Measure Monitor Control

VCT9368

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	PTFE

Technical Data

			Port Size BSP or NPT	Orifice mm	Body Rating	Min . /Max. Operating Differential Pressures. BAR.			KV Flow Factor L/min.
						Min.	Normally Closed Maximum		
	A	E					AC	DC	
VCT9368	0	P	¼”	0.8	100	0.2	100	100	0.2

Order Codes

A	Seal Material	D	Protection
3	PTFE	P	IP65
		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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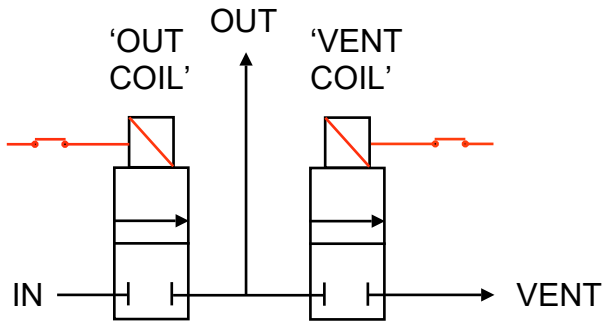
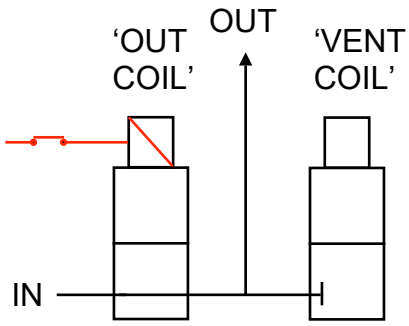
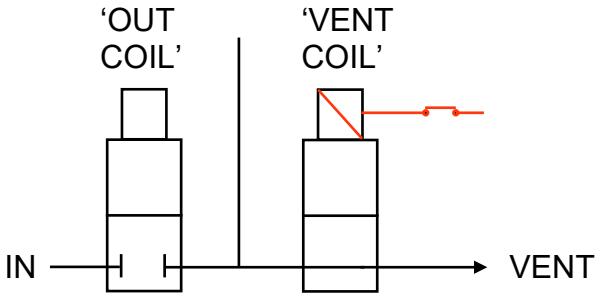
Function



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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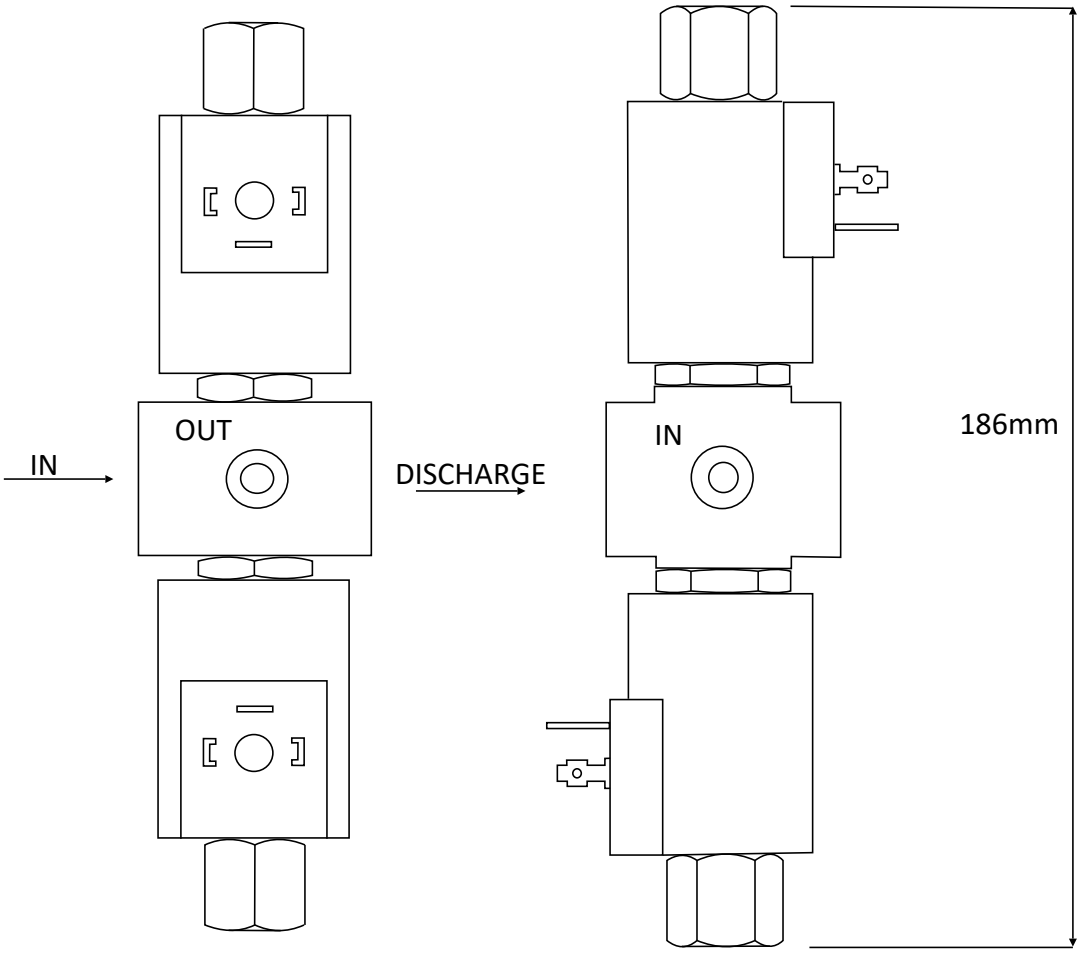
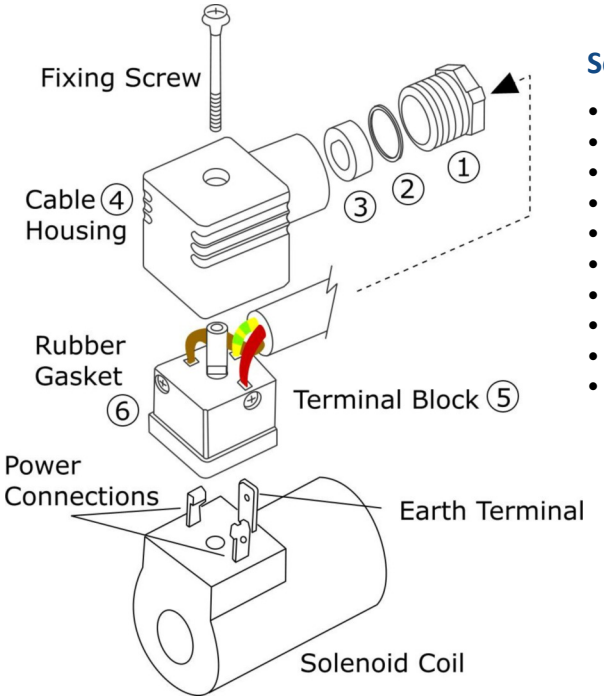
Dimensions



IP65 SAFE AREA INSTALLATION & MAINTENANCE

SAFE AREA
SOLENOID VALVES
DIN 43650-A (Large)
DIN 43650-B (Small)

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:

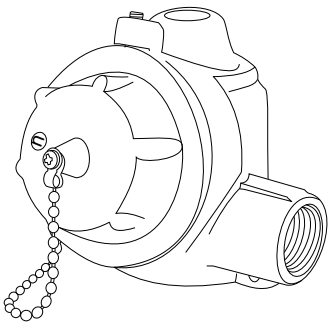
- Isolate the site electrical power supply
- Isolate the site media supply (dependant on the application)...air, water, steam etc.
- Remove the solenoid coil by unscrewing the coil retention nut anti-clockwise
- Remove the coil tube stem by unscrewing anti-clockwise
- Carefully remove the plunger assembly (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

Measure Monitor Control

Solenoid Wiring
IP67 Housing
SAFE AREA & EEXD

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

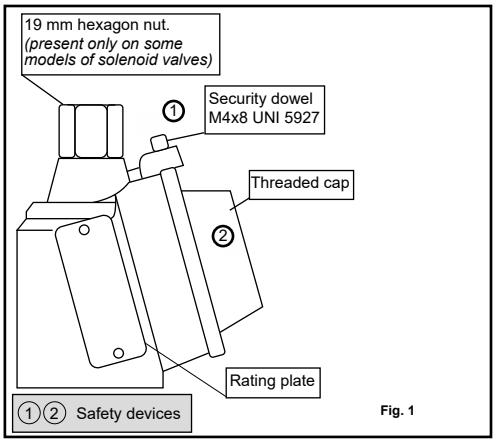
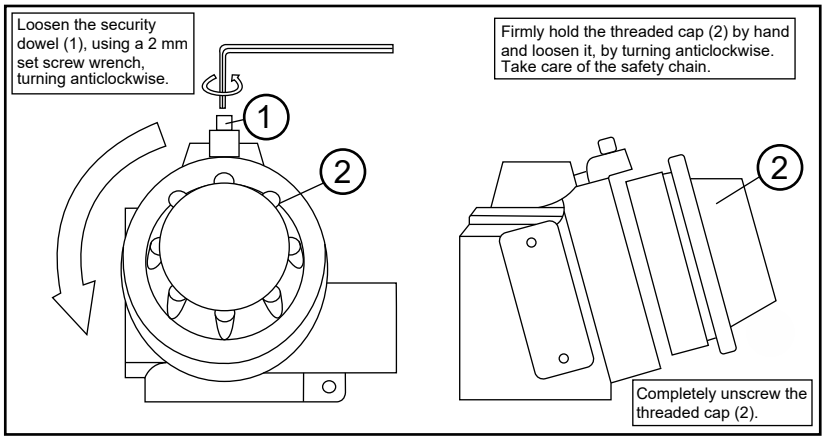
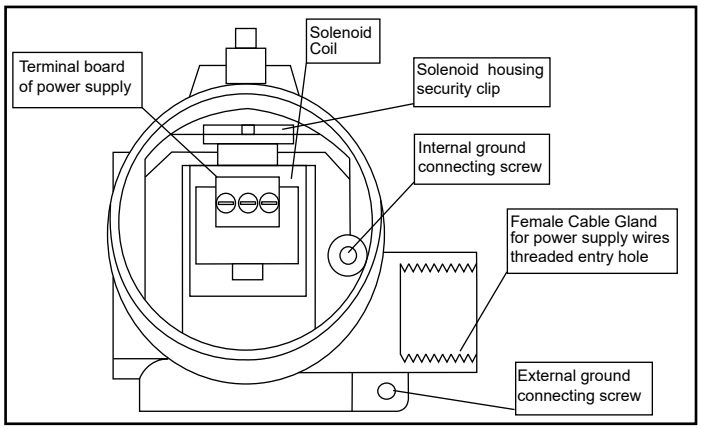


Fig. 1

B

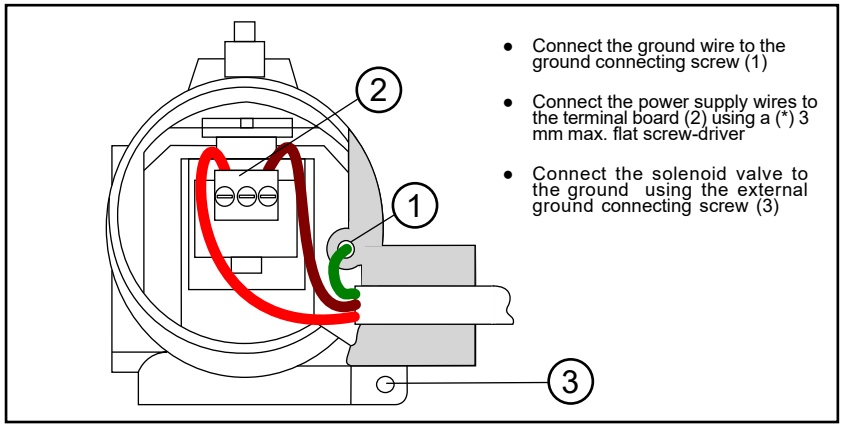


C

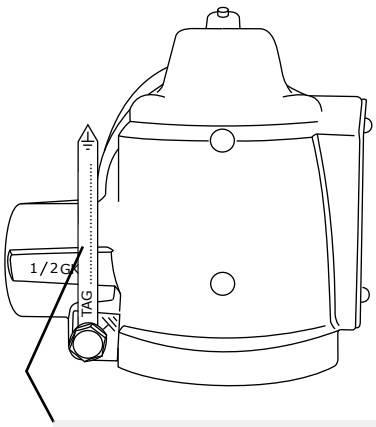


Pipe fittings used for cable entry (Cable, duct, conduit etc) are NOT supplied by the manufacturer.
Installation engineers should ensure that the use of fittings are of the correct diameter and suitable to secure the tightness of the cable used. Where site conditions indicate, cable duct, conduit etc.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

D



- Connect the ground wire to the ground connecting screw (1)
- Connect the power supply wires to the terminal board (2) using a (*) 3 mm max. flat screw-driver
- Connect the solenoid valve to the ground using the external ground connecting screw (3)



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