# 思顿・森萨|<mark>SZSD</mark>



### **FEATURES**

- Multiple corrosion resistant materials available (316L, C276, Inconel625)
- No Oil-filed Flush Diaphragm
- Reverse protection
- Output short circuit protection
- Non linearity upto ±0.25%
- Up to ±1.0% Total Error Band
- -20°C...+85°C Compensated Temperature
- -20°C...+85°C Operating Temperature

### **STANDARD RANGES**

### **SPECIFICATIONS**

- High Accuracy
- Compact
- Variety of Pressure Ports and Electrical Configurations
- High corresponding frequency >1KHz
- Multiple outputs 0~10VDC, 1~5VDC and 4~20mA
- Multiple connector optional

### **APPLICATIONS**

- Environmental-friendly chemical coatings and polyurethane equipment
- Food grade or medical equipment for pressure control
- Paint detection system
- Slurry of mud or coal,Mud slurry Pump,Paper pulp, Crude, Asphalt, etc.
- Oilfield drilling, Well logging, Offshore oil production stands, Oil well measuring instruments, etc
- Other industrial sites requiring resistance of blocking, high-strength vibration and impact

Range (psi)	Range (Bar)	Gage	Seal	Absolute	Comp	ound
075	05	•				●S
0150	010	•				●S
0250	016	•				● S
0300	020	•				●S
0500	035	•				● S
0750	050	•			•	● S
01000	070	•			•	● S
01500	0100	•			•	
02250	0150	•			•	
03000	0200	•			•	
03700	0250	•			•	
05000	0350	•			•	
06000	0400	•			•	
07500	0500	•			•	
010000	0700	•			•	
015000	01000	•			•	●S

Note: Intermediate ranges available upon request. For "•S" ,plesae confirm with factory.

Force | Pressure | Temperature | LVDT | Switch -



# **PERFORMANCE SPECIFICATIONS**

Ambient Temperature: 25°C (unless otherwise specified)

PARAMETERS	MIN	ТҮР	MAX	UNIT	NOTES	
Accuracy (combined non linearity, hysteresis, and repeatability)	-0.25	±0.25	0.25	%F.S.BFSL	@ 25°C	
Zero Error	-0.5	±0.25	0.5		@ 25°C	
Full Scale Error	-1.0	±0.5	1.0		@ 25°C	
Isolation (Body to any Lead)	100			MΩ	@ 250VDC	
Pressure Cycles	1X10 <sup>7</sup>			0~FS Cycles		
Proof Pressure	2X		15k psi	Rated		
Burst Pressure	5X		15k psi	Rated		
Long Term Stability (1 year)	-0.25	±0.25	0.25	%F.S		
Total Error Band	-1.0	±0.5	1.0	%F.S	Over compensated temp ran	
Compensated Temperature	-20		85	°C		
Operating Temperature	-20		125	°C	Except cable 105°C max	
Storage Temperature	-40		125	°C	Except cable 105°C max	
Load Resistance (RL)	RL > 100k			Ω	Voltage Output	
Load Resistance (RL)	<supply td="" volt<=""><td>age -9V) / 0.0</td><td>2A</td><td>Ω</td><td>Current Output</td></supply>	age -9V) / 0.0	2A	Ω	Current Output	
Current Consumption			10	mA	Voltage Output	
Rise Time (10% to 90%)	<2ms (Voltage Output); <3ms (Current Output); Without Snubber					
Pressure Port Material	17-4PH					
Shock	50g, 11mseo	Half Sine Sho	ock per MIL-ST	D-202G, Method	213B, Condition A	
			cedure 514.2-2			

Notes: For custom configurations, please consult factory.

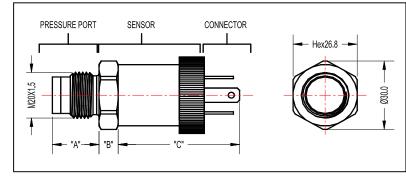
Pressure range under 0...70bar, customer to ensure venting through mating connector.

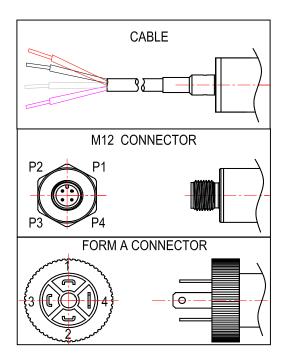
Compensated Temperature: The temperature range over which the product will produce an output proportional to pressure within the specifiedperformance limits.

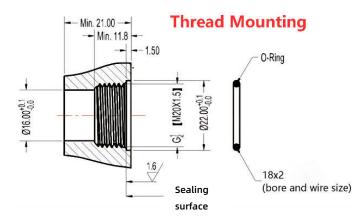
Operating Temperature: The temperature range over which the product will produce an output proportional to pressure but may not remain within the specified performance limits.

Storage Temperature: The temperature range over which the product can be stored safely in occasions without pressure applied or power nput and remains rated performance. Beyond this temperature range may cause permanent damage to the product. All configurations are built with supply voltage reverse and output short-circuit protections.

# **DIMENSIONS** [mm]







# **CONNECTION TYPE**

CODE	CONNECTION TYPE	DIM C (MAX)
1	Cable 1m	1.97 [50.0]
4	M12	1.85 [47.9]
5	FORM A	2.05 [52.0]

### **PRESSURE PORT**

CODE	PRESSURE PORT TYPE							
CODE	PORT	DIM A	DIM B					
2	M20 x 1.5 mm ISO 6149-2	0.661 [16.8]	0.3 [8.0]					
А	G1/2	0.787 [20.0]	0.315 [8.0]					
Х	Customer Special	TBC	TBC					

### WEATHERPROOF

	WEATHER-PROOF RATING							
CODE	CONNECTION TYPE	IP CODE						
1	Cable 1m	IP67						
4	M12	IP67						
5	FORM A	IP65						

### OUTPUTS

CODE	OUTPUT SIGNAL	SUPPLY VOLTAGE		
1	0.5 - 4.5V	5 ± 0.25V		
1	RATIOMETRIC	PROTECTED to 16V		
2	1 - 5V	8 - 36V		
3	4 - 20mA	9 - 36V		
4	0 - 5V	8 - 36V		
5	0 - 10V	13 - 36V		
6	1 - 6V	8 - 36V		
7	0.5 - 4.5V	7.5- 36V		



### WIRING

Current Output Wiring							
CONNECTION	NNECTION +SUPPLY -SUPPLY NC.PINS						
M12	1	2	3,4	Hole Through			
FORM A	1	2	3,4	Connector			
Cable	RED	BLACK		Hole Through Housing			

Voltage Output Wiring								
CONNECTION	CONNECTION +SUPPLY +OUTPOT COMMON NC.PINS							
M12	1	3	2	4	Hole Through			
FORM C	1	3	2	4	Connector			
Cable	RED	WHITE (GREEN)	BLACK	-	Hole Through Housing			

# **CONNECTION TYPES**

	CONNECTION TYPES							
CONNECTION	DESCRIPTION	MATING HOUSING P/N	MATING TERMINAL PIN					
M12	BINDER SERIES 713, 09 3431 77 04 OR EQUIV	4-POS FEMALE CONNECTOR	-					
FORM A	OMAL ARB03S or ARB03R	OMAL AHB6733 3+PE	-					
Cable	4-WIRE,22 AWG, UNSHIELDED,PVC,105°C	-	-					

Notes: Transmitter of gage pressure type requires vent to atmosphere on the pressure reference side.

This is accomplished via cable from the transmitter (the end of the cable should be terminated to clean and dry area) or through

the customer mating connector/cable assembly which has internal vent path.

### **ORDERING INFORMATION**

MP51	3	5	-	1	0	1	9	-	050B	G
Model	Output	Connection	-	Port Material	Snubber	Label	Pressure Port	-	Pressure Range	Pressure Type
	1= 0.5-4.5V RATIOMETRIC 2= 1-5V 3= 4-20mA 4= 0-5V 5= 0-10V 6= 1-6V 7= 0.5-4.5V X= Customer Special	1= Cable 4= M12 5= FORM A X= Customer Special		1= 304Screw+ 17-4Diaphgram X= Customer Special	0= No Snubber	0= No Label (OEM) 1= Adhesive Label 2= Laser Marking	2= M20 x 1.5 A= G1/2 X= Customer Special		050Bar B= Bar M= Mpa P= PSI K= Kpa	G= Gauge C= Compound

Note: For shielded cable or other connector requirements, please consult the factory.