



**FLOW RATE
METER**

**BULLETIN 166
(6-10)**

Fischer-Robertson, Inc. 3890 Symmes Rd. Hamilton, OH 45015 p: 513-860-3445 web: www.fischer-robertson.com

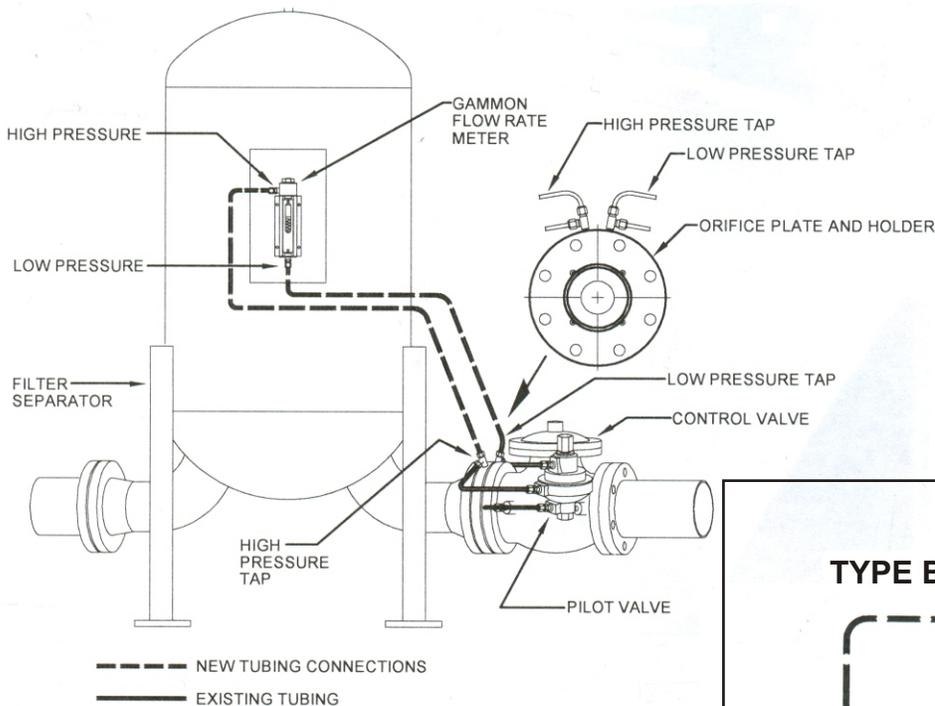
INTRODUCING THE GAMMON FR METER

This unique variation of the world-recognized Gammon Gauge® gives you the Flow Rate (FR) of the fuel that is passing through the fuel system. Versions for any flow rate are available, accurate to 5% at full flow.

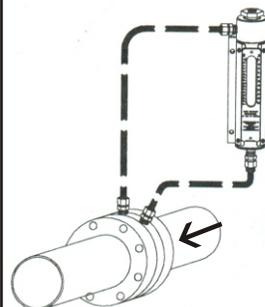
You can now comply with ATA 103 and other specifications that require you to report flow rate with each differential pressure reading on filter separators.

TYPE A

Available in two types. The most simple one is a combination of an existing orifice plate that is already installed with a discharge control valve on a filter separator. For example, installations in aviation fuel farms already have rate of flow control valves, some-times called "slug valves". Installation is really simple. You connect the Gammon FR Meter to the same ports that are connected to the rate of flow pilot valve on the slug valve. See attached sketch.



TYPE B



To install the Gammon FR Meter where there is no existing control valve having an orifice plate, we can supply an orifice plate ready to install between any pipe flanges in your system. All that is needed is for you to tell us the pipe size and flange rating as well as the maximum flow rate of your system.

HOW TO ORDER

TYPE A- Where there is an existing control valve with rate of flow control pilot valve:
Brand name of control valve _____
Pipe size _____
Maximum expected flow rate _____
Orifice inside diameter (_____). Look for a nameplate tag on top of the orifice flange. If the part number or orifice diameter cannot be found, it must be measured.
ORDER GTP-9570PB

TYPE B- Where it is necessary for us to supply a suitable orifice plate from 2" to 16" pipe size:
ORDER GTP-9590PB
NOTE: the flange is carbon steel. The orifice plate is made of Type 304 stainless steel. We will calculate the inside diameter for your flow rate maximum.

OPTIONS

The standard scales are graduated in U.S. Gallons per minute but can also be supplied with a combination of dekaliters per minute on the right side and gallons per minute on the left side or with dekaliters on both sides. There is no change in price.

All Gammon FR Meters are made with the Push to Test Button to comply with the API (IP) 1581 rule for piston-type differential pressure gauges. The standard location is on the left side but can be on the front, for panel mounting, at no extra cost.

Gammon FR Meters are available with extra cost options such as: Stainless Steel instead of Aluminum body. The Peak Hold feature can also be supplied, (PH). For example, a typical Type A, could be GTP-9570S-PBF for a stainless steel meter with push-button in the front.

Installation Kits

The Type A and B Gammon FR Meters do not include tubing or fittings. If you want to order tubing and fittings, we can provide a kit consisting of 16 feet of 1/4" annealed stainless steel tubing, 4 tubing fittings and 2 street tees with 1/8" NPT threads.

ORDER GTP-9591

NOTE: *When ordering Type A for use with existing orifice plates and rate of flow control pilots, be advised that the existing rate of flow limit setting may be quite different from the current day maximum that is allowed for the 5th Edition API(IP) 1581 elements that are installed in the filter separator. When you have this flow meter, you will be able to adjust your rate of flow control pilot valve correctly.*

The flow rate (FR) meter is made the same way that the standard Gammon gauge is made except that virtually every application requires a special spring and a custom-made scale plate. For this reason, an FR Meter that we design and manufacture cannot be used on any installation other than the one for which we designed this meter.

Application Engineering:

Bob Agnew

c: 513-505-6969

e-mail: bagnew@fischer-robertson.com