

<b>Installation and Maintenance Instructions</b> <b>ASCO™ series 256-356, 2/2 solenoid valves NC/NO and 3/2 solenoid valves NC/NO/U, direct operated, brass or stainless steel or composite body, 1/8"-1/4"/pad mounting/push-in fitting/nut for tube</b>	<b>GB</b>
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**Applies to the following articles:**

### DESCRIPTION

Series 256 / 356, 20 mm and 30 mm coil sizes, with the following services:

- 256 - NC/NO
- 356 - NC/NO/U

Body Material:

- 20 mm Coil Sizes → Brass / Stainless Steel / Composite
- 30 mm Coil Sizes → Brass / Stainless Steel

### ASSEMBLY

The components ASCO are intended to be used only within the technical characteristics specified on the nameplate or in the documentation. To avoid damage to the equipment, make sure to prevent the liquid from solidifying at low temperatures and stay within the maximum and minimum temperature limits.

Modifications to the equipment may only be made after consulting the manufacturer or his representative.

Before installation, depressurise the piping system and clean internally.

The solenoid valves may be mounted in any position without affecting operation.

The direction of flow is indicated by markings on the valve's body and in the documentation.

Pipe connections have to be in accordance with the size indicated on the body, label or in the product leaflet.

**CAUTION :**

- Reducing the connections may cause improper operation or malfunction.
- For the protection of the equipment, install a strainer or filter suitable for the service involved in the inlet side as close to the product as possible.
- If tape, paste, spray or a similar lubricant is used when tightening, avoid particles entering the system.
- Use proper tools and locate wrenches as close as possible to the connection point.
- To avoid damage to the equipment, **DO NOT OVERTIGHTEN** pipe connections. Observe a maximum tightening torque of 5 to 7 Nm.
- Do not use the valve or solenoid operator as a lever.
- Pipe connections should not apply any force, torque or strain to the product.

### ELECTRICAL CONNECTION

All electrical connections must only be made by trained and qualified personnel and have to be in accordance with the local regulations and standards.

**CAUTION:**

- Before any intervention, turn off the electrical current to power off the components.
- All screw terminals must be properly tightened before putting into service.
- Depending on the voltage, electrical components must be grounded according to local standards and regulations.
- To ensure ground continuity of the coil, make sure it is correctly positioned during assembly/disassembly (no. 1).

The equipment is electrically connected as follows:

- Detachable connector to DIN 43650, 11 mm, industrial standard B or ISO 4400 / EN 175301-803, form A (On proper connection and when the (supplied or selected) connector used is IP65- or IP67-rated, the solenoid valve will have IP65 or IP67 protection).

### PUTTING INTO OPERATION

Before pressurising the circuit, perform an electrical test. In case of solenoid valves, energise the coil a few times and notice a metal click signifying the solenoid operation.

### FUNCTION

Most solenoid valves are equipped with coils for continuous duty service. To prevent the risk of personal injury, do not touch the solenoid operator which can become hot under normal operating conditions. If the solenoid valve is easily accessible, the installer must provide protection against accidental contact.

Our solenoid valves and pilot valves are designed to operate with devices compliant with EN 61131-2 standard.

### SOUND EMISSION

The emission of sound depends on the application, fluid and type of equipment used. The exact determination of the sound level can only be carried out by the user having the valve installed in his system.

### MAINTENANCE

Maintenance of ASCO products is dependent on service conditions. Periodic cleaning is recommended, the timing of which will depend on the fluids used and the service conditions. During servicing, the components must be checked for excessive wear. A complete set of internal parts is available as a spare parts or rebuild kit. If a problem occurs during installation/maintenance or in case of doubt, please contact ASCO or authorised representatives.

### DISASSEMBLY

Versions with composite bodies and 1/8" models: No spare parts kit is available (Except coil kits, pages: 21-24/1/8" - 30 /composite).

Disassemble the parts in the order indicated in the views in these I&M Instructions (see pages 20, 23, 26)

- 1 - Remove the retaining clip (1) and the coil (2) (see coil codes pages 21, 24, 27).
- 2 - Unscrew the core-tube unit (3) and separate it from the body.
- 3 - Remove the core/spring unit (4)(5) and the seal (6).
- 4 - Clean or replace all parts.

### REASSEMBLY

Reassemble the parts in the reverse order of disassembly. Make sure the retaining clip is correctly positioned on the coil (see pages 20, 23, 26 + spare parts kits pages 22, 25, 28, 29).

The exhaust must be connected to prevent contamination of the inside of the solenoid valve.

**NOTE:**

- 1 - Grease the seal (6) and lightly coat the outer circumference of the core with a lubricant conforming to standard AFNOR ISO TR 3498 categories HL and FC.
- 2 - Make sure the core-tube unit is properly tightened at a torque (A) of 7 to 9 Nm for 1/8" models and a torque (B) of 30 to 40 Nm for 1/4" and Pad Mount models.
- 3 - Install the coil in the direction shown on the photograph (no. P1) to ensure ground continuity.
- 4 - After reassembly, operate the solenoid valve or the manifold several times to ensure the valves open and close properly.
- 5 - Reassemble the piping connections and tighten at a maximum torque of 5 to 7 Nm for metal bodies and 1.2 to 2 Nm for 1/8" composite body.

**Solenoid valve, normally closed, directly operated**

Artikel No.	Type No.
145428	107.11-01
145429	107.12-01