

Solenoid Valve - 2/2 - Direct Acting - Normally Closed



Benefits & Features

- Two way normally closed, direct acting lift assisted diaphragm
- Vacuum, gas, air, water etc.
- Zero differential pressure operation
- Brass body, BSP female ports. Optional Flanged
- IP65 DIN coil
- Optional EExm II T4 solenoid coil



Specification

Configuration	Direct acting lift assisted diaphragm
Port Sizes	3/8" to 2"
Orifice	see table below
Kv	see table below
Body	Brass
Media	Vacuum, gas, air, water etc.

Technical Data - Safe Area

						Orifice mm	Pressure in Bar			KV Flow Factor L/min.	Vac. (torr)
							Min. / Max. Operating Differential Pressures				
							Min.	Maximum			
								Coil C45			
	A	B	C	D	E		AC	DC			
SX23		18		3/8"		18	0	16	4	43	10 ⁻¹
SX23		18		1/2"		18	0	16	4	57	10 ⁻¹
SX23		23		3/4"		23	0	15	3.5	97	10 ⁻¹
SX23		28		1"		28	0	12	3	157	10 ⁻¹
SX23		33		1 1/4"		33	0	12	1.5	229	1
SX23		33		1 1/2"		33	0	12	1.5	300	1
SX23		44		1 1/2"		44	0	10	1	372	1
SX23		44		2"		44	0	10	1	443	1

Technical Data - Hazardous Area

						Orifice mm	Pressure in Bar			KV Flow Factor L/min.	Vac. (torr)
							Min. / Max. Operating Differential Pressures				
							Min.	Maximum			
								Coil C50			
	A	B	C	D	E		AC	DC			
SX23		18		3/8"		18	0	2.5	—	43	10 ⁻¹
SX23		18		1/2"		18	0	2.5	—	57	10 ⁻¹
SX23		23		3/4"		23	0	1.5	—	97	10 ⁻¹
SX23		28		1"		28	0	1.5	—	157	10 ⁻¹
SX23		33		1 1/4"		33	0	1.5	—	229	1
SX23		33		1 1/2"		33	0	1.5	—	300	1
SX23		44		1 1/2"		44	0	1	—	372	1
SX23		44		2"		44	0	1	—	443	1

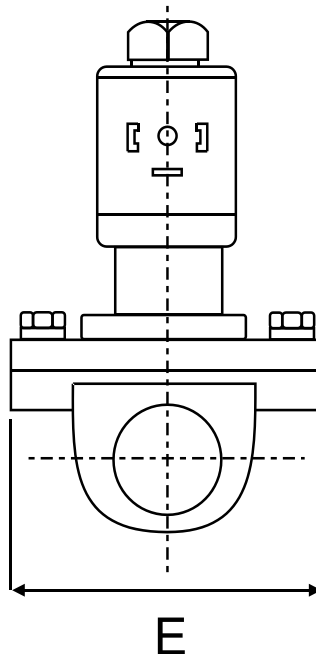
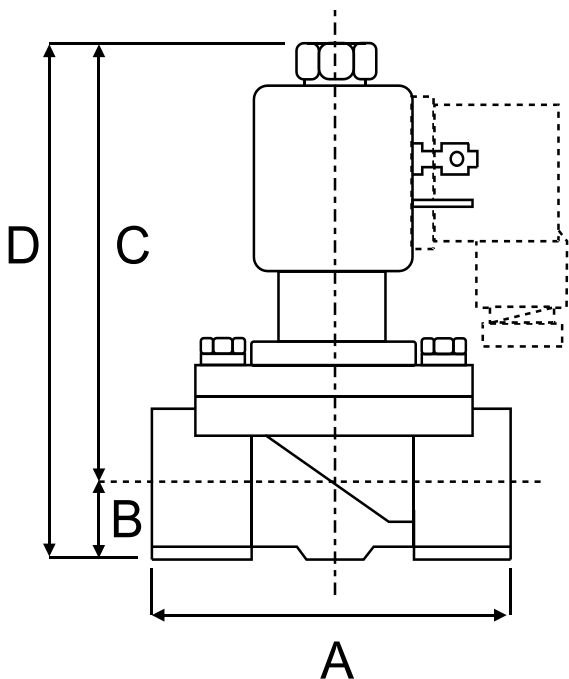
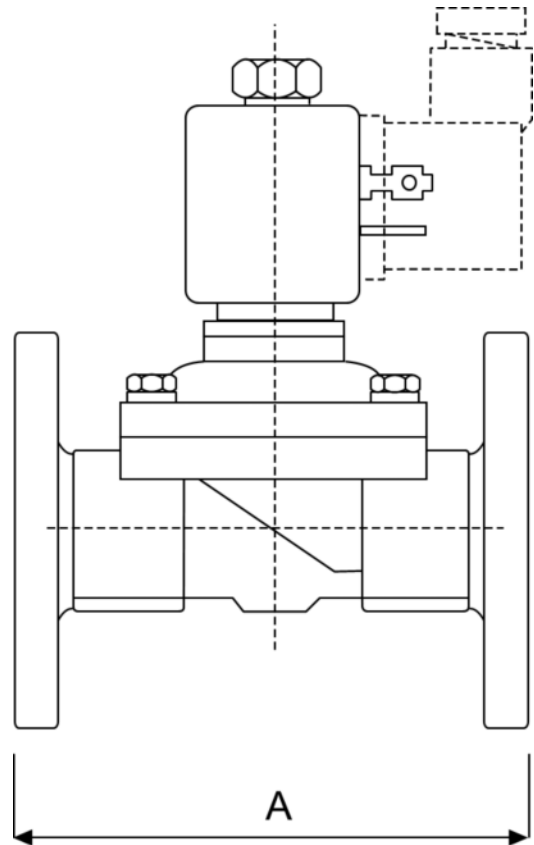
Solenoid Valve - 2/2 - Pilot Operated - Normally Closed



Weights & Dimensions

Safe Area

Weight Kg	Port Size	Dimensions mm					
		Ported	Flanged	B	C	D	E
		A					
0.9	3/8"	71	98	14	98	112	51
0.9	1/2"	71	98	14	98	112	51
1.0	3/4"	80	108	17	101	118	61
1.4	1"	90	138	20	104	124	71
1.8	1 1/4"	97	155	29	112	141	76
1.8	1 1/2"	97	155	29	112	141	76
3.5	1 1/2"	118	155	35	125	160	98
3.5	2"	118	175	35	125	160	98

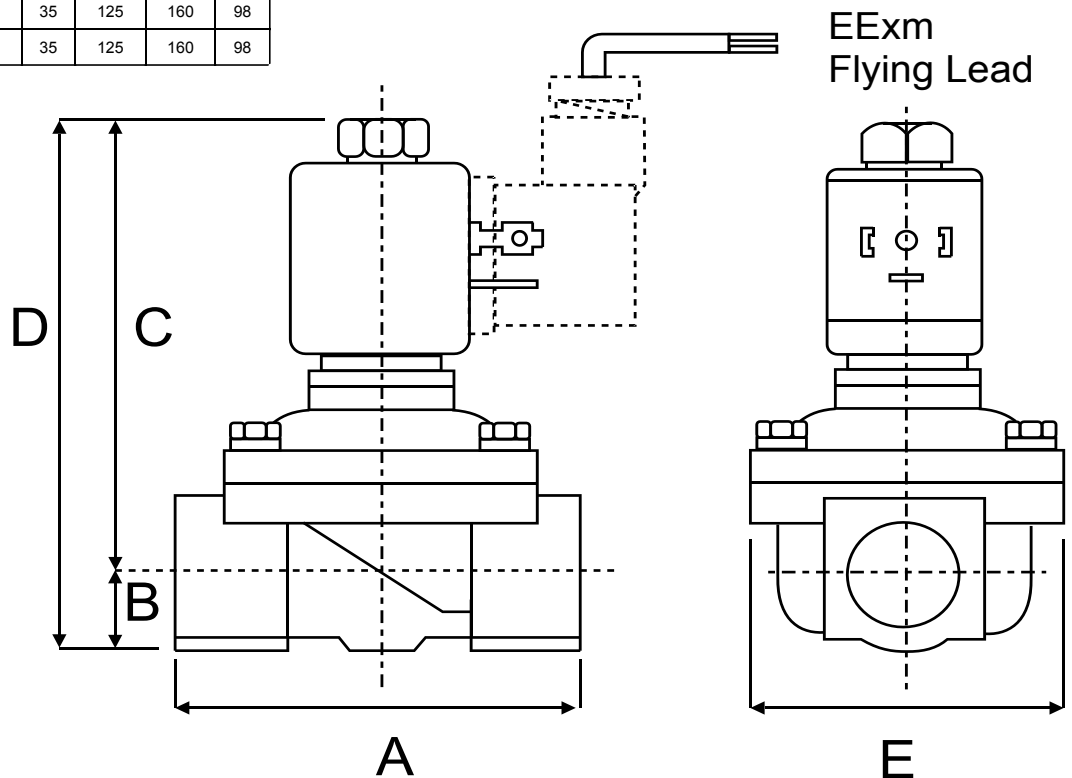


Solenoid Valve - 2/2 - Pilot Operated - Normally Closed

Weights & Dimensions

Hazardous Area

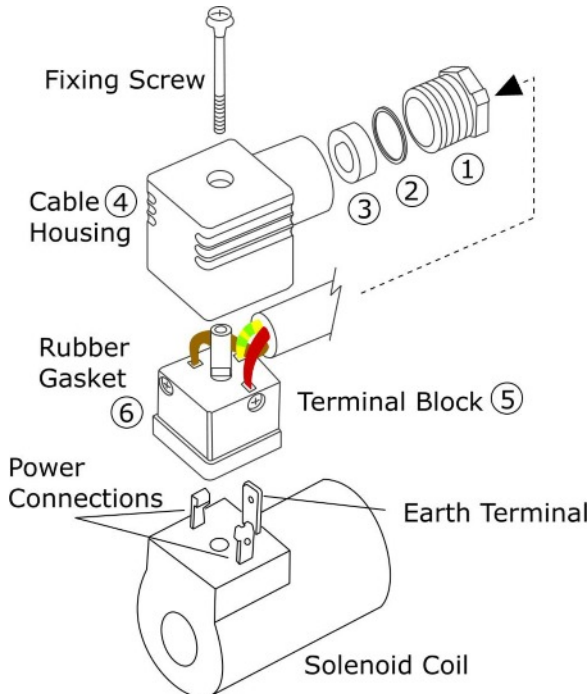
Port Size	Weight Kg	Dimensions mm				
		A	B	C	D	E
3/8"	0.9	71	14	98	112	51
1/2"	0.9	71	14	98	112	51
3/4"	1	80	17	101	118	61
1"	1.4	90	20	104	124	71
1 1/4"	1.8	97	29	112	141	76
1 1/2"	1.8	97	29	112	141	76
1 1/2"	3.5	118	35	125	160	98
2"	3.5	118	35	125	160	98



Order Codes

A	Body	B	Screwed Port	C	Seals (fluid temp. min / max)	D	Protection	E	Options		
T	Brass	E	3/8" BSP	F	1/2" BSP	0	NBR (-10°C to + 80°C)	P	IP65	FL	Flanged
		H	3/4" BSP	L	1" BSP	1	VITON (-10°C to + 120°C)	M	EExm II T4	SG	Cleaned for Oxygen Service
		N	1 1/4" BSP	O	1 1/2" BSP	6	EPDM (-10°C to + 120°C)				
		P	2" BSP								

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