

KITZ

KITZ PFA Lined Ball Valves

Superior Chemical Resistance

New



KITZ CORPORATION

Unrivalled chemical resistance makes KITZ PFA lined stainless steel ball valves an excellent selection for chemical, pharmaceutical, food processing and other corrosive industrial applications.

KITZ PFA Lined Ball Valves

Superior resistance for chemicals

All surfaces of valve wet parts are lined with PFA to protect valve service life from chemical corrosion.

Lining with high durability

Injection molded PFA lining is free from pinholes, cracks, swelling, and locally uneven thickness, and prevents service problems with exfoliation, stress cracking and fluid permeation.

Thermal resistance

PFA's thermal stability is so reliable that prolonged exposure even to 260°C would never affect mechanical properties of linings and valves.

Prevention of contamination of fluids

Colorless PFA contains no harmful additive or pigment, and remains chemically inactive, and thus there is no concern of organic extraction or elution of metallic ions.

Resistance to thermal shock and mechanical impact

Compared with FEP, PFA's high viscoelasticity provides far better properties such as tensile strength, elongation and bending elasticity even under a higher temperature range.

Ease in valve operation

PFA's paraffin molecular structure provides extremely smooth surface of lined wet parts to minimize valve operating torque.

Minimized valve operation cost

Damage caused by corrosion or wear is almost nil with PFA lining to extend valve service life, reducing its operation cost consequently.

Ease in valve automation

KITZ pneumatic actuators can be factory-assembled with KITZ PFA lined ball valves for readily available valve automation.

Applicational versatility

The following optional features are available.

- Oil-Water Free Treatment
- Cavity Pressure Relief Device

What's PFA?

PFA (Perfluoroalkyl vinyl ether resin) is inherently provided with thermal stability, chemical resistance and good mechanical properties, which are equal to or even better than those of PTFE, while it has overcome PTFE's difficulty with thermoplasticity. Its superior workability enables to provide valve wet parts with fine lining without any concern of pinholes. Also it is recommended for food processing since it is colorless and needs no additive or pigment contents.

Lining

Internal body is completely lined with PFA, thick enough to protect valves from corrosion attack.

Explanation of Product Code

FA - 10 U TB LN

① ② ③ ④ ⑤

① Valve operation

- NoneLever handle
- FAKITZ FA Type actuator (Double Action)
- FASKITZ FAS Type actuator (Spring Return)
- BKITZ B Type actuator (Double Action)
- BSKITZ BS Type actuator (Spring Return)
- BSWKITZ BSW Type actuator (Spring Return with Screw Handle)

② Class

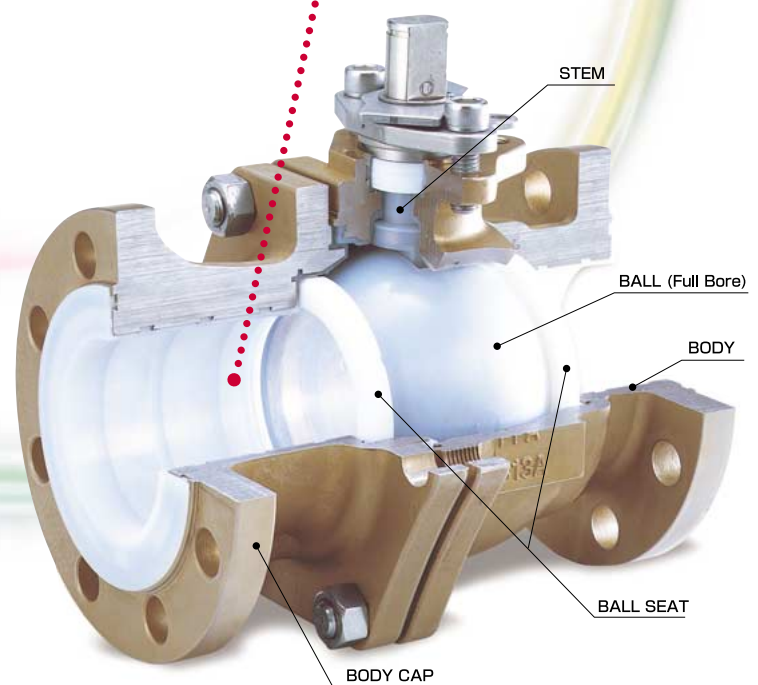
- 1010K

③ Main body material

- UStainless Steel

④ Symbol for ball valves

- ⑤ Symbol for PFA Lined





Design and inspection standards

- Maximum service pressure ··· 1.37MPa
- Service temperature ······ -30°C ~ +150°C
- Face to face dimension ····· KITZ Standard
- End flange dimensions ····· JIS B 2238 10K
- Wall thickness ········· ASME B 16.34 Class 150
- Test pressure ··········· Shell test : 2.06 MPa (Hydrostatic)
Seat test : 0.59 MPa (Air)

Material

Parts	Material
Body	SCS13A
Bonnet	SCS13A
Stem	SUS304
Ball	SUS304 or SCS13A
Gland	SCS13A
Packing	PTFE
Ball Seat	HYPATITE PTFE
Lined	PFA

Application

KITZ PFA lined ball valves can be used :

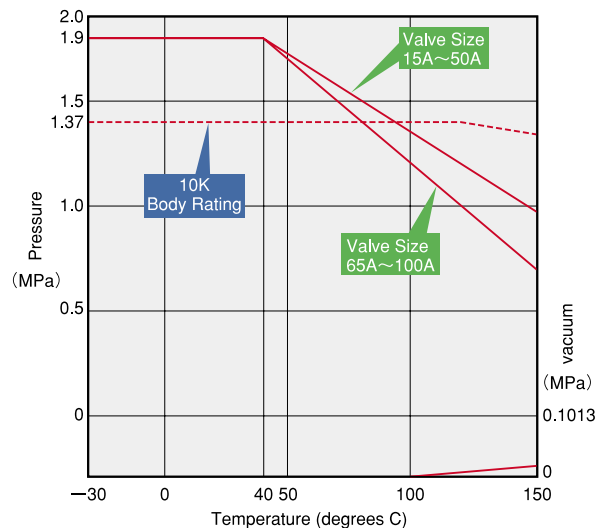
- Where aggressive non-oxidized fluids (chlorine, sulfuric acid, wet halogen gas, phosphoric acid, acetic acid, fluoric acid, etc.) are supplied.
- Where acid and alkaline fluids are alternately supplied.
- Where high resistance to heat or stress cracking, or high mechanical strength is required.
- Where fluids should not be contaminated by the extraction of organic substance or the elution of metallic ions. (eg. Semiconductor production processes, or food or pharmaceutical production processes.)

⚠ Cautions

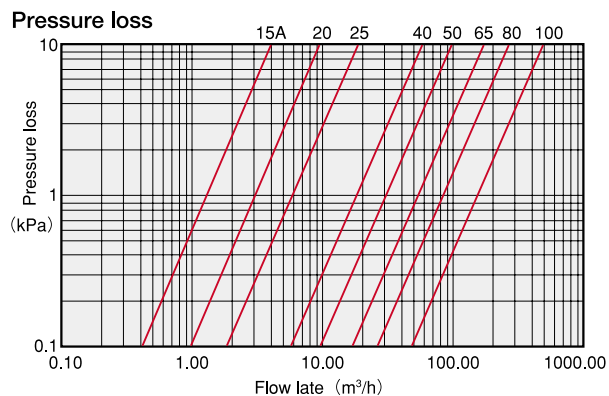
The following service should be avoided.

- Molten alkali metals or their solutions, or high temperature fluorine or fluorine compounds.
 - High permeable fluids such as halogen or halogen compounds, when handled at high temperatures.
 - Slurries or solidifiable fluids.
 - Fluids containing vinyl chloride, styrene, chloroprene, butadiene, various kinds of polymethyl acrylate or other monomers which are easy to get polymerized.
- Use of asbestos-free PTFE jacketed gaskets is recommended fore end flanges coupled with PFA lined ball valves.

Pressure-Temperature Ratings



Pressure loss ; Rated Cv

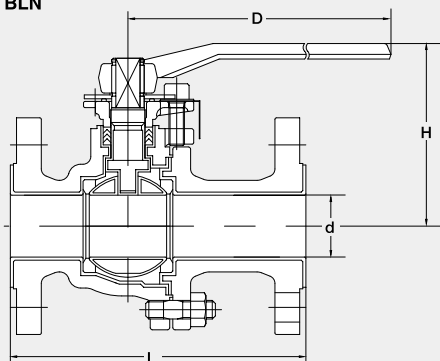


Rated Cv

Valve Size	15A	20A	25A	40A	50A	65A	80A	100A
Cv	15	35	68	210	350	620	960	1750

Manual operation (Lever type)

Product Code: 10UTBLN



Dimensions

Valve Size	(mm)								
	A	15	20	25	40	50	65	80	100
B	1/2	3/4	1	1 1/2	2	2 1/2	3	4	
d		15	20	25	40	50	65	80	100
L		140	152	165	191	216	240	250	280
H		104	106	129	118	124	157	166	204
D		130	130	160	230	230	400	400	460

 **CAUTION**

Technical data published in this catalog have been developed from our design Calculation, in-house testing, field reports provided by our customers and/or published official standards or specifications. They are good only to cover typical applications as a general guideline to users of KITZ products introduced in this catalog.

For any specific application, Cusers are kindly requested to contact KITZ Corporation for technical advice, or to carry out their own study and evaluation for proving suitability of these products to such an application. Failure to follow this request could result in property damage and/or personal injury, for which we shall not be liable.

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ISO 9001 certified since 1989



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