



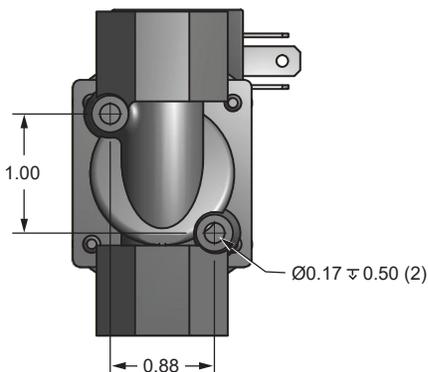
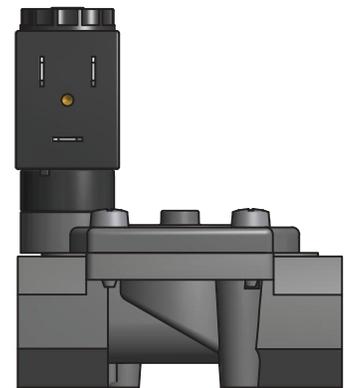
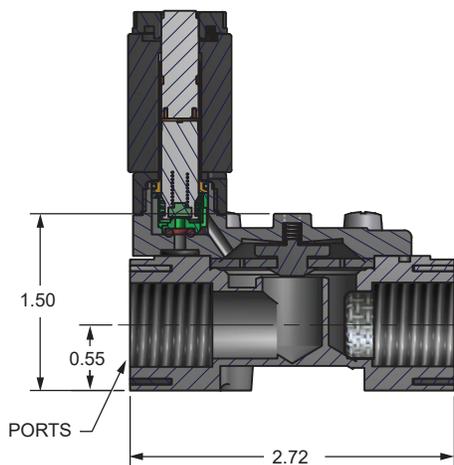
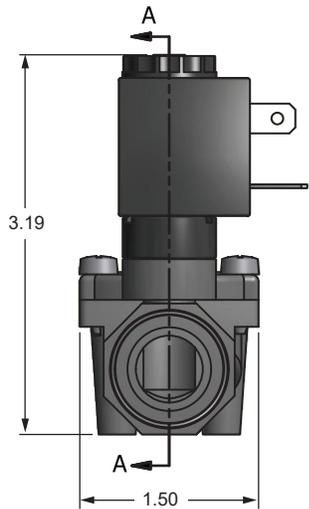
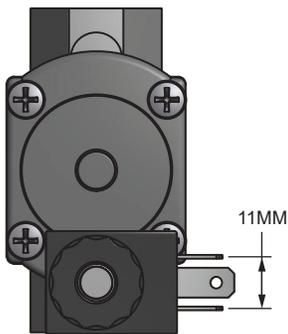
# Series 3580

## Diaphragm Process Composite Air-Sol 2-Way

The Spartan Scientific Series 3580 is an engineered composite 2-Way, 2-Position solenoid/air operated valve designed for the control of liquid media and inert gas. The valve exhibits a large 1/2" orifice and three port sizes standard, 1/4", 3/8" and 1/2" NPT. The Normally Open version of the 3580 has a unique operator that allows for function without the use of a bypass tube as with the 3510 and has a push non-locking and a turn-lock manual override. The valve's compact design utilizes the latest in material sciences with the use of composite materials in the valve body. The solenoid pilot is power saving low wattage, made of stainless steel working components and is miniaturized to fit in tight places. Standard elastomers available are FKM, NBR, and EPDM. The fully encapsulated coils are available in all standard voltages and with spaded, flying leads or with a connector attached. Typical applications are for installations where there is a need to control inert fluids and gases, condensate drainage, hot water plumbing and sprinkler systems.

### Dimensional Data

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED



DIAPHRAGM  
PROCESS



# Series 3580

Diaphragm Process  
Composite Air-Sol 2-Way

## Technical Data

**Function:** 2-Way, 2-Position; Inlet Pilot Diaphragm;  
Solenoid Operated; Normally Closed, or Normally Open

**Port Size / Flow Factor:** 1/4" NPT / 1.55 Cv  
3/8" NPT / 1.95 Cv  
1/2" NPT / 2.45 Cv

**Orifice Sizes:** 12.5mm / 2.45Cv

**Pressure Range:** 7 to 150 psi (depending on orifice size and function)

**Temp. Range:** Fluid Max.: +60°C  
Dry Range: Ambient +10° to +50°C

**Response Time:** 20 to 80ms Complete Cycle

**Media:** Air, water

**Environment Protection:** IP65 (IEC 144), NEMA 4  
Dust-tight and water resistant (with electrical connector)

**Mounting:** Use #8 x 0.50" long self-tapping screws (2)  
(not provided)

**Wetted Materials:** Elastomers: FKM, NBR, EPDM,  
FKM FDA\*, NBR NSF\*, EPDM NSF\* - Compliant  
Operator: 300 and 400 Series Stainless Steel, or Brass  
Orifice Basket: Acetal POM  
Shading Ring: Copper (AC Only)  
Springs: 300 Series Stainless Steel  
Valve Body: Glass-filled Nylon (NSF Approved)

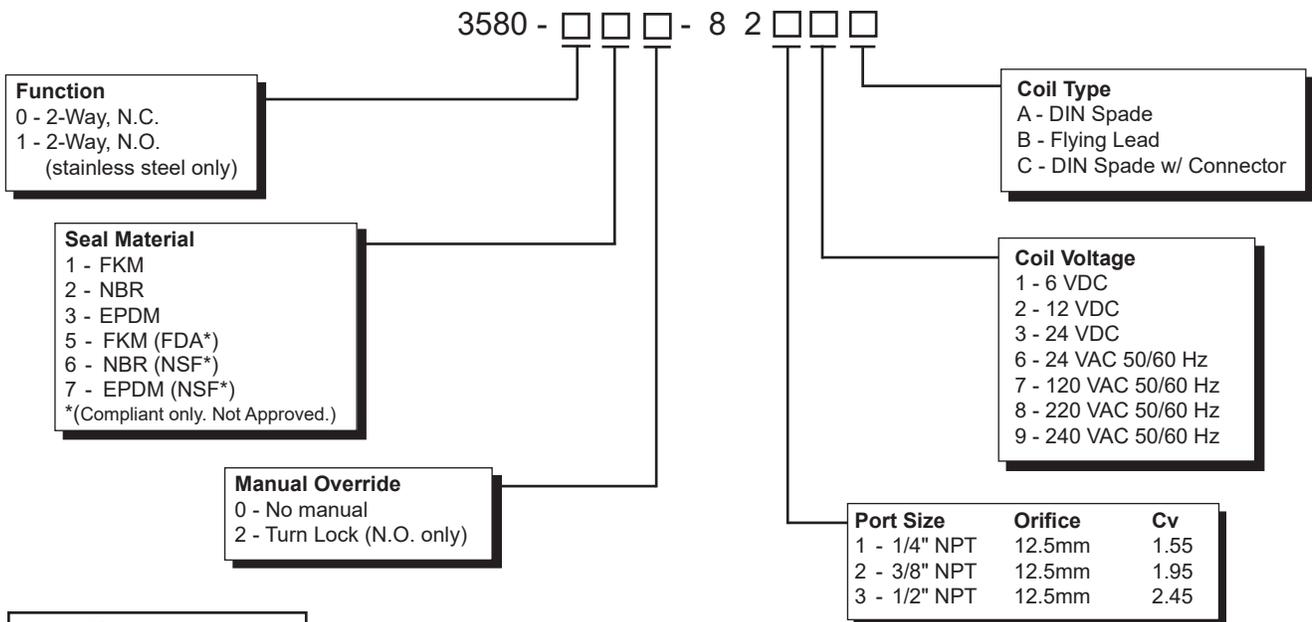
**Coil Data:** Duty Cycle: Continuous (within specifications)  
Encapsulation: Glass-Filled Nylon  
Insulation: Class F  
Power Rating: 6.5 Watt VDC, 8.5 VA VAC  
(others available on request)  
Voltage: 6, 12, 24 VDC  
24, 120, 220, 240 VAC 50/60 Hz  
Voltage Tolerance: +/- 10% Nominal  
Winding: Class H

**Connections:** Spades: Terminals AMP 6.3x0.8 width 11mm  
Flying Lead: PVC 22 AWG, Multi-Strand Copper Wire,  
300V, 12" minimum length

**Packaged Weight:** 0.48 lbs.

 Consult factory for available versions  
recognized under the Component  
Program of Underwriters Laboratories, Inc.

## How To Order



Repair Kits	
Specify Part Number	
FKM	3580-01-0001
NBR	3580-B1-0001
EPDM	3580-E1-0001

Order Example: 3580-010-8211A  
2-Way, N.C., FKM, No Override,  
1/4" NPT, 6 VDC, DIN Spade

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