

# Model MC2070B Economy Differential Pressure Transmitter



MC2070B Differential Pressure Transmitter is assembled by piezoresistive-silicon differential pressure sensor, and the housing is the aluminium alloy structure similar with MC20B and surface is coated with epoxy resin paint. MC2070B Differential Pressure Transmitter is moisture-proof, waterproof, and corrosion-resistant. It can work in harsh environments and outdoor conditions. The transmitter has a small volume and light weight, which can be installed on the process pipeline and supported. Compared with transmitters that require a base or bracket, it greatly reduces installation and maintenance costs or connected through the press-leading tube. it is widely applied in the air supply for boiler, underground ventilation and other electricity and mining industries, as well as the process control field of automated pressure detection for the super clean workshop. It is suitable for differential pressure or pressure measuring for medical treatment, chemical fiber, electricity, dustless house and etc. The transmitter uses proprietary current output with wide temperature compensation and provides a stable zero regardless of the transducer environment.

#### **SPECIFICATIONS**

Supply Voltage	12 to 36V	
Operating Range	(Differential/Gage/Negative Pressure):(-100KPa)-(-100Pa)-0~100Pa-300KPa-7MPa	
Accuracy	±0.25%, ±0.5%(25°C)	
Over Pressure	200-300% full scale	
Long Term Stability	<0.25%FS per year	
Response	<100ms	
Output Signal	(4~20)mA (2/3/4-wires), (0~10/20) mA (0~5) V, (1~5) V, (0~10) V, etc.	
Temperature Range	-20∼85℃	
Temperature Effects	0.015%FS/°C	
Housing	Cast Aluminum	
Protection Class	IP65	



MC2070	Differential Pressure Transmitter	
-	Appearance Type	B: Normal (without display)
		BE: with LED display
		BC: with LCD display
-	Pressure range	e.g. 0-10bar or 0-1MPa etc.
-0	Signal Output	1: 4-20 mA 2-wires
		2: 4-20 mA 3-wires
		3: 4-20 mA 4-wires
		4: 0-5V
		5: 0-10V
		6: 1-5V
		7: 1-10V
		8: 0-10mA
		9: 0-20mA
		11: RS485
		0: specified (Please Mention)
-E	Ex-proof	1: Nope
		2: Ex-proof
-A	Installment type	1: thread
		4: customer specified
-	Size of installment	e.g. for A1, -1/2BSP or -M20*1.5 etc.;
		for A3, -2" or 3" etc.

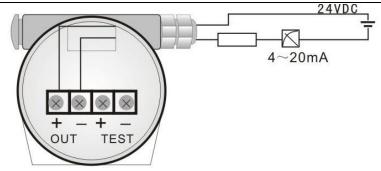
### ORDERING CODES

## With LED display:



WIRING





#### 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 " $\rightarrow$  DS-I  $\rightarrow$ " 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.