

**SM-TPL2C**

**DIFFERENTIAL PRESSURE TRANSMITTER**

Pressure transducers belonging to TPL2C series have been designed to be used as **immersion level measuring instruments**, employable in manifold fields dealing with controlling, regulating and monitoring activities. Installation of the sensors requires their total immersion (IP68 protection class) at maximum depth, where measurements to determine levels non-dense substances are performed from.

The sensitive part in contact with pressure, and the whole body as well, is entirely made of **AISI 316L** corrosion-proof stainless steel.

Electronic section, realised via SMD technology, consists of a high precision instrumental amplifier and a stable supplier, protected against short circuits and polarity inversion.

Every pressure transmitter is entirely LASER welded and completely resin-encapsulated, to ensure insensitivity and a high degree of hermetic tight.

During production cycle, pressure transmitters are thermally compensated, tested and individually calibrated with the use of completely automated stations that analyse and record data.



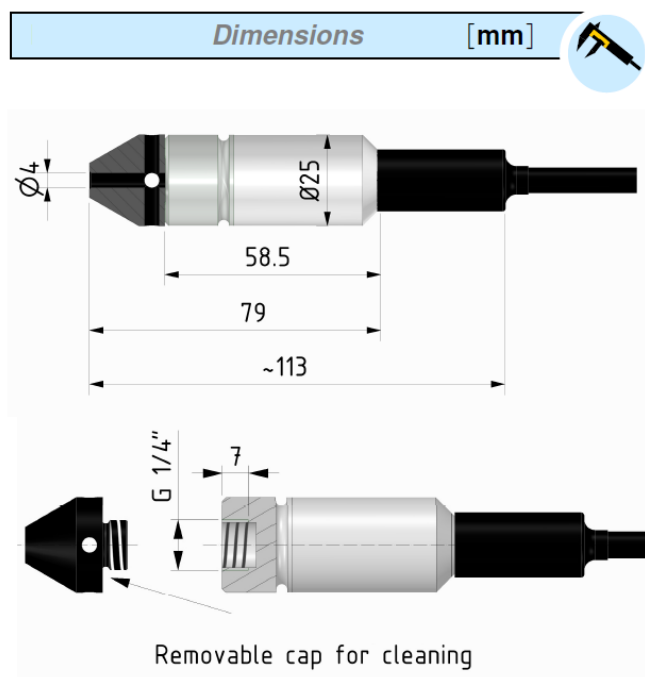
**±0.10%**  
Linearity - Hysteresis

**AISI 316L**

**CE RoHS**

High resistance against SHOCKS

**15** Long term high stability



## Technical Data

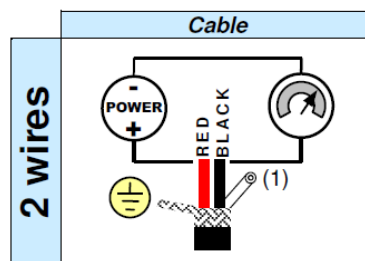


RELATIVE PRESSURE (R) Zero at atmospheric pressure	0.3 - 0.4 - 0.5 - 1 - 2 - 3.5 - 5 bar 7.5 - 10 - 15 - 20 bar
LINEARITY and HYSTERESIS	≤ ± 0.10 %
TEMPERATURE EFFECT (1°C)	
a) on zero	≤ ± 0.015%
b) on sensitivity	≤ ± 0.015%
NOMINAL SENSITIVITY	4-20mA (2 wires)
CALIBRATION TOLERANCE	≤ ± 0.1%
NOMINAL POWER SUPPLY	11.5 - 24Vdc
MAX. POWER SUPPLY	28Vdc
MAX. ABSORPTION :	20mA
LOADING RESISTANCE :	from 0 to 470Ω
INSULATION RESISTANCE	>2 GΩ
ZERO BALANCE	≤ ± 1%
RESPONSE FREQUENCY	0.5 KHz
LIMIT MECHANICAL VALUES REFERRED TO NOMINAL PRESSURE :	
a) service pressure	100%
b) max. permissible pressure	150%
c) breaking pressure	>300%
d) highly dynamic pressure	75%
REFERENCE TEMPERATURE	+23°C
WORKING TEMPERATURE RANGE	-10/+50°C
STORAGE TEMPERATURE RANGE	-20/+70°C
PROTECTION CLASS (EN 60529)	IP68 (100h at 100m water column)
SENSOR and BODY EXECUTION MATERIAL	AISI 316L
PROTECTIVE CAP MATERIAL	POM Acetal
ELECTRICAL CONNECTION	Cable

## OPTIONS

POLYURETHANE CABLE	Per meter
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## Electrical connections



<sup>(1)</sup> Be sure that while wiring compensating pipe remains open.



Connected to body of the pressure transmitter

### WARNING:

Check that fluid is compatible with:  
stainless steel AISI 316L, polyurethane and acetal.



## SENSEL MEASUREMENT

41, rue des laitières - 94300 VINCENNES - FRANCE

Tél. : 01 56 88 25 78 - [www.sensel-measurement.fr](http://www.sensel-measurement.fr) - [contact@sensel-measurement.com](mailto:contact@sensel-measurement.com)

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