

# Honeywell Pressure Switches

Table 2. Specifications

Characteristic	HP Series	HE Series	LP Series	LE Series
Product length (connector version AMP Super Seal)	see page 5	see page 5	see page 6	see page 6
Product length (blade)	see page 5	see page 5	see page 6	see page 6
Product length (wire out)	see page 5	see page 5	see page 6	see page 6
Hex size	27 mm	27 mm	27 mm	27 mm
Ease of installation	box spanner	box spanner	box spanner	box spanner
Snap-action switch	yes	yes	yes	no
Set point <sup>1</sup> range	150 psi to 4500 psi	150 psi to 4500 psi	3.5 psi to 150 psi	3.5 psi to 150 psi
Set point ranges	6	6	4	4
Set point accuracy @ 25 °C (before test)	150 psi to 500 psi (±5 %) 500 psi to 4000 psi (±3.5 %) >4000 psi (±2 % [up to 2 %])	150 psi to 1000 psi (±14%) 1000 psi to 2000 psi (±12 %) 2000 psi to 4000 psi (±11 %) >4000 psi (±10 % [up to 10 %])	for 3.5 psi to 10 psi (±1 psi), for >10 psi to 50 psi (±3 psi), for >50 psi to 100 psi (±7 psi), for >100 psi to 150 psi (±10 psi)	for 3.5 psi to 10 psi (±1 psi), for >10 psi to 50 psi (±3 psi), for >50 psi to 100 psi (±7 psi), for >100 psi to 150 psi (±10 psi)
Average deadband	n/a	n/a	n/a	for 3.5 psi to 10 psi (±2.8 psi), for >10 psi to 50 psi (±14 psi), for >50 psi to 100 psi (±38 psi), for >100 psi to 150 psi (±40 psi)
Operating pressure <sup>2</sup>	5,000 psi max.	5,000 psi max.	250 psi max.	250 psi max.
Proof pressure <sup>3</sup>	10,000 psi	10,000 psi	500 psi	500 psi
Hysteresis	5 % to 55 % (based on set point range)	3 % to 65 % (based on set point range)	3 % to 50 % (based on set point range)	n/a
Burst pressure <sup>4</sup>	20,000 psi	20,000 psi	750 psi for set points 3.5 psi to 22 psi, 1250 psi for set points > 22 psi	750 psi for set points 3.5 psi to 22 psi, 1250 psi for set points > 22 psi
Current rating (resistive)	5 A at 250 Vac 5 A at 24 Vdc	5 A at 250 Vac 3 A at 24 Vdc	7.5 mA to 5 A, 24 Vdc and 250 Vac	7.5 mA to 3 A, 24 Vdc and 250 Vac
Current rating (inductive)	5 A at 115 Vac (SX rating) 3 A at 28 Vdc	n/a	1 A at 28 Vdc	n/a
Temperature rating	-40 °C to 120 °C [-40 °F to 248 °F]	-40 °C to 85 °C [-40 °F to 185 °F]	-40 °C to 120 °C [-40 °F to 248 °F]	-40 °C to 120 °C [-40 °F to 248 °F]
Media connection	multiple ports available	multiple ports available	multiple ports available	multiple ports available
Pressure ports	M14 × 1.5, M18 × 1.5, 1/2-20 UNF, 9/16-18 UNF, 3/4-16 UNF, 7/8-14 UNF		1/4-18 NPT, 1/8-27 NPT, 1/2-20 UNF, 1/8-27 PTF, M12 × 1.5, M14 × 1.5, 9/16-18 UNF, 3/4-16 UNF, G1/8 BSPP, 7/16-20 UNF, R1/8 BSPT, M10 × 1.0, R1/2 BSPT, G1/4 BSPP, R1/4 BSPT	1/4-18 NPT, 1/8-27 NPT, 1/2-20 UNF, 1/8-27 PTF, M12 × 1.5, M14 × 1.5, 9/16-18 UNF, 3/4-16 UNF, G1/8 BSPP, 7/16-20 UNF, R1/8 BSPT, M10 × 1.0, R1/2 BSPT, G1/4 BSPP, R1/4 BSPT

# HP Series, HE Series, LP Series, LE Series

Table 2. Specifications (continued)

Characteristic	HP Series	HE Series	LP Series	LE Series
Termination	AA = Spade Terminals BA = Screw Terminals CA = Deutsch DT04-3P-E005 (3-Pin Connector) DA = Amp Super Seal 1.5 - 282105-1 (3-Pin Connector) EA = 10-inch Cable, 18 AWG (Wire Out, No Connector) FA = 10-inch Cable w/Deutsch DT04-3P-E005 (3-Pin Connector) (16 AWG)* GA = 10-inch Cable w/Amp Super Seal 1.5 - 282105-1 (3-Pin Connector) (18 AWG)* HA = 10-inch Cable w/Metripack 280 Delphi 15300002 (2-Pin Connector) (18 AWG)* JA = 10-inch Cable w/Din43650-C (3-Pin Connector) (18 AWG)* KA = 10-inch Cable w/M12x1 (Brad Harrison Micro) - 21032121306 Harting P/N (3-Pin Connector) (18 AWG)* LA = 10-inch Cable w/Packard Weatherpack Male Terminal - 12020827 (3-Pin Connector) (18 AWG) MA = 10-inch Cable w/Deutsch DT04-2P-E005 (2-Pin Connector) (18 AWG) NA = 3-inch Cable w/Packard 2P Tower Connector - 12015792 (2-Pin Connector) (18 AWG) PA = 2.75-inch Cable w/Packard 2P Shroud Connector - 12010973 (2-Pin Connector) (18 AWG) RA = 4-inch Cable w/Packard 2P Shroud Connector - 12010973 (2-Pin Connector) (16 AWG) SA = 5.5-inch Cable w/ITT Cannon 2P Sure-Seal Circular Connector - SS2R-120-1804-000 (2-Pin Connector) (18 AWG) TA = 8.5-inch Cable w/ITT Cannon 3P Sure-Seal Circular Connector - SS3R-120-8551-001 (3-Pin Connector) (16 AWG)* UA = 10-inch Cable - Vacuum Impregnated w/Deutsch DT06-3S-EP06 (3-Socket Connector) (16 AWG)* VA = 10-inch Cable - Vacuum Impregnated w/Deutsch DT04-3P-E005 (3-Pin Connector) (16 AWG)* WA = 4.5-inch Cable w/Blade Terminals 6,3 mm x 0,8 mm (16 AWG)* YA = 6-inch Cable w/Amp Super Seal 1.5 - 282104-1 (2-Pin Connector) (18 AWG)* ZA = 10-inch Cable w/Deutsch DT06-2S-CE06 (2-Socket Connector) (18 AWG) AB = Deutsch DT04-2P-E005 (2-Pin Connector)** BB = 10-inch Cable w/Metripack 150 Delphi 12129615 (3-Pin Connector) (18 AWG)* DB = 10-inch Cable w/AMP 2,5 mm System Series Connector 1-967402-1 (18 AWG)* EB = 4.5-inch Cable w/Packard Shroud Connector 12015792 (2-Pin Connector) (18 AWG) FB = 10-inch Cable w/Metripack 150 Delphi 12052641 (2-Pin Connector) (18 AWG) GB = 10-inch Cable w/Deutsch Plug HD 16-3 96S (3-Pin Connector) (16 AWG)*			
Circuit forms <sup>5</sup>	SPDT, SPST - NO/NC	SPDT, SPST - NO/NC	SPDT, SPST - NO/NC	SPDT, SPST - NO/NC
Life	2 million	1 million	2 million	1 million
Agency approvals (special use switches)	UL pending	UL pending	UL pending	UL pending
Agency approvals (other)	CE	CE	CE pending	CE pending
Field adjustability <sup>6</sup>	no	no	yes	yes
Spike dampening	yes	yes	no	no
Ingress protection <sup>7</sup>	IP67	IP67	IP67	IP67
Vibration resistance	10 Hz to 2000 Hz at 15 g 20 min/sweep	10 Hz to 2000 Hz at 15 g 20 min/sweep	10 Hz to 2000 Hz at 15 g 20 min/sweep	10 Hz to 2000 Hz at 15 g 20 min/sweep
Shock resistance	500 m/sec <sup>2</sup> , 11 mSEC, 100 shocks / axis	500 m/sec <sup>2</sup> , 11 mSEC, 100 shocks / axis	500 m/sec <sup>2</sup> , 11 mSEC	500 m/sec <sup>2</sup> , 11 mSEC
Wetted part (diaphragm)	n/a	n/a	Kapton® (Teflon® coated), Tefzel®	Kapton® (Teflon® coated), Tefzel®
Wetted part (piston)	nitrile or EPDM O-ring, steel piston	nitrile or EPDM O-ring, steel piston	n/a	n/a
Weight	0,133 g [4.7 oz]	0,133 g [4.7 oz]	0,058 kg [2.0 oz]	0,053 kg [1.9 oz]
Contacts	silver / gold inlay	silver	gold plated	gold plated
Product finish	zinc plating	zinc plating	zinc plating	zinc plating

<sup>1</sup>Set point: Point at which switch actuates or de-actuates

<sup>2</sup>Operating pressure: Maximum normal system operating pressure (above set point)

<sup>3</sup>Proof pressure: Maximum pressure that the switch can handle while it maintains set point accuracy. Intermittent spikes to this level are acceptable.

<sup>4</sup>Burst pressure: Point of complete switch failure

<sup>5</sup>SPST: Single pole, single throw. SPDT: Single pole, double throw. NO: Normally open. NC: Normally closed.

<sup>6</sup>Field adjustability only available with AA, BA, CA, and DA (SPST only) terminations.

<sup>7</sup>IP00 for AA and BA terminations.

\*These connectors are designed for dual circuit (SPDT) by default. They can be used for single-circuit applications (SPNC/SPNO) by making suitable connections. Refer to wiring diagram.

\*\*Option AB is available only for LP and LE Series.