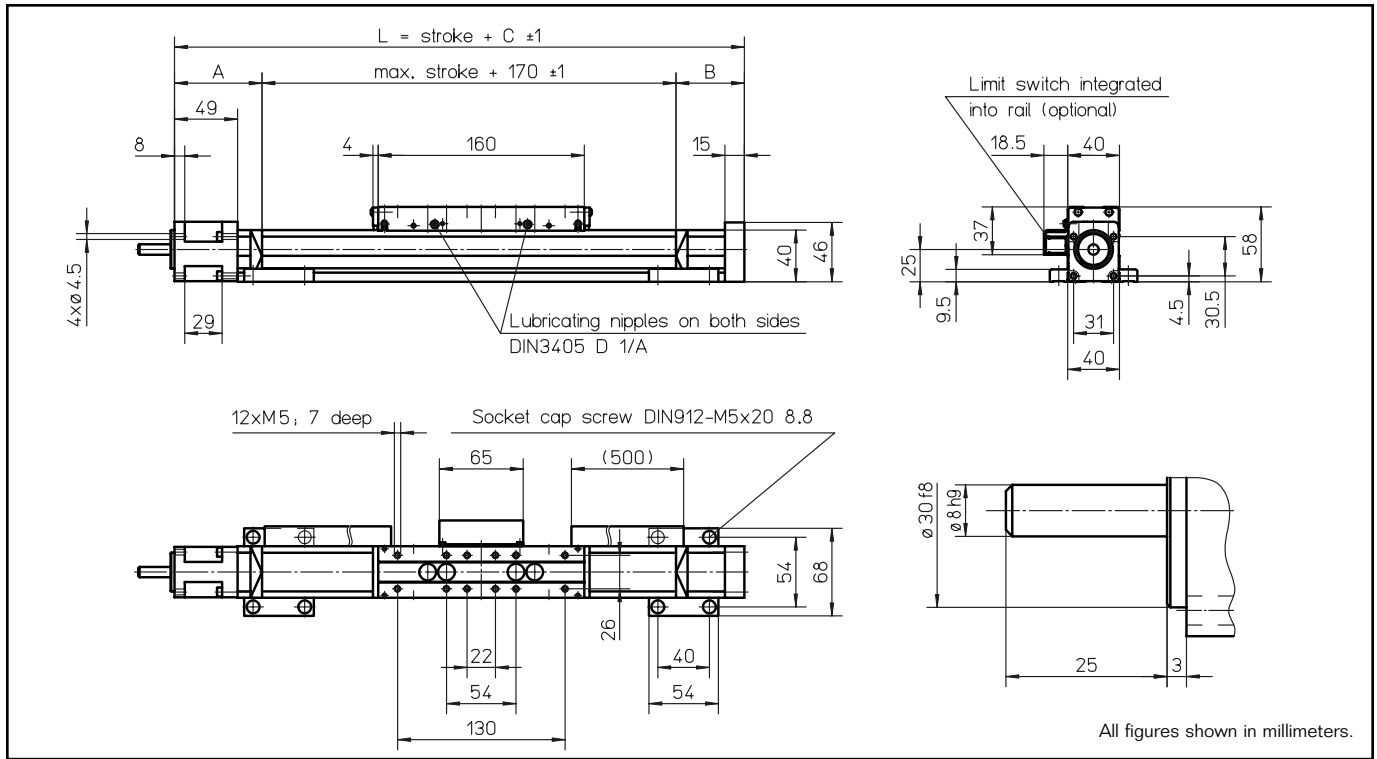


WIESEL™ POWERLine® WM40

with ball screw drive and integrated linear guide



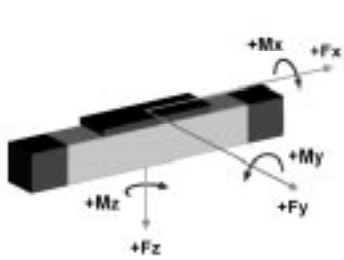
Technical data

Linear speed:max. 0.25 m/s
 Repeatability:± 0.01 mm
 Acceleration:max. 20 m/s²
 Rotational speed:max. 3000 rpm
 Drive element:Ball screw
 Diameter:12 mm
 Lead:5 mm
 Stroke length:up to 2000 mm
 Power bridge:160 or 210 mm long
 see page 62
 Geometrical moment of inertia:ly 10.8 x 10⁴ mm⁴
 lz 13.4 x 10⁴ mm⁴

Weights

Basic unit with zero stroke:1.5 kg
 100 mm stroke:0.3 kg
 Power bridge with carriage:0.36 kg
 Provided:4 pieces KAO mounting
 brackets

Loads and load moments



Load	dynam. [N]
Fx drive	1000
Fy	450
+/- Fz	600
Load moment	dynam. [Nm]
Mx	10
My ¹⁾	30
Mz ¹⁾	30

1) Increase of the admissible values by the use of a long power bridge or additional free-sliding power bridge (pages 62 and 63).

Idle torques [Nm]

Rotational speed [rpm]	Lead P [mm]
150	0.3
1500	0.5
3000	0.8

Additional lengths as a function of the stroke

Stroke length [mm]	A [mm]	B [mm]	Additional length [mm]
0-500	65	35	270
501-1100	65	45	280
1101-2000	70	60	300

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

Geometrical moment of inertia:

1 m⁴=10¹² mm⁴=2.4025 x 10⁶ in⁴

Mass moment of inertia:

1 kg · m²=10⁴ kg · cm²=0.738 lb · ft · s²

Mass:

1 kg=2.2 lb

Rotational speed of the screw as a function of the total length

