Flue Gas Temperature



The flue gas temperature series is designed to allow monitoring of flue gas operating temperatures. The terminal head is mounted on a stand-off to decrease heat transfer to the terminal block or temperature transmitter and wire connections held within.

- ◆ Easy installation
- ◆ Rapid response
- Rugged design

Technical Data

Wire:

• 200°C: 24 AWG, teflon/teflon

400°C: 24AWG, fiberglass/fiberglass
600°C: 20AWG, fiberglass/fiberglass

Coupling / nipple extension:

• Terminal block connection: 2" between head and flange

• Temperature transmitter connection: 6" between head and flange

Sheath material: 316 stainless steel

Probe diameter: 1/4"

Probe length: see ordering data

Sensor type: Pt100 RTD / Thermocouple

Accuracy:

• Pt100: +/- 0.3°C, DIN EN 60751 (according to IEC 751)

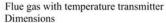
• Thermocouple: standard limits of error, special limits available

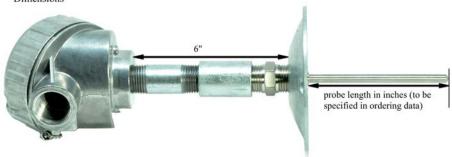
Operating temperature: see ordering data (200°C, 400°C and 600°C available)

Enclosure: aluminum head **Mounting:** aluminum flange

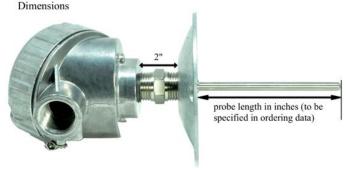


Industry Usage: Manufacturing





Flue gas w/ terminal block



Ordering Data

TS-F -(probe length)- (sensor type)- (sensor value)- (max operating temp) in inches R = RTD 100 = 100 ohms in °C TC = Thermocouple K = K calibration

ie. TS-F-8-R-100-400: Flue gas temperature assembly with 8" long probe, 100 ohm RTD and maximum operating temperature of 400°C

TT-F -(probe length)- (sensor type)- (sensor value)- (max operating temp)/ (temp trans. range) in inches R = RTD 100 = 100 ohms in °C TC = Thermocouple K = K calibration

ie. TT-F-8-R-100-600/0C600C: Flue gas temperature assembly with 8" long probe, 100 ohm RTD, maximum operating temperature of 600C and temperature transmitter with a temperature range of 0...600°C

TXR420: Digital Temperature Transmitter



The TXR420 is a digital temperature transmitter and can be PC programmed to be used with a Pt100 RTD at various temperature ranges. This device is protected against reverse polarity and has sensor fault detection built in.

- ♦ High accuracy
- ◆ Unaffected by EMI
- ◆ PC programmable

Technical Data

Power supply: 24 VDC (10...35 VDC) Output signal: 4...20mA or 20...4mA

Connection type: 2-wire Sensor type: Pt100 RTD

Accuracy: 0.1%

Min. Input current: <3.5mA

Current limit: <23mA Switch on delay: 4 sec Response time: 2 sec

Influence of power supply: +/- 0.01%/V **Max. load:** (V_{ref} -10 V)/ 0.022 Amp

Linearity error: <0.1%

Temperature drift: 0.1%/°C

Damping (programmable): 0...60 sec

Electrical connection: Plug connection as per DIN EN 175301-803-A

Ambient temperature: -40...85°C

Protection class: IP 66/ IP 00

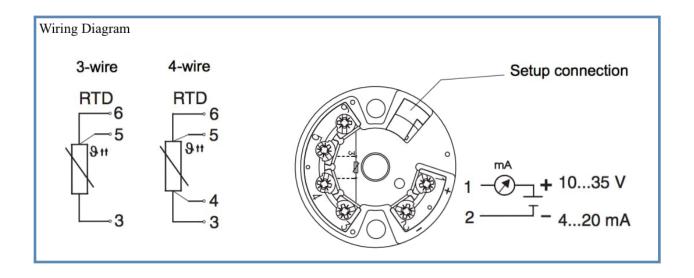
Climatic class: Cl. C, EN 60654-1 EMC immunity: Acc. to EN 61326-1 Vibration protection: 4g/2...150Hz

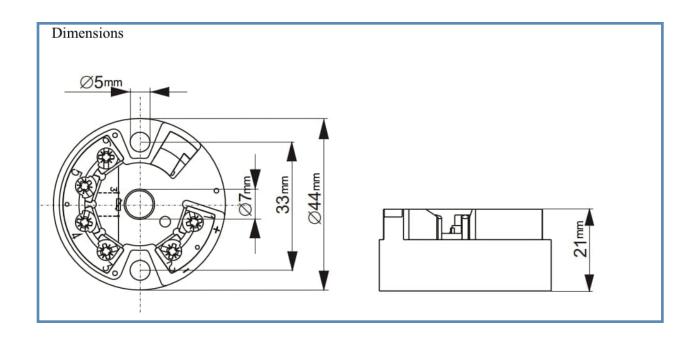
Approval: CE



Industry Usage

Waste management, HVAC, Energy management, Food processing, Refineries, Pharmaceutical





RTD Input Table			
Туре	Min. Temperature	Max. Temperature	Min. Span
Pt 100	-200°C	850°C	10°C

Accessories:

TX420-cable-usb: includes a PC software package, a communication adapter and the serial connection cable.

Ordering Data

TXR420/ (programming/ temp range) - (output) - (input)
$$0 = \text{no programming}$$
 $4 = 4...20\text{mA}$ $3W = 3\text{-wire}$ $20 = 20...4\text{mA}$ $4W = 4\text{-wire}$

ie. TXR420/0-0-0: temperature transmitter with no calibration

ie. TXR420/-20C300C-4-3W: temperature transmitter calibrated for a Pt100 at a temp range of -20° C...300°C with a 4...20mA output