

MPM380 Piezoresistive Pressure Transducer

Introduction

General MPM380 pressure transducer is produced by build-in an OEM piezoresistive pressure sensor into stainless steel housing. Due to stainless steel pressure port and housing, the product has good media compatibility, stable performance and high accuracy, it can be used for static gas and liquid media pressure measurement. Flush diaphragm MPM380 pressure transducer has G1/2 male pressure port and Viton sealed washer for fact type seal. Flush diaphragm MPM380 transducer has 0 ~ 70kPa...35MPa pressure range, it can be used for food, medicine, sanitation fields which is easy to be dirty.



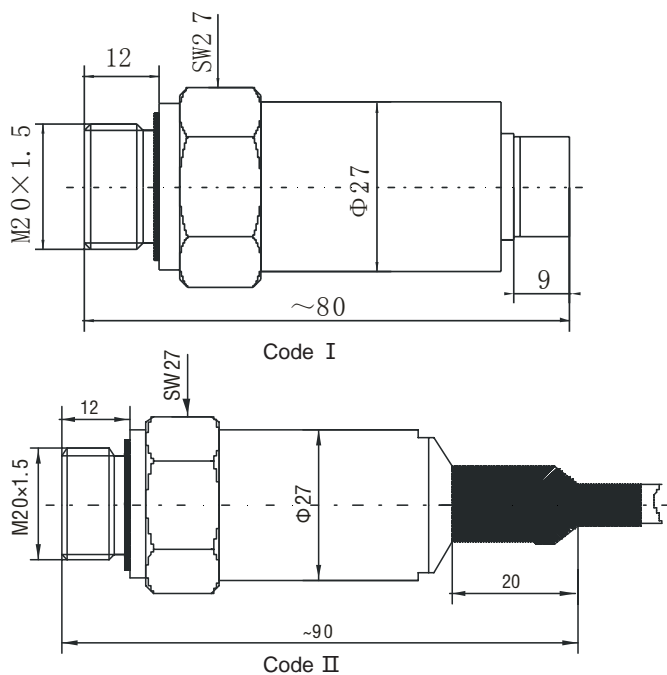
Features

- Full stainless steel construction;
- Thread connection optional;
- Constant current supply;
- Laser trimming compensating zero and FS thermal error;
- Using high reliable and stable solid piezoresistive pressure cell;
- Cable connection or plug connection

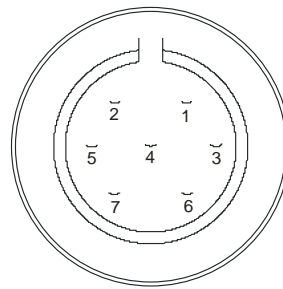
Specifications

@1.5mADC, 25°C	
Pressure range	-100kPa...0kPa~20kPa...100MPa
Overpressure	1.5 times FS or 110MPa (min.value is valid)
Power supply	1.5mADC
Signal	≥70mVDC(0~20kPa,≥50mVDC)
Accuracy	±0.1%FS(min.), ±0.25%FS(typ.), ±0.5%FS(max.)
Long-term stability	±0.3%FS/year
Compensation temp.	0°C ~50°C
Operation temp.	-30°C ~80°C , -10°C ~70°C (Cable)
Storage temp.	-40°C ~120°C , -20°C ~85°C (Cable)
Zero temp. coefficient	±0.02%FS/°C (typ.), ±0.04%FS/°C (max.)
FS temp. coefficient	±0.02%FS/°C (typ.), ±0.04%FS/°C (max.)
Housing	Stainless steel 1Cr18Ni9Ti
Diaphragm	Stainless steel 316L
O-ring	Viton
Cable	Polythene
Response time (10%~90%)	≤1ms
Insulation resistance	100MΩ, 100VDC
Production	IP65(cable connection)

Outline Construction (Unit: mm)



Electrical Connection



Pin	Definition	color
3	+IN	Black
5	-IN	Yellow
1	-IN	White
2	+OUT	Red
4	-OUT	Blue

Standard electric connection is plug connection; cable connection is optional.

Order Guide

MPM380		Piezoresistive Pressure Transducer				
Code	Pressure range	Ref.	Code	Pressure range	Ref.	
0B	0~ 20kPa	G	12	0~2MPa	G, A	
0A	0~ 35kPa	G	13	0~3.5MPa	G, A, S	
02	0~ 70kPa	G.A	14	0~7MPa	A, S	
03	0~ 100kPa	G.A	15	0~10MPa	S	
07	0~ 200kPa	G.A	17	0~20MPa	S	
08	0~ 350kPa	G.A	18	0~35MPa	S	
09	0~ 700kPa	G.A	19	0~70MPa	S	
10	0~ 1000kPa	G.A	20	0~100MPa	S	
	Code	Pressure type				
	G	Gauge				
	A	Absolute				
	S	Sealed gauge				
	Code	Electrical connection				
	I	Plug connection				
	II	Cable connection				
		Cable length(m)	1.5m cable is free of charge; the extra cable should be paid additionally.			
			Code	Pressure port		
			P	G1/2 male flush diaphragm		
MPM380	10	G	II	5	P the whole spec	

Notes

- We can also provide the user with voltage power supply product, the power supply is more than 9V; please note it when you select option codes;
- When the user install flush diaphragm product at local place, please pay attention to correct sealing method to prevent the stress affecting product stability; please use attached seal-ring to install and seal, but not use face type sealing or wrap tetrafluoroethylene belt on the thread;