Submersible level transmitters for corrosive media

ATM/NC



Version: 25.06.2014

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Technical Specifications

Pressure measuring range (mH2O)

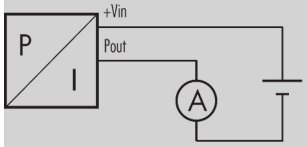
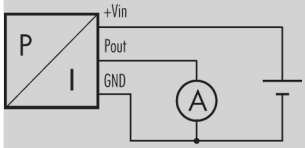
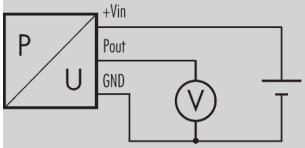
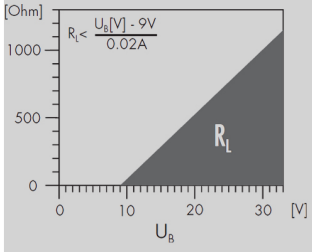
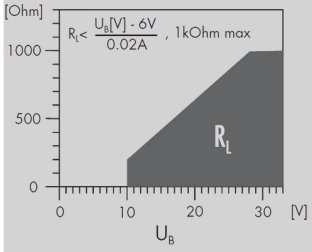
	1 ... 5	> 5 … 20	> 20 … 250
Overpressure	3 bar	3 x FS (≥ 3 bar)	3 x FS
Burst pressure	> 200 bar	> 200 bar	> 200 bar
Accuracy, (1), (± % FS)	≤ 2.0	≤ 1.0	≤ 0.5
Accuracy, (1), (3), (± % FS)	< 0.5%	< 0.5%	< 0.5%
Thermal shift, (± % FS/°C)			
Zero point 0...70°C	≤ 0.06	≤ 0.03	≤ 0.015
Zero point -25...85°C	≤ 0.08	≤ 0.04	≤ 0.02
Span 0...70°C	≤ 0.015	≤ 0.015	≤ 0.015
Span -25...85°C	≤ 0.02	≤ 0.02	≤ 0.02
Long term stability, (2)	< 0.5% FS / < 4 mbar	< 0.2% FS / < 4 mbar	< 0.1% FS / < 0.2% FS

(1) Zero based accuracy according to DIN16086, incl. hysteresis and repeatability at ambient temperature
(2) 1 year (typ. / max.)
(3) Only if diaphragm is made in titanium

Temperature range

Operating temperature	-5...80 °C
Process temperature	-5...80 °C
Storage temperature	-10...80 °C

Electrical specifications

	4 ... 20 mA	0 ... 20 mA	0 ... 5 V / 0 ... 10 V
Power supply	9...33 V DC	9...33 V DC	15...30 V DC
Supply influence	< 0.1% FS	< 0.1% FS	< 0.1% FS
Current consumption			3 mA
Circuit diagram			
Load resistance			R_L > 10kOhm
Load influence	< 0.1% FS	< 0.1% FS	< 0.1% FS

Qualifications

	Description	Level	Typical interferences
EN 61000-4-2	Electrostatic discharge	4 kV contact 8 kV air	
EN 61000-4-3	Irradiated RF	10V/m (0.08...1 GHz)	Radio sets, wireless phones
EN 61000-4-4	Transients (burst)	2 kV	Motors, valves
EN 61000-4-6	Conducted RF	10 V (0.15...80 MHz, 3 s)	Frequency converters

Physical specifications

Materials	
Transducer	Stainless steel (316L / 1.4435) with teflon protection, titanium (Gr. 2)
Housing	PVDF
Seals	Viton (Standard), EPDM, Kalrez
Cable	PUR, FEP, PE

Equipment

Overview

10.00.0091	Accessories overview

Additional documents

Operating and safety instructions

	Article number
10.88.0092	DMM029

Ordering information

			X.	XXXX.	XXXX.	XX.	XXX
Type							
	ATM/NC	30					
Pressure type							
	Gauge		1				
	Absolute (vacuum)		2				
Pressure measuring range							
	100 mbar...25 bar			XX			
Process connection							
	Open, TD in titanium (Fig. 1)			90			
	Open, TD 316L with FEP foil (Fig. 1)			91			
Electrical connection							
	PE cable, IP 68, black (2), (3)				13		
	PUR cable, IP 68, black (2), (3)				15		
	FEP cable, IP 68, black (2)				21		
Output signal							
	0... 5 V DC				46		
	0...10 V DC				47		
	0...20 mA				00		
	4...20 mA				05		
	4...20mA with surge protection				08		
	0...10 V DC with surge protection				49		
	0...5 V DC with surge protection				50		
	Customized				99		
Accuracy							
	≤ ± 2.0 % FS for p < 500 mbar (4)					6	
	≤ ± 1.0 % FS for p ≤ 2 bar					5	
	≤ ± 0.5 % FS for p > 2 bar					0	
Temperature range							
	-5...50 °C compensated (allowed process temperature: -5...50 °C)					4	
	-5...80 °C compensated (allowed process temperature: -5...80 °C), (5)					5	
Option 1							
Option 2							
Option 3							
	Seals: Viton (standard)						U
	Seals: EPDM						S
	Seals: Kalrez, (6)						T
	Protective cap in brass						W
	Protective cap in POM						W
	Humidity filter element for gauge versions (only for PUR and PE cable)						Z

(1) mH2O, mWS, mWC etc. available

(2) Please specify the required cable length and medium

(3) For operating temperature > 50°C, PE or FEP cable must be used

(4) < ± 0.5 % FS if diaphragam is made in titanium

(5) Only if diaphragm is made in titanium

(6) Available only with FEP cable

Technical drawings

Dimensions

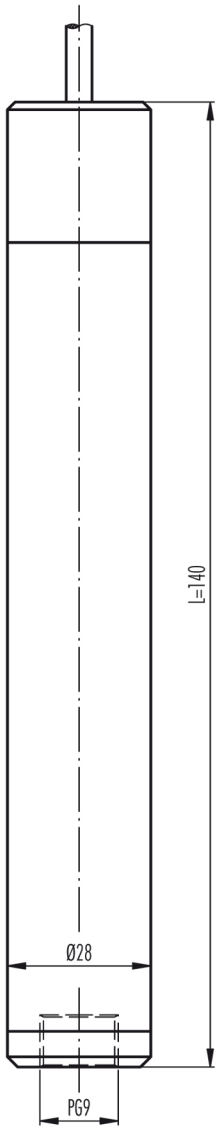


Fig. 1

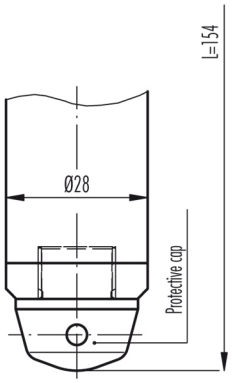


Fig. 2

Colour	2-Wire	3-Wire
white	+Vin	+Vin
yellow	Pout	GND
brown		Pout

Specifications may change without notice.

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