

## Mechanical Pressure Switch



measuring  
•  
monitoring  
•  
analyzing

KPH300



- Switching Ranges: -5...-28 "Hg to 450...4600 PSIG
- Field Adjustable Setpoint
- Diaphragm or Piston Type Sensing Element
- SPDT Micro-Switch Contact
- CE Compliant to Suppress RFI, EMI and ESD
- RoHS Compliant



Contact:  
Industrial Process Measurement, Inc.  
3910 Park Avenue, Unit 7  
Edison, NJ 08820  
732-632-6400  
support@instrumentation2000.com  
<https://www.instrumentation2000.com/>



## Description

The KPH300 is an excellent choice for pressure switching applications that require a reliable solution at an affordable price. It utilizes proven diaphragm or piston sensing technology, depending on the measuring range. The setpoint and hysteresis are both field adjustable. These can also be factory-set at your specified setpoint for a small additional charge. SPST and SPDT micro-switch contacts are available in zinc-nickel plated steel for extended service life. The combination of reliability and low cost also makes the KPH300 an excellent choice for many OEM applications.

## Applications:

- Hydraulic and Pneumatic Systems
- Pumps and Compressors
- Tank Monitoring
- Leak Detection
- Water Management

## Technical Details

**Switching Ranges:** -5...-28 "Hg to 450...4600 PSIG  
**Switch Type:** Snap-Action with Adjustable Hysteresis

**Process Connection:** 1/4" or 1/8" Male NPT  
 (Others Available on Request)

**Measuring Element:** NBR  
**Wetted Materials:** Zinc-Nickel Plated Steel and NBR  
**Housing Material:** Zinc-Nickel Plated Steel

**Media, Ambient and Storage Temperature:** -4...176 °F

**Proof Pressure**  
**5/28-VAC:** 350 PSIG  
**3/7 to 30/290:** 870 PSIG  
**100/220 to 450/4600:** 5000 PSIG

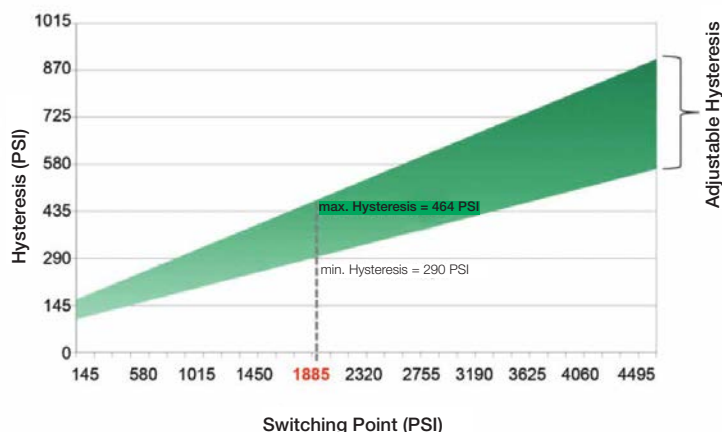
## Switching Parameters

**Function:** SPDT  
**Repeatability:**  $\pm 2\%$  of Full Scale Range at 70 °F  
**Contact Rating:** 6 A @ 125/250 V<sub>AC</sub>,  
 6 A @ 12/24 V<sub>DC</sub>,  
**Hysteresis:** Adjustable (See Charts)  
**Contact Material:** Solid Silver, Self-Cleaning  
**Frequency:** Max. 100 cycles/min  
**Service Life:** >1,000,000 Load Cycles

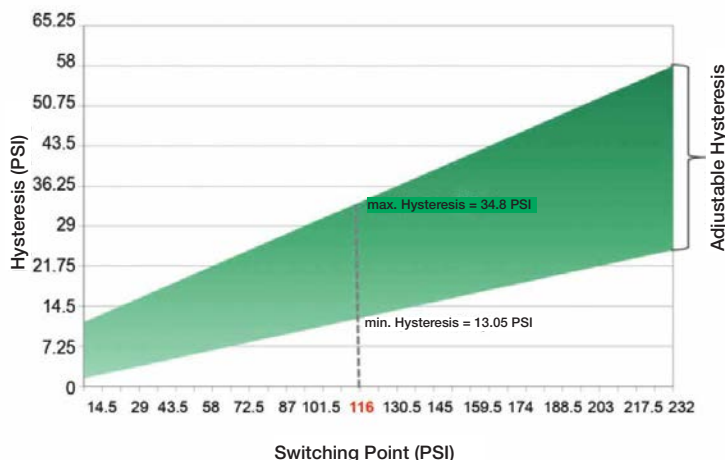
**Ingress Protection:** IP65 (Plug Connector (Hirschman))  
 IP67 (All Others)  
**Weight:** 0.2 lbs. Approx.



Adjustable Hysteresis (Piston Type)



Adjustable Hysteresis (Membrane Type)



Order Details (Example: KPH300-1 2 15/220 8 P; 100 PSI Falling))

| Model   | Switch                         | Fitting <sup>1)</sup>  | Switching Pressure Range<br>(Adjustable) | Electrical Connection <sup>2)</sup>   | Options <sup>3)</sup>   |
|---|--------------------------------|--|--|---|---|
| KPH300V-  | ..3.. = SPDT                   | ..1.. = 1/8" NPT,<br>Male  | ..5/28-VAC.. = -5...-28 "Hg              | ..1 = Plug Connector<br>(DIN 43 650)<br>with 36"Cable<br><br>..8 = Plug Connector<br>(DIN 43 650)<br>(Standard) | ..C = Plug Connector<br>(DIN 43 650)<br>with 1/2" NPT Conduit<br>(with Electrical<br>Connection 8 or 1)<br><br>..SP = Factory Set<br>Switch Point<br>(Please Specify the<br>Desired Pressure<br>Switch Point and<br>Indicate Rising or<br>Falling Pressure) |
| KPH300L-  |                                |  | ..3/7.. = 3...7 PSIG                     |   |   |
|   |                                |  | ..3/15.. = 3...15 PSIG                   |   |   |
|   |                                |  | ..3/30.. = 3...30 PSIG                   |   |   |
|   |                                |  | ..7/70.. = 7...70 PSIG                   |   |   |
|   |                                |  | ..7/120.. = 7...120 PSIG                 |   |   |
|   |                                |  | ..15/200.. = 15...200 PSIG               |   |   |
|   |                                |  | ..15/230.. = 15...230 PSIG               |   |   |
| KPH300H-  |                                | ..2.. = 1/4" NPT,<br>Male<br>(Standard)  | ..30/290.. = 30...290 PSIG               |   |   |
|   |                                |  | ..100/220.. = 100...220 PSIG             |   |   |
|   | ..145/435.. = 145...435 PSIG   |  |  |   |   |
|   | ..145/1160.. = 145...1160 PSIG |  |  |   |   |
|   |                                | ..145/1750.. = 145...1750 PSIG   |  |   |   |
|   |                                | ..145/2320.. = 145...2320 PSIG   |  |   |   |
|   |                                | ..300/2900.. = 300...2900 PSIG   |  |   |   |
|   |                                | ..300/3600.. = 300...3600 PSIG   |  |   |   |
|   |                                | ..450/4600.. = 300...4600 PSIG   |  |   |   |
|   |                                | ..25 = M12 x 1<br>(4-pin Micro DC)   |  |   |   |
|   |                                | ..36 = 3' Integral Cable   |  |   |   |
|   |                                | ..EP = EPDM Diaphragm<br>(-10/250 °F)<br>..HNBR = Low Temperature<br>Nitrile (-40/110 °F)<br>..VT = FKM Diaphragm<br>(0/250 °F)<br>..SS = 316 SS<br>Wetted Materials |  |   |   |
| Accessories: P/N 807.037 = 4-Pin Micro-DC Connector with 6-foot Cable for Electrical Connection 25<br>P/N 807.037/5M = 4-Pin Micro-DC Connector with 16-foot Cable for Electrical Connection 25<br>P/N 807.037/10M = 4-Pin Micro-DC Connector with 32-foot Cable for Electrical Connection 25 |                                |  |  |   |   |

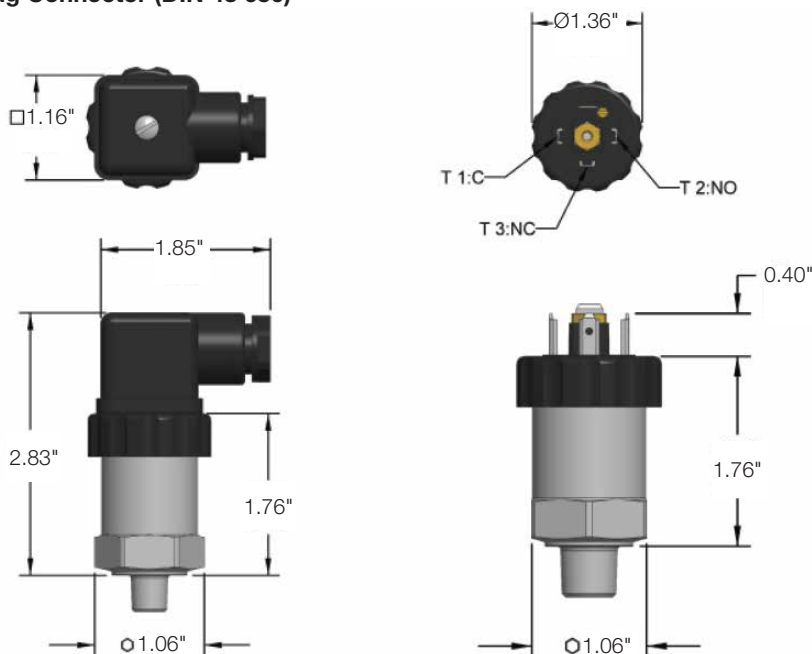
<sup>1)</sup> Other fittings available on request

<sup>2)</sup> Other electrical connections available on request

<sup>3)</sup> Not all options are available for all ranges. Consult factory

## Dimensions

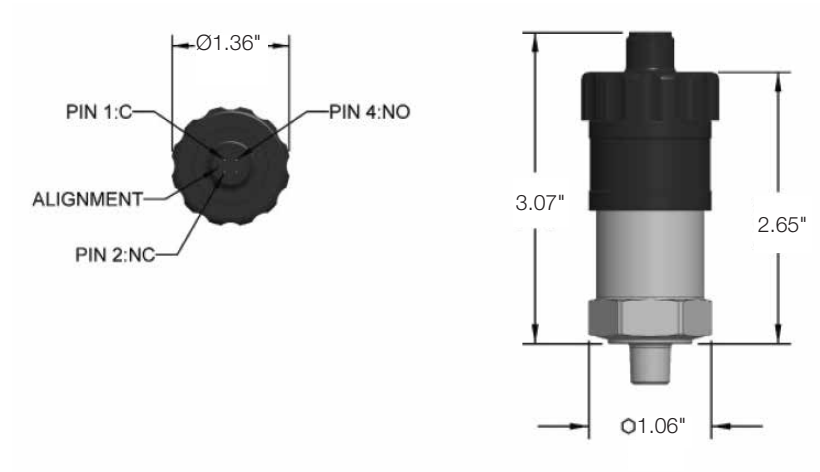
### Electrical Connection 8, Plug Connector (DIN 43 650)





### Dimensions (Cont.)

Electrical Connection 25, M12 x 1(4-pin Micro DC)



Electrical Connection 36, 3' Integral Cable

