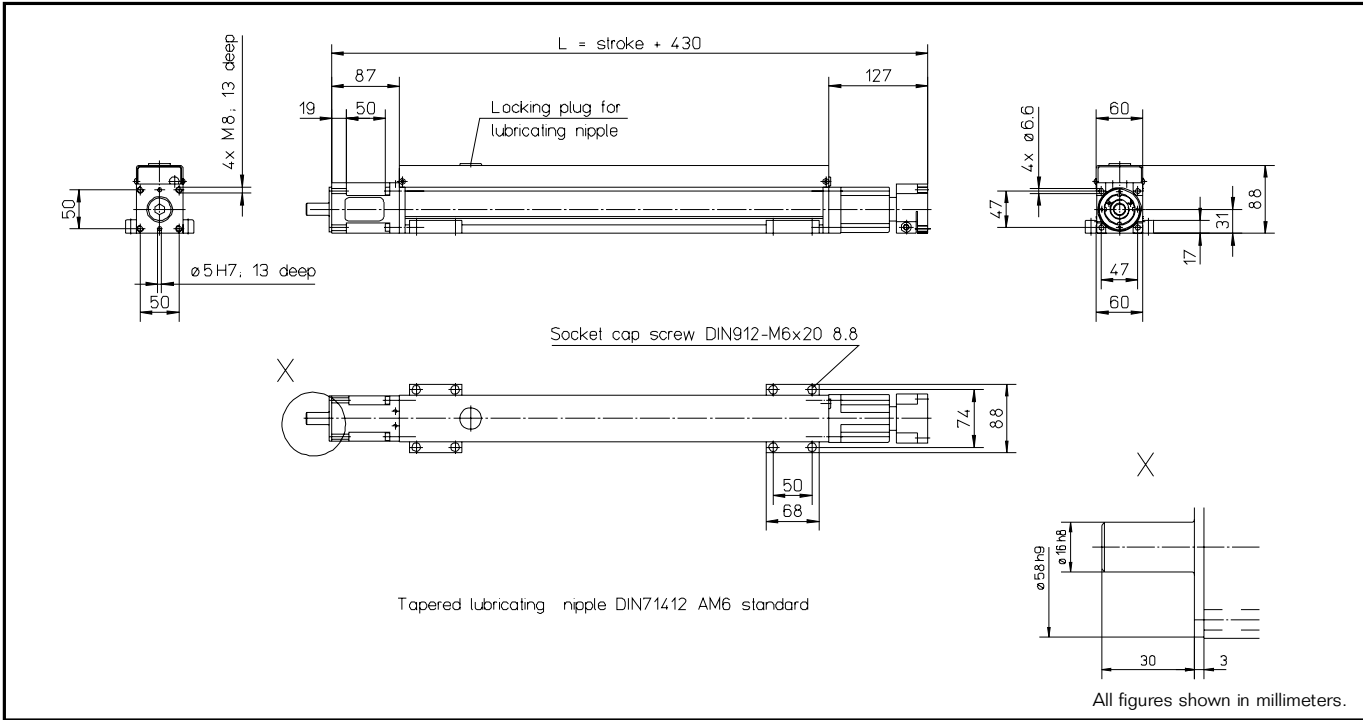


WIESEL™ VARIOLine™ WZ60

with ball screw drive and integrated linear ball bearing drive

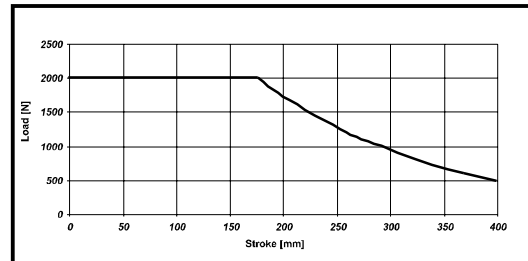


Technical data

- Linear speed:max. 1.5 m/s
- Repeatability: ± 0.02 mm
- Acceleration:max. 20 m/s²
- Rotational speed:3000 rpm
- Drive element:ball screw with backlash free single nut
- Diameter:20 mm
- Lead:5, 20, 50 mm
- Stroke length:max 400 mm
- Geometrical moment of inertia:ly 5.8×10^5 mm⁴
lz 5.9×10^5 mm⁴
- Weights
- Basic unit with zero stroke:4.5 kg
- 100 mm stroke:0.77 kg
- Mass to be moved without stroke:1.8 kg
- Mass to be moved per 100 mm stroke:0.26 kg
- Provided:4 pieces KAO mounting brackets

Idle torques [Nm]

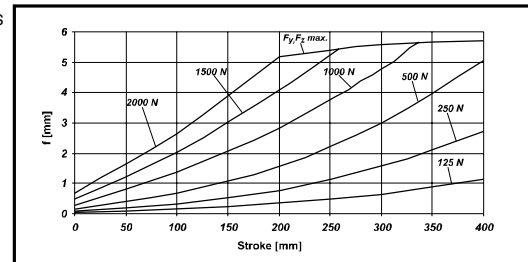
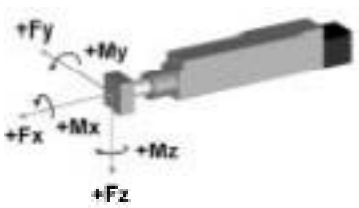
Rotational speed [rpm]	Lead P [mm]		
	5	20	50
150	0.5	0.9	1.2
1500	0.9	1.4	1.8
3000	1.3	1.6	2.0



Max side load F_y, F_z

Loads and load moments

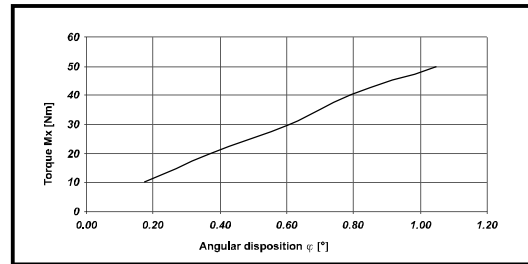
Load	dynam. [N]
F_x drive	2800
F_y	see diagram
$\pm F_z$	see diagram
Load moment	dynam. [Nm]
M_x	50



Deflection due to F_y, F_z

Unit conversions

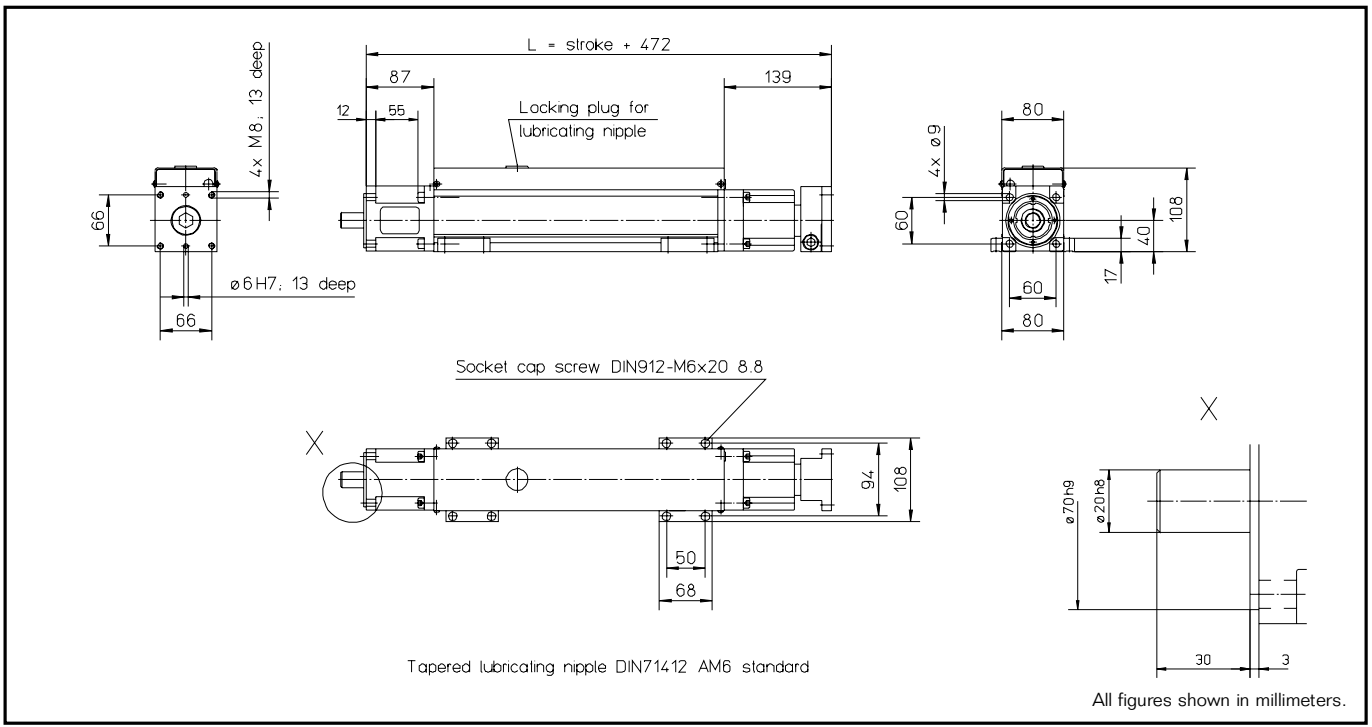
Length:	1 m=1000 mm=39.37 inches 1 inch=25.4 mm
Force:	1 N=0.225 lbf 1 lbf=4.45 N
Moment of Force:	1 Nm=0.738 lb · ft=8.85 lb · inches 1 lb · ft=1.36 Nm



Torsion

WIESEL™ VARIOLine™ WZ80

with ball screw drive and integrated linear ball bearing drive



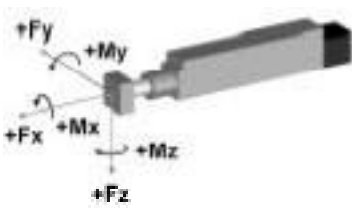
Technical data

- Linear speed:max. 1.5 m/s
- Repeatability: ± 0.02 mm
- Acceleration:max. 20 m/s²
- Rotational speed:3000 rpm
- Drive element:ball screw with backlash free single nut
- Diameter:25 mm
- Lead:5, 10, 20, 50 mm
- Stroke length:max 500 mm
- Geometrical moment of inertia:ly 1.9×10^6 mm⁴
lz 1.9×10^6 mm⁴

Weights

- Basic unit with zero stroke:7.5 kg
- 100 mm stroke:1.35 kg
- Mass to be moved without stroke:3.0 kg
- Mass to be moved per 100 mm stroke:0.5 kg
- Provided:4 pieces KAO mounting brackets

Loads and load moments



Load	dynam. [N]
Fx drive	3500
Fy	see diagram
$\pm Fz$	see diagram
Load moment	dynam. [Nm]
Mx	150

Unit conversions

Geometrical moment of inertia:	$1 \text{ m}^4 = 10^{12} \text{ mm}^4 = 2.4025 \times 10^6 \text{ in}^4$
Mass moment of inertia:	$1 \text{ kg} \cdot \text{m}^2 = 10^4 \text{ kg} \cdot \text{cm}^2 = 0.738 \text{ lb} \cdot \text{ft} \cdot \text{s}^2$
Mass:	$1 \text{ kg} = 2.2 \text{ lb}$

Idle torques [Nm]

Rotational speed [rpm]	Lead P [mm]			
	5	10	20	50
150	0.6	1.1	1.3	1.8
1500	1.1	1.5	1.6	2.2
3000	1.4	1.8	1.8	2.7

