



## Model PSC903 Bluetooth Pressure Sensor for Heavy Industry and General Purpose Industrial monitoring and data analysis Applications

*PRESSURE SENSOR LIMITED's model PSC903 Bluetooth Pressure Sensor was developed for all types of industrial applications. The design is based on high temperature, inorganically bonded, media isolated, piezoresistive technology and offers reliable and accurate measurements under harsh environmental conditions. Robust construction of the PSC903 provides stable operation when subjected to shock and vibration. Integrated Bluetooth 4.0 transmission features and easy-to-use APP software provide measure data runtime monitoring, recording and data analysis. Suitable for use in OEM machinery, process control, automation, plastic and alloy injection molding machines, hydraulic pumps, etc.*

State of the art design machined from a solid piece of 17-4PH provides a leak-proof, all metal sealed system. There are no O-rings, welds or organics exposed to the pressure media. Features digital compensation and temperature correction for high accuracy and stability. All wetted parts are 17-4PH.



- Gauge & Absolute Pressures
- ASIC Temperature Compensated
- Robust construction to stand high vibrations
- 2.0 % Total Error Band
- Bluetooth 4.0 low power technology
- Wetted Parts: 17-4PH
- Process Fitting: 1/8"-27 NPT  
(see model type for others available)
- Electrical Connection: Bluetooth Wireless

### Sample Applications:

- Process Automation & Control
- Plastic and Alloy injection machines
- Test and Measurement Equipment
- Factory Automation
- Energy Management
- Heavy industry
- Measurement monitoring & data analysis

PSC903 Ordering Model NO.: PSC903-X-X-Y			
	X	X	Y
Output Type	Pressure Range	Port Type	Special configuration
Bluetooth 4.0	3 = 100 psi	1 = 1/8-27 NPT	Consult factory
	4 = 250 psi	2 = 1/4-18 NPT	
	5 = 500 psi	3 = DIN3852-A-G1/4	
	6 = 1000 psi	4 = DIN3852-E-G1/4	
	7 = 2500 psi	5 = DIN3852-A-M10*1.0	
	8 = 5000 psi	6 = DIN3852-A-M12*1.5	
	9 = 10000 psi	7 = 7/16-20 UNF	
	A = 15000 psi	X = Special	
	B = 20000 psi		
	X = Special		

Performance (specified @ 25 °C)	
Power Supply	½ AA Lithium battery
Battery Life	15min per operation 5 operations per day, turn off the unit by pressing button after each operation product must stand for 60days (min).
Accuracy (Best fit straight line)	0.75% (BFSL)
Stability	0.25%/year
Temperature compensation	-20~ 85 °C
Operating temperature (Media Temperature)	-20~ 85 °C
Storage Temperature	-20~ 85 °C
Burst Pressure	5 X Full Scale
Proof Pressure	1.5 X Full Scale
Pressure Cycle	1M full scale cycles minimum
Mechanical Vibration	IEC60068-2-6 20g 10-2000Hz
Mechanical Shock	Half-Sine, Peak 50g, 11mS, MIL-STD-202, Method 213B, Condition A
Receiving Distance of Bluetooth data	In open air approximately 10m
Encapsulation protection level	IP65



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Electromagnetic Compatibility (EMC) Part			
Electromagnetic Interference (EMI)			
Test Item	Test Requirement	Test Method	Limit
Radiated Emission	EN301 489-17 V2.2.1 (2012-09) Clause 7.1	EN301 489-1 V1.9.2 (2011-09) Clause 8.2	Clause 8.2.3
Electromagnetic Susceptibility (EMS)			
ESD (Electrostatic Discharge)	EN301 489-17 V2.2.1 (2012-09) Clause 7.2	EN301 489-1 V1.9.2 (2011-09) Clause 9.3	Clause 9.3.3
Radiated Immunity, 80MHz to 2.7GHz	EN301 489-17 V2.2.1 (2012-09) Clause 7.2	EN301 489-1 V1.9.2 (2011-09) Clause 9.2	Clause 9.2.3



Radio Spectrum Matter (RSM) Part			
Transmitter Parameters			
Test Item	Test Requirement	Test Method	Limit
Equivalent Isotropic Radiated Power (Radiated)	EN300 328 (2006-10) V1.7.1 Clause 4.3.1	EN300 328 (2006-10) V1.7.1 Clause 5.7.2	-10dBW(100mW) e.i.r.p
Maximum Spectral Power Density	EN300 328 (2006-10) V1.7.1 Clause 4.3.2	EN300 328 (2006-10) V1.7.1 Clause 5.7.3.1	10mW per MHz
Medium Access Protocol	EN300 328 (2006-10) V1.7.1 Clause 4.3.5	--	--
Frequency Range (Radiated)	EN300 328 (2006-10) V1.7.1 Clause 4.3.3	EN300 328 (2006-10) V1.7.1 Clause 5.7.4	F <sub>L</sub> > 2.4GHz and F <sub>H</sub> <2.4835GHz
Transmitter Spurious Emission	EN300 328 (2006-10) V1.7.1 Clause 4.3.6	EN300 328 (2006-10) V1.7.1 Clause 5.7.5	Table 2 & 3
Electromagnetic Susceptibility (EMS)			
Receiver Spurious Emission	EN300 328 (2006-10) V1.7.1 Clause 4.3.7	EN300 328 (2006-10) V1.7.1 Clause 5.7.6	Table 4 & 5

### Structure reference (Unit: Inch[mm])

