CLARK SOLUTIONS

Model 1323, 3-Way Solenoid Valve

1/4" Pipe Size, Direct Acting Solenoid

DESCRIPTION

Model 1323 three-way solenoid valves are available in brass, 304 or 316 stainless steel bodies. A variety of seal and seat materials including Acrylo-Nitrile, Neoprene®, Ethylpropylene and Viton® satisfy many general industry applications.

The valves employ a direct acting solenoid. A choice of solenoids cover a range of ambient temperatures and operating voltages.

Options include weather proof housing, energized coil indicator light and manual override.

SPECIFICATIONS

GENERAL

Operation: 3-way, two positions (N.C., N.O., divergent, convergent, universal)
Valve Body: Brass, AISI 304 stainless steel, AISI 316 stainless steel
Valve Life: > 1,000,000 cycles, field rebuild kits available
Valve Seals & Seats: See Table 2
Connections: 1/4" BSP or NPT
Operating Voltage: 12 VDC; 24 VDC/VAC; 120 VAC, 60Hz
Standard Solenoid Housing: Encapsulated, includes DIN 43650 connector (PG-9)
Connector Wire Connection: Screw terminal
Optional IP65/NEMA4 Weather Proof: Encapsulated coil,1/2" NPT potted conduit connection with flying leads
Coil Rating:
Class F coil to 80°C: AC 60 Hz, 13 W; DC, 19 W
Class H coil to 180°C: AC 60 Hz, 13 W; DC,19 W
Options: Manual operation, weatherproof housing, energized coil indicator light
Weight: 0.5 kg

Table 1

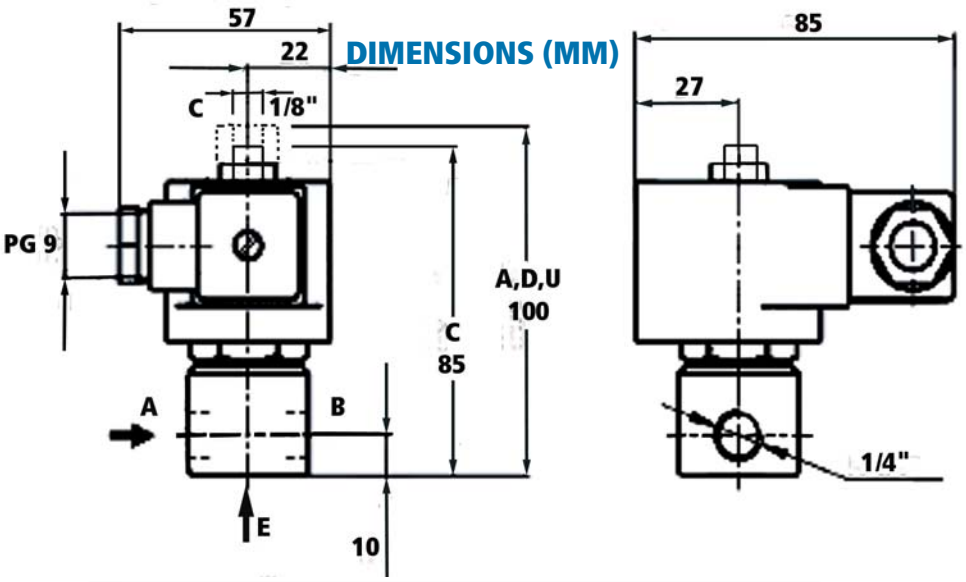
Wetted Materials			
Body	**Plunger**	**Plunger Tower**	**Springs**
Brass	AISI 430F	304L or 305 SS	Copper
AISI 304	AISI 430F	304L or 305 SS	Silver & 302 SS
AISI 316	AISI 430F	304L or 305 SS	Silver & 302 SS

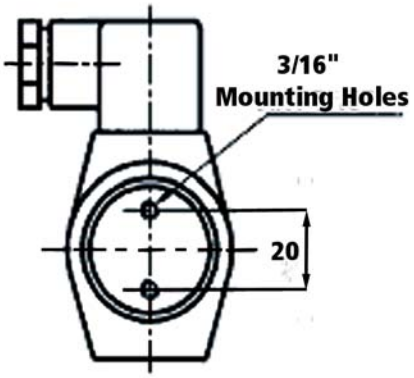
Table 2

Seat Material	**Acrylo Nitrile**	**Neoprene®**	**Ethyl-propylene**	**Viton®**
Maximum Temperature	+80°C	+80°C	+150°C	+150°C
Uses	Water, air, light oils, kerosene. Low and medium vacuum.	Oxygen, alcohol, argon, other non-corrosive light gases and liquids. Freon 12.	Water steam, hot water, acetone.	Benzene, naphtha, aromatics, etc.. Hot gases. High vacuum.

Orifice Diameter	Cv (GPM)	Kv (m^3/h)	Max. Differential Pressure (bar) by Configuration			
			N.C.	N.O.	DIV	CONV.
Three-Way, Two Position, "C" Construction (See Table on next page), N.C., No Connector at "C" Outlet						
1.75	0.103	0.09	10	-	-	-
2.00	0.117	0.10	7	-	-	-
2.50	0.164	0.14	3	-	-	-
Three-Way, Two Position,"D" Construction (See Table on next page), Divergent						
1.75	0.103	0.09	10	-	20	-
2.00	0.117	0.10	7	-	15	-
2.50	0.164	0.14	3	-	10	-
Three-Way, Two Position, "A" Construction (See Table on next page), N.O.						
1.75	0.103	0.09	5	12	5	5
2.00	0.117	0.10	3	10	3	3
2.50	0.164	0.14	-	3	-	-
Three-Way, Two Position, "U" Construction (See Table on next page), Universal						
1.75	0.103	0.09	8	12	20	8
2.00	0.117	0.10	6	10	15	6
2.50	0.164	0.14	3	3	10	3

DIMENSIONS (MM)





E VIEW
Mounting Details

Construction	C & D	A	D	U	U
De-Energized					
Energized					
Configuration	N.C	N.O	Divergent	Convergent	Universal

Install in any position, preferably on a horizontal run of pipe with coil upright.

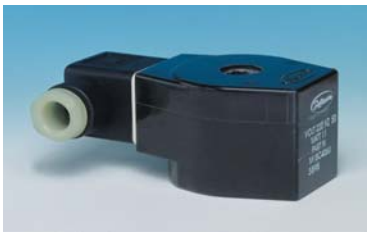
Except "C", all constructions may be used for any configurations but it is desirable to select the valve according to its use to obtain the best performance.

Flow Calculation, Liquids:

$$Q=Cv\sqrt{\frac{DP}{G}}$$

Q= Flow Rate, GPM (U.S.A.)
Cv= Valve Flow Coefficient
DP= Valve Pressure Drop, PSID
G= Specific Gravity of Liquid (= 1.0 for Water)

Option YC Weather Proof Housing with 1/2" NPT Threaded Conduit Connector



Standard Coil and DIN43650 Connector

ORDERING INFORMATION

SELECT ITEM FROM EACH COLUMN IN CHART BELOW FROM LEFT TO RIGHT
EXAMPLE: 1323SV17ATF24DC

Model Number Information								
Model	**Body Material**	**Seat & Seal Material**	**Orifice Size (mm)**	**Construction (See Above Table)**	**Connection Threads**	**Coil Type**	**Voltage**	**Options**
1323	**B= Brass** S= 304 SS I= 316 SS	**A= Acrylo-Nitrile** V= Viton N= Neoprene E= Ethylpropylene	**17= 1.75** 20=2.00 25= 2.50	**U= U Construction** C= C Construction D= D Construction A= A Construction	**T= NPT** - = BSP	**F= Class F** H= Class H	**12DC= 12 VDC** **120AC= 120 VAC, 60 HZ** 24DC= 24 VDC 24AC= 24 VAC, 60 HZ	Prefix YC= Weather Proof Housing (1/2" NPT Thread) Suffix M= Manual Operation Coil Indicator Light= Consult Factory

Bold Order Combinations Typically Ship From Stock

INSTALLATION RECOMMENDATIONS

Place a strainer with a porosity $\leq$ 100µ upstream of valve (see Clark Solutions Model 1359 Y Strainer).

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