

GB - Sanitary Differential Pressure Switch

Introduction

For over 20 years the Anderson-Negele "GB" has been the industry standard for insuring that continuous pasteurizer regenerators operate safely and in compliance with the PMO. Not only is it the simplest way to insure that the booster pump only runs when a safe differential exists across the regenerator, but it can also improve the operational efficiency of the system.

By utilizing one or more of the standard features, the system can be protected against oscillation during start-up, or freeze-up of the cooler. It also can provide a control signal to simplify maintenance of proper system back-pressure. And with the new high pressure and temperature options you can specify exactly the right unit for your HTST, HHST, or UHT system. For a complete package of failsafe controls, please ask about our AV9900 STLR and DART reference thermometer.



Authorizations



Features

- Complies with all PMO, CFR and 3-A standards
- Sensor and range options for standard and high temp (UHT/ Aseptic) applications
- Options for "split" regenerators and higher pressures now available
- Large, bright, LED displays with simple-to-read differential bargraph
- Dual 4-20mA retransmission standard
- Secondary alarm relay on High Pressure channel is standard

RODEM[®]

PROCESS EQUIPMENT

www.rodem.com 800-543-7312

Specifications

GENERAL

Power Supply: 115 or 230 VAC (specify), 50/60 Hz 30W max.consumption

Pressure Ranges: 0-99 psig, 0-199 psig, 0-9.9 BAR, 0-19.9 BAR

Differential Ranges: 1-15 psid, 5-75 psid, 0.1-1.5 BAR

Sensor Temperature Range: 25-250°F (SY transducer)
 25-275°F (SR transmitter)
 25-350°F (TFP-2 transmitter)
 25-400°F (TFP-3 transmitter)

Pressure Inputs: 0-50 mV (std), 4-20mA (optional)

Relay Capacity: 5 amps at 115 or 230VAC for both Differential (K1) and High Pressure Alarm (K2)

4-20mA Retrans: Any two of three channels (specify when ordering) internally powered at 15VDC (500 ohms max loop resistance)

Approvals: FDA Milk Safety Branch memorandum of compliance with PMO; UL listed

ENCLOSURE

Material: Aluminum w/Polyurethane paint

Dimensions: 10"H x 8 1/16"W x 3 15/16"D

Weight: 8 1/4 lbs.

Order Information

Sanitary Differential Pressure Switch



CASE & MOUNT

1 Aluminum case (surface or panel mount)

RANGE

070 0-99 psig
 204 0-9.9 BAR
 247 0-199 psig
 465 0-19.9 BAR

ENGINEERING UNITS

G psig
 B BAR

DIFFERENTIAL

097 1-15 PSID Diff. (Std. for Range 070)
 101 5-75 PSID Diff. (Std. for Range 247)
 205 .1-1.5 BAR Diff. (Std. for Range 204,465)

POWER

1 115V 50/60 Hz
 2 230V 50/60 Hz

RETRANSMISSION

1 Past. & Diff. - Std. (4-20mA internally powered)
 2 Raw & Pasteurized (4-20mA internally powered)
 3 Raw & Differential (4-20mA internally powered)

INPUTS

1 Raw = mV(SY); Past. = mV (SY) standard

2 Raw = 4-20mA internal power (SR/TFP); Past. = 4-20mA internal power (SR/TFP)

3 Raw = mV (SY); Past. = 4-20mA internal power (SR/TFP)

4 Raw = 4-20mA internal power (SR/TFP); Past. = mV (SY)

5 Raw = mV(SY); Past. = 4-20mA ext. power (ext. powered retrans signal)

6 Raw = 4-20mA ext. power (ext. powered retrans signal) Past. = mV (SY)

7 Raw = 4-20mA ext. power (TFP) Past. = 4-20mA ext. power (TFP)

Sanitary Transducer with Conduit Housing



RANGE

070 0-99 psig
 204 0-9.9 BAR
 247 0-199 psig
 465 0-19.9 BAR

ENGINEERING UNITS

G psig
 B BAR

FITTINGS

004 1 1/2" Tri-Clamp
 005 2" Tri-Clamp
 016 1 1/2" Cherry "I" (male)
 017 2" Cherry "I" (male)
 027 1 1/2" G & H "H" line (male)
 028 2" G & H "H" line (male)
 044 1 1/2" #14 Bevel Seat (w/nut)
 045 2" #14 Bevel Seat (w/nut)
 059 1 1/2" NPT²

DIAPHRAGM MATERIAL

1 316 "L" Stainless Steel (Standard)
 2 Hastelloy "C"

DIAPHRAGM FINISH

1 Standard (R_a = 25 microinches)

CABLE LENGTH

00	No Cable		
05	25'	21	125'
10	50'	22	150'
15	75'	23	175'
20	100'	24	200'

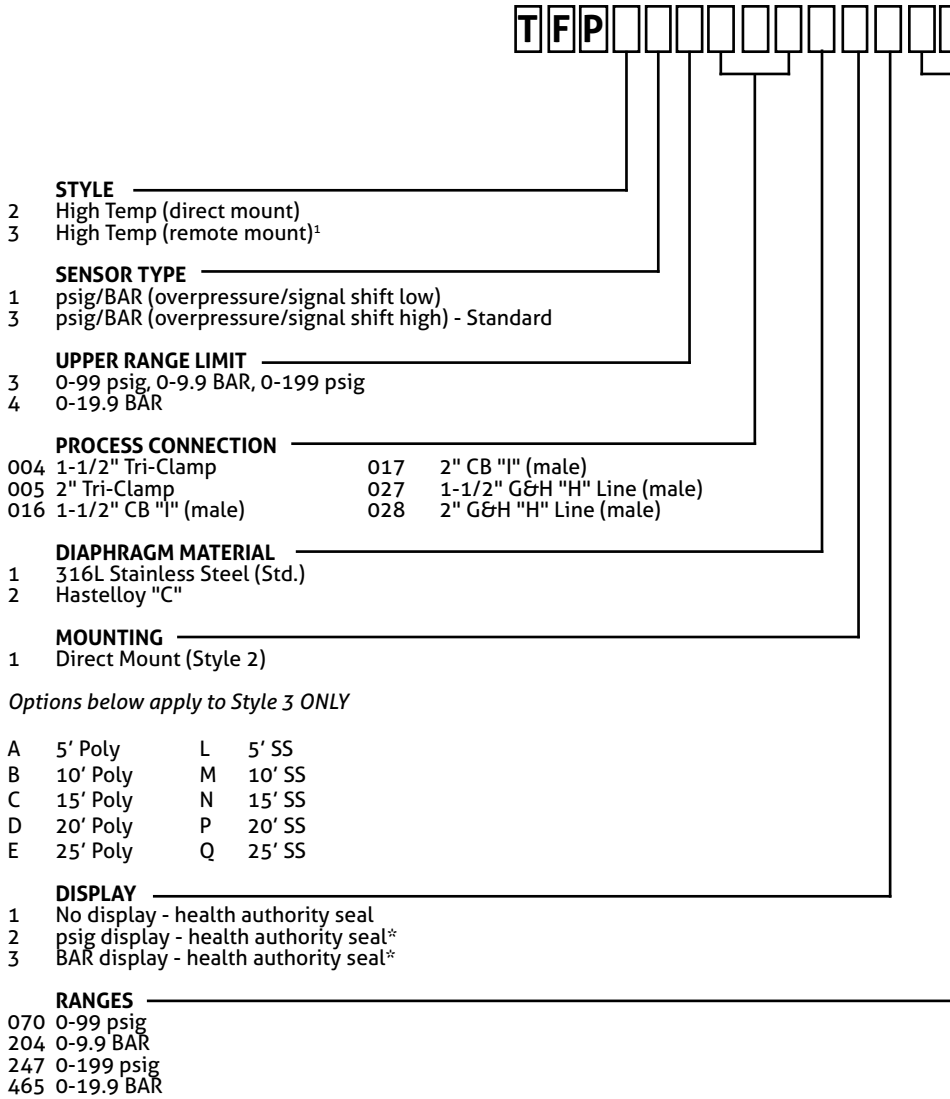
NOTE: If ordering SY transducer separately, include interface card - matched set¹. Information provided below:

CODE	RANGE	CARD NUMBER
070	0-99 psig	SP56014E0084
204	0-9.9 BAR	SP56014E0086
247	0-199 psig	SP56014E0085
465	0-19.9 BAR	SP56014E0085

¹ Interface cards for SY transducers only.

² Not 3-A compliant

Sanitary Electronic Pressure Transmitter - (High Temperature)



Replacement Interface Cards

RANGE	CARD NUMBER
ALL	SP56014E0088

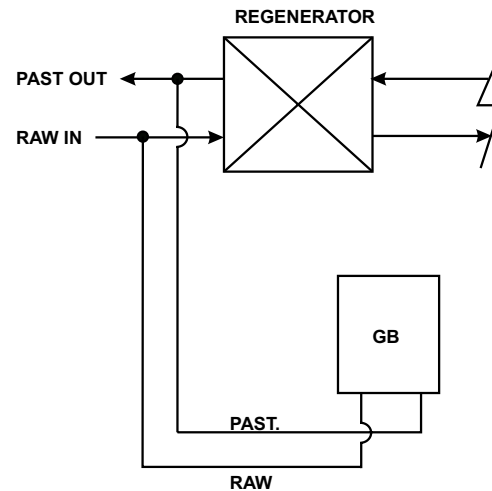
Use this card if power to sensor is required (standard).

ALL	SP56014E0087
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Use this card if channel to receive an already powered signal (retran input).

Note: Replacement card needed only if original is damaged. Calibration will not change if replacing sensor.

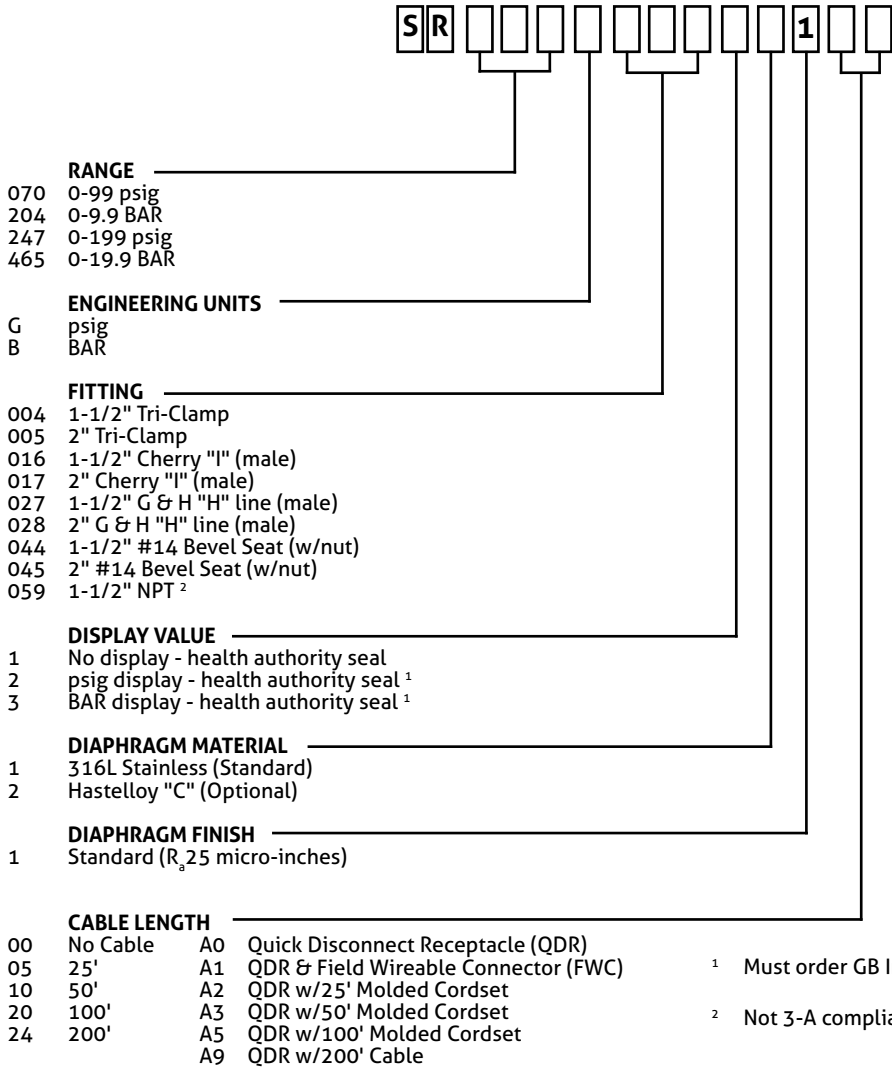
"Typical" Single Regenerator System Schematic



COMMON GB INPUT SETUP

Standard Temp. Processing = GB INPUT CONFIG "1"
(SY transducers)
High Temp. Processing = GB INPUT CONFIG "2"
(TFP transmitters)

SR - Sanitary Electronic Pressure Transmitter



Replacement Interface Cards

RANGE CARD NUMBER

ALL SP56014E0088

Use this card if power to sensor is required (standard).

ALL SP56014E0087

Use this card if channel to receive an already powered signal (retran input).

Note: Replacement card needed only if original is damaged. Calibration will not change if replacing sensor.

"Typical" Split Regenerator System Schematic

