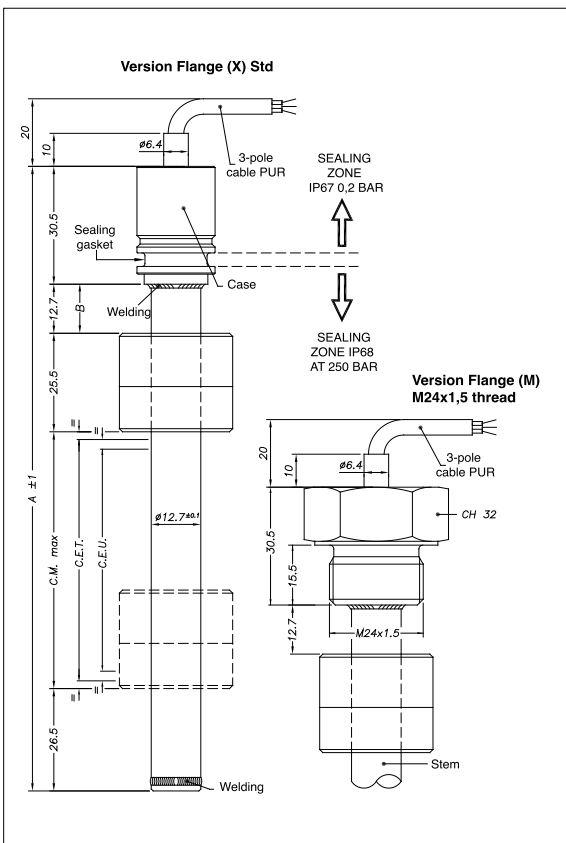




### Applicative characteristics

- 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

> 25x10<sup>6</sup> m strokes, or > 100x10<sup>6</sup> 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/s<sup>2</sup> max displacement

#### Cursor dragging force

≤ 0.5 N

#### Vibrations

5...2000Hz, Amax =0,75 mm a max. = 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

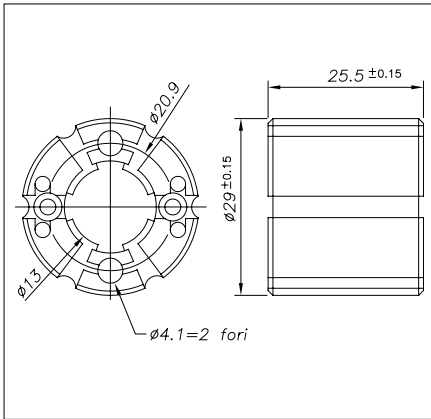
Steel AISI 304

## MECHANICAL / ELECTRICAL DATA

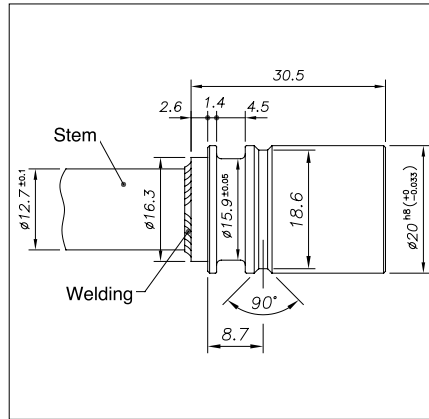
MODEL		50	100	150	200	250	300	350	400	450	500	550	600	750	800	850	900	950	1000	
Useful electrical stroke (C.E.U.) + 1/-0	mm	<b>Model</b>																		
Theoretical electrical stroke (C.E.T.) ± 1	mm	C.E.U. + 1																		
Independent linearity (within C.E.U.)	± %	0.35																		
Mechanical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



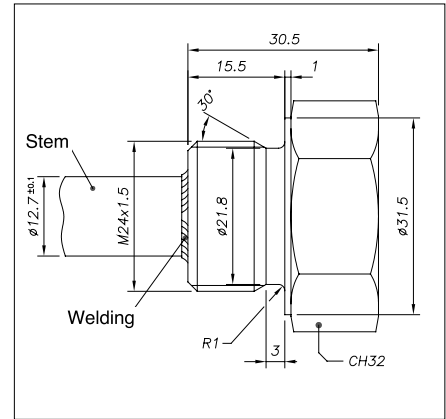
### PCUR010 CURSOR



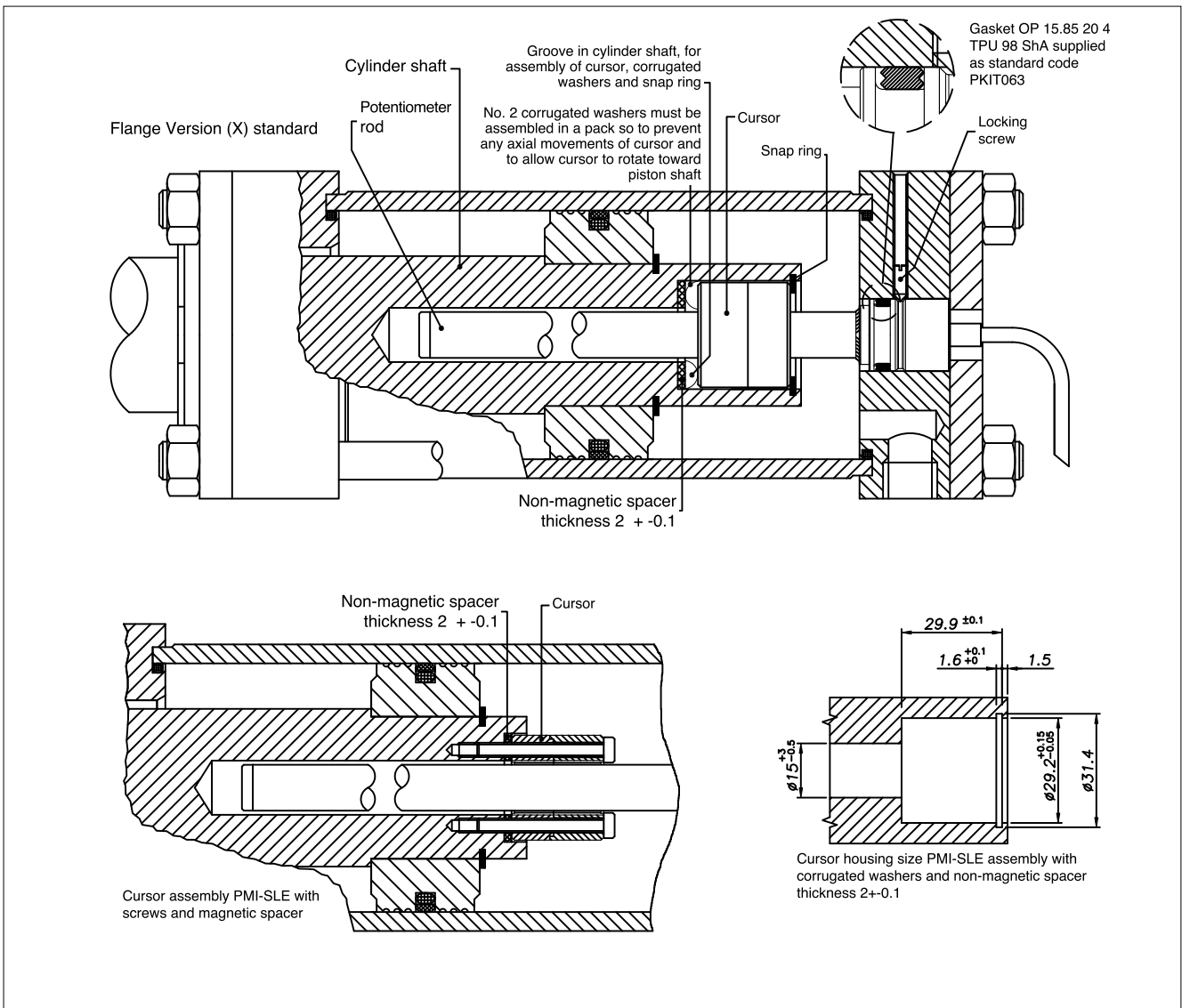
### STANDARD FLANGE (X)



### THREADED FLANGE (M)



## INSTALLATION INSIDE THE CYLINDER

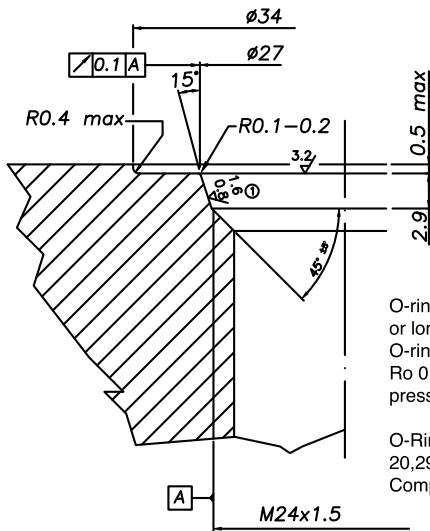
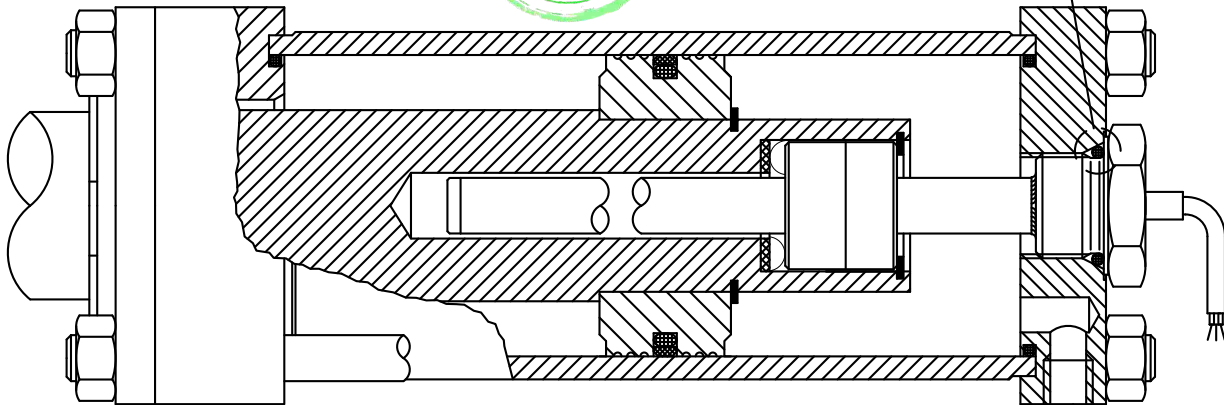
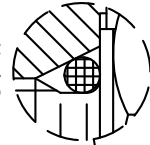


# INSTALLATION INSIDE THE CYLINDER

Flange Version (M) thread M24x1,5

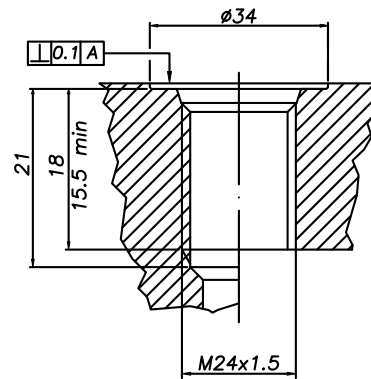


O-Ring recommended  
PARKER 2-117 20,29x2,62  
Material NBR 90 Shore-A  
Compound PARKER N552-90

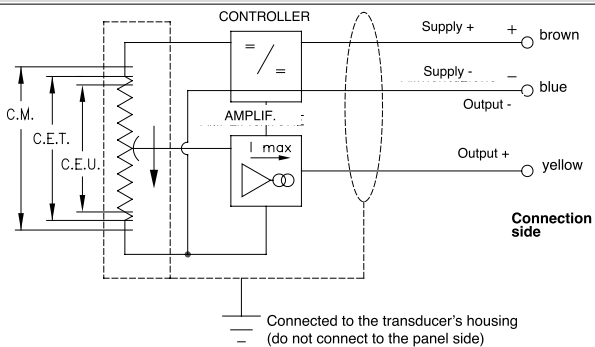


O-ring surface must be free of spiral or longitudinal scratches  $R_o$  1,6 $\mu$ m for O-rings with NOT PULSING pressure  
 $R_o$  0,8 $\mu$ m for O-rings with PULSING pressure

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



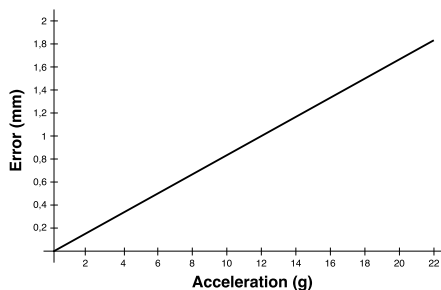
## ELECTRICAL CONNECTIONS



### 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

