

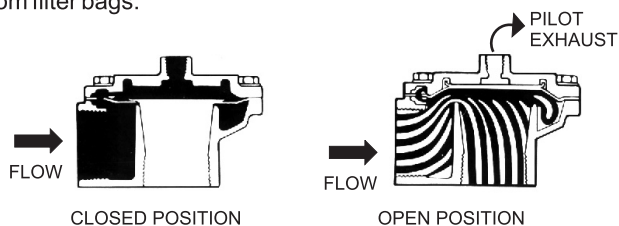
2/2-Way Pulse and Pilot Valves.

Valves For Dust Collector Service

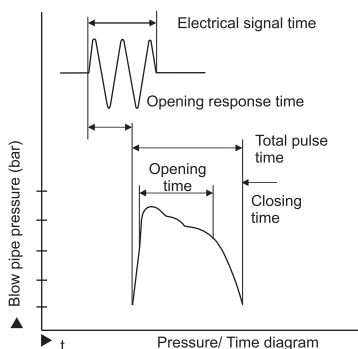
DATA SHEET
9150

AVCON has designed and developed 2/2 (2-Way) Pulse Valve and Pilot Solenoid Valve for Dust Collector Systems. This leaflet offers, high technology valve for this market.

The main pulse valve have just one moving part, the diaphragm, a unique springless construction in most of design, provides fast opening and closing of the valve. This high speed operation, not only saves compressed air, but it provides the kind of shock wave necessary to free the dust from filter bags.



AVCON Pulse type valve is specially designed for reverse air jet dust collector and exhaust gas purifier system. High flow, long operational life and fast opening and closing contributes to produce reliable and economical operation.



OPERATIONS

The Pulse Valve is either operated by an integral solenoid operator or a remote pilot solenoid valve. When the pilot solenoid valve is energised, the air trapped above the diaphragm is quickly exhausted through the pilot solenoid valve, causing fast opening of the main pulse valve. When the pilot solenoid valve is de-energised, air supplied through a bleed hole is trapped above main diaphragm, causing to close the valve. The remote control solenoid valve, selection of the proper pilot valve orifice is important, as well as length of the connecting tube should be kept as short as possible.

SOLENOID ENCLOSURE

Waterproof enclosures are designed to IS 12063-1987 (IEC 60529-1989) Part - I IP-67 Protection, Explosion/Flameproof enclosure are designed to IS/IEC-60079-1:2007/IS 12063-1987(IEC- 60529-1989 IP-67), Protection class upto IP-66.

CONSTRUCTION MATERIAL

Type 9150A: Body and bonnet pressure diecast Aluminium. Diaphragm of Hytrel is Standard.



Type 9150B : Body, bonnet and diaphragm same as above, but mounted with Stainless Steel core tube M 45 series magnetic construction, coil & Housing assembly.

Type 9150E : Body and bonnet in Shell Moulded aluminum. Main diaphragm in Hytrel, main seat in Delrin. The Pilot diaphragm of ultra soft Buna Nitrile.

SOLENOID PILOT VALVE

For controlling the Pulse valve either for mounting directly on the flange or for remote control, solenoid pulse valves are available. They are specially selected for high frequency operation required for dust collector duty. Pilot solenoid valves can be mounted individually.

COILS

The valves listed in leaflet 9150 are provided with continuous duty, class 'H' insulation moulded coils. They are available for AC and DC supply, rated to 18 VA on AC and 12 watts on DC supply. Every solenoid valve before leaving our factory undergoes high voltage insulation breakdown test as per IS 2071 part II of 1974. Coils are built suitable for industrial working voltage for AC and DC supply.

TEMPERATURE

The valves are normally rated for maximum fluid temperature upto 130°C when supplied with Hytrel Diaphragm.

INSTALLATION

Valves are mountable in any position without affecting operation, but as a general practice, to fit the valve keeping solenoid upright and above header tank is desirable. This prevents scale and particles entering into valve. The valves are provided with normal Standard-G-ISO-228 (BSP-F) threads.

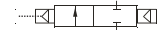
NOTE : USE OF FILTER IN THE INLET SIDE IS HIGHLY RECOMMENDED.

ELECTRICAL REFERENCE

Coil Type	Power Consumption & Watt Rating			Class of Insulation	Protection
	AC		DC		
	VA Inrush	VA Holding	Watts		
M 45.1 SQ	25	18	12	H	GP/WP IP-67
M 45.1 RD	25	18	12	H	GP/WP IP-67
M 45.1 FLP IIC	25	18	12	H	IS/IEC 60079-1:2007, Group IIC. IS 12063-1987 IP-66 (IEC 60529:1989).

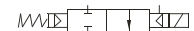
SPECIFICATION TABLE

WITHOUT PILOT OPERATOR, ANGLE TYPE EXTERNALLY PILOT.



Catalogue Number	Pipe Size mm	Orifice Size mm	Flow Factor Kv M ³ /hr.	Minimum Pressure bar	Maximum Operating Pressure (bar)	BTP bar	Material		Constr. Ref.	VA Rating AC	Watt Rating DC	Coil Type	Housing
							Body	Seat					
9150A20	20	29	11	0.3	8.5	10	AD	HY	37.1	--	--	--	--
9150A25	25	29	17	0.3	8.5	10	AD	HY	37.1	--	--	--	--
9150A35	35	52	43	0.3	8.5	10	AD	HY	37.1	--	--	--	--

WITH INTEGRAL OPERATOR, ANGLE TYPE.



9150B20	20	29	11	0.3	8.5	10	AD	HY	38.1	18	12	M45.1	SQ
9150B25	25	29	17	0.3	8.5	10	AD	HY	38.1	18	12	M45.1	SQ
9150B35	35	52	43	0.3	8.5	10	AD	HY	38.2	18	12	M45.1	SQ
9150B50	50	60	77	0.3	8.5	10	AD	HY	38.2	18	12	M45.1	SQ
9150B65	65	66	92	0.6	8.5	10	AD	HY	38.2	18	12	M45.1	SQ
9150B75	75	76	170	0.6	6.0	10	AD	HY	38.2	18	12	M45.1	SQ

WITH BUILT ON OPERATOR, FLANGE TYPE.



9150E80	80	80	137	0.3	2.3	8.5	AL	HY	43.1	18	12	M45.1	SQ
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DIMENSIONS (IN MM)

CONSTRUCTION REF. NO.: 37.1

CONSTRUCTION REF. NO.: 38.1

60(RADIALLY)

45

Valve fitted with M45 SQ. coil

Valve fitted with M45 RD GP coil - General purpose enclosure as per IP-20

Valve fitted with M45 RD WP coil - Waterproof metallic enclosure as per IS 12063-1987 IP-67.

CONSTRUCTION REF. NO.: 38.2

60(RADIALLY)

45

Valve fitted with M45 SQ. coil

CONSTRUCTION REF. NO.: 43.1

Valve fitted with M45 FLP IIC coil - Flameproof metallic enclosure as per IS/IEC-60079-1:2007.

Catalogue Number	Pipe Size mm	Constr. Ref.	A	B	C	D	Weight (Approx.) Kgs. ⚡	E (RADIALLY)			F			G (APPROX.)		
								RD GP	RD WP	FLP	RD GP	RD WP	FLP	RD GP	RD WP	FLP
9150A20	20	37.1	90	22	55	75	0.360	-	-	-	-	-	-	-	-	-
9150A25	25	37.1	90	22	55	75	0.360	-	-	-	-	-	-	-	-	-
9150A35	35	37.1	141	30	67	137	1.160	-	-	-	-	-	-	-	-	-
9150B20	20	38.1	90	22	119	75	0.728	60	96	96	48	62	80	106	114	184
9150B25	25	38.1	90	22	119	75	0.728	60	96	96	48	62	80	106	114	184
9150B35	35	38.2	141	30	148	137	1.508	60	96	96	48	62	80	135	143	213
9150B50	50	38.2	170	38	173	165	2.228	60	96	96	48	62	80	160	168	238
9150B65	65	38.2	170	44	213	165	3.023	60	96	96	48	62	80	200	208	278
9150B75	75	38.2	194	52	213	208	3.523	60	96	96	48	62	80	200	208	278
9150E80	80	43.1	220	-	195	220	3.0	60	96	96	48	62	80	195	203	273

⚡ Weight with SQ enclosure only, ask AVCON for other weights.

Note:

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