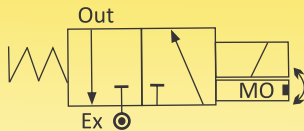


# SOLENOID VALVES FOR AUTOMATION

## 3 - WAY MANIFOLD MOUNTED, SOLENOID VALVES, WITH M22 COILS.

### SERIES R381D



On De-energization Normally Inlet Closed, Outlet Connects to Exhaust Port.  
On Coil Energization inlet is Connected to Outlet , Closing Exhaust Port.

**NOTE:** For your requirement of valves with Flameproof Enclosure , please refer to catalogue no. 9381B.

#### General Description:

Series R381D Solenoid Valves are 3-Way Pilot Valves to be mounted on manifold to obtain, preferred number of outlets. Standard upto 8 Valves on manifold mounted are available. Large quantity can also be made by connecting accumulator in the inlet side to stop starving of the valves

**End connection:** Manifold are provided with inlet 1/4" or 3/8" BSP/NPT Female threads. Outlets are available in 1/4" BSP/NPT(F) threads.

**Max. Temp. range:** For media is (-)5°C & Max. with Buna Nitrile seals: 80°C. Max. ambient temperature with Class 'H' coil (+)42°C.

**Mounting:** Valves can be mounted on Pneumatic Rotary Actuators with the Screws provided as accessory.

**Coils:** Series R381D Solenoid Valves with M22-SQ coils are available in Class 'H' insulated (180°C) coil; encapsulated in Thermo Plastic, containing 30% Glass filled. All coils are for continuous service 100% duty (E.D). Rated voltage tolerances are +10%/-15% for all AC power coils; +10%/-15% for DC supply. SQ coils are suitable for Connectors Form 'A' & 'B' (ISO4400) according to EN 175301-803 and Protection Class IP 67 as per IEC-60529-2001.

**Approvals:** M22 Coils are CE, EMI/EMC approved. Available for voltage range 220 / 230 / 240 / 110 / 48 / 24V 50/60 Hz AC and 220/110/24V DC. For approval information, please refer to page no. 66.

#### Materials:

Size : 1/4" BSP or NPT.  
Valve Body : Aluminium LM-24 Hard Anodized.  
Seals(Seating) : Buna Nitrile.  
Tube Nut : Brass  
Plunger & Stopper : AISI SS 430FR.  
Spring : AISI SS 302  
Shading Ring : For AC: Copper  
For DC: No shading ring.  
Standard Coil Type : AC-M22-SQ:240,110V 50 Hz. Rating: 5 VA.  
DC-M22-SQ: 24V DC. Rating: 6.5 Watts.  
Manual Override : Standard. Before attempting electrical operation-Check the Manual Override is at 'Close' Position.  
Application : Valves are very suitable and useful for Piloting Diaphragm Control Valves, Bag Filter Valves, Angle Seated Valves, Any Pilot Operation.

#### NOTE:

- 1) Use of fine gauge filter in the inlet side is highly recommended.
- 2) Do not install bigger size of solenoid valve on smaller size pipeline.

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

Series R381D Solenoid Valves are not designed for Back Pressure coming from downstream side.

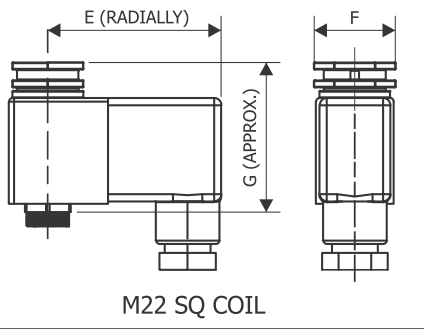
### SPECIFICATIONS:

Series	Size 'G' thr	Orifice Size	Flow Factor Kv	Body Material	Seat	BTP bar	Max. Operating Pressure (Bar)		Coil Type	Coil Rating		Constr. Ref. No	Weight kgs
							Air			VA	Watt		
R381D	Inch	mm	M <sup>3</sup> /hr.							~	=		
3006X2	1/4	3.0	0.12	AD	BN	10	0	6	M 22-SQ	5	6.5	733	0.256
3006X4	1/4	3.0	0.12	AD	BN	10	0	6	M 22-SQ	5	6.5	733	0.512
3006X6	1/4	3.0	0.12	AD	BN	10	0	6	M 22-SQ	5	6.5	733	0.768
3006X8	1/4	3.0	0.12	AD	BN	10	0	6	M 22-SQ	5	6.5	733	1.024



**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, diaphragm, medium name, Flow (M3/hr), pressure (bar), temp. Deg.C, coil voltage AC or DC., Quantity (Nos), etc.

COIL TYPE	POWER CONSUMPTION & WATT RATING			Class of Insulation	Protection	Certification Standard
	AC		DC			
	VA Holding	Watts	Watts			
M22-SQ/WP67	5	5	6.5	H	WP-IP-67	IS/IEC 60529-2001



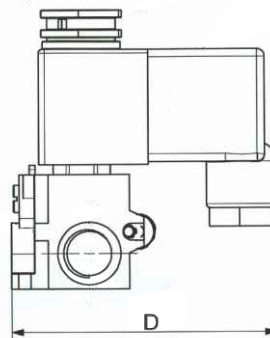
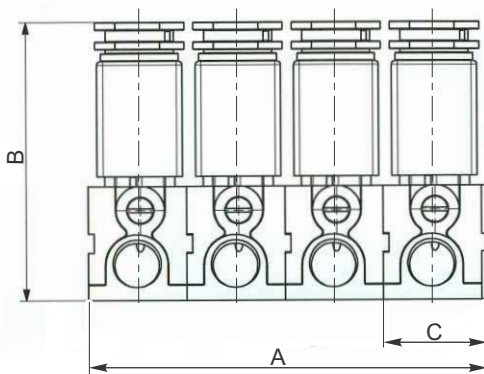
M22 SQ COIL

Construction Ref. No.733

**DIMENSION IN (MM)**

CATALOGUE NO.	Number Of Valves	A (mm)	B (mm)	C (mm)	D (mm)	Weight (kgs)
R381D 062	2	53	72	27	68	0.256
R381D 063	3	78	72	27	68	0.384
R381D 064	4	103	72	27	68	0.512
R381D 065	5	128	72	27	68	0.640
R381D 066	6	153	72	27	68	0.768
R381D 067	7	178	72	27	68	0.896
R381D 068	8	203	72	27	68	1.024

**NOTE:** Weight of each is 0.127. Multiple Weight X No of Valves.



CATALOGUE NO.	Number Of Valves	CONSTR REF.	E (RADIALLY)	F	G	List Of Approvals									
			SQ	SQ	SQ	APPROVAL	IP 67	TYPE 4X, 6P	Exd mb IIC T6 Gb	Exia IIC T6	Exd Tb IIIC T6 Gb	DGMS	PESO		
			M22	M22	M22										
R381D 062	2	733	50	22	40										
R381D 063	3	733	50	22	40	ISI	✓		✓	✓					✓
R381D 064	4	733	50	22	40	CE	✓		✓						✓
R381D 065	5	733	50	22	40	UL									
R381D 066	6	733	50	22	40	GOST									
R381D 067	7	733	50	22	40	IECEX			✓		✓				
R381D 068	8	733	50	22	40	ATEX			✓		✓				

**Note:**  
 Technical specifications, details & dimensions are subject to change without prior notice.  
 Dimensions in the table are approximate subject to final confirmation by AVCON.

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