

# Auxiliary Equipment for Pneumatic Control Valve

## ASCO Three-way Solenoid Valve

### OVERVIEW

The application of solenoid valves for switching the output of control valves forms a control loop with the pneumatic valve. Mounted between the valve actuator and positioner, the solenoid valve changes the output from supply to venting, and vice versa. Various specifications are available.

### SPECIFICATIONS

#### **Operation**

Universal

#### **Pneumatic connection**

Rc1/4, 1/4NPT

#### **Power supply**

100V AC, 200V AC

50/60 Hz, etc.

12V DC, 24V DC, etc.

#### **Main materials**

##### **Body**

Brass

##### **Main sheet**

Buner N

##### **Coil**

Type F mold coil

##### **Ambient temperature range**

-20 to 50°C

##### **Case**

General (indoor use)

Water-proof (outdoor use)

TIIS Flameproof Approval (outdoor use)

Conduit connection G1/2, 1/2NPT

For other specifications, please contact us.

Example: Material, coil insulation grade, manual operation, connection, etc.



Model JE3J320G174

**Basic Model Number Table**

**Table 1 Low-pressure applications**

Use	Supply air pressure Ps *i	Model No. [Connection screw: Rc1/4]	Model No. [Connection screw: NPT1/4]
General (indoor use)	Ps ≤ 270 kPa {2.8 kgf/cm <sup>2</sup> }	J320A107	8320A107
	Ps > 270 kPa {2.8 kgf/cm <sup>2</sup> }	J320G174	8320G174
Water-proof (outdoor use)	Ps ≤ 270 kPa {2.8 kgf/cm <sup>2</sup> }	J320A108	8320A108
	Ps > 270 kPa {2.8 kgf/cm <sup>2</sup> }	J320G174	8320G174
Flameproof (TIIS d2G4)	Ps ≤ 270 kPa {2.8 kgf/cm <sup>2</sup> }	JE3J320A107	JE38320A107
	Ps > 270 kPa {2.8 kgf/cm <sup>2</sup> }	JE3J320G174	JE38320G174

Note \*i. Ps value are for "Supply air pressure" in the allowable pressure difference table in control valve specification sheets.

**Applicable actuator**

- Diaphragm actuator: Model PSA1 to 4, HA2 to 4, VA5, PSK, VM12, RSA1, 2, VR3 (excluding VR3/supply air pressure 490 kPa)
- G-O-motor actuator: Model GOM

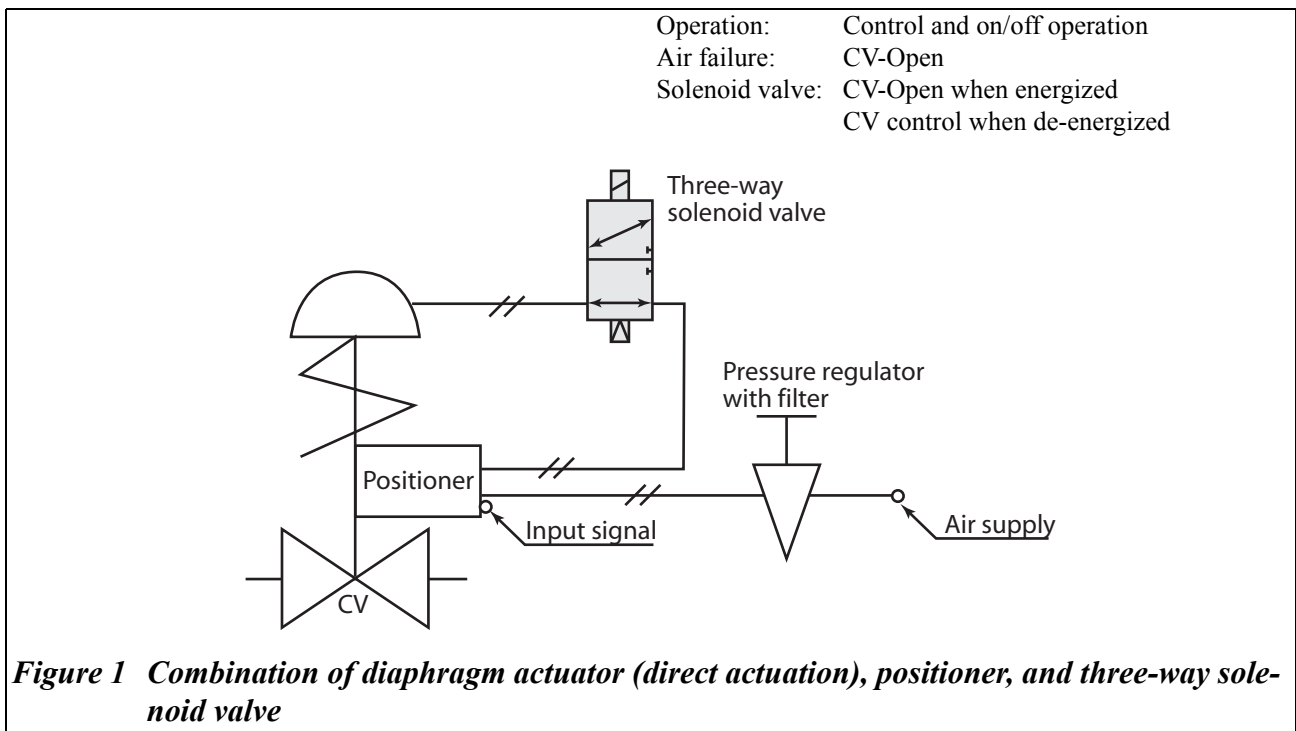


Table 2 High-pressure applications

Use	Supply air pressure $P_s$ *i	Model No. [Connection screw: Rc1/4]	Model No. [Connection screw: NPT1/4]
General (indoor use)	$P_s \leq 860 \text{ kPa}$ {8.7 kgf/cm <sup>2</sup> }	J320A101	8320A101
Water-proof (outdoor use)	$P_s \leq 860 \text{ kPa}$ {8.7 kgf/cm <sup>2</sup> }	J320A102	8320A102
Flameproof (TIIS d2G4)	$P_s \leq 860 \text{ kPa}$ {8.7 kgf/cm <sup>2</sup> }	JE3J320A101	JE38320A101

Note \*i.  $P_s$  value are maximum supply air pressure value used by customers. (They do not indicate supply air pressure to an actuator.)

### Applicable actuator:

- Spring piston cylinder actuator: Model PSA6, 7
- Springless piston cylinder actuator: Model VP, SLOP

A piston cylinder actuator (positive actuation) with a positioner and an air failure open mechanism are combined with a three-way solenoid valve for high-pressure application.

Operation: Control and on/off operation  
 Air failure: CV-Open  
 Solenoid valve: CV-Open when energized  
 CV control when de-energized

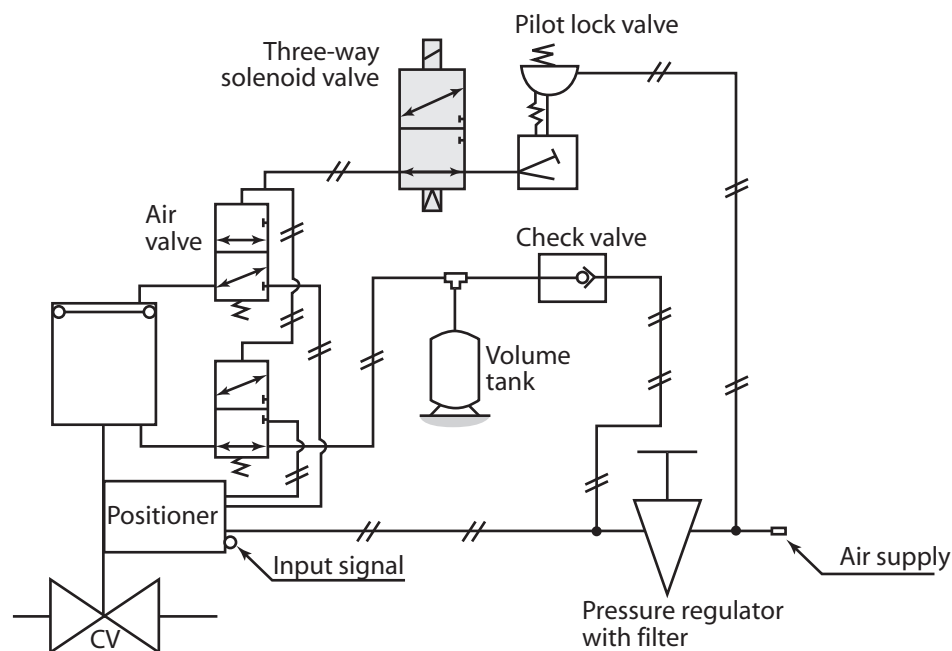


Figure 2 Combination of springless piston cylinder, positioner, air-failure open mechanism, and three-way solenoid valve

Please, read 'Terms and Conditions' from following URL before the order and use.

<http://www.azbil.com/products/bi/order.html>

*Specifications are subject to change without notice.*

**azbil**

---

## Azbil Corporation

Advanced Automation Company

1-12-2 Kawana, Fujisawa  
Kanagawa 251-8522 Japan  
URL: <http://www.azbil.com/>

5th edition: Aug. 2015

*No part of this publication may be reproduced or duplicated without the prior written permission of Azbil Corporation.*