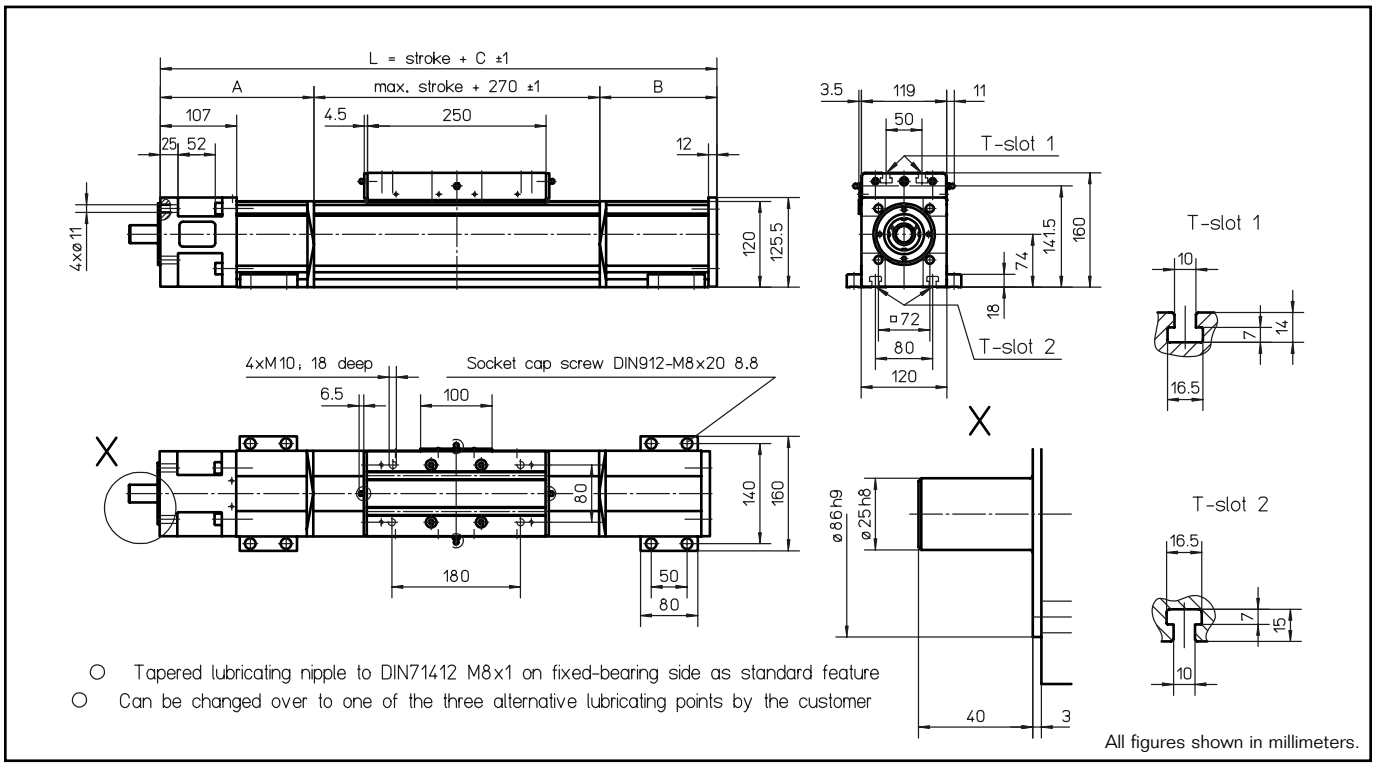
WIESEL™ *DYNA*Line® WV120

with ball screw drive



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: . . . . . .250 mm long
Geometrical moment of inertia: . . .ly 7.7 x 10^6 mm⁴
Iz 9.4 x 10^6 mm⁴

Weights
Basic unit with zero stroke: . . . . .18.1 kg
100 mm stroke: . . . . . .1.94 kg
Power bridge with carriage: . . . . .4.75 kg
Provided: . . . . . .4 pieces KAO mounting brackets

Feed force

Maximum feed force Fx:
12000 N
8000 N with ball screw drive 3240

Note: All loads and load moments must be absorbed by external guides

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 $m^4=10^{12}$ $mm^4=2.4025 \times 10^6$ in^4

Mass moment of inertia:
1 kg • $m^2=10^4$ kg • $cm^2=0.738$ lb • ft • s^2

Mass:
1 kg=2.2 lb

Idle torques [Nm]

Rotational speed [rpm]	Lead P [mm] 5	10	20	40
150	1.0	1.0	1.1	1.2
1500	2.1	2.2	2.3	2.5
3000	2.4	2.6	2.7	3.0

Additional lengths as a function of the stroke

Stroke length [mm]	A [mm]	B [mm]	Additional length C [mm]
0–940	145	50	465
941-1860	180	120	570
1861-2790	215	155	640
2791-3720	250	190	710
3721-4650	285	225	780
4651-5000	320	255	845

Note: For tube lengths of 5400 mm and over, the tubular profile is composed of two parts. The joint must be adequately supported. It may be possible to position the joint according to customer's wishes. For screw leads > 20 mm, excess lengths cannot be implemented.