

2/2-Way Midget Type, Direct Acting Solenoid Valves.

DATA SHEET
9210 B
9220 B

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

SPECIFICATIONS

- Sizes : 6mm (1/4") to 15mm (1/2").
- End Connections : Standard-G-ISO-228 (BSP-F),
Optional-NPT.
- Construction -Body : Brass forged IS 6912,
SS ASTM A351 Gr. CF8.
SS ASTM A351 Gr.CF8M.
- Seat : Standard-Nitrile (Buna 'N'),
Optional-Neoprene, Viton, PTFE
and others.
- Differential Pressure : 0 to 40 bar.
- Temperature of Fluid : -5°C to 80°C.
- Coil Voltage : Standard-230-volts,50Hz. AC.
Optional - 24, 110, 240 V DC & AC
50Hz 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, gas, vacuum, light and
heavy oil,mild corrosive fluid, etc.
- Optional Features : Manual override.



- Sales Point : Most versatile and reliable valve for
millions of trouble free operations
- Application : Furnaces, boilers, textile machinery
water treatment plant, ash handling,
sugar machinery and others.
- Note : USE OF FILTER IN THE INLET
SIDE IS HIGHLY RECOMMENDED.

SPECIFICATION TABLE 2/2 WAY NORMALLY CLOSED

Catalogue Number	Pipe Size Inch	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
					AC			DC				Body	Seat					
					Air/Gas	Water	Light Oil	Air/Gas	Water	Light Oil								
9210B15	1/4	1.5	0.07	0	30	18	11	40	28	24	40	BR	BN	2.1	18	12	M45.1	SQ
9210B20	1/4	2.0	0.09	0	22	16	9	30	20	16	40	BR	BN	2.1	18	12	M45.1	SQ
9210B25	1/4	2.5	0.11	0	17	9	4.5	20	15	12	40	BR	BN	2.1	18	12	M45.1	SQ
9210B30	1/4	3.0	0.13	0	12	6	3	12	10	7	40	BR	BN	2.1	18	12	M45.1	SQ
9210B31	1/4	3.0	0.15	0	15	12	9	25	22	20	40	BR	BN	157	36	22	M50	SQ
9210B40	1/4	4.0	0.40	0	5	3.5	1.5	5	4.5	3.5	40	BR	BN	2.1	18	12	M45.1	SQ
9210B41	1/4	4.0	0.43	0	10	8	8	20	18	18	40	BR	BN	157	36	22	M50	SQ
9210B45	1/4	4.5	0.60	0	3.5	2.5	1	4.5	4	3	40	BR	BN	2.1	18	12	M45.1	SQ
9210B46	1/4	4.5	0.62	0	8	6	4	18	16	16	40	BR	BN	157	36	22	M50	SQ
9210B60	1/4	6.0	0.78	0	2.5	2	0.6	3.5	3	2	40	BR	BN	2.1	18	12	M45.1	SQ
9210B61	1/4	6.0	0.80	0	5	4.5	3.5	11	11	11	40	BR	BN	157	36	22	M50	SQ

2/2 WAY NORMALLY OPEN

9220B15	1/4	1.5	0.07	0	22	21	17	25	22	18	20	BR	BN	2.1	18	12	M45.1	SQ
9220B25	1/4	2.5	0.11	0	10	9	8	12	10	8	20	BR	BN	2.1	18	12	M45.1	SQ
9220B30	1/4	3.0	0.13	0	7	5	3.5	8	6	4	20	BR	BN	2.1	18	12	M45.1	SQ

2/2 WAY NORMALLY CLOSED

9210B2510	3/8	2.5	0.11	0	17	9	4.5	20	15	12	40	CF8	BN	172	18	12	M45.1	SQ
9210B3010	3/8	3.0	0.13	0	12	6	3	12	10	7	40	CF8	BN	172	18	12	M45.1	SQ
9210B3110	3/8	3.0	0.15	0	15	12	9	25	22	20	40	CF8	BN	164	36	22	M50	SQ
9210B4010	3/8	4.0	0.40	0	5	3.5	1.5	5	4.5	3.5	40	CF8	BN	172	18	12	M45.1	SQ
9210B4110	3/8	4.0	0.43	0	10	8	8	20	18	18	40	CF8	BN	164	36	22	M50	SQ
9210B4510	3/8	4.5	0.60	0	3.5	2.5	1	4.5	4	3	40	CF8	BN	172	18	12	M45.1	SQ
9210B4610	3/8	4.5	0.62	0	8	6	4	18	16	16	40	CF8	BN	164	36	22	M50	SQ
9210B6010	3/8	6.0	0.78	0	2.5	2	0.6	3.5	3	2	40	CF8	BN	172	18	12	M45.1	SQ
9210B6110	3/8	6.0	0.80	0	5	4.5	3.5	11	11	11	40	CF8	BN	164	36	22	M50	SQ
9210B8110	3/8	8.0	1.10	0	2	1.8	1	3	2.7	2.5	40	CF8	BN	164	36	22	M50	SQ

2/2 WAY NORMALLY OPEN

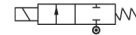
9220B2610	3/8	2.5	0.11	0	10	9	7	12	10	8	20	CF8	BN	164	36	22	M50	SQ
9220B3110	3/8	3.0	0.13	0	7	5	3.5	8	6	4	20	CF8	BN	164	36	22	M50	SQ

❖ For Higher port sizes in normally open design use different construction only.

ELECTRICAL REFERENCE

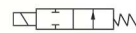
Coil Type	Power Consumption & Watt Rating			Class of Insulation	Protection
	AC		DC		
	VA Inrush	VA Holding	Watts		
M 45.1 SQ	25	18	12	H	GP/WP IP-67
M 50 SQ	50	36	22	H	GP/WP IP-67
M 45.1 RD	25	18	12	H	GP/WP IP-67
M 50 RD	50	36	22	H	GP/WP IP-67
M 45.1 FLP IIC	25	18	12	H	IS 2148-2004 Group IIA, IIB, IIC. IS12063-1987 IP-67. IS 4012-1967Dustproof / IS 4013-1967 Dusttight. IS/IEC 60079-1:2007, Group IIC. IS/IEC 60529-2001 IP-67
M 50 FLP IIC	50	36	22	H	

2/2 WAY NORMALLY CLOSED



Catalogue Number	Pipe Size Inch	Orifice Size mm	Flow Factor M ³ /hr. Kv	Minimum Pressure bar	Maximum Operating Pressure (bar)						BTP bar	Material		Constr. Ref.	VA Rating AC	Watt Rating DC	Coil Type	Housing
					AC			DC				Body	Seat					
					Air/Gas	Water	Light Oil	Air/Gas	Water	Light Oil								
9210B4115	1/2	4.0	0.43	0	10	8	8	20	18	18	40	CF8	BN	164	36	22	M50	SQ
9210B6115	1/2	6.0	0.80	0	5	4.5	3.5	11	11	11	40	CF8	BN	164	36	22	M50	SQ
9210B8115	1/2	8.0	1.30	0	2	1.8	1	3	2.7	2.5	40	CF8	BN	164	36	22	M50	SQ
9210B9115	1/2	9.0	1.50	0	1.8	1	0.5	2.5	2	1	40	CF8	BN	164	36	22	M50	SQ
9210B1115	1/2	11.0	2.00	0	1	0.6	0.3	1	1	0.5	40	CF8	BN	164	36	22	M50	SQ

2/2 WAY NORMALLY OPEN



9220B3115	1/2	3.0	0.13	0	7	5	3.5	8	6	4	20	CF8	BN	172	18	12	M50	SQ
-----------	-----	-----	------	---	---	---	-----	---	---	---	----	-----	----	-----	----	----	-----	----

DIMENSIONS (IN MM)

CONSTRUCTION REF. NO. :2.1

60 (RADIALLY), 45, 19C/C, 2 NOS. M6x6 DEEP MOUNTING HOLES

BRASS BODY

CONSTRUCTION REF. NO. :157

63 (RADIALLY), 48, 19C/C, 2 NOS. M6x6 DEEP MOUNTING HOLES

BRASS BODY

CONSTRUCTION REF. NO. :2.2

60 (RADIALLY), 18C/C, 2 NOS. M6x1Px9 DEEP FOR MOUNTING, 16.2C/C, 45

SS BODY

CONSTRUCTION REF. NO. :165

63 (RADIALLY), 18C/C, 2 NOS. M6x1Px9 DEEP FOR MOUNTING, 16.2C/C, 48

SS BODY

CONSTRUCTION REF. NO. :172

60 (RADIALLY), 45, 1/2" NPT FEMALE, A FOR 1/2", 22C/C, 2 NOS. M6x6 DEEP MOUNTING HOLES

SS BODY With MO

CONSTRUCTION REF. NO. :164

63 (RADIALLY), 48, 22C/C, 2 NOS. M6x6 DEEP MOUNTING HOLES

SS BODY Without MO

Valve fitted with M45 / M50 RD GP coil - General purpose enclosure as per IP-20

E (RADIALLY), F, G (APPROX.), 1/2" NPT

Valve fitted with M45 / M50 FLP IIC coil Flameproof metallic enclosure as per IS/IEC 60529-2001 IP-67 IS 2148-2004 Group IIA,IIB,IIC.

E (RADIALLY), F, G (APPROX.), 1/2" NPT

☐ Valve fitted with M45 SQ. coil. ☒ Valve fitted with M50 SQ. coil.

Catalogue Number	Pipe Size Inch	Constr. Ref.	A	B	C	Weight (Approx.) Kgs. ♂	E (RADIALLY)			F			G (APPROX.)		
							RD GP	RD WP	FLP	RD GP	RD WP	FLP	RD GP	RD WP	FLP
9210B15-30/40/45/60	1/4	2.1	39.5	10.5	85	0.518	60	96	96	48	62	80	72	80	150
9210B31/41/46/61	1/4	157	39.5	10.5	95	0.615	66	96	96	57	68	80	86	91	156
9220B15-30	1/4	2.1	39.5	10.5	85	0.518	60	96	96	48	62	80	72	80	150
9210B15-30/40/45/60	1/4	2.2	51	12.6	78	0.503	60	96	96	48	62	80	65	73	143
9210B31/41/46/61	1/4	165	51	12.6	108	0.605	66	96	96	57	68	80	79	104	163
9220B15-30	1/4	2.2	51	12.6	78	0.503	60	96	96	48	62	80	65	73	143
9210B2510-6010	3/8	172	68	16	93	0.583	60	96	96	48	62	80	80	88	158
9210B3110-8110	3/8	164	54	16	103	0.680	66	96	96	57	68	80	94	99	164
9220B 2610-3110	3/8	172	68	16	103	0.744	66	96	96	57	62	80	94	99	164
9210B4115-1115	1/2	164	54	16	103	0.690	66	96	96	57	68	80	94	99	164
9220B3115	1/2	172	54	16	93	0.593	60	96	96	48	62	80	80	88	158

◆ 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.

