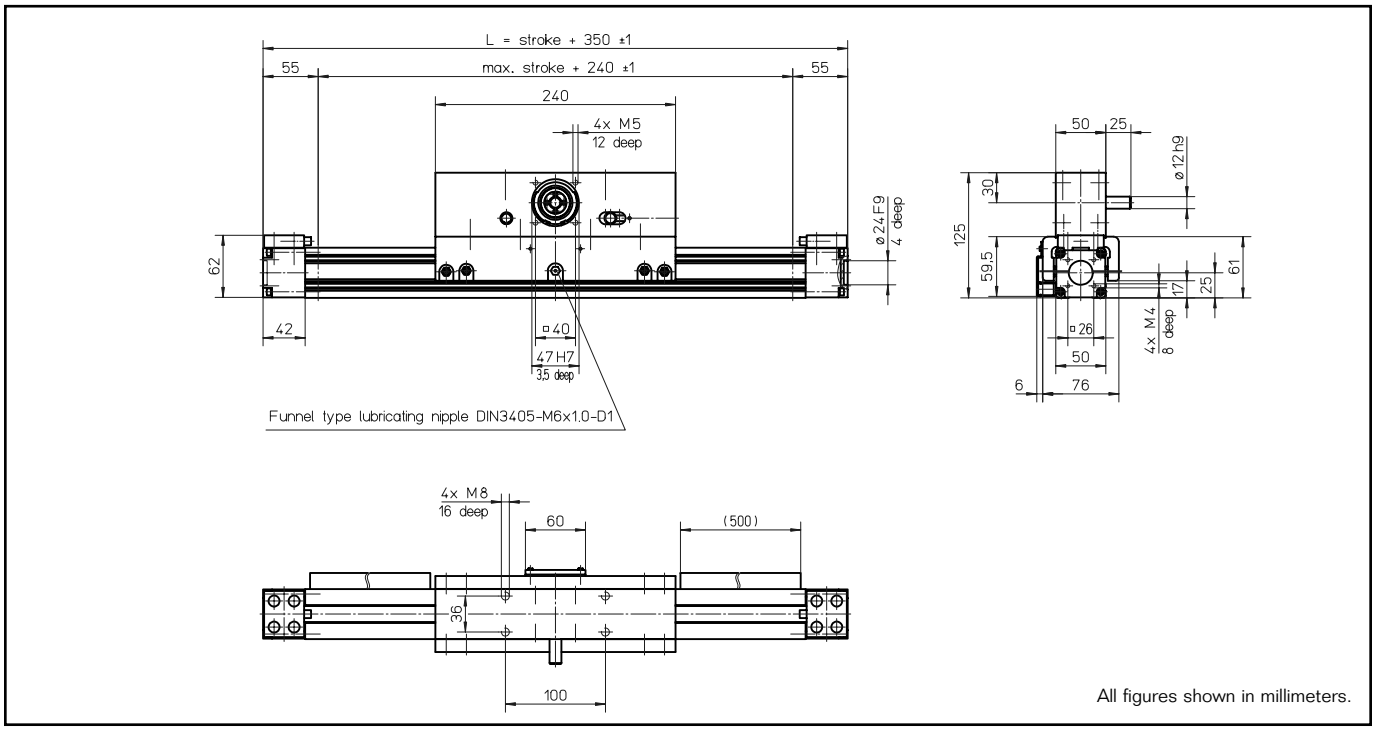
WIESEL™ *SPEED*Line® WHZ50

with roller guideway and AT toothed belt



Note: Mounted wipers on request. The use of a long power bridge increases the total length.

Technical data

Linear speed: . . . . . .max. 6.5 m/s
Repeatability: . . . . . .± 0.05 mm
Acceleration: . . . . . .max. 40 m/s²
Drive element: . . . . . .Toothed belt 16ATL5
Diameter: . . . . . .38.20 mm
Stroke per revolution: . . . . . .120 mm
Stroke length: . . . . . .up to 1500 mm
Length of power bridge: . . . . . .240 or 400 mm
see page 28
Geometrical moment of inertia: . . .ly 3.30 x 10^5 mm⁴
lz 2.65 x 10^5 mm⁴

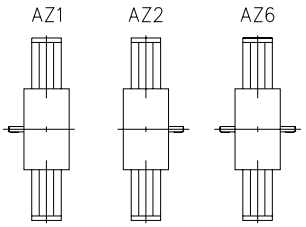
Weights
Basic unit with zero stroke: . . . . .4.50 kg
100 mm stroke: . . . . . .0.42 kg
Power bridge with carriage: . . . . .2.90 kg

Idle torques [Nm]

Rotational speed [rpm]	M_{idle} [Nm]
150	1.7
1500	2.4
3250	3.8

Execution of drive shafts

(Detailed description see pg 99)
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

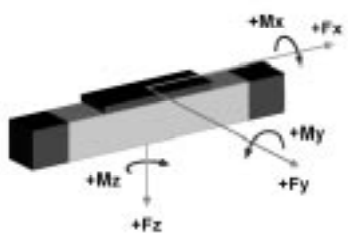
Moment of Force:
1 Nm=0.738 lb • ft=8.85 lb • inches
1 lb • ft=1.36 Nm

Geometrical moment of inertia:
1 m⁴=10^{12} mm⁴=2.4025 x 10^6 in⁴

Mass moment of inertia:
1 kg • m²=10^4 kg • cm²=0.738 lb • ft • s²

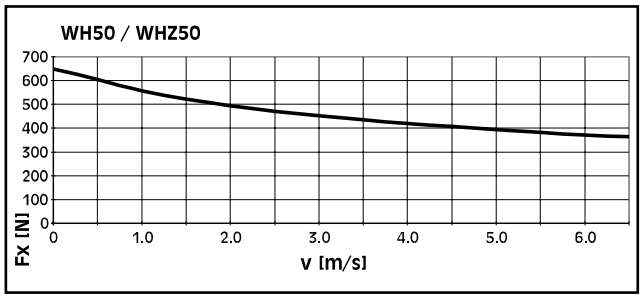
Mass:
1 kg=2.2 lb

Loads and load moments



Load	dynam. [N]
Fx drive[1)]	max. 670
Fy	415
±Fz	730
Load moment	**dynam. [Nm]**
Mx	16
My[2)]	87
Mz[2)]	50

Fx depending on 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 28 and 29).