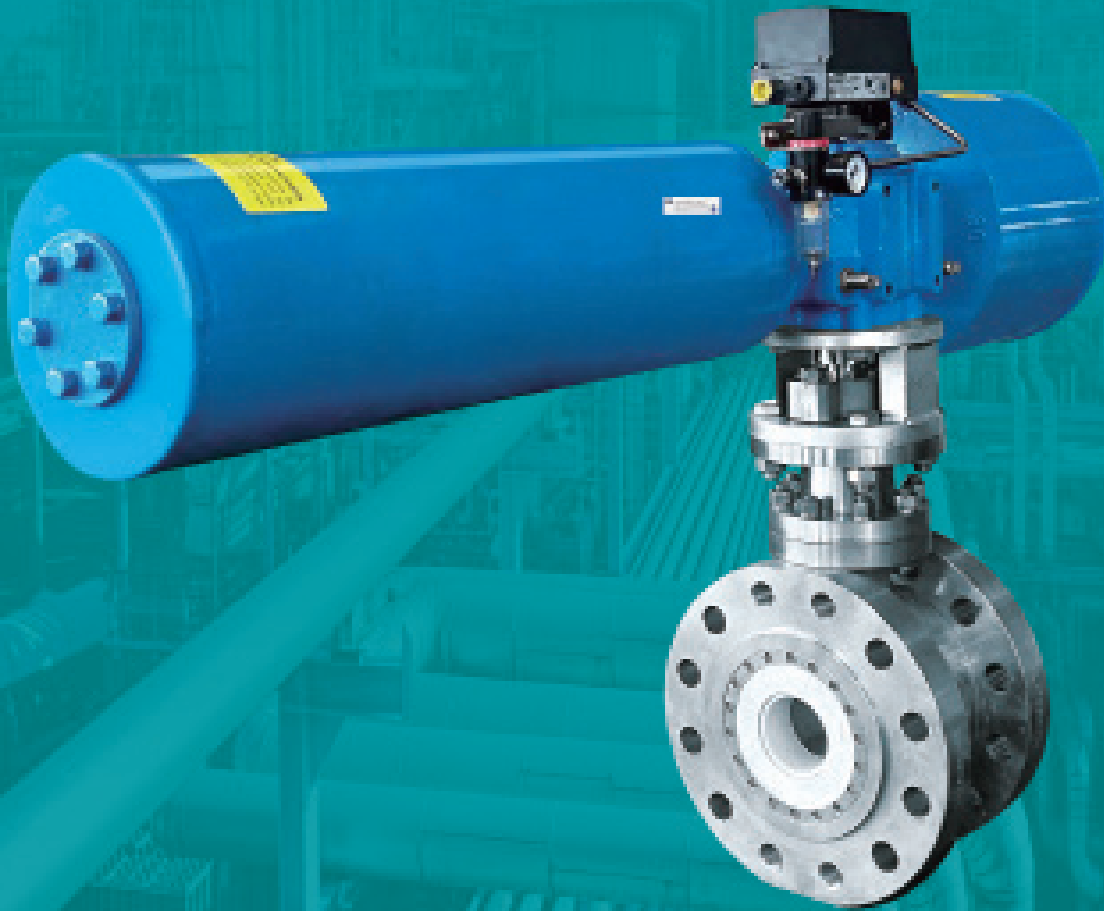


CERAMIC C ROTARY VALVE

The KOWOV series ceramic C valve features a non-eccentric, cavity-free design. The ball core can bear high torque, making it particularly suitable for harsh conditions where the medium tends to crystallize, scale, or clog.

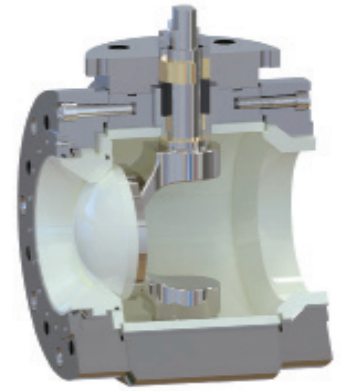


FCRV CERAMIC C ROTARY VALVE

Currently, in various industries, certain highly erosive conditions require strict sealing while dealing with media that are viscous, prone to caking, scaling, crystallizing, or containing large particles, causing various valves to clog. This calls for a valve that can function both as a control valve and a shut-off valve, with excellent sealing performance, smooth operation, and the ability to overcome various clogging situations.

Compared to the eccentric and double eccentric valves on the market, the KOWOV series ceramic C valve features a non-eccentric design, ensuring no erosion of the valve stem during small opening angles, thereby providing maximum protection to the valve stem.

The ball crown of the valve maintains close contact with the seat, allowing for the shearing of adhered materials and debris on the sealing pair, ensuring the cleanliness of the sealing surfaces; the inherent self-lubricating properties of ceramics ensure that the ball core and the seat do not stick to the medium. The valve adopts a structural design with upper and lower support shafts for positioning. The support shafts are statically fitted with the valve body, preventing any tilting of the C-rotary. The valve stem is set inside the upper support shaft, and the thrust of the medium on the C-rotary is borne by the upper and lower support shafts, with the valve stem only transmitting the torque for opening and closing the ball valve.



Structural characteristics

- Special C-type structure design with ball core mechanically connected and embedded by C-type lugs and ceramic ball crown, protecting lugs from erosion.
- Concentric design keeps ceramic ball crown in close contact with the seat, scraping off adhered materials and ensuring sealing performance.
- C-type lugs directly bear rotational torque, ideal for harsh conditions with crystallization, scaling, caking, high solid content, and clogging.
- Cavity-free design prevents material accumulation inside the valve.
- Fixed ball design prevents ball core movement under pressure, resulting in low operating torque, achieving ANSI Class VI sealing.
- All flow passages in contact with the medium are lined with ceramic, ensuring corrosion resistance.
- Anti-blowout stem design ensures valve safety and reliability.

Main technical parameters

Structural form	Fixed Ball
Flange standard	ASME B16.5/HG/DIN/JIS
Nominal Path	DN50~DN400
Nominal pressure	PN10~PN150/150Lb~900Lb
Service temperature	-40°C~456°C



Flow Characteristic Sheet of Ceramic Rotary C Valve

CERAVALVE			Cv flow coefficients										
Nominal diameter		Ball bore	Centre body										
			DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300	DN350
			1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"	14"
DN50	2"	round	62										
DN65	2 1/2"	round	62	97									
DN80	3"	round	60	95	155								
DN100	4"	round	55	90	152	249							
DN125	5"	round		86	145	249	389						
DN150	6"	round			137	238	380	608					
DN200	8"	round				230	366	600	875				
DN250	10"	round					354	588	865	1377			
DN300	12"	round						567	850	1350	2515		
DN350	14"	round							839	1322	2465	3383	
DN400	16"	round								1280	2285	3206	4651

