

GAMMON DIRECT READING DIFFERENTIAL PRESSURE GAUGE



Standard Gauge

Gauge With Test Valve

Gauge With Test Valve and Peak Hold

Gauge With Test Valve and DP Switch

- ◆ **READ DIFFERENTIAL PRESSURE DIRECTLY AT THE TOP OF THE PISTON**
- ◆ **NO CALCULATION REQUIRED**
- ◆ **ACCURATE TO WITHIN 0.5PSI DIFFERENTIAL AT SYSTEM PRESSURES UP TO 300PSI**
- ◆ **UNAFFECTED BY PRESSURE SURGES**
- ◆ **DUAL CALIBRATION, PSI AND BAR**
- ◆ **BUILT IN 10 MICRON GAUGE PROTECTION FILTER**
- ◆ **RUGGED CONSTRUCTION, SUITABLE FOR MOBILE AND STATIONARY USEAGE**
- ◆ **STAINLESS STEEL SCALE**
- ◆ **TUBE PROTECTED FROM ULTRAVIOLET LIGHT**

Introduction.

Differential pressure gauges are installed on filter vessels to display the differential pressure across the filter elements. This information is used to determine when the elements are blocked and

require changing, but also, if readings are taken regularly and displayed graphically a trend can be observed and any deviations can then be investigated fully.

General Description.

The Gammon direct reading Differential Pressure Gauge uses the simplest method of measurement available. The piston is contained in a close fitting glass tube with a spring beneath it. High pressure from the filter inlet is fed to the top of the tube and low pressure from the filter outlet is fed to the bottom of the tube. The differential pressure is read directly from the position of the top of the piston against the scale.

Because of its' simple design the accuracy of this gauge is not affected by pressure surges, unlike a "Bourdon Tube" gauge. It can easily be checked

for free movement and zero error by fitting a simple 3 port valve to the low pressure side of the gauge, which is piped back to a reservoir such as the vehicle tank. The gauge has a 10 micron filter which ensures that dirt from the high pressure connection will not enter the tube, and an ultra-violet light shield to prevent lead oxide deposits forming when used with aviation gasoline (Avgas).

The Gammon Gauge has therefore become a standard within the aviation refuelling industry where the high flow rates and resultant surge pressures demand the highest possible equipment standards.

New Developments.

The Gammon Gauge, long established as the worldwide market leader for aviation fuel systems, has now been developed further in order to offer you even more options.

Gauge With Free Movement Test Valve.

This variant incorporates an integral push button to carry out the free movement test. Pressing and holding the button vents the pressure below the piston and allows it to travel fully down to meet the free movement test requirements of EI1581 without the need for a separate 3 port valve. As part of this design there is an inbuilt pressure relief feature which prevents the build up of potentially damaging thermal pressures which could damage the gauge. Note:- When the free movement test is performed, or during thermal relief a small volume of fuel is discharged through the vent connection.

Gauge With Test Valve and Peak Hold.

The Peak Hold feature locks the piston at the point of the highest reading so that the operator can see the maximum differential pressure reached during the last operation. Turning the knob releases the piston and allows it to return to zero. Peak Hold gauges are also fitted with the Free Movement Test Valve as standard.

Gauge With DP Switch.

If differential pressure suddenly increases and it is not being observed by the operator then filter element failure can occur. The Gauge With DP Switch, if used with a separate control system, can terminate system flow automatically under these circumstances. The non powered normally open proximity switch is fitted to the side of the gauge and closes when it detects the presence of the piston. The position of the switch within the housing is easily adjustable so that the set point can be changed on site.

The requirement for such a system has been identified by JIG Bulletin 58, which dictates that aviation fuel hydrant dispensers must be fitted with a system to terminate flow when a high filter differential pressure occurs. The Gammon Gauge when fitted with the DP Switch offers a cost effective and reliable basis for the required system.

Aljac also offers a Deadman and Differential Pressure Protection System which can be used in conjunction with this Gauge in order to meet the requirements of JIG Bulletin 58. See data sheet DSS0830.

Upgrades.

All Gammon Gauges can be upgraded to incorporate the above mentioned enhancements.

Detailed Specifications.

Material Of Construction:- Aluminium Alloy/ Stainless Steel. All Stainless Steel versions are available on request.

Seals:- Viton.

Maximum Working Pressure:- 300psi.

Cylinder Test Pressure:- 1200psi.

Working Temperature:- Minus 40deg C to plus 70deg C.

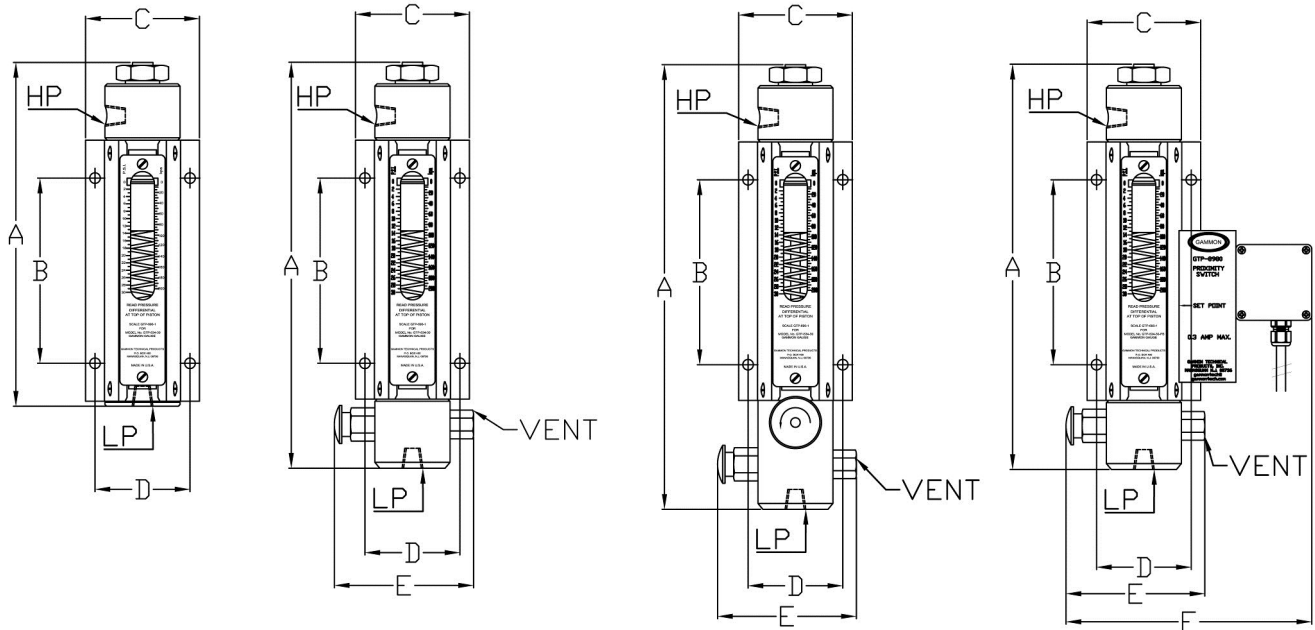
Connections:-

Standard Gauge and Gauge with Test Valve:- 1/4 inch BSPP female as standard, 1/4 inch NPT female as an option.

Peak Hold Gauge and Gauge with DP Switch:- 1/4 inch NPT female.

Vent Connection:- 1/8 inch NPT female (Gauges with Test Valve only).

Overall Dimensions.



| Dimension | Standard Gauge 6001044002 | Gauge With Free Movement Test Valve 6001044050 | Gauge With Peak Hold and Free Movement Test Valve 6001044060 | Gauge With DP Switch and Free Movement Test Valve 60018980CR |
|----------------------|------------------------------|--|--|--|
| A | 229mm | 273mm | 298mm | 273mm |
| B | 124mm | 124mm | 124mm | 124mm |
| C | 76mm | 76mm | 76mm | 76mm |
| D | 63mm | 63mm | 63mm | 63mm |
| E | Not Applicable | 86mm | 86mm | 86mm |
| F | Not Applicable | Not Applicable | Not Applicable | 165mm |
| Mounting Hole | 4 x 7.1mm Dia. | 4 x 7.1mm Dia. | 4 x 7.1mm Dia. | 4 x 7.1mm Dia. |
| O/All Depth | 50mm | 50mm | 75mm | 50mm |
| HP and LP | 1/4 inch BSPP fem. | 1/4 inch BSPP female | 1/4 inch NPT female | 1/4 inch NPT female |
| Vent | Not Applicable | 1/8 inch NPT female | 1/8 inch NPT female | 1/8 inch NPT female |
| Nett Weight | 0.95 Kg | 1.27 Kg. | 1.55Kg | 1.83Kg |

How To Order.

Part Number 6001044002. Standard Gauge, Aluminium, BSP threads, 0-30psi. (Gammon GTP-534-30A).

Part Number 6001044050. Gauge with Free Movement Test Valve, Aluminium, BSPP threads, 0-30psi. (Gammon GTP-534PB-30A).

Part Number 6001044060. Gauge with Peak Hold, Free Movement Test Valve, Aluminium, NPT threads, 0-30psi. (Gammon GTP-534PBPH-30A).

Part Number 60018980CR. Gauge with DP Switch (right hand side mounted), Free Movement Test valve, Aluminium, NPT threads, 0-30psi. (Gammon GTP8980-C-RH-0-0). Also available with the switch mounted on the left hand side.

Accessories.

Aljac Fuelling Components can offer a full range of accessories alongside the basic gauge, including free movement test valves, isolation valves, Stainless Steel compression fittings, Stainless Steel sense tubing, and fitting kits including all of the above items.

Retro fit kits are also now available to convert older Standard Gauges to the latest designs.

We can also supply 0-15psi gauges in all variants (except Peak Hold).

Please discuss your requirements with our Sales Department.

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