

PS 30

Linear Measuring System for Miniature Translation Stage MS 30



Miniature Translation Stage MS 30, 8 mm travel with PS 30

Specifications

- measuring lengths up to 30 mm
- resolution better than 50 nm
- open- or closed loop-application
- xy combinations
- ultra high vacuum preparation optionally
- customized designs possible
- driven by USB-Controller CU 30 (CU.030.xx0x)

Technical Data

Measuring length 8, 18 or 30 mm
 Mass about 20 g

Resolution

Standard 1 µm
 Premium 0.5 µm
 High End 0.1 µm
 Excellence 0.05 µm
 (other resolutions on request)

Scale tape

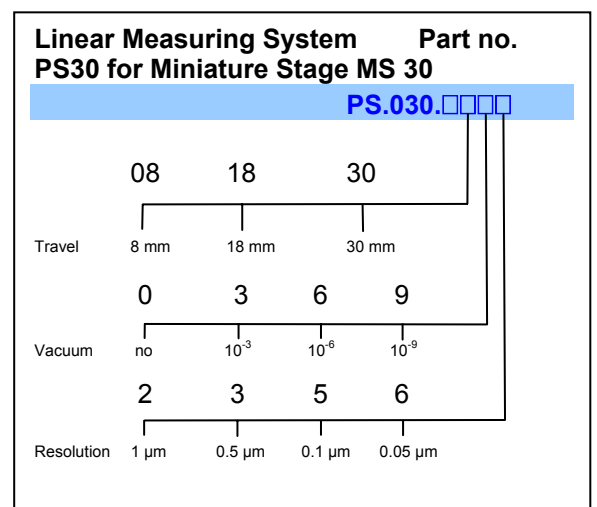
Material Steel
 Grating period 20 µm
 Length of scale measuring length + 22 mm at the center of the scale
 Reference mark
 Linear expansion coefficient $23.8 \times 10^{-6} \text{ grd}^{-1}$
 Accuracy class $\pm 1 \text{ µm/m}$

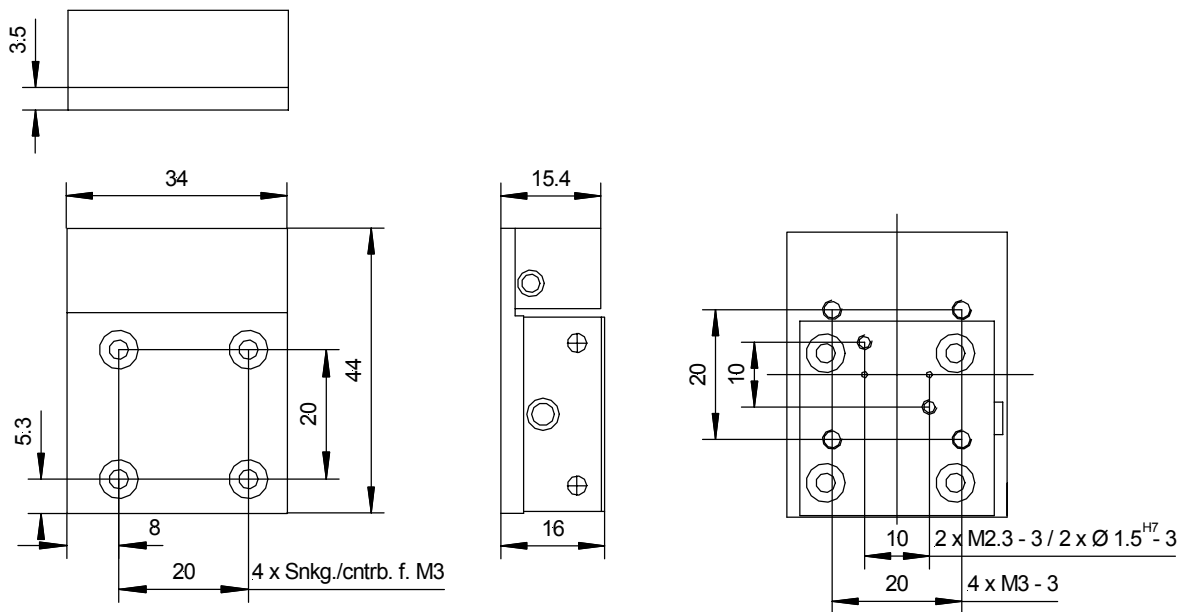
Electrical Data

Scanning frequency max. 400 kHz
 Output signal RS 422 with interpolation
 Supply voltage 5 V DC +/- 10%
 Power consumption 150 mA
 Cable length 1.5 m
 Operating temperature 0° – 55° C
 Vibration (50 – 2,000 Hz) $< 200 \text{ ms}^{-2}$
 Shock (11 ms) $< 400 \text{ ms}^{-2}$

Application Examples

- Micro-/Nano Technology
- Bio Technology
- Microscopy
- Quality Control
- Metrology
- R & D



Linear Measuring System PS 30 with adapter plate for MS 30**XYZ-arrangement with MS 30 (8 mm travel) and PS 30 (8 mm travel and 50 nm resolution)**