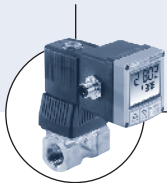


## Pressure transmitter



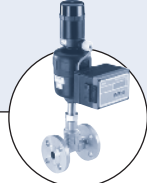
- Ceramic measurement cell
- Two-wire version
- Compact, stable construction for the highest operational reliability
- Media stop system if bursting pressure exceeded

Type 8314 can be combined with...



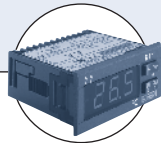
**Type 8624**

PI controller



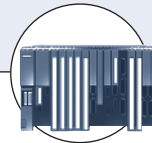
**Type 2712**

Continuous control valve



**Type 0911**

Process indicator



**PLC**

The compact pressure transmitter Type 8314 meets the highest requirements with regard to mechanical loading, EMC characteristics and operational reliability and is particularly suitable for demanding industrial applications.

General data	
<b>Body material</b>	Stainless steel 1.4305 AISI 303
<b>Wetted parts materials</b>	Ceramics (Al <sub>2</sub> O <sub>3</sub> ), stainless steel 1.4305 (1.4404 AISI 316L on request), FKM seal, PPS
<b>Electrical connection</b>	M12 x 1 plug
<b>Process connection</b>	G 1/4" external to DIN 3852 Form E
<b>Installation</b>	as required, preferably with pressure connection in downward position
<b>Measurement principle</b>	Ceramic technology
<b>Measurement procedure</b>	Relative pressure measurement
<b>Measuring range</b>	0 up to 1, 4, 6, 10, 16, 40 or 100 bar
<b>Overload</b>	3 x full scale at 0 ... 4 bar 2.5 x full scale at 6 ... 100 bar
<b>Bursting pressure</b>	3 x full scale at 0 ... 4 bar 2.5 x full scale at 6 ... 100 bar patented media stop system to prevent escape of media if the bursting pressure range is exceeded (≥ 4 bar nominal pressure)
<b>Fluid temperature</b>	5°F up to 257°F (-15°C up to +125°C)
<b>Accuracy</b>	Sum of linearity, hysteresis and reproductibility: ≤ 0.3% of F.S.* Balancing accuracy of zero point and full scale: ≤ 0.3% of F.S.*
<b>Long term stability</b>	0.5% of F.S. / 10 year
<b>Dynamic response</b>	Suitable for static and dynamic measurements response time < 2 ms, typ. 1ms

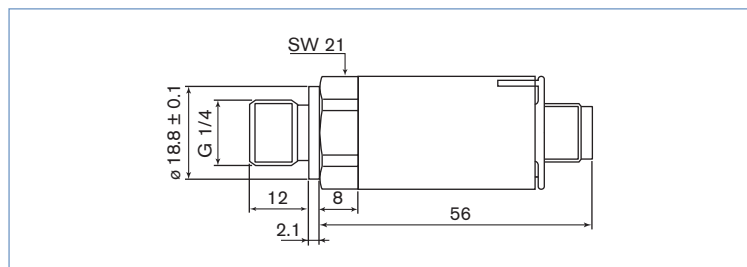
Electrical data	
<b>Power supply (U)</b>	8 up to 33 V DC, unregulated
<b>Output signal (two-wire)</b>	Standard 4 up to 20 mA signal
<b>Load in Ω</b>	< (U - 8 V) / 0.02 A
<b>Protected connection</b>	Short-circuit proof & protected against reversal polarity

Environment	
<b>Ambient temperature</b>	5°F up to 185°F (-15°C up to +85°C)
<b>Temperat. coefficient</b>	< 0.015% of F.S.* / C° (Coef. zero point and sensitivity)

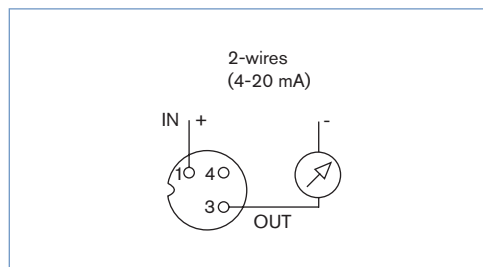
Standard and approvals	
<b>Protection class</b>	IP67
<b>Interference emission</b>	Acc. to EN 50081-1 and EN 55022
<b>Interference stability</b>	Acc. to EN 50082-2

\* F.S. = full scale

Dimensions [mm]



Electrical connections



Ordering chart transmitter Type 8314 and accessories

Transmitter

Process connection	Pressure range [bar]	Item no.
G 1/4	0 to 1	550 364
	0 to 4	550 365
	0 to 6	552 954
	0 to 10	550 366
	0 to 16	552 955
	0 to 40	550 367
	0 to 100	550 368

**i** Further versions on request

- Pressure**  
Other measuring ranges
- Port connection**  
NPT 1/4"
- Electrical connection**  
connectors
- Additional**  
electrical outputs

Accessories

Description	Item no.
5-pin M12 female cable connector with plastic threaded locking ring	917 116
5-pin M12 female connector moulded on cable (2 m, shielded)	438 680

EMC acc. to harmonised standards for interference resistance EN 50082-2, IEC 61000-6-2 and EN 61326-1, interference radiation EN 50081-1, EN 55022, CISPR 22, EN 61326-1

Interference stability	Test Norm / Test condition	Effects
<b>Electro-static discharge</b> ESD	EN 61000-4-2 15 kV air, 89 kV contact discharge	No effects
<b>High frequency electro-magnetic irradiation</b>	EN 61000-4-3 200 V/m, 80 ... 100 MHz	No effects
<b>Line related high frequency coupling</b>	EN 61000-4-6 30 V, 0.15 ... 80 MHz	No effects
<b>Fast transients (Bursts)</b>	EN 61000-4-4 / 4 kV	No effects
<b>Magnetic fields</b>	EN 61000-4-8 / 30 A/m, 50 Hz	No effects
<b>Surge voltage</b>	EN 61000-4-5 / Line-Line, Line-Case 500V, 12 Ohm, 9 µF Radiometric Line-Line 500V, 2 Ohm, 18 µF	No failure
<b>Insulation voltage</b>	500 V DC (optional 1000 V DC) 350 V AC (optional 700 V AC)	No effects
Interference transmitted	Test standard / Test condition	Effects
<b>Line - related interference</b>	EN 55022	
<b>Interference</b>	0.15 ... 30 MHz	No emission
<b>Radiation from body</b>	30 ... 1000 MHz, 10 meter	No emission
Test / Admissions		
<b>Shock acc. IEC 28-2-27</b>	75G, 11 ms half sine wave, all three directions. Free fall from 1 m on concrete (6x)	
<b>Constant shock acc. IEC 68-2-29</b>	40G for 6 ms, 1000 x all three directions	
<b>Vibration acc. IEC 68-2-6</b>	20G, 9...200 Hz, 2...9 Hz with amplif. +/- 15 mm, 1 Octave/min all three directions, 50 constant load	