



ENGLISH

Datasheet

Stock Nos: 1440809, 1440794, 1440810, 1440795, 1440811, 1440797, 1440812, 1440798, 1440813, 1440799, 1440814, 1440800, 1440815, 1440801, 1440816, 1440802, 1440817, 1440803, 1440818, 1440804, 1440805, 1440819, 1440806, 1440807, 1440820, 1440808

SOL Series

Industrial Solenoid Valves



- For liquid or gas* use
- Full range of sizes from 3/8" to 2"
- 2 port, normally open (NO) & normally closed (NC) versions
- Pilot operated
- Brass body
- 24Vdc or 230Vac operation

The SOL Series is a range of 2-way solenoid valves which are pilot-operated and are in a choice of 230Vac or 24Vdc coils to suit the required voltage.

Ideal for use in a wide range of industrial and commercial applications such as autoclaves, cooling plant and equipment, watering plant, fire extinguishing systems, hygienic & sanitary applications as well as water jet machinery and many other fluid control uses.

General Features

The electro-pilot of the pilot-operated solenoid valves is not directly responsible for opening (closing) the solenoid valve. The solenoid valve presents three sequential chambers :

- inlet chamber Ci (upstream of the diaphragm)
- compensating chamber Cc (downstream of the diaphragm and upstream of the electro-pilot)
- outlet chamber Cu (downstream of the electro-pilot).

In the 2/2-way normally closed (NC) solenoid valve, Ci & Cc are communicating by means of a compensating hole when the coil is de-energised. Therefore, the diaphragm is in a condition of balanced pressure level and DN tightness is ensured by the retaining spring load for the same diaphragm.

When the coil is energised by acting on the electro-pilot, there is an immediate communication between Cc and Cu; the sudden increase in volume of the pressurised fluid over the diaphragm ($Cc + Cu > Ci$) causes a pressure drop.

The diaphragm is no longer in a condition of balanced pressure level and it swells up in the higher pressure direction thus raising up and opening the DN to let the fluid flow.

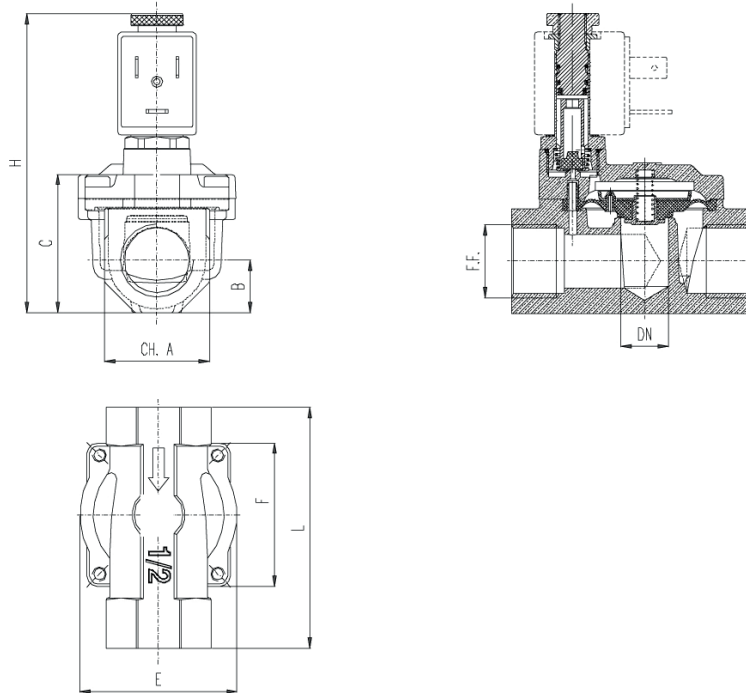
* Group 2 gases.

Mechanical Characteristics		Electrical Characteristics	
Body material	Forged brass	Electrical insulation class	I
Plunger	Magnetic stainless steel	Temperature class	H
Gaskets	NBR	Protection Class (with connector)	IP65
T _{room} Maximum	80°C	Type of service	Continuous
T _{fluid} Minimum	-20°C	Coil approval	VDE
T _{fluid} Maximum	90°C		





SOL Series Industrial Solenoid Valves



RS Stock No.	Operating Voltage	Operation	Size	Dimension (mm)								Pressure (bar)		Max Flow (m ³ /hr)	Operating Temp
				DN	CH.A	B	C	E	F	L	H	Min	Max		
1440809	24Vdc	NO	G3/8"	11.5	24	12	32.5	42	38	57	93.5	0.1	15	1.7	-20 to +90 Deg C
1440794		NC													
1440810	NO														
1440795	NC														
1440811	24Vdc	NO	G1/2"	13.5	30	15	40	45	41	69	101	0.1	15	3.8	-20 to +90 Deg C
1440797		NC													
1440812	NO														
1440798	NC														
1440813	24Vdc	NO	G3/4"	18	36	18	46.6	54	50	74	108	0.2	15	5	-20 to +90 Deg C
1440799		NC													
1440814	NO														
1440800	NC														
1440815	24Vdc	NO	G1"	26	45	22.5	60	71	67	93	120	0.2	12	11	-20 to +90 Deg C
1440801		NC													
1440816	NO														
1440802	NC														
1440817	24Vdc	NO	G1-1/4"	32	55	27.5	73.5	87	79	111	146	0.4	12	17	-20 to +90 Deg C
1440803		NC													
1440818	NO														
1440804	NC														
1440805	24Vdc	NC	G1-1/2"	45	62	31	85	110	100	138	154	0.4	10	27	-20 to +90 Deg C
1440819	230Vac	NO													
1440806	230Vac	NC													
1440807	24Vdc	NC													
1440820	230Vac	NO	G2"	50	75	37.5	99	110	100	145	168	0.4	10	26	-20 to +90 Deg C
1440808		NC													