

Overview

BAPI offers two styles of differential pressure switch: the Differential Pressure Switch in a BAPI-Box and the Beck Differential Pressure Switch. This application note provides a quick reference comparison between the two models. Specifications in the comparison include Pressure Ranges, Contact Ratings, Proof Pressure, Accuracy, Hysteresis and Repeatability.

Comparison



BAPI
Adjustable
Pressure
Switch



Beck
Adjustable
Pressure
Switch

Specifications	BAPI Adjustable Pressure Switch	Beck Adjustable Pressure Sensor
Pressure Adjustment	Springs to cover all ranges, square bit adjustment within range	3 factory configured ranges
Pressure Range	0.1 to 35.32" WC, (30 to 8,800 Pa)	0.08 to 4.00" WC (20 to 1000 Pa)
Pressure Fittings	0.25" (6.35 mm) brass fitting	0.25" (6.35mm) plastic fitting
Enclosure Type	UV-resistant polycarbonate	UV-resistant plastic
UL Listing	353	508
CE Conformity	No CE Rating	Low Voltage Directive 2006/95/EC; RoHS Directive 2011/65/EC; ATEX-Directive 2014/34/EC; CSA.
IP Rating	IP41 Equivalent	IP54 with cover attached (protection against dust and splashing water)
Wiring Connection	Spade connectors	Spade connectors or included spade terminals
Contacts	SPDT	SPDT
Application Items Included	BB lid screw pack	2 static probes, 2 screw packs, 2 meters of PVC tubing, 3 spade terminals, 4 sheet metal mounting screws
Operating Temp	-40 to 185°F (-40 to 85°C)	-4 to 185°F (-20 to 85°C)
Contact Ratings	28 VA pilot ducty, 24 VAC 1/10 HP, 120 to 277 VAC 125 VA, pilot duty, 125 VAC 2.5 A, inductive, 125 VAC 5.0 A, resistive, 125 VAC 0.1 A, 30 VDC	0.4 A, inductive, 250 VAC 1.5 A, resistive, 250 VAC 0.8 A, inductive, 125 VAC 3.0 A, resistive, 125 VAC 0.4 A, 30VDC 0.1 A, 24 VDC
Proof Pressure	100" WC (24,900 Pa)	40" WC (10,000 Pa)
Accuracy	±10%	±15%, min ±0.04" WC (10 Pa)
Hysteresis	0.07 to 0.09" WC (17.4 to 22.4 Pa)	BA/APSW1: 0.04" WC (10 Pa) BA/APSW2: 0.08" WC (20 Pa) BA/APSW3: 0.40" WC (100 Pa)
Drift	Specification not available	Less than 15%
Repeatability	<10% of setting	BA/APSW1: ±5%, min ±5 Pa BA/APSW2: ±2%, min ±5 Pa BA/APSW3: ±1%, min ±5 Pa