

2HMP SERIES

HVAC & Refrigeration Pressure Sensor

Introduction

The Sensata Technologies 2HMP series is ideal for demanding air conditioning, refrigeration and industrial applications where long-term reliability and accuracy is a must. The 2HMP provides best in class accuracy over temperature, in a reliable, hermetic design at a competitive price. Sensata Technologies has been a leading global supplier of pressure sensors and switches for over 50 years.



Features

- Rugged seal ideal for outdoor environments
- Industry leading accuracy over broad temperature range
- Electrical isolation helps protect against electrical shocks or equipment damage
- Media isolation prevents abnormal operation during thermal shock
- Media and electrical isolation protects against thermal and electrical shock
- Outstanding EMC/ESD performance
- Low cost design for OEM applications
- MEMS sensing technology
- Integrated connector or flying leads
- Flexible threaded fitting or braze tube pressure connection and mounting options

Applications

- Commercial refrigeration
- Variable speed HVAC
- Transport refrigeration
- Chillers
- Heat pumps
- Variable refrigerant flow (VRF)



Technical Specifications

'	
Pressure Ranges	0 to 100 psi through 0 to 750 psi, 0 to 1MPa through 0 to 5MPa
Performance Accuracy	± 1% F.S. typical over -25°C to 125°C (-13°F to 257°F)
Operating Temperature	-40°C to 125°C (-40°F to 257°F)
Storage Temperature	-40°C to 150°C (-40°F to 302°F)
Proof Pressure	1000 psi, 6.9 MPa
Burst Pressure	3600 psi, 24.8 MPa
Cycle Life	1 million F.S. cycles
Vibration	11 g (50 to 2000 Hz)
Drop (any Axis)	1 m
Electrical Connection	IP67 Available
Wetted Materials	304L Stainless Steel Brass/copper Other materials available

Page 1

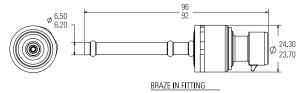
Electrical Specifications

Supply Voltage (V _{IN})	4.5 VDC to 5.5 VDC
Output Voltage (V _{ουτ})	0.5 VDC to 4.5 VDC typical
Supply Current	8 mA max @ 5 VDC with no load
Output Current	2.5 mA max sink or source
Output Load	10K ohms min
Output Response Time	2 ms, additional options available
Overvoltage Protection	16 VDC
Reverse Voltage	-14 VDC
Short Circuit Protected	Yes
EMC (IEC62000-4-20)	100 V/m
ESD (IEC 61000-4-2)	8 kV contact, 15 kV air
Electrically Isolated Housing	1800VAC for 1 second

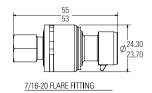


STANDARD CONFIGURATIONS

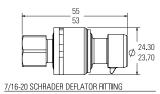
Dimensions in mm



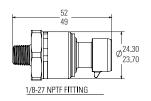














AGENCY APPROVALS & CERTIFICATES

UL / C-UL

873





RoHS Compliant

Page 2

Revised 02/06/18

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

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