

Fittings and Accessories

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Fittings



Diaphragm Amplifier



Rotowink Indicators



Differential Pressure Indicators



Pressure Switch



Boostermites



Miniature Inline Restrictors



Miniature Inline Filters

- Reduced assembly and maintenance time.
- Expanded pressure rating.
- Pre-applied thread sealant.
- Silicone free o-rings.
- Nickel plated brass bodies and collets.
- Maximum flows in a reduced size.

Specifications

Fluid: Compressed air, nitrogen, inert and non-combustible gases compatible with materials of construction.

Working Pressure: 29.5" Hg vacuum to 260 psig (750 mm Hg to 18 bar)

Note: Flow Control working pressures: 5 to 150 psig (.3 to 10 bar)

Working Temperature: 0° to 175°F (-20° to 80°C)

Materials

Body, swivel fitting and collet: Nickel plated brass

O-ring: Silicone free Nitrile

Sealing washer (parallel male threads): Thermoplastic

Tubing: Nylon 11 or 12, Polyurethane (95 durometer or above) and LDPE (Low Density Polyethylene).

Thread Sealant: Precote 5 thread sealant is factory applied to the circumference of tapered male threads.

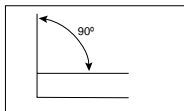


Tube O.D.'s and Tube Tolerances

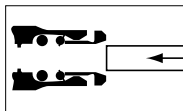
Tube O.D.	O.D. Tube Tolerances	
	Nylon	Polyurethane
1/8" to 1/2" (3 mm to 14 mm)	+0.002" (+0.05 mm) -0.004" (-0.10 mm)	±0.004" (±0.10 mm)

LDPE –Tolerances specified in DIN 73378 or BS54-09/1:1976

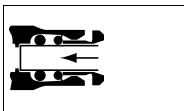
Method of Assembly



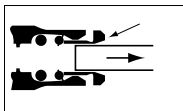
1. Ensure that the tube end is cut square and is free of burrs.



2. Push the tube through the collet into the fitting.

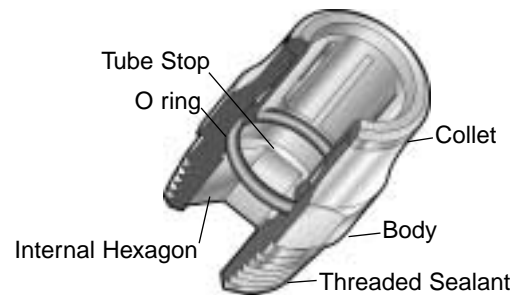


3. Continue pushing the tube (firmly) through the O-ring until it bottoms on the tube stop, then pull back



4. To disconnect, push the tube into the fitting until it bottoms on the tube stop. Then while holding down the collet, withdraw the tube.

Fitting Cutaway





Male Connector



Tube O.D.	NPTF or UNF Thread	
	Thread	Part Number
1/8"	10-32	12 425 0110
	1/16	12 425 0116
	1/8	12 425 0118
	1/4	12 425 0128
5/32"	10-32	12 425 0210
	1/8	12 425 0218
	1/4	12 425 0228
3/16"	1/8	12 425 0318
	1/4	12 425 0328
1/4"	10-32	12 425 0410
	1/8	12 425 0418
	1/4	12 425 0428
	3/8	12 425 0438
5/16"	1/8	12 425 0518
	1/4	12 425 0528
	3/8	12 425 0538
3/8"	1/8	12 425 0618
	1/4	12 425 0628
	3/8	12 425 0638
	1/2	12 425 0648
1/2"	1/4	12 425 0728
	3/8	12 425 0738
	1/2	12 425 0748

Swivel Male Elbow



Tube O.D.	NPTF or UNF Thread	
	Thread	Part Number
1/8"	10-32	12 447 0110
	1/8	12 447 0118
	1/4	12 447 0128
5/32"	10-32	12 447 0210
	1/8	12 447 0218
	1/4	12 447 0228
3/16"	1/8	12 447 0318
	1/4	12 447 0328
1/4"	10-32	12 447 0410
	1/8	12 447 0418
	1/4	12 447 0428
	3/8	12 447 0438
5/16"	1/8	12 447 0518
	1/4	12 447 0528
3/8"	1/8	12 447 0618
	1/4	12 447 0628
	3/8	12 447 0638
	1/2	12 447 0648
1/2"	1/4	12 447 0728
	3/8	12 447 0738
	1/2	12 447 0748

For additional sizes, configurations, metric products, and technical specifications request catalog Fittings APC-101.



Fittings and Accessories

Male Elbow



Tube O.D.	NPTF Thread	Part Number
1/8"	1/8	12 445 0118
5/32"	1/8	12 445 0218
	1/4	12 445 0228
3/16"	1/8	12 445 0318
	1/4	12 445 0328
1/4"	1/8	12 445 0418
	1/4	12 445 0428
	3/8	12 445 0438
5/16"	1/8	12 445 0518
	1/4	12 445 0528
3/8"	1/8	12 445 0618
	1/4	12 445 0628
	3/8	12 445 0638
	1/2	12 445 0648
1/2"	1/4	12 445 0728
	3/8	12 445 0738
	1/2	12 445 0748

Female Connector



Tube O.D.	NPTF Thread	Part Number
5/32"	1/8	12 426 0218
	1/4	12 426 0228
1/4"	1/8	12 426 0418
	1/4	12 426 0428
3/8"	1/4	12 426 0628
	3/8	12 426 0638

Union



Tube O.D.	Part Number
1/8"	12 020 0100
5/32"	12 020 0200
1/4"	12 020 0400
5/16"	12 020 0500
3/8"	12 020 0600
1/2"	12 020 0700

Swivel Male Branch Tee



Tube O.D.	NPTF or UNF Thread	Part Number
1/8"	10-32 UNF	12 467 0110
	1/8	12 467 0118
	1/4	12 467 0128
5/32"	10-32 UNF	12 467 0210
	1/8	12 467 0218
	1/4	12 467 0228
1/4"	1/8	12 467 0418
	1/4	12 467 0428
	3/8	12 467 0438
5/16"	1/8	12 467 0518
	1/4	12 467 0528
3/8"	1/8	12 467 0618
	1/4	12 467 0628
	3/8	12 467 0638
	1/2	12 467 0648
1/2"	1/4	12 467 0728
	3/8	12 467 0738
	1/2	12 467 0748



Union Tee

Tube O.D.	Part Number
1/8"	12 060 0100
5/32"	12 060 0200
1/4"	12 060 0400
5/16"	12 060 0500
3/8"	12 060 0600
1/2"	12 060 0700

Union Elbow



Tube O.D.	Part Number
5/32"	12 040 0200
1/4"	12 040 0400
5/16"	12 040 0500
5/16"	12 040 0500
3/8"	12 040 0600
1/2"	12 040 0700

Swivel Male Run Tee



Tube O.D.	NPTF or UNF Thread	Part Number
5/32"	10-32 UNF	12 468 0210
	1/8	12 468 0218
	1/4	12 468 0228
1/4"	1/8	12 468 0418
	1/4	12 468 0428
	3/8	12 468 0438
3/8"	1/8	12 468 0618
	1/4	12 468 0628
	3/8	12 468 0638
1/2"	1/2	12 468 0648
	1/4	12 468 0728
	3/8	12 468 0738
1/2"	3/8	12 468 0738
	1/2	12 468 0748



Plug*

Stem O.D.	Part Number
5/32"	11 004 0400
1/4"	94 050 904
5/16"	11 004 0800
3/8"	94 050 906
1/2"	94 050 907

*Material: Thermoplastic

Bulkhead Union



Tube O.D.	Part Number
1/8"	12 029 0100
5/32"	12 029 0200
3/16"	12 029 0300
1/4"	12 029 0400
5/16"	12 029 0500
3/8"	12 029 0600
1/2"	12 029 0700

For additional sizes, configurations, metric products, and technical specifications request catalog Fittings APC-101.



Parallel Union “Y” Connector*



Tube O.D. (2x)	Tube O.D. (1x)	Part Number
5/32"	5/32"	12 082 0200
5/32"	1/4"	12 082 0402
1/4"	1/4"	12 082 0400

*Body Material: Thermoplastic



Tube End Reducer

Tube O.D.	Stem O.D.	Part Number
5/32"	1/4"	12 023 0402
	3/8"	12 023 0602
1/4"	3/8"	12 023 0604
	1/2"	12 023 0704
3/8"	1/2"	12 023 0706

Right Angle (Banjo) Flow Controls

Operation:

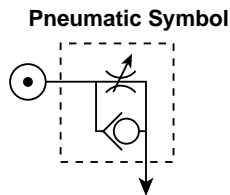
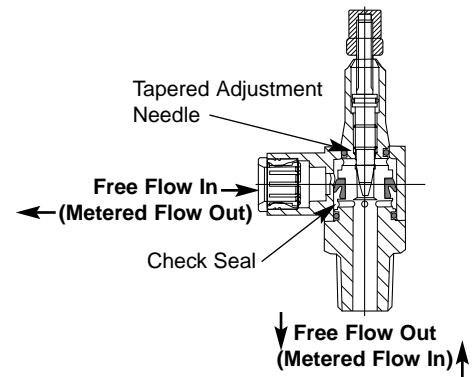
Flow Controls are meter out type. Compressed air passes freely into the push-in fitting portion of the flow control, flowing past the check seal and entering the connected component. In reverse flow conditions, air passes back into the flow control and energizes the check seal. Air must now flow through the metered passage controlled by the tapered adjustment needle of the flow control, and finally exits through the push-in fitting end.

Specifications

- Fluid: Compressed air.
- Working Pressure: 5 to 150 psig (.3 to 10 bar)
- Temperature Range: 0° to 175°F (-20° to 80°C)

Materials of Construction:

- Banjo bolt, body, collet: Nickel plated brass
- Tapered adjusting needle: Brass
- O-rings and check-seal: Silicone free Nitrile
- Sealing washer: Thermoplastic (10-32 UNF)
- Tubing: Nylon 11 or 12, 95 durometer polyurethane.
- Thread Sealant: Applied to the full circumference of tapered male threads.



VB0 Series

Tube O.D.	NPT or UNF Thread	Part Number
5/32"	10-32 UNF	12 VB0 0210
	1/8	12 VB0 0218
1/4"	1/8	12 VB0 0418
	1/4	12 VB0 0428
3/8"	1/4	12 VB0 0628
	3/8	12 VB0 0638
1/2"	3/8	12 VB0 0738
	1/2	12 VB0 0748

NPT Female	NPT Male	Part Number
1/8	1/8	12 VB0 1818
1/4	1/4	12 VB0 2828
3/8	3/8	12 VB0 3838
1/2	1/2	12 VB0 4848

For additional sizes, configurations, metric products, and technical specifications request catalog Fittings APC-101.



Fittings and Accessories

Check Valves - T50 In-line Push-in 5/32" - 1/2" O.D. tube

Technical Data

Fluid: Compressed air, nitrogen, inert and non-combustible gases compatible with materials of construction.

Operating Pressure:

26.8" Hg vacuum to 230 psi (-0.9 to 16 bar)

Operating Temperature:

0°* to 175°F (-20°* to 80°C)

* Consult our Technical Service for use below 35°F (2°C)



Model	O.D. Tube
T50Y0002	5/32"
T50Y0004	1/4"
T50Y0005	5/16"
T50Y0006	3/8"
T50Y0007	1/2"

ISO Symbol



Pressure Reducing Fitting - 124GB In-line Push-in 5/32" - 1/2" O.D. tube 1/8 - 1/2 NPTF pipe

Technical Data

Fluid: Compressed air, nitrogen, inert and non-combustible gases compatible with materials of construction.

Operating Pressure:

Primary (inlet) pressure 0 to 150 psi (0 - 10 bar)

Maximum secondary (regulated) pressure 115 psi (8 bar)

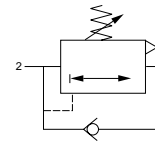
Operating Temperature:

0° to 175°F (-20° to +80°C)



Part Number	O/D Tube	NPTF Thread
12 4GB 0218	5/32	1/8
12 4GB 0418	1/4	1/8
12 4GB 0428	1/4	1/4
12 4GB 0528	5/16	1/4
12 4GB 0538	5/16	3/8
12 4GB 0638	3/8	3/8
12 4GB 0748	1/2	1/2

ISO Symbol



Pressure Reducing Fitting: It is often necessary to provide a secondary reduced pressure to an actuator to control its operating force. A pressure reducing fitting provides this function, and can be manually adjusted to the required pressure level.

Pilot Operated Check Valve - 124GA In-line Push-in 1/4" - 1/2" O.D. tube 1/8 - 1/2 NPTF pipe

Technical Data

Fluid: Compressed air, nitrogen, inert and non-combustible gases compatible with materials of construction.

Operating Pressure:

15-150 psi (1 - 10 bar)

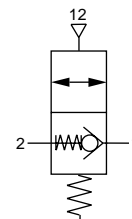
Operating Temperature:

0° to 175°F (-20° to +80°C)



Product Number	O.D. Tube	NPTF Thread
12 4GA 0418	1/4"	1/8
12 4GA 0428	1/4"	1/4
12 4GA 0638	3/8"	3/8
12 4GA 0748	1/2"	1/2

ISO Symbol



Pilot Operated Check Valve: A blocking fitting which allows air flow in both directions if a pilot pressure is applied to port 12. When pressure to the pilot port is removed flow occurs in one direction only due to an integral control valve. When used in pairs, blocking fittings can control an actuator to give controlled operation in the event of an electrical problem, air failure, or tube breakage.

For additional sizes, configurations, metric products, and technical specifications request catalog Fittings APC-101.



Pressure Reducing Fitting -124GD

**In-line Push-in
5/32" O.D. tube
1/8 - 1/4 NPTF pipe**

Technical Data

Fluid: Compressed air, nitrogen, inert and non-combustible gases compatible with materials of construction.

Operating Pressure:

- Cylinder pressure (Pc) 145 psi (10 bar) max
- Sensor supply pressure 43 to 145 psi (3 - 10 bar)
- Sensor switch pressure 14.5 psi (1.0 bar) typical

Operating Temperature:

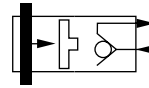
0° to 175°F (-20° to +80°C)

Pneumatic Sensor Fittings: Provides an air signal when a cylinder has reached the end of travel. Sensor fittings operate by detecting the drop in exhaust pressure at the end of a stroke. They effectively offer an all-pneumatic option to the electrical reed switch.



Product Number	Tube O/D	NPTF Thread
12 4GD 0218	5/32"	1/8
12 4GD 0228	5/32"	1/8

ISO Symbol



Tubing and Accessories

High Pressure Inch Tubing (Nylon 12)

Tubing				Maximum Working Pressure @ -40°F to 70°F (-40°C to 20°C)		Minimum Bend Radius		Part Number and Color				
OD (inch)	ID (inch)	OD (mm)	ID (mm)	psig	bar	inch	mm	Natural	Black	Blue	Green	Red
1/8	0.060			400	27.6	0.38	10	40 016 101	40 016 401	40 016 701	40 017 301	40 017 601
5/32	0.090	4	2.3	350	24.1	0.56	14	40 016 102	40 016 402	40 016 702	40 017 302	40 017 602
3/16	0.122			315	21.7	0.63	16	40 016 103	40 016 403	40 016 703	40 017 303	40 017 603
1/4	0.165			290	21.0	0.88	22	40 016 104	40 016 404	40 016 704	40 017 304	40 017 604
5/16	0.213	8	5.5	275	19.0	1.13	29	40 016 105	40 016 405	40 016 705	40 017 305	40 017 605
3/8	2.450			265	18.3	1.25	32	40 016 106	40 016 406			
1/2	0.370			210	14.5	1.50	38	40 016 107	40 016 407			

For other colors, lengths or packaging, please consult factory.

High Flow Inch Tubing (Nylon 11)

Tubing				Maximum Working Pressure @ -40°F to 70°F (-40°C to 20°C)		Minimum Bend Radius		Part Number and Color					
OD (inch)	ID (inch)	OD (mm)	ID (mm)	psig	bar	inch	mm	Natural	Black	Blue	Green	Red	Yellow
1/8	0.093			225	15.5	0.38	10	PB 0051 100	PB 0751 100	PB 0551 100	PB 0251 100	PB 0151 100	PB 0351 100
5/32	0.106	4	2.3	275	19.0	0.50	13	PB 0052 100	PB 0752 100	PB 0552 100	PB 0252 100	PB 0152 100	PB 0352 100
3/16	0.138			225	15.5	0.63	16	PB 0053 100	PB 0753 100	PB 0553 100	PB 0253 100	PB 0153 100	PB 0353 100
1/4	0.180			250	17.2	0.88	22	PB 0054 100	PB 0754 100	PB 0554 100	PB 0254 100	PB 0154 100	PB 0354 100
5/16	0.232	8	5.5	220	15.2	1.25	32	PB 0055 100	PB 0755 100	PB 0555 100	PB 0255 100	PB 0155 100	PB 0355 100
3/8	0.275			220	15.2	1.50	38	PB 0056 100	PB 0756 100	PB 0556 100	PB 0256 100	PB 0156 100	PB 0356 100
1/2	0.375			200	13.8	2.00	51	PB 0057 100	PB 0757 100	PB 0557 100	PB 0257 100	PB 0157 100	PB 0357 100

Notes

The working pressure for Nylon 11 tubing is calculated using a 4 to 1 safety factor.

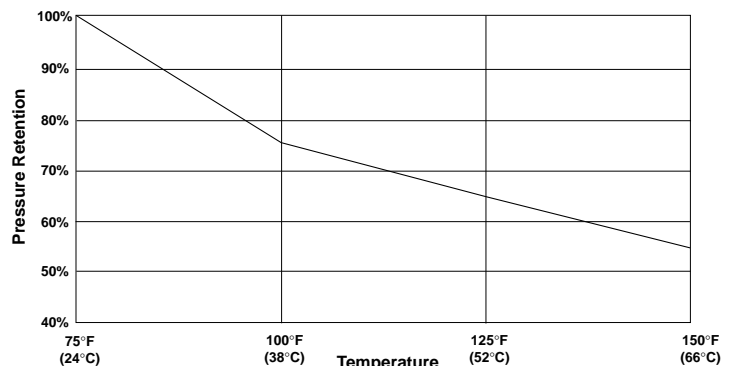
* To determine working pressures at other temperatures, see chart.

Tubing is supplied in 100 ft. (30.5m) coils, packaged in poly bags.

For other colors, lengths or packaging, please consult factory.

For availability of "ghosted" part numbers consult factory.

Working Pressure at Elevated Temperature



Tube Cutter

Item	Product Number
Tube Cutter (5 pack)	M/3314
Replacement blade (5 pack)	M/32009



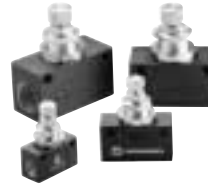
Fittings and Accessories

Check Valves



Port Size NPT	Model
1/8	C/520
1/4	C/521
3/8	C/532
1/2	C/522
3/4	C/523
1	C/524

In-line Flow Controls



Port Size NPT	Model
1/8	T1000A1800
1/4	T1000A2800
3/8	T1000A3800
1/2	T1000A4800

Quick Exhaust Valves



Port Size NPT	Model
1/8	T70A 1800
1/4	T70A 2800
3/8	T70A 3800
1/2	T70A 4800

Shuttle Valves



Port Size NPT	Model
1/8	T65A1800
1/4	T65A2800

Quietaire™ Pneumatic Silencers

Heavy-duty shell type



Port Size NPT	Part Number (male)	Part Number (female)
1/8	MB001A	MA001A
1/4	MB002A	MA002A
3/8	MB003A	MA003A
1/2	MB004A	MA004A
3/4	MB006A	MA006A
1	MB008A	MA008A

Standard-duty, sintered bronze



Port Size NPT	Part Number
10-32	MS000A
1/8	MS001A
1/4	MS002A
3/8	MS003A
1/2	MS004A
3/4	MS006A
1	MS008A

Standard-duty porous plastic



Port Size NPT	Part Number
10-32 UNF	M/S0
1/8	C/S1
1/4	C/S2
3/8	C/S3
1/2	C/S4
3/4	C/S6
1	C/S8

Breather vent sintered bronze



Port Size NPT	Part Number
1/8	MV001A
1/4	MV002A
3/8	MV003A
1/2	MV004A
3/4	MV006A
1	MV008A

Heavy duty speed control sintered bronze



Port Size NPT	Part Number
1/8	MM001A
1/4	MM002A
3/8	MM003A
1/2	MM004A

Standard-duty speed control porous plastic



Port Size NPT	Part Number
10-32 UNF	T20M0500
1/8	T20A1800
1/4	T20A2800
3/8	T20A3800
1/2	T20A4800

For additional sizes, configurations, metric products, and technical specifications request catalog Fittings APC-101.V

Diaphragm Amplifiers



- Miniature pneumatic interface amplifiers
- Sense very low pneumatic signals
- Provide on/off control of a high pressure air supply
- Low and ultra-low pressure models
- Used with non-contact sensors to amplify outputs to a usable level
- Serves as an output device in miniature pneumatic circuits

Ordering Information

To order, quote appropriate product number from the tables on the following pages, e.g. 5DA-010-D0A for control of systems where actuation is required above a 4" H₂O signal with the output resetting to off when the control signal falls below 1" H₂O.

Operation:

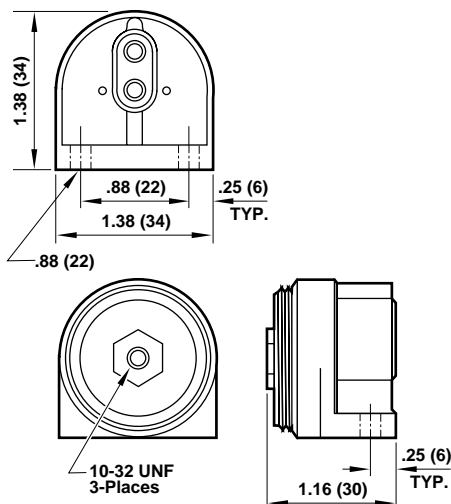
Supply pressure travels through an orifice and is vented to atmosphere. When a control signal is applied, it energizes a diaphragm, compressing a spring and cutting off the vent passage. Pressure is now directed from the supply to outlet port, providing an amplified signal. When the control signal is removed, the spring returns the diaphragm to its non-energized position, and the supply signal is once again vented to atmosphere.

Specifications

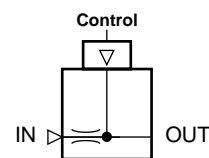
Fluid: Compressed air, nitrogen, or inert gases
 Max. Control Pressure: 5 psig (.3 bar)
 Inlet Pressure
 Minimum: 0 psig (0 bar)
 Maximum: 125 psig (8.6 bar)
 Temperature Range: 35° to 150°F (2° to 66°C)
 Equivalent Orifice Size: 0.014" (.36 mm)
 Cycle Rate: 25 Hz
 Ports: 10-32 UNF

Materials of Construction

Body: Noryl
 End Cap: Polycarbonate
 Spring: Stainless steel
 Diaphragm: Buna-N



Pneumatic Symbol



Part Number	Port Thread	Positive On/Off Actuation Points	
		ON - when control signal is more than:	OFF - when control signal is less than:
5DA-010-D0A	10-32 UNF	4" H ₂ O (10 mbar)	1" H ₂ O (2.5 mbar)
5DA-011-D0A	10-32 UNF	10" H ₂ O (25 mbar)	5" H ₂ O (12.5 mbar)

Furnished with three adapters for use with 1/16" ID flexible tubing.

Rotowink Indicators

- Visual indication of system status
- Indicate presence or absence of pressure
- Large (13/16") or small (7/16") lens
- Choice of connections
- Contrasting, fluorescent indicator colors

Operation

Pressure applied to an internal piston/diaphragm assembly compresses a spring, moving a linkage which rotates the colored indicator ball. When full actuation pressure is reached, the indicator ball rotates fully, changing the indicator color.

When the pressure signal is removed, the internal spring returns the indicator ball to its non-actuated color/position.



Specifications

Fluid: Compressed air, nitrogen, or inert gases

Air Consumption: None

Working Pressure: See order chart FIT-9-9.

Temperature Range: 35° to 150°F (2° to 66°C)

Materials of Construction

Body:

5VS-1XX-XXX - Acetal

5VS-4XX-XXX - Polyphenylene

5VS-2XX-XXX - Acetal

End Plug:

5VS-1XX-XXX - Acetal

5VS-4XX-XXX - Aluminum

Piston: Acetal

Elastomer: Buna-N

Lens: Acrylic

Options

Special versions of the Rotowink are available, please consult factory with specific requirements and quantities.

Ordering Information

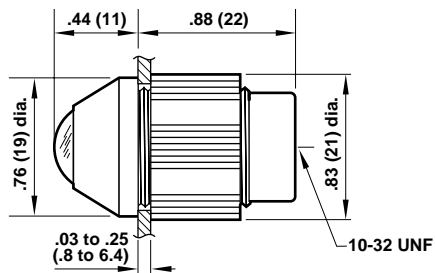
To order, quote appropriate product number from the tables on the following pages, e.g. 5VS-401-00 for 1/8 NPT female connection, black/red indication, and 10 psig actuation pressure.



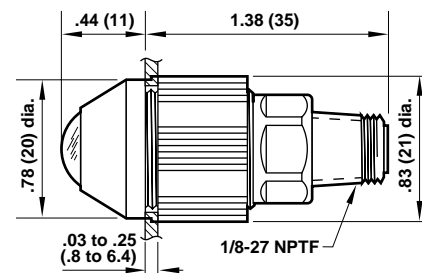
Colors (Standard combinations listed. Other combinations available.)		Operating Pressure Ranges		
		1 to 15 psig (.07 to 1 bar)	10 to 125 psig (.7 to 8.6 bar)	15 to 150 psig (1 to 10.3 bar)
		NPT or UNF Thread Port		
Normal	Actuated	10-32 UNF* (Female)	1/8 NPTF (Female)	1/8 NPTF (Male)
Part Numbers				
Black	Red	5VS-101-000	5VS-401-000	5VS-201-000
Black	Green	5VS-102-000	5VS-402-000	5VS-202-000
Black	Yellow	5VS-103-000	5VS-403-000	—
Red	Green	5VS-112-000	5VS-412-000	5VS-212-000
Green	Red	5VS-121-000	5VS-421-000	5VS-221-000
Specifications				
Maximum Pressure - psig (bar)		15 (1)	125 (8.6)	150 (10.3)
Actuation Pressure - psig (bar)		1 (.07)	10 (.7)	15 (1)
Deactuation Pressure - psig (bar)		15" H2O (38 mbar)	2 (.14)	2 (.14)
Mounting Hole Ø - in. (mm)		.72 (18.3)	1.22 (31.0)	.72 (18.3)

*Furnished with an adapter for use with 1/16" ID flexible tubing.

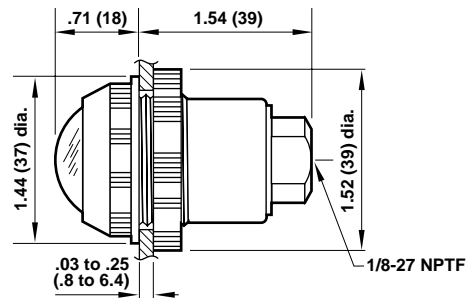
5VS-1XX Series



5VS-2XX Series



5VS-4XX Series



Differential Pressure Indicators

- Visual indication of differential pressure levels
- Full 360° visibility of RED/GREEN pressure indicator
- Light weight construction
- 1/8 NPT (female) connections
- In-line or bottom porting

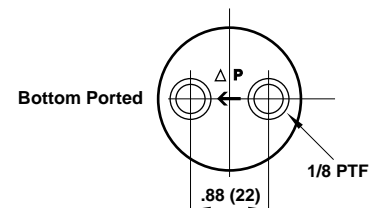
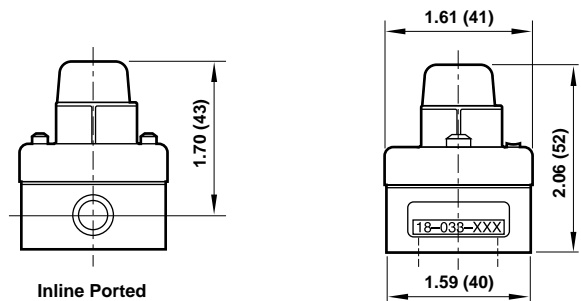
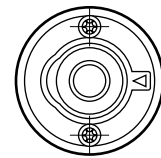


Specifications

Fluid: Compressed air, nitrogen or inert gases
 Max. Inlet Pressure: 250 psig (17.2 bar)
 Temperature Range: 0° to 175°F (-18° to 79°C)
 Max. Differential Pressure: 15 psid (1 bar d)
 Ports: 1/8 NPT (female)

Materials of Construction

Indicator Body: Transparent nylon
 Adapter Body: Aluminum
 Internal Parts: Acetal
 Spring: Stainless steel
 Elastomers: Nitrile



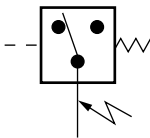
Part Number	Port Location	Differential Range	Indicator Color Code - (ΔP range)		
			GREEN	GREEN/RED	RED
18-033-104	In-line	0 to 5 psid	less than 0.5 psid	between 0.5 and 4.5 psi	greater than 4.5 psid
18-033-105	Bottom	(0 to 0.35 bar d)	(0.04 bar d)	(0.04 and 0.31 bar d)	(0.31 bar d)
18-033-101	In-line	0 to 10 psid	less than 4 psid	between 4 and 10 psid	greater than 10 psid
18-033-102	Bottom	(0 to 0.7 bar d)	(0.3 bar d)	(0.3 and 0.7 bar d)	(0.7 bar d)

Pressure Switch



- Integrates pneumatic and electrical systems
- Low actuation pressure
- Panel mountable
- Single-pole Double-throw operation
- May be wired Normally-open or Normally-closed

Pneumatic Symbol



Operation:

Signal pressure extends a diaphragm which contacts and actuates an electrical micro-switch.

Specifications

Fluid: Compressed air, nitrogen, or inert gases

Max. Working Pressure: 15 psig (1 bar)

Actuation Pressure: 1 psig (.07 bar)

Temperature Range: 35° to 150°F (2° to 66°C)

Electrical Rating: 5 Amps 125/250 Vac

Air Consumption: 0

Panel Mounting Hole: Ø1-7/32" (31 mm)

Panel Thickness: 0.03 to 0.25" (.8 to 6.4 mm)

Connections

Pneumatic: 10-32 UNF

Electrical: 0.093 female spade (3x)

Materials of Construction

Body and Locknut: Aluminum

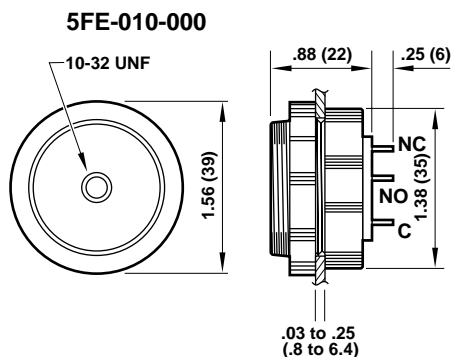
Switch Carrier: Noryl

Diaphragm: Polyurethane

Diaphragm Plate: Nylon

Order Number - 5FE-010-000

Crimp type, insulated, male spade electrical terminals for 18-22 gauge wire are furnished with each switch.



Boostermites

- Compact pneumatic power amplifiers
- Sense very low pneumatic signals
- Provide on/off control of a high pressure air supply
- Low and ultra-low pressure models
- Inputs (control) from pneumatic sensors, logic devices, instrumentation systems
- Provide direct operation of small actuators (cylinders), large air piloted valves, and other small pneumatic devices
- Average service life exceeding 100 million cycles



Operation

Boostermites are bleed actuated, 2-position, 3-way, 3-port, normally closed poppet valves. Supply pressure travels through an orifice and is vented to atmosphere. When a control signal is applied, it energizes a diaphragm, compressing a spring and cutting off the vent passage. Pressure is now directed from the supply to the poppet piston, which shifts the valve, connecting the inlet to the outlet ports. When the control signal is removed, the spring returns the diaphragm to its non-energized position, and the supply signal is once again vented to atmosphere, and the poppet piston shifts the valve to the non-actuated position.

Specifications

Fluid: Filtered (25 μ), lubricated or non-lubricated compressed air

Max. Control Pressure: 5 psig (.3 bar)

Inlet Pressure

Minimum: 20 psig (1.4 bar)

Maximum: 125 psig (8.6 bar)

Temperature Range: 35° to 150°F (2° to 66°C)

Equivalent Orifice Size: 0.094" (2.4 mm)

Cycle Rate: 900 cpm

Ports

Control: 10-32 UNF

Main: 1/8 PTF

Materials of Construction

Body: Aluminum

Piston Assembly: Aluminum, Acetal

End Caps: Polycarbonate, Nylon

Springs: Stainless steel

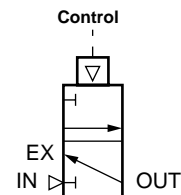
Elastomers: Buna-N

Service Kit (includes seals) Part Number: P0150A-01

Ordering Information

To order, quote appropriate product number from the tables on the following pages, e.g. 5BV-011-D0A for operation of pneumatic devices where actuation is required above a 3" H₂O signal with the output resetting to off when the control signal falls below 1/2" H₂O.

Pneumatic Symbol

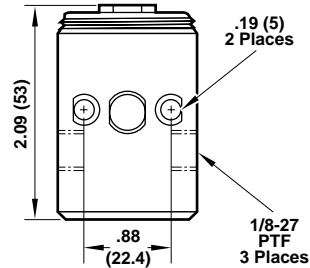
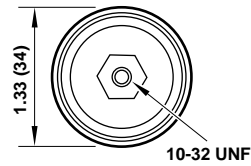




Part Number	Port Thread		Positive On/Off Actuation Points	
	Control	Main	ON - when control signal is more than*	OFF - when control signal is less than:
5BV-011-10A	10-32 UNF	1/8 PTF	3" H2O (7.5 mbar)	1/2" H2O (1.3 mbar)
5BV-010-10A	10-32 UNF	1/8 PTF	10" H2O (25 mbar)	5" H2O (12.5 mbar)

*Variation with attitude change: 1/2" H2O (1.3 mbar)

Furnished with two 1/2" long mounting spacers and a control port adapter for use with 1/16" ID flexible tubing.



Miniature Inline Restrictors

- Provide “resistor” function in pneumatic circuits
- High precision sapphire orifices
- Color coded aluminum body with internal 200 x 200 mesh stainless steel prefilter
- 10-32 UNF or barbed tube connections
- Direct in-line mounting
- Signal attenuation and time delay functions in miniature pneumatic circuits



Specifications

Fluid: Compressed air, nitrogen or inert gases
 Maximum Pressure: 125 psig (8.6 bar)
 Temperature Range: 35° to 150°F (2° to 66°C)

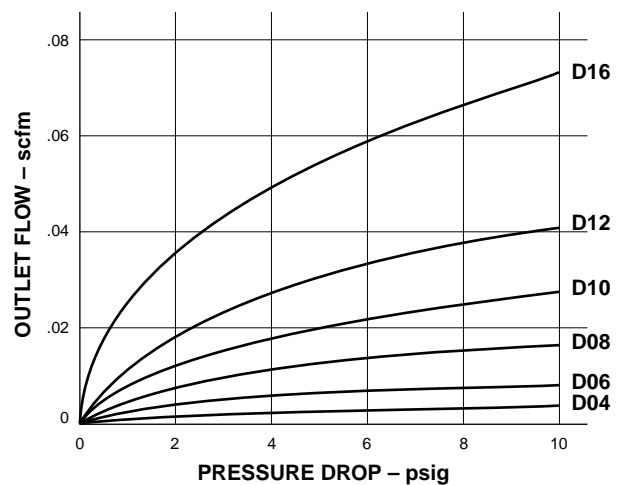
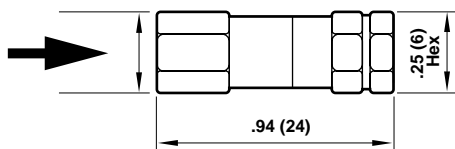
Materials of Construction

Body: Aluminum
 Orifice: Sapphire
 Screen: Stainless steel

Pneumatic Symbol



Part Number	Orifice Inch (mm)	Color Code
4LR-010-D04	0.004 (.10)	Yellow
4LR-010-D06	0.006 (.15)	Brown
4LR-010-D08	0.008 (.20)	Red
4LR-010-D10	0.010 (.25)	Black
4LR-010-D12	0.012 (.30)	Blue
4LR-010-D16	0.016 (.40)	Green

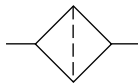


Miniature Inline Filters



- 25-micron element rating
- Connections for 1/8" or 5/32" ID flexible tubing
- Direct in-line mounting
- Protection against particulate contamination for miniature pneumatic systems

Pneumatic Symbol

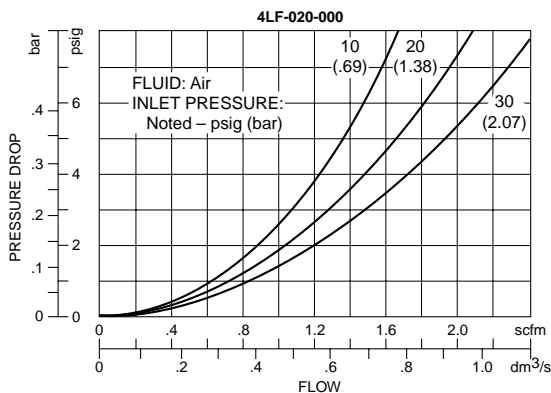
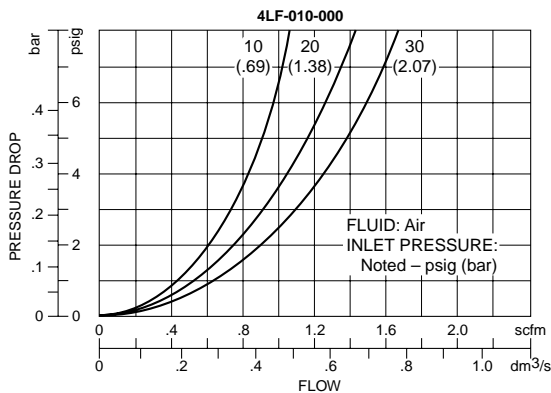


Specifications

Fluid: Compressed air, nitrogen or inert gases
 Element Rating: 25 μ
 Maximum Pressure: 60 psig (4.1 bar)
 Maximum Temperature: 125°F (52°C)

Materials of Construction

Body: Polypropylene
 Element: Sintered Bronze
 Elastomers: Buna-N



Part Number	Flexible Tube Connection
4LF-010-000	1/8" ID
4LF-020-000	5/32" ID

Part Number	ØA	ØC	B
4LF-010-000	0.15 (3.8)	0.64 (6.3)	1.58 (40.1)
4LF-020-000	0.18 (4.6)	0.64 (16.3)	1.70 (43.2)

