SC912 A1-A5 (AC/)DC -Service and Installation -

10/27/2023 Rev.0

DESCRIPTION
The SC912 Solenoid Valves are 2-way, normally open, direct acting, general purpose valves. All stainless steel or brass bodies with synthetic seating and sealing materials make them suitable for use with a variety of liquids, oils, and gases. Valves may be mounted in any position.

OPERATION
SC912 Valves are normally open (N.O.) and closed when electrically energized.

SPECIFICATIONS
Use SC912 Valves within the specified operating ranges as indicated on the nameplate and in the complete Catalog Number. (max. psi, voltage, cycle, max. media temperature at F ambient, Cv factor, etc.).

OPERATING TEMPERATURES

Ambient	Elastomer	Fluid (EPR)
32º - 125º F	C - EPR	32º - 295º F
32º - 125º F	N - Nitrile	32º - 180º F
32º - 125º F	V - FKM	32º - 230º F

For other applications, consult the factory.

INSTALLATION
Check valve specifications to make sure of proper application.
1. Clear all lines of foreign matter.
2. Valves are multipoised and may be mounted in any position. Flow must be in the direction indicated on the valve body. If sediment is a problem, install a fine mesh strainer having adequate capacity ahead of the valve.
3. Do not use the solenoid housing as a handle. Apply thread seal to the male threads only.
4. Provide clearance for solenoid removal.
5. Wire in accordance with applicable local and national electrical codes.

MAINTENANCE

COIL REPLACEMENT
Turn off the electrical power supply to the solenoid before disconnecting the coil lead wires.

It is not necessary to remove the valve from the pipeline. Follow Steps 1, 2 and 3 under VALVE DISASSEMBLY. Disassemble solenoid, taking care to note the exact order of placement and quantity parts.

Incorrect reassembly can cause coil burnout. At all times take care not to nick, dent or damage plunger tube.

CLEANING

Cleaning fluid must be compatible with all valve components.

It is recommended that SC912 Valves be cleaned on a routine basis by qualified personnel. Valves should be cleaned where flow media or service conditions may determine the life of the valve. Apply correct voltage, if excessive leakage occurs or if the operation is sluggish, the unit must be cleaned.

PARTS
The charts that follow cover replaceable coil part numbers and Rebuild kits for most SC912 valves.

When ordering parts/kits, specify Catalog Number, Serial Number, and Part Name. If your valve's Catalog Number is not listed, obtain the complete Serial Number, and consult the factory.

REBUILD KIT
The Rebuild Kit contains a plunger/spring/seat disc assembly, plunger tube assembly, and O-rings.

Note – The below kits may be used on valves with metering (F) or without metering.

REBUILD $ REPAIR KIT CHART

Valve	Rebuild Kits	Repair Kits
SC912YN__CB___(F)	KSC9202CBA5	-
SC912YN__CE___	KSC9202CBA5	-
SC912YN__CF___	KSC9202CDA5	-
SC912YN__CD___(F)	KSC9202CDA5	-
SC912YN__CR___(F)	KSC9202CBA5	-
SC912YN__CS___(F)	KSC9202CDA5	-
SC912YN__NB___(F)	KSC9202NBA5	-
SC912YN__NE___	KSC9202NBA5	-
SC912YN__NF___	KSC9202NDA5	-
SC912YN__ND___(F)	KSC9202NDA5	-
SC912YN__NR___(F)	KSC9202NBA5	-
SC912YN__NS___(F)	KSC9202NDA5	-
SC912YN__VB___(F)	KSC9202VBA5	-
SC912YN__VE___	KSC9202VBA5	-
SC912YN__VF___	KSC9202VDA5	-
SC912YN__VD___(F)	KSC9202VDA5	-
SC912YN__VR___(F)	KSC9202VBA5	-
SC912YN__VS___(F)	KSC9202VDA5	-

COIL CHART

Valve	Voltage	DIN Coil	Lead Wire
SC911YN02_____	120V 50/60	C944	C944L
SC911YN24_____	24V 50/60	C987	C987L
SC911YN15_____	12 VDC 4W	C999	C999L
SC911YN44_____	24 VDC 4W	C926	C926L

GC Valves, LLC. 456 Crompton St., Charlotte, NC 28241
Ph: 704-588-3300, Fx: 704-973-9526, Service@gcvalves.com

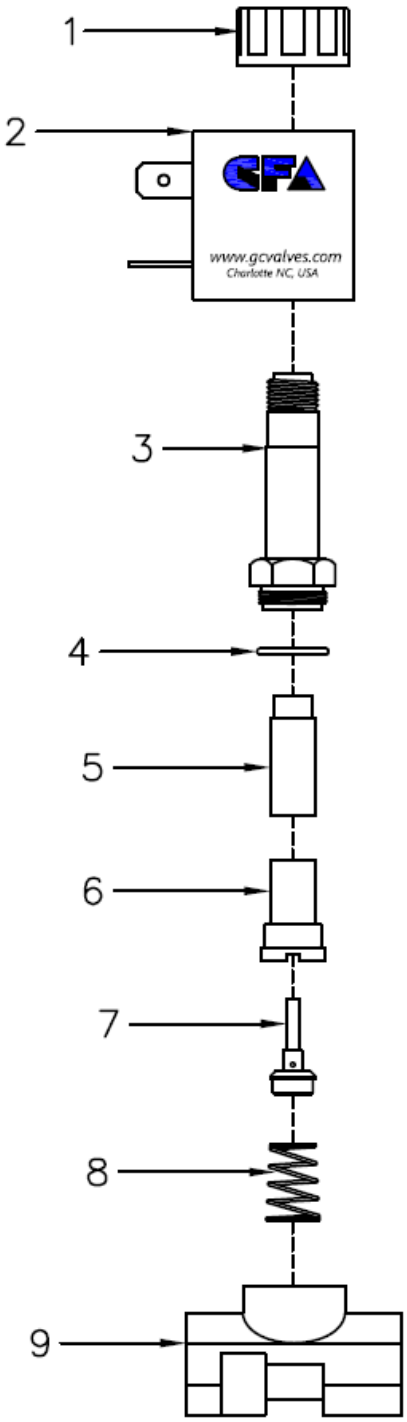
DISASSEMBLY AND REBUILD KIT INSTALLATION

WARNING

Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

---

1. Unscrew the top nut (1).
2. Lift off the coil (2) from plunger tube (3).
3. Do not damage the solenoid assembly.
5. Use 13mm deep socket or similar tool to remove plunger tube (3). Do not nick dent or damage plunger tube (3) or valve seating surfaces.
6. Hold plunger tube (3) in position when removing from valve body (9) to prevent loss of internal parts.
7. Carefully remove plunger (5), tube head (6), seat retainer (7), and spring (8).
8. Check seating surfaces on the seat disc (7) and valve body (9) for damage or wear.
9. Replace items (5), (6), (7), and other parts as necessary. Consult the "REBUILD & REPAIR KIT CHART" for the correct kit part number.
10. Re-assemble in reverse order from above taking care to properly install items (3) through (8).
11. Tighten plunger tube (3) to 25 In/Lbs.
12. Replace coil (2) and top nut (1). Tighten to approximately 15 In/Lbs.
12. Re-connect electrical and test for proper operation.



TROUBLESHOOTING

If the valve fails to open, check the voltage against the rating on the nameplate, check the voltage at solenoid lead connections, and check the control circuit and solenoid coil for burnout. If the valve fails to close, check the condition of the synthetic seat disc. Check for a damaged spring. The valve must be free of dirt to ensure tight shutoff. If dirt is a problem, install a fine mesh strainer to ensure proper closing and trouble-free operation.

Buzzing or chattering can be caused by low voltage, dirt, or chips between the top of the plunger and the tube head. Check voltage, clean operator assembly, and valve body assembly.