered on both sides with outside detachable cover

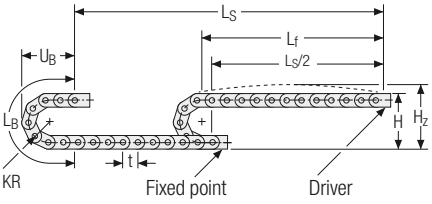
- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.

Optional: protection against chips up to 850 °C

On request, we also produce all TKA types in designs for protection against hot chips. The special material used protects the cables from hot chips up to 850 °C. This practically excludes downtimes due to hot chips that could destroy the cables.

TKA38 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

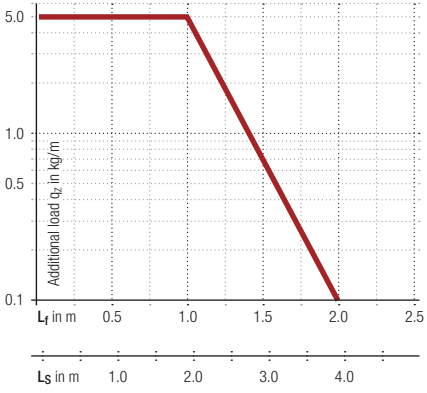


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
70	176	201	297	127
95	226	251	375	152
120	276	301	454	177
145	326	351	532	202
170	376	401	611	227
195	426	451	689	525
230	496	521	799	287

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 = 1.13 kg/m at B_i 78 mm. For other inner widths, the maximum additional load changes.



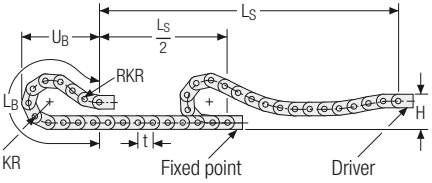
Velocity
up to 10 m/s

Acceleration
up to 50 m/s²

Travel length
up to 3.9 m

Additional load
up to 5.0 kg/m

Gliding arrangement



The gliding cable carrier has to be routed in a channel.
See p. 654.

Velocity
up to 2.5 m/s

Acceleration
up to 20 m/s²

Travel length
up to 120 m

Additional load
up to 5.0 kg/m

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

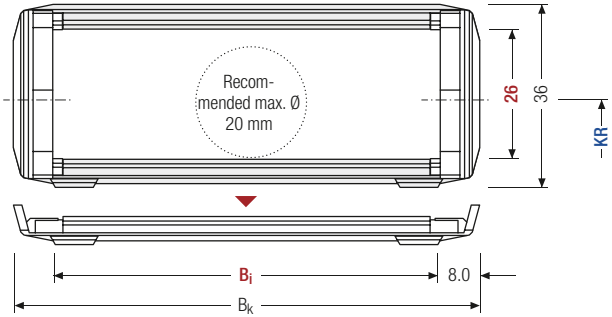
TKA38.060 | Dimensions · Technical data

Stay variant 060 – covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.

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

B_i 25 – 130 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 for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]						B_k [mm]	KR [mm]							q_k [kg/m]
26	36	25	38	58	78	103	130	B_i + 16	70	95	120	145	170	195	230	0.77 – 1.47

Order example

TKA38	.	060	.	78	.	145	-	1155		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

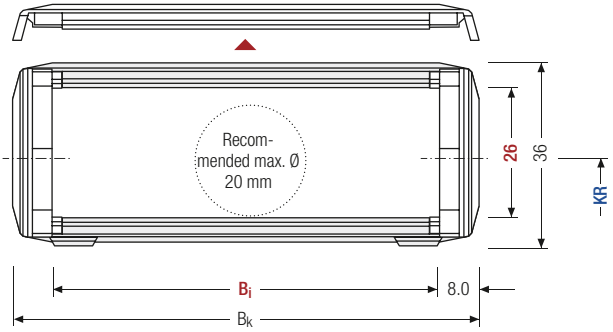
TKA38.080 | Dimensions · Technical data

Stay variant 080 – covered on both sides with outside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside: very quick release.**

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

B_i 25 – 130 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 for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]						B_k [mm]	KR [mm]						q_k [kg/m]
26	36	25	38	58	78	103	130	B_i + 16	70	95	120	145	170	195	230	0.77 – 1.47

Order example

TKA38	080	78	145	1155	VS
Type	Stay variant	B_i [mm]	KR [mm]	L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

TKA38 | Inner distribution | TS0 · TS1

Divider systems

As a standard, the divider system is mounted on every 2nd chain link.

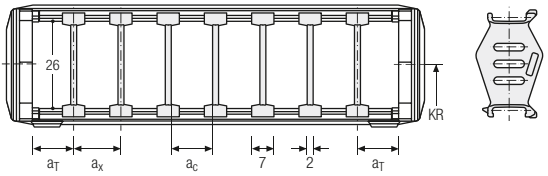
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.
The locking cams click into place in the locking grids 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	3.5	7	5	–	–
B		8	6	2	–

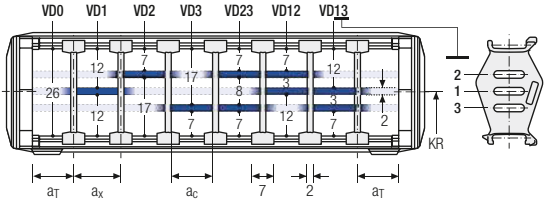
B_i [mm]	25	38	58	78	103	130
$a_{T\ min}$ [mm]	8.5	9	9	9	7.5	9



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	3.5	7	5	–	2
B		8	6	2	2

B_i [mm]	25	38	58	78	103	130
$a_{T\ min}$ [mm]	8.5	9	9	9	7.5	9



Order example

TS1 . A . 3 - VD0
⋮
- VD1

Divider system | Version | n_T | Height separation

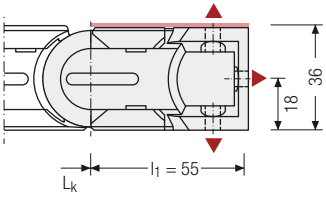
Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T].

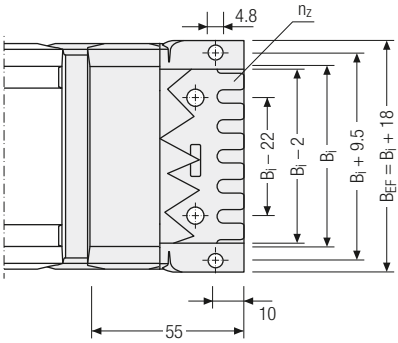
If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

TKA38 | End connectors | UMB

Universal end connectors UMB – plastic (standard)

The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom, or face on**.

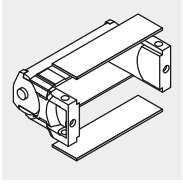




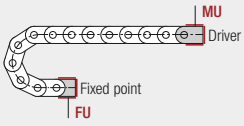
▲ Assembly options

Recommended tightening torque: 3 Nm for cheese-head screws ISO 4762 - M4 x 20

B_i [mm]	B_{EF} [mm]	n_z
25	43	2
38	56	3
58	76	5
78	96	7
103	121	9
130	148	13



The end connectors are also available as an option **without** cover sheet. Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

TKA45

Pitch
45.5 mm

Inner height
36 mm

Inner widths
50 – 150 mm

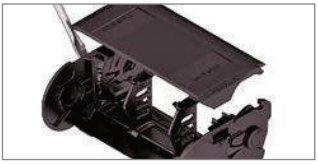
Bending radii
82 – 230 mm

Stay variants

Design 060 page 454

Covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.



Design 080 page 455

Covered on both sides with outside detachable cover

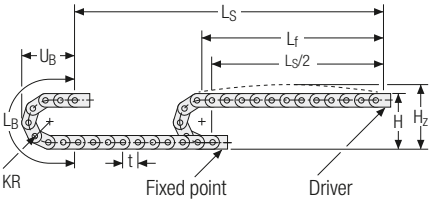
- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.

Optional: protection against chips up to 850 °C

On request, we also produce all TKA types in designs for protection against hot chips. The special material used protects the cables from hot chips up to 850 °C. This practically excludes downtimes due to hot chips that could destroy the cables.

TKA45 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

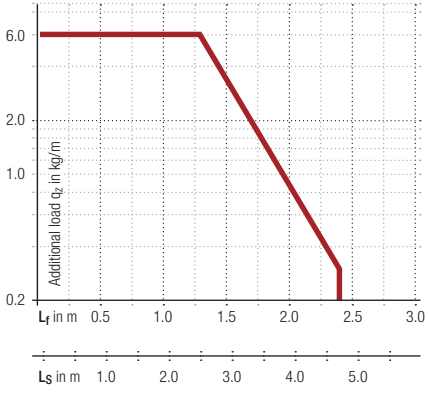


KR [mm]	H [mm]	H_z [mm]	L_B [mm]	U_B [mm]
82	214	249	348	153
95	240	275	389	166
125	300	335	483	196
145	340	375	546	216
170	390	425	625	241
200	450	485	719	271
230	520	555	814	301

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 = 2.29 kg/m at B_i 150 mm. For other inner widths, the maximum additional load changes.



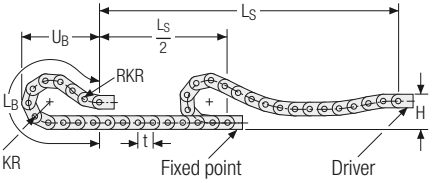
Velocity
up to 9 m/s

Acceleration
up to 45 m/s²

Travel length
up to 4.7 m

Additional load
up to 6.0 kg/m

Gliding arrangement



The gliding cable carrier has to be routed in a channel.
See p. 654.

Velocity
up to 3 m/s

Acceleration
up to 20 m/s²

Travel length
up to 125 m

Additional load
up to 6.0 kg/m

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Inner heights
36

Inner widths
50 – 150

tsubaki-kabelschlepp.com/tka

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

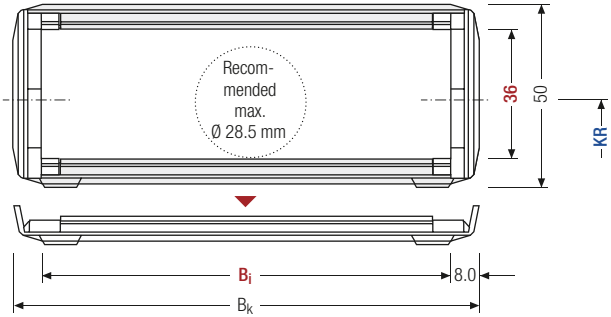
TKA45.060 | Dimensions · Technical data

Stay variant 060 – covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.

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

B_i 50 – 150 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 for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]							q_k [kg/m]
36	50	50	75	100	125	150	B_i + 16	82	95	125	145	170	200	230	1.34 – 2.29

Order example

TKA45	.	060	.	125	.	170	-	1456		VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]		Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

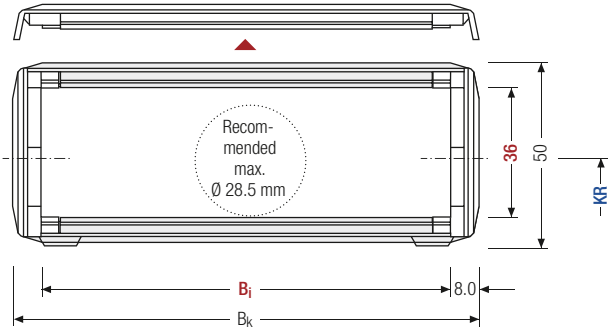
TKA45.080 | Dimensions · Technical data

Stay variant 080 – covered on both sides with outside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside: very quick release.**

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

B_i 50 – 150 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 for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]							q_k [kg/m]
36	50	50	75	100	125	150	B_i + 16	82	95	125	145	170	200	230	1.34 – 2.29

Order example

TKA45	.	080	.	125	.	170	-	1456	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

TKA45 | Inner distribution | TS0 · TS1

Divider systems

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

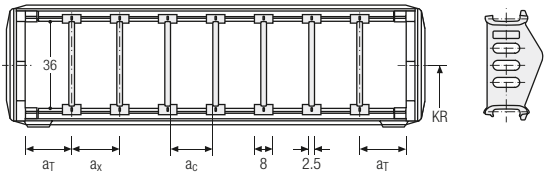
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.
The locking cams click into place in the locking grids 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	4	8	5.5	–	–
B	•	8	5.5	2	–

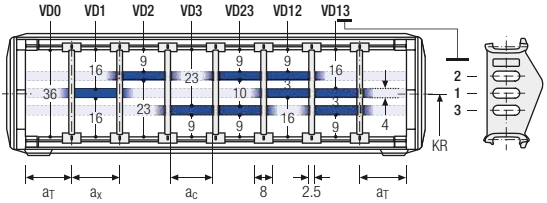
B_i [mm]	50	75	100	125	150
$a_{T\ min}$ [mm]	11	11.5	12	12.5	11



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	4	8	5.5	–	2
B	•	8	5.5	2	2

B_i [mm]	50	75	100	125	150
$a_{T\ min}$ [mm]	11	11.5	12	12.5	11



Order example

TS1 . A . 3 - VD0
⋮
- VD1

Divider system | Version | n_T | Height separation

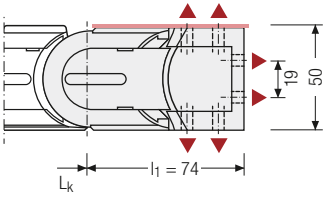
Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T].

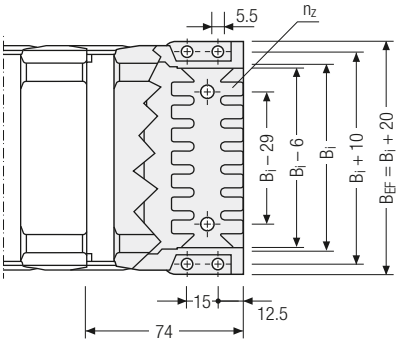
If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

TKA45 | End connectors | UMB

Universal end connectors UMB – plastic (standard)

The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom, or face on**.

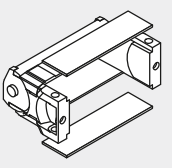




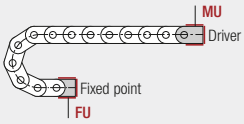
▲ Assembly options

Recommended tightening torque: 5 Nm for cheese-head screws ISO 4762 - M5 x 8.8

B_i [mm]	B_{EF} [mm]	n_Z
50	70	2 x 3
75	95	2 x 5
100	120	2 x 7
125	145	2 x 9
150	170	2 x 11



The end connectors are also available as an option **without** cover sheet. Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type

TKA55

Pitch
55.5 mm

Inner height
45 mm

Inner widths
50 – 250 mm

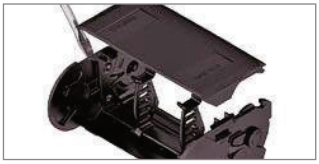
Bending radii
100 – 300 mm

Stay variants

Design 060 ..... page **460**

Covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.



Design 080 ..... page **461**

Covered on both sides with outside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside:** very quick release.

Optional: protection against chips up to 850 °C

On request, we also produce all TKA types in designs for protection against hot chips. The special material used protects the cables from hot chips up to 850 °C. This practically excludes downtimes due to hot chips that could destroy the cables.

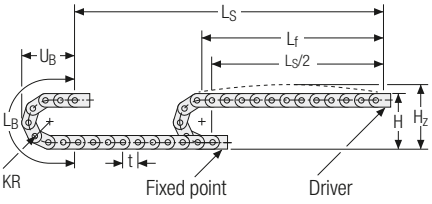
Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

TKA55 | Installation dim. | Unsupported · Gliding

Unsupported arrangement

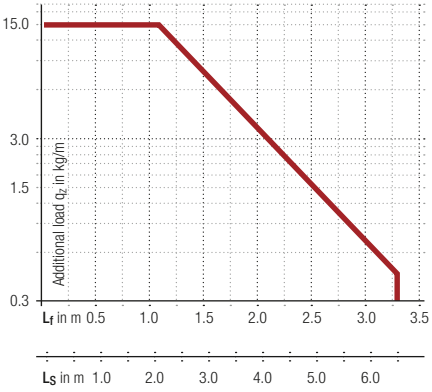


KR [mm]	H [mm]	H_Z [mm]	L_B [mm]	U_B [mm]
100	264	304	425	188
120	304	344	488	208
140	344	384	551	228
170	414	454	645	258
195	454	494	725	283
225	514	554	818	313
250	564	604	896	338
300	664	704	1211	388

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 = 1.95 kg/m at B_i 50 mm. For other inner widths, the maximum additional load changes.



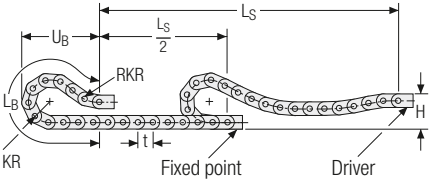
Velocity
up to 8 m/s

Acceleration
up to 40 m/s²

Travel length
up to 6.5 m

Additional load
up to 15.0 kg/m

Gliding arrangement



The gliding cable carrier has to be routed in a channel.
See p. 654.

Velocity
up to 3.0 m/s

Acceleration
up to 15 m/s²

Travel length
up to 150 m

Additional load
up to 15.0 kg/m

Our technical support can provide help for gliding arrangements:
technik@kabelschlepp.de

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

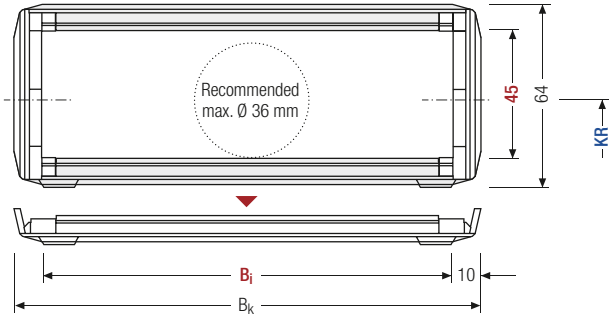
TKA55.060 | Dimensions · Technical data

Stay variant 060 – covered on both sides with inside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Inside:** very quick release.

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

B_i 50 – 250 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 for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]				q_k [kg/m]
45	64	50	75	100	125	150	B_i + 21	100	120	140	170	1.95
		175	200	225	250			195	225	250	300	4.28

Order example

TKA55	060	200	225	2553	VS
Type	Stay variant	B_i [mm]	KR [mm]	L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

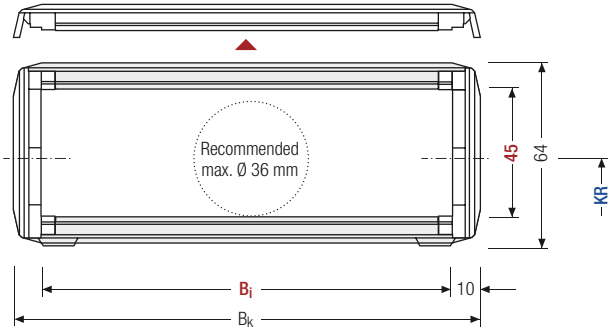
TKA55.080 | Dimensions · Technical data

Stay variant 080 – covered on both sides with outside detachable cover

- Plastic cover for rough environmental conditions with dirt, chips or spray water.
- Fully detachable on one side in any position.
- **Outside: very quick release.**

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

B_i 50 – 150 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 for odd number of chain links

h_i [mm]	h_G [mm]	B_i [mm]					B_k [mm]	KR [mm]				q_k [kg/m]
45	64	50	75	100	125	150	B_i + 21	100	120	140	170	1.95
		175	200	225	250			195	225	250	300	4.28

Order example

TKA55	.	080	.	200	.	225	-	2553	VS
Type		Stay variant		B_i [mm]		KR [mm]		L_k [mm]	Stay arrangement

Our technical support can provide help for gliding arrangements: **technik@kabelschlepp.de**

Key for abbreviations on page 12

Design guidelines from page 38

Technical support:
technik@kabelschlepp.de

TKA55 | Inner distribution | TS0 · TS1

Divider systems

As a standard, the divider system is mounted on every 2nd chain link.

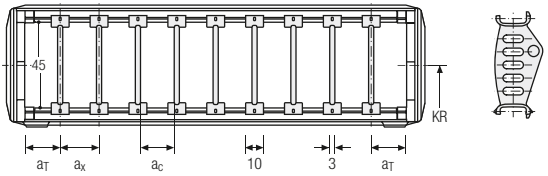
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(Version A)**.

The dividers are easily attached to the stay for applications with transverse accelerations and for applications laying on the side by simply turning them.
The locking cams click into place in the locking grids 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	5	10	7	–	–
B		10	7	2	–

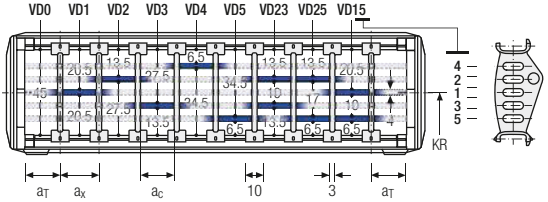
B_i [mm]	50	75	100	125	150
$a_{T\ min}$ [mm]	13	11.5	12	12.5	13
B_i [mm]	175	200	225	250	
$a_{T\ min}$ [mm]	11.5	12	12.5	13	



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	5	10	7	–	2
B		10	7	2	2

B_i [mm]	50	75	100	125	150
$a_{T\ min}$ [mm]	13	11.5	12	12.5	13
B_i [mm]	175	200	225	250	
$a_{T\ min}$ [mm]	11.5	12	12.5	13	



Order example

TS1 . A . 3 - VD0
⋮
- VD1

Divider system | Version | n_T | Height separation

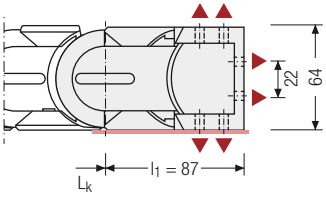
Please state the designation of the divider system **(TS0, TS1 …)**, version and number of dividers per cross section [n_T].

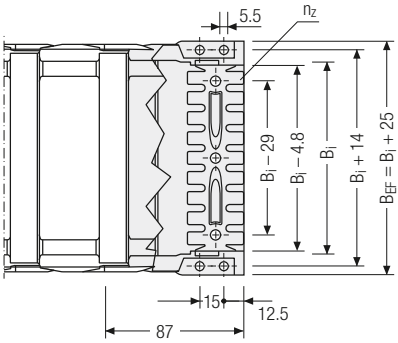
If using divider systems with height separation **(TS1)** please also state the positions [e.g. VD1] viewed from the left driver belt. You are welcome to add a sketch to your order.

TKA55 | End connectors | UMB

Universal end connectors UMB – plastic (standard)

The universal end connectors (UMB) are made from plastic and can **be mounted from the top, from the bottom, or face on**.

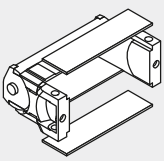




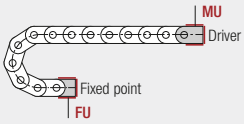
▲ Assembly options

Recommended tightening torque: 5 Nm for cheese-head screws ISO 4762 - M5 x 8.8

B_i [mm]	B_{EF} [mm]	n_z
50	74	2 x 3
75	99	2 x 5
100	124	2 x 7
125	149	2 x 9
150	174	2 x 11
175	199	2 x 13
200	224	–
225	249	–
250	274	–



The end connectors are also available as an option **without** cover sheet. Please state when ordering.



Connection point
F – fixed point
M – driver

Connection type
U – universal end connector

Order example

UMB	.	F	U
UMB	.	M	U
End connector		Connection point	Connection type