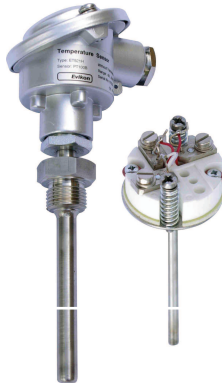4-20mA
0-10V
RS485

A4
steel

Screw-in RTD sensor with replaceable insert
ET521

- For measuring temperatures from -50 to +500 ℃

- Pt100, Pt1000 resistance sensor

- Double RTD sensing element option

- Variety of DIN B type terminal heads

- AISI 316 s/s protection tube with welded screw fitting acts as an integrated thermowell

- Head-mountable transmitters available — to provide 0-10 V / 4-20 mA or RS485 Modbus RTU communication

ET52x series screw-in RTD thermometers with terminal head and replaceable measuring insert are designed for measuring temperatures in liquids and gases under demanding conditions.

Applications include heating installations, ovens, furnaces and plant engineering, as well as industrial automation. The protection tube with welded screw fitting functions as an integrated thermowell and the measuring insert can be replaced without interrupting the process.

Depending on the needs of application, platinum RTD sensing elements of specific nominal resistance and accuracy class for temperatures up to +500 ℃, protection tubes of different length, various terminal heads and outputs can be supplied.

Measuring insert with sensing element
   - 1.4404/AISI316L stainless steel, Ø6 mm
    various sizes according to protection tube,
    screw-mountable to terminal head,
    compression springs for better heat contact with the bottom
of protection tube
   - Pt100 or Pt1000 RTD sensing element,
     class B, A according to EN 60751,
     measurement range -50...+250 ℃ or -50...+ 500 ℃

Protection tube
   Thermowell integrated with terminal head
   - 1.4404/AISI316L stainless steel Ø10 mm, E75...350 mm
    (tubes in stock: E = 75/ 100 / 130 / 160 / 200 / 250/ 300/ 350 mm)
   - extension neck (length H = 30...180 mm) for prevention of
    terminal head overheating
   .
Welded screw fitting
   - 1.4401/AISI316 stainless steel
   - G1/2 welded screw fitting as standard,
    G1/4, M20×1,5 or other threads by order

Terminal heads
   - types: B: standard aluminium DIN 43729
   - protection class IP55, on request up to IP67
   - allowed temperature without transmitter: -40...+100 ℃,
                     with transmitter -40...+75 ℃

Output
   - ceramic terminal block (-C) for 2-, 3- or 4-wire connection
   - in-head transmitter option
   - E2060 series transmitters mountable into terminal heads
    (see: sheet 2.00) — to provide 4-20 mA / 0-10 V analog
    output or digital RS485 Modbus RTU interface