HCVAC1 Valve



Application

HCVAC1 steam conditioning valve combines pressure and temperature control in a single valve and is commonly used in process steam systems.

Description

HCVAC1 is straightway valve. It incorporates a spraywater manifold and atomizing steam implementation downstream of its pressure reduction stage. Its pressure-reducing device (steam sparger) is regulatory valve with perforated plug (with a stem driven through guide bushing) and slip-in seat fixed by construction cage. A medium undergoes multistep expansion. Firstly, the expansion occurs on the perforated plug itself. Next steps are up to throttling plates fixed at the valve's outlet. Their number coincides with the given work characteristics of the valve. Water injection follows the complete steam expansion. Drilled stem feeds the atomizer with steam entering pressure-reducing portion of the valve. The occurrence of smaller droplets permits the water to remain suspended and its almost immediate absorption by the steam's stream. Any control of coolant's flow demands an implementation of additional injection valve.

Technical data

	inlet			outlet		connection pipe of injected water
Nominal diameter		DN25÷DN300		according to patron's demand		DN15÷DN50
Nominal pressure		PN40÷PN400		PN16÷PN400		PN40÷PN400
Connections		welding ready				bolted flanges; welding ready
Flow coefficient Kvs		10÷1000 m³/h				
Body	1.0460 (P250GH) 1.0619 (GP240GH) 1.5415 (16Mo3)		1.7335 (13CrMo4-5) 1.5419 (G20Mo5) 1.7357 (G17CrMo5-5)		1.7380 (10CrMo9-10) 1.7715 (14MoV6-3) 1.4903 (X10CrMoVNb9-1)	1.4901 (X10CrWMoVNb9-2) 1.7379 (G17CrMo9-10)
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 (X22		1.4923 (X22CrMo	V12-2)		
Cage	1.4057 ((X17CrNi16-2)				
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				

