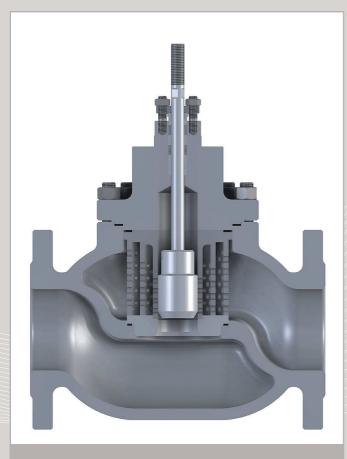
HCVB3 Valve



Application

Regulatory valve of HCVB3 type is ready to perform with heavy erosive media. It is suitable to control the highly demanding parameters, also during infinite critical conditions. Advantage of this valve is high coefficient of the pressure recycling. It perfectly fits if the reduction of noise and/or cavitation are of extreme importance.

Description

HCVB3 is straightway valve. Basically, it consists of body topped by the bonnet and the seat fixed by throttled cages: active (which drives a plug) and two passive ones. 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. A medium undergoes three-step expansion (when the plug is of piston-type) or four-step expansion (when perforated plug is applied). Piston-type plug exposes vents of the active cage and gives the way to the partial expansion. Further reduction of the pressure is up to vents of the two passive cages. The valve with perforated plug allows for the allocation of pressure drop first to the plug itself (active stage) and next to three throttle cages (in that case all are passive ones). Plug of HCVB3 valve can be balanced by means of seal. Thanks to that the lower power of the actuator is needed. The valve with seal balanced plug resides in class IV leakage allowable. HCVB3 valve works with media flow directed under the plug.

Technical data

Nominal diameter		DN25÷DN300				
Nominal pressure		PN10÷PN400				
Connections		bolted flanges; welding ready				
Flow coefficient Kvs		10÷1300 m³/h				
Body	1.0460 (P250GH) 1.0619 (GP240GH) 1.5415 (16Mo3) 1.7335 (13CrMo4-5)		1.5419 (G20Mo5) 1.7357 (G17CrMo5-5) 1.4541 (X6CrNiTi18-10) 1.4404 (X2CrNiMo17-12-2)	1.4308 (GX5CrNi19-10) 1.4408 (GX5CrNiMo19-11-2) 1.7380 (10CrMo9-10) 1.7715 (14MoV6-3)	1.4903 (X10CrMoVNb9-1) 1.4901 (X10CrWMoVNb9-2) 1.7379 (G17CrMo9-10) 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)			
Cages	1.4057 (.4057 (X17CrNi16-2)				
Hardening of the inner parts		stelliting; nitriding; hardening				
Rangeability 50:1		50:1	50:1			
Leakage class		metal/metal sealing – IV (standard); V (improved)				
Body's gland		spiral, metal+graphite				
Seal bushing		graphite; PTFE				