

product capabilities overview



Honeywell's 1HP is a liquid or fluid pressure detection switch designed specifically to handle highly accurate and demanding aerospace and defense requirements.

Featuring robust, stainless steel housing with field-proven MICRO SWITCH™ subminiature basic switches, the 1HP is easily configurable for fast prototyping, development and delivery times. With the industry's broadest range of setpoints, these switches fit into a wide variety of medium- to high-pressure applications.

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Features and Benefits

(★ = competitive differentiator)

- ★ Broad range of pressure setpoints for added flexibility in system design (150 psi to 5000 psi)
- ★ Highly accurate, unique design delivers higher setpoint precision, even in fluctuating temperatures
- ★ Short delivery lead times for both standard and configurable options
- Modular design, with a wide selection of pressure ranges, lead wires and contacts available
- Highly sensitive, customized on/off switching with the ability to set switch differentials
- High burst and proof pressure ratings to handle demanding applications
- Compact and easy to design or retrofit into new or existing designs
- MICRO SWITCH™ precision switch component provides enhanced accuracy and highest quality
- Agency testing per DO-160 and US military specifications
- Customization delivers flexible, easily configurable packaging and provides a wide range of fitting and termination options

Value to Customers

- Single source supplier of a wide range of complementary products
- Partnership of engineering applications expertise with over 75 years of experience developing and applying reliable MICRO SWITCH™ technology for aerospace and military environments
- Experienced technical resources available to work with customers to help resolve technical questions

Potential Applications

Engines, fuel systems, environmental control systems, fire suppression systems, and brake systems.

Potential Customers

Suppliers that employ or design aircraft and ground vehicle sub-systems to military and commercial OEMs.

Typical Specifications

| Characteristic | 1HP |
|-----------------------|---|
| Resistive load | 4 A (50,000 ft); 7 A (sea level) |
| Inductive load | 2 A (50,000 ft); 4 A (sea level) |
| Set point pressure | 150 psi to 5000 psi |
| Burst pressure | Up to 12000 psi |
| Proof pressure | Up to 9000 psi max. |
| Operating pressure | Up to 6000 psi max. |
| Excitation | 28 Vdc |
| Insulation resistance | 100 mOhm @ 500 Vdc for 5 sec |
| Dielectric resistance | 500 ac RMS @ 60 Hz for one minute, 1 mA leakage, max. |
| Contact material | Silver, gold |
| Switch configuration | SPST, SPDT |
| Pressure reference | Sealed gage, gage |
| Operating cycles | 100 K minimum |
| Operating temperature | -55 °C to 70 °C [-67 °F to 158 °F] |
| Storage temperature | -55 °C to 85 °C [-67 °F to 185 °F] |
| Media compatibility | Suitable for air, fuel, water, oil, Skydrol™ |

For more information about sensing and control products, visit www.honeywell.com/sensing or call

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