Miniature submersible level transmitters

MTM/N 10

Version: 24.06.2014

global.sensor.excellence

www.stssensors.com

Technical specifications for passive version

Pressure measuring range (mH2O)

	10 ... 20	> 20 ... 40	> 40 ... 100
Overpressure	3 x FS	3 x FS (≤ 12 bar)	12 bar
Accuracy, (1) (± % FS)	≤ 0.5 / ≤ 0.25	≤ 0.5 / ≤ 0.25	≤ 0.5 / ≤ 0.25
Setting accuracy			
Zero point	± 1mV	± 1mV	± 1mV
Span	± 2 %	± 2 %	± 2 %
Thermal shift, (± % FS/°C)			
Zero point -5...50°C	≤ 0.06	≤ 0.03	≤ 0.015
Span -5...50°C	≤ 0.015	≤ 0.015	≤ 0.015
Long term stability, (2)	≤ 0.2% FS / < 4 mbar	≤ 0.1% FS / < 0.2% FS	≤ 0.1% FS / < 0.2% FS

(1) Best Straight Line (BSL) at ambient temperature
(2) 1 year (typ. / max.)

Typical output signal (mH2O)

	10 ... 20	> 20 ... 40	> 40 ... 100
Output signal, (1), (mV)	50	100	100

(1) At nominal pressure, 10 V DC

Technical specifications for active version, (1)

Pressure measuring range (mH2O)

	10 ... 20	> 20 ... 40	> 40 ... 100
Accuracy, (2) (± % FS)	≤ 0.5 / ≤ 0.25 / ≤ 0.1	≤ 0.5 / ≤ 0.25 / ≤ 0.1	≤ 0.5 / ≤ 0.25 / ≤ 0.1
Thermal shift, (± % FS/°C)			
Zero point -5...50°C	≤ 0.06	≤ 0.03	≤ 0.015
Span -5...50°C	≤ 0.015	≤ 0.015	≤ 0.015

(1) For further specifications see ATM/N
(2) Zero based accuracy according to DIN16086, incl. hysteresis and repeatability at ambient temperature

Technical specifications with datalogger, (1)

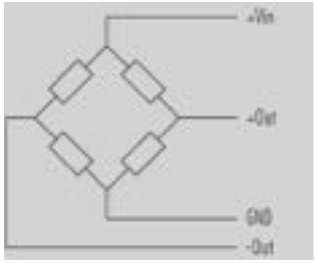
Pressure measuring range (mH2O)

	10 ... 20	> 20 ... 40	> 40 ... 100
Accuracy, (2) (± % FS)	≤ 0.1	≤ 0.1	≤ 0.1
Thermal shift, (± % FS/°C)			
Zero point -5...50°C	≤ 0.06	≤ 0.03	≤ 0.015
Span -5...50°C	≤ 0.015	≤ 0.015	≤ 0.015

(1) For further specifications see DL or DL/N70
(2) Zero based accuracy according to DIN16086, incl. hysteresis and repeatability at ambient temperature

Electrical specifications for passive version

Pressure range

Circuit diagram	
Input impedance	> 10 kOhm
Bridge resistance, (typ.)	3 kOhm
Supply voltage, output signal 0...10VDC / 0...20mA / 4...20mA	15 ... 30 VDC
Supply voltage, output signal 0...5 VDC	10 ... 30 VDC
Cable length (max.)	200 m

Physical specifications, (1), (2)

Materials	
Transducer	Stainless steel (316L / 1.4435), Titanium (Gr. 2)
Housing	Stainless steel (316L / 1.4435), Titanium (Gr. 2)
Seals	NBR
Cable	PUR, PE

(1) Only for level transmitter MTM/N10
(2) Stainless steel only in clean water applications

Equipment

Overview

10.00.0091	Accessories overview

Additional documents

Operating and safety instructions

	Article number
10.88.0369	DMM030

Ordering information

			X.	XX	XX.	XXXX.	XX.	XXX
Type								
	MTM/N 10	15						
Pressure type								
	Gauge		1					
	Absolute (vacuum)		2					
Pressure measuring range (1)								
	1 bar ... 10 bar			XX				
	Offset, special adjustment			99				
Model								
	Standart passive, with mV output signal, (Fig. 1/2)			0				
	Active, with analog amplifier, (Fig. 3)			2				
	With datalogger DL/N 70 (Fig. 4)			4				
Electrical connection								
	PUR cable, black IP 68			0				
	PE cable, black, IP 68			1				
	Connectable version, IP 68, (Fig. 5), (5), (6)			3				
Version								
	Closed, (Fig. 1)				55			
	Open, (Fig. 2)				56			
Connecting cable (4)								
	PE cable							1
	PUR cable							0
Output signal								
	0...mV (specified by the customer), (Fig. 1 / 2), (8)				13			
	0...100 mV				14			
	0...5 VDC, (Fig. 3), (9)				46			
	0...10 VDC, (Fig. 3), (9)				47			
	0...20 mA, (Fig. 3), (9)				00			
	4...20 mA, (Fig. 3), (9)				05			
	RS485, (Fig. 5), (6), (9)				62			
Accuracy								
	≤ ± 0.5 % FS, BSL (passive version only) (7), (8)						0	
	≤ ± 0.5 % FS, (with option seperate electronic) (9)						0	
	≤ ± 0.25 % FS, BSL (passive version only) ((7), (8)						1	
	≤ ± 0.25 % FS, (with option seperate electronic) (9)						1	
	≤ ± 0.1 % FS, (with option seperate electronic) (9)						2	
	≤ ± 0.1 % FS (DL/N 70)						2	
Temperature range								
	-5...50 °C compensated (allowed process temperature: -5...50 °C)						4	
Option								
	Seals: NBR (Standard)							R
	Titanium							K
	Humidity filter element for gauge versions (only for PUR and PE cable)							Z

(1) mH2O, mWS, mWC etc. available

(2) Please specify the required cable length and medium

(3) Suitable for drinking water (food approved)

(4) Connecting cable between MTM/N10 and electronics

(5) Connector with required cable has to be ordered separately (KART100)

(6) Only with datalogger DL/N70
(7) BSL: Best Straight Line
(8) Passive version
(9) Active version

Technical drawings

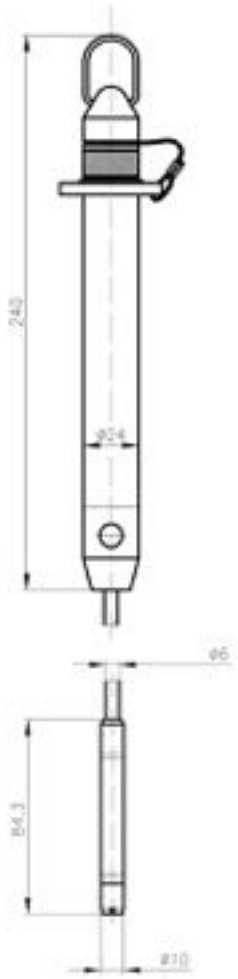
Dimensions

Fig. 1: Passive version, closed

Fig. 2: Passive version, open

Fig. 3: Active version

Fig. 5: Version with datalogger DL/N Series 70



Colour	Connection configuration Passive version
white	+Vin
yellow	GND
brown	+Out
green	- Out

Connection configuration with separate electronics, see datasheet ADW/N, Series 24
Connection configuration with datalogger, see datasheet DL/N, Series 64/70

Specifications may change without notice.

STS Headquarters, Switzerland
STS Sensor Technik Sirnach AG
Rüthofstrasse 8, 8370 Sirnach, Switzerland
sales@stssensors.com | www.stssensors.com

STS France:
STS France
844 Route de la Caille, 74350 Allonzier la Caille, France
info-fr@stssensors.com | www.stssensors.fr

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

STS Great Britain:
STS Great Britain Ltd
Box 1942 | Warwick | CV34 9AE, United Kingdom
contact@stssensors.com | www.stssensors.co.uk

STS Italy:
STS Italia s.r.l.
Via Gesù 5, 20090 Opera (Milano), Italy
info-italia@stssensors.com | www.stssensors.it