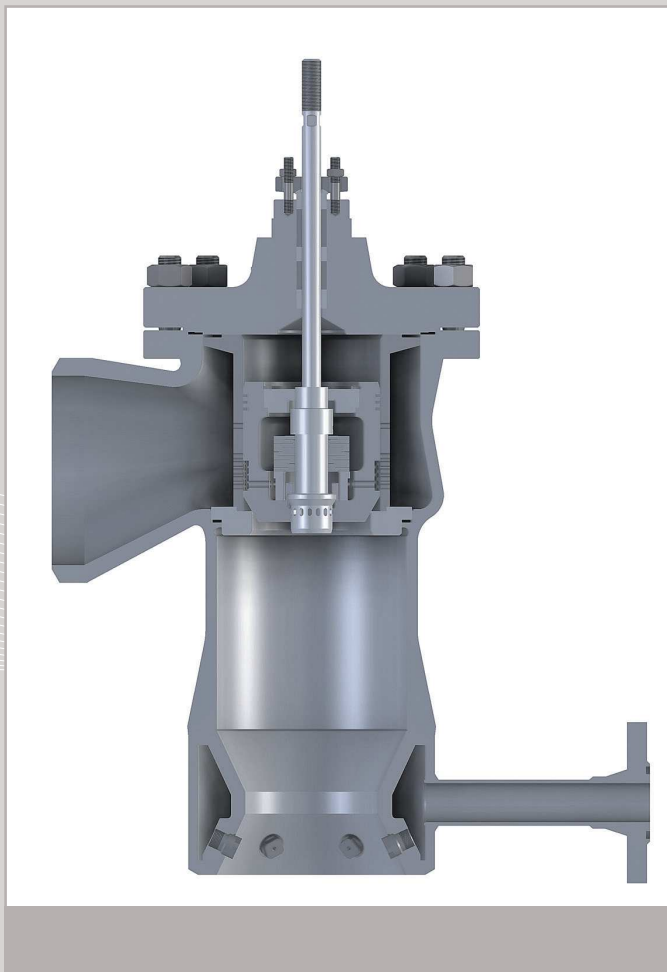


## HCVKC3 Valve



### Application

HCVKC3 steam conditioning valve combines pressure and temperature control in a single valve, and is commonly used in process steam systems.

### Description

HCVKC3 is an angle valve. It incorporates a highly effective spraywater manifold downstream of its pressure reduction stage, at the valve's convergent cone placed in outlet connection pipe, purposely profiled to accelerate the steam to be cooled and initialize its turbulent flow. It increases the ability of fine tuning and supports water uptake even if low velocity of the steam occurs. The valve basically consists of: the body topped by the bonnet, the main plug (piston-type or perforated, pressure balanced by inner plug—so called pilot plug), and the seat fixed by active cage which drives main plug. Both the bonnet and the seat, as well as active cage, are sealed with graphite spiral wound gaskets (placed in channels). Thus, disassembly and assembly of the valve are easy and do not require any special tools. 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. HCVKC3 valve works with media flow directed over the plug. Any control of coolant's flow demands an implementation of additional injection valve.

### Technical data

	inlet/outlet		connection pipe of injected water	
Nominal diameter	DN80÷DN250		DN15÷DN40	
Nominal pressure	PN10÷PN40		PN25÷PN100	
Connections	bolted flanges; welding ready		bolted flanges; welding ready	
Flow coefficient Kvs	40÷800 m <sup>3</sup> /h			
Body	1.0619 (GP240GH)	1.5419 (G20Mo5)	1.7357 (G17CrMo5-5)	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 (X22CrMoV12-2)		
Injection nozzles	1.4305 (X8CrNiS18-9)			
Hardening of the inner parts	stellite; nitriding; hardening			
Rangeability	20:1			
Leakage class	metal/metal sealing—IV (standard); V (improved)			
Body's gland	spiral, metal+graphite			
Seal bushing	graphite			

**INTEC**

Industrial Automatics Enterprise INTEC Ltd. Co.  
ul. Bacciarlego 54, 51-649 Wrocław, Poland  
tel./fax: + 48 71 348 18 18, e-mail: biuro@intec.com.pl  
www.intec.com.pl

**WK**<sup>®</sup>

WAKMET Industrial Valves Factory UItD.  
Bodzanów 75, 48-340 Gliucholazy 1, Poland  
tel./fax: + 48 77 439 40 20, e-mail: wakmet@wakmet.com.pl  
www.wakmet.com.pl