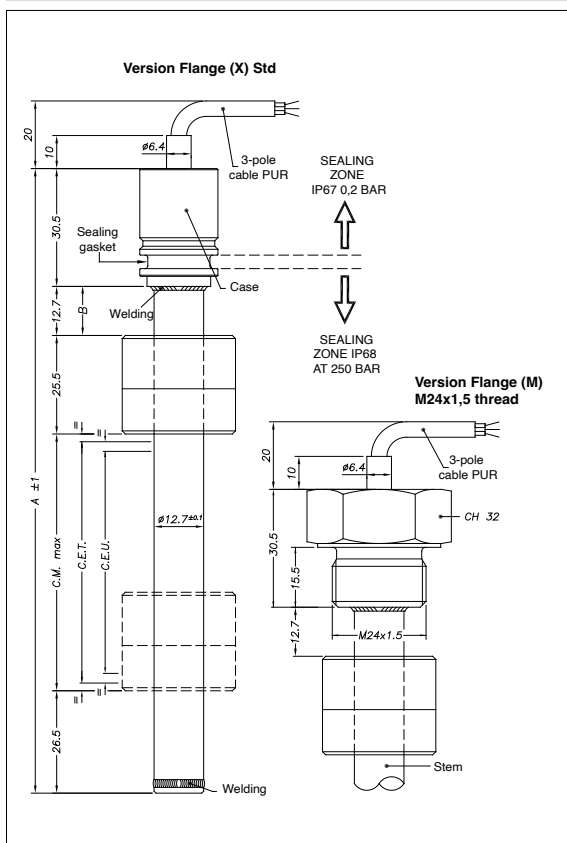




Applicative characteristics

- 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.)

from 50 to 1000 mm
(for intermediate strokes see table "Electrical / Mechanical Data")

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

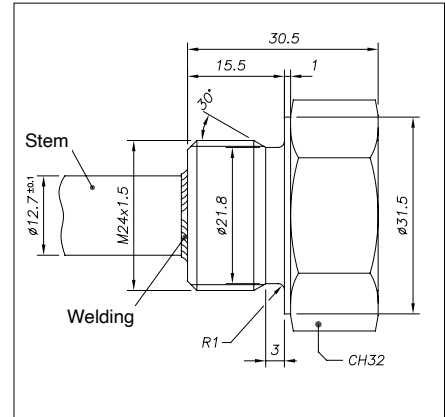
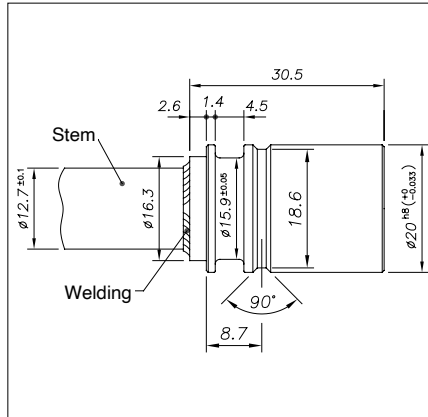
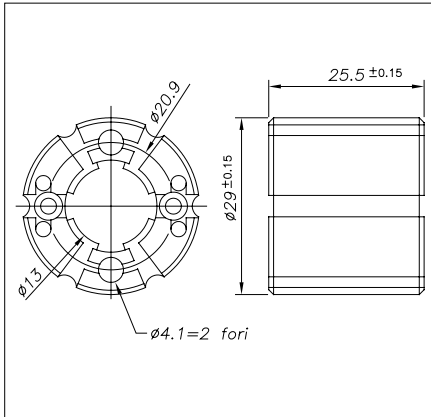
MECHANICAL / ELECTRICAL DATA

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																	
Lenght "A" ±1	mm	C.E.U. + 100.2																	

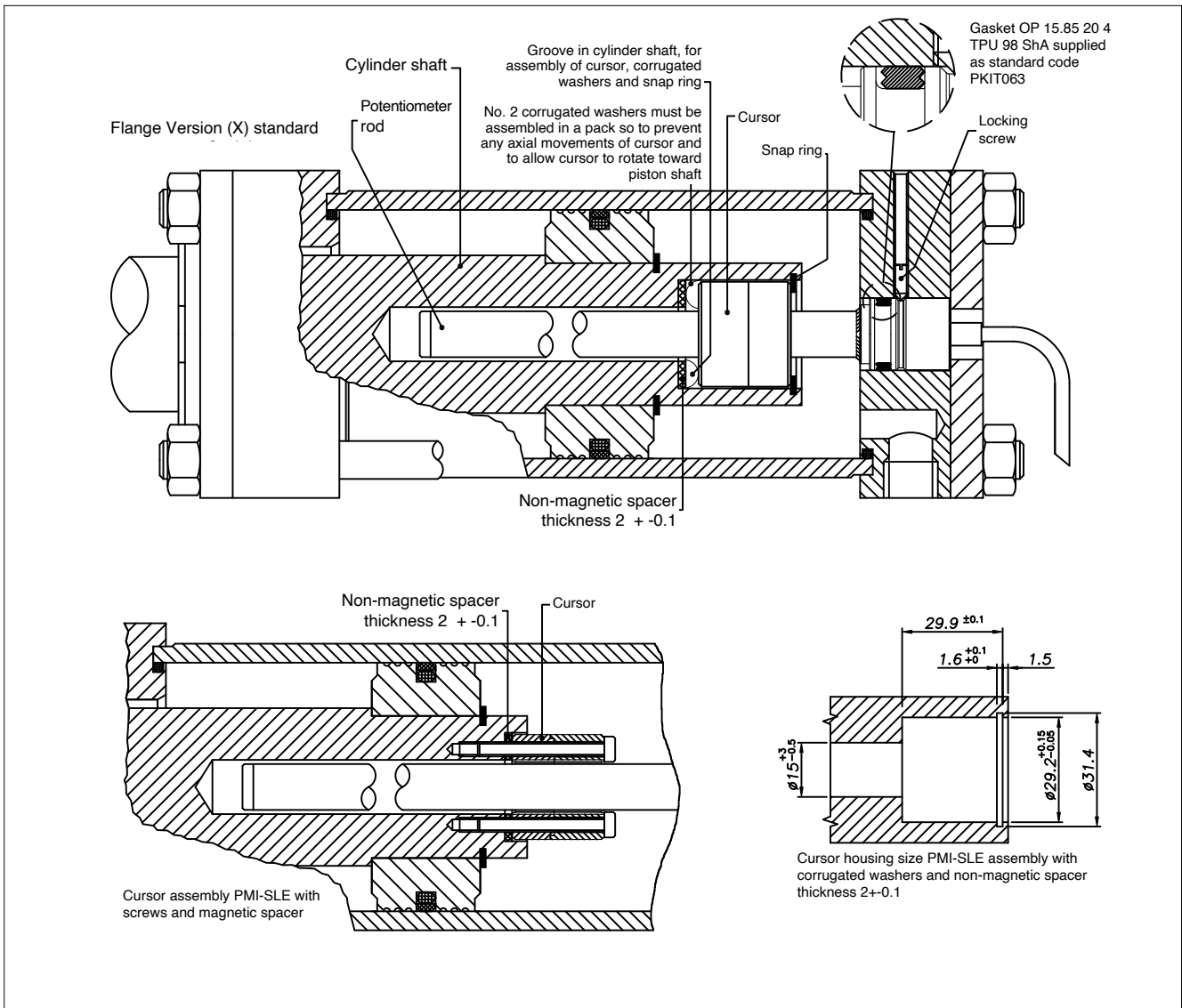
PCUR010 CURSOR

STANDARD FLANGE (X)

THREADED FLANGE (M)



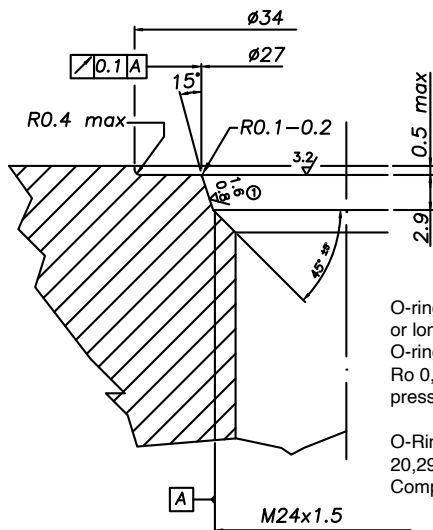
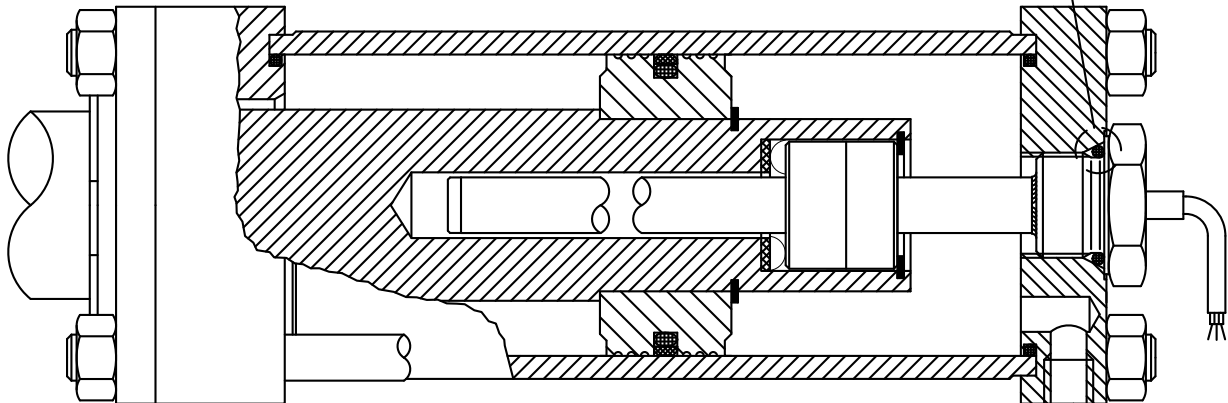
INSTALLATION INSIDE THE CYLINDER



INSTALLATION INSIDE THE CYLINDER

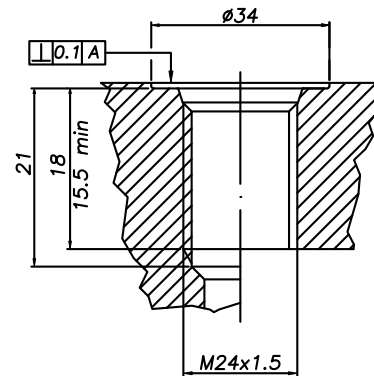
Flange Version (M) thread M24x1,5

O-Ring recommended
PARKER 2-117 20,29x2,62
Material NBR 90 Shore-A
Compound PARKER N552-90

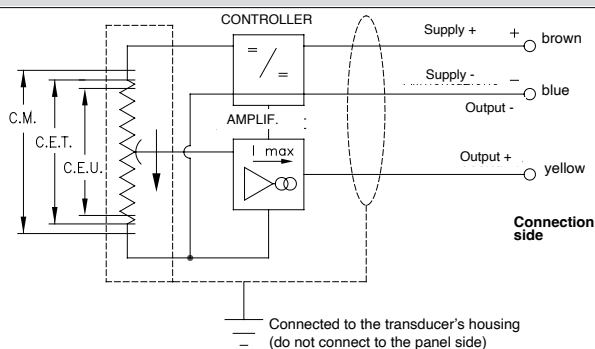


O-ring surface must be free of spiral or longitudinal scratches $R0.16\mu\text{m}$ for O-rings with NOT PULSING pressure
 $R0.08\mu\text{m}$ for O-rings with PULSING pressure

O-Ring recommended PARKER 2-117 20,29x2,62 Material NBR 90 Shore-A Compound PARKER N552-90



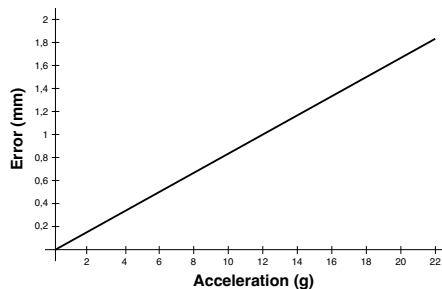
ELECTRICAL CONNECTIONS



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.
- To ensure that the PCUR010 external magnetic cursor fastens to the sensor's internal cursor, insert the external magnetic cursor and position it at least at fastening height "B" (12.7 mm) from the electrical output.

TRACKING ERROR



LOAD DIAGRAM

