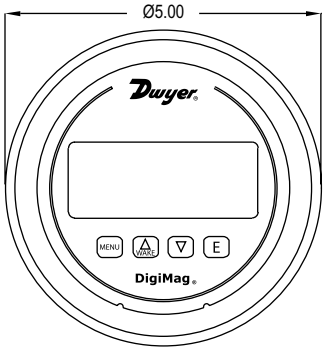
Dwyer

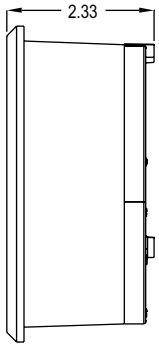
SERIES DM-1000

DIGIMAG® DIGITAL DIFFERENTIAL PRESSURE AND FLOW GAGE

24 Volt or Battery Powered, Fits in Magnehelic® Gage Cut-Out

CALIBRATION SERVICES AVAILABLE





The **Series DM-1000 DigiMag® Digital Differential Pressure and Flow Gage** monitors the pressure of air and compatible gases just as its famous analog predecessor the Magnehelic® differential pressure gage. All models are factory calibrated to specific ranges. The 4-digit LCD can display readings in common English and metric units so conversions are not necessary. The simplified four button operation reduces set up time and simplifies calibration with its digital push-button zero and span.

BENEFITS/FEATURES

- Field programmed reduces installation time
- User selectable parameters for pressure, air velocity or flow permits same device for multiple applications
- Specialized filter set point for alerts when maintenance is due
- Security levels permit matches the correct access to right skill
- Power versatility works with 9-24 VDC or 9 V battery allows deployment in a variety of spaces wired or not

APPLICATIONS

- Differential pressure across filters
- Fan control
- Static pressures in ducts or buildings
- Room pressurization monitoring

SPECIFICATIONS

Service: Air and non-combustible, compatible gases.
Wetted Materials: Consult factory.
Housing Materials: Glass filled plastic.
Accuracy: ±1% FS including linearity, hysteresis and repeatability; ±2% FS for ranges 1 in w.c. and below.
Temperature Limits: 0 to 140°F (-18 to 60°C).
Compensated Temperature Limits: 32 to 122°F (0 to 50°C).
Long Term Stability: ±1% FS per year.
Thermal Effect: ±0.05% FS/°F typ.; ±0.10% FS/°F for ranges 1 in w.c. and below.
Display: 4-digit LCD (digits: 0.60H x 0.33W).
Display Update: Selectable for 1 s to 10 minutes or update only from button push.
Pressure Limits: Normal and bi-directional ranges 5 in w.c. and lower = 2 psi (13.7 kPa); Normal and bi-directional ranges 10 in w.c. and higher = 11 psi (75 KPa).
Selectable Engineering Units: in w.c., psi, kPa, Pa, mm w.c., mBar, in Hg, mm Hg, FS (0-100%).
Power Requirements: 9 V alkaline battery, included, user replaceable or external power supply 9-24 VDC.
Battery Service Life: Battery life depending on the display update setting: 150 hours (typical) if display update = 1 s; 9 month (typical) if display update = 10 minutes; 1.5 years (typical) if display update is disabled. Battery may last up to four times longer when using lithium-based battery ULTRALIFE U9VL-J.
Current Consumption: 5 mA max.
Electrical Connections: Removable terminal block for 16 to 26 AWG.
Electrical Entry: Cable gland for 0.114 to 0.250″ (2.9 to 6.4 mm) diameter cable.
Process Connections: 1/8″ (3 mm) ID tubing.
Enclosure Rating: NEMA 4X (IP66).
Size: 5″ (127 mm) OD front face.
Weight: 1.18 lb (535 g).
Compliance: CE.

MODEL CHART

Model	Range in w.c.	psi	kPa	Pa	mbar	mm w.c.	in Hg	mm Hg	% of FS	Resolution in w.c.
DM-1102	0.250	–	0.062	62.20	0.622	6.35	–	0.467	100.0	0.001
DM-1103	0.500	–	0.124	124.5	1.245	12.70	–	0.934	100.0	0.001
DM-1104	1.000	–	0.249	249.1	2.492	25.40	–	1.868	100.0	0.001
DM-1105	2.000	–	0.498	498.2	4.982	50.80	–	3.736	100.0	0.001
DM-1107	5.000	0.181	1.245	1245	12.45	127.0	0.368	9.34	100.0	0.002
DM-1108	10.00	0.361	2.491	2491	24.91	254.0	0.736	18.68	100.0	0.010
DM-1109	15.00	0.543	3.738	3738	37.38	381.0	1.104	28.02	100.0	0.010
DM-1110	25.00	0.903	6.227	6227	62.27	635.0	1.839	46.71	100.0	0.010
DM-1111	50.00	1.806	12.45	–	124.5	1270	3.678	93.42	100.0	0.020
DM-1112	100.0	3.613	24.91	–	249.1	2540	7.355	186.8	100.0	0.100

Note: Contact the factory for available bi-directional ranges from ±0.25 to ±10 in w.c.
Note: For air flow models change -11XX to -12XX.

OPTIONS

To order add suffix:	Description
-NIST	NIST traceable calibration certificate
Example: DM-1103-NIST	

ACCESSORIES

Model	Description
A-286	4-1/2″ gage panel mounting flange
A-300	Flat flush mounting bracket
A-480	Plastic static pressure tip
A-489	4″ straight static pressure tip with flange

Process Tubing Options: See page 453 (Gage Tubing Accessories)