



## Submersible level transmitters for corrosive media

# ATM/NC

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Version: 28.03.2012

# Technical Specifications

## Pressure measuring range (mH2O)

	1 ... 5	> 5 ... 20	> 20 ... 250
<b>Overpressure</b>	3 bar	3 x FS ( $\geq 3$ bar)	3 x FS
<b>Burst pressure</b>	> 200 bar	> 200 bar	> 200 bar
<b>Accuracy, (1), (<math>\pm</math> % FS)</b>	$\leq 2.0$	$\leq 2.0$	$\leq 2.0$
<b>Accuracy, (1), (3), (<math>\pm</math> % FS)</b>	< 0.5%,	< 0.5%,	< 0.5%,
<b>Thermal shift, (<math>\pm</math> % FS/<math>^{\circ}</math>C)</b>			
Zero point 0...70 $^{\circ}$ C	$\leq 0.06$	$\leq 0.03$	$\leq 0.015$
Zero point -25...85 $^{\circ}$ C	$\leq 0.08$	$\leq 0.04$	$\leq 0.02$
Span 0...70 $^{\circ}$ C	$\leq 0.015$	$\leq 0.015$	$\leq 0.015$
Span -25...85 $^{\circ}$ C	$\leq 0.02$	$\leq 0.02$	$\leq 0.02$
<b>Long term stability, (2)</b>	< 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

<b>Operating temperature</b>	-5...80 $^{\circ}$ C
<b>Process temperature</b>	-5...80 $^{\circ}$ C
<b>Storage temperature</b>	-10...80 $^{\circ}$ C

## Electrical specifications

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

## Qualifications

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

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## Physical specifications

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

## Equipment

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### Overview

<b>10.00.0091</b>	Accessories overview

## Additional documents

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### Operating and safety instructions

	Article number
<b>10.88.0092</b>	DMM029

## Ordering information

		X. XXXX.	XXXX.	XX.	XXX
<b>Type</b>					
	ATM/NC	30			
<b>Pressure type</b>					
	Gauge	1			
	Absolute (vacuum)	2			
<b>Pressure measuring range</b>					
	Any pressure measuring ranges between 0...1 mH <sub>2</sub> O and 0...250 mH <sub>2</sub> O available, (1)	XX			
<b>Process connection</b>					
	Open, TD in titanium, (Fig. 1)	90			
	Open, TD with teflon foil, (Fig. 1)	91			
<b>Electrical connection</b>					
	PE cable, IP 68, (2), (3)		13		
	PUR cable, IP 68, (2), (3)		15		
	PTFE cable, IP 68, (2)		21		
	Customized connection available		XX		
<b>Output signal</b>					
	4...20 mA		05		
	0...20 mA		00		
	0... 5 V DC		46		
	0...10 V DC		47		
<b>Accuracy</b>					
	≤ ± 2.0 % FS			9	
<b>Temperature range</b>					
	-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	
<b>Option 1</b>					
	Special oil filling: ASEOL Food (for food applications)				G
	Special oil filling: Halocarbon (for oxygen applications) (5)				H
<b>Option 2</b>					
	Electronics packed in gel: Gauge pressure				C
	Electronics packed in gel: Absolute pressure				D
<b>Option 3</b>					
	Version titanium				K
	Seals: Viton (standard)				U
	Seals: EPDM				S
	Seals: Kalrez				T
	Protective cap (brass or POM)				W

(1) mH<sub>2</sub>O, mWS, mWC etc. available

(2) Please specify the required cable length and medium

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

(4) Only if diaphragm is made in titanium

(5) min. Medium temperature -25 °C

For pricing or any further information, please contact Omni Instruments Ltd.

# Technical drawings

## Dimensions

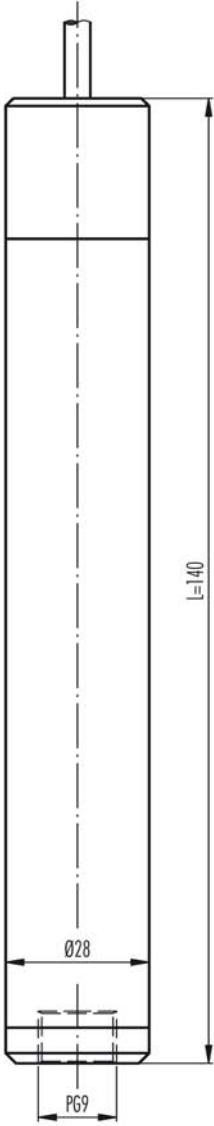


Fig. 1

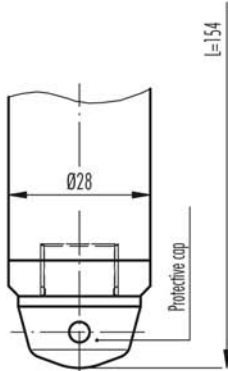


Fig. 2

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