



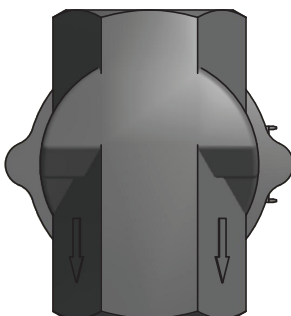
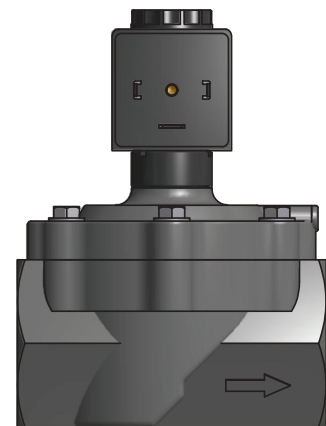
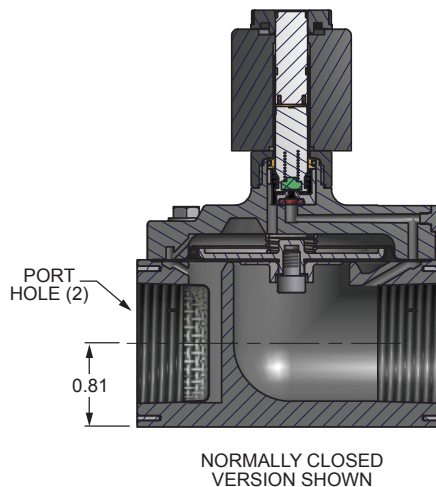
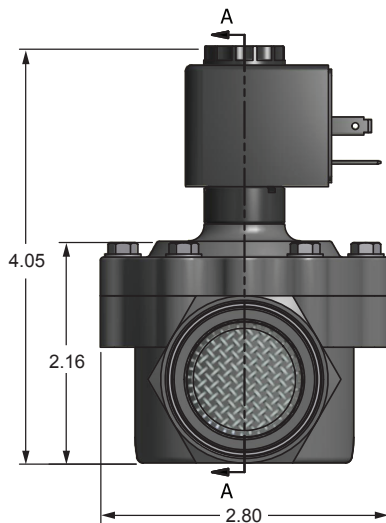
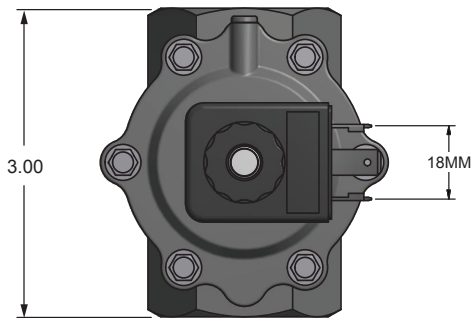
# Series 3685

## Diaphragm Process Composite Air-Sol 2-Way

The Spartan Scientific Series 3685 2-way, 2-position solenoid diaphragm valve offers the highest flow for the smallest overall size in its class. The valve is designed from the ground up using modern design technologies and materials. Featuring a full flow 1.1.25" (28 mm) orifice, the 3685 is available in either normally open or normally closed configurations. The PEI body is media compatible, light in weight, and by use of external metal port rings, is virtually indestructible. The normally open version of the valve features an optional turn lock manual override and has no external by-pass tube which eliminates leak points and size. The body is available in 3/4" and 1.0" NPT. The low wattage solenoid features a DIN 43650 Form A electrical interface and is nylon encapsulated. FKM, EPDM and NBR are standard elastomers and the operators are made of stainless steel / brass or stainless steel / brass with copper shading rings for AC versions. Typical applications include control of inert gases, water and compatible fluids.

### Dimensional Data

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED





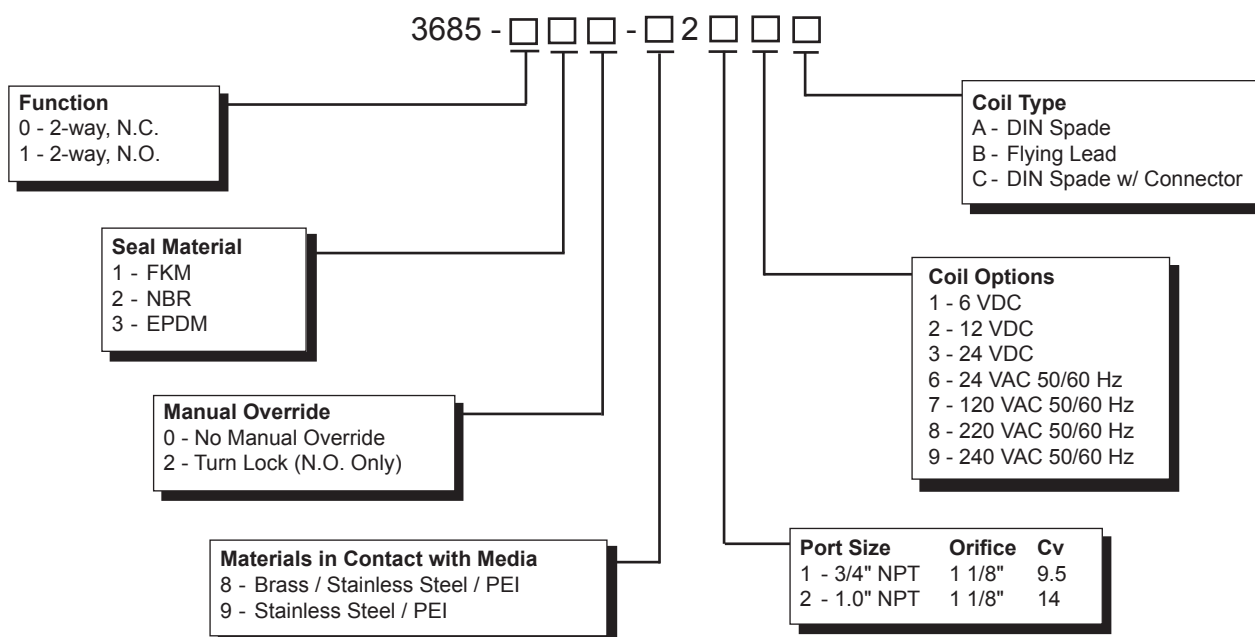
# Series 3685

Diaphragm Process  
Composite Air-Sol 2-Way

## Technical Data

<b>Function:</b>	2-Way, 2-Position; Internal Pilot Solenoid Operated; Normally Closed or Normally Open	<b>Mounting:</b>	On pipe
<b>Port Sizes / Flow Factor:</b>	3/4" NPT / 9.5 Cv 1.0" NPT / 14 Cv	<b>Materials:</b>	Operator: 300 and 400 Series Stainless Steel and Brass Orifice Seals: EPDM; FKM; NBR (others available on request) Springs: 300 Series Stainless Steel Valve Body: Glass-Filled Polyester
<b>Orifice Sizes</b>	1.125"	<b>Coil Data:</b>	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, 240VAC 50/60 Hz Voltage tolerance: +/- 10% Nominal Winding: Class H
<b>Pressure Range:</b>	10 - 120 psi (depending on orifice size and function)	<b>Connections:</b>	DIN Spades: Accordance with DIN 43650 Form "A" / ISO 4400, EN175301-803;2000 Flying Lead: PVC 18 AWG, Multi-Strand Copper Wire, 300V, 18" Length
<b>Temp. Range:</b>	Fluid max.: +60°C Dry Range: Ambient +10° to +50°C	<b>Packaged Weight:</b>	0.78 lbs.
<b>Response Time:</b>	80 - 120ms Complete Cycle		
<b>Media:</b>	Air, oil, light oil, noble gases, water (contact factory for compatibilities)		
<b>Manual Override:</b>	Turn Lock (available on request) Normally Open Version Only		
<b>Environment</b>	IP65 (IEC 144), NEMA 4		
<b>Protection:</b>	Dust-tight and water resistant (with electrical connector)		

## How To Order



Order Example: 3685-010-8211A  
2-way, N.C., FKM, no override,  
Brass, 3/4" NPT, 6 VDC, DIN Spade

**SPARTAN**  
SCIENTIFIC

P.O. Box 9792 • Boardman, Ohio 44513  
PH: (855)629-4648 • Fax: (330)758-3314  
www.spartanscientific.com

www.comoso.com