

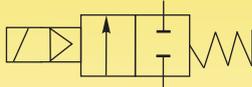


# SOLENOID VALVES FOR BAG FILTER APPLICATION

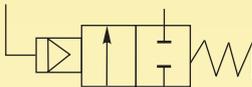


**SERIES R150E – 2/2 WAY – NORMALLY CLOSED INTERNAL PILOT OPERATED, WITH M36 COILS & SERIES R150A – 2/2 WAY – NORMALLY CLOSED EXTERNALLY PILOT OPERATED VALVES.**

## SERIES R150E-A



3/4", 1" & 1 1/2" Valve (E)



3/4", 1" & 1 1/2" Valve (A)



R150E



R150A

### General Description:

Series R150E Solenoid Valves are Internal Pilot Operated, Diaphragm Type, Bag Filter Solenoid Valves and Series R150A are External Pilot Operated, Diaphragm Type, Bag Filter Valves – requires very low differential pressure. Valves are used in Bag House as “Bag Shaker” Valves.

**End connection:** ‘G’-ISO-228 (BSP) & NPT.

**Max. Temperature range:** For media Air or Neutral Gas - Hytrel diaphragm -Minimum (-)5°C and Max. 120°C, Buna Nitrile Diaphragm: 80°C and with Viton diaphragm upto 140 °C. Max. Ambient temperature with Class ‘H’ coil (+)42°C.

**Application :** Cement Plants, Detergent Industries etc.

**Coils :** Series R150E Solenoid Valves are available in Class ‘H’ insulated (180°C) coil; encapsulated in Thermo Plastic, containing 30% Glass filled. All coils are for continuous service for intermittent 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 :** M36 Coils are CE, EMI/EMC approved. Available for voltage range 220/230/240/110/48/24V 50/60Hz AC and 220/110/24V DC. For approval information, please refer to page no. 20.

### Materials:

Valve Body : Aluminum LM-24 Die Cast.  
 Seals (Seating) : Hytrel,  
 (Optional) : Buna Nitrile and Viton  
 Tube Nut : S.S. 304  
 Plunger & Stopper: AISI SS 430FR,  
 Spring : AISI SS 302.  
 Shading Ring : For AC: Copper/Silver,  
 For DC: No shading ring.  
 Standard Coil Type : AC – M36-SQ: 240, 110V 50 Hz, Rating:14 VA,  
 DC – M36-SQ: Rating: 10.5 Watts.

### NOTE

- 1) Use of fine gauge filter in the inlet side is highly recommended.
- 2) Valves not recommended for installation in inlet side of Pump.
- 3) Do not install bigger size of Solenoid Valve on smaller size pipeline.

**Installation :** The Valves are essentially suitable for mounting in horizontal pipeline with magnetic construction vertical and upright position. Series R150E/A Solenoid valves are not designed for Back Pressure coming from downstream side.

## SPECIFICATIONS: Normally Closed Internal Pilot Operated

Series	Pipe Size	Orifice Size	Flow Factor Kv	Body Material	Seat		BTP	Working Pr.(bar)		Coil Type	Coil Rating		Constr. Ref.	Weight* Kgs
								min	max		VA	Watt		
R150E	Inch	mm	M <sup>3</sup> /hr.				bar				~	=		
20	3/4	29	11	AD	HYT	BN	16	0.3	8.5	M36-SQ	14	10.5	710	0.7
25	1	29	17	AD	HYT	BN	16	0.3	8.5	M36-SQ	14	10.5	710	0.7
35	1 1/2	52	43	AD	HYT	BN	16	0.3	8.5	M36-SQ	14	10.5	710	1.4

## SPECIFICATIONS: Normally Closed Externally Pilot Operated

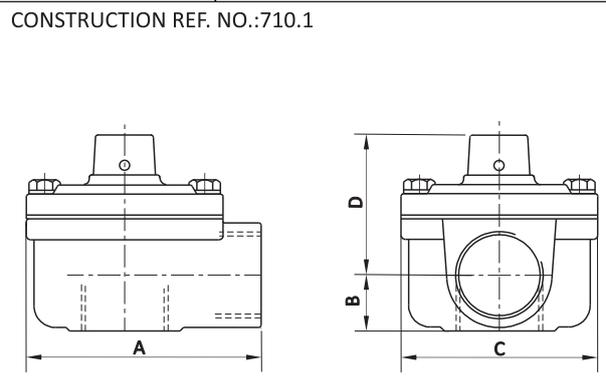
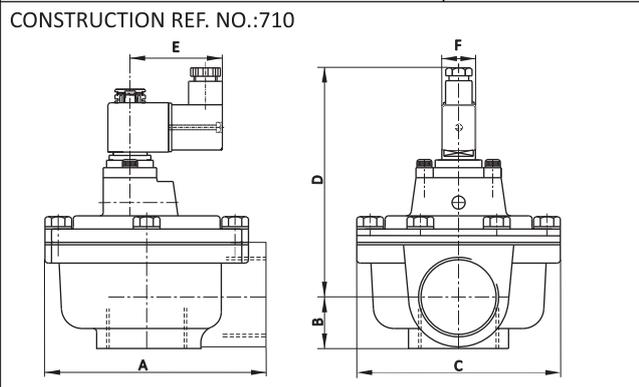
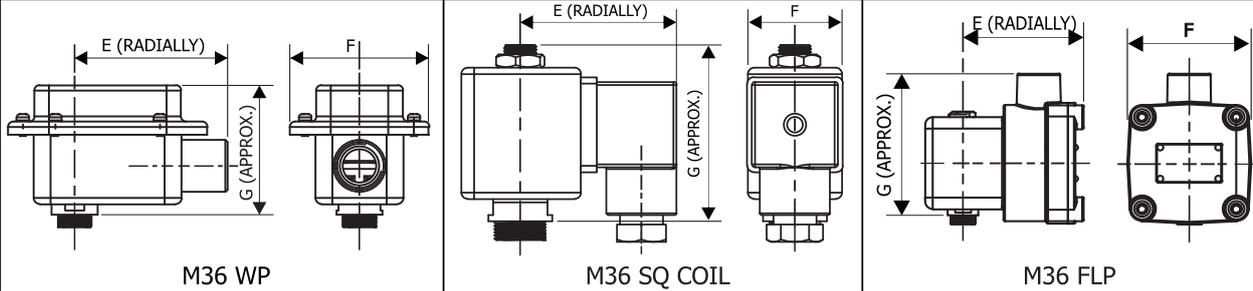
Series	Pipe Size	Orifice Size	Flow Factor Kv	Body Material	Seat		BTP	Working Pr.(bar)		Coil Type	Coil Rating		Constr. Ref.	Weight* Kgs
								min	max		VA	Watt		
R150A	Inch	mm	M <sup>3</sup> /hr.				bar				~	=		
20	3/4	29	11	AD	HYT	BN	16	0.3	8.5	-	-	-	710.1	0.4
25	1	29	17	AD	HYT	BN	16	0.3	8.5	-	-	-	710.1	0.4
35	1 1/2	52	43	AD	HYT	BN	16	0.3	8.5	-	-	-	710.1	1.05

\* Weight of AD Valve Body with SQ coil.

**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.

COIL TYPE	POWER CONSUMPTION & WATT RATING			Class of Insulation	Protection	Certification Standard
	AC		DC			
	VA Holding	Watts	Watts			
M36-SQ-GP/SQ-WP67	13.5	8	10.5	H	GP/WP-IP-67	IS/IEC 60529-2001
M36-RD/WP67	13.5	8	10.5	H	WP-IP-67	IS/IEC 60529-2001
M36-RD/FLP-IIC + IP66/IP67	13.5	8	10.5	H	FLP-IIC+IP66/IP67	IS/IEC 60079-1-2014



DIMENSION IN (MM)

List Of Approvals

CATALOGUE NO	Size (Inch)	A	B	C	D	E	F	List Of Approvals							
R150E20	3/4	87	22	76	102	50	30	APPROVAL	IP 67	TYPE 4X, 6P	Exd mb IIC T6 Gb	Exia IIC T6	Exd Tb IIC T6 Gb	DGMS	PESO
R150E25	1	87	22	76	102	50	30	ISI	<	<	<	<	<	<	<
R150E35	1 1/2	133	30	140	147	50	30	CE	<	<	<	<	<	<	<
CATALOGUE NO	Size (Inch)	A	B	C	D	E	F	UL	PG	GOST	IECEX	ATEX			
R150A 20	3/4	87	22	76	62	-	-								
R150A 25	1	87	22	76	62	-	-								
R150A 35	1 1/2	133	30	140	110	-	-								
CATALOGUE NO.	PIPE SIZE INCH	CONSTR. REF.	E (RADIALLY)			F			G						
			SQ	RD WP	FLP	SQ	RD WP	FLP	SQ	RD WP	FLP				
			M36	M36	M36	M36	M36	M36	M36	M36	M36	M36	M36	M36	
R150E20	3/4	710	50	73	80	30	67	62	56	58	78				
R150E25	1	710	50	73	80	30	67	62	56	58	78				
R150E35	1-1/2	710	50	73	80	30	67	62	56	58	78				

**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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