

CLARK SOLUTIONS

Model 1365, 3-Way Solenoid Valve

1/4" Pipe Size, Direct Acting Solenoid

DESCRIPTION

Model 1365 three-way solenoid valves are available in brass, iron or 304 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 position (N.C., N.O., divergent, universal)

Valve Body : Brass, AISI 304 stainless steel, iron

Valve Life: > 1,000,000 cycles, field rebuild kits available

Valve Seals & Seats: Acrylo-Nitrile, Neoprene®, Ethylpropylene or Viton®

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: 0.6 kg



File LR87427 2M - LR108921-1



File MH16855 Vol. 2 Sec. 2

Table 1

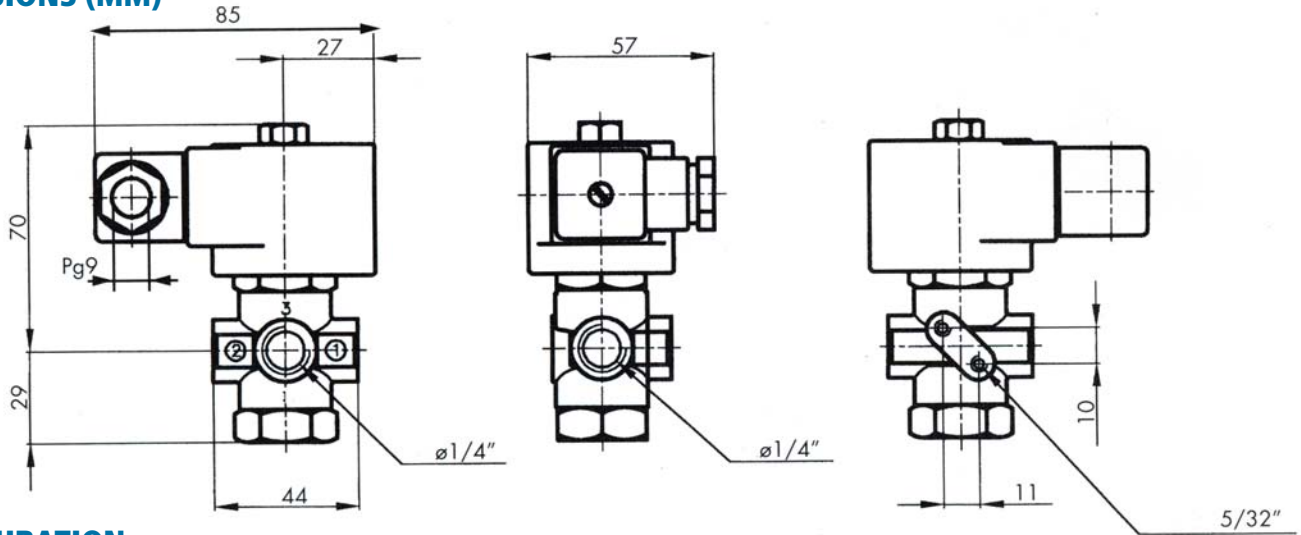
Wetted Materials			
Body	Plunger	Plunger Tower	Springs
Brass	AISI 430F	304L or 305 SS	Copper
AISI 304	AISI 430F	304L or 305 SS	Silver & 302 SS

Table 2

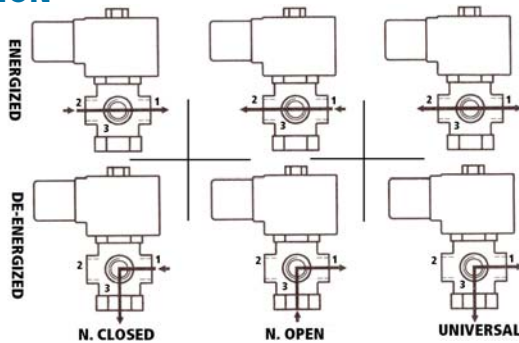
Seat Material	Acrylo Nitrile	Neoprene®	Ethyl-propylene	Viton®
Maximum Temperature	+80°C	+80°C	+150°C	+150°C
Uses	Water, air, light oils, kerosene. Low and medium vacuum.	Oxygen, alcohol, argon, other non-corrosive light gases and liquids. Freon 12.	Water steam, hot water, acetone.	Benzene, naphtha, aromatics,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

Orifice Diameter	Cv (GPM)	Kv (m³/h)	Max. Differential Pressure (bar) by Configuration			
			N.C.	N.O.	DIV.	CONV.
Three-Way, Two Position, "C" Construction, Normally Closed, No Connector at "C" Outlet						
1.75	0.94	0.08	15	5	20	5
2.25	0.140	0.12	8	3	15	3
3.00	0.246	0.21	4	1	10	1
4.00	0.351	0.30	2	-	8	-
Three-Way, Two Position, "A" Construction, Normally Open						
1.75	0.94	0.08	7	8	20	7
2.25	0.140	0.12	5	6	15	5
3.00	0.246	0.21	3	4	10	3
4.00	0.351	0.30	1	2	8	1
Three-Way, Two Position, Three-Way, Two Position, "U" Construction, Universal						
1.75	0.94	0.08	10	7	20	7
2.25	0.140	0.12	8	5	15	5
3.00	0.246	0.21	4	3	10	3
4.00	0.351	0.30	1.5	1.5	8	1.5

DIMENSIONS (MM)



CONFIGURATION



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

Except "C", normally open, 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:

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

Q= Flow Rate, GPM (U.S.A.)
 C_v= 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: 1365SV40UTF120AC

Model Number Information								
Model	Body Material	Seat & Seal Material	Orifice Size (mm)	Configuration (See Above)	Connection Threads	Coil Type	Voltage	Options
1365	B= Brass S= 304 SS H= Iron	A= Acrylo-Nitrile V= Viton N= Neoprene E= Ethylpropylene	17= 1.75 22= 2.25 30= 3.00 40= 4.00	U= Universal A= Normally Open C= Normally Closed	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

INSTALLATION RECOMMENDATIONS

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