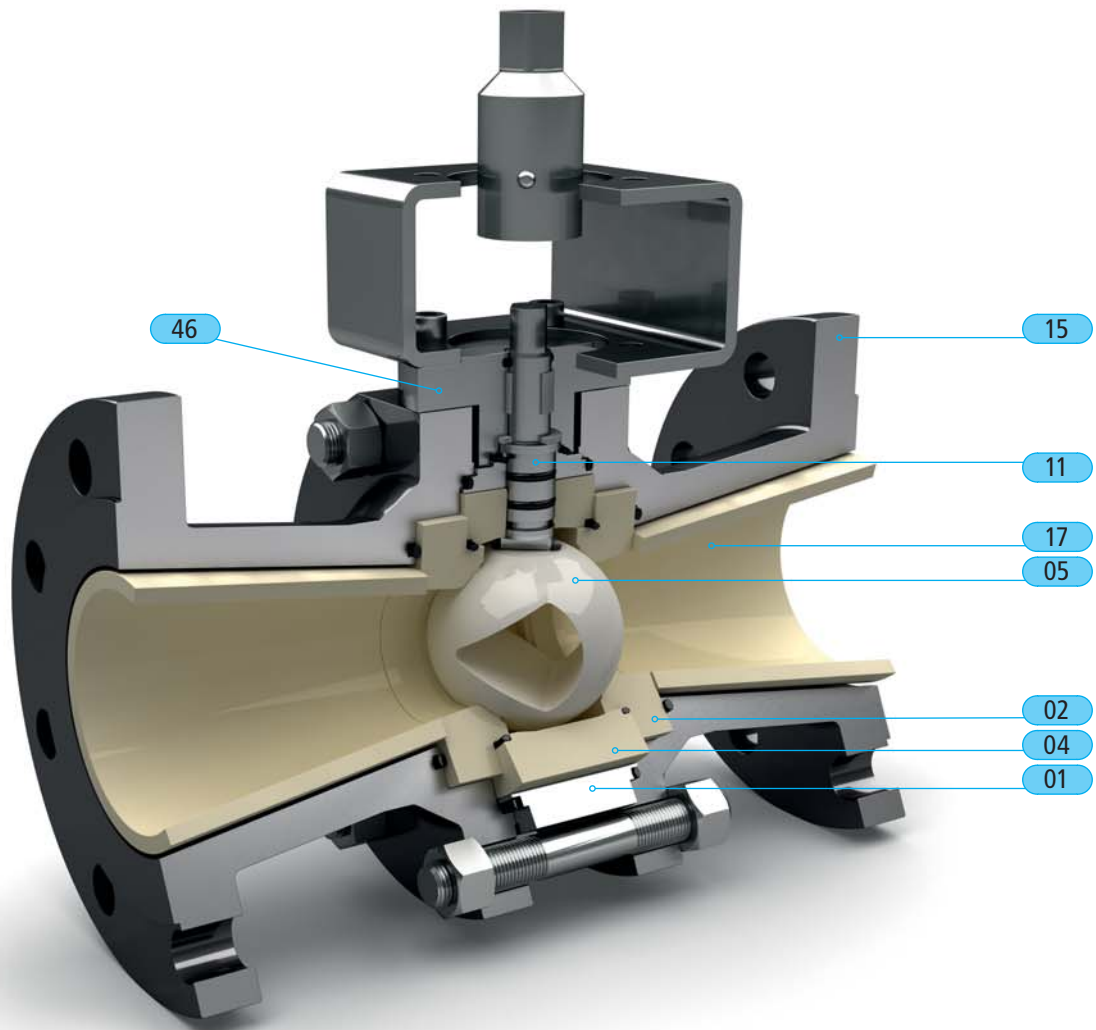


BALL VALVE • KSV

MATERIALS / MATERIAL OPTIONS:



Item	Part description	Materials	Material options
01	Housing	1.4301	
02	Seat ring	Al ₂ O ₃	Si ₃ N ₄ - SSiC
04	Ball socket	Al ₂ O ₃	Si ₃ N ₄ - SSiC
05	Ball	ZrO ₂	Si ₃ N ₄ - WoC -2.4605
11	Stem shaft	2.4605	3.7035 - Tantal - ZrO ₂
15	Flange	C22.8 Halar	
17	Wear protection sleeve	Al ₂ O ₃	Si ₃ N ₄ - SSiC
46	Bonnet flange	1.4301	
	O-rings	FKM(Viton)	FFKM (Kalrez)
	Seals	FKM(Viton)	PTFE
	Bearing bushes	PTFE	
	Screws / nuts	A2-/A4-70	

FUNCTION:

The CeraValve type KSV is a ceramic lined ball valve for the on/off function as well as for throttling control applications for use in excessively abrasive and corrosive applications.

The basic principle of this valve is based on a floating ball sealing against the downstream seat, using differential pressure as sealing force. Both seats are fixed while the ball has a predetermined "float space". The ceramic components of the valve are held within the metal housing which absorbs the physical load and vibration of the pipe system. The ¼-turn movement of the ball (0-90°) yields a specific valve opening. The ball slot is available in several different geometrical shapes depending on the desired flow characteristic for the application.

The three piece design of the valve allows for direct connection to existing pipelines without the need for pipe reducers in front and behind the valve. For example, the valve can be configured with 3.0" flanges with a 2.0" center body. The end flanges accommodate the direct mount to the 3.0" pipe while the reduced (2.0") center body provides for optimum selection of installed valve trim and also reduces weight and costs of the valve and installation.

Actuator connection is done by a yoke interface that meets the dimensional standards of ISO 5211. This provides for a direct center of most all ¼ turn actuation including, pneumatic, electric, and hydraulic actuators. 10 position locking manual hand levers and manual gear operators are also available. The yoke interface is removable and able to be easily modified to accommodate special applications.

NOMINAL SIZE RANGE:

Flange connections DN 15 (1/2") up to DN 300 (12")

Center housing: DN 15 (1/2") to DN 150 (6")

PRESSURE RANGE:

PN 10 to PN 40

ANSI class 150 and class 300

Other nominal pressure ranges on request

OVERALL LENGTH:

according to EN 558-1 Series 1+27

according to ASME / ANSI B 16.10 / EN 558-2 Series 37+38

OPTIONS:

TA-Luft low emission design

Wafer-type

optional ceramics, stem shafts and

Sealing materials

Chemistry design (KSC type)

TEMPERATURE RANGE:

-30 °C to +160 °C / -22 °F to +320 °F

TYPICAL APPLICATION AREAS:

Coal fired power plants: FGD

- Limestone Slurry
- Hydrated Lime Slurry
- Gypsum Slurry
- High Chlorides Water
- Ash

Waste incineration plants:

- Dosing of HCl washing water (prewasher)
- Dosing of the lime milk for the absorber (pH regulation, desulphurisation)

Dye production:

- Dosing of TiO₂ suspension with sulphuric acid
- Diluted acid preparation

Mining:

- Dosing of copper suspension with acid content

Chemistry:

Alternatives to PTFE / PFA lined valves when the media is abrasive

Alternatives to valve manufactured from special materials

(e.g. Hastelloy, titanium, etc.).