Solenoid Valve Specifications and Dimensions: 3S020-35 Series

Valve Model	3S020-35
Valve Type	3 Way Normally Closed (NC) or Normally Open (NO)
Action	Direct Acting
Cv (Orifice)	020: 2mm Orifice; 035: 3mm Orifice (0.5 Cv)
Operating Pressure (PSI)	Vacuum to 100 PSI (2mm orifice): Vacuum to 60PSI (3.5mm orifice)
Operating Temperature (°C)	-5-248 °F (-15 to120 °C)
Port Size (NPT)	¼” NPT
Body Materials	Stainless Steel
Seal Materials:	Viton
Coil Protection Insulation Class	H Class IP65
Coil Duty	100% ED
Coil Power	14W
Electrical Connections	DIN
Service	Air, Gas, Liquid

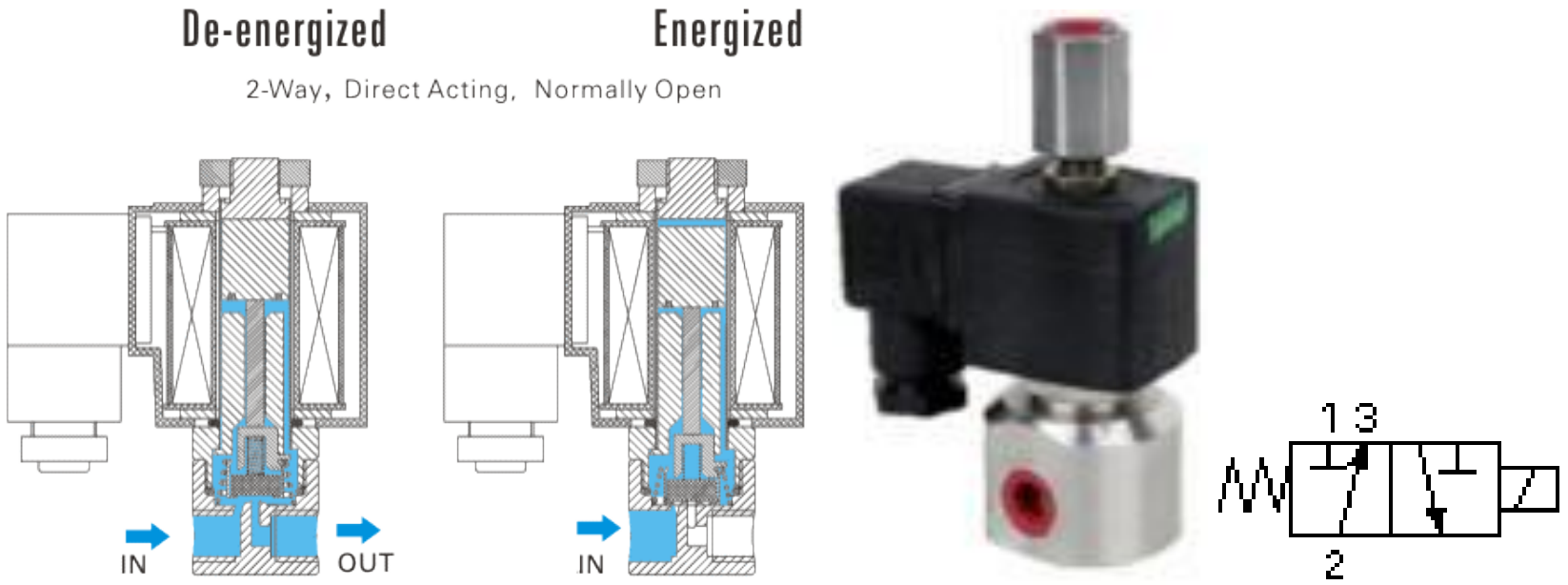
Electrical Coil Connections	
For DIN Coil	**To connect DIN coil:** 1. Remove the Philip screw from the plastic housing and unplug it from the DIN coil. 2. From the screw opening, push the terminal block out from the plastic housing. 3. Note the 1, 2 and ground markings on underside of DIN enclosure. 4. For DC DIN Coil, Connect 1 to Positive, 2 to Negative. 5. For AC DIN Coil, connect 1 to HOT wire, 2 to Neutral wire, and if required connect ground to ground wire.
For Grommet Coil	**To connect Grommet coil:** 1. For DC Coil, connect one of the two wires to Positive, and the other wire to Negative. 2. For AC Coil, connect one of the two wires to HOT wire, and the other wire to neutral wire.

2/3 Direct Acting Solenoid Valve Normally Closed (3S020-35 Series)

As shown below, when the valve is de-energized (left diagram), the plunger under the force of spring seals the main orifice, and port CYL connects with port EX. When the valve is energized (right diagram), the coil magnetic force pulls back the plunger and closes port EX, and connects port IN to CYL.

To operate the 3S020 or 3S035 as a normally open diverter, you need to connect the supply air to Port No 1. The Top Port is the normally open port and Port No. 2 is the normally closed port. In the configuration, air goes from Port No. 1 to the Top Port when the valve is de-energized. When it is energized air will go from Port No. 1 to Port No. 2 and the Top Port will be shut off.

To operate the 3S020 or 3S035 as a normally open on/off valve, you need to connect the supply air to the Top Port. The Port No.1 is the normally open port. In the configuration, air goes from the Top Port to Port No. 1 when the valve is de-energized. When it is energized the Top Port is shut off, and Port No. 1 will be exhausted to Port No. 2. To operate the 3S035 as a normally open diverter , you need to connect the supply air to Port No 1. The Top Port is the normally open port and Port No. 2 is the normally closed port. In the configuration, air goes from Port No. 1 to the Top Port when the valve is de-energized. When it is energized air will go from Port No. 1 to Port No. 2 and the Top Port will be shut off.



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MODEL: 3S035 -1/4