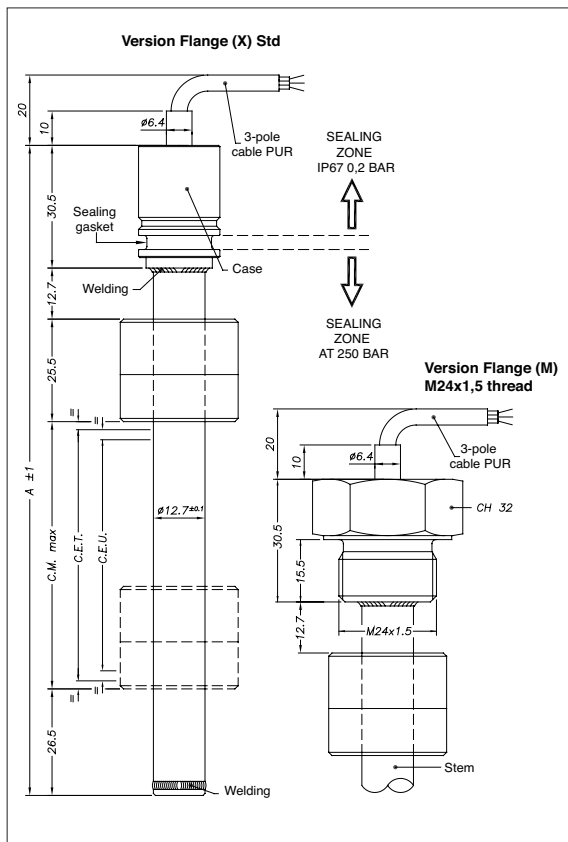




Applicative characteristics

- The PMI-SLE transducer, is the amplified version of the PMI-SL, a product designed for all inside cylinder applications which require a smaller transducer (the rod diameter is only 12,7 mm).
- The PMI Slim offers the same robustness: stainless-steel body, IP67 protection level, and pressure resistance up to 250 bar (400 bar peak)
- Available with flanged or threaded heads, to guarantee mechanical compatibility with all main cylinder types
- Patented solution
- Ideal for applications inside hydraulic cylinders, demanding simple solutions which guarantee measurement repeatability.

MECHANICAL DIMENSION



TECHNICAL DATA

Useful electrical stroke (C.E.U.)

50/100/150/200/250/300/350/400/450/500/550/600/750/800/850/900/950/1000

Independent linearity (within C.E.U.)

± 0,35%

Resolution

Infinite

Repeatability

≤ 0.08 mm

Hysteresis

< 250µm

Life

> 25x10⁶ m strokes, or > 100x10⁶ maneuvers, whichever is less

Displacement sensitivity (no hysteresis))

from 0.05 to 0.1 mm

Tracking error

see table

Displacement speed

standard ≤ 5 m/s

Max. acceleration

≤ 10m/s² max displacement

Cursor dragging force

≤ 0.5 N

Vibrations

5...2000Hz, Amax =0,75 mm amax. = 20 g

Shock

50 g, 11ms.

Power supply voltage

10...30Vdc (see the load diagram)

Max power consumption

35mA

Min load allowed

see the load diagram

Output signal

4...20 mA

- ZERO position (4mA):

between 1% and 3% of the C.E.U.

- SPAN position (20mA):

between 96% and 99% of the C.E.U.

Electrical connection

1 mt. 3-pole shielded cable

Sampling time

≤ 1 ms

Noise on output

< 0.08%FS RMS

Electrical isolation

> 100 MΩ at 45 Vdc = 1 bar, 2 s

Zero and FSO temperature drift

< 0.02%FS/°C

Polarity inversion protection

Yes

Pulse overvoltage protection

Yes

Working temperature

-30...+80°C

Storage temperature

-40...+100°C

Protection level

IP67

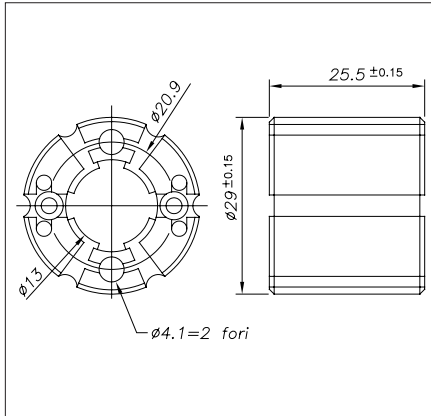
Material for transducer case

Steel AISI 304

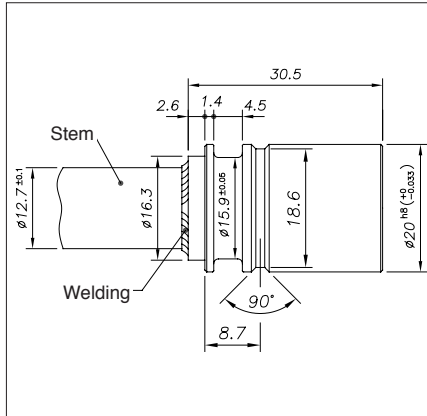
MECHANICAL / ELECTRICAL DATA

| MODEL | | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 750 | 800 | 850 | 900 | 950 | 1000 |
|--|-----|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| Useful electrical stroke (C.E.U.) + 1/-0 | mm | Model | | | | | | | | | | | | | | | | | |
| Theoretical electrical stroke (C.E.T.) ± 1 | mm | C.E.U. + 1 | | | | | | | | | | | | | | | | | |
| Independent linearity (within C.E.U.) | ± % | 0.35 | | | | | | | | | | | | | | | | | |
| Mechanical stroke (C.M.) | mm | C.E.U. + 5 | | | | | | | | | | | | | | | | | |
| Length "A" ±1 | mm | C.E.U. + 100.2 | | | | | | | | | | | | | | | | | |

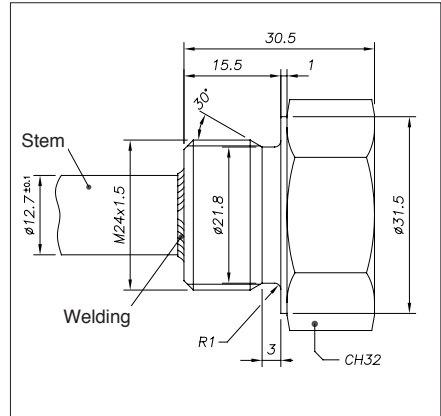
PCUR010 CURSOR



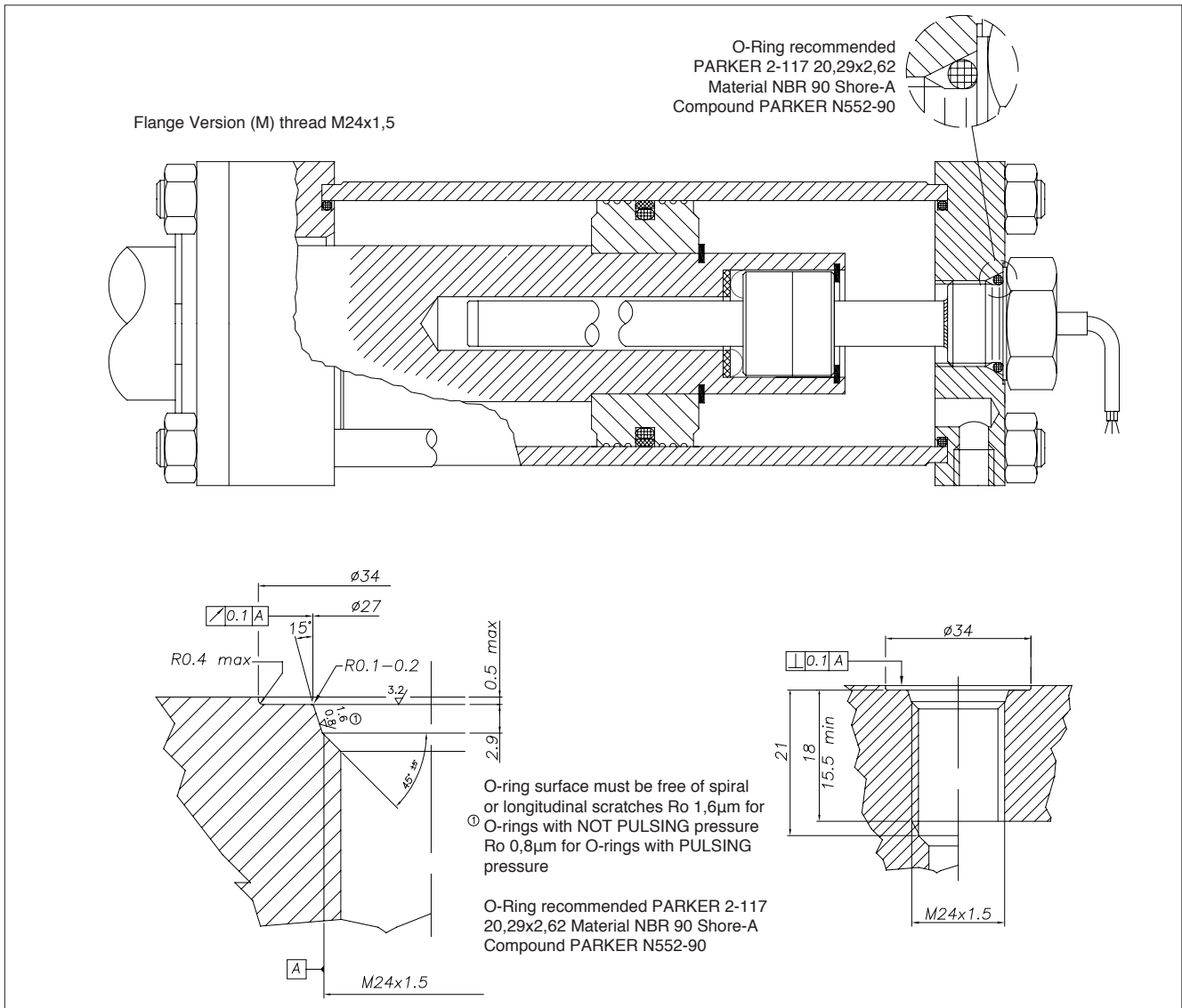
STANDARD FLANGE (X)



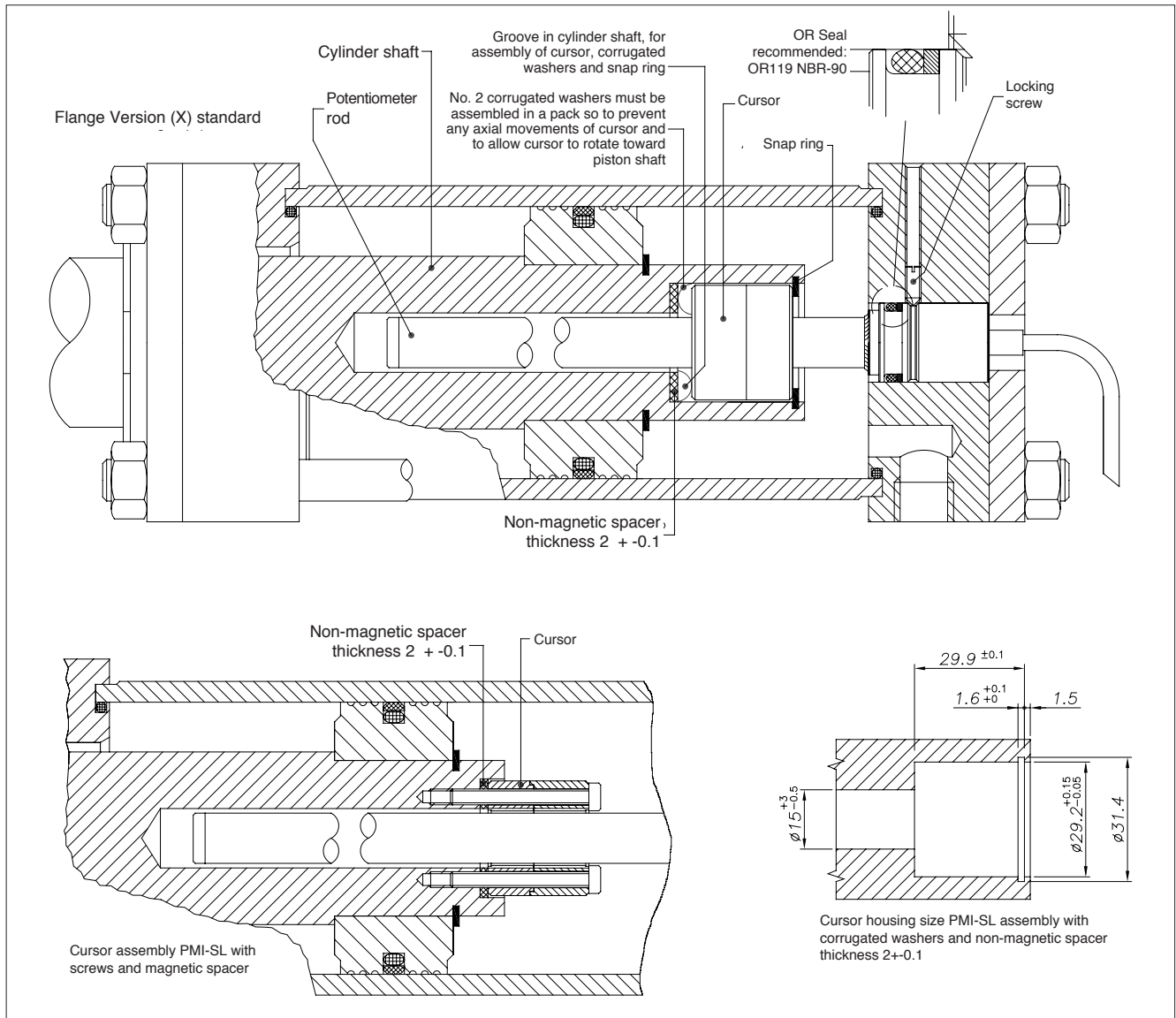
THREADED FLANGE (M)



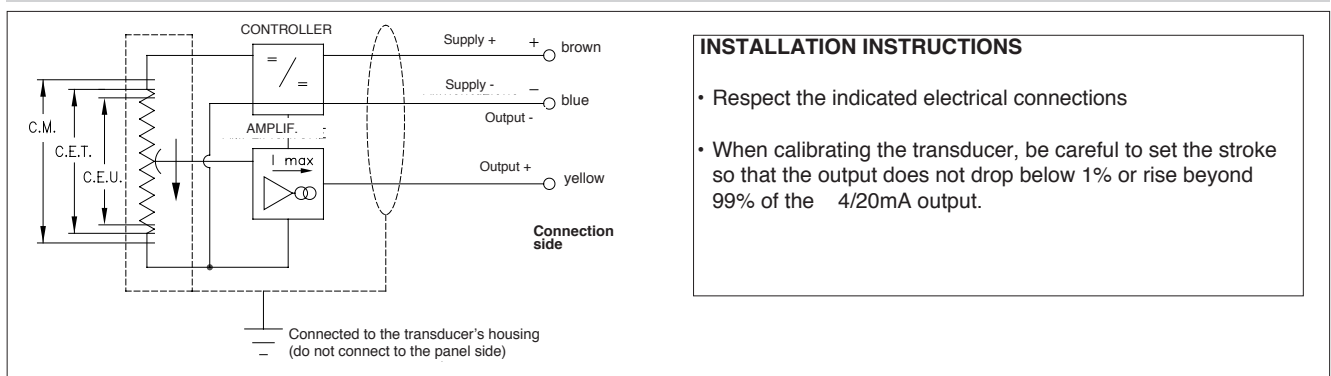
INSTALLATION INSIDE THE CYLINDER



INSTALLATION INSIDE THE CYLINDER



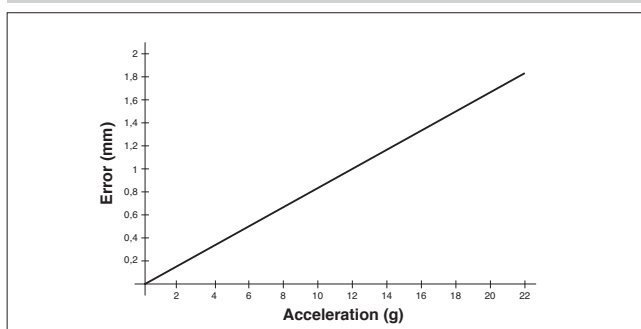
ELECTRICAL CONNECTIONS



INSTALLATION INSTRUCTIONS

- Respect the indicated electrical connections
- When calibrating the transducer, be careful to set the stroke so that the output does not drop below 1% or rise beyond 99% of the 4/20mA output.

TRACKING ERROR



LOAD DIAGRAM

