AIR-2-ELECTRIC® SWITCHES

Features

- Switch modules available normally open or normally closed
- Wide range of mounting configurations available
- Actuators with or without an air pressure indicator
- Standard manual override
- Interfaces pneumatic signals with manual signals, via the same devices, saving space and cost, adding safety and convenience
- 4 bright colors for visibility and operator recognition
- Can actuate as many as 12 switches
- Low operating pressure requirements: approx. 10 psig

Air-2-Electric® Pneumatic Actuators Numbering System

A S - ❑ - ❑

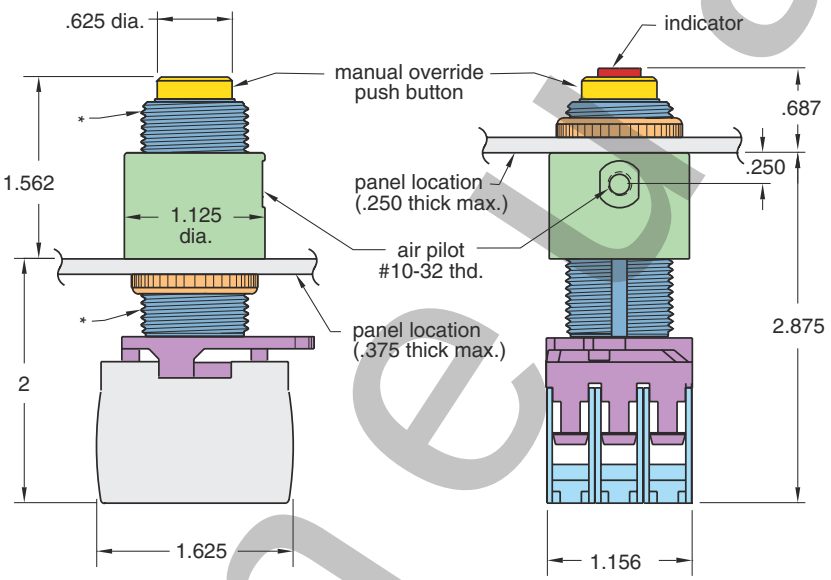
Pneumatic Actuator

Push Button Color/ Indicator Color:

BG - Black/Green
BR - Black/Red
BY - Black/Yellow
BW - Black/White
BN - Black/No Indicator
GN - Green/No Indicator
RN - Red/No Indicator
YN - Yellow/No Indicator

Blank - Pneumatic Actuation with Manual Override (Standard)
A - Pneumatic Actuation Only (Manual Override Blocked)

Air-2-Electric® System Dimensions



* M22 x 1.5 thread (7/8" dia. panel mount hole)

Medium: Air

Operating Pressure: Approx. 10 psig plus 1.5 psig per switch

Max. Operating Pressure: 150 psig

Temperature Range: 32° - 140° F

Port: 10-32

Construction:
Activator Housing - Nickel-plated brass, Anodized aluminum, Nylon
Internal Parts - Delrin ®
Seals - Buna-N rubber
Mounting - M22 x 1.5 male thread for panel mount through 7/8" diameter hole

Air-2-Electric® Pneumatic Actuators

Push Button

Manual Override	Air Actuation Only
AS-BN - Black*	**AS-BN-A** - Black
AS-GN - Green	**AS-GN-A** - Green
AS-RN - Red	**AS-RN-A** - Red
AS-YN - Yellow	**AS-YN-A** - Yellow

* Push button color

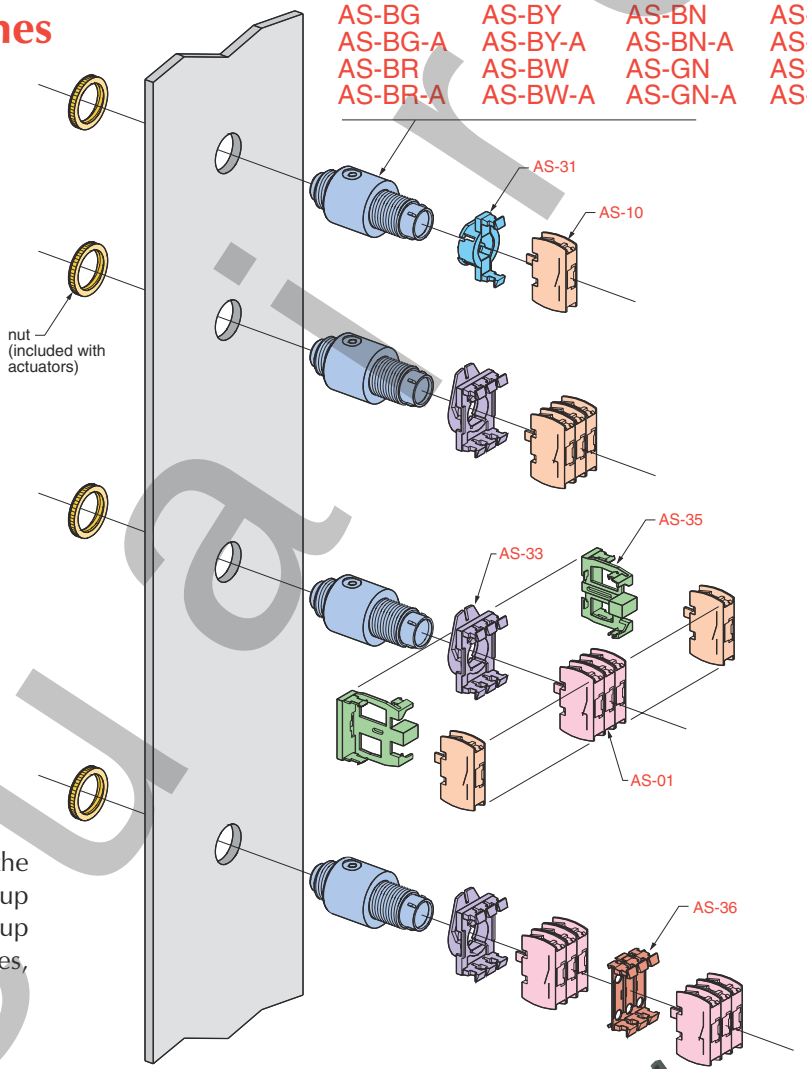
Push Button with Indicator

Manual Override	Air Actuation Only
AS-BG - Green**	**AS-BG-A** - Green
AS-BR - Red	**AS-BR-A** - Red
AS-BY - Yellow	**AS-BY-A** - Yellow
AS-BW - White	**AS-BW-A** - White

** Indicator Color

Air-2-Electric® Air Switches and Mounting Clips

The Air-2-Electric system can handle multiple switches; using line voltage, as many as 12 switches can be actuated. Switch modules are available in normally open or normally closed models. Air-2-Electric actuators are available with a number of feature options such as a manual override and an air pressure indicator and in a variety of colors.



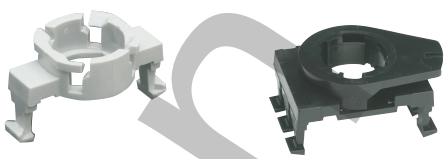
Air Switches

AS-01 - Normally Closed
AS-10 - Normally Open

Mounting Clips

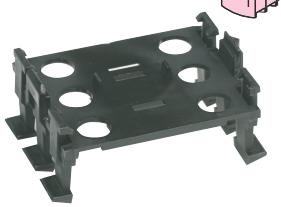
The single clip mounts one switch to the pneumatic actuator. The front clip mounts up to three switches. Add side clips to mount up to five switches. For six to twelve switches, add a 2nd row clip to the front clip.

Note: The 2nd row clip will not mount where side clips are attached.



AS-31 - Single Clip **AS-33 - Front Clip**

AS-35 - Side Clip



AS-36 - 2nd Row Clip

SWITCH MODULES AS-01 AND AS-10 Electrical and Mechanical Characteristics

Electrical Performance					Voltage		Motor Horsepower
AC	Nom. Operating Voltage (VAC) (50-60 Hz)	110	220	440	110	Single phase	0.5
	Nom. Operating Current (A)	8	6.5	3.5	220	Single phase	1.0
DC	Nom. Operating Voltage (VDC)	12	24		220/440	3-phase	3.0
	Nom. Operating Current (A)	4	1.5		440/480	3-phase	5.0

Electrical Life	220 V (50-60 Hz)		Approvals
Operating Current (A)	6	2	
No. of Operations	1×10^6	3×10^6	

Mechanical Life	3×10^6 cycles	Connection	Screw terminals suitable for field wiring # 14-12 AWG

WARNING Caution should be taken to assure the conformation of all applicable standard codes and installation procedures. Proper design engineering procedures should be used to guard against the accidental actuation of the switches. Manual overrides or other precautionary measures should be considered.

Pressure Actuated Switches

Medium: Air

Inlet Pressure: 5 - 150 psig

Temperature Range: 32° - 230° F

Pilot Port: #10-32, 1/8 NPT, M5

Mounting: External thread and nut for panel, bracket, or bulkhead mounting,
5/8 - 32 pressure actuated
15/32-32 manually operated

Accuracy: Actuation and deactuation pressures listed are nominal values. Each has a tolerance of ±12% or 1 psi whichever is greater

❑❑❑-1❑❑-❑❑-❑

SAS Sub-Miniature Air Switch
MAS Miniature Air Switch

Design Series

Switch Current Rating:
SAS
A 5A @ 125/250 VAC
3A @ 30 VDC/.1A 60 VDC
X no switch
MAS
B 3A @ 125/250 VAC
3A @ 30 VDC
C 10A @ 125/250 VAC
5A @ 50 VDC
X no switch

Switch Terminals:
SAS: **0** no switch
1 110 series Q.C.
MAS: **0** no switch
2 187 series Q.C.
3 screw terminals

Actuation Pressure*
06 6 psig
20 20 psig
40 41 psig
65 65 psig

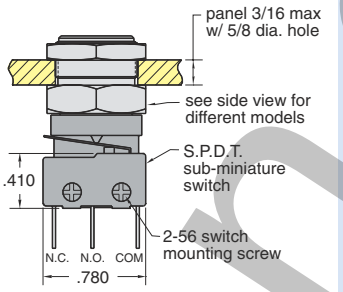
Deactuation Pressure*
06 5 psig
20 18 psig
40 36 psig
65 58 psig

Inlet Port:
Blank 10-32 thd
F 1/8 NPT female
P 1/8 NPT male
M5 M5 x 0.8 thd

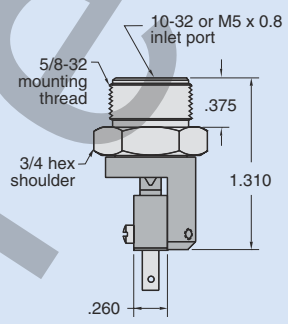
*Nominal value +/- 12% or 1psi, whichever is greater when used with Clippard switches

Pressure Actuated — Mechanically Actuated

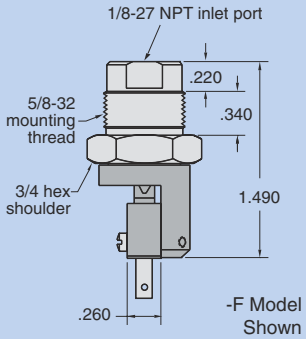
SAS Model



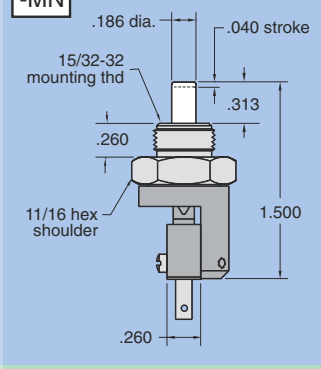
STD. & -M5



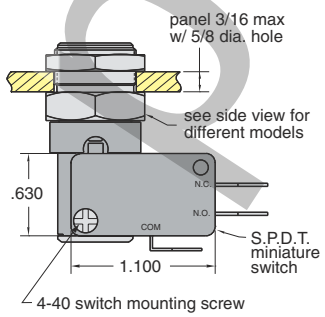
-F & -P

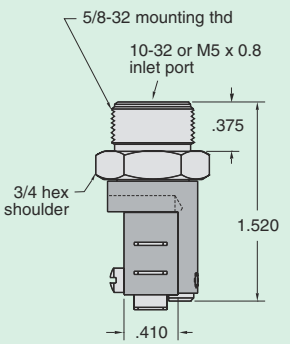


-MN

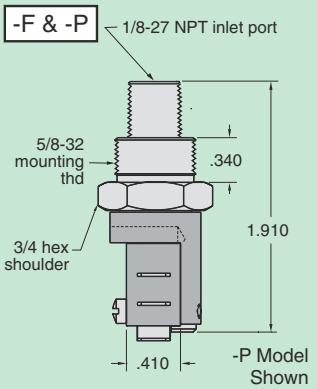


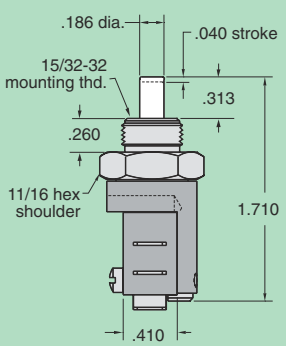
MAS Model





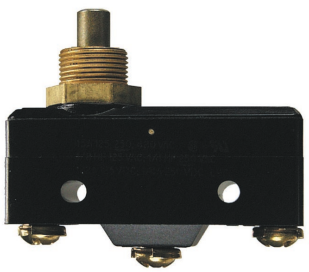
-F & -P

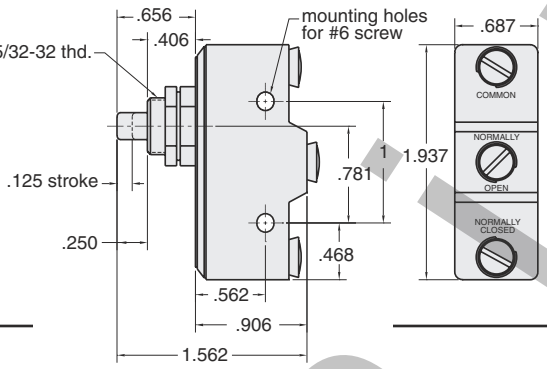




ES-1

Single pole, double throw snap-action electrical switch





Stem Travel: 1/8″

Rating A.C.: 120 volts - 15 amperes
240 volts - 15 amperes
480 volts - 15 amperes

Rating D.C.: 125 volts - 0.5 amperes
250 volts - 0.25 amperes

Mounting: 15/32-32 thread; nut and lockwashers furnished, also two .140″ dia. mounting holes in body

Temperature Range: 32˚ to 230˚ F

Approvals: UL and CE

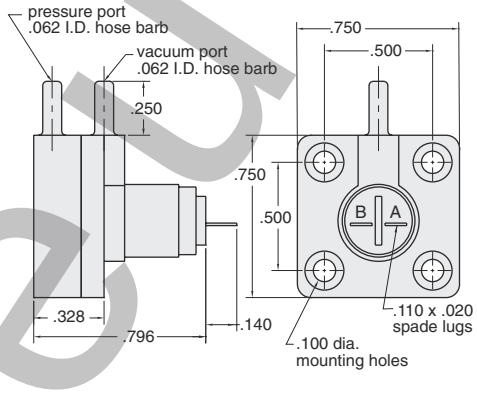
15601

Type: Terminal cover for ES-1 (optional)

Note: Specify ES-1GP for gold plated contact.

5100-3 NO
5100-3 NC

Pneumatic electric switch



Electrical Rating: 60 ma. AC resistive
40 ma. DC resistive @120 volts

Switching Speed: 125 Hz, normally open

Actuating Pressure: 3″ H_2O 10% pressure vacuum, or DP

Maximum Pressure: 8 psig (continuous)

Construction: ABS plastic case gold plated contacts natural rubber diaphragm

Options: 5100 N.O. contacts normally open
5100 N.C. contacts normally closed

Weight: 4 grams

Temperature Range: 32˚ to 230˚ F

Use: for interfacing fluidic or other low pressure air signals with electronic circuitry dual inputs operates on pressure, vacuum, or differential pressure signals

Did you know...

Clippard Instrument Laboratory, Inc. began as a manufacturer of radio coils and test instruments in 1941.