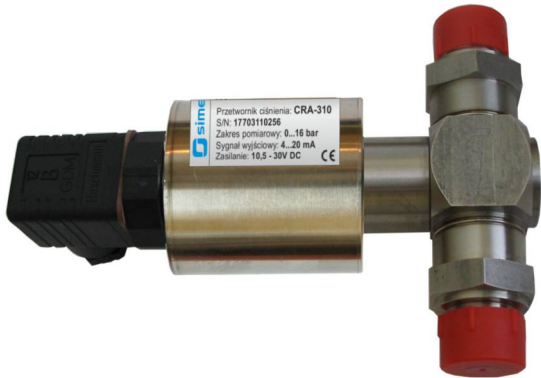


CRA-310



- differential pressure transmitter
- any range from 0 ÷ 20 mbar do 0 ÷ 16 bar
- output: 4...20 mA (2-wire)
- medium temperature up to 120°C (direct measurement)
- piezoresistant silicon sensor
- resistant to overload with full static pressure

The CRA-310 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 electronics is placed in a casing with a degree of protection IP 54. The electrical connection is a DIN 43650 connector. 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

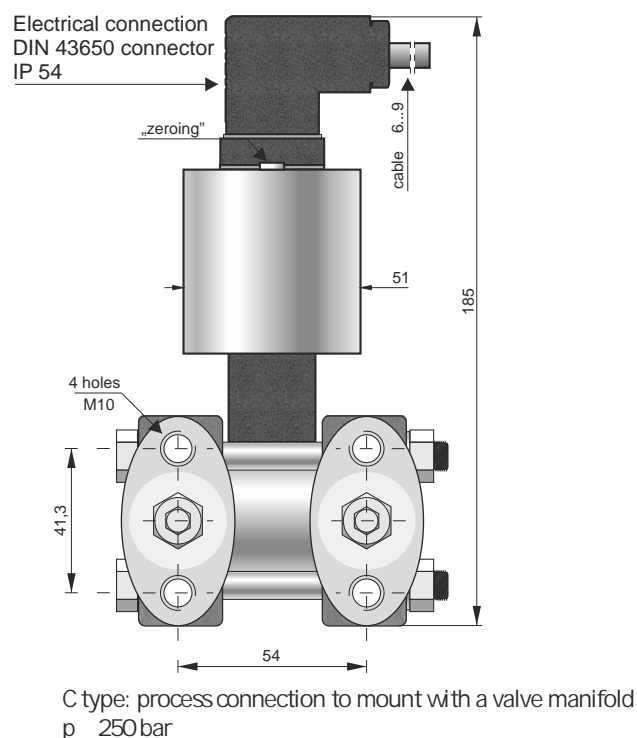
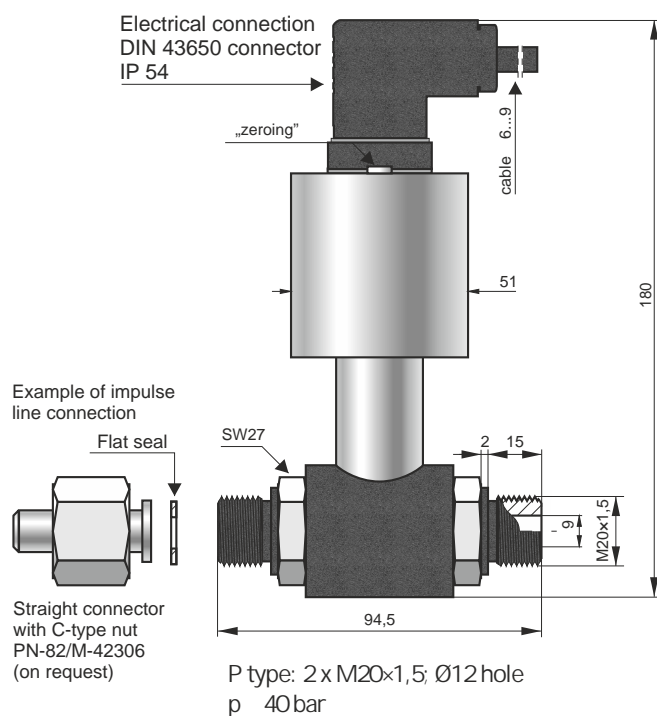
Power supply	10 ÷ 36V DC
Error due to supply voltage changes	0,005% / V
Measuring range	0 ÷ 20 mbar to 0 ÷ 16 bar
Output signal	4...20 mA (2-wire)
Hysteresis, repeatability	0,05%
Electrical connection	DIN 43650 connector
Compensation range	0°C ÷ 70°C
Operating temperature range	-25°C ÷ 80°C (ambient 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 54
Materials	wetted parts: 316L stainless steel case: 304 stainless steel diaphragm: 316L stainless steel, option Hastelloy (C276)

	Measuring range			
	100 mbar	1 bar	2 bar	16 bar
Overpressure limit (repeated, without hysteresis)*	250 bar (40 bar for P type connection), equivalent to allowable static pressure			
„Zero“ error from static pressure	0,1% / 10 bar			
Accuracy	0,4%	0,25%		
Thermal error	typ. 0,3% / 10°C max. 0,4% / 10°C	typ. 0,2% / 10°C max. 0,3% / 10°C		

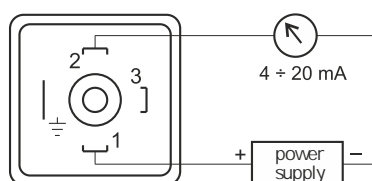
CAUTION: the medium must not be allowed to freeze in the impulse line or close to the process connection of the transmitter.



## DIMENSIONS / TYPES OF PROCESS CONNECTIONS

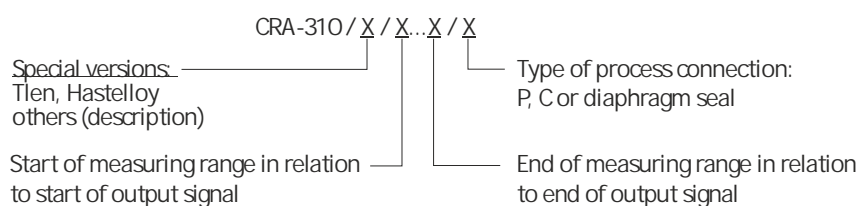


## WIRING DIAGRAMS



DIN 43650 connector, IP 65,  
4 ÷ 20 mA output signal

## ORDERING



### Special versions, certificates:

Hastelloy	wetted parts of the transducer measuring head made of Hastelloy C 276
Tlen	for oxygen service (sensor filled with fluorolube fluid), for ranges 1 bar
others	description of required parameters, after consultation with the consultant

Ordering sample:

CRA-310 / 0...160 mbar / P

CRA-310 differential pressure transmitter, standard version, measuring range 0...160 mbar,  
process connection 2 x M20x1,5 with hole 12 mm.



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