


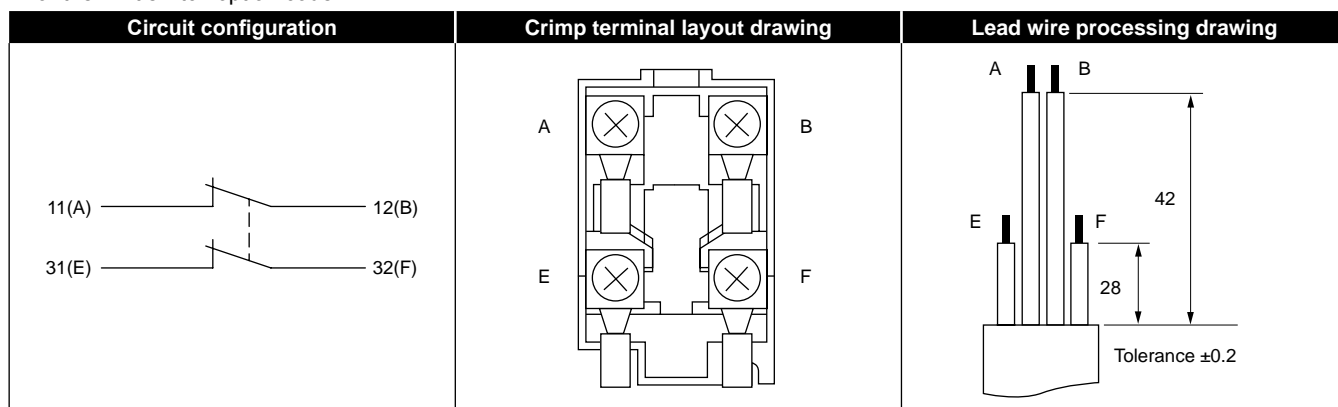
How to connect limit switch

Applicable to products with the limit switch option code "L" and "M".

- (1) When connecting to the terminal via insulating tube and M3.5 crimp terminal, place the crimp terminals as shown in Figure 2-7 so as not to ride over the case or cover.
- (2) The applicable lead wire size is AWG 20 to 18 (0.5 to 0.75 mm²).
The lead wire should be processed in accordance with the length in Figure 2-7. The excess lead wire may come into contact with the cover and cause it to be lifted.

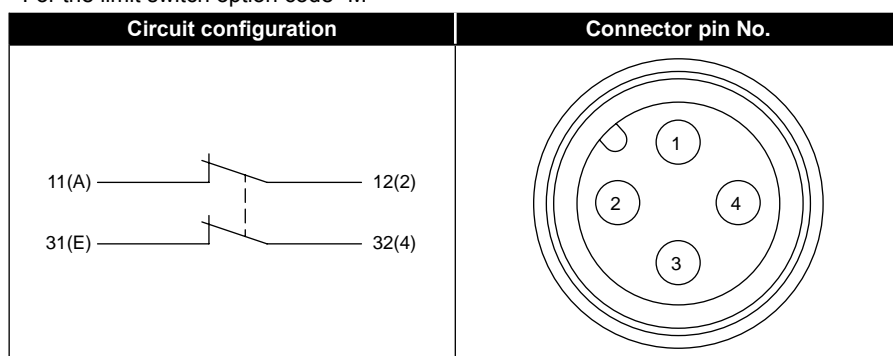
 CAUTION	<p>Do not push a crimp terminal or the like into the gap of the pipe case, as it may cause the case to be damaged or deformed.</p> <p>Be sure to use the crimp terminal with the thickness of 0.5 mm or less to avoid interference with the inside of the switch case.</p>
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· For the limit switch option code "L"



(Figure 2-7)

· For the limit switch option code "M"



(Figure 2-8)

- (3) When mounting a connector to the conduit port, be sure to use a connector with the thread length of 9 mm or less so as not to interfere with the built-in switch.
 Recommended connector ST-13.5 5301-5030 (LAPP)
 Recommended seal packing JPK-16, GP-13.5 or GPM20
- (4) For the tightening torque of each part, please refer to Table 2-3.

Table 2-3 Applicable tightening torque

Screw tightening point	Recommended tightening torque values
Terminal thread	0.6 to 0.8 [N·m]
Cover mounting screw	0.5 to 0.7 [N·m]
Connector	1.8 to 2.2 [N·m]



Safety precautions

Fluid Control Components: Warnings and Cautions

Be sure to read this section before use.

Precautions for each model series and for individual products

3-port solenoid valve with spool position detection (SNP)

Design/selection

⚠ WARNING

1 Ambient environment

- (1) SNP Series cannot be used in an explosive gas atmosphere.
- (2) If there are high levels of dust in the area, install a downward-facing silencer or elbow fitting on the exhaust port so that dust does not enter.

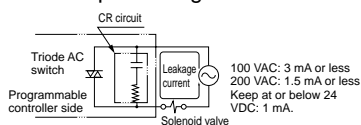
⚠ CAUTION

1 Ultra dry air

The inside of the valve is pre-lubricated with grease.
This valve may not be appropriate if extra dry air quality is required at the end of the circuit.

2 Leakage current from other fluid control components

When operating the solenoid valve with a programmable controller, etc., check that the output leakage current from the programmable controller is within the following specifications. Failure to observe this could lead to malfunctions.



3 Min. working pressure

The pressure must be 0.2 MPa and over to operate the SNP Series. If the piping cross-section area on the fluid inlet is reduced, the operation may become unstable due to a pressure drop during valve operation which causes the pressure inside the valve to drop.

4 Fluid supply side piping

Ensure that the effective cross-sectional area of the fluid supply side (P port) pipe is twice the pipe composite effective cross-sectional area to be connected to the outlet side (A port) and exhaust side (R port). The min. working pressure may not be attainable due to insufficient flow during valve operation.

Mounting, installation and adjustment

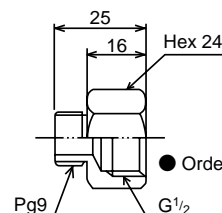
⚠ CAUTION

1 Piping

Do not pipe using the solenoid valve and limit switch. There is a risk of damage.

2 Wiring

- (1) For DIN terminal box connection, refer to "General Purpose Valves (No. CB-03-1SA)."
- (2) When changing the nominal thread size from Pg9 to G1/2 for the DIN terminal box's junction box outlets, use the optional connector shown at the right.



- (3) Coil direction can be changed 180°.

To reverse the electrical connection direction, rotate only the coil. The valve will not function if the pilot solenoid valve body is moved.

- (4) When using a connector for the limit switch, be sure to use one with thread length of 9 mm or less.
Recommended connector: ST-13.5 5301-5030 (LAPP)
Recommended seal packing: JPK-16, GP-13.5 or GPM20

Use/maintenance

⚠ CAUTION

1 Transfer circuit

When using a vacuum absorbing pad (suction bowl) for the transfer circuit, install a filter between the suction pad and valve so that foreign matter does not enter the valve. Otherwise, leakage may result.

2 Leaving under elevated pressure

If the valve is left under elevated pressure for three days or longer, the starting response could be delayed.

3 Pilot solenoid valves

Pilot solenoid valve for CVSE2 (actuator assembly kit):
Equipped with CVSE2-ACTUATOR-0 *1 T- Rated voltage.
After disassembly, assemble the manual override section (green) onto the port P side of the body.

Note: *1 is the coil housing code.

*2 is the rated voltage code.