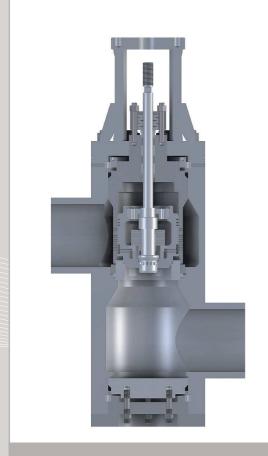
HCVZ1 Valve



Application

Regulatory valve of HCVZ1 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. HCVZ1 type is most 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

HCVZ1 is so-called Z-type valve (outlet and inlet connection pipes are not in line, but parallel to each other). Basically, it consists of: forged body, self-sealing inner bonnet integrated with cage, and main plug (piston--type or perforated, pressure balanced by inner plug-so 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, HCVZ1 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

Średnica nominalna na wlocie		DN50÷DN300			
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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			

