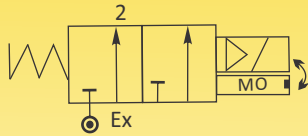


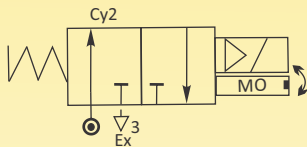
SOLENOID VALVES FOR AUTOMATION

**3/2 WAY – PILOT OPERATED, POPPET TYPE, SOLENOID VALVE,
Normally Closed-energized to Open and Normally Open-Energized to Close.**

SERIES 321D&322D



N.C.
Normally Closed
Coil energised - Open
Coil de-energised - Closed



N.O.
Normally Open
Coil energised - Close
Coil de-energised - Open

NOTE: For your requirement of valves with Flameproof Enclosure, please refer to catalogue no. 9360D & 9362D

General Description:

Series 321D & 322D Solenoid Valves are Pilot Piston Operated type Valves, requires very low minimum pressure differential to operate. Valves are used on application where high flow rate is required. Valves are suitable for general application with media such as Air, Gas, etc., provided they are compatible with construction material of the valve.

End Connection:

'G'-ISO-228 (BSP) & NPT.

Max Temperature Range:

For media – Minimum (-)5°C and maximum with Buna Nitrile poppets is 80°C; Viton poppets 140°C. Max. ambient temperature with Class 'H' coil (+)42°C.

Manual Override:

Valve can be operated manually to open the valve when there is No Electric supply to the coil. Manual Override consist of slotted head screw for Screw Driver with Two possible position to Open the valve and Close the valve. Manual Override is to be positioned at Close Position when valve is operated through coil.

BEFORE ATTEMPTING ELECTRICAL OPERATION: CHECK THE MANUAL OVERRIDE IS AT CLOSE POSITION.

Mounting Bracket:

Mounting Brackets are available as accessory.

Coil:

Series 321D & 322D Solenoid Valves are supplied with Class 'H' insulated (180°C) coil; encapsulated in Thermo Plastic, containing 40% Glass fibre.

All coils are for continuous service, 100% duty (E.D). Rated voltage tolerances for all AC Coils ±10%/-5% and for DC Supply Coils +10%/-5%. Coils can be used on AC with frequency of 50 Hz to IP 65 as per IEC-60529-2001.

Installation:

Valves can be mounted in any position except "Inverted", preferably in horizontal pipeline with magnetic construction in vertical and upright position.

Series 321D & 322D Solenoid valves are not designed for Back Pressure coming from downstream side.

Approvals:

IP-65 As per IEC-60529-2001, Coil M22-SQ: 220/230V 50/60 Hz, 240V 50/60Hz, 110V 50/60 Hz, 24V DC.

Material:

Valve Body	: Aluminium LM-24 Die Cast and Hard Anodized.
Seals/Poppets	: Buna Nitrile or Viton.
Tube Nut	: Brass tube nuts,
Plunger & Stopper	: AISI 430FR St.St.
Spring	: AISI302 St.St.
Shading Ring	: For AC: Copper/Al/Silver, For DC: No shading ring.
Coil Type	: AC – M22-SQ/GP/H, 240V, 110V 50 Hz, Rating:5.5 VA DC-M22-SQ/GP/H, 24V Rating: 4 Watts.
Application	: For Operating Diaphragm Control Valves, Pneumatic Cylinders, Piston Type Valves, etc.

SPECIFICATIONS:

Series	Size 'G' thr	Orifice Size	Flow Factor Kv	Body Material	Seat	BTP	Working Pr.(bar)		Coil Type	Coil Rating		Constr. Ref. No	Weight	
							bar	min		max	VA			Watt
Normally Closed														
321 D06	¼	6	1.9	AD	BN	V	16	1.5	12	M22-SQ	5.5	4	583	0.310
321 D10	¾	10	1.9	AD	BN	V	16	1.5	12	M22-SQ	5.5	4	583	0.580
321 D15	½	15	1.9	AD	BN	V	16	1.5	12	M22-SQ	5.5	4	583	0.580
Normally Open														
322 D06	¼	6	1.9	AD	BN	V	16	1.5	12	M22-SQ	5.5	4	583	0.310
322 D10	¾	10	1.9	AD	BN	V	16	1.5	12	M22-SQ	5.5	4	583	0.580
322 D15	½	15	1.9	AD	BN	V	16	1.5	12	M22-SQ	5.5	4	583	0.580

NOTE: Valves suitable for AC and DC supply are different in characteristics and construction. No Interchanging of coils between DC to AC or AC to DC possible. DO NOT INTERCHANGE COILS. Minimum details required for submitting offer: Size , Body material, Seat Poppets, medium name, Flow (M3/hr), pressure (bar), temp. Deg.C, coil voltage AC or DC.,Quantity (Nos), etc.

