



WATER PRESSURE SENSOR

116CP Series

WORLD CLASS PERFORMANCE

Utilizing Sensata's industry leading ceramic capacitive technology, the 116CP is housed in a small and innovative plastic package ideal for boilers, pumps, and other light industrial applications.

The 116CP is offered in a wide range of configurations including various pressure ports, electrical outs and pressure ranges from 0-3 to 0-16 bar.

Features

- Multiple port & Connector options
- High accuracy: +/-1.5%FS
- Small & compact size
- 100% automated calibration
- REACH/RoHS compliant

Applications

- Boilers
- Heat pumps
- Residential booster pumps
- Lawn & Pool pumps
- Circulator pumps
- Pump controllers
- Food & Beverage equipment

Technical Specifications

Pressure Ranges

0-3 to 0-16bar

Performance

Electrical Connection RAST 2.5
 Pressure Connection..... G $\frac{3}{8}$, G $\frac{1}{4}$, quick connect
 (See next page drawings)
 Pressure Reference..... Sealed Gauge (1bar)
 Total Error Band Accuracy..... +/-1.5%FS (typical)
 Operating Temperature 2° to 90°C
 Storage Temperature -40° to 125°C

Electrical

Supply Voltage 5VDC or 8-30VDC
 Output Voltage..... 0.5 to 3.5V
 Supply Current 8.0mA
 Output Current 5.0mA (max)
 Output Load 10kOhm pull down
 Output Response Time <10ms
 Overvoltage Protection 16V
 Reverse Voltage -14V
 Short Circuit Protected Yes
 EMC Conforms to EN 61326-2-3 for sensors
 ESD..... 8kV/air, 4kV/direct

Physical

Proof Pressure..... 2xFS (1)
 Burst Pressure 3xFS (1)
 Random Vibration 5G (2-2kHz)
 Mechanical Shock 40G $\frac{1}{2}$ HL SINE
 Drop (any Axis) 1m

Agencies

REACH
 RoHS compliant
 CE

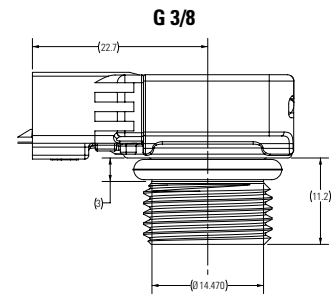
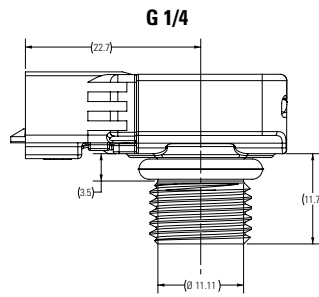
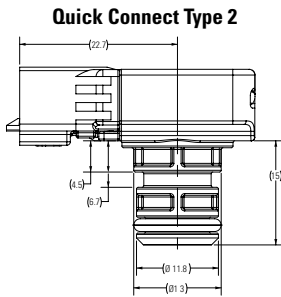
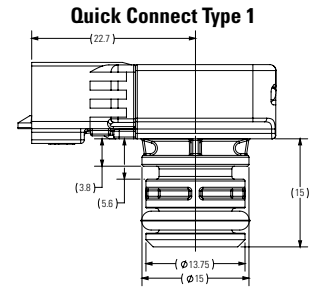
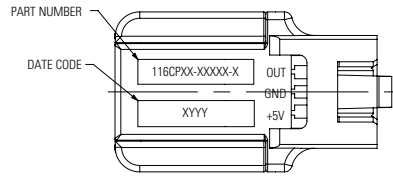
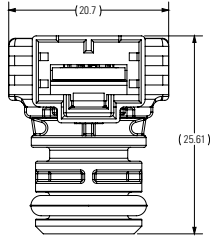
Note:

(1) FS (Pressure) = $P_{max} - P_{min}$
 FS (Voltage) = $V_{out_{max}} - V_{out_{min}}$

WATER PRESSURE SENSOR

116CP Series

Dimensions All dimensions are in millimeters (mm)



Ordering Information

EXAMPLE			116		CP		2		1		-	M04		S		2		-	0
Input																			
116	(5VDC)																		
117	(8-30VDC)																		
Family																			
CP	Ceramic Capacitive Pressure (APT)																		
Port																			
1	(Null)																		
2	(Quick Connect Type 1)																		
3	(G ¹ / ₄)																		
4	(G ³ / ₈)																		
5	(Quick Connect Type 2)																		
Connector																			
0	(Null)																		
1	(RAST 2.5 3Pos)																		
2	(RAST 2.5 4Pos)																		
3	(RAST 2.5 3Pos Alternate)																		
Pressure																			
Bar	PSI																		
M06	090																		
M10	150																		
M16	230																		
MXX	YYY																		
P_ref																			
A	(Absolute)																		
S	(Sealed Gauge)																		
G	(Gauge)																		
Span																			
1	(1.125-3.6V)																		
2	(0.5-3.5V)																		
3	(0.5-4.5V)																		
4	(0.5-2.75V)																		
5	(0.5-2.5V)																		
6	(Custom)																		
Special Requirement																			
0 or 50	(Application Dependent)																		
1	(Custom)																		



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