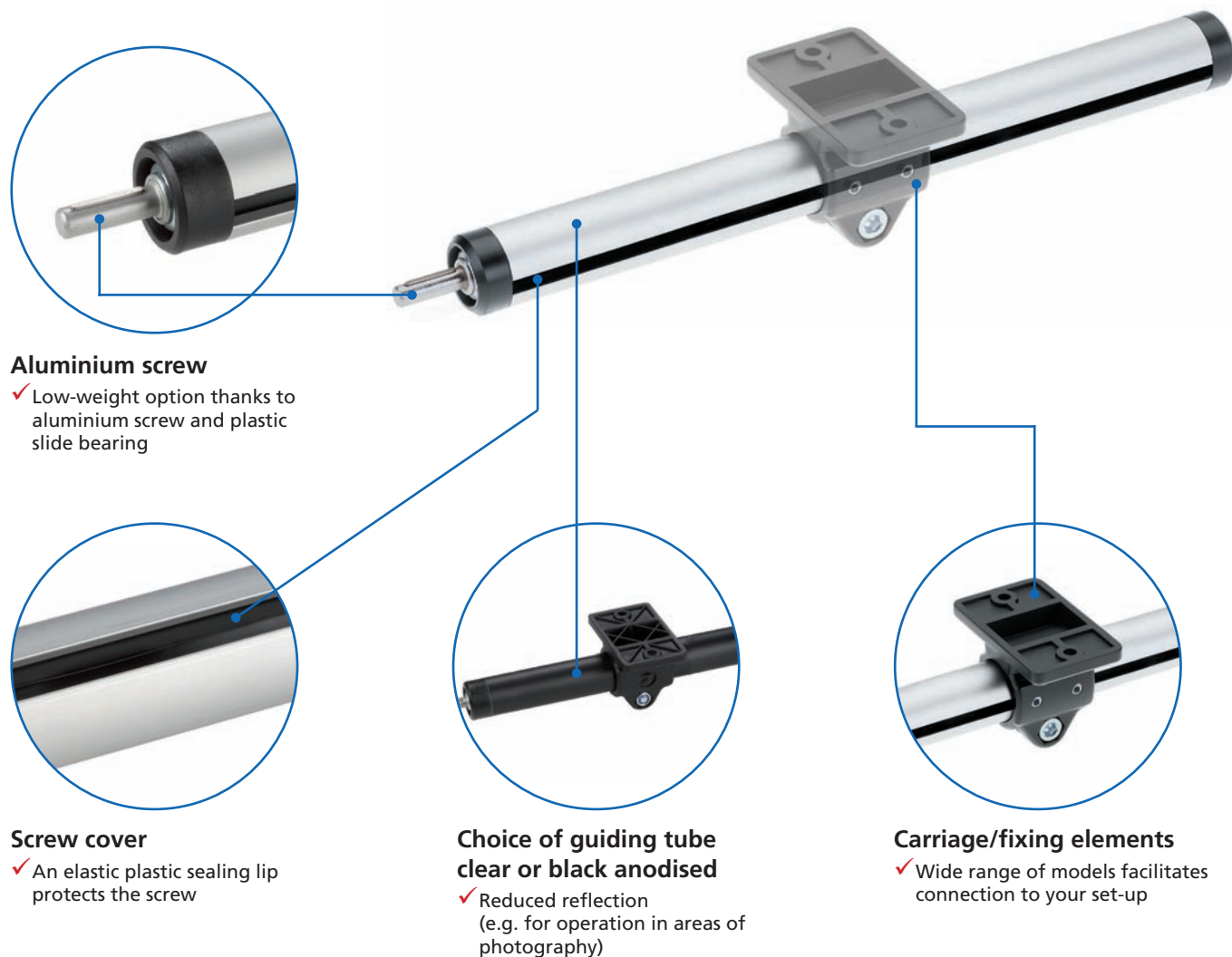
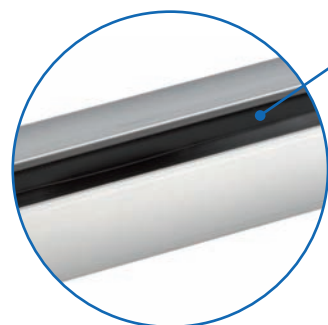


Single tube actuator - *RK LightUnit*

The "light option" for simple manual adjustments



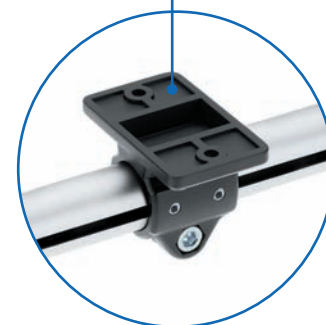
Aluminium screw
✓ Low-weight option thanks to aluminium screw and plastic slide bearing



Screw cover
✓ An elastic plastic sealing lip protects the screw



Choice of guiding tube clear or black anodised
✓ Reduced reflection (e.g. for operation in areas of photography)



Carriage/fixing elements
✓ Wide range of models facilitates connection to your set-up



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:

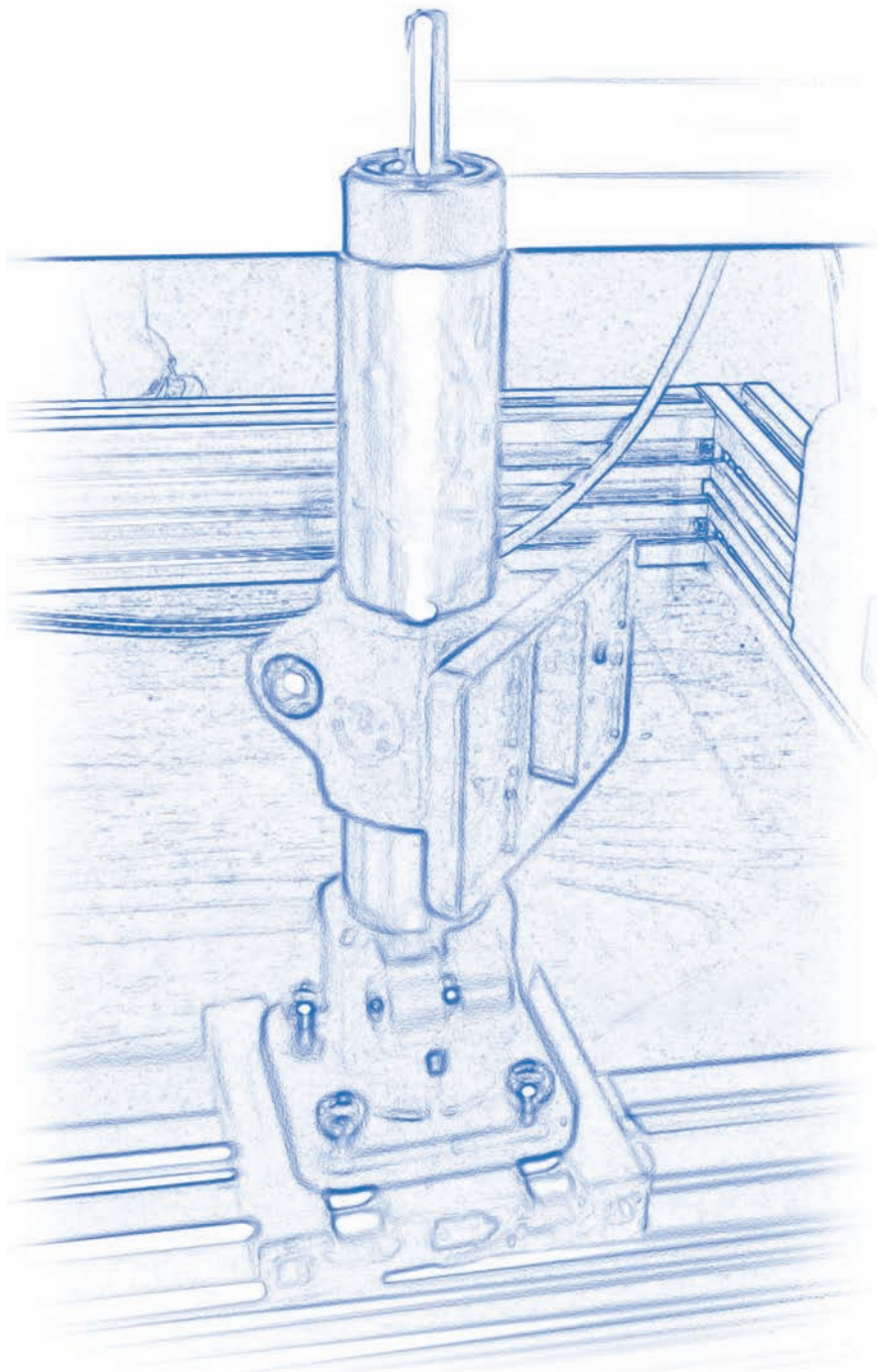
- Additional non driven carriage as torque support.

RK LightUnit - Table of contents

Properties/Technical data		<ul style="list-style-type: none"> ■ General information/operating conditions 28 ■ Load data 29 							
Versions (Dimensions, order numbers)		<ul style="list-style-type: none"> ■ Right or lefthand thread 30 - 31 ■ Right and lefthand thread 32 - 33 							
		<table border="0"> <tr> <td>Accessories</td> <td>Fixing</td> <td> <ul style="list-style-type: none"> ■ Carriage 34 - 35 ■ Fixing elements 36 - 37 ■ Reducing bushes 38 ■ Clamping lever 39 </td> </tr> <tr> <td></td> <td>Drive</td> <td> <ul style="list-style-type: none"> ■ Handwheel 40 </td> </tr> <tr> <td></td> <td>Position determination</td> <td> <ul style="list-style-type: none"> ■ Positioning indicator 41 </td> </tr> </table>	Accessories	Fixing	<ul style="list-style-type: none"> ■ Carriage 34 - 35 ■ Fixing elements 36 - 37 ■ Reducing bushes 38 ■ Clamping lever 39 		Drive	<ul style="list-style-type: none"> ■ Handwheel 40 	
Accessories	Fixing	<ul style="list-style-type: none"> ■ Carriage 34 - 35 ■ Fixing elements 36 - 37 ■ Reducing bushes 38 ■ Clamping lever 39 							
	Drive	<ul style="list-style-type: none"> ■ Handwheel 40 							
	Position determination	<ul style="list-style-type: none"> ■ Positioning indicator 41 							

General information/operating conditions

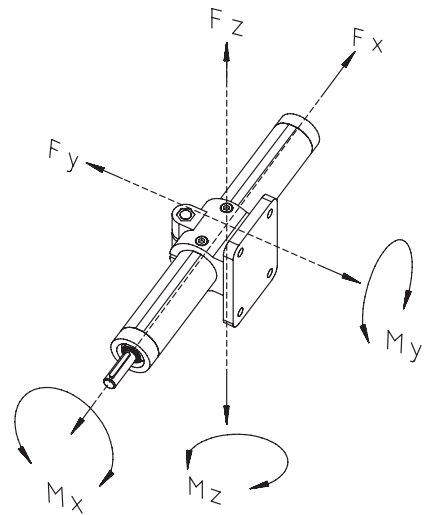
Design	Actuator with aluminium ACME screw in a slotted aluminium profile
Guide	Slide guide
Installation position	Any position
Lead accuracy	± 0.3 mm/300 mm travel
Screw lead	3 mm
Self-locking	Yes
No-load torque	0.35 Nm
Ambient temperature	0°C to +60°C



Load data*

- F Force [N]
- M Moment [Nm]
- I Geometric moment of inertia [cm⁴]

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

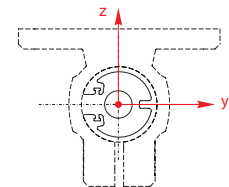


Type	F _x	F _y				F _z				M _x	M _y	M _z
Total length [mm]		300	500	800	1000	300	500	800	1000			
Deflection [mm]		1.0	2.5	4.0	5.0	1.0	2.5	4.0	5.0			
Force	300	700	550	270	140	1390	1210	600	450	2.5	5.5	5.5

Geometric moment of inertia

[cm⁴]

Type	I _y	I _z
RK LightUnit	1.90	1.88



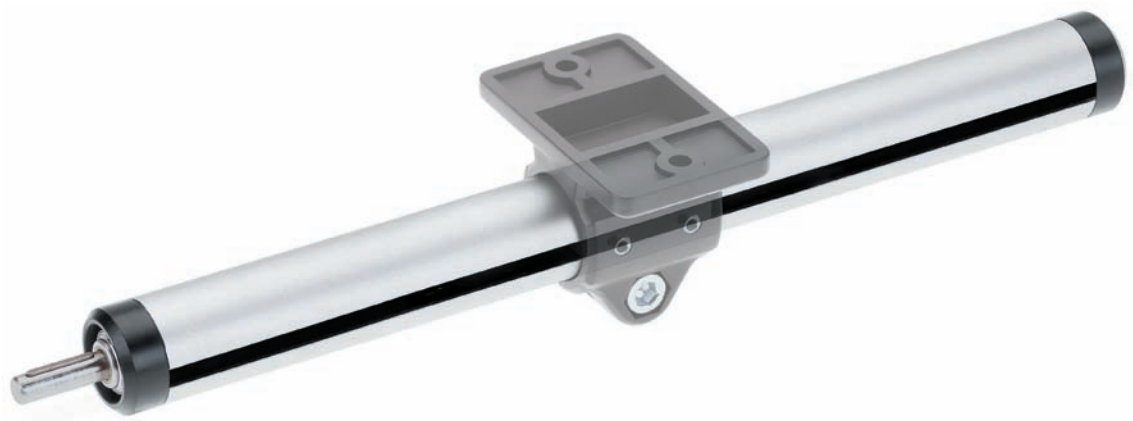
RK LightUnit – Versions

Order information:

- 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

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

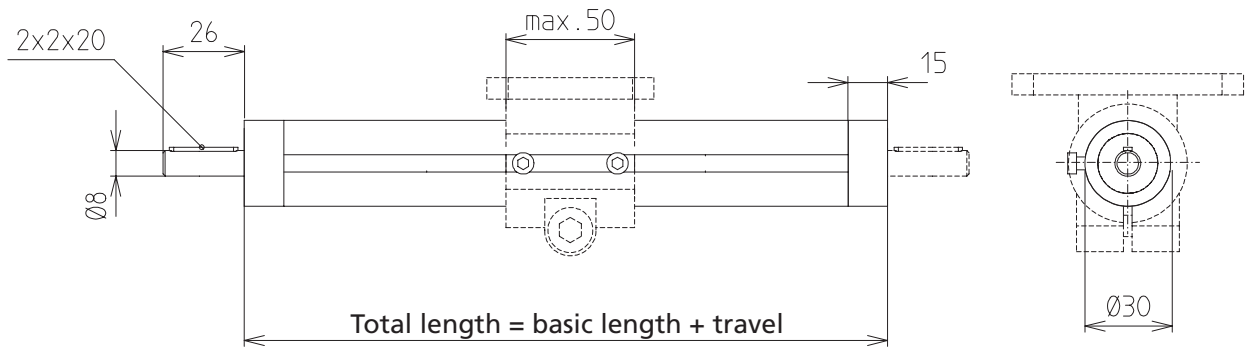
[mm]

Code No.	Type	Screw	Travel	Total length	Mass [kg]
TFA 3000 T_0300	30	14 x 3	220	300	0.31
TFA 3000 T_0500	30	14 x 3	420	500	0.51
TFA 3000 T_0800	30	14 x 3	720	800	0.81
TFA 3000 T_1000	30	14 x 3	920	1000	1.01

Guiding tube
A = clear anodised
C = black anodised

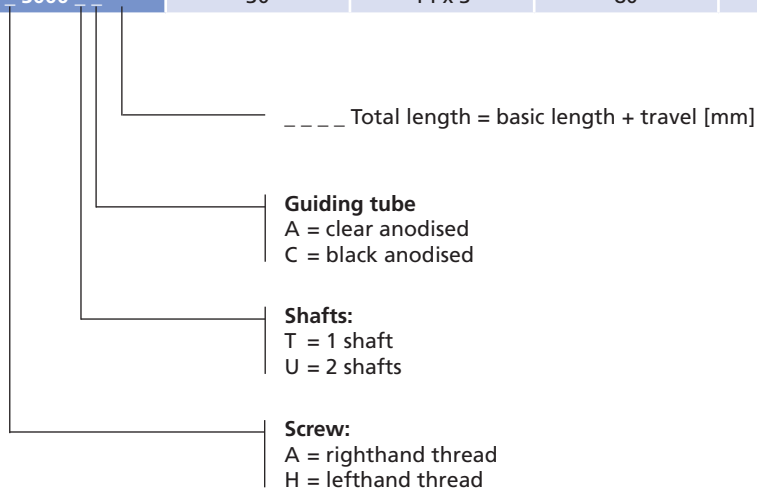
Version

- Variable lengths
- Right or lefthand thread



Variable lengths

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



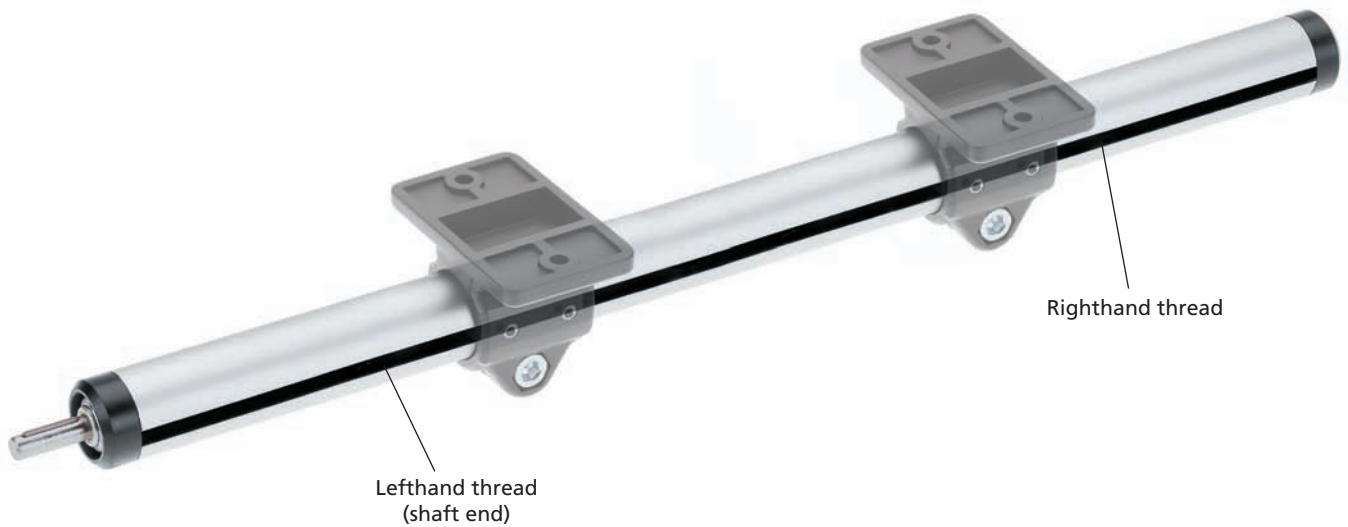
RK LightUnit – Versions

Order information:

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

Version

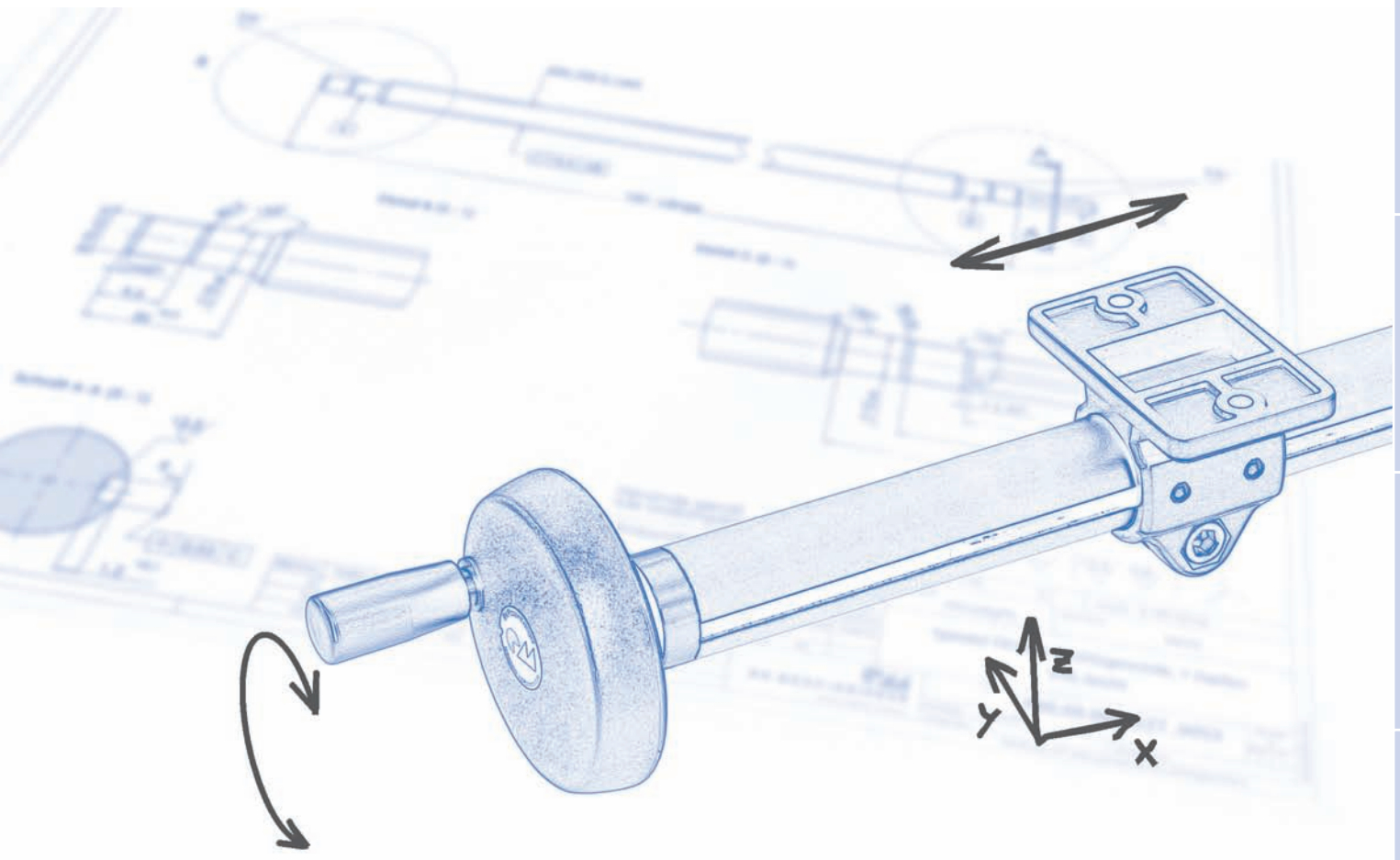
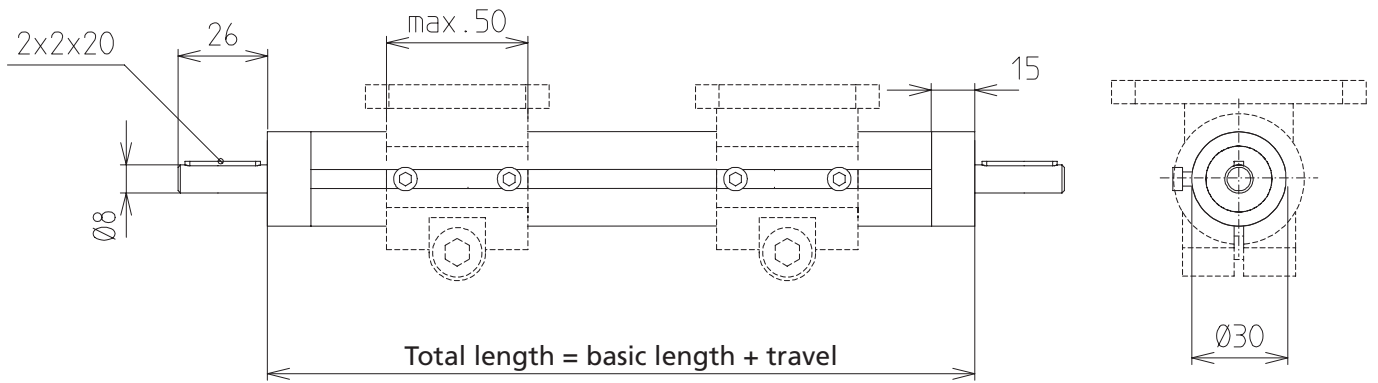
- Right and lefthand thread



[mm]

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

Carriage

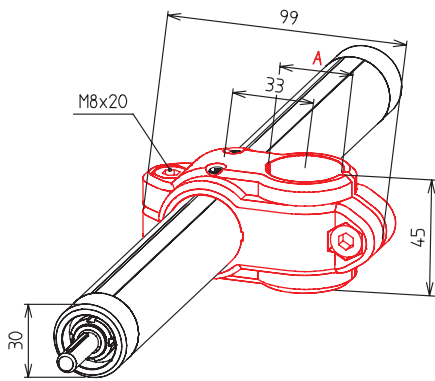
- A wide range of models facilitate mounting

Material: Reinforced polyamide, black; fastenings galvanised or stainless steel

Order information:

- The carriages are fitted with screws as standard. These can be replaced with clamping levers if required. For clamping lever, please see page 39.

K-KU



Code No.	Type	Clamping A
13001200C	K-KU 30	Diam. 20, 25, 30 □20

[mm]

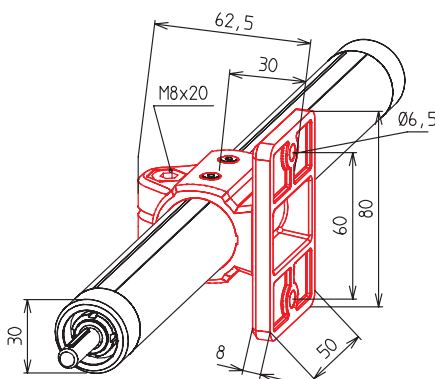
Clamping A:

- R20 = Diam. 20
- R25 = Diam. 25
- R30 = Diam. 30
- V20 = □20

Screws:

- S = steel, galvanised (standard)
- E = stainless steel

FK-KU



Code No.	Type	Clamping A
13009200C	FK-KU 30	Ø 20, 25, 30 □20

[mm]

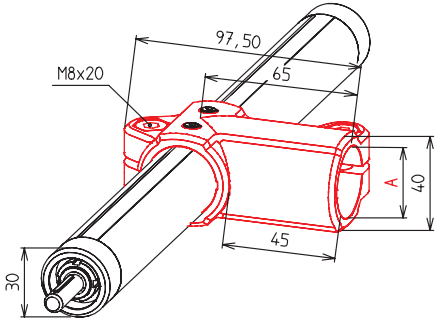
Clamping A:

- R20 = Diam. 20
- R25 = Diam. 25
- R30 = Diam. 30
- V20 = □20

Screws:

- S = steel, galvanised (standard)
- E = stainless steel

W-KU

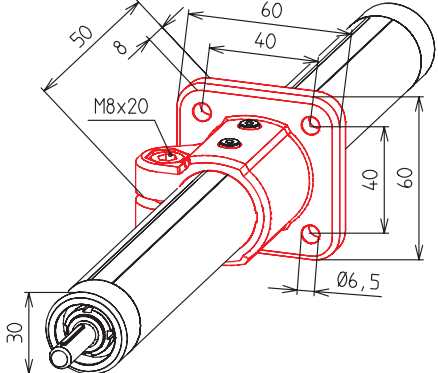


Code No.	Type	Clamping A
13007200C	W-KU 30	Diam. 20, 25, 30 □20

Clamping A:
 R20 = Diam. 20
 R25 = Diam. 25
 R30 = Diam. 30
 V20 = □20

Screws:
 S = steel, galvanised (standard)
 E = stainless steel

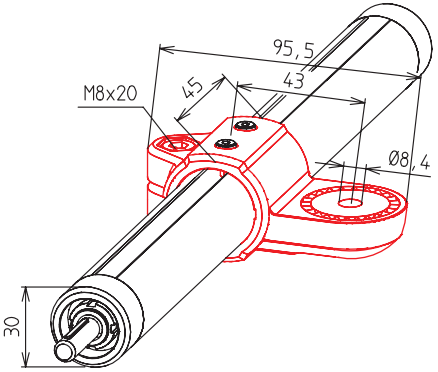
FS-KU



Code No.	Type
13011200C	FS-KU 30

Screws:
 S = steel, galvanised (standard)
 E = stainless steel

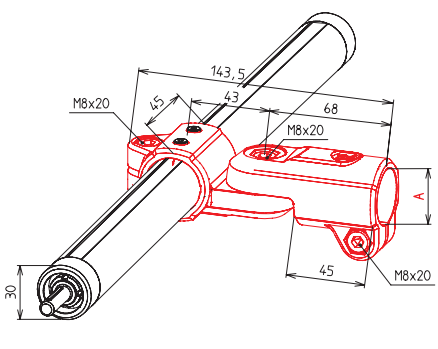
LW-KU



Code No.	Type
13014200C	LW-KU 30

Screws:
 S = steel, galvanised (standard)
 E = stainless steel

GW-KU



Code No.	Type	Clamping A
13016200C	GW-KU 30	Diam. 20, 25, 30 □20

Clamping A:
 R20 = Diam. 20
 R25 = Diam. 25
 R30 = Diam. 30
 V20 = □20

Screws:
 S = steel, galvanised (standard)
 E = stainless steel

RK LightUnit – Fixing

Fixing elements

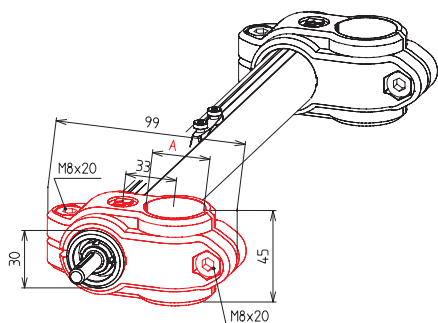
Order information:

- The carriages are fitted with screws as standard. These can be replaced with clamping levers if required. For clamping lever, please see page 39.

- 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 galvanised or stainless steel

K-KU



[mm]

Code No.	Type	Package Qty	Clamping A
K00030AC _ R30 _ _ _	K-KU 30	1	Diam. 20, 25, 30 □20
K00030BC _ R30	K-KU 30	5	Diam. 20, 25, 30 □20

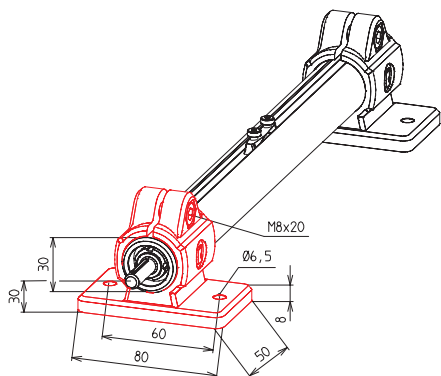
Clamping A:

R20 = Diam. 20
R25 = Diam. 25
R30 = Diam. 30
V20 = □20

Screws:

S = steel, galvanised (standard)
E = stainless steel

FK-KU



[mm]

Code No.	Type	Package Qty
K20030AC _ R30	FK-KU 30	1
K20030BC _ R30	FK-KU 30	5

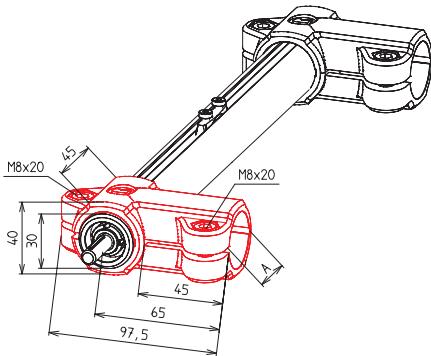
Screws:

S = steel, galvanised (standard)
E = stainless steel



Fixing elements

W-KU



Code No.	Type	Package Qty	Clamping A
K10030AC _ R30 _ _ _	W-KU 30	1	Diam. 20, 25, 30 □20
K10030BC R30	W-KU 30	5	Diam. 20, 25, 30 □20

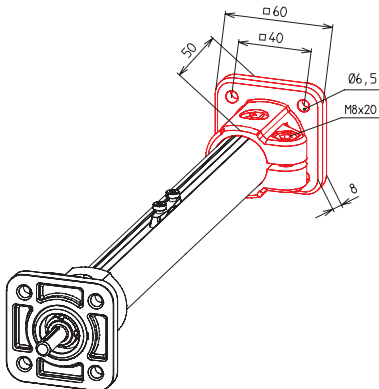
Clamping A:

- R20 = Diam. 20
- R25 = Diam. 25
- R30 = Diam. 30
- V20 = □20

Screws:

- S = steel, galvanised (standard)
- E = stainless steel

FS-KU

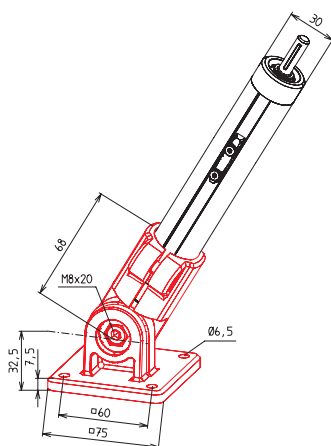


Code No.	Type	Package Qty
K30030AC _ R30	FS-KU 30	1
K30030BC R30	FS-KU 30	5

Screws:

- S = steel, galvanised (standard)
- E = stainless steel

GF-KU



Code No.	Type	Package Qty
K80230AC _ R30	GF-KU 30	1
K80230BC R30	GF-KU 30	5

Screws:

- S = steel, galvanised (standard)
- E = stainless steel

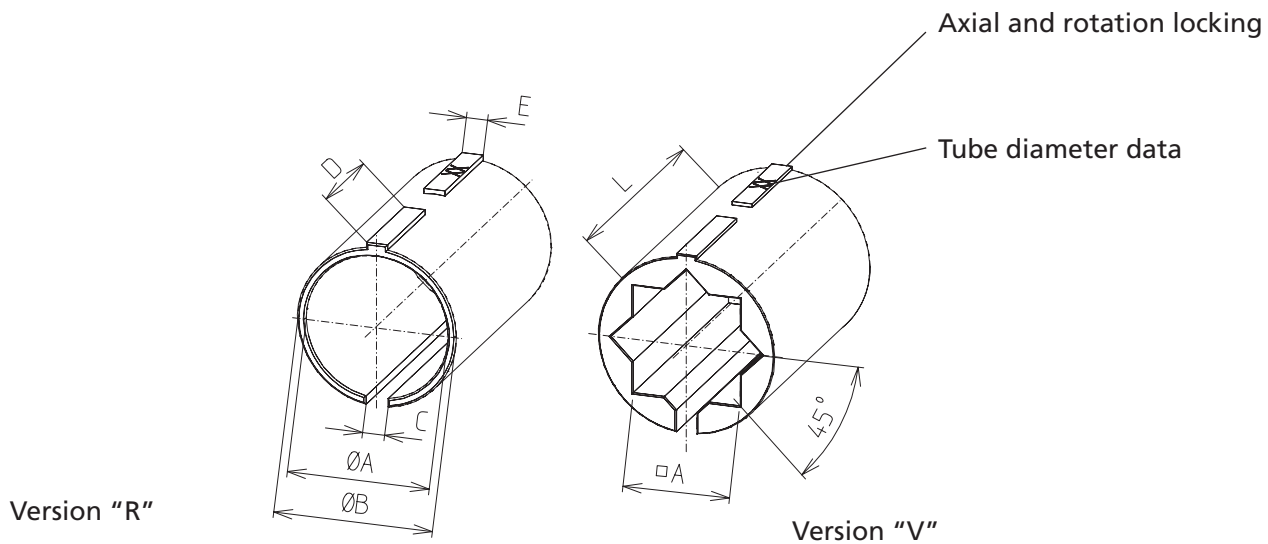
RK LightUnit – Fixing

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



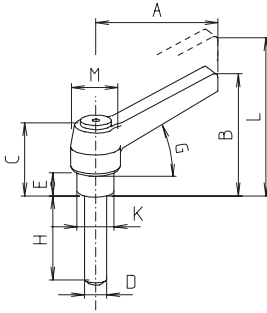
Code No.	Type	Version	Package Qty	A + 0.1	B	C	D	E	L
96204AC	30	R20	1	20.25	30	3.5	18.9	3.4	45
96204BC	30	R20	5	20.25	30	3.5	18.9	3.4	45
96206AC	30	R25	1	25.25	30	3.5	18.9	3.4	45
96206BC	30	R25	5	25.25	30	3.5	18.9	3.4	45
96208AC	30	V20	1	20.25	30	3.5	18.9	3.4	45
96208BC	30	V20	5	20.25	30	3.5	18.9	3.4	45

[mm]

Clamping lever

■ For the equipping of fixing elements and carriages

Material: Handle made of PA, black



Code No.	Type	Screw	A	B	C	D	E	G	H	K	L	M
902381	30	steel	65	48.5	36.5	M8	14	20°	25	13	52.5	18

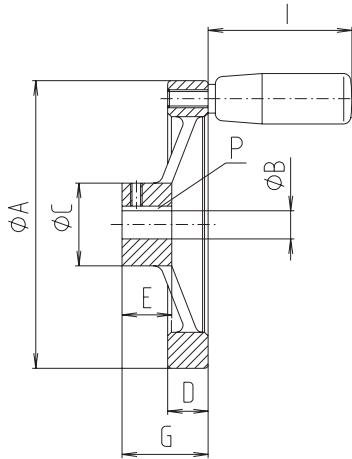
[mm]

RK LightUnit – Drive

Handwheel

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

Material: Aluminium die cast, black powder-coated



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

[mm]



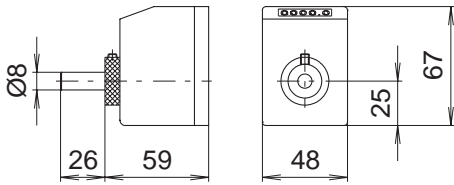
Positioning indicator

- 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

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



Installation position: vertical

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