

Intrinsically safe level transmitters for corrosive media

ATM/NC/Ex



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
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

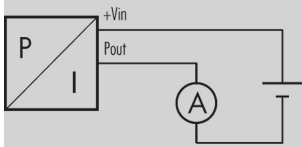
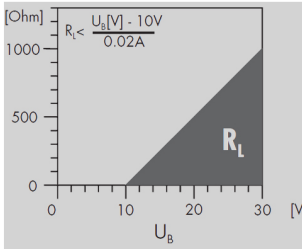
(1) Zero based accuracy according to DIN16086, incl. hysteresis and repeatability at ambient temperature

(2) 1 year (typ. / max.)

Temperature range

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

Electrical specifications

	4 ... 20 mA
Power supply	10...30 V DC
Supply influence	< 0.1% FS
Circuit diagram	
Load resistance	
Load influence	< 0.1% FS

ATEX Approval

Certificate, (1)	SEE 99 ATEX 2640	
Gas	II 2G Ex ia IIC T3 / T4 / T6	EN 60079-0 / -11 / -26
Dust	II 1D Ex iaD 20 IP6x Tx°C	EN 61241-0 / -11
Mining	I M2 Ex ia I	EN 50303
Temperature class, (2)	T6	T4
Ambient temperature	-5...50 °C	-5...80 °C
Process temperature	-25...55 °C	-25...85 °C
Maximum values of the intrinsically safe circuit	30 V / 100 mA / 1 W	

(1) For detailed Ex specifications see certificate and operating an safety instructions

(2) Without any information about temperature class the transmitter will be delivered for T4

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, PTFE

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/Ex	36			
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 teflon foil, (Fig. 1)	91			
Electrical connection	PUR cable, blue, IP 68, (2), (3)		17		
	PTFE cable, blue, IP 68, (2)		22		
	Customized connection available		XX		
Output signal	4...20 mA		05		
Accuracy	≤ ± 2.0 % FS			9	
Temperature range	T6 (Ta: -5...50 °C) -5...50 °C compensated (allowed process temperature: -5...50°C)			0	
	T4 (Ta: -5...80 °C) -5...80 °C compensated (allowed process temperature: -5...80°C), (4)			1	
Option 1	Special oil filling: ASEOL Food (for food applications)				
	Special oil filling: Halocarbon (for oxygen applications)				
Option 2					
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, PTFE cable must be used

(4) Only if diaphragm is made in titanium

Technical drawings

Dimensions

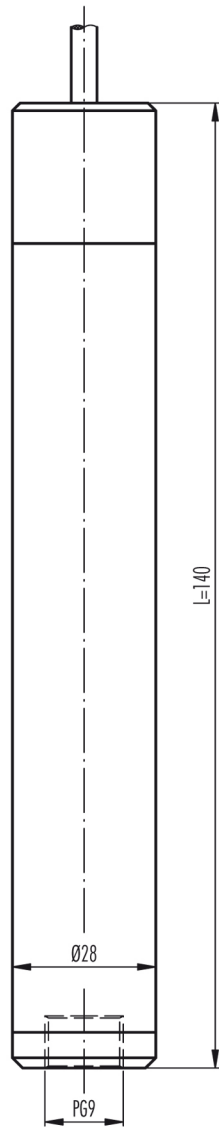


Fig. 1

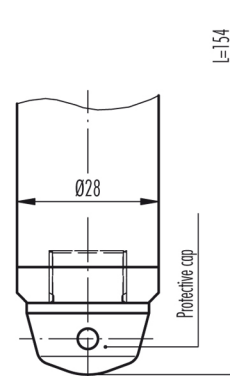


Fig. 2

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

Specifications may change without notice.

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