



## SERIES DHC | DIGIHELIC® DIFFERENTIAL PRESSURE CONTROLLER



### 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

### DESCRIPTION

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.

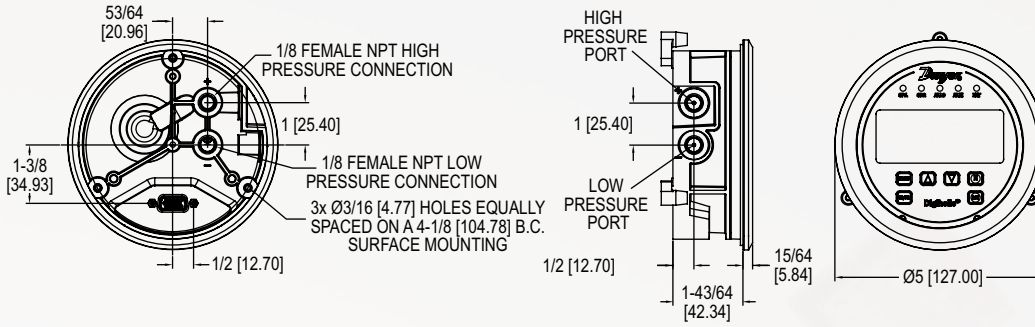
## SPECIFICATIONS

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

## SWITCH SPECIFICATIONS

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

**DIMENSIONS**



**HOW TO ORDER**

Use the **bold** characters from the chart below to construct a product code.

	<b>DHC</b>	<b>-202</b>	<b>-NIST</b>	
<b>SERIES</b>				<b>OPTIONS</b>
DHC: Digihelic® differential pressure controller				-FC: Factory calibration certificate -NIST: NIST traceable calibration certificate -SS: 304 brushed stainless steel bezel
<b>RANGE</b>				
<b>002:</b> 0.25 in w.c.	<b>208:</b> ±5 in w.c.			
<b>003:</b> 0.5 in w.c.	<b>209:</b> ±10 in w.c.			
<b>004:</b> 1 in w.c.	<b>053:</b> 60 Pa			
<b>006:</b> 2.5 in w.c.	<b>055:</b> 125 Pa			
<b>008:</b> 5 in w.c.	<b>056:</b> 250 Pa			
<b>009:</b> 10 in w.c.	<b>253:</b> ±60 Pa			
<b>010:</b> 25 in w.c.	<b>255:</b> ±125 Pa			
<b>011:</b> 50 in w.c.	<b>256:</b> ±250 Pa			
<b>012:</b> 100 in w.c.	<b>082:</b> 6 mm w.c.			
<b>202:</b> ±0.25 in w.c.	<b>084:</b> 25 mm w.c.			
<b>203:</b> ±0.5 in w.c.	<b>282:</b> ±6 mm w.c.			
<b>204:</b> ±1 in w.c.	<b>284:</b> ±25 mm w.c.			
<b>206:</b> ±2.5 in w.c.				

**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

**ORDER ONLINE TODAY!**

[dwyer-inst.com/Product/SeriesDHC](https://dwyer-inst.com/Product/SeriesDHC)

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Printed in U.S.A. 6/22

DS-DHC

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