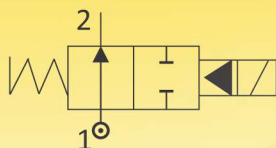


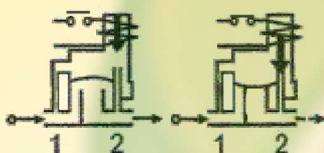
SOLENOID VALVES FOR AUTOMATION

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

SERIES 113A



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



NOTE: For your requirement of valves with Flameproof Enclosure, please refer to catalogue no. 9120F.

General Description:

Series 113A 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:

Working temperature for media is (-)5°C & Max. with Buna Nitrile Diaphragm: 80 °C and with Viton diaphragm upto 140 °C. Max. ambient temperature with Class 'H' coil (+)42°C.

Mounting Bracket:

Mounting Bracket available as accessory.

Body
Material

Coil:

Series 113A Solenoid Valves are available in 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 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 113A Solenoid valves are not designed for Back Pressure coming from downstream side.

Approvals:

IP-65 As per IEC-60529-2001, Coil M-36-SQ: 220/230V 50/60 Hz, 240 50/60Hz, 110 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	: ASISI 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, 110 V 50 Hz, Rating:18 VA, DC – M36-SQ/GP/H, 24 VDC, Rating: 12 Watts.

- NOTE** : (1) Manual override not available.
 (2) Use of fine gauge filter in the inlet side is highly recommended.

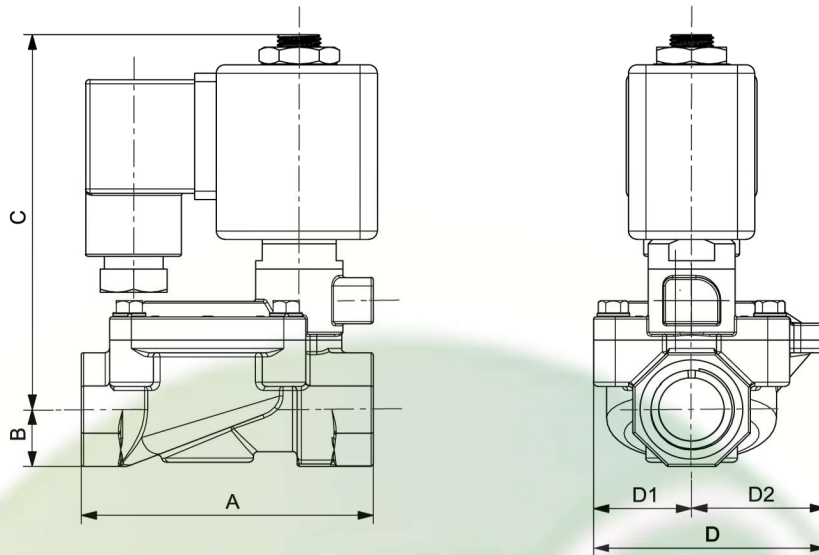
SPECIFICATIONS:

Series	Size 'G'thr	Orifice	Kv	Body Material		Seat		BTP	Working Pr.(bar)		Coil Type	Coil Rating		Constr. Ref. No	Weight
									min	max		VA	Watt		
113A	Inch	mm	M ³ /hr.					bar				~	=		kgs
10	3/8	15	3.0	BR	CF8	BN	V	25	0.3	12	M36-SQ	18	12	591	0.530
15	1/2	15	3.0	BR	CF8	BN	V	25	0.3	12	M36-SQ	18	12	591	0.560
20	3/4	20	8.0	-	CF8	BN	V	25	0.3	12	M36-SQ	18	12	591	0.880
25	1	25	9.5	-	CF8	BN	V	25	0.3	12	M36-SQ	18	12	591	0.930
35	1 1/2	35	30	-	CF8	BN	V	25	0.3	10	M36-SQ	18	12	591	1.650
50	2	50	37.5	-	CF8	BN	V	25	0.3	10	M36-SQ	18	12	591	2.850



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. 591



CATALOGUE NO.	Size	A	B	C	D	D1	D2	APPROX WT. (kgs)
113A 10	3/8"(FG)	67	13	89	53	22	31	0.530
113A 15	1/2"(FG)	67	13	89	53	22	31	0.580
113A15	1/2"(IC)	67	13	89	53	22	31	0.550
113A 20	3/4"(IC)	93	17	95	76	33	43	0.880
113A 25	1"(IC)	102	20	98	76	33	43	0.935
113A 35	1 1/2"(IC)	132	28	105	110	55	55	1.650
113A 50	2"(IC)	160	35	114	132	64	68	2.850

How to read the catalogue:

113A 15 BR/CF8 BN/V BSP/NPT

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

Coil Voltage:

M36 SQ H-18/12 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)