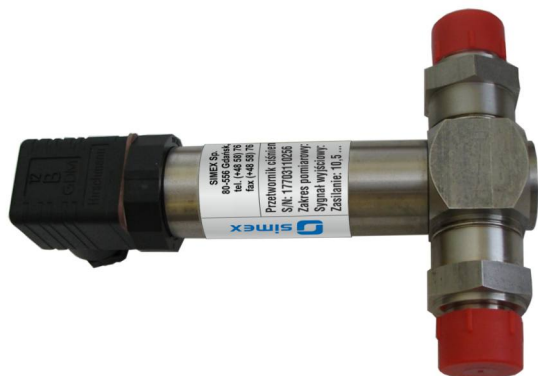


CRA-300



- differential pressure transmitter
- any range from 0 ÷ 10 mbar up to 0 ÷ 25 bar
- output: 4...20 mA (2-wire) or 0...10V (3-wire)
- medium temperature up to 120°C (direct measurement)
- certificate of Institute of Public Health for contact with potable water
- piezoresistant silicon sensor
- IP 65 or IP 67, depending on type of electrical connection

The CRA-300 transmitter is applicable to the measurement of differential pressure of gases, vapours and liquids. The active element is a piezoresistant silicon sensor separated from the medium by separating diaphragm and a specially selected type of manometric fluid. The special desing of the active sensing element ensures withstanding the pressure surges and overloads of up to 40 bar. The electronics is placed in a casing with a degree of protection IP65, IP67, depending on the type of electrical connection applied. Potentiometers can be used to shift the zero position and the range by up to 10%, without altering the settings. The transmitter is not heavy, so it can be installed directly onto impulse lines. For fitting in any desired position on a Ø25 pipe the mounting bracket is recommended. The version with C type process connection can be fitted directly to a 3- or 5-valve manifold. The factory-mounted transmitters with VM type valve manifold are recommended. A transmitter without a valve manifold can be fitted in any position on a 2" pipe or on a wall using the C-2" mounting bracket. When the special process connections are required for the measurement of levels and pressures (e.g. at food and chemical industries), the transmitter is provided with a diaphragm seal.

TECHNICAL DATA

Power supply	8 ÷ 36V DC (2-wire system), 13 ÷ 30V DC (3-wire system), 9 ÷ 28V DC (Ex version)
Error due to supply voltage changes	0,005% / V
Measuring range	-100 ÷ 100 mbar to -1 ÷ 1 bar; 0 ÷ 400 mbar to 0 ÷ 6 bar; 0 ÷ 10 to 0 ÷ 25 bar
Output signal	4...20 mA (2-wire); 0...10V (3-wire)
Hysteresis, repeatability	0,05%
Compensation range	-10°C ÷ 80°C
Operating temperature range	-25°C ÷ 80°C (ambient temperature)
Medium temperature range	-25°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	316L stainless steel
Material of the casing	304 stainless steel

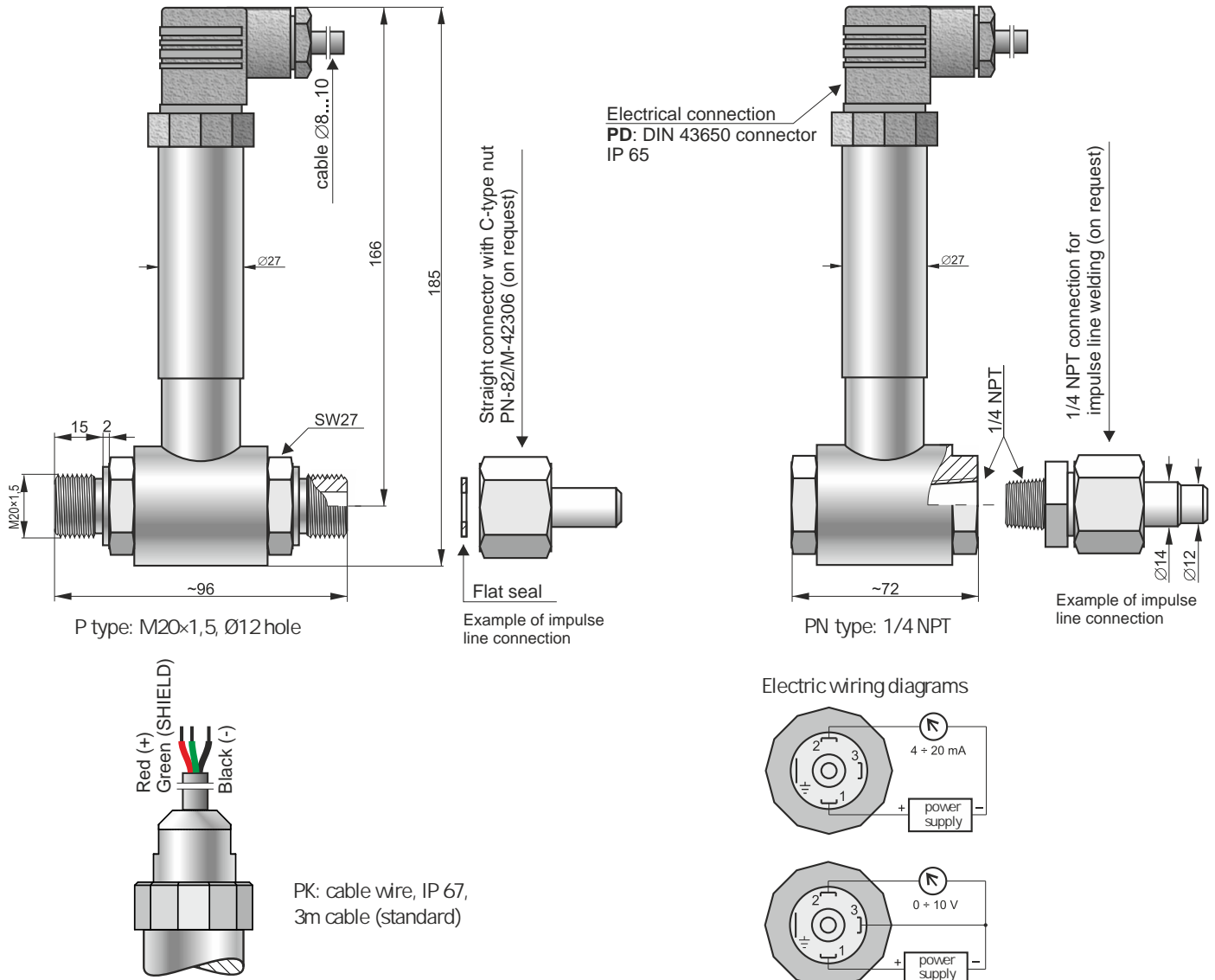
	Measuring range		
	25 mbar	100 mbar	1...25 bar
Overpressure limit (repeated, without hysteresis)*	1 bar	1 bar	6 x range (max. 40 bar)
Damaging overpressure	2 bar	2 bar	8 x range (max. 100 bar)
Accuracy	0,4%	0,4%	0,25%
Long term stability	0,6% / year	0,2% / year	0,1% / year
Thermal error	typ. 0,6% / 10°C max. 1% / 10°C	typ. 0,3% / 10°C max. 0,4% / 10°C	typ. 0,2% / 10°C max. 0,3% / 10°C

*Caution: Performing a differential pressure measurement with a static pressure higher than the permissible transducer overload is risky. In such a situation, we recommend the use of CRA-300 transmitters in a special version of 4 MPa or CCA-310 transmitters, resistant to overload with full static pressure of 4 MPa.

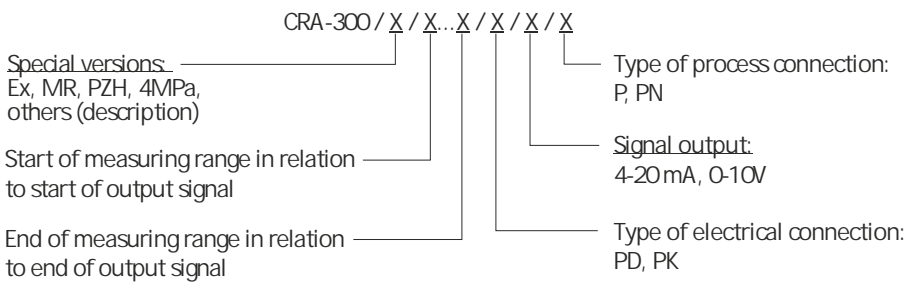
Caution: the medium must not be allowed to freeze in the impulse line or close to the pipe stub of the transmitter.



DIMENSIONS / TYPES OF PROCESS AND ELECTRICAL CONNECTIONS



ORDERING



Special versions, certificates:

Ex	ATEX Intrinsic safety certificate (4..20mA output)
MR	marine certificate: DNV, BV (not available in ALW, ALM version)
4MPa	permissible static pressure 4 MPa regardless of the measuring range, additional error due to static pressure: ±0.1% / 1MPa
PZH	certificate of Institute of Public Health for contact with potable water
others	description of required parameters, after consultation with the consultant

Ordering sample:

CRA-300 / Ex / 0..600 kPa / PK (cable 5m) / 4-20 mA / P

CRA-300 differential pressure transmitter, intrinsic safe, measuring range 0..600 kPa, cable electrical connection, cable length 5m, output signal 4-20mA, process connection M20x1,5 with hole 12 mm.

