**Series DH3 Digihelic® Differential Pressure Controller**

**Digihelic® Controller in Photohelic® Gage, Square Root Output for Flow**

The Series DH3 Digihelic® Differential Pressure Controller is a 3 in 1 instrument possessing a digital display gage, control relay switches, and a transmitter with current output all packed in the popular Photohelic® gage style housing. Combining these 3 features into one instrument allows the reduction of several instruments with one product, saving inventory, installation time and money. The Digihelic® controller is the ideal instrument for pressure, velocity or volumetric flow operation in several commonly used engineering units. 2 SPDT control relays with adjustable deadbands are provided along with a scalable 4-20 mA process output.

### APPLICATIONS
- SCFM flow in ducts
- Filter status
- Static pressures in ducts or buildings
- Damper control
- Fan control

### SPECIFICATIONS
- **Service**: Air and non-combustible, compatible gases.
- **Wetted Materials**: Consult factory.
- **Housing Material**: Die cast aluminum case and bezel.
- **Accuracy**: ±1.5% for 0.25” to ±0.25” w.c. ranges. Ranges 0.5” to 5” w.c. and corresponding bi-directional (except ±2.5” w.c.) ±1%; All other ranges: ±0.5% @ 77°F (25°C) including hysteresis and repeatability (after 1 hour warm-up).
- **Stability**: < ±1% per year.
- **Pressure Limits**: Ranges ≤ 2.5 in w.c.: 25 psi; ±2.5”, 5 in w.c.: 5 psi; 10 in w.c.: 5 psi; 25 in w.c.: 5 psi; 50 in w.c.: 5 psi; 100 in w.c.: 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). For 0.25” and ±0.25” w.c. ranges: ±0.03%/°F (±0.054%/°C).
- **Power Requirements**: 12-28 VDC, 12-28 VAC 50 to 400 Hz.
- **Power Consumption**: 3 VA max.
- **Output Signal**: 4-20 mA DC into 900 ohms max.
- **Zero & Span Adjustments**: Accessible via menus.
- **Response Time**: 250 ms (damping set to 1).
- **Display**: Backlit 4 digit LCD 0.4” height LED indicators for set point and alarm status.
- **Electrical Connections**: 15 pin male high density D-sub connection. 18” (46 cm) cable with 10 conductors included. 4’ and 10’ cables available.
- **Process Connections**: 1/8” female NPT. Side or back connections.
- **Mounting Orientation**: Mount unit in vertical plane.
- **Size**: 5” (127 mm) OD x 3-1/8” (79.38 mm).
- **Weight**: 1.75 lbs. (794 g).
- **Agency Approvals**: CE.

### SWITCH SPECIFICATIONS
- **Switch Type**: 2 SPDT relays.
- **Electrical Rating**: 1 amp @ 30 VAC/VDC.
- **Set Point Adjustment**: Adjustable via keypad on face.

### ACCESSORIES
- **A-298, Flat Aluminum Bracket for flush mounting**: $26.75
- **A-301, Static Pressure Tip for 1/4” metal tubing connection**: $9.90
- **A-302, Static Pressure Tip for 3/16” and 1/8” I.D. plastic or rubber tubing**: $9.10
- **A-302F-A, 303 SS Static Pressure Tip with mounting flange**: $9.10
- **A-320-B, Instrument Enclosure**: $220.00
- **A-370, Mounting Bracket flush mount bracket**: $32.75
- **A-489, 4” Straight Static Pressure Tip with Flange**: $6.67

Items are subject to Schedule B discounts.

### OPTIONS
- **For NIST traceable calibration certificate, add suffix -NIST to model numbers.**
  - Example DH3-004-NIST: $90.00
- **For factory calibration certificate, add suffix -FC to model numbers.**
  - Example DH3-004-FC: $30.00

Items are net priced and are not subject to any discount.

See page 587 for process tubing options.

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**Model** | **Ranges** | **Price**
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DH3-002 | 0-0.25 in w.c. | $355.00
DH3-003 | 0-0.5 in w.c. | $289.00
DH3-004 | 0-1 in w.c. | $289.00
DH3-005 | 0-2.5 in w.c. | $289.00
DH3-006 | 0-5 in w.c. | $289.00
DH3-007 | 0-10 in w.c. | $289.00
DH3-008 | 0-25 in w.c. | $289.00
DH3-009 | 0-50 in w.c. | $289.00
DH3-010 | 0-100 in w.c. | $289.00
DH3-011 | 0-250 in w.c. | $355.00
DH3-012 | 0-500 in w.c. | $289.00
DH3-013 | 1-10 in w.c. | $289.00
DH3-014 | 1-25 in w.c. | $289.00
DH3-015 | 1-50 in w.c. | $289.00
DH3-016 | 1-100 in w.c. | $289.00
DH3-017 | 1-250 in w.c. | $289.00
DH3-018 | 1-500 in w.c. | $289.00

*Velocity and volumetric flow not available on bi-directional range units and models DH3-009 and DH3-010.