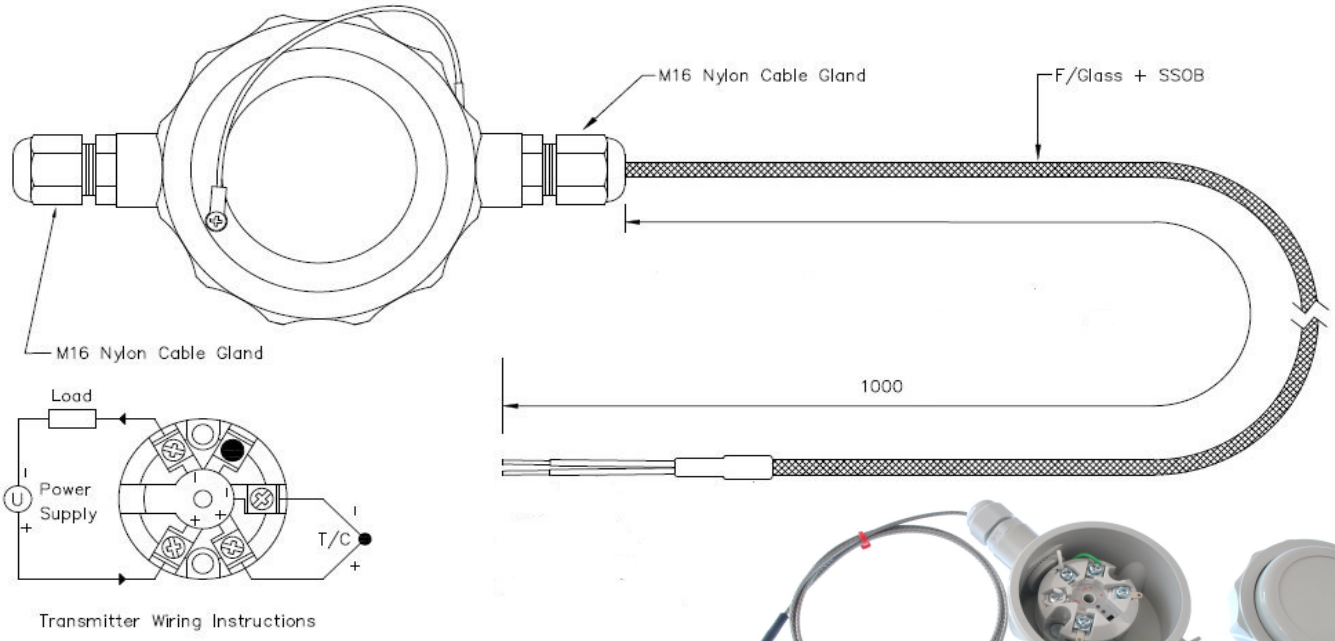
ENGLISH

Datasheet

4-20mA remote wall mounted housing, Type K Thermocouple input 1 metre lead

0°C to +1000°C ranged Transmitter



- Compatible with type K (NC/NA) thermocouples
- Surface Mounting for remote installation
- 4-20 mA output
- Range 0-1000°C (transmitter can be re-ranged if desired)
- Entry Threads M16
- 1 metre of type K 7/0.2 fibre glass cable with stainless steel overbraid

Housing moulded in general purpose ABS, the external fixing points provide a simple and rapid means of mounting sensors directly onto ducts, dispensing with the need for separate mounting plates.

Specifications

Head:	High Impact ABS Plastic Construction
Transmitter:	The push button temperature transmitter is a cost effective “smart” in head transmitter that accepts thermocouple temperature sensors and converts sensor output over a configured range to a standard industrial (4 to 20) mA transmission signal. *(transmitter device has an ambient range of -40°C to +85°C)*
Cable:	1 metre of type K 7/0.2 fibre glass cable with stainless steel overbraid
Cable Termination:	Bare tails

Type	Cable Glands	Cable Length (mm)	Transmitter Range	RS order code
Pt100	M16	1000	0°C to +1000°C	**872-2755**

RS199/0816

TRANSMITTER SPECIFICATION @ 20 °C

INPUT

Sensor	Range (°C)	Accuracy
K	-200 to 1370	± 0.1% of F.S. ± 0.5°C (plus any sensor error)

Range (mV)		
mV	-10 to 70	± 0.02 % of full scale

Isolation	Tested to 250 V dc
Sensor Burnout	Either up or down scale output
Cold Junction Range	(-40 to 85) °C; Accuracy ±0.5°C Tracking ± 0.05°C /°C
Stability Offset	0.1°C /°C, Span 0.05°C /°C

OUTPUT

Output type	2 wire (4 to 20) mA current loop
Output range	4.0mA to 20.0mA
Output connection	Screw Terminal
Maximum output	21.5mA (in high burnout condition)
Minimum output	3.8mA (in low burnout condition)
Accuracy	(mA output / 2000) or 5uA (whichever is the greater)
Loop Voltage effect	± 0.2uA / V
Thermal drift	± 1uA / °C Typically ± 1.5uA
Maximum output load	[(Vsupply-10)/20] K Ohms (Example 700 ohms @ 24V)

GENERAL SPECIFICATION

Update time	500mS
Response time	1 second
Start-up time	4 seconds (Output < 4mA during start up)
Warm-up time	1 minute to full accuracy
Power supply	10 to 30 Volts dc

ENVIRONMENTAL

Ambient operating range	(-40 to +85) °C
Ambient storage temperature	(-50 to +90) °C
Ambient humidity range	(10 to 90) % RH non condensing

What is the difference between a RTD and PRT sensor?
Nothing. RTD means resistance thermometer detector (the sensing element) and PRT means Platinum resistance thermometer (the whole assembly) i.e. a PRT uses a RTD.

Wiring Diagram