



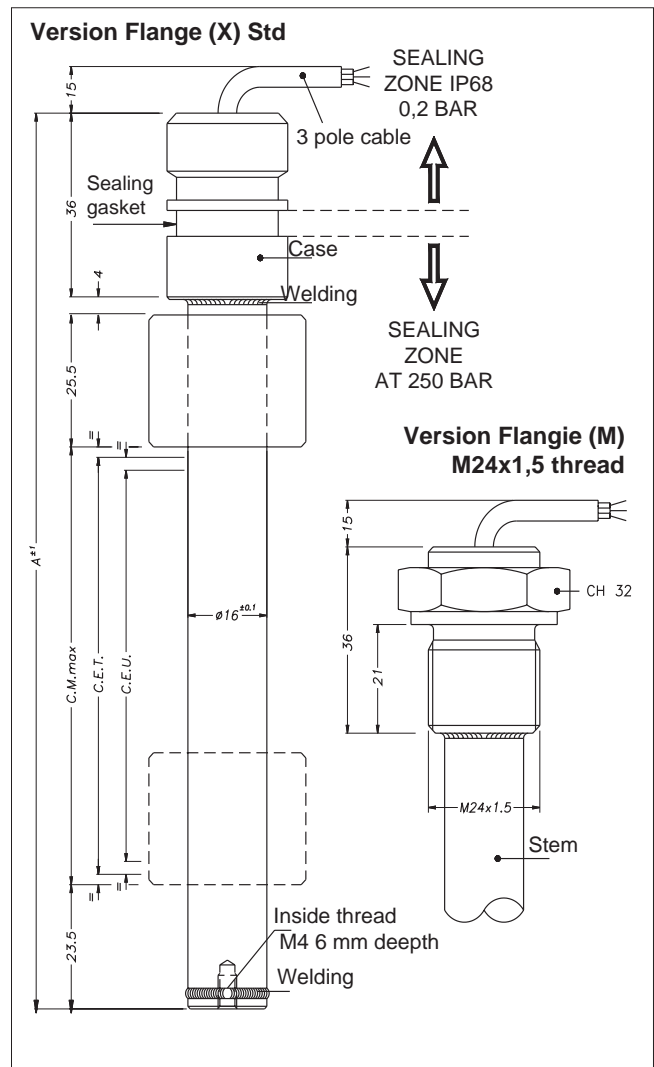
Principals characteristics

- The PMI-12 transducer is designed for use inside oil-pressure cylinders, applications that demand high strength.
- The AISI316 stainless steel body and IP68 protection level permit installation in cylinders with pressures up to 250 bar (400 bar peak).
- Available with internal flanges or external threads to guarantee mechanical compatibility with all principal cylinder types.
- Patented

TECHNICAL DATA

Useful electrical stroke (C.E.U.)	50 at 1000 mm
Independent linearity (within C.E.U.)	see table
Resolution	Infinite
Repeatability	≤ 0.08 mm
Electrical connection	1 mt. 3-pole shielded cable
Displacement speed	standard ≤ 5 m/s
Max. acceleration	≤ 10m/s ² max displacement
Cursor dragging force	≤ 0.5 N
Vibrations	5...2000 Hz, Amax = 0.75 mm amax = 20 g
Shock	50 g, 11 ms
Displacement sensitivity (no hysteresis)	from 0.05 to 0.1 mm
Tracking error	see table
Tolerance on resistance	± 20%
Recommended cursor current	< 0.1 μA
Maximum cursor current in case of bad performances	10 mA
Maximum applicable voltage	see table
Electrical isolation	> 100 MΩ at 500 V = 1 bar, 2 s
Dielectric strength	< 100 μA at 500 V~ 50 Hz, 2 s, 1 bar
Dissipation at 40°C (0 W at 120°C)	see table
Thermal coefficient of resistance	-200...+200 ppm/°C typical
Actual Temperature Coefficient of the output voltage	≤ 5 ppm/°C typical
Working temperature	-30...+100°C
Storage temperature	-50...+120°C
Material for transducer case	Steel AISI 316 / AISI 304

MECHANICAL DIMENSION



Important: All the data reported in the catalogue linearity and temperature coefficients are valid for a sensor utilization as a ratiometric device with a max current across the cursor circuit $I_c \leq 0.1 \mu A$.

