

Submersible Transmitters

ATM/N 19 - Miniature Level Transmitter



Customer benefits

- Submersible level transmitter with a diameter of 19mm
- Fast customization thanks to configurable product design
- Compact design requires minimal space
- PE cable for use in aggressive media

Version: 25.04.2016

Technical Specifications

Pressure measuring range (mH₂O)

	1 ... 5	> 5 ... 20	> 20 ... 250
Overpressure	3 bar	3 x FS	3 x FS
Burst pressure, (1)	> 200 bar	> 200 bar	> 200 bar
Accuracy, (2), (± % FS)	≤ 0.5 / ≤ 0.25	≤ 0.5 / ≤ 0.25 / ≤ 0.1	≤ 0.5 / ≤ 0.25 / ≤ 0.1
Total Error, (3), (4), (± % FS)			
-5...50 °C, (typ. / max.)	≤ 0.8 / 1.0	≤ 0.3 / 0.5	≤ 0.3 / 0.5
Response time, (typ.)	< 1ms / 10 ... 90%	< 1ms / 10 ... 90%	< 1ms / 10 ... 90%
Long term stability, (5)	< 0.5% FS / < 4 mbar	< 0.2% FS / < 4 mbar	< 0.1% FS / < 0.2% FS

(1) Transducer

(2) Zero based accuracy according to DIN-16086, incl. hysteresis and repeatability at ambient temperature

(3) Only for current output

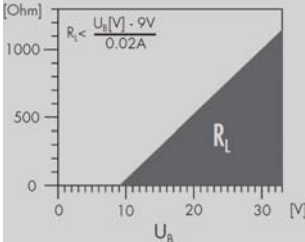
(4) Total error including accuracy and temperature influences at maximum signal span (16 mA)

(5) 1 year (typ. / max.), the long term stability can be improved by ageing (burn-in) the sensor

Temperature range

Operating temperature	-5 ... 50°C
Process temperature	-5 ... 50°C
Storage temperature	-5 ... 50°C

Electrical specifications

	4 ... 20 mA	0 ... 5 V / 0 ... 10 V
Power supply	9 ... 33 V	15 ... 30 VDC
Supply influence	< 0.1% FS	0.1% FS
Current consumption		3 mA
Load resistance		$R_L > 10k\Omega$
Load influence	< 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 ... 2.7 GHz, 3s)	Radio sets, wireless phones
EN 61000-4-4	Transients (burst)	2 kV	Motors, valves
EN 61000-4-5	Surge	Line-Line: 0.5 kV/42 Ω Line-Earth: 1 kV/42 Ω	Overvoltage
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)
Housing	Stainless steel (316L / 1.4404)
Seals	Viton, EPDM, Kalrez
Cabel	PUR, PE, FEP
Weight (1)	150 g

(1) Specification for a ATM/N19, closed, cable

Equipment

Overview

10.00.0091	Accessories overview
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Additional documents

Operating and safety instructions

	Article number
10.88.0092	DMM029

Ordering information

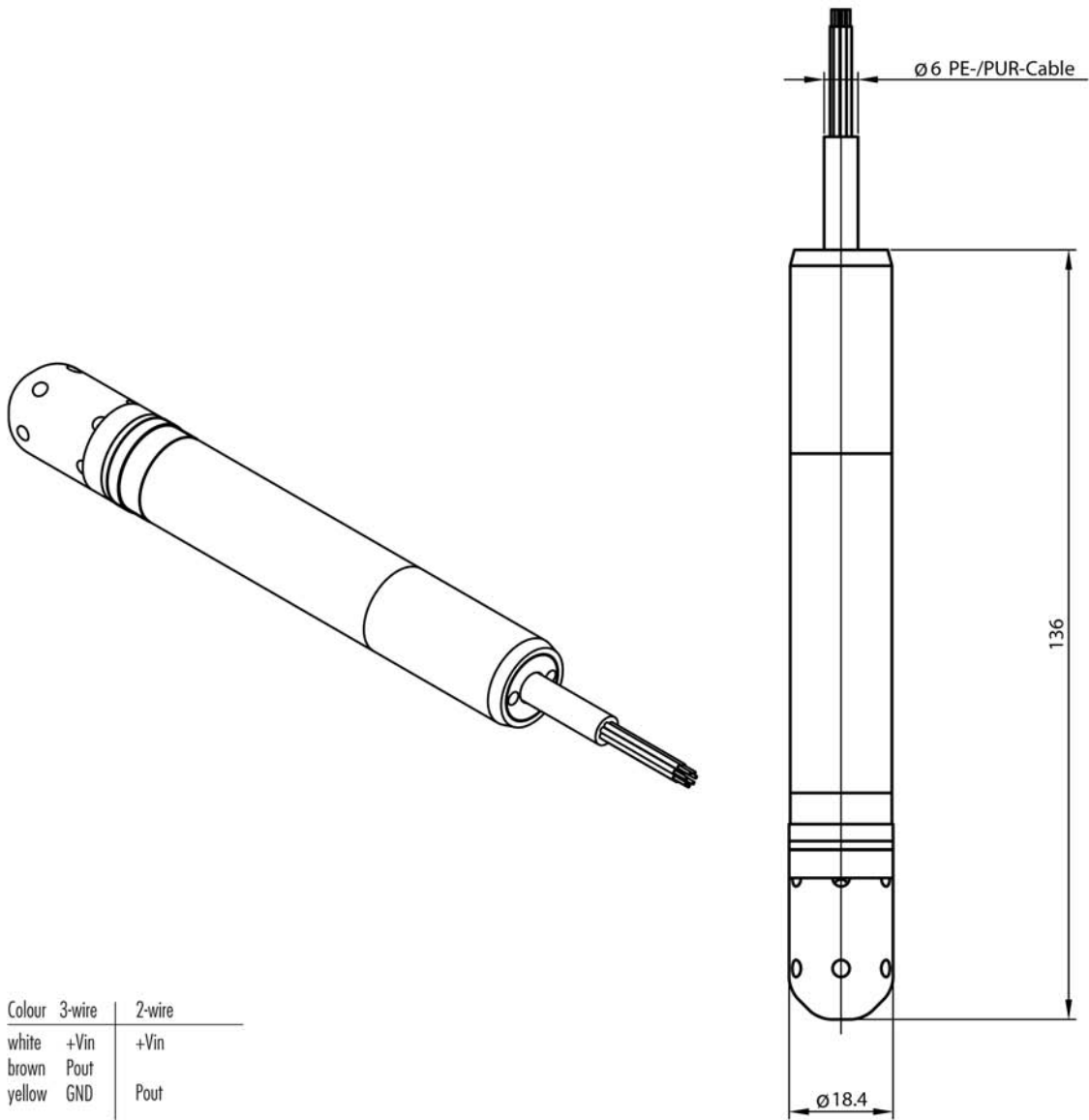
		X. XXXX.	XXXX.	XX.	XXX
Type	ATM/N 19	94			
Pressure type	Gauge	1			
	Absolute (vacuum)	2			
Pressure measuring range	100 mbar ... 25 bar	XX			
Process connection	Closed (Fig.1)	55			
Electrical connection	PE cable, black, IP 68 (2) (3)		13		
	PUR cable, black, IP 68 (2)		15		
	FEP cable, black, IP 68 (2)		21		
Output signal	0 ... 5 VDC		46		
	0 ... 10 VDC		47		
	4 ... 20 mA		05		
Accuracy	$\leq \pm 0.5$ % FS			0	
	$\leq \pm 0.25$ % FS			1	
	$\leq \pm 0.1$ % FS			2	
Temperature range	-5 ... 50°C compensated (allowed process temperature: -5 ... 50°C)			4	
	-5 ... 80°C compensated (allowed process temperature: -5 ... 80°C)			5	
Option 1	Special oil filling: Anderol Food (for food applications)				G
Option 2					
Option 3	Seals: Viton (standard)				U
	Seals: EPDM				S
	Seals: Kalrez (Level)				T
	Humidity filter element for gauge versions (only for PUR and PE cable)				Z

(2) Please specify the required cable length and medium

(3) Suitable for drinking water (food approved)

Technical drawings

Dimensions



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

Specifications may change without notice.

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