

Stainless Steel Media Isolated Pressure Sensors Line Guide



Stainless products. Steeled expertise. Honeywell Sensing and Control (S&C) offers decades of experience in the stainless steel pressure transducers industry. That's why, industry-wide, our transducers are known for enhanced quality, reliability, and service – which adds up to outstanding value for your applications. Most Honeywell S&C transducers take advantage of piezoresistive technology, and are fully steel media isolating with

stainless steel or aerospace alloys and no internal elastometric seals. This design often makes them resistant to harsh, aggressive media and challenging environments. What's more, long before they're shipped, our transducers are tested against critical manufacturing specifications. Then again, you expect meticulous attention to detail from an industry leader.

FEATURES

STAINLESS STEEL MEDIA ISOLATED PRESSURE SENSORS 13 mm Series.

Features: Rugged, isolated stainless steel package • Accommodates media that will not adversely affect 316L stainless steel • Often reliable semiconductor technology • Calibrated and temperature compensated • Voltage or current supply options • Absolute and sealed gage pressures • For potential applications from 500 psi to 5,000 psi

Benefits: Used in high pressure potential applications involving measurement of hostile media in harsh environments. Piezoresistive semiconductor sensor chip in oil-isolated housing with or without an integral ceramic for temperature compensation and calibration is designed to provide reliable, stable, and accurate performance. Weld-ring collar and special back support ring for enhanced cycle life capability as well as further package integration in OEM applications. Potential applications include industrial and hydraulic controls, tank pressure, pressure transmitters, and process control systems.

19 mm Series.

Features: Rugged, isolated stainless steel package • Accommodates media that will not adversely affect 316L stainless steel • Small size • Often reliable semiconductor technology • Absolute and gage pressures • Vacuum compatible, isolated sensors • Calibrated and temperature compensated (some listings) • For potential applications up to 500 psi

Benefits: Variety of pressure connections allow use in wide range of OEM equipment. Uncompensated version for use in potential applications using specialized circuit designs. Rugged and often reliable for use in potential applications where corrosive liquids or gases are monitored and may also be exposed to a vacuum such as industrial controls, process control systems, industrial automation and flow control, and pressure calibrators.

MLH Series.

Features: All-wetted parts • No internal elastomeric seals • Stable and creep free • Reverse voltage and output short circuit protected • Less than 2 ms response time • Easy customization • Rated IP65 or better • Exceeds CE heavy industrial EMC for use in areas of high RFI/EMI • Amplified and temperature compensated • Wide choice of connections and terminations • Calibration for special pressure ranges

Benefits: Combines ASIC technology with media isolated, metal diaphragm. All metal wetted parts for use in a variety of potential fluid applications. Amplified outputs often eliminate cost of external amplifiers. Wide selection of industry standard connectors and process ports for enhanced reliability and user flexibility. Potential applications include diesel engines, refrigeration and HVAC/R, general industrial and hydraulics, off-road vehicles, braking systems, natural gas vehicles, and medical.

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When reliability is demanded, Honeywell delivers.

Stainless steel pressure transducers are found in applications where sensors cannot be easily replaced — where supreme durability is a top priority. That's why you'll find Honeywell S&C pressure transducers performing expertly in potential applications, such as compressors and hydraulic controls, and in industries as diverse as aerospace, medical, transportation, agriculture, refrigeration, and industrial. Our full line of sensors deliver enhanced performance and reliability, plus: bonded strain gage technology enhances resistance to shock, vibration and hostile conditions; absolute, gage and sealed-gage measurement; a wide array of pressure ranges, port styles, termination types, and outputs; package types from miniature surface mount sensors to high-end stainless steel isolated transmitters (for stringent process control); pressure ranges from 3 psi to 10 kpsi; and corrosion resistance.



Pressure Sensors

13 mm Series

Pressure connection	ring with back support, 1/8-27 NPT, 1/4-18 NPT, 7/16 UNF
Measurement type	absolute, sealed gage
Construction	wetted parts 316L SS
Pressure range	0 psi to 500 psi through 0 psi to 5000 psi
Output signal	0 mV to 100 mV (nominal)
Accuracy	±0.25% BFSL max.
Amplified	no
Compensated temperature range	0 °C to 82 °C [32 °F to 180 °F]
Termination	ribbon cable



Pressure Sensors

19 mm Series

Pressure connection	cell with body O-ring, flush mount, flush mount with flange, 1/8-27 NPT, 1/4-18 NPT, 7/16 UNF, 1/4 BSPP, Euro O-ring, 1/4 VCR (female nut)
Measurement type	absolute, gage, vacuum gage
Construction	wetted parts 316L SS
Pressure range	0 psi to 3 psi through 0 psi to 500 psi
Output signal	0 mV to 150 mV (nominal)
Accuracy	±0.25% BFSL max.
Amplified	no
Compensated temperature range	0 °C to 82 °C [32 °F to 180 °F]
Termination	ribbon cable



Pressure Sensors

MLH Series

Pressure connection	1/4-18 NPT, M12 x 1.5 (ISO 6149), M14 x 1.5 (ISO 6149), 3/8-24 UNF (SAE-3 O-ring boss), M18 x 1.5 (ISO 6149), 1/8 in-27 NPT, 1/2 in-20 UNF (SAE-5 O-ring boss), M10 x 1 (ISO 6149), 1/4 in SAE Female Schrader, 7/16-20 UNF (SAE-4 O-ring boss), 1/2 in NPT, 9/16-18 UNF (SAE-6 O-ring boss), PT 1/4-19 BSP Tapered Thread, G 1/4-19 (DIN 3852-2), G 1/8 with O-ring groove, M16 x 1.5 (ISO 6149), G 1/4 with O-ring groove, G 1/8 (DIN 3852-2), PT1/8-28 BSP Tapered Thread, M20 x 1.5 (ISO 6149), 1/2-20 37° Flare (SAE JIC)
Measurement type	gage, sealed gage
Construction	port - 304L stainless steel; diaphragm - Haynes 214 alloy
Pressure range	0 psi to 50 psi through 0 psi to 8000 psi
Output signal	0.5 Vdc to 4.5 Vdc ratiometric output at 5 Vdc excitation, 4 mA to 20 mA current from 9.5 Vdc to 30 Vdc excitation, 1.0 Vdc to 6.0 Vdc regulated output from 8 Vdc to 30 Vdc excitation, 0.25 Vdc to 10.25 Vdc regulated output from 14 Vdc to 30 Vdc excitation, 0.5 Vdc to 4.5 Vdc regulated output from 7 Vdc to 30 Vdc excitation, 0 mV to 50 mV from 5 Vdc excitation, 1 Vdc to 5 Vdc output from 8 Vdc to 30 Vdc excitation
Accuracy	±0.25% full scale BFSL (±0.5% full scale BFSL on ranges below 100 psi)
Amplified	yes
Compensated temperature range	-40 °C to 125 °C [-40 °F to 257 °F]
Termination	Packard MetriPak 150, Hirschmann, M12 x 1 (Brad Harrison micro), DIN 72585 (Cannon APD type), DIN 43650-C (IP65), Amp Superseal 1.5 (IP67), cable, flying leads, Deutsch DTM04-3P (integral)



Pressure Sensors

SPT Series

Pressure connection	1/8-27 NPT, 1/4-18 NPT, 7/16-20 UNF, 1/4-19 BSPP, 1/4 VCR gland
Measurement type	absolute, gage, sealed gage, vacuum gage pressures
Construction	wetted parts 316L SS
Pressure range	0 psi to 3 psi through 0 psi to 5000 psi
Output signal	4 mA to 20 mA, 0 mV to 100 mV, 1 Vdc to 5 Vdc
Accuracy	±0.25% BFSL max.
Amplified	yes, amplified and unamplified
Compensated temperature range	-10 °C to 85 °C [14 °F to 185 °F]
Termination	bayonet connector, cable

SPT Series.

Features: Often reliable semiconductor technology • Rugged, 316L stainless steel wetted parts • Calibrated and temperature compensated • NEMA 4 design

• Absolute, gage, sealed gage, and vacuum gage pressures • Often ideal for potential applications where medial compatibility is a problem

Benefits: Variety of pressure connections allows use in wide range of OEM equipment. For use in potential applications where corrosive liquids and gases are monitored such as industrial automation and flow control, pressure instrumentation, hydraulic systems, and process control.

Warranty. Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

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For more information about Sensing and Control products, visit www.honeywell.com/sensing or call +1-815-235-6847. Email inquiries to info.sc@honeywell.com

WARNING **PERSONAL INJURY**

- DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

WARNING **MISUSE OF DOCUMENTATION**

- The information presented in this catalogue is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

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