15 mm Solenoid Valve



Applications

- Oxygen Conservers and Concentrators
- Sieve Bed Switching
- Anesthesia Delivery
- Compression Therapy
- Gas Chromatography
- Insufflators
- Flow Control/Shut-off

The Series 26 miniature pneumatic solenoid valve is a robust and proven product with a reputation for reliable and consistent performance. The Series 26 miniature solenoid valve is the preferred choice of major OEM's in the medical and analytical market. With valve bodies made from nickel-plated brass and multiple pneumatic and electrical interface options, the Series 26 miniature solenoid valve is the ideal solution for general purpose applications and those applications requiring low out-gassing and a bubble-tight seal.

Features

- Proven performance tested to 260 million life cycles
- Wide range of available electrical connections to simplify valve integration and control
- Manifold mount body interface simplifies the manifold design and eases valve installation
- Available Analytical and Oxygen Service Clean to minimize contamination
- RoHS compliant 🎎



Product Specifications

Mechanical

Valve Type:

2/3 Port, Direct-acting poppet style

- Normally Closed (NC)
- Normally Open (NO)
- Distributor

Media:

Air, argon, helium, hydrogen, methane, nitrogen, oxygen,

& other non-reacting gasses

Operating Environment:

32 to 158°F (0 to 70°C)

Storage Temperature:

-40 to 158°F (-40 to 70°C)

Dimensions:

Length: 1.53 in (38.8 mm) Diameter: 0.75 in (19.0 mm)

Weight:

2.1 oz (60 g)

Internal Volume:

0.026 in³ (0.426 cm³)

Filtration:

40 micron (recommended)

Oxygen Clean:

Call For Details

Electrical

Power Options:

0.5, 1.0 or 2.0 Watts

Voltage Options:

5, 12 or 24 VDC

Further power reduction may be achieved through the use of spike and hold or PWM electrical control.

Electrical Connections:

Wire Leads, PC Pins, Solder Tabs, Quick Disconnect Spade

Wetted Materials

Body:

36000 HO2 Brass, Nickel Plated

Stem Base:

36000 HO2 Brass:

Poppet Options:

FKM

All Others:

430 FR Series Stainless Steel 302 Series Stainless Steel 36000 HO2 Brass, Nickel Plated

Performance Characteristics

Leak Rate:

< 0.016 sccm of air (bubble tight)

Response:

<30 ms cycling

Pressure:

0 to 100 psig (6.9 bar)

Vacuum:

0-27 in Hg (686 mm Hg)

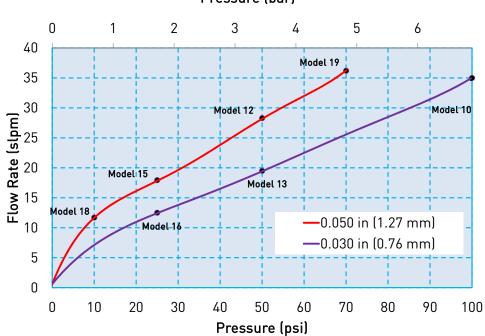
Orifice Sizes:

0.030" (0.76 mm) 0.050" (1.27 mm)



Typical Flow Curve





All models reflect typical flow output capability based on rated pressure

Pressure and Flow Capabilities/Life Requirements

Model No.	Orifice Size	Nominal Cv	Maximum Supply Pressure	Power Consumption	Elastomer	Life Requirements (millions of cycles*)
10	0.030 in (0.76 mm)	0.017	100 psig (6.9 bar)	2 Watts	FKM	100
12	0.050 in (1.27 mm)	0.031	50 psig (3.5 bar)	2 Watts	FKM	100
13	0.030 in (0.76 mm)	0.017	50 psig (3.5 bar)	1 Watt	FKM	200
15	0.050 in (1.27 mm)	0.025	25 psig (1.7 bar)	1 Watt	FKM	200
16	0.030 in (0.76 mm)	0.017	25 psig (1.7 bar)	0.5 Watt	FKM	260
18	0.050 in (1.27 mm)	0.021	10 psig (0.7 bar)	0.5 Watt	FKM	260
19	0.050 in (1.27 mm)	0.025	70 psig (4.8 bar)	2 Watts	FKM	20

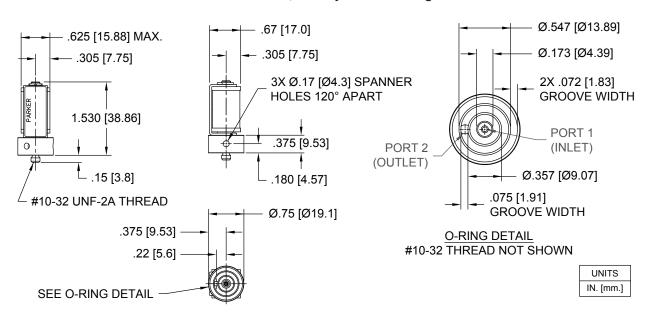
^{*}Life is dependent upon elastomeric material, duty cycle and pressures

For custom requirements please contact Applications Engineering at 1-603-595-1500 or ppfinfo@parker.com

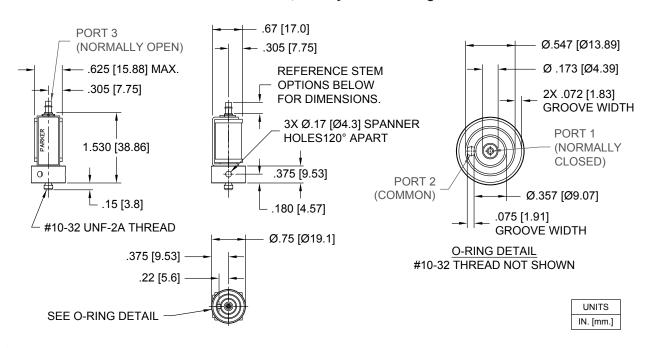


Mechanical Integration Dimensions

Basic Dimensions, 2-Way Valve Configuration



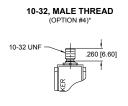
Basic Dimensions, 3-Way Valve Configuration



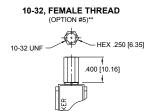


Mechanical Integration Dimensions

Stem Options



*Torque applied to #10-32 male fitting not to exceed 0.5 in-oz (3.5 mN-m). Use Loctite 290 or compatible liquid-curing fastener to secure mating fitting in place.

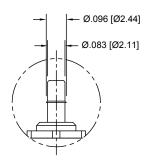


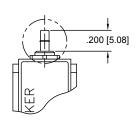
**Torque applied to #10-32 Female fitting not to exceed 0.5 in-oz (3.5 mN-m). Use 1/4 inch hex wrench to support the fitting when installing a mating, #10-32 male fitting.

Barb Options

1/16" (1.5 mm) Barb

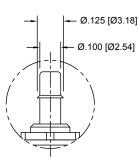
(For 1/16" (1.5 mm) I.D. Tubing) (OPTION #6)

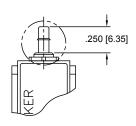




5/64" (2 mm) Barb

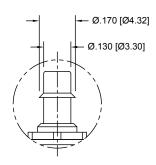
(For 5/64" (2 mm) I.D. Tubing) (OPTION #7)

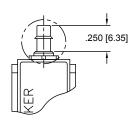




1/8" (3 mm) Barb

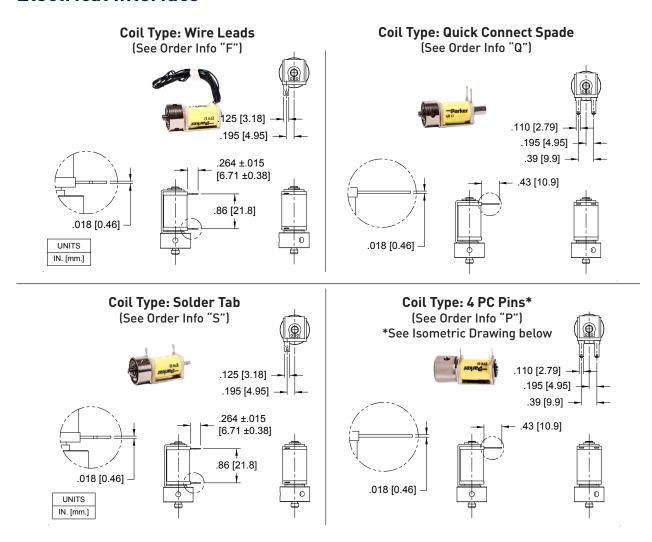
(For 1/8" (3 mm) I.D. Tubing) (OPTION #8)



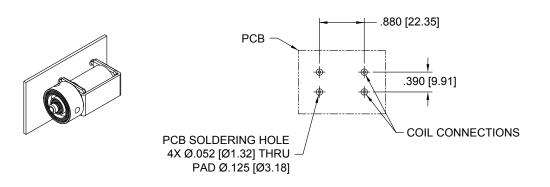




Electrical Interface



*4 PC PIN PCB Interface

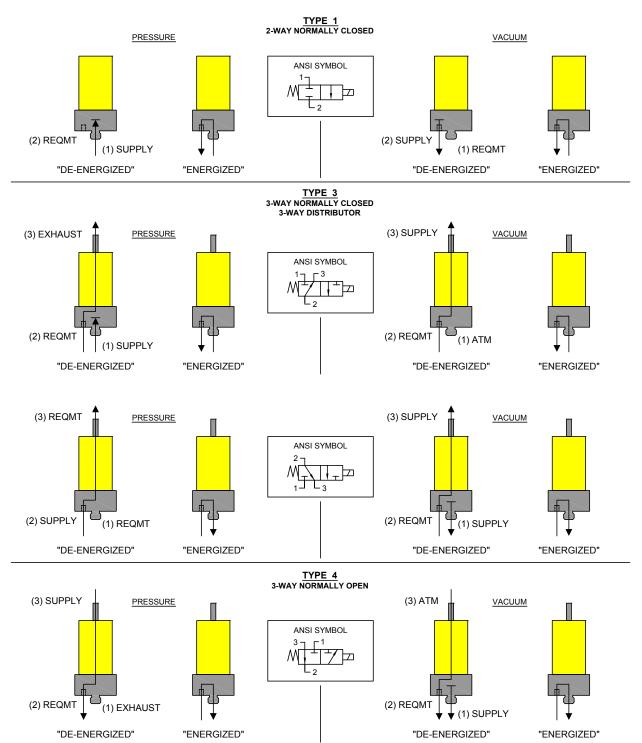




Series 26 Miniature Pneumatic Solenoid Valve ANSI Symbols

LEGEND:						
SUPPLY:	Pneumatic Source or Supply Pressure					
EXHAUST:	Exhaust to Atmospheric Pressure					
REQMT:	Customer Requirement or Application					
ATM:	Atmospheric Pressure					

Pneumatic Schematics by Valve Types





Ordering Information

Sample Part ID	26	10	3	NV	12	P	4	7
Description	Series	Model Number: Pressure / Orifice / Power	Туре	Material	Voltage	Electrical Coil Selection	Pneumatic Connection Body	Pneumatic Connection Stem
Options	26	10: 0-100 psig / 0.030" orifice / 2 Watts	1: 2-Way NC	NV: Nickel-plated Brass/FKM	5: 5 VDC	F: Wire Leads, 18", No Termination	4: 10-32 Male	0: Manifold Mount
		12: 0-50 psig / 0.050" orifice / 2 Watts	3: 3-Way NC or Distributor		12: 12 VDC	P: PC Mount, 4 PC Pins		(2-Way NC Only)
		13: 0-50 psig / 0.030" orifice / 1 Watt	4: 3-Way NO		24: 24 VDC	S: PC Mount, 2 Solder Tabs		4: 10-32 Male
		15: 0-25 psig / 0.050" orifice / 1 Watt				Q: Quick Connect Spade		5: 10-32 Female
		16: 0-25 psig / 0.030" orifice / 0.5 Watt						6: 1/16" (1.5 mm) Barbs*
		18: 0-10 psig / 0.050" orifice / 0.5 Watt						7: 5/64" (2 mm) Barbs
		19: 0-70 psig / 0.050" orifice / 2 Watts						8: 1/8" (3 mm) Barbs
								*1/16" Barbs not available for 0.050" orifice valves

NOTE: In order to provide the best possible solution for your application, please provide the following requirements when contacting Applications Engineering:



- Media, Inlet & Outlet Pressures
- Minimum Required Flow Rate
- System Supply Voltage
- Media
- Ambient Temperature Range

Please click on the Order On-line button (or go to www.parker.com/precisionfluidics/s11) to configure your Series 26 Miniature Pneumatic Solenoid Valve. For more detailed information, visit us on the Web, or call and refer to Performance Spec. #790-002075-001 and Drawing #890-003016-001.

