

# MC20B Pressure Transmitter



MC20B Pressure Transmitter is a cost efficient general purpose pressure transmitter. Each unit is constructed of stainless steel or cast aluminium for durability in severe environments. Both gas and liquid pressure overloads of up to 300% over capacity are safely accepted. The transmitter uses proprietary current output with wide temperature compensation. This design references the primary pressure sensing diaphragm to the atmosphere, and provides a stable zero regardless of the transducer environment. The products widely apply to the industrial process control, petroleum, chemical industry, metallurgy and other industries.

### **FEATURES**

Pressure Media	Fluid, Gas
Supply Voltage	12 to 36V
Accuracy	±0.25%, ±0.5%(25℃)
Over Pressure	200-300% full scale
Long Term Stability	<0.25% FS per year
Response	<100ms
Output Signal	(4~20)mA (2-wire/ 4-wire), (0~10/20) mA
	$(0\sim5)\ \text{V},\ (1\sim5)\ \text{V},\ (0\sim10)\ \text{V},\ \text{etc.}$
Temperature Range	-20∼85℃(Normal), -20∼200℃(Installation of the bellow)
Temperature Effects	0.00015%FS/℃
Pressure Connection	User specified
Electrical Connection	Female thread with connector
Protection Class	IP65
Housing Material	Cast Aluminium

### **ORDERING CODES**

MC20	Pressure Transmitter	
-	Housing type	B: MC20B Housing
		BE: MC20E Housing
-	Pressure range	e.g. 0-10bar or 0-1MPa etc.



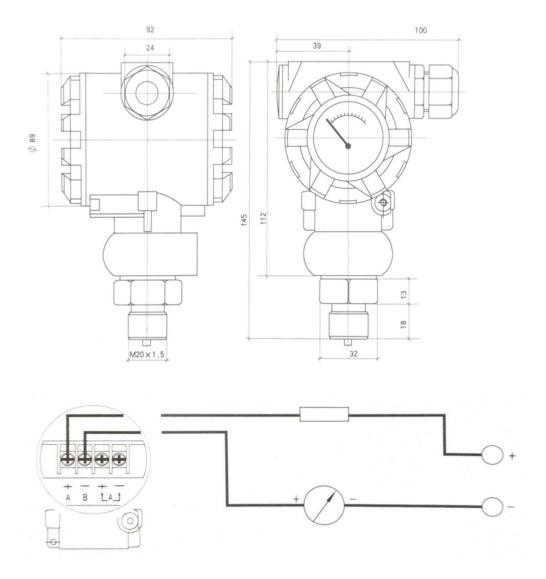
		STRONG MAC INC
-	Wet Part Material	-S4: 304 Stainless Steel
		-S6: 316 Stainless Steel
		-PP: Polypropylene
		-PT: PTFE
		-US: specified
-0	Signal Output	1: 4-20 mA 2-wires
		2: 4-20 mA 4-wires
		3: 4-20mA + HART
		4: 0-5V
		5: 0-10V
		6: 1-5V
		7: 1-10V
		8: 0-10mA
		9: 0-20mA
		11: RS485
		0: specified
-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



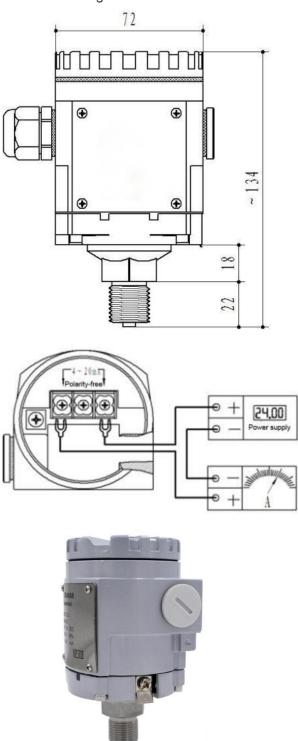


**HOUSING AND DIMENSION** MC20B Housing:





### MC20E 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  $\rightarrow$  display "lock"  $\rightarrow$  " $\triangle$ "  $\rightarrow$  change to "0003 " $\rightarrow$ " set " $\rightarrow$  change to the lower limit value  $\rightarrow$ " set " $\rightarrow$  DS-H  $\rightarrow$ " set " $\rightarrow$  change to the upper limit value of measurement (through" Z  $\triangle$  "two keys)  $\rightarrow$ " set " $\rightarrow$  end  $\rightarrow$  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"  $\rightarrow$  display "lock " $\rightarrow$  " $\triangle$ "  $\rightarrow$  change to" 0066 " (through" Z  $\triangle$  "two keys) $\rightarrow$  "set"  $\rightarrow$  Sn  $\rightarrow$  "set"  $\rightarrow$  2  $\rightarrow$  "set"  $\rightarrow$  AD-L  $\rightarrow$ "set" $\rightarrow$  lower limit pressure exerted at this time, until displaying value is stable (ignore whatever the value is) $\rightarrow$  "set"  $\rightarrow$  AD-H  $\rightarrow$  "set"  $\rightarrow$ 



upper limit pressure exerted at this time, until displaying value is stable (ignore whatever the value is)  $\rightarrow$  "set"  $\rightarrow$  SOIL  $\rightarrow$  "set"  $\rightarrow$  calibrate 4mA by standard ammeter zero ( through "Z  $\triangle$ " two keys )  $\rightarrow$  "set"  $\rightarrow$  SOIH  $\rightarrow$  "set"  $\rightarrow$  calibrate 20mA by standard ammeter zero ( through "Z  $\triangle$ " two keys )  $\rightarrow$  "set"  $\rightarrow$  DS-L  $\rightarrow$  input the lower limit value of transmitter  $\rightarrow$  "set"  $\rightarrow$  DS-H  $\rightarrow$  "set"  $\rightarrow$  input the upper limit value of transmitter  $\rightarrow$  "set"  $\rightarrow$  DP  $\rightarrow$  "set"  $\rightarrow$  change the position of decimal point through "Z"  $\rightarrow$  "set"  $\rightarrow$  end  $\rightarrow$  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.