

MCT80X Temperature Transmitter



MCT80X Temperature Transmitter can be on-site installed to measure, display temperature and transmit corresponding signal to remote device. It consists of thermocouple or RTD, temperature transmitter and display module that adopts two-wire output of 4~20mADC or other user specified signals for transmission. It is extensively applied in the petroleum, chemistry industry, metallurgy, electric power, textile industry, food processing etc.

MCT80X temperature transmitter can be used to measure the temperature of liquid, steam, gas and the solid surface ranging -200°C to 1800°C. It is noted for their flexibility, wear resistance, vibration resistance and high temperature resistance. The outer protective tube of the armored thermo element is made of stainless steel and in which high density oxide is used as the insulating layer, it is pollution resistance and enough mechanical strength, in order to meet the adverse circumstances.

MCT80X temperature transmitter consists of temperature sensitive components, protection tube made of stainless steel, joint box, and fixture for different purposes. MCT80X can be made by assembly structure or sheathed structure. In comparison with assembly type, the sheathed is with small diameter, easy to bend, perfect vibration endurance, suitable for the place where assembly type is not suitable.



Technical specification

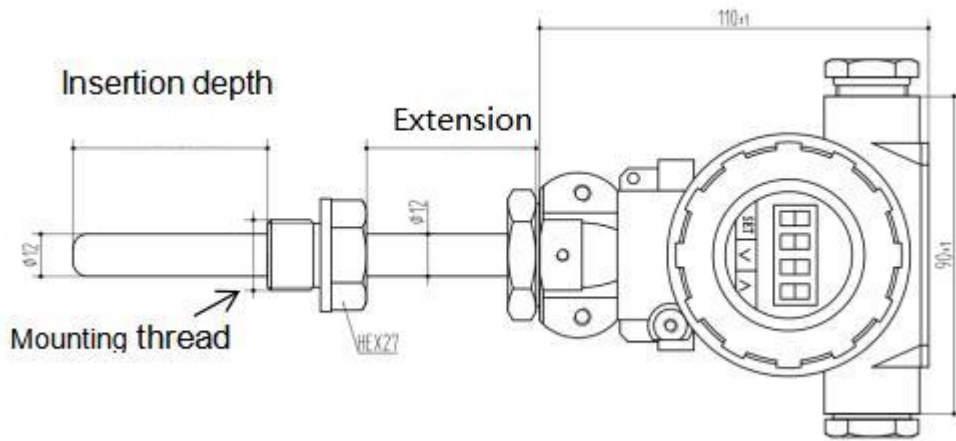
- Compensation for cool end with high accuracy
- Output signal linear with temperature
- On-site display temperature
- Range: -200~1800°C
- Accuracy: $\pm 0.5\%$
- Output: 4-20mA(two-wire) or user specified
- Power supply: 14-34VDC, or 24VDC
- Load: 0-500 Ω (for 24VDC)

- Humidity:5~90%
- Accuracy of the indicator: 0.25%(100%scale)
- Power Consume:<0.8W

Model selection

MCT80	Temperature Transmitter	
-	Case type	X: 120 Housing X3: 1351 Housing S: Customer specified
-	Type of temperature sensor	R: RTD C: Thermocouple
-	(Temperature range)	e.g. (0-100°C) or (0-200°F) etc.
-	Output nods	None: Single output D: Dual output
-	Material of wet parts	-SS: SS wet parts -F4: PTFE lined wet parts -CR: Ceramic probe -O: specified For SS (stainless steel) , please specified 304SS or 316SS.
-	Signal output	S1: 4-20mA S2: 4-20mA + HART S3: RS485 S4: RTD S5: Thermocouple S0: customer specified
-D	Display	1: Without 2: LED 3: LCD
-A	Installment type	1: fixed thread 2: slide adjustable thread 3: rotatable adjustable thread 4: flange 5: clamp 6: none thread or flange 0: customer specified
-	Ex-proof protection	None: No Ex-proof protection Ex: Ex-proof
	Thermo well	None: without TW: with thermo well
-	Size of installment	e.g. for A1, -1/2BSP or -M20*1.5 etc.; for A3, -2" or 3" etc.
-	(Diameter of Probe)	E.g. -6 (6mm), or -1/4". etc.
-	(Length of Probe)	E.g. -200 (200mm), or -8". etc.

Dimensions:



MCT80X 120 Housing:



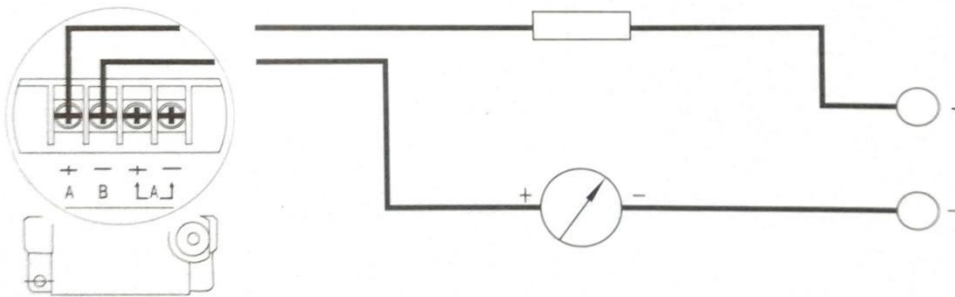
MCT80X3 3051 Housing:



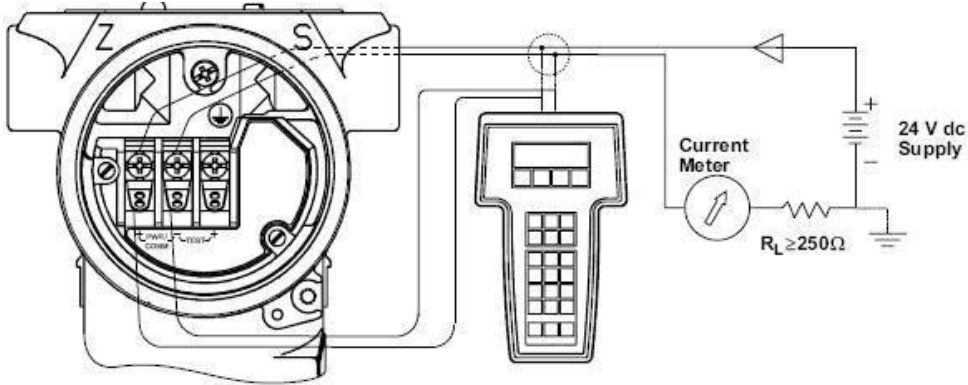
Thermowell:



Wiring of MCT80X:



Wiring of MCT80X3:



Buttons and menus operation of MCT80X:

Long press the "SET" key to enter the transmitter setting mode, short press the "SET" key to enter the setting project, press the "▲", "▼" key to adjust the project, short press the "SET" key again to save the setting project and enter the next setting project. Set the project categories in the following order:

0	1	2	3	4	5	6	7	8	9	10
K	E	S	B	J	T	R	N	Pt100	Cu100	Cu50

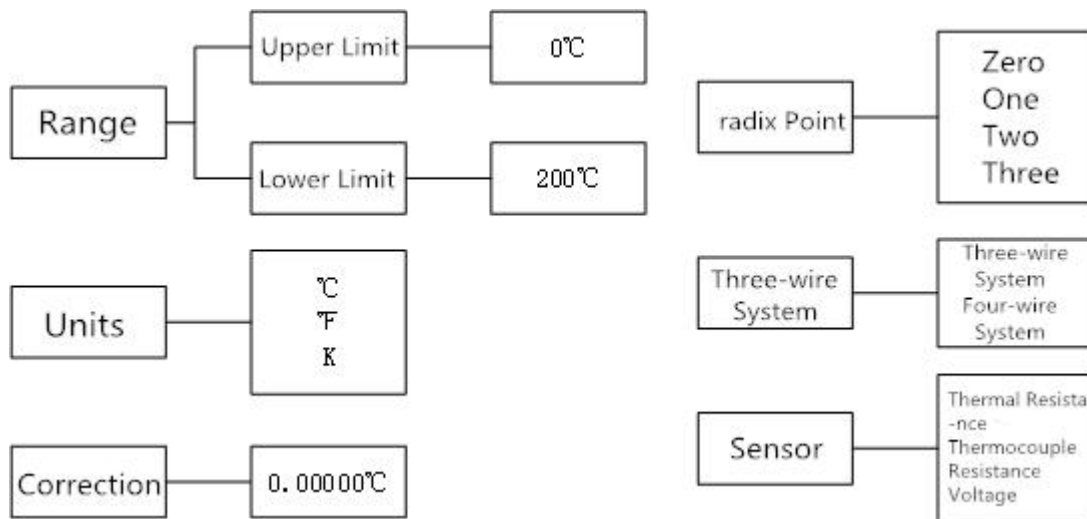
- A) "TYPE": select the sensor type. The models represented by the numbers are as above.
 - B) "LOW", lowest limit adjustment corresponding to 4mA output.
 - C) "UP", upper limit adjustment corresponding to 20mA output.
 - D) "RSC", migration regulation mode. The unit of migration value is Celsius, which is used for migration measurement error. (For example, if the temperature displayed is too high by 0.5 ° C, adjust the migration value to -0.5, and the output changes to 0.0 ° C.)
- Note: Long press "▲", "▼" can continuously adjust the value.

Buttons and menus operation of WMT180X3:

The upper part of the key is the M key, and the lower part from left to right is the S key and the Z key

Key	Menu Option	Data Modification
M	Select/enter	Confirm and exit
S	Returns the upper	Loop to the left
Z	Cycles down	Increasing Numbers/shifting decimal points

Function diagram (Note: Long time press M key to enter the menu)



The models represented by the Numbers are as follows:

0	1	2	3	4	5	6	7	8	9	10
K	E	S	B	J	T	R	N	Pt100	Cu100	Cu50