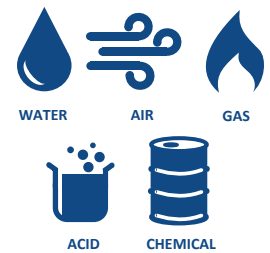
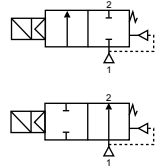
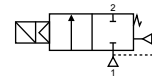


## Solenoid Valve:

- **SS1010 Two Way Normally Closed Solenoid Valves**
- **SS1011 Two Way Normally Open Solenoid Valves**




- Specification - Normally Closed: **Page 2**
- Specification - Normally Open : **Page 3**
- Specification - Wiring Details IP65 Solenoid Coil: **Page 4**
- Installation & Maintenance Procedures: **Page 4**
- Flameproof Solenoid Coil: **Page 5**



## Solenoid Valve - 2/2 - 3/8" - 2" Normally Closed

### Benefits & Features

- Wide pressure range, flow rates and orifice options
- Always use in conjunction with an inlet filter
- Installation in any position, horizontal with the coil uppermost is preferred
- Solenoid coil is interchangeable with optional EExd IIC ATEX 
- BSP ports as standard. NPT upon request



### Materials in contact with the media

<b>Body</b>	316 stainless steel
<b>Internal Parts</b>	Stainless steel
<b>Seals</b>	NBR, VITON or EPDM
<b>Shading Ring</b>	Copper (EN 12735-1)
<b>Seats, core, tube, springs</b>	Stainless Steel




### Technical Features

<b>Max. Viscosity</b>	5°E (-37cST mm <sup>2</sup> /s)
<b>Response Time</b>	Opening: 400ms - 1600 ms, Closing: 1000ms - 2000ms
<b>Seals</b>	NBR



### Options

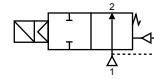
<b>Female port</b>	BSP. NPT on request
<b>ATEX Coil</b>	Explosion proof coil housing to EExd IIC 

### Technical Data - SS1010 - Screwed Port - Normally Closed

Model	Port	Orifice mm	Min./Max. Differential Pressure Range		Kv L/min.	Seal Temperature Range			Weight Kg
			Min.	Max.		NBR	VITON	EPDM	
SS1010.02	3/8"	12.5	0.5	16	48	-10.. +80°C	-10.. +160°C	-10.. +130°C	0.74
SS1010.03	1/2"	12.5	0.5	16	48	-10.. +80°C	-10.. +160°C	-10.. +130°C	0.72
SS1010.04	3/4"	17	0.5	16	90	-10.. +80°C	-10.. +160°C	-10.. +130°C	0.86
SS1010.05	1"	17	0.5	16	90	-10.. +80°C	-10.. +160°C	-10.. +130°C	0.84
SS1010.06	1 1/4"	35	0.5	16	315	-10.. +80°C	-10.. +160°C	-10.. +130°C	3.45
SS1010.07	1 1/2"	40	0.5	16	430	-10.. +80°C	-10.. +160°C	-10.. +130°C	3.35
SS1010.08	2"	50	0.5	16	690	-10.. +80°C	-10.. +160°C	-10.. +130°C	3.78


### Technical Data - SS1010-F - Flanged - Normally Closed

Model	Port DN	Orifice mm	Min./Max. Differential Pressure Range		Kv L/min.	Seal Temperature Range			Weight Kg
			Min.	Max.		NBR	VITON	EPDM	
SS1010-F.06	32	35	0.5	16	315	-10.. +80°C	-10.. +160°C	-10.. +130°C	7.5
SS1010-F.07	40	40	0.5	16	430	-10.. +80°C	-10.. +160°C	-10.. +130°C	8
SS1010-F.08	50	50	0.5	16	690	-10.. +80°C	-10.. +160°C	-10.. +130°C	9.5



## Solenoid Valve - 2/2 - 3/8" - 2" Normally Open

### Benefits & Features

- Wide pressure range, flow rates and orifice options
- Always use in conjunction with an inlet filter
- Installation in any position, horizontal with the coil uppermost is preferred
- Solenoid coil is interchangeable with optional EExd IIC ATEX 
- BSP ports as standard. NPT upon request



### Materials in contact with the media


<b>Body</b>	316 stainless steel
<b>Internal Parts</b>	Stainless steel
<b>Seals</b>	NBR, VITON or EPDM
<b>Shading Ring</b>	Copper (EN 12735-1)
<b>Seats, core, tube, springs</b>	Stainless Steel



### Technical Features

<b>Max. Viscosity</b>	5°E (-37cST mm <sup>2</sup> /s)
<b>Response Time</b>	Opening: 400ms - 1600 ms, Closing: 1000ms - 2000ms
<b>Seals</b>	NBR

### Options

<b>Female port</b>	BSP. NPT on request
<b>ATEX Coil</b>	Explosion proof coil housing to EExd IIC 



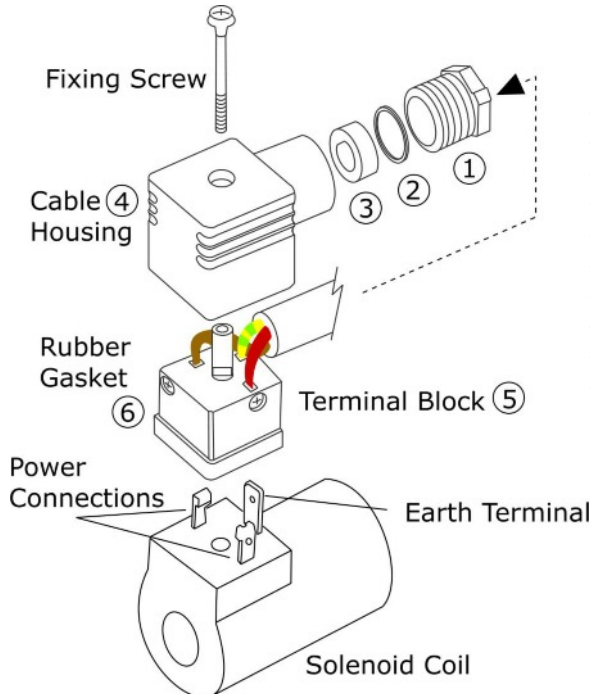
### Technical Data - SS1011 - Screwed Port - Normally Open

Model	Port	Orifice mm	Min./Max. Differential Pressure Range		Kv L/min.	Seal Temperature Range			Weight Kg
			Min.	Max.		NBR	VITON	EPDM	
SS1011.02	3/8"	12.5	0.5	12	48	-10.. +80°C	-10.. +160°C	-10.. +130°C	0.96
SS1011.03	1/2"	12.5	0.5	12	48	-10.. +80°C	-10.. +160°C	-10.. +130°C	0.93
SS1011.04	3/4"	17	0.5	12	90	-10.. +80°C	-10.. +160°C	-10.. +130°C	1.15
SS1011.05	1"	17	0.5	12	90	-10.. +80°C	-10.. +160°C	-10.. +130°C	1.10
SS1011.06	1 1/4"	35	0.5	8	315	-10.. +80°C	-10.. +160°C	-10.. +130°C	3.55
SS1011.07	1 1/2"	40	0.5	8	430	-10.. +80°C	-10.. +160°C	-10.. +130°C	3.45
SS1011.08	2"	50	0.5	8	690	-10.. +80°C	-10.. +160°C	-10.. +130°C	3.88

### Technical Data - SS1011F - Flanged - Normally Open

Model	Port DN	Orifice mm	Min./Max. Differential Pressure Range		Kv L/min.	Seal Temperature Range			Weight Kg
			Min.	Max.		NBR	VITON	EPDM	
SS1010-F.06	32	35	0.5	8	315	-10.. +80°C	-10.. +160°C	-10.. +130°C	7.5
SS1010-F.07	40	40	0.5	8	430	-10.. +80°C	-10.. +160°C	-10.. +130°C	8
SS1010-F.08	50	50	0.5	8	690	-10.. +80°C	-10.. +160°C	-10.. +130°C	9.5

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

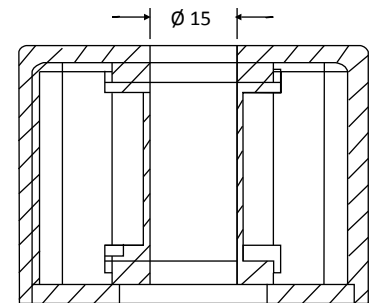
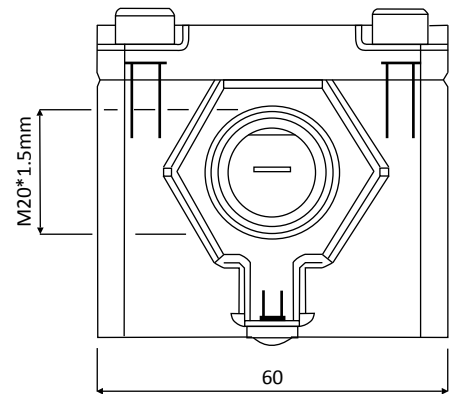
## Flameproof (D Type) ATEX (Ex d IIC T4 Gb) Certified IP67 Coil



II 2G Ex d II CT4 Gb  
Ex td III CT135°C Db

### General Specification

- Flameproof coil suitable for TORK solenoid valves
- Voltages: (AC) 12, 24, 48, 110 & 230V
- Voltages: (DC) 12, 24, 48 & 110
- Power consumption: (AC) 15VA, 24VA
- Power Consumption: (DC) 18W
- Voltage tolerance: AC: -15%, +10%. DC: -10%, +10%
- Duty: 100% ED
- Ambient temperature: -10°C to +60°C
- Protection degree: IP67 (EN60529)
- Cable gland connection: M20\*1.5mm (NPT upon request)
- Coil insulation class: H (180°C max.)
- Body: Aluminium



Section AA

