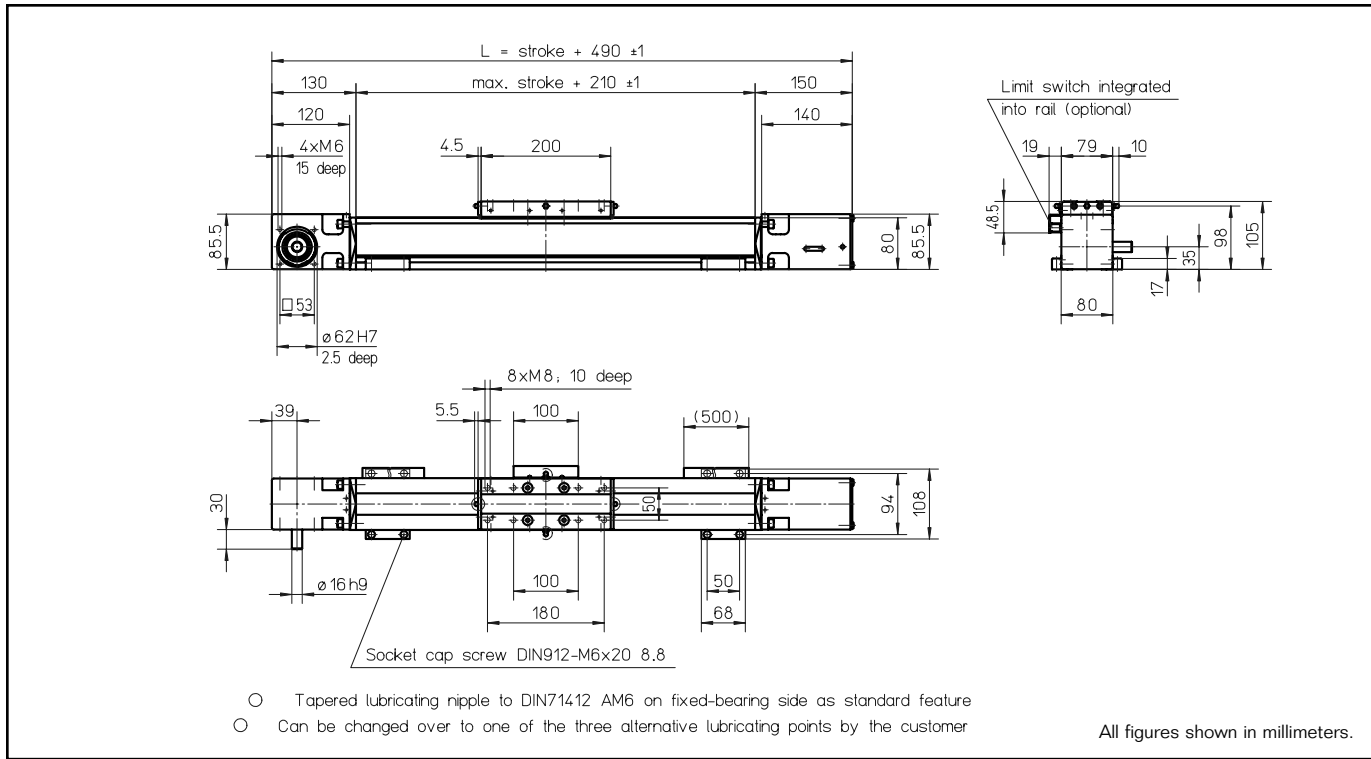


WIESEL™ POWERLine® WM80 – 370 ZRT

with toothed belt drive and integrated linear short ball-bearing guide system



Technical data

Linear speed:max. 2.5 m/s
 Repeatability:± 0.05 mm
 Acceleration:max. 20 m/s²
 Drive element:Toothed belt 25AT10
 Diameter:54.11 mm
 Stroke per revolution:170 mm
 Stroke length:5500 mm
 Length of power bridge:200 mm
 Geometrical moment of inertia: ..ly 1.89 x 10⁶ mm⁴
 lz 1.97 x 10⁶ mm⁴

Weights

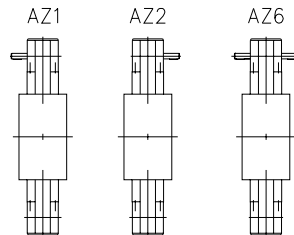
Basic unit with zero stroke:9.20 kg
 100 mm stroke:0.80 kg
 Power bridge with carriage:2.10 kg
 Provided:4 pieces KAO mounting brackets

Idle torques [Nm]

Rotational speed [rpm]	M _{idle} [Nm]
150	4.0
450	5.4
885	6.2

Execution of drive shafts

(Detailed description see pg 100)
 Other executions on request.



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

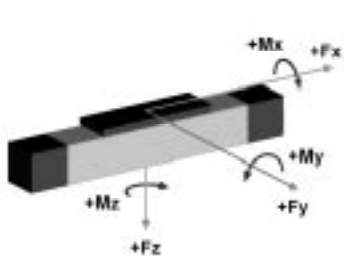
Mass moment of inertia:

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

Mass:

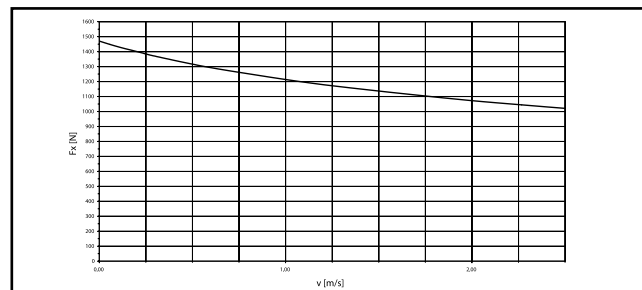
1 kg=2.2 lb

Loads and load moments



Load	dynam. [N]
Fx drive ¹⁾	1470
Fy	2100
+/- Fz	2100
Load moment	dynam. [Nm]
Mx	68
My ²⁾	135
Mz ²⁾	135

F_x over the linear speed



1) Depending on the speed, see respective chart.

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