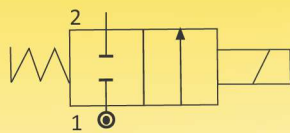




# SOLENOID VALVES FOR AUTOMATION

## 2/2 WAY – NORMALLY CLOSED – DIRECT ACTING TYPE, WITHOUT MANUAL OVERRIDE

### SERIES 220A



N.C.

**Normally Closed**

Coil energised - Open  
Coil de-energised - Closed



**NOTE:** For your requirement of valves with Flameproof Enclosure, please refer to catalogue no. 9210A.

### General Description:

Series 220A Solenoid Valves are Direct Acting and DO NOT require minimum pressure to operate. Valves are used on general applications where small overall dimensions and low power consumption is required. Valves are applicable on media such as Water, Air, Light Oil, Inert 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 seating is 80°C; Viton seating 140°C. Max. ambient temperature with Class 'H' coil (+)42°C.

### Mounting Bracket:

Mounting Brackets are available as accessory.

### Coil:

Series 220A Solenoid Valves are supplied with Class 'H' insulated (180°C) coils; 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 220A Solenoid valves are not designed for Back Pressure coming from downstream side.

### Approvals:

IP-65 As per IEC-60529-2001, Coil M36-SQ: 220/230V 50/60 Hz, 240V 50/60Hz, 110V 50/60 Hz, 24V DC.

### Material:

Valve Body	: Brass Stamping to IS- 6912 (1/8" & 1/4"), : ASTM A351 Gr.CF8 (SS304), Optional.: ASTM A351 Gr.CF8M.
Seals(Seating)	: Buna Nitrile or Viton.
Tube Nut	: For Brass body: Brass tube nuts; For Stainless Steel body : AISI 316St.St.
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, 240, 110 V 50 Hz, Rating:5.5 VA DC-M22-SQ/GP/H,24V Rating: 4 Watts AC – M36-SQ/GP/H, 240, 110V 50 Hz, Rating:18 VA and 24 VDC-M36-SQ/GP/H, Rating:12Watts.
Application	: Textile Machinery, Coffee Machines, Sterilizers, Wood Working Machines, Electro Medical Equipment, Shoe Manufacturing Machines, Exhaust Gas Analyzers, Scientific Equipment, Automatic Dispensers, Pilot Valves, etc.

### NOTE

: Manual override not available.

### SPECIFICATIONS:

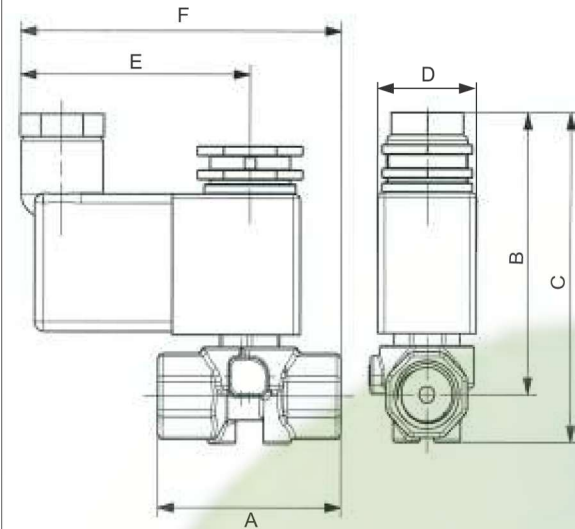
Series	Size 'G'thr	Orifice Size	Flow Factor Kv	Body Material	Seat	BTP	Working Pr.(bar)				Coil Type	Coil Rating		Constr. Ref. No	Weight* kgs
							230V AC	24V DC				VA	Watt		
220A	Inch	mm	M <sup>3</sup> /hr.			bar	min	max	min	max					
1503	1/8"	1.5	0.06	BR CF8	BN V	16	0	20	0	20	M22-SQ	5.5	4	599	0.136
2203	1/8"	2.2	0.12	BR CF8	BN V	16	0	8	0	20	M22-SQ	5.5	4	599	0.136
1506	1/4"	1.5	0.06	BR CF8	BN V	16	0	30	0	30	M36-SQ	18	12	600	0.285
2206	1/4"	2.2	0.12	BR CF8	BN V	16	0	30	0	30	M36-SQ	18	12	600	0.285
3306	1/4"	3.0	0.15	BR CF8	BN V	16	0	20	0	25	M36-SQ	18	12	600	0.285

\*Weight of Brass Body.

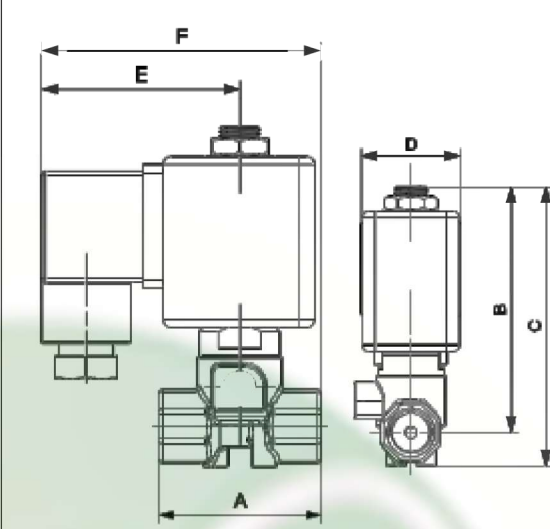
**NOTE:** Valves suitable for AC and DC supply are different in characteristics and construction. No Interchanging of coils between DC to AC or AC to DC possible. DO NOT INTERCHANGE COILS. Minimum details required for submitting offer: Size, Body material, seating, medium name, Flow (M3/hr), pressure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



Construction Ref. No. 599



Construction Ref. No. 600



### DIMENSION TABLE

CATALOGUE NO.	Size (Inch)	DIMENSION IN MM.						APPROX WT. (kgs)
		A	B	C	D	E	F	
220A1503	1/8	30	59	69	22	50	65	0.136
220A2203	1/8	30	59	69	22	50	65	0.136
220A1506	1/4	40	73	83	30	49	69	0.285
220A2206	1/4	40	73	83	30	49	69	0.285
220A3306	1/4	40	73	83	30	49	69	0.285

### How to read the catalogue:

220A 1503 BR/CF8 BN/V BSP/NPT

- Series 2-way Normally Closed, Direct Acting Type
- Size of valve/ Port size.
- Body material (Brass / CF8)
- Seating material (Buna Nitrile/Viton)
- End Connection (BSP / NPT)

### Coil Voltage:

M22/36 SQ H-5.5-18/4-12 WP-65

- Size of Coil.
- Coil Type (Square)
- Class of Insulation. Coil VA (AC) or Watts (DC)
- Class of Electrical Protection.

110V 50Hz AC/DC

- Electrical Voltage, Std. 230, 110, 24 AC / 24 V DC
- Hertz
- Characteristics (AC / DC)