

Solenoid Valve - 5/2 - Double Solenoid - Bistable - Open Centres

Benefits & Features

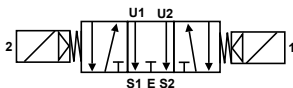
- High dependency five way three position
- Double Bistable. Open centres
- Suitable for gaseous media
- Model for liquid media available upon request
- Brass or 316 Stainless Steel bodies
- IP65 solenoid protection

Specification

| | |
|------------------------|---|
| Configuration | Pilot operated |
| Port Sizes | 3/8" & 1/2" BSP / NPT |
| Orifice | 11.0mm |
| Kv | 30 |
| Body | Brass or 316 Stainless Steel |
| Media | Air & gaseous media only. Subject to material compatibility |
| Pressure ranges | 3-10 Bar (AC/DC) |
| Seal options | NBR -10 to +70°C VITON (-10 to +90°C) HNBR -10 to +90°C |



Configuration



D18.p Double Solenoid Bistable. Open Centres
 IN: E
 Coil 1 Energised: From E to U1
 From U2 to S2
 Coil 2 Energised: From E to U2
 From U1 to S1
 Coils De-energised: From U1 to S1
 From U2 to S2

Technical Data

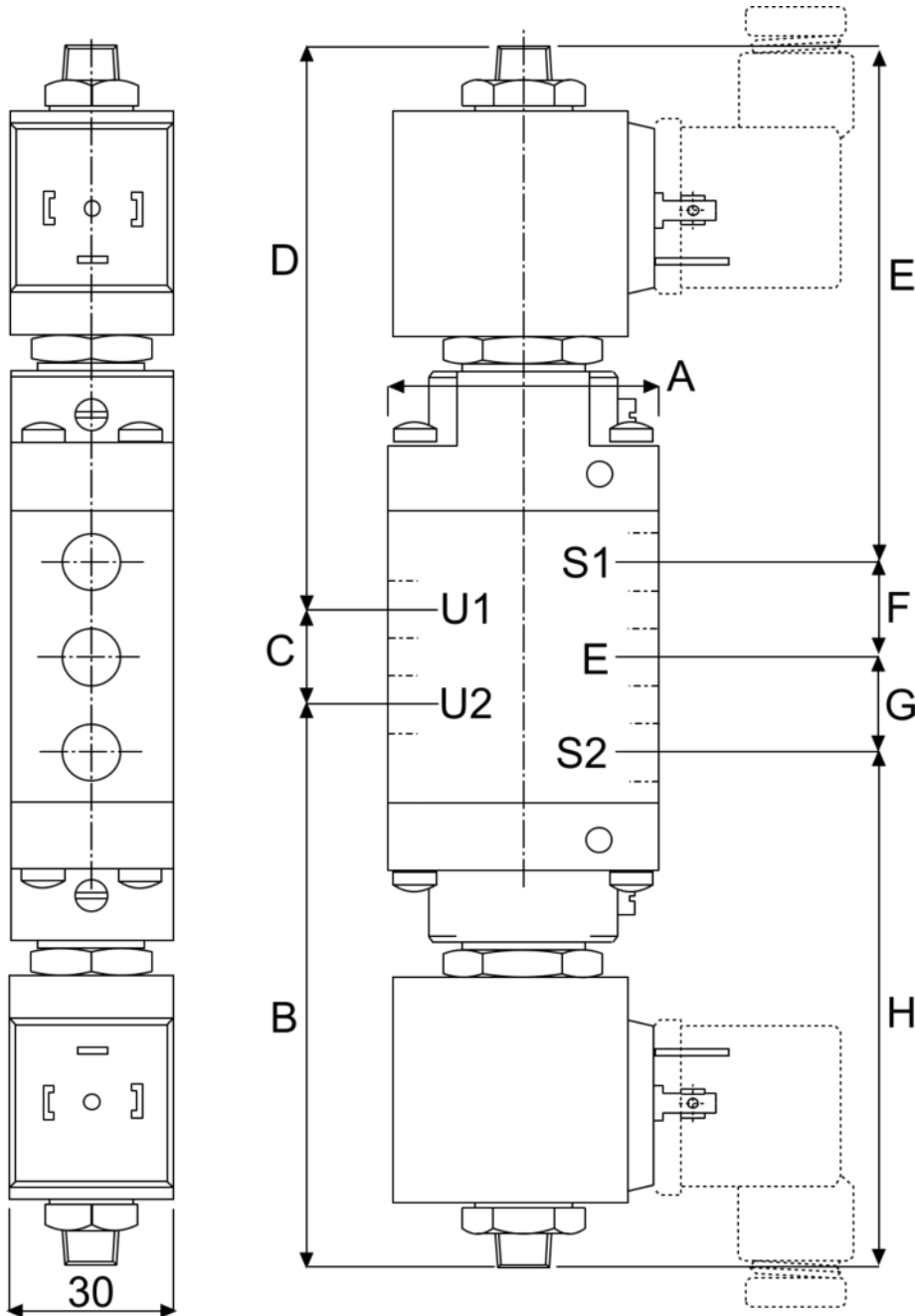
| D18 | A | 11 | B | C | D | E | Port Size BSP or NPT | Body Rating | Orifice mm | Min. /Max. Operating Differential Pressures. | | KV Flow Factor L/min. | |
|-----|---|----|---|---|---|---|-------------------------------|----------------|---------------|---|----------------|--------------------------------|----|
| | | | | | | | | | | Min. BAR | Maximum BAR | | |
| | | | | | | | | | | | AC | | DC |
| | | | | | | | 3/8" or 1/2" | 10 | 11 | 3 | 10 | 10 | 30 |

Order Codes

| A | Body | B | Port | C | Seals (fluid temp. min / max) | D | Protection | E | Options | | |
|---|---------------------|---|----------|---|-------------------------------|---|-------------------------|---|---------|---|-----------------|
| T | Brass | F | 1/2" BSP | G | 1/2" NPT | 0 | NBR (-10°C to + 70°C) | P | IP65 | X | Manual Override |
| I | 316 Stainless Steel | | | | | 1 | VITON (-10°C to + 90°C) | | | | |
| | | | | | | 7 | HNBR (-10°C to + 90°C) | | | | |

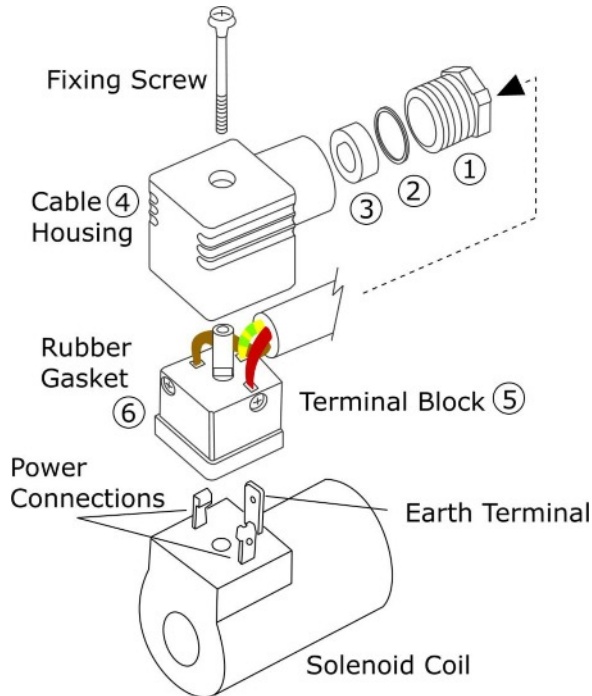
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Weights & Dimensions



| Weight Kg | Dimensions mm | | | | | | | |
|-----------|---------------|-----|----|-----|-----|----|----|-----|
| | A | B | C | D | E | F | G | H |
| 2.2 | 60 | 125 | 30 | 125 | 110 | 30 | 30 | 110 |

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