

Aviation Safety Shutdown and Meter Maintenance Tool**Features**

- Monitors differential pressure (ΔP)
- System shutdown at a preprogrammed ΔP value
- Maximum ΔP value and corresponding flowrate printed on fueling ticket

Benefits

- Increased safety
- Helps assure fuel purity
- Improves filter vessel maintenance
- Assists in ATA 103 and JIG Guidelines compliance

General Information

The differential pressure ΔP transducer is a safety shutdown device and a maintenance tool for aviation fueling systems. The ΔP transducer monitors the differential pressure between a point immediately upstream and a point immediately downstream of the filter vessel.

In conjunction with a **LCR-II**, **LCR 600** or **MASTERLOAD III** electronic register and a solenoid operated valve, the ΔP transducer can stop fuelings when the differential pressure (ΔP = pressure drop) across the filter vessel meets a preprogrammed ΔP shutdown value. Shutting the system down at a predetermined ΔP shutdown value eliminates the risk of rupturing the filter, which can lead to a tainted fueling and the costly process of defueling and refueling an aircraft. The ΔP shutdown value is determined by a setting on the LectroCount register.

The maximum ΔP registered by the ΔP transducer during a fueling and the flow rate at which it occurred can be recorded by the register and printed on the fueling ticket. The maximum ΔP is a reliable indicator of the condition of the filter. By monitoring the maximum ΔP , filters can be replaced at the appropriate time ensuring the health of the fueling system.

The ΔP transducer is designed for into-plane refueling by refuelers, hydrant trucks, and hydrant carts, and stationary systems. It is compatible with both the **LectroCount LCR-II**, **LectroCount LCR 600**, or **MASTERLOAD III** electronic registers.

US Patent: 7,765,978 - Differential pressure sensor for fuel delivery systems.

Specifications

Materials of Construction

Body
Stainless steel (316L)

Wetted Materials

Stainless steel (316L), Viton® seals

Applicable Products

Class 2: Jet Fuel

Pressure Rating

Differential measurement range
0 to 43.5 PSID (0 to 3 bar) for
rated accuracy [60.0 PSID (4 bar)
overpressure limit]

Line pressure range

0 to 150 PSI (0 to 10.3 bar)

Operating Temperature Range

-40 to 176 °F (-40 to 80 °C)

Accuracy

±0.2% of full scale
±0.088 PSID from -4 to 104 °F (-20 to
40 °C)

Power

10 to 28 VDC, <4 mA

Communication Protocol

RS485

Register Compatibility

LectroCount LCR-II
SR214 operating software
ST250 ticket software

LectroCount LCR 600

SR601 operating software
ST601 ticket software

Avery-Hardoll *MASTERLOAD III*
FlightConnect Ready or Enabled

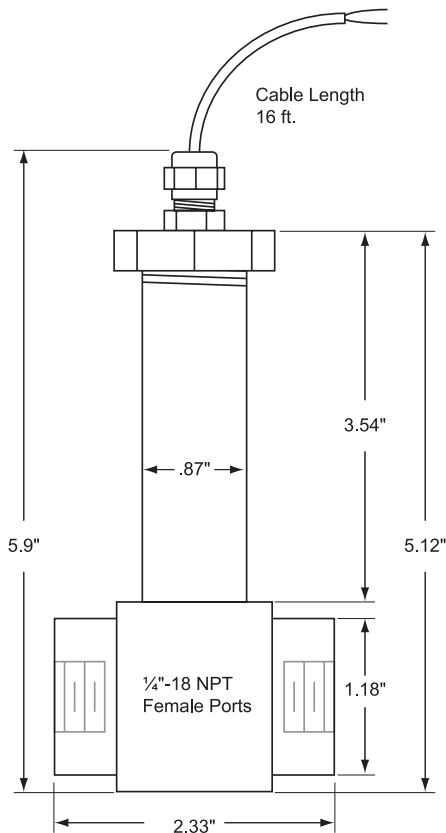
Environmental Rating

IP67 (similar to NEMA 4X)

Safety

Designed to meet Class I, Division
2 Groups C and D requirements

Dimensions



Sample Fueling Ticket

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AIR LC
O'HARE INTERNATIONAL AIRPORT
105 ALBRECHT DR.
LAKE BLUFF, IL 60044-2242
847.295.1050

AIRCRAFT SERVICE RECORD

TICKET NUMBER          0827961380

Air Sleigh
FLIGHT NUMBER          164
AIRCRAFT TYPE          B787
TAIL NUMBER            N408P

ORIGIN                  ORD
DESTINATION             LAX

TRANSACTION             Fuel
FUEL TYPE               Jet A
TRUCK NUMBER           1
FUELING LOCATION       Gate C2
FUELER                 Degner

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METER NUMBER           A Aviation 81
SALE NUMBER            259
TIME START             08/27/15 12:25:51
TIME END               08/27/15 12:42:16
START COUNT            0. Gallons
END GROSS COUNT        1147 Gallons
GROSS DELIVERY         1147 Gallons
START TOTALIZER        26061 Gallons
END TOTALIZER          27108 Gallons
DP 7.2 PSI @          656 GPM
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TOTAL DELIVERED        1147 Gallons

GROSS INVENTORY        953 Gallons

RECEIVED BY _____
    
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**Differential
Pressure
Reading**

Consult the factory when certified engineering drawings are required.
Dimensions shown are not suitable for construction or modifications