

# DBL Differential Pressure Switches (Plastic)

The DBL Series Differential Pressure Switches are general purpose pressure switches designed for both HVAC and Energy Management applications. These pressure switches can be used to sense positive, negative, or differential air pressures when used in conjunction with an DBZ-06, A/SPT or A/VPT Series sampling tube. The NEMA 3 (IP54) rated weather proof plastic enclosure contains an On/Off, single stage micro switch and two pressure chambers separated by a silicone diaphragm. The enclosure also contains a 1/2" conduit knockout and guards against accidental contact with the live switch terminal screws as well as the factory calibrated linear set point adjusting knob. The set point can be adjusted without comparing to a field gauge, manometer or magnehelic.

**Applications:** Monitoring Filter Blockage, Proof of Flow, Prove Excessive or Insufficient Flow, Alarms and Control

**The DBL Series is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, [www.workaci.com](http://www.workaci.com).**

## PRODUCT SPECIFICATIONS

<b>Input Pressure Range:</b>	See ordering on reverse side
<b>Adjustable Set Point Range:</b>	See ordering grid below (Internal Linear Scaled knob)
<b>Adjustable Set Point Switching Differential:</b>	Factory Default: +/- 15% of Trip / Set Point; See ordering grid below for adjustable switching differential range
<b>Contact (Load) Rating:</b>	250 VAC maximum, 1.0A Resistive (0.4A Inductive)
<b>Contact Arrangement:</b>	SPDT (Form 1C) w/ Automatic Reset
<b>Measured Media:</b>	Air and other non-combustible, non-aggressive gases
<b>Diaphragm Material:</b>	Silicone
<b>Maximum Operating Pressure:</b>	40" wc (10 kPa)
<b>Life Expectancy:</b>	1,000,000 cycles
<b>Operating   Storage Temperature Range:</b>	-4 to 185°F (-20 to 85°C)
<b>Mounting Direction:</b>	Any vertical plane
<b>Enclosure Material:</b>	Base = PA6.6 / Cover = Polystyrene (Transparent)
<b>Enclosure Rating:</b>	NEMA 3 (IP54)
<b>Sample Line Connections:</b>	Accepts 3/16" ID (8mm) Push on plastic/poly tubing
<b>Electrical Connections:</b>	Spade (Maximum 16 AWG (1.5 mm <sup>2</sup> ))
<b>Conduit Opening:</b>	Accepts 1/2" NPT Conduit
<b>Agency Approvals:</b>	CE, ISO 9001, RoHS2, WEEE
<b>Dimensions (Diameter x Height):</b>	4.00" x 2.30" (100 x 58 mm)
<b>Weight:</b>	DBL Series: 0.40 lbs (0.20 kg)   DBZ-06: 0.16 lbs (0.072 kg)

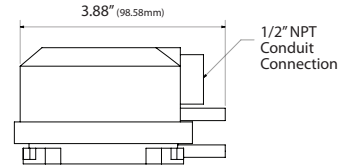
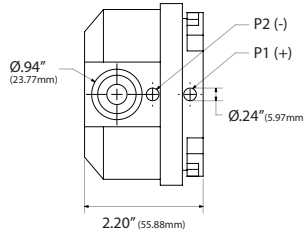
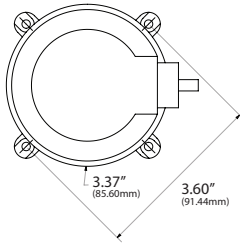
**Note:** For more information regarding the SPT and VPT Pitot Tubes, see their respective data sheets



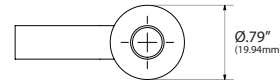
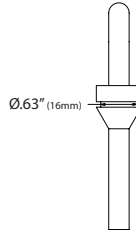
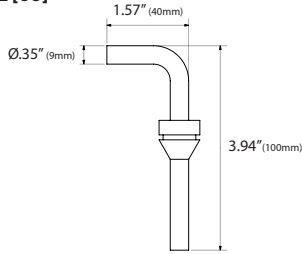


**DIMENSIONAL DRAWING**

**DBL [205]**



**DBZ [06]**



Front View

Right View

Top View

**STANDARD ORDERING**

Model # Example: **DBL-205L** -OR- **105934**

Model #	Item #	Ranges Inches wc (Adjustable Set Point)	Adjustable Switching Differential Inches w.c.	Contact
<b>DBL-205L</b>	105934	0.08 to 0.8" wc	0.04 to 0.08" wc	SPDT
<b>DBL-205B</b>	102423	0.20 to 2.0" wc	0.08 to 0.16" wc	SPDT
<b>DBL-205D</b>	102424	0.80 to 4.0" wc	0.40 to 0.80" wc	SPDT
<b>DBL-205E</b>	106255	2.0 to 10.0" wc	0.60 to 1.20" wc	SPDT

**ACCESSORIES ORDERING**

Model # Example: **DBZ-06** -OR- **106657**

Model #	Item #	Description
<b>DBZ-06</b>	106657	Duct Mounting Kit – Contains two metal right angle Pitot Tubes, two grommets and 6.5' (2.0m) tubing

**Note\*:** Other compatible products include ACI's Pick up Port (A/PUP) Series, Medical Grade Tubing Kit (A/10'), Transformer Series (A/LE) and DC Power Supplies (A/PS1.5 or A/LPR)

