



Resistance thermometer TYPE MNS

Tank Thermometer

- Mineral insulated thermometer for temperature measurement in insulation and concrete surroundings e.g. liquid gas tanks and LNG tanks.
- Measuring temp. range: -200°C to +100°C.
- The measuring element is glass encapsulated platinum elements according to EN60751.
- Protective sheath of AISI 316L filled with compressed MgO powder. Sensor tip Ø6 AISI 316L.
- 26 AWG PTFE
- Response time (mean values) measured at velocities in:
water w. 0.4 m/s: $\tau_{0.5} = 6.4 \text{ sec.}$ - $\tau_{0.9} = 27 \text{ sec.}$
- Recommended measuring current: 1 mA (max. 2 mA).
- Approvals: Ex ia IIC T6 Ga, FM13ATEX0019X, IECEx FME 13.0003X, DNV-GL EU RO MR



EU RO MUTUAL RECOGNITION TYPE APPROVAL CERTIFICATE - Group members are:



To achieve the highest accuracy we recommend the 4 wire calibrated version. Each calibrated sensor is supplied with a certificate stating its own individual coefficients Ro, A, B and C to substitute the standard coefficients in the EN60751 platinum curve. By use of the coefficients the uncertainty of the sensor will be $\leq 20 \text{ mK}$ in the range -195 to 100 °C. The transmitter will represent the major part of the total system uncertainty.

Options / accessories:

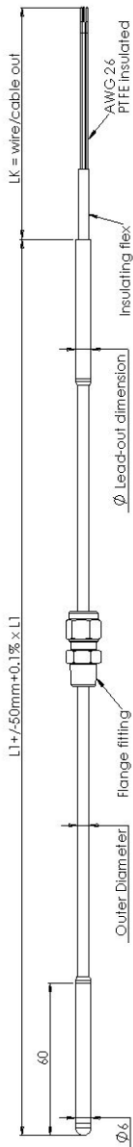
- Junction box
- Transmitters
- Calibration
- Factory Acceptance Test (FAT)
- Installation accessories

See separate data sheets for further information

For installation and connection - see drawing 800-MNS-EX and installation manual.

Recommended Torque while mounting:

- 1/8" threaded part: 16-18 Nm (Max. 22 Nm)
- Compression part: max. 16-18 Nm



Ordering: See ordering form on back page



ORDERING FORM / RESISTANCE THERMOMETER TYPE MNS

Type MNS

V4.6

Sensor Length/L1:

Min. 200 mm -
max. 300.000 mm
Optional length

Outer Diameter:

4.5 mm 5
6.0 mm 6

Number of elements:

Simplex S
Duplex D

Wiring (Number of conductors):

3 wire 3
4 wire 4

Resistance at 0°C:

100 Ω 1

Tolerance Class EN 60751:

Grade A 1
Grade B 2
Calibrated - 4 wire only C

Sensor Tip:

Ø6x60 A

Lead-out wire:

PTFE single wire 1

Lead-out dimension:

Straight 0
Ø6 1
Ø10 2
Ø12 3

MNS TAG No. - Project No.:

Max. 20 characters - customer def.

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Extension length L2:

..... None
..... Min. 500 mm - max 10,000 mm

Sensor tip fitting:

..... 0 None
..... 5 Sensor connection block

Flange fitting:

..... 0 None
..... 5 1/8" NPT SS ferrule compression fitting
..... 6 1/4" NPT SS ferrule compression fitting
..... 7 1/2" NPT SS ferrule compression fitting
..... 8 3/4" NPT SS ferrule compression fitting

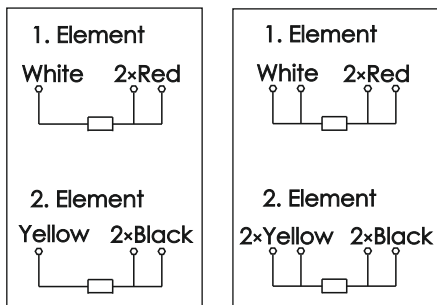
Junction box fitting:

..... 0 None

Lead-out wire/LK:

..... Min. 200 mm
..... Optional length

Connection Diagram:



Head office:

Senmatic A/S
Industrivej 8, 5471 Sønderø, Denmark
Phone: +45 64 89 22 11
dk@senmatic.com - www.senmatic.com