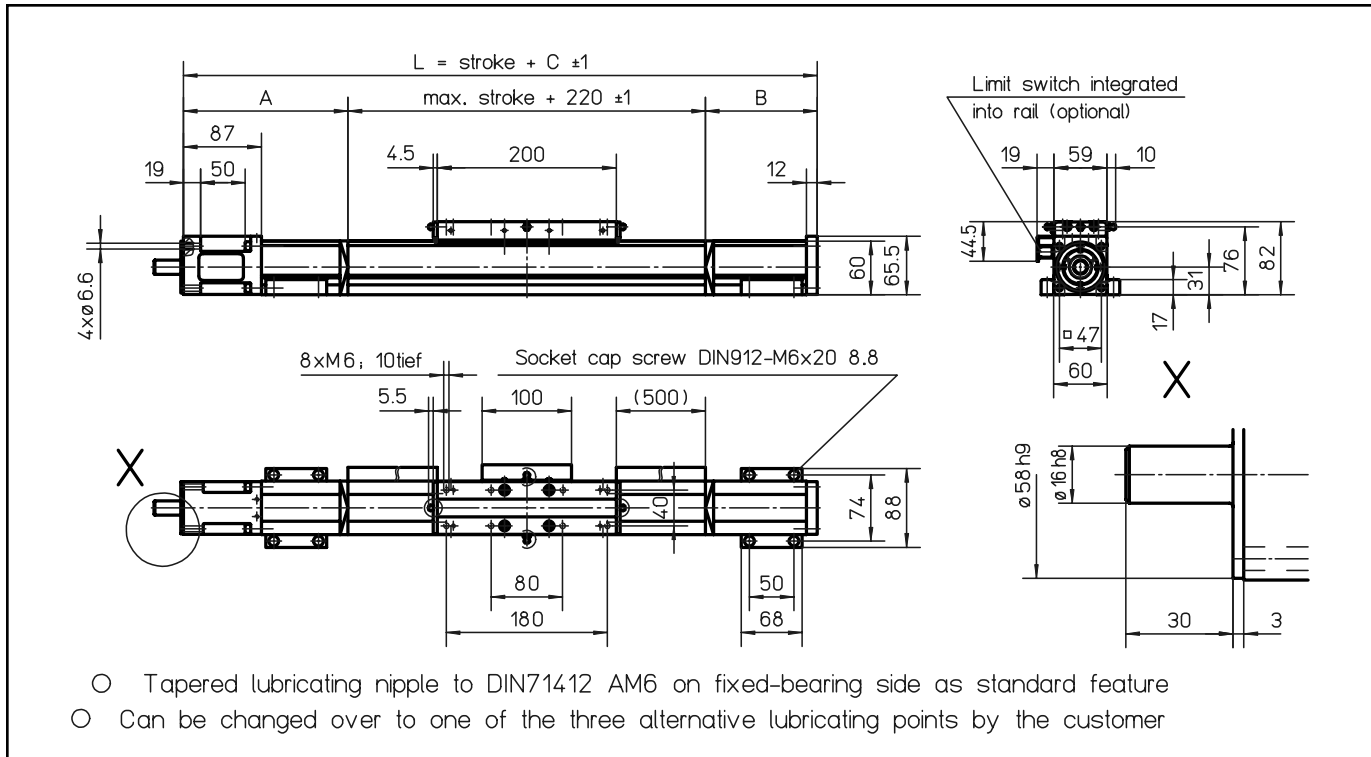


# WIESEL™ POWERLine® WM60 – 370

with ball screw drive and integrated linear ball-bearing guide



All figures shown in millimeters.

## Technical data

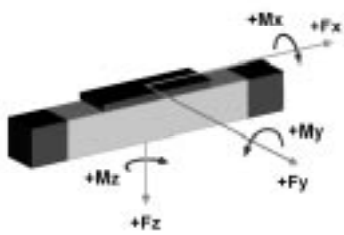
Linear speed: .....max. 2.5 m/s  
 Repeatability: .....± 0.01 mm  
 Acceleration: .....max. 10 m/s<sup>2</sup>  
 Rotational speed: .....max. 3000 rpm  
 Drive element: .....Pretensioned ball screw drive  
 with single nut, no backlash  
 Diameter: .....20 mm  
 Lead: .....5, 20, 50 mm  
 Stroke length: .....up to 5000 mm  
 Power bridge: .....200 mm long  
 Geometrical moment of inertia: ..ly 5.8 x 10<sup>5</sup> mm<sup>4</sup>  
 lz 5.9 x 10<sup>5</sup> mm<sup>4</sup>

## Weights

Basic unit with zero stroke: .....3.8 kg  
 100 mm stroke: .....0.65 kg  
 Power bridge with carriage: .....1.00 kg  
 Provided: .....4 pieces KAO mounting  
 brackets

## Loads and load moments

Load	dynam. [N]
F <sub>x</sub> drive	2800
F <sub>y</sub>	1400
± F <sub>z</sub>	1400
Load moment	dynam. [Nm]
M <sub>x</sub>	50
M <sub>y</sub>	100
M <sub>z</sub>	100



## 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<sup>4</sup>=10<sup>12</sup> mm<sup>4</sup>=2.4025 x 10<sup>6</sup> in<sup>4</sup>

**Mass moment of inertia:**  
 1 kg · m<sup>2</sup>=10<sup>4</sup> kg · cm<sup>2</sup>=0.738 lb · ft · s<sup>2</sup>

**Mass:**  
 1 kg=2.2 lb

## Idle torques [Nm]

Rotational speed [rpm]	Lead P [mm]		
	5	20	50
150	0.5	0.9	1.2
1500	0.9	1.4	1.8
3000	1.3	1.6	2

## Additional lengths as a function of the stroke

Stroke length [mm]	A [mm]	B [mm]	Additional length C [mm]
0-580	95	20	335
581-1140	110	60	390
1141-1805	130	80	430
1806-2460	155	105	480
2461-3125	175	125	520
3126-3780	200	150	570
3781-4445	220	170	610
4446-5000	240	190	650