

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
- PTFE cable for use in aggressive media

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), (\pm % FS) | $\leq 0.5 / \leq 0.25$ | $\leq 0.5 / \leq 0.25 / \leq 0.1$ | $\leq 0.5 / \leq 0.25 / \leq 0.1$ |
| Total Error, (3), (4), (\pm % FS) | | | |
| -5...50 °C, (typ./max.) | $\leq 0.8 / 1.0$ | $\leq 0.3 / 0.5$ | $\leq 0.3 / 0.5$ |
| 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

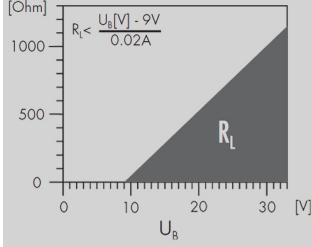
(4) Total error including accuracy and temperature influences at maximum signal span (16 mA)

(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 |  | |
| 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 | |
|------------|----------------------|
| 10.00.0091 | Accessories overview |

Additional documents

OPERATING AND SAFETY INSTRUCTIONS

| Article number | |
|----------------|--------|
| 10.88.0092 | DMM029 |

Ordering information

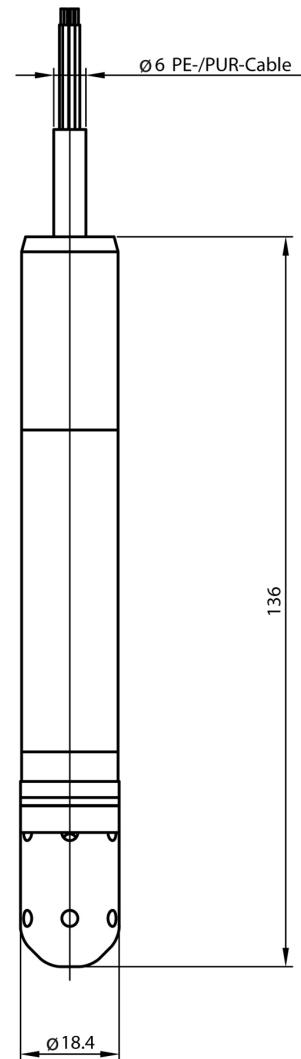
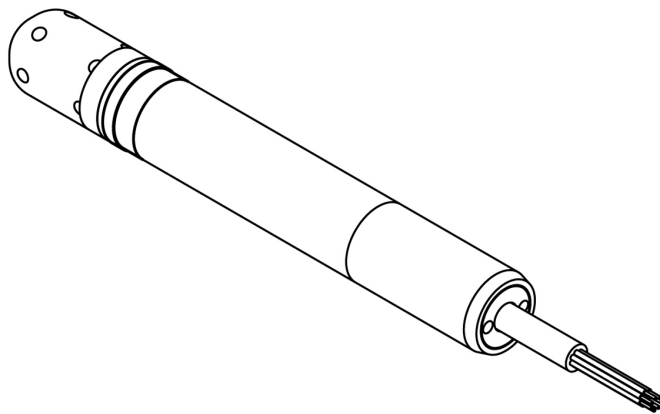
| | X. | XXXX. | XXXX. | XX. | XXX |
|---------------------------------|---|----------|-------|-----|-----|
| Type | | | | | |
| | ATM/N 19 | 94 | | | |
| Pressure type | | | | | |
| | Gauge | 1 | | | |
| | Absolute (vacuum) | 2 | | | |
| Pressure measuring range | | | | | |
| | 100 mbar ... 25 bar | | 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 process temperature: -5 ... 50°C | (allowed | | | 4 |
| | -5 ... 80°C compensated process temperature: -5 ... 80°C | (allowed | | | 5 |
| Option 1 | | | | | |
| | Special oil filling: Anderol Food food applications) | (for | | | 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 | Pout |
| yellow | GND | Pout |



SCIGATE AUTOMATION (S) PTE LTD
 No. 1 Bukit Batok Street 22 #01-01 Singapore 659592
 Tel: (65) 6561 0488 Fax: (65) 6562 0588
 Email: sales@scigate.com.sg Web: www.scigate.com.sg
 Business Hours: Monday - Friday 8.30am - 6.15pm

Specifications may change without notice.

ST5 Headquarters, Switzerland:
 ST5 Sensor Technik, Sirmach AG
 Rütihofstrasse 8 | 8370 Sirmach | Switzerland
 sales@stssensors.com | www.stssensors.com

ST5 China:
 ST5 Sensor Technology (Shanghai) Co. Ltd
 Room 2603-2606 | North Building, Fortune | 108 Square
 Lane 1839 | Qixin Road | Minhang District | Shanghai | China
 sales@stssensors.com | www.stssensors.com.cn

ST5 France:
 ST5 France
 844 Route de la Caille | 74350 Allonziere la Caille | France
 info-fr@stssensors.com | www.stssensors.fr

ST5 Germany:
 ST5 Sensoren Transmitter Systeme GmbH
 Poststrasse 7 | 71063 Sindelfingen | Germany
 info-de@stssensors.com | www.stssensors.de

ST5 Great Britain:
 ST5 Great Britain Ltd.
 Box 3942 | Warwick | CV34 9AE | United Kingdom
 contact@stssensors.com | www.stssensors.co.uk

ST5 Italy:
 ST5 Italia s.r.l.
 Via Lambro 36 | 20090 Opera (MI) | Italy
 info-italia@stssensors.com | www.stssensors.it