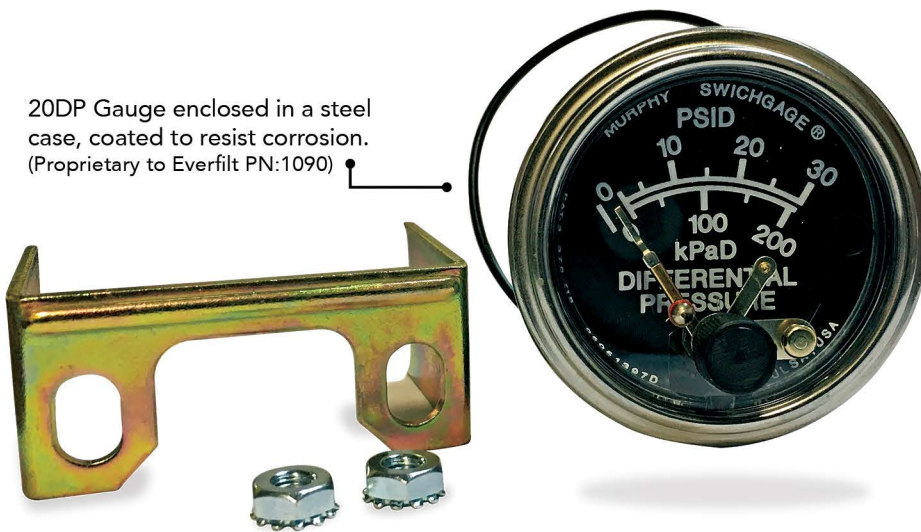


20DP — Differential Pressure Gauge

The **20DP Series Gauges** (2 inch/51 mm dial) are diaphragm-actuated, differential pressure-indicating gauges, with a built-in electrical switch. The 20DP gauge is proprietary to Everfilt and is used for tripping alarms and/or shutting down equipment. It is intended to monitor and indicate oil, fuel or water filter restriction and can reduce risk of dangerously high pressure, which may rupture the filter, resulting in contaminants entering system.

20DP Gauge enclosed in a steel case, coated to resist corrosion. (Proprietary to Everfilt PN:1090)



Specifications

Dial: White on black, dual scale; U.S.A. standard scale is PSI/kPa. Other scales available-inquire.

Case: 20DP Series: plated steel.

Bezel: Polished stainless steel.

Lens: Polycarbonate, high-impact.

Temp Range:

Ambient: -40°F (-40°C) thru 150°F (66°C)

Process: -40°F (-40°C) thru 250°F (121°C)

Process Connection: 1/8-27 NPTM brass.

Sensing Element: Beryllium copper diaphragm.

Gauge Accuracy: ±3% maximum across scale.

Adjustable Limit Contact: SPST contact; pilot-duty only, 2 A @ 30 VAC/DC; closed when the low limit is met, open when pointer is in normal operating range. Contacts are gold flashed silver.

Limit Contact Adjustment: by 1/16 in. hex wrench thru 100% of scale.

Limit Contact Wire Leads: (20DP Series): 18 AWG (1.0mm²) x 12 in. (305 mm).

Limit Contact Terminals: A20DP Series number #4 screw terminals.

Snap-Switch Rating: ("DPE" models): SPDT, 3 A @ 30 VDC inductive; 4 A @ 125 VAC inductive.

Unit Weight: 20DP Series: 9oz (0.25kg)

Unit Dimensions: 20DP Series: 3x2-3/4 x 2-3/4 in. (76 x 70 x 70 mm).

Features

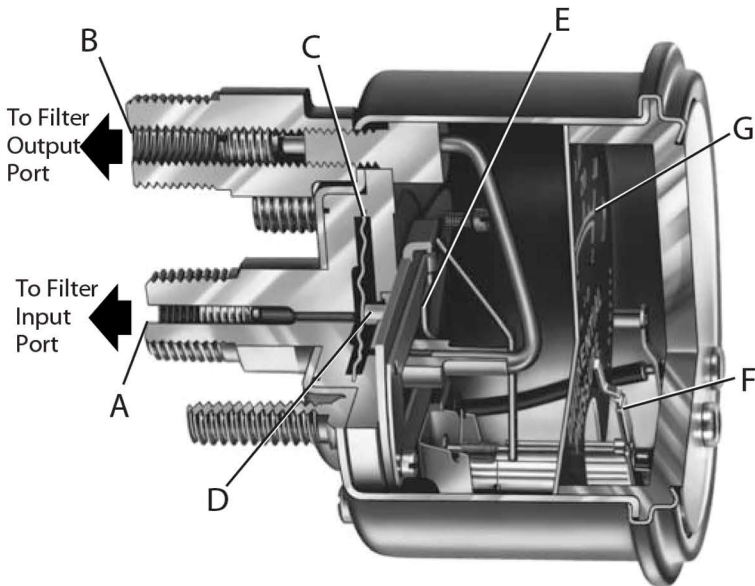
1. **Constant Visual Indication** of the condition of your filter is shown on the dial.
2. **Two Instruments in One** — an accurate indicating gauge and adjustable p.s.i.d. limit switch. Reduces inventory and installation time.
3. **Adjustable Contact** lets you set the monitoring range of the gauge. The contact is tamper-proof and can be set only with a 1/16 Allen-head wrench.
4. **Durability** — All gauges are made of durable materials, allowing them to withstand rugged applications.
5. **Early Filter Changes** cost you money and increase the risk of contaminants entering the system. A Murphy filter restriction SWICHGAGE® will let you know when to change the filter and maintain peak efficiency.



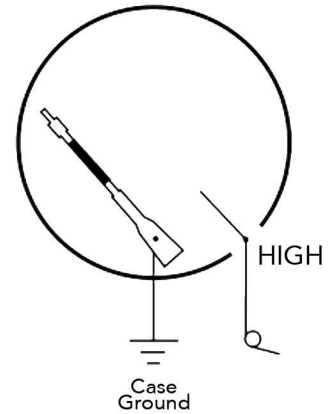
Operating Characteristics

Port **A** connects to the input side of the filter. Pressure pushes diaphragm **C** forward, thus pushing the button **D**, which turns the crank arm **E**, which in turn moves pointer **F** to register the amount of pressure on dial **G**. Port **B** connects to the outlet side of the filter. Pressure is exerted through tube **H** and pushes on the diaphragm, thus applying pressure on both sides of the diaphragm.

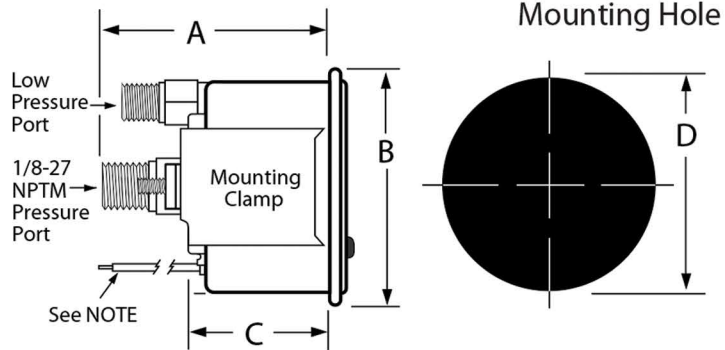
The pointer displays pressure in the amount that the input pressure is greater than the outlet pressure. As the filter is restricted by contaminants and the pressure difference reaches the critical point, the pointer touches the pre-set limit contact and shuts down the system or activates a visual or audible signal to alert the operator.



20DP Internal Wiring



20DP Series	
A.	2-7/32 (56)
B.	2-15/64 (57)
C.	1-5/16 (33)
D.	2-1/16 (53)



Ranges Available*	Max. Static Pressure	Max. Differential Pressure	Contact Setting	Base Model	Range
0-30 (0-207) [0-2.0]	300 (2.1) [20]	60 (414) [4.0]	20 (138) [1.0]	20DP (K=Knob adjusting face contact)	30 = 0-30

*Values are shown in PSI, (kPa/MPa) and [bar]. Values in kPa/MPa and bar are mathematical conversions from PSI-they do not reflect actual second scale range.

