

Solenoid Valve - 2/2 Twin - Block/Bleed

Benefits & Features

- Water, gas, high pressure gases, light oils
- Media temperature: -10°C to +90°C
- Two way normally closed
- Ideal for high pressure applications where the media is trapped
- Brass or 316 Stainless Steel bodies
- Safe Area, ATEX EExd IIB or IIC
- New IECEX versions

Specification

| | |
|------------------------|--|
| Configuration | Double Pilot operated piston design |
| Port Sizes | 1/4" BSP or NPT |
| Orifice | 0.8mm |
| Kv | 0.2 |
| Body | Brass or 316 Stainless Steel |
| Media | Air, water, liquids etc. Subject to material compatibility |
| Pressure ranges | 0 - 100 Bar (AC or DC) |
| Seals | NBR, VITON |



Technical Data

| | | | Port Size BSP or NPT | Orifice mm | Body Rating | Min. /Max. Operating Differential Pressures. BAR. | | | KV Flow Factor L/min. |
|---------|---|---|-------------------------------|---------------|----------------|--|----------------------------|-----|-----------------------------|
| | A | E | | | | Min. | Normally Closed Maximum | | |
| | | | | | | | AC | DC | |
| VCT9367 | 0 | P | 1/4" | 0.8 | 100 | 0.2 | 100 | 100 | 0.2 |

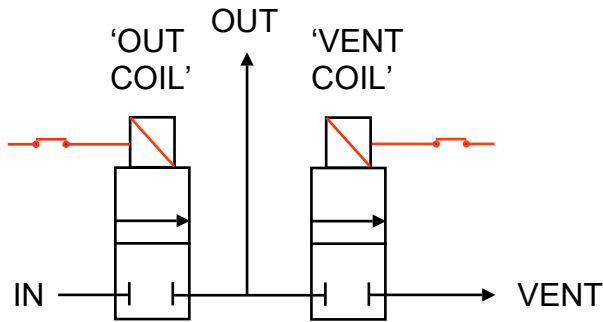
Order Codes

| | | | |
|----------|---------------|-------------|------------------------------|
| A | Seal Material | D | Protection |
| 0 | NBR | P | IP65 |
| 1 | VITON | B | EExd IIB |
| | | C | EExd IIC |
| | | C/LT | EExd IIC (-60 to +60°C amb.) |
| | | H | EExd IIB IECEX |
| | | T | EExd IIC IECEX |

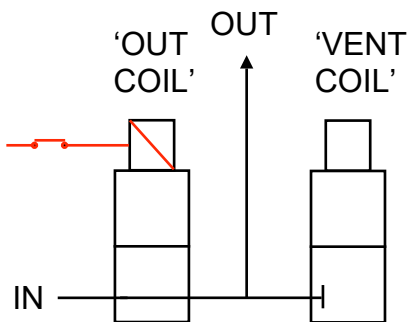


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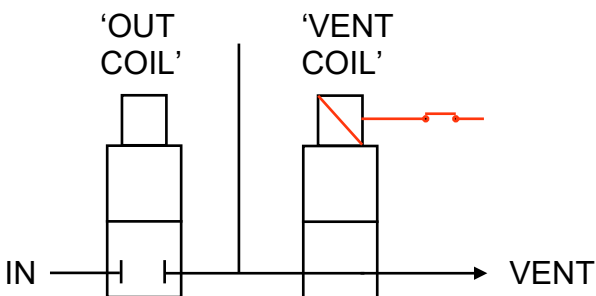
Function



Normal Flow Circuit,
both coils energised



- Solenoid 'OUT' is energised
- Media Flows through 'OUT'
- Solenoid 'Vent' is closed

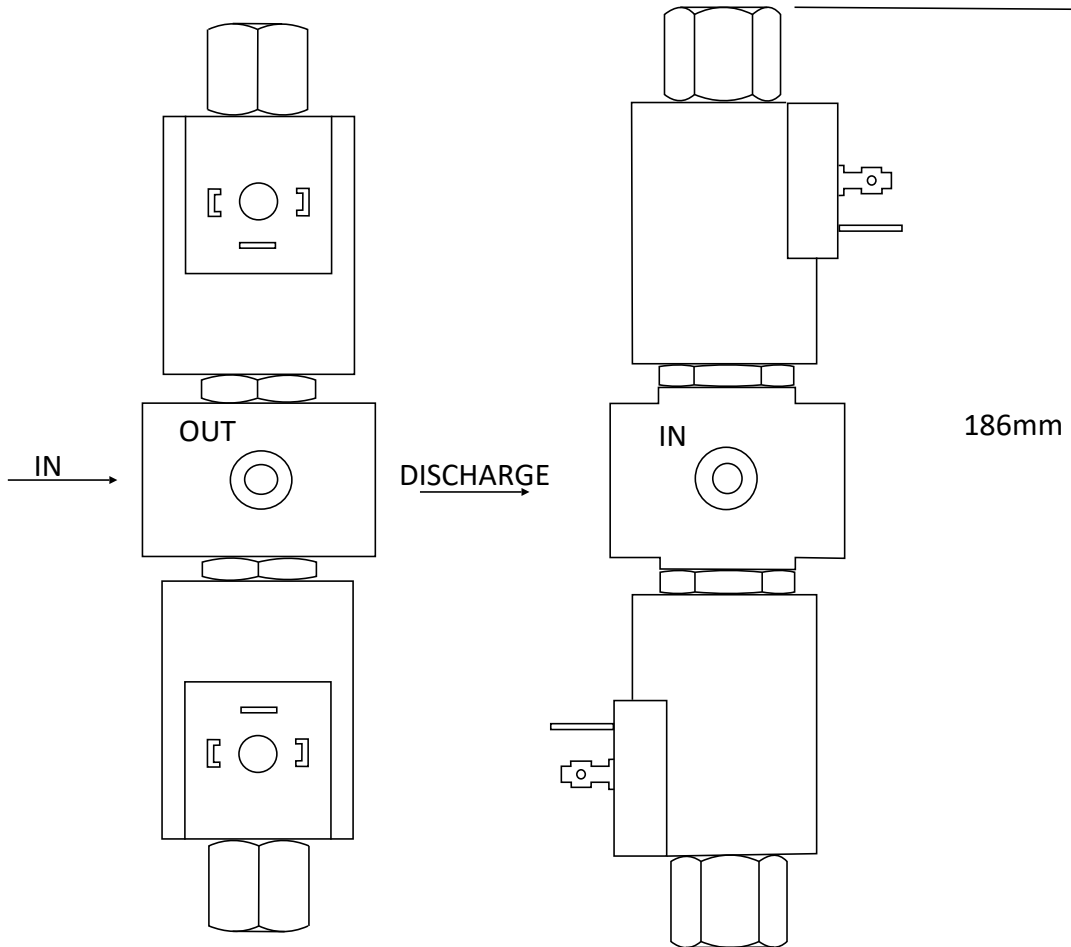


- Solenoid OUT is de-energised
- Media Is trapped between 'IN' and 'OUT' solenoid
- Solenoid 'Vent' is energised.
- 'OUT' line is discharged through 'Vent' solenoid

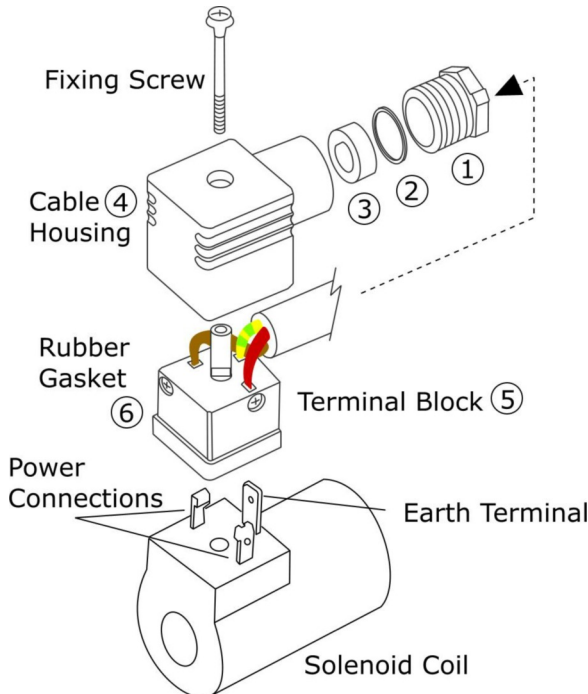


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Dimensions



DIN electrical socket connectors to protect solenoid coil terminals and wiring.



Section 1: DIN Connector Assembly

- Insert the electrical power cable through the gland assembly (1,2,3)
- Push the cable through cable housing (4)
- Connect power and earth cables to terminal block 5
- Push terminal block (5) backwards, inside cable housing (4)
- Place rubber gasket (6) on terminal block (5) front face
- Push terminal block onto solenoid coil terminals
- Push fixing screw through complete assembly
- Tighten fixing screw with small screwdriver
- Do not over tighten
- Tighten cable gland (1,2,3) by hand

Section 2: How to install Solenoid Valves

Solenoid Valves can normally be installed and operate in any orientation. However, certain models are designed to operate in horizontal installations. Please contact Red Dragon for further information.

Installation Procedure:

Check that the Solenoid Valve is the correct product ordered for the application:

- Isolate the site electrical power supply
- Isolate the site media supply (dependant on the application)...air, water, steam etc. Leave until cool/safe.
- Insert the valve onto the pipe, ensuring that the flow direction is observed....IN for incoming media, or an arrow stamped on the valve body.
- Ensure that the pipe connections are free from burrs or loose pipe thread tape
- Tighten all pipe joints
- Connect electrical power supply via DIN electrical socket connector, as detailed in section 1
- Ensure that DIN connector is properly connected to solenoid coil and the gasket is installed correctly
- Apply media pressure and check for leaks

Section 3: Maintenance Procedure for Solenoid Valves

In the unlikely event of a valve malfunction, or routine maintenance, follow these instructions:

- Isolate the site electrical power supply
- Isolate the site media supply (dependant on the application)...air, water, steam etc.
- Remove the solenoid coil by unscrewing the coil retention nut anti-clockwise
- Remove the coil tube stem by unscrewing anti-clockwise
- Carefully remove the plunger assembly (inside the coil stem)
- Check the plunger assembly for damage or worn seals
- Check the face inside the coil stem for foreign particles that could prevent correct operation
- For Pilot Diaphragm Solenoid Valves: remove the top cover housing and check the diaphragm for damage and blocked transfer port.
- Re-assemble the valve in reverse order, ensuring that all parts are cleaned and assembled correctly

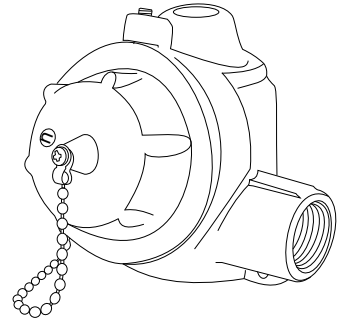


Electrical Wiring - IP67 Housing

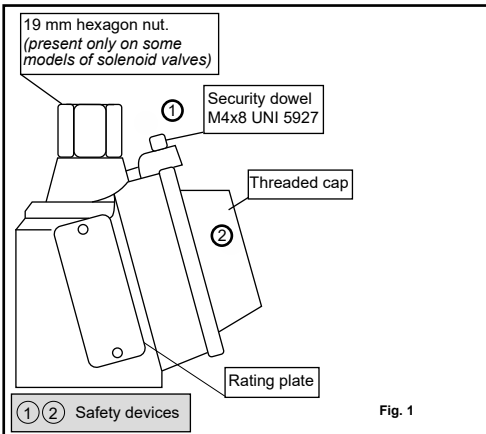
Installation Procedures & Methods



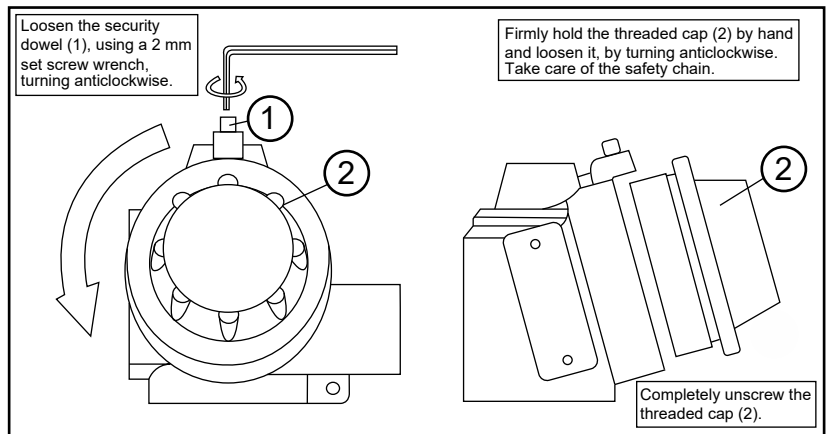
Attention: For safety purposes, always ensure that the power supply is disconnected. After de-energising, allow 15 minutes before continuing the following procedures



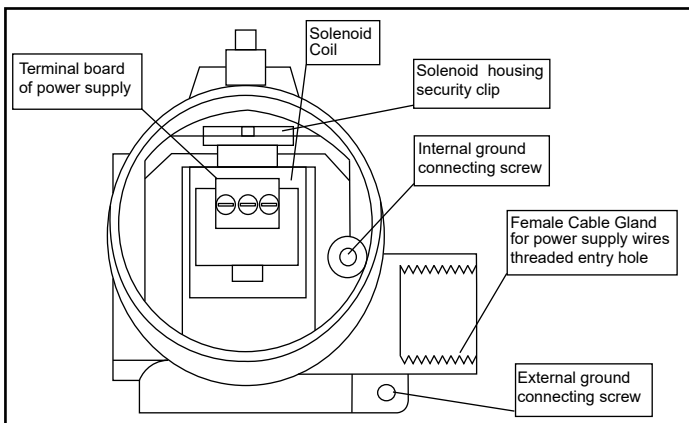
A



B

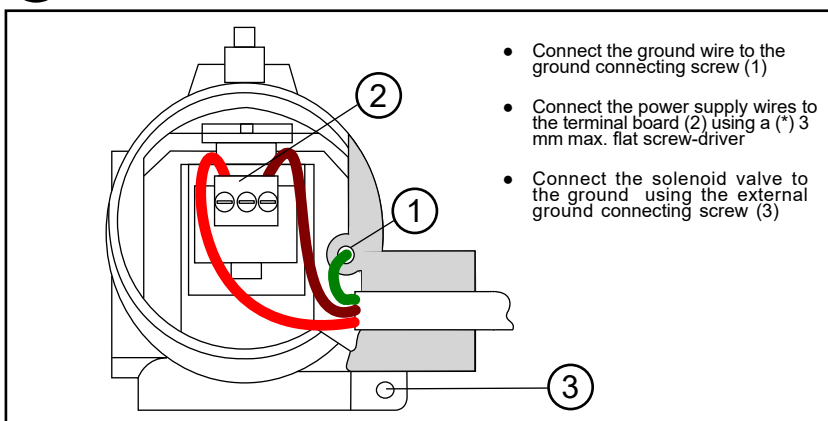


C

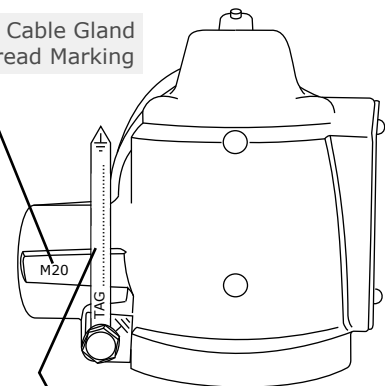


Pipe fittings used for cable entry (Cable, duct, conduit etc) are NOT supplied by the manufacturer. Installation engineers should ensure that the use of fittings are of the correct diameter and suitable to secure the tightness of the cable used. Where site conditions indicate, cable duct, conduit etc. must be ATEX approved, for a protection degree equal or greater than the protection degree indicated on the rating plate. The female thread type is indicated on the housing: M20*1.5mm or 1/2"NPT

D



Electrical Cable Gland Entry Thread Marking



Earth Tag. Can be customised with Tag number, part number etc.