Honeywell

ST3000 PRODUCT BULLETIN

Honeywell's ST 3000 ™ Transmitters accurately measure differential, gauge or absolute pressure.

A piezoresistive sensor is combined with microprocessor-based electronics to provide an output signal proportional to the measured variable.

The microprocessor enhances accuracy by compensating the output signal for the effects of ambient temperature and static pressures changes and for device non-linearities.

Highest measurement capability for all pressure, level and flow applications.
The ST 3000 offers two different series to satisfy your application and price requirements.

Series 100 (S100) **:** The highest performance of the market.

Series 900 (S900) **:** a complete range of pressure, level and DP flow transmitters with high performance.

Best installed accuracy over the lifetime
- Total Probe Error +/- 0.1 % of span for series S900, +/- 0.07% for series 100 with +/- 10°C and 10 bar process variations.
- Stability +/- 0.03% of URL per year with guarantee.

Improved accuracy and stability means fewer calibration checks and eliminates the need for special "high accuracy" transmitters.

Reliability
- Field reliability > 600 years.
- Minimum overpressure effects.
- Minimal transient temperature effects.

Automatic temperature and static pressure compensation improves the transmitter's performance and adaptability to changing process conditions.
The result is greater process efficiency and less material waste.

Low cost of ownership

- A wide span turndown and high reliability reduces the number of different spare transmitters that need to be stocked.

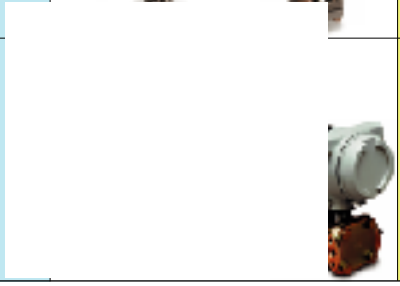
- Remote Communication allows an operator to make quick adjustments and checks from a safe area.

- On board diagnostics alerts an operator to any detected faults and cuts down on the maintenance time associated with troubleshooting.

- Multiple and secondary variable measurements eliminates the purchasing and installation cost of auxiliary devices.

ST 3000 PRODUCT OFFERING

ST 3000 consists of a complete line of differential, absolute, gauge and low range pressure transmitters as well as models for both level and remote seal applications. The Series 900 offers the best solution for all field applications requiring smart performance. The Series100 is designed for those applications demanding the highest performance.

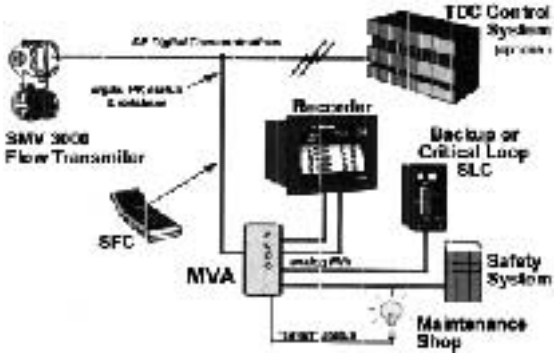
General Purpose Series 900		High Performance Series 100
		**Low Differential Pressure "span from 0-1 mbar up to 0-25 mbar"** *Model STD11O*
Differential Pressure "span from 0-25 mbar up to 0-210 bar" *Models STD924, STD930 and STD974*		**Differential Pressure "span from 0-2.5 mbar up to 0-210 bar"** *Models STD120, STD125, STD130 and STD170*
Gauge Pressure "span from 0-1.4 bar up to 0-415 bar" *Single head Models STG944 and STG974* *In-Line Design Models STG94L, STG97L and STG98L*		**Gauge Pressure "span from 0-0. 35 bar up to 0-415 bar"** *Single head Models STG140, STG170 and STG180* *In-Line Design Models STG14L, STG17L and STG18L*
Absolute Pressure "span from 0-67 mbarA up to 0-35 barA" *Models STA922 and STA940*		**Absolute Pressure "span from 0-67 mbarA up to 0-35 barA"** *Models STA122 and STA140*
Liquid Level "span from 0-62 mbar up to 0-7 bar" *Flanged mount Models STF924, STF932, STF92F and STF93F*		**Liquid Level "span from 0-25 mbar up to 0-7 bar"** *Flanged mount Models STF128, STF132, STF12F, STF13F and STF14F*
Remote Seals : **Differential "span from 0-63 mbar up to 0-7 bar"** *Model STR93D* **Gauge "span from 0-1.4bar up to 0-35 bar"** *Model STR94G*		**Remote Seals :** **Differential "span from 0-25 mbar up to 0-7 bar"** *Models STR12D, STR13D* **Gauge "span from 0-0.35bar up to 0-210 bar"** *Models STR14G, STR17G* **Absolute "span from 0-0.35 barA up to 0-35 barA"** *Model STR144*
Special applications Pulp & Paper : **gauge "span from 0-0.3 bar up to 0-7 bar"** *Model STG93P*		**Special applications High Temperature :** **Gauge "span from 0-0.63 bar up to 0-35 bar"** *Models STG14T, STF14T*
Special applications ***Level Measurement System :*** *LMS*		**Special applications :** ***Multivariable : SMV3000*** *Models SMA110, SMA 125, SMG 170.*

ACCESSORIES

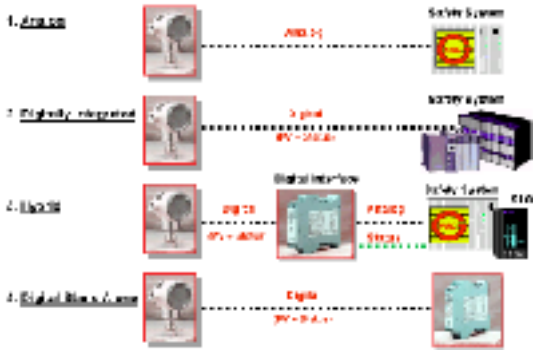
Smart Field Configurator (SCF) 	Smart Configuration Toolkit (SCT3000) 	Hart Configurator U275 	Fieldbus Configuration Tool (TPS-PS Builder/NI) 	Smartline Meters (Analog/Digital) 
Angular Mounting bracket 	Flat mouting bracket 	Manifolds 	Lightning protector/ Piping Adaptors 	Pilot Tube/Primary Elements 

Multivariable to Analog converter (MVA)

MVA Used for Transmitter Integration



Multivariable Trip Switch (MTS)



PRODUCT DESCRIPTION

The three input signals from the sensor as well as the characterisation data, stored in a PROM at the meter body level, are transmitted to the electronic module microprocessor to calculate a process value compensated for the static pressure and temperature. In this way, the ST 3000 provides an output signal that is stable and fully compensated for changes in process and ambient conditions over a very large range. The electronic can be changed without impacting the characterisation.

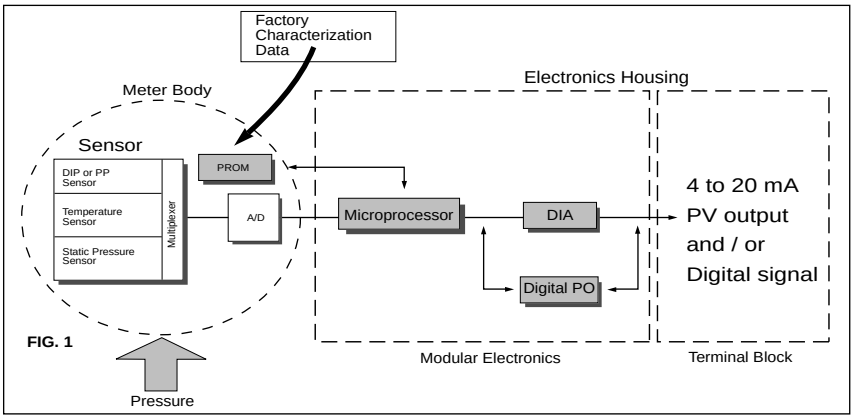
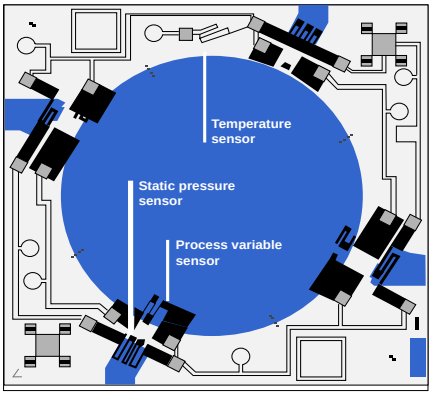


FIG. 1

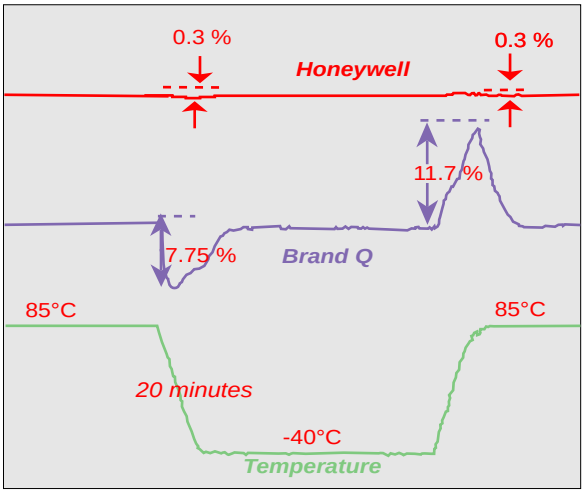
SENSOR

Honeywell sensor is the only one on the market that really measures the temperature and static pressure.

Inherently multivariable is the .....

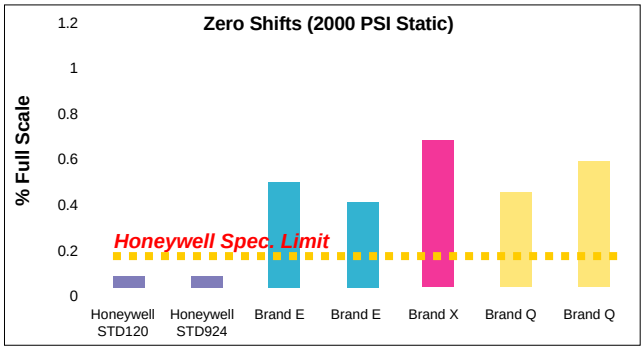


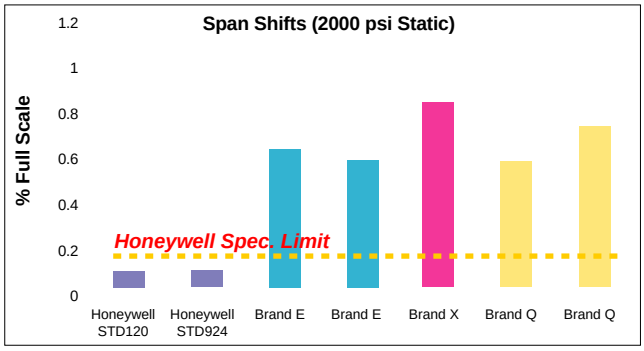
The sensor used in the ST 3000 is actually a multi-variable sensor (it is key to Best Installed Accuracy over the lifetime) that measures differential pressure, static pressure and sensor temperature. These measurements are used by the transmitter's microprocessor to compensate for any measurement error that might result from temperature or static pressure effects on the device.



Fast Acting Ambient temperature measurement means minimal transient temperature effect for Honeywell transmitters.

Active static pressure compensation minimizes effect on zero and means improved profits due to better control





Impact on transmitter performance

$$TPE = \sqrt{(RA)^2+(TEZ)^2+(TES)^2+(SPEZ)^2+(SPES)^2}$$

Where :

TPE = total probable error
RA = reference accuracy
TEZ = temperature ef fect on zero
TES = temperature ef fect on span
SPEZ = static pressure ef fect on zero
SPES = static pressure ef fect on span

Total Probable Error (TPE)

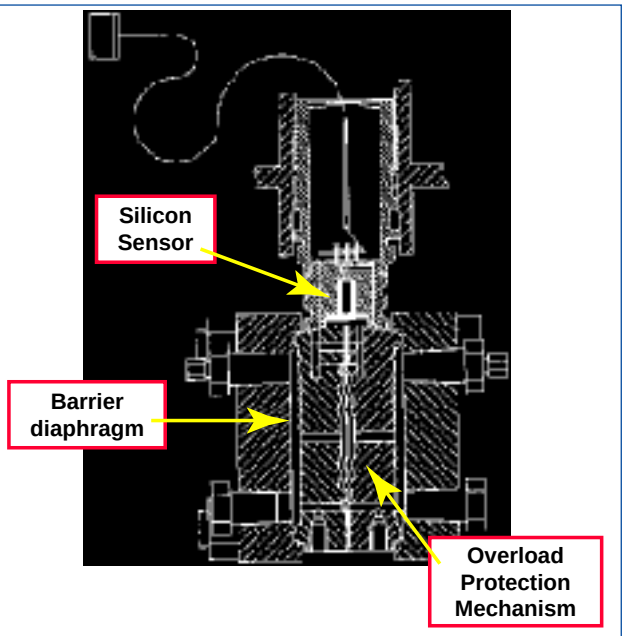
Using all 5 variables mentioned is the most comprehensive way to calculate TPE performance.

Total Probable Error (TPE) is the best way to compare the specifications of various transmitters. It takes into account that not all errors will occur in the same direction at the same time.

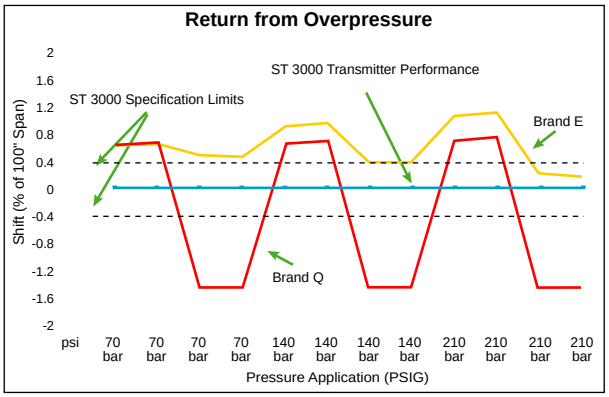
METER BODY

Meter body design provides best installed accuracy.

- Large, compliant barrier diaphragms induce less effect on pressure measurement
- Barrier diaphragms are .002” thick for better corrosion resistance
- Overload mechanism protects the sensor from high speed shocks and overpressure applications to full static pressure rating of 210 bar
- Single crystal silicon sensor has zero mechanical hysteresis and a high sensitivity to pressure
- Meter body design reduces the temperature environment at the sensor for longer lifetime
- 310 bar static pressure rating available for high pressure applications



The overload mechanism in the ST 3000 protects the sensor and minimizes the effects of overpressure applications.
This is important because an improperly cycled 3-valve manifold can cause an inadvertent overpressure. Without an adequate overload protection mechanism residual shifts in output can occur.

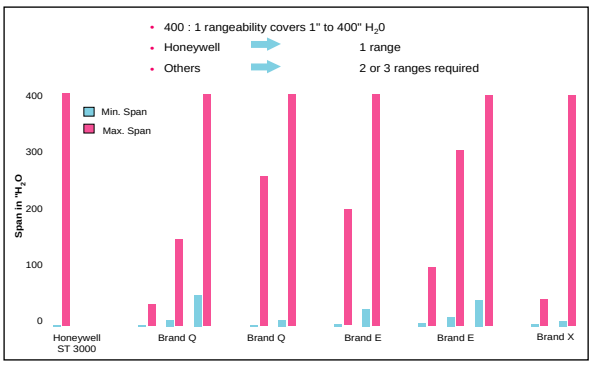


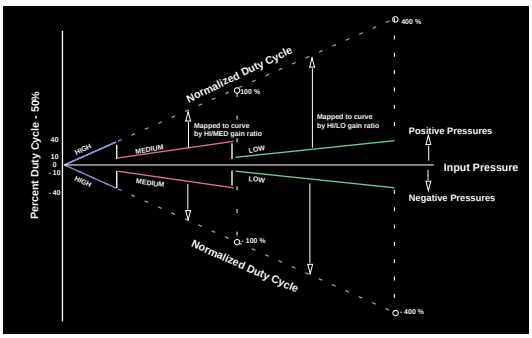
First is the overload mechanism. The meter body is designed so that the barrier diaphragm will bottom-out against the back plate of the meter body when excessive pressure is applied to either side of the transmitter. Once the diaphragm has bottomed out, no further pressure can be applied to the sensor. The design is calculated so that the diaphragm will bottom out well before the breaking point is reached.

ELECTRONICS

Honeywell PATENTED input conversion technique gives 4 times greater range than a single gain Analog to Digital (A/D) converter would allow.

It also utilises auto-gain switching of the input amplifier to optimise signal sensitivity and resolution which results in best signal measurements at small spans while still enabling the transmitter to operate with very large spans as well.



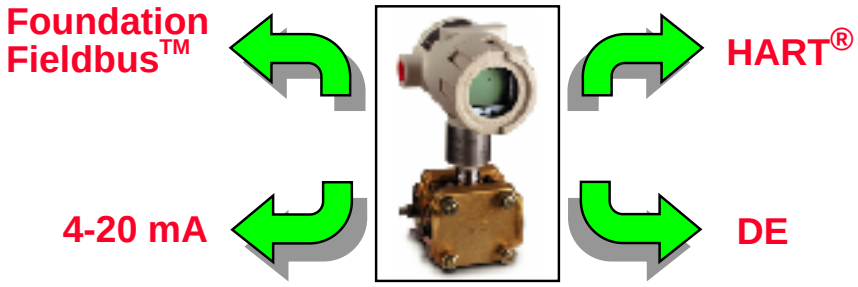


The transmitter software utilizes the measured duty-cycle signal along with the gain information to “map” the duty-cycle signal onto a continuous “normalized duty-cycle” curve. This continuous curve is used by characterization algorithm in the transmitter software to provide an accurate output.

The result of this technique is to allow accurate operation with a *400:1 TURNDOWN*, the largest rangeability.

OUTPUT

Make your choice...



You choose to best fit your applications.....ONLY CHANGE YOUR ELECTRONIC OUTPUT BOARD

ADVANCED DIAGNOSTICS

Honeywell's ST 3000 provides diagnostics on three distinct levels;
- sensor
- electronics
- loop integrity
Over 30 unique diagnostic messages allow maintenance personnel to quickly evaluate the status of the instrument and its loop and take appropriate corrective action.
In many cases, what was thought to be a transmitter problem turns out to be something quite different (process problem, host system problem etc.). The last thing you want your maintenance personnel doing, is responding to work orders on properly operating instruments.
The ST3000 performs extensive diagnostics upon powering up of the instrument. It verifies the integrity of the product code, the characterization data, the customer entered data, the calibration data as well as the RAM memory.
During operation, it continuously checks for the validity of the input measurement it is making and providing as an output.

It does this thru looking at the reasonableness of the measured value and deciding if it could be due to a hardware failure or a process overload condition.

It also checks to see if the transmitter could be operating in an over-temperature condition possibly as a result of steam-tracing left on in hot weather. It also checks to see if the temperature compensation of the D/A circuit is operating correctly.

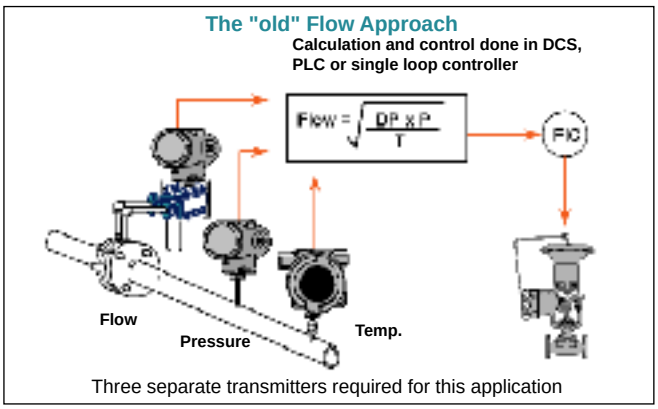
It also checks to see if the transmitter database is valid or if it has been corrupted.

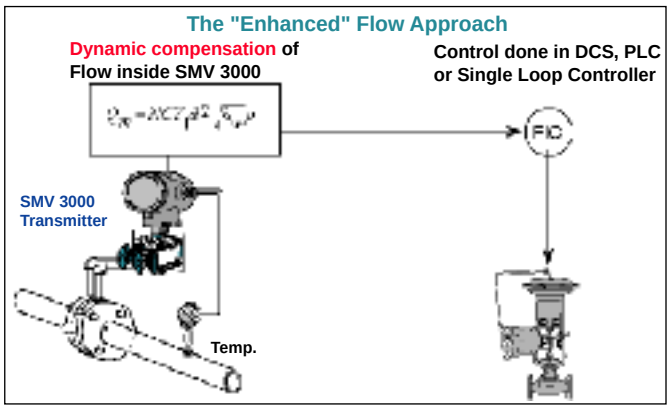
There are 2 levels of status messages provided by the ST3000:
Non-critical: These result from suspected problems, but output may still be good. Action should be taken to check what is causing the non-critical status, but the output can still be used until cause is determined.

Critical: These result from failures that definitely cause an incorrect output and immediate action should be taken by the user to correct the problem.

SPECIAL APPLICATIONS

Pressure, Temperature, Level, Mass Flow : The Multivariable Solution

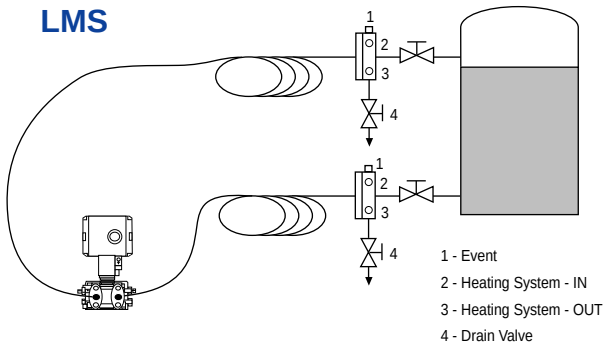


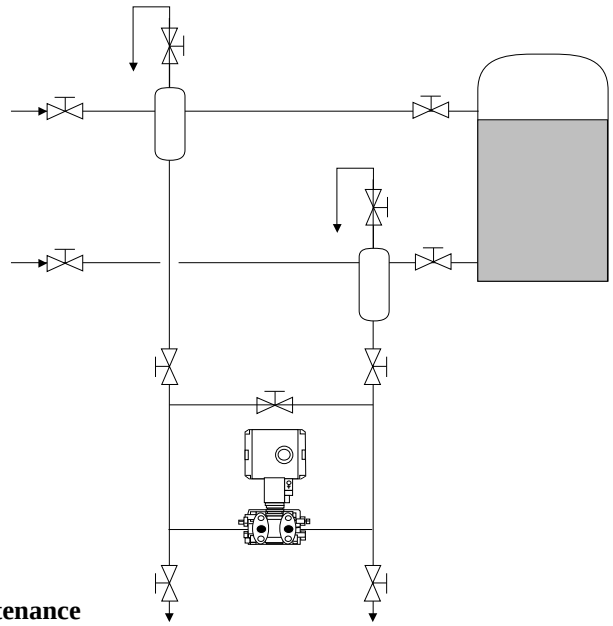


- SMV3000's versatile makes it perfect for :
Computing gas flows – for process control, custody transfer, energy and material balances.
Steam flow – for control and energy balances, utility heat rate, and efficiency calculations.
- Benefits

- **Lower Installation Costs and Capital Expenditures**
- **Better Regulatory Compliance**
- **Efficient Maintenance**
- **Flexible Diagnostics**
- **Less Inventory**

Level Measurement with Integrated Purging and Heating Features

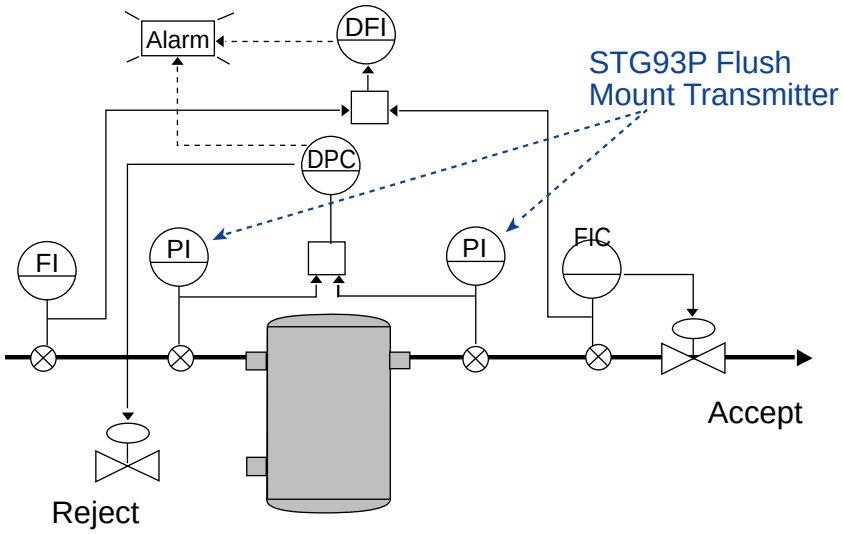




- Integrated Level Measurement System is the ideal solution
when the process fluid, filling the manifolds and piping of a measurement system, can solidify or crystallize.

- **Important cost reduction of preventive maintenance**
- **Very low installation costs**
- **Reliable measurement**
- **Better accuracy**
- **No time drift**
- **No sealing fluid**
- **Heating protection limited to the connection point**

Screen Anti-Clog Control System



- The flush mount transmitters are ideal for applications :
where the process medium :
is subject to contamination fr om carry-over during batch processing ;
is a pulp & paper application such as stock lines, refiners and screens where a flush mount is desire ;
is a slurry or has suspended solids that may clog an instrument line ;
may crystallize, polymerize or precipitate.
or
where the process temperature is high, up to 150°C (302°F)

- Benefits

- **Eliminates Capillaries : Potential field Damage, Ambient temperature Error and Density Error**
- **Provides Optimum Field Replacement Unit : Easy Replacement of single Seal, No Capillary Fill or installation Required, No Calibration Shift**
- **Reduced Installation/Repair Cost**
- **Minimum Down-Time**

General Specifications

(Caution: The information provided in this Product Bulletin is of a general nature. Not all specifications apply to all models. Please consult specification sheets for more details. Honeywell reserves the right to change specifications and dimensions at any time without prior notice).

- **Output (two-wire)**
  4-20 mAdc analog or DE digital communications. FIELDBUS and HART protocol options are available on both the Series 100 and 900.
- **Supply Voltage Effect**
  0.005% of span per volt.
- **Voltage Range**
  10.8 to 42.4 Vdc at the terminals.
- **Damping**
  Digital damping is adjustable from 0 to 32 seconds for STs, and from 0 to 102 sec. for SMVs
- **Current Range**
  3.6 to 21.8 mAdc
  Process variable limits: 3.8 to20.8mAdc
  Burnout Low: 3.6mAdc Burnout High: 21.8mAdc
  18 mA for FIELDBUS

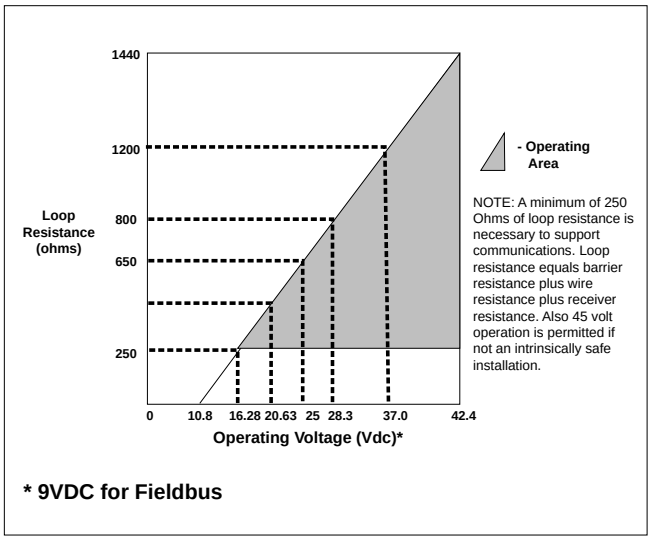


Figure : 3 Supply Voltage / Loop Resistance

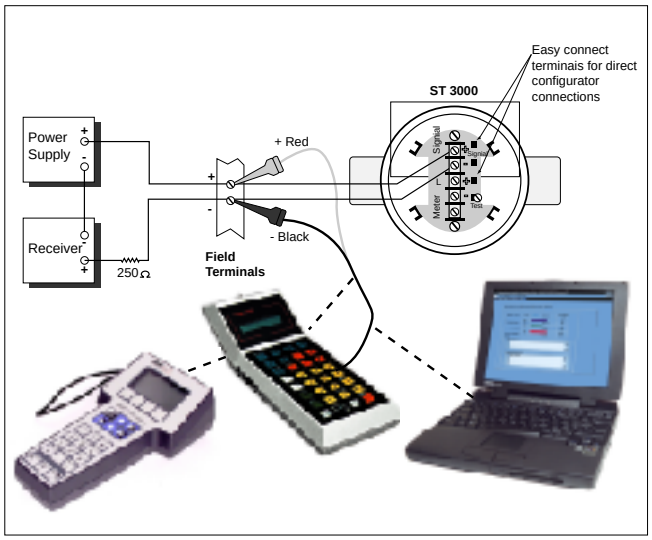


Figure : 4 Configurators and ST3000 Communication Loop

CE Mark Conformity
891336/EEC Electromagnetic Compatibility Directive

Barrier Diaphragm Materials
316 LSS, Hastelloy C, Tantalum and Monel is available on selected models.

Head Gaskets
Teflon is standard on most models. Viton also available.

Fill Fluid
Silicone Oil or CTFE (Chlorotrifluoroethylene). Other fill fluids are available.

Humidity Limits
0 to 100 % RH.

Electronic Housing
Epoxy-polyester hybrid paint. Low copper aluminium. Meets NEMA 4X and NEMA 7; IP 66/67.

Safety approval certifications

Approval Body	Approval Type	Location or Classification	Geographic Area
FACTORY MUTUAL	Expl. Proof	Class I, Div. 1, Groups A, B, C, D	North America
	Dust ign. Proof	Class II, III, Div. 1, Groups E, F, G	
	Non-Incendive	Class I, Div. 2, Groups A, B, C, D	
	Intrin. Safe	Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G	
CSA	Expl. Proof	Class I, Div. 1, Groups B, C, D	Canada
	Dust ign. Proof	Class II, III, Div. 1, Groups E, F, G	
	Intrin. Safe	Class I, II, III, Div. 1, Groups A, B, C, D, E, F, G	
Honeywell	Self-Declared	Explosive Atmospheres Directive 94/9/EC, Eqp't Group II Cat. 3 (Non sparking for Zone 2, IEC79-15-1987); Ex II 3 GD T6 X	Europe
SAA	Intrin. Safe	Ex ia IIC T4	Australia
	Non-Incendive	Ex n IIC T6 (T4 with SM option)	
CENELEC	Intrin. Safe & Flame Proof	EEx ia IICT5, T4 and EEx d IIC T6	Europe
	Flame Proof	EEx d IIC T6	

General Specifications
(continued)
Temperarure and Overpressure Limits

		Ambient Temperature °C	Ambient Temperature °F	Meter Body Temperature °C	Meter Body Temperature °F	Overpressure Bar / psi
Multivariable	SMA110	-40 to 85	-40 to 185	-40 to 110	-40 to 230	210/3000
	SMA 125					
	SMG170					
Differential	STD110	-15 to 65	5 to 150	-15 to 65	5 to 150	3.45 / 50
	STD120/125/130/170	-40 to 85	-40 to 185	-40 to 125	-40 to 257	210 / 3000
	STD924/930/974	-40 to 85	-40 to 185	-40 to 110	-40 to 230	210 / 3000
Gauge	STG140/14L	-40 to 85	-40 to 185	-40 to 110	-40 to 230	approx. 1.5XURL
	STG170/17L	-40 to 85	-40 to 85	-40 to 110	-40 to 230	310 / 4500
	STG180/18L	-40 to 85	-40 to 85	-40 to 110	-40 to 230	620 / 9000
	STG944/94L	-40 to 70	-40 to 158	-40 to 110	-40 to 230	approx. 1.5XURL
	STG974/97L	-40 to 70	-40 to 158	-40 to 110	-40 to 230	310 / 4500
	STG98L	-40 to 70	-40 to 158	-40 to 110	-40 to 230	620 / 9000
Absolute	STA122/922	Refer to the Specification Sheet				
	STA140	-40 to 85	-40 to 185	-40 to 80	-40 to 176	52 barA / 750 psi
	STA940	-25 to 70	-13 to 158	-25 to 70	-13 to 158	52 barA / 750 psi
Liquid Level	STF128/132	-40 to 85	-40 to 185	-40 to 110	-40 to 230	14/210 - 44/640
	STF12F/13F/14F	-40 to 85	-40 to 185	-40 to 110	-40 to 230	14/210 - 44/640
	STF924/932	-40 to 85	-40 to 185	-40 to 110	-40 to 230	14/210 - 44/640
	STF92F/93F	-40 to 85	-40 to 185	-40 to 110	-40 to 230	14/210 - 44/640
GP Speciality	STG93P	-15 to 65	5 to 149	-15 to 95	5 to 203	10 barA / 150psi
	STG14T	-40 to 85	-40 to 185	-40 to 150	-40 to 302	52 barA / 750 psi
	STF14T	-40 to 85	-40 to 185	-40 to 150	-40 to 302	52 barA / 750 psi

Specifications will vary based on fill fluid used and other conditions

Construction

• ADAPTER FLANGES (S1, T1, S2, T2 and V 2)
Convert standard inch NPT connections to inch NPT/standard 1/4 inch NPT connections to 1/2 inch NPT.
Available in SS , Hastelloy C and Monel.
S1: SS single flange for STG9xx
S2 : SS double flange for STD1xx, STD9xx
T1 : Hastelloy C - Single flange for STG9xx
T2 : Hastelloy C - Double flange for STD1xx, STD9xx
V2 : Monel - Double Flange for STD1xx, STD9xx

• Modified DIN Process Heads - DN
Replaces standard heads with modified 316 SS heads.

• Laminar flow element : LF (Only for SMV Multivariable transmitter)
Provides specific mass and volumetric flow equations supporting the Meriam Laminar Flow Element only.

• SS Center Vent /Drain and Bushing - (Option CV)
Allows a special bushing on side end vent/drain plugs.

• Blind DIN SS Flanges - (Option B1/B2)
The blind flange option removes one (B1) or two (B2) vents /drains from the process flanges. Only used when customer will vent or drain from manifold.
B1 : One flange for STG9xx
B2 : Two flanges for STD1xx and STD9xx.
In those applications where the customer is looking for a complete blind flange (Vent/drain and process connections) the marketing Division must be involved for a special quotation and feasability. The complete blind flange is used when the STD is used as GP transmitter.

• SS Electronic housing with M20 conduit connection - (Option SH)
Usefull minly for Off-Shore applications, it provides a complete SS electronic housing.

• Low Temperature (-50 C ambient limit) - (Option LT)
Provides special fill fluid in the meter body to properly operate in up to -50 C .

• SS Reference Head (CS is Standard) - (Option HR)
Only for STG944 or STG974. The transmitter is provided with SS blind flange on reference side.

Electronic

• Lightning Protection (Option LP).
It is a terminal block with circuitry that protects the transmitter from transient surges induced by nearby lightning strikes.

• Indicating Meter (ME, SM)
An analog meter (option ME) is available with a dual 0 to 10 square root and 0 to 100% linear scale. The Smart Meter (option SM) provides an LCD display for both analog and digital output and can be configured to display 0 to 100% scale, engineering units and square root.

• Local Zero and Span- (Option ZS)
Provides a local zero and span adjustments.

• HART Protocol - (Option HC)
Provides Hart protocol communication according to Hart Foundation.
It's available on series 100 and 900 transmitters.

• FOUNDATION Fieldbus (Option FF)
Equips transmitter with FF protocol for use in 31.25 kbit/s FF networks.
The 4/20 mA output signal is not available.

Accessories

• Conduit Adapters - A1, A2
Converts standard 1/2 inch NPT Electrical conduit Entry to M20 or m3/4 inch NPT. Adapters are 316 SS.
A1 : M20 SS conduit adapter
A2 : _ inch SS conduit adapter

• Head gaskets - VT
Replaces standard PTFE head gaskets with Viton on STD1xx, STD9xx, STG1xx, STG9xx transmitters.

• Mounting Bracket (MB, SB, FB)
Available in angle (CS, SS) or flat style (SS) suitable either for horizontal or vertical mounting on a two-inches pipe or for wall mounting.
MB: Angle type in Carbon steel
SB: Angle type in SS
FB: flat type in SS

• Side Vent/Drain (SV)
Replaces standard and vent/ drain plugs with side vent/drain plugs.

• NACE Nuts and Bolts - CR
Standard heads and bolts for the ST3000 are CS. CR option supplies A286SS Bolts and 302/304SS Nuts for enviroments that are corrosive to CS. 316SS bolts for adaptors are also supplied.

• Blank Stainless Steel Customer wired-on Tag (Option TB)
Equips transmitters with a stainless steel, wired-on tag without information.

• Head gaskets - (Option TF)
Replaces standard Viton head gaskets with PTFE on STA1xx and STA9xx transmitters.

Test / Configuration / Certification

• Transmitter Configuration (Option TC)
Provides transmitter configuration for the operating database seletcted by the customer. This option may be ordered in combination with the CC option.
If only TC option is ordered then the transmitter is rerange to the required LRV and URV. It is not calibrated with an applied pressure.
The factory can configure the transmitter linear/square root extraction, damping time, LRV, URV, and mode (analog/digital), and enter an ID tag of up to eight characters and scratchpad information as specified. The TC form must be completed at time of order. There are two CC forms:
- STCCTCTG : for single transmitter
- STCTCTGS : for multiple transmitters having same model number and different tags and ranges.

• Custom Calibration and ID in Memory (Option CC)
The factory can calibrate any range within the scope of the transmitter's range and enter an ID tag of up to eight characters in the transmitter's memory.
The CC form must be completed at time of order. There are two CC forms:
- STCCTCTG : for single transmitter
- STCTCTGS : for multiple transmitters having same model number and different tags and ranges.

• Multivariable Tx Configuration (MC) only for SMV.
Allows you to have the SMV3000 configured at the factory based on your application. Includes range configuration for DP, AP, Temp. and Compensated Flow rate.
The MC form must be completed at time of order.

• Write protection - WP
A jumper on the main board is activated so that the configuration database in read-only mode and can not be changed.

• Stainless Steel Customer wired-on Tag (Option TG)
Equips transmitters with a stainless steel, wired-on tag with additional data of up to 4 lines of 28 characters. The number of characters for tagging includes spaces.

• Clean Transmitter - (Option OX)
Insure that the ST3000 has been cleaned of Hidrocarbons so that it can be used in applications such as oxygen and clorine service.

• Over Pressure Leak Test : (Option TP)
Certificates confirming that the ST3000 has been leak tested to the max. overpressure allowed from each model of transmitter. (F-3392).• •
Additional Warranty : (Option W1 ~ W4)
Standard warranty for the ST3000 is one year after installation and max.18 months after delivery.
The extended warranty options allow the ST3000 to be warranted for up an additional 4 years.

• Calibration Test report and Certificate of Conformance - (Option F1)
Provides certificates statement configuration and calibration points for all measured variables and Certificate of conformance as well (F3399)

• Certificate of Conformance - (Option F3)
Provides certificate stating that the ST3000 conforms to all Honeywell documentation (F3391).

• Certificate of Origin - (Option F5)
Provides certificate stating where the ST3000 is assembled. It could be in the USA (F0195) or in Amiens (Attestation of origin F0195).
When the product is assembled in Amiens and the attestation of origin is not sufficient, then a certificate of origin, signed by Amiens Commercial Chamber, will be provided and can be ordered as special n. xxx from list of specials. The request must be provided at time of order.

• NACE Certificate - (Option F7)
Provides certificate stating that specified wetted parts conforme to NACE specifications (F0198).

• Certificate of Compliance to contract - (Option F9)
Provides certificate stating that the material covered has been assembled in accordance with, and has been found to meet the applicable requirements for the material, including any specification forming a part of the customer order description. (F-1091)

• Certificate of material conformance - (Option F11)
Provides certificate stating that the material covered has been assembled in accordance with, and has been found to meet the applicable requirements for the material, including any specification forming a part of the customer order description. (F-1091)
The material covered are the wetted parts like Diaphram, Process Heads and Gasket and as well as fill fluid.

• Declaration of CE Conformity - (Option F13)
Provides certificate stating that the ST3000 follows CE Marks requirements and meets Industry requirements of EN 58001-2.

General Specifications - Span Limits and Accuracy

MODEL Number		Maximum Span		Minimum Span		Turn-Down	Accuracy (Analog) % of Span	Combined Zero & Span Temp Effect per 28˚C	Press Effect per 70 bar	Weight kg (lbs)
Multivariable Transmitter										
SMA110	Differential	0-62.5 mbar	0-25" H20	0-1.2 mbar	0.5" H20	25:1	0.125	(see spec.)		7 (15.4)
	Absolute	0-7 barA	0-1000 psia	0-0.35 barA	5 psia	20:1	0.1	(see spec.)		
SMA125	Differential	0-1 bar	0-400" H20	0-2.5 mbar	0-1" H20	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	0-1000 mbar	0-400" H20	0-2.5 mbar	1" H20	400:1	0.1	(see spec.)		
	Gauge	0-210 bar	0-3000 psi	0-4.16 bar	60 psi	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 : RDT, T/C, J, K, E, T										
Differential Pressure	STD110	0-25 mbar	0-10" H20	0-1 mbar	0-0.4" H20	25:1	0.1	0.4875		7 (15.4)
	STD120	0-1 bar	0-400" H20	0-2.5 mbar	0-1" H20	400:1	0.075	0.1	0.15	
	STD125	0-1.5 bar	0-600" H20	0-62 mbar	0-25" H20	24:1	0.075	0.1	0.2	
	STD130	0-7 bar	0-100 psi	0-0.35 bar	0-5 psi	20:1	0.075	0.1	0.15	
	STD170	0-210 bar	0-3000 psi	0-7 bar	0-100 psi	30:1	0.15	0.175	0.15	
	STD924	0-1 bar	0-400" H20	0-25 mbar	0-10" H20	40:1	0.1	0.25	0.3	4.1 (9)
	STD930	0-7 bar	0-100 psi	0-0.35 bar	0-5 psi	20:1	0.1	0.25	0.3	
	STD974	0-210 bar	0-3000 psi	0-7 bar	0-100 psi	30:1	0.2	0.325	0.3	
Gauge Pressure	STG140/14L	0-35 bar	0-500 psi	0-0.35 bar	0-5 psi	100:1	0.075	0.1		4.5 (10)/1.7 (3.8)
	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	0-6000 psi	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		4.5 (10)/1.7 (3.8)
	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		1.7 (3.8)
Absolute Pressure	STA122	0-1040 mbarA	0-780 mmHhA	0-67 mbarA	0-50 mmHgA	78:1	0.075	0.175		4.5 (10)
	STA140	0-35 barA	0-500 psia	0-0.35 barA	0-5 psi	100:1	0.075	0.1		
	STA922	0-1040 mbarA	0-780 mmHgA	0-67 mbarA	0-50 mmHgA	15:1	0.1	0.25		4.5 (10)
	STA940	0-35 barA	0-500 psia	0-1.4 barA	0-100 psia	25:1	0.1	0.25		
Flange Mount Liquid Level	STF128	0-1 bar	0-400" H20	0-25 mbar	0-10" H20	40:1	0.1	0.4	0.3	12 (26.5)
	STF132	0-7 bar	0-100 psi	0-35 bar	0-5 psi	20:1	0.1	0.4	0.3	
	STF12F	0-1 bar	0-400" H20	0-2.5 bar	0-1" H20	400:1	0.075	0.1	0.15	7 (15.4)
	STF13F	0-7 bar	0-100 psi	0-35 mbar	0-5 psi	20:1	0.075	0.1	0.15	
	STF14F	0-1.5 bar	0-600" H20	0-62 mbar	0-25" H20	24:1	0.075	0.1	0.2	
	STF924	0-1 bar	0-400" H20	0-62 mbar	0-25" H20	16:1	0.1	0.5	0.4	12 (26.5)
	STF932	0-7 bar	0-100 psi	0-35 mbar	0-5 psi	20:1	0.1	0.5	0.4	
	STF92F	0-1 bar	0-400" H20	0-25 mbar	0-10" H20	40:1	0.1	0.25	0.3	7 (15.4)
	STF93F	0-7 bar	0-100 psi	0-0.35 bar	0-5 psi	20:1	0.1	0.25	0.3	
Remote Seals										
Differential	STR12D	0-1 bar	0-400" H20	0-25 mbar	0-10" H20	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 psi	100:1	0.1	1.88		
Special High Temperature gauge Pressure										
Gauge	STG14T	0-35 bar	0-500 psig	0-63 mbar	0-0.9 psig	550:1	0.0875	0.10		3.2 to 7 (7 to 15)
	STF14T									
Special "Flush Mount" Gauge Pressure										
Gauge	STG93P	0-7 bar	0-100 psig	0-0.3 bar	0-5 psi	20:1	0.1	0.0875		1.8 (3.9)

Specifications are based on reference conditions and stainless steel barrier diaphragm. Accuracy, temperature and pressure effect are show in "% of calibrated span"
The following models have compound characterisation as standard and can be spanned within the limits of ±100%URL: STD110, STF128, STF132, STF932, STR12D, STR93D, STM125 (DP measurement only).

Model Selection Guide

Notice: Not all options and configurations are available with all models. Please contact your Honeywell representative for details.

Format STD/MA/MG XXX -_ _ _ - -00000- -_ _ ….-

Model No Table 1 Table II Table III

Differential Pressure Transmitters

	Span Limits		Model Number Code
Series 100	0-1 to 0-25 mbar	0-0.4" H2O to 0-10" H2O	STD110
	0-2.5 to 0-1000 mbar	0-1" H2O to 0-400" H2O	STD120
	0-60 to 0-1.5 bar	0-25" H2O to 0-600" H2O	STD125
	0-0.35 to 0-7 bar	0-5 psi to 0-100 psi	STD130
	0-7 to 0-210 bar	0-100 psi to 0-3000 psi	STD170
Multivariable Transmitter	0-1.2 to 0-62.5 mbar	0.5" H2O to 0-25" H2O	SMA110
	0-2.5 to 0-1000 mbar	0-1" H2O to 0-400" H2O	SMA125
	0-2.5 to 0-1000 mbar	1" H2O to 0-400" H2O	SMG170
Series 900	0-25 to 0-1000 mbar	0-10" H2O to 0-400" H2O	STD924
	0-0.35 to 0-7 bar	0-5 psi to 0-100 psi	STD930
	0-7 to 0-210 bar	0-100 psi to 0-3000 psi	STD974

Table I	Process Heads	Vent/Drain	Barrier Diaphragm	
Material	Carb. Stl	316 SS	316L SS	A
	Carb. Stl	316 SS	Hastelloy C	B
	Carb. Stl	316 SS	Monel	C
	Carb. Stl	316 SS	Tantalum	D
	316 SS	316 SS	316L SS	E
	316 SS	316 SS	Hastelloy C	F
	316 SS	316 SS	Monel	G
	316 SS	316 SS	Tantalum	H
	Hastelloy C	Hastelloy C	Hastelloy C	J
	Hastelloy C	Hastelloy C	Tantalum	K
	Monel	Monel	Monel	L
Fill Fluid	Silicon			1
	CTFE			2
Process Connection	1/4" NPT			A
	1/2" NPT with adapter (on " NPT head)			H

Table II		
	(Fixed - No Selection)	-00000-

Table III *Options*		
	None	-00-
	Adapter Flange - 1/2" NPT SS	S2
	Adapter Flange - 1/2" NPT Hast. C	T2
	Modified DIN Process Heads - 316SS	DN
	SS Electronics Housing with M20 Conduit Connection	SH
	M20 316SS Conduit Adapter	A1
	3/4" NPT 3166SS Conduit Adapter	A2
	Mounting Bracket - Carbon Stl	MB
	Mounting Bracket - SS	SB
	Flat Mounting bracket	FB
	Lighting Protection	LP
	Analogue Meter (0-100 even, 0-10 square root)	ME
	Smart Meter	SM
	Side Vent/Drain (End/Vent Drain is standard)	SV
	Custom Calibration	CC
	Transmitter Configuration	TC
	FF Configuration	FC
	Multivariable Transmitter Configuration	MC
	Write Protection	WP
	A286SS (NACE) Bolts & 302/304SS (NACE) Head Nuts	CR
	SS Wired-on Tag	TG
	Fieldbus Communication	FF
	HART Compatible Communications	HC
	Local Zero and Span	ZS
	Clean Transmitter for Oxygen or Chlorine service	OX
	Over Pressure Leak Test	TP
	SS Centre Vent Drain Bushing	CV
	Blind DIN SS Flanges mounted with NACE Bolts	B2
	Low Temperature - 50C Ambient Limit	LT

Model Selection Guide

Notice: Not all options and configurations are available with all models. Please contact your Honeywell representative for details.

Format STG/A1XX -_ _ _- -00000- -_ _ …. -

Model No Table 1 Table II Table III

Series 100 Gauge and Absolute Pressure Transmitters

	Span Limits		Model Number	Code			
Gauge	0-0.35 to 0-35 bar	0-5 to 0-500 psi	STG140		⇓		
	0-7 to 0-210 bar	0-100 to 0-3000 psi	STG170		⇓		
Single Head	0-7 to 0-420 bar	0-100 to 0-6000 psi	STG180			⇓	
In-Line Design	0-0.35 to 0-35bar	0-5 to 0-500 psi	STG14L			⇓	
	0-7 to 0-210 bar	0-100 to 0-3000 psi	STG17L			⇓	
	0-7 to 0-420 bar	0-100 to 0-6000 psi	STG18L			⇓	
Absolute	0-67 to 1040 mbarA	0-50 to 0-780 mmHgA	STA122				⇓
	0-0.35 to 0-35barA	0-5 to 0-500 psia	STA140				⇓
Hight Temperature	0-0.063 to 0-35bar		STG14T				⇓

Table I	**Process Heads**	**Vent/Drain**	**Barrier Diaphragm**						
Material	Carb. Stl		316L SS	A	•	•		•	
	Carb. Stl		Hastelloy C	B	•	•		•	
	Carb. Stl		Monel	C	•			•	
	316 SS		316L SS	E	•	•		•	
	***		316L SS	E			•		•
	316 SS		Hastelloy C	F	•	•		•	
	***		Hastelloy C	F			•		
	316 SS		Monel	G	•			•	
	Hastelloy C		Hastelloy C	J	•	•		•	
	Monel		Monel	L	•			•	
	Sanitary		316L SS	Z					•
Fill Fluid	Silicon DC200			1	•	•	•	•	•
	CTFE			2	•	•	•	•	
Process Connection	9/16" - 18 Amico			A	•	•		•	
	1/2" NPT (female)			G	•	•	•	•	•

TableII	(Fixed - No Selection)	-00000-	•	•	•	•	•

Table III *Options*							
	None	-00-	•	•	•	•	•
	SS Electronics Housing with M20 Conduit Connection	SH	•	•	•	•	•
	M20 316SS Conduit Adapter	A1	•	•	•	•	•
	3/4" NPT 3166SS Conduit Adapter	A2	•	•	•	•	•
	Mounting Bracket - Carbon Stl.	MB	•	•	•	•	
	Mounting Bracket - SS	SB	•	•	•	•	
	Flat Mounting bracket	FB	•	•	•	•	
	Viton Process Head Gasket (Teflon is standard)	VT	•	•			•
	Teflon Process Head Gasket (Viton is standard)	TF				•	
	Modified DIN Process Head 316SS	DN	•	•		•	
	Lighting Protection	LP	•	•	•	•	•
	Analogue Meter (0-100 even, 0-10 square root)	ME	•	•	•	•	
	Smart Meter	SM	•	•	•	•	•
	Custom Calibration	CC	•	•	•	•	•
	Transmitter Configuration	TC	•	•	•	•	•
	Fieldbus Configuration	FC	•	•	•	•	•
	Write Protection	WP	•	•	•	•	•
	A286SS (NACE) Bolts & 302/304SS (NACE) Head Nuts	CR	•	•		•	•
	SS Wired-on Tag	TG	•	•	•	•	•
	Fieldbus Communication	FF	•	•	•	•	•
	HART Compatible Communications	HC	•	•	•	•	•
	Clean Transmitter for Oxygen or Chlorine service	OX	•	•		•	
	Over Pressure Leak Test	TP	•	•	•	•	•

Model Selection Guide

Notice: Not all options and configurations are available with all models. Please contact your Honeywell representative for details.

Format STG/A9XX -_ _ _ - -00000- -_ _ ….-

Model No Table 1 Table II Table III

Series 900 Gauge and Absolute Pressure Transmitters

Gauge	Span Limits		Model Number	Code
In-Line Design	0-1.4 to 0-35 bar	0-20 to 0-500 psi	STG94L	
	0-21 to 0-210 bar	0-300 to 0-3000 psi	STG97L	
	0-35 to 0-415 bar	0-500 to 0-6000 psi	STG98L	
Dual Head	0-1.4 to 0-35 bar	0-20 to 0-500 psi	STG944	
	0-21 to 0-210 bar	0-300 to 0-3000 psi	STG974	
Absolute	0-67 to 1040 mbarA	0-50 to 0-780 mmHgA	STA922	
	0-1.4 to 0-35 barA	0-5 to 0-500 psia	STA940	
Flush	0-0.3 to 0-7 bar	0-5 to 0-100 psi	STG93P	

Table I	Process Heads	Vent/Drain	Barrier Diaphragm	Code
Material	Carb. Stl	316 SS	316L SS	A
	Carb. Stl	316 SS	Hastelloy C	B
	316 SS		316L SS	E
	316 SS	316 SS	316L SS	E
	316 SS		Hastelloy C	F
	316 SS	316 SS	Hastelloy C	F
	Hastelloy C	Hastelloy C	Hastelloy C	J
Fill Fluid	Silicon			1
	CTFE			2
Process Connection	1/4" NPT			A
	1/2" NPT with adapter			G
	1/2" NPT (female)			G
	1" Slip with Locking screw			1

TableII	(Fixed - No Selection)	-00000-

Table III *Options*		
	None	-00-
	Adapter Flange - 1/2" NPT SS	S1
	Adapter Flange - 1/2" NPT Hast. C	T1
	SS Electronics Housing with M20 Conduit Connection	SH
	M20 316SS Conduit Adapter	A1
	3/4" NPT 3166SS Conduit Adapter	A2
	Mounting Bracket - Carbon Stl.	MB
	Mounting Bracket - SS	SB
	Flat Mounting bracket	FB
	Viton Process Head Gasket (Teflon is standard)	VT
	Teflon Process Head Gasket (Viton is standard)	TF
	Lighting Protection	LP
	Analogue Meter (0-100 even, 0-10 square root)	ME
	Smart Meter	SM
	Side Vent/Drain (End/Vent Drain is Standard)	SV
	Custom Calibration	CC
	Transmitter Configuration	TC
	Fieldbus Configuration	FC
	Write Protection	WP
	A286SS (NACE) Bolts & 302/304SS (NACE) Head Nuts	CR
	SS Wired-on Tag	TG
	Modified DIN Process Heads - 316SS	DN
	SS Reference Head (Carb Stl. Is standard)	HR
	Fieldbus Communication	FF
	HART Compatible Communications	HC
	Local Zero and Span	ZS
	Clean Transmitter for Oxygen or Chlorine service	OX
	Over Pressure Leak Test	TP
	Blind DIN SS Flanges mounted with NACE Bolts	B1
	Low Temperature -50˚C Ambient Limit	LT

Model Selection Guide

Notice: Not all options and configurations are available with all models. Please contact your Honeywell representative for details.

Format STFXXX -_ _ _- -_ _ _ _ _- -_ _.…-

Model No Table 1 Table II Table III

Flange Mounted Liquid Level Transmitters

	Span Limits		Model Number	Code
Series 100	0-25 to 1000 mbar	0-10 to 400" H20	STF128	⇓
	0-0.35 to 0-7 bar	0-5 to 0-100 psi	STF132	⇓
	0-2.5 to 1000 mbar	0-1 to 400"H20	STF12F	⇓
	0-0.35 to 0-7 bar	0-5 to 0-100 psi	STF13F	⇓
	0-62.2 to 1500 mbar	0-25 to 600" H20	STF14F	⇓
	0-0.063 to 35 bar	0-0.9 to 0-500 psi	STF14T	⇓
Series 900	0-62 to 0-1000 mbar	0-25 to 400" H20	STF924	⇓
	0-0.35 to 0-7 bar	0-5 to 100 psi	STF932	⇓
	0-62 to 1000 mbar	0-25 to 400"H20	STF92F	⇓
	0-0.35 to 0-7 bar	0-5 to 0-100 psia	STF93F	⇓

Table I	Design	Ref. Hd.	Vent/Drain Valve	Barrier Diaph.*	Barrier Plate*	Extension*	
Material	Flush	Carbon Steel	316 SS	316LSS	316SS		A
				Hast C	316SS		W
				Hast C	Hast C		B
				Monel	Monel		C
		316SS.		316SS	316SS	N/A	E
				Hast C	316SS		X
				Hast C	Hast C		F
				Monel	Monel		G
		Hast C	Hast C	Hast C	Hast C		J
		Monel	Monel	Monel	Monel		L
	Extend.	Carbon Steel	316SS	316LSS	316SS		M
				Hast C		316SS	N
		316SS		316LSS			R
				Hast C			S
	Pseudo Flange	Carbon Steel	316SS	316LSS	N/A	N/A	A
				Hast C			B
				Monel			C
		316SS		316LSS			E
				Hast C			F
				Monel			G
	Sanitary Flange (3-A)	316SS	316SS	316SS	316SS	316SS	Z

N/A = Not Applicable *=wetted part

Fill Fluid	Silicon		1
	CTFE		2
Process Connection	**Reference Head**	**Flange**	
	1/4" NPT	H.P. Slide	A
	1/4" NPT	L.P. Slide	C
	1/2" NPT (with adapter)	H.P. Slide	H
	1/2" NPT (with adapter)	L.P. Slide	K

Table II			
	No Selection		0----
	3" ANSI Class 150	Carbon Steel (non-wetted)	-1---
	3" ANSI Class 300		-2---
	DV80-PN40 DIN		-3---
	4" ANSI Class 150		-4---
	4" ANSI Class 300		-5---
	DV100-PN40 DIN		-6---

(Continued overleaf)

Model Selection Guide

Notice: Specifications are continuously being updated. Please contact your Honeywell representative for the latest details.

Flange Mounted Liquid Level Transmitters (continued)

Table II		STF128, STF132		⇓							
		STF12F,STF13F			⇓						
		STF14F				⇓					
		STF14T					⇓				
		STF924, STF932								⇓	
		STF92F, STF93F									⇓
	3" ANSI Class 150		_A_ _ _	•						•	
	3" ANSI Class 300	304SS	_B_ _ _	•						•	
	DV80-PN40 DIN	(non-wetted)	_C_ _ _	•						•	
	4" ANSI Class 150		_D_ _ _	•						•	
	4" ANSI Class 300		_E_ _ _	•						•	
Flange	DN100-PN40 DIN		_F_ _ _	•						•	
	3" ANSI Class 150		_H_ _ _	•						•	
	3" ANSI Class 300	304SS	_J_ _ _	•						•	
	DV80-PN40 DIN	(non-wetted)	_K_ _ _	•						•	
	4" ANSI Class 150		_L_ _ _	•						•	
	4" ANSI Class 300		_M_ _ _	•						•	
	DN100-PN40 DIN		_N_ _ _	•						•	
	1" ANSI Class 300	316SS	_V_ _ _					•			
	2" ANSI Class 300		_Z_ _ _					•			
	Pseudo Flange on Standard DP:										
	2"ANSI Class 150 with Vent/Drain	316SS	_T_ _ _		•	•					
	3" ANSI Class 150 with Vent/Drain	(wetted)	_R_ _ _		•	•					•
	3" ANSI Class 150 w/o Vent/Drain		_P_ _ _		•	•					•
	3-A Sanitary Flange for 4" Ladish Tri-Clamp Tri-Clamp	(wetted)	_S_ _ _	•						•	
	NoSelection		_ _ O _ _	•	•	•				•	•
Gasket Ring (wetted)	FlushDesign	316SS	_ _1_ _	•						•	
		Hast C	_ _2_ _	•						•	
		Monel	_ _3_ _	•							
	ExtendedDesign	316SS	_ _5_ _	•						•	
	NoSelection		_ _ _0_		•	•					•
	Flush		_ _ _F_	•						•	
	Diameter	**Length**									
	2.86 inches	2 inches	_ _ _1_	•						•	
	(for 3" or 4" spud)	4 inches	_ _ _2_	•						•	
		6 inches	_ _ _3_	•						•	
	3.75 inches	2 inches	_ _ _5_	•						•	
	(optional 4" spud)	4 inches	_ _ _6_	•						•	
		6 inches	_ _ _7_	•						•	
	4 inch nominal sanitary	2 inches	_ _ _A_	•						•	
	(for sanitary spud)	6 inches	_ _ _B_	•						•	
	NoSelection		_ _ _ _0	•	•	•				•	•
Table III *Options*	None		-00-	•	•	•	•			•	•
	Adapter Flange - 1/2" NPT SS		S1	•	•	•				•	•
	Adapter Flange - 1/2" NPT Hast. C		T1	•	•	•				•	•
	Adapter Flange - 1/2" NPT Monel		V1	•	•						
	Modified DIN Process Heads - 316SS		DN	•	•	•				•	•
	SS Electronics Housing with M20 Conduit Connection		SH	•	•	•				•	•
	M20 316SS Conduit Adapter		A1	•	•	•	•			•	•
	3/4" NPT 3166SS Conduit Adapter		A2	•	•	•	•			•	•
	Lighting Protection		LP	•	•	•	•			•	•
	Analogue Meter (0-100 even, 0-10 square root)		ME	•	•	•				•	•
	Smart Meter		SM	•	•	•	•			•	•
	316SS (NACE) Bolts & 304SS (NACE) Retaining Ring for Head and 316SS (NACE) Bolts for Adapter		CR	•	•	•	•			•	•
	SS Customer Tag		TG	•	•	•	•			•	•
	Custom Calibration and ID in Memory		CC	•	•	•	•			•	•
	Transmitter Configuration		TC	•	•	•	•			•	•
	Fieldbus Configuration		FC	•	•	•	•			•	•
	Clean Transmitter for Oxygen or Chlorine service		OX	•	•	•	•			•	•
	Over Pressure Leak Test		TP	•	•	•				•	•
	Write Protection		WP	•	•	•	•			•	•
	Blind DIN SS Flanges mounted with NACE Bolts		B1	•	•	•	•			•	•
	Local Zero and Span		ZS							•	•
	Fieldbus Communication		FF	•	•	•	•			•	•
	HART Protocol Compatible Electronics		HC	•	•	•	•			•	•

Dimension Drawings

All drawings are for configurations with stainless steel diaphrams. Please refer to specification sheets for more details.

Reference Dimensions : millimeters / inches ** See note*

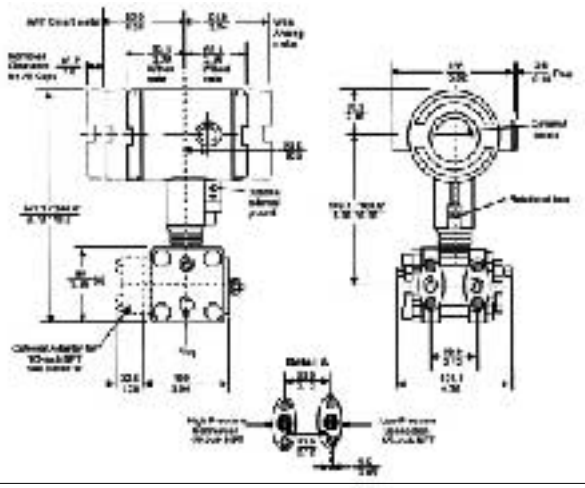


Figure : 5
Typical mounting dimensions for models STD 110, STD 120, STD 125, STD 130 and STD 170.

Reference Dimensions : millimeters / inches ** See note*

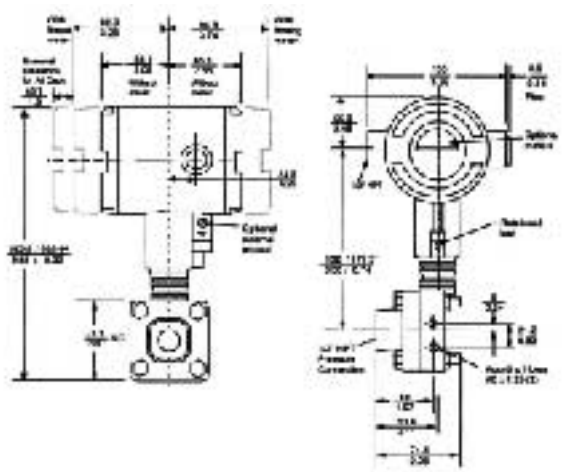


Figure : 6
Typical mounting dimensions for single-head models STG 140, STG 170, and STG 180.

Reference Dimensions : millimeters / inches ** See note*

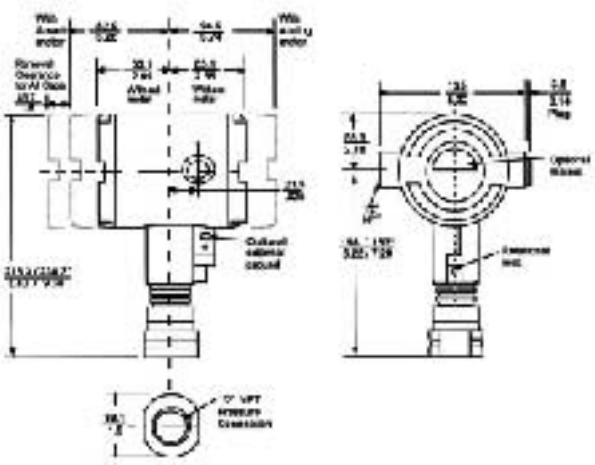


Figure : 7
Typical mounting dimensions for in-line models STG 14L, STG 17L, and STG 18L.

** Dimensions vary due to slight difference in electronics housing designs.*

Figure : 8
Typical mounting dimensions
for models STD 924
and STD 930-A, B, E, F, J (SS, HastelloyC).

Reference Dimensions : millimeters / inches ** See note*

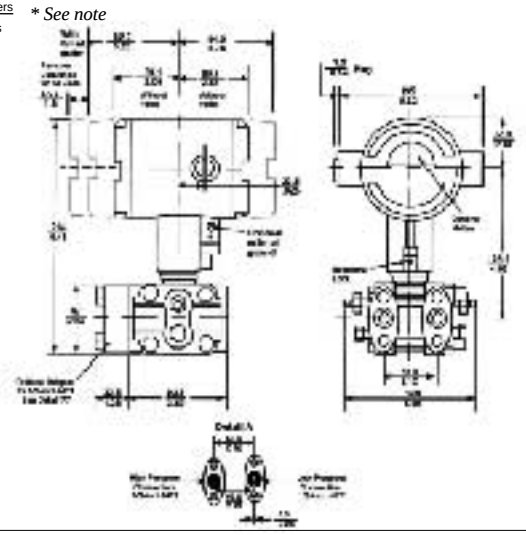


Figure : 9
Typical mounting dimensions
for models STD 924
and STD 930-C, D, G, H, K, L
(Monel, Tantalum), and model STD 974.

Reference Dimensions : millimeters / inches ** See note*

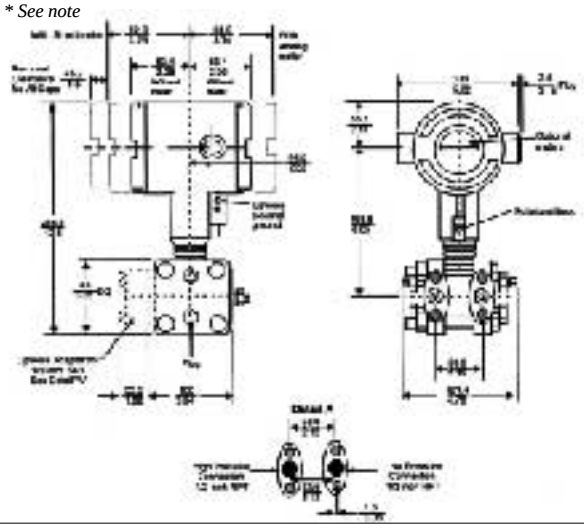
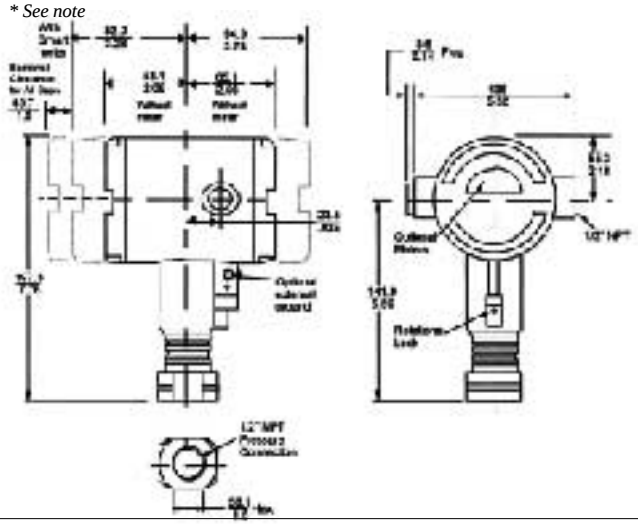


Figure : 10
Typical mounting dimensions
for in-line models STG 94L, STG 97L,
and STG 98L.

Reference Dimensions : millimeters / inches ** See note*



** Dimensions vary due to slight difference in electronics housing designs.*

Reference Dimensions : millimeters / inches ** See note*

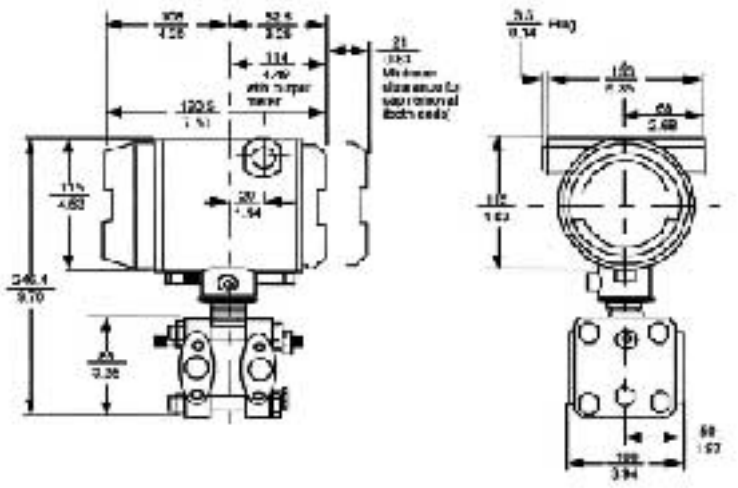


Figure : 11
Approximate mounting dimensions for models SMA 110, SMA 125 and SMG 170.

Reference Dimensions : millimeters / inches ** See note*

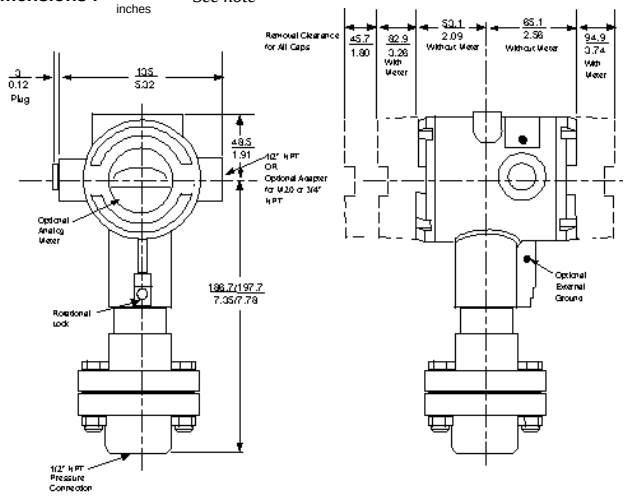


Figure : 12
Typical mounting dimensions for 1/2-inch NPT connection model STG 14T.

Reference Dimensions : millimeters / inches ** See note*

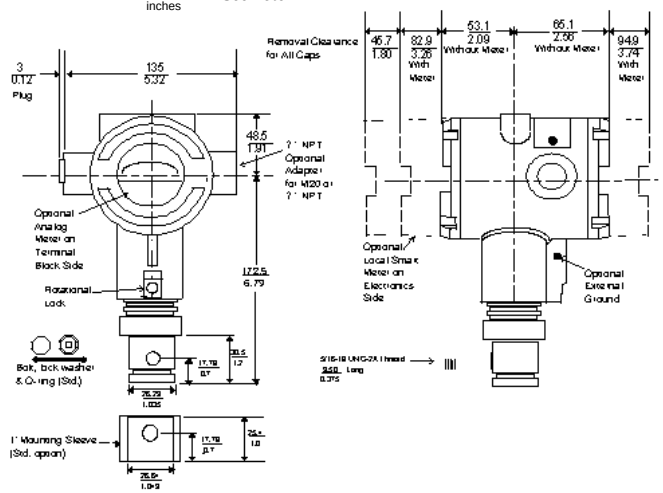


Figure : 13
Typical mounting dimensions for 1" Flush Mount/model STG 93P.

** Dimensions vary due to slight difference in electronics housing designs.*

ST3000 SMART PRESSURE TRANSMITTER
HONEYWELL Sales Order : _____
Customer ref : _____
Project : _____

MODEL NUMBER : _____

Parameter type	OPTION " C C "	Factory default	
ID MEMORY :	☐☐☐☐☐☐☐☐	**X X X X X X X X**	Cust.tag insert. in the TX memory Ensure that appropriate characters are used (8 max)
Units :	PSI ☐ mmHG ☐ in H2O ☐ KPa ☐ MPa ☐ mBAR ☐ BAR ☐ mmH2O ☐ inHG ☐ g/cm^2 ☐ kg/cm^2 ☐	**inH20 or PSI**	Depend on the model
LRV :	. .	**Standard**	Ensure that LRV and URV do
URV :	. .	**Standard**	not exceed the LRV and URL

Parameter type	OPTION " T C "	Factory default	
ID MEMORY :	☐☐☐☐☐☐☐☐	**XXXXXXXX**	Cust.tag insert. in the TX memory Ensure that appropriate characters are used (8 max)
Units :	PSI ☐ mmHG ☐ in H2O ☐ KPa ☐ MPa ☐ mBAR ☐ BAR ☐ mmH2O ☐ inHG ☐ g/cm^2 ☐ kg/cm^2 ☐	**inH20 or PSI**	Depend on the model
LRV :		**Standard**	Ensure that LRV and URV do
URV :		**Standard**	not exceed the LRV and URL
Output from :	LINEAR ☐ SQUARE ROOT ☐	**LINEAR**	
Damping	0,0 ☐ 0,16 ☐ 0,32 ☐ 0,48 ☐ 1,0 ☐ 2,0 ☐ 4,0 ☐ 8,0 ☐ 16,0 ☐ 32,0 ☐	**0,48 second**	
Mode Comm. :	DE ☐ ANALOG ☐	**ANALOG**	Hart Protocol (HC) : No selection
DE Configuration :	Single Range ☐ Sing. Ran. w\SV ☐ Dual Range ☐	**Single Range w\SV**	DE Configuration Code
	B\O Lo ☐ (Input failsafe mode : Low limit burnout setting) B\O Hi ☐ (Input failsafe mode : High limit burnout setting) LKG ☐ (Input failsafe mode : Hold burnout setting) FSO B\O Lo ☐ (Output failsafe mode : Low limit burnout setting) FSO B\O Hi ☐ (Output failsafe mode : High limit burnout setting) FSO LKG ☐ (Output failsafe mode : Hold burnout setting)	**B\O Hi**	(for DE output only)
		6 BYTES	
Scratchpad :		**2x16 characters**	Ensure that appropriate
		in memory	characters are used.

	Customer ID TAG.		Comments
TAG :		**14 characters (max)**	Cust.tag engraved on the housing nameplate

	OPTION " T G "		Comments
1 LINE		**4x28 characters (max)**	Cust.tag engraved on St. ST.nameplate
		316SS wired with customer data.	connected to the TX via wire.
2 LINE			
3 LINE			
4 LINE			

Field Instruments on the Web

Honeywell IAC Europe Web Site

For the latest information on Honeywell IAC Europe's automation solutions, products and services, just drop in to:
http://europe.iac.honeywell.com
It is designed to enable visitors to access the information they are searching for easily and quickly. It also has a news alert function, which enables you to subscribe to important breaking news items.

European Industrial Store

For more specific information about any of Honeywell's field instrument solutions, the best place to go is to the Industrial Store web site. It gives you the latest information on select Honeywell field instruments, as well as 24-hours-a-day access to Honeywell experts. This quick, convenient and interactive site can be found at:
http://www.industrialstore.honeywell.com

Honeywell Field Instrument Technology Selector

The Honeywell Field Instruments Technology Selector ™ is a FREE service provided by
Honeywell at
http://www.technologyselector.com/start.htm
Technology Selector™ is an OPEN, on-line web application tool designed to help users select the best available field instrument technology for their specific industrial measurement applications. The information provided by this tool is based on industry standards and will suit most applications. Users are able to enter selection preferences and generate application solution sets.

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INDUSTRIAL AUTOMATION AND CONTROL

Honeywell

U.S.A.:
Honeywell Industrial Automation and Control
16404 North Black Canyon Hwy.
Phoenix, AZ 85023
(602) 313-5000

Canada:
The Honeywell Centre
155 Gordon Baker Rd.
North York, Ontario M2H 3N7
1-800-461-0013

Latin America:
Honeywell Inc.
480 Sawgrass Corporate Parkway,
Suite 200
Sunrise, Florida 33325
(954) 845-2600

Japan:
Industrial Operations Tokyo
4-28-1 Nishi-Rokugo Ohtu-ku
Tokyo 144, Japan
(81) 3-3486-2051

Asia:
Honeywell Southeast Asia
Honeywell Building
17 Changi Business Park Central 1
Singapore 486073, Rep. of Singapore
(65) 355-2828

Pacific Division:
Honeywell Pty Ltd.
5 Thomas Holt Drive
North Ryde NSW Australia 2113
(61-2) 353 7000

Europe & Africa:
Honeywell S.A.
Avenue du Bourget 1
1140 Brussels, Belgium
(32) 2 728 2636

Eastern Europe:
Honeywell Praha, s.r.o.
Budejovicka 1, 140 21 Prague 4
Czech Republic
(420) 2 6112 2238

Middle East:
Honeywell Middle East Ltd.
Khalifa Street, Sheikh Faisal Building
Abu Dhabi, U.A.E.
(9712) 627 1188 (or 2533)

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