

# PS83 – OEM Subminiature Vacuum Switch

▶ 12" to 30" Hg (406 to 1016 mbar) formerly PS-J series

This compact vacuum switch is designed for OEM applications. Metal blade contacts in lieu of microswitches make this a very economical switch. The PS83 series features Teflon®-coated Kapton® diaphragms. Kapton® polyimide maintains excellent physical properties over a wide temperature range, while the Teflon® coating offers superb chemical resistance.

## Specifications

<b>Operating Temperature</b>	-40°F to +200°F (-40°C to +93°C)
<b>Switch*</b>	100 VA Max.; 42 V Maximum Voltage
<b>Repeatability</b>	±10% of Full Set Point Range @ 70°F (20°C) ambient temp.
<b>Wetted Parts</b>	
<b>Diaphragm</b>	Teflon®-coated Kapton®
<b>Housing</b>	Brass (optional 316 SS)
<b>Electrical Termination</b>	Exposed Terminals IP00; Flying Leads IP00; IP option IP65
<b>Proof Pressure</b>	0 psig to 150 psig
<b>Approvals</b>	CE (UL Approved units available)
<b>Weight, Approximate</b>	0.14 lbs. (0.06 kg)

\*Gold contacts (option G) may be required for less than 12 VDC and 20 mA. Teflon® and Kapton® are registered trademarks of Dupont.

## How To Order

Use the **Bold** characters from the chart below to construct a product code.

<b>SELECT</b>	<b>PS83</b>	<b>-20</b>	<b>-4MNB</b>	<b>-A</b>	<b>-SP</b>	<b>-XX</b>	<b>-XXXX</b>
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- Pressure Range Code 20  
Insert Pressure Range Code from table below
- Pressure Fitting<sup>1</sup> 4MNB  

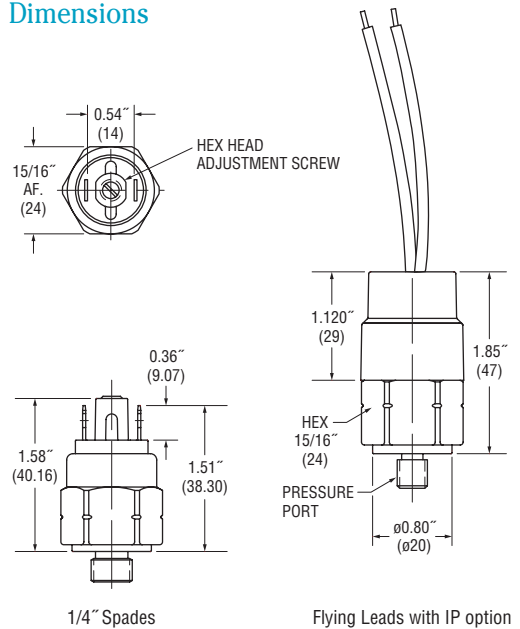
Brass	<b>316 Stainless Steel</b>
<b>-2MNB</b> 1/8" NPTM	<b>-2MNS</b> 1/8" NPTM
<b>-4MNB</b> 1/4" NPTM	<b>-4MNS</b> 1/4" NPTM
<b>-2MGB</b> 1/8" BSPM	<b>-2MGS</b> 1/8" BSPM
<b>-4MGB</b> 1/4" BSPM	<b>-4MGS</b> 1/4" BSPM
<b>-8MGB</b> 1/2" BSPM	<b>-4MSS</b> 7/16"-20 SAE Male
<b>-M10B</b> M10 x 1.0 Straight	<b>-6MSS</b> 9/16"-18 SAE Male
<b>-M12B</b> M12 x 1.5 Straight	
<b>-4MSB</b> 7/16"-20 SAE Male	
<b>-6MSB</b> 9/16"-18 SAE Male	
- Circuit A  
-A SPST/NO; -B SPST/NC
- Electrical Termination SP  
-SP Spade Terminals (standard); -TS Terminal Screws;  
-FLXX Flying Leads<sup>2</sup>; -FLSXX Flying Leads w/PVC Shrink Tubing<sup>2</sup>
- Options G  
-G Gold Contacts (for loads less than 12 mA @ 12 VDC); -IP Ingress Protection<sup>3</sup>;  
-OXY Oxygen Cleaned; -RB Rubber Boot (shipped loose);  
-WF Weather Pack Connector, Female; -WM Weather Pack Connector, Male;  
-DE Deutsch Connector, Male, DT04 Series
- Fixed Set Point (optional)  
A. Specify set point -FS (in Inches Hg or mBAR, see example)<sup>4</sup> 500  
B. Set Point Actuation R  
R on Rising Vacuum; F on Falling Vacuum  
Example: **-FS500MBARF** for 500 mBAR Falling or **-FS14INHGR** for 14" Hg Rising

### Notes:

- Other connectors available. Consult factory.
- 18" is standard. Specify lead length in inches (max. 48"). e.g. **-FL18** or **-FLS30**.
- Ingress Protection is available only with **-FL** or **-FLS** Electrical Termination.
- Set Point must be within Pressure Range selected in Step 1 above.



## Dimensions



## Pressure Range Table

Pressure Range Code	Pressure Range	Average Dead Band
20	12-28" Hg (406.4-9.48.2 mbar)	Less than 15% of full set point range