

AVK 869/BB0X99

M100 - Downstream pressure reducing valve

AVK 869/BB0X99 diaphragm operated control valve for pressure reducing applications (PRV) automatically reduces a higher inlet pressure to a lower outlet pressure. The outlet pressure is kept constant, regardless of changes in flow or inlet pressure. The main control valve is pilot operated, capable of precise setting and easy adjustment of outlet pressure.

Valve body in ductile iron GJS-500-7 coated with Fusion Bonded Epoxy 300 microns RAL 5017, GSK approved. Standard configuration with pilot, pipes and fittings in stainless steel.

AVK 869/BB0X99 valve has a flexible design, allowing easy addition of features and accessories.

FEATURES AND BENEFITS

- Automatic operation
- Full and reduced bore body
- Lifted seat in stainless steel
- Parabolic design of plug
- In-line serviceable
- Variety of accessories

RANGE

- PN 10-16
- DN 50÷600

STANDARDS

- | | |
|--------------------------|--------------------------|
| • EN 1074-1 | Valves for water supply |
| • EN 1074-5 | Regulating valves |
| • EN 558 S1 (ISO 5752) | Face To Face |
| • EN 1092-2 (ISO 7005-2) | Drilling flanges |
| • EN 12266-1 (ISO 5208) | Pressure tests grade "A" |

CERTIFICATES

- DM 174 (I),
- WRAS (UK),
- ACS (F),
- DVGW (DE) - Coating & Rubbers

CORROSION PROTECTION

- Coated inside-outside FBE 300 Microns

DM 174

WRAS
APPROVED PRODUCT



APPLICATIONS

- Drinking water / Water treatment
- Irrigation



WORKING CONDITIONS

- | | |
|-------------------------------|---------------|
| • Media: | Treated water |
| • Minimum operating pressure: | 0.5 bar |
| • Maximum operating pressure: | 16 bar |
| • Maximum water temperature: | +70°C |

COMPLEMENTARY FUNCTIONS

- M120 Pressure sustaining
- M130 Check valve
- M170 Solenoid control
- M117 Dual stage day/night and solenoid control

PILOT CALIBRATION RANGE

- | | | |
|------------------|---------|----------------|
| • Yellow spring: | PN10/16 | 0.2 - 2.0 bar |
| • Blue spring: | PN10/16 | 0.5 - 5.0 bar |
| • Red spring: | PN10/16 | 0.7 - 7.0 bar |
| • Green spring: | PN10/16 | 1.1 - 11.0 bar |
| • Brown spring: | PN10/16 | 1.4 - 14.0 bar |
| • Green spring: | PN25 | 2.1 - 21.0 bar |
| • Black spring: | PN40 | 3.5 - 35.0 bar |

PICTURES ARE PURELY FOR ILLUSTRATIVE PURPOSES



OPERATION

The **869/BB0X99** is a pilot-controlled valve with a 2-way pressure reducing pilot [4]. The calibrated orifice [2] continuously allows flow from the valve inlet into the upper control chamber. The pressure reducing pilot [4] senses the outlet pressure through the connection on the valve outlet port. Under flowing conditions, the pressure reducing pilot [4] reacts to small changes in the outlet pressure, controlling the valve position by modulating the pressure in the control chamber. When the outlet pressure changes according to the set-value of the pilot, the pilot modulates to ensure pressure control.

1. BALL VALVE - PILOT SYSTEM ISOLATION
2. Y-STRAINER + CALIBRATED ORIFICE (2.5 mm)
3. UNIDIRECTIONAL NEEDLE VALVE
4. PRESSURE REDUCING PILOT - ACV100
5. MANOMETER
6. BALL VALVE
7. VENT

Optional features:

8. BALL VALVE
9. MANOMETER
10. BALL VALVE
11. POSITION INDICATOR

