



PRODUCT OVERVIEW

PRESSURE MEASUREMENT

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P90 series Pressure Sensors for Universal Applications



P90

I . Profiles:

Macsensor P90 is economic type pressure transducer designed for water pumps, water pipes, wall-hang boiler and liquid pressure measurement. It using imported high quality ceramic sensor core, it is high performance in low cost, high volume, commercial and industrial applications. Suitable for measuring the pressure of non-corrosive gas and liquid.

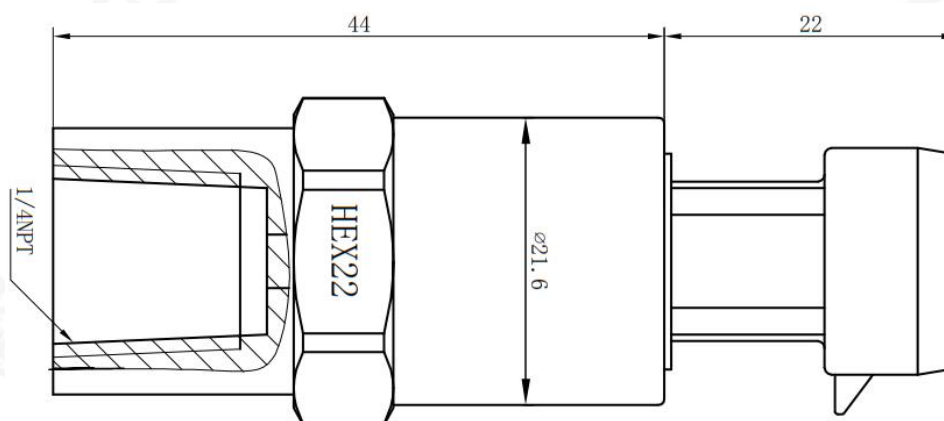
II . Features

1. Range: 0-2Bar to 100Bar optional
2. State Accuracy: $\pm 1.5\%$ F.S. (typical)
3. Error: $\pm 3\%$ F.S. (including 0 ~ 90 °C temperature error)
4. MEMS technology
5. High integration and high stability
6. Temperature compensation, signal amplification
7. EMI protection; CE Approved
8. Wide voltage power supply (5 ~ 25VDC), it has the reverse polarity protection and short circuit protection.
9. Standard and custom options available in OEM quantities

III.Specifications

Model:	P90			
Parameter:				
Pressure Range	0-2bar...100Bar optional			
Body materials:	Stainless steel			
Overload	200%F.S.			
Accuracy	$\leq 1.5\%F.S.$ (Typical)			
Max Error:	$\pm 3\%F.S.$ (including 0 ~ 90 °C temperature error)			
Working Temp	-30°C~100 °C			
Storage Temp	-40°C~85°C			
Temperature Compensation	0°C~60°C			
Supply voltage	5.0 $\pm$ 0.5VDC (default)	8 ~ 25VDC customized for 907C		
Output voltage	0.5 ~ 4.5VDC (Ratiometric)	0.5 ~ 3.5VDC	1 ~ 5VDC	0.5 ~ 4.5VDC (Non-Ratiometric)
Supply current	<10mA			
Output impedance	$\geq 2.5k\ \Omega$			
Pressure cycle life	> 1000,000			
Protection	IP65			
Pressure port	G1/4-19	G1/8-28	G3/8-19	Or By customized
Measures media	Air, water, oil and other non-corrosive, non-solvent medium			
Vibration	10Hz,3mm/ one hour			
Cable	Red wire - +5VDC, Black(or white)-GND, Blue(or green)-V out			
Connector	1pin-5VDC,2pin-null,3pin-Vout,4pin-GND(Acquiescence type:C2521HF-4P)			
Certificate approving:	ROSH and CE Certificate.			
Remarks:	Special applications request ,can custom by order			

IV. Dimension and Drawing



Notice: Special application customize is acceptable.

V .Electronic Connections:

Electronic Wire Connections					
	Power Supply Vcc+	Power Supply V-/0V	Signal Output S+	Signal Output S-/0V	Ground Wire
2 wire 4-20 mA	Red wire	NA	Blue wire & Green wire	NA	Yellow wire
3 Wire 0-5V; 0-10V; 0.5-4.5V	Red wire	Black wire	Blue wire & Green wire	White/Yellow wire	Yellow wire
Hirschman Connector Type	Pins 1 Red wire	Pins 3 Black wire	Pins 2 Signal wire	Pins 3 Black wire	Pins G ground wire
M12 Connector 4 Pins Type	Pins 1 Brown wire	Pins 3 0V/Blue wire	Pins 2 White wire	Pins 3 0V/Blue wire	Pins 4 Black wire
Packard 3 Pins Connector Type	Pins B Red wire	Pins A Black wire	Pins C Blue/Green wire	Pins A Black wire	NA

VI.Part Number Code Table For Pressure Range:

000	-1-0	016	0-1.5	031	0-10	047	0-125
001	-1-1	017	0-1.6	032	0-12	048	0-150
002	-1-9	018	0-1.7	033	0-15	049	0-200
003	-1-10	019	0-1.8	034	0-16	050	0-250
004	-1-16	020	0-1.9	035	0-20	051	0-300
005	-1-20	021	0-2.0	036	0-25	052	0-350
006	-1-25	016	0-2.1	037	0-30	053	0-400
007	-1-30	022	0-2.2	038	0-35	054	0-450
008	-1-35	023	0-2.3	039	0-40	055	0-500
009	-1-40	024	0-2.5	040	0-50	056	0-600
010	-1-65	025	0-3	041	0-60	057	0-700
011	0-0.5	026	0-4	042	0-65	058	0-800
012	0-1.0	027	0-5	043	0-70	059	0-1000
013	0-1.1	028	0-6	044	0-80	060	0-10000
014	0-1.2	029	0-7	045	0-90	061	0-15000
015	0-1.3	030	0-8	046	0-100	X	Customized

VII. Order Information

P/N Selection	P90 (Model)	3	E	00500	P	0	1	G
Output	3= 4-20mA 4= 0.5-4.5V Ratiometric 5= 0-5V 6= 1-5V 7= 0-10V 8= 0.5-4.5V							
Process connection	A= G1/4" D =G1/2" G=1/4"NPT 5= M20*1.5 7= 1/8"NPT M=7/16-20UNF Female with thimble		B= G1/4" Female E =G1/2" Female H=1/4" NPT Female 6= M10*1.0 K=7/16-20UNF male					
Pressure Measurment	See last pages Pressure Range Code Table and select your requested range code adhere here.							
Pressure Unit	B=Bar	P=PSI	K=kPa	M=MPA	H=mH2O			
Accuracy	0=4%F.S.	1=1.5%F.S.	2=1%F.S.	3=0.5%F.S.				
Electronic Connection	1= Cable 1M E= Cable 2M 2= Cable 3M 3= Cable 5M 4= M12 4Pins 5= Packard 3 Pins 7= Hirschman DIN43650 8= Smaller Hirschman							
Pressure type	G=Gage S=Sealed A=Absolute							