# **MASTER** series



# 5 10

9

1 Aluminum stays available in 1 mm width sections

6

- 2 Aluminum stays in 1 mm width **sections** with plastic adapter
- 3 Plastic stays with integrated divider fixing

8

7

MASTER series | Overview

- 4 Can be opened quickly on the inside and the outside for cable laying
- 5 | Fixable dividers
- 6 Many possibilities for internal subdivision
- 7 Replaceable glide shoes
- 8 Closed and open universal mounting brackets (UMBs)
- 9 C-rail for strain relief elements
- 10 Integratable strain relief comb

#### **Features**

- Low intrinsic weight
- Favorable ratio of inner to outer dimensions
- Versions with aluminum stays available in 1 mm width sections up to 800 mm inner width
- Long service life due to minimized hinge wear owing to the "life extending 2 disc principle"
- Extremely quiet through internal damping system

Variable pre-tensioning for the most varied applications is possible





















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



C-rail integrated in the connector



Fixable dividers for applications laying on the side and high lateral accelerations



Many separation options for the cables

# MASTER series | Overview

Key for abbreviations on page 16

Design guidelines from page 64

Technical support: technik@kabelschlepp.de

online-engineer.de

Туре	Opening variant	Stay variant	<b>h</b> i [mm]	h <sub>G</sub> [mm]	B <sub>i</sub> [mm]	B <sub>k</sub> [mm]	B <sub>i-</sub> grid [mm]	t [mm]	KR [mm]	Addi- tional load ≤ [kg/m]	Cable- d <sub>max</sub> [mm]	
	obe				$\overline{(\longleftrightarrow)}$		X mm	$\Leftrightarrow$		GA CA		
H33		RSH	33	51	50 – 400	B <sub>i</sub> + 22	1	56	60 – 300	11	26	
H46		RSH	46	64	50 – 400	B <sub>i</sub> + 26	1	67	75 – 350	20	36	
L60		RSH RE	60 60	88 88	75 – 600 85 – 250	B <sub>i</sub> + 28	1 –	<u></u>	135 – 500 135 – 500		48 48	
L80		RSH RE	80		100 – 800 85 – 250		1 -	<u>.</u>	150 – 500 150 – 500		64 64	

# MASTER series

#### Inner heights

1	33
<b>↓</b>	80

Inner widths

wiutiis	
50	
800	
<b>←</b>	

tsubaki-kabelschlepp.com/ master

<b>MASTER series</b>   Overv
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Unsuppo	rted arrar	ngement	Glidin	g arrange	ment		Inner dis	tribution			ation va		Page
Travel length ≤ [m]	v <sub>max</sub> ≤ [m/s]	<b>a</b> max ≤ [m/s²]	Travel length ≤ [m]	v <sub>max</sub> ≤ [m/s]	<b>a</b> max ≤ [m/s²]	TS0	TS1	TS2	TS3	vertical hanging or standing	lying on the side	rotating arrangement	Pa
										vertica 0	ΪΣ	arra	
3.5	10	50	60	2	2-3	•	•	-	•	•	•	_	310
6.4	8	40	80	2	2-3	•	•	-	•	•	•	_	316
													······································
7	6	30	-	-	-	•	•	-	•	•	•	-	322
7	6	30	-	-	-	•	•	-	•	•	•	_	326
7.9	5	25	_	-	_	•	•	-	•	•	•	_	332
7.9	5	25	-	-	-	•	•	-	•	•	•	_	336

# H33 | Stay variants | Overview

# **H33**



**Pitch** 56 mm



Inner height 33 mm



Inner widths 50 - 400 mm



Bending radii 60 – 300 mm

## **Stay variants**



#### Aluminum stay RSH ......page 310

#### Frame screw-in stay

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

# TOTALTRAX® complete systems



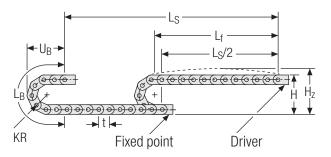
Benefit from the advantages of the TOTALTRAX® complete system. A complete delivery from one source — with a warranty certificate on request! Learn more at **tsubaki-kabelschlepp.com/totaltrax** 

#### 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**



H33 | Installation dim. | Unsupported

KR	Н	$H_z$	$L_B$	$U_B$
[mm]	[mm]	[mm]	[mm]	[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.



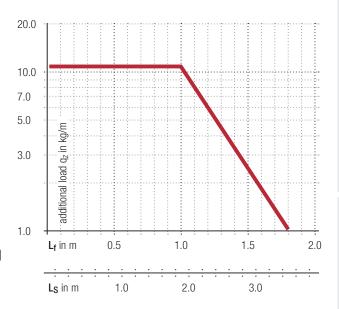




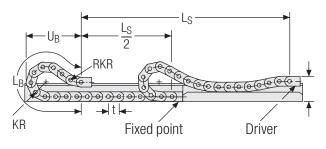
**Acceleration** up to 50 m/s<sup>2</sup>



Additional load up to 11 kg/m



#### Gliding arrangement



The gliding cable carrier must be guided in a channel. See p. 782.

We recommend the use of glide shoes for gliding applications.



Speed up to 2 m/s



Acceleration up to 2 - 3 m/s<sup>2</sup>



Travel length up to 60 m



Additional load up to 11 kg/m

## **HC33 RSH** | Dimensions · Technical data

## Aluminum 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.



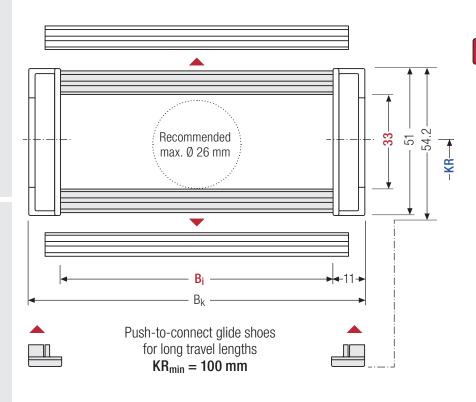


Stays mounted on each



 $B_i 50 - 400 \text{ mm}$ in 1 mm width sections

chain link (VS: fully-stayed)



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 Lk

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length L<sub>k</sub> rounded to pitch t

h <sub>i</sub>	h <sub>G</sub>	h <sub>Gʻ</sub>	B <sub>i</sub>	B <sub>k</sub>	KR	<b>q<sub>k</sub></b>
[mm]	[mm]	[mm]	[mm]*	[mm]	[mm]	[kg/m]
33	51	54,2	50 – 400	B <sub>i</sub> + 22	60         75         100         125         150         175         200         220         250         300	

<sup>\*</sup> in 1 mm width sections

#### Order example



#### **Divider systems**

The divider system is mounted on every 2<sup>nd</sup> chain link as a standard.

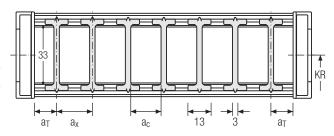
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

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 <sub>x grid</sub> [mm]	n <sub>T</sub>
Α	7	13	10	_	-
В	7	13	10	2	_

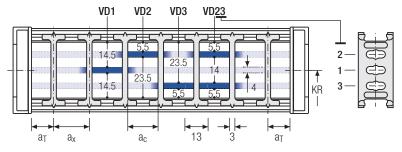
The dividers can be moved within the cross section (version A) or fixed (version B).



#### Divider system TS1 with continuous height separation

Vers.				a <sub>x grid</sub> [mm]	
Α	7	13	10	_	2
В	7	13	10	2	2

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

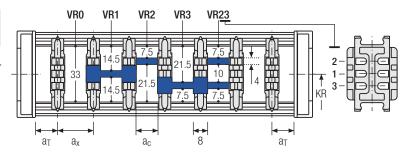


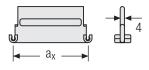
#### Divider system TS3 with height separation consisting of plastic partitions

**HC33 RSH** ∣ Inner distribution ∣ TS0 · TS1 · TS3

Vers.	a <sub>T min</sub> [mm]	a <sub>x min</sub> [mm]	a <sub>c min</sub> [mm]	n <sub>T min</sub>
Α	4	16	8	2

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





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

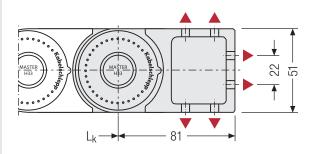
	a <sub>x</sub> (center distance of dividers) [mm]										
	a <sub>c</sub> (nominal width of inner chamber) [mm]										
16	18	23	28	32	33	38	43	48	58	64	68
8	10	15	20	24	25	30	35	40	50	56	60
78	80	88	96	112	128	144	160	176	192	208	
70	72	80	88	104	120	136	152	168	184	200	

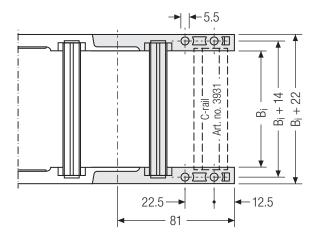
When using **plastic partitions with a\_x > 112 mm**, we recommend an additional center support with a **twin divider** ( $S_T = 3$  mm). Twin dividers are also suitable for retrofitting in the partition system.

## **H33** | End connectors

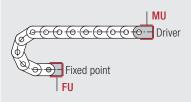
#### Universal end connectors UMB – plastic (standard)

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





▲ Assembly options



#### **Connection point**

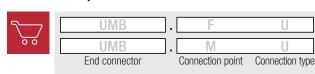
F - fixed point

M – driver

#### **Connection type**

U – universal mounting bracket

#### Order example



We recommend the use of strain reliefs before driver and fixed point. See from p. 834.

#### 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



Inner widths



Incre-ments



tsubaki-kabelschlepp.com/ master



# H46 | Stay variants | Overview

# **H46**



Pitch 67 mm



Inner height 46 mm



Inner widths 50 - 400 mm



Bending radii 75 – 350 mm

## **Stay variants**



#### Aluminum stay RSH page 316

#### Frame screw-in stay

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

# **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

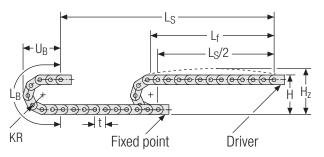
Inner heights

Inner

widths

# H46 | Installation dim. | Unsupported

#### **Unsupported arrangement**



KR	H	H <sub>Z</sub>	L <sub>B</sub>	U <sub>B</sub>
[mm]	[mm]	[mm]	[mm]	[mm]
<b>75</b>	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.



Speed up to 8 m/s

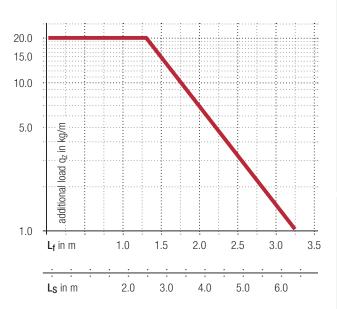


**Acceleration** up to 40 m/s<sup>2</sup>

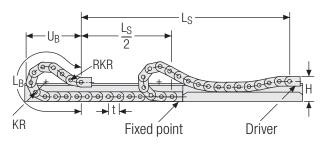




Additional load up to 20 kg/m



#### Gliding arrangement



The gliding cable carrier must be guided in a channel. See p. 782.

We recommend the use of glide shoes for gliding applications.



Speed up to 2 m/s



Acceleration up to  $2 - 3 \text{ m/s}^2$ 



Travel length up to 80 m

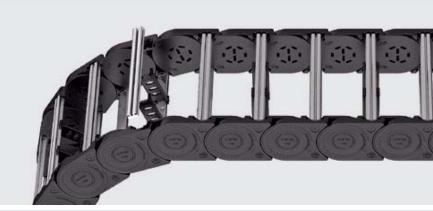


Additional load up to 20 kg/m

## **HC46 RSH** | Dimensions · Technical data

# **Aluminum 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.



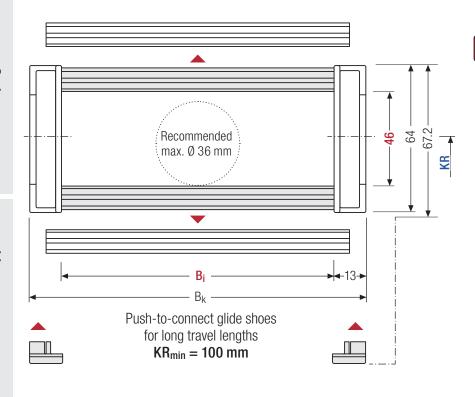


Stays mounted on each chain link (VS: fully-stayed)



 $B_i 50 - 400 \ mm$ 

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 Lk

$$L_{k} \approx \frac{L_{S}}{2} + L_{B}$$

Cable carrier length  $L_k$  rounded to pitch t

h <sub>i</sub>	h <sub>G</sub>	h <sub>Gʻ</sub>	B <sub>i</sub>	B <sub>k</sub>	KR	<b>q<sub>k</sub></b>
[mm]	[mm]	[mm]	[mm]*	[mm]	[mm]	[kg/m]
46	64	67,2	50 – 400	B <sub>i</sub> + 26	75         100         125         150         175         200         220         250         300         350	

<sup>\*</sup> in 1 mm width sections

#### Order example



#### **Divider systems**

The divider system is mounted on every 2<sup>nd</sup> chain link as a standard.

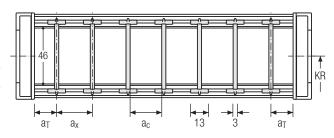
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section (version A).

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 <sub>x grid</sub> [mm]	n <sub>T</sub>
Α	7	13	10	_	_
В	7	13	10	2	<u> </u>

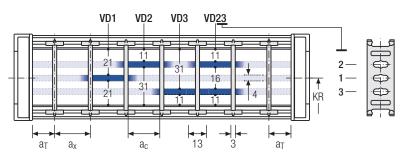
The dividers can be moved within the cross section (version A) or fixed (version B).



#### Divider system TS1 with continuous height separation

Vers.				a <sub>x grid</sub> [mm]	n <sub>T</sub>
Α	7	13	10	_	2
В	7	13	10	2	2

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

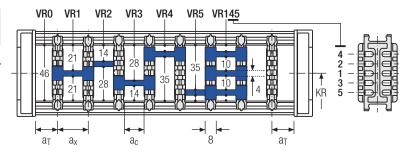


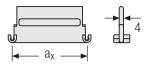
#### **Divider system TS3** with height separation consisting of plastic partitions

**HC46 RSH** ∣ Inner distribution ∣ TS0 · TS1 · TS3

Vers.	a <sub>T min</sub> [mm]	a <sub>x min</sub> [mm]	a <sub>c min</sub> [mm]	n <sub>T min</sub>
Α	4	16	8	2

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





Aluminum partitions in 1 mm increments with  $a_x > 42 \text{ mm}$  are also available.

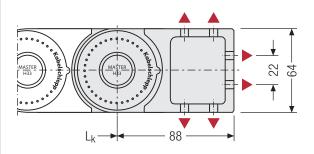
a <sub>x</sub> (center distance of dividers) [mm]												
$a_{\mathbb{C}}$ (nominal width of inner chamber) [mm]												
16	18	23	28	32	33	38	43	48	58	64	68	
8	10	15	20	24	25	30	35	40	50	56	60	
78	80	88	96	112	128	144	160	176	192	208		
70	72	80	88	104	120	136	152	168	184	200		

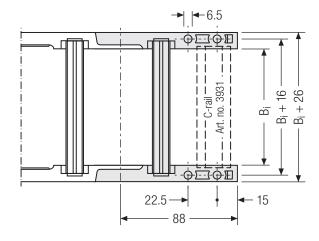
When using plastic partitions with  $a_x > 112 \text{ mm}$ , we recommend an additional center support with a **twin divider** ( $S_T = 3$  mm). Twin dividers are also suitable for retrofitting in the partition system.

## **H46** | End connectors

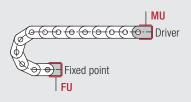
#### Universal end connectors UMB – plastic (standard)

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





▲ Assembly options



#### **Connection point**

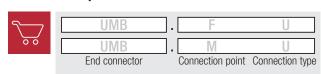
F - fixed point

M – driver

#### **Connection type**

U – universal mounting bracket

#### Order example



We recommend the use of strain reliefs before driver and fixed point. See from p. 834.

#### 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



Inner widths



Incre-ments



tsubaki-kabelschlepp.com/ master



# L60 | Stay variants | Overview



Pitch 91 mm



Inner height 60 mm

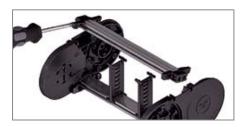


Inner widths 75 – 600 mm



Bending radii 135 – 500 mm

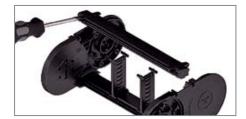
## Stay variants



#### Aluminum stay RSH page 322

#### 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 326

#### Frame screw-in stay

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

#### **TOTALTRAX®** complete systems

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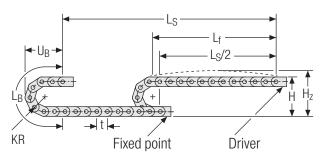


#### TRAXLINE® cables for cable carriers

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

# L60 | Installation dim. | Unsupported

#### **Unsupported arrangement**



KR [mm]	H [mm]	H <sub>z</sub> [mm]	L <sub>B</sub> [mm]	U <sub>B</sub> [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

Inner heights



Inner widths

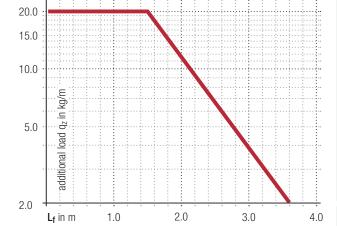


tsubaki-kabelschlepp.com/

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.



4.0

6.0

Speed up to 6 m/s



Acceleration up to 30 m/s<sup>2</sup>





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



Ls in m

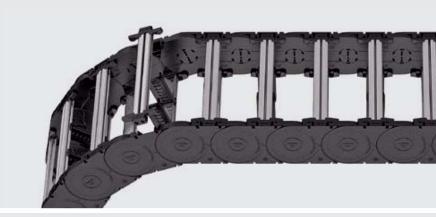
2.0

Configure your cable carrier here: online-engineer.de

## LC60 RSH | Dimensions · Technical data

# Plastic stay RSH – screw-in frame stay

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

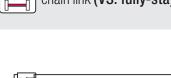


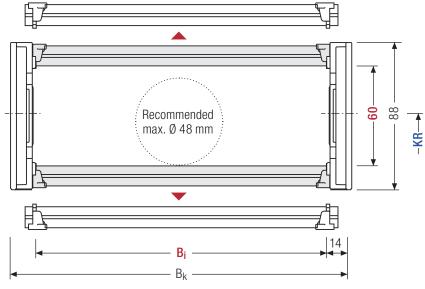


Stays mounted on each chain link (VS: fully-stayed)



 $B_i 75 - 600 \text{ mm}$  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<sub>k</sub>

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length  $L_k$  rounded to pitch t

<b>h</b> i [mm]	h <sub>G</sub> [mm]	B <sub>i</sub>	B <sub>k</sub>	KR [mm]	<b>9k</b> [kg/m]
		: [mm]	[111111]	[11111]	[rg/III]
60	88	75 – 600	B <sub>i</sub> + 28	135         150         175         200         250         300         350         400         500	2,78 – 7,10

<sup>\*</sup> in 1 mm width sections

#### Order example



# Inner



#### Inner widths







:subaki-kabelschlepp.com/

# heights

#### **Divider system TS0** without height separation

The divider system is mounted on every 2<sup>nd</sup> chain link

As a standard, dividers or the complete divider system

(dividers with height separations) are movable in the

LC60 RSH | Inner distribution | TS0 · TS1

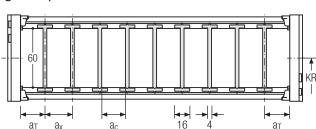
Vers.			a <sub>c min</sub> [mm]	Λ 9α	n <sub>T</sub>
Α	10	13	9	_	_
В	10	13	9	2	_

**Divider systems** 

cross section (version A).

as a standard.

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



must be installed at the factory.

For applications with lateral acceleration and lying on

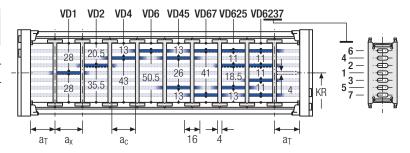
the side, the dividers can be attached by a fixing profile,

available as an accessory (version B). The fixing profile

#### **Divider system TS1** with continuous height separation

Vers.				a <sub>x grid</sub> [mm]	n <sub>T</sub> min
Α	10	13	9	_	2
В	10	13	9	2	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

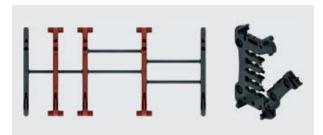
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at traxline.de

## LC60 RSH | Inner distribution | TS3

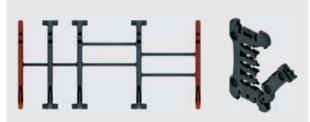
#### Divider system TS3 with height separation consisting of plastic partitions

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.

#### Divider version A



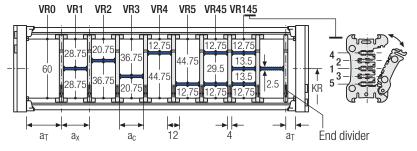
#### End divider

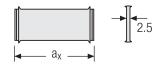


Vers.	a <sub>T min</sub>	a <sub>x min</sub>	a <sub>c min</sub>	n <sub>T</sub>
	[mm]	[mm]	[mm]	min
Α	8/4*	14	10	2

\* For End divider

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



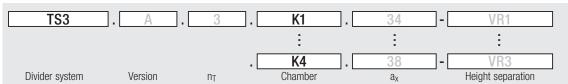


	<b>a</b> <sub>x</sub> (center distance of dividers) [mm]															
	$a_{c}$ (nominal width of inner chamber) [mm]															
14	16	19	23	24	28	29	32	33	34	38	39	43	44	48	49	54
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	59	64	68	69	74	78	79	80	84	88	89	94	96	99	112	
54	55	60	64	65	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] viewed from the left driver belt. You are welcome to add a sketch to your order.

#### Inner heights



#### Inner widths



Increments

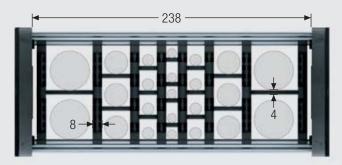


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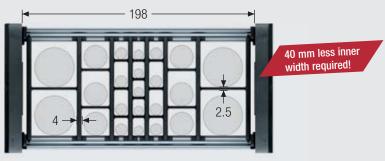
## The next generation of the TS3 divider system

Width optimized for more space in the same cable carrier

#### Width comparison

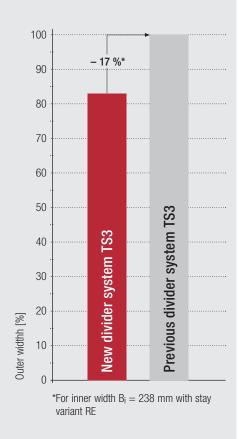


Previous divider system TS3 with stay variant RE



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

#### Width optimization through adapted dividers



# Easy-to-assemble cable separation on the smallest footprint



Insert cables, open dividers and insert first height separator



Insert additional cables, insert height separators



Insert cables, complete height separators

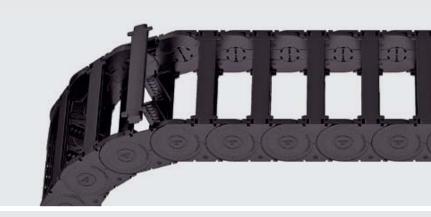


Close dividers

## LE60 RE | Dimensions · Technical data

# Plastic stay RE frame screw-in stay

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



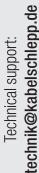


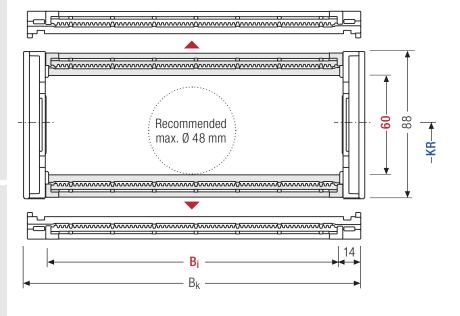
Stays mounted on each chain link (VS: fully-stayed)



 $B_i 85 - 250 \text{ mm}$ 

Design guidelines





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 Lk

$$L_{k} \approx \frac{L_{S}}{2} + L_{B}$$

Cable carrier length L<sub>k</sub> rounded to pitch t

h <sub>i</sub> [mm]	h <sub>G</sub> [mm]		<b>E</b> [m	B <sub>i</sub> m]		<b>B</b> <sub>k</sub> [mm]			KR [mm]			<b>q<sub>k</sub></b> [kg/m]
60	0.0	85 125		138	150	B <sub>i</sub> + 28	135	150	175	200	250	3.00 – 4.20
60	00	180	196	225	250	Dj + 20	300	350	400	500		3.00 – 4.20

#### Order example



#### **Divider systems**

The divider system is mounted on every 2<sup>nd</sup> chain link as a standard.

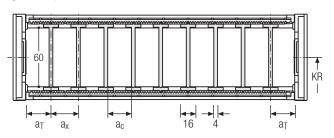
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section (version A).

#### **Divider system TS0** without height separation

**LE60 RE** | Inner distribution | TS0 · TS1

Vers.	a <sub>T min</sub> [mm]	a <sub>x min</sub> [mm]	a <sub>c min</sub> [mm]	n <sub>T min</sub>
Α	10	13	9	_

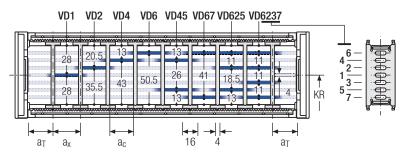
The dividers can be moved within the cross section.



#### **Divider system TS1** with continuous height separation

Vers.	a <sub>T min</sub> [mm]	a <sub>x min</sub> [mm]	a <sub>c min</sub> [mm]	n <sub>T min</sub>
Α	10	13	9	2

The dividers can be moved within the cross section.



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#### TRAXLINE® cables for cable carriers

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## LE60 RE | Inner distribution | TS3

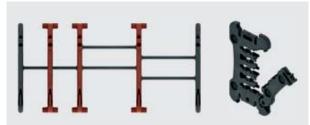
#### Divider system TS3 with height separation consisting of plastic partitions

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.

#### Divider version A



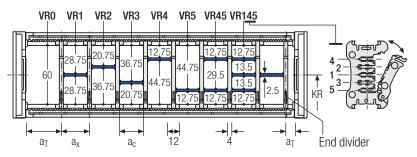
#### End divider

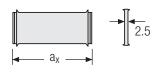


Vers.	a <sub>T min</sub>	a <sub>x min</sub>	a <sub>c min</sub>	n <sub>T</sub>
	[mm]	[mm]	[mm]	min
Α	8/4*	14	10	2

\* For End divider

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



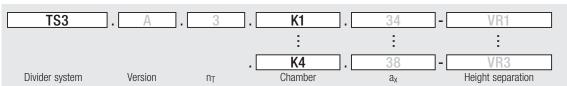


	a <sub>x</sub> (center distance of dividers) [mm]															
	a <sub>c</sub> (nominal width of inner chamber) [mm]															
14	14 16 19 23 24 28 29 32 33 34 38 39 43 44 48 49 54															
10	10 12 15 19 20 24 25 28 29 30 34 35 39 40 44 45 50															
58	59	64	68	69	74	78	79	80	84	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  $a_{\rm X} > 49\ mm.$ 

#### Order example





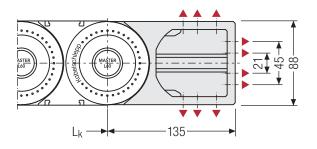
Please state the designation of the divider system **(TS0, TS1,...)**, version and number of dividers per cross section  $[n_T]$ . In addition, please also enter the chambers [K] from left to right, as well as the assembly distances  $[a_T/a_x]$  (as seen from the driver).

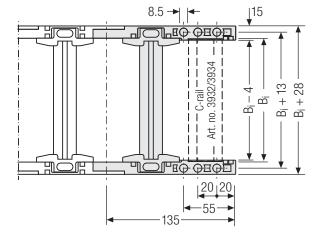
If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

#### **Universal end connectors UMB – plastic** (standard)

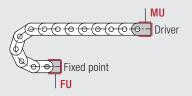
L60 | End connectors | Plastic

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





▲ Assembly options



#### **Connection point**

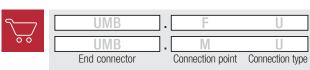
**F** – fixed point

M – driver

#### **Connection type**

U - universal mounting bracket

#### Order example



We recommend the use of strain reliefs before driver and fixed point. See from p. 834.

#### 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



Pitch 111 mm



Inner height 80 mm



Inner widths 85 – 800 mm



Bending radii 150 – 500 mm

## **Stay variants**



#### Aluminum stay RSH page 332

#### 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 336

#### Frame screw-in stay

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

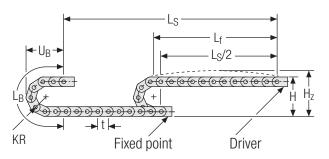
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#### TRAXLINE® cables for cable carriers

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L80 | Installation dim. | Unsupported

KR	Н	$H_{z}$	$L_B$	$U_B$
[mm]	[mm]	[mm]	[mm]	[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



Inner widths



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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.



Speed up to 5 m/s

Travel length

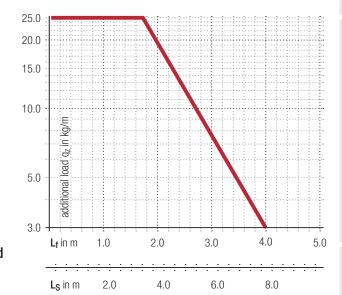
up to 7.9 m



Acceleration up to 25 m/s<sup>2</sup>



**Additional load** up to 25 kg/m



#### More product information online



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



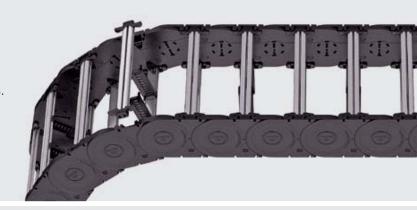
Configure your cable carrier here: online-engineer.de

## LC80 RSH | Dimensions · Technical data

# Plastic stay RSH –

screw-in frame stay

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



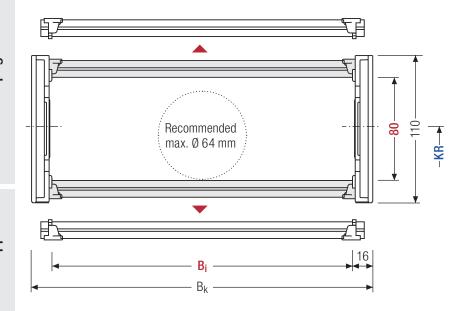


Stays mounted on each chain link (VS: fully-stayed)



B<sub>i</sub> 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 Lk

$$L_k \approx \frac{L_S}{2} + L_B$$

Cable carrier length  $L_k$  rounded to pitch t

h <sub>i</sub>	h <sub>G</sub>	B <sub>i</sub>	<b>B<sub>k</sub></b>	KR	<b>q<sub>k</sub></b>
[mm]	[mm]	[mm]*	[mm]	[mm]	[kg/m]
80	110	100 – 800	B <sub>i</sub> + 32	150         200         250         300         350         400         500	3.89 – 10.01

<sup>\*</sup> in 1 mm width sections

#### Order example



#### **Divider systems**

The divider system is mounted on every 2<sup>nd</sup> 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).

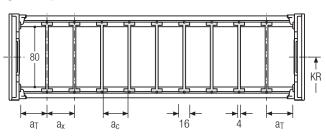
For applications with lateral acceleration and lying on the side, the dividers can be attached by a fixing profile, available as an accessory (version B). The fixing profile must be installed at the factory.

#### **Divider system TS0** without height separation

LC80 RSH | Inner distribution | TS0 · TS1

Vers.				a <sub>x grid</sub> [mm]	n <sub>T</sub>
Α	10	16	12	_	-
В	10	16	12	3	-

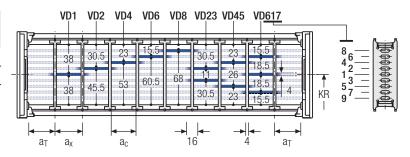
The dividers can be moved within the cross section (version A) or fixed (version B).



#### **Divider system TS1** with continuous height separation

Vers.				a <sub>x grid</sub> [mm]	n <sub>T</sub>
Α	10	16	12	_	2
В	10	16	12	3	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

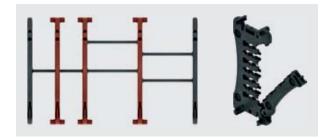
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at traxline.de

## LC80 RSH | Inner distribution | TS3

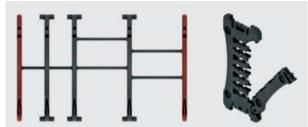
#### **Divider system TS3** with height separation consisting of plastic partitions

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



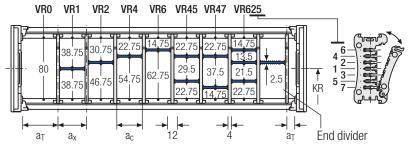
#### End divider

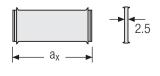


Vers.	a <sub>T min</sub>	a <sub>x min</sub>	a <sub>c min</sub>	n <sub>T</sub>
	[mm]	[mm]	[mm]	min
Α	8/4*	14	10	2

\* For End divider

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



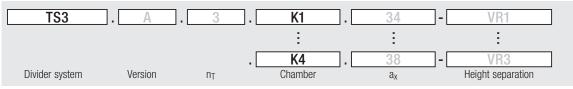


	<b>a</b> <sub>x</sub> (center distance of dividers) [mm]															
	a <sub>c</sub> (nominal width of inner chamber) [mm]															
14	14 16 19 23 24 28 29 32 33 34 38 39 43 44 48 49 54															
10	10 12 15 19 20 24 25 28 29 30 34 35 39 40 44 45 50															
58	59	64	68	69	74	78	79	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  $a_{\rm X} > 49\ mm.$ 

#### 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] viewed from the left driver belt. You are welcome to add a sketch to your order.

Inner heights

Inner widths
100
800

Increments

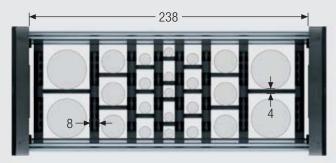
1 mm

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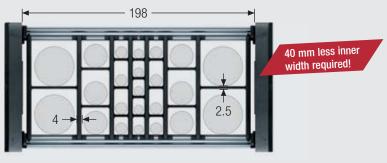
# The next generation of the TS3 divider system

Width optimized for more space in the same cable carrier

#### Width comparison

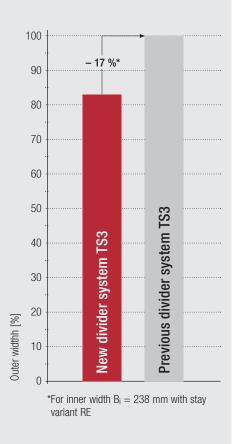


Previous divider system TS3 with stay variant RE



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

# Width optimization through adapted dividers



# Easy-to-assemble cable separation on the smallest footprint



Insert cables, open dividers and insert first height separator



Insert additional cables, insert height separators



Insert cables, complete height separators



Close dividers

## LE80 RE | Dimensions · Technical data

## Plastic stay RE frame screw-in stay

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





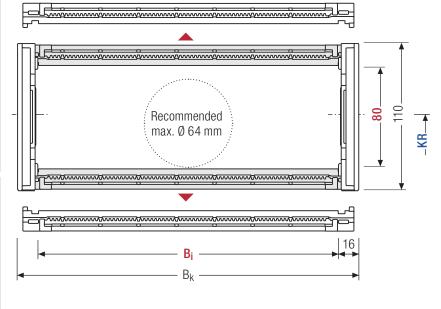
Stays mounted on each chain link (VS: fully-stayed)



 $B_i 85 - 250 \text{ mm}$ 

from page 64





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 Lk

$$L_{k} \approx \frac{L_{S}}{2} + L_{B}$$

Cable carrier length L<sub>k</sub> rounded to pitch t

h <sub>i</sub> [mm]	h <sub>G</sub> [mm]	<mark>B</mark> i [mm]				<b>B</b> <sub>k</sub> [mm]		KR [mm]		<b>q<sub>k</sub></b> [kg/m]
00	110	85	125	138	150	D 22	150	200	300	204 402
00	110	180	196	225	250	B <sub>i</sub> + 32	350	400	500	3.84 – 4.83

#### Order example



heights

# **LE80 RE** | Inner distribution | TS0 · TS1

#### **Divider systems**

The divider system is mounted on every 2<sup>nd</sup> chain link as a standard.

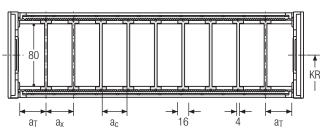
As a standard, dividers or the complete divider system (dividers with height separations) are movable in the cross section **(version A)**.

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 <sub>x grid</sub> [mm]	n <sub>T</sub>	
Α	10	16	12	_	_	
В	10	16	12	2.5	_	

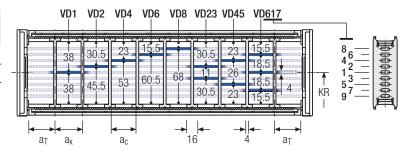
The dividers can be moved within the cross section (version A) or fixed (version B).



#### **Divider system TS1** with continuous height separation

Vers.				a <sub>x grid</sub> [mm]	
Α	10	16	12	_	2
В	10	16	12	2.5	2

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



#### TOTALTRAX® complete systems

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#### TRAXLINE® cables for cable carriers

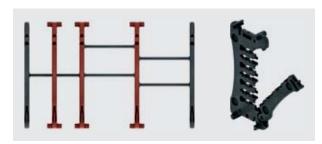
Hi-flex electric cables which were especially developed, optimized and tested for use in cable carriers can be found at **traxline.de** 

## LE80 RE | Inner distribution | TS3

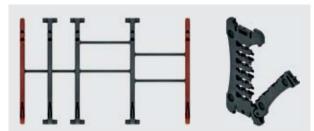
#### Divider system TS3 with height separation consisting of plastic partitions

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



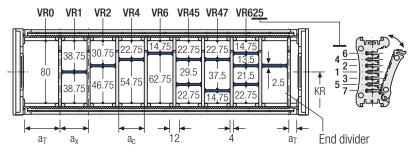
#### End divider

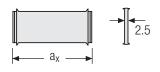


Vers.	a <sub>T min</sub>	a <sub>x min</sub>	<b>a<sub>c min</sub></b>	n <sub>T</sub>
	[mm]	[mm]	[mm]	min
Α	8/4*	14	10	2

\* For End divider

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



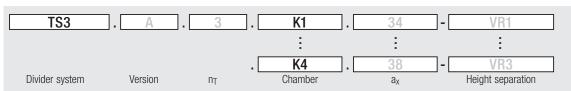


<b>a</b> <sub>X</sub> (center distance of dividers) [mm]																
a <sub>c</sub> (nominal width of inner chamber) [mm]																
14	16	19	23	24	28	29	32	33	34	38	39	43	44	48	49	54
10	12	15	19	20	24	25	28	29	30	34	35	39	40	44	45	50
58	59	64	68	69	74	78	79	80	84	88	89	94	96	99	112	
54	55	60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

An additional central support is required when using plastic partitions with  $a_{x} > 49 \text{ mm}$ .

#### 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).

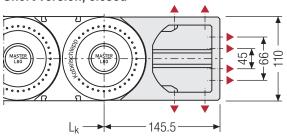
If using divider systems with height separation **(TS1, TS3)** please also state the positions [e.g. VD23] viewed from the left driver belt. You are welcome to add a sketch to your order.

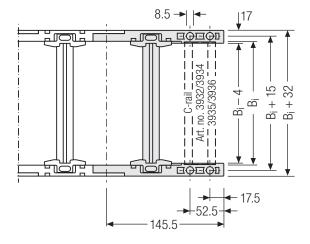
#### **Universal end connectors UMB – plastic** (standard)

L80 | End connectors | Plastic

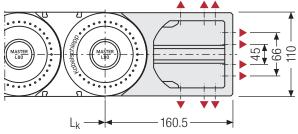
The universal mounting brackets (UMB) are made from plastic and can be mounted from the top, from the bottom or face on.

#### Short version, closed



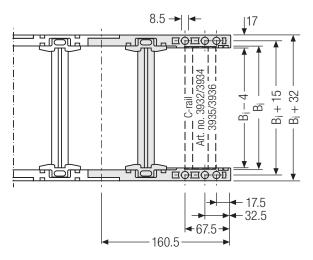


#### Long version, closed





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



Assembly options

# MU Fixed point FU

#### **Connection point**

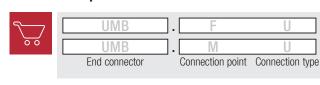
**F** – fixed point

M – driver

#### **Connection type**

U - universal mounting bracket

#### Order example



We recommend the use of strain reliefs before driver and fixed point. See from p. 834.