# ASCO™ Miniature Solenoid Valves

General Service Valves

Series
**275 / 375**

## Features

- Direct acting solenoid valve
  - Composite body as lead-free alternative to brass
  - Compact design and low power consumption
  - Barbed ports with ring nuts for easy and safe connection of tubing at high pressure
  - Steam valves can handle high pressure and temperatures
  - High resistance to aggressive media
- Typical applications include
  - Dental Sterilizers
  - Benchtop Sterilizers
  - Steam Sterilizers
  - Bio-Medical Analyzers



## General Valve Information

| | |
|---|---|
| Body | PPS |
| Seals* | FKM |
| Internal Components | Stainless Steel, Stainless Steel and PPS |
| Seat | PPS |
| Core Tube | Stainless Steel |
| Shading Coil | Copper |
| Fluids | Liquids or gases |
| Fluid Temperature | 0°C +140°C |
| Differential Pressure | see "Specifications" [1 bar = 100 kPa] |
| Response Time | ~ 20ms |
| Max. Viscosity | 37 cSt (mm²/s) |

* Ensure that the compatibility of the materials in contact with the fluids is verified

## Electrical Characteristics

| | |
|---|---|
| **Coil Insulation Class** | F |
| **Connector** | Spade plug (cable Ø 6-8 mm or Ø 6-10 mm) |
| **Connector Specification** | DIN 43650, 11 mm, EN 175301-803, form A |
| **Electrical Safety** | IEC 335 |
| **Electrical Enclosure Protection** | Moulded IP67 (EN 60529) with plug-connector |
| **Standard Voltages** ( Other voltages and frequencies on request) | DC (=) : 12 - 24V (+10% -5%)<br>AC (~) : 24V/50 - 110V/50 Hz<br>230V/50-60 Hz (+10% -15%) |

| Operator Ambient Temperature Range | Type | Power Ratings | | | Replacement Coils | | |
|---|---|---|---|---|---|---|---|
| | | Holding ~ | | Hot/Cold = | ~ | = | |
| °C (°F) | | (VA) | (W) | (W) | 230 V/50-60Hz | 24 VDC | 12 VDC |
| -10 to +60 (14 to 140) | S0 | - | - | 5.0 | - | 533593-001 | 533593-004 |
| | | 9.0 | 9.0 | 9.0 | 533593-003 | 533593-002 | 533593-005 |
| | L0 | - | - | 5.0 | - | 533598-001 | - |
| | | - | - | 9.0 | - | 533598-002 | - |

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## Specifications

| Series | Function | Pipe Connection | Orifice Size in mm (inches) | Flow Coefficient in Kv (in Cv) | Operating Pressure Gas in bar (in psi) | Operating Pressure Liquid in bar (in psi) | Power Rating AC (VA) | Power Rating DC (W) |
|---|---|---|---|---|---|---|---|---|
| 275 | 2/2 NC | G 1/8, Barbed Ports or Barbed Ports with ring nut | 1.6 mm (0.06 in) | 0.09 (0.10) | 0 - 10 (0 - 145) | 0 - 10 (0 - 145) | 9 | 5 |
| | | G 1/8, Barbed Ports or Barbed Ports with ring nut | 2.3 mm (0.09 in) | 0.15 (0.17) | 0 - 10 (0 - 145) | 0 - 10 (0 - 145) | 9 | 5 |
| | | G 1/8, Barbed Ports or Barbed Ports with ring nut | 3.2 mm (0.13 in) | 0.25 (0.29) | 0 - 10 (0 - 145)<br>0 - 6 (0 - 87) for DC coils | 0 - 10 (0 - 145)<br>0 - 6 (0 - 87) for DC coils | 9 | 5 |
| | 2/2 NO | Barbed Ports | 2.5 mm (0.10 in) | 0.14 (0.16) | 0 - 5 (0 - 72.5) | 0 - 5 (0 - 72.5) | 9 | 9 |
| | | G 1/8 or Barbed Ports | 3.0 mm (0.12 in) | 0.18 (0.21) | 0 - 2.5 (0 - 36.2) | 0 - 2.5 (0 - 36.2) | 9 | 9 |
| | | Barbed Ports with ring nut | | 0.15 (0.17) | | | | |
| | | Barbed Ports | 4.2 mm (0.17 in) | 0.26 ( 0.30) | 0 - 2.5 (0 - 36.2) | 0 - 2.5 (0 - 36.2) | 9 | 9 |
| | | G 1/4 | | 0.33 (0.38) | | | | |
| 375 | 3/2 U | G 1/8 or Barbed Ports | 2.3 mm (0.09 in) | 0.2 (0.23) | 0 - 4 (0 - 58) | 0 - 4 (0 - 58) | 9 | 9 |
| | | Barbed Ports with ring nut | | 0.12 (0.14) | | | | |

## How to Order

**G 275 A 100 S0 V00 F1**

**Fluid Connection Type**
G = G ISO Connection
6 = Barbed Fitting
0 = Nut for Tube

**Product Series**
275 = 275 Series (2-Way)

**Revision**
A = Initial Release

**Item ID**

| Item | Service | Orifice Size | Wattage AC | Wattage DC |
|---|---|---|---|---|
| 100 | NC | 1.6 | - | 5.0 |
| 101 | NC | 2.3 | - | 5.0 |
| 102 | NC | 3.2 | - | 5.0 |
| 110 | NC | 1.6 | 9.0 | 9.0 |
| 111 | NC | 2.3 | 9.0 | 9.0 |
| 112 | NC | 3.2 | 9.0 | 9.0 |
| 200 | NO | 3.0 | 9.0 | 9.0 |
| 201(1) | NO(1) | 4.2(1) | 9.0(1) | 9.0(1) |
| 202(2) | NO(2) | 4.2(2) | 9.0(2) | 9.0(2) |

Note:
(1) Connection type G 1/4" only
(2) Connection type 6 only

**Sealing and Options**
V00 = FKM

**Electrical Connection Type**
S0 = Spade Plug without Connector
S1 = Spade Plug with Connector
L0 = Flying Leads

**Voltage**
F1 = 24 V DC Class F
F3 = 12 V DC Class F
FH = 230V/50-60Hz
F0 = 110 V / 50 Hz (120 V / 60 Hz)
FQ = 24V/50-60Hz

**G 375 A 300 S0 V00 F1**

**Fluid Connection Type**
G = G ISO Connection
6 = Barbed Fitting
0 = Nut for Tube

**Product Series**
375 = 375 Series (3-Way)

**Revision**
A = Initial Release

**Item ID**

| Item | Service | Orifice Size |
|---|---|---|
| 300 | U | 2.3 |

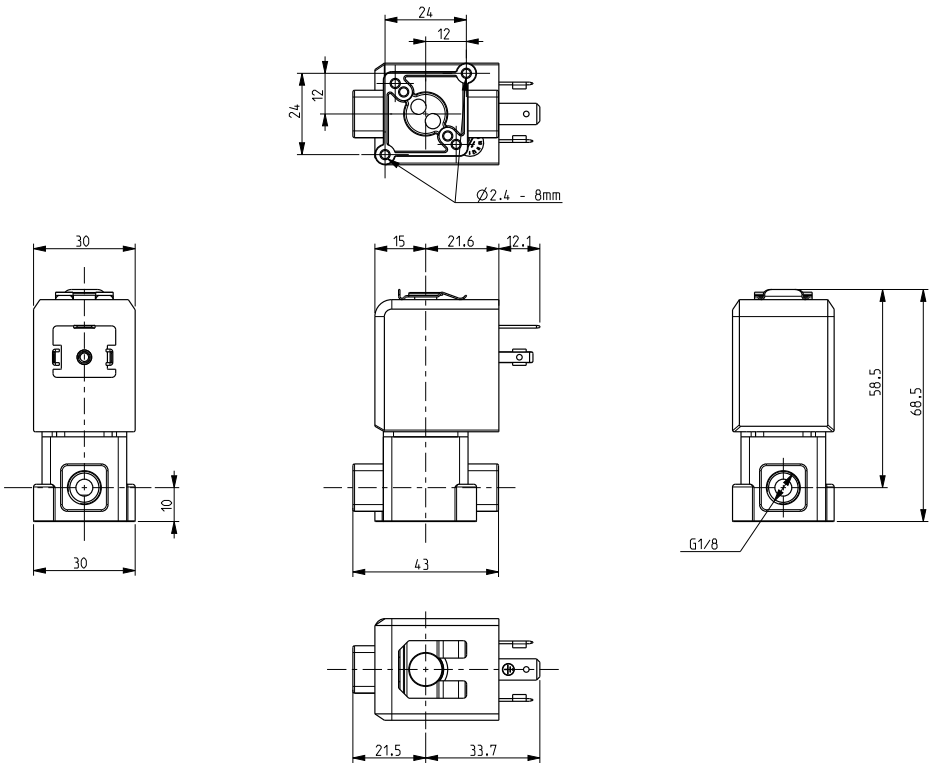
**Sealing and Options**
V00 = FKM

**Electrical Connection Type**
S0 = Spade Plug without Connector
S1 = Spade Plug with Connector
L0 = Flying Leads

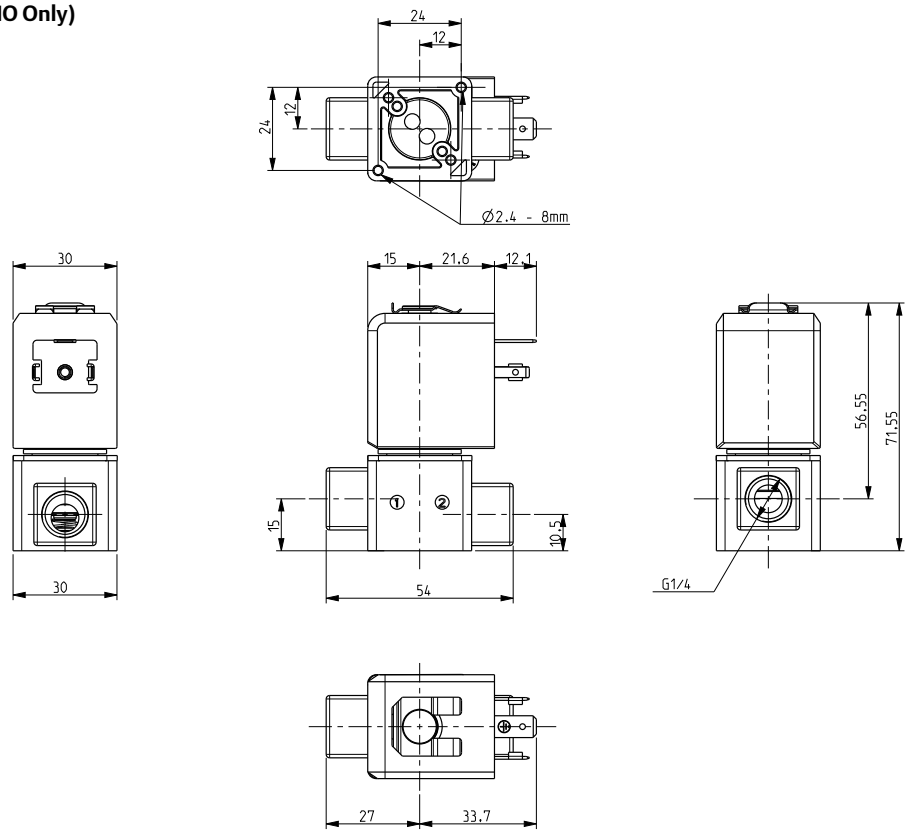
**Voltage**
F1 = 24 V DC Class F
F3 = 12 V DC Class F
FH = 230V/50-60Hz
F0 = 110 V / 50 Hz (120 V / 60 Hz)
FQ = 24V/50-60Hz

## Dimensions (mm)

**Series 275**
**G1/8 Connection**

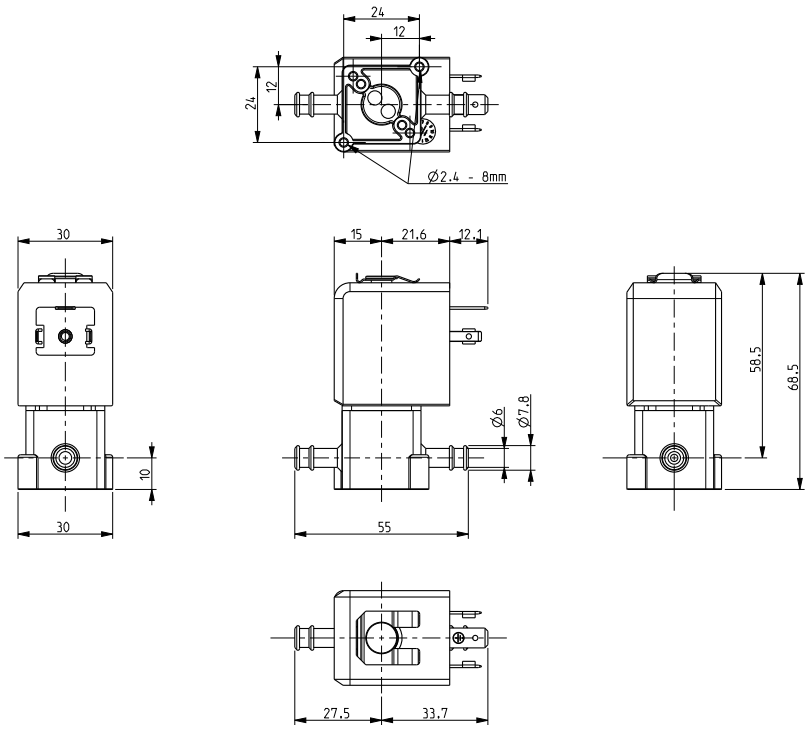



**Series 275**
**G1/4 Connection (2/2 NO Only)**

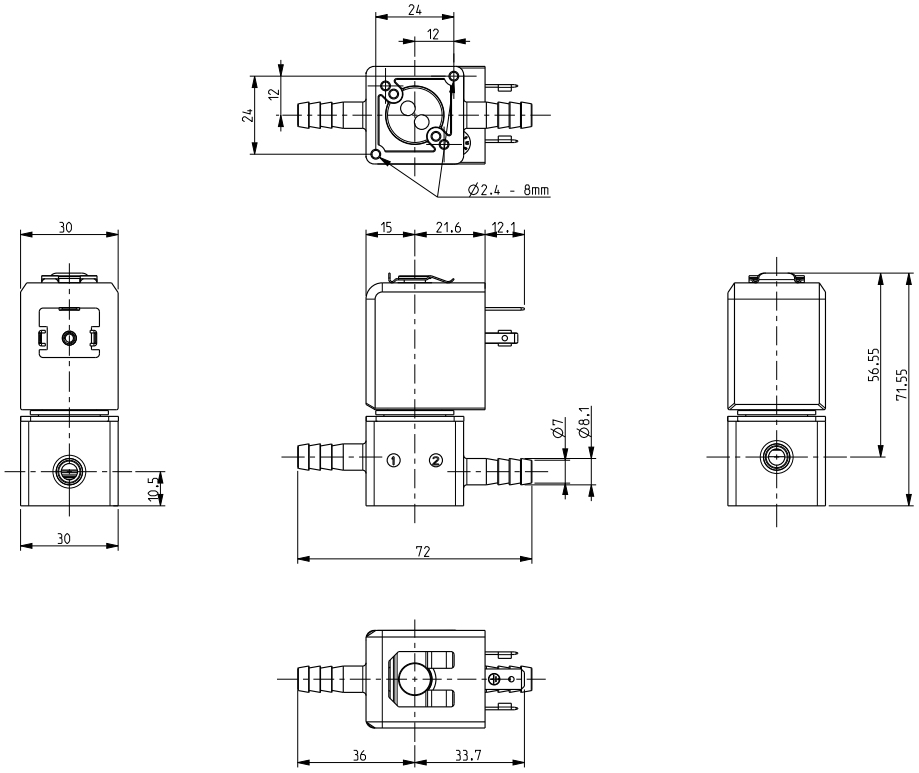


## Dimensions (mm)

**Series 275**
**Barbed Ports (2/2 NC)**

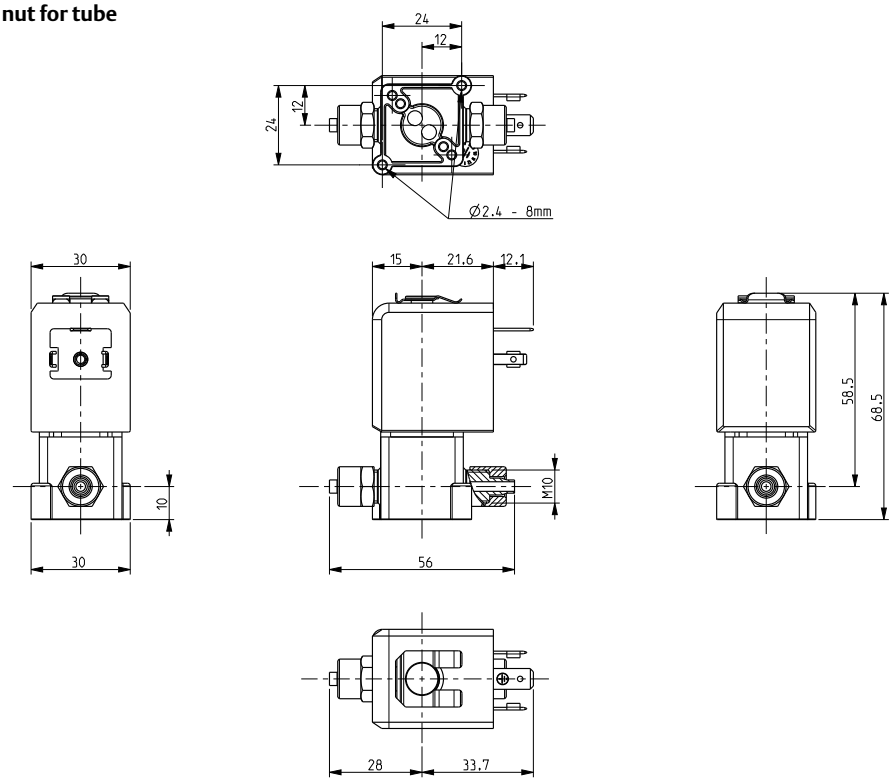



**Series 275**
**Barbed Ports (2/2 NO)**

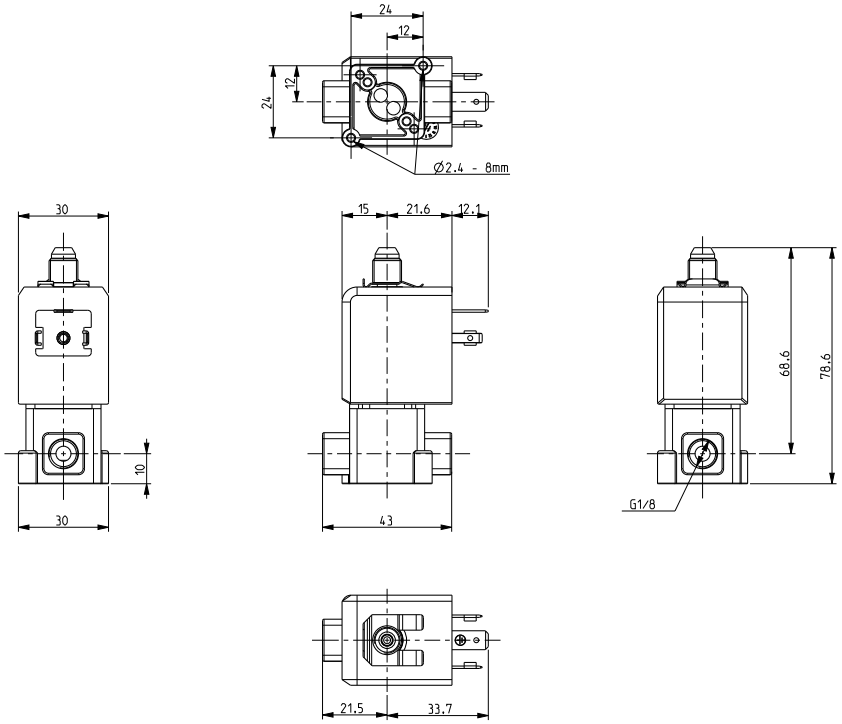


## Dimensions (mm)

**Series 275**
**Barbed Ports with ring nut for tube**

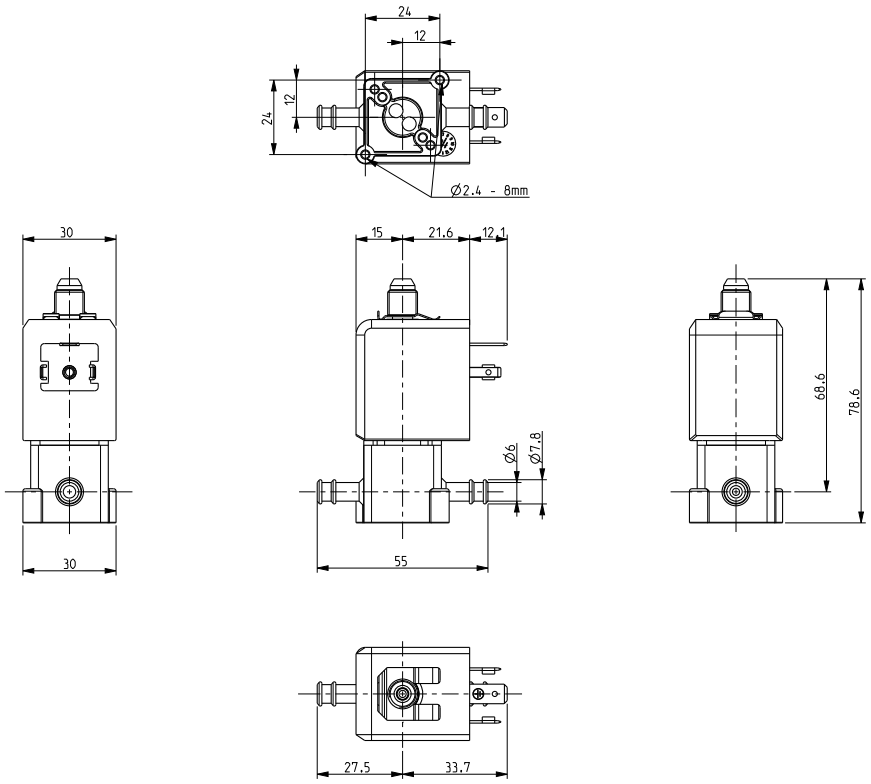



**Series 375**
**G 1/8 Connection**



## Dimensions (mm)

**Series 375**
**Barbed Ports**




**Series 375**
**Barbed Ports with ring nut for tube**

