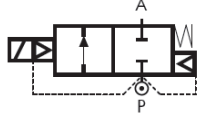


# D223/224/225 Series, Vacuum – 2/2 Normally Closed

| Specifications                     |   |
|------------------------------------|---|
| Function (single acting)           |  <p>Flow direction underseat 2 → 1</p> |
| Maximum Viscosity                  | Max. 21cST (3 °E)   |
| Body Material (Std)                | Brass CW617N (EN 12165)   |
| Flange                             | Stainless Steel 1.4305 EN 10088 (AISI 303)  |
| Tube                               | Stainless Steel AISI 304  |
| Plunger                            | Stainless Steel 1.4106 EN 10088 (AISI 430F)   |
| Top Stop                           | Stainless Steel 1.4105 EN 10088 (AISI 430F)   |
| Springs                            | Stainless Steel AISI 302  |
| Seal Material (Std)                | NBR   |
| Connection Type (Std)              | G parallel thread (ISO 228-1)   |
| Shading Ring                       | Copper  |
| Electrical Characteristics         |   |
| Standard Coil Voltage DC (-)       | 24 V  |
| Standard Coil Voltage AC 50 Hz (-) | 24 V, 110 V, 200 V, 230 V   |
| Standard Coil Voltage AC 60 Hz (-) | 24 V, 120 V, 220 V, 240 V   |
| Voltage Tolerance                  | +10% to -15% (AC)   |
|                                    | +10% to -5% (DC)  |
| Duty Cycle                         | 100% ED   |
| Protection Class                   | IP65 (EN 60529)<br>with plug and gasket correctly fitted *  |
| Electrical Connection              | to EN 175301 - 803 - A (ex DIN 43650)   |
| Coil Insulation                    | Class F 155 °C  |
| Power Rating (Standard)            | AC 18 VA (holding)<br>AC 36 VA (inrush)<br>DC 14 W  |

## Features and Benefits

- Pilot operated
- Robust construction for industrial applications
- Configuration suitable for vacuum
- Stainless steel AISI 430F operators with low residual magnetism
- Coils tested 100% in compliance to RoHS directive and to relevant international standards
- High quality seal materials
- Speed control screw as standard
- Response time 50 to 500 ms

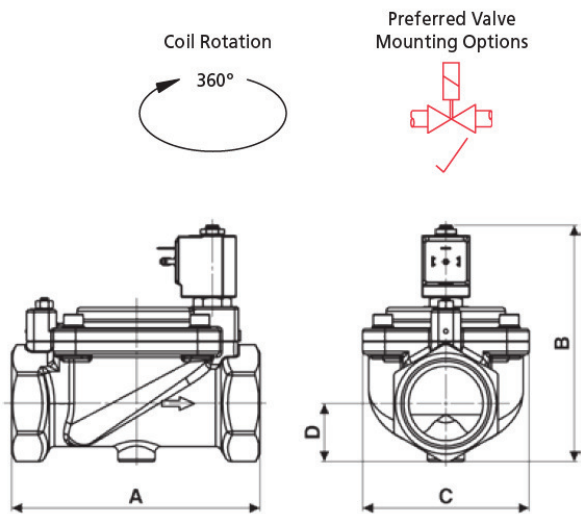


| Pipe Size | Cv (gpm) | Kv (m³/h) | OPD (bar)   |             | Orifice (mm) | Seal Material | Valve Code |
|-----------|----------|-----------|-------------|-------------|--------------|---------------|------------|
|           |          |           | AC Voltages | DC Voltages |              |               |            |
| 1 ¼"      | 25.97    | 22.20     | -0.5        | -0.5        | 40           | NBR           | D223DBKL   |
| 1 ½"      | 28.08    | 24.00     | to          | to          | 40           | NBR           | D224DBKL   |
| 2"        | 37.91    | 32.40     | -0.95       | -0.95       | 50           | NBR           | D225DBJL   |

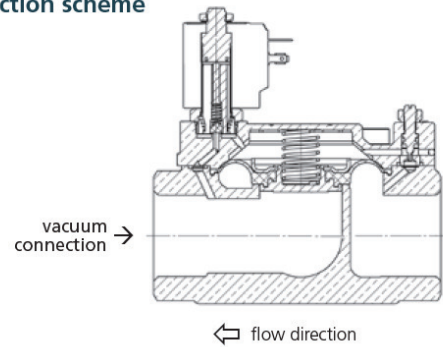
## Options Available

| Seal Material <sup>1</sup> and Media Temperature Range | Media           | Ambient Temperature Range |        |
|--|-----------------|---------------------------|--------|
|  |                 | Min                       | Max    |
| NBR (-10 °C to +90 °C)                                 | Water, oil, air | -10 °C                    | +50 °C |

<sup>1</sup> See corrosion reference guide and sealing solutions for material compatibility. Other seals material on request.



### Connection scheme



| Pipe Size   | A   | B   | C   | D  | Weight (kg) |
|-------------|-----|-----|-----|----|-------------|
| 1 ¼" - 1 ½" | 140 | 140 | 96  | 31 | 2.8         |
| 2"          | 168 | 158 | 112 | 39 | 3.9         |

Dimensions (mm)

### Solenoid enclosures

#### 7--0 Type Coil - Insulation class F

- External material: PBT (reinforced fiberglass 30%)
- Electrical connection: DIN EN 175301-803 form A
- Winding insulation: Class H (E180)
- Enclosure classification: Conforms to IP65 (according to EN 60529) with plug and gasket correctly fitted\*



#### Type 600 011- Plug

- Rated Voltage (max.): 250 VAC / 300 VDC
- Nominal Current: 10A (rated) / 16A (max)
- Wire cross-section: 1.5 mm<sup>2</sup> max
- Cable Entry: PG9 (6 to 8 mm)
- Enclosure classification: Conforms to IP65 (according to EN 60529) with supplied gasket
- Insulation class: group C- VDE 0110
- Housing colour: black
- UL approved, file No: E205538



\* Plug and gasket not supplied as standard, must be ordered separately

### Coding chart

#### Main Valve Assembly

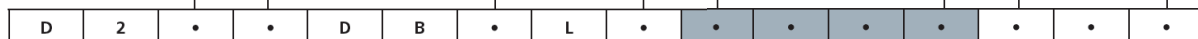
| Pipe Size |
|-----------|
| 23 1 ¼"   |
| 24 1 ½"   |
| 25 2"     |

| Orifice <sup>1</sup> |
|----------------------|
| K 40                 |
| J 50                 |

| Option     |
|------------|
| w/o option |

| Voltage / Frequency - Class F      |
|------------------------------------|
| 7250 24 VDC                        |
| 7200 24 V / 50/60 Hz               |
| 7400 110 V / 50 Hz - 120 V / 60 Hz |
| 7600 200 V / 50 Hz - 220 V / 60 Hz |
| 7700 230 V / 50 Hz - 240 V / 60 Hz |

| Plug         |
|--------------|
| w/o plug     |
| 0A1 c/w plug |



<sup>1</sup> DN40 for D223 and D224; DN50 for D225.

### Product coding example:

D225DBJL 7250  
2" G, auto operation, brass body, NBR seals, 50 mm orifice, 24 VDC, without plug.