

MP200 Series

Universal Programmable Temperature Transmitter w/4-20 mA or 20-4 mA Output



Product Features

- Programmable input : T/C, RTD, mV
- 2 or 3-wire Pt100 input with linearized output
- 2-wire loop powered 4-20mA / 20-4 mA output
- Cold junction compensation for thermocouples
- Configuration with a PC via TxConfig interface

Description

MP200 series comes factory calibrated but is also a fully customer re-programmable temperature transmitter. In-the-field configuration of input type and working range can be achieved by means of a cable and an RS232 port from a PC.

Table 1 – MP200 series input sensor

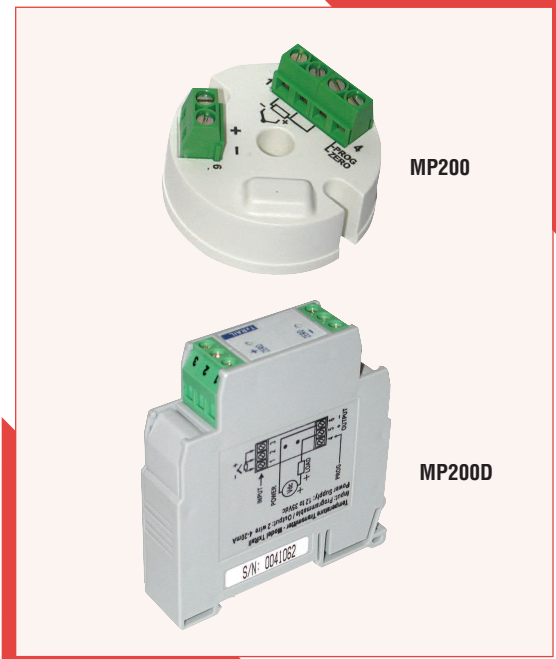
Sensor Type (Code)	Range	Min. SPAN
T/C K (K)	0 to 1370 °C (32 to 2500 °F)	100 °C
T/C J (J)	0 to 760 °C (32 to 1400 °F)	100 °C
T/C R (R)	0 to 1760 °C (32 to 3200 °F)	400 °C
T/C S (S)	0 to 1760 °C (32 to 3200 °F)	400 °C
T/C T (T)	0 to 400 °C (32 to 752 °F)	100 °C
T/C N (N)	0 to 1300 °C (32 to 2372 °F)	100 °C
T/C E (E)	0 to 720 °C (32 to 1328 °F)	100 °C
Pt100 (P)	0 to 650 °C (-32 to 1020 °F)	40 °C
Voltage (AV)	0 to 50mV	5mV

Specifications

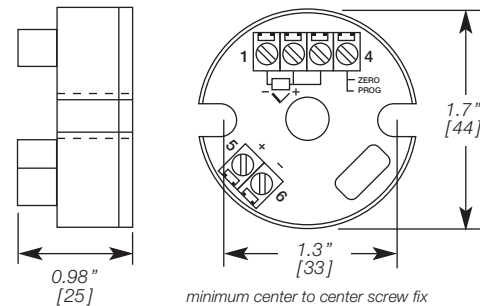
Sensor Input :	User defined. The supported sensors are listed in Table 1, along with their max. ranges.
Thermocouples :	Types J, K, R, S, T, N, E, according to IEC 60584 (ITS-90). Impedance >> 1MΩ
Pt100 :	Excitation : 180 uA. 2 or 3-wire connection (for 2-wire sensors, tie terminals 2 and 3 together). $\alpha = 0.00385$, according to IEC 60751 (ITS-90).
Voltage :	0 to 50mVDC. Impedance >> 1M
Total accuracy :	Better than 0.3% of the maximum range for thermocouples and 0.2% for Pt100 and voltage
Response Time :	< 500 ms
Output :	2-wire 4-20mA, linear with respect to the measured temperature.
Resolution :	0,001mA (14 bits).
Power supply :	12 to 35VDC, across the transmitter
Maximum load (RL) :	$RL (max.) = (V_{supply} - 12) / 0.02 [\Omega]$
Electromagnetic compatibility :	EN 50081-2, EN 50082-2
Operating Temperature :	-40 °C.....80 °C (-40 °F...176 °F)
Housing Material :	ABS UL94-HB.
Housing Dimensions :	MP200 : 44 mm (diameter) x 25 mm (height). MP200D : 72 mm (H) x 78 mm (D) x 19 mm (W)

Cold Junction Compensation for Thermocouples

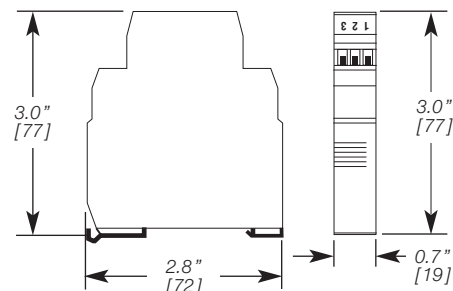
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- Specifications subject to change without notice.



Dimensions



MP200



MP200D

Custom Builder

Model	Input Code	Range
MP200	P, AV, K, J, R, S, T, N, E	(___ / ___)
MP200D	P, AV, K, J, R, S, T, N, E	(___ / ___)

Ex.: MP200 - P - (0/100 °C)