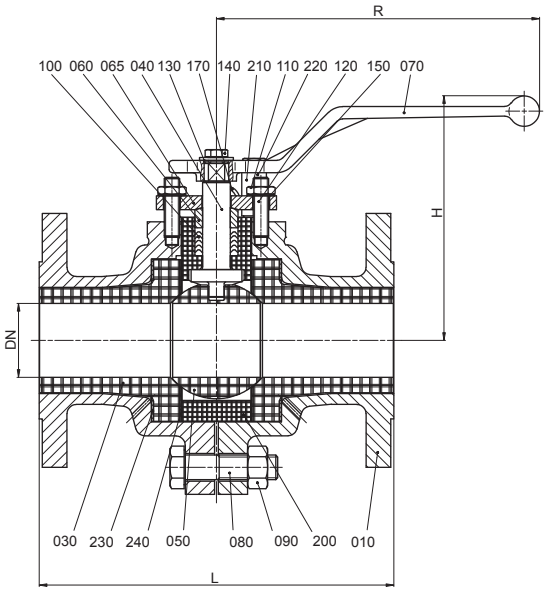
Atomac

Lined Ball Valves

Type AKH5



Flange Connections **ANSI B 16.5, 150lbs**

*Avaible on DIN EN 1092-2 P10, PN16

Magnesia Partially Stabilized Zirconia (Mg PSZ) Ceramic Lined Ball Valve*

Due to advanced ceramic technology, the AKH5 achieves an unequalled performance that offers the ideal solution for many difficult applications in which erosion, wear, abrasion, impact, corrosion and high temperature cause conventional materials to fail.

Furthermore the design of the AKH5 offers minimum cavity space that reduces the retention of line media within the body cavity so therefore product contamination problems aresignificantly reduced.

The Mg-PSZ Zirconia Ceramic material offers :

Wear Resistance: Abrasive slurries have little effect on its rock hard surfaces.

Corrosion Resistance: It is virtually inert to acid bases and most other corrosives.

Impact Resistance:

The composition of the materials and the advanced process technology result in high mechanical strength and toughness.

Temperature Resistance:

High operating temperatures and thermal shock are not a problem. The melting point of Mg-PSZ ceramic is well beyond the valve limits of 350°C. Higher ratings on request.

Cavitation Resistance:

Cavitation related problems are sharply reduced due to the extreme hardness of the ceramic material (Rockwell 89)

Unequalled Benefits:

The Mg-PSZ ceramics have consistently outperformed steels, cobalt, nickel alloys and other ceramics in a wide range of severe applications such as, steam services, abrasive slurries, fly ash, high temperature corrosives and sand abrasion are only a few of the many conditions where the AKH5 Mg-PSZ lined ball valve has solved serious problems.

**Also availble as V-port ball valve for precise modulating control service.*

Dimensions - mm.

SIZE	ANSI	L	H	R	Ød	Ød1	d4	Øk	ØD	nxd2	b	Weight (kg)
1"	150#	152.4	122	160	25	145	66.5	79.2	107.9	4x16	13	6.9
1½"	150#	178	150	210	38	180	85.5	98.4	127	4x16	16	12.45
2"	150#	203	160	210	48	200	104.5	120.5	152.4	4x19	18.5	18.5
3"	150#	241	205	313	77	260	136.5	152.4	190.5	4x19	22.5	40.0
4"	150#	292	210	313	97	290	174.5	190.5	228.6	8x19	26.5	61.1

Standard Material Specifications

No.	Description	Material	No.	Description	Material
010	body piece	ductile cast iron with PFA (EN-JS1049 / ASTM A395)	100	packing material (chevron) / packing ring	PTFE / Grafseal
020	body	ceramic (circonia/ MG-PSZ)			
030	bushing	ceramic (circonia/ MG-PSZ)	110	hexagon nut	stainless steel (1.4301/ A 194 8)
040	stem	stainless steel / ceramic°	120	stud bolt	stainless steel (1.4301/ A 193 B8)
050	ball	ceramic (circonia/ MG-PSZ)	130	lock washer	stainless steel (1.4301/ AISI 304)
060	gland	stainless steel (1.430)	140	hexagon bolt	stainless steel (1.4301/ A 193 B8)
065	gland shaped ring	stainless steel (1.430)	150	serrated lock washer	stainless steel (1.4301/ AISI 304)
070	hand lever	[size 1"-2"]= die cast metal (EN 12844) [size 3"-4"]= ductile iron (galvanized)	170	grounding device°°	stainless steel (1.4310/ AISI 301)
			210	stop	steel (galvanized)
080	stud bolt	stainless steel (1.4301-K70^ / A 193 B8)	220	hexagon bolt	stainless steel (1.4301/ A 193 B8)
090	hexagon nut	stainless steel (1.4301-K70^ / A 194 8)	230,240,250	flat gasket	Gylon / Garfite S

° optional
If special stem materials are neccessary, consult Flowserve Gmbh, please.

** Grounding device only in combination with stainless steel stem
^ other on request