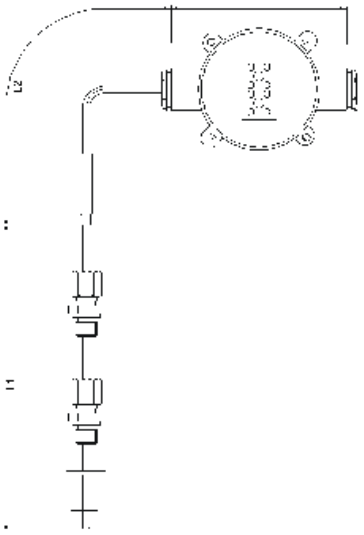
RESISTANCE THERMOMETER **Measuring insert: Fixed**	**Type: RT-RST-MC**	Sheet No. 1-56 V2.1 **5857-E010818V2.1**

Application:

- Stern Tube

Properties:

- Pt100 resistance thermometer in acc. with IEC 60751
- Measuring insert: fixed
- Mechanical and thermal stress in accordance with DIN 43772
- Process attachment: adjustable coupling
- Constructed so as to have the greatest possible accuracy and durability during demanding operating conditions that means:
  - It is robust
  - It is flexible/ bendable (do not bend the first 50mm!)
  - It has a quick reaction time
- Outer protective sheath: acid-proof steel
- IP67
- Electrical connection: Cable or Connection box
- Mechanical connection: 2 adjustable couplings
- Marine approved by: DNV, LR, NK, RINA, ABS and BV



MECHANICAL SPECIFICATIONS

Protective sheath: ---------- 1.4571
EN 1.4571 (AISI 316Ti)

Mineral insulated tube diameter [mm]: -----
Ø3 mm
Ø4.5 mm
Ø6 mm
Special

Mineral insulated tube length L1 [mm]: ----
2000 mm
3000 mm
5000 mm
7000 mm
10000 mm
Special

Adjustable coupling: ----------
Adjustable 1/4” BSP
Adjustable 3/8” BSP
Adjustable 1/2” BSP
Special

ELECTRICAL SPECIFICATIONS

---Sensor element:
1xPt100
2xPt100
1xPt1000 (only cl. B 1/1 and cl. A)
2xPt1000 (only cl. B 1/1 and cl. A)

---Number of conductors:
2-wire (recommended only for Pt1000)
3-wire
4-wire

----Cable type:
TBT (Teflon-Braid-Teflon)
Special

----Cable Length L2:
3 m, 5 m, 7 m, 10 m
Special

---Media temperatures max:
+600°C
Special

---Tolerance in acc. with IEC 60751:
Type A DIN (i.e.±(0,15+0,002xTactual) °C)
Type B 1/1 DIN (i.e.±(0,3+0,005xTactual) °C)
Type B 1/3 DIN (i.e.±(0,1+0,0017xTactual) °C)
Type B 1/6 DIN (i.e.±(0,05+0,00083xTactual) °C)
Type B 1/10 DIN (i.e.±(0,03+0,0005xTactual) °C)

Link for further information: Pt100 Tolerance

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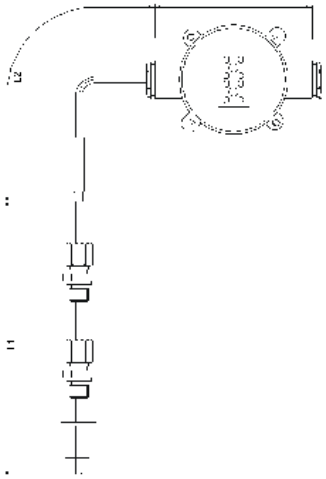
Calibration:
Temperature calibration are used to verify and certify the sensor to have the correct accuracy. We can do either: “In house” or “Accredited” calibration. Accredited is certified by 3.e part. Normally we do a calibration in 3 points.

Enhanced performance services:
Cold applications (below -50°C) will influence the material and the measurement. CRYO treatment is needed to ensure a correct and working sensor down to -196°C.

A sensor will always drift over time, especially when there are high temperature fluctuations.
With “Ageing treatment” we stabilize the sensor to ensure a minimum drift over time. The benefits are long term stability, more correct measurement and easier planning of calibration periods.

Documentation:
Please order the correct documentation when ordering the sensor.



SIGNAL PROCESSING

Enclosure

Marine Box (112x82x42mm) ----------

ABS Box (82x80x56mm) ----------

NONE ----------

Programmable mounted transmitter:

Measuring range min/max: -200/+850°C
Output: 2-wire, 4-20 mA
Min. span: 25°C
Ambient temperature min/max: -40/+85°C

5333A Uninsulated for RTD
5333D EEX Uninsulated for RTD
5332A Uninsulated for RTD
5332D EEX Uninsulated for RTD
5331A Galvanic Isolated RTD / TC
5331D EEX Galvanic Isolated RTD / TC
5335A Hart 5 Protocol Standard
5335D Hart 5 Protocol CSA, FM, ATEX, IECEx
5337A Hart 5 & 7 Protocol
5337D Hart 5 & 7 Protocol CSA, FM, ATEX, IECEx

Transmitter Type:			
4 mA =	C°	20 mA =	C°

5350A Profibus standard
5350B Profibus ATEX, FM and CSA

Link to further information:

Transmitter Overview

Programmable rail mounted transmitter

CALIBRATION

None ----**Calibration:**
In house (Span -33°C - +700°C)

Accredited – in laboratory (-196°C - +1200°C)

1.	Point	°C
2.	Point	°C
3.	Point	°C

More point on request

Enhanced performance services

----**Cryo treatment.**
For temperature sensor under -50°C

----**Ageing:**
For long term stability.
Secure minimum drift of sensor accuracy

----**Documentation**
Certificate: 3.1 Material
Certificate of origin
Certificate of conformity

----**Marine Certificate**
Certificate of DNV
Certificate of BV
Certificate of Rina
Certificate of ClassNK
Certificate of LR
Certificate of ABS

Other on request

Save Print Submit

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