Asco 20229

ASCO 8210G094-120/60,110/50 Solenoid Valve Instruction Manual

Model: 20229

1. Product Overview

The ASCO 8210G094-120/60,110/50 is a brass body, pilot-operated, general service solenoid valve designed to permit and shut off fluid flow. This 2-way valve operates as Normally Closed (NC), meaning it is closed when de-energized and opens when energized. It features a durable brass construction and Nitrile Butylene sealing, suitable for various applications including liquid, corrosive, and air/inert gas service. Key features include long service life, low internal leakage, and high flow capabilities.

Figure 1: ASCO 8210G094-120/60,110/50 Brass Body Pilot Operated General Service Solenoid Valve. This image displays the complete valve assembly, featuring the brass body with threaded pipe connections and the green solenoid coil with electrical leads.

2. Safety Precautions

Always observe the following safety precautions to prevent personal injury or damage to the equipment:

- Disconnect power before installation, maintenance, or troubleshooting.
- Ensure the operating pressure and temperature are within the valve's specified limits.
- Use appropriate personal protective equipment (PPE) during installation and maintenance.
- Verify proper electrical grounding and wiring according to local codes and standards.
- Do not exceed the maximum operating pressure of 150 psi.

3. Installation

3.1 Mounting

- Mount the valve with the solenoid coil in the upright vertical position for optimal performance and life.
- Ensure sufficient clearance for maintenance and coil replacement.

3.2 Piping Connections

- Clean pipe threads and internal valve parts of any foreign matter.
- Apply pipe sealant sparingly to male pipe threads only to prevent material from entering the valve.
- Use a wrench on the valve body when making pipe connections to avoid twisting or damaging the valve.
- Ensure the flow direction matches the arrow on the valve body.

3.3 Electrical Connections

- Connect the valve to the specified voltage (120/60V, 110/50V).
- Ensure all electrical connections are secure and insulated to prevent short circuits.
- Follow all applicable electrical codes and standards.

4. Operation

The ASCO 8210G094-120/60,110/50 is a 2-way, Normally Closed (NC) solenoid valve. This means:

- When electrical power is **not** applied to the solenoid coil, the valve remains in its closed position, preventing fluid flow.
- When electrical power **is** applied to the solenoid coil, the coil energizes, opening the valve and allowing fluid to flow through.
- The valve will return to its closed position once power is removed.

5. Maintenance

Regular maintenance ensures optimal performance and extends the life of your solenoid valve.

- **Periodic Inspection:** Regularly inspect the valve for any signs of leakage, corrosion, or damage to the coil or body.

- **Cleaning:** If the valve is exposed to dirty media, periodic cleaning of internal components may be necessary. Disassemble the valve carefully, clean parts with a suitable solvent, and reassemble with new gaskets if required.
- **Coil Replacement:** The solenoid coil is a wear item and may eventually fail. If the valve fails to operate electrically, the coil may need replacement. The coil is designed for easy replacement. Ensure the replacement coil matches the original specifications (voltage, frequency).
- **Seal Replacement:** Over time, the Nitrile Butylene seals may degrade. If internal or external leakage occurs, consider replacing the sealing components.

Always disconnect power and depressurize the system before performing any maintenance.

6. Troubleshooting Guide

Problem	Possible Cause	Solution
Valve does not open when energized	• No power to coil • Incorrect voltage • Damaged coil • Obstruction in valve	• Check electrical connections and power supply • Verify correct voltage supply • Replace coil • Disassemble and clean valve internals
Valve does not close when de-energized	• Debris preventing closure • Worn seals • Coil remains energized	• Disassemble and clean valve internals • Replace seals • Check electrical wiring for constant power
External leakage	• Loose pipe connections • Damaged valve body or seals	• Tighten connections, reapply sealant if necessary • Inspect and replace damaged parts or seals
Reduced flow	• Partial obstruction • Insufficient pressure differential	• Clean valve internals • Verify system pressure meets valve requirements

7. Technical Specifications

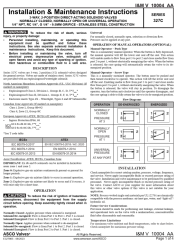
Specification	Value
Model Number	20229
Part Number	8210G094-120/60,110/50
Valve Type	Solenoid Valve
Operation	2-Way, Normally Closed

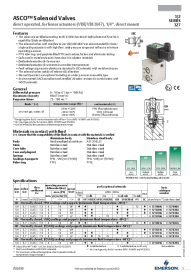
Specification	Value
Body Material	Brass
Sealing Material	Nitrile Butylene
Pipe Size	1/2 inch
Orifice Size	5/8 inch
Maximum Operating Pressure	150 psi
Voltage	120/60V, 110/50V
Number of Ports	2
Manufacturer	ASCO Valve Inc.
Date First Available	October 20, 2015
Package Dimensions	5.1 x 4.2 x 2.8 inches; 1 Pound
Specification Met	UL

8. Warranty and Support

Specific warranty information for this product was not available in the provided data. Please refer to the manufacturer's official website or contact ASCO Valve Inc. directly for detailed warranty terms and technical support.
Manufacturer: ASCO Valve Inc.

Related Documents - 20229

	ASCO Series 8262 & 8263 Solenoid Valves: Installation and Maintenance Instructions Comprehensive installation and maintenance guide for ASCO Series 8262 and 8263 2-way direct-acting solenoid valves. Covers operation, installation, maintenance, temperature limitations, pressure differentials, and disassembly/reassembly procedures.
	ASCO 327C Series Solenoid Valve Installation and Maintenance Instructions Comprehensive installation and maintenance guide for ASCO 327C Series 3-way, 2-position solenoid valves. Covers product details, safety warnings, operational modes, installation, maintenance, troubleshooting, wiring, and ordering information. Features explosionproof/watertight solenoids with UL, ULC, ATEX, and IECEx certifications.

	[ASCO Series 327 Direct Operated Solenoid Valves - Technical Data] Detailed technical specifications, features, installation, and ordering information for ASCO Series 327 direct operated solenoid valves, designed for linear actuators.
	[ASCO 262A3.. Series 2-Way Direct Acting Solenoid Valve Installation and Maintenance Instructions] Comprehensive guide for ASCO 262A3.. series 2-way direct acting solenoid valves, covering important information, description, operation, installation, temperature limitations, mounting, piping, electrical installation, maintenance procedures, spare parts, disassembly, and reassembly.
	[ASCO 7000 Series Automatic Closed Transition Transfer & Bypass-Isolation Switches Wiring Diagram] This document provides detailed wiring diagrams for ASCO 7000 Series Automatic Closed Transition Transfer & Bypass-Isolation Switches, Type J7ACTB, rated for 150-600 Amperes.
	[ASCO™ Advanced Redundant Control System Series 141 - Technical Specifications and Ordering Guide] Detailed technical specifications, features, configurations (1002, 2002, 2003), electrical data, dimensions, and ordering information for the ASCO™ Advanced Redundant Control System Series 141.