

PS82 – Economical Miniature Vacuum Switches

► 169 to 1016 mbar (5" to 30" Hg) formerly PS-EV series

These miniature vacuum switches, based on our proven PS71 series, are designed for demanding applications where space and/or price are strong concerns.

Specifications

Operating Temperature	-40°C to +80°C (-40°F to +180°F)
Switch*	5 Amp at 12/24Vdc and 125/250Vac; 1 Amp with gold contacts (option G)
Repeatability	±2% of Full Set Point Range @ 20°C (70°F)
Wetted Parts	
Diaphragm Material	Nitrile standard (optional EPDM, Viton® and Neoprene)
Fitting	Brass (optional 316 Stainless Steel)
Spring	316 Stainless Steel
Electrical Termination	DIN 43650A IP65; Male Conduit with Flying Leads IP00; Flying Leads IP65; IP option IP66
Proof Pressure	35 bar (500 psi)
Approvals	CE
Weight, Approximate	0.25 kg (0.5 lbs.)

*Gold contacts (option G) may be required for less than 12Vdc and 20mA.

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How to Order

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

PS82 Series _____ **PS82** **10** **-4MNB** **-C** **-H** **-XX** **-XXXX**

Pressure Range Code

Insert Pressure Range Code from table below right

Pressure Fitting¹

Brass **316 Stainless Steel**

2MNB 1/8" NPTM **2MNS** 1/8" NPTM

4MNB 1/4" NPTM **4MNS** 1/4" NPTM

2MGB 1/8" BSPM **4MGS** 1/4" BSPM

4MGB 1/4" BSPM

4MSB 7/16"-20 SAE Male

6MSB 9/16"-18 SAE Male

Circuit

A SPST/NO **B** SPST/NC **C** SPDT (at zero pressure (gauge))

Electrical Termination

FLXX Flying Leads² **FLSXX** Flying Leads w/PVC Shrink Tubing²

ELXX 1/2" NPT Male Conduit w/Flying Leads³ **CABXX** 18 AWG PVC Cable⁴

H DIN 43650A Male Half Only⁵ **HR** Right Angle DIN 43650A Male Half Only⁵

HC DIN 43650A 9mm Cable Clamp⁵

HCR Right Angle DIN 43650A 9mm Cable Clamp⁵

HN DIN 43650A with 1/2" Female NPT Conduit⁵

HNR Right Angle DIN 43650A with 1/2" Female NPT Conduit⁵

HM Micro (9.4mm Spacing) DIN Style Male Half Only⁵

Options

V Viton® Diaphragm **N** Neoprene Diaphragm **E** EPDM Diaphragm

G Gold Contacts (for loads less than 12mA @ 12Vdc)

RD Reduced Differential (50% reduction typical) **IP** Ingress Protection⁶

OXY Oxygen Cleaned **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 mBAR or Inches Hg, see example)⁷

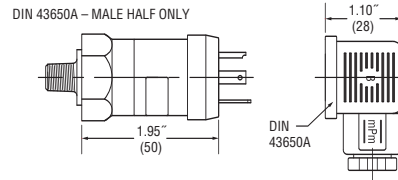
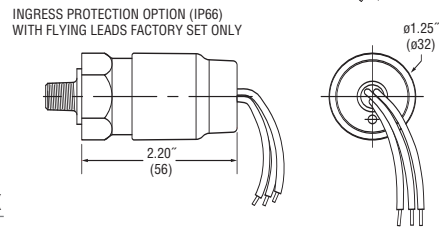
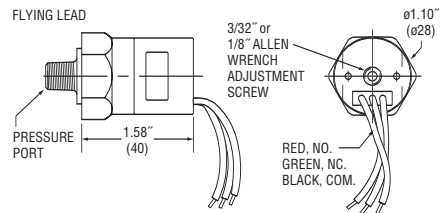
B. Set Point Actuation

R on Rising Vacuum; **F** on Falling Vacuum

Example: **FS300MBARF** for 300 mBAR Falling or **FS10INHGR** for 10" Hg Rising



Dimensions



Pin 1	Common
Pin 2	Normally Closed
Pin 3	Normally Open

Pressure Range Table

Pressure Range Code	Pressure Range	Average Dead Band
10	169.3 - 508.0 mbar (5 - 15" Hg)	100 - 150 mbar (3 - 5" Hg)
20	406.4 - 1016.0 mbar (12 - 30" Hg)	100 - 270 mbar (3 - 9" Hg)

Notes:

- Other connectors available. Consult factory.
- 18" is standard. Specify lead length in inches (max. 48"). e.g. **FL18** or **FLS30**.
- 18" is standard. Specify cable length in inches (max. 48"). e.g. **EL18** or **EL30**.
- 36" is minimum. Specify cable length in inches. e.g. **CAB36** or **CAB120**.
- DIN connectors require **C** SPDT circuit.
- Ingress Protection is available only with **FL**, **FLS** or **CAB** Electrical Termination choices. Ingress Protection requires Fixed Set Point **FS**.
- Set Point must be within Pressure Range selected in Step 1 above.