

Model U5100

Industrial - High EMI Rated, High Stability

Description

The U5100 series from SENSYS Sensors sets the price / performance standard for transducers used in demanding environments. The U5100 exceeds the latest heavy industrial CE requirements including surge protection, and is over voltage protected in both positive and reverse polarity. The 100% 316L media isolation covers all but the most corrosive environments.

Features

- ▶ Heavy Industrial CE Approval
- ▶ 100V/m EMI Protection
- ▶ Reverse Polarity Protection
- ▶ 0.3%FS accuracy
- ▶ Compact Outline
- ▶ -40 to 125°C

Applications

- ▶ Advanced HVAC Controllers
- ▶ Refrigeration Systems
- ▶ Automotive Test Stands
- ▶ Gas compressors
- ▶ Industrial process control
- ▶ Pumps and Compressors
- ▶ Hydraulic/Pneumatic
- ▶ Agriculture Equipment
- ▶ Energy and Water Management



Specifications

Range

1, 2, 3.5, 7, 10, 20, 35, 70, 100, 200, 350, 700 bar

Performance

Accuracy	±0.3%FS(RSS)
Thermal Effect on Zero	±0.03%FS/°C
Thermal Effect on Span	±0.03%FS/°C
Compensated Temperature Range	-20 ~ 85°C
Operating Temperature Range	-40 ~ 125°C / -40 ~ 100°C(4~20mA)

Electrical

Excitation	4.75~5.25VDC	8~30VDC	15~30VDC	9~30VDC	
Output	0.5~4.5VDC	1~5VDC	0~5VDC	0~10VDC	4~20mA(2Wire)
Insulation Resistance	1MΩ @25VDC				
Electrical Connection	Cable, Packard Connector, Mini Din Connector				

Physical

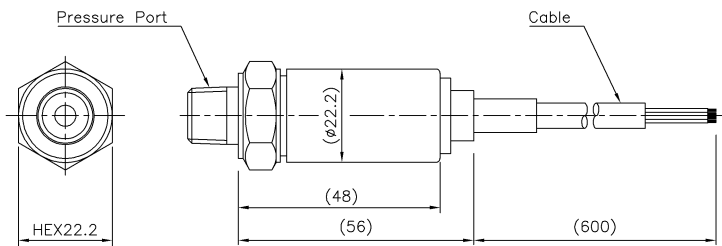
Proof Pressure	300%FS Max.
Burst Pressure	400%FS Min.
Vibration	20G at 20 to 200Hz
Shock	50G / 11ms
Media-Wetted Materials	Stainless Steel 316
Weight	Mini Din Connector type : Approx. 100g (Sensor Only)

CE compliant per the following specification

EN55022 Emission Class A & B
 IEC61000-4-2 Electrostatic Discharge Immunity(6kV contact/8kV air)
 IEC61000-4-3 EM Field Immunity(30V/m)
 IEC61000-4-4 Electrical Fast Transient Immunity(1kV)
 IEC61000-4-5 Surge(1kV)
 IEC61000-4-6 Conducted Immunity(10V)
 IEC61000-4-9 Pulsed Magnetic Field Immunity(100A/m)

Dimension

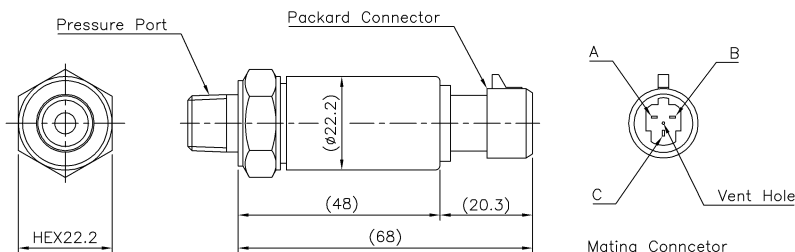
► Cable Type



Vent Through Cable (Under 70bar) Max Operating Temperature for Cable is 100°C

Wire Color	Connections	
	V Output	mA Output
Red	Input ⊕	Input ⊕
Black	Common ⊖	Output ⊕
Green	Output ⊕	x

► Packard Connector Type

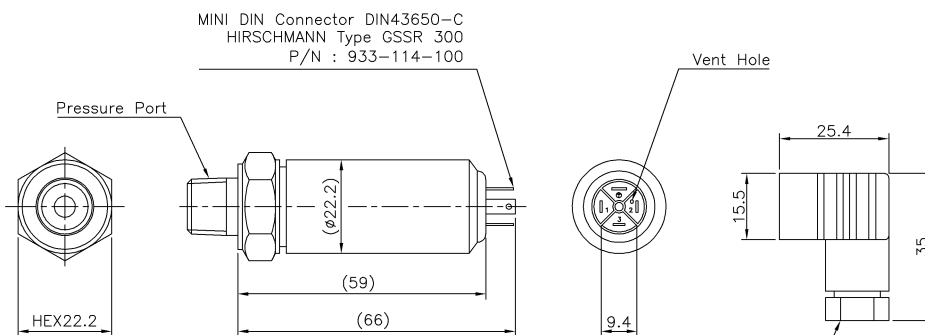


Vent Through Hole in Connector (Under 70bar)

Mating Connector
 Housing P/N : 12078090
 Pin P/N : 12103881-L

Pin No.	Connections	
	V Output	mA Output
A	Input ⊕	Input ⊕
B	Common ⊖	Output ⊕
C	Output ⊕	x

► Mini DIN Connector Type



Vent Through Hole in Connector (Under 70bar)

Mating Connector
 P/N : 933 024-100
 Gasket P/N : 730 185-002

Pin No.	Connections	
	V Output	mA Output
1	Input ⊕	Input ⊕
2	Output ⊕	Output ⊕
3	Common ⊖	x
⊕	Earth	x

Ordering Information

Model Name	U51	3	1-00000	5-010	B	G	Type of Pressure
Output							G : Gauge A : Absolute
3 : 0.5~4.5V							
4 : 1~5V							
5 : 4~20mA							
6 : 0~5V							
7 : 0~10V							
Connection							Pressure Unit
1 : Cable							B : bar
4 : Packard Metripak 150							P : psi
6 : Mini-Hirschman DIN43650 ind C							
Options							Pressure Range
Pressure port							001 : 0~1bar
2 : G(PF)1/4							002 : 0~2bar
4 : 7/16-20 UNF Male, O-ring							3.5 : 0~3.5bar
5 : 1/4-18 NPT							007 : 0~7bar
P : 7/16-20 female							010 : 0~10bar
X : R(PT)1/4							020 : 0~20bar
							035 : 0~35bar
							070 : 0~70bar
							200 : 0~200bar
							350 : 0~350bar
							700 : 0~700bar