

MINIATURE PRESSURE TRANSMITTER FOR LEVEL MEASUREMENT MTM/N10



15

CE

Features

- Compact version with an outer diameter of **10 mm**
- For relative or absolute pressure measurement
- Any measuring ranges within 10 mH₂O and 100 mH₂O available
- High reliability

Typical applications

- Level measurement in very small bores
- Wells
 - Boreholes
 - Dams

Technical specifications for passive version

Pressure ranges	[bar]	1.0 ... 2.0	> 2.0 ... 4.0	> 4 ... 10
Overpressure		3 x FS	3 x FS (max. 12 bar)	12 bar
Accuracy ¹⁾	[± % FS]	≤ 0.5 (optional ≤ 0.25)	≤ 0.5 (optional ≤ 0.25)	≤ 0.5 (optional ≤ 0.25)
Setting accuracy	NP Span	± 1mV ± 2%	± 1mV ± 2%	± 1mV ± 2%
Thermal shift	[± % FS/°C]			
Zero	-5...50°C	≤ 0.06	≤ 0.03	≤ 0.015
Span	-5...50°C	≤ 0.015	≤ 0.015	≤ 0.015
Long-term stability (1 year) - (typ./max)		≤ 0.2% FS/< 4mbar	≤ 0.1% FS/< 0.2% FS	≤ 0.1% FS/< 0.2% FS

Technical specifications for active version³⁾

Pressure ranges	[bar]	1.0 ... 2.0	> 2.0 ... 4.0	> 4 ... 10
Accuracy ²⁾	[± % FS]	≤ 0.5 (optional ≤ 0.25, ≤ 0.1)	≤ 0.5 (optional ≤ 0.25, ≤ 0.1)	≤ 0.5 (optional ≤ 0.25, ≤ 0.1)
Thermal shift	[± % FS/°C]			
Zero	-5...50°C	≤ 0.06	≤ 0.03	≤ 0.015
Span	-5...50°C	≤ 0.015	≤ 0.015	≤ 0.015

Technical specifications with datalogger⁴⁾

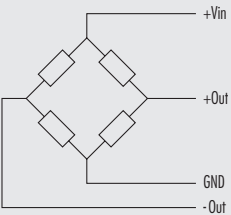
Pressure ranges	[bar]	1.0 ... 2.0	> 2.0 ... 4.0	> 4 ... 10
Accuracy ²⁾	[± % FS]	≤ 0.1	≤ 0.1	≤ 0.1
Thermal shift	[± % FS/°C]			
Zero	-5...50°C	≤ 0.06	≤ 0.03	≤ 0.015
Span	-5...50°C	≤ 0.015	≤ 0.015	≤ 0.015

Electrical data for passive version

Pressure ranges	[bar]	1.0 ... 2.0	> 2.0 ... 4.0	> 4 ... 10
Full scale signal typ. (10V DC voltage supply)	[mV]	50	100	100

Connection

Electrical connection



Input impedance > 10kOhm
Bridge resistance 3kOhm, typ.
Max. voltage supply 15 V DC

Electrical data for active version: see ATM/N datasheet, Series 24
 Electrical data for datalogger: see DL/N datasheet, Series 64/70

Materials Fig.1 /Fig.2	
Pressure connection, diaphragm, housing	Stainless steel 1.4435 (316L)
Seals	NBR

¹⁾ BSL

²⁾ Zero based non-conformity according to DIN 16086, including hysteresis is and repeatability

³⁾ further specifications see ATM/N datasheet, Series 24

⁴⁾ further specifications see DL/N datasheet, Series 64/70

Ordering Information

		15	X	. XXXX	. XXXX	. XX	. XXX
Type	MTM/N10	15					
Pressure type	Gauge	1					
	Absolute	2					
Pressure range ¹⁾	All pressure ranges between 0...10 mH ₂ O and 0...100 mH ₂ O available			XX			
Version	passive, with mV output signal (Fig. 1/2)						0
	active, with analog amplifier (Fig. 3)						2
	with datalogger DL/N Series 64 (Fig. 4)						3 2
	with datalogger DL/N Series 70 (Fig. 5)						4 3
Electrical connection	PUR cable ²⁾ (Fig. 1/2/3)						0
	PE cable ^{2) 3)} (Fig. 1/2/3)						1
	Lumberg RSF 4 connector, 4-pin (Fig. 4)						3 2
	Lumberg RSF 8 connector, 8-pin (Fig. 5)						4 3
Version	Closed						55
	Open						56
Connecting cable ⁴⁾	PUR cable ²⁾ (Fig. 3/4/5)						
	PE cable ^{2) 3)} (Fig. 3/4/5)						
Output signal	0...50 mV (Fig. 1/2)						13
	0...100 mV (Fig. 1/2)						14
	0...20 mA (Fig. 3)						00
	4...20 mA (Fig. 3)						05
	0...5 V DC (Fig. 3)						46
	0...10 V DC (Fig. 3)						47
	RS232 (Fig. 4)				3 2		61
	RS485 (Fig. 5)				4 3		62
Accuracy	≤ ± 0.5 % FS (BSL) (Fig. 1/2)						0
	≤ ± 0.5 % FS (Fig. 3)						0
	≤ ± 0.25 % FS (BSL) (Fig. 1/2)						1
	≤ ± 0.25 % FS (Fig. 3)						1
	≤ ± 0.1 % FS (Fig. 3/4/5)						2
Temperature range	-5...50°C compensated (max. medium temp. -5...50°C)						4
Options	Seals: NBR						R

¹⁾ All pressure units (e.g. bar, mWS etc.) available

²⁾ Please specify the required cable length and medium

³⁾ Suitable for drinking water (food approved), please specify the required cable length and medium

⁴⁾ Connecting cable between submersible transmitter and electronics; please specify the required cable length and medium

Dimensions

Fig. 1: Passive version, closed

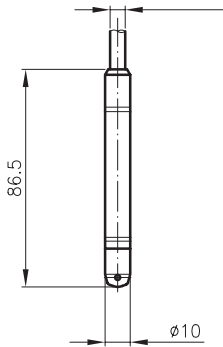


Fig. 2: Passive version, open

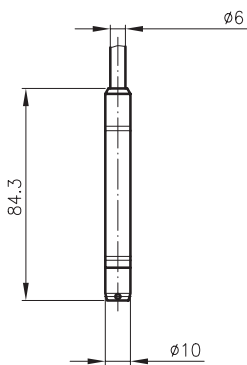


Fig. 3: Active version

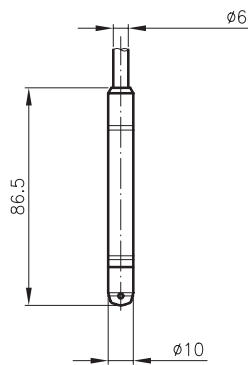
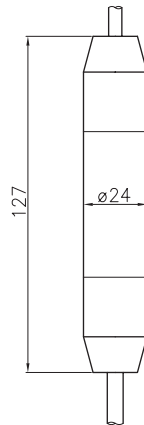
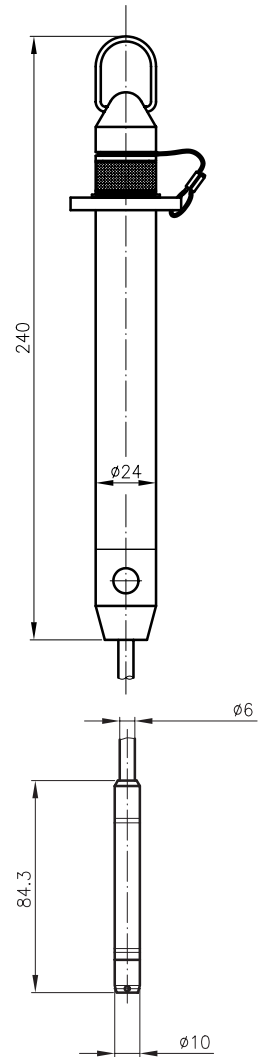


Fig. 5: Version with datalogger DL/N Series 70



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

Connection configuration with separate electronics, see datasheet ATM/N, Series 24

Connection configuration with datalogger, see datasheet DL/N, Series 64/70

Specifications may change without notice.

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Switzerland	Germany	Italy	France	Represented by:
STS Sensor Technik Sirnach AG Rütihofstrasse 8 CH - 8370 Sirnach Tel.: +41 (0)71 969 49 29 Fax: +41 (0)71 969 49 20 e-mail: sales@sts-ag.ch Internet: www.sts-ag.com	STS Sensoren Transmitter Systeme GmbH Poststrasse 7 D - 71063 Sindelfingen Tel.: +49 (0)7031 204 9410 Fax: +49 (0)7031 204 9420 e-mail: info@sts-ag.de Internet: www.sts-ag.com	STS Italia s.r.l. Via Gesù 5 I - 20090 Opera (MI) Tel.: +39 02 57607073/074 Fax: +39 02 57607110 e-mail: info@sts-italia.it Internet: www.sts-ag.com	STS France 844, Route de la Caille FR - 74350 Allonzier la Caille Tel.: +33 (0)4 50 08 48 15 Fax: +33 (0)4 50 67 02 43 e-mail: info@stsfrence.fr Internet: www.sts-ag.com	