

Brooks® IPS122 Series 2 Inch Stainless Steel Indicating Pressure Switches

- » Compact unit for easy installation into new or existing gas systems
- » Local or remote indication of switch interlock to guard against undesirable process pressure conditions to ensure process accuracy and protect product yields
- » High purity for use in all application environments



Product Description

The Brooks Instrument IPS122 Series 2 inch stainless steel indicating pressure switches provide a high purity, precision pressure gauge and electronic switch with an adjustable pressure switch setpoint. This compact 2 inch unit has the ability to operate lights or relays up to a maximum of 12 watts. Available in a variety of pressure ranges and process connections and this device provides solid state switching for cleanroom and hazardous applications.

Features

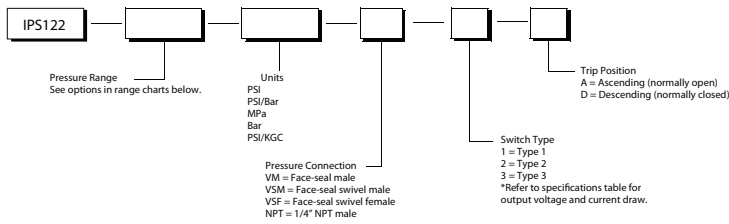
- Local and remote alarm capability
- Local indication of pressure reading and switch position (normally open or normally closed)
- Solid state design for hazardous environments
- Switches welded in oxygen-free chambers to meet rigid cleanliness and safety guidelines
- 1 year warranty

Applications

Gas delivery systems and tools used for semiconductor processing, including:

- Bulk gas
- Gas cabinets
- Gas distribution
- Gas panels

Product Configurations



Range	Figure Intervals*	Smallest Interval*
30-0-15	10 in Hg-3 psi	2 in Hg-1 psi
30-0-30	10 in Hg-5 psi	2 in Hg-1 psi
30-0-60	30 in Hg-10 psi	5 in Hg-2 psi
30-0-100	30 in Hg-20 psi	5 in Hg-2 psi
30-0-160	10 in Hg-25 psi	10 in Hg-5 psi
30-0-200	30 in Hg-40 psi	10 in Hg-5 psi
30-0-300	10 in Hg-50 psi	15 in Hg-10 psi

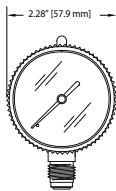
Range	Figure Intervals*	Smallest Interval*
0-30	5	1
0-60	10	2
0-100	20	2
0-160	40	5
0-200	40	5
0-300	50	10

Range	Figure Intervals*	Smallest Interval*
0-400	100	10
0-600	100	20
0-1000	200	20
0-3000	500	100
0-4000	1000	100

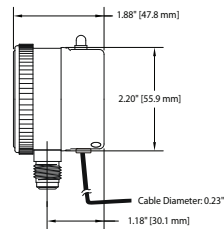
NOTE:
All ranges listed are in Hg and/or psi. If a scale other than Hg or psi is required, convert the pressure range code to the customer specified units and use that in the product description code when specifying the product.
For dual range specify the range code for the first engineering unit (Ex. For a dual range with units of KGC/KPA the range should be specified in KGC).

* All figure intervals and smallest interval depicted in this chart represent typical artwork layout and may not be accurate for all gauges.

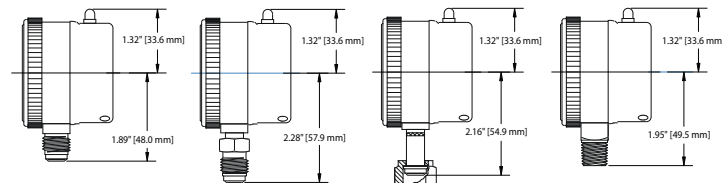
Product Dimensions



FRONT VIEW



SIDE VIEW



VM
FACE SEAL MALE 1/4"

VSM
FACE SEAL
SWIVEL MALE 1/4"

VSF
FACE SEAL
SWIVEL FEMALE 1/4"

NPT
1/4"

IPS122 Series 2 Inch Stainless Steel Indicating Pressure Switches Specifications

Case Material 300 series stainless steel, electropolished
Bezel and Lens Material One-piece polycarbonate, screw-on
Socket 316L stainless steel
Movement 300 Series Stainless Steel
Bourdon Tube 316L stainless steel
Proof Pressure 110%
Burst Pressure 400%
Connections Face-seal male, face-seal swivel male, face-seal swivel female and 1/4" NPT male

Dial White with black marking "Use No Oil" is red

Accuracy 1% of full scale
Helium Leak Check 4×10^{-9} Inboard Std. cc/sec
Cleaning Cleaned for oxygen service to ANSI B40.1 level IV specifications

Response Time Less than 200 milliseconds
Operating (ambient) 0° to 160°F (-18° to 71°C)
Compensating 20° to 135°F (-7° to 57°C)
Storage -20° to 175°F (-29° to 79°C)

Switch Power Input

Off-On Switch Type 1 9 to 30 VDC
Logic Output 8 to 30 VDC
Type 2 9 to 30 VDC
Logic Output 5 VDC Type 3 4.8 to 5.2 VDC

Switch Power Rating

Off-On Switch Type 1 12 watts or 500 mA
175 mA max. for intrinsically safe applications

Logic Output 8 to 30 VDC
Type 2 60 mA (sink). Open collector NPN
Logic Output 5 VDC Type 3 60 mA (sink). Open collector NPN

Output Voltage and Current Draw

Off-On Switch Type 1 0 to 9-30 VDC; 30 mA (off), 45 mA (on)
Logic Output 8-30 VDC
Type 2 0 to 9-30 VDC; 30 mA (off), 45 mA (on)
Logic Output 5 VDC Type 3 0 to 5 VDC; 3 mA (off), 11 mA (on)
Switch leads 2 m [6"] cable, tinned ends, 0.23" in diameter

Switch Differential 3% of scale; 0.25% of scale repeatability
Trip Position External adjust. Select to trip on ascending (N.O.) or descending (N.C.) pressure. (Field changeable by internal jumper.)

Pressure Ranges Available Vacuum to 4,000 PSI (276 bar). Metric also available. Offered in single scale only. (See chart on the left)

Approximate Shipping Weight 0.65 lbs. (0.29 kg)

HELP DESK

In case you need technical assistance:

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Europe +(31) 318 549 290
Asia +011-81-3-5633-7100



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