



by ALFACOM

# ZW & PS SERIES

## SOLENOID VALVES

Technical catalog and coil selection guide



ZW N.O



ZW N.C



PS N.C | SS304

### Performance. Reliability. Control.

Brass and stainless steel 2-way solenoid valves | N.C and N.O configurations

Pressure range up to 16 bar | Port sizes up to 2" | Multiple coil voltage options

PRODUCT OVERVIEW

# ZW & PS SERIES

2-way solenoid valves for water, air, light oil, steam and high-temperature liquids

## ZW | N.C

BRASS | SEMI-DIRECT



|           |                 |
|-----------|-----------------|
| PORT SIZE | 3/8" - 2"       |
| PRESSURE  | 0 - 10 bar*     |
| SEAL      | FKM (Viton)     |
| FUNCTION  | Normally Closed |

## ZW | N.O

BRASS | SEMI-DIRECT



|           |               |
|-----------|---------------|
| PORT SIZE | 3/8" - 1"     |
| PRESSURE  | 0 - 6 bar     |
| SEAL      | FKM (Viton)   |
| FUNCTION  | Normally Open |

## PS | N.C

SS304 | PILOT OPERATED



|           |                 |
|-----------|-----------------|
| PORT SIZE | 1/4" - 2"       |
| PRESSURE  | 0.1 - 16 bar*   |
| SEAL      | PTFE            |
| FUNCTION  | Normally Closed |

### AVAILABLE COIL VOLTAGES

12VDC | 24VDC | 24VAC | 110VAC | 220-240VAC

Coil protection: IP65 | Insulation class: H | Thread options: G or NPT

\* ZW N.C maximum pressure depends on coil type and valve size. Refer to the detailed selection table.  
\* PS: 16 bar through 1"; 12 bar for 1 1/4" through 2". Pilot operation requires minimum differential pressure.

ZW SERIES TECHNICAL DATA

# ZW SERIES

Brass semi-direct acting solenoid valves with FKM (Viton) seals

ZW | N.C

Media: water, air, liquids and light oil (viscosity <=20 cSt) | -10 to 120 C with FKM

| Model  | Port   | Orifice | Cv  | AC pressure | DC pressure | L x W x H   | Weight  |
|--------|--------|---------|-----|-------------|-------------|-------------|---------|
| ZW-10N | 3/8"   | 16 mm   | 3.5 | 0-10        | 0-8         | 60x45x101   | 0.70 kg |
| ZW-15N | 1/2"   | 16 mm   | 3.5 | 0-10        | 0-8         | 60x45x101   | 0.70 kg |
| ZW-20N | 3/4"   | 20 mm   | 7.6 | 0-10        | 0-8         | 67x50x107   | 0.74 kg |
| ZW-25N | 1"     | 25 mm   | 12  | 0-10        | 0-8         | 82x66x115   | 1.10 kg |
| ZW-32N | 1 1/4" | 32 mm   | 24  | 0-10        | 0-6         | 102x82x147  | 2.00 kg |
| ZW-40N | 1 1/2" | 40 mm   | 29  | 0-10        | 0-6         | 110x85x153  | 2.20 kg |
| ZW-50N | 2"     | 50 mm   | 48  | 0-10        | 0-6         | 134x108x166 | 3.10 kg |

ZW | N.O

Available range supplied by ALFACOM: 3/8" through 1"

| Model   | Port | Orifice | Cv  | AC pressure | DC pressure | L x W x H | Weight  |
|---------|------|---------|-----|-------------|-------------|-----------|---------|
| ZW-10NK | 3/8" | 15 mm   | 3.5 | 0-6         | 0-6         | 60x45x109 | 0.75 kg |
| ZW-15NK | 1/2" | 15 mm   | 3.5 | 0-6         | 0-6         | 60x45x109 | 0.75 kg |
| ZW-20NK | 3/4" | 20 mm   | 7.6 | 0-6         | 0-6         | 67x50x119 | 0.80 kg |
| ZW-25NK | 1"   | 25 mm   | 12  | 0-6         | 0-6         | 82x66x127 | 1.30 kg |

ELECTRICAL DATA

DN10-25: AC 28VA / DC 18W | DN32-50: AC 45VA / DC 31W | IP65 | Class H

Available voltages: 12VDC, 24VDC, 24VAC, 110VAC and 220-240VAC

PS SERIES TECHNICAL DATA

PS SERIES | SS304

Pilot operated N.C steam solenoid valves with PTFE seals



SERVICE DATA

|                   |                                                |
|-------------------|------------------------------------------------|
| BODY              | Stainless steel SS304                          |
| SEAL              | PTFE                                           |
| MEDIA             | Steam / high-temperature liquid                |
| TEMPERATURE       | 0 to 180 C                                     |
| FUNCTION          | Pilot operated, Normally Closed                |
| MIN. DIFFERENTIAL | 0.1 bar (1/4" and 3/8") / 0.4 bar (1/2" to 1") |

| Model    | Port   | Orifice | Cv  | Min. | Max. AC | Max. DC | Temp. | Coil     | Order code (AC220V) |
|----------|--------|---------|-----|------|---------|---------|-------|----------|---------------------|
| PS-A-08J | 1/4"   | 8 mm    | 1.8 | 0.1  | 16      | 16      | 180 C | 20VA/20W | PS-A-08J-AC220V     |
| PS-A-10J | 3/8"   | 10 mm   | 3.1 | 0.1  | 16      | 16      | 180 C | 20VA/20W | PS-A-10J-AC220V     |
| PS-15J   | 1/2"   | 15 mm   | 4.8 | 0.4  | 16      | 16      | 180 C | 20VA/20W | PS-15J-AC220V       |
| PS-20J   | 3/4"   | 20 mm   | 7.6 | 0.4  | 16      | 16      | 180 C | 20VA/20W | PS-20J-AC220V       |
| PS-25J   | 1"     | 25 mm   | 12  | 0.4  | 16      | 16      | 180 C | 20VA/20W | PS-25J-AC220V       |
| PS-32J   | 1 1/4" | 32 mm   | 24  | 0.4  | 12      | 12      | 180 C | 20VA/20W | PS-32J-AC220V       |
| PS-40J   | 1 1/2" | 40 mm   | 30  | 0.4  | 12      | 12      | 180 C | 20VA/20W | PS-40J-AC220V       |
| PS-50J   | 2"     | 50 mm   | 48  | 0.4  | 12      | 12      | 180 C | 20VA/20W | PS-50J-AC220V       |

ORDERING GUIDE

PS - [SIZE CODE] - J - [THREAD] - [VOLTAGE]

J = SS304 | blank thread code = G thread | T = NPT thread

Voltages: AC220-240V, AC110V, AC24V, DC24V or DC12V | IP65 | Class H

Pressure values are in bar. Dimensions are in mm. Selection must consider medium, temperature, differential pressure and supply voltage.  
Specifications are based on manufacturer data and are subject to change without notice. Confirm final selection with ALFACOM.

D01-410 SERIES COIL

# D01-410 SERIES COIL

Square DIN coil for compatible ZW and PS solenoid valve operators



D01-410 SERIES

### TECHNICAL CHARACTERISTICS

|                       |                                         |
|-----------------------|-----------------------------------------|
| CONSTRUCTION          | Square thermoset encapsulated coil      |
| ELECTRICAL CONNECTION | DIN 43650A                              |
| INSULATION CLASS      | Class H                                 |
| ENCLOSURE RATING      | IP65 with correct connector*            |
| TYPICAL POWER         | AC: 20VA / DC: 20W                      |
| STOCKED VOLTAGES      | 12VDC, 24VDC, 24VAC, 110VAC, 220-240VAC |

### SELECTION AND INSTALLATION

- Select the voltage and current type exactly as specified by the control system.
- D01-410 is the preferred square coil option supplied by ALFACOM where compatible with the valve operator.
- IP65 protection is achieved only with the correct connector, gasket and cable-gland assembly.
- The coil must be fully seated and secured before operation.
- Never energize an AC coil when it is removed from the valve armature tube.

\* Enclosure rating is achieved only when the correct DIN connector, seal and cable entry are installed.

Power consumption and dimensional compatibility must be confirmed for the selected voltage and valve operator.

510 SERIES COIL

# 510 SERIES COIL

Square DIN coil for compatible steam-solenoid valve operators



510 SERIES

### TECHNICAL CHARACTERISTICS

|                       |                                              |
|-----------------------|----------------------------------------------|
| CONSTRUCTION          | Square encapsulated coil                     |
| ELECTRICAL CONNECTION | DIN 43650A                                   |
| INSULATION CLASS      | Class H                                      |
| ENCLOSURE RATING      | IP64 / NEMA 4*                               |
| DUTY                  | Continuous duty, subject to rated conditions |
| STOCKED VOLTAGES      | 12VDC, 24VDC, 24VAC, 110VAC, 220-240VAC      |

### SELECTION AND INSTALLATION

- Use only with a compatible operator tube and matching coil bore.
- Confirm voltage, AC/DC current type and frequency before energizing.
- Install the DIN connector with the correct gasket and cable gland to maintain the enclosure rating.
- The coil must be fully seated and secured before operation.
- Do not energize an AC coil while it is removed from the valve operator.

\* Enclosure rating is achieved only when the correct DIN connector, seal and cable entry are installed.

Power consumption and dimensional compatibility must be confirmed for the selected voltage and valve operator.



by **ALFACOM**

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Specifications are subject to change without notice.

Consult ALFACOM for final valve and coil selection.

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