

Trapezoidal Screw

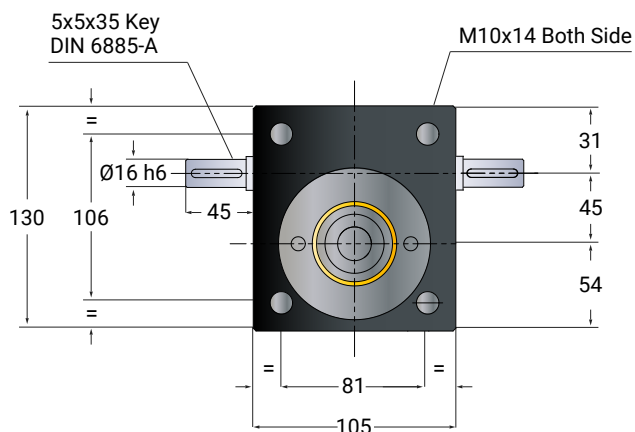
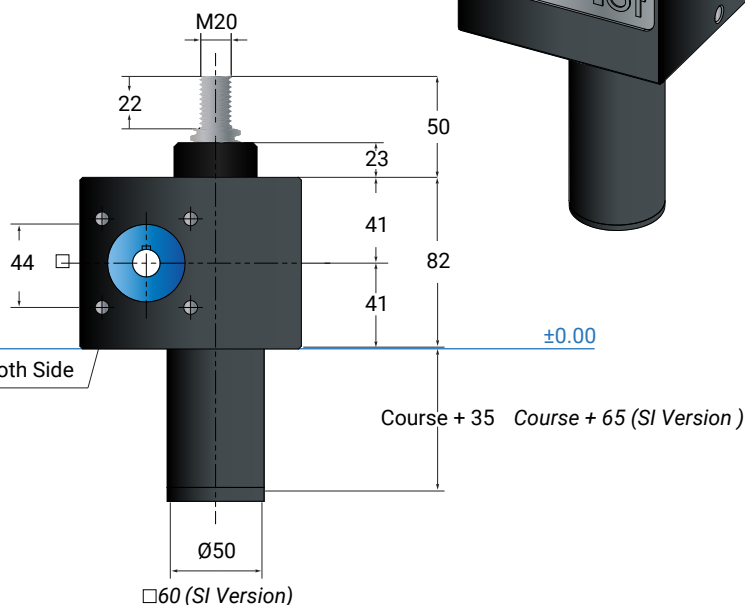


Diagram illustrating the components of a motor assembly, including:

- KK**: Spring
- PHS**: Pin
- UM**: Mounting bracket
- UF**: Flange
- UMB**: Mounting bracket
- UGMB**: Mounting bracket
- MOTOR**: Motor unit
- MFB**: Mounting bracket
- ISW**: Switch
- MSW**: Switch
- KB**: Knob
- A**: Port
- B**: Port
- MFA**: Mounting bracket
- AMB**: Mounting bracket
- AGMB**: Mounting bracket
- MOTOR**: Motor unit

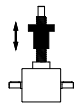
Type	Version	Speed	Standart screw	i	Stroke per drive shaft rotation
VK25-VH-A	Translating screw	Normal	Tr 30x6	6:1	1.00 mm
VK25-VH-B		Low speed		24:1	0.25 mm
VK25-SH-A	Rotating screw	Normal	Tr 30x6	6:1	1.00 mm
VK25-SH-B		Low speed		24:1	0.25 mm

Max static load: 25 kN
Max dynamic load: See duty cycle curves
Nominal speed: 1500 rpm
Max speed: 3000 rpm (depending force and duty cycle)
Screw size: Tr 30x6
Operation temperature: -10/60C
Screw lubrication: Grease lubrication
Input torque: Max 18 Nm (A) max 10 Nm (B)
Drive-through torque: Max 100 Nm

Graph showing the relationship between torque (kN) and duty cycle (%) for Trapezoidal Screws Tr 30x6 at 20°C. The graph includes curves for 300 rpm, 1800 rpm, 1500 rpm, 1000 rpm, and 500 rpm. The torque decreases as the duty cycle increases and as the rpm increases.

These curves above represents the thermally safe operating time of the product in percent. These values are valid for the normal operating conditions of the system (lubrication, ambient temperature, environmental conditions, etc.). Otherwise, please contact Mecmot Engineering department.

VK25-SH

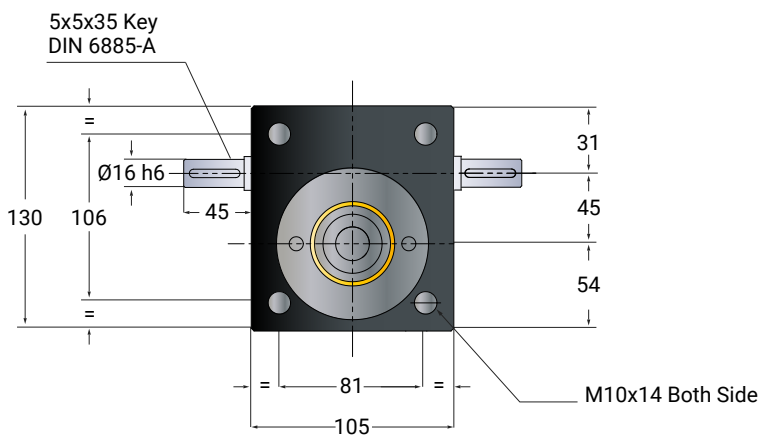
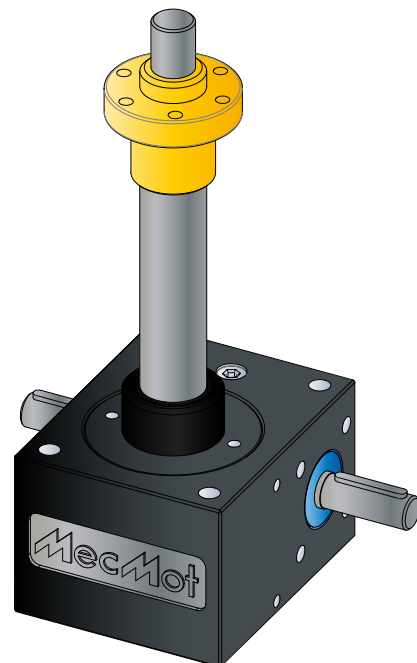
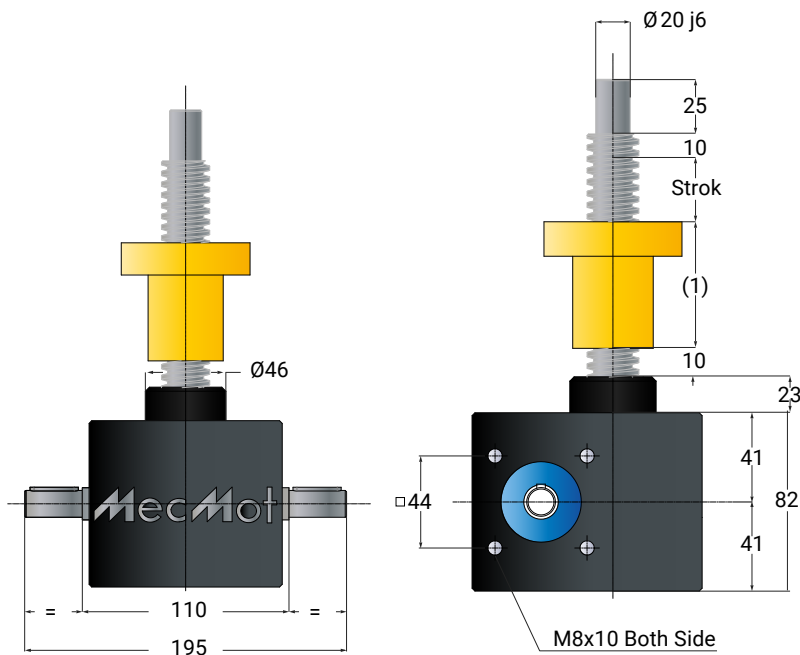


Max

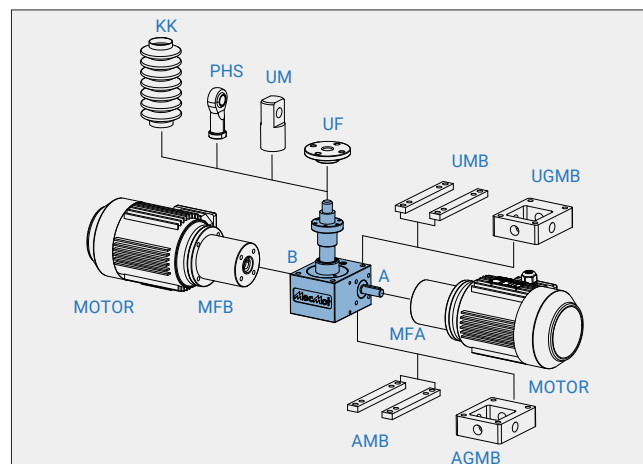
25 kN



Trapezoidal Screw



SH ACCESSORIES

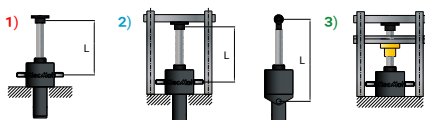
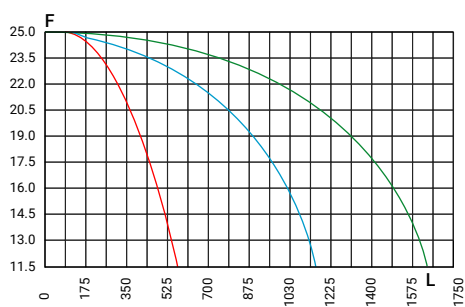


Euler's law (safety factor = 2 dynamic compression load)

Limit load 1 (red) - 2 (blue) - 3 (green)

F = Load [kN]

L = Overall trapezoidal screw length [mm]

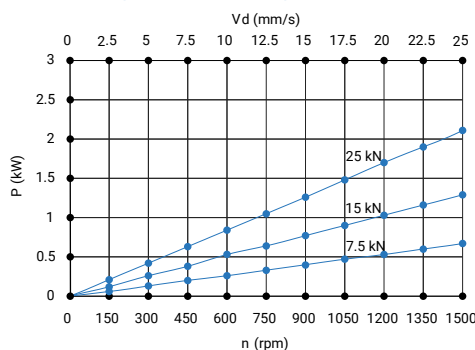


Power Curves (Reduction A Version)

P = Requested input power [kW]

n = Worm rotational speed [rpm]

Vd = Spindle translation speed [mm/s]



Power Curves (Reduction B Version)

P = Requested input power [kW]

n = Worm rotational speed [rpm]

Vd = Spindle translation speed [mm/s]

