

KPH COMPACT PRESSURE SWITCH



Flow
Pressure
Level
Temperature
measurement
monitoring
control



- Rugged Compact Design
- Long Cycle Life
- Ranges: Vacuum to 6100 PSIG
- Suitable for Pneumatic or Hydraulic Applications
- Easily Adjusted Setpoint
- Plug-in Connector Standard

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Model:
KPH



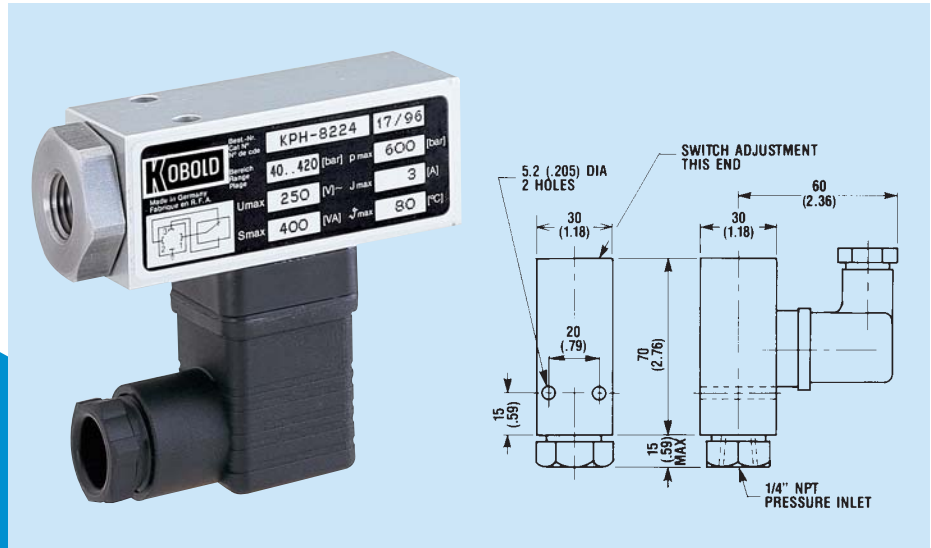
Features

- Rugged Compact Design
- Long Cycle Life
- Ranges: Vacuum to 6100 PSIG
- Suitable for Pneumatic or Hydraulic Applications
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The KOBOLD KPH pressure switch is a highly reliable, small footprint pressure switch ideal for OEM installations. Its long cycle life and rugged mechanical design are your assurance that it will provide your customer with reliable service during the life of your product.

The 8000 and 8200 series are usable with air, gas, lubricating oil, light fuel, or any one of many other industrial media. The 8100 series, with all brass wetted parts, are suitable for water and water based liquids. Its single pole double throw switch has mechanical reliability typically found only in reed switches. Unlike reed switches, however, the KPH is capable of switching AC loads of up to five amps, at 220 volts.

Rugged, compact and reliable ... the perfect switch for your pressure applications.



KOBOLD KPH Pressure Switch

Specifications

- Range:** -14.0 to 6100 PSIG
- Media**
- KPH-8000:** Gases or liquids
 - KPH-8200:** Liquids only
- Cleanliness:** Non-depositing
- Max. Viscosity:** 97 cSt (450 SSU)
- Repeatability:** ±3% of full scale
- Sensing Mechanism**
- KPH-8000:** Diaphragm
 - KPH-8200:** Piston
- Fittings:** 1/4" NPT
- Optional:** SAE (KPH-8200)
- Wetted Parts**
- KPH-8000:** Aluminum, Buna-N,
 - KPH-8100:** Brass, Buna-N

- KPH-8200:** Aluminum, Buna-N, 420-SS, PTFE
- Mechanical Data**
- Switching Rate:** 100 Hz max.
 - Switch Life:** 10⁷ cycles min.
 - Vibration:** 15g max.
 - Weight:** 0.4 lbs
- Electrical Data**
- Switch Type:** SPDT snap-action
 - Maximum Resistive Loads**
 - AC:** 220 V @ 5 A
 - DC:** 120 V @ 0.4 A
 - Switch Life**
 - 100% Load:** 5 x 10⁴ cycles
 - 50% Load:** 10⁵ cycles
 - Protection:** NEMA 4

KPH Ordering Information

Range (PSIG)	Deadband (non-adjustable) (PSI)	Burst Pressure (PSIG)	Temperature Range		Order Number	
			Ambient (°F)	Medium (°F)	Aluminum	Brass
-14.5 - 0	2 - 3	1200	15 to 175	-5 to 175	KPH-8021	-
3 - 30	2 - 4	1200	15 to 175	-5 to 175	KPH-8022	KPH-8122
7.5 - 120	4 - 9	1200	15 to 175	-5 to 175	KPH-8023	KPH-8123
15 - 230	4 - 13	1200	15 to 175	-5 to 175	KPH-8024	-
70 - 1000	150 - 220	5800	30 to 175	30 to 210	KPH-8221	-
150 - 2300	160 - 245	5800	30 to 175	30 to 210	KPH-8222	-
360 - 3600	160 - 245	5800	-10 to 175	-10 to 210	KPH-8223	-
580 - 6100	245 - 505	8700	-10 to 175	-10 to 210	KPH-8224	-
Options						
SAE fittings. Available in series KPH-8200 switches					S	
Splash protection cover for adjustment screw mechanism					EC	

Lighted LED Connector:

A lighted connector is available for the pressure switch. The lighted connector consists of a translucent housing with an LED insert. The insert may be rotated such that the LED illuminates in series with either terminal #2 or #3 in the connector. Customer wiring connections are then made to screw terminal #4 in the insert and terminal #1 in the connector. See Fig. 1

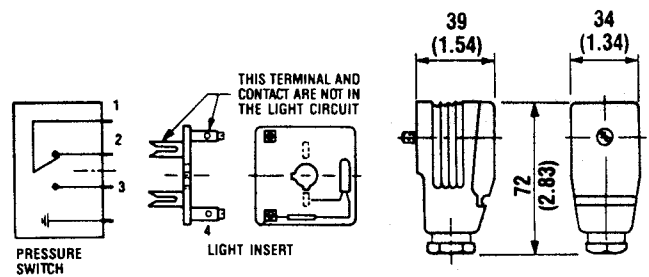


Fig. 1 LED Insert

Fig. 2 Connector with LED

Order Information:

VOLTAGE	ORDER NUMBER
12-28 VAC/DC	05-854-18
90-130 VAC/DC	05-854-19
180-240 VAC/DC	05-854-20

Switch Selection and Mounting Instructions

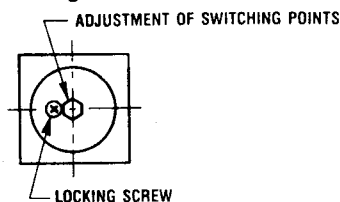
- Select a switch such that the desired switching point falls roughly in the middle of the adjustment range.
- Do not exceed switch electrical ratings. Use an appropriately sized relay when switching larger electrical loads.
- For liquid media with pressure spikes and/or pulsating pressures, install a pressure snubber.
- For outdoor applications, sufficient protection must be provided. Critical conditions include aggressive atmosphere, salt bearing atmosphere, and drastic temperature variations.

Adjustment of Switching Point

Either the upper or the lower switching point may be adjusted. The opposite one is then fixed by the dead-band characteristic of the switch.

The switching point may be set even during operation. Use a pressure gauge for exact adjustment. Proceed as follows:

1. Loosen locking screw.
2. Adjust the switching point using a 5 mm hexagon wrench. Clockwise rotation increases switching pressure and counter-clockwise rotation decreases switching pressure. Low-end of adjustment range is reached when top of adjustment barrel is approximately level with top of switch housing. High-end of adjustment range is reached when adjustment barrel is fully CW.
3. Re-tighten locking screw.



Protective Cover

An Elastomer Cover for the adjustment end of the switch is available. This cover provides protection to this switch adjustment mechanism particularly when subjected to splashing liquids.

Cover — Order No. 06-644-02
See Fig. 5

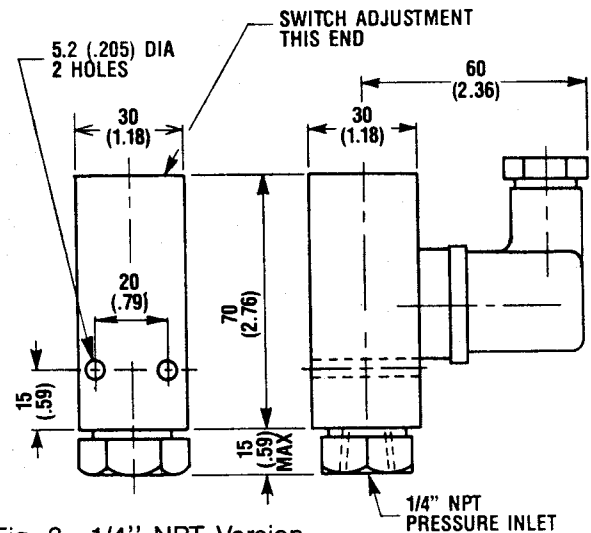


Fig. 3 1/4" NPT Version

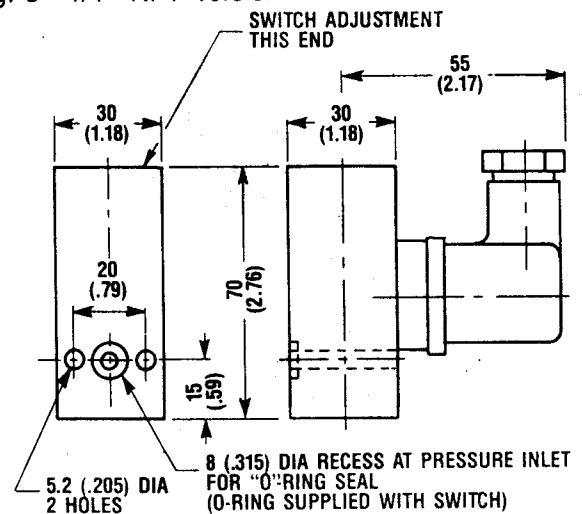


Fig. 4 Flange Version

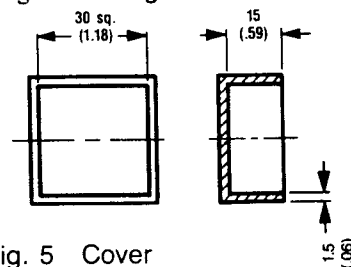


Fig. 5 Cover
All dimensions in mm (inches)