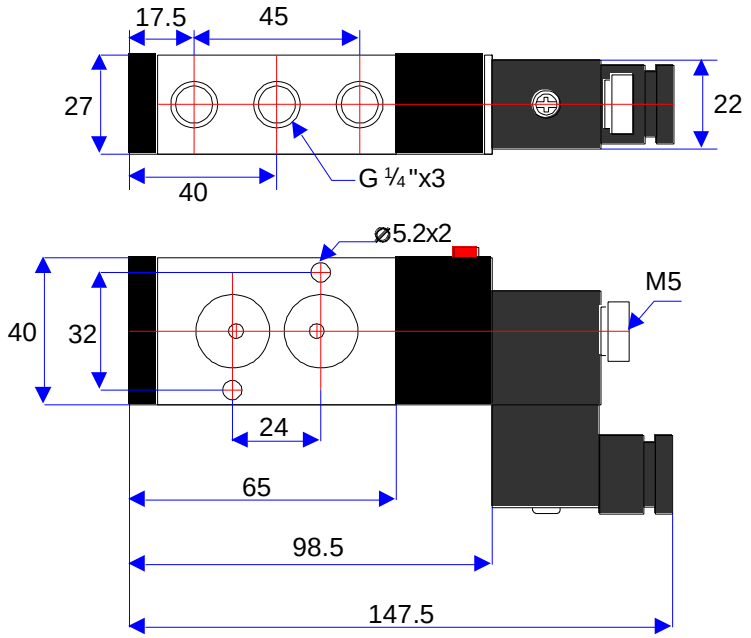
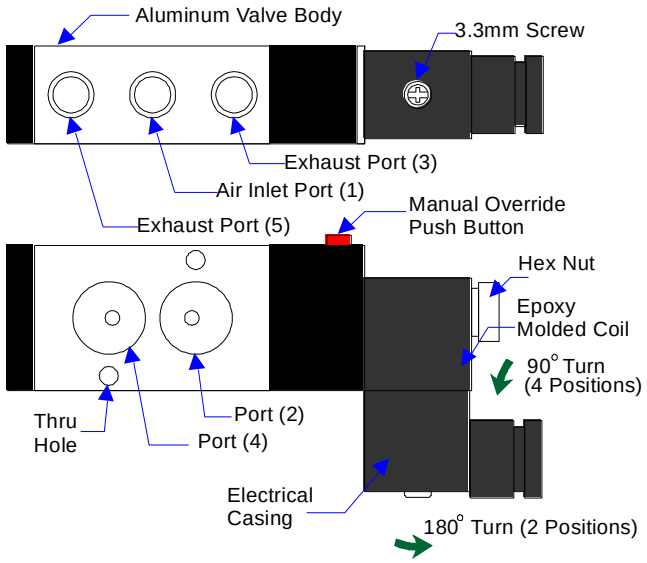
DIMENSIONS IN mm (Figure 1)



DESCRIPTION (Figure 2)



SPECIFICATIONS

Flow Media	Air (Filtered 40 Micron)
Movement	Internal Guiding Piston
Port & Position	Five Ports, Two Positions
Port Dimension	G ¼" for Inlet and Exhaust
Lubrication	Not Necessary
Operating Pressure	(1.5 ~ 8.0) Kgf/cm² ; (22 ~ 118) PSI
Maximum Pressure	10.5 Kgf/cm² ; 150 PSI
Operating Temperature	(0°~50°)C; (32°~122°)F
Voltage Deviation	± 10%
Power Consumption	AC (4.5 VA) ; DC (3W)
Anti-Static Rating	Class F
Protection Class	Class IP65 (DIN40050)
Certification	CE
Maximum Frequency	5 per Second
Minimum Discharge time	0.05 Second
Weight	335 g

Model AIP65

NAMUR Version Solenoid Valve

- Weatherproof
- Epoxy molded coil with mounted fixed connector
- Coil with protection class IP65 and has been CE registered
- Electrical casing with cable gland pg 9

Available Coil Ratings:

DC 12 V
DC 24 V
AC 24 V 50/60 HZ
AC 110 V 50/60 HZ
AC 220 V 50/60 HZ

What is included?

Aluminum valve body, Epoxy molded coil, Electrical Casing

Optional Configuration?

- Choice of DC or AC voltage ratings
- Epoxy molded coil can be rotated 90° for 4 different positions
- Electrical Casing can be rotated 180° for 2 different positions

Optional Accessories that are NOT Included

- 2 O-rings to be fitted at Port 2 and 4
- 2 35mm hex bolt for attaching the solenoid valve to the actuator
- Muffler for port 3 and 5 for noise reduction
- Electric cable and End plug

Installing the Electrical Cable

Before the solenoid valve can be put into service, electrical cable with end plug must be connected to the electrical casing.

(1) Remove the electrical casing from the rest of the valve. This is easily done by loosening the 3.3mm screw (see figure 2). Completely remove the 3.3mm screw from the casing

(2) After the casing is detached a set of 3 narrow slots are revealed on the casing insert. Slots are identified by electrical symbols for "+" and ground. The metal base for attaching copper wire is on the other side of the insert.

(3) Pop out the casing insert with a small screw driver. The metal base is revealed.
(4) Attach copper wires accordingly.

(5) Replace the casing insert and attach the electrical casing back to the rest of valve body

FEATURES AND BENEFITS

- ÷ Large Internal Flow Area- with yield flow factor (Cv) of 1.4. Enables usage on a large range of actuators
- ÷ NBR Dynamic Wafer Seals- Seal rated for 20 million cycles on lubricated air service
- ÷ Balanced Spool- Allows constant shifting force for pressure range 1.5kg/cm^2 ~ 8kg/cm^2 (22PSI ~ 118PSI)
- ÷ G ¼"(Port 1) Inlet Port- Unrestricted flow and easy access to the inlet port
- ÷ Two ¼" Exhaust Port (3 & 5)- Unrestricted flow, port threaded for installation of mufflers or other devices
- ÷ Aluminum Anodized Parts- Valves parts are anodized for corrosion protection
- ÷ Air Assisted Spring Return- The spool spring is assisted with supply air to aid in boosting spring force
- ÷ Epoxy Molded Coils- Coils are moisture proof and seal from other elements
- ÷ Manual Override Button- Allow manual operation during setup and testing

SEQUENCE OF OPERATION

For Double Acting Actuator:

When Solenoid Valve is Energized (Figure 3)

(1) Spring loaded spool diaphragm moves left compressing the spring.
(2) Inlet air from the compressor is allowed to flow from inlet port 1 and out thru port 2 to the actuator.
(3) Exhaust air from the actuator is allowed to flow into port 4 and out of the solenoid valve through exhaust port 5.

When Solenoid Valve is De-energized (Figure 4)

(1) Loaded Spring is released moving the spool diaphragm to the right.
(2) Inlet air from the compressor is allowed to flow from inlet port 1 out thru port 4 to the actuator.
(3) Exhaust air from the actuator is allowed to flow into port 2 and out of solenoid valve through exhaust port 3.

For Spring Return Actuator:

When Solenoid Valve is Energized (Figure 3)

(1) Spring loaded spool diaphragm moves left compressing the spring.
(2) Inlet air from the compressor is allowed to flow from inlet port 1 and out thru port 2 to the actuator.
(3) Exhaust air from the actuator is allowed to flow into port 4 and out of the solenoid valve through exhaust port 5.

When Solenoid Valve is De-energized (Figure 4,5)

(1) Loaded Spring is released moving the spool diaphragm to the right.
(2) Inlet air from the compressor is allowed to flow from inlet port 1 out thru port 4 to the actuator. The springs in the actuator are compressed and loaded
(3) Exhaust air from the actuator is allowed to flow into port 2 and out of solenoid valve through exhaust port 3.
(4) In the event of air failure to inlet port 1, the loaded springs in the actuator are released. Exhaust Air flow out of the actuator to port 4 and out of the solenoid valve through port 1. Atmosphere air flows from port 3 to port 2 then into the actuator spring chamber.

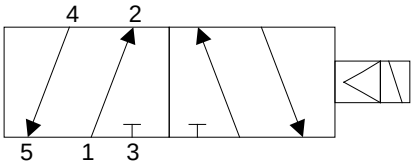


Figure 3: Simplified Operational Diagram

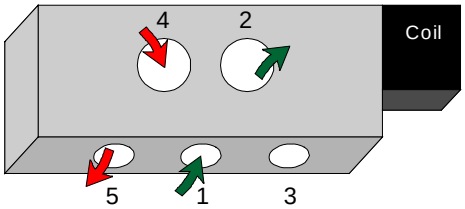


Figure 3: Air Flow Pattern (Solenoid Energized)

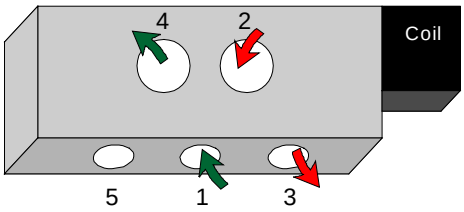


Figure 4: Air Flow Pattern (Solenoid De- energized)

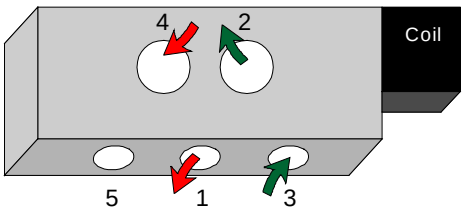


Figure 5: Air Flow Pattern (Air Failure to Port 1)