



## AVK PRESSURE REDUCING CONTROL VALVE, WITH ELECTRICAL ACTUATOR, PN10/16

859/0099-001



### Hydraulic pilot operated pressure reducing control valve with AUMA Profox

AVK hydraulic pilot operated control valves for pressure reducing applications automatically reduce a high inlet pressure to a lower outlet pressure. The hydraulic AVK pilot, that does not require any power, maintains a constant outlet pressure regardless of changes in flow or inlet pressure.

AUMA Profox is mounted on the pilot and allows for changing the outlet pressure. AUMA Profox is only activated when change of outlet pressure is required, which results in very low power consumption. AUMA Profox communicates using an analog 4-20 mA signal, or Profibus.

The control valves use the energy from the pressurised water to change the valve position and therefore do not need an actuator for regulation but only for changing outlet pressure set point. This ensures low power consumption. In case of lost power supply, the valve continues to regulate.

#### *Time-based pressure management:*

Time-based pressure management adjusts the outlet pressure based on an expected flow profile and predefined set points for time and pressure. Time-based pressure management allows for a constant pressure within a predefined geographical area far from the valve, because the outlet pressure set point takes the pressure loss calculated from the flow curve into account. This method maintains a low, stable pressure at the consumers in the area and thereby reduces the average pressure significantly resulting in huge energy and water savings.

#### *Flow-based pressure management:*

Flow-based pressure management adjusts the outlet pressure according to the actual consumption based on the signal from a flow meter. Flow-based pressure management allows for a constant pressure within a predefined geographical area far from the valve, because the outlet pressure set point takes the pressure loss calculated from the actual flow curve into account. This method maintains a low, stable pressure at the consumers in the area and thereby reduces the average pressure significantly resulting in huge energy and water savings. Such a regulation takes changes in consumption that falls outside the normal range into account, such as holiday periods, water consumption via fire hydrants and other abnormal consumption patterns.

#### **Control valve DN50-600:**

Design according to EN 1074 – 5, face-to-face dimension according to EN 558 Table 2 Basic Series 1, standard flange drilling to EN1092-2 PN10/16.

Body and bonnet of ductile iron, all non-coated internals made of stainless steel AISI316.

WRAS approved materials, GSK approved fusion bonded epoxy coating.



Expect... **AVR**