

# Flow-Alert flow switches (microswitch)

## For liquids / Air and other compressed gases

- Automatically signals alarm if flow is too high or too low
- Automatically opens or closes electrical circuits
- Triggers warning lights, buzzers and other devices
- Shuts down pumps and/or other equipment to protect your operation against permanent damage
- Available from ¼" to 1½" sizes in aluminum, brass and stainless
- Installs in any position
- Easier-to-read linear scale
- No flow straighteners or special piping requirements
- Relatively insensitive to shock and vibration
- Special scales available



### Technical data

Materials	2024 - T351 anodized aluminum body, piston and cone C360 brass body, piston and cone 303 stainless body, 2024 - T351 anodized aluminum piston and cone Oil, PE, WBF, & air meters T303 stainless body, C360 brass piston and cone (water meters) T316 stainless body, piston and cone
Petroleum (oil) common parts	
Spider plate: T316 SS Spring: T302 SS Fasteners: T303 SS Pressure seals: Viton® Lens: Polycarbonate	Retaining ring: SAE 1070/1090 carbon steel Retaining spring: SAE 1070/1090 carbon steel Indicator and internal magnet: PPS / ceramic Enclosure seal: Silicone gasket Scale support: 6063 - T6 aluminum
Phosphate ester (PE) common parts	
Spider plate: T316 SS Spring: T302 SS Fasteners: T303 SS Pressure seals: EPR Lens: Polycarbonate	Retaining ring: SAE 1070/1090 carbon steel Retaining spring: SAE 1070/1090 carbon steel Indicator and internal magnet: PPS / ceramic Enclosure seal: Silicone gasket Scale support: 6063 - T6 aluminum
Water-based (WBF), water, air common parts	
Spider plate: T316 SS Spring: T302 SS Fasteners: T303 SS Pressure seals: Viton® Lens: Polycarbonate	Retaining ring: T316 SS Retaining spring: T316 SS Indicator and internal magnet: PPS / ceramic Enclosure seal: Silicone gasket Scale support: 6063 - T6 aluminum
API oil / air / caustic and corrosive liquids and gases	
Spider plate: T316 SS Spring: T316 SS Fasteners: T316 SS Pressure seals: Viton® Lens: Polycarbonate	Retaining ring: T316 SS Retaining spring: T316 SS Indicator and internal magnet: PPS / ceramic Enclosure seal: Silicone gasket Scale support: 6063 - T6 aluminum
Threads	SAE J1926/1, NPTF ANSI B2.2, BSPP ISO1179
Temperature range	-29 to +116 °C (-20 to +240 °F)
Pressure rating	
Aluminum / brass operating	
Liquids	3,500 psi/241 bar max. with a 3:1 safety factor.
Gases	1,000 psi/69 bar max. with a 10:1 safety factor. For high cycle applications, see page conversion information.
Stainless steel operating	
Liquids	6,000 psi/414 bar max. with a 3:1 safety factor.
Gases	1,500 psi/103 bar max. with a 10:1 safety factor. For high cycle applications, see page conversion information.
Accuracy	±2% of full scale
Repeatability	±1%

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### Dimensions

A	B	C	D	E	F	G	H	I	J	K
Nominal port size	Length in (mm)	Length in (mm)	Length in (mm)	Width in (mm)	Width in (mm)	Width in (mm)	Width in (mm)	Depth in (mm)	Offset in (mm)	Hole dia in (mm)
¼ (SAE 6)	6.6 (168)	5.27 (134)	6.41 (163)	6.00 (152)	3.23 (82)	3.00 (76)	4.20 (107)	2.94 (75)	1.51 (38)	.31 (8)
½ (SAE 10)	6.6 (168)	5.27 (134)	6.41 (163)	6.00 (152)	3.23 (82)	3.00 (76)	4.20 (107)	2.94 (75)	1.51 (38)	.31 (8)
¾ (SAE 12)	7.2 (183)	5.27 (134)	7.04 (179)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.27 (32)	.31 (8)
1 (SAE 16)	7.2 (183)	5.27 (134)	7.04 (179)	6.00 (152)	3.60 (91)	3.00 (76)	4.20 (107)	2.94 (75)	1.27 (32)	.31 (8)
1¼ (SAE 20)	12.2 (310)	10.68 (271)	11.65 (296)	7.63 (194)	4.84 (123)	3.82 (97)	5.02 (128)	4.50 (114)	2.20 (56)	.31 (8)
1½ (SAE 24)	12.2 (310)	10.68 (271)	11.65 (296)	7.63 (194)	4.84 (123)	3.82 (97)	5.02 (128)	4.50 (114)	2.20 (56)	.31 (8)

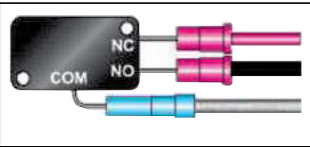
### Enclosure

Material	Anodized and epoxy powder-coated aluminum with polycarbonate lens.
Seals	Silicone gasket between enclosure and lens. Viton® O-rings between enclosure and flow meter body.
Connection	Pig-tail conductor (standard) with water-tight strain relief. Other connections, including quick-disconnect, are available – consult factory for details.
Fastener	T303 SS
Rating	NEMA 12 & 13 (IP52/54)

### Electrical circuitry

Adjustable flow-alert signal: Single (1) or double (2) switch, pre-wired single-pole, double-throw (SPDT)  
UL recognized and CSA certified with high or low flow limit setting, adjustable over the entire flow measuring range. Other switches are available – consult factory for details. Optional 2,4 m (8 ft) cables are available – consult factory for details.  
10A @ 250 VAC maximum, 0.5A @ 125 VDC maximum.

All flow-alert sizes (¼ to 1½ inch series) are offered in single (1) switch or double (2) switch models.  
The single switch model is supplied with a 34" length of 4-wire #18 AWG jacketed cable.  
The double switch model is supplied with an 18" length of 7-wire #16 AWG jacketed cable.



#### One (1) switch 4-wire cable

Red	Normally closed (NC)
Black	Normally open (NO)
White	Common (COM)
Green	Ground

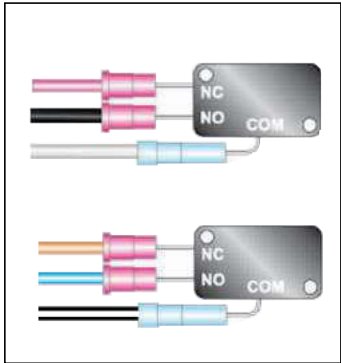
#### Two (2) switch 7-wire cable

##### Switch #1

Red	Normally closed (NC)
Black	Normally open (NO)
White	Common (COM)

##### Switch #2

Orange	Normally closed (NC)
Blue	Normally open (NO)
White/black	Common (COM)
Green	Ground



Note: Weights for all sizes can be found on page 80.