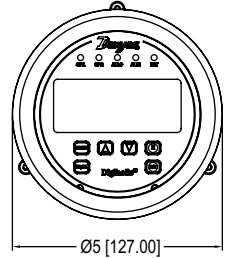
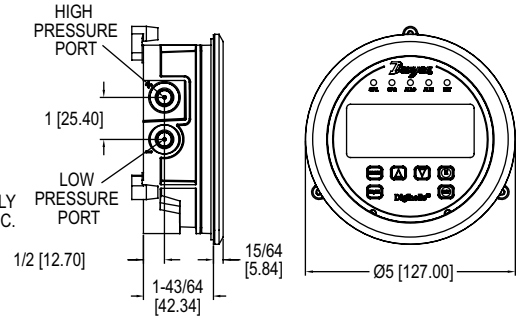
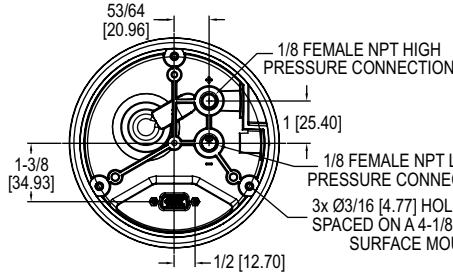


# DIGIHELIC® DIFFERENTIAL PRESSURE CONTROLLER

## 3-in-1 Differential Pressure Controller

CALIBRATION SERVICES AVAILABLE



The Series DHC DigiHelic® Differential Pressure Controller is a 3-in-1 instrument possessing a digital display gage, control relay switches, and a transmitter with both current and voltage outputs. Combining these 3 features allows the reduction of several instruments with one product, saving inventory, installation time, and cost. The Series DHC DigiHelic® differential pressure controller is the ideal instrument for pressure, velocity, and volumetric flow applications reading in several commonly used engineering units with optional unidirectional or bidirectional ranges. These units achieve a 1.5% or better accuracy on extremely low ranges, and 0.5% accuracy for ranges at or above 1 in w.c. Calibration can be performed in the field, making maintaining its accuracy more manageable. Additionally, the Series DHC DigiHelic® differential pressure controller includes 2 SPDT control relays with adjustable deadbands. Programming the unit is simple using the built-in menu. With scalable 4-20 mA, selectable voltage process outputs, and selectable Modbus® or BACnet communication, this controller can easily fit into your application.

### BENEFITS/FEATURES

- One instrument saves inventory, installation time, and money with its measurement versatility and innovative 3-in-1 design
- Measurement precision via full-scale accuracy of 1.5% or better on extremely low ranges, and 0.5% for ranges at or above 1 in w.c.
- Safe and secure with security menu programming
- Simplified field upgrade to DHC pressure controller with optional stainless steel bezel

### APPLICATIONS

- SCFM duct flow
- Filter status
- Duct or building static pressure
- Damper and fan control

### MODEL CHART

Model	Range	Model	Range
DHC-002	0.25 in w.c.	DHC-208	±5 in w.c.
DHC-003	0.5 in w.c.	DHC-209	±10 in w.c.
DHC-004	1 in w.c.	DHC-053	60 Pa
DHC-006	2.5 in w.c.	DHC-055	125 Pa
DHC-008	5 in w.c.	DHC-056	250 Pa
DHC-009	10 in w.c.	DHC-253	±60 Pa
DHC-010	25 in w.c.	DHC-255	±125 Pa
DHC-011	50 in w.c.	DHC-256	±250 Pa
DHC-012	100 in w.c.	DHC-082	6 mm w.c.
DHC-202	±0.25 in w.c.	DHC-084	25 mm w.c.
DHC-203	±0.5 in w.c.	DHC-282	±6 mm w.c.
DHC-204	±1 in w.c.	DHC-284	±25 mm w.c.
DHC-206	±2.5 in w.c.		

### OPTIONS

Use order add suffix:	Description
-FC	Factory calibration certificate
-NIST	NIST traceable calibration certificate
-SS	304 brushed stainless steel bezel

**Example:** DHC-202-FC

### SPECIFICATIONS

**Service:** Air and non-combustible, compatible gases.  
**Wetted Materials:** Consult factory.  
**Housing Material:** Polycarbonate.  
**Accuracy:** ±0.5% FSO for all ranges, except 0.5 in w.c. @ ±1% FSO, and ranges at or below ±0.25 in w.c. @ ±1.5% FSO.  
**Stability:** < ±1% / year FSO.  
**Pressure Limits:** Ranges > 1 in w.c.: 6 psi max operation, 6 psi burst; Ranges ≤ 1 in w.c.: 3.6 psi max operation, 6 psi burst.  
**Temperature Limits:** -4 to 158°F (-20 to 70°C).  
**Thermal Effects:** .02% FS / °F (.036% FS / °C).  
**Power Requirements:** 12-28 VDC or 12-28 VAC 50 to 400 Hz.  
**Power Consumption:** 3 VA max.  
**Output Signal:** 4-20 mA (4-wire); 0-10 V, 0-5 V, 1-5 V, and 2-10 V (4-wire).  
**Communication:** BACnet MS/TP or Modbus® RTU.  
**Supported Baud Rate:** 9600, 19200, 38400, 57600, 76800, 115200.  
**Device Load:** 1/8 unit load.  
**Zero and Span Adjustments:** Accessible via menus.  
**Response Time:** 400 ms (damping set to 0).  
**Display:** Backlit LCD display, LED setpoint indicators.  
**Electrical Connections:** 15 pin male high density D-sub connection. 18" (46 cm) cable with 15 conductors included.  
**Process Connections:** 1/8" female NPT ports on side and back.  
**Enclosure Rating:** NEMA 4X (IP66).  
**Mounting Orientation:** Not position sensitive.  
**Size:** 5" OD (127 mm) x 1.9" (48 mm) deep.  
**Weight:** 8.8 oz (250 g).  
**Compliance:** BTL, CE.

### SWITCH SPECIFICATIONS

**Switch Type:** 2 SPDT relays.  
**Electrical Rating:** 1 A @ 30 VAC/VDC.  
**Set Point Adjustment:** Accessible via menus.

### ACCESSORIES

Model	Description
A-299	Surface mounting bracket
A-300	Flat flush mounting bracket
A-301	Static pressure tip for 1/4" metal tubing connection
A-302	Static pressure tip, for 3/16" and 1/8" ID plastic or rubber tubing.
A-302F-A	303 SS Static pressure tip with mounting flange, for 3/16" I.D. rubber or plastic tubing. 4" insertion depth, includes mounting screws
A-330	1/8" pipe plug, socket hex, plated steel.
A-331	1/8" NPT filter vent plug, nylon and sintered metal
A-489	4" straight static pressure tip with flange