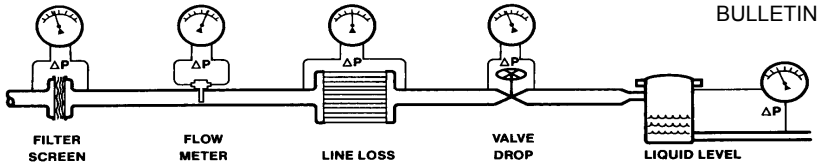
Mid-West®
Instrument



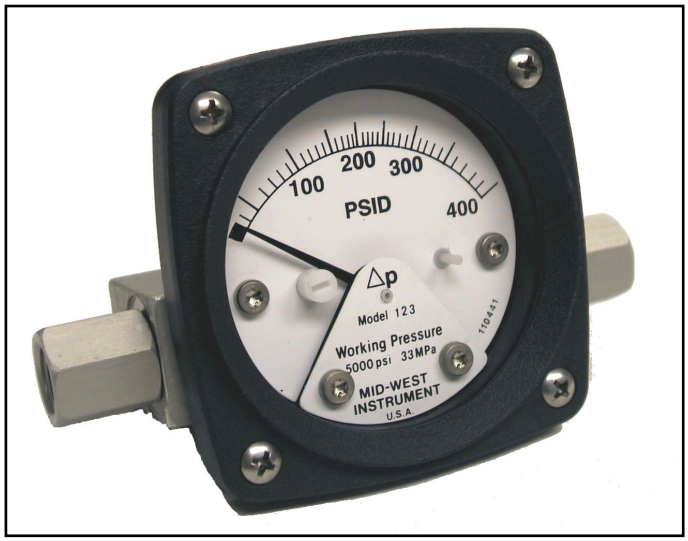
BULLETIN NO. 123/03

Model 123 "FILTER-MINDER" PISTON-TYPE Differential Pressure Gauge

HIGH RANGE: 0-150 P.S.I.D. TO 0- 400 P.S.I.D. (10.3 bar To 27.6 bar)

Gauge Features

- Range: 0-150 PSID thru 0-400 PSID (10.3 bar thru 27.6 bar)
- Working pressure 5000 P.S.I.G. (340 bar).
- Over-range protection to 5000 P.S.I.G.
- Aluminum or 316 / 316L SS Gauge Body.
- Wetted 316 SS and Ceramic moving components.
- Weather-resistant construction standard.
- Accuracy ± 3-2-3 % standard.
- Optional Shatter Resistant lens
- 2 ½" and 4 ½" plastic dial assemblies.
- Optional 4 ½" Anodized Aluminum dial assembly.
- Reverse pressure ports available.
- Five Year Limited Warranty.



2 ½" Dial

4 ½" Dial

Switch Features

- Hermetically Sealed Switch Outputs up to 3 amps in SPST configuration and up to 1 amp in SPDT configuration.
- SPST outputs available in Normally Open or Normally Closed configurations.
- Up to two independent adjustable switch points.
- Switch Adjustable from 15% - 100% of Range *
- Up to 240 VAC/VDC voltage ratings
- CE Marked to requirements of the Low Voltage Directive
- Optional Configuration for Class I, Div 2, Group A, B, C, & D, Class II, Groups F & G Hazardous Locations. (Contact factory for UL & CSA Listing)

* dependent on selected switch option.

Operation: Differential pressure is sensed by the movement of a piston magnet against a calibrated spring. The gauge pointer, outside the pressure housing, follows the movement of the piston magnet and indicates differential pressure. When equipped, magnetically operated reed switches, also located outside the pressure housing, actuate dependent upon the positional relationship between the reed switch and the internal magnetic piston. The reed contact(s) can be positioned to actuate within a defined percentage of the full-scale range of the gauge.

See Model 120 Bulletin for Dimensional Information

Part Numbering System

1 2 3 — ☐ ☐ — ☐ ☐ — ☐ ☐ ☐ ☐ — ☐ ☐ ☐

1 BASIC MODEL NUMBER

2 BODY MATERIAL
A. Aluminum
S. 316 S.S.

3 DIAL SIZE
A. 2-1/2" Round Uni-Directional Dial
C. 4-1/2" Round Uni-Directional Dial
G. 4-1/2" Round Uni-Directional Anod. Alum. Hous. Assy.
T. Non-indicating Differential Pressure Switch Only Selection Appropriate Electrical Options

4 SEALS & DIAPHRAGM
0. Buna N
1. * Viton® * Viton is a registered trademark of Dupont Dow Elastomers
2. Neoprene
4. ** Teflon® ** Teflon is registered trademark of Dupont Dow
5. Ethylene Propylene
6. Perflouroelastomer
9. Special (Uncoded Options)

5 CONNECTIONS
2. 1/4" FNPT End Connections
7. ½" FNPT End Connected Stainless Steel Adapters

6 OPTIONS (Up to four options)
O. None
A. Reversed High/Low Process Connections
B. DIN2353 12-S (12mm) Steel Tube Fittings (2)
C. Mounting Holes in Gauge Body for field mounting of Electrical Configurations A & B
D. Mounting Holes in Gauge Body for field mounting of Electrical Configurations L & M
F. Pipe Mounting Kit (Carbon Steel) (Contact Factory)
L. Liquid Fill (Not available w/follower pointer Option M)
M. Maximum Indicator Follower Pointer
T. Oxygen Cleaning
U. S.S. Tag w/S.S. Wire
V. S.S. Tag w/S.S. Screws
W. Wall Mounting Kit
X. Individual Gauge Packaging
Z. Special (Uncoded Options)

7 ELECTRICAL CONFIGURATIONS
(Switch Adjustable Range 10-90% except where stated below)
O. None
A. One (1) Switch in STD Encl. with Grommet Wire Seal
B. Two (2) Switches in STD Encl. with Grommet Wire Seal
C. One (1) Switch in STD Encl. with ¼" FNPT Electrical Connection NEMA 4X.
D. Two (2 Switches in STD Encl. with ¼" FNPT Electrical Connection NEMA 4X.
E. One (1) Switch in NEMA 4X General Purpose Enclosure, Div. II Hazardous Locations.
F. Two (2) Switches in NEMA 4X General Purpose Enclosure, Div. II Hazardous Locations.
L. One (1) Switch in STD Enclosure with Plug In Connector (DIN 43650/I 65 – PG-11)
M. Two (2) Switches in STD Enclosure with Plug In Connector (DIN 43650/I 65 – PG-11)
Z. Special

8 ELECTRICAL SPECIFICATIONS
A. SPDT 3W, 0.25 Amp, 125 VAC/VDC (Switch adjustable range of 15-90%)
E. SPST 60W, 3 Amp, 240 VAC/VDC Normally Open (Switch adjustable range of 25-95%)
F. SPST 60W, 3 Amp, 240 VAC/VDC Normally Closed (Switch adjustable range of 25-95%)
G. SPST 60W, 3 Amp, 240 VAC/VDC 1Normally Open, 1 Normally Closed (Switch adjustable range of 25-95%) (Available with Electrical Configurations B, D, F, & M)
H. SPDT 60W, 1 Amp, 240 VAC/VDC (Switch adjustable range of 25-95%)
Z. Special

NOTE: Not all options are available in combination with other options.

Factory Preset of switches available at no charge (Specify Setting on the order)

The use of diaphragm seals is not recommended. Attempts to install such seals on this gauge will voity

PROOF PRESSURE: 10,000 PSI working pressure

TEMPERATURE LIMITS: -40° F (-40° C) TO + 200° F (+93° C) - These limits are based on the entire instrument being saturated to these temperatures. System (process) temperatures may exceed these limitations with proper installation. Contact our customer service representative for details.

STANDARDS: All Model 123 Series differential pressure gauges either to conform to and/or are designed to the requirements of the following standards:

ASME B1.20.1
ASME B40.1
CSA-C22.2 No. 14, and 213
UL Std. No. 50, 508, and 1604
NACE MR0175
NEMA Std. No. 250
SAE J514
EN-61010-1

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