

# 2/2-Way Pilot Operated, Piston Type High Pressure Solenoid Valves.

DATA SHEET  
9100H  
9120H

Normally Closed, Energised To Open,  
Normally Open, Energised To Close.

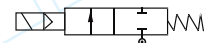
## SPECIFICATIONS

Sizes	: 10mm (3/8") to 75mm (3").
End Connections	: Standard-G-ISO-228 (BSP-F), Optional - NPT.
Construction-Body	: Upto 20mm (3/4") Brass forged IS 6912 and above in SS ASTM A351 Gr.CF8. Optional-SS ASTM A351Gr. CF8M.
-Piston	: SS AISI 304 (Bar Stock).
-Seat	: Standard -PTFE, : Optional-Viton.
Differential Pressure	: 2 to 24 bar.
Temperature of Fluid	: -5°C to 120°C.
Coil Voltage	: Standard-230-volts, 50Hz. A.C. Optional-24, 110, V DC & AC 50 Hz or 60Hz.
Coil Insulation and Temperature.	: Ambient upto 42°C. Class 'H' insulated upto155°C.
Coil Rating	: Continuously rated.
Enclosure	: Standard-General purpose SQ. moulded coil upto IP-20, Optional-Weatherproof SQ. moulded coil upto IP-67, Flameproof coil upto FLP IIC.
Fluids	: Air, water, light hydraulic oil, mild corrosive medium, etc.



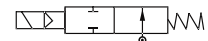
Optional Features	: Manual override, mounting bracket.
Sales Point	: Highly reliable, compact, maintenance free valve, suitable for thousands of operations.
Application	: Chemical, textile, petrochemical, water treatment, ash handling system, combustion equipment, etc. Not suitable for Steam duty application.
Note	: USE OF FILTER IN THE INLET SIDE IS HIGHLY RECOMMENDED.

## SPECIFICATION TABLE 2/2 WAY NORMALLY CLOSED



Catalogue Number	Pipe Size	Orifice Size	Flow Factor Kv	Minimum Pressure	Maximum Operating Pressure (bar)						BTP	Material		Constr. Ref.	VA Rating	Watt Rating	Coil	Housing
					AC			DC				Body	Seat					
					Air/Gas	Water	Light Oil	Air/Gas	Water	Light Oil								
9100H104	3/8	16	2.6	2	20	16	7	24	24	20	40	BR	PTFE	9.1	18	12	M45.1	SQ
9100H154	1/2	16	3.4	2	20	16	7	24	24	20	40	BR	PTFE	9.1	18	12	M45.1	SQ
9100H204	3/4	20	5.2	2	20	16	7	24	24	20	40	BR	PTFE	9.1	18	12	M45.1	SQ
9100H254	1	25	8.6	2	18	16	7	24	24	20	40	CF8	PTFE	9.1	18	12	M45.1	SQ
9100H304	1 1/4	28	14.0	2	18	16	7	24	24	20	40	CF8	PTFE	9.1	18	12	M45.1	SQ
9100H354	1 1/2	34	17.3	2	18	16	7	24	20	10	40	CF8	PTFE	9.1	18	12	M45.1	SQ
9100H504	2	45	30.5	2	18	14	7	22	16	10	40	CF8	PTFE	154	18	12	M45.1	SQ
9100H654	2 1/2	60	45	2	14	10	7	14	14	10	40	CF8	PTFE	154	36	22	M50	SQ
9100H754	3	72	66	2	14	9	6	14	12	8	40	CF8	PTFE	154	36	22	M50	SQ

## 2/2 WAY NORMALLY OPEN (NEW MAGNETIC CONSTRUCTION TYPE)



9120H104	3/8	16	2.6	2	12	12	7	12	12	7	40	BR	PTFE	9.1	18	12	M45.1	SQ
9120H154	1/2	16	3.4	2	12	12	7	12	12	7	40	BR	PTFE	9.1	18	12	M45.1	SQ
9120H204	3/4	20	5.2	2	12	12	7	12	12	7	40	BR	PTFE	9.1	18	12	M45.1	SQ
9120H254	1	25	8.6	2	10	10	7	10	8	7	40	CF8	PTFE	9.1	18	12	M45.1	SQ
9120H304	1 1/4	28	14.0	2	10	10	7	10	10	7	40	CF8	PTFE	9.1	18	12	M45.1	SQ
9120H354	1 1/2	34	17.3	2	10	10	7	10	10	7	40	CF8	PTFE	9.1	18	12	M45.1	SQ
9120H504	2	45	30.5	2	10	10	7	10	10	7	40	CF8	PTFE	154	18	12	M45.1	SQ
9120H654	2 1/2	60	45	2	6	7	5	6	7	5	40	CF8	PTFE	154	36	22	M50	SQ
9120H754	3	72	66	2	5	6	5	5	6	5	40	CF8	PTFE	154	36	22	M50	SQ

## 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 50 SQ	50	36	22	H	GP/WP IP-67
M 45.1 RD	25	18	12	H	GP/WP IP-67
M 50 RD	50	36	22	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).
M 50 FLP IIC	50	36	22	H	

## DIMENSIONS IN (MM)

Catalogue Number		Pipe Size Inch	Constr. Ref.	A	B	C	D	Weight (Approx.) Kgs. ⬠	Valve fitted with M45 / M50 RD GP coil - General purpose enclosure as per IP-20			
Normally Closed	Normally Open											
9100H104	9120H104	3/8	9.1	65	29	109	68	1.298				
9100H154	9120H154	1/2	9.1	65	29	109	68	1.298				
9100H204	9120H204	3/4	9.1	80	36	113	79	1.723				
9100H254	9120H254	1	9.1	95	41	121	93	2.238				
9100H304	9120H304	1 1/4	9.1	100	45	123	106	2.518				
9100H354	9120H354	1 1/2	9.1	118	56.5	125	117	3.023				
9100H504	9120H504	2	154	137	70	145	135	4.323				
9100H654	9120H654	2 1/2	154	172	89	163	164	6.383				
9100H754	9120H754	3	154	195	94	171	184	7.233				
CONSTRUCTION REF. NO.: 9.1												
CONSTRUCTION REF. NO.: 154												
Catalogue Number		Pipe Size Inch	Constr. Ref.	E (RADIALLY)			F			G (APPROX.)		
Normally Closed	Normally Open			RD GP	RD WP	FLP	RD GP	RD WP	FLP	RD GP	RD WP	FLP
9100H104	9120H104	3/8	9.1	60	96	96	48	62	80	96	104	174
9100H154	9120H154	1/2	9.1	60	96	96	48	62	80	96	104	174
9100H204	9120H204	3/4	9.1	60	96	96	48	62	80	100	108	178
9100H254	9120H254	1	9.1	60	96	96	48	62	80	108	116	186
9100H304	9120H304	1 1/4	9.1	60	96	96	48	62	80	110	118	188
9100H354	9120H354	1 1/2	9.1	60	96	96	48	62	80	112	120	190
9100H504	9120H504	2	154	60	96	96	48	62	80	132	140	210
9100H654	9120H654	2 1/2	154	66	96	96	57	68	80	154	159	224
9100H754	9120H754	3	154	66	96	96	57	68	80	162	167	232

⬠ 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.