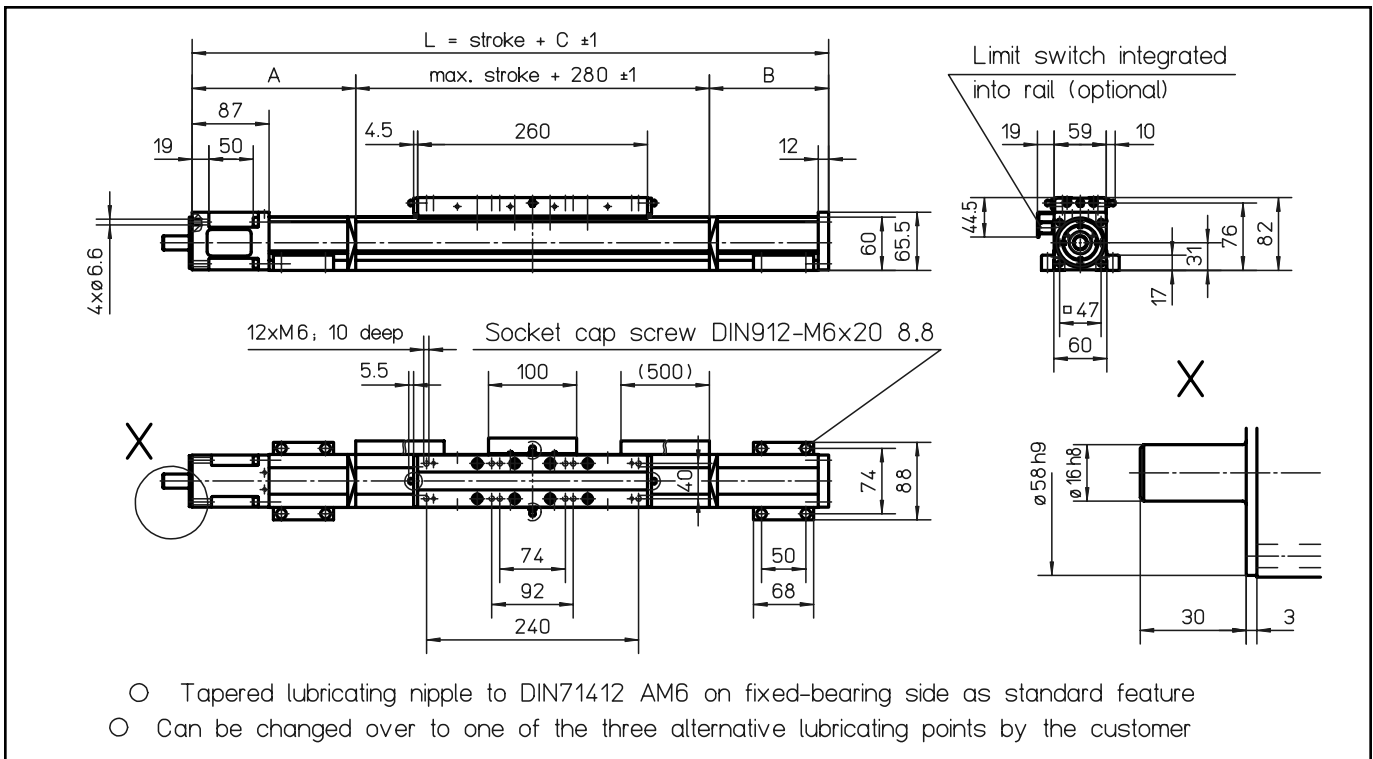


WIESEL™ POWERLine® WM60

with ball screw drive and integrated linear ball-bearing guide



All figures shown in millimeters.

Technical data

Linear speed:max. 2.5 m/s
 Repeatability:± 0.01 mm
 Acceleration:max. 20 m/s²
 Rotational speed:max. 3000 rpm
 Drive element:Pretensioned ball screw drive
 Diameter:20 mm
 Lead:5, 20, 50 mm
 Stroke length:up to 11.000 mm
 with lead 50 mm
 max. 5000 mm

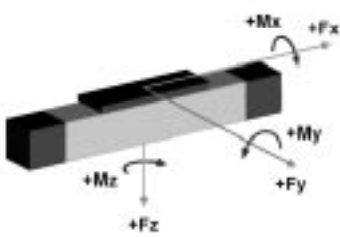
Power bridge:260 or 450 mm long
 see page 62

Geometrical moment of inertia:ly 5.8 x 10⁵ mm⁴
 lz 5.9 x 10⁵ mm⁴

Weights

Basic unit with zero stroke:6.16 kg
 100 mm stroke:0.64 kg
 Power bridge with carriage:1.99 kg
 Provided:4 pieces KAO mounting
 brackets

Loads and load moments



| Load | dynam. [N] |
|------------------|-------------|
| Fx drive | 4000 |
| Fy | 2000 |
| ± Fz | 2000 |
| Load moment | dynam. [Nm] |
| Mx | 100 |
| My ¹⁾ | 200 |
| Mz ¹⁾ | 200 |

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

Unit conversions

Length:
 1 m=1000 mm=39.37 inches
 1 inch=25.4 mm

Geometrical moment of inertia:
 1 m⁴=10¹² mm⁴=2.4025 x 10⁹ in⁴

Mass moment of inertia:
 1 kg · m²=10⁷ kg · cm²=0.738 lb · ft · s²

Mass:
 1 kg=2.2 lb

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

Idle torques [Nm]

| Rotational speed [rpm] | Lead P [mm] | | |
|------------------------|-------------|-----|-----|
| | 5 | 20 | 50 |
| 150 | 0.6 | 1.1 | 1.5 |
| 1500 | 1.1 | 1.8 | 2.3 |
| 3000 | 1.6 | 2.0 | 2.5 |

Additional lengths as a function of the stroke

| Stroke length [mm] | A [mm] | B [mm] | Additional length C [mm] |
|--------------------|--------|--------|--------------------------|
| 0-695 | 115 | 65 | 460 |
| 696-1335 | 165 | 115 | 560 |
| 1336-2075 | 185 | 135 | 600 |
| 2076-2780 | 210 | 160 | 650 |
| 2781-3545 | 230 | 180 | 690 |
| 3546-4285 | 250 | 200 | 730 |
| 4286-5015 | 275 | 225 | 780 |