

General Purpose Series 3

2-Way and 3-Way Solenoid Valve



The Series 3 solenoid valve is suitable for both liquids and gases, including bleach and saline, for applications including clinical chemistry, blood chemistry, and ink jet printing. These 2-way and 3-way valves provide high flow in a small valve with pressures up to 100 PSI, they feature barbs for soft tubing and no metal to metal sliding surfaces, ensuring long, trouble free operation. These valves are an excellent alternative to pinch valves, since there is no pinched tubing to wear out.

Features

- Wetted parts are engineered plastic (PEEK), magnetic stainless steel, and elastomer (FKM or EPDM)
- Chemically resistant to moderate acids, bases, dilute bleach, saline
- Integral molded and machined barbs for soft tubing eliminate potential leaks at connection
- High flow in small package provides fast cycle times and low pressure losses
- No sliding metal to metal surfaces minimize wear of moving parts
- Direct acting design does not require pressure or vacuum to operate

Physical Properties

Valve Type:

2-Way Normally Closed, 3-Way

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:

24" Hg - 100 psig	0.055" (1.40 mm)	1/16" Barb
24" Hg - 50 psig	0.078" (1.98 mm)	1/8" Barb
24" Hg - 20 psig	0.090" (2.29 mm)	3/16" Barb

Diaphragm Version

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

1 X 10⁻⁵ cc/sec. He

Response Time:

<12 milliseconds cycling

Recommended Filtration: 10 μ max **Proof Pressure:** 1.5X rated pressure

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

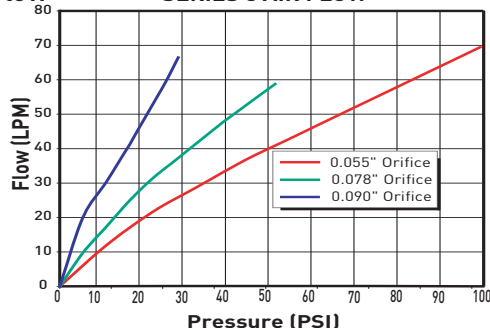
Voltage:

12 VDC

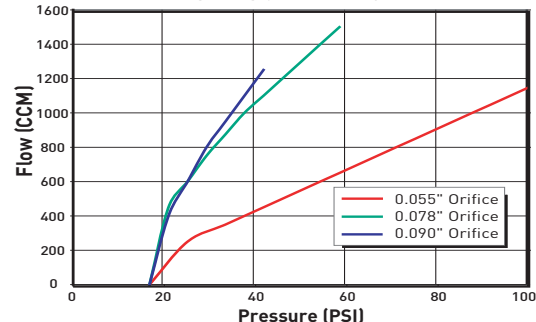
24 VDC

12" Lead Wires Standard

Flow SERIES 3 AIR FLOW



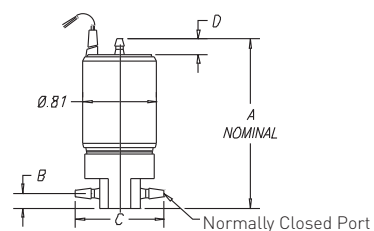
Flow SERIES 3 WATER FLOW



General Purpose Series 3

Dimensions

DIMENSIONS, 0.60" ORFICE								
	THREE - WAY					TWO - WAY		
PORTS	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	1.02	0.35		1.69	0.16	1.02
3/16 BARBS	2.13	0.16	1.32	0.44		1.69	0.16	1.32
10 - 32	1.68	0.22	0.81	N/A		1.68	0.22	0.81



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	24" Hg - 100 psi	24" Hg - 100 psi	24" Hg - 100 psi	24" Hg - 100 psi	24" Hg - 100 psi	24" Hg - 100 psi	24" Hg - 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	24" Hg - 100 psi	24" Hg - 50 psi	24" Hg - 50 psi	24" Hg - 50 psi	24" Hg - 50 psi	24" Hg - 50 psi	24" Hg - 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	24" Hg - 50 psi	24" Hg - 50 psi	24" Hg - 25 psi	24" Hg - 25 psi	24" Hg - 20 psi	24" Hg - 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	24" Hg - 20 psi	24" Hg - 20 psi	24" Hg - 20 psi	24" Hg - 20 psi	24" Hg - 20 psi	24" Hg - 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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For more information call 1.800.525.2857 or email ppfinfo@parker.com
Visit www.parker.com/precisionfluidics

