

Product Bulletin

KLIXON

PS80

Automatic Reset Pressure Switch



Key Features

- Epoxy-less seal
- Hermetically sealed sensor
- Flexible range of set-points and tolerances
- Factory calibrated fixed set-points
- Single-pole, single-throw switch: normally open or closed contacts

The PS80 is an automatic reset pressure switch designed to meet a broad variety of application requirements by offering a wide

range of pressure settings, port fittings, and electrical connections. The PS80 is available in quick connect or leaded constructions and is manufactured globally at ISO 9000 certified locations to ensure the quality you expect from TI.

Applications

Current applications for the PS80 include high and low limit safety controls on residential and commercial air conditioning units and refrigeration systems, as well as a variety of industrial applications.

Operation

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

Design Specifications

Operating Pressure

0 to 750psig (50 bar)

Proof Pressure**

250psig (17 bar) for set-point < 100psig (6.9 bar)
600psig (41 bar) for set-point 100-500psig (6.9-34.4 bar)
800psig (55 bar) for set-point > 500psig (34.4 bar)

Burst Pressure

5000psig (345 bar)

Life at Rated Current

100,000 cycles

Electrical Ratings

120/240 VAC - 6.0 RLA 36 LRA
120/277 VAC - 375VA Pilot Duty
24 VAC - 125VA Pilot Duty

Dielectric Strength

750 Vrms Open Contacts
1550 Vrms Terminals to Fitting (Ground)

Lead Wire Material

#18 AWG 600V 125°C 1/32" XLP
#18 AWG 600V 125°C 1/16" XLP

Ambient Temperature (UL Rating)

-20°F to 150°F / (-29°C to 65°C)

Fluid Temperature (UL Rating)

-65°F to 275°F / (-54°C to 135°C)

**The highest pressure a switch can be exposed to without influencing the set-point.

Agency Recognitions

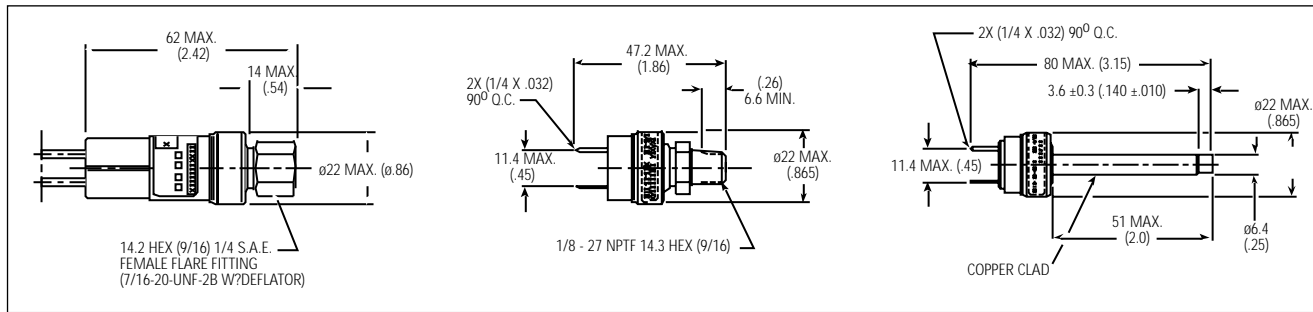
UL (USA) ¹	File SA995, Guide SDFY2
UL (Canada) ¹	File SA995, Guide SDFY8

1 - Recognized to U.S. and Canadian requirements by Underwriters Laboratories (UL873 and C22.2 No. 24)

2 - ENEC Certified

3 - PED CE0035 Module B/D

Typical Physical Characteristics



Note: Other port fittings are available, contact Marketing.

Sample Request Data Form *(Please complete as much as possible)*

Company Name and Address _____

Contact _____

Phone _____ Fax _____ Email _____

Description of Application _____

Exact Function of Switch in System _____

Cut In Pressure _____ Tolerance _____ Cut Out Pressure _____ Tolerance _____

Pressure Port Fitting _____ Switch Termination _____

Wire Lead Termination (e.g., 1/2 inch strip, 1/4 inch female Q.C., etc.) _____

Minimum System Pressure _____ Sustained System Pressure _____ Peak System Pressure _____

Switch Logic (Contacts to Open / Close on Pressure Rise) _____

Volts (AC/DC) _____ Amps _____ Inductive / Resistive _____

Cycle Life Requirement _____ Operating Temperature _____

Allowable Drift Over Temperature / Life _____

Switch Environment (Protected / Unprotected) _____

Agency Approvals (UL, VDE, TUV, ?) _____ Estimated Annual Volume _____

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