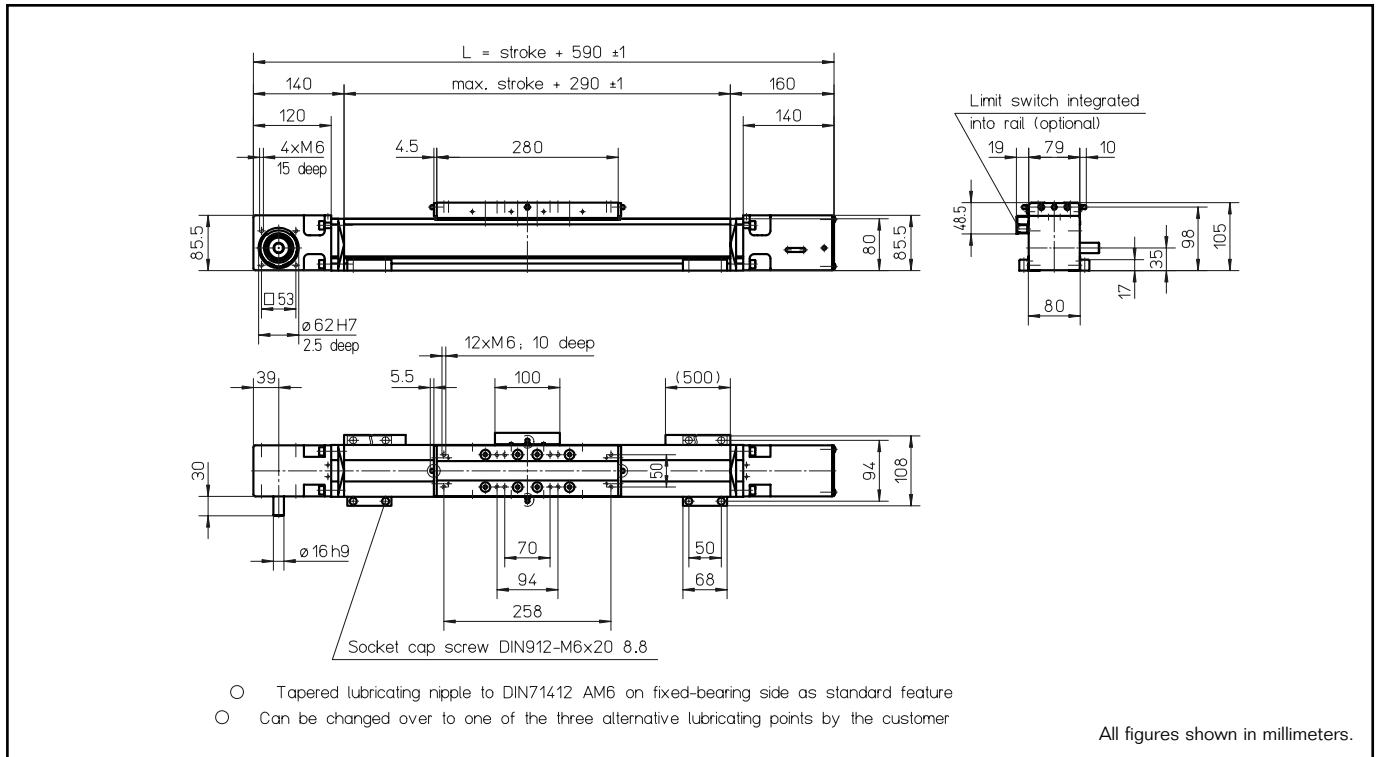


# WIESEL™ POWERLine® WM80 ZRT

with toothed belt drive and integrated linear ball-bearing guide



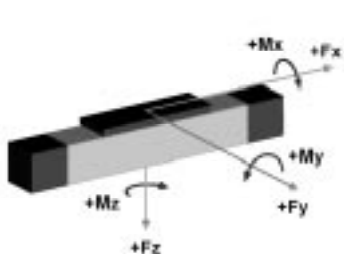
## Technical data

Linear speed: .....max. 2.5 m/s  
 Repeatability: .....± 0.05 mm  
 Acceleration: .....max. 20 m/s<sup>2</sup>  
 Drive element: .....Toothed belt 25AT10  
 Diameter: .....54.11 mm  
 Stroke per revolution: .....170 mm  
 Stroke length: .....5400 mm  
 Length of power bridge: .....280 or 450 mm  
 Geometrical moment of inertia: .....ly 1.89 x 10<sup>6</sup> mm<sup>4</sup>  
 lz 1.97 x 10<sup>6</sup> mm<sup>4</sup>

## Weights

Basic unit with zero stroke: .....11.20 kg  
 100 mm stroke: .....0.80 kg  
 Power bridge with carriage: .....3.40 kg  
 Provided: .....4 pieces KAO mounting brackets

## Loads and load moments



Load	dynam. [N]
Fx drive <sup>1)</sup>	1470
Fy	3000
+/- Fz	3000
Load moment	dynam. [Nm]
Mx	150
My <sup>2)</sup>	300
Mz <sup>2)</sup>	300

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).

## Idle torques [Nm]

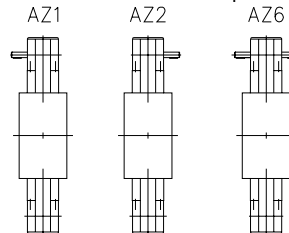
Rotational speed [rpm]	M <sub>idle</sub> [Nm]
150	*)
450	*)
885	*)

\*) values in determination

## 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 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

## F<sub>x</sub> over the linear speed

