

2/2-Way Pilot Operated, Flanged Piston Type, Solenoid Valves.

DATA SHEET
9160PXX/CF8/CF8M
9162PXX/CF8/CF8M

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

SPECIFICATIONS

Sizes	: 25mm (1") to 100mm (4").
End Connections	: Flanged to ASA 150 RF, Optional-Drilled to other standards.
Face to Face	: As per DIN 3202 Part I Series F1.
Construction-Body	: Standard- SS ASTM A351 Gr. CF8, upto 4" (100 mm). All in investment casting with integrated Stainless Steel Seat.
Cover & Piston	: SS ASTM-A351 Gr. CF8/CF8M.
-Seat	: PTFE.
Differential Pressure	: 2 to 25 bar (Refer specs. table).
Temperature of fluid	: -5°C to 120°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 upto 155°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, gas, light oil, water.
Feature	: Manual override (Only for 9160P). No Manual Override in 9162P Design
Sales Point	: Reliable & maintenance free, On-Off valve in SS (CF8) with flanged Construction.

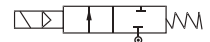


Application: Furnaces, boilers, textile machinery, treatment plant, ash handling plant, Sugar machinery plant, etc.

Mounting: In horizontal pipeline; keeping solenoid upright & vertical.

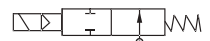
Note: USE OF FILTER IN THE INLET SIDE IS HIGHLY RECOMMENDED.

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 Type	Housing
					AC			DC				Body	Seat		AC	DC	Type			
					Air/Gas	Water	Light Oil	Air/Gas	Water	Light Oil										
9160P255	1	25	11	2	24	22	20	25	22	20	40	CF8	PTFE	34.1	18	12	M45.1	SQ		
9160P405	1 1/2	35	23	2	24	22	20	25	22	20	40	CF8	PTFE	34.1	18	12	M45.1	SQ		
9160P505	2	50	39	2	20	18	16	20	18	16	40	CF8	PTFE	34.1	18	12	M45.1	SQ		
9160P655	2 1/2	63	46	2	18	16	14	20	18	14	40	CF8	PTFE	162	36	22	M50	SQ		
9160P755	3	76	64	2	18	16	14	18	16	14	40	CF8	PTFE	162	36	22	M50	SQ		
9160P1005	4	94	101	2	14	14	12	14	14	12	40	CF8	PTFE	162	36	22	M50	SQ		

2/2 WAY NORMALLY OPEN



9162P255	1	25	11	2	22	20	18	23	20	18	40	CF8	PTFE	34.1	18	12	M45.1	SQ
9162P405	1 1/2	35	23	2	22	20	18	23	20	18	40	CF8	PTFE	34.1	18	12	M45.1	SQ
9162P505	2	50	39	2	18	16	14	18	16	14	40	CF8	PTFE	34.1	18	12	M45.1	SQ
9162P655	2 1/2	63	46	2	16	14	12	18	16	12	40	CF8	PTFE	162	36	22	M50	SQ
9162P755	3	76	64	2	16	14	12	16	14	12	40	CF8	PTFE	162	36	22	M50	SQ
9162P1005	4	94	101	2	8	6	4	8	6	4	40	CF8	PTFE	162	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 DIN 3202	B	C	ØD	Weight (Approx.) Kgs. ♦	Valve fitted with M45 / M50 RD GP coil - General purpose enclosure as per IP-20
Normally Closed	Normally Open								
9160P255	9162P255	1	34.1	160	54	158	105	5.900	
9160P405	9162P405	1 ½	34.1	200	64	166	135	8.600	
9160P505	9162P505	2	34.1	230	76	176	160	13.800	
9160P655	9162P655	2 ½	162	290	89	208	180	20.600	
9160P755	9162P755	3	162	310	96	223	200	25.600	
9160P1005	9162P1005	4	162	350	115	238	225	44.000	

CONSTRUCTION REF. NO.: 34.1			CONSTRUCTION REF. NO.: 162		

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
9160P255	9162P255	1	34.1	60	96	96	48	62	80	145	153	223
9160P405	9162P405	1 ½	34.1	60	96	96	48	62	80	153	161	231
9160P505	9162P505	2	34.1	60	96	96	48	62	80	163	171	241
9160P655	9162P655	2 ½	162	66	96	96	57	68	80	199	205	269
9160P755	9162P755	3	162	66	96	96	57	68	80	214	219	284
9160P1005	9162P1005	4	162	66	96	96	57	68	80	229	234	299

♦ 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.

2/2-Way Pilot Operated, Flanged Piston Type, Solenoid Valves.

DATA SHEET
9160PXX/SGI
9162PXX/SGI

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

SPECIFICATIONS

Sizes	: 25mm (1") to 150mm (6").
End Connections	: Flanged to ASA 150 RF, Optional-Drilled to other standards.
Face to Face	: As per DIN 3202 Part I Series F1.
Construction-Body	: Standard-SG (DI) IS 1865-400/15, with Stainless Steel Seat.
Sleeve & Piston	: SS ASTM-A351 Gr. CF8.
-Seat	: PTFE.
Differential Pressure	: 2 to 25 bar (Refer specs. table).
Temperature of fluid	: -5°C to 120°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 upto 155°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, gas, light oil, water.
Feature	: Manual override (Only for 9160P). No Manual Override in 9162P Design
Sales Point	: Reliable & maintenance free, On-Off valve in SGI(DI) with flanged Construction.



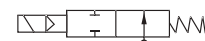
- Application:** Furnaces, boilers, textile machinery, treatment plant, ash handling plant, Sugar machinery plant, etc.
- Mounting:** In horizontal pipeline; keeping solenoid upright & vertical.
- Note:** 1)USE OF FILTER IN THE INLET SIDE IS HIGHLY RECOMMENDED.
2)HYTREL DIAPHRAGMS ARE MANUFACTURED IN HOUSE WITH OUR PROPRIETARY FORMULAS.

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								
9160P255	1	25	11	2	24	22	20	25	22	20	26	SGI	PTFE	34.1	18	12	M45.1	SQ
9160P405	1 1/2	35	23	2	24	22	20	25	22	20	26	SGI	PTFE	34.1	18	12	M45.1	SQ
9160P505	2	50	39	2	20	18	16	20	18	16	26	SGI	PTFE	34.1	18	12	M45.1	SQ
9160P655	2 1/2	63	46	2	18	16	14	20	18	14	26	SGI	PTFE	162	36	22	M50	SQ
9160P755	3	76	64	2	18	16	14	18	16	14	26	SGI	PTFE	162	36	22	M50	SQ
9160P1005	4	94	101	2	14	14	12	14	14	12	26	SGI	PTFE	162	36	22	M50	SQ
9160P1505	6	146	230	2	12	8	8	12	8	8	26	SGI	PTFE	162	36	22	M50	SQ

2/2 WAY NORMALLY OPEN

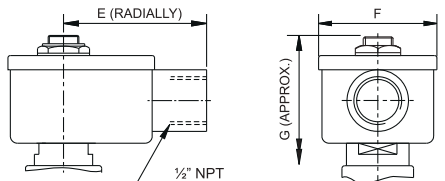
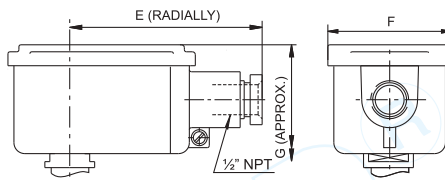
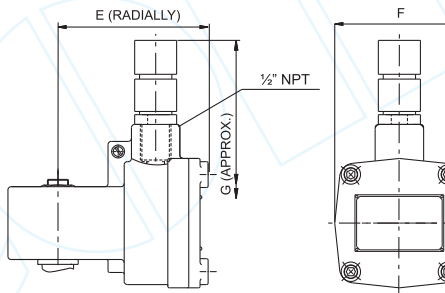


9162P255	1	25	11	2	22	20	18	23	20	18	26	SGI	PTFE	34.1	18	12	M45.1	SQ
9162P405	1 1/2	35	23	2	22	20	18	23	20	18	26	SGI	PTFE	34.1	18	12	M45.1	SQ
9162P505	2	50	39	2	18	16	14	18	16	14	26	SGI	PTFE	34.1	18	12	M45.1	SQ
9162P655	2 1/2	63	46	2	16	14	12	18	16	12	26	SGI	PTFE	162	36	22	M50	SQ
9162P755	3	76	64	2	16	14	12	16	14	12	26	SGI	PTFE	162	36	22	M50	SQ
9162P1005	4	94	101	2	8	6	4	8	6	4	26	SGI	PTFE	162	36	22	M50	SQ
9162P1505	6	146	230	2	8	5	3	8	5	3	26	SGI	PTFE	162	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 DIN 3202	B	C	ØD	Weight (Approx.)	Valve fitted with M45 / M50 RD GP coil - General purpose enclosure as per IP-20 
Normally Closed	Normally Open							Kgs. ♦	
9160P255	9162P255	1	34.1	160	54	158	105	5.900	Valve fitted with M45 / M50 RD WP coil - Waterproof metallic enclosure as per IS12063-1987 IP-67. 
9160P405	9162P405	1 ½	34.1	200	64	166	135	8.600	
9160P505	9162P505	2	34.1	230	76	176	160	13.800	Valve fitted with M45 / M50 FLP IIC coil - Flameproof metallic enclosure as per IS/IEC-60079-1:2007. 
9160P655	9162P655	2 ½	162	290	89	208	180	20.600	
9160P755	9162P755	3	162	310	96	223	200	25.600	
9160P1005	9162P1005	4	162	350	115	238	225	44.000	
9160P1505	9162P1505	6	162	480	140	268	316	63.000	

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
9160P255	9162P255	1	34.1	60	96	96	48	62	80	145	153	223
9160P405	9162P405	1 ½	34.1	60	96	96	48	62	80	153	161	231
9160P505	9162P505	2	34.1	60	96	96	48	62	80	163	171	241
9160P655	9162P655	2 ½	162	66	96	96	57	68	80	199	205	269
9160P755	9162P755	3	162	66	96	96	57	68	80	214	219	284
9160P1005	9162P1005	4	162	66	96	96	57	68	80	229	234	299
9160P1505	9162P1505	6	162	66	96	96	57	68	80	259	264	329

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

Note:

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