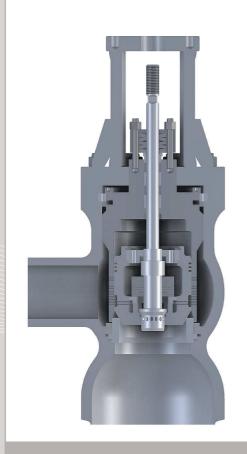
## **HCVK3 Valve**



## **Application**

Regulatory valve of HCVK3 type is ready to perform with heavy erosive media. It is suitable to control the highly demanding parameters, also during infinite critical conditions. High coefficient of the pressure recycling is the advantage of this valve. It perfectly fits if the reduction of noise and/or cavitation are of extreme importance. The valve also qualifies if an increased ability of the tuning is needed and/or the reduction of actuator's power. HCVK3 type is often used as boiler feed and/or start valve and turbine start and discharge valve. In general: in installations calling for medium and/or high reduction of steam parameters.

## **Description**

HCVK3 is an angle valve. Its forged body has equal walls' thickness (gauge), what reduces the thermal stresses during valve's warming up and cooling. Self-sealing inner bonnet is integrated with cage, which drives a main plug (piston-type or perforated, pressure balanced by inner plugso called pilot plug). Two types of seat are available: screw-in or slip-in (the latter is pressed by screw plug). A medium undergoes single-stage expansion. At the very beginning of the valve's stroke the pilot plug works. It controls small flows and reduces the pressure differences which affect the main plug. The reduced dynamic forces acting on main plug might permit choosing a smaller actuator. If the pilot plug fully opens, the main plug starts moving. Piston-type one opens the vents of active cage. In case of perforated plug, only its perforation is responsible for pressure reduction; the cage does not, HCVK3 valve works with media flow directed over the plug. Its construction allows to increase the number of expansion's steps (additional appliances are assembled on the outlet connection pipe). The valve also has the special version: with unbalanced plug.

## Technical data

Inlet's nominal diameter		DN50÷DN300			
Outlet's nominal diameter		according to patron's demand			
Nominal pressure		PN40÷PN400			
Connections		welding ready			
Flow coefficient Kvs		10÷1300 m³/h			
Body	1.0460 (P250GH) 1.5415 (16Mo3) 1.7335 (13CrMo4-5)		1.4541 (X6CrNiTi18-10) 1.4404 (X2CrNiMo17-12-2) 1.7380 (10CrMo9-10)	1.7715 (14MoV6-3) 1.4903 (X10CrMoVNb9-1) 1.4901 (X10CrWMoVNb9-2)	1.6368 (15NiCuMoNb5-6-4)
Plug	1.4541(X6CrNiTi18-10)		1,4057(X17CrNi16-2)	1,4125 (X105CrMo17)	titanium BT-9
Seat	1.4541(X6CrNiTi18-10)		1.4057(X17CrNi16-2)	1.4125 (X105CrMo17)	titanium BT-9
Stem	1.4057 (X17CrNi16-2)		1.4923 (X22CrMoV12-2)		
Hardening of the inner parts		stelliting; nitriding; hardening			
Rangeability		200:1			
Leakage class		metal/metal sealing – IV (standard); V (improved)			
Body's gland		trapezoid, graphite			
Seal bushing		graphite; PTFE			

