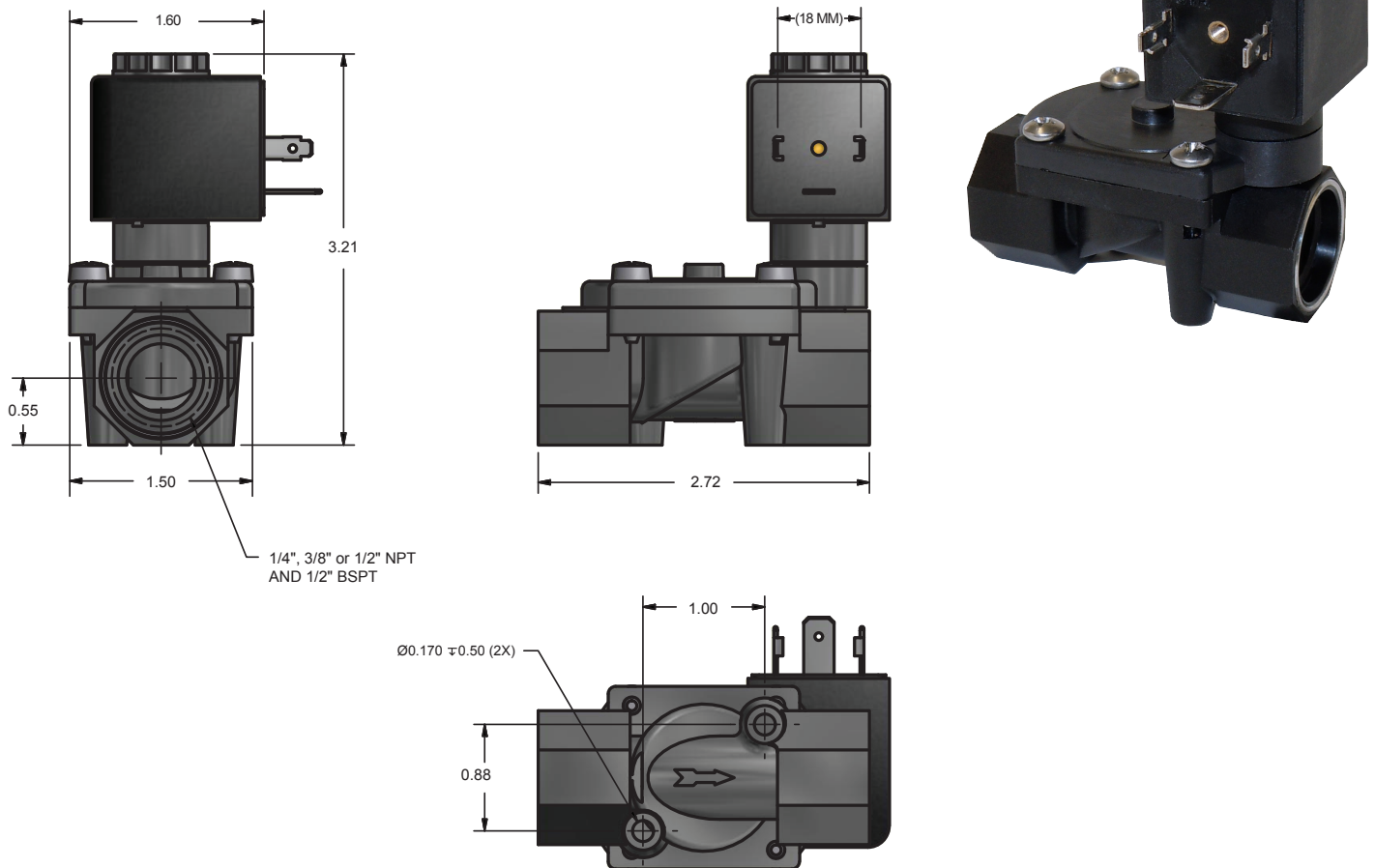




The Spartan Scientific Series 3585 2-way, 2-position solenoid diaphragm valve offers the highest flow for the lightest weight in its class. The valve is designed from the ground up using modern design technologies and materials. Featuring a full flow 1/2" (12.5 mm) orifice, the 3585 is available in either normally open or normally closed configurations. The nylon 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 1/4", 3/8" and 1/2" NPT or BSP. The low wattage solenoid features a DIN 43650 Form A electrical interface and is nylon encapsulated. FKM, EPDM and Buna 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 gasses, water and compatible fluids.

## Dimensional Data

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED



## Technical Data

<b>Function:</b>	2-way, 2-position normally open, or normally closed, internal pilot diaphragm, solenoid operated	<b>Materials:</b>	Operator: 400 and 300 Series Stainless Steel or Brass Valve Body - Dupont Zytel® 77G33 Glass Filled Nylon NSF approved, PPS Seals: Viton, Nitrile, EPDM Shading Ring - Copper
<b>Port Sizes:</b>	1/4", 3/8", 1/2" NPT or 1/2" BSPT on request	<b>Media:</b>	Air, oil, water, potable water, emulsion, inert gas
<b>Orifice Sizes:</b>	1/2" (12.5mm)	<b>Coil Data:</b>	Glass filled nylon encapsulation (Class F, continuous duty) 6.5W VDC, 8.5VA VAC Volts: 6, 12, 24 VDC 24, 120, 220, 240 VAC 50/60 Hz Voltage tolerance: +/- 10%
<b>Pressure Range:</b>	7 - 150 psi (requires minimum sealing pressure)		
<b>Flow Factors:</b>	1/4" NPT 1.55 Cv 3/8" NPT 1.95 Cv 1/2" NPT and BSPT 2.45 Cv		
<b>Temperature Range:</b>	(Fluid max. +90°C) Ambient -10° to +50°C		
<b>Response Time:</b>	20 to 80 MS Complete cycle		



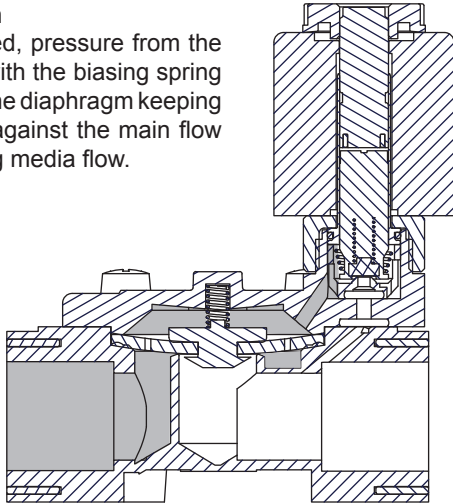
# Series 3585

Air-Sol 2-Way  
Process Solenoid Valves

## Principle of Operation

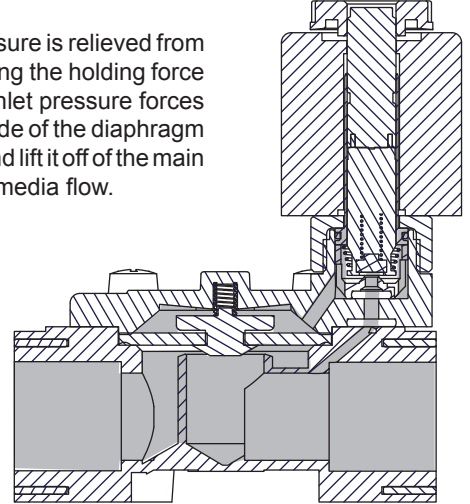
### Closed Position

Pilot de-energized, pressure from the inlet combined with the biasing spring applies force to the diaphragm keeping it closed tightly against the main flow orifice preventing media flow.



### Open Position

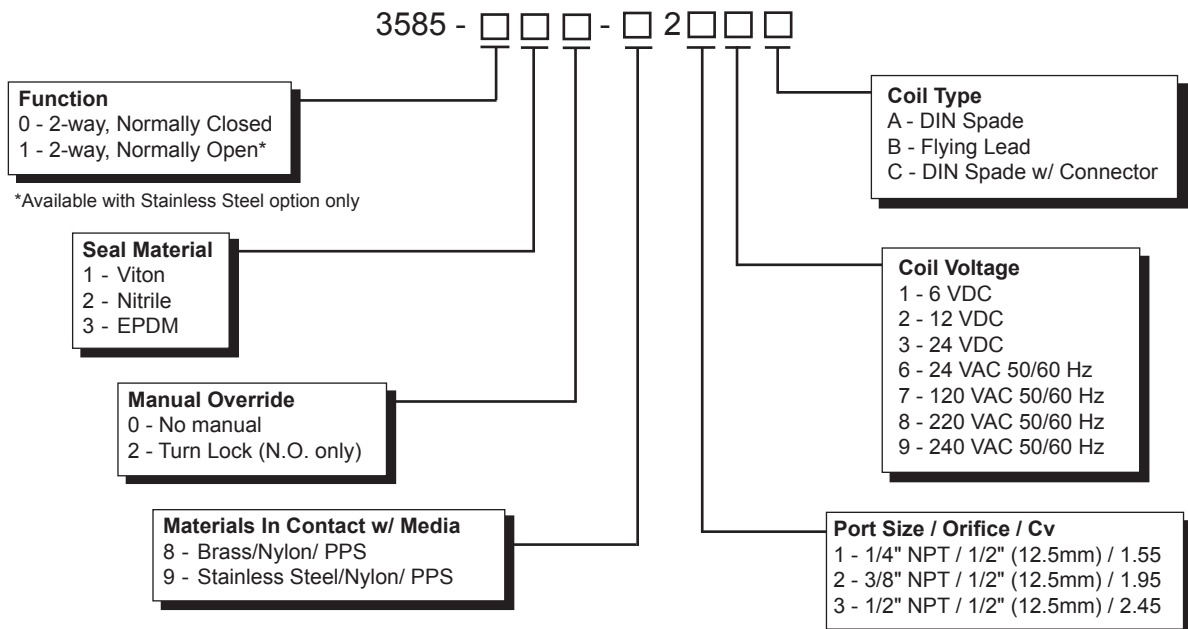
Pilot energized, pressure is relieved from pilot bonnet eliminating the holding force on the diaphragm. Inlet pressure forces the diaphragm to flex the diaphragm and lift it off of the main flow orifice allowing media flow.



Note: Normally Closed Version Shown



## How To Order



Order Example: 3585-010-8211A  
 Series 3585, 2-way, Normally Closed, Viton, No Manual,  
 Brass / Nylon / PPS, 1/4" NPT, 6 VDC, DIN Spade