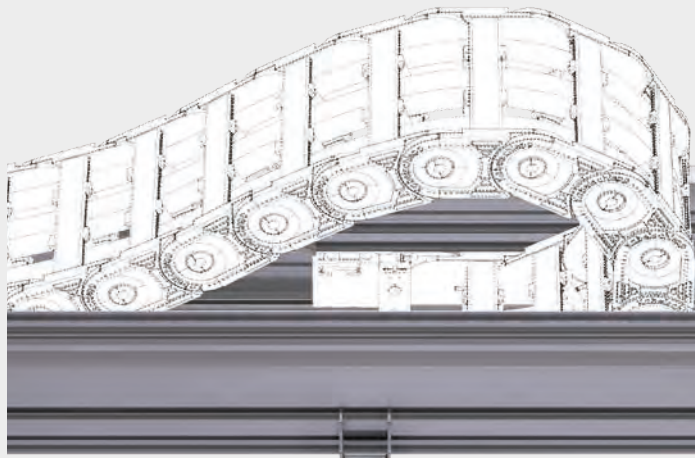


Aluminium guide channels in the modular system

- Modular system with many mounting options.
- Standard lengths and sets.
- Lightweight design for high speeds.
- Slide and roller support made of high-quality plastic.

Key for abbreviations
on page 16Design guidelines
from page 64Channel side wall
Al alloyStandard lengths 1000 / 2000 mm
Special lengths on requestTechnical support:
technik@kabelschlepp.de

Features

- Safe operation on long travel length
- Seawater resistant
- Twin channel connectors for parallel arrangement of several channels
- Standard- and Heavy-Duty-Version
- Variable fixation in standard stainless steel
- UMB mounting kit for assembly of the cable carrier

The Alu Guide System (TKAL) for long travel applications and high loads ensures secure guidance and smooth running of the energy chain in a gliding and rolling application.

The standardized channel profiles of 1000 / 2000 mm in length can be individually adjusted to the width of the chain. They can be quickly and easily be installed with the help of a mounting kit. Such UMB mounting kits are also available for attaching the fixed-point of the energy chain.

The optional damping band additionally reduces noise emission and guarantees an even quieter running of the chain.

TSUBAKI KABELSCHLEPP also offer the Alu Guide System (TKAL) together with the appropriate energy chain as well as with the ready-to-install TOTALTRAX® System including cables.

Alu Guide System (TKAL) | Versions

One-sided arrangement

For One-sided arrangement of the cable carrier, the cable carrier slides behind the fixed point on a slide support with run-on bevels.

Open design

Channel with and without supports incl. run-on bevels.

Dirt and water can drop through without restrictions.



Opposite arrangement

For opposite arrangement, a slide support with a minimum length of 500 mm is also attached for bridging between the fixed point connections.

Open design

Channel with and without supports incl. run-on bevels.

Dirt and water can drop through without restrictions.



Glide and roll support made of plastic

Glide support

- Simple and quick mounting by hooking in
- Slip-free hold in channel fastening groove
- 500 mm long, loadable up to 100 kg
- Compensation of linear expansion by tothing at the joints – continuous glide surface
- Optimized, rounded approach slope without bend



Roll support (TKAL 254/274)

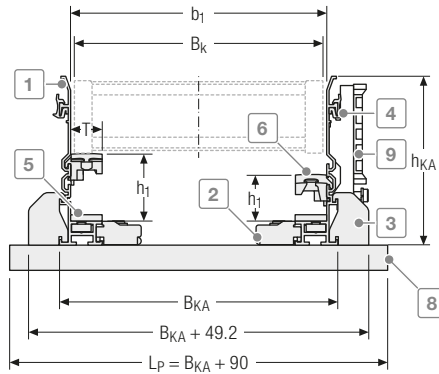
- Simple and quick mounting by hooking in
- Slip-free hold in channel fastening groove
- 500 mm long, loadable up to 100 kg
- Compensation of linear expansion by tothing at the joints – continuous roll surface
- Minimal noise emission



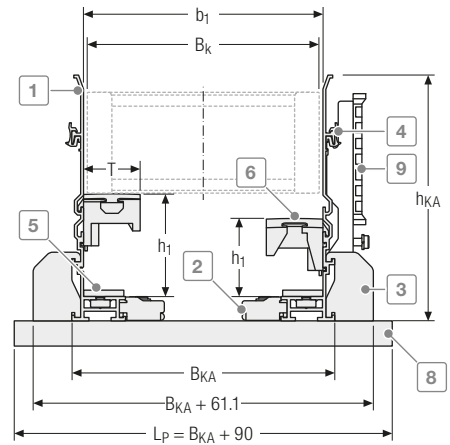
Alu Guide System (TKAL) | Dimensions

Dimensions

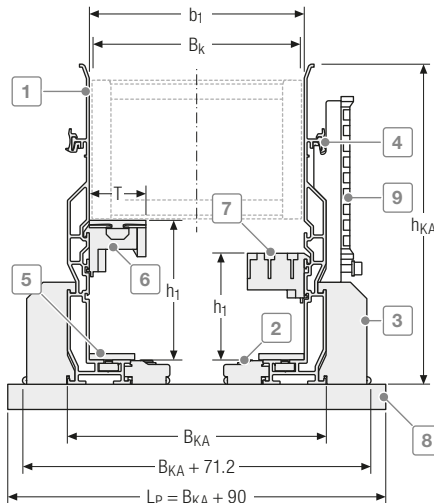
TKAL 134



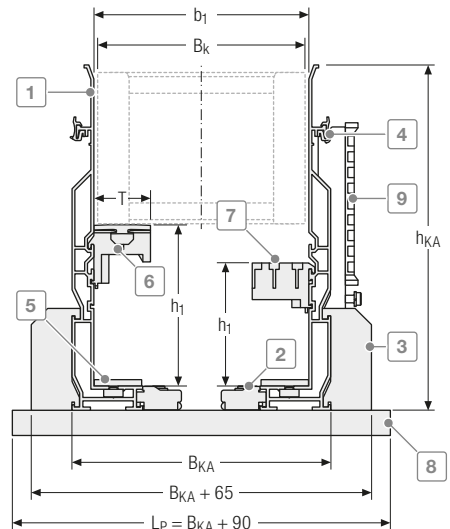
TKAL 195




TKAL 254



TKAL 274



 As a standard, the mounting kits included with the delivery are installed on all joins as well as at both ends of a channel. If you require more angle brackets beyond this, please state this when ordering.

- 1 Channel profile
- 2 Internal mounting kit
- 3 External mounting kit
- 4 Joint connectors
- 5 Damping band (optional)

- 6 Stable gliding support made of plastic
- 7 Stable roller support made of plastic
- 8 C-Rail
- 9 Strain relief holder kit

Key for abbreviations
on page 16

Design guidelines
from page 64

Technical support:
technik@kabelschlepp.de

online-engineer.de
Cable Carrier Configurator

Alu Guide System (TKAL) | Dimensions

UNIFLEX Advanced series

Type	Channel type	h ₁ [mm]	h _{KA} [mm]	b ₁ [mm]	b ₂ [mm]	b ₃ [mm]	B _{KA} [mm]	T [mm]
UA1455 page 164								
Glide shoes	134	40	134	B_k + 7	B _k + 50	B _k - 69	B _k + 25	25
UA1555 page 174								
Glide shoes	134	53	134	B_k + 9	B _k + 52	B _k - 67	B _k + 27	25
UA1665 page 184								
Glide shoes	195	61,5	195	B_k + 10	B _k + 60,15	B _k - 82,4	B _k + 28,6	45
UA1775 page 194								
Glide shoes	195	81	195	B_k + 9	B _k + 59,15	B _k - 83,4	B _k + 27,6	45
UA1995 page 202								
Glide shoes	254	116	254	B_k + 10,4	B _k + 71,9	B _k - 81	B _k + 45	45

K series

Type	Channel type	h ₁ [mm]	h _{KA} [mm]	b ₁ [mm]	b ₂ [mm]	b ₃ [mm]	B _{KA} [mm]	T [mm]
K0650 page 312								
Slide discs	134	56,5	134	B_k + 13	B _k + 56	B _k - 63	B _k + 31	25
K0900 page 326								
Slide discs	195	81	195	B_k + 19	B _k + 69,15	B _k - 73,4	B _k + 23,6	45

M series

Type	Channel type	h ₁ [mm]	h _{KA} [mm]	b ₁ [mm]	b ₂ [mm]	b ₃ [mm]	B _{KA} [mm]	T [mm]
M0650 page 402								
Glide shoes	195	61,5	195	B_k + 5	B _k + 55,15	B _k - 87,4	B _k + 23,6	45
Offroad glide shoes	195	61,5	195	B_k + 5	B _k + 55,15	B _k - 87,4	B _k + 23,6	45
M0950 page 418								
Glide shoes	195	81	195	B_k + 5	B _k + 55,15	B _k - 87,4	B _k + 23,6	45
Offroad glide shoes	195	86	195	B_k + 5	B _k + 55,15	B _k - 87,4	B _k + 23,6	45
M1250 page 444								
Offroad glide shoes	274	103	274	B_k + 6	B _k + 67,5	B _k - 97,4	B _k + 40,6	45
M1300 page 418								
Glide shoes	274	127,5	274	B_k + 6	B _k + 67,5	B _k - 97,4	B _k + 40,6	45



The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b₁ and the overall width B_{KA}.



Our engineers will be happy to help with your project planning – please contact us.

QUANTUM® series

Type	Channel type	h ₁ [mm]	h _{KA} [mm]	b ₁ [mm]	b ₂ [mm]	b ₃ [mm]	B _{KA} [mm]	T [mm]
Q040 page 520								
–	134	40	134	B _k + 4	B _k + 47	B _k – 72	B _k + 22	25
Q060 page 526								
Glide shoes	195	66.5	195	B _k + 9	B _k + 59.2	B _k – 83.4	B _k + 27.6	45
Q080 page 536								
Glide shoes	195	86	195	B _k + 13	B _k + 63.2	B _k – 79.4	B _k + 31.6	45
Q100 page 550								
Glide shoes	274	108	274	B _k + 13	B _k + 74.5	B _k – 90.4	B _k + 47.6	45

TKA series

Type	Channel type	h ₁ [mm]	h _{KA} [mm]	b ₁ [mm]	b ₂ [mm]	b ₃ [mm]	B _{KA} [mm]	T [mm]
TKA38 page 610								
–	134	36.5	134	B _k + 4	B _k + 47	B _k – 72	B _k + 22	25
TKA45 page 616								
–	134	53	134	B _k + 5	B _k + 48	B _k – 71	B _k + 23	25
TKA55 page 624								
–	195	66.5	195	B _k + 5	B _k + 55.2	B _k – 87.4	B _k + 23.6	45

UAT series

Type	Channel type	h ₁ [mm]	h _{KA} [mm]	b ₁ [mm]	b ₂ [mm]	b ₃ [mm]	B _{KA} [mm]	T [mm]
UAT1555 page 636								
–	195	66.5	195	B _k + 5	B _k + 55.2	B _k – 87.4	B _k + 23.6	45

TKHD series

Type	Channel type	h ₁ [mm]	h _{KA} [mm]	b ₁ [mm]	b ₂ [mm]	b ₃ [mm]	B _{KA} [mm]	T [mm]
TKHD85 page 482								
Glide shoes	254	90	254	B _k + 6	B _k + 67.5	B _k – 85.4	B _k + 40.6	45
TKHD90 page 488								
Glide shoes	274	127.5	274	B _k + 6	B _k + 67.5	B _k – 97.4	B _k + 40.6	45
TKHD85-R page 494								
–	254	84.5	254	B _k + 6	B _k + 67.5	B _k – 85.4	B _k + 40.6	45
TKHD90-R page 500								
–	274	117	274	B _k + 6	B _k + 67.5	B _k – 97.4	B _k + 40.6	45



The cable carrier outer width without attachments B_k is taken into account for calculating the inner width of guide channel b₁ and the overall width B_{KA}.

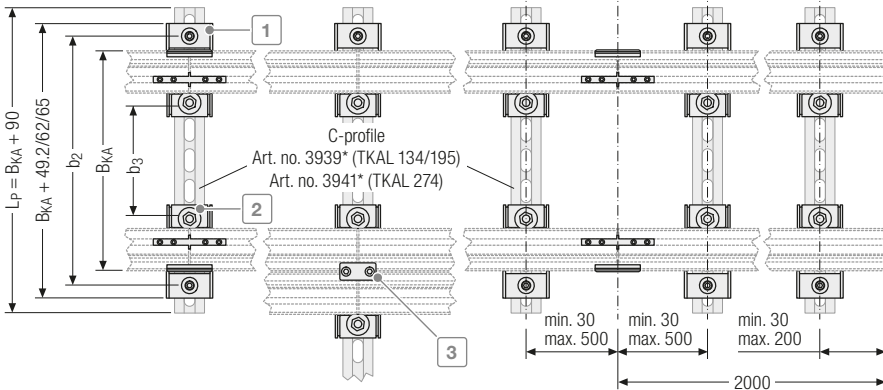


Our engineers will be happy to help with your project planning – please contact us.

Alu Guide System (TKAL) | Fixing Elements

Standard and heavy duty

The internal or external mounting kits made of stainless steel are mounted at the joints, ensuring precise connection of the joints in addition to fastening the channel to the substructure.

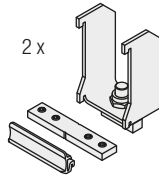


Flying joint

The internal and external mounting kits made of stainless steel are mounted with a spacing of 30-500 mm from the joints, ensuring fastening of the channel to the substructure. The mounting kit does not necessarily have to be mounted at the joints.

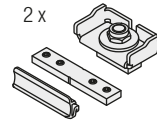
External mounting kit 1

The mounting brackets are mounted at the outside of the channel. The additional joint connectors ensure precise connection of the joints.



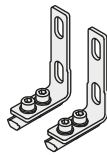
Internal mounting kit 2

The mounting brackets are mounted at the inside of the channel. The additional joint connectors ensure precise connection of the joints.



UMB mounting kit

The UMB mounting kit for fixed point ensures optimum fastening of the cable carrier in the channel and depends on the cable carrier type.



Holder set strain relief (optional)


The holders are mounted on the outside of the channel for fixed installation of cables.



Twin channel connector 3 (optional)

The twin channel connectors enable the parallel arrangement of several channels.



 All pictures of the mounting kit are exemplary.

Order example

To order the Alu Guide System, please provide the following information or the used cable carrier:

- Number of guide channels
- Total length of channel
- Support length L_{KA}'
- Type of fastening (internal/external)
- Delivery (unmounted/mounted)
- Support height h_1
- Fixing with C-profile
- Inner width of guide channel b_1

* More information can be found on page 895