

Part No. <u>B424B30IMV</u>



Part No. <u>B424B1000</u>

The Ashcroft B-Series pressure switch offers precision and reliability in the toughest industrial applications. Designed with a NEMA 4X rating, this switch stands up to harsh environments, resisting water, dust, and corrosion, which makes it perfect for industrial, process, and outdoor applications. Featuring Ashcroft's renowned accuracy, an easily adjustable setpoint, and a durable, compact build, the B-Series delivers reliable and consistent performance.

**B-Series Mechanical Pressure** 

## Applications

**Switches** 

- Petrochemical
- Pulp and paper mills
- Plant pressure
- Water and waste water
- Pumps, compressors, and turbines
- Boilers and burners
- Degreasers and evaporators
- Hydraulic and lubrication systems
- Heating and air conditioning
- Marine equipment
- OEM equipment

### Features

- · Easy mechanical set point adjustment
- Setpoint locking screw
- Broad setpoint and deadband ranges to fit almost any application
- Wall mountable
- 15A SPDT relay
- Narrow deadband ranges on B420B models



| Ashcroft B-Series Pressure Switches |                            |                    |                       |  |   |                         |                 |        |          |  |
|-------------------------------------|----------------------------|--------------------|-----------------------|--|---|-------------------------|-----------------|--------|----------|--|
| Part Number                         | Setpoint Range             | Deadband<br>Range* | Diaphragm<br>Material | Output   | Process<br>Connection                                       | Electrical<br>Connecton | Drawing<br>Link | Wt(lb) | Price    |  |
| <u>B424B30IMV</u>                   | -30 to -4.5in Hg<br>vacuum | 1.5 to 4.0in Hg    | Buna-N                | SPDT 15A -125 to<br>480 VAC,<br>1/2A - 125 VAC,<br>1/4A - 250 VDC,<br>6A - 30 VDC. | 1/4in female NPT  | 3/4in female NPT        | PDF             | 1.72   | \$236.00 |  |
| B424B15                             | 2.25 to 15 psig            | 0.5 to 1.5 psig    |                       |  |   |                         | PDF             | 1.70   | \$206.00 |  |
| <u>B424B30</u>                      | 4.5 to 30 psig             |                    |                       |  |   |                         | PDF             | 1.73   | \$206.00 |  |
| B424B60                             | 9 to 60 psig               | 1.0 to 3.5 psig    |                       |  |   |                         | PDF             | 1.75   | \$206.00 |  |
| B424B100                            | 15 to 100 psig             | 1.5 to 5.0 psig    |                       |  |   |                         | PDF             | 1.72   | \$206.00 |  |
| <u>B424B200</u>                     | 30 to 200 psig             | 5 to 13 psig       |                       |  |   |                         | PDF             | 1.73   | \$206.00 |  |
| <u>B424B400</u>                     | 60 to 400 psig             | 5 to 24 psig       |                       |  |   |                         | PDF             | 1.74   | \$206.00 |  |
| <u>B424B1000</u>                    | 150 to 1000 psig           | 30 to 110 psig     |                       |  | 1/2in male NPT or<br>1/4in female NPT<br>process connection |                         | PDF             | 1.88   | \$273.00 |  |
| <u>B424B3000</u>                    | 450 to 3000 psig           | 80 to 235 psig     |                       |  |   |                         | PDF             | 1.90   | \$273.00 |  |
| <u>B424V15</u>                      | 2.25 to 15 psig            | 0.7 to 2.1 psig    | - Viton               | SPDT 15A -125 to<br>480 VAC,<br>1/2A - 125 VAC,<br>1/4A - 250 VDC,<br>6A - 30 VDC. | 1/4in female NPT  | 3/4in female NPT        | PDF             | 1.72   | \$221.00 |  |
| <u>B424V30</u>                      | 4.5 to 30 psig             |                    |                       |  |   |                         | PDF             | 1.73   | \$221.00 |  |
| <u>B424V60</u>                      | 9 to 60 psig               | 1.4 to 4.9 psig    |                       |  |   |                         | PDF             | 1.72   | \$221.00 |  |
| <u>B424V100</u>                     | 15 to 100 psig             | 2.1 to 7.0 psig    |                       |  |   |                         | PDF             | 1.72   | \$221.00 |  |
| <u>B424V200</u>                     | 30 to 200 psig             | 7 to 18.2 psig     |                       |  |   |                         | PDF             | 1.75   | \$221.00 |  |
| <u>B424V400</u>                     | 60 to 400 psig             | 7 to 33.6 psig     |                       |  |   |                         | PDF             | 1.76   | \$221.00 |  |
| <u>B420B15</u>                      | 2.25 to 15 psig            | 0.1 to 0.35 psig   | Buna-N                | SPDT 15A -<br>125/250 VAC  | 1/4in female NPT  | 3/4in female NPT        | PDF             | 1.71   | \$224.00 |  |
| <u>B420B60</u>                      | 9 to 60 psig               | 0.3 to 1.0 psig    |                       |  |   |                         | PDF             | 1.74   | \$224.00 |  |
| <u>B420B100</u>                     | 15 to 100 psig             | 0.5 to 1.7 psig    |                       |  |   |                         | PDF             | 1.72   | \$224.00 |  |
| B420B200                            | 30 to 200 psig             | 1 to 3 psig        |                       |  |   |                         | PDF             | 1.74   | \$224.00 |  |

\* Due to the mechanical design of the switch, the actual deadband will vary from one switch to another but will be within the specified deadband range. Generally, the expected deadband for a setpoint at the lower end of the range will trend towards the lower end for the deadband range. The deadband for a setpoint at the upper end of the range will trend towards the upper end for the deadband range.



# **B-Series Mechanical Pressure** Switches

| Ashcroft B-Series General Specifications |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| Setpoint                                 | Field adjustable   |  |  |  |  |  |
| Setpoint Repeatability                   | ±1% of full range<br>(Additional setpoint shift of 1% of range per 50°F from initial setpoint set at 70°F typical) |  |  |  |  |  |
| Enclosure Material                       | Epoxy-coated aluminum  |  |  |  |  |  |
| Enclosure Rating                         | NEMA 4X, IP66  |  |  |  |  |  |
| Process Connection                       | 1/4in female NPT, 1/2in male NPT or 1/4in NPT on B424B1000 and B424B3000   |  |  |  |  |  |
| Electrical Output                        | SPDT   |  |  |  |  |  |
| Electrical Termination                   | 3/4in NPT female   |  |  |  |  |  |
| Ambient Temperature Range                | -20°F to 150°F (-28°C to 65°C)   |  |  |  |  |  |
| Process Temperature Range                | 0°F to 150°F (-17.8°F to 65.6°C) Buna-N diaphragm,<br>20°F to 300°F (-6.7°C to 148.9°C) Viton diaphragm            |  |  |  |  |  |
| Wetted Material                          | 316 Stainless Steel, Buna-N or Viton depending on model  |  |  |  |  |  |
| Agency Approvals                         | UL E34743 , CSA: 55541   |  |  |  |  |  |

| Pressure Ratings           |        |        |  |  |  |  |  |
|----------------------------|--------|--------|--|--|--|--|--|
| Ranges<br>(Listed in psig) | Proof  | Burst  |  |  |  |  |  |
| 30in Hg vac                | 250    | 400    |  |  |  |  |  |
| 0-15                       |        | 1,500  |  |  |  |  |  |
| 0-30                       | 500    |        |  |  |  |  |  |
| 0-60                       |        |        |  |  |  |  |  |
| 0-100                      | 1 000  | 3,000  |  |  |  |  |  |
| 0-200                      | 1,000  |        |  |  |  |  |  |
| 0-400                      | 2,400  |        |  |  |  |  |  |
| 0-1000                     | 10.000 | 18,000 |  |  |  |  |  |
| 0-3000                     | 12,000 |        |  |  |  |  |  |

Scan or click on the QR code for the manufacturer's installation and maintenance instructions.





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# **Electrical Connections**

