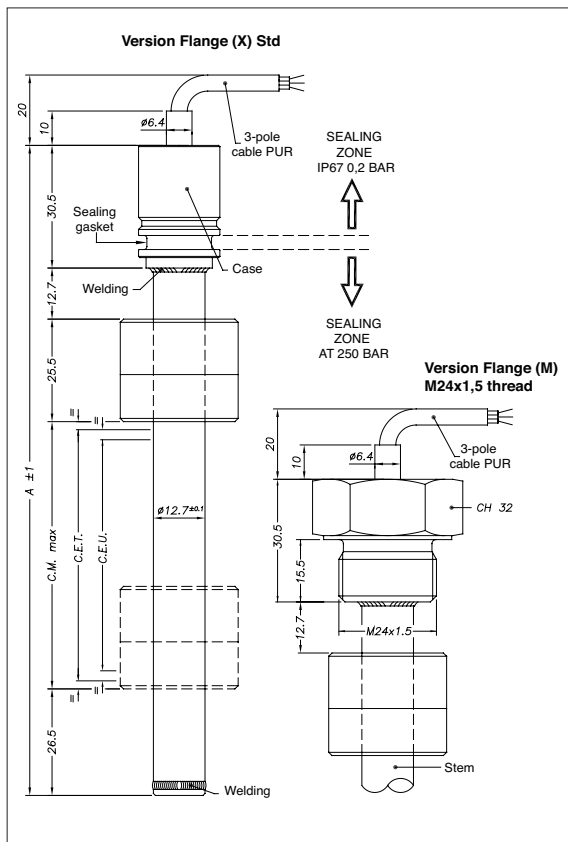




### Applicative characteristics

- 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

> 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 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

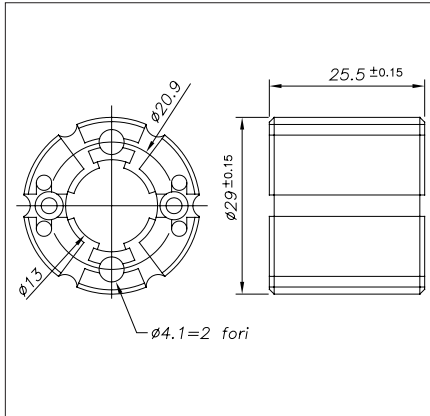
#### Material for transducer case

Steel AISI 304

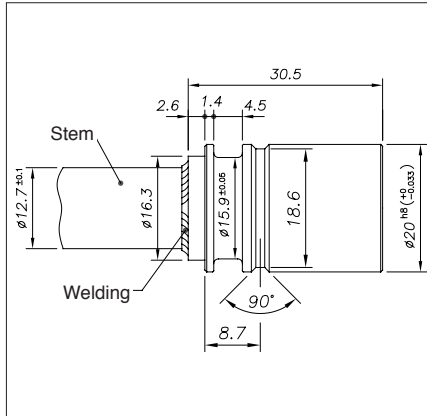
## MECHANICAL / ELECTRICAL DATA

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																		

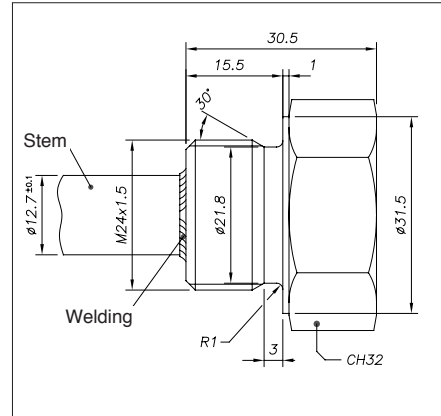
### PCUR010 CURSOR



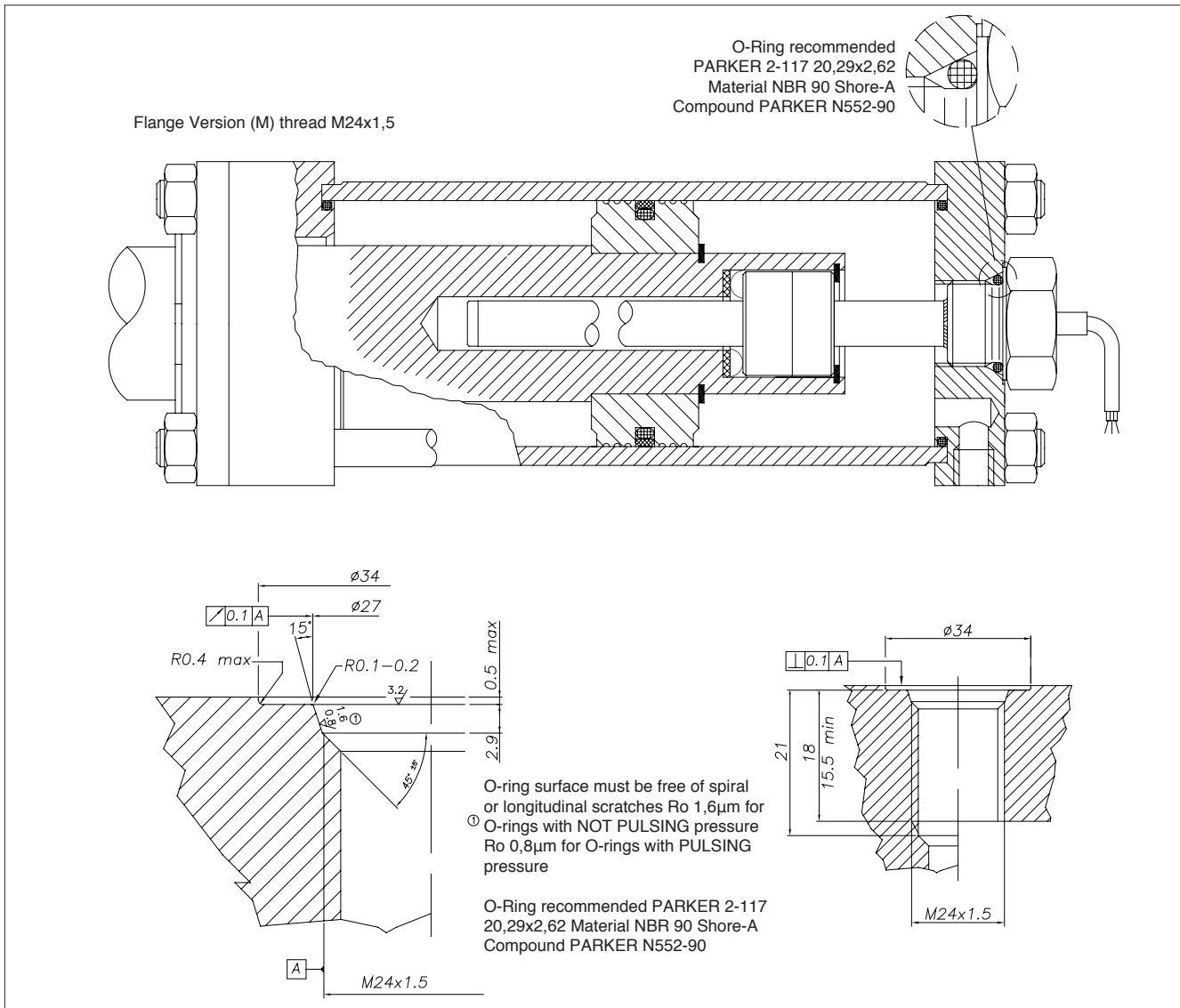
### STANDARD FLANGE (X)



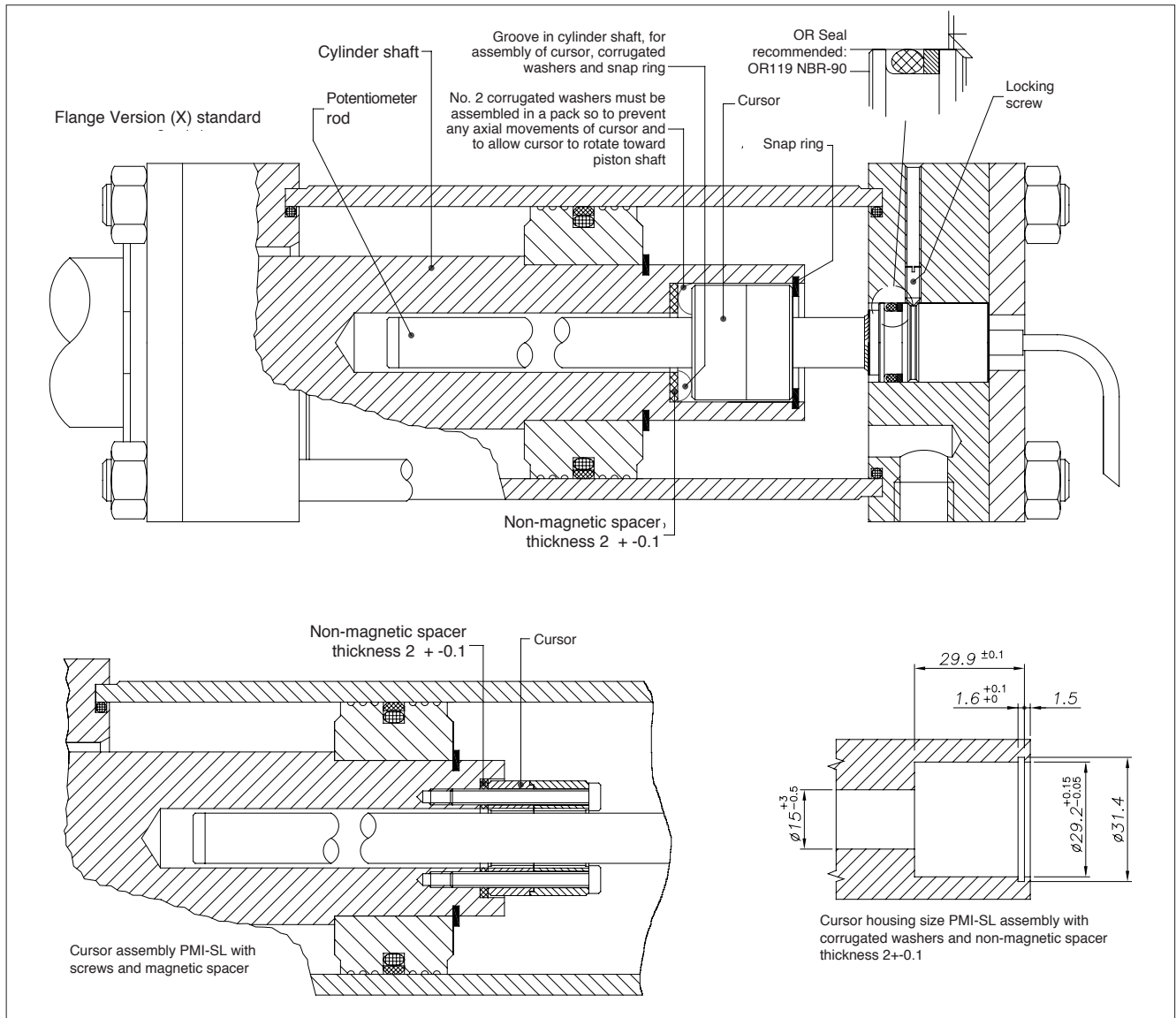
### THREADED FLANGE (M)



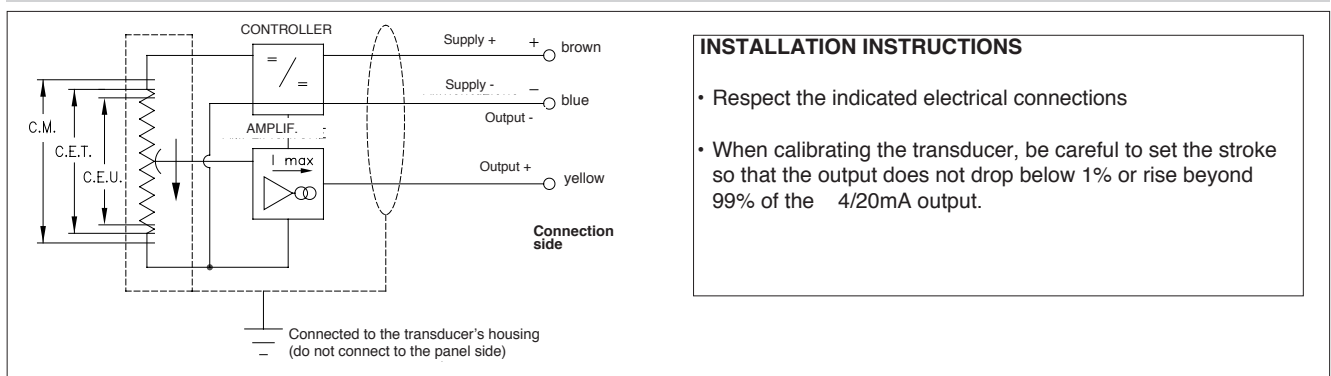
## INSTALLATION INSIDE THE CYLINDER



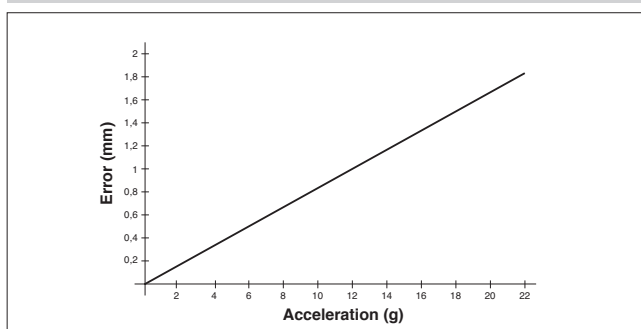
## INSTALLATION INSIDE THE CYLINDER



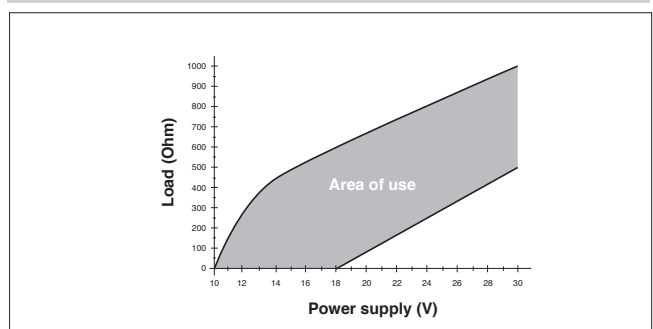
## ELECTRICAL CONNECTIONS



## TRACKING ERROR



## LOAD DIAGRAM

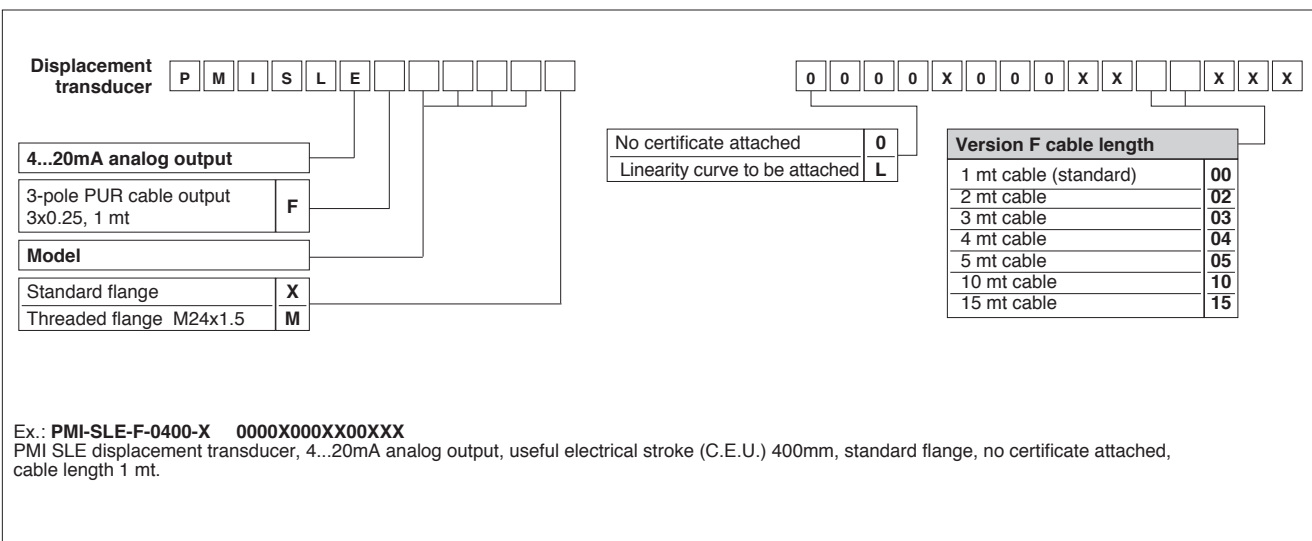


## ACCESSORIES (series)

Standard magnetic cursor

PCUR010

## ORDERING CODE



Sensors are manufactured in compliance with:

- EMC 2004/108/CE compatibility directive
- RoHS 2002/95/CE directive

Electrical installation requirements and Conformity certificate are available on our web site: [www.gefran.com](http://www.gefran.com)

**GEFRAN spa** reserves the right to make any kind of design or functional modification at any moment without prior notice.

**GEFRAN**

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