

#### **GAMMON TECHNICAL PRODUCTS, INC.** P.O.BOX 400 - 2300 HWY 34 MANASQUAN, N.J. 08736

PHONE 732-223-4600 FAX 732-223-5778 WEBSITE www.gammontech.com STORE www.gammontechstore.com GAMMON GAUGE™

BULLETIN 25 (9-19)

## GAMMON GAUGE<sup>™</sup> Direct Reading Differential Pressure Gauge

Why settle for less when you can have the tried and true **original**? *Designed and Manufacturered in the U.S.A.* 



GTP-534 ORIGINAL MODEL



GTP-8980 GAMMON GAUGE™ CONTROL SYSTEM Meets ATA-103 and IATA JIG Bulletin 58.



GTP-534-PB-PH PEAK-HOLD With Push Button TEST VALVE

The PEAK-HOLD feature registers the highest reading, locking the piston so the operator can see maximum differential pressure for the most recent fueling operation. Turning the large knob releases the piston so that it can return to zero.



GTP-534 PBF PUSH BUTTON IN FRONT (optional button position)



GTP-534 PB PUSH BUTTON 3-WAY TEST VALVE

#### **UNIQUE FEATURES**

Peak-Hold Reading	The maximum differential pressure that is measured during an operation automatically locks the piston so that the operator will have that information without actually having watched the gauge at the time. After the reading has been seen, the operator releases the piston by turning a knob. It is usually impossible for the operator to see the gauge while refueling an aircraft so the highest differential pressure reading is rarely seen. This feature eliminates the problem just as in the case of an unmanned facility such as a pipeline or hydrant system. Patent applied for.
Push Button Test Valve	Hold the button in to relieve pressure under the piston. System pressure will force the piston down so the operator can observe motion. Erratic movement of the piston indicated contamination of piston and glass cylinder, requiring cleaning. <b>Note:</b> This test releases about 50ml of fuel which can be collected in a cup or directed to recovery systems.
Pressure Relief Feature	Incorporated in all Push Button models is a thermal expansion relief valve set at 300 psi to protect the gauge from excessive pressure if isolation valves have been closed.

#### COMMON FEATURES OF ALL MODELS OF THE GAMMON GAUGE™

- Read differential pressure directly at top of piston
- Accurate within 1/4 psi at system pressures to 300 psi
- No subtraction calculation required
- All models available in aluminum or stainless steel
- Positive and negative surge pressure will not influence calibration
- Multiple calibrations:
  - Front face: PSI and Kpa
  - Back face: Bar and KG/cm<sup>2</sup>
- Every cylinder tested at 1200 psi
- Rugged construction suitable for vehicle or stationary use
- Built-in gauge protection filter, 10 microns
- Maximum operation pressure of 300 psi
- Fittings: 1/4" NPT female, 1/4" BSP available
- Temperature range of standard Viton GLT seals: -40°F to +400°F (-40°C to +204°C)
- Ultraviolet light protection film face cover prevents rays from degrading fuel in the glass tube

**NOTE:** The GTP-279 filter is obsolete. We offer a conversion assembly GTP-9515-1 (S/S) or GTP-9515-2 (AL). This is a complete replacement for the upper flange.

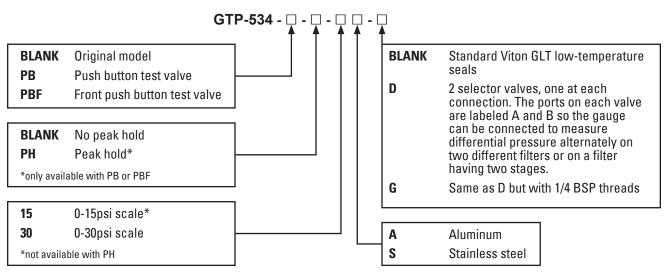
#### SYSTEM PRESSURE GAUGES

# Part Number Range Face Diameter GTP-686A 0-60 psi 2" GTP-686B 0-100 psi 2" GTP-686C 0-160 psi 2" GTP-686D 0-300 psi 2"

#### **REPLACEMENT PARTS**

GTP-2233	Filter element
GTP-672-1	Scale: 0-15 psi
GTP-690-1	Scale: 0-30 psi
GTP-547-1	Glass cylinder
GTP-2200-023V	Cylinder O-rings

#### HOW TO ORDER



#### **CALIBRATION TESTING**

To meet API-1581, you should have a 3-way valve. Our 3-way valve meets this requirement and is used to check calibration as well as to check free movement of the piston.

- 1. Establish flow in the system. The gauge should indicate a pressure drop.
- 2. Push the test button. The piston should travel to the bottom of the scale.
- 3. Release the button and stop flow in the system. The piston should return to zero.

If the piston returns to zero, you have not only calibrated the gauge, you have checked it for free moment across its entire range. If the piston moves slowly, the filter (located in the top of the gauge) may be clogged and need replacement. This calibration technique is accepted by all major oil companies, all major airlines, and military services worldwide. Gammon Gauges<sup>™</sup> have been in service in virtually every major airport in the world for as long as 30 years and we have never heard of or seen a single gauge go out of calibration. Occasionally a piston will stick after many years in service, but hand cleaning with "Scotch Brite" plastic abrasive will make it as good as new (**Note**: Do not clean with sandpaper or steel wool). Replace the o-rings and reassemble.

#### CONVERSION OF EXISTING GAMMON GAUGES™

An existing Gammon Gauge<sup>™</sup> can be converted to have the Peak-Hold and the Push Button Test Valve by replacing the lower flange of the gauge. Order as follows:

STANDARD GTP-534	ADD PUSH BUTTON	ADD PUSH BUTTON & PEAK HOLD
Aluminum	GTP-552-8PB	GTP-552-40
Aluminum with Front Push Button	GTP-552-8PBF	GTP-552-40F
Stainless Steel	GTP-552-9PB	GTP-552-40SS
Stainless Steel with Front Push Button	GTP-552-9PBF	GTP-552-40FS

**Note**: On Gammon Gauges<sup>™</sup> without test buttons, a GTP-2305V 3-way ball valve can be installed.

### GAMMON GAUGE<sup>™</sup> CONTROL SYSTEMS Protect Against Filter Element Bursting Add a Differential Pressure Switch to the Gammon Gauge<sup>™</sup> Sound Alarm - Stop Flow - Turn on Second Filter Normally Open or Normally Closed, Fail Safe

If differential pressure suddenly increases or a facility is operated without personnel monitoring the differential pressure, filter element failure can occur. This new switch is unique. It adds differential pressure control at a low cost using a non-powered proximity switch. This simple double-sealed switch is ideal for use in PLC (miniature computer) and relay controlled systems. The connection box is rated NEMA 4X.

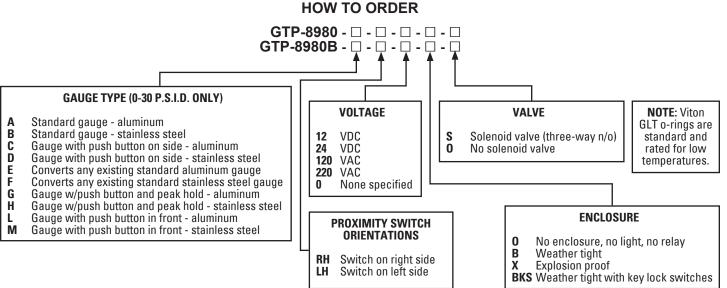
Control operations are also available if you don't plan to use an external control. We have weather-tight and explosion-proof versions.

We strongly recommend a 3-way test valve for properly testing the Gammon Gauge<sup>™</sup> and Proximity Switch and/or system.

Any Gammon Gauge<sup>™</sup> can be converted to include the new proximity switch.

Note: To meet IATA JIG Bulletin 58, order one of the "KS" options for key switch reset and test functions. The ATA-103 does not require this. For vehicle mounting, we recommend the weather-tight housing.





#### **EXAMPLE**

GTP-8980B-C-RH-12-B-0 is a differential pressure gauge with a normally closed switch as follows: push button aluminum gauge, 30 psi scale, switch on right side, 12 VDC, enclosure is weather tight which includes light and push to test feature, no solenoid valve, and low temperature o-rings.

GTP-8980B-C-RH-12-BKS-0 is the same as above except the enclosure has 2 key lock switches for test and reset per IATA JIG Bulletin 58.

#### NOTE:

- 1. GTP-8980 has a normally open switch. The switch closes upon high differential pressure. If the cable to the controller is cut, high differential would never be detected.
- 2. GTP-8980B has a normally closed switch. The switch opens upon high differential pressure. If the cable to the controller is cut, the system would go into alarm notifying the operator that something is wrong with the system.
- 3. If a system is purchased without the controller (no enclosure), both types of switches are still available. When a complete system is ordered with an enclosure, it is our policy to provide a GTP-8980B fail safe system unless otherwise requested. The difference is in the internal wiring and components in the controller.