

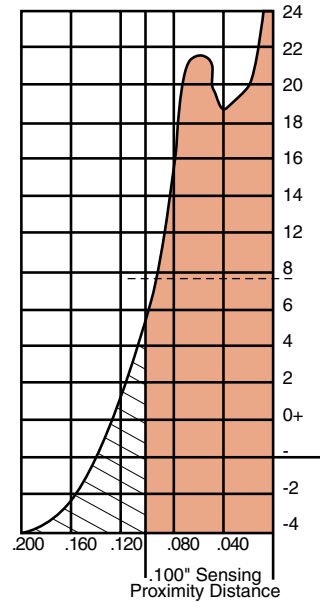
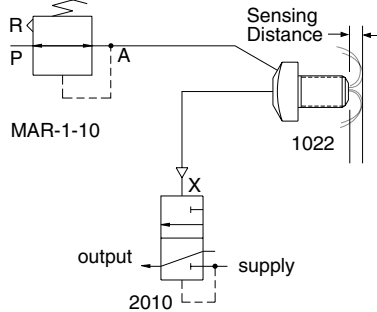
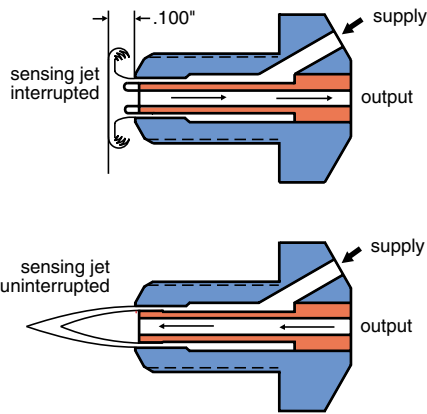
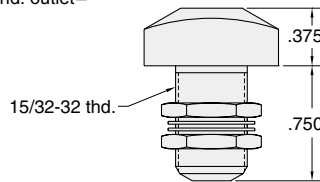
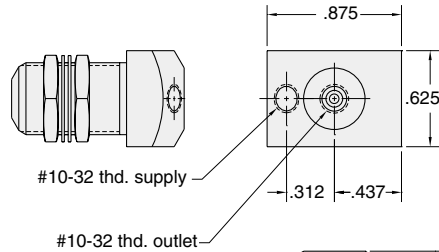


PROXIMITY SENSORS

1022

Non-contact air limit switch with no moving parts; will sense any flat or curved object which presents a sensing surface of 1/4" or more to the sensing nozzle

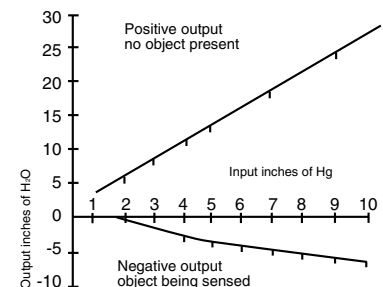
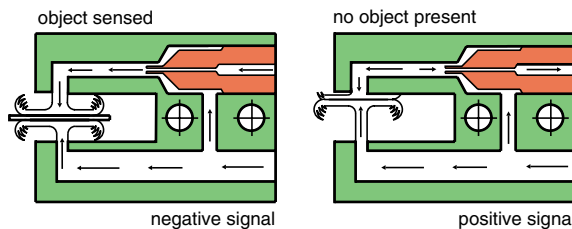
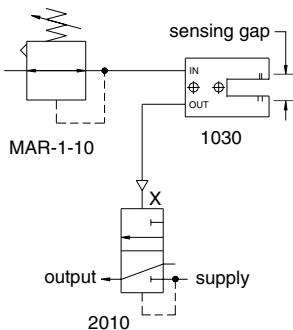
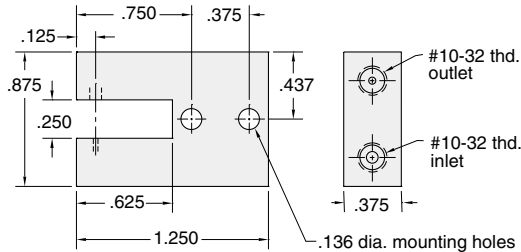
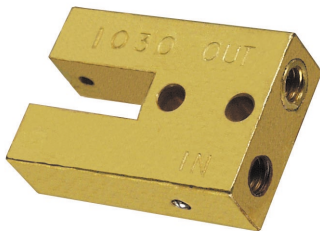
- Medium:** Air
- Input Pressure:** 4 to 10 psig
- Nominal Proximity Distance:** .100"
- Output Signal at 4 psig supply:**
Normal: 2" H₂O actuated: 7 1/2" H₂O
- Frequency Response:** 500 CPM
- Air Consumption:** 0.3 SCFM
- Sensing Capability:** Flat or curved surfaces with 1/8" minimum radius
- Connections:** 10-32 female
- Construction:** Solid brass bright dipped
- Temperature Range:** 32° to 230° F



1030

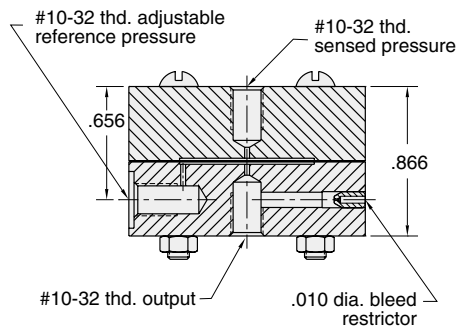
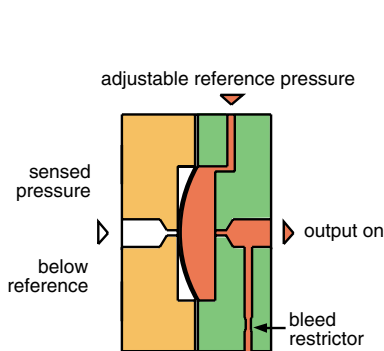
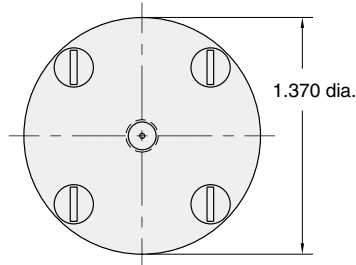
Non-contact positive pressure sensor will sense any flat or round object with a 1/32" minimum radius. Produces a positive signal when no object is present and a negative signal when an object interrupts its sensing system

- Medium:** Air
- Input Pressure:** 0.5-5 psig
- Output:** -3" to 26" H₂O @ 4 psig
- Frequency Response:** 1000 cpm
- Air Consumption:** 1/4 SCFM @ 4 psig
- Sensing Capability:** Flat or curved surfaces with 1/32" minimum radius. May be used for up to 4" gap with an additional auxiliary jet
- Connections:** 10-32 female
- Construction:** Solid brass bright dipped
- Temperature Range:** 32° to 230° F



1043

Normally on single stage pressure repeater for off-on control of an adjustable reference pressure when a sensed pressure moves above or below the reference pressure level



Medium: reference pressure - air sensed pressure - air, gas, or liquid

Input Pressure: 1-150 psig max.

Air Flow: .029" orifice

Response Time: 5 ms.

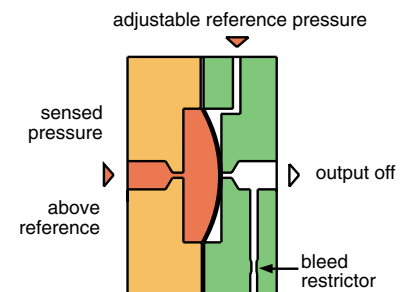
Differential Sensitivity: 2%

Frequency Response: 60 Hz

Ports: 10-32 female

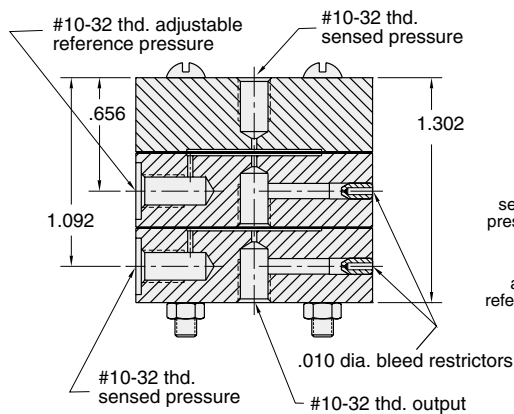
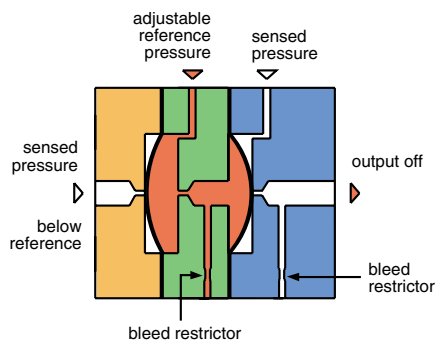
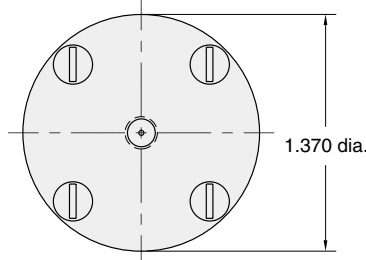
Materials: Anodized aluminum body, Buna-N diaphragms

Temperature Range: 32° to 230° F



1044

Normally off two stage pressure repeater for off-on control of an adjustable reference pressure when a sensed pressure moves above or below the reference pressure level



Medium: reference pressure - air sensed pressure - air, gas, or liquid

Input Pressure: 1-150 psig max.

Air Flow: .029" orifice

Response Time: 5 ms.

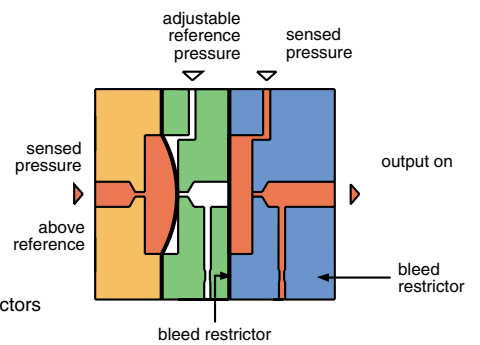
Differential Sensitivity: 2%

Frequency Response: 60 Hz

Ports: 10-32 female

Materials: Anodized aluminum body, Buna-N diaphragms

Temperature Range: 32° to 230° F

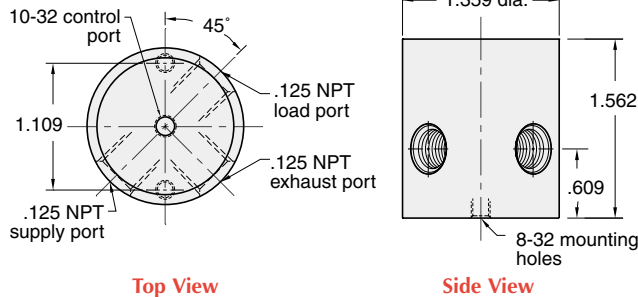
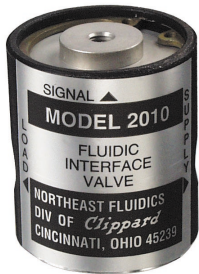




SPECIAL PILOTED 3-WAY VALVES

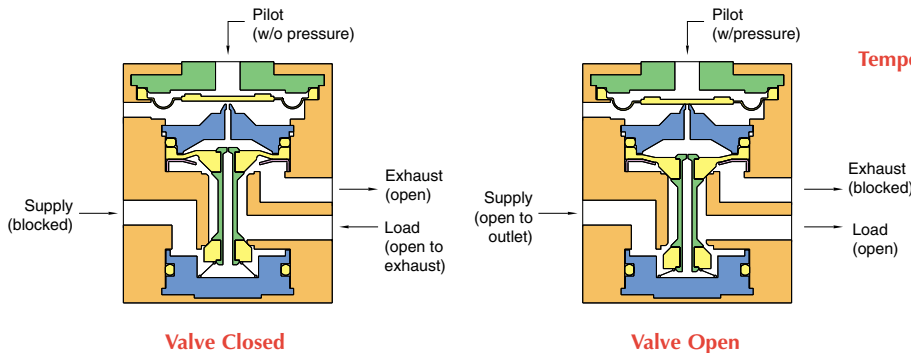
2010

3-way valve normally closed interface amplifies very low pressure air-jet sensing signals to working power levels



Top View

Side View



Valve Closed

Valve Open

Medium: air

Material: anodized aluminum body, Buna-N diaphragms

Input Pressure: 30-100 psig max.

Air Flow: 22 SCFM @ 100 psig

Pilot Pressure: 4" H₂O @ 100 psig

Maximum Allowable Pilot Pressure: 5 psig

Response Time: 10 ms. dead headed

Operating Speed: 50 Hz

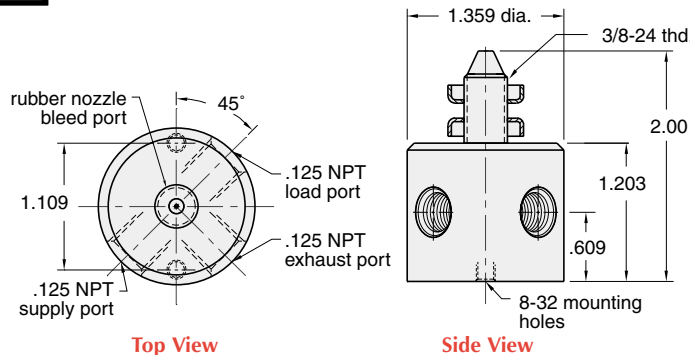
Bleed: 0.1 SCFM @ 100 psig

Ports: Load - 1/8 NPT female
Supply - 1/8 NPT female
Exhaust - 1/8 NPT female
Control - 10-32 female

Temperature Range: 32° to 230° F

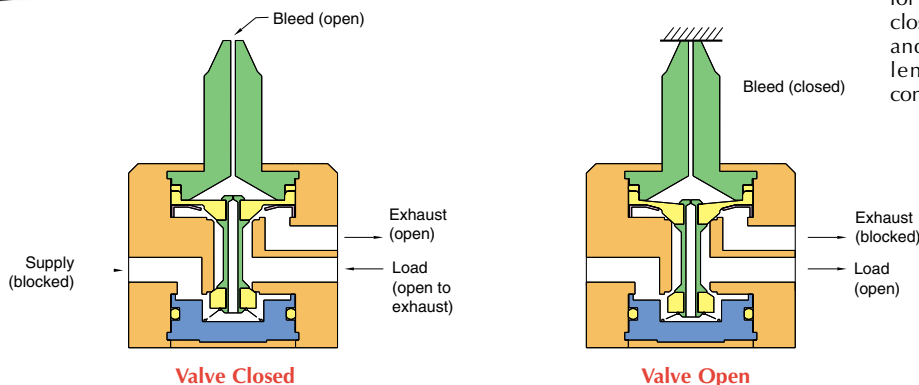
2011-1

3-way bleed pressure piloted limit valve; blocking of the sensing port causes rapid valve opening



Top View

Side View



Valve Closed

Valve Open

Medium: air

Material: anodized aluminum body, Buna-N diaphragms

Input Pressure: 30-100 psig max.

Air Flow: 22 SCFM @ 100 psig

Bleed: 0.1 SCFM @ 100 psig

Response Time: 15 ms.
(response time will increase)

Ports: 1/8 NPT

Temperature Range: 32° to 230° F

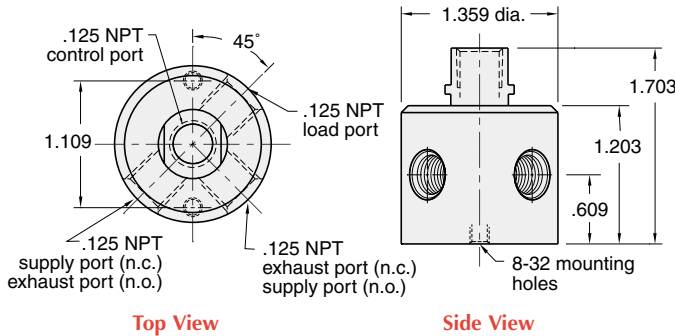
Note: Supplied with threaded bulkhead mount and integral rubber nozzle for direct actuation by mechanical closure. By removing rubber nozzle and inserting a 10-32 fitting and length of hose, 2011-1 can be converted to a remote sensing valve.

SPECIAL PILOTED 3-WAY VALVES



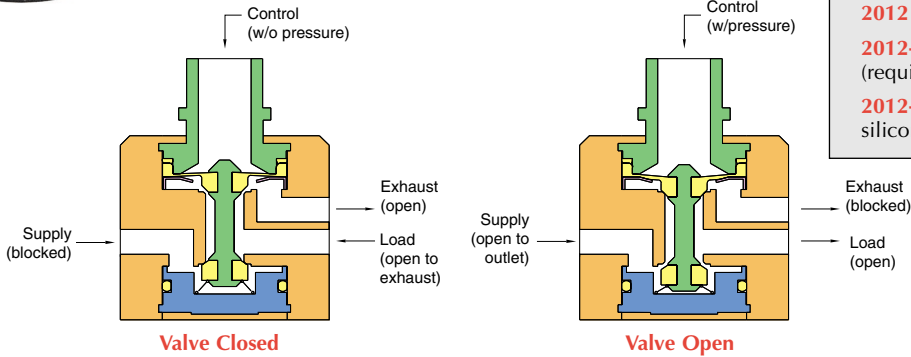
2012

3-way valve n.o. or n.c. air piloted



Top View

Side View



Valve Closed

Valve Open

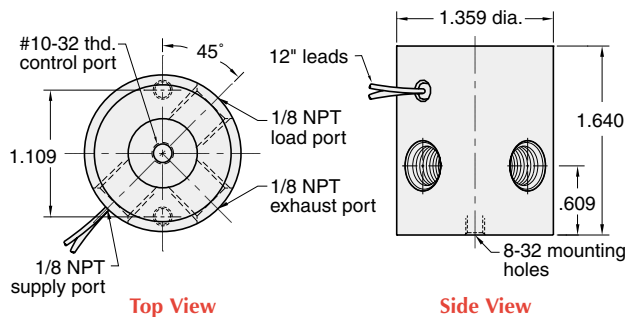
- Medium:** air
- Material:** anodized aluminum body, Buna-N diaphragms
- Input Pressure:** 1-100 psig max.
- Air Flow:** 22 SCFM @ 100 psig
- Bleed:** 0.1 SCFM @ 100 psig
- Minimum Pilot Pressure:**
n.o. - 90% of supply pr.
n.c. - 60% of supply pr.
- Response Time:** 15 ms. after pilot pressure reaches switch point
- Operating Speed:** 1100 CPM
- Ports:** 1/8 NPT female
- Temperature Range:** 32° to 230° F

Options:

- 2012** standard valve
- 2012-VAC** for vacuum operation (requires positive pressure pilot signal)
- 2012-G** for use with liquid adhesives - silicone diaphragm and seals

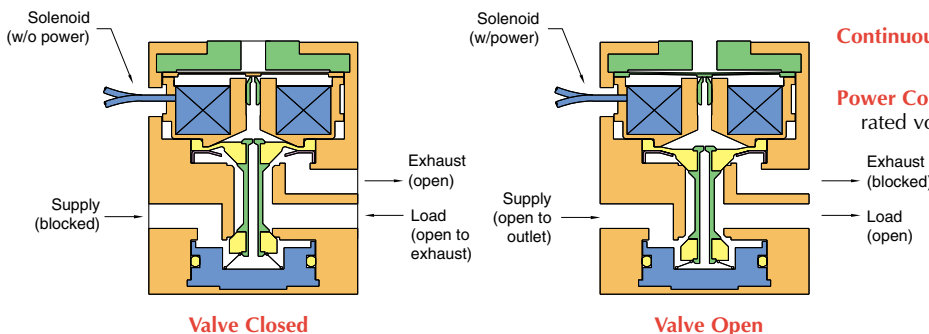
2013 - □

3-way normally closed electronic valve with low-power DC solenoid solid state output signals can be directly converted to high pressure pneumatic power without amplification



Top View

Side View



Valve Closed

Valve Open

- Medium:** air
- Material:** anodized aluminum body, Buna-N diaphragms
- Stem Travel:** 1/8"
- Input Pressure:** 30-100 psig max.
- Air Flow:** 22 SCFM @ 100 psig
- Bleed:** 0.1 SCFM @ 100 psig
- Filtration:** 10 micron
- Frequency Response:** 50 Hz @ 100 psig
70 Hz @ 30 psig
- Ports:** 1/8 NPT female
- Switching Speed:** 10 ms.
- Leads:** 28 gauge stranded P.V.C. insulated
- Temperature Range:** 32° to 230° F

- Standard Voltages:** 2013-6 6 volts DC,
2013-12 12 volts DC,
2013-24 24 volts DC

- Continuous Overload:** 350% @ 25° C ambient;
250% @ 50° C ambient
- Power Consumption:** less than 0.50 watts at rated voltage (80 ma. @ 6V
40 ma. @ 12V.
20 ma. @ 24V)

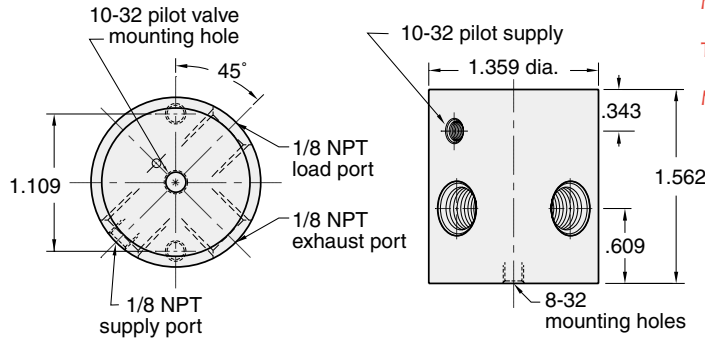


SPECIAL PILOTED 3-WAY VALVES

2020

3-way normally closed pressure piloted valve. Designed to be piloted by a Clippard EV or ET manifold mount electronic valve. Output from the EV/ET actuates the valve to produce outputs up to 22 SCFM at 100 psig. Combines low wattage, long life and cool running of the EV/ET valves with quick response and high flow of Clippard booster type valves.

- Medium:** air
- Input Pressure:** 30-100 psig max.
- Air Flow:** 22 SCFM @ 100 psig
- Pilot Pressure:** 60% of supply pressure, min.
- Response Time:** approx. 20 ms.
- Ports:** Inlet, outlet, exhaust 1/8 NPT
Pilot supply is 10-32 female
- Mounting:** Mounting holes provided
- Temperature Range:** 32° to 230° F
- Materials:** Anodized aluminum, stainless steel



2020 shown with ET Pilot Valve and external pilot supply

2021



The 2020 and 2021 are identical in all respects except one. The 2020 has an external 10-32 port for the pressure supply to the EV/ET electronic pilot valve. The 2021 has an internal pressure supply to the EV/ET.

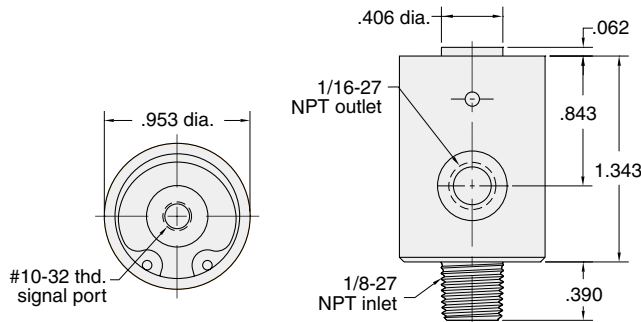
Top View

Side View

2050

3-way miniature valve interface

- Medium:** air
- Input Pressure:** 30-100 psig max.
- Air Flow:** 15 SCFM@100 psig
- Pilot Pressure:** 15" H₂O
- Maximum Allowable Pilot Pressure:** 5 psig
- Response Time:** 10 ms.
- Ports:** Inlet - 1/8 NPT male
Outlet - 1/16" NPT female
Pilot - 10-32 female
- Temperature Range:** 32° to 230° F



Top View

Side View

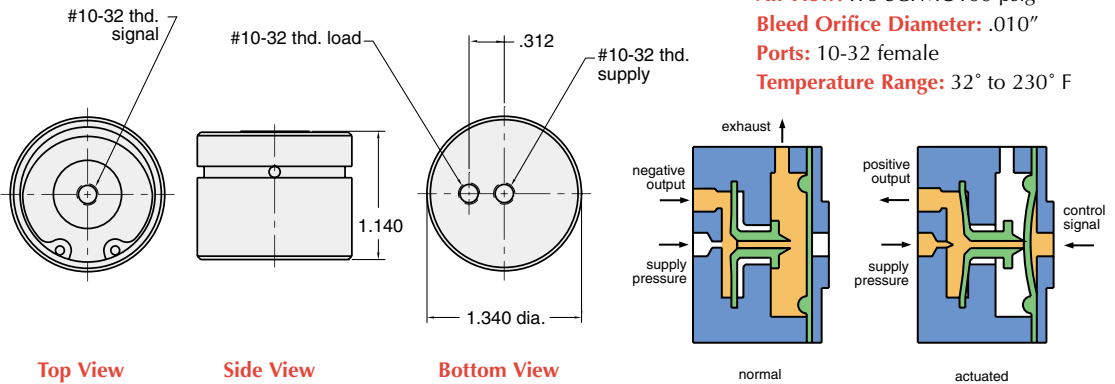
Wow! Scratch -n- Sniff photo!

3200-A



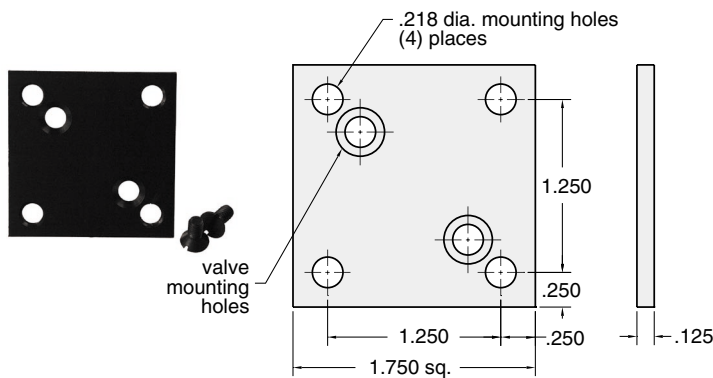
Pressure piloted snap action amplifying valve provides a sharp, clean output signal, even with slow-changing pressure input signals; output is stabilized without chatter or oscillation

Medium: air
Input Pressure: 3-100 psig max.
Minimum Pilot Pressure: 1.5" H₂O psig
Maximum Pilot Pressure: 1psig (28" H₂O")
Air Flow: .18 SCFM@100 psig
Bleed Orifice Diameter: .010"
Ports: 10-32 female
Temperature Range: 32° to 230° F



2010-050

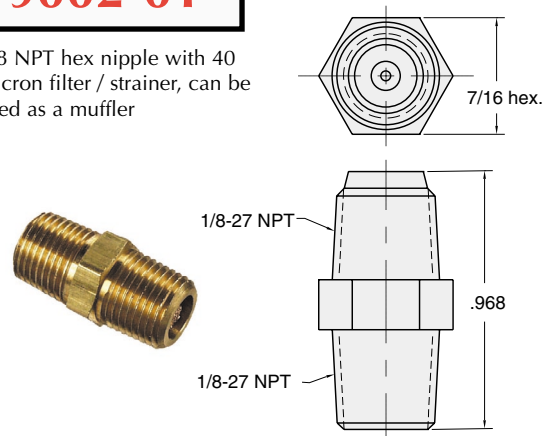
Flat bracket to mount 2010, 2011-1, 2012 and 2013 valves.



Construction: Black oxide finish, two mounting screws furnished.

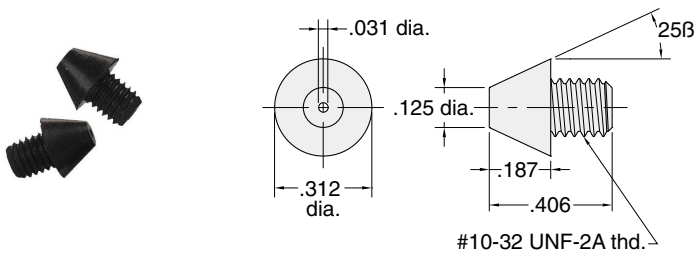
9002-01

1/8 NPT hex nipple with 40 micron filter / strainer, can be used as a muffler



2011-012

10-32 rubber nozzles for replacement 2011-1 limit valves. 10-32 thread, five to a package.



3200-006

Mounting bracket for 3200-A snap action relays.

