

HF5

MANUAL-OPERATED BALL VALVE

HF5
HF5-W



HISAKA
BRAND



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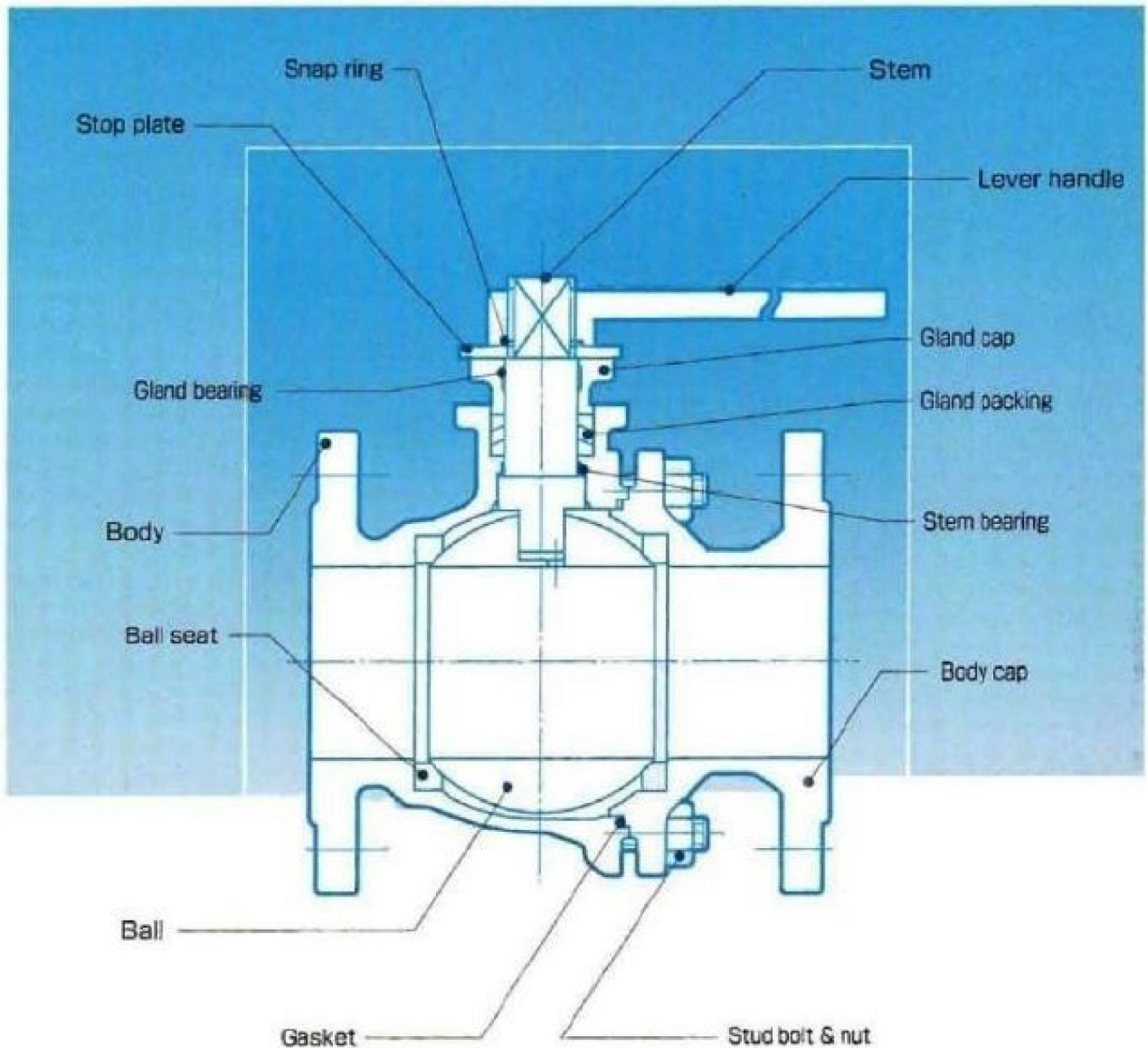


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FLANGE BALL VALVE



HF5



HF5 Series features:

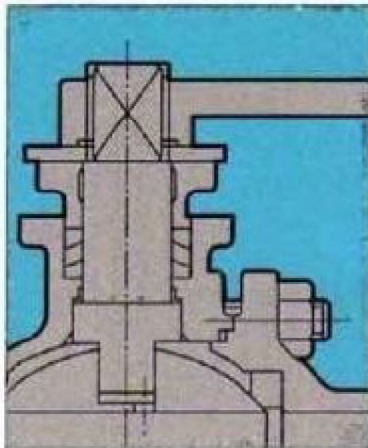
In addition to superior characteristics of HF3 Ball Valve, HF5 has such advantages that safety, maintainability and automatization are easily done through further improvement.

1. A rectangular stem top can prevent operational errors.
2. The structure equipped with a standard MAXTITE PTFE* seat (next generation PTFE seat) brings a longer product life.
3. Free from any leakage from a gland because manually operated parts are not at all affected by automatization of a process.

Structural Features

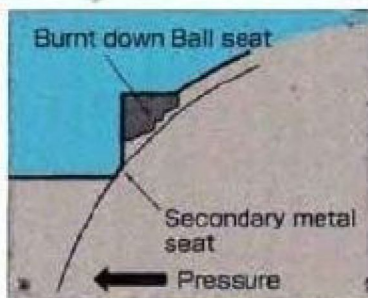
1 | Anti-Blow-out Stem (fire safe)

HF5 has a flanged stem inserted from inside of the body so that the stem never blow out even it is subject to abnormally high pressure or a gland bolt becomes loose. The flange at the lower part of the stem acts as a stopper inside the body. Furthermore, the flanged stem that will closely contact with the body under internal pressure prevents excessive leakage if a gland packing is burnt down at the worst case of fire for instance.



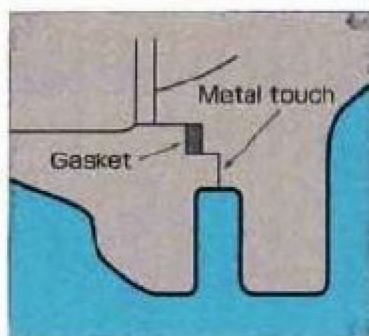
2 | Secondary Metal Seat (fire safe)

HF5 Ball Valve has a structure that prevents excessive leakage and the spread of fire through close contact of the ball with the secondary metal seat installed in the main body if the ball seat is burnt down.



3 | Metal Touch Body seal (fire safe)

The double-seal type joint of the body and a body cap with a PTFE gasket and metal touch maintains sealing effect and protects excessive leakage if the PTFE gasket is burnt down.



4 | Anti-static Device (optional)

Friction between the ball and the ball seat may generate static electricity. For flammable fluid, an optional anti-static device may be installed on the stem in two different places to prevent electrification.

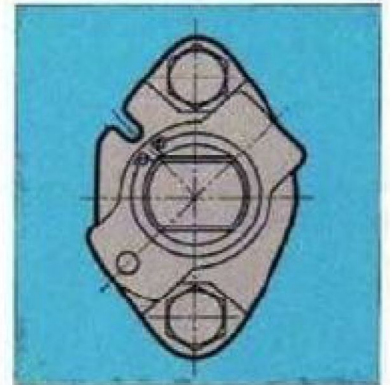
(Anti-static device is not the part equipped as the standard.)

5 | Ball Seat

A MAXTITE PTFE® seat (next generation PTFE seat) is employed as the standard specification. Its resistance to high temperature is superior to a pure PTFE seat. Moreover, the life of MAXTITE PTFE® seat is long. Flexibility of a ball valve has been further improved through a wide choice of seat material from pure PTFE to metal to meet customer's requirements.

6 | Stem

A rectangular top-stem employed by the HF5 Ball Valve can perfectly avoid operational errors of opening and closing. In addition, such stem provides easy identification of the open-close position at the site and increases safety.

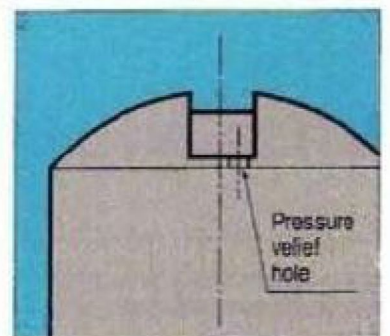


7 | Gland Packing

A gland packing has a special structure combining a unique hat-shaped stem bearing. Self-sealing function under fluid pressure ensures and maintains sealing performance and, minimizes a hassle of additional tightening of the gland.

8 | Pressure Relief Protection

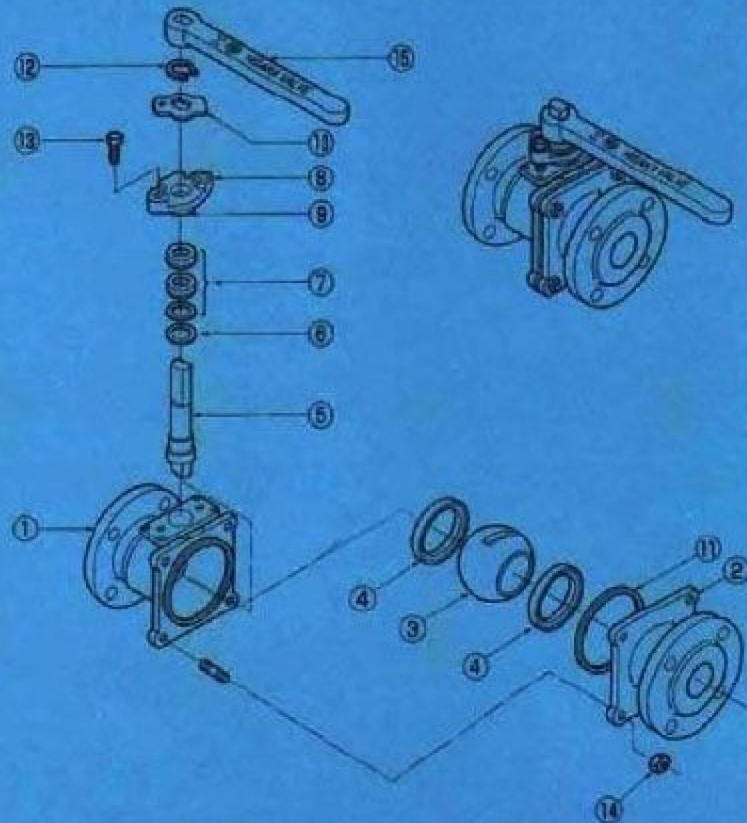
The engagement of the ball and the stem has a hole to prevent internal pressure from rising. The hole enables to avoid rising of fluid pressure in the pocket when the valve is open. Therefore, the ball seat is free from direct damage.



9 | Key Lock (with an optional key)

Key lock is available at full open and full close positions. Operational errors by non-authorized personnel can therefore be prevented effectively.

<Structure and Material>



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■Parts list

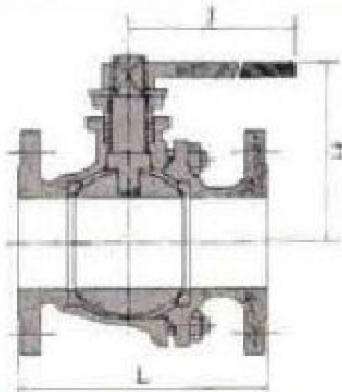
Class		150			10K	
No.	Parts name					
1	Body	SCS13A	SCS14A	WC8	FC200	FCD450
2	Body cap	SCS13A	SCS14A	WC8	FC200	FCD450
3	Ball	SUS304(SCS13A)	SUS316(SCS14A)	SUS304(SCS13A)	SUS304(SCS13A)	SUS304(SCS13A)
4	Ball seat	MAXTITE PTFE*	MAXTITE PTFE*	MAXTITE PTFE*	PTFE	PTFE
5	Stem	SUS304	SUS316	SUS403	SUS403	SUS403
6	Stem bearing	PTFE	PTFE	PTFE	PTFE	PTFE
7	Gland packing	PTFE	PTFE	PTFE	PTFE	PTFE
8	Gland cap	SCS13A	SCS14A	SCS13A	FCD450(Cr plating)	FCD450(Cr plating)
9	Gland bearing	PTFE	PTFE	PTFE	PTFE	PTFE
10	Stop plate	SUS304	SUS304	SUS304	SUS304	SUS304
11	Gasket	PTFE	PTFE	PTFE	PTFE	PTFE
12	Snap ring	SUS304	SUS304	SK5	SK5	SK5
13	Bolt	SUS304	SUS304	S45C(Cr plating)	SS400(Cr plating)	S45C(Cr plating)
14	Stud bolt & nut	SUS304	SUS304	S45C(Cr plating)	SS400(Cr plating)	S45C(Cr plating)
15	Lever handle	FCD450(Painting)	FCD450(Painting)	FCD450(Painting)	FCD450(Painting)	FCD450(Painting)

H I S A K A

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FLANGE TYPE BALL VALVE

class 150 Full bore-HF5, Stainless steel & cast steel



Pressure for inspection

Body	10K - 2.06MPa (Pneumatic pressure)
	Class 150 - 2.94MPa (Pneumatic pressure)
Seat	0.56MPa (Pneumatic pressure)

For serviceable range of pressure and temperature, refer to page 6.

Parts name	Material			
Body	SCS13A	SCS14A	SCS16A	WCB
Body cap	SCS13A	SCS14A	SCS16A	WCB
Ball	SCS13A	SCS14A	SCS16A	SCS13A
	(SUS304)	(SUS316)	(SUS316L)	(SUS304)
Stem	SUS304	SUS316	SUS316L	SUS403
Seat	MAXTITE PTFE [®] PTFE			
Gland packing	PTFE			

For nominal diameter 100A - 200A, we will provide a gear operator by your request.

④For dimensions of the gear operator, refer to page 4.

④Weight is expressed by 10K of SCS material.

④SCS 16A of 32A and WCB are not available.

Nominal diameter	A	15	20	25	32	40	50	65	80	100	125	150	200	250	300
Bore diameter	B	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12
Bore diameter		13	18	25	32	38	51	64	76	102	127	158	203	254	305
L		108	117	127	140	165	178	190	203	229	320	394	457	533	610
H		75	78	102	107	110	112	138	154	177	290	310	375	④	④
I		120	120	160	160	200	260	300	350	400	700	1000	1500		
Weight (kg)		2.2	2.5	3.7	5.8	7.8	9.4	14.5	18.8	26.9	44.4	50.4	92.3	210	335



EX-STOCK WAREHOUSE

Size 2 dia, SS 316 body Full Bore Flanged Type

Size 8" dia CS A216 body Full Bore Flanged Type

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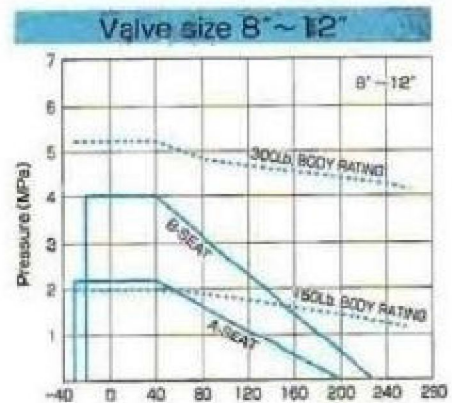
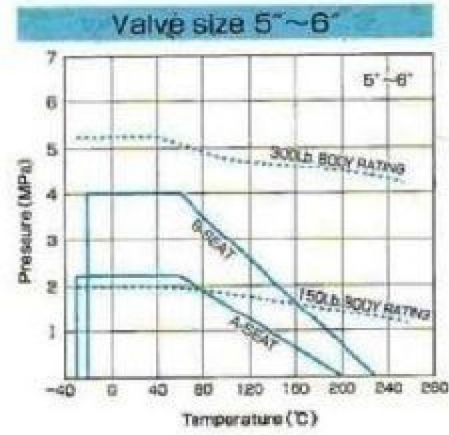
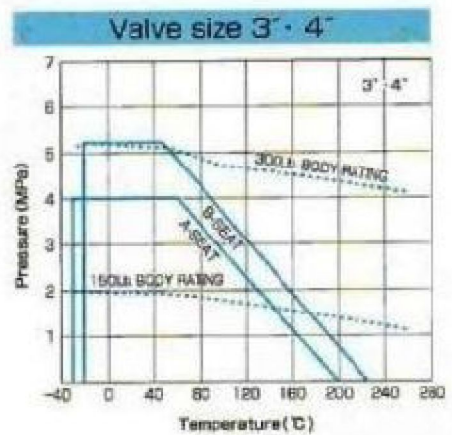
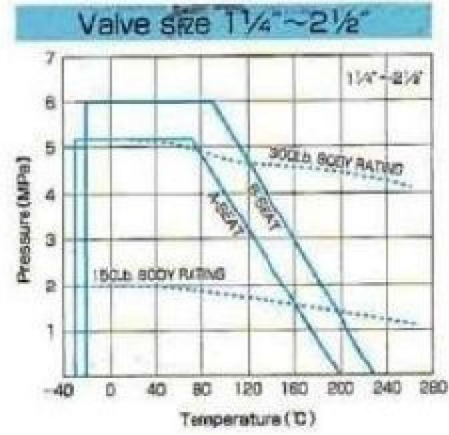
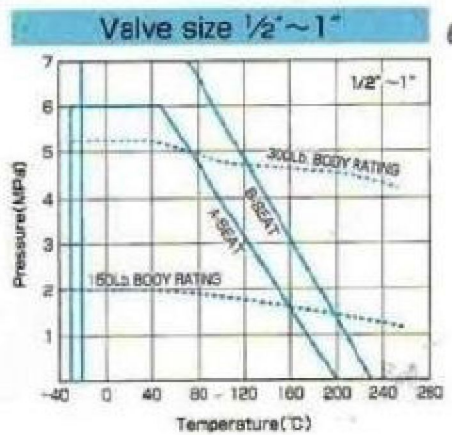
Pressure/temperature (NON SHOCK)

Pressure/temperature rating

The allowable range of pressure and temperature of ball valves shall satisfy both body rating specified by nominal pressure (class) and seat rating of ball seat material. The maximum allowable pressure indicated at the following graph is for NON-SHOCK (for hydrostatic water flow) and not actual working pressure.

Note 1 Body rating is based on the values of ANSI B16.34 for WCB.

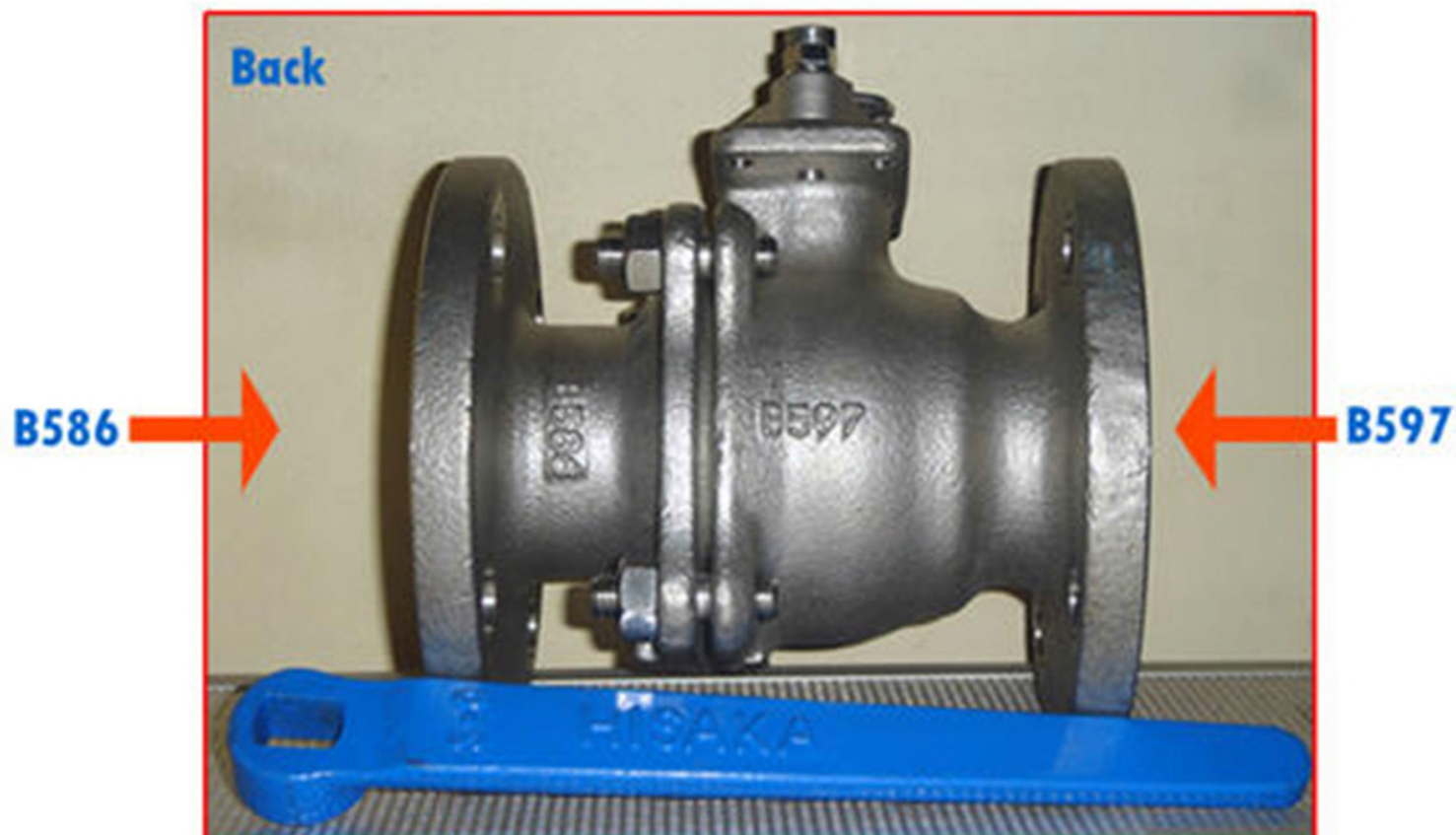
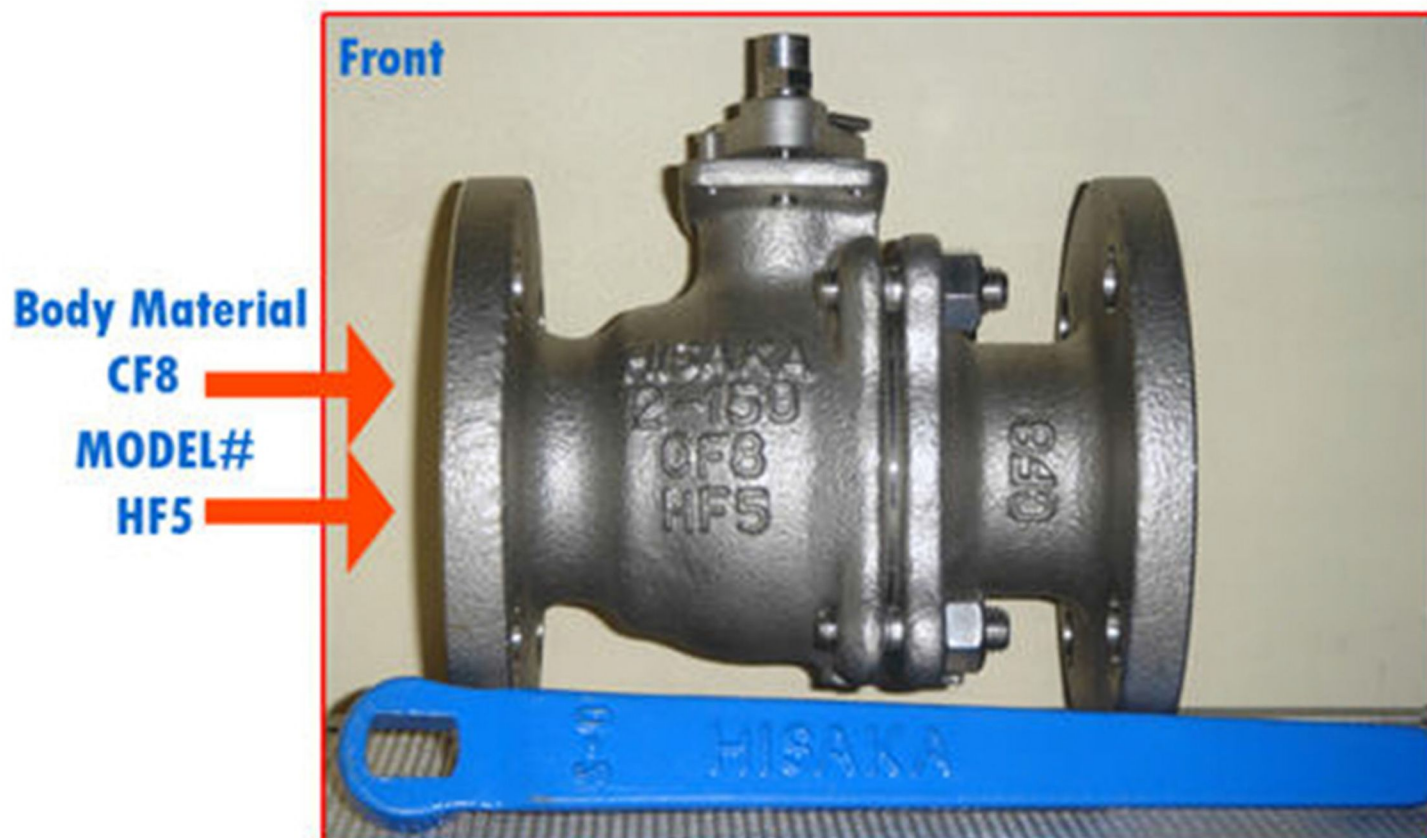
Note 2 A-SEAT: pure PTFE seat, B-SEAT: MAXTITE PTFE® seat



We exercised great care to information of this catalogue, however, if you have some questions or find something wrong, please contact us.

In addition, please note that this information may be subject to change without notice for some unavoidable reasons.

HISAKA BALL VALVE JAPAN MADE



EX-STOCK WAREHOUSE: A53, API5LB Sumitomo Pipeline Seamless to size 24" dia. / A216 Gate, Globe, Check, Ball, Y-Strainer Valves to size 24" dia. Fittings, Flanges A234 & A105N sizes to 24" dia. Seamless BWE and all Stainless Steel SUS 304, TP321, 316L items.