

SC9 Series Manifold Valves

Table of Contents

- Page 1 – General Overview
- Page 2 – Valve Specifications
- Page 3 – Part Number Selection
- Pages 4-5 – Drawings

Construction

Wetted Components		
Body	303 SS	Brass
Operator Tube	303 SS	Brass
Plunger & Tube Head	IJ117	
Springs	304 Stainless Steel	
Shading Ring	Copper	
Seals	FKM (Std.), Nitrile, EPDM, FFKM, PTFE	

Coil Enclosures

- G Coil - 18" Lead Wires (IP65)
- Y Coil – DIN Form B – 11mm (IP65)
- See Engineering Guide for additional coil enclosures

Electrical

Series	Power Consumption	
	DC (watts)	AC (volt-amps)
SC9	4	6.5

- All Coils Rated for 100% Duty Cycle
- Voltage Tolerance: ±10% from nominal

Rebuild Kits

Seal Material	Part Number	
	Stainless Steel	Brass
FFKM	KSC9102ADA5	n/a
EPDM	KSC9102CDA5	KSC9102CBA5
Nitrile	KSC9102NDA5	KSC9102NBA5
PTFE	KSC9102TDA5	KSC9102TBA5
FKM	KSC9102VDA5	KSC9102VBA5



Ambient Temperature (Nominal)

- 32°F to 140°F (0°C to 60°C)

Fluid Temperature by Seal Material

- FKM: -20°F to 230°F (-29°C to 110°C)
- Nitrile: -40°F to 180°F (-40°C to 82°C)
- EPDM: -70°F to 295°F (-57°C to 146°C)
- FFKM: -67°F to 366°F (-55°C to 186°C)
- PTFE: -320°F to 366°F (-196°C to 186°C)

*Brass body valves limited to 230°F (110°C) max.

Approvals

- cURus (MH17997)
- CE Certified





2-Way • Normally Closed & Normally Open • 1/8" & 1/4" NPT

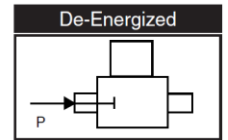
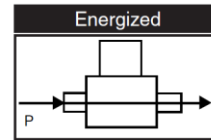
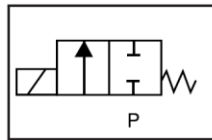
SC9 Series Manifold Valves

2 - 6 Stations • Subminiature Direct Acting • Stainless Steel & Brass

Normally Closed Manifold Specifications (Closed when de-energized)

Pipe Size (NPT)	Orifice Size (mm)	Flow Factor (Cv)	Operating Pressure Differential (PSI)			Part Number ^① (Shown as 2-Station with 120 VAC DIN Coil and FKM Seals)	
			Min.	Maximum		Stainless Steel	Brass
				Air/Gas & Liquid			
				AC	DC		
1/8	1.0	0.035	0	580	580	SC921YH02VDAA1	SC921YH02VBAA1
	1.2	0.046	0	580	360	SC921YH02VDAA2	SC921YH02VBAA2
	1.6	0.084	0	435	160	SC921YH02VDAA3	SC921YH02VBAA3
	2.0	0.112	0	261	116	SC921YH02VDAA4	SC921YH02VBAA4
	2.4	0.140	0	203	87	SC921YH02VDAA5	SC921YH02VBAA5
	3.0	0.280	0	116	36	SC921YH02VDAA6	SC921YH02VBAA6
1/4	1.0	0.035	0	580	580	SC921YH02VDBA1	SC921YH02VBBA1
	1.2	0.046	0	580	360	SC921YH02VDBA2	SC921YH02VBBA2
	1.6	0.084	0	435	160	SC921YH02VDBA3	SC921YH02VBBA3
	2.0	0.112	0	261	116	SC921YH02VDBA4	SC921YH02VBBA4
	2.4	0.140	0	203	87	SC921YH02VDBA5	SC921YH02VBBA5
	3.0	0.280	0	116	36	SC921YH02VDBA6	SC921YH02VBBA6

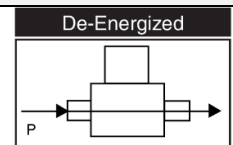
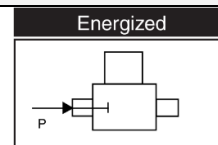
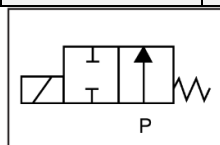
- ① See part number selection guide for additional voltages and variations.
2. MRP = 5X MOPD



Normally Open Manifold Specifications (Open when de-energized)

Pipe Size (NPT)	Orifice Size (mm)	Flow Factor (Cv)	Operating Pressure Differential (PSI)			Part Number ^① (Shown as 2-Station with 120 VAC DIN Coil and FKM Seals)	
			Min.	Maximum		Stainless Steel	Brass
				Air/Gas & Liquid			
				AC	DC		
1/8	1.2	0.046	0	217	217	SC922YH02VDAA2	SC922YH02VBAA2
	1.6	0.084	0	145	145	SC922YH02VDAA3	SC922YH02VBAA3
	2.0	0.112	0	95	95	SC922YH02VDAA4	SC922YH02VBAA4
	2.4	0.140	0	55	55	SC922YH02VDAA5	SC922YH02VBAA5
1/4	1.2	0.046	0	217	217	SC922YH02VDBA2	SC922YH02VBBA2
	1.6	0.084	0	145	145	SC922YH02VDBA3	SC922YH02VBBA3
	2.0	0.112	0	95	95	SC922YH02VDBA4	SC922YH02VBBA4
	2.4	0.140	0	55	55	SC922YH02VDBA5	SC922YH02VBBA5

- ① See part number selection guide for additional voltages and variations.
2. MRP = 5X MOPD



800-828-0484

www.gcvalves.com

sales@gcvalves.com



2-Way • Normally Closed & Normally Open • 1/8" & 1/4" NPT

SC9 Series Manifold Valves

2 - 6 Stations • Subminiature Direct Acting • Stainless Steel & Brass

SC9 Manifold Series Part Number Selection

Valve Series	Number of Stations	Operating Mode	Coil Housing	Coil Class	Voltage	Seal Material	Body Material/ Pipe Size	Orifice Size
①	②	③	④	⑤	⑥	⑦	⑧	⑨
SC9	2	1	Y	H	02	V	BA	A5

① **Valve Series**

SC9	Subminiature Direct Acting
-----	----------------------------

② **Number of Stations**

2	Two Stations
3	Three Stations
4	Four Stations
5	Five Stations
6	Six Stations

③ **Operating Mode**

1	2-Way Normally Closed (NC)
2	2-Way Normally Open (NO)

④ **Coil Type**

G	18" Lead Wires
Y	DIN (Form B – 11mm)

⑤ **Coil Class**

H	H Class Coil
---	--------------

⑥ **Voltage**

02	120 VAC, 60 Hz; 110 VAC, 50 Hz
03	208 VAC, 60 Hz
04	240 VAC, 60 Hz; 220 VAC, 50 Hz
24	24 VAC, 50/60 Hz
15	12 VDC
16	24 VDC

⑦ **Seal Material**

A	FFKM (Not available with 3.0 mm orifice)
C	EPDM
N	Nitrile
T	PTFE
V	FKM

⑧ **Body Material/Pipe Size**

BA	Brass, 1/8" NPT
BB	Brass, 1/4" NPT
DA	303 Stainless Steel, 1/8" NPT
DB	303 Stainless Steel, 1/4" NPT

⑨ **Orifice Size**

A1	1.0 mm
A2	1.2 mm
A3	1.6 mm
A4	2.0 mm
A5	2.4 mm (Standard)
A6	3.0 mm

⑩ **Optional Suffix**

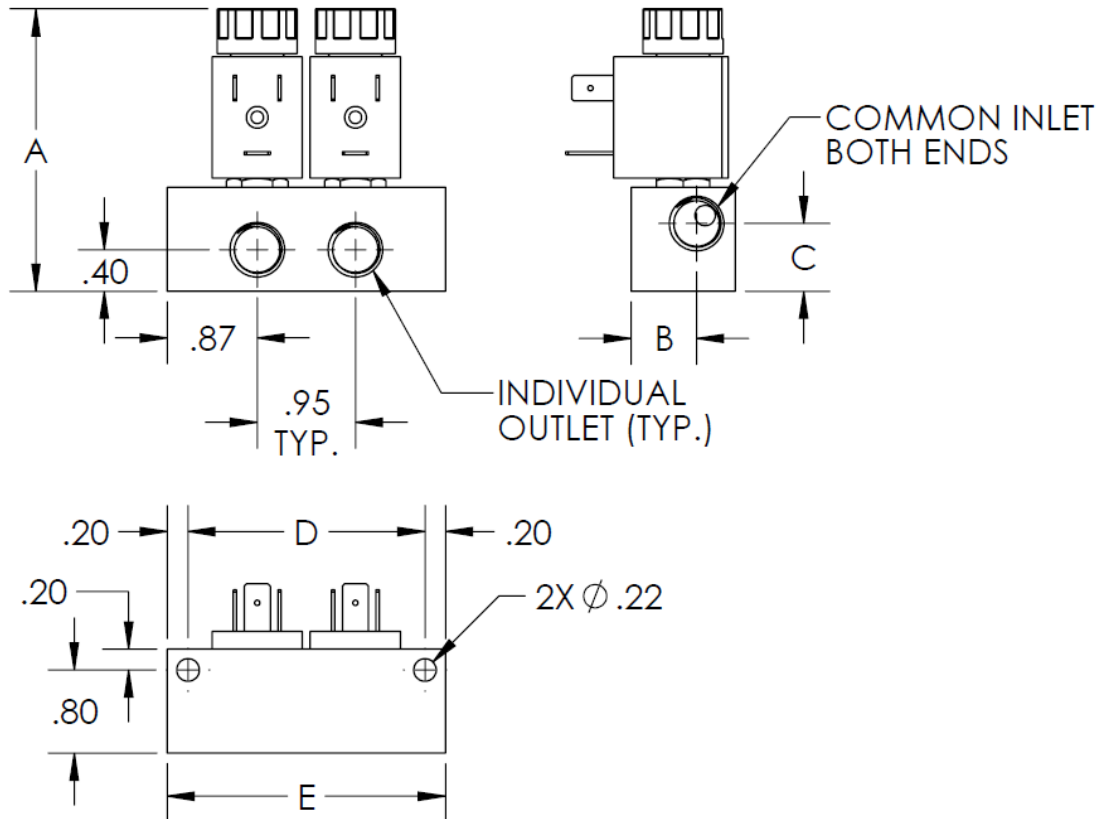
(blank)	No Option
F	Metering (1/4" Manifolds Only)
N	Cleaned for Oxygen Service
P	Nickel Plated Plunger & Tube

SC9 Series Manifold Valves

2 - 6 Stations • Subminiature Direct Acting • Stainless Steel & Brass

Drawing 1

SC9 Manifold Series



Pipe Size	Series/ # of Stations	A		B	C	D	E	Weight
		Normally Closed (SC9#1)	Normally Open (SC9#2)					
1/8" NPT	SC92	2.72	2.80	0.71	0.73	2.28	2.68	0.9 lb
	SC93	2.72	2.80	0.71	0.73	3.22	3.62	1.4 lb
	SC94	2.72	2.80	0.71	0.73	4.17	4.57	1.9 lb
	SC95	2.72	2.80	0.71	0.73	5.12	5.51	2.4 lb
	SC96	2.72	2.80	0.71	0.73	6.06	6.46	2.9 lb
1/4" NPT	SC92	2.72	2.80	0.64	0.65	2.28	2.68	1.0 lb
	SC93	2.72	2.80	0.64	0.65	3.22	3.62	1.5 lb
	SC94	2.72	2.80	0.64	0.65	4.17	4.57	2.0 lb
	SC95	2.72	2.80	0.64	0.65	5.12	5.51	2.5 lb
	SC96	2.72	2.80	0.64	0.65	6.06	6.46	3.0 lb

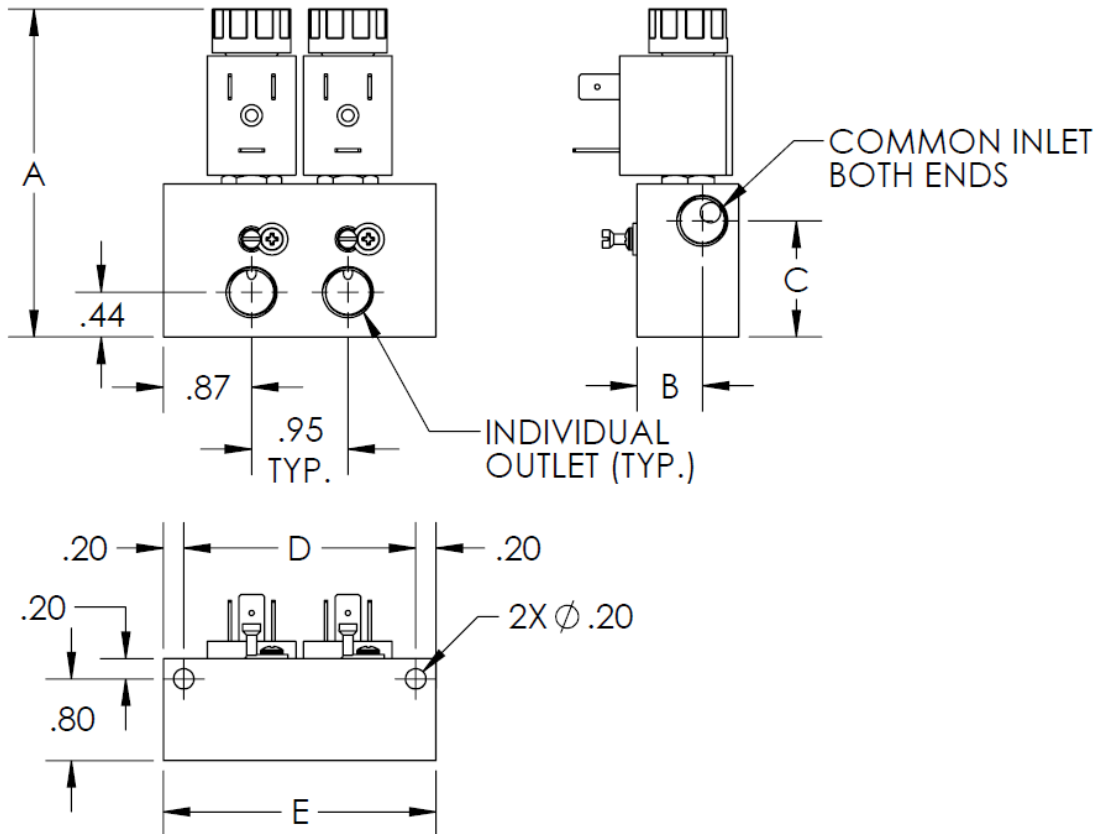
- SC9 series manifold valves can be mounted in any position.
- Dimensions shown in inches.
- Drawing not to scale.

SC9 Series Manifold Valves

2 - 6 Stations • Subminiature Direct Acting • Stainless Steel & Brass

Drawing 2

SC9 Manifold Series with Metering ("F" Suffix)



Pipe Size	Series/ # of Stations	A		B	C	D	E	Weight
		Normally Closed (SC9#1)	Normally Open (SC9#2)					
1/4" NPT	SC92	3.22	3.30	0.64	1.14	2.28	2.68	1.5 lb
	SC93	3.22	3.30	0.64	1.14	3.22	3.62	2.0 lb
	SC94	3.22	3.30	0.64	1.14	4.17	4.57	2.5 lb
	SC95	3.22	3.30	0.64	1.14	5.12	5.51	3.0 lb
	SC96	3.22	3.30	0.64	1.14	6.06	6.46	3.5 lb

- SC9 series manifold valves can be mounted in any position.
- Dimensions shown in inches.
- Drawing not to scale.