

Submersible level transmitters for corrosive media

ATM/NC



Version: 27.06.2012

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	≤ 2.0	≤ 2.0
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			$R_L > 10k\Omega$
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					
	Any pressure measuring ranges between 0...1 mH ₂ O and 0...250 mH ₂ O available, (1)	XX			
Process connection					
	Open, TD in titanium, (Fig. 1)	90			
	Open, TD with FEP foil, (Fig. 1)	91			
Electrical connection					
	PE cable, IP 68, (2), (3)		13		
	PUR cable, IP 68, (2), (3)		15		
	FEP cable, IP 68, (2)		21		
	Customized connection available		XX		
Output signal					
	4...20 mA		05		
	0...20 mA		00		
	0... 5 V DC		46		
	0...10 V DC		47		
Accuracy					
	≤ ± 2.0 % FS			9	
Temperature range					
	-5...50 °C compensated (allowed process temperature: -5...50 °C)			4	
	0...70 °C compensated (allowed process temperature: 0...80 °C), (4)			1	
	-25...85 °C compensated (allowed process temperature: -5...80 °C), (4)			2	
Option 1					
	Special oil filling: ASEOL Food (for food applications)				G
	Special oil filling: Halocarbon (for oxygen applications) (5)				H
Option 2					
	Electronics packed in gel: Gauge pressure				C
	Electronics packed in gel: Absolute pressure				D
Option 3					
	Version titanium				K
	Seals: Viton (standard)				U
	Seals: EPDM				S
	Seals: Kalrez				T
	Protective cap (brass or POM)				W

(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) Only if diaphragm is made in titanium

(5) min. Medium temperature -25 °C

Technical drawings

Dimensions

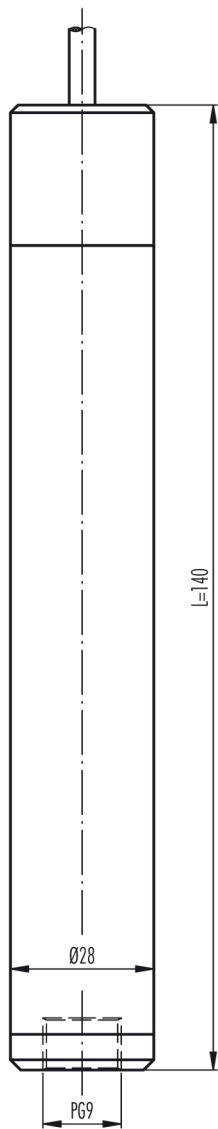


Fig. 1

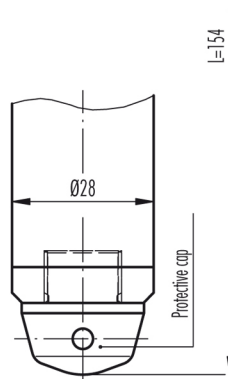


Fig. 2

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

Specifications may change without notice.

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