

| 116CP SERIES

WATER PRESSURE SENSOR

Introduction

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

SPECIFICATIONS

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

Pressure Ranges	0-3 to 0-16bar
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Physical

Proof Pressure	2xFS ⁽¹⁾
Burst Pressure	3xFS ⁽¹⁾
Random Vibration	5G (2-2kHz)
Mechanical Shock	40G½ HL SINE
Drop (any Axis)	1m

⁽¹⁾ FS (Pressure) = Pmax – Pmin

FS (Voltage) = Voutmax - Voutmin

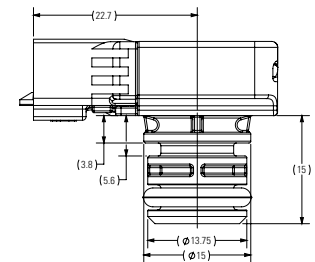
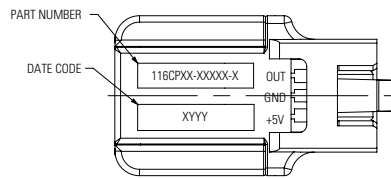
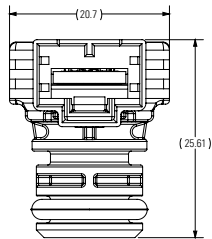
Performance

Electrical Connection	RAST 2.5
Pressure Connection	G¾, G¼, 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

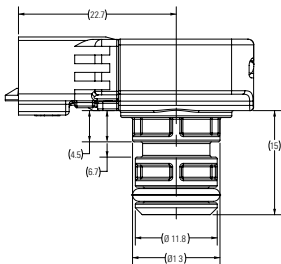


DIMENSIONS

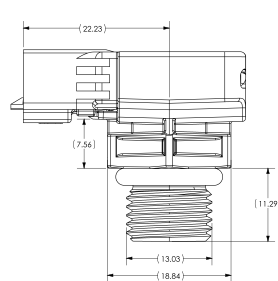
Dimensions in mm [Inch]



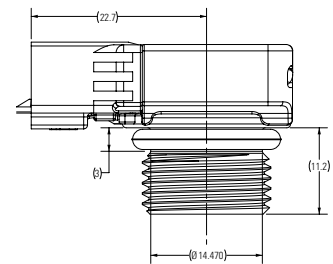
Quick Connect Type 2



G 1/4



G 3/8





ORDERING OPTIONS

Example : 116CP21-M04S2-0

Input		
116 (5VDC)		
117 (8-30VDC)		
Family		
CP Ceramic Capacitive Pressure (APT)		
Port		
1 (Null)	3 (G ¹ / ₄)	5 (Quick Connect Type 2)
2 (Quick Connect Type 1)	4 (G ³ / ₈)	
Connector		
0 (Null)	2 (RAST 2.5 4Pos)	
1 (RAST 2.5 3Pos)	3 (RAST 2.5 3Pos Alternate)	
Pressure		
Bar PSI	M06 090	M16 230
M04 060	M10 150	MX ^X YYY
P_ref		
A (Absolute)	S (Sealed Gauge)	
G (Gauge)		
Span		
1 (1.125-3.6V)	3 (0.5-4.5V)	5 (0.5-2.5V)
2 (0.5-3.5V)	4 (0.5-2.75V)	6 (Custom)
Special Requirement		
0 or 50 (Application Dependent)		
1 (Custom)		



AGENCY APPROVALS & CERTIFICATIONS

REACH
 RoHS compliant
 CE

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Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

CONTACT US

Americas

+1 (800) 350 2727
 sensors@sensata.com
 switches@sensata.com

Europe, Middle East & Africa

+359 (2) 809 1826
 pressure-info.eu@sensata.com

Asia Pacific

sales.isasia@list.sensata.com
 China +86 (21) 2306 1500
 Japan +81 (45) 277 7117
 Korea +82 (31) 601 2004
 India +91 (80) 67920890
 Rest of Asia +886 (2) 27602006
 ext 2808