

MC20WB Flush Diaphragm Pressure Transmitter



With the diaphragm is exposed and senses the pressure directly, MC20WB Flush Diaphragm Pressure Transmitter is convenient for cleaning, and able to meet the Moisture-proof, waterproof, ex-proof and other severe working condition requirements. It adopts flush diaphragm to directly receive pressure signal, takes diffused silicon pressure sensor as sensitive element and uses standard silicone or olive oil as pressure transfer medium. With cast aluminum housing and design of corrosion resistance, vibration resistance and wide range temperature compensation, stainless steel 316L and specially welded flush isolation diaphragm are used for special measurement end. It prevents fouling due to its exposed diaphragm, which is especially applicable to measure viscous fluid pressure with sanitary requirements of health care and food industry, solving problems of fouling, block, cleaning and sanitation. It is also widely applicable to sanitary industries and occasions with fouling forming medium.

FEATURES

- 316L or other optional flush diaphragm structure adopted for pressure connection.
- Sanitary, anti-fouling, good seal, long-term stable work.
- Wide pressure range, can measure absolute pressure, gauge pressure and sealed reference pressure.
- With cooling bellow, excellent performance for high temperature medium application.
- Optional output signal, can be customized.
- Various installation options including thread, flange, clamp etc.
- Cast aluminum housing design, strong resistance and easily readable.

APPLICATIONS

Occasion with easy block, high sanitary requirement and convenient cleaning such as medicine and health care, food, liquor-making, dairy and drinks. Environmental protection

chemical coating, polyurethane equipment, paint detection system etc.

SPECIFICATIONS

Pressure Media	Fluid, Gas
Supply Voltage	12 to 36V
Accuracy	±0.5%(25°C)
Over Pressure	200-300% full scale
Long Term Stability	<0.5% FS per year
Response	<100ms
Output Signal	(4~20)mA (2-wire/ 4-wire) , (0~10/20) mA (0~5) V, (1~5) V, (0~10) V, etc.
Temperature Range	-20~95°C (Normal), -20~250°C (Installation of the bellow)
Temperature Effects	0.00015%/FS/°C
Pressure Connection	User specified
Material of Housing	Cast aluminum
Protection Class	IP65
Vibration resistance	Sine curve: 20g, 25Hz~2kHz; IEC 60068-2-6 Random: 7.5grms, 5Hz~1kHz; IEC 60068-2-64
Ex-proof	Ex dIICT6

ORDERING CODES

MC20W	Flush Diaphragm Pressure Transmitter	
-	Housing type	B: MC20B Housing BE: MC20E Housing H3: MC20D Housing
-	Pressure range	e.g. 0-10bar or 0-1MPa etc.
-	Wet Part Material	-S4: 304 Stainless Steel -S6: 316 Stainless Steel
-M	Material of Diaphragm	1: 316 2: Tantalum 3: Hastelloy C 4: PTFE lined 0: specified (Please Mention)
-O	Signal Output	1: 4-20 mA 2-wires 2: 4-20 mA 4-wires 3: 4-20mA + HART 4: 0-5V 5: 0-10V 6: 1-5V 7: 1-10V 8: 0-10mA 9: 0-20mA

		11: RS485 0: specified
-D	Display	1: Without 2: LED 3: LCD
-T	Temperature	1: Normal 2: High Temperature
-E	Ex-proof	1: Nope 2: Ex-proof
-A	Installment type	1: thread 2: flange 3: clamp 4: customer specified
-	Size of installment	e.g. for A1, -1/2BSP or -M20*1.5 etc.; for A3, -2" or 3" etc.

WITH HIGH TEMPERATURE BELLOW

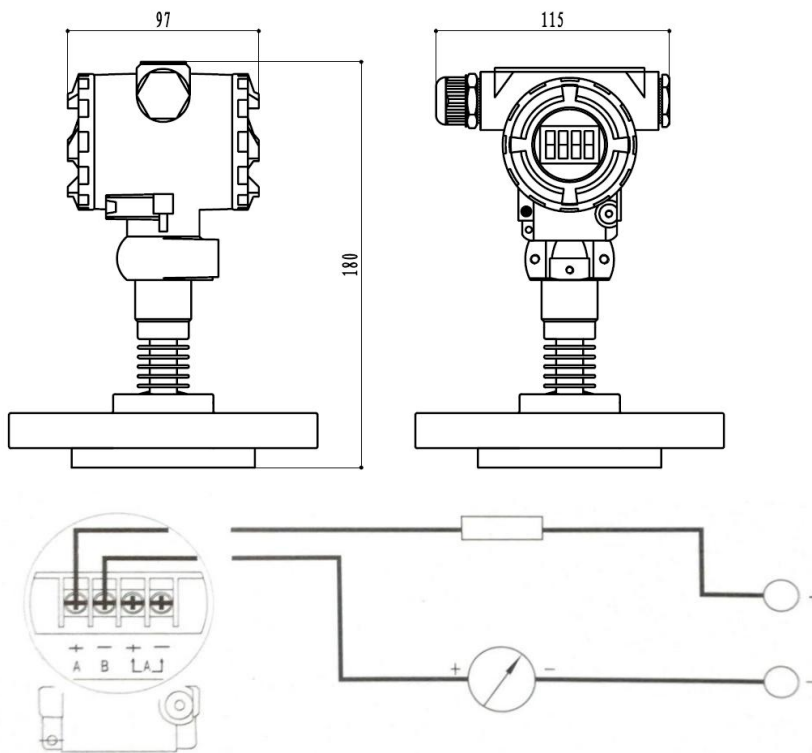


SPECIAL CUSTOMIZED INSTALLATION CONNECTION

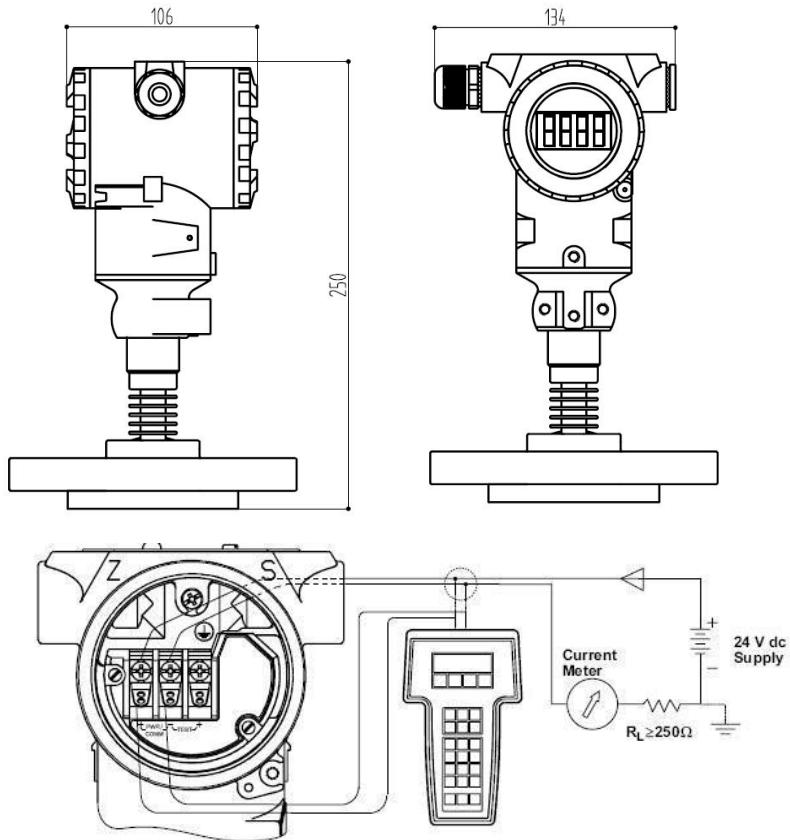


DIMENSION

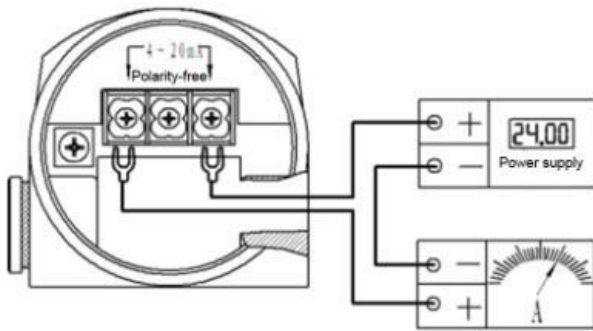
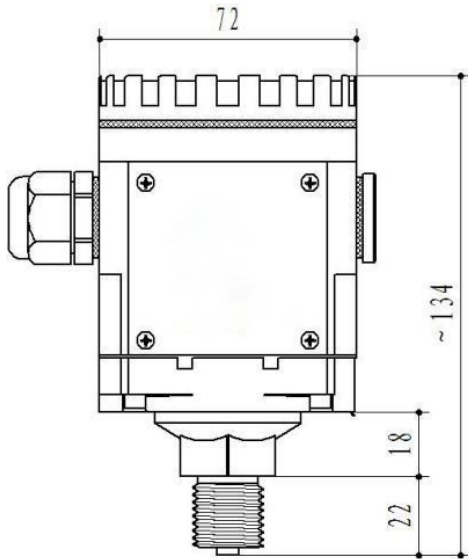
MC20WB Housing:



MC20D Housing:



MC20WE Housing:



BREIF OPERATION OF PRESSURE TRANSMITTER DIGITAL DISPLAY METER

- 1), In field application, under zero pressure, you may press and hold the "Z" key for 3 seconds to reset zero automatically.
- 2), Changing transmitting range without calibrating pressure exerted:
Press "set" key → display "lock" → "△" → change to "0003" → "set" → DS-I → "set"

→ change to the lower limit value → "set" → DS-H → "set" → change to the upper limit value of measurement (through "Z Δ" two keys) → "set" → end → OK



3), Recalibrating transmitting range with standard pressure exerted (please note that this is the calibration of the transmitter at the factory. Generally, there is no need to operate on site to avoid any operation fault)
 Press "set" → display "lock" → "Δ" → change to "0066" (through "Z Δ" two keys) → "set" → Sn → "set" → 2 → "set" → AD-L → "set" → lower limit pressure exerted at this time, until displaying value is stable (ignore whatever the value is) → "set" → AD-H → "set" → upper limit pressure exerted at this time, until displaying value is stable (ignore whatever the value is) → "set" → SOIL → "set" → calibrate 4mA by standard ammeter zero (through "Z Δ" two keys) → "set" → SOIH → "set" → calibrate 20mA by standard ammeter zero (through "Z Δ" two keys) → "set" → DS-L → input the lower limit value of transmitter → "set" → DS-H → "set" → input the upper limit value of transmitter → "set" → DP → "set" → change the position of decimal point through "Z" → "set" → end → OK

Notes:

For example, if you cannot acquire -1bar for pressure exertion, you may recalibrate the range into 0~2 bar via above 3) step, then changing transmitting range to -1bar~1bar via above 2) step.

Generally, you may only use above 2) step to change transmitter range, and there's no need for 3) step.

INSTALLATION

(1) The product is installed vertically on the field pressure connection.

(2) During the outdoor installation, try to put the transmitter in a dry and ventilated place, and avoid direct strong sunshine and rain, or else the performance will become poor or break down.

(3) When the product is installed in the area with frequent lightning, "lightning protection" should be indicated when ordering; Meanwhile, we suggest that the user additionally install the lightning protection equipment on site, and ensure reliable grounding of the product and the power supply, which can reduce the probability of the transmitter damage caused by the lightning.

(4) If no output or abnormal output of the transmitter is found after the installation, please check:

Whether the electrical connection is accurate and firm;

Whether the supply voltage is too low and whether the load resistance is too high.

