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Miniature Multimedia Valves



ENGINEERING YOUR SUCCESS.

Inert Isolation PTFE Series 1

3-Way Solenoid Valve



The Series 1 diaphragm type valve has a low internal volume and rapid response time, which enables users to get readings quickly for their analysis. These direct acting 3-way solenoid valves require no pressure to operate.

Features

- Provides excellent compatibility with a wide range of media due to a valve body manufactured from PTFE and PTFE-insulated lead wires (also uses borosilicate glass wetted parts).
- Offers coils rated for 100% duty and contained in a nickel-plate steel housing.
- Uses low power and offers low internal volume.
- Requires no pressure to operate.

Physical Properties

Valve Type:	3-Way diaphragm
Media:	Liquids and gases
Operating Environment:	50 to 150°F (10 to 66°C)
Size:	See Dimensions
Porting:	1/4-28 Threaded Ports
Weight:	2.7 oz (PTFE Body Option)
Internal Volume:	68 μ L (PTFE Body Option)

Electrical

Power:	Voltage:	Current:	Resistance:
			(Ω +5% @ 70°F)
2.5 Watts	12 VDC	211 ma	57 Ω
4.2 Watts	24 VDC	173 ma	139 Ω

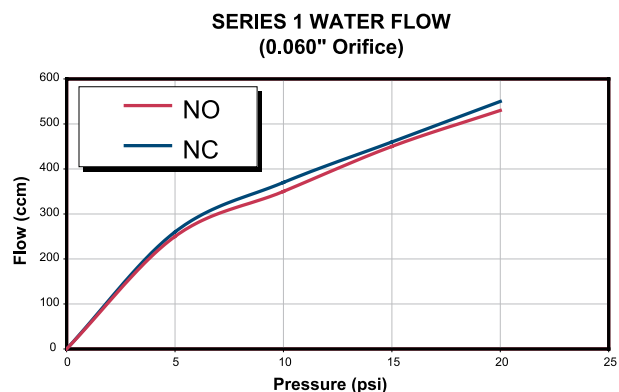
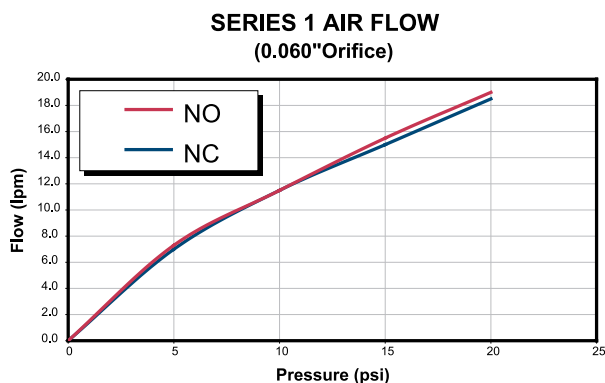
Wetted Materials

Materials Contacting Media:	PTFE, Borosilicate Glass
Body Options:	PTFE

Performance Characteristics

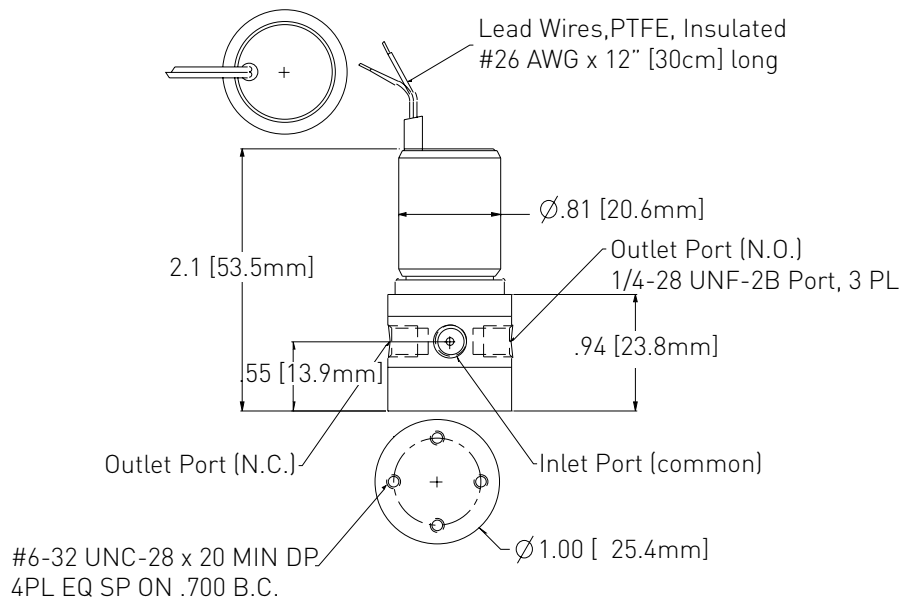
Operating Pressure:	Vacuum up to 20 psi (1.38 BAR)
Response:	20 millisecond
Orifice Diameters:	0.060" (1.52 mm)
Leak Rate:	Bubble Tight

Flow



Inert Isolation PTFE Series 1

Dimensions



Ordering Information

		part number	
		001-0017-900	001-0028-900
part description	Valve Type	3-Way	3-Way
	Media	Liquids & Gases	Liquids & Gases
	Operating Pressure	Vacuum - 20 psi	Vacuum - 20 psi
	Orifice	0.060"	0.060"
	Valve Body Material	PTFE	PTFE
	Voltage	12 VDC	24 VDC
	Porting	1/4 - 28	1/4 - 28
	Operating Environment	50 - 150 deg F	50 - 150 deg F
	Material Contact Media	PTFE	PTFE



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Inert Isolation PTFE Series 2

2-Way Solenoid Valve



The Series 2 Valves are 2-way solenoid valves that feature all PTFE wetted parts. They have a life expectancy of 10 million cycles and will operate despite a current loss of 20 percent, making them ideal for critical applications. All valves are cycled 50,000 times prior to shipment and tested 100% to ensure maximum performance to rigid specifications.

Features

- Uses low power and offers low internal volume.
- Fast acting with a high cycle life.
- Requires no pressure to operate.
- Built with PTFE wetted parts.

Physical Properties

Valve Type:
2-Way diaphragm
Media:
Liquids and gases
Operating Environment:
40 to 150°F (4 to 66°C)
Size:
See Dimensions
Porting:
1/4-28 Threaded Ports
Weight:
2.5 oz
Internal Volume:
49 μ L

Electrical

Power:	Voltage:	Current:	Resistance:
			(Ω +5% @ 70°F)
2.5 Watts	12 VDC	211 ma	57 Ω
4.2 Watts	24 VDC	173 ma	139 Ω

Wetted Materials

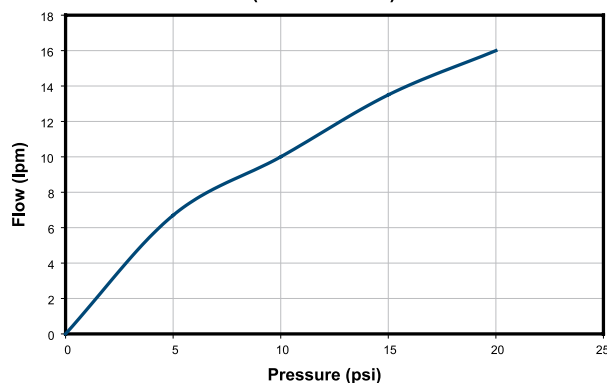
Materials Contacting Media:
PTFE, Body
Body Options:
PTFE

Performance Characteristics

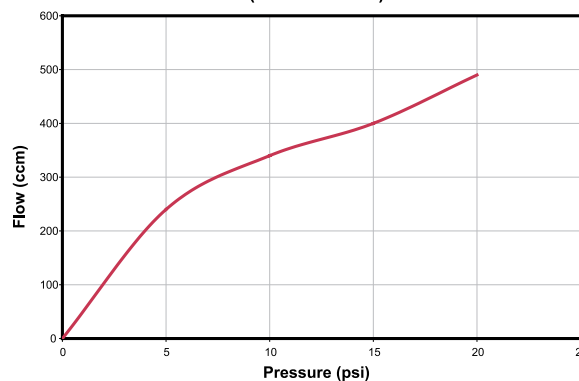
Operating Pressure:
Vacuum up to 20 psi (1.38 BAR)
Response:
20 millisecond
Orifice Diameters:
0.060" (1.52 mm)
Leak Rate:
Bubble Tight

Flow

SERIES 2 AIR FLOW
(0.060" Orifice)

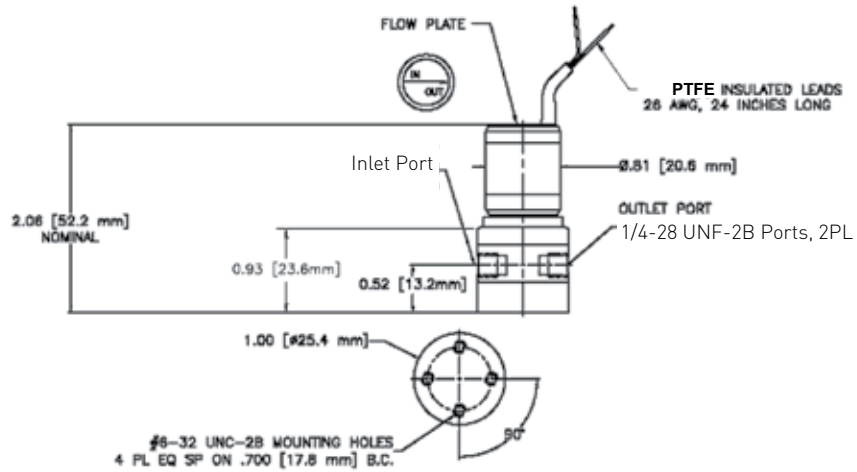


SERIES 2 WATER FLOW
(0.060" Orifice)



Inert Isolation PTFE Series 2

Dimensions



Ordering Information

	part number	
	002-0017-900	002-0010-900
Valve Type	2-Way NC	2-Way NC
Media	Liquids & Gases	Liquids & Gases
Operating Pressure	Vacuum - 20 psi	Vacuum - 20 psi
Orifice	0.060"	0.060"
Valve Body Material	PTFE	PTFE
Voltage	12 VDC	24 VDC
Porting	1/4 - 28	1/4 - 28
Operating Environment	40 - 150 deg F	40 - 150 deg F
Material Contact Media	PTFE	PTFE



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General Purpose Series 3

2-Way and 3-Way Solenoid Valve



The Series 3 solenoid valve is suitable for both liquids and gases, including media such as bleach, for applications in clinical chemistry, blood chemistry, and ink jet printing. These 2-way and 3-way valves are rated for continuous duty and have low power consumption. Wetted parts for this series include non-corrosive plastics, stainless steel, and a variety of elastomer seals.

Features

- Wetted parts composed of non-corrosive plastics, stainless steel, and a variety of elastomer seals.
- Requires no pressure to operate.
- Provides high cycle life.
- Small package with no sliding metal-to-metal surfaces.
- Eliminates potential leak paths with integral barbs molded as part of the valve body and machined to the endplate.

Physical Properties

Valve Type:

2-Way Normally Closed

3-Way Configurations

Media:

Liquids and gases

Operating Environment:

40 to 150°F (4 to 66°C)

Size:

See Dimensions

Porting:

Barbs: 1/16", 1/8", 3/16"

Weight:

1.8 to 2.0 oz
(Material and Configuration Dependent)

Internal Volume:

238 μ L (1/16" Barb Option)

326 μ L (1/8" Barb Option)

516 μ L (3/16" Barb Option)

Performance Characteristics

Operating Pressure:	Orifice Diameters:	Fitting Type:
VAC - 100 psig	0.055" (1.40 mm)	1/16" Barb
VAC - 50 psig	0.078" (1.98 mm)	1/8" Barb
VAC - 20 psig	0.090" (2.29 mm)	3/16" Barb

Diaphragm Version

0 - 25 psig	0.078" (1.98 mm)	1/8" Barb
-------------	------------------	-----------

Leak Rate:

Bubble Tight

Response:

20 millisecond

Wetted Materials

Materials Contacting Media:

PTFE, Stainless Steel, Seal, Body
Diaphragm Version: EPDM & Ryton

Seal Options:

FKM, EPDM

Body Options:

Standard: PEEK *Diaphragm:* Ryton

Electrical

Power:

2.5 Watts

4.2 Watts

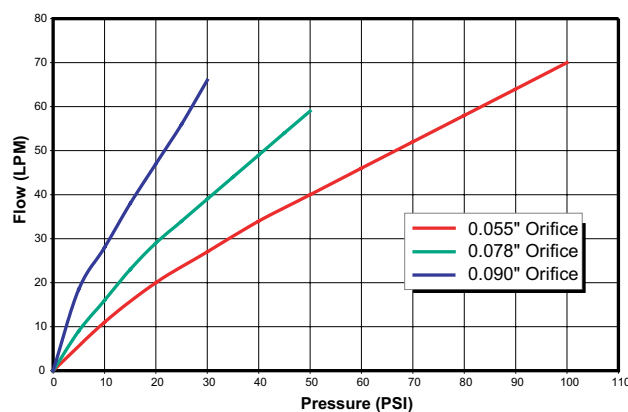
Voltage:

12 VDC

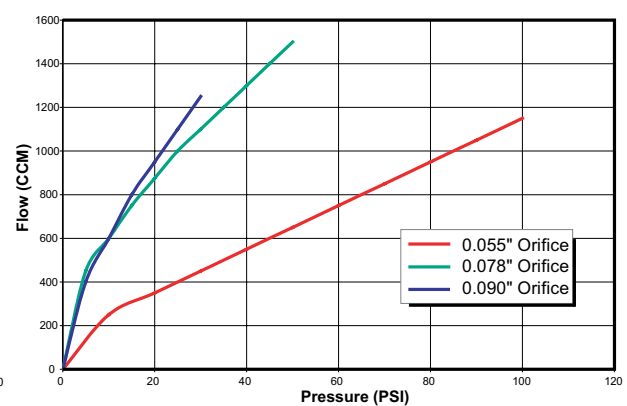
24 VDC

Flow

SERIES 3 AIR FLOW



SERIES 3 WATER FLOW

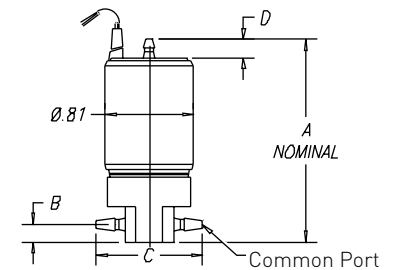


General Purpose Series 3

Dimensions

DIMENSIONS (INCHES)

PORTS	THREE-WAY				TWO-WAY		
	A	B	C	D	A	B	C
1/16 BARBS	1.86	0.16	0.98	0.17	1.69	0.16	0.98
1/8 BARBS	2.03	0.16	1.15	0.35	1.69	0.16	1.15
3/16 BARBS	2.13	0.16	1.32	0.44	1.69	0.16	1.32



Ordering Information

part description	part number							
	003-0137-900	003-0218-900	003-0130-900	003-0214-900	003-0096-900	003-0264-900	003-0194-900	
Valve Type	2-Way NC	2-Way NC	3-Way	3-Way	2-Way NC	2-Way NC	3-Way	
Media	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	
Operating Pressure	Vacuum - 100 psi	Vacuum - 100 psi	Vacuum - 100 psi	Vacuum - 100 psi	Vacuum - 100 psi	Vacuum - 100 psi	Vacuum - 100 psi	
Orifice	0.055"	0.055"	0.055"	0.055"	0.055"	0.055"	0.055"	
Valve Body Material	PEEK	PEEK	PEEK	PEEK	PEEK	PEEK	PEEK	
Voltage	12 VDC	12 VDC	12 VDC	12 VDC	24 VDC	24 VDC	24 VDC	
Porting	1/16" Barb	1/16" Barb	1/16" Barb	1/16" Barb	1/16" Barb	1/16" Barb	1/16" Barb	
Operating Environment	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	
Material Contact Media	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	
Seals	FKM	EPDM	FKM	EPDM	FKM	EPDM	FKM	

part description	part number							
	003-0241-900	003-0141-900	003-0260-900	003-0120-900	003-0356-900	003-0111-900	003-0257-900	
Valve Type	3-Way	2-Way NC	2-Way NC	3-Way	3-Way	2-Way NC	2-Way NC	
Media	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	
Operating Pressure	Vacuum - 100 psi	Vacuum - 50 psi	Vacuum - 50 psi	Vacuum - 50 psi	Vacuum - 50 psi	Vacuum - 50 psi	Vacuum - 50 psi	
Orifice	0.055"	0.078"	0.078"	0.078"	0.078"	0.078"	0.078"	
Valve Body Material	PEEK	PEEK	PEEK	PEEK	PEEK	PEEK	PEEK	
Voltage	24 VDC	12 VDC	12 VDC	12 VDC	12 VDC	24 VDC	24 VDC	
Porting	1/16" Barb	1/8" Barb	1/8" Barb	1/8" Barb	1/8" Barb	1/8" Barb	1/8" Barb	
Operating Environment	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	
Material Contact Media	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	
Seals	EPDM	FKM	EPDM	FKM	EPDM	FKM	EPDM	

part description	part number						
	003-0165-900	003-0258-900	003-0178-900	003-0496-900	003-0175-900	003-0189-900	
Valve Type	3-Way	3-Way	2-Way NC	2-Way NC	2-Way NC	2-Way NC	
Media	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	
Operating Pressure	Vacuum - 50 psi	Vacuum - 50 psi	Vacuum - 25 psi	Vacuum - 25 psi	Vacuum - 20 psi	Vacuum - 20 psi	
Orifice	0.078"	0.078"	0.078"	0.078"	0.090"	0.090"	
Valve Body Material	PEEK	PEEK	Ryton	Ryton	PEEK	PEEK	
Voltage	24 VDC	24 VDC	12 VDC	24 VDC	12 VDC	12 VDC	
Porting	1/8" Barb	1/8" Barb	1/8" Barb	1/8" Barb	3/16" Barb	3/16" Barb	
Operating Environment	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	
Material Contact Media	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	EPDM, Ryton	EPDM, Ryton	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	
Seals	FKM	EPDM	EPDM Diaphragm	EPDM Diaphragm	FKM	EPDM	



part description	part number						
	003-0328-900	003-0347-900	003-0359-900	003-0376-900	003-0421-900	003-0461-900	
Valve Type	3-Way	3-Way	2-Way NC	2-Way NC	3-Way	3-Way	
Media	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	
Operating Pressure	Vacuum - 20 psi	Vacuum - 20 psi	Vacuum - 20 psi	Vacuum - 20 psi	Vacuum - 20 psi	Vacuum - 20 psi	
Orifice	0.090"	0.090"	0.090"	0.090"	0.090"	0.090"	
Valve Body Material	PEEK	PEEK	PEEK	PEEK	PEEK	PEEK	
Voltage	12 VDC	12 VDC	24 VDC	24 VDC	24 VDC	24 VDC	
Porting	3/16" Barb	3/16" Barb	3/16" Barb	3/16" Barb	3/16" Barb	3/16" Barb	
Operating Environment	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	40 - 150 deg F	
Material Contact Media	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	PTFE, Stainless Steel, Seals, Body	
Seals	FKM	EPDM	FKM	EPDM	FKM	EPDM	

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Extreme Performance Series 9

2-Way and 3-Way Valve



Series 9 valves offer outstanding potential for precision control in liquid and gas analysis. Combining high speed and high flow in a small size, this rugged valve operates with extreme repeatability. This solenoid valve is constructed of non-corroding, passivated stainless steel. Series 9 coils are rated continuous duty and are potted to exclude the environment.

Features

- Offers high speed (typical response time less than 5 ms).
- Configurable up to 1250 psi.
- Leak-tight to 1×10^{-7} cc/sec/atm Helium.
- Offers repeatability and consistency.
- Constructed of non-corrosive stainless steel.
- Available with a variety of ports, seals, and voltages.

Physical Properties

Valve Type:

2-Way and 3-Way Configurations

Media:

Liquids and gases

Operating Environment:

40 to 221°F (4 to 105°C)

Size:

See Dimensions

Porting:

1/4-28 Threaded Ports

Weight:

3.1 oz (3-Way, 1/8" NPT Body Option)

Porting:

1/4-28 Threaded Ports; 1/8" NPT (Female); A-Lok compression fittings

Internal Volume:

Various

Electrical

Power:	Voltage:	Current:	Resistance:
			(Ω +5% @ 70°F)
12 Watts	12 VDC	1000 ma	12 Ω
12 Watts	24 VDC	500 ma	48 Ω

Wetted Materials

Materials Contacting Media:

PTFE, Stainless Steel, Body, Seals

Body:

316L Stainless Steel

Seals:

FKM & Vespel, FKM

Performance Characteristics

Operating Pressure:

1250 psig (0.030 in orifice)
100-250 psig (0.060 in orifice)
See Chart
100 psig (0.116 in orifice)

Orifice Diameters:

0.030" (0.76 mm)
0.060" (1.52 mm)
0.116" (2.99 mm)

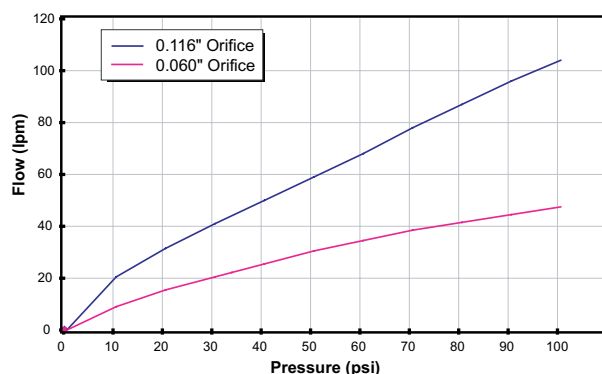
Leak Rate:

1×10^{-7} cc/sec/atm Helium

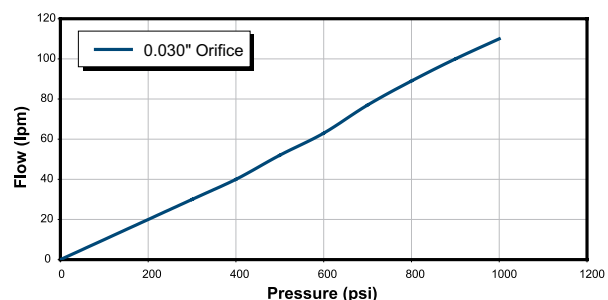
NOTE: Not rated for continuous duty at maximum temperature

Flow

SERIES 9 AIR FLOW

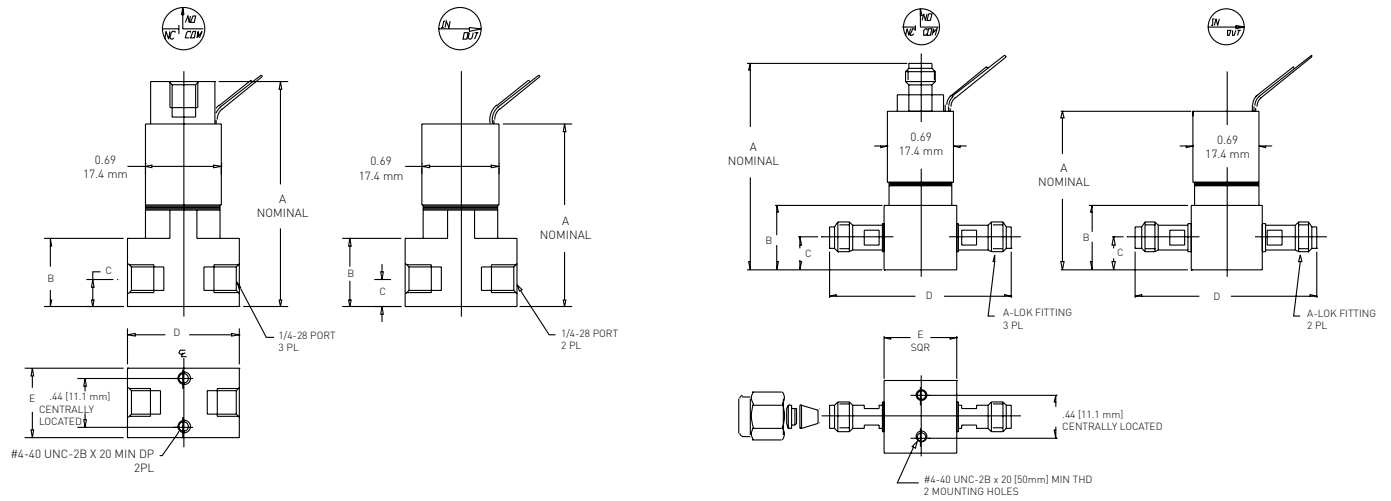


SERIES 9 AIR FLOW



Extreme Performance Series 9

Dimensions



DIMENSIONS (INCHES)

PORTS	THREE-WAY				
	A	B	C	D	E
1/8 NPT	2.18	0.60	0.30	1.00	0.63
PORTS	TWO-WAY				
	A	B	C	D	E
1/4 - 28	1.64	0.61	0.25	1.00	0.63
1/8 NPT	1.76	0.60	0.30	1.00	0.63

DIMENSIONS (INCHES)

PORTS	THREE-WAY					TWO-WAY				
	A	B	C	D	E	A	B	C	D	E
1/16 A-LOK	--	--	--	--	--	1.64	0.66	0.33	1.63	0.75
1/8 A-LOK	2.18	0.66	0.33	1.91	0.75	1.64	0.66	0.33	1.91	0.75

Ordering Information

		part number					
		009-0100-900	009-0172-900	009-0272-900	009-0270-900	009-0631-900	
part description	Valve Type	2-Way NC	2-Way NC	2-Way NC	2-Way NC	2-Way NC	
	Media	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	
	Operating Pressure	Vacuum to 1250 psi	Vacuum to 1250 psi	Vacuum to 1250 psi	Vacuum to 250 psi	Vacuum to 250 psi	
	Orifice	0.030"	0.030"	0.030"	0.060"	0.060"	
	Valve Body Material	316L Stainless	316L Stainless	316L Stainless	316L Stainless	316L Stainless	
	Voltage	12 VDC	24 VDC	24 VDC	24 VDC	24 VDC	
	Porting	1/16" A-Lok	1/16" A-Lok	1/4" - 28	1/8" A-Lok	1/8" FNPT	
	Operating Environment	40 - 221 deg F	40 - 221 deg F	40 - 221 deg F	40 - 221 deg F	40 - 221 deg F	
	Material Contact Media	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals	
	Seals	Vespel, FKM	Vespel, FKM	Vespel, FKM	FKM	FKM	



		part number					
		009-0269-900	091-0094-900	009-0933-900	009-0089-900	009-0207-900	009-0143-900
part description	Valve Type	3-Way	3-Way	3-Way	2-Way NC	3-Way	3-Way
	Media	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases
	Operating Pressure	Vacuum to 100 psi	Vacuum to 100 psi	Vacuum to 100 psi	Vacuum to 100 psi	Vacuum to 100 psi	Vacuum to 100 psi
	Orifice	0.060"	0.060"	0.060"	0.116"	0.116"	0.116"
	Valve Body Material	316L Stainless	316L Stainless	316L Stainless	316L Stainless	316L Stainless	316L Stainless
	Voltage	24 VDC	12 VDC	24 VDC	24 VDC	12 VDC	24 VDC
	Porting	1/8" A-Lok	1/8" FNPT	1/8" FNPT	1/8" FNPT	1/8" FNPT	1/8" FNPT
	Operating Environment	40 - 221 deg F	40 - 221 deg F	40 - 221 deg F	40 - 221 deg F	40 - 221 deg F	40 - 221 deg F
	Material Contact Media	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals
	Seals	FKM	FKM	FKM	FKM	FKM	FKM

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Extreme Performance Series 99

Ultra High Leak Integrity Valve



The Series 99 offers ultra-high vacuum valve technology in a reliable compact design. Using the Gen-Lock™ seal, the Series 99 delivers low leak rates, high speed, and high flow and operates well in high temperature applications.

Features

- Provides ultra-high vacuum and high pressure.
- Constructed of non-corrosive stainless steel.
- Performs at high speed (5 msec or less opening response time).
- Offers a variety of porting options.
- Offers a high cycle life.

Physical Properties

Valve Type:
2-Way and 3-Way Configurations
Media:
Liquids and gases
Operating Environment:
4 to 221°F (-15 to 105°C)
Size:
See Dimensions
Porting:
Vacuum fittings; A-Lok compression fittings
Weight:
3.1 oz (3-Way, 1/8" Body Option)
Internal Volume:
Various

Electrical

Power:	Voltage:	Current:	Resistance:
			(Ω+5% @ 70°F)
12 Watts	12 VDC	1000 ma	12 Ω
12 Watts	24 VDC	500 ma	48 Ω

Wetted Materials

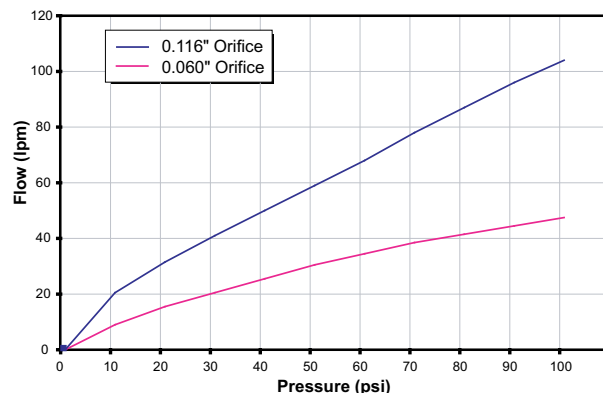
Materials Contacting Media:
PTFE, Stainless Steel, Body, Seals
Body Options:
316L Stainless Steel
Seals Options:
Vespel & Silver-Plated Nickel, FKM & Silver-Plated Nickel Gasket

Performance Characteristics

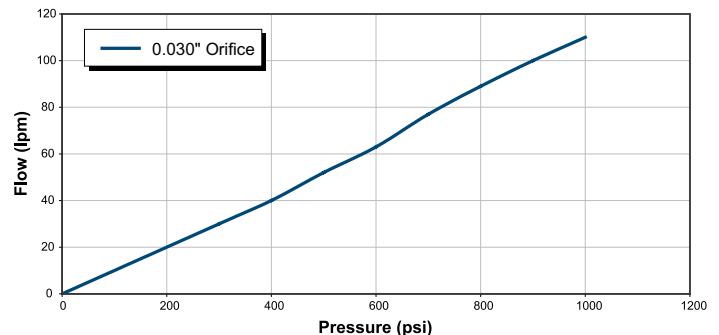
Operating Pressure:
1250 psig (0.030 in orifice) 100-250 psig (0.060 in orifice) See Chart 100 psig (0.116 in orifice)
Orifice Diameters:
0.030" (0.76 mm) 0.060" (1.52 mm) 0.116" (2.99 mm)
Leak Rate:
1 x 10 ⁻⁸ cc/sec/atm Helium <i>NOTE: Not rated for continuous duty at maximum temperature</i>

Flow

SERIES 99 AIR FLOW

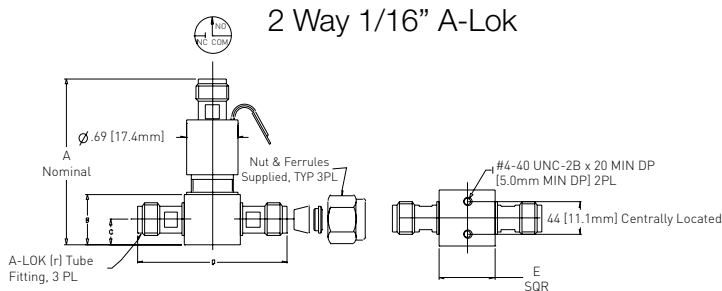


SERIES 99 AIR FLOW

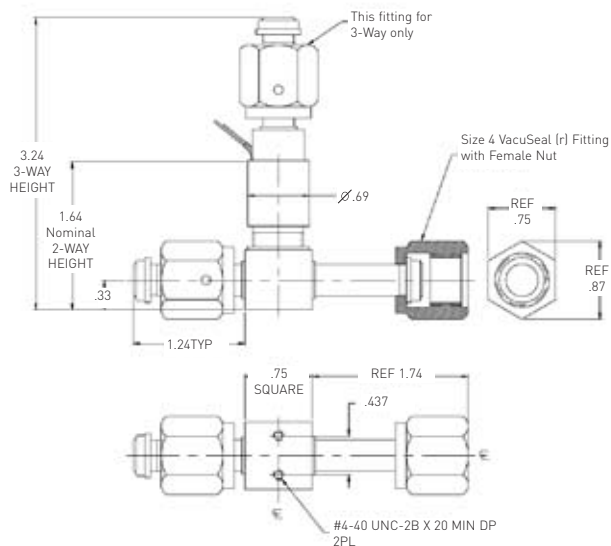


Extreme Performance Series 99

Dimensions



1/4 inch Female VacuSeal



DIMENSIONS (INCHES) A-Lok Options

PORTS	THREE-WAY				
	A	B	C	D	E
1/8 A-Lok	2.13	0.67	0.33	1.91	0.75
PORTS	TWO-WAY				
	A	B	C	D	E
1/16 A-Lok	1.66	0.67	0.33	1.63	0.75
1/8 A-Lok	1.66	0.67	0.33	1.91	0.75

Ordering Information

		part number				
		099-0051-900	099-0340-900	099-0080-900	099-0135-900	099-0075-900
part description	Valve Type	2-Way NC	2-Way NC	2-Way NC	3-Way	3-Way
	Media	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases	Liquids & Gases
	Operating Pressure	Vacuum to 1250 psi	Vacuum to 1250 psi	Vacuum to 250 psi	Vacuum to 100 psi	Vacuum to 100 psi
	Orifice	0.030"	0.030"	0.060"	0.060"	0.060"
	Valve Body Material	316L Stainless	316L Stainless	316L Stainless	316L Stainless	316L Stainless
	Voltage	12 VDC	24 VDC	24 VDC	24 VDC	12 VDC
	Porting	1/16" A-Lok	1/16" A-Lok	1/8" A-Lok	1/8" A-Lok	1/8" A-Lok
	Operating Environment	40 - 221 deg F	40 - 221 deg F	40 - 221 deg F	40 - 221 deg F	40 - 221 deg F
	Material Contact Media	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals
	Seals	Vespel and Gasket	Vespel and Gasket	FKM and Gasket	FKM and Gasket	FKM and Gasket
Gasket	Silver Plated Nickel	Silver Plated Nickel	Silver Plated Nickel	Silver Plated Nickel	Silver Plated Nickel	

		part number	
		099-0167-900	099-0107-900
part description	Valve Type	2-Way NC	3-Way
	Media	Liquids & Gases	Liquids & Gases
	Operating Pressure	to 100 psi	to 100 psi
	Orifice	0.116"	0.116"
	Valve Body Material	316L Stainless	316L Stainless
	Voltage	24 VDC	24 VDC
	Porting	1/4" Female VacuSeal	1/4" Female VacuSeal
	Operating Environment	40 - 221 deg F	40 - 221 deg F
	Material Contact Media	PTFE, Stainless Steel, Body, Seals	PTFE, Stainless Steel, Body, Seals
	Seals	FKM and Gasket	FKM and Gasket
Gasket	Silver Plated Nickel	Silver Plated Nickel	



Order on-line at www.parkerfluidics.com or call 1.800.482.8258



Pulse Valves Series 9 & 99

Ultra High Leak Integrity Valve



Pulse Valves are available in flange mount, axial flow, and 2-Way Normally Closed versions. Constructed of corrosion resistant materials, these field-proven units provide extreme repeatability and operate as fast as 160 microseconds. They are capable of operating at pressures up to 85 atmospheres and speeds of 120 Hz. Supersonic gas pulses can be delivered with "First Shot" accuracy.

Features

- Performs at ultra-high speed (as fast as 2 msec).
- Delivers repeatable pulses and high repetition rates.
- Requires no pressure to operate.
- Built from stainless steel construction.

Physical Properties

Valve Type:
Flange Mount, Axial Flow, 2-Way Normally Closed version
Media:
Liquids and gases
Operating Environment:
4 to 105°C (39 to 221°F)
Size:
Configuration and fitting dependent (Contact factory for details)
Weight:
2.8 oz (9-181-900)
Porting:
A-Lok, VacuSeal
Internal Volume:
Various (Contact factory for details)

Electrical

Power:	Voltage:	Current:	Resistance:
			(Ω+5% @ 70°F)
12 Watts	12 VDC	1000 ma	12 Ω
12 Watts	20 VDC	594 ma	33 Ω
11.2 Watts	28 VDC	400 ma	70 Ω

Wetted Materials

Poppet Materials:
Series 9 and Series 99 PTFE, PEEK, PCTFE, PI (Vespel®*), CTFE (Kel-F®*) <i>Two spare poppets ship with valve assembly</i>
O-Ring:
Series 9 Only FFKM (Kalrez®*)
Gasket Materials:
Series 99 Only Silver-Plated Nickel
<small>*NOTE: Vespel and Kalrez are trademarks of Dupont. Kel-F is a trademark of 3M Company.</small>

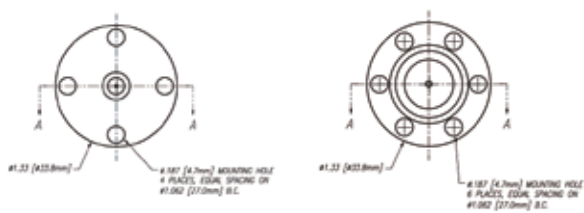
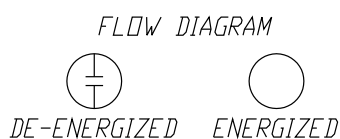
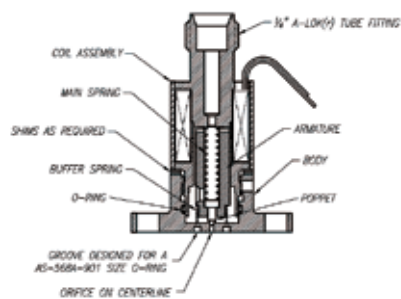
Performance Characteristics

Operating Pressure:
1250 psig (0.030" orifice) 100-250 psig (0.060" orifice) <i>See Chart</i> 100 psig (0.116" orifice)
Orifice Diameters:
0.030" (0.76 mm) 0.060" (1.52 mm) 0.116" (2.99 mm)
Leak Rate:
1 x 10 ⁻⁸ cc/sec/atm Helium <i>NOTE: Not rated for continuous duty at maximum temperature</i>

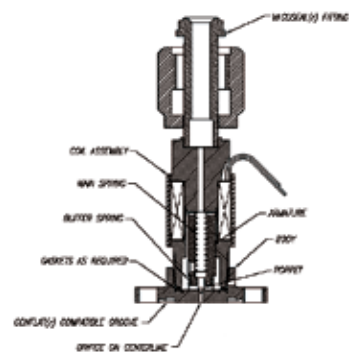
Pulse Valves Series 9 & 99

Dimensions

Series 9



Series 99



Ordering Information

Visit www.parker.com/pneutronics and click on Multimedia Valves, then Pulse Valves to download PDFs for Series 9 and Series 99 Part Number Configuration and Spare Parts Ordering information.

Order on-line at www.parkerfluidics.com or call 1.800.482.8258



Isolation LQX12

2-Way and 3-Way Solenoid Valve



LQX12 is a high-performance two-way and three-way universal isolated diaphragm valve. This highly flexible design is 12mm wide and incorporates dual-elastomer options. LQX12 supports the pressure and flow requirements needed by today's analytical, bio-analytical, and clinical diagnostic OEMs.

Features

- Offers dual elastomer options (PEEK body and EPDM or FFKM elastomer) for performance and reliability in a range of liquid and gas media.
- Reduces overall system size with its efficient packaging and 12mm design; ideal for manifold mounting.
- Provides low internal unswept volume.
- Ensures secure electrical termination to standard female connectors with friction-locked (latching) electrical connection.
- Offers installation flexibility with the manifold sub-base; option of fluid connectors on single or multiple station assemblies.

Physical Properties

Valve Type:
3-Way Universal 2-Way Normally Closed
Media:
Liquids and Gases
Operating Environment:
0 to 55°C (32 to 131°F)
Storage Temperature:
-40 to 70°C (-40 to 158°F)
Length:
1.16" (29.46 mm)
Width:
.47" (11.94 mm)
Height:
1.57" (39.88 mm)
Porting:
Manifold mount with gasket
Manifold Options:
1/4-28 fluid connectors available on single or multiple station manifolds
Weight:
0.86 oz (24.66 grams)
Internal Volume:
32 µL (to manifold interface)

Electrical

Power:
2.0 Watts max.
Voltage:
12 and 24 VDC + 5.0% (Other options available)
Electrical Connections:
2.54 mm pitch male pins Friction-locked design receives standard female connector <i>Options:</i> 18" leaded assembly, splash guard for wet environment

Wetted Materials

Elastomer:
EPDM or FFKM (perfluoroelastomer)
Body/Manifold
PEEK (polyetheretherketone)

Performance Characteristics

Pressure Ranges:
Vacuum to 50 psig
Leak Rate:
0.016 sccm (at 50 psi air)
Response:
<20 msec cycling
Minimum Flow:
18 lpm air @ 50 psi 500 sccm water @ 50 psi
Life Cycle:
10 Million (meeting all specifications)
Orifice Size:
0.040"



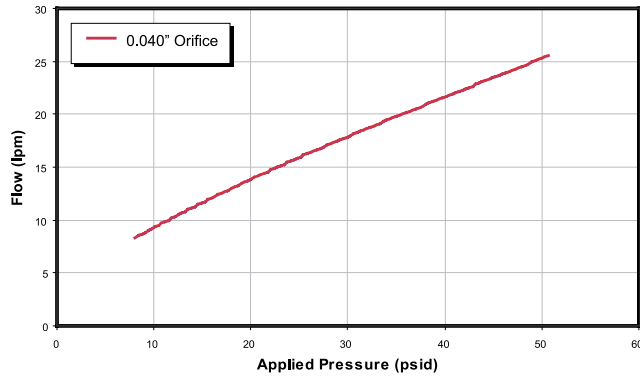
Ordering Information

Sample Part ID	LQX12	3W	12	FF	FS	-	001
Description	Series	Configuration	Voltage	Seal/Gasket	Mounting Style	-	Custom Accessories
Options		2W: 2-Way, Normally Closed 3W: 3-Way	12: 12 VDC 24: 24 VDC	FF: FFKM EP: EPDM	FS: Face Seal 48: 1/4-28 Ports		000: Standard Product 001: Flying Leads, 18"

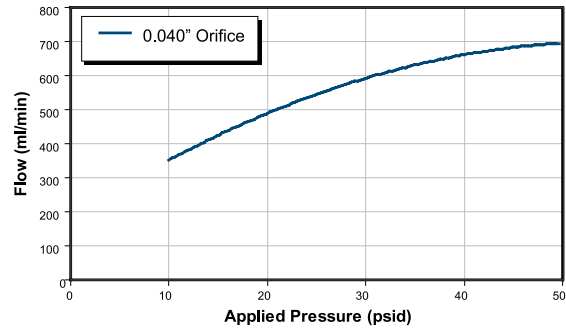
Isolation LQX12

Flow

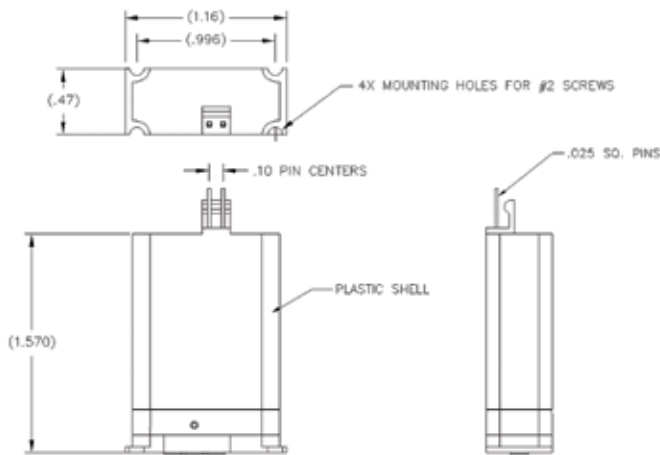
LQX12 Typical Air Flow



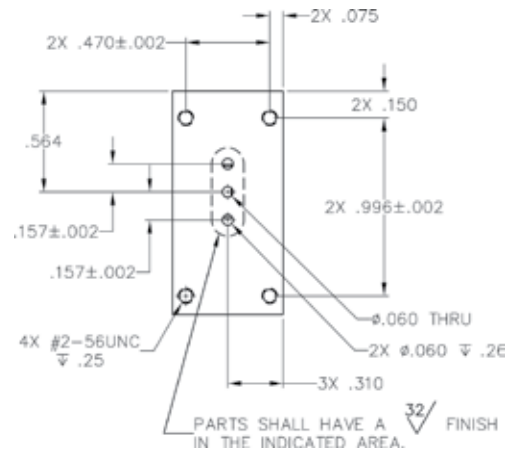
LQX12 Typical Water Flow



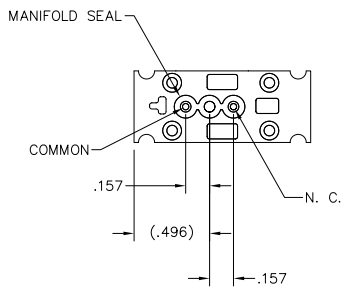
Dimensions



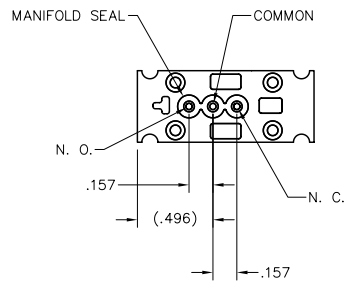
Manifold Interface



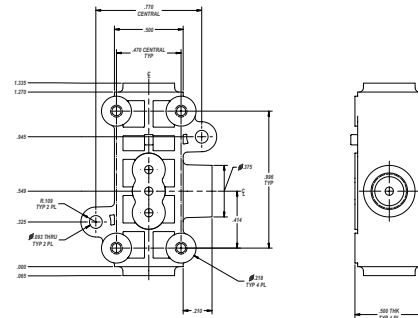
2-Way



3-Way



1/4-28 Manifold



Order on-line at www.parkerfluidics.com or call 1.800.482.8258



Isolation LQX16

2-Way and 3-Way Solenoid Valve



The two-way and three-way LQX16 manifold-mountable assembly allows valves to be spaced less than 0.10" apart, enabling designers to maximize spacing.

Features

- Offers low internal volume and high cycle life.
- Provides a small package for optimal design benefits.
- Does not require pressure assistance to operate.
- Offers installation flexibility with the manifold sub-base; option for fluid connectors on single or multiple station assemblies.

Physical Properties

Valve Type:

3-Way Universal

Media:

Liquids and gases

Operating Environment:

40 to 150°F (4 to 66°C)

Storage:

-40 to 70°C

Weight:

2.2 oz (1/4-28 Option)

Porting:

Manifold mount

1/4-28 Threaded Ports

Internal Volume:

123.3 μ L (Manifold Mount Option)

213.3 μ L (1/4-28 Option)

Electrical

Power:

3.4 Watts max.

Voltage:

12 and 24 VDC + 5.0%

Current:

286 ma (@ 12 VDC)

141 ma (@ 24 VDC)

Resistance (Ω +5% @ 70°F):

42 Ω

170 Ω

Wetted Materials

Elastomer:

EPDM or FKM

Body/Manifold:

PEEK (polyetheretherketone)

Performance Characteristics

Operating Pressure:

Vacuum to 50 psig

Leak Rate:

0.016 sccm (at 50 psi air)

Response:

<20 millisecond

Life Cycle:

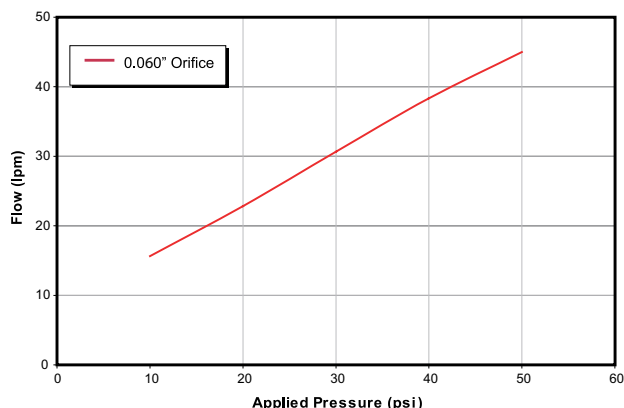
10 Million (Application Dependent)

Orifice Size:

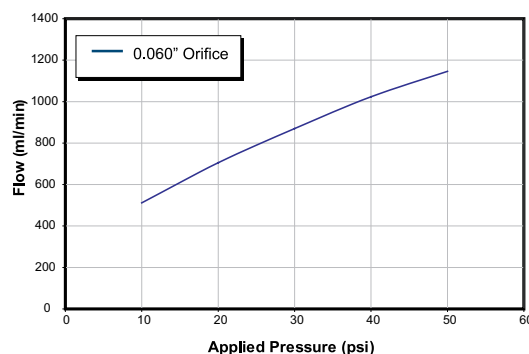
0.060"

Flow

LQX16 Typical Air Flow



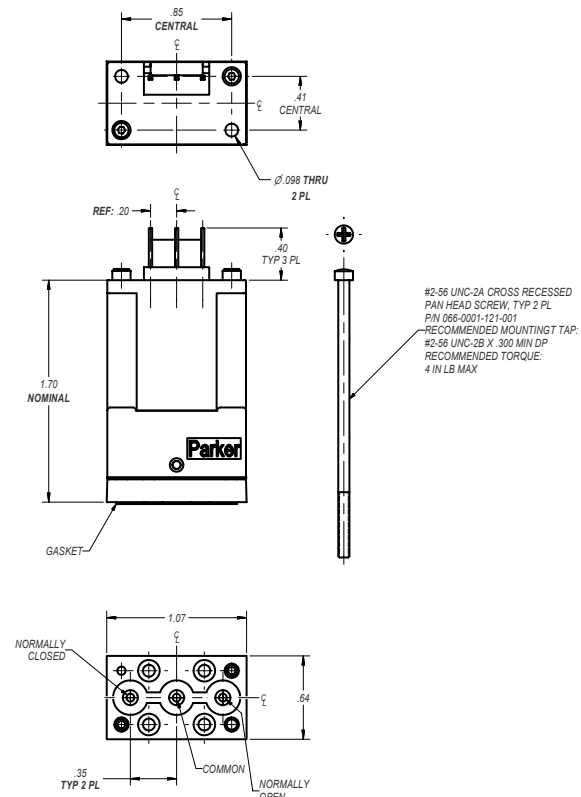
LQX16 Typical Water Flow



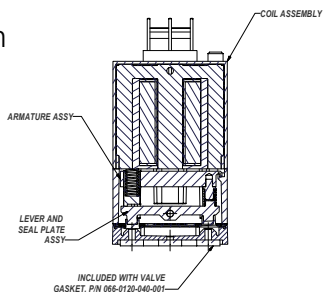
Isolation LQX16

Dimensions

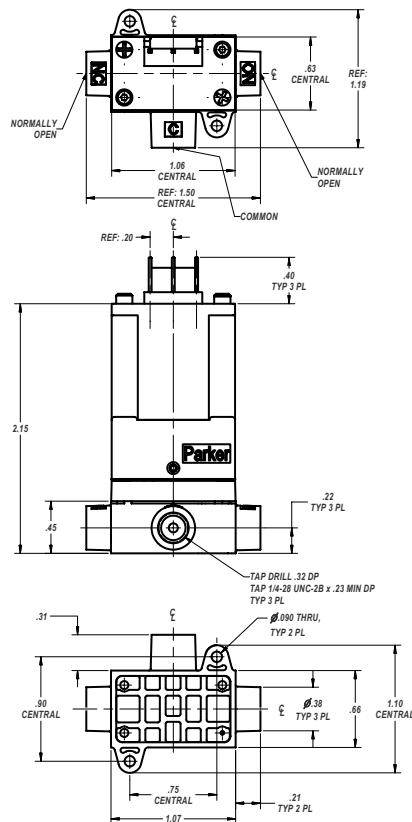
3-Way



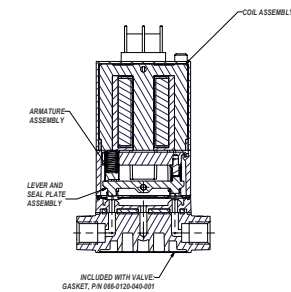
Cross-Section



Manifold Interface



Cross-Section



Ordering Information

Sample Part ID	LQX16	3W	12	FK	FS	-	001
Description	Series	Configuration	Voltage	Seal/Gasket	Mounting Style	-	Custom Accessories
Options		3W: 3-Way	12: 12 VDC 24: 24 VDC	FK: FKM EP: EPDM	FS: Face Seal 48: 1/4-28 Ports		000: Standard Product 001: Flying Leads, 24"



Order on-line at www.parkerfluidics.com or call 1.800.482.8258





Parker Hannifin Corporation
Pneutronics Division
26 Clinton Dr., Unit 103
Hollis, NH 03049
phone 603 595 1500
fax 603 595 8080
www.parker.com/pneutronics