

ST 3000 Smart Pressure Transmitter

Exceptional Accuracy, Stability and Reliability



YEAR 2000 READY

The ST 3000 Pressure Transmitter demonstrates that greater accuracy and stability pay off in important savings. Its single board design and inherent quality make it the world's most reliable transmitter, and its self diagnostics and digital communications cut out most of the man hours and costs from starting up and maintaining conventional transmitters.

Priced to meet your needs

The Smartline ST 3000 offers 2 different series to satisfy your application and pricing requirements.

Series 100 a full range of pressure, level and DP flow applications with the highest performance available today.

Series 900 lightweight and compact. Priced as low as conventional transmitters with higher functionality and performance.

Communicate with any protocol

The ST 3000 now includes FIELDBUS[®], HART[®], DE or 4-20mA protocols - one of the most complete range of transmitters offered by a single supplier

New standards of accuracy and stability

- In its analogue and HART[®] modes, ST 3000 is accurate to $\pm 0.1\%$ of span over a wider turn-down than any other transmitter. With its superior stability, there's often no need to re-calibrate after rearranging.
- In its DE mode, ST 3000 is accurate to $\pm 0.0625\%$ of span, with reduced potential for errors due to changes in ambient temperature and static pressure.

Smart communications

Honeywell's hand-held Smart Field Communicator (SFC) provides both a local and remote interface for easy configuration and testing during start-up, trouble-shooting and on-going maintenance.

Measure the difference in the money you save

The ST 3000 can give you these significant savings over conventional transmitters:

Procurement - The ST 3000's wide adjustable range covers plant requirements with a limited number of models and meter bodies. Because of their proven reliability and interchangeability, fewer ST 3000 electronic boards are needed for emergencies.

Start-up - The ST 3000 is factory-calibrated and ready for easy configuration at the transmitter site, saving valuable man-hours during installation.

Operation - With a performance better than comparable transmitters at varying temperatures and static pressures the ST3000 provides more efficient process control and more accurate metering while operating closer to the plant limits without added risk.

Maintenance - Proven stability over long periods of time reduces routine maintenance to a minimum. Self-diagnostics help ensure a safe, continuous operation.

General Specifications

| | |
|-------------------------------|--|
| Output | Characterisation: linear or square root Signal: 4-20mA dc or Honeywell "DE" digital protocol. Optional FIELDBUS and HART protocol available |
| Ambient Temperature Limit* | -40° to 85°C (-40° to 185°F) |
| Meter Body Temperature Limit* | -40° to 125°C (-40° to 257°F) |
| Over-pressure* | 210 bar (3000 psi) |
| Drift* | ±0.03% of URL per year |
| Electronic Housing | Epoxy-polyester hybrid paint. Low copper aluminium. Meets NEMA4X/ IP66 |
| Damping | Adjustable from 0 to 32 seconds |
| Supply Voltage | 11 to 45 Vdc |
| Safety Approvals | Meets all major international intrinsic safety and explosion proof standards and CE Mark |

* Specifications shown are for Model STD 120

| MODEL NO. | | Maximum Span | Minimum Span | Turn-Down | Accuracy (Analogue) % of span | Combined Zero & Span Temp Effect per 28°C | Press Effect per 70 bar | |
|---|--------------|--------------|--------------|-------------|-------------------------------|---|-------------------------|-------------|
| Multivariable Transmitter | | | | | | | | |
| SMA110 | Differential | 0-62.2 mbar | 0-25" H2O | 0-1.25mbar | 0.5" H2O | 25:1 | 0.125 | (see spec.) |
| | Absolute | 0-7barA | 0-100psia | 0-0.35barA | 5psia | 20:1 | 0.1 | (see spec.) |
| STA125 | Differential | 0-1 bar | 0-400" H2O | 0-2.5 mbar | 0-1" H2O | 400:1 | 0.1 | (see spec.) |
| | Absolute | 0-52 barA | 0-750 psia | 0-1.04 barA | 0-15 psia | 50:1 | 0.1 | (see spec.) |
| SMG170 | Differential | 0-1000mbar | 0-400" H2O | 0-2.5mbar | 1" H2O | 400:1 | 0.1 | (see spec.) |
| | Gauge | 0-210bar | 0-3000psi | 0-4.16 bar | 60psi | 50:1 | 0.1 | (see spec.) |
| SMA110, 125, SMG170 temperature range can vary from min. -200°C to max 1250°C depending on sensor type : RTD, T/C, J, K, E, T | | | | | | | | |
| Differential Pressure | STD110 | 0-25 mbar | 0-10" H2O | 0-1 mbar | 0-0.4" H2O | 25:1 | 0.1 | 0.4875 |
| | STD120 | 0-1 bar | 0-400" H2O | 0-2.5 mbar | 0-1" H2O | 400:1 | 0.075 | 0.1 |
| | STD125 | 0-1.5 bar | 0-600" H2O | 0-62 mbar | 0-25" H2O | 24:1 | 0.075 | 0.1 |
| | STD130 | 0-7 bar | 0-100 psi | 0-0.35 bar | 0-5 psi | 20:1 | 0.075 | 0.1 |
| | STD170 | 0-210 bar | 0-3000 psi | 0-7 bar | 0-100psi | 30:1 | 0.15 | 0.175 |
| | STD924 | 0-1 bar | 0-400" H2O | 0-25 mbar | 0-10" H2O | 40:1 | 0.1 | 0.25 |
| | STD930 | 0-7 bar | 0-100 psi | 0-0.35 bar | 0-5 psi | 20:1 | 0.1 | 0.25 |
| Gauge Pressure | STD974 | 0-210 bar | 0-3000 psi | 0-7 bar | 0-100 psi | 30:1 | 0.2 | 0.325 |
| | STG140/14L | 0-35 bar | 0-500 psi | 0-0.35 bar | 0-5 psi | 100:1 | 0.075 | 0.1 |
| | STG170/17L | 0-210 bar | 0-3000 psi | 0-7 bar | 0-100 psi | 30:1 | 0.15 | 0.175 |
| | STG180/18L | 0-415 bar | 0-6000psi | 0-7 bar | 0-100 psi | 60:1 | 0.15 | 0.175 |
| | STG944/94L | 0-35 bar | 0-500 psi | 0-1.4 bar | 0-20 psi | 25:1 | 0.1 | 0.25 |
| Absolute Pressure | STG974/97L | 0-210 bar | 0-3000 psi | 0-21 bar | 0-300 psi | 10:1 | 0.2 | 0.325 |
| | STG98L | 0-415 bar | 0-6000 psi | 0-35 bar | 0-500 psi | 12:1 | 0.2 | 0.325 |
| | STA122 | 0-1040 mbarA | 0-780 mmHgA | 0-67 mbarA | 0-50 mmHgA | 78:1 | 0.075 | 0.175 |
| | STA140 | 0-35 barA | 0-500 psia | 0-0.35 barA | 0-5 psia | 100:1 | 0.075 | 0.1 |
| GP Speciality | STA922 | 0-1040 mbarA | 0-780 mmHgA | 0-67 mbarA | 0-50 mmHgA | 15:1 | 0.1 | 0.25 |
| | STA940 | 0-35 barA | 0-500 psia | 0-1.4 barA | 0-20 psia | 25:1 | 0.1 | 0.25 |
| | STG93P | 0-7bar | 0-100psi | 0-0.3bar | 5psi | 20:1 | 0.1 | 0.5 |
| | STG14T | 0-35bar | 0-500psi | 0-63mbar | 0.9psi | 550:1 | 0.087 | 0.1 |
| Flange Mount Liquid Level | STF14T | 0-35bar | 0-500psi | 0-63mbar | 0.9psi | 550:1 | 0.087 | 0.1 |
| | STF128 | 0-1 bar | 0-400" H2O | 0-25 mbar | 0-10" H2O | 40:1 | 0.1 | 0.4 |
| | STF132 | 0-7 bar | 0-100 psi | 0-35 bar | 0-5 psi | 20:1 | 0.1 | 0.4 |
| | STF12F | 0-1 bar | 0-400" H2O | 0-2.5 bar | 0-1" H2O | 400:1 | 0.075 | 0.1 |
| | STF13F | 0-7 bar | 0-100 psi | 0-35 mbar | 0-5 psi | 20:1 | 0.075 | 0.1 |
| | STF14F | 0-1.5 bar | 0-600" H2O | 0-62 mbar | 0-25" H2O | 24:1 | 0.075 | 0.1 |
| | STF924 | 0-1 bar | 0-400" H2O | 0-62 mbar | 0-25" H2O | 16:1 | 0.1 | 0.5 |
| | STF932 | 0-7 bar | 0-100 psi | 0-35 mbar | 0-5 psi | 20:1 | 0.1 | 0.5 |
| Remote Seals | STF92F | 0-1 bar | 0-400" H2O | 0-25 mbar | 0-10" H2O | 40:1 | 0.1 | 0.25 |
| | STF93F | 0-7 bar | 0-100 psi | 0-0.35 bar | 0-5 psi | 20:1 | 0.1 | 0.25 |
| Differential | STR12D | 0-1 bar | 0-400" H2O | 0-25 mbar | 0-10" H2O | 40:1 | 0.2 | 1.2 |
| | STR13D | 0-7 bar | 0-100 psi | 0-0.35 bar | 0-5 psi | 20:1 | 0.1 | 0.33 |
| | STR93D | 0-7 bar | 0-100 psi | 0-63 mbar | 0-0.9 psi | 110:1 | 0.2 | 0.15 |
| Gauge | STR14G | 0-35 bar | 0-500 psi | 0-0.35 bar | 0-5 psi | 100:1 | 0.1 | 1.88 |
| | STR17G | 0-210 bar | 0-3000 psi | 0-7 bar | 0-100 psi | 30:1 | 0.15 | 0.7 |
| | STR94G | 0-35 bar | 0-500 psi | 0-1.4 bar | 0-20 psi | 25:1 | 0.1 | 2.2 |
| Absolute | STR14A | 0-35 barA | 0-500 psia | 0-0.35 barA | 0-5 psia | 100:1 | 0.1 | 1.88 |



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., Kaiserleistrße 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

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