

Data sheet

# Solenoid valves, 2/2-way servo-operated type EV220B 6-22

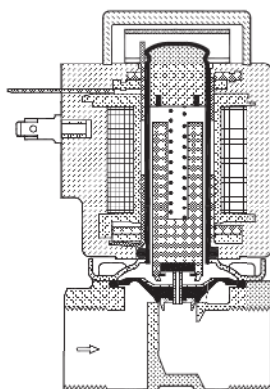


EV220B 6-22 is a direct servo-operated 2/2-way solenoid valve program with connections from 1/4" to 1". This program is especially for OEM applications demanding a robust solution and moderate flow rates.

**Features and versions:**

- For water, oil, compressed air and similar neutral media
- Flow range from 0.2 – 19 m<sup>3</sup>/h
- Differential pressure from 1 – 30 bar
- Media temperature from -30 – 100 °C
- Ambient temperature: Up to 80 °C
- Coil enclosure: Up to IP67
- Thread connections: From G 1/4 – G 1
- DN 6 – 22
- Viscosity: Up to 50 cSt
- Brass version NC and NO
- DZR brass version NC
- FKM and EPDM
- Also available with NPT thread

## Function, NC



1. Armature spring
2. Armature
3. Valve plate
4. Equalising orifice
5. Main orifice
6. Pilot orifice
7. Diaphragm
8. Coil

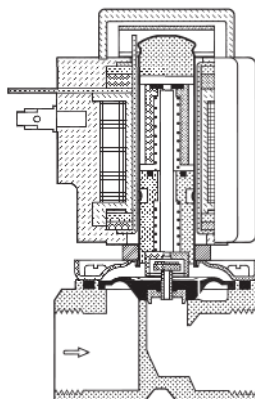
### Coil voltage disconnected (closed):

When the supply voltage to the coil (8) is disconnected, the valve plate (3) is pressed down against the pilot orifice (6) by the armature spring (1). The pressure across the diaphragm (7) is built up via the equalising orifice (4). The diaphragm closes the main orifice (5) as soon as the pressure across the diaphragm is equivalent to the inlet pressure. The valve will be closed for as long as the voltage to the coil is disconnected.

### Coil voltage connected (open):

When voltage is applied to the coil, the pilot orifice (6) is opened. As the pilot orifice is larger than the equalising orifice (4), the pressure across the diaphragm (7) drops and therefore it is lifted clear of the main orifice (5). The valve is now open and will be open for as long as the minimum differential pressure across the valve is maintained, and for as long as there is voltage to the coil.

## Function, NO



1. Opening spring
2. Armature
3. Valve plate
4. Equalising orifice
5. Main orifice
6. Pilot orifice
7. Diaphragm
8. Coil

### Coil voltage disconnected (open):

When the voltage to the coil (8) is disconnected, the pilot orifice (6) is open. As the pilot orifice is larger than the equalising orifice (4), the pressure across the diaphragm (7) drops and therefore it is lifted clear of the main orifice (5). The valve will be open for as long as the minimum differential pressure across the valve is maintained, and for as long as the voltage to the coil is disconnected.

### Coil voltage connected (closed):

When voltage is applied to the coil, the valve plate (3) is pressed down against the pilot orifice (6). The pressure across the diaphragm (7) is built up via the equalising orifice (4). The diaphragm closes the main orifice (5) as soon as the pressure across the diaphragm is equivalent to the inlet pressure. The valve will be closed for as long as there is voltage to the coil.