

INDICATORS FOR MELT PRESSURE CONTROL

MODELS DP434 DIGITAL & DP409 ANALOG CONTROLLERS



Analog Models From **\$450**

Digital Models From **\$475**



Cables and Sensor Sold Separately.

- ✓ Transducer Excitation Supply Standard
- ✓ Integral Shunt Calibration for Easy Set-up, Span Check and Adjustment
- ✓ Recorder Outputs Standard

- ✓ DP434 Features 3½ Digit LED Display with Fixed Zero for 19990 Display
- ✓ DP409 Features Easy-to-Read Analog Display with 240° Dial Indication

- ✓ Adjustable Damping, Response Time Selectable at 0.3 s or 5.0 s
- ✓ Dual Alarm Setpoints HI/HI, LO/LO, LO/HI, HI/LO



OMEGA's melt pressure indicators also function as transducer power supplies and signal conditioners. The DP434 Digital Model has a large 88.9 mm (3½") digit LED display which is easy to read, even from a distance, while the DP409 Analog Model has a 152.4 mm (6"), 240° arc (international scale) for easy viewing. Both units are housed in a standard ¼ DIN case.

The DP434 and DP409 are designed for use with OMEGA's melt pressure transducers or any 4-leg, 350 Ω Wheatstone bridge strain gage transducer. A calibration

switch allows for a quick span check and adjustment for zero at zero pressure. The complete electronics assembly can be removed and replaced from the front without disturbing the wiring in back.

Dual setpoint models can be used to give a preliminary warning before an actual shutdown sequence is initiated. HI/HI LO/LO, LO/HI, or HI/LO alarm modes can be programmed, and the relays are isolated during a setpoint change or calibration check to prevent accidental emergency shutdown.

**SPECIFICATIONS
DP434 DIGITAL &
DP409 ANALOG METERS
PERFORMANCE
CHARACTERISTICS**

Standard Ranges: 0-1500, 0-3000, 0-5000, 0-10,000 & 0-15,000 psig
Accuracy: ±0.1% of full scale or one digit (DP434); ±2.0% of full scale (DP409)

Analog (Recorder) Output:
Accuracy: ±0.1% of full scale,
Repeatability: ±0.1% of full scale,
Linearity: ±0.1% of full scale,
Stability: ±0.1% of full scale
(or one digit)

**ELECTRICAL
CHARACTERISTICS**

Power: 106-125 or 200-250 Vac
50/60 hz, ½ Amp maximum
Zero Adjustment: ±35% with front
panel adjustment

Sensitivity Adjustment (Span):
1 to 2.5 mV/V or 2.5-5.0 mV/V switch
selectable and fully adjustable.

Shunt Resistance Calibration: Internal
30.1 kΩ Shunt Resistor

Response Time (Damping):
Selectable at 0.3 or 5.0 seconds

Recorder Outputs: Standard: 0-1 Vdc;
0-2 Vdc, 0-5 Vdc & 0-10 Vdc;

Optional: 4-20 mA, load from 15-400 Ω
(add suffix R to model number and
\$100 to price)

Transducer Power Supply:
8.2 Vdc ±5%

CONTROL CHARACTERISTICS

Dual Relays: 2 SPDT (Single pole
double throw) (Shipped 1 Hi, 2 Lo)

Relay Rating: 8 Amp @ 125/250 Vac,
5 Amp @ 30 Vdc

Set Point Range: 1-100% of full scale

Accuracy: ±0.3% of full scale

Hysteresis: ±0.5% of full scale

Alarm Indication: Front panel LED

Mode: Above or below set point

Reset: Automatic or manual

Peak Hold: Optional

PHYSICAL CHARACTERISTICS

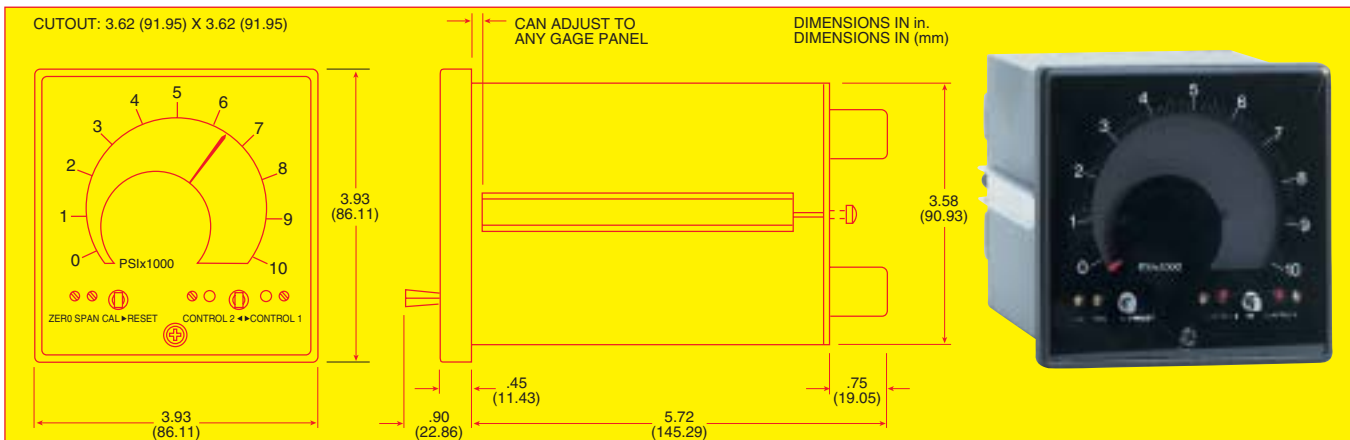
Size: ¼ DIN

Display: For DP434: 3½ active digits,
LED, 0.3 in height, plus extra digit fixed
zero and selectable decimal point. For
DP409: 152.4 mm (6") scale, 240° arc.

Operating Temperature: 0 to 140°F
(-18 to 60°C)

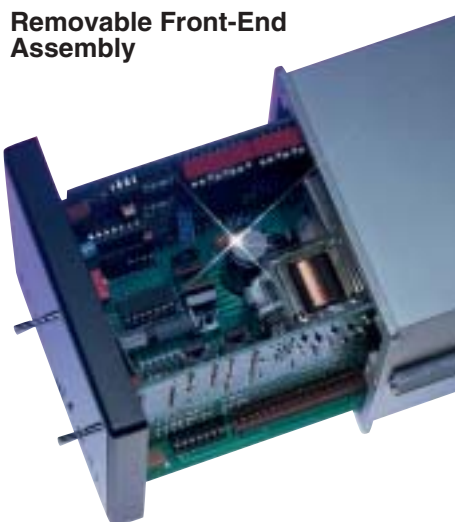
Weight: 2.5 lb (1.1 kg)

Note: Range changes for the DP434
can be made in the field.



MOST POPULAR MODELS HIGHLIGHTED

Removable Front-End
Assembly



To Order (Specify Model Number)				
RANGE (psi)	DIGITAL MODEL	PRICE	ANALOG MODEL	PRICE
0 to 1,500	DP434*	\$475	DP409-1500	\$450
0 to 3,000			DP409-3K	450
0 to 5,000			DP409-5K	450
0 to 10,000			DP409-10K	450
0 to 15,000			DP409-15K	450
DUAL ALARM MODELS				
0 to 1,500	DP434A*	\$585	DP409A-1500	\$550
0 to 3,000			DP409A-3K	550
0 to 5,000			DP409A-5K	550
0 to 10,000			DP409A-10K	550
0 to 15,000			DP409A-15K	550

*Unit is scalable over all ranges.



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• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters