

ST 3000 Gauge Pressure Transmitters for High Temperatures



MEASUREMENT & CONTROL



YEAR 2000 READY

Honeywell's newest line of ST 3000 Smart Pressure Transmitters now includes models that withstand process temperatures in excess of 300°F (150°C). Designed to measure pressure or the level of fluid in open or non-pressurised tanks, these unique transmitters can replace troublesome capillary-filled remote seal systems to yield better overall accuracy, much greater stability, and substantially reduced installation and maintenance costs. A new, patented sensor provides the high-temperature performance and functionality.

Features and Functions

ST 3000 Transmitters for High Temperatures address difficult applications in which high temperatures prohibit in contact between the transmitter and the process, or where contact could contribute to clogging or contamination. In addition, eliminating unreliable, troublesome remote seals prevents a multitude of measurement problems and numerous field and maintenance difficulties. These effective, accurate new transmitters:

- Withstand process temperatures in excess of 150°C
- Replace remote seals in many applications

- Feature a new, robust Honeywell-patented sensor that provides more performance and functionality than any comparable product on the market
- Offer small, flange-mount models with piping sizes down to 1 inch to reduce associated piping, plumbing, and equipment costs.

Versatile and Flexible

Eliminating a remote-seal capillary system reduces errors due to changes in ambient temperature and fill fluid densities. Because remote-seal transmitters are notorious for being troublesome and often introduce problems of their own into a process, replacing them with a more reliable alternative is highly desirable. Honeywell's new high-temperature capability ST 3000's offer the same high level of accuracy as all our highly respected ST 3000 transmitters. Also, replacing remote seals in sanitary applications minimises downtime because there is no need to remove these transmitters during Clean-In-Place and Sterilise-In-Place operations.

Applications Capability

High-temperature capabilities make this product the ideal choice when the process medium:

- is a slurry or has suspended solids that may clog the, instrument line
- might freeze or solidify due to ambient or process temperature changes
- has a high temperature.

These new devices are well suited for a variety of industries such as power generation, industrial energy management, pulp and paper, hydrocarbon processing, oil and gas, and chemicals. A small flange-mount model with piping sizes as small as one inch reduces associated piping, plumbing and equipment costs.

Sanitary Applications

Two sanitary models, designed for food and pharmaceutical applications, are suitable for Clean-In-Place and Sterilise-In-Place installations and meet 3A requirements for non-contamination of the process. The sanitary connection avoids the cavities and dead volume that often contribute to contamination.

For further information on how ST 3000 Gauge Pressure Transmitters for High Temperatures can benefit your operation, contact your local Honeywell account manager or distributor. Visit our World Wide Web site at www.iac.honeywell.com

General Specifications

Upper Range Limit bar (psig)	35 (500)	
Minimum Span bar (psig)	0.063 (0.9)	
Turndown Ratio	550 :1	
Zero Elevation and Suppression	No limit except minimum span from absolute zero to 100%URL	
Accuracy (Reference)	± 0.075% of calibrated span or upper range value (URV), whichever is greater	
Process Connections	Process Head : ½” NPT Sanitary : 2” Sanitary Tri-Clamp Flange : ½”, 1”, 1½”, 2”, 3” or 4” class 150 or 300 ANSI flange	
Diaphragm Materials (wetted)	316L Stainless Steel	
Gasket Ring Materials (wetted)	316L Stainless Steel	
Mounting Flange (non-wetted)	Zinc Chromate plated Carbon Steel, 304 SS or 316 SS. Sanitary design : 316SS	
Fill Fluid	Silicone (DC200) Neobee	
Electronic Housing	Epoxy-polyester hybrid paint. Low copper-aluminium alloy. Meets NEMA 4X (watertight) and NEMA 7 (explosion proof), IP66/67	
Ambient Temperature °F/°C	77±2 / 25±1	-40 to 185 / -40 to 85
Process Interface Temp. °F/°C	77±2 / 25±1	-40 to 302 / -40 to 150
Humidity	10 to 55	0 to 100
Flange Rating		
ANSI Class 150 psi/bar	0 / 0	265 / 18
ANSI Class 300 psi/bar	0 / 0	690 / 48
Supply Voltage, Current and Load Resistance	Voltage Range : 10.8 to 42.4 Vdc at terminals Current Range : 3.8 to 21.8 mA Load Resistance : 0 to 1440 ohms	
Output (two wire)	Analogue 4 to 20mA or digital communications DE mode	
Supply Voltage Effect	±0.005% of span per volt	
Damping Time Constant	Adjustable from 0 to 32 seconds digital damping	
RFI Protection (Standard)	Negligible (20 to 1000 MHz at 30 volts per meter)	
CE Conformity (Europe)	89/336/EEC, Electromagnetic Compatibility (EMC) Directive	

Distributor :



Tlf: 67150 250 Faks: 67 150 251

Mail: post@instrumentteam.no

Web: www.instrumentteam.no

Honeywell

Industrial Measurement and Control

<http://europe.iac.honeywell.com>

Northern Europe and Southern Africa: Honeywell Ltd., Arlington Business Park, Bracknell, RG21 1EB, UK - Tel:[44] 1344 656000

Central Europe: Honeywell A.G., Kaiserleistre 39, 63067 Offenbach, Germany - Tel: [49] 69-8064-0

Western and Southern Europe: Honeywell S.A., Avenue de Schiphol 3, 1140 Brussels, Belgium - Tel: [32-2] 728 2611

Eastern Europe: Honeywell s.r.o., Budejovicka 1, 140 21 Prague 4, Czech Republic - Tel: [420-2] 6112-2777

Middle East: Honeywell Middle East Ltd., Khalifa Street, Sheikh Faisal Building, Abu Dhabi, U.A.E. - Tel: [9712] 322530

Asia: Honeywell Asia Pacific Inc., Room 3213-3225, Sun Hung Kai Centre, 30 Harbour Rd., Wanchai, Hong Kong - Tel: [852] 23319133

Japan: Industrial Operations Tokyo, 4-28-1 Nishi-Rokugo Othu-ku, Tokyo 144, Japan - Tel: [81] 3-3486-2051