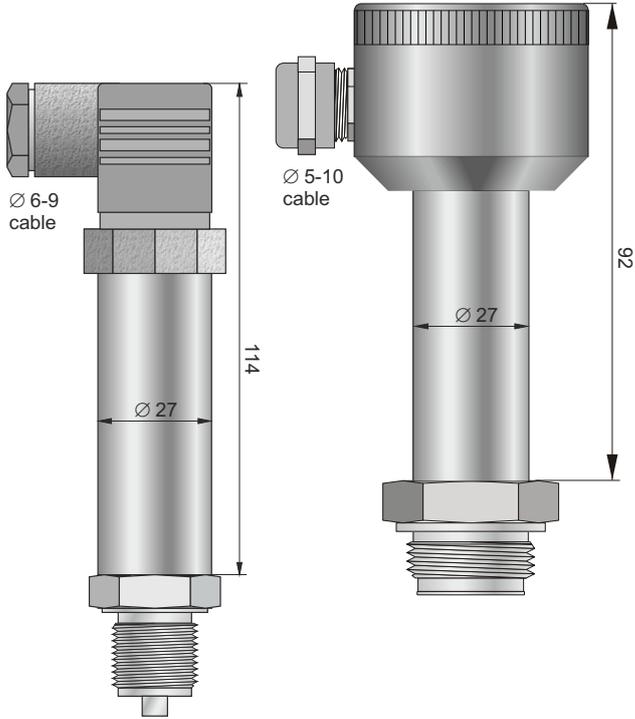


CCA-300



- any range from 0 - 10 mbar up to 0 - 1000 bar
- 4 - 20 mA two-wire or 0 - 10 V output
- IP 65 or IP 67, depending on type of electrical connection
- measurements under explosion hazard (ATEX Intrinsic safety)
- PED Conformity (97/23/EC)

The **CCA-300** pressure transmitter is applicable to the measurement of the pressure, underpressure and absolute pressure of gases, vapours and liquids. ATEX Intrinsic safety Ex version is available for taking measurements in zones under explosion hazard. The installation of the transmitter in a zone under explosion hazard requires the use of a EEx power supply.

Construction

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 IP 65 or IP 67, depending on type of electrical connection applied.

Calibration

Potentiometers can be used to shift the zero position and the range by up to $\pm 10\%$, without altering the settings.

TECHNICAL DATA

Power supply	10,5V - 30VDC (wersion with EEx 12 - 28VDC)
Error due to supply voltage changes	0,005% / V
Measuring range	any from 0 - 10 mbar to 0 - 1000 bar (overpressure, underpressure); 400 mbar - 80 bar (absolute pressure)
Output signal	4 - 20 mA (two wire transmission); 0 - 10 V
Hysteresis, repeatability	0,05%
Compensation range	-10°C ÷ 80°C
Operating temperature range	-40°C ÷ 80°C (ambient temperature)
Medium temperature range	-40°C ÷ 120°C (direct measurement); over 120°C (measurement with the use of impulse line, radiator or diaphragm seal)
Protection class	IP 65 or IP 67, depending on type of electrical connection applied
Material of the wetted parts	00H17N14M2 (316Lss)
Material of the casing	0H18N9 (304ss)

	Measuring range		
	100 mbar	400 mbar	0..1 bar - 1000 bar
Overpressure limit (repeated, without hysteresis)	1bar	2,5 bar	4 x range (max. 1200 bar)
Damaging overpressure	2 bar	5 bar	8 x range (max. 2000 bar)
Accuracy	0,3%	0,2% 0,16% - special version	
Long term stability	0,2% / year	0,1% / year	
Thermal error	typ. 0,3% / 10°C max. 0,4% / 10°C		typ. 0,2% / 10°C max. 0,3% / 10°C

Caution: the medium must not be allowed to freeze in the impulse line or close to the pipe stub of the transmitter.

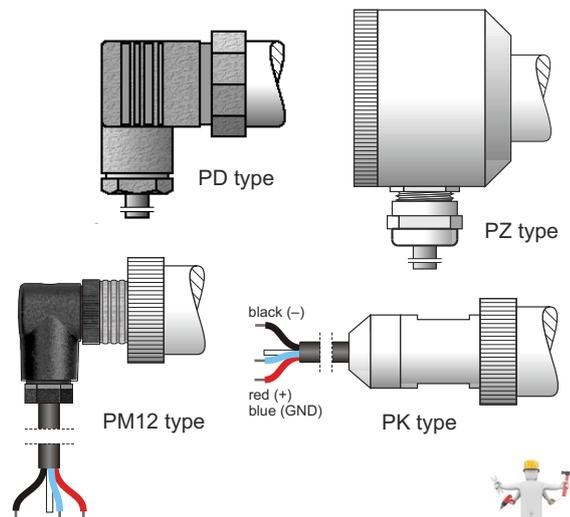
INSTALLATION

The transmitter is not heavy, so it can be installed directly on the installation. When the pressure of steam or other hot media is measured, a siphon or impulse line should be used. The needle valve placed upstream the transmitter simplifies instalation process and enables the zero point adjustment or the transmitter replacement. When the special process connections are required for the measurement of levels and pressures (e.g. at food and chemical industries), the transmitter id provided with an diaphragm seal.

APPLICATION

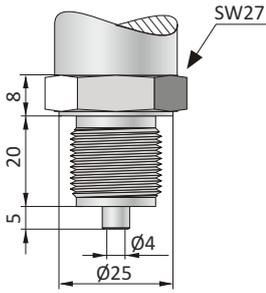
Applicable to measurement the pressure of dusty gases, and viscous or solidifying liquids. The transmitters with flush diaphragm are applied in food industry and pharmaceutical industry in aseptic systems. Using of fitting socketswith a seal upstream the stub thread is recommended.

TYPES OF ELECTRICAL CONNECTIONS



KKATAEN_v1.14.011

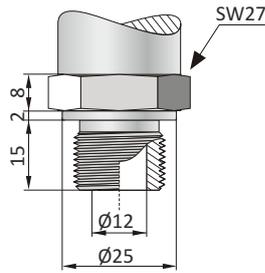
CONNECTIONS



G1/2 type: G1/2", Ø4 hole
M type: M20x1,5, Ø4 hole

Wetted parts material: 316Lss

Application: Applicable to measurement the pressure of uncontaminated gases, vapours and liquids at any measurements ranges

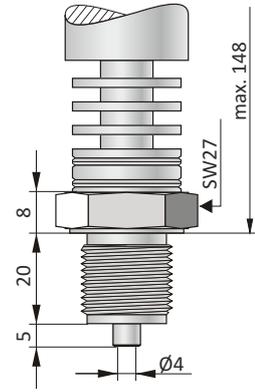


GP type: G1/2", Ø12 hole
P type: M20x1,5, Ø12 hole

Wetted parts material: 316Lss - standard, Hastelloy C-276

Application: Applicable to measurement the pressure of viscous and contaminates media.

Max. range: 0 - 70 bar



RG type: G1/2" with radiator

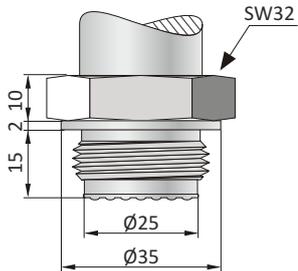
RM type: M20x1,5 with radiator

Wetted parts material: 316Lss

Application: Applicable to measurement the pressure of uncontaminated gases, vapours and liquids at the temperature up to 170°C, with no impulse line.

Min. range: 160 mbar

Max. range: 40 bar

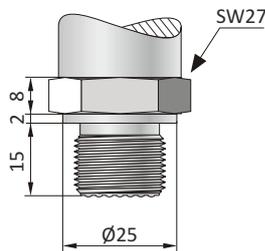


CM30x2 type: M30x2 with flush diaphragm

Wetted parts material: 316Lss - standard, Hastelloy C-276

Min. range: 250 mbar

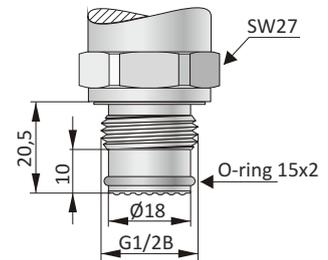
Max. range: 70 bar



CM20x1,5 type: M20x1,5 with flush diaphragm

Wetted parts material: 316Lss

Min. range: 10 bar

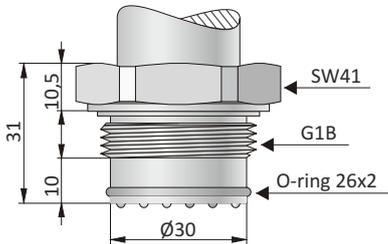


CG1/2 type: G1/2" with flush diaphragm

Wetted parts material: 316Lss

Min. range: 2,5 bar

Max. range: 600 bar

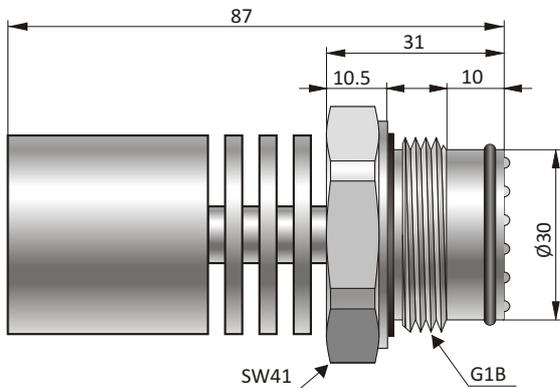


CG1 type: G1" with flush diaphragm

Wetted parts material: 316Lss - standard, Hastelloy C-276

Min. range: 100 mbar

Max. range: 70 bar



S-RCG1: Threaded seal with flush diaphragm and radiator

Maximum measuring range: 0...40 bar

Overpressure limit: 100 bar

Medium temperature range: 0...160°C

Material of diaphragm and seal: 00H17N14M2 (316Lss)

ORDERING

CCA-300 / X / X - X / X / X

Special versions:
 EEx, PED, 0-10V, D, H, NE, NN
 Hastelloy, Tlen, others (description)

Start of measuring range in relation to start of output signal 4 mA

End of measuring range in relation to end of output signal 20 mA

Note: for measurement of absolute pressure, state ABS

Type of electrical connection:
 PD, PZ, PK, PM12

Type of process connection or type of diaphragm seal

