

## Model MC20D Smart Universal Pressure Transmitter



### DESCRIPTION

MC20D Smart Universal Pressure Transmitter is a cost efficient general purpose pressure transmitter. Each unit is constructed of stainless steel for durability in severe environments. Both gas and liquid pressure overloads of up to 200% over capacity are safely accepted. The MC20D provides accurate, stable, and reliable pressure measurement in difficult applications. Its small compact design allows it to be directly connected to a process. The MC20D features a fully configurable LCD that displays pressure and diagnostic information. The information displayed is directly from the microprocessor which accounts for its accuracy and reliability.

### SPECIFICATIONS

Pressure Media	Fluids, gas
Supply Voltage	15 to 36V
Operating Range	(Gage/Absolute Pressure)--Max(0~60)MPa, Min(0~0.5)KPa
	(Negative Pressure)---Max(-100KPa~), Min(-0.2~0.2 )KPa
Accuracy	±0.5%(25°C)
Over Pressure	200% full scale
Long Term Stability	<0.25%FS per year
Response	<10ms
Output Signal	(4~20)mA+HART protocol (Current two-wire/three-wire, HART protocol) , etc.

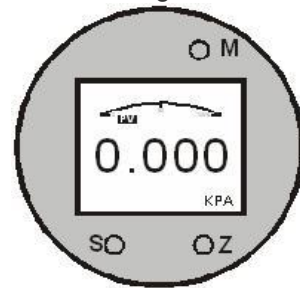
Model MC20D Pressure Transmitter

Temperature Range	-20~85℃(Normal), -20~200℃(Installation of the radiator)
Temperature Effects	0.00015%FS/℃
Pressure Connection	G1/2 female or user specified
Electrical Connection	Waterproof Connector(M20*1.5)
Protection Class	IP65

**INSTRUCTIONS**

1. HART operator may be connected to the circuit (4-20mA) for monitoring the pressure transmitter or setting operations (see HART operator manual).

2. The use instruction for the button on the preset transmitter's LCD display:



- a. Z key data set used for the interface and prompts shift. S key data set used for entering the interface to set data and preservation. M keys used for data storage.
  - b. When left corner of the bottom displays " 1-19" characters, the transmitter is in the site configuration mode, then enter a password and you can modify key parameters.
  - c. Process the data set, S key is used to adjust numbers and decimal points, Z key to shift, M key to save.
3. Pressure transmitter's display table button setup is as follows:
- a. Press S key to enter the data set interface. When the sign bit flashes, you can modify the sign bit.
  - b. If press the S key again, you can switch the positive and negative data.
  - c. Press the Z key, the first digit starts to flash, that mean it can be modified. Then long-time press or continuous press the S button repeatedly, you can set the figure between 0-9 cycle.
  - d. Press the Z key again, you can setting the second to fifth digits. The method is identical with the first one.
  - e. After setting the fifth digit, press the Z key to start setting the decimal point. When 4 decimal point flashes at the same time, you can set the decimal point. Press S key to cycle through the decimal point position.

- f. After the completion of the decimal point, press the Z key, arrow start blinking, you can save the settings.
  - g. Press the S key, save the settings. Press the Z key, the sign bit flashes ,you can start to set data again.
  - h. Process in the data set, at any time you can press the M button to quickly save the settings, without having to wait until the arrow starts to flash when you can save the settings.
4. In On-site configuration, the figures showed at the lower left corner is set for variable type:
- 0 or blank: normal display; 1: Set the password; 2: Set the units; 3: Set the lower range limit; 4: Set the upper range limit; 5: Set the damping; 18: 4mA current fine-tuning; 19: 20mA current fine-tuning;
- At the standard measurement mode, press the Z key for 5 seconds to 4mA current adjustment mode; At standard measurement mode, press the S key for 5 seconds to 20mA current adjustment mode ;
- In the current fine-tuning mode, press the Z key to reduce the output current, press the S key to increase the output current. Press the Z key and S key at the same time or do not press any key for 10 seconds, the end of regulation, and save the adjusted value.

#### **NOTES**

- 1. Please check the signs before installation to conform that the product model and the power supply range and is consistent with the scene;
- 2. Power should be stable voltage source;
- 3. In order to avoid solid deposits or other viscous material deposition into the pressure transducer hole, it is recommended to installation should be vertical down (or downward-sloping at an angle);
- 4. In the measurement of high-temperature media, please use the joining pipe or cooling heat sink, the temperature dropped to the use of transmitter range;
- 5. For outdoor installation, the transmitter should be kept dry and ventilated place, avoid direct light and rain;
- 6. When transmitter range  $\leq 5\text{KPa}$ , the installation location will affect the zero point output; you need to adjust the zero point output after product installation.

#### **ORDERING CODES**

Model MC20D Pressure Transmitter

MC20D( KPa) <input type="checkbox"/> <input type="checkbox"/> E <input type="checkbox"/> A <input type="checkbox"/> C <input type="checkbox"/> R <input type="checkbox"/> <b>Smart Universal pressure transmitter</b>	
(KPa)	Operating Range
	G: Gage Pressure A: Absolute Pressure P: Negative Pressure
	K: Diffused silicon transducer T: Ceramic piezoresistive transducer P :Ceramic capacitor transducer
E <input type="checkbox"/>	Output Signal
	1: (4~20)mA+HART protocol 2: User Specified
A <input type="checkbox"/>	Accuracy
	1: 0.25 2: 0.5
C <input type="checkbox"/>	Pressure Connection
	1: G1/2 female 2: User Specified

**CIRCUIT & COMMUNICATIONS**

