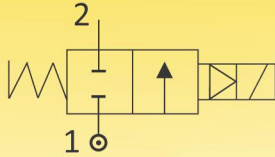


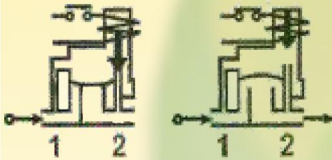
# SOLENOID VALVES FOR AUTOMATION

2/2 WAY – NORMALLY CLOSED – INTERNAL PILOT OPERATED, WITHOUT MANUAL OVERRIDE

## SERIES 111A



**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. 9100F.

### General Description:

Series 111A Solenoid Valves are Diaphragm Pilot Operated and require very low minimum differential pressure to operate. Valves are used on application with High Flow Rate. Valves are suitable for general application with media such as Water, Light Oil, Gas and Air, provided they are compatible with construction material of the valve.

### End Connection:

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

### Max Temperature Range:

For media- Min.(-)05°C & Max. with :  
 Buna Nitrile Diaphragm: 80°C and with  
 Viton diaphragm upto 140°C .  
 Max. Ambient Temp with Class 'H' Coil  
 (+)42°C.

### Mounting Bracket:

Mounting Bracket available as accessory.

### Coil:

Series 111A Solenoid Valves are available in 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 are suitable for Connectors Form A (ISO4400) according to EN 175301-803 and protection class 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 111A 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 (3/8" & 1/2"), : ASTM A351 Gr.CF8 (SS304), Optional.: ASTM A351 Gr.CF8M.
- Seals(Seating) : Buna Nitrile or Viton.
- Tube Nut : AISI 316 St.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-M36-SQ/GP/H,240, 110V 50Hz, Rating:18VA DC-M36-SQ/GP/H, 24 VDC, Rating:12 watts

### NOTE

- 1)Use of filter is highly recommended in the inlet side of valve.
- 2)Manual override not available.

## SPECIFICATIONS:

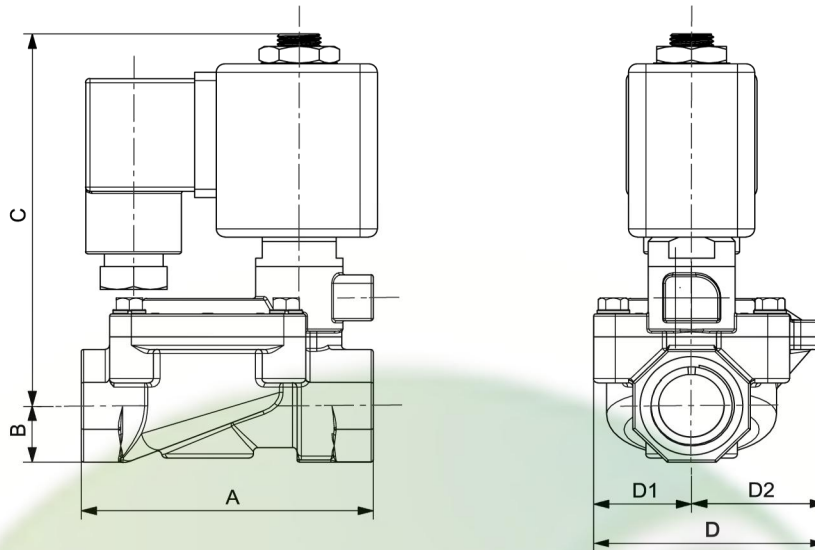
Series	Size 'G' thr	Orifice Size	Flow Factor Kv	Body Material		Seat		BTP	Working Pr.(bar)		Coil Type	Coil Rating		Constr. Ref. No	Weight*
									min	max		VA	Watt		
111A	Inch	mm	M <sup>3</sup> /hr.	BR	CF8	BN	V	bar	min	max	M36-SQ	18	12	577	kgs
10	3/8	15	3.0	BR	CF8	BN	V	25	0.3	12	M36-SQ	18	12	577	0.530
15	1/2	15	3.0	-	CF8	BN	V	25	0.3	12	M36-SQ	18	12	577	0.880
20	3/4	20	8.0	-	CF8	BN	V	25	0.3	12	M36-SQ	18	12	577	0.930
25	1	25	9.5	-	CF8	BN	V	25	0.3	10	M36-SQ	18	12	577	1.650
35	1 1/2	35	30	-	CF8	BN	V	25	0.3	10	M36-SQ	18	12	577	2.850
50	2	50	37.2	-	CF8	BN	V	25	0.3	10	M36-SQ	18	12	577	2.850

\*Weight of CF8 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.

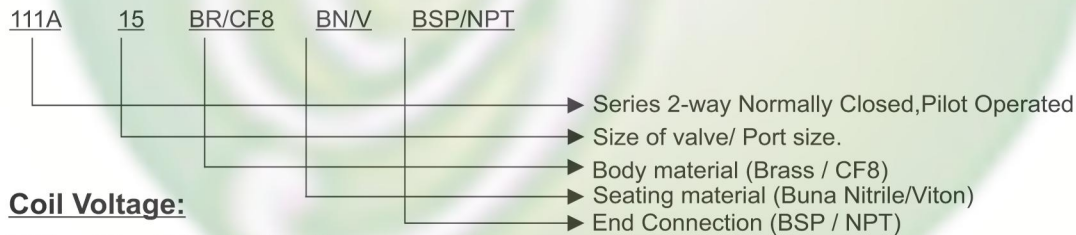
Construction Ref. No. 577



**DIMENSION TABLE**

CATALOGUE NO.	Size	A	B	C	D	D1	D2	APPROX WT. (kgs)
111A 10	3/8"(FG)	67	13	89	53	22	31	0.530
111A 15	1/2"(FG)	67	13	89	53	22	31	0.580
111A15	1/2"(IC)	67	13	89	53	22	31	0.550
111A 20	3/4"(IC)	93	17	95	76	33	43	0.880
111A 25	1"(IC)	102	20	98	76	33	43	0.935
111A 35	1 1/2"(IC)	132	28	105	110	55	55	1.650
111A 50	2"(IC)	160	35	114	132	64	68	2.850

**How to read the catalogue:**



**Coil Voltage:**

