



Rate and Total Flow Meter Indicator

DPF140 Series



- ✓ Simple Setup
- ✓ DC Powered (DPF143), Loop Powered (DPF144)
- ✓ Remote or Flow Sensor Mounted (with Adaptor)
- ✓ Rugged NEMA 4X (IP67) Plastic Housing
- ✓ Non-Volatile Memory

The DPF140 Series of flow meters are micro controller based indicators with transmission and pulse outputs. These units are designed to compute and display flow rate and total. The DPF143 has one scaled pulse output and the DPF144 has two. In addition to the scaled pulse output, both models provide an alternative pulse pass-through output with galvanic isolation. The DPF143 is powered by an external DC power source. The DPF144 is a “two-wire” or “loop powered” device, meaning that it is powered by the 4 to 20 mA loop circuit itself.

Pulse and 4 to 20 mA analog outputs can be used to signal external devices, e.g. certain metering pumps and water treatment controls. Alternatively, one or more pulse outputs can be configured as alarm outputs. These flow meters can be password protected to prevent resetting the total or changing configuration settings.

The DPF140 Series meters are available in wall or panel mount configurations. Wall mounted versions can be converted from wall to meter mount with an adaptor plate. Check with OMEGA for compatible meters. Order the DPF144 only if a 4 to 20 mA output signal is a requirement, otherwise the DPF143 offers the most flexibility.



DPF143W shown with DPF140-DC, shown smaller than actual size.

Specifications

Display: Rate 5-digit auto-ranging, total 8-digit

Units:

Rate Units: Gallons/second/minute/hour/day, liter/second/minute/hour/day, cubic feet/second/minute/hour/day, cubic meters/second/minute/hour/day, miner's inch, mega liters/day, million gallons/day, fluid oz/second/minute/hour/day, barrels (42 gallon)/second/minute/hour/day

Total Units: Gallon, gallon x 1000, liters, mega liter, cubic meter, acre feet, cubic feet, cubic feet x 1000, million gallon, miner's inch day, acre inch, fluid ounce, barrels (42 gallon)

OUTPUTS

Pulse Output 1 (All Models): Scaled pulse output, high alarm output or low alarm output (opto-isolated)

Type: Current sinking
Maximum Voltage: 45 Vdc (100 mA)
Maximum Frequency: 6.5 Hz
Pulse Width: 100 ms
Isolation: 300V

Pulse Output 2:

DPF143:

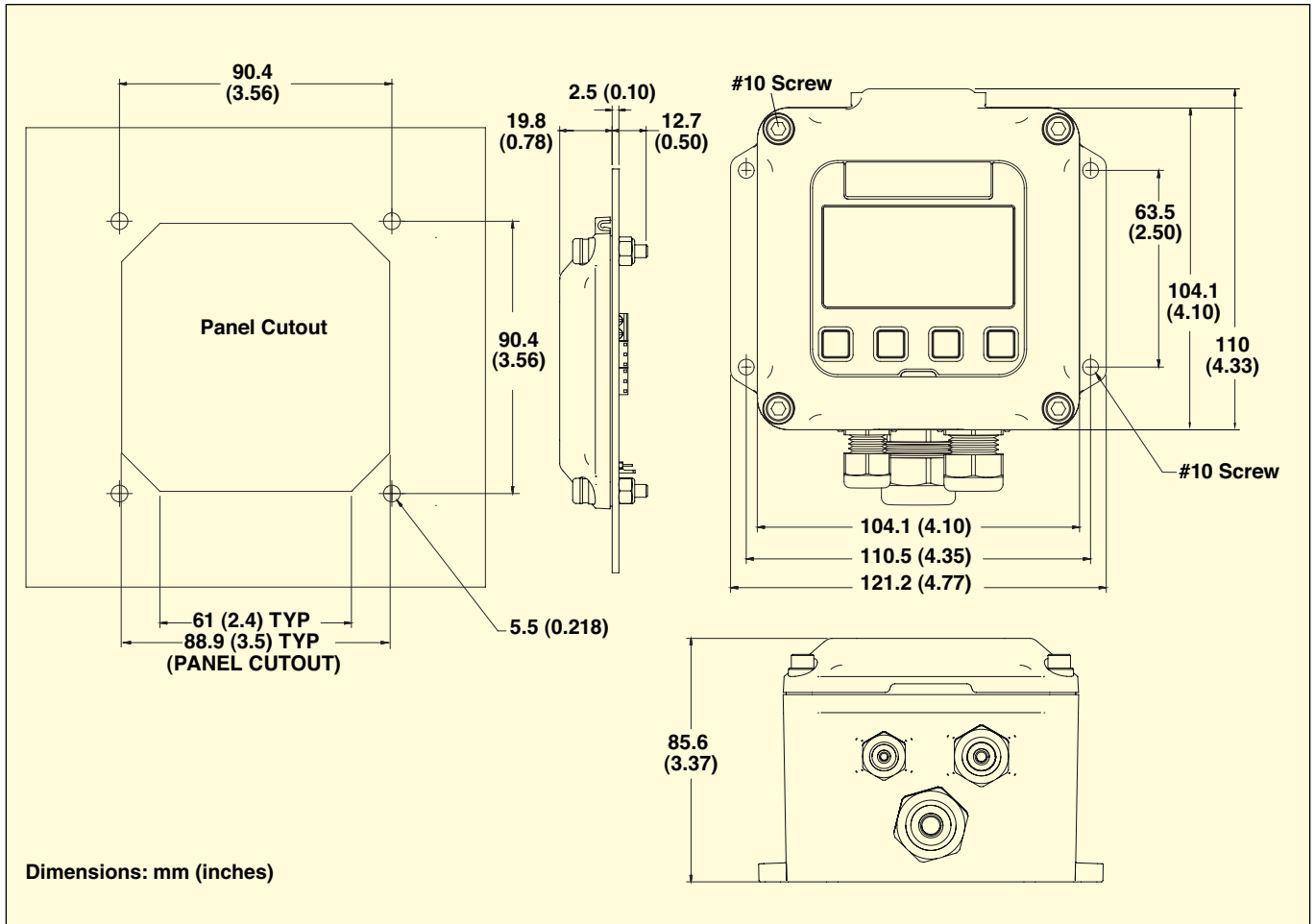
Type: Current sinking
Maximum Voltage: 45 Vdc (100 mA)
Maximum Frequency: 2000 Hz pulse width same as sensor input
Isolation: 300V
Configurable as Alarm: No

DPF144:

Type: Current sinking
Maximum Voltage: 45 Vdc (10 mA)
Maximum Frequency: 6.5 Hz
Pulse Width: 100 ms
Isolation: 300V
Configurable as Alarm: Yes (high or low)

Loop Power Output: DPF144 only

Set P Range: 0.1 to 99999.9 units/pulse
Input: 5V pulse or contact closure
Input Range: 0.752 to 2000 Hz
K-Factor Range: 0.001 to 999999.999
Flow Alarm Output Range: 0.1 to 99999.9
Operating Temperature: 0 to 55°C (-32 to 131°F)
Non-Operating Temperature: -40 to 75°C (-40 to 158°F)
Environmental: NEMA 4X (IP67)



To Order	
Model No.	Description
DPF143W	DC powered indicator for rate and total, wall mount
DPF143P	DC powered indicator for rate and total, panel mount
DPF144W	Loop powered indicator for rate and total, wall mount
DPF144P	Loop powered indicator for rate and total, panel mount
Accessories	
DPF140-DC	Display cover (optional)
DPF140-W2M	Wall to meter adaptor kit (optional)

Comes complete with operator's manual.
Ordering Example: DPF143W, DC powered indicator for rate and total with DPF140-DC display cover.