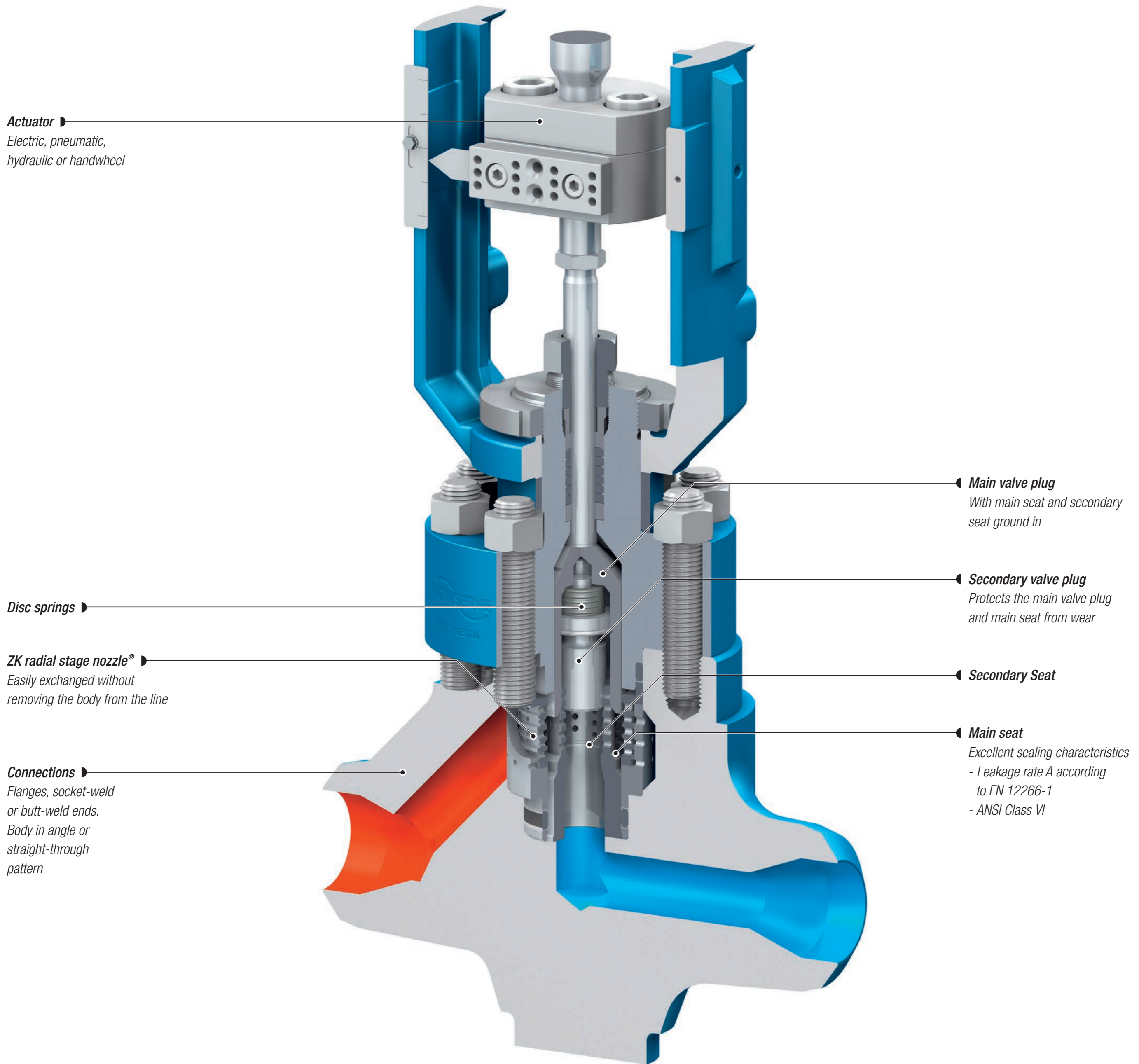


# GESTRA Control Valve with ZK Radial Stage Nozzle®

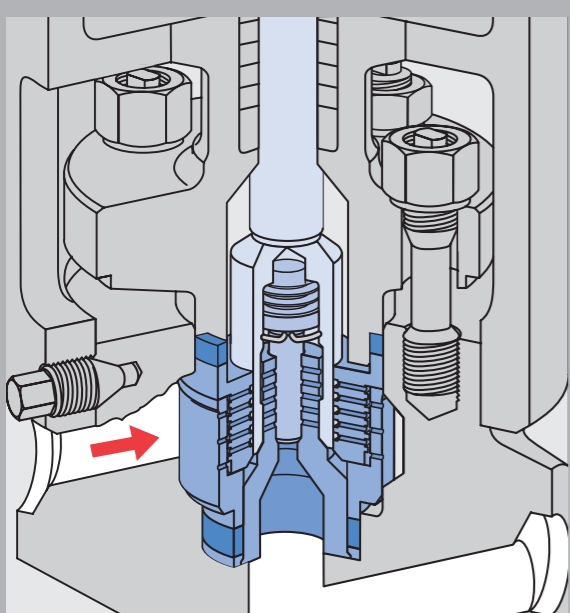
Type ZK 313, 600 bar, 620 °C, Class 2500,  $\Delta p_{\max}$  300 bar (8700 psi, 1148 °F,  $\Delta p_{\max}$  4350 psi)



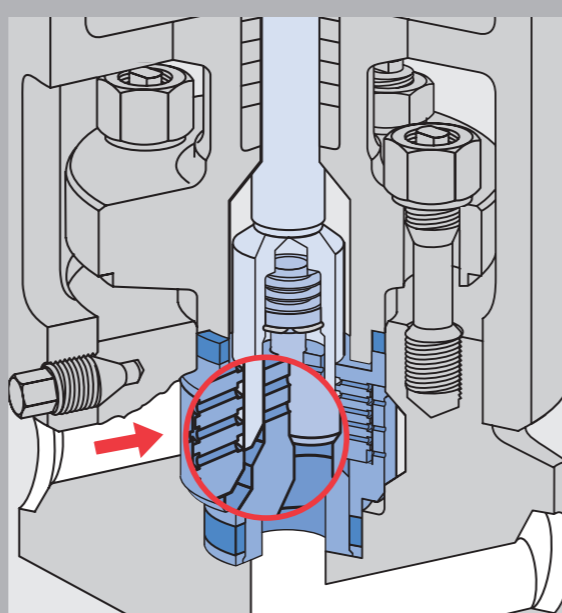
GESTRA



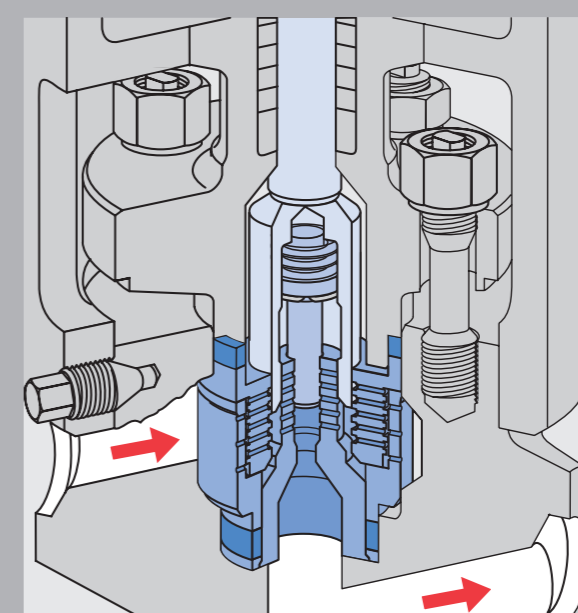
## Functional principle of the tandem shut-off



The tandem shut-off combines the function of a conventional isolating valve and a control valve, achieving very low leakage rates. Here the main valve plug is shown in the closed position.



At the beginning of the opening process, first the main valve plug is lifted off the main seat, while the secondary valve plug remains closed until the main plug has reached a certain lift. At the moment of opening or closing, the flow velocity at the main valve seat is zero, so that wire drawing is excluded.



The valve is now in the control position. Irrespective of the position of the main valve plug, the pressure is always reduced in several stages, even for the lower control range.