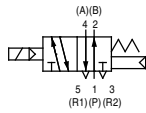


Series **EVS7-** □

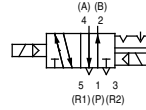
Standard Specifications

JIS Symbol

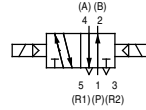
2 position single



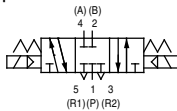
2 position double (metal)



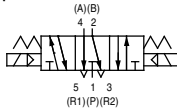
2 position double (rubber)



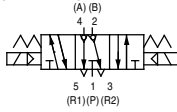
3 position closed center



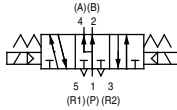
3 position exhaust center



3 position perfect



3 position pressure center



| Valve specifications    | Valve type                                 | Metal seal                             | Rubber seal                |  |
|-------------------------|--|--|----------------------------|--|
|                         | Fluid                                      | Air, Inert gas                         |                            |  |
|                         | Maximum operating pressure                 | 1.0 MPa                                |                            |  |
|                         | Minimum operating pressure                 | Single                                 | 0.1 MPa                    | 0.1 MPa                                |
|                         |  | Double                                 | 0.1 MPa                    | 0.1 MPa                                |
|                         |  | 3 position                             | 0.1 MPa                    | 0.1 MPa: Size 1<br>0.15 MPa: Size 2, 3 |
|                         | Ambient and fluid temperature              | -10° to 60°C <sup>(1)</sup>            | -5° to 60°C <sup>(1)</sup> |  |
|                         | Lubrication                                | None                                   |                            |  |
|                         | Manual override                            | Push type (Tool required)              |                            |  |
|                         | Impact resistance/<br>Vibration resistance | 150/50 m/s <sup>2</sup> <sup>(2)</sup> |                            |  |
| Enclosure               | IP65 (Dust/Splashproof type)               |  |                            |  |
| Electric specifications | Rated coil voltage                         | 12 VDC, 24 VDC                         |                            |  |
|                         | Allowable voltage fluctuation              | -15 to +10% of rated voltage           |                            |  |
|                         | Type of coil insulation                    | Equivalent to Class B                  |                            |  |
|                         | Power consumption                          | 24 VDC                                 | 1.8 W DC (75 mA)           |  |
|                         |  | 12 VDC                                 | 1.8 W DC (150 mA)          |  |

- VK
- VZ
- VF
- VFR
- VP4
- VZS
- VFS
- VS4
- VQ7
- EVS**
- VFN

Note 1) Use dry air to prevent condensation at low temperatures.

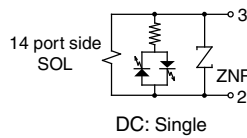
Note 2) Impact resistance: No malfunction resulted during on the impact test using a drop impact tester. The test was performed one time each in the axial and right angle directions of the main valve and armature for both energized and de-energized conditions.

Vibration resistance: No malfunction resulted during a one-sweep test between 8.3 and 2000 Hz. The test was performed in the axial and right angle directions of the main valve and armature for both energized and de-energized conditions.

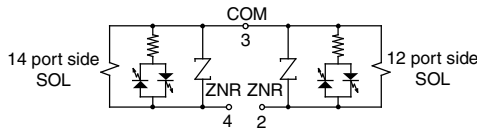
**! Precautions**

**! Caution**

Internal Wiring Specifications

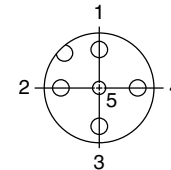


DC: Single



DC: Double

M12 connector: Wiring specifications



- Pin no.
- 1: Open
  - 2: 12 port side SOL (+)
  - 3: COM (-)
  - 4: 14 port side SOL (+)
  - 5: Ground

# Series EVS7-□

## Model

### Series EVS7-6



| Positions  |                 |             | Bore size | Flow characteristics |      |     |                             |      |     |
|------------|-----------------|-------------|-----------|----------------------|------|-----|-----------------------------|------|-----|
|            |                 |             |           | 1 → 4, 2 (P → A, B)  |      |     | 4, 2 → 5, 3 (A, B → EA, EB) |      |     |
|            |                 |             |           | C                    | b    | Cv  | C                           | b    | Cv  |
| 2 position | Single          | Metal seal  | 1/4       | 4.1                  | 0.10 | 0.9 | 5.2                         | 0.07 | 1.1 |
|            |                 | Rubber seal |           | 5.0                  | 0.13 | 1.1 | 6.0                         | 0.11 | 1.4 |
|            | Double          | Metal seal  |           | 4.1                  | 0.10 | 0.9 | 5.2                         | 0.07 | 1.1 |
|            |                 | Rubber seal |           | 5.0                  | 0.13 | 1.1 | 6.0                         | 0.11 | 1.4 |
| 3 position | Closed center   | Metal seal  |           | 4.1                  | 0.10 | 0.9 | 5.2                         | 0.10 | 1.1 |
|            |                 | Rubber seal |           | 5.0                  | 0.13 | 1.1 | 5.6                         | 0.20 | 1.3 |
|            | Exhaust center  | Metal seal  |           | 4.1                  | 0.10 | 0.9 | 5.2                         | 0.10 | 1.1 |
|            |                 | Rubber seal |           | 4.8                  | 0.16 | 1.1 | 6.0                         | 0.17 | 1.4 |
|            | Pressure center | Metal seal  | 4.1       | 0.10                 | 0.9  | 5.2 | 0.08                        | 1.1  |     |
|            |                 | Rubber seal | 5.6       | 0.15                 | 1.2  | 5.9 | 0.08                        | 1.3  |     |
|            | Perfect type    | Metal seal  | 1.4       | —                    | —    | 3.1 | —                           | —    |     |
|            |                 | Rubber seal | 1.4       | —                    | —    | 3.1 | —                           | —    |     |

### Series EVS7-8



| Positions  |                 |             | Bore size | Flow characteristics |      |     |                             |      |     |
|------------|-----------------|-------------|-----------|----------------------|------|-----|-----------------------------|------|-----|
|            |                 |             |           | 1 → 4, 2 (P → A, B)  |      |     | 4, 2 → 5, 3 (A, B → EA, EB) |      |     |
|            |                 |             |           | C                    | b    | Cv  | C                           | b    | Cv  |
| 2 position | Single          | Metal seal  | 3/8       | 10                   | 0.18 | 2.4 | 12                          | 0.24 | 3.0 |
|            |                 | Rubber seal |           | 12                   | 0.24 | 3.0 | 13                          | 0.27 | 3.3 |
|            | Double          | Metal seal  |           | 10                   | 0.18 | 2.4 | 12                          | 0.24 | 3.0 |
|            |                 | Rubber seal |           | 12                   | 0.24 | 3.0 | 13                          | 0.27 | 3.3 |
| 3 position | Closed center   | Metal seal  |           | 10                   | 0.28 | 2.4 | 10                          | 0.24 | 2.4 |
|            |                 | Rubber seal |           | 11                   | 0.25 | 2.8 | 11                          | 0.27 | 2.8 |
|            | Exhaust center  | Metal seal  |           | 10                   | 0.16 | 2.4 | 10                          | 0.20 | 2.4 |
|            |                 | Rubber seal |           | 11                   | 0.26 | 2.8 | 13                          | 0.27 | 3.3 |
|            | Pressure center | Metal seal  | 10        | 0.26                 | 2.4  | 11  | 0.25                        | 2.8  |     |
|            |                 | Rubber seal | 13        | 0.27                 | 3.3  | 12  | 0.29                        | 3.0  |     |
|            | Perfect type    | Metal seal  | 7.2       | —                    | —    | 7.0 | —                           | —    |     |
|            |                 | Rubber seal | 7.2       | —                    | —    | 7.0 | —                           | —    |     |

### Series EVS7-10

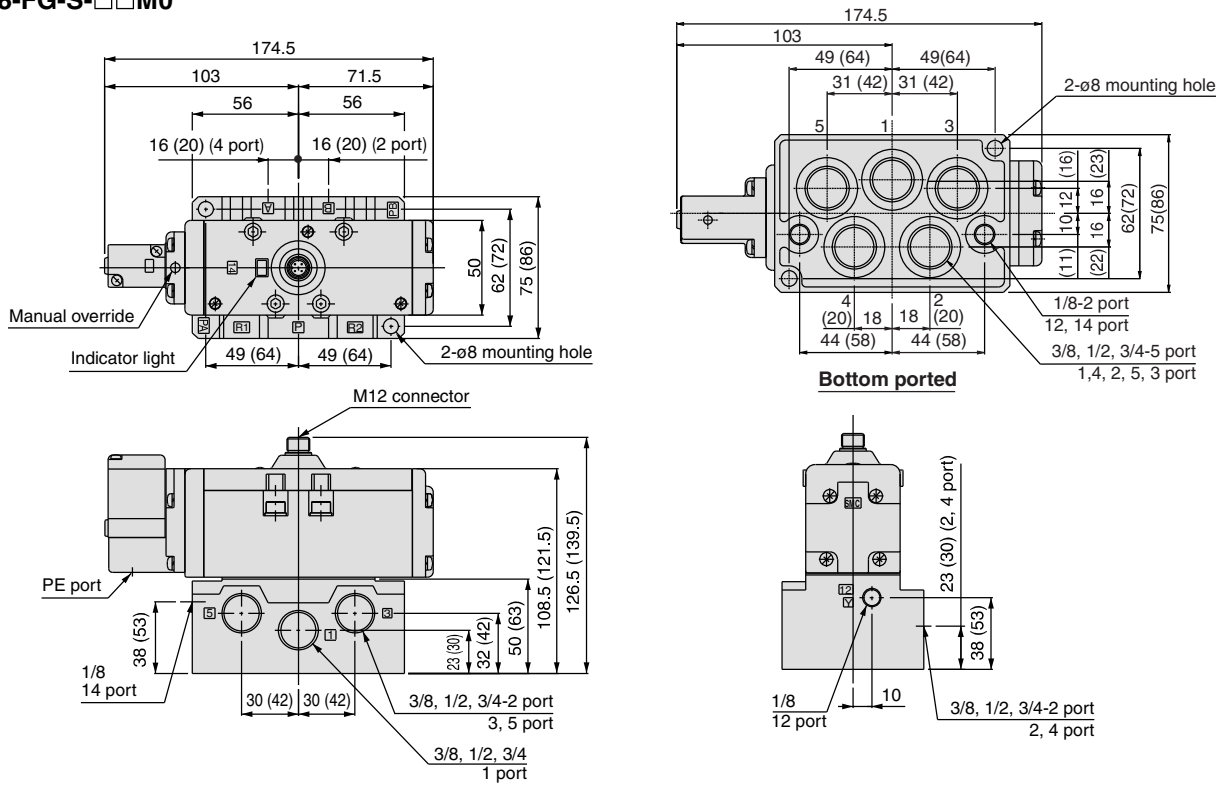


| Positions  |                 |             | Bore size | Flow characteristics |      |     |                             |      |     |
|------------|-----------------|-------------|-----------|----------------------|------|-----|-----------------------------|------|-----|
|            |                 |             |           | 1 → 4, 2 (P → A, B)  |      |     | 4, 2 → 5, 3 (A, B → EA, EB) |      |     |
|            |                 |             |           | C                    | b    | Cv  | C                           | b    | Cv  |
| 2 position | Single          | Metal seal  | 1/2       | 13                   | 0.10 | 3.0 | 18                          | 0.10 | 4.0 |
|            |                 | Rubber seal |           | 16                   | 0.20 | 4.0 | 18                          | 0.20 | 4.4 |
|            | Double          | Metal seal  |           | 13                   | 0.10 | 3.0 | 18                          | 0.10 | 4.0 |
|            |                 | Rubber seal |           | 16                   | 0.20 | 4.0 | 18                          | 0.20 | 4.4 |
| 3 position | Closed center   | Metal seal  |           | 13                   | 0.10 | 3.0 | 18                          | 0.10 | 4.0 |
|            |                 | Rubber seal |           | 15                   | 0.20 | 3.5 | 15                          | 0.20 | 3.7 |
|            | Exhaust center  | Metal seal  |           | 13                   | 0.10 | 3.0 | 18                          | 0.10 | 4.0 |
|            |                 | Rubber seal |           | 16                   | 0.20 | 4.0 | 16                          | 0.20 | 4.0 |
|            | Pressure center | Metal seal  | 13        | 0.10                 | 3.0  | 18  | 0.10                        | 4.0  |     |
|            |                 | Rubber seal | 15        | 0.20                 | 3.8  | 19  | 0.10                        | 4.4  |     |

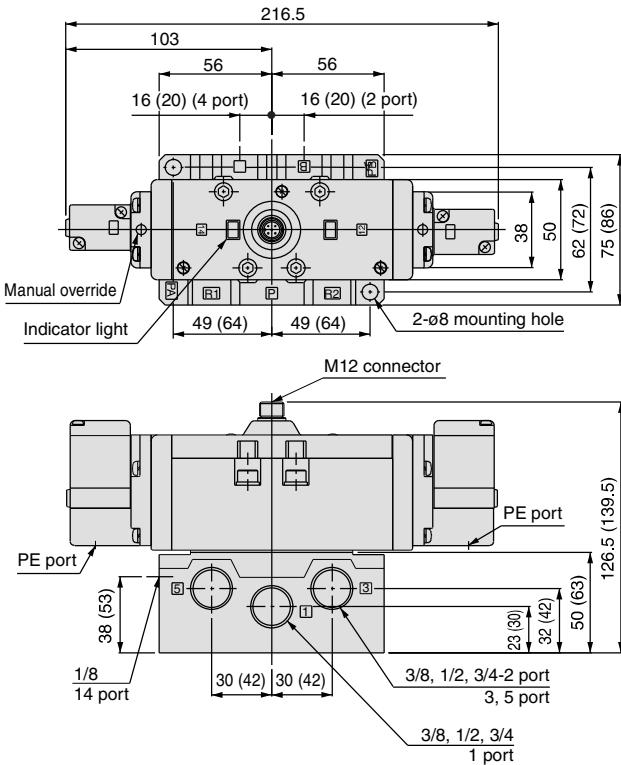
# Series EVS7-□

## Dimensions

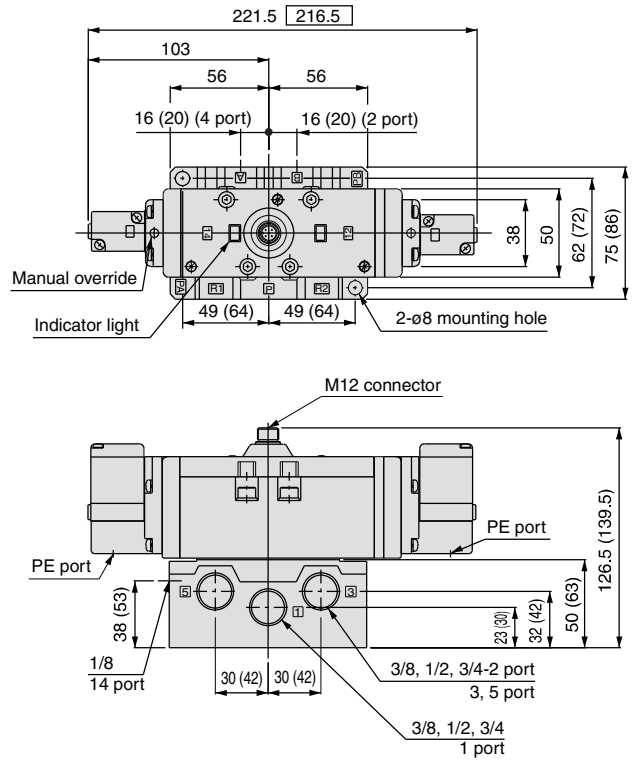
### EVS7-8-FG-S-□□M0



### EVS7-8-FG-D-□□M0



### EVS7-8-F<sup>H</sup>G-D-□□M0



Dimension inside   is for rubber seal.  
 Dimensions inside ( ) are for Sub-plate.