INTERNAL HYDRANTS WITH CONSTANT FLOW QCONST

Qconst hydrants upstream of the hydrant valve have a control and regulation device that allows setting and maintaining constant capacity regardless of the water network pressure.

Internal hydrants are supplied from external water supply system or from fire tanks often via pumps.According to MSWiA regulation the pressure on the hydrant valve cannot be less than 0,2 MPa and not to exceed 1.2 MPa and 0.7 MPa (for hydrant 25 and hydrants 33, 52 respectively). The flow rate must not be less than: 60 l / min (hydrant 25), 90 l / min (fire hydrant 33) and 150 l / min (fire hydrant 52). Many buildings are fire protected using all types of hydrants and sprinkler system. In this case, designing of water fire protection system is necessary for different flow rates and different working pressures. Particular attention should be paid to the fact that sprinklers require much higher pressures than internal hydrants, up to 2.5 MPa, which may be a difficulty in the design and implementation of fire protection supply. The solution to this problem are internal hydrants with constant flow – Qconst, which can be supplied from firefighting water installations with pressure up to 2.5 MPa.
Qconst hydrants before the valve have a control and regulation device enabling to set and maintain a constant flow regardless of the water supply pressure.

The static pressure value of the hydrant supply system is shown on the manometer of the control and regulation device, which allows for constant monitoring of the readiness of the device for correct operation. The set pressure on the control and regulating device is equal to the dynamic pressure of the water supplying the hydrant. This property allows you to determine the hydrant's performance based on its K factor and the set water pressure.
Qconst hydrants have been tested by CNBOP-PIB in Józefów, test report No. 203/BS/13.

Internal hydrant with constant flow DN25	Internal hydrant with constant flow DN33	Internal hydrant with constant flow DN52