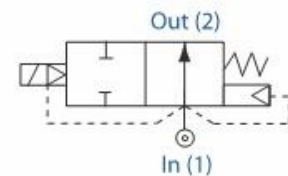


## ACDN Series 2/2 Normally Open



### Features & Benefits

- Robust Valve Design
- Diaphragm Operation
- Fully Ported Orifices for high flow
- Choice of Valve Body Material and Seals
- Response time up to 1" 15-60ms
- Response time up to 2" 40-1000ms



### Electrical Characteristics

|                              |  |
|------------------------------|--|
| Coil Voltage DC (=):         | 12v, 24v, 110v   |
| Coil Voltage AC 50Hz (~):    | 24v, 110v, 120v, 230v  |
| Coil Voltage AC 60Hz (~):    | 24v, 110v, 120v, 220v  |
| Voltage tolerance:           | +10% or -10%   |
| Duty Cycle:                  | 100% ED  |
| Protection Class (Std):      | IP65 (BS EN 60529)<br>(plug supplied as standard)                |
| Electrical Connection (Std): | PG9 Din Connector DIN 43650/ISO<br>4400 (EN 175301-803) Form 'A' |
| Coil Insulation:             | Class H (BS EN 60085) 180°C (E5 type)                            |
| Power Rating:                | 14.5 watts, 19VA   |

### Specifications

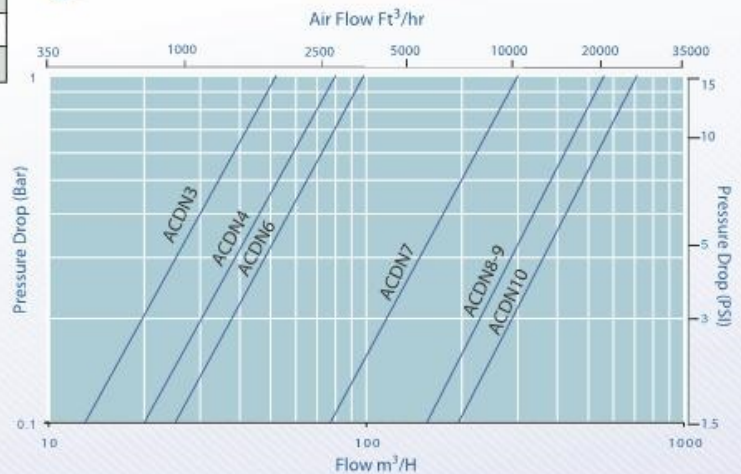
|                            |                                  |
|----------------------------|----------------------------------|
| Function:                  | Normally Open, Energise to close |
| Ambient Temperature:       | -10°C to +50°C                   |
| Maximum Viscosity:         | 115 SSU                          |
| Body Material 3/8" - 1":   | Brass CZ122                      |
| Body Material 1 1/4" - 2": | Bronze DIN1705                   |
| Flange Tube:               | Stainless Steel 303              |
| Plunger and Top Stop:      | Stainless Steel 430FR            |
| Springs:                   | Stainless Steel 302              |
| Seal Material (Std):       | Nitrile (BunaN)                  |
| Connection Type (Std):     | BS21                             |
| Shading Coil:              | Copper                           |

### Features

| Pipe Size | Qn    | OPD (Bar)   |             | P.Max<br>Bar | Orifice<br>mm | Cat No. |
|-----------|-------|-------------|-------------|--------------|---------------|---------|
|           |       | AC Voltages | DC Voltages |              |               |         |
| 3/8"      | 866   | 0-10        | 0-10        | 50           | 16.00         | ACDN3   |
| 1/2"      | 1333  | 0-10        | 0-10        | 50           | 16.00         | ACDN4   |
| 3/4"      | 1583  | 0-10        | 0-10        | 50           | 16.00         | ACDN6   |
| 1"        | 5001  | 0-10        | 0-10        | 50           | 20.00         | ACDN7   |
| 1 1/4"    | 9168  | 0.3-10      | 0.3-10      | 50           | 40.00         | ACDN8   |
| 1 1/2"    | 9168  | 0.3-10      | 0.3-10      | 50           | 40.00         | ACDN9   |
| 2"        | 11669 | 0.3-10      | 0.3-10      | 50           | 40.00         | ACDN10  |

Qn = Flow of air in litres/min @ 20°C. Input 6 bar Δp of 1 bar

### Flow Data



#### How to use the Flow Chart

1. Select the required flow.
2. Note the corresponding orifices/model and pressure drop.
3. Using orifices/model, (refer to the Features panel) for technical information

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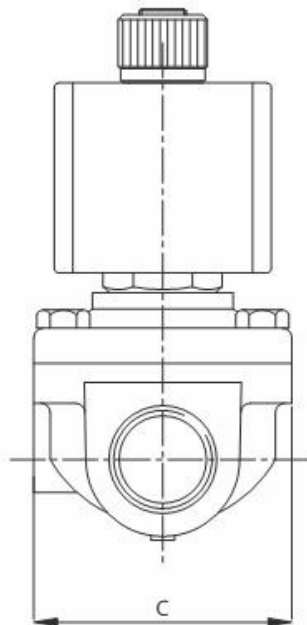
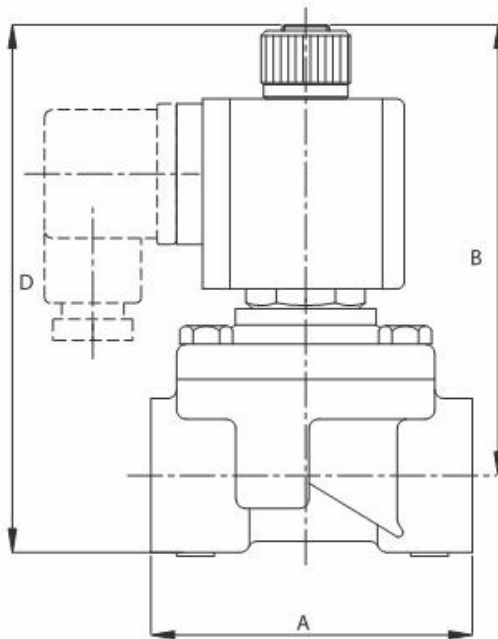
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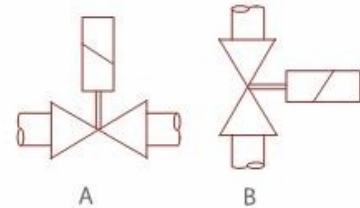
Fax +39 023562627

E-mail: morrel\_int\_srl@yahoo.it

## ACDN Series 2/2 Normally Open



Mounting



Solenoid Coil may be rotated to any angle.

### Dimensions

#### Note:

- Tested in accordance with BS EN12266-1
- PED Compliant
- Stainless Steel dimensions vary from chart consult factory

| Size        | A    | B   | C   | D   | Weight (Kg) |
|-------------|------|-----|-----|-----|-------------|
| 3/8" - 3/4" | 69.5 | 88  | 75  | 104 | 0.90        |
| 1"          | 85   | 90  | 75  | 112 | 1.20        |
| 1½" - 2"    | 137  | 103 | 120 | 152 | 3.00        |

Dimensions given in mm

### Options

| Solenoid Enclosure |                               |                |
|--------------------|-------------------------------|----------------|
| Protection Class   | Electrical Entry              | Ambient        |
| EExd T6 (IP67)     | M20 X 1.5 Female              | -50°C to +40°C |
| EExd T4 (IP67)     | M20 X 1.5 Female              | -50°C to +70°C |
| Exm T5 (IP65)      | M16 X 1.5 Male<br>FLYING LEAD | -20°C to +40°C |

| Body Material       |
|---------------------|
| Stainless Steel 316 |

| Seal Material                 | Media Temperature Range |
|-------------------------------|-------------------------|
| EPDM (WRAS approved up to 1") | -50°C to +120°C         |
| Viton                         | -20°C to +150°C         |

See solenoid enclosures for specific details

ANSI and PN flange connection available

LED power indicator option

See corrosion reference guide and sealing solutions for material compatibility

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