The SERIES DH Digihelic® Differential Pressure Controller is a 3-in-1 instrument possessing a digital display gage, control relay switches, and a transmitter with current output. The Digihelic® controller is the ideal instrument for pressure, velocity and flow applications, achieving a 0.5% full scale accuracy on ranges from 0.25 to 100 in w.c.

APPLICATIONS

- SCFM duct flow
- Industrial ovens air flow
- Filter status
- Clean room pressurization
- Furne hood air flow
- Surgical and medical room pressurization
- Damper and fan control

FEATURES/BENEFITS

- 3-in-1 instrument allows the reduction of several instruments with one product, saving inventory, installation time and money
- Velocity of flow modes, a square root output coincides with the actual flow curve for greater precision
- Power usage of 120/220 VAC or 24 VDC provides flexibility to incorporate device in control panel
- Secure menu program provides access to device operation only for the right skill level
- Modbus® communications supports Process and HVAC system integration and control

SPECIFICATIONS

- Service: Air and non-combustible, compatible gases
- Wetted Materials: Consult factory
- Housing Material: ABS plastic, UL approved 94 V-0
- Accuracy: ±0.5% at 77°F (25°C) including hysteresis and repeatability
- Stability: < ±1% per year
- Pressure Limits: Ranges ≤ 2.5 in w.c. = 2 psi; 5": 5 psi; 10": 5 psi; 25": 5 psi; 50": 5 psi, 100": 9 psi
- Temperature Limits: 32 to 140°F (0 to 60°C)
- Compensated Temperature Limits: 32 to 140°F (0 to 60°C)
- Thermal Effects: 0.020%/°F (0.036/°C) from 77°F (25°C)
- Power Requirements: High voltage power = 100 to 240 VAC, 50 to 400 Hz or 132 to 240 VDC. Low voltage power = 24 VDC ±20%
- Power Consumption: Low voltage power = 24 VDC - 130 mA max; High voltage power = 100 to 240 VAC, 132 to 240 VDC - 7VA max
- Output Signal: 4-20 mA DC into 900 Ω max
- Zero & Span Adjustments: Accessible via menus

RESPONSE TIME: 250 ms.

- Display: 4 digit LCD 0.4” height. LED indicators for set point and alarm status
- Electrical Connections: Screw terminals
- Process Connections: Compression fitting for use with 1/8” ID X 1/4” OD tubing (3.175 mm ID x 6.35 mm OD). Optional barbed fitting for 3/16” ID tubing
- Enclosure Rating: Face designed to meet NEMA 4X (IP66)
- Mounting Orientation: Mount unit in horizontal plane
- Size: 1/8 DIN
- Panel Cutout: 1.772 x 3.620 in (45 x 92 mm)
- Weight: 14.4 oz (408 g)
- Serial Communications: Modbus®, RTU, RS485, 9600 baud
- Agency Approvals: CE, UL

SWITCH SPECIFICATIONS

- Switch Type: 2 SPDT relays
- Electrical Rating: 8 amps at 240 VAC resistive
- Set Point Adjustment: Adjustable via keypad on face

ACCESSORIES

- Model: MN-1
  Description: Mini-Node™ USB/RS-485 converter; the Mini-Node™ converters are an easy solution for utilizing the Digihelic® controller’s RS-485 serial communication and connecting to virtually any PC
- Model: A-266
  Description: Digihelic® surface mounting bracket
- Model: A-203
  Description: 1/8” ID x 1/4” OD PVC tubing
- Model: Digihelic® Links™
  Description: Communications Software

OPTIONS

- To order add suffix: Description
- NIST
  Description: Factory calibration certificate
- Barbed fitting for 3/16” ID tubing
- NIST traceable calibration certificate
- Digihelic® surface mounting bracket
- Factory calibration certificate
- Communications Software

MODEL CHART - AVAILABLE PRESSURE ENGINEERING UNITS

<table>
<thead>
<tr>
<th>Model</th>
<th>in w.c.</th>
<th>ft w.c.</th>
<th>mm w.c.</th>
<th>cm w.c.</th>
<th>psi</th>
<th>in Hg</th>
<th>mm Hg</th>
<th>mbar</th>
<th>Pa</th>
<th>kPa</th>
<th>hPa</th>
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<tbody>
<tr>
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<td>2500</td>
<td>-</td>
<td>6.350</td>
<td>0.635</td>
<td>-</td>
<td>0.467</td>
<td>0.623</td>
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*Velocity and volumetric flow not available on bi-directional range units and models DH-009 & DH-010

ACCESSORIES

- Model: MN-1
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- Model: A-203
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- Model: Digihelic® Links™
  Description: Communications Software

MODEL CHART - BI-DIRECTIONAL* RANGES

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<tr>
<td>DH-014</td>
<td>1.0 to 0.1 in w.c.</td>
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<tr>
<td>DH-015</td>
<td>2.5 to 2.5 in w.c.</td>
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<tr>
<td>DH-016</td>
<td>5 to 5 in w.c.</td>
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<tr>
<td>DH-017</td>
<td>10 to 10 in w.c.</td>
</tr>
</tbody>
</table>

*Velocity and volumetric flow not available on bi-directional range units and models DH-009 & DH-010

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Process Tubing Options: See page 499 (Gage Tubing Accessories)