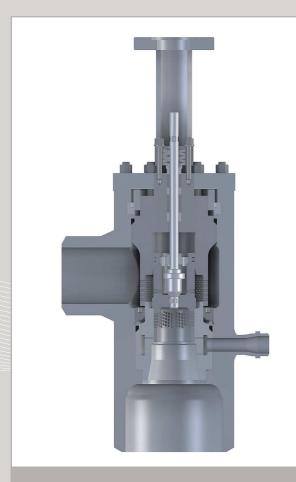
HCVKC1 Valve



Application

HCVKC1 steam conditioning valve combines pressure and temperature control in a single valve. Temperature reduction is up to water (e.g., feedwater) injection under high pressure conditions. HCVKC1 type is commonly used as turbine start or discharge valve.

Description

HCVKC1 is an angle valve. Coolant, i.e. water, is injected under the plug. Basically, the valve consists of: forged body, self-sealing inner bonnet integrated with cage, and main plug (perforated, pressure balanced by inner plug-so called pilot plug). Slip-in seat (pressed by screw plug) has nozzles responsible to deliver adequately sprayed water, supplied to the body through one or two connection pipes. A medium undergoes single-stage expansion. In case of perforated plug, only its perforation is responsible for pressure reduction; the cage does not. The main plug also opens water nozzles one after another; the pilot plug does not. HCVKC1 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). Any control of coolant's flow demands an implementation of additional injection valve. HCVKC1 valve also has the special version: with unbalanced plug.

Technical data

		inlet		outlet		connection pipe of injected water
Nominal diameter		DN50÷DN300		according to patron's demand		DN15÷DN50
Nominal pressure		PN40÷PN400		PN16÷PN400		PN40÷PN400
Connections		welding ready			welding ready	
Flow coefficient Kvs		10÷1300 m ³ /h				
Body	,	0460 (P250GH) 1.7335 (13CrMo4- 5415 (16Mo3) 1.7380 (10CrMo9-		,	1.7715 (14MoV6-3) 1.4903 (X10CrMoVNb9-1)	1.4901 (X10CrWMoVNb9-2)
Plug	1.4541(X6CrNiTi18-10)		1.4057(X17CrNi16	-2)	1.4125 (X105CrMo17)	
Seat	1.4541(X6CrNiTi18-10)		1.4057(X17CrNi16	-2)	1.4125 (X105CrMo17)	
Stem	1.4057 (X17CrNi16-2) 1.4923 (X22CrMo			/12-2)		
Hardening of the inner parts		stelliting; nitriding; hardening				
Rangeability		50:1				
Leakage class		metal/metal sealing-IV (standard); V (improved)				
Body's gland		trapezoid, graphite				
Seal bushing		graphite				

