

## VNB (Solenoid), Process Valve for Flow Control

### VNB311A-F20A-5DZ-Q

#### Datasheet

### General series information

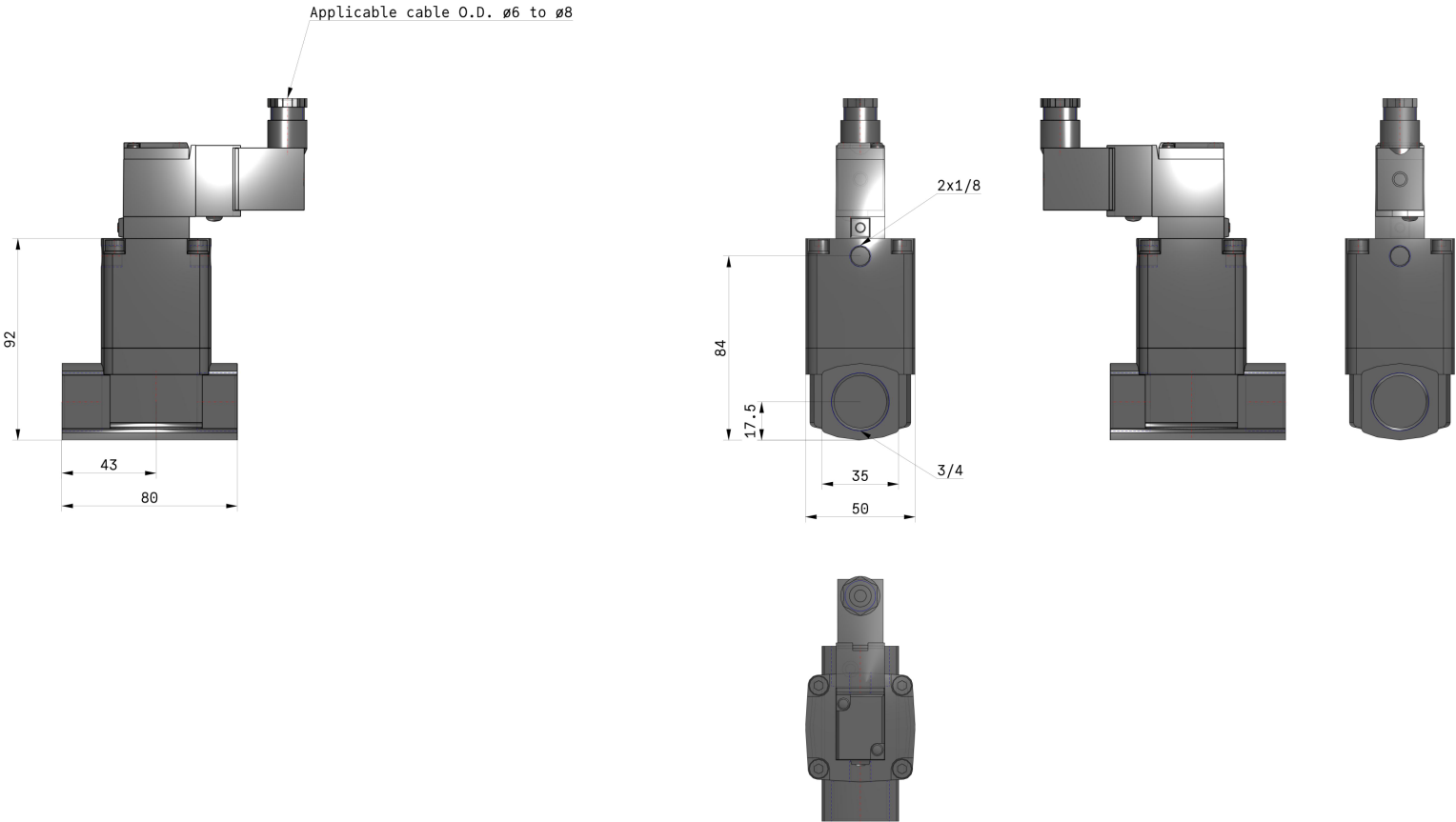
- Process valve series VNB
- External pilot solenoid
- Orifice size: 7mm to 50mm
- Port size: 1/8 to 2 Rc(PT)
- Seal material: NBR, FKM, EPR

### Standard specifications

|                                        |                                                        |
|----------------------------------------|--------------------------------------------------------|
| Area Code                              | Japan, Asia, Australia                                 |
| Size                                   | 3 [ø20 (N.C. 0.5 MPa/N.O. 1 MPa), ø14 (N.C. 1 MPa)]    |
| Valve Type                             | 1 [N.C. (Operating Pressure 0.5 MPa)]                  |
| Sealant                                | A (NBR Seal)                                           |
| Body Material                          | Standard (Bronze Body)                                 |
| Pilot System Option                    | Standard                                               |
| Thread                                 | F (G(PF))                                              |
| Port Size                              | 20A (3/4)                                              |
| Voltage                                | 5 (24 VDC)                                             |
| Lead Wire                              | DZ (DIN Terminal w/Light and Surge Voltage Suppressor) |
| Manual Override                        | Non-locking Push Type                                  |
| Bracket                                | None                                                   |
| CE-Compliant                           | Q (CE-Marked)                                          |
| Maximum temperature of pressure medium | 60 °C                                                  |
| Minimum temperature of pressure medium | -5 °C                                                  |
| Proof pressure                         | 1.5 MPa                                                |
| Maximum ambient temperature            | 50 °C                                                  |
| Minimum ambient temperature            | -5 °C                                                  |

|                                 |                       |
|---------------------------------|-----------------------|
| Pressure range                  | Low vacuum to 0.5 MPa |
| External pilot air: Press.      | 0.25 - 0.7 MPa        |
| External pilot air: Temperature | -5 °C - 50 °C         |
| Weight                          | 1.000 Kg              |

Dimensions



## Constructions



## Component Parts

| No. | Description          | Material        | Note                           |
|-----|----------------------|-----------------|--------------------------------|
| ①   | Body                 | Bronze*         | Clear coated                   |
| ②   | Cover assembly       | Aluminium alloy | Platinum silver painted        |
| ③   | Plate assembly       | Brass*          | Valve material (NBR, FKM, EPR) |
| ④   | Valve element        | (NBR, FKM, EPR) | Stainless steel or brass       |
| ⑤   | Piston assembly      | Aluminium alloy | —                              |
| ⑥   | Return spring        | Piano wire      | —                              |
| ⑦   | Pilot solenoid valve | —               | —                              |

Note) Parts ③ and ④ are for selection of valve composition.

\* The body option "S" is stainless steel, and "L" is aluminum.

## Additional information

|                           |                                                                                  |
|---------------------------|----------------------------------------------------------------------------------|
| Catalogue                 | <a href="#">VN_EU.pdf</a>                                                        |
| Declaration of conformity | <a href="#">newDoC_VN_TF1Z328EN.pdf</a><br><a href="#">DoC_VNx_TFM0001-B.pdf</a> |
| Installation manuals      | <a href="#">IM_VNB_TF2Z301EN-D.pdf</a>                                           |
| Operation manuals         | <a href="#">OM_VNB_OMA0005EN-E.pdf</a>                                           |