
	INSTALLATION AND MAINTENANCE INSTRUCTIONS Series 202, posiflow, normally closed, direct operated 1/4		GB
---	---	---	-----------

DESCRIPTION

Series 202 are 2-way, normally closed, direct operated proportional solenoid valves, designed for infinitely variable flow service. The valve body is stainless steel construction.

OPERATION

By regulating the coil current, the proportional valve will open or close infinitely. At increasing pressure differential, the valve will operate at a lower current through the coil.

For optimum performance the electrical coil input is recommended to be a rectangular pulse width modulated voltage with a frequency of 300 Hz. In addition the current should be kept substantially independent from changes in coil winding resistance. Under certain installation circumstances, undesirable vibration might occur. In that case increase frequency and/or ramp time.

For accurately regulating the flow, with the commonly used control signals (0-10 V DC, 0-20 mA or 4-20 mA) a pulse width modulating proportional control unit, housed in a connector complying to ISO 4400, can be ordered separately under ASCO Series E908A001.

INSTALLATION

ASCO Numatics components are intended to be used only within the technical characteristics as specified on the nameplate. Changes to the equipment are only allowed after consulting the manufacturer or its representative. Before installation depressurise the piping system and clean internally.

The equipment may be mounted in any position.

The flow direction and pipe connection of valves are indicated on the body.

The pipe connections have to be in accordance with the size indicated on the nameplate and fitted accordingly.

CAUTION:

- Reducing the connections may cause improper operation or malfunctioning.
- 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.
- Do not use valve or solenoid as a lever.
- The pipe connections should not apply any force, torque or strain to the product.

ELECTRICAL CONNECTION

In case of electrical connections, they are only to be made by trained personnel and have to be in accordance with the local regulations and standards.

CAUTION:

- Turn off electrical power supply and de-energise the electrical circuit and voltage carrying parts before starting work.
- All electrical screw terminals must be properly tightened according to the standards before putting into service.
- Dependent upon the voltage electrical components must be provided with an earth connection and satisfy local regulations and standards.

The equipment can have one of the following electrical terminals:

- Spade plug connections according to ISO-4400 (when correctly installed this connection provides IP-65 protection).
- Embedded screw terminals in metal enclosure with "Pg" cable gland.
- Flying leads or cables.

PUTTING INTO SERVICE

Before pressurising the system, first carry-out an electrical test. In case of solenoid valves, energise the coil a few times and check the valve operation.

SERVICE

Most of the solenoid valves are equipped with coils for continuous duty service. To prevent the possibility of personal or property damage do not touch the solenoid which can become hot under normal operation conditions. If the solenoid valve is easily accessible, the installer must provide protection preventing accidental contact.

SOUND EMISSION

The emission of sound depends on the application, medium and nature of the 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 Numatics products is dependent on service conditions. Periodic cleaning is recommended, the timing of which will depend on the media and service conditions. During servicing, components should be examined for excessive wear. A complete set of internal parts is available as a spare parts kit. If a problem occurs during installation/maintenance or in case of doubt please contact ASCO Numatics or authorised representatives.

VALVE DISASSEMBLY

Disassemble in an orderly fashion. Pay careful attention to exploded views provided for identification of parts.

1. Remove cap, retaining clip, coil and spring washer from solenoid base sub-assembly. **CAUTION:** when metal retaining clip disengages, it can spring upwards.
2. Unscrew the solenoid base sub-assembly.
3. Remove core assembly, core spring and body gasket.
4. All parts are now accessible for cleaning or replacement.

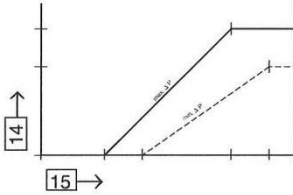
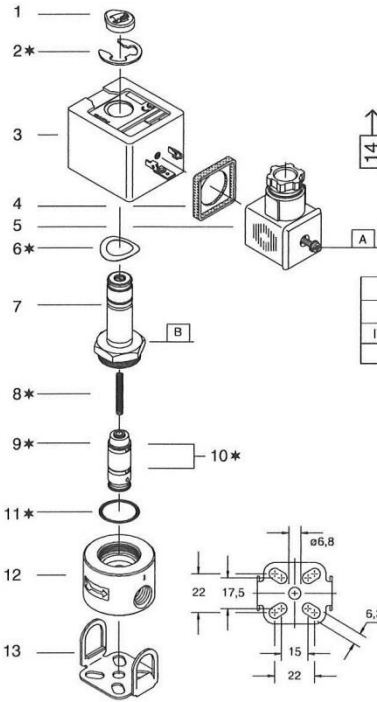
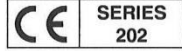
VALVE REASSEMBLY

Reassemble in reverse order of disassembly paying careful attention to exploded views provided for identification and placement of parts.

1. **NOTE:** Lubricate all gaskets/O-rings with high quality silicone grease. Replace body gasket, core spring, core assembly and solenoid base sub-assembly. Torque solenoid base sub-assembly according to torque chart.
2. Replace spring washer, solenoid, retaining clip and cap.
3. After maintenance, operate the valve a few times to be sure of proper operation.

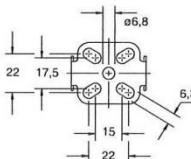
A separate Declaration of Incorporation relating to EEC-Directive 89/392/EEC Annex II B is available on request. Please provide acknowledgement number and serial numbers of products concerned. This product complies with the essential requirements of the EMC-Directive 89/336/EEC and amendments as well as the 73/23/EEC + 93/68/EEC Low Voltage Directives. A separate Declaration of Conformity is available on request.

ASCO	DRAWING	DESSIN	ZEICHNUNG
	DISEGNO	DIBUJO	TEKENING

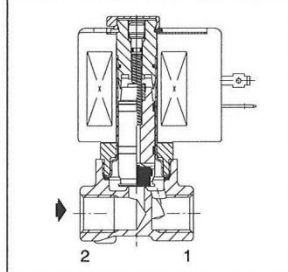


	A	0,6 ± 0,2	5 ± 2
B	20 ± 3	175 ± 25	
ITEMS	NEWTON.METRES	INCH.POUNDS	

TORQUE CHART



ASCO	DRAWING	DESSIN	ZEICHNUNG
	DISEGNO	DIBUJO	TEKENING



GB	* Supplied in spare part kit
FR	* Livrés en pochette de rechange
DE	* Enthalten im Ersatzteilsatz
ES	* Incluido en Kit de recambio
IT	* Disponibile nel Kit parti di ricambio
NL	* Geleverd in vervangingsset

Ø	Catalogue number Code electrovanne Katalognummer Código de la electroválvula Codice elettrovalvola Catalogusnummer	Spare part kit Code pochette de rechange Ersatzteilsatz Código del kit de recambio Kit parti di ricambio Vervangingsset
1/4	SCB202A011V SCB202A012V SCB202A013V SCB202A014V SCB202A016V SCB202A017V SCB202A061V SCB202A062V SCB202A063V SCB202A064V SCB202A066V SCB202A067V	C133602 V C133602 V C133602 V C133603 V C133603 V C133606 V C133606 V C133606 V C133606 V C133607 V C133607 V C133607 V

GB DESCRIPTION

- | | |
|--------------------------|----------------------|
| 1. Cap | 10. Rider rings |
| 2. Retaining clip | 11. Gasket, body |
| 3. Coil & nameplate | 12. Valve body |
| 4. Gasket | 13. Mounting bracket |
| 5. Connector assembly | 14. Flow |
| 6. Spring washer | 15. Coil current |
| 7. Sol base sub-assembly | |
| 8. Spring | |
| 9. Core assembly | |

FR DESCRIPTION

- | | |
|--------------------------------|-------------------------------|
| 1. Bouchon | 10. Bague du curseur |
| 2. Clip de maintien | 11. Joint d'étanchéité, corps |
| 3. Bobine & fiche signalétique | 12. Corps |
| 4. Joint d'étanchéité | 13. Support de montage |
| 5. Montage du connecteur | 14. Fluide |
| 6. Rondelle élastique | 15. Courant de la bobine |
| 7. Sol. sous-ensemble de base | |
| 8. Ressort | |
| 9. Noyau | |

DE BESCHREIBUNG

- | | |
|-------------------------|-----------------------|
| 1. Kappe | 10. Reiterringen |
| 2. Klammerhalterung | 11. Dichtung, Gehäuse |
| 3. Spule & Typenschild | 12. Ventilgehäuse |
| 4. Dichtung | 13. Montagehalterung |
| 5. Geräteseckdose | 14. Durchfluß |
| 6. Federscheibe | 15. Spulenstrom |
| 7. Haltermutter | |
| 8. Feder | |
| 9. Magnetankerbaugruppe | |

ES DESCRIPCION

- | | |
|--------------------------------------|----------------------------------|
| 1. Casquillo | 9. Conjunto de núcleo |
| 2. Clip de sujeción | 10. Arandelas de desplaza miento |
| 3. Bobina y placa de características | 11. Guarnición, cuerpo |
| 4. Guarnición | 12. Cuerpo de la válvula |
| 5. Conjunto del conector | 13. Soporte de montaje |
| 6. Arandela resorte | 14. Fluido |
| 7. Base auxiliar del solenoide | 15. Corriente de la bobina |
| 8. Resorte | |

IT DESCRIZIONE

- | | |
|-----------------------|---------------------------|
| 1. Cappuccio | 10. Anelli intermedi |
| 2. Clip di fissaggio | 11. Guarnizione, corpo |
| 3. Bobina e targhetta | 12. Corpo valvola |
| 4. Guarnizione | 13. Staffa di montaggio |
| 5. Gruppo connettore | 14. Portata |
| 6. Rondella elastica | 15. Corrente della bobina |
| 7. Gruppo cannotto | |
| 8. Molla | |
| 9. Gruppo del nucleo | |

NL BESCHRIJVING

- | | |
|------------------------------|-------------------------------|
| 1. Sluiddop | 10. Geleideringen |
| 2. Clip | 11. Afdichting, afsluiterhuis |
| 3. Spoel met typeplaatje | 12. Afsluiterhuis |
| 4. Afdichting | 13. Bevestigingsbeugel |
| 5. Sleker | 14. Debiet |
| 6. Veerring | 15. Stroom door spoel |
| 7. Kopstuk/dekset-combinatie | |
| 8. Veer | |
| 9. Divulser | |

Applies to the following articles:

Proportional control valve »posiflow« for air / gas / water / oil, 24 V DC, NC

Article No.

Type No.

101639 to 101640

PV 2011 to PV 2012

Proportional control valve »posiflow«, for air / gas, 24 V DC, NC

Article No.

Type No.

101641 to 101644

PV 2013 to PV 2016

Proportional control valve »posiflow«, for water / oil, 24 V DC, NC

Article No.

Type No.

101645 to 101648

PV 2023 to PV 2026