

FOR HIGH PRESSURE & BIG SIZE PIPING TRUNNION MOUNTED BALL VALVE

■ TF5-W	■ TF5-TD	■ TF5-TS
■ TF5 (M) -W	■ TF5 (M) -TD	■ TF5 (M) -TS

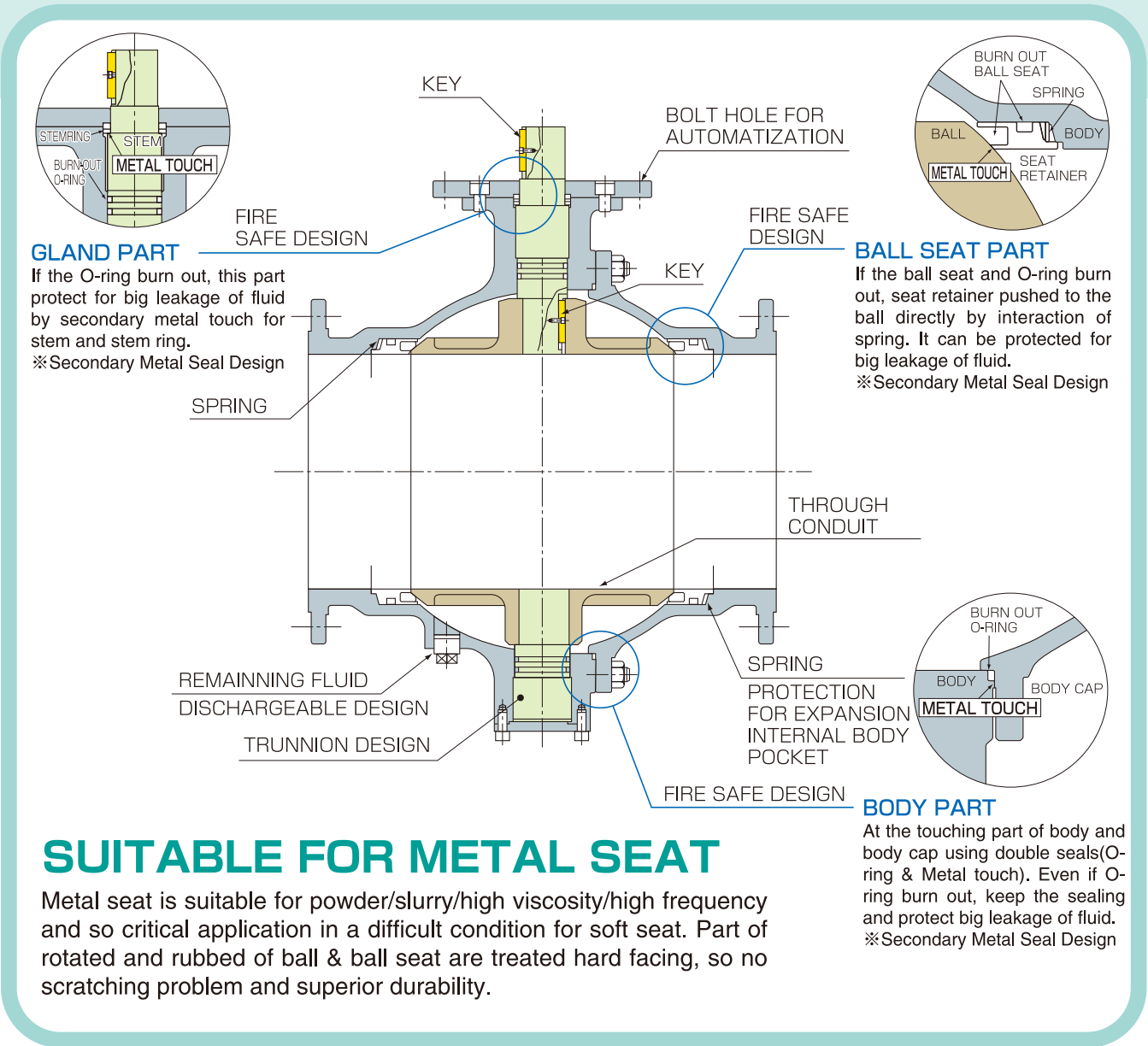
HISAKA WORKS, LTD.

WHAT IS TRUNNION MOUNTED BALL VALVE?

Trunnion Mounted ball valve is designed all in-one for ball and stem that installed squarely to the fluid direction. The sealing style of floating type ball valve is that ball is pushed to the ball seat by fluid pressure. But for trunnion mounted ball valve is getting seal by interaction for spring at back of ball seat and fluid pressure. There is not influence of any fluid & condition.

CHARACTERISTIC OF TRUNNION TYPE

Trunnion type can improve some leaking problem of original characteristic of floating type ball valve. For example, pressure changeable at both streams, low pressure condition and inequality flow direction. And trunnion type has not gotten heavy load at the seat on high pressure application. Therefore it is usable for large size piping also.



GLAND PART

If the O-ring burn out, this part protect for big leakage of fluid by secondary metal touch for stem and stem ring.
 ※Secondary Metal Seal Design

BALL SEAT PART

If the ball seat and O-ring burn out, seat retainer pushed to the ball directly by interaction of spring. It can be protected for big leakage of fluid.
 ※Secondary Metal Seal Design

BODY PART

At the touching part of body and body cap using double seals(O-ring & Metal touch). Even if O-ring burn out, keep the sealing and protect big leakage of fluid.
 ※Secondary Metal Seal Design

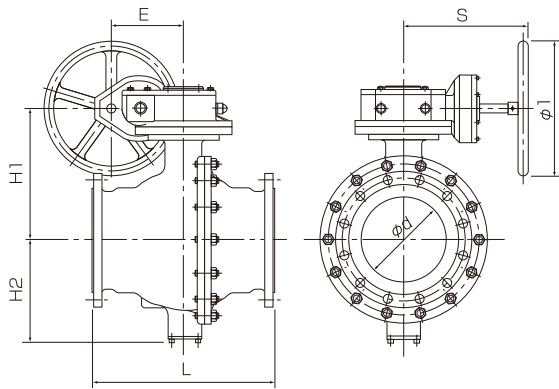
SUITABLE FOR METAL SEAT

Metal seat is suitable for powder/slurry/high viscosity/high frequency and so critical application in a difficult condition for soft seat. Part of rotated and rubbed of ball & ball seat are treated hard facing, so no scratching problem and superior durability.

STRONG POINT OF HISAKA'S TRUNNION

- Superior durability.
- Light operation torque = easy operation.
- Easy for automatization by gland bolt hole design. (no need to remove from the piping)
- Standard ball seat: Reinforced PTFE
- Fire Safe Design
- Self relief system for expansion internal body pocket
- Dischargeable remaining fluid in body pocket (Block and bleed system)
- Ball is 1body type by through conduit
- Based on API-6D, ASME B16.34
- Ball and stem are fixed by key, therefore impossibility for slacking.

TF5-W·TF5 (M) -W (CLASS150·300)



TF5-W CLASS 150

	d	L	H1	H2	I	E	S	WORM GEAR
200A/8"	203	457	321	247	600	71	288	AB550N
250A/10"	254	533	376	305	800	86	311	AB880N
300A/12"	305	610	431	352	800	130	437	AB1950N
350A/14"	337	686	465	385	800	130	387	AB1950N
400A/16"	387	762	514	435	400	211	409	AB1950N/SP4
450A/18"	438	864	526	445	400	211	409	AB1950N/SP4
500A/20"	489	914	581	491	400	211	409	AB1950N/SP4
600A/24"	591	1067	678	573	600	211	497	AB1950N/SP4

TF5-W CLASS 300

	d	L	H1	H2	I	E	S	WORM GEAR
200A/8"	203	502	349	259	800	130	387	AB1950N
250A/10"	254	568	398	312	800	130	387	AB1950N
300A/12"	305	648	447	365	400	211	409	AB1950N/SP4
350A/14"	337	762	485	402	400	211	409	AB1950N/SP4
400A/16"	387	838	533	449	600	211	515	AB1950N/SP4
450A/18"	438	914	579	464	600	211	447	AB1950N/SP4
500A/20"	489	991	613	505	800	211	547	AB1950N/SP4
600A/24"	591	1143	728	597	600	263	500	AB6800N/SP4

TF5 (M) -W CLASS 150

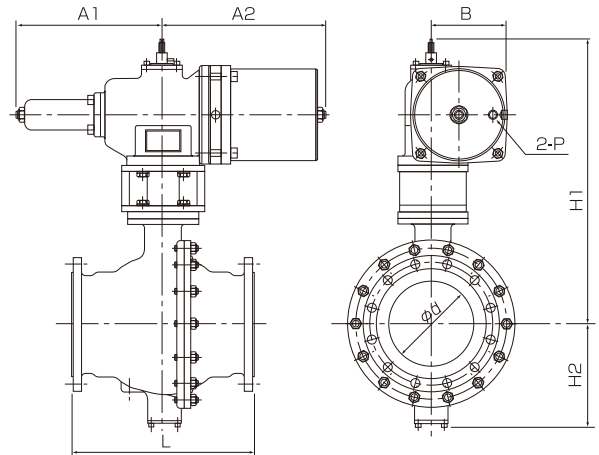
	d	L	H1	H2	I	E	S	WORM GEAR
200A/8"	203	457	335	247	800	130	387	AB1950N
250A/10"	254	533	389	305	600	211	497	AB1950N/SP4
300A/12"	305	610	431	352	800	211	445	AB1950N/SP4
350A/14"	337	686	469	385	400	263	442	AB6800N/SP4
400A/16"	387	762	518	435	600	263	550	AB6800N/SP4

TF5 (M) -W CLASS 300

	d	L	H1	H2	I	E	S	WORM GEAR
200A/8"	203	502	349	259	800	211	445	AB1950N/SP4
250A/10"	254	568	398	312	800	211	445	AB1950N/SP4
300A/12"	305	648	451	365	800	263	500	AB6800N/SP4
350A/14"	337	762	491	402	800	263	500	AB6800N/SP4
400A/16"	387	838	563	449	600	431	611	A250G/SP9

※For ASME900Lb, 1500Lb, 2500Lb, and bigger size, please apply to us.

TF5-TD·TF5 (M) -TD (CLASS150·300)



TF5-TD CLASS 150

	d	L	H1	H2	A1	A2	B	P	ACTUATOR
200A/8"	203	457	747	247	338	372	188	Rc3/8	TD6
250A/10"	254	533	845	305	426	478	225	Rc3/4	TD7
300A/12"	305	610	900	352	426	478	225	Rc3/4	TD7
350A/14"	337	686	1026	385	571	633	306	Rc3/4	TD8
400A/16"	387	762	1075	435	571	633	306	Rc3/4	TD8
450A/18"	438	864		445	571	633	306	Rc3/4	TD8
500A/20"	489	914		491	667	753	375	Rc3/4	TD9
600A/24"	591	1067		573	667	753	375	Rc3/4	TD9

TF5-TD CLASS 300

	d	L	H1	H2	A1	A2	B	P	ACTUATOR
200A/8"	203	502	432	259	426	478	225	Rc3/4	TD7
250A/10"	254	568	531	312	571	633	306	Rc3/4	TD8
300A/12"	305	648	555	365	571	633	306	Rc3/4	TD8
350A/14"	337	762		402	571	633	306	Rc3/4	TD8
400A/16"	387	838		449	667	753	375	Rc3/4	TD9
450A/18"	438	914		464	667	753	375	Rc3/4	TD9
500A/20"	489	991		505	667	753	375	Rc3/4	TD9
600A/24"	591	1067							

TF5 (M) -TD CLASS 150

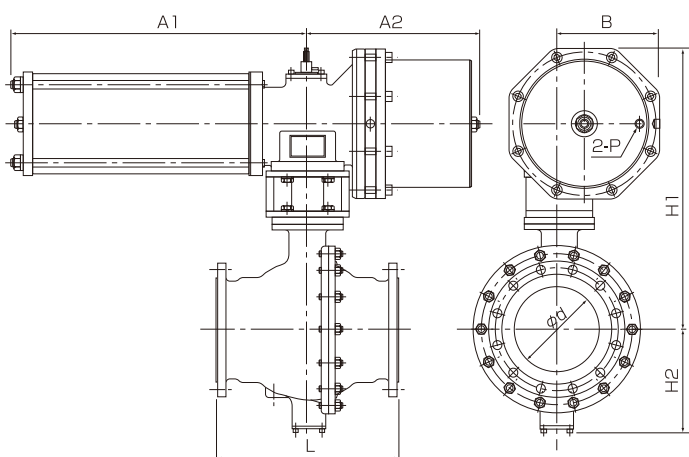
	d	L	H1	H2	A1	A2	B	P	ACTUATOR
200A/8"	203	457	619	247	426	478	225	Rc3/4	TD7
250A/10"	254	533	950	305	571	633	306	Rc3/4	TD8
300A/12"	305	610	992	352	571	633	306	Rc3/4	TD8
350A/14"	337	686	1137	385	667	753	375	Rc3/4	TD9
400A/16"	387	762	1186	435	667	753	375	Rc3/4	TD9

TF5 (M) -TD CLASS 300

	d	L	H1	H2	A1	A2	B	P	ACTUATOR
200A/8"	203	502	482	259	571	633	306	Rc3/4	TD8
250A/10"	254	568		312	667	753	375	Rc3/4	TD9
300A/12"	305	648		365	667	753	375	Rc3/4	TD9
350A/14"	337	762							
400A/16"	387	838							

※For ASME900Lb, 1500Lb, 2500Lb, and bigger size, please apply to us.

TF5-TS・TF5 (M)-TS (CLASS150・300)



TF5-TS CLASS 150

	d	L	H1	H2	A1	A2	B	P	ACTUATOR
200A/8"	203	457	747	247	657	393	233	Rc3/8	TS6
250A/10"	254	533	845	305	862	515	304	Rc3/4	TS7
300A/12"	305	610	900	352	862	515	304	Rc3/4	TS7
350A/14"	337	686	1026	385	1203	704	390	Rc3/4	TS8
400A/16"	387	762	1075	435	1203	704	390	Rc3/4	TS8
450A/18"	438	864		445	1203	704	390	Rc3/4	TS8

TF5-TS CLASS 300

	d	L	H1	H2	A1	A2	B	P	ACTUATOR
200A/8"	203	502	432	259	862	515	304	Rc3/4	TS7
250A/10"	254	568	531	312	1203	704	390	Rc3/4	TS8
300A/12"	305	648	555	365	1203	704	390	Rc3/4	TS8
350A/14"	337	762		402	1203	704	390	Rc3/4	TS8

TF5 (M)-TS CLASS 150

	d	L	H1	H2	A1	A2	B	P	ACTUATOR
200A/8"	203	457	619	247	862	515	304	Rc3/4	TS7
250A/10"	254	533	950	305	1203	704	390	Rc3/4	TS8
300A/12"	305	610	992	352	1203	704	390	Rc3/4	TS8

TF5 (M)-TS CLASS 300

	d	L	H1	H2	A1	A2	B	P	ACTUATOR
200A/8"	203	502	482	259	1203	704	390	Rc3/4	TS8

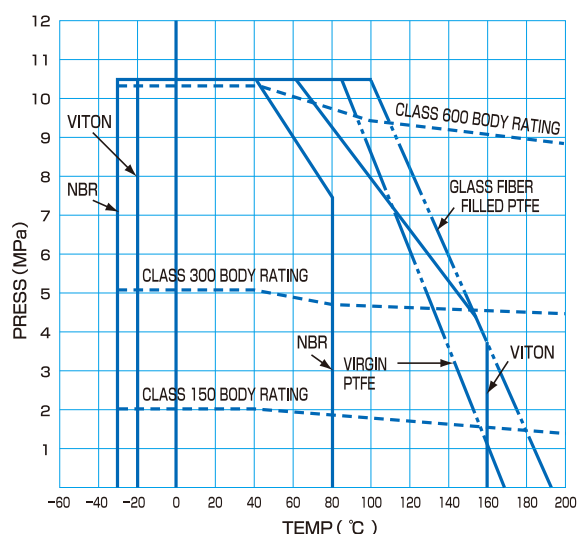
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STANDARD PRODUCTION RANGE

	TF5 (SOFT SEAT)							
	JIS10K/ASME150Lb				JIS20K/JIS30K/ASME300Lb			
	SCS13A	SCS14A	SCS16A	WCB	SCS13A	SCS14A	SCS16A	WCB
200A/8"	○	○	○	○	○	○	○	○
250A/10"	○	○	○	○	○	○	○	○
300A/12"	○	○	○	○	○	○	○	○
350A/14"	○	○	○	○	○	○	○	○
400A/16"	○	○	○	○	○	○	○	○
450A/18"	○	○	○	○	○	○	○	○
500A/20"	○	○	○	○	○	○	○	○
600A/24"	○	○	○	○	○	○	○	○

	TF5 (M) (METAL SEAT)							
	JIS10K/ASME150Lb				JIS20K/JIS30K/ASME300Lb			
	SCS13A	SCS14A	SCS16A	WCB	SCS13A	SCS14A	SCS16A	WCB
200A/8"	○	○	○	○	○	○	○	○
250A/10"	○	○	○	○	○	○	○	○
300A/12"	○	○	○	○	○	○	○	○
350A/14"	○	○	○	○	○	○	○	○
400A/16"	○	○	○	○	○	○	○	○

TEMPERATURE/PRESSURE RATING



- ISO 14001 CERTIFIED FACTORY
- ISO 9001 CERTIFIED FACTORY
- HIGH PRESSURE GAS AUTHORIZED FACTORY
- API CERTIFIED FACTORY

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