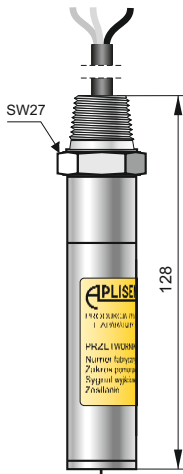


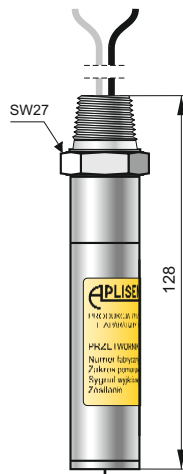
# EXPLOSION PROOF PRESSURE TRANSMITTER PCE-28/EXD

- ✓ Any range from 0...25 mbar up to 0...1380 bar
- ✓ Marine certificate – DNV, BV
- ✓ 4 ÷ 20 mA two-wire output
- ✓ SIL 1 certificate
- ✓ Explosion proof certificate (ATEX, IECEx)
- ✓ NACE compatibility

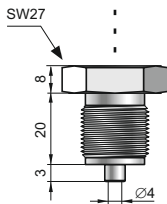
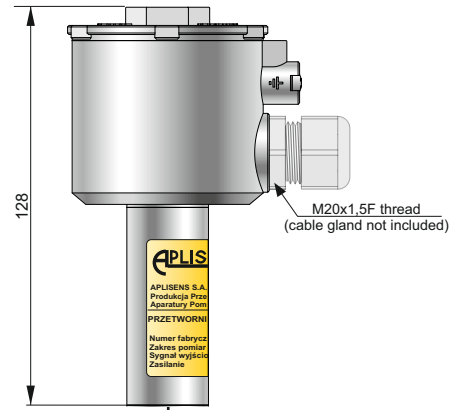
**SGM (1/2"NPTM)**  
cable connection  
IP68  
(IP66 for gauge pressure <80bar)



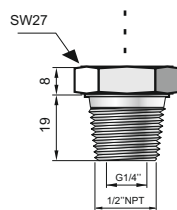
**FL (1/2"NPTM)**  
flying leads  
IP68  
(IP66 for gauge pressure <80bar)



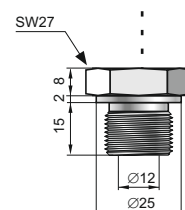
**PZ2**  
IP66



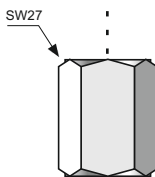
**G1/2 type**  
G1/2", Ø4 hole



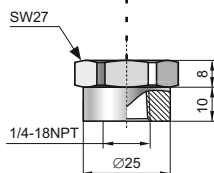
**1/2"NPT type**  
1/2"NPT male +  
internal thread G1/4"



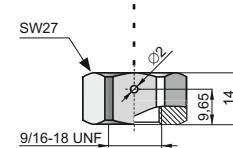
**GP type**  
G1/2", Ø12 hole



**1/2"NPT F type**  
internal thread  
1/2-14NPT (adapter)



**1/4NPTF type**  
1/4-18 NPT female



**Autoclave**  
type F-250-C  
(9/16-18 UNF)

## Application and construction

The PCE-28 pressure transmitter is applicable to the measurement of the pressure, underpressure and absolute pressure of gases, vapours and liquids. The active sensing element is a piezoresistant silicon sensor separated from the medium by a diaphragm and by specially selected type of manometric liquid. The electronics is placed in a casing with a degree of protection from IP 66 to IP 68.

## Measurements under explosion hazard

ATEX Explosion Proof version is available for taking measurements in zones under explosion hazard.

### Technical data

#### Any measuring range

0...25 mbar ÷ 0...1380 bar (over pressure, under pressure); 400 mbar ÷ 80 bar (absolute pressure)

	Measuring range				
	25 mbar	100 mbar	400 mbar	0...1 bar ÷ 160bar	0...160 bar ÷ 1380bar
Overpressure Limit (repeated, without hysteresis)	1 bar	1 bar	2,5 bar	4 x range	2 x range; max. 1600 bar
Damaging Overpressure	2 bar	2 bar	5 bar	8 x range; max. 2000 bar	
Accuracy	0,6%	0,3%	0,2% (0,16% - special version)		
Long term stability	0,6% / year	0,2% / year	0,1% / year		
Thermal error	Typically 0,5% / 10°C Max 0,6% / 10°C	Typically 0,3% / 10°C Max 0,4% / 10°C		Typically 0,2% / 10°C Max 0,3% / 10°C	

<b>Hysteresis, repeatability</b>	0,05%
<b>Response time</b>	< 120 ms
<b>Thermal compensation range</b>	-10...80°C
<b>Operating temperature range (ambient temp.)</b>	
FL electrical connection	-40...80°C*
SGM electrical connection	-40...65°C*
* more information available in user's manual and certificate	
<b>Medium temperature range</b>	-40...130°C

over 130°C – measurement with use an impulse line

CAUTION: the medium must not be allowed to freeze in the impulse line or close to the process connection of the transmitter

<b>Output signal</b>	4...20 mA, two wire transmission
<b>Material of wetted parts</b>	316Lss, Hastelloy C 276
<b>Material of casing</b>	304ss, 316Lss
<b>Power supply</b>	8...30 V DC Version Safety: 10,5...36 V DC
<b>Error due to supply voltage changes</b>	0,005%/ V
<b>Load resistance</b>	$R[\Omega] \leq \frac{U_{sup}[V] - 8V}{0,02A}$

## Ordering procedure

Model	Code	Description
PCE-28/Exd		Pressure transmitter II 2G Ex db IIC T6/T5/T4 Gb II 2D Ex tb IIIC T85°C/T100°C/T120°C Db I M2 Ex db I Mb (only for PZ2 casing)  Ex db IIC T6/T5/T4 Gb Ex tb IIIC T85°C/T100°C/T120°C Db Ex db I Mb (only for PZ2 casing) <b>IECEx</b>
Versions, certificates more than one option is available	/MR..... /0,16%..... /SIL 1..... /NACE.....	Marine certificate – DNV, BV Accuracy <0,16% (available for ranges >400mbar) SIL 1 certificate; only 4...20mA output NACE MR-01-75 certificate
Measuring range	/...+... [required units]	Measuring range
Casing, electrical connection	/SGM (1/2"NPTM)..... /FL (1/2"NPTM)..... /PZ2.....	316LSS housing, cable electrical connection (3 m of cable in standard) 316LSS housing, flying leads (2 m of flying leads in standard) 304SS housing, IP66, electrical connection M20x1,5F
Process connection	/G1/2..... /GP..... /GP(Hastelloy)..... /1/2"NPTM..... /1/2"NPTF..... /1/4"NPTF..... /Autoclave.....	Thread G1/2" (male) with Ø4 hole, wetted parts SS316L Pressure limits: max. 1000bar Thread G1/2" (male) with Ø12 hole, wetted parts SS316L Pressure limits: min. 0,25bar / max. 350bar Thread G1/2" (male) with Ø12 hole, wetted parts Hastelloy C 276 Pressure limits: min. 0,25bar / max. 350bar Thread 1/2"NPT Male, wetted parts SS316L Pressure limits: max. 690bar Thread G1/2 or M20x1,5 with adapter to 1/2"NPT Female, wetted parts SS316L (Pressure limits: max. 690bar) Thread 1/4"NPT Female, wetted parts SS316L Pressure limits: min. 10bar / max. 690bar Compatible with Autoclave type F-250-C Pressure limits: min. 400bar / max. 1380bar
Accessories	/MT..... /PT..... /PC..... /PCR.....	Stainless Steel Tag plate mounted on wire TAG sticker on transmitter's body Mounting bracket PC type for fitting on a wall Mounting bracket PC type for fitting on a 2" pipe
Other specification	/.....	Description of required parameters