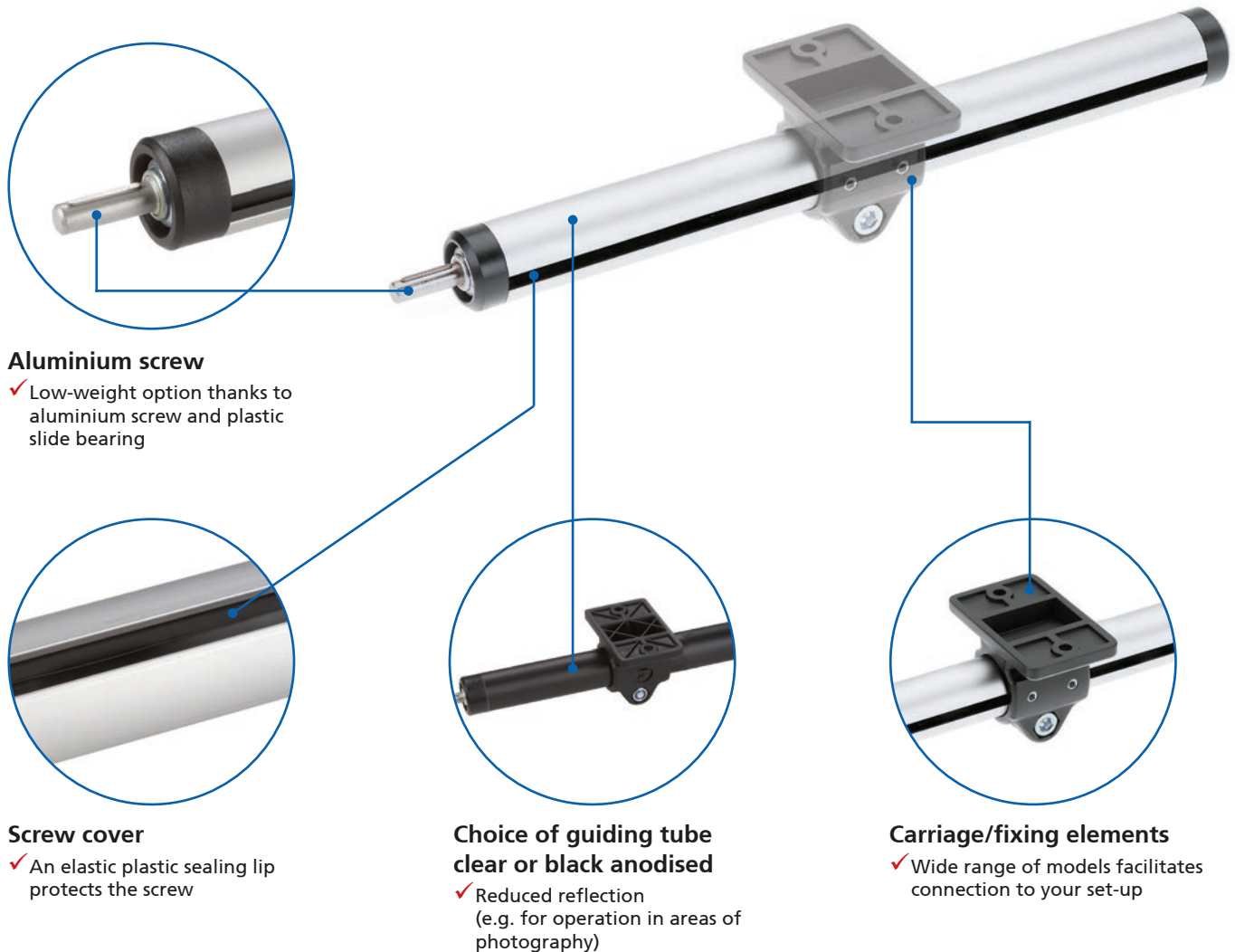


Single tube actuator – *RK LightUnit*

The “light option” for simple manual adjustments



Standard lengths

48 h
ready for delivery

Features:

- Unit for “light” moving applications
- Low-cost manual adjustment
- For applications where the focus is on “weight reduction”
- Suitable for use in areas susceptible to corrosion

Options:

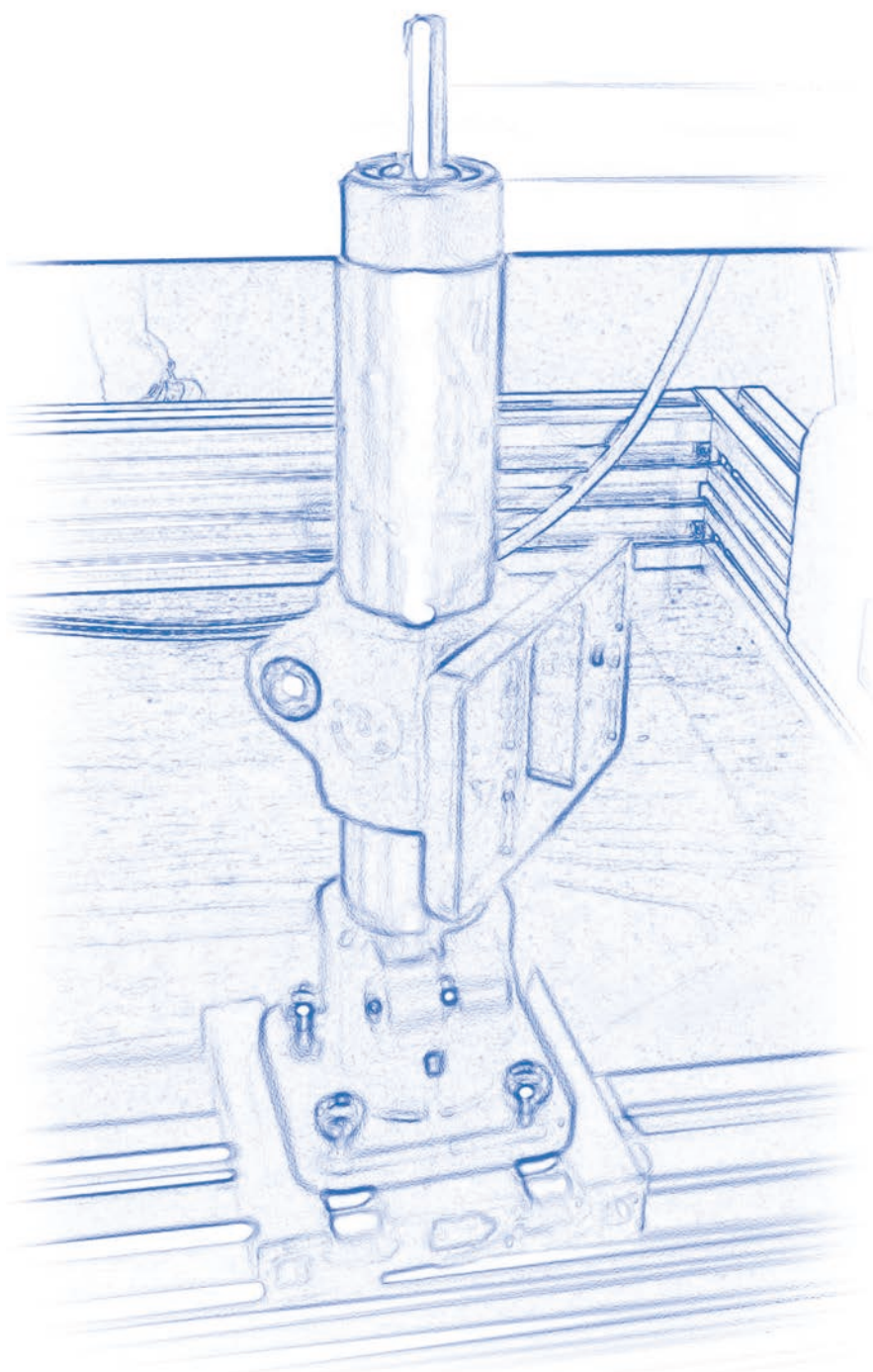
- Additional non driven carriage as torque support

RK LightUnit – Table of contents

Properties/Technical data		<ul style="list-style-type: none">■ General information/operating conditions 30■ Load data 31
Versions (Dimensions, order numbers)		<ul style="list-style-type: none">■ Right or lefthand thread 32 - 33■ Right and lefthand thread 34 - 35
Accessories	<div><div>Fixing</div><div>Drive</div><div>Position determination</div></div>	<ul style="list-style-type: none">■ Carriage 36 - 37■ Fixing elements 38 - 39■ Reducing bushes 40■ Clamping lever 41■ Handwheel 42■ Positioning indicator 43

General information/operating conditions

Design	Actuator with aluminium ACME screw in a slotted aluminium profile
Guide	Slide guide
Installation position	Any position
Lead accuracy	$\pm 0.3 \text{ mm/300 mm travel}$
Screw lead	3 mm
Self-locking	Yes
No-load torque	0.35 Nm
Ambient temperature	0°C to +60°C

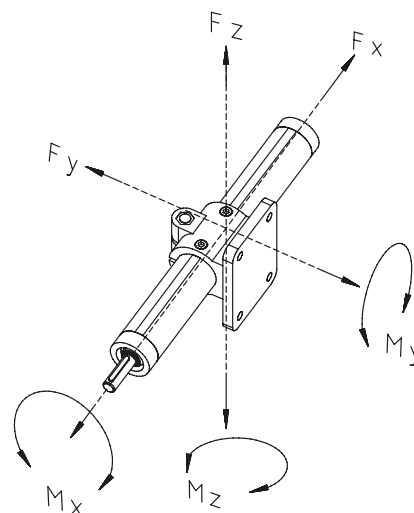




Load data*

F	Force [N]
M	Moment [Nm]
I	Geometric moment of inertia [cm ⁴]

* with reference to carriage (static, resting on end elements)

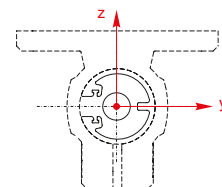


Type	F _x	F _y				F _z				M _x	M _y	M _z
Total length [mm]		300	500	800	1000	300	500	800	1000			
Deflection [mm]		1.0	2.5	4.0	5.0	1.0	2.5	4.0	5.0			
Force	300	700	550	270	140	1390	1210	600	450	2.5	5.5	5.5

Geometric moment of inertia

[cm⁴]

Type	I _y	I _z
RK LightUnit	1.90	1.88



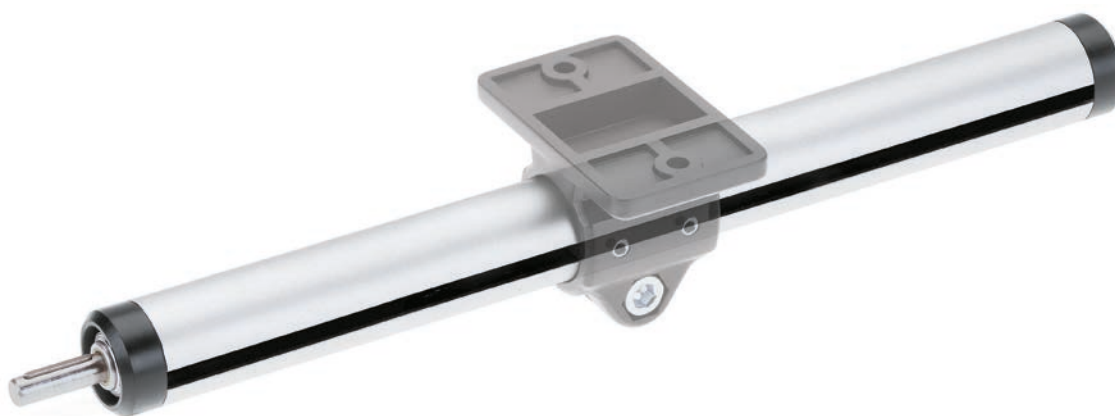
RK LightUnit – Versions

Order instructions:

- Choice of carriage - this must be ordered separately
- Standard lengths in stock!
Take advantage of our fast delivery times.

Version

- Standard lengths
- Righthand thread



Standard lengths



Standard lengths

- Guiding tube clear anodised: Total length 300, 500, 800 or 1000 mm
- Guiding tube black anodised: Total length 300 mm
- Righthand thread screw with a drive shaft

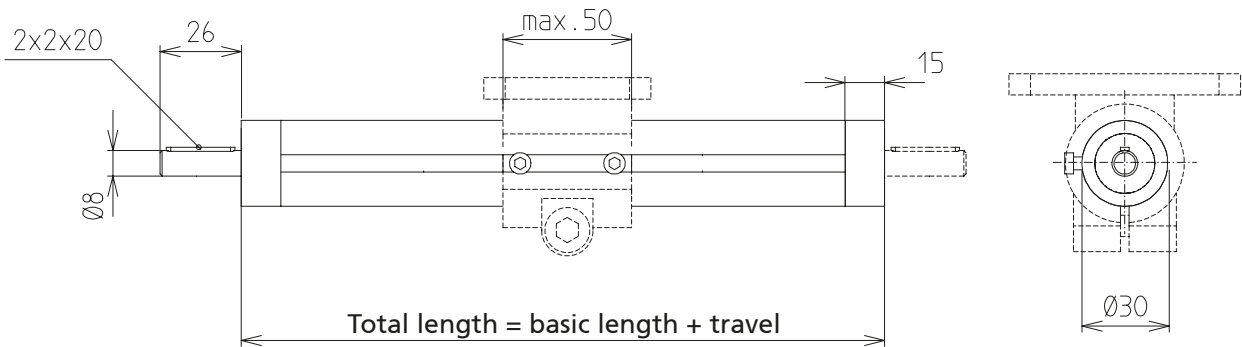
Code No.	Type	Screw	Travel	Total length	Mass [kg]
TFA 3000 T_0300	30	14 x 3	220	300	0.31
TFA 3000 TA0500	30	14 x 3	420	500	0.51
TFA 3000 TA0800	30	14 x 3	720	800	0.81
TFA 3000 TA1000	30	14 x 3	920	1000	1.01

[mm]

Guiding tube
A = clear anodised
C = black anodised

- Version
- Variable lengths

■ Right or lefthand thread



Variable lengths

[mm]

Code No.	Type	Screw	Basic length	Max. travel	Mass [kg]	
					Basic length	per 100 mm travel
TF_3000	30	14 x 3	80	920	0.097	0.099

----- Total length = basic length + travel [mm]

Guiding tube

A = clear anodised

C = black anodised

Shafts:

T = 1 shaft

U = 2 shafts

Screw:

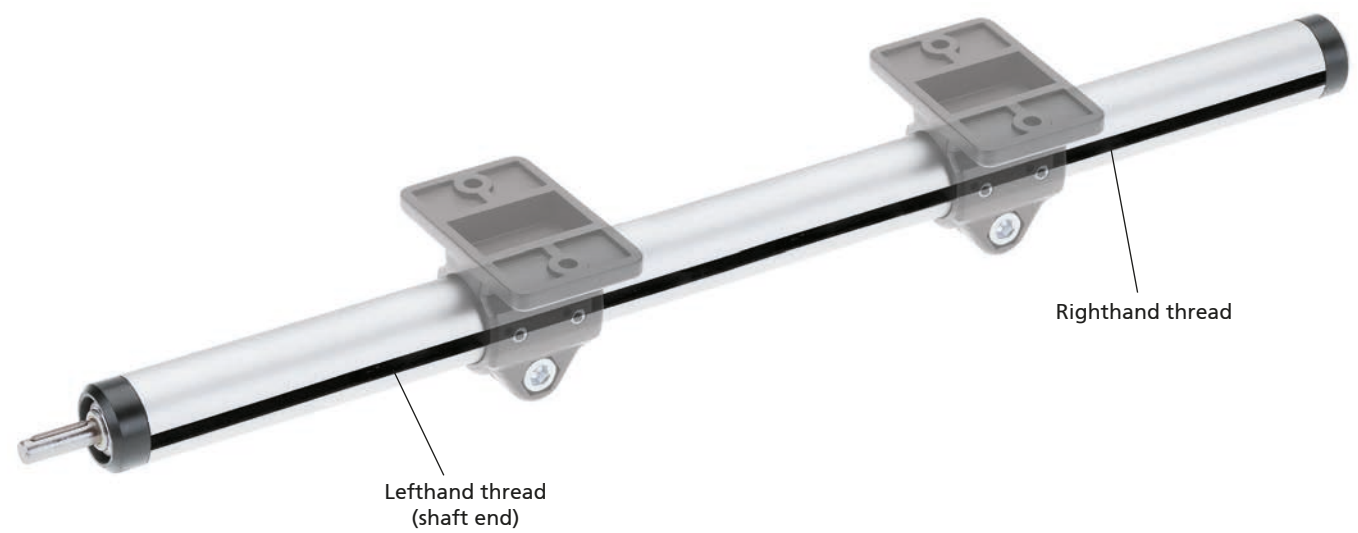
A = righthand thread

H = lefthand thread

RK LightUnit – Versions

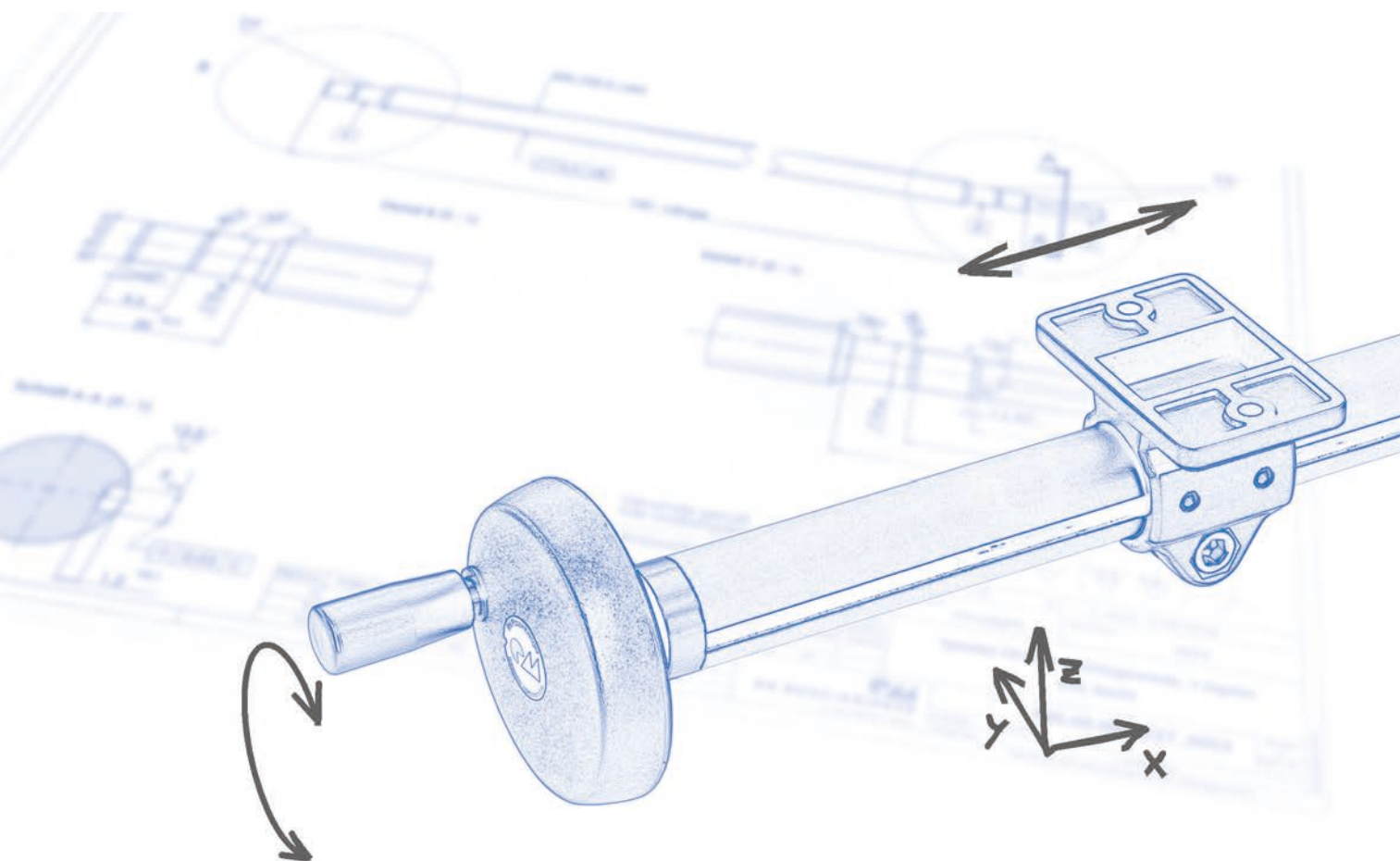
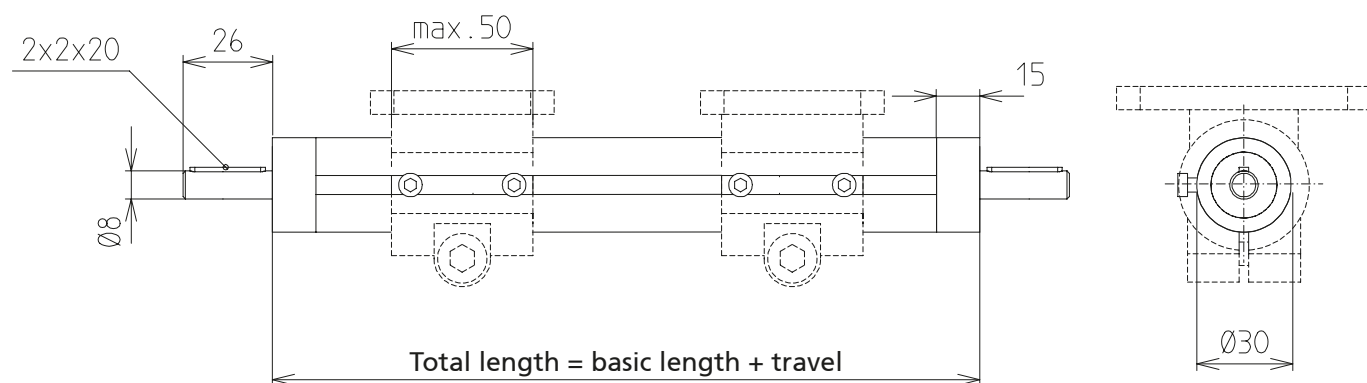
- Order instructions:**
- Choice of carriage - this must be ordered separately
 - Please specify total travel when placing an order

Version ■ Right and lefthand thread



Code No.	Type	Screw	Basic length	Max. travel	Mass [kg]	
					Basic length	per 100 mm travel
TFC 3000	30	14 x 3	130	870	0.113	0.099

- Total length = basic length + total travel [mm]
- Guiding tube**
A = clear anodised
C = black anodised
- Screw:**
S = 1 shaft on the lefthand thread side
T = 1 shaft on the righthand thread side
U = 2 shafts



RK LightUnit – Fixing

Order instructions:

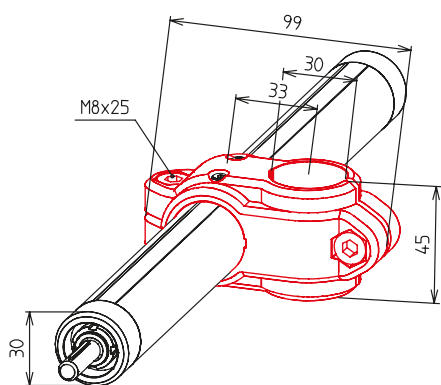
- The carriages are fitted with screws as standard. These can be replaced with clamping levers if required. For clamping lever, please see page 41.
- Screws in stainless steel on inquiry
- Suitable reducing bushes on page 40

Carriage

- A wide range of models facilitate mounting

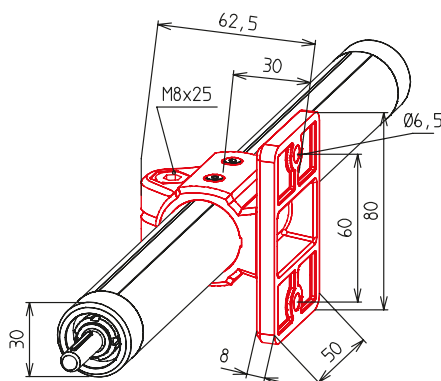
Material: Reinforced polyamide, black; fastenings zinc plated or stainless steel

K-KU



Code No.	Type	[mm]
13001200CSR30	K-KU 30	

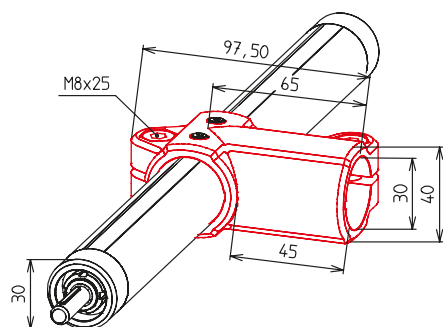
FK-KU



Code No.	Type	[mm]
13009200CS	FK-KU 30	

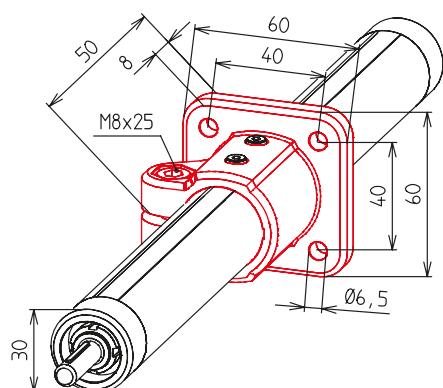


W-KU



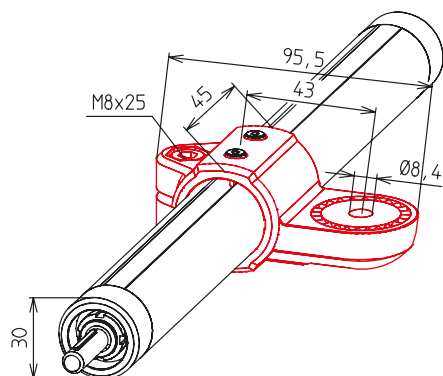
Code No.	Type
13007200CSR30	W-KU 30

FS-KU



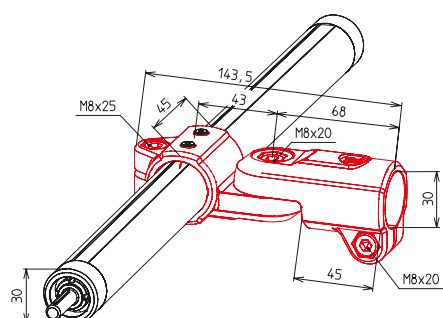
Code No.	Type
13011200CS	FS-KU 30

LW-KU



Code No.	Type
13014200CS	LW-KU 30

GW-KU



Code No.	Type
13016200CSR30	GW-KU 30

RK LightUnit – Fixing

Order instructions:

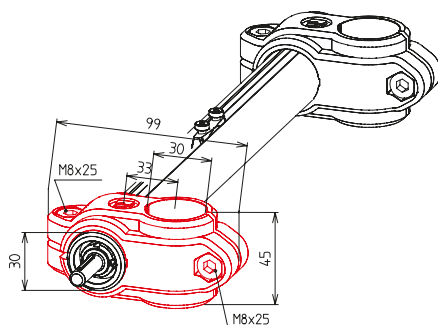
- The carriages are fitted with screws as standard. These can be replaced with clamping levers if required. For clamping lever, please see page 41.
- Purchase only in lot sizes and a multiple of that, see product table below

Fixing elements

- A special reducing bush system enables connection to a range of tube diameters
- A wide range of models facilitate mounting

Material: Reinforced polyamide, black; fastenings zinc plated or stainless steel

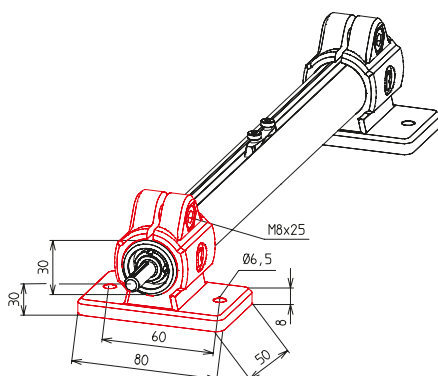
K-KU



[mm]

Code No.	Type	lot sizes
K00030BCSR30R30	K-KU 30	5, 10, 15... pcs

FK-KU



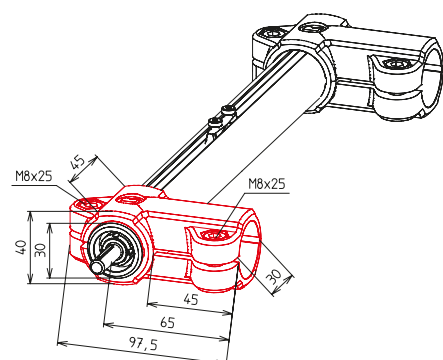
[mm]

Code No.	Type	lot sizes
K20030ACSR30	FK-KU 30	5, 10, 15... pcs



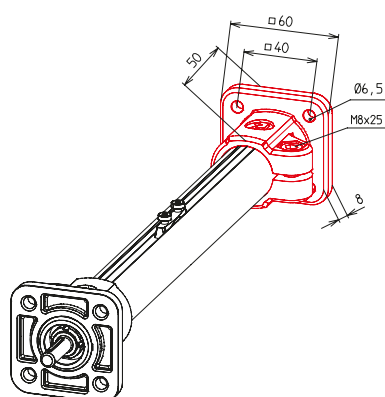
Fixing elements

W-KU



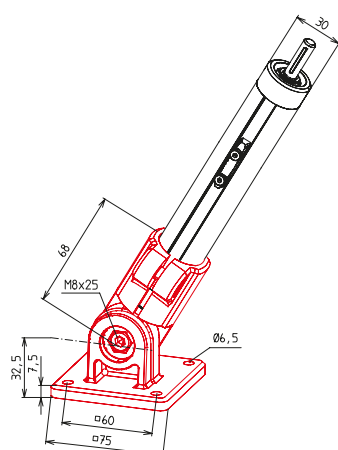
Code No.	Type	lot sizes
K10030BCSR30R30	W-KU 30	5, 10, 15... pcs

FS-KU



Code No.	Type	lot sizes
K30030BCSR30	FS-KU 30	5, 10, 15... pcs

GF-KU



Code No.	Type	lot sizes
K80230BCSR30	GF-KU 30	5, 10, 15... pcs

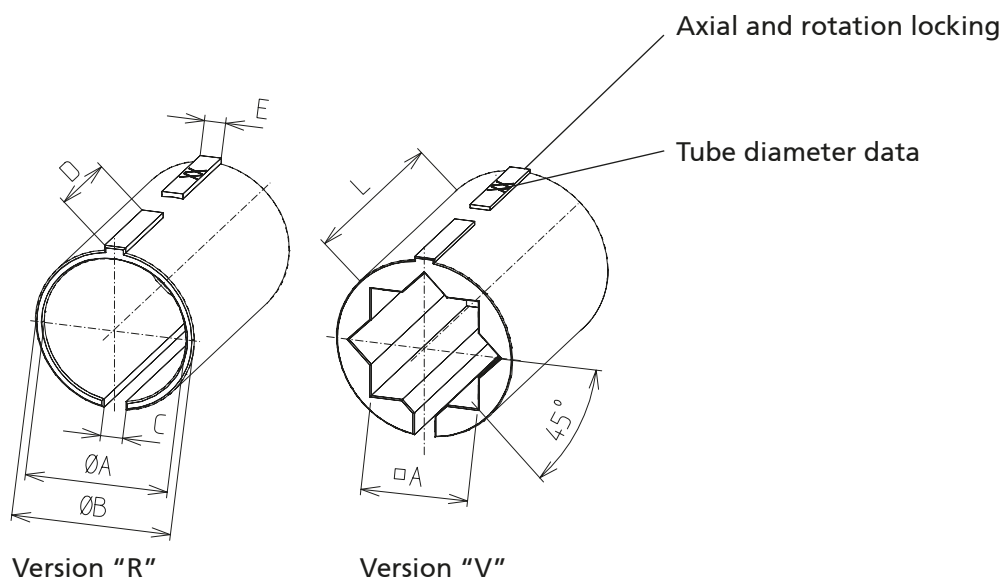
RK LightUnit – Fixing

Reducing bushes



- Simply replace the reducing bush to modify the tube diameter on carriages or fixing elements
- In the case of fixing elements, the reducing bushes are included in the scope of delivery when entering the order number and do not need to be ordered separately

Material: PA6.6 GF30



[mm]

Code No.	Type	Version	lot sizes	A+0,1	B	C	D	E	L
96204BC	30	R20	5, 10, 15... pcs	20,25	30	3,5	18,9	3,4	45
96206BC	30	R25	5, 10, 15... pcs	25,25	30	3,5	18,9	3,4	45
96208BC	30	V20	5, 10, 15... pcs	20,25	30	3,5	18,9	3,4	45



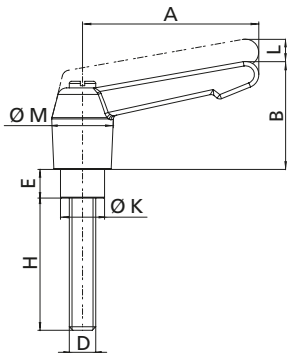
Clamping lever

■ For the equipping of fixing elements and carriages

Material: Handle made of PA, black



(Symbolic representation)



[mm]

Code No.	Type	Screw	A	B	D	E	H	K	L	M
902381	30	steel	65	35	M8	14	25	13	4	19,5

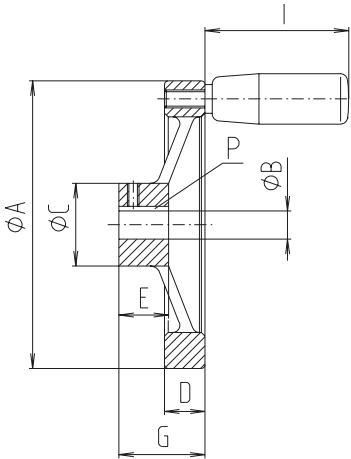
Handwheel

- Rotating cylindrical grip
- Fully turned wheel rim
- Machined hub

Material: Aluminium die cast, black powder-coated



Ø 80



[mm]

Code No.	Type	A	B	C	D	E	G	P	I
90903	30	80	8	23	11	17	35	2 x 2	42



Positioning indicator

- max. ambient temperature +80°C
- Figure height 6 mm
- Indicating accuracy ± 0.1 mm

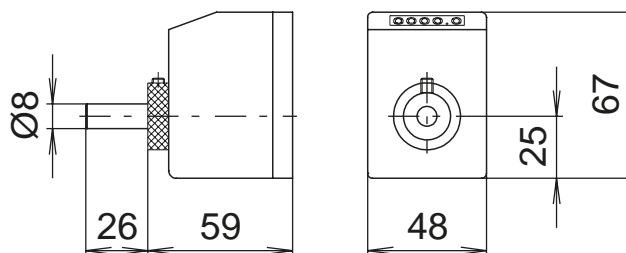
Material: Housing polyamide 6 Orange RAL 2004, Steel parts, corrosion protected

Scope of delivery: Positioning indicator, clamping ring, shaft extension and fastenings

Note: “rising” and “falling” versions refer to the clockwise rotation of the drive shaft.



Installation position: horizontal



Installation position: vertical

Code No.	Installation position	Version*
91043	Horizontal	3 mm rising
91053		3 mm falling
91063	Vertical	3 mm rising
91073		3 mm falling
91010	Horizontal	6 mm rising
91029		6 mm falling
91020	Vertical	6 mm rising
91019		6 mm falling

* Version with double lead e.g. for installation on righthand/lefthand thread screws