

# NAMUR Interface 3 Port Solenoid Valve

# VFN200N Series



[Option]

The interface surface complies with NAMUR.

- Can be directly installed on the industrial valve actuator that complies with NAMUR.



## How to Order

VFN212 N - 5 D Z - 02 F - - -

NAMUR Interface

CE marking

Voltage

|   |                          |
|---|--------------------------|
| 1 | 100 VAC, 50/60 Hz        |
| 2 | 200 VAC, 50/60 Hz        |
| 3 | 110 to 120 VAC, 50/60 Hz |
| 4 | 220 VAC, 50/60 Hz        |
| 5 | 24 VDC                   |
| 6 | 12 VDC                   |
| 7 | 240 VAC, 50/60 Hz        |

For other rated voltages, please contact SMC.

Electrical entry

|                      |                                  |
|----------------------|----------------------------------|
| G                    | Grommet                          |
| E                    | Grommet terminal                 |
| T                    | Conduit terminal                 |
| D                    | DIN terminal                     |
| DO                   | DIN terminal (Without connector) |
| Y <sup>(Note)</sup>  | DIN terminal                     |
| YO <sup>(Note)</sup> | DIN terminal (Without connector) |

Note) Conforming to DIN 43650, Form B

Thread type

|     |         |
|-----|---------|
| Nil | Rc (PT) |
| F   | G (PF)  |
| N   | NPT     |

Solenoid

|     |                 |
|-----|-----------------|
| Nil | Single solenoid |
| D   | Double solenoid |

Manual override

|     |                                  |
|-----|----------------------------------|
| Nil | Non-locking push type (Flush)    |
| A   | Non-locking push type (Extended) |
| B   | Locking type (Tool required)     |

Light/Surge voltage suppressor

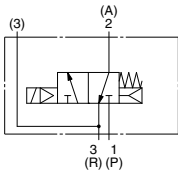
|                     |                                     |
|---------------------|-------------------------------------|
| Nil                 | None                                |
| Z                   | With light/surge voltage suppressor |
| S <sup>(Note)</sup> | With surge voltage suppressor       |

Note) Available for grommet type only.

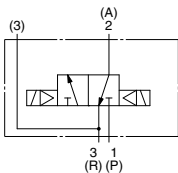
## Specifications

### Symbol

Single solenoid



Double solenoid



| Valve specifications                  | Fluid   | Air   |
|---------------------------------------|---------|---|
| Valve type                            |         | Normally closed   |
| Max. operating pressure               |         | 0.9 MPa (130 psi)   |
| Min. operating pressure               |         | 0.15 MPa (22 psi)   |
| Ambient and fluid temperature         |         | -10 to +60°C Note 1)  |
| Lubrication                           |         | Not required Note 2)  |
| Pilot valve manual override           |         | Non-locking push type (Flush/Extended)/Locking type (Tool required) |
| Enclosure                             |         | Dustproof   |
| Port size                             |         | 1/4   |
| Cv factor (Effective area)            |         | Refer to "Flow Rate Characteristics" table below.                   |
| Weight                                |         | Refer to "Weight" table below.                                      |
| Other                                 |         | Cylinder ports should be NAMUR hole pattern.                        |
| Coil rated voltage                    |         | 12, 24 VDC, 100, 110 to 120, 200, 220, 240 VAC (50/60 Hz)           |
| Allowable voltage fluctuation         |         | -15 to +10% of rated voltage  |
| Coil insulation type                  |         | Class B or equivalent   |
| Apparent power AC (Power consumption) | Inrush  | 5.0 VA/60 Hz, 5.6 VA/50 Hz  |
|                                       | Holding | 2.3 VA (1.5 W)/60 Hz, 3.4 VA (2.1 W) 9/50 Hz                        |
| Power consumption DC                  |         | 1.8 W   |
| Electrical entry                      |         | Grommet, Grommet terminal, Conduit terminal, DIN terminal           |

Note 1) Use dry-air at low temperature.

Note 2) Use turbine oil No.1 (ISO VG32), if lubricated.

## Flow Rate Characteristics

| 2-position | Single solenoid | Flow rate characteristics |      |      |           |      |      |
|------------|-----------------|---------------------------|------|------|-----------|------|------|
|            |                 | 1→2 (P→A)                 |      |      | 2→3 (A→R) |      |      |
|            |                 | C                         | b    | Cv   | C         | b    | Cv   |
|            | Double solenoid | 2.68                      | 0.40 | 0.72 | 5.41      | 0.31 | 1.38 |
|            |                 | 2.68                      | 0.40 | 0.72 | 5.41      | 0.31 | 1.38 |

## Weight

| Model            | Weight (g) |
|------------------|------------|
| VFN212N-5D-02F   | 240        |
| VFN212N-5D-02F-D | 380        |

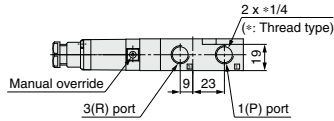
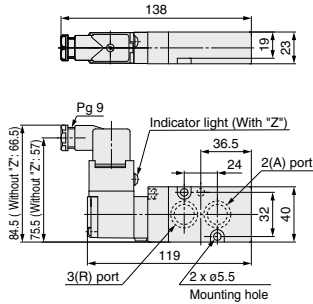
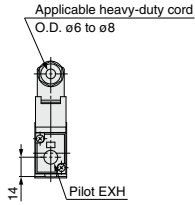


# VFN200N Series

## Dimensions

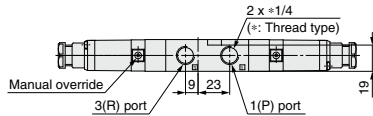
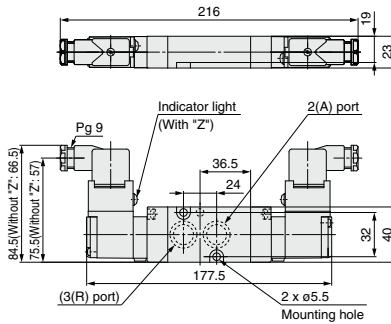
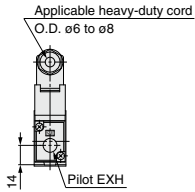
### DIN terminal

VFN212N-□<sup>D</sup>(Y)□□-02□-□



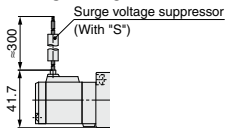
### DIN terminal

VFN212N-□<sup>D</sup>(Y)□□-02□-D-□



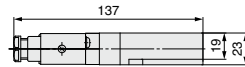
### Grommet

VFN212N-□G□□-02□-□-□



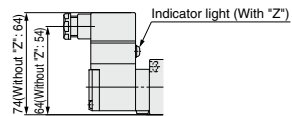
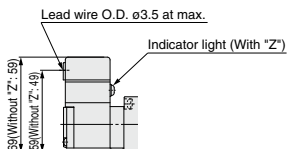
### Conduit terminal

VFN212N-□T□□-02□-□-□

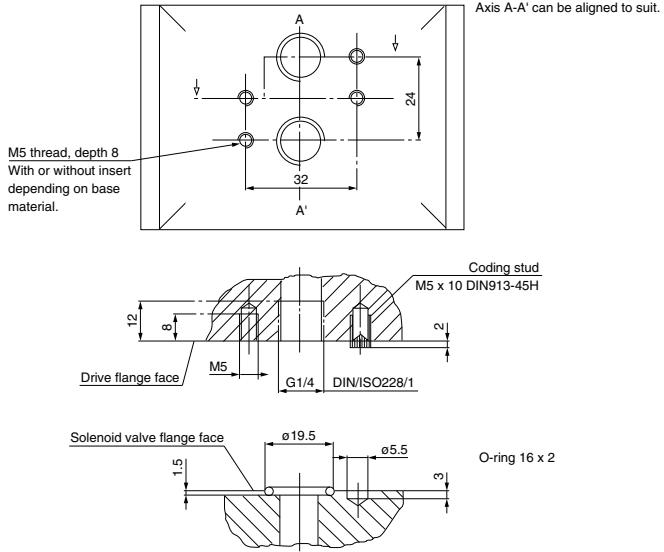


### Grommet terminal

VFN212N-□E□□-02□-□-□



**NAMUR Mounting Pattern**



The solenoid valve can be attached with 2 mounting bolts.  
The positioning of the coding stud hole is left up to the manufacturer and thus also determines the location of the coding stud.

|                                   |
|-----------------------------------|
| <b>IP</b>                         |
| <b>IW</b>                         |
| <b>1301</b>                       |
| <b>AW</b>                         |
| IL1 <input type="checkbox"/>      |
| IL2 <input type="checkbox"/>      |
| IT                                |
| CP <input type="checkbox"/>       |
| IS                                |
| <b>VFN</b>                        |
| IN-<br>T <input type="checkbox"/> |