

NEW FROM TI

46PS Pressure Switch

- Electrically rated up to 480 Vac
- High current capability
- Capable of 2.5 million cycles†
- Automatic reset
- SPST* switch with normally open or closed contacts**
- Factory calibrated pressure setpoints from vacuum to 750 psig
- Snap-acting stainless steel hermetically sealed sensor
- Available in environmentally sealed switch
- Compact size



Applications

A recent breakthrough in TI's pressure sensing technology enables direct line break capability in applications that have been traditionally controlled in pilot duty circuits by contactors or relays. The 46PS pressure switch is capable of breaking 2 amp loads at 480 Vac for 2.5 million cycles.† It is ideal for cycling condenser fan motors to maintain an acceptable condensing pressure during low ambient temperature conditions. In applications such as split room air conditioning systems, the 46PS as a head pressure control can result in significant cost savings when used instead of a pilot duty switch and relay. Other potential uses include fluid pressure sensing in commercial and industrial applications.

Operation

The snap-acting stainless steel sensor reverses its curvature when pressurized to a customer-specified pressure setpoint. When the disc snaps, it opens or closes a set of electrical contacts by means of a transfer pin. Resetting the switch occurs automatically when pressure drops below the differential setpoint.

NOTE: All of our pressure switch products are manufactured at an ISO 9001 Registered Quality Facility.

Design Specifications

Operating Pressure:	Vacuum to 750 psig
Burst Pressure:	5000 psig
Proof Pressure:	600 psig
Max. Mechanical Rated Life:	2,500,000 cycles†
Max. Electrical Ratings:	13 FLA / 65 LRA @ 120Vac 10 FLA / 45 LRA @ 240Vac 4 FLA / 24 LRA @ 480Vac (consult factory if higher levels are required)
Dielectric Strength:	750 Vrms Across Open Contacts 2200 Vrms Terminals to Fitting
Ambient Temperature:	-20°F to 150°F / -28.9°C to 65°C (Leaded) -40°F to 275°F / -40°C to 135°C (Quick-connect)
Fluid Temperature:	-65°F to 275°F / -53.9°C to 135°C
Agency Approvals:	UL Recognized File No. SA995 U.S. Category SDFY2 Canada Category SDFY8 DIN Registration Pending VDE License Pending IP 67 Environmental Seal (Leaded)

† Requires TI/customer specification closure and validation testing before application approval.

* SPST - Single pole, single throw

** Switch logic at atmospheric pressure

Ordering Samples

TI encourages the use of engineering test samples to assist in your pressure switch specification process. Please call or FAX the following information for the fastest possible sampling lead times:

1. Customer product application
2. Exact function of switch in system
3. Cut-in pressure and tolerance
4. Cut-out pressure and tolerance
5. Port fitting
6. Switch termination
7. Wire lead termination (e.g., 1/2" strip, 1/4" female quick connect, etc.)
8. Sustained system pressure
9. Peak system pressure
10. Voltage and amperage requirements
11. Cycle life requirement
12. Operating temperature
13. Switch environment (protected/unprotected)
14. Agency approvals other than those listed on cover
15. Estimated annual volume

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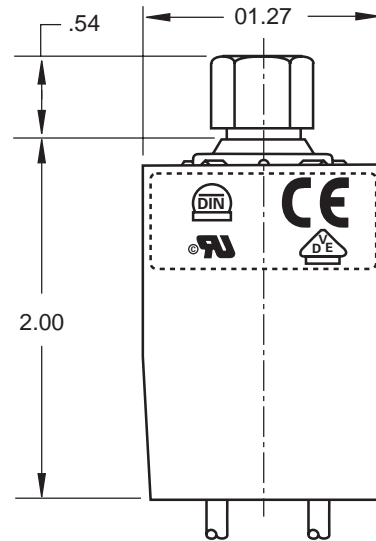
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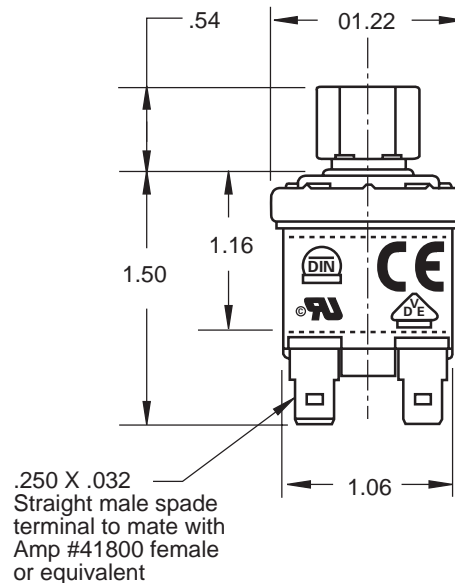
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Typical Physical Characteristics

Environmentally Sealed Leaded Construction



Quick Connect Construction



Dimensions are in inches

