Honeywell

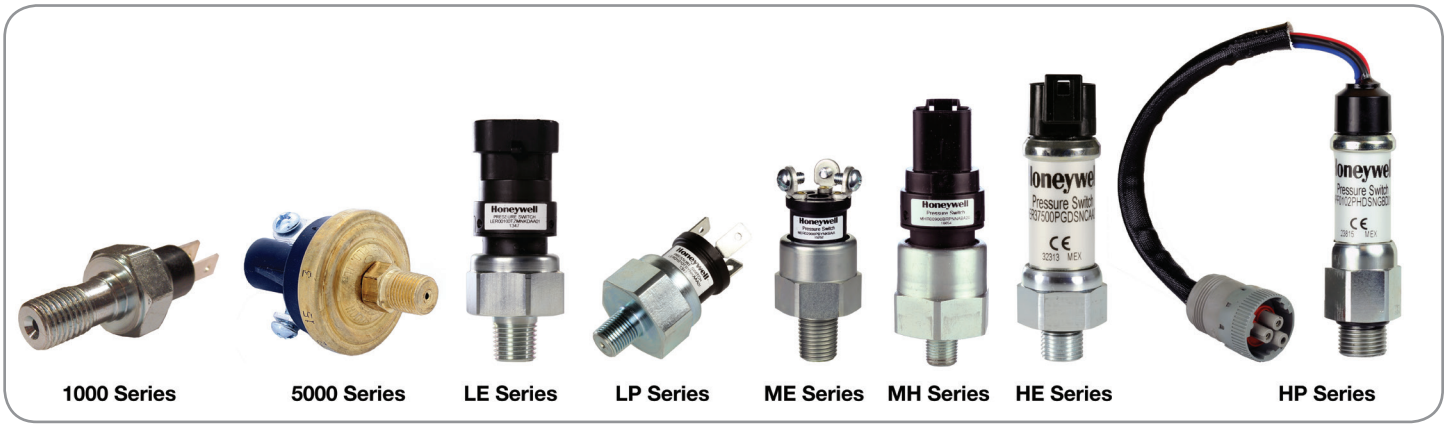
# Honeywell Pressure Switches

HP, HE, MH, ME, LP, LE, 5000, and 1000 Series

**50094081**

*Issue 5*

**Datasheet**




## DESCRIPTION

The Honeywell Pressure Switch portfolio consists of:

- High Pressure (HE/HP Series)
- Medium Pressure (ME/MH Series)
- Low Pressure (LE/LP Series)
- 5000 Series, 1000 Series

These pressure switches are durable, reliable electromechanical gauge pressure on/off switches that are available with either single pole single throw (SPST) normally open or normally closed circuitry, or single pole double throw (SPDT) circuitry. Their high proof pressure and burst pressure ratings can allow for use in many rugged applications that require the making or breaking of an electrical connection in response to a pressure change of the system media.

## DIFFERENTIATION

- **Through optional smart diagnostic technology, Honeywell pressure switches are able to detect failures such as open circuits, cut wires, worn insulation, and more[6]**
- Optional smart diagnostic technology allows up to four segregated signal amplitudes to perform diagnostics and status[6]
- Pressure port snubber suppresses pressure spikes[2]
- IP67 sealing provides enhanced durability in harsh environmental and washing applications[1]

## VALUE TO CUSTOMERS

- Designed to provide resistance to corrosion and enhances equipment life with available two million life cycle rating and IP67 rating[1]
- Can expedite design and product cycle due to ability to receive samples in two weeks and production units in four weeks
- Can reduce tooling, service, and manufacturing labor costs due to standard connections, extended product life, and expedited design and production cycle

## FEATURES

- Pressure switching set point range: 3.5 psi to 4500 psi
- Proof pressure: from 500 psi up to 10,000 psi
- Burst pressure: from 1250 psi up to 20,000 psi
- Life cycle rating up to 2 million
- IP67 sealing rating[4]
- Operating temperature: -40 °C to 120 °C [-40 °F to 248 °F]
- Hysteresis option[5]
- More than 15 pressure port options and over 30 electrical terminations
- Plated steel, brass or stainless steel options[3]
- Switching point accuracy up to ±2 %

## POTENTIAL APPLICATIONS



- Agricultural machinery
- Heavy duty construction machinery and trucks
- Lawn & garden machinery
- Marine vessels
- Material handling machinery
- Railway



- CNC machines
- Compressors/boilers
- Fracking equipment
- Food & beverage equipment
- Generators
- HVAC/R equipment
- Mud pumps
- Pneumatic equipment
- Presses/punches
- Pressure washers
- Trash compactors
- Water pumps & jet cutting machines

## PORTFOLIO

Honeywell also offers the PBN1 Series and PBN3 Series Pressure Sensor.

[1] HP, HE, MH, ME, LP, LE Series
[2] HP, HE Series
[3] ME, MH, LP, LE Series
[4] HP, HE, LP, LE, ME Series
[5] HP, HE, LP Series
[6] HP, HE, ME, LP, LE Series

# Honeywell Pressure Switches, HP, HE, MH, ME, LP, LE, 5000, 1000 Series

**Table 1. Specifications**

| Characteristic | HP Series | HE Series | ME Series | MH Series | LP Series | LE Series | 5000 Series | 1000 Series |
|---|---|---|---|---|---|---|---|---|
| Product length (various terminations) | see pages 5 and 6 | see page 5 | see page 8 | see page 7 | see page 9 | see page 9 | see page 10 | – |
| Product length (blade) | see pages 5 and 6 | see page 5 | see page 8 | see page 7 | see page 9 | see page 9 | 58,42 mm [2.3 in] | 65,6 mm [2.583 in] |
| Product length (#8-32 screws) | see pages 5 and 6 | see page 5 | see page 8 | see page 7 | see page 9 | see page 9 | 60,96 mm [2.4 in] | – |
| Product length (Metripack) | see pages 5 and 6 | see page 5 | see page 8 | see page 7 | see page 9 | see page 9 | 73,66 mm [2.9 in] | – |
| Hex size | 27 mm | 27 mm | 27 mm | 27 mm | 27 mm | 27 mm | 0.50 in (steel) 0.437 in (brass) | M10 x 1.25 banjo fitting |
| Ease of installation | box spanner | box spanner | box spanner | box spanner | box spanner | box spanner | 1/2 in open spanner | 18 mm open spanner |
| Snap-action switch | yes | yes | no | no | yes | no | no | no |
| Set point[1] range | 100 psi to 4500 psi | 150 psi to 4500 psi | 25 psi to 350 psi | 40 psi to 500 psi | 3.5 psi to 150 psi | 3.5 psi to 150 psi | 75 psi to 150 psi | 10 psi to 60 psi [0,69 bar to 2,7 bar] |
| Set point ranges | 6 (Base Style A) 7 (Base Style B) | 6 | 4 | 4 | 4 | 4 | 8 | – |
| Set point accuracy @ 25 °C (before test) | 100 psi to 150 psi (±10 %); 150 psi to 500 psi (±6 %); 501 psi to 4000 psi (±3.5 %); 4000 psi to 4500 psi (±2 %) | 150 psi to 1000 psi (±14%); 1000 psi to 2000 psi (±12 %); 2000 psi to 4000 psi (±11 %); >4000 psi (±10 %) | 25 psi to 50 psi (±3 psi); >50 psi to 100 psi (±7 psi); >100 psi to 150 psi (±10 psi); >150 psi to 250 psi (±13 psi); >250 psi to 350 psi (±16 psi) | 40 psi to 70 psi (±7 psi); >70 psi to 130 psi (±10 psi); >130 psi to 200 psi (±15 psi); >200 psi to 280 psi (±20 psi); >280 psi to 350 psi (±30 psi); >350 psi to 500 psi (±40 psi) | 3.5 psi to 10 psi (±1 psi); >10 psi to 50 psi (±3 psi); >50 psi to 100 psi (±7 psi); >100 psi to 150 psi (±10 psi) | | 0.5 psi to 1 psi (±0.3 psi); 1.1 psi to 3 psi (±0.5 psi); 3.1 psi to 7 psi (±1 psi); 8 psi to 13 psi (±2 psi); 14 psi to 24 psi (±3 psi); 25 psi to 50 psi (±5 psi); 51 psi to 90 psi (±7 psi); 91 psi to 150 psi (±10 psi) | 20 psi ±10 psi; 58 psi ±20 psi |
| Average dead-band max. | n/a | n/a | 25 psi to 50 psi (20 psi); >50 psi to 100 psi (30 psi); >100 psi to 150 psi (40 psi); >150 psi to 250 psi (50 psi); >250 psi to 350 psi (60 psi) | 40 psi to 70 psi (±6 psi); >70 psi to 130 psi (±10 psi); >130 psi to 200 psi (±15 psi); >200 psi to 280 psi (±20 psi); >280 psi to 350 psi (±30 psi); >350 psi to 500 psi (±40 psi) | n/a | 3.5 psi to 10 psi (±2.8 psi); >10 psi to 50 psi (±14 psi); >50 psi to 100 psi (±38 psi); >100 psi to 150 psi (±40 psi) | 0.5 psi to 3 psi (±1.5 psi); 4 psi to 7 psi (±2.5 psi); 8 psi to 13 psi (±3.5 psi); 14 psi to 24 psi (±8 psi); 25 psi to 50 psi (±15 psi); 51 psi to 90 psi (±23 psi); 91 psi to 150 psi (±40 psi) | n/a |
| Operating pressure[2] | 5,000 psi max. | 5,000 psi max. | 500 psi max. | 600 psi max. | 250 psi max. | 250 psi max. | 150 psi, 250 psi | 1400 psi [96,5 bar] max. |
| Proof pressure[3] | 10,000 psi (Base Style A) 6,500 psi (Base Style B) | 10,000 psi | 4,000 psi | 6,000 psi | 500 psi | 500 psi | 500 psi | 2973 psi [205 bar] |
| Hysteresis | 5 % to 55 % (based on set point range) | 3 % to 65 % (based on set point range) | n/a | n/a | 5 % to 55 % (based on set point range) | n/a | n/a | n/a |
| Burst pressure[4] | 20,000 psi (Base Style A); 9,000 psi (Base Style B) | 20,000 psi | 8,000 psi | 9,000 psi | 1250 psi | 1250 psi | 4000 psi | 3500 psi [241 bar] |
| Current rating (resistive) | 5 A at 250 Vac 5 A at 24 Vdc | 3 A at 250 Vac 3 A at 24 Vdc | 7.5 mA to 3 A, 24 Vdc and 250 Vac | 100 mA to 3 A max. | 7.5 mA to 5 A, 24 Vdc and 250 Vac | 7.5 mA to 3 A, 24 Vdc and 250 Vac | 15 A, 6 Vdc; 8 A, 12 Vdc; 4 A, 24 Vdc | 12 Vdc with two-1157 bulbs (4.4 A) |
| Current rating (inductive) | 5 A at 115 Vac (SX rating); 3 A at 28 Vdc | n/a | n/a | n/a | 1 A at 28 Vdc | n/a | 1 A, 120 Vac 0.5 A, 240 Vac | n/a |

[8]Port Style C: Switches less than 975 psi will use Base Style B; switches greater than 975 psi will use Base Style A.
Port Styles F and G: Switches less than 350 psi will use Base Style B; switches greater than 350 psi will use Base Style A.
Port Styles A, B, E, M, P, T, and Y will use Base Style B.
Switches less than 150 psi will only use Base Style B.

# Honeywell Pressure Switches, HP, HE, MH, ME, LP, LE, 5000, 1000 Series

| Characteristic | HP Series | HE Series | ME Series | MH Series | LP Series | LE Series | 5000 Series | 1000 Series |
|---|---|---|---|---|---|---|---|---|
| Rated thermal current | 5 A | 3 A | 3 A | n/a | 5 A | 3 A | n/a | n/a |
| Rated insulation voltage | 28 V | 28 V | 28 V | n/a | 28 V | 28 V | n/a | n/a |
| Short-circuit protective device c-type max. rating | Class J fuse (10 A, 600 V) | | | n/a | Class J fuse (10 A, 600 V) | | n/a | n/a |
| Conditional short circuit current | 1000 A | | | n/a | 1000 A | 1000 A | n/a | n/a |
| Pollution degree | 3 (macro environment) | | | n/a | 3 (macro environment) | | n/a | 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 121 °C [-40 °F to 250 °F] | -20 °C to 74 °C [-4 °F to 165 °F] |
| Media connection | multiple ports available | multiple ports available | multiple ports available | | | | 1/8-27 NPT male thread | multiple ports available |
| Pressure ports | Refer to product nomenclature for pressure port types. | C = 1/2-20 UNF<br>F = M14 × 1.5<br>G =9/16-18 UNF<br>H = 3/4-16 UNF<br>K = M18 × 1.5<br>N = 7/8-14 UNF | A = 1/4-18 NPT<br>B = 1/8-27 NPT<br>C = 1/2-20 UNF<br>D = 1/8-27 PTF<br>E = M12 × 1.5<br>F = M14 × 1.5<br>G = 9/16-18 UNF<br>H = 3/4-16 UNF<br>J = G1/8 BSPP<br>M = 7/16-20 UNF<br>R = R1/8 BSPT<br>T = M10 × 1.0<br>V = R1/2 BSPT<br>Y = G1/4 BSPP<br>Z = R1/4 BSPT | A = 1/4-18 NPT<br>B = 1/8-27 NPT<br>C = 1/2-20 UNF<br>D = 1/8-27 PTF<br>E = M12 × 1.5<br>F = M14 × 1.5<br>G = 9/16-18 UNF<br>H = 3/4-16 UNF<br>J = G1/8 BSPP<br>L = 3/8-24 UNF<br>M = 7/16-20 UNF<br>P = 1/2-14 NPT<br>R = R1/8 BSPT<br>T = M10 × 1.0<br>V = R1/2 BSPT<br>Y = G1/4 BSPP<br>Z = R1/4 BSPT | A = 1/4-18 NPT<br>B = 1/8-27 NPT<br>C = 1/2-20 UNF<br>D = 1/8-27 PTF<br>E = M12 × 1.5<br>F = M14 × 1.5<br>G = 9/16-18 UNF<br>H = 3/4-16 UNF<br>J = G1/8 BSPP<br>M = 7/16-20 UNF<br>R = R1/8 BSPT<br>T = M10 × 1.0<br>V = R1/2 BSPT<br>Y = G1/4 BSPP<br>Z = R1/4 BSPT | A = 1/4-18 NPT<br>B = 1/8-27 NPT<br>C = 1/2-20 UNF<br>D = 1/8-27 PTF<br>E = M12 × 1.5<br>F = M14 × 1.5<br>G = 9/16-18 UNF<br>H = 3/4-16 UNF<br>J = G1/8 BSPP<br>M = 7/16-20 UNF<br>R = R1/8 BSPT<br>T = M10 × 1.0<br>V = R1/2 BSPT<br>Y = G1/4 BSPP<br>Z = R1/4 BSPT | 1/8-27 NPT | M10 x 1.25 double banjo;<br>M10 x 1;<br>1/8-27 NPT |
| Circuit forms[5] | SPDT, SPST - NO/NC | | SPDT, SPST - NO/NC | SPST - NO/NC | SPDT, SPST - NO/NC | SPDT, SPST - NO/NC | SPST-NO; SPST-NC | SPNO |
| Smart pressure | single- or dual-resistor topology available | | | – | single- or dual-resistor topology available | | – | – |
| Life | 2 million (Base A)<br>1 million (Base B) | 1 million | 1 million | 1 million | 2 million | 1 million | 100,000 cycles | 100,000 cycles |
| Agency approvals (special use switches) | – | – | – | – | – | – | UL Custom (select models) | – |
| Agency approvals (other) | CE | CE | CE | CE | CE | CE | – | – |
| Field adjustability[6] | no | no | yes | yes | yes | yes | yes | no |
| Spike dampening | yes | yes | no | no | no | no | no | no |
| Ingress protection[7] | IP67 (connecetors)<br>IP67 (wire/Base A)<br>IP69K (wire/Base B)<br>IP00 (blade/screw) | IP67 (connectors)<br>IP00 (blade/screw) | IP67 (connectors)<br>IP67 (wire out)<br>IP00 (blade/screw) | IP67 (connectors)<br>IP00 (blade/screw) | IP67 (connectors)<br>IP67 (wire out)<br>IP00 (blade/screw) | IP67 (connectors)<br>IP67 (wire out)<br>IP00 (blade/screw) | IP00 | IP65 |
| Vibration resistance | swept sine: 10 Hz to 2000 Hz at 15 g, 20 min/sweep; 8 hours in each axis<br>random: 5 Hz to 2000 Hz, 8 hours/axis; 14,88 g-RMS, each axis | | | | | | – | – |
| Shock resistance | 500 m/sec$^2$, 11 mSEC, 100 shocks / axis | | 500 m/sec$^2$, 11 mSEC | | | | | 15 G @ 5 mSEC |
| Wetted part (diaphragm) | n/a | | Kapton® (Teflon® coated) | Nitrile/EPDM/LTNB | Kapton® (Teflon® coated) | Tefzel® | Polymide film | EPDM |
| Wetted part (piston) | nitrile o-ring, steel piston | | nitrile or EPDM o-ring | nitrile or EPDM o-ring | nitrile or EPDM o-ring | nitrile or EPDM o-ring | nitrile or EPDM o-ring | EPDM |
| Weight | 133 g [4.7 oz] (Base Style A)<br>178 g [6.28 oz] (Base Style B) | | 53 g [1.9 oz] | 53 g [1.9 oz] | 58 g [2.0 oz] | 53 g [1.9 oz] | 65 g [2.3 oz] | 40 g [1.4 oz] |
| Contacts | silver / gold inlay | silver | gold plated | gold plated | gold plated | gold plated | silver-plated copper | silver-plated copper |
| Product finish | zinc plating | zinc plating | zinc plating | zinc plating | zinc plating | zinc plating | glass reinforced polyester (housing); plated steel (base) | Rynite 545 glass filled (housing); Travalent plated steel (base) |

[1]Set point: Point at which switch actuates or de-actuates
[2]Operating pressure: Maximum normal system operating pressure
[3]Proof pressure: Maximum pressure that the switch can handle while it maintains set point accuracy. Intermittent spikes to this level are acceptable.
[4]Burst pressure: Point of complete switch failure
[5]SPST: Single pole, single throw. SPDT: Single pole, double throw. NO: Normally open. NC: Normally closed.
[6]Field adjustability only available with AA, BA, CA, and DA (SPST only) terminations.
[7]IP00 for AA and BA terminations.

**Table 2. Terminations**

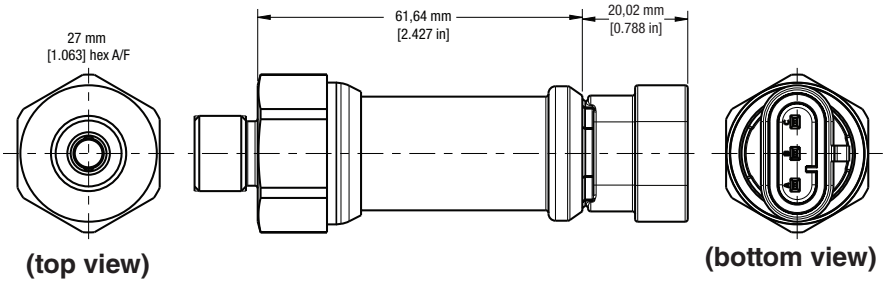
| Series | Available Terminations |
|---|---|
| HP, HE, ME, LP, LE | AA = Spade Terminals<br>BA = Screw Terminals<br>CA = Deutsch DT04-3P-E005 (3-Pin Connector)<br>DA = Amp Super Seal 1.5 - 282105-1 (3-Pin Connector)<br>EA = 10-inch Cable, 18 AWG (Wire Out, No Connector)<br>FA = 10-inch Cable w/Deutsch DT04-3P-E005 (3-Pin Connector) (16 AWG)*<br>GA = 10-inch Cable w/Amp Super Seal 1.5 - 282105-1 (3-Pin Connector) (18 AWG)*<br>HA = 10-inch Cable w/Metripack 280 Delphi 15300002 (2-Pin Connector) (18 AWG)*<br>JA = 10-inch Cable w/Din43650-C (3-Pin Connector) (18 AWG)*<br>KA = 10-inch Cable w/M12x1 (Brad Harrison Micro) - 21032121306 Harting P/N (3-Pin Connector) (18 AWG)*<br>LA = 10-inch Cable w/Packard Weatherpack Male Terminal - 12020827 (3-Pin Connector) (18 AWG)*<br>MA = 10-inch Cable w/Deutsch DT04-2P-E005 (2-Pin Connector) (18 AWG)<br>NA = 3-inch Cable w/Packard 2P Tower Connector - 12015792 (2-Pin Connector) (18 AWG)<br>PA = 2.75-inch Cable w/Packard 2P Shroud Connector - 12010973 (2-Pin Connector) (18 AWG)<br>RA = 4-inch Cable w/Packard 2P Shroud Connector - 12010973 (2-Pin Connector) (16 AWG)<br>SA = 5.5-inch Cable w/ITT Cannon 2P Sure-Seal Circular Connector - SS2R-120-1804-000 (2-Pin Connector) (18 AWG)<br>TA = 8.5-inch Cable w/ITT Cannon 3P Sure-Seal Circular Connector - SS3R-120-8551-001 (3-Pin Connector) (16 AWG)*<br>UA = 10-inch Cable - Vacuum Impregnated w/Deutsch DT06-3S-EP06 (3-Socket Connector) (16 AWG)*<br>VA = 10-inch Cable - Vacuum Impregnated w/Deutsch DT04-3P-E005 (3-Pin Connector) (16 AWG)*<br>WA = 4.5-inch Cable w/Blade Terminals 6,3 mm x 0,8 mm (16 AWG)*<br>XA = 10-inch Cable w/ Metripack 2-Pin Shroud Connector 153000027 (18 AWG)<br>YA = 6-inch Cable w/Amp Super Seal 1.5 - 282104-1 (2-Pin Connector) (18 AWG)*<br>ZA = 10-inch Cable w/Deutsch DT06-2S-CE06 (2-Socket Connector) (18 AWG)<br>AB = Deutsch DT04-2P-E005 (2-Pin Connector)<br>BB = 10-inch Cable w/Metripack 150 Delphi 12129615 (3-Pin Connector) (18 AWG)*<br>CB = 6-inch Cable w/ AMP Super Seal 1.5 - 282080-1 (2-Pin Connector) (18 AWG)<br>DB = 10-inch Cable w/AMP 2,5 mm System Series Connector 1-967402-1 (18 AWG)*<br>EB = 4.5-inch Cable w/Packard Shroud Connector 12015792 (2-Pin Connector) (18 AWG)<br>FB = 10-inch Cable w/Metripack 150 Delphi 12052641 (2-Pin Connector) (18 AWG)<br>GB = 8.5-inch Cable w/Deutsch Plug HD 16-3 96S (3-Pin Connector) (16 AWG) |
| MH | AA = Spade Terminals<br>BA = Screw Terminals<br>DA = Amp Super Seal 1.5 - 282105-1 (3-Pin Connector)<br>EA = 10-inch Cable, 18 AWG (Wire Out, No Connector)<br>HA = 10-inch Cable w/Metripack 280 Delphi 15300002 (2-Pin Connector) (18 AWG)*<br>MA = 10-inch Cable w/Deutsch DT04-2P-E005 (2-Pin Connector) (18 AWG)<br>NA = 3-inch Cable w/Packard 2P Tower Connector - 12015792 (2-Pin Connector) (18 AWG)<br>PA = 2.75-inch Cable w/Packard 2P Shroud Connector - 12010973 (2-Pin Connector) (18 AWG)<br>RA = 4-inch Cable w/Packard 2P Shroud Connector - 12010973 (2-Pin Connector) (16 AWG)<br>SA = 5.5-inch Cable w/ITT Cannon 2P Sure-Seal Circular Connector - SS2R-120-1804-000 (2-Pin Connector) (18 AWG)<br>WA = 4.5-inch Cable w/Blade Terminals 6,3 mm x 0,8 mm (16 AWG)*<br>XA = 10-inch Cable w/ Metripack 2-Pin Shroud Connector 153000027 (18 AWG)<br>YA = 6-inch Cable w/Amp Super Seal 1.5 - 282104-1 (2-Pin Connector) (18 AWG)*<br>ZA = 10-inch Cable w/Deutsch DT06-2S-CE06 (2-Socket Connector) (18 AWG)<br>AB = Deutsch DT04-2P-E005 (2-Pin Connector)<br>CB = 6-inch Cable w/ AMP Super Seal 1.5 - 282080-1 (2-Pin Connector) (18 AWG)<br>DB = 10-inch Cable w/AMP 2,5 mm System Series Connector 1-967402-1 (18 AWG)*<br>EB = 4.5-inch Cable w/Packard Shroud Connector 12015792 (2-Pin Connector) (18 AWG)<br>FB = 10-inch Cable w/Metripack 150 Delphi 12052641 (2-Pin Connector) (18 AWG) |

*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.

## DIMENSIONS – HIGH PRESSURE: HP SERIES (BASE STYLE A), HE SERIES

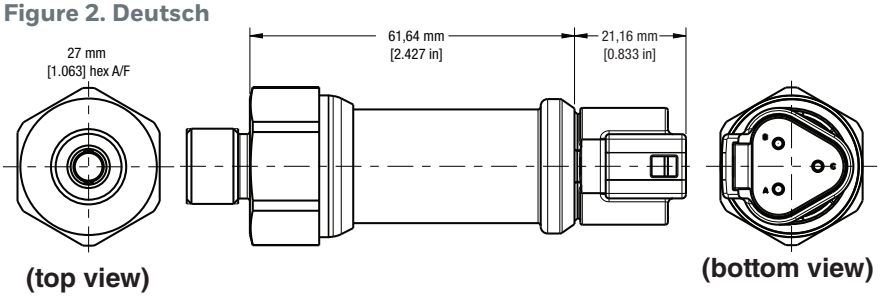
Base Style A key specifications • Life: 2 million (HP), 1 million (HE); Burst pressure: 20,000 psi

### Figure 1. AMP Superseal 1.5



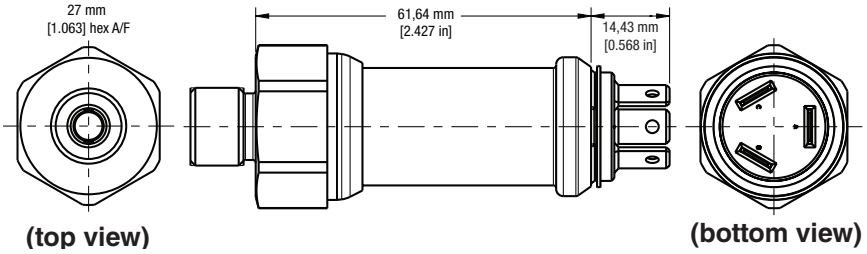

**Female Connector Part Number (included):** C-282105
**Male Mating Connector (customer provided):** C-282087
**IP Rating:** IP67

### Figure 2. Deutsch

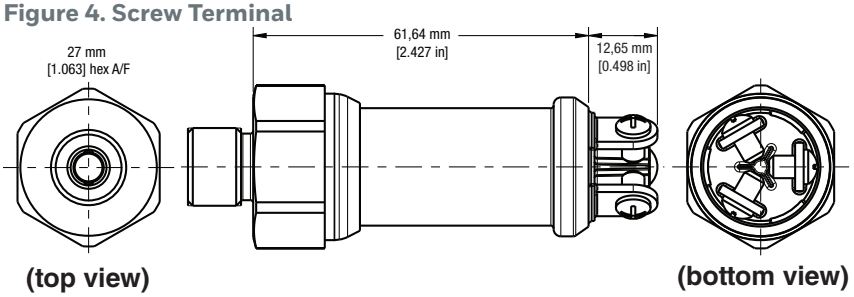



**Female Connector Part Number (included):** DT04-3P
**Male Mating Connector (customer provided):** DT06-3S
**IP Rating:** IP67

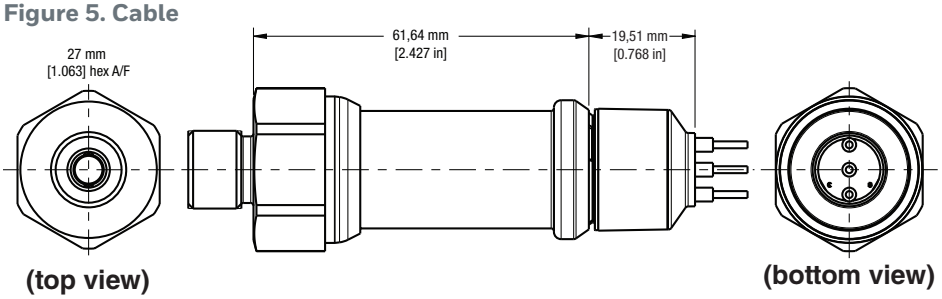
### Figure 3. Spade Terminal




### Figure 4. Screw Terminal




### Figure 5. Cable




**IP Rating:** IP67

## DIMENSIONS – HIGH PRESSURE: HP SERIES (BASE STYLE B)

Base Style B key specifications • Life: 1 million; Burst pressure: 9,000 psi

**Figure 6. HP Series Base Style B**

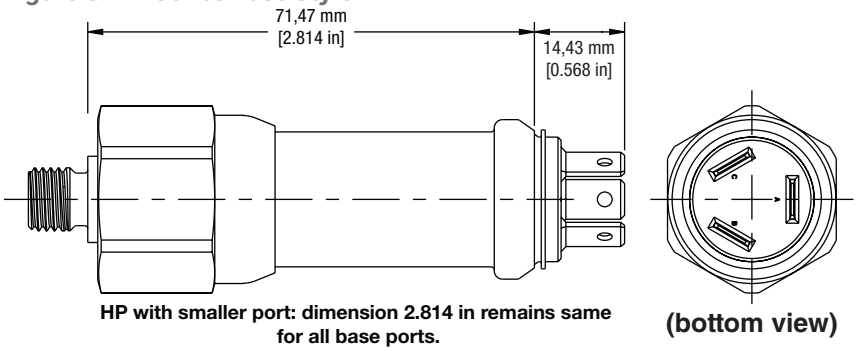



**Figure 7. HP Series Pressure Port Dimensions**

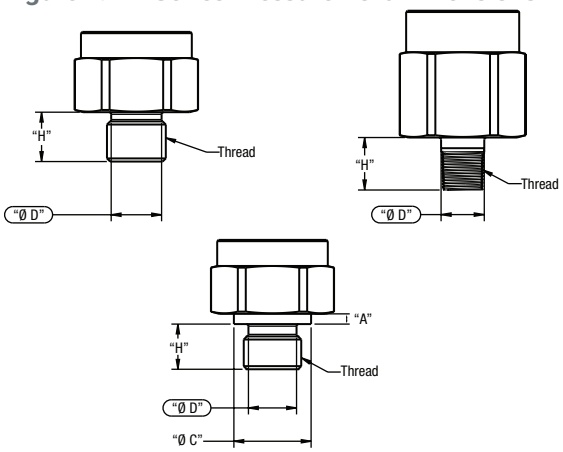



**Table 3. HP/HE Series Pressure Port Diameters and Heights**

| Nomenclature Code | Thread | Height "A" | Diameter "ØD" | Diameter "ØC" | Height "H" |
|---|---|---|---|---|---|
| **M** | 7/16-20 UNF | – | 9,25 mm [0.364 in] | – | 11 mm [0.433 in] |
| **C**[1] | 1/2-20 UNF | – | 10,85 mm [0.427 in] | – | 11 mm [0.433 in] |
| **G**[2] | 9/16-18 UNF | – | 12,24 mm [0.482 in] | – | 12 mm [0.472 in] |
| **H** | 3/4-16 UNF | – | 16,74 mm [0.66 in] | – | 14 mm [0.551 in] |
| **N** | 7/8-14 UNF | – | 19,6 mm [0.773 in] | – | 16 mm [0.630 in] |
| **T** | M10 x 1.0 | 1,60 mm [0.063 in] | 9,25 mm [0.364 in] | 13,79 mm [0.543 in] | 11 mm [0.433 in] |
| **E** | M12 x 1.5 | 2,48 mm [0.098 in] | 10,85 mm [0.427 in] | 16,79 mm [0.661 in] | 11 mm [0.433 in] |
| **F**[2] | M14 x 1.5 | 2,48 mm [0.098 in] | 12,24 mm [0.482 in] | 18,8 mm [0.74 in] | 12 mm [0.472 in] |
| **K** | M18 x 1.5 | 2,48 mm [0.098 in] | 16,74 mm [0.66 in] | 23,8 mm [0.937 in] | 14 mm [0.551 in] |
| **B** | 1/8-27 NPT | – | 10,29 mm [0.405 in] | – | 12,497 mm [0.492 in] |
| **A** | 1/4-18 NPT | – | 13,72 mm [0.540 in] | – | 17,63 mm [0.694 in] |

[1]Port Style C: Switches less than 975 psi will use Base Style B; switches greater than 975 psi will use Base Style A.
[2]Port Styles F and G: Switches less than 350 psi will use Base Style B; switches greater than 350 psi will use Base Style A. Switches less than 150 psi will use only Base Style B.

## DIMENSIONS - MEDIUM PRESSURE: MH SERIES

**Figure 8. AMP Superseal 1.5**

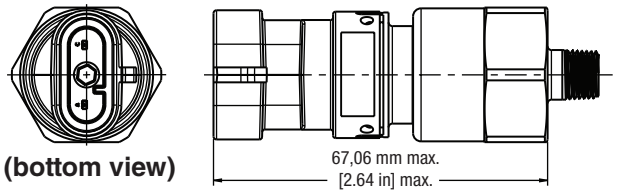



**Figure 9. Deutsch 2-pin**

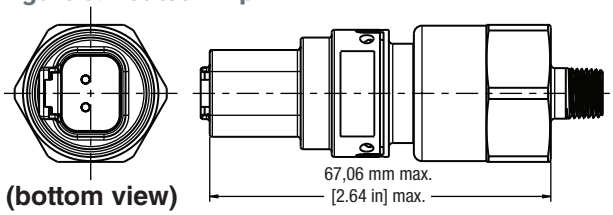



**Figure 10. Wire out**

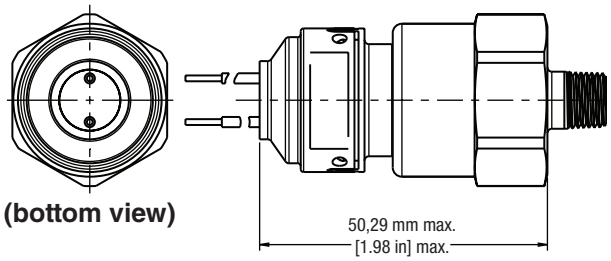



**Figure 11. Blade terminal**

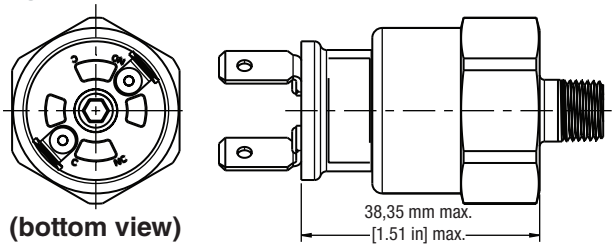



**Figure 12. Screw terminal**

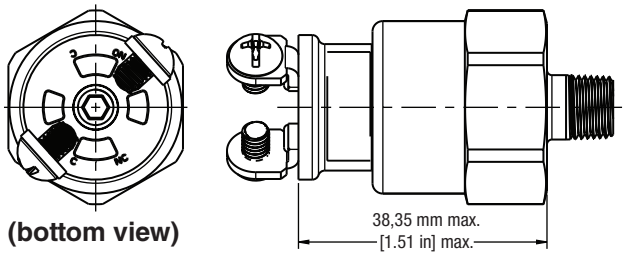



**Figure 13. MH Series Pressure Port Dimensions**

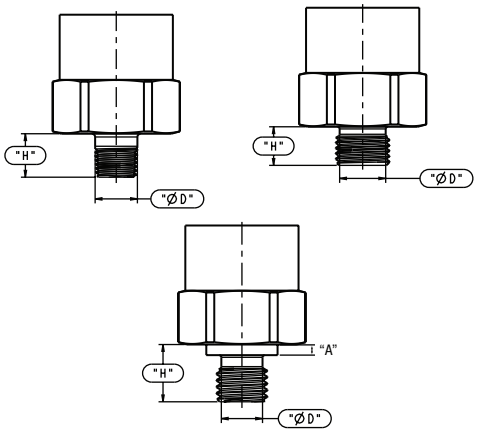


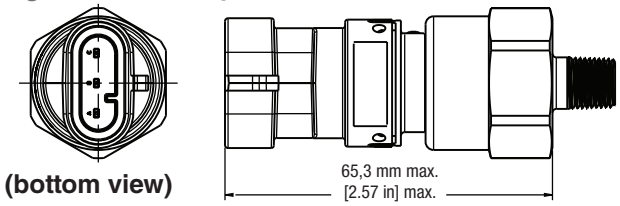

**Table 4. MH Series Pressure Port Diameters and Heights**

| Port | Diameter "ØD" | Height "H" |
|---|---|---|
| R 1/2 BSPT | 21,34 mm [0.840 in] | 17,09 mm [0.673 in] |
| R 1/4 BSPT | 13,46 mm [0.530 in] | 13,74 mm [0.541 in] |
| R 1/8 BSPT | 9,96 mm [0.392 in] | 10,24 mm [0.403 in] |
| 1/8-27 PTF | 10,34 mm [0.407 in] | 9,24 mm [0.364 in] |
| 1/4-18 NPT | 13,72 mm [0.540 in] | 17,63 mm [0.694 in] |
| 1/8-27 NPT | 10,29 mm [0.405 in] | 12,497 mm [0.492 in] |
| G 1/4 BSPP | 11,1 mm [0.437 in] | 11,20 mm [0.441 in] |
| G 1/8 BSPP | 8,28 mm [0.326 in] | 7,59 mm [0.299 in] |
| 3/4-16 UNF | 16,74 mm [0.659 in] | 11,1 mm [0.437 in] |
| 7/16-20 UNF | 9,25 mm [0.364 in] | 9,09 mm [0.358 in] |
| 9/16-18 UNF | 12,24 mm [0.482 in] | 10,00 mm[0.394 in] |
| 1/2-20 UNF | 10,85 mm [0.427 in] | 9,09 mm [0.358 in] |

| Port | Height "A" | Diameter "ØC" | Diameter "ØD" | Height "H" |
|---|---|---|---|---|
| M14 × 1.5 | 2,49 mm [0.098 in] | 18,8 mm [0.74 in] | 11,71 mm [0.461 in] | 10,998 mm [0.433 in] |
| M12 × 1.5 | 2,49 mm [0.098 in] | 16,79 mm [0.661 in] | 9,70 mm [0.382 in] | 10,998 mm [0.433 in] |
| M10 × 1.0 | 1,6 mm [0.063 in] | 13,79 mm [0.543 in] | 8,41 mm [0.331 in] | 8,51 mm [0.335 in] |

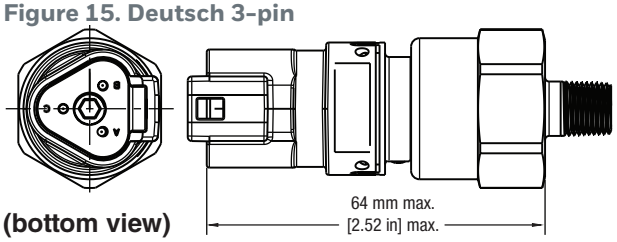
## DIMENSIONS - MEDIUM PRESSURE: ME SERIES

**Figure 14. AMP Superseal 1.5**



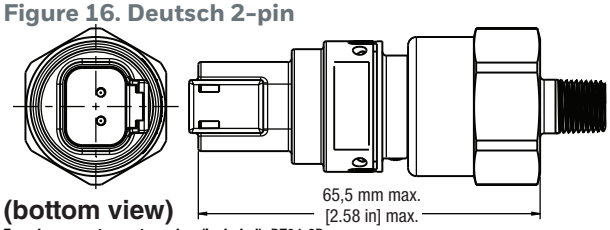

**Female connector part number (included):** C-282105
**Male mating connector (customer provided):** C-282087
**IP rating:** IP67

**Figure 15. Deutsch 3-pin**



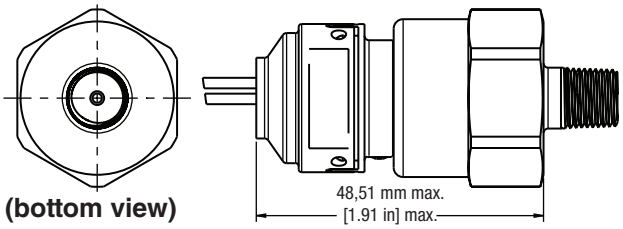

**Female connector part number (included):** DT04-3P
**Male mating connector (customer provided):** DT06-3S
**IP rating:** IP67

**Figure 16. Deutsch 2-pin**




**Female connector part number (included):** DT04-2P
**Male mating connector (customer provided):** DT06-2S
**IP rating:** IP67

**Figure 17. Wire out**




**IP rating:** IP67

**Figure 18. Blade terminal**

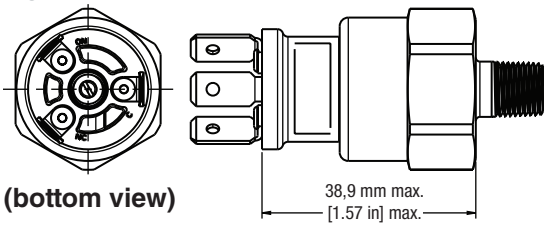



**Figure 19. Screw terminal**

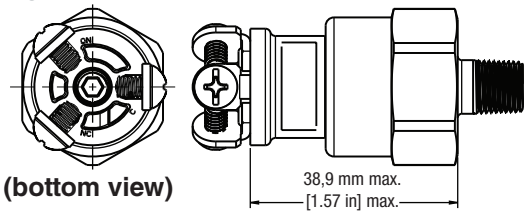



**Figure 20. ME Series Pressure Port Dimensions**

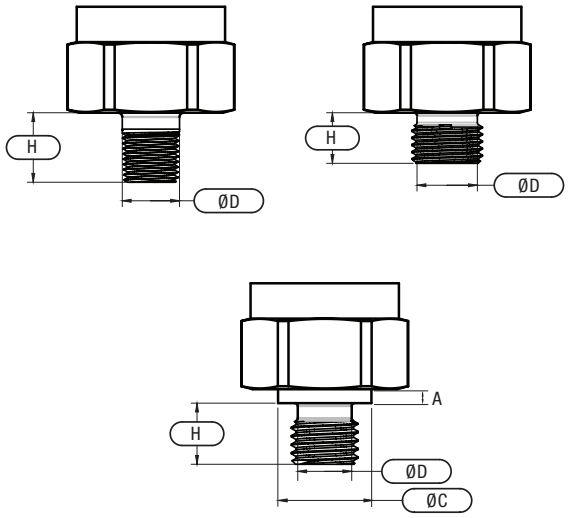



**Table 5. ME Series Pressure Port Diameters and Heights**

| Port | Diameter "ØD" | Height "H" |
|---|---|---|
| R 1/2 BSPT | 21,34 mm [0.840 in] | 17,09 mm [0.673 in] |
| R 1/4 BSPT | 13,46 mm [0.530 in] | 13,74 mm [0.541 in] |
| R 1/8 BSPT | 9,96 mm [0.392 in] | 10,24 mm [0.403 in] |
| 1/8-27 PTF | 10,34 mm [0.407 in] | 9,24 mm [0.364 in] |
| 1/4-18 NPT | 13,72 mm [0.540 in] | 17,63 mm [0.694 in] |
| 1/8-27 NPT | 10,29 mm [0.405 in] | 12,497 mm [0.492 in] |
| G 1/4 BSPP | 11,1 mm [0.437 in] | 11,20 mm [0.441 in] |
| G 1/8 BSPP | 8,28 mm [0.326 in] | 7,59 mm [0.299 in] |
| 3/4-16 UNF | 16,74 mm [0.659 in] | 11,1 mm [0.437 in] |
| 7/16-20 UNF | 9,25 mm [0.364 in] | 9,09 mm [0.358 in] |
| 9/16-18 UNF | 12,24 mm [0.482 in] | 10,00 mm[0.394 in] |
| 1/2-20 UNF | 10,85 mm [0.427 in] | 9,09 mm [0.358 in] |

| Port | Height "A" | Diameter "ØC" | Diameter "ØD" | Height "H" |
|---|---|---|---|---|
| M14 × 1.5 | 2,49 mm [0.098 in] | 18,8 mm [0.74 in] | 11,71 mm [0.461 in] | 10,998 mm [0.433 in] |
| M12 × 1.5 | 2,49 mm [0.098 in] | 16,79 mm [0.661 in] | 9,70 mm [0.382 in] | 10,998 mm [0.433 in] |
| M10 × 1.0 | 1,6 mm [0.063 in] | 13,79 mm [0.543 in] | 8,41 mm [0.331 in] | 8,51 mm [0.335 in] |

## DIMENSIONS - LOW PRESSURE: LP SERIES, LE SERIES

**Figure 21. AMP Superseal 1.5**

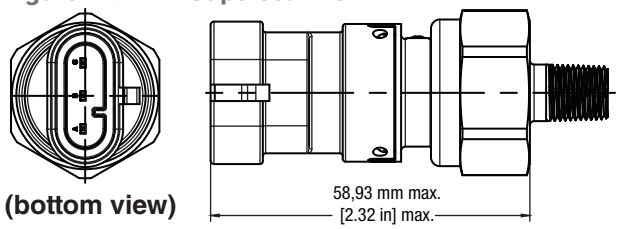



**Figure 22. Deutsch 3-pin**

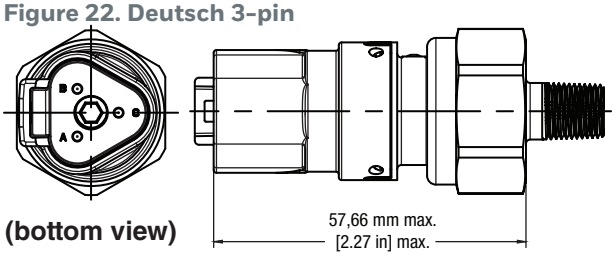



**Figure 23. Deutsch 2-pin**

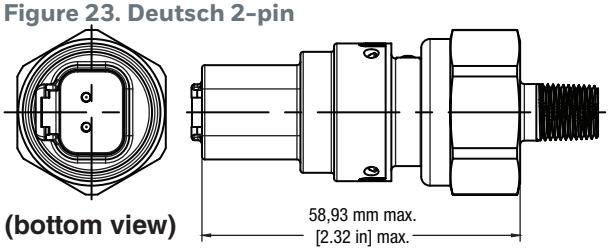



**Figure 24. Wire out**

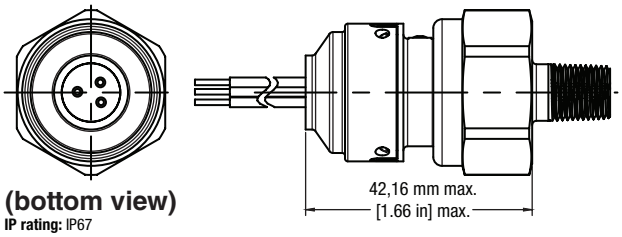



**Figure 25. Spade terminal**

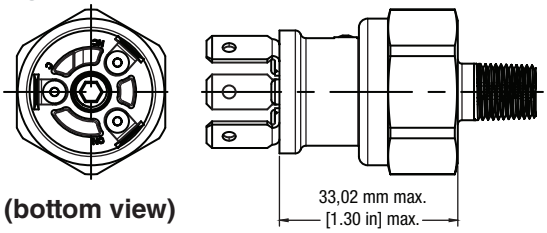



**Figure 26. Screw terminal**

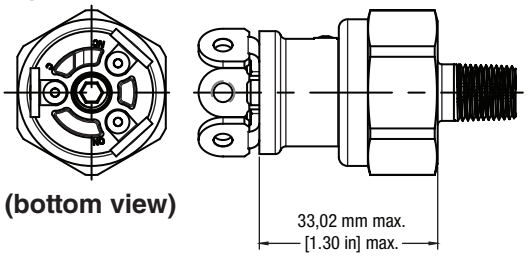



**Figure 27. LP/LE Series Pressure Port Dimensions**

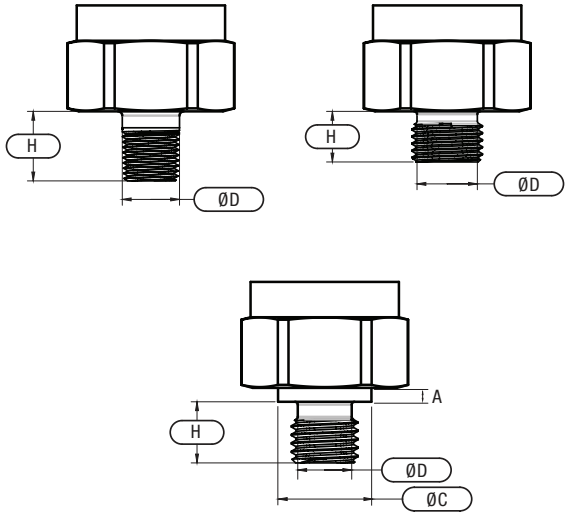



**Table 6. LP/LE Series Pressure Port Diameters and Heights**

| Port | Diameter "ØD" | Height "H" |
|---|---|---|
| R 1/2 BSPT | 21,34 mm [0.840 in] | 17,09 mm [0.673 in] |
| R 1/4 BSPT | 13,46 mm [0.530 in] | 13,74 mm [0.541 in] |
| R 1/8 BSPT | 9,96 mm [0.392 in] | 10,24 mm [0.403 in] |
| 1/8-27 PTF | 10,34 mm [0.407 in] | 9,24 mm [0.364 in] |
| 1/4-18 NPT | 13,72 mm [0.540 in] | 17,63 mm [0.694 in] |
| 1/8-27 NPT | 10,29 mm [0.405 in] | 12,497 mm [0.492 in] |
| G 1/4 BSPP | 11,1 mm [0.437 in] | 11,20 mm [0.441 in] |
| G 1/8 BSPP | 8,28 mm [0.326 in] | 7,59 mm [0.299 in] |
| 3/4-16 UNF | 16,74 mm [0.659 in] | 11,1 mm [0.437 in] |
| 7/16-20 UNF | 9,25 mm [0.364 in] | 9,09 mm [0.358 in] |
| 9/16-18 UNF | 12,24 mm [0.482 in] | 10,00 mm [0.394 in] |
| 1/2-20 UNF | 10,85 mm [0.427 in] | 9,09 mm [0.358 in] |

| Port | Height "A" | Diameter "ØC" | Diameter "ØD" | Height "H" |
|---|---|---|---|---|
| M14 × 1.5 | 2,49 mm [0.098 in] | 18,8 mm [0.74 in] | 11,71 mm [0.461 in] | 10,998 mm [0.433 in] |
| M12 × 1.5 | 2,49 mm [0.098 in] | 16,79 mm [0.661 in] | 9,70 mm [0.382 in] | 10,998 mm [0.433 in] |
| M10 × 1.0 | 1,6 mm [0.063 in] | 13,79 mm [0.543 in] | 8,41 mm [0.331 in] | 8,51 mm [0.335 in] |

## DIMENSIONS - 1000 SERIES, 5000 SERIES

**Figure 28. 1000 Series Dimensions**

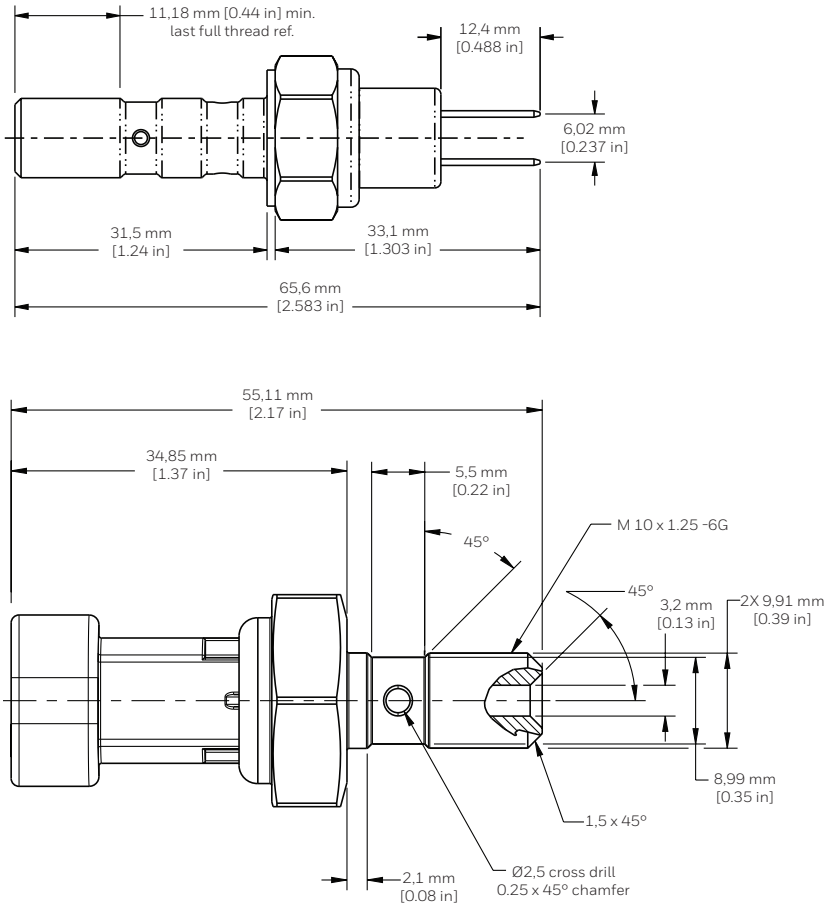
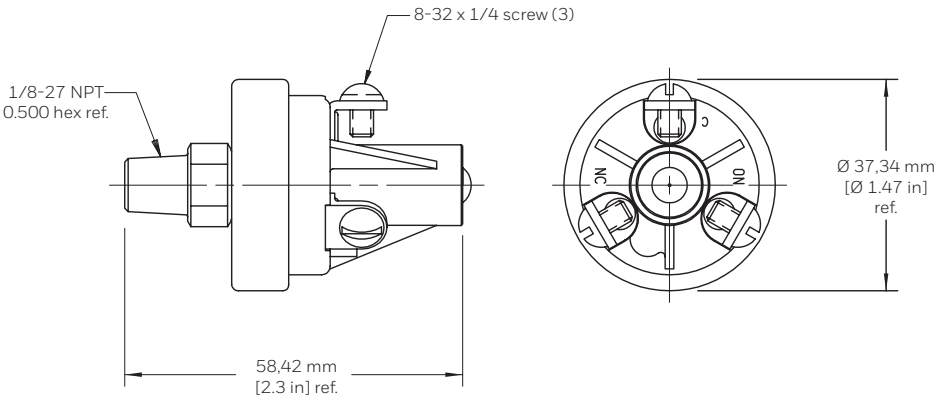



**Figure 29. 5000 Series Dimensions**



## NOMENCLATURE: HIGH PRESSURE

For example, **HPR05500PFNSPAAA01** defines a high pressure switch, rising factory set, non-adjustable set point, 550 psi set point, psig, sealed gage pressure unit, M14 x 1.5 port type, SPST-NO silver contacts output, cold-rolled steel base, glycol-based fluid (EPDM) actuation/application, spade terminal connectors, standard switch, individually boxed units.

### HP — Series

**HP Series**
**HE Series**
(100 psi to 4500 psi), High Pressure Switch

### R — Set Point

| | |
|---|---|
| **R** | Rising factory set, non-adjustable |
| **F** | Falling factory set, non-adjustable |

**NOTE:**
**Set point below 100 psi is available only with HP Series (Body Style B).**

### 05500 — Pressure Set Point

6,89 bar to 310,26 bar [100 psi to 4500 psi]

**NOTE:**
**Pressure set point is always five digits.**

For bar, the set point value will be multiplied by 100 and entered in the listing. For example, 15,45 Bar is noted as 01545. This allows for 2 decimal places.

For psi, the set point value will be multiplied by 10 and entered in the listing. For example, 245.5 psi is noted as 02455. This allows for 1 decimal place.

### P — Pressure Unit

| | |
|---|---|
| **P** | psig, sealed gage |
| **B** | bar, sealed gage |

### F — Port Type

| | |
|---|---|
| **A** | 1/4-18 NPT |
| **B** | 1/8-27 NPT |
| **C** | 1/2-20 UNF |
| **E** | M12 x 1.5 |
| **F** | M14 x 1.5 |
| **G** | 9/16-18 UNF |
| **H** | 3/4-16 UNF |
| **K** | M18 x 1.5 |
| **M** | 7/16-20 UNF |
| **N** | 7/8-14 UNF |
| **T** | M10 x 1.0 |

### N — Output

| | |
|---|---|
| **N** | SPST-NO, silver contacts |
| **C** | SPST-NC, silver contacts |
| **D** | SPDT-NO/NC, silver contacts |
| **H** | NO, gold inlay contacts |
| **J** | NC, gold inlay contacts |
| **K** | SPDT(NO/NC), gold inlay contacts |
| **E** | NO, with 510 Ω/ 0.5 W & 160 Ω/ 0.5 W resistors |
| **F** | NC, with 3000 Ω/ 0.125 W resistor |

### S — Base

| | |
|---|---|
| **S** | Cold-rolled steel |

### P — Actuation/ Application

| | |
|---|---|
| **N** | Petroleum-based hydraulic fluid (Nitrile) |
| **P** | Glycol-based fluid (EPDM) |

EDPM O-ring option only available from 100 psi to 250 psi.

### AA — Connector Type

| | |
|---|---|
| **AA** | 1/4 in 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/ 1/4 in Spade Terminals 6,3 mm x 0,8 mm (16 AWG) |
| **XA** | 10-inch Cable w/ Metripack 2-Pin Shroud Connector 153000027 (18 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) |
| **BB** | 10-inch Cable w/Metripack 150 Delphi 12129615 (3-Pin Connector) (18 AWG) |
| **CB** | 6-inch Cable w/ AMP Super Seal 1.5 - 282080-1 (2-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** | 8.5-inch Cable w/Deutsch Plug HD 16-3 96S (3-Pin Connector) (16 AWG)* |

*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.

### A — Options

| | |
|---|---|
| **A** | Standard switch |
| **B** | With 3 shrink sleeve |
| **C** | With shrink sleeve (plastic coating) |
| **D** | With shrink sleeve (acrylic coating) |
| **F** | 304,8 mm [12 in] total wire length |
| **G** | With conduit sleeve |
| **H** | With Vibra seal for port threads |
| **J** | #8-32 screw with external tooth lockwasher*** |
| **K** | 914,4 mm [36 in] total wire length |
| **L** | 304,8 mm [12 in] total wire length with acrylic sleeve |
| **M** | 914,4 mm [36 in] total wire length with acrylic sleeve |

*** For screw terminal option only

### 01 — Packaging Options

| | |
|---|---|
| **01** | Individually boxed units* |
| **02** | Individually boxed units** |
| **15** | 25 individual boxes packed in bulk packaging* |
| **16** | 25 individual boxes packed in bulk packaging** |
| **20** | 50 individual boxes packed in bulk packaging* |
| **21** | 50 individual boxes packed in bulk packaging** |
| **25** | 25 units in bulk packaging* |
| **26** | 25 units in bulk packaging** |
| **50** | 50 individual parts in bulk packaging* |

* Not applicable for HP Series (Base Style B)
** Not applicable for HP (Base Style A) & HE Series

### HP Series Port Types

| Thread Type | Base Style A | Base Style B |
|---|---|---|
| A = 1/4-18 NPT | n/a | 100 psi to 4500 psi |
| B = 1/8-27 NPT | n/a | 100 psi to 4500 psi |
| C = 1/2-20 UNF | >975 psi | n/a |
| E = M12 x 1.5 | n/a | 100 psi to 4500 psi |
| F = M14 x 1.5 | >350 psi | n/a |
| G = 9/16-18 UNF | >350 psi | <350 psi |
| H = 3/4-16 UNF | >150 psi | <150 psi |
| K = M18 x 1.5 | 150 psi to 4500 psi | n/a |
| M = 7/16-20 UNF | n/a | 100 psi to 4500 psi |
| N = 7/8-14 UNF | 150 psi to 4500 psi | n/a |
| T = M10 x 1.0 | n/a | 100 psi to 4500 psi |

Port Type A, B, E, M, and T will be available only with HP Series.
Base Style B will be available only with HP Series

## NOMENCLATURE: MEDIUM PRESSURE, HIGH BURST

For example, **MHR01500PFPVMAAA01** defines a medium pressure, high burst switch, rising factory set, non-adjustable set point, 150 psi set point, psig, sealed gage pressure unit, 1/4-18 NPT port type, SPST-NO contacts output, stainless steel base, LTNB diaphragm, and spade terminal connectors.

| MH | R | 01500 | P | A | P | N | M | AA | A | 01 |
|---|---|---|---|---|---|---|---|---|---|---|
| Series | Set Point | Pressure Set Point | Pressure Unit | Port Type | Output | Base | Actuation/ Application | Connector Type | Options | Packaging Options |
| **MH Series** Medium Pressure Switch | **R** Rising factory set, non-adjustable<br>**F** Falling factory set, non-adjustable<br>**T** Rising, field adjustable*<br>**C** Falling, field adjustable* | 0,24 bar to 10,34 bar [3.5 psi to 150 psi] | **P** psig, sealed gage<br>**B** bar, sealed gage<br>**M** bar, true gage*<br>**T** psig, true gage*<br>**G** psig, sealed gage with epoxy**<br>**H** bar, sealed gage with epoxy** | **A** 1/4-18 NPT<br>**B** 1/8-27 NPT<br>**C** 1/2-20 UNF<br>**D** 1/8-27 PTF<br>**E** M12 x 1.5<br>**F** M14 x 1.5<br>**G** 9/16-18 UNF<br>**H** 3/4-16 UNF<br>**J** G1/8 BSPP<br>**L** 3/8-24 UNF<br>**M** 7/16-20 UNF<br>**P** 1/2-14 NPT<br>**R** R1/8 BSPT<br>**T** M10 × 1.0<br>**V** R1/2 BSPT<br>**Y** G1/4 BSPP<br>**Z** R1/4 BSPT | **P** SPST-NO<br>**M** SPST-NC | **N** Cold-rolled steel<br>**B** Brass<br>**V** Stainless steel | **M** LTNB diaphragm (Low-temp Buna N)<br>**N** HNBR diaphragm (Hydrogenated Nitrile Butadiene Rubber)<br>**E** EPDM diaphragm (Ethylene-Propylene-Diene Monomer) | **AA** 1/4 in Spade Terminals<br>**BA** Screw Terminals<br>**DA** Amp Super Seal 1.5 - 282105-1 (3-Pin Connector)<br>**EA** 10-inch Cable, 18 AWG (Wire Out, No Connector)<br>**HA** 10-inch Cable w/Metripack 280 Delphi 15300002 (2-Pin Connector) (18 AWG)*<br>**MA** 10-inch Cable w/Deutsch DT04-2P-E005 (2-Pin Connector) (18 AWG)<br>**NA** 3-inch Cable w/Packard 2P Tower Connector - 12015792 (2-Pin Connector) (18 AWG)<br>**PA** 2.75-inch Cable w/Packard 2P Shroud Connector - 12010973 (2-Pin Connector) (18 AWG)<br>**RA** 4-inch Cable w/Packard 2P Shroud Connector - 12010973 (2-Pin Connector) (16 AWG)<br>**SA** 5.5-inch Cable w/ITT Cannon 2P Sure-Seal Circular Connector - SS2R-120-1804-000 (2-Pin Connector) (18 AWG)<br>**WA** 4.5-inch Cable w/ 1/4 in Spade Terminals 6,3 mm x 0,8 mm (16 AWG)*<br>**XA** 10-inch Cable w/ Metripack 2-Pin Shroud Connector 153000287 (18 AWG)<br>**YA** 6-inch Cable w/Amp Super Seal 1.5 - 282104-1 (2-Pin Connector) (18 AWG)*<br>**ZA** 10-inch Cable w/Deutsch DT06-2S-CE06 (2-Socket Connector) (18 AWG)<br>**AB** Deutsch DT04-2P-E005 (2-Pin Connector)<br>**CB** 6-inch Cable with Amp Super Seal 1.5 - 282080-1 (2-Pin Connector) (18 AWG)<br>**DB** 10-inch Cable w/AMP 2,5 mm System Series Connector 1-967402-1 (18 AWG)*<br>**EB** 4.5-inch Cable w/Packard Shroud Connector 12015792 (2-Pin Connector) (18 AWG)<br>**FB** 10-inch Cable w/Metripack 150 Delphi 12052641 (2-Pin Connector) (18 AWG) | **A** Standard switch<br>**C** With shrink sleeve (plastic coating)<br>**D** With shrink sleeve (acrylic coating)<br>**F** 304,8 mm [12 in] total wire length<br>**G** With conduit sleeve<br>**H** With Vibra seal for threads<br>**J** #8-32 screw with external tooth lockwasher***<br>**K** 914,4 mm [36 in] total wire length<br>**L** 304,8 mm [12 in] total wire length w/ shrink sleeve<br>**M** 914,4 mm [36 in] total wire length w/ shrink sleeve | **01** Individually boxed units<br>**15** 25 individual boxes packed in bulk packaging<br>**20** 150 units in bulk packaging<br>**25** 25 units in bulk packaging<br>**30** 150 individual boxes packed in bulk packaging |

* Field adjustable option is only available for:
1. Blade and screw terminations (SPDT, SPNO, SPNC)
2. Deutsch DT04-3P (SPDT, SPNO, SPNC)
3. Amp Superseal 1.5 (3-pin) (SPNO & SPNC)

**NOTE:**
**Pressure set point is always five digits.**

For bar, the set point value will be multiplied by 100 and entered in the listing. For example, 15,45 Bar is noted as 01545. This allows for 2 decimal places.

For psi, the set point value will be multiplied by 10 and entered in the listing. For example, 245.5 psi is noted as 02455. This allows for 1 decimal place.

*Blade and screw electrical terminations are available with only the the true gage option.

**Connector cavity and roll forming area filled with epoxy to meet dunk test sealing capability.

*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.

***applicable only for screw terminal version.

## NOMENCLATURE: MEDIUM PRESSURE

For example, **MER01500PFPVKAAA01** defines a medium pressure switch, rising factory set, non-adjustable set point, 55 psi set point, psig, sealed gage pressure unit, M14 x 1.5 port type, SPST-NO gold-plated contacts output, stainless steel base, Kapton® diaphragm (Teflon® coated), Nitrile O-ring actuation/application, spade terminal connectors, standard switch, individually boxed units.

**ME** — Series

**ME Series** Medium Pressure Switch

**R** — Set Point

| | |
|---|---|
| R | Rising factory set, non-adjustable |
| F | Falling factory set, non-adjustable |
| T | Rising, field adjustable* |
| C | Falling, field adjustable* |

* Field adjustable option is only available for:
1. Blade and screw terminations (SPDT, SPNO, SPNC)
2. Deutsch DT04-3P (SPDT, SPNO, SPNC)
3. Amp Superseal 1.5 (3-pin) (SPNO & SPNC)

**01500** — Pressure Set Point

1,72 bar to 24,13 bar [25 psi to 350 psi]

**NOTE:**
**Pressure set point is always five digits.**

For bar, the set point value will be multiplied by 100 and entered in the listing. For example, 15,45 Bar is noted as 01545. This allows for 2 decimal places.

For psi, the set point value will be multiplied by 10 and entered in the listing. For example, 245.5 psi is noted as 02455. This allows for 1 decimal place.

**P** — Pressure Unit

| | |
|---|---|
| P | psig, sealed gage |
| B | bar, sealed gage |
| M | bar, true gage |
| T | psig, true gage |
| G | psig, sealed gage with epoxy |
| H | bar, sealed gage with epoxy |

Blade and screw electrical terminations are available with only the the true gage option.

**F** — Port Type

| | |
|---|---|
| A | 1/4-18 NPT |
| B | 1/8-27 NPT |
| C | 1/2-20 UNF |
| D | 1/8-27 PTF |
| E | M12 x 1.5 |
| F | M14 x 1.5 |
| G | 9/16-18 UNF |
| H | 3/4-16 UNF |
| J | G1/8 BSPP |
| M | 7/16-20 UNF |
| R | R1/8 BSPT |
| T | M10 × 1.0 |
| V | R1/2 BSPT |
| Y | G1/4 BSPP |
| Z | R1/4 BSPT |

**P** — Output

| | |
|---|---|
| P | SPST-NO, gold-plated contacts |
| M | SPST-NC, gold-plated contacts |
| Y | SPDT-NO/NC, gold-plated contacts |
| E | NO, with 510 Ω/ 0.5 W & 160 Ω/ 0.5 W resistors |
| F | NC, with 3000 Ω/ 0.125 W resistor |

**V** — Base

| | |
|---|---|
| N | Cold-rolled steel with zinc plating |
| V | Stainless steel |

**K** — Actuation/ Application

| | |
|---|---|
| K | Kapton® diaphragm (Teflon® coated), Nitrile O-ring[1] |
| H | Kapton® diaphragm (Teflon® coated), EPDM O-ring[2] |

[1] Air, Petroleum-based hydraulic fluid, engine oil
[2] Glycol-based fluid

**AA** — Connector Type

| | |
|---|---|
| AA | 1/4 in 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/ 1/4 in Spade Terminals 6,3 mm x 0,8 mm (16 AWG)* |
| XA | 10-inch Cable w/ Metripack 2-Pin Shroud Connector 153000287 (18 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)* |
| CB | 6-inch Cable with Amp Super Seal 1.5 - 282080-1 (2-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 | 8.5-inch Cable w/Deutsch Plug HD 16-3 96S (3-Pin Connector) (16 AWG) |

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

**A** — Options

| | |
|---|---|
| A | Standard switch |
| B | With 3 shrink sleeve |
| C | With shrink sleeve (plastic coating) |
| D | With shrink sleeve (acrylic coating) |
| E | With 1/8 W resistor between terminals |
| F | 304,8 mm [12 in] total wire length |
| G | With conduit sleeve |
| H | With Vibra seal for port threads |
| J | #8-32 screw with external tooth lockwasher |
| K | 914,4 mm [36 in] total wire length |
| R | With port neck O-ring for LPS |

*** For screw terminal option only

**01** — Packaging Options

| | |
|---|---|
| 01 | Individually boxed units |
| 15 | 25 individual boxes packed in bulk packaging |
| 20 | 150 units in bulk packaging |
| 25 | 25 units in bulk packaging |
| 30 | 150 individual boxes packed in bulk packaging |

## NOMENCLATURE: LOW PRESSURE

For example, **LPR00550PFPVKAAA01** defines a low pressure switch, rising factory set, non-adjustable set point, 55 psi set point, psig, sealed gage pressure unit, M14 x 1.5 port type, SPST-NO gold-plated contacts output, stainless steel base, Kapton® diaphragm (Teflon® coated), Nitrile O-ring actuation/application, spade terminal connectors, standard switch, individually boxed units.

### LP — Series

**LP Series, LE Series** Low Pressure Switch

### R — Set Point

| | |
|---|---|
| R | Rising factory set, non-adjustable |
| F | Falling factory set, non-adjustable |
| T | Rising, field adjustable* |
| C | Falling, field adjustable* |

* Field adjustable option is only available for:
1. Blade and screw terminations (SPDT, SPNO, SPNC)
2. Deutsch DT04-3P (SPDT, SPNO, SPNC)
3. Amp Superseal 1.5 (3-pin) (SPNO & SPNC)

### 00550 — Pressure Set Point

0,24 bar to 10,34 bar [3.5 psi to 150 psi]

**NOTE:**
**Pressure set point is always five digits.**

For bar, the set point value will be multiplied by 100 and entered in the listing. For example, 15,45 Bar is noted as 01545. This allows for 2 decimal places.

For psi, the set point value will be multiplied by 10 and entered in the listing. For example, 245.5 psi is noted as 02455. This allows for 1 decimal place.

### P — Pressure Unit

| | |
|---|---|
| P | psig, sealed gage |
| B | bar, sealed gage |
| M | bar, true gage |
| T | psig, true gage |
| G | psig, sealed gage with epoxy |
| H | bar, sealed gage with epoxy |

Blade and screw electrical terminations are available with only the the true gage option.

True gage option is available only up to 20 psig set point for integral connectors and wire out electrical terminations.

### F — Port Type

| | |
|---|---|
| A | 1/4-18 NPT |
| B | 1/8-27 NPT |
| C | 1/2-20 UNF |
| D | 1/8-27 PTF |
| E | M12 x 1.5 |
| F | M14 x 1.5 |
| G | 9/16-18 UNF |
| H | 3/4-16 UNF |
| J | G1/8 BSPP |
| M | 7/16-20 UNF |
| R | R1/8 BSPT |
| T | M10 × 1.0 |
| V | R1/2 BSPT |
| Y | G1/4 BSPP |
| Z | R1/4 BSPT |

### P — Output

| | |
|---|---|
| P | SPST-NO, gold-plated contacts |
| M | SPST-NC, gold-plated contacts |
| Y | SPDT-NO/NC, gold-plated contacts |
| E | NO, with 510 Ω/ 1 W & 160 Ω/ 1 W resistors**** |
| F | NC, with 3000 Ω/ 0.125 W resistor |
| G | NC with 510 Ω/ 0.5 W and 160 Ω/ 0.5 W resistors**** |

**** Available only on LP Series

### V — Base

| | |
|---|---|
| B | Brass |
| N | Cold-rolled steel with zinc plating |
| V | Stainless steel |

### K — Actuation/ Application

| | |
|---|---|
| K | Kapton® diaphragm (Teflon® coated), Nitrile O-ring[1] |
| H | Kapton® diaphragm (Teflon® coated), EPDM O-ring[2] |
| T | Tefzel® and Kapton® diaphragm, Nitrile O-ring[3] |
| U | Tefzel® and Kapton® diaphragm, EPDM O-ring[4] |

[1] Air, Petroleum-based hydraulic fluid, engine oil
[2] Glycol-based fluid
[3] For high temperature fluid media **(LE Series only)**
[4] For high temperature fluid media, glycol-based fluid **(LE Series only)**

### AA — Connector Type

| | |
|---|---|
| AA | 1/4 in 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/ 1/4 in Spade Terminals 6,3 mm x 0,8 mm (16 AWG)* |
| XA | 10-inch Cable w/ Metripack 2-Pin Shroud Connector 153000287 (18 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-C606 (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)* |
| CB | 6-inch Cable with Amp Super Seal 1.5 - 282080-1 (2-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 | 8.5-inch Cable w/Deutsch Plug HD 16-3 96S (3-Pin Connector) (16 AWG) |

*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.
**For electrical termination with SPST option, only SPNO configuration is available. SPNC configuration cannot be provided.

### A — Options

| | |
|---|---|
| A | Standard switch |
| B | With 3 shrink sleeve |
| C | With shrink sleeve (plastic coating) |
| D | With shrink sleeve (acrylic coating) |
| F | 304,8 mm [12 in] total wire length |
| G | With conduit sleeve |
| H | With Vibra seal for port threads |
| K | 914,4 mm [36 in] total wire length |
| L | 304,8 mm [12 in] total wire length with acrylic sleeve |
| M | 914,4 mm [36 in] total wire length with acrylic sleeve |

*** For screw terminal option only

### 01 — Packaging Options

| | |
|---|---|
| 01 | Individually boxed units |
| 15 | 25 individual boxes packed in bulk packaging |
| 20 | 150 units in bulk packaging |
| 25 | 25 units in bulk packaging |
| 30 | 150 individual boxes packed in bulk packaging |

## ADDITIONAL MATERIALS

The following associated literature is available at sensing.honeywell.com:

- Product range guide
- Product line guide
- Technical note: Smart Diagnostic Technology
- Product application-specific information
  - Application Note: Honeywell Pressure Switches
  - Sensors and switches in front loaders
  - Sensors and switches in mobile cranes
  - Sensors and switches in oil rig applications
  - Industrial product line card

**⚠ WARNING**
**PERSONAL INJURY**

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

**⚠ WARNING**
**MISUSE OF DOCUMENTATION**

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**

### Warranty/Remedy

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