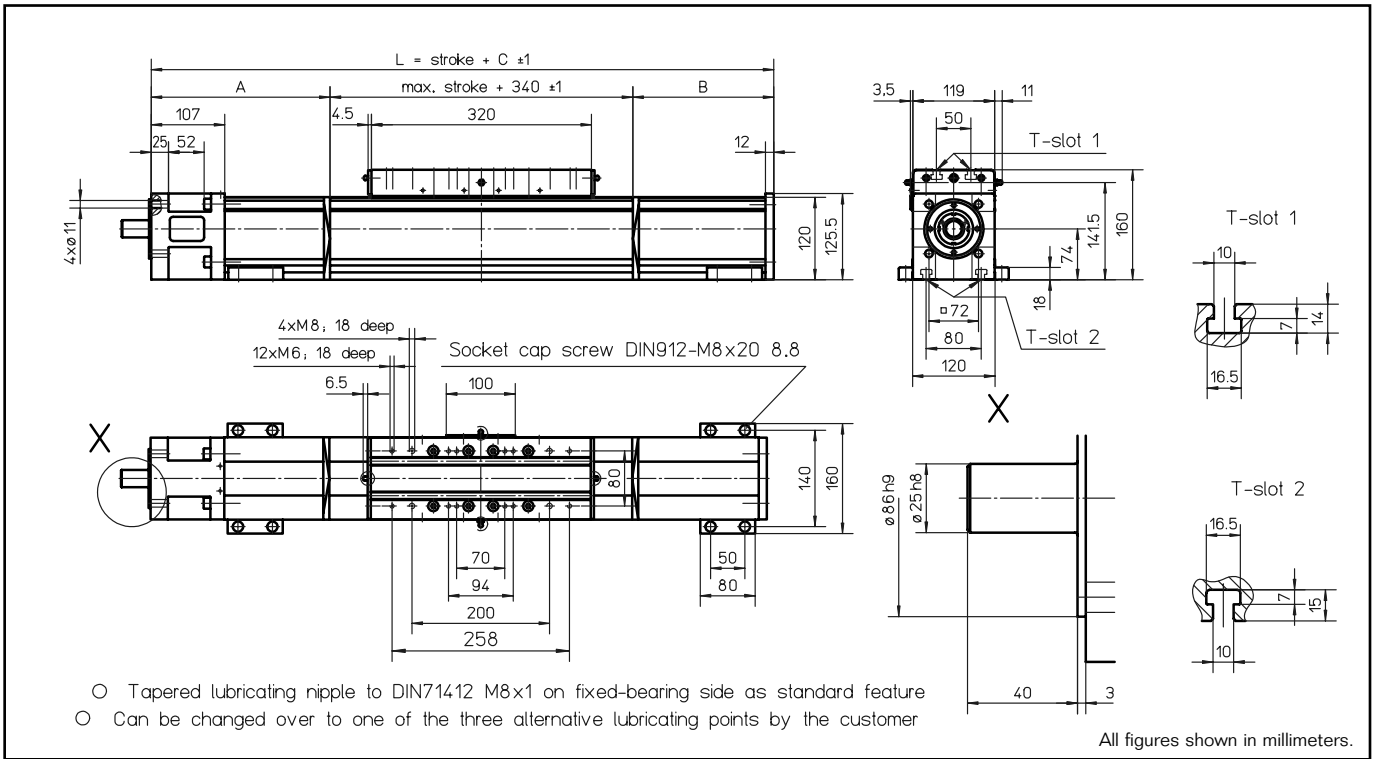


WIESEL™ POWERLine® WM120

with ball screw drive and integrated linear ball-bearing guide



Technical data

Linear speed:max. 2.0 m/s
 Repeatability:± 0.01 mm
 Acceleration:max. 20 m/s²
 Rotational speed:max. 3000 rpm
 Drive element:Pretensioned ball screw drive
 Diameter:32 mm
 Lead:5, 10, 20, 40 mm
 Stroke length:up to 11.000 mm
 with lead 40 mm
 max. 5000 mm

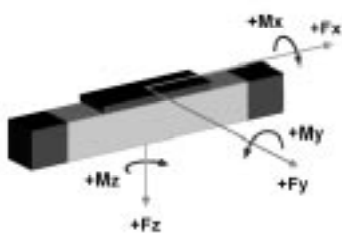
Power bridge:320 or 500 mm long
 see page 62

Geometrical moment of inertia:ly 7.7 x 10⁶ mm⁴
 lz 9.4 x 10⁶ mm⁴

Weights

Basic unit with zero stroke:25.91 kg
 100 mm stroke:1.93 kg
 Power bridge with carriage:9.25 kg
 Provided:4 pieces KAO mounting
 brackets

Loads and load moments



Load	dynam. [N]
Fx drive	12000
Fx drive 3240	8000
Fy	6000
± Fz	6000
Load moment	dynam. [Nm]
Mx	500
My	600
Mz	600

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=10⁷ kg · cm²=0.738 lb · ft · s²

Mass:
 1 kg=2.2 lb

Idle torques [Nm]

Rotational speed [rpm]	Lead P [mm]			
	5	10	20	40
150	1.2	2.1	1.8	2.4
1500	2.3	3.0	2.8	3.6
3000	2.8	3.8	3.5	4.0

Additional lengths as a function of the stroke

Stroke length [mm]	A [mm]	B [mm]	Additional length C [mm]
0-890	155	100	595
891-1695	225	170	735
1696-2625	260	205	805
2626-3555	295	240	875
3556-4485	330	275	945
4486-5000	365	310	1015