

Class 150 Stainless Steel Ball Valves

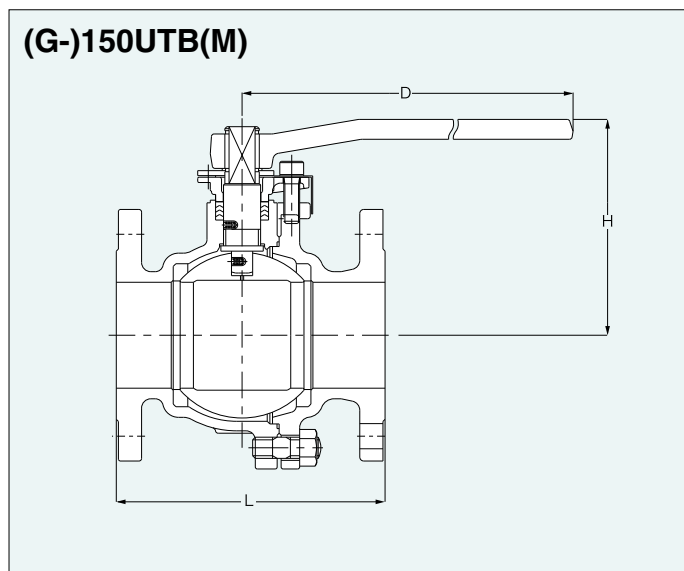
Full bore, Split body, Side entry design

Features

- Antistatic device
- Blowout-proof stem
- Double "D" stem head
- High performance **HYPATITE® PTFE** ball seats

Page 99 for Pressure-Temperature Ratings.

Page 44 for Construction and Materials.



Dimensions of 150UTB(M)

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/2	2	2 1/2	3	4	5	6	8	10
	DN	15	20	25	40	50	65	80	100	125	150	200	250
Ball bore		15	20	25	40	50	65	80	100	125	150	200	250
L		108	117	127	165	178	190	203	229	356	394	457	533
H		102	105	124	115	120	155	165	200	220	295	355	Gear operation
D		130	130	160	230	230	400	400	460	460	1000	1500	Gear operation

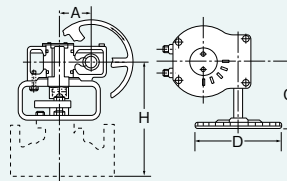
Valve operator

NPS 1/2 to 8: Lever operation
 NPS 5 to 8: Optional gear operation
 NPS 10: Standard gear operation

Gear Operation

Unit: mm

Nominal Pressure	Class 150	Gear Operator			
		H	D	C	A
Nominal size (NPS)	5	312	310	165	65.5
	6	337	310	165	65.5
	8	414	360	210	88.5
	10	477	500	363	93.5



Worm gear operators may be mounted on KITZ ball valves at your option for the smoothest valve operation. Electric or pneumatic actuators are also optionally available. Contact KITZ distributors for appropriate choice and sizing of valve actuators.

Refer to "Product Range" on Page 1.

Class 600/1500 Stainless Steel/Carbon Steel Ball Valves

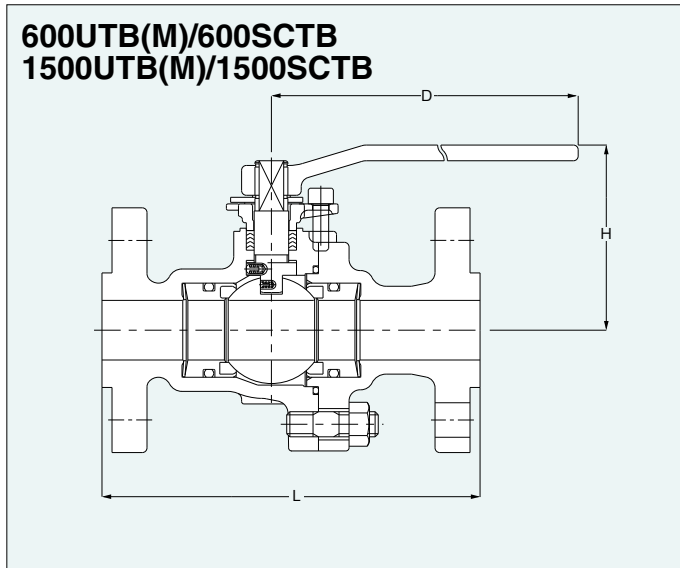
Full bore, Split body, Side entry design

Features

- Antistatic device
- Blowout-proof stem
- Fire test certification★ (API 607) ...Carbon Steel only
- Double "D" stem head
- Ball seats: Reinforced PTFE with MoS₂ for Class 600
Nylon with MoS₂ for Class 1500

Page 100 for Pressure-Temperature Ratings.

Page 46 to 49 for Construction and Materials.



Dimensions of 600UTB(M), 600SCTB

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/2
	DN	15	20	25	40
Ball bore		13	19	25	38
L		165	190	216	241
H		105	108	130	118
D		130	130	160	230

Valve operator

Lever operation

Options

- ★ Flexible graphite packing and flexible graphite spiral wound gasket (See Pages 11, 46 and 47)
- Ball and stem to 316ss available in carbon steel valves upon request

Dimensions of 1500UTB(M), 1500SCTB

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/2
	DN	15	20	25	40
Ball bore		13	19	25	38
L		216	229	254	305
H		134	117	123	148
D		160	230	230	400

Valve operator

Lever operation

Options

- ★ Flexible graphite packing and flexible graphite spiral wound gasket (See Pages 11, 48 and 49)
- Ball and stem to 316ss available in carbon steel valves upon request

Class 150/300 Stainless Steel/Carbon Steel Ball Valves

Full bore, Split body, Side entry design

Features

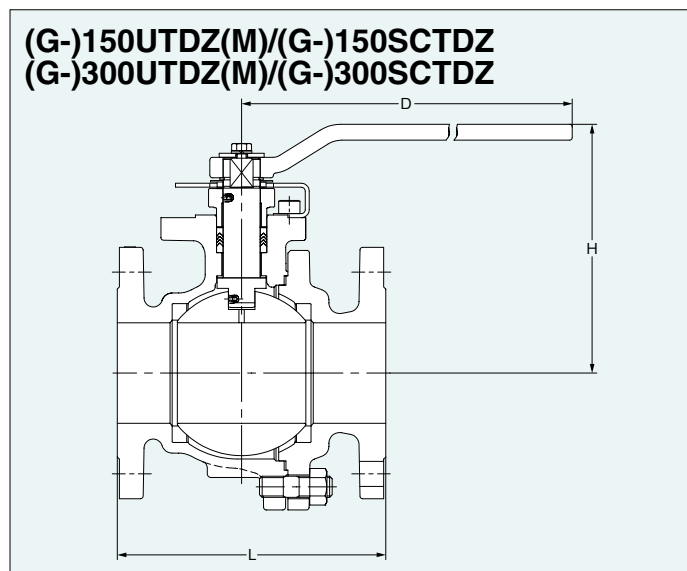
- Antistatic device
- Blowout-proof stem
- Fire test certification★(API 607, ISO 10497)
- Stem head conform to CAPI ADDS 2.02 dimensions
- High performance **HYPATITE® PTFE** ball seats
- Actuator mounting pad to ISO 5211

- Conform to NACE MR0175 for hardness of body, body cap, stem and ball.

Page 96 for Pressure-Temperature Ratings.

Page 43 for Construction and Materials.

Page 93 for Dimension of Actuator Mounting Pad.



(G-)150UTDZ(M)/(G-)150SCTDZ
(G-)300UTDZ(M)/(G-)300SCTDZ

Dimensions of 150UTDZ(M), 150SCTDZ

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/4*	1 1/2	2	2 1/2	3	4	5	6	8	10
	DN	15	20	25	32*	40	50	65	80	100	125	150	200	250
Ball bore		14	19	24	32	38	50	64	76	100	123	151	202	253
L		108	117	127	140	165	178	190	203	229	356	394	457	533
H		108	111	124	128	134	143	179	189	224	240	315	406	Gear operation
D		130	130	160	160	230	230	400	400	460	460	1000	1500	Gear operation

Valve operator

NPS 1/2 to 8: Lever operation
 NPS 5 to 8: Optional gear operation
 NPS 10: Standard gear operation

Option

★ Flexible graphite packing and gasket
 (See Pages 11 and 38)

- Ball and stem to 316ss available in carbon steel valves upon request

Dimensions of 300UTDZ(M), 300SCTDZ

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/4*	1 1/2	2	2 1/2	3	4	5	6	8
	DN	15	20	25	32*	40	50	65	80	100	125	105	200
Ball bore		14	19	24	32	38	50	64	76	100	123	151	202
L		140	152	165	178	190	216	241	283	305	381	403	502
H		108	111	124	128	134	143	179	189	251	267	315	406
D		130	130	160	160	230	230	400	400	750	750	1000	1500

Valve operator

NPS 1/2 to 8: Lever operation
 NPS 4 to 8: Optional gear operation

Option

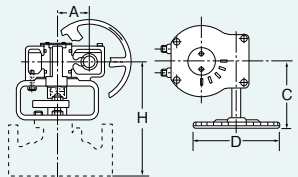
★ Flexible graphite packing and gasket
 (See Pages 11 and 43)

- Ball and stem to 316ss available in carbon steel valves upon request

Gear Operation

Unit: mm

Nominal Pressure	Class 150	Class 300	Gear Operator										
			H		D		C		A				
			150	300	150	300	150	300	150	300			
		4	258	310	165	65.5							
Nominal size (NPS)	5		274	254	165	65.5							
	6	6	322	335	310	360	165	210	66.5	88.5			
	8	8	412	412	360	360	210	210	88.5	88.5			
	10		448	—	500	—	363	—	93.5	—			



Worm gear operators may be mounted on KITZ ball valves at your option for the smoothest valve operation. Electric or pneumatic actuators are also optionally available. Contact KITZ distributors for appropriate choice and sizing of valve actuators.

Refer to "Product Range" on Page 1.

Class 150/300 Stainless Steel/Carbon Steel Ball Valves

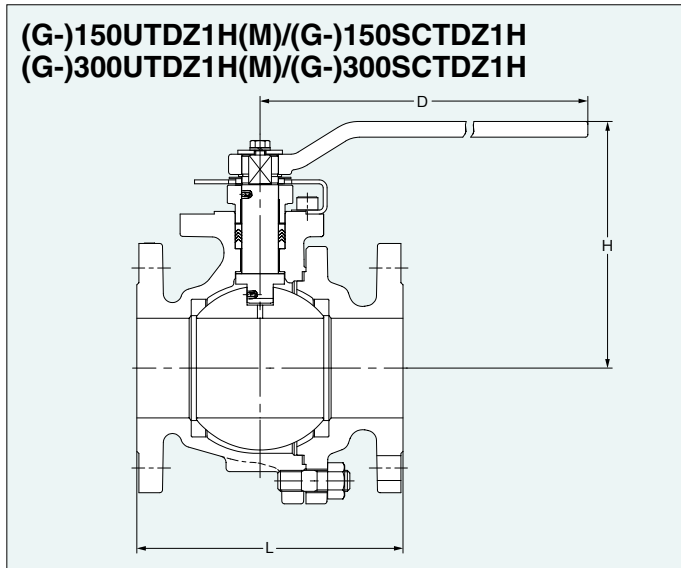
Full bore, Split body, Side entry design

Features

- FILLTITE® ball seats. Temperature range: -29°C to 300°C
- Antistatic device
- Blowout-proof stem
- Fire test certification (API 607, ISO 10497)
- Stem head conform to CAPI ADDS2.02 dimensions
- Actuator mounting pad to ISO 5211
- Conform to NACE MR0175 for hardness of body, body cap, stem and ball

Page 97 for Pressure-Temperature Ratings.

Page 37 for Construction and Materials.



Dimensions of 150UTDZ1H(M), 150SCTDZ1H

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10
	DN	15	20	25	32	40	50	65	80	100	125	150	200	250
Ball bore		14	19	24	32	38	50	64	76	100	123	151	202	253
L		108	117	127	140	165	178	190	203	229	356	394	457	533
H		108	111	124	128	134	143	179	189	251	Gear operation	Gear operation	Gear operation	Gear operation
D		130	130	160	160	230	230	400	400	750	Gear operation	Gear operation	Gear operation	Gear operation

Valve operator

NPS 1/2 to 4: Lever operation
NPS 5 to 10: Standard gear operation

Dimensions of 300UTDZ1H(M), 300SCTDZ1H

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/2	2	2 1/2	3	4	6	8
	DN	15	20	25	40	50	65	80	100	150	200
Ball bore		14	19	24	38	50	64	76	100	151	202
L		140	152	165	190	216	241	283	305	403	502
H		108	111	124	134	143	179	189	Gear operation	Gear operation	Gear operation
D		130	130	160	230	230	400	400	Gear operation	Gear operation	Gear operation

Valve operator

NPS 1/2 to 3: Lever operation
NPS 4 to 8: Standard gear operation

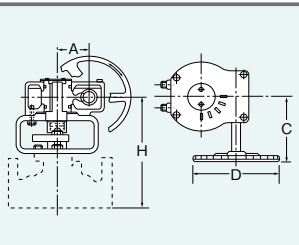
Options

- Ball and stem to 316ss available in carbon steel valves upon request

Gear Operation

Unit: mm

Nominal Pressure	Class 150	Class 300	Gear Operator							
			H		D		C		A	
			150	300	150	300	150	300	150	300
Valve size (NPS)	4		274	258	310	310	165	165		65.5
	5		335	332	360	500	210	363		88.5
	6		409	417	500	500	363	377		93.5
	8		456		500		377			134.0



Electric or pneumatic actuators are also optionally available. Contact KITZ distributors for appropriate choice and sizing of valve actuators.

Refer to "Product Range" on Page 4.

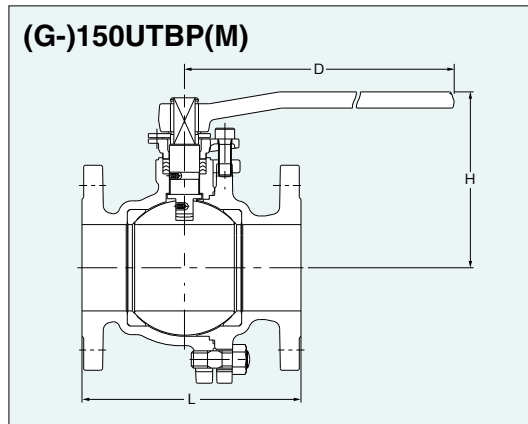
Class 150 Stainless Steel Pocketless Ball Valves

Full bore, Split body, Side entry design

Page 99 for Pressure-Temperature Ratings.

Features

- Unique filled cavity provides excellent resistance to media build up and/or stagnation between seats
- Antistatic device
- Blowout-proof stem
- Double "D" stem head
- High performance **HYPATITE®** PTFE ball seats
- Actuator mounting pad to KITZ standard



Valve operator

NPS 1/2 to 8: Lever operation
NPS 3 to 8: Optional gear operation

Dimensions of 150UTBP(M)

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/2	2	2 1/2	3	4	5	6	8
	DN	15	20	25	40	50	65	80	100	125	150	200
Ball bore		15	20	25	40	50	65	80	100	125	150	200
L		108	117	127	165	178	190	203	229	356	394	457
H		102	105	124	115	120	155	165	200	220	295	355
D		130	130	160	230	230	400	400	460	460	1000	1500

※Please contact KITZ or KITZ distributors for details about gear operated products.

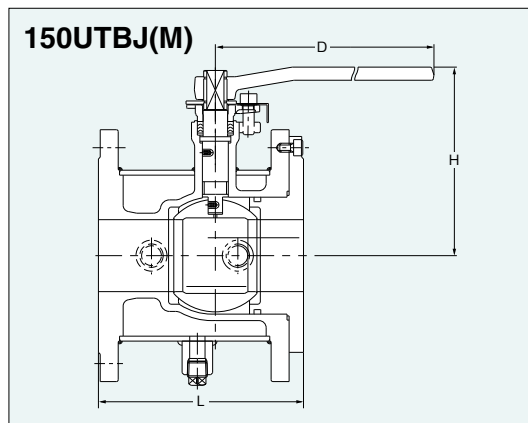
Class 150 Stainless Steel Jacketed Ball Valves

Full bore

Page 99 for Pressure-Temperature Ratings.

Features

- Fully jacketed to maintain media temperature
- Antistatic device
- Double "D" stem head
- High performance **HYPATITE®** PTFE ball seats
- Actuator mounting pad to KITZ standard



Valve operator

NPS 1/2 to 6: Lever operation
NPS 6: Optional gear operation

Note

- Maximum allowable pressure is 1.4 MPa (200 psi) at 260°C (500°F).
- 10K type is also available.

Dimensions of 150UTBJ(M)

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/2	2	2 1/2	3*	4*	6*
	DN	15	20	25	40	50	65	80	100	150
Ball bore		15	20	25	40	50	65	65	80	125
L		110	120	130	165	180	190	200	230	270
H		131	135	150	150	157	188	188	213	258
D		130	130	160	230	230	400	400	400	460

* 150UTRJM

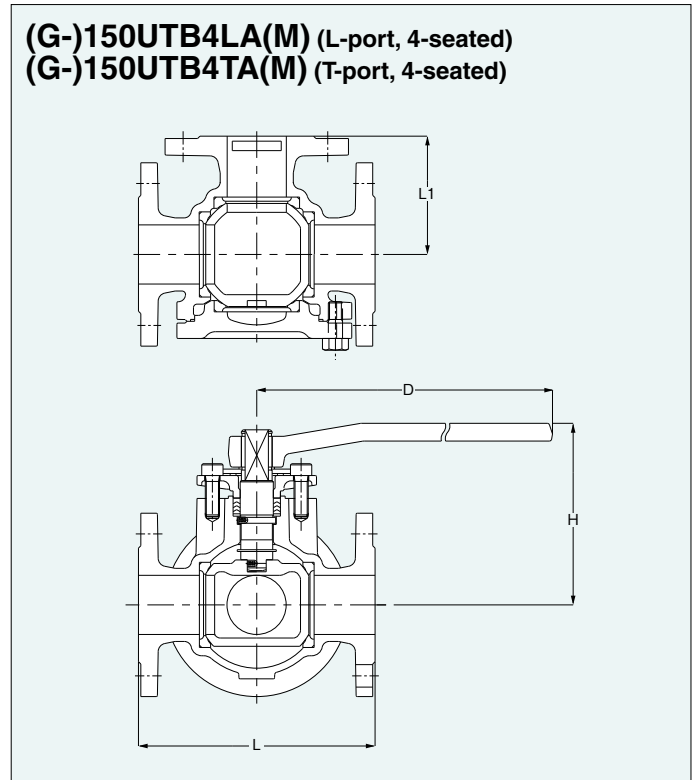
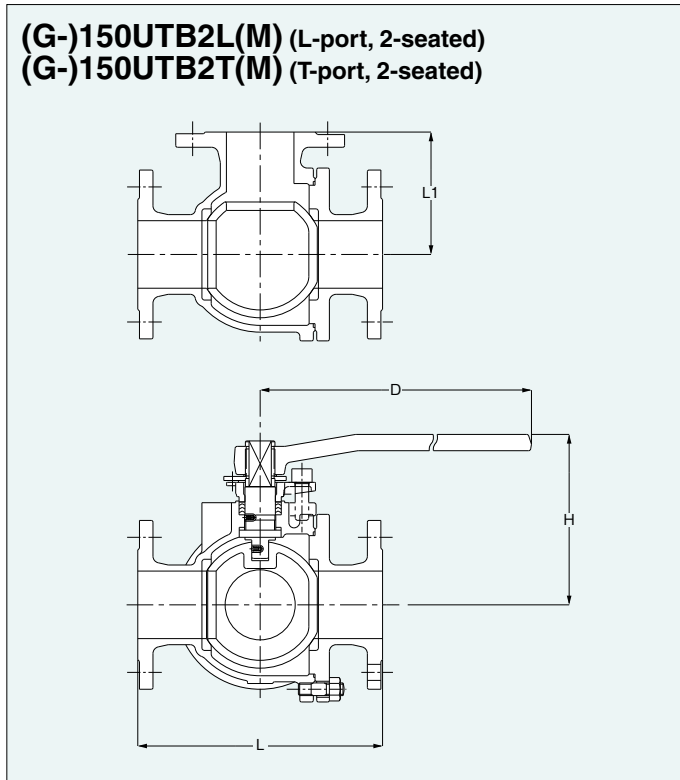
Class 150 Stainless Steel 3-way Ball Valves

Full bore, 2-seated or 4-seated, Split body, Side entry design

Features

- Used for diverting or mixing process media
- One 3-way valve can replace several other valves plus the associated piping pieces
- Antistatic device
- Blowout-proof stem
- Double "D" stem head
- High performance **HYPATITE® PTFE** ball seats
- Actuator mounting pad to KITZ standard

150UTB2L/2T: Page 96 for Pressure-Temperature Ratings. (See UTDZ Series)
 150UTB4LA/4TA: Page 100 for Pressure-Temperature Ratings.
 Page 106 for Allowable Port Orientation.



Dimensions of 150UTB2L(M), 150UTB2T(M)

Unit: mm

Nominal Size	NPS	1	1½	2	3	4	6*
	DN	25	40	50	80	100	150
Ball bore		25	38	51	76	102	127
L		165	210	220	262	342	437
L1		82.5	105	110	131	171	218.5
H		124	115	123	165	200	220
D		160	230	230	400	460	460

Valve operator

NPS 1 to 6: Lever operation
 NPS 6: Optional gear operation

Note

· 10K type is also available.

Dimensions of 150UTB4LA(M), 150UTB4TA(M)

Unit: mm

Nominal Size	NPS	½	¾	1	1½	2	2½	3	4
	DN	15	20	25	40	50	65	80	100
Ball bore		15	19	25	38	51	64	76	102
L		120	135	154	177	200	240	262	342
L1		65	67.5	77	88.5	100	120	131	171
H		128	132	135	146	155	185	198	267
D		160	160	160	400	400	460	460	1000

Valve operator

NPS ½ to 8: Lever operation
 NPS 6 to 8: Optional gear operation

Note

· 10K type is also available.

Refer to "Product Range" on Page 2.

Gear Operation

Unit: mm

Nominal Pressure	Class 150	Gear Operator			
		H	D	C	A
	6	399	360	210	88.5
8	467	500	363	93.5	

Class 150 Stainless Steel 3-way Ball Valves

Reduced bore, 2-seated or 4-seated, Split body, Side entry design

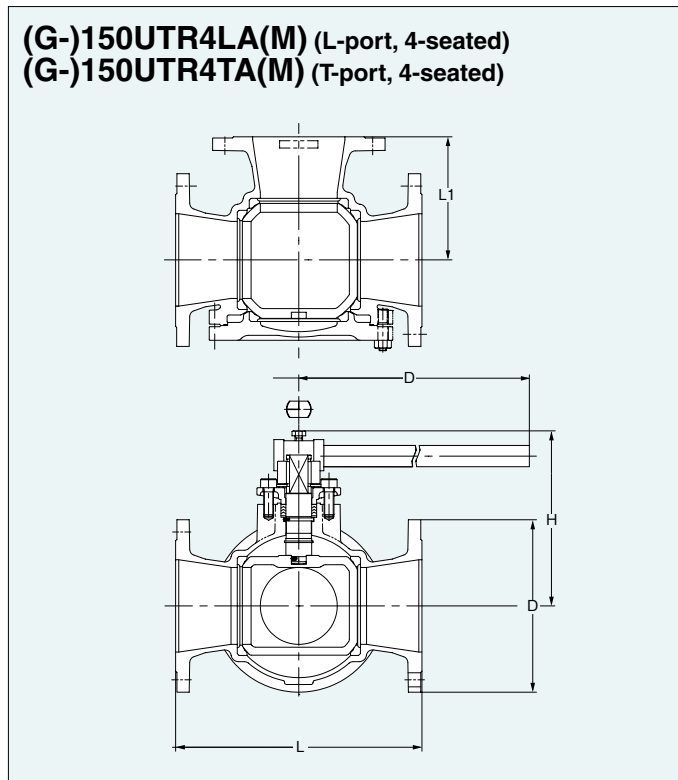
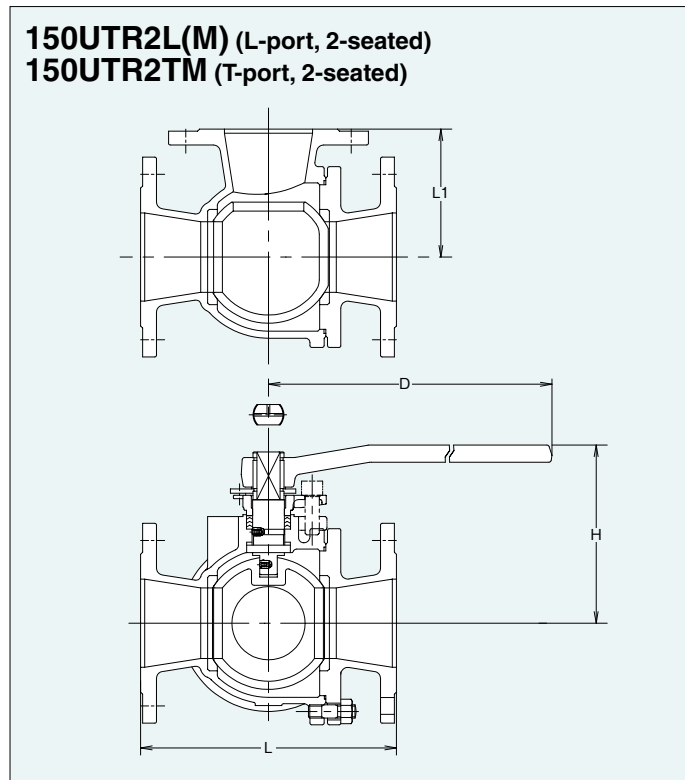
Features

- Used for diverting or mixing process media
- One 3-way valve can replace several other valves plus the associated piping pieces
- Antistatic device
- Blowout-proof stem
- Double "D" stem head
- High performance **HYPATITE® PTFE** ball seats
- Actuator mounting pad to KITZ standard

150UTR2L/2T: Page 96 for Pressure-Temperature Ratings. (See UTDZ Series)

150UTR4LA/4TA: Page 100 for Pressure-Temperature Ratings

Page 106 for Allowable Port Orientation.



Dimensions of 150UTR2L(M), 150UTR2TM

Unit: mm

Nominal Size	NPS	6
	DN	150
Ball bore		127
L		437
L1		218.5
H		220
D		460

Valve operator

NPS 6: Lever operation
NPS 6: Optional gear operation

Note

· 10K type is also available.

Dimensions of 150UTR4LA(M), 150UTR4TA(M)

Unit: mm

Nominal Size	NPS	6	8
	DN	150	200
Ball bore		125	150
L		407	463
L1		203.5	231.5
H		289	335
D		1000	1500

Valve operator

NPS 6,8: Lever operation
NPS 6,8: Optional gear operation

Note

· 10K type is also available.

Refer to "Product Range" on Page 2.

※Please contact KITZ or KITZ distributors for details about gear operated products.

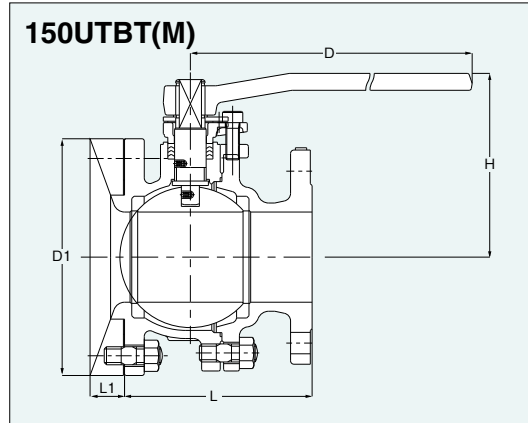
Class 150 Stainless Steel Tank Ball Valves

Full bore, Split body, Side entry design

Page 99 for Pressure-Temperature Ratings.

Features

- Direct mounting to tank bottom
- Churning media evenly
- Antistatic device
- Blowout-proof stem
- Double "D" stem head
- High performance **HYPATITE®** PTFE ball seats
- Actuator mounting pad to KITZ standard



Valve operator

NPS 1 to 6: Lever operation

Note

- Maximum allowable temperature is 200°C (392°F).
- Class 300 and 10K/20K types are also available.

Dimensions of 150UTBT(M)

Unit: mm

Nominal Size	NPS DN	1	1½	2	2½	3	4	5	6	8	10
		25	40	50	65	80	100	125	150	200	250
Ball bore		25	40	50	65	80	100	125	150	For these sizes, please contact KITZ Corporation.	
L		102	125	142	160	171	176	255	292		
H		150	134	143	177	187	222	242	312		
D		160	230	230	400	400	460	460	1000		
L1		35	35	41	43	45	53	53	53		
D1		135	155	175	185	210	280	305	330		

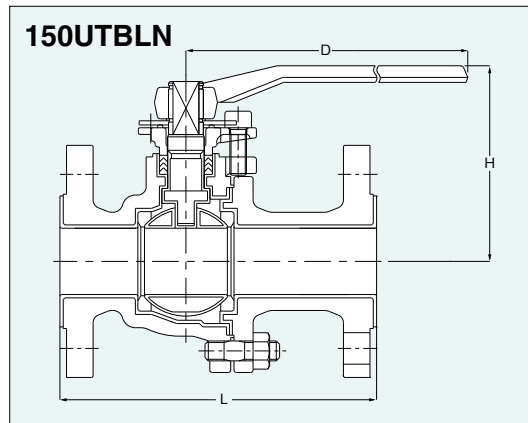
10K Stainless Steel PFA Lined Ball Valves

Full bore, Split body, Side entry design

Page 100 for Pressure-Temperature Ratings.

Features

- Highly corrosion-resistant PFA lining
- Fine lining without a pinhole
- Highly heat-resistant PFA
- No additives or paints are included
- Double "D" stem head
- High performance **HYPATITE®** PTFE ball seats
- Actuator mounting pad to KITZ standard



Valve operator

NPS ½ to 4: Lever operation

Dimensions of 150UTBLN

Unit: mm

Nominal Size	NPS DN	½	¾	1	1½	2	2½	3	4
		15	20	25	40	50	65	80	100
Ball bore		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

Class 150/300 Stainless Steel/Carbon Steel Ball Valves

Reduced bore, Uni-body, End entry design

Features

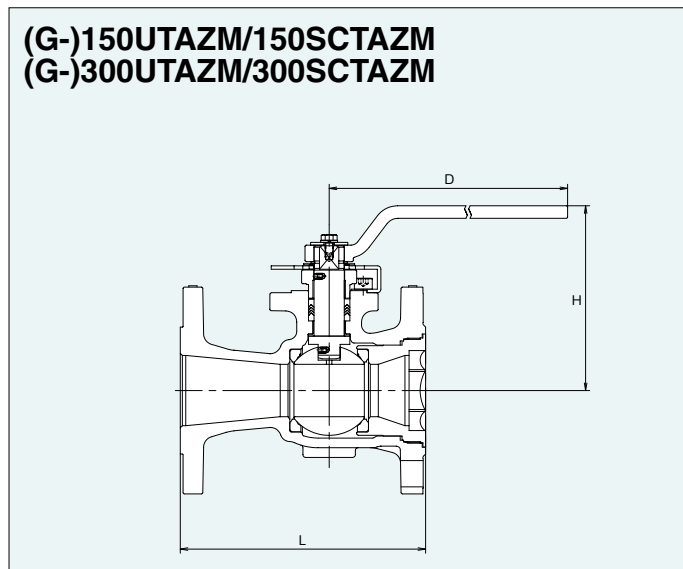
- Antistatic device
- Blowout-proof stem
- Fire test certification* (API 607)
- Double "D" stem head
- High performance **HYPATITE® PTFE** ball seats
- Actuator mounting pad to ISO 5211

- Conform to NACE MR0175 for hardness of body, body insert, stem and ball.

Page 96 for Pressure-Temperature Ratings.

Page 42 and 45 for Construction and Materials.

Page 94 for Dimension of Actuator Mounting Pad.



Dimensions of 150UTAZM/150SCTAZM

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/2	2	3	4	6	8	10
	DN	15	20	25	40	50	80	100	150	200	250
Ball bore		10	12.5	17.5	30	38	58	76	100	151	187
L		108	117	127	165	178	203	229	267	292	330
H		92	95	110	127	134	173	189	224	315	392
D		130	130	130	160	230	400	400	460	1000	1500

Valve operator

NPS 1/2 to 10: Lever operation
NPS 6 to 10: Optional gear operation

Options

- ★ Flexible graphite packing and gasket (See Pages 11 and 45)
- Ball and stem to CF8M (316) (150SCTAZM)

Dimensions of 300UTAZM/300SCTAZM

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/2	2	3	4	6	8	10
	DN	15	20	25	40	50	80	100	150	200	250
Ball bore		10	12.5	17.5	30	38	58	76	100	151	187
L		140	152	165	190	216	283	305	403	419	457
H		92	95	110	127	134	173	189	251	315	392
D		130	130	130	160	230	400	400	750	1000	1500

Valve operator

NPS 1/2 to 10: Lever operation
NPS 6 to 10: Optional gear operation

Options

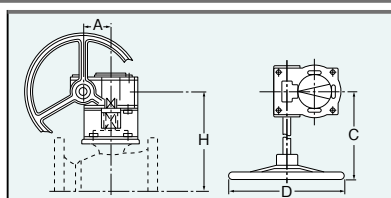
- ★ Flexible graphite packing and gasket (See Pages 11 and 45)
- Ball and stem to CF8M (316) (300SCTAZM)

Gear Operation

Unit: mm

Nominal Pressure	Class 150	Class 300	Gear Operator			
			H	D	C	A
Nominal size (NPS)	6	6	267	300	283	71
	8	8	336	300	283	71
	10	10	400	400	337	86

Refer to "Product Range" on Page 1.

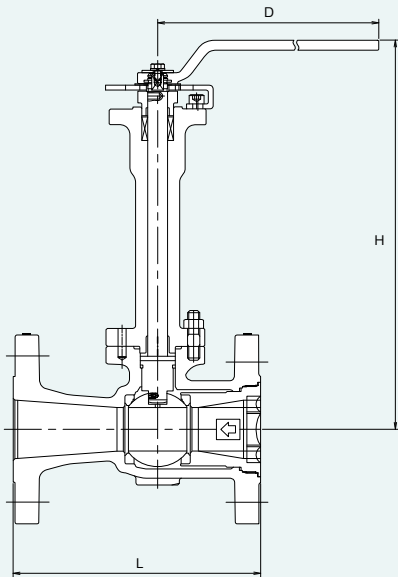


Worm gear operators may be mounted on KITZ ball valves at your option for the smoothest valve operation. Electric or pneumatic actuators are also optionally available. Contact KITZ distributors for appropriate choice and sizing of valve actuators.

* The position of hand wheel may differ depending on sizes and classes. Please consult KITZ for more details on the specifications.

Class 150/300 Low Temperature Service Ball Valves (Reduced Bore)

(G-)150/300UTAZL(M)



Page 104 for Pressure-Temperature Ratings.

Design Specifications

Items	
Wall thickness	ASME B16.34
Face to face dimensions	ASME B16.10
Flange	ASME B16.5

Materials

Name of Parts	Materials
Body	CF8 (CF8M)
Bonnet	316SS
Insert	316SS
Stem	316SS/XM-19H
Seat spring	INCONEL® X-750 (NPS 3 & larger)
Ball	316SS
Gland	CF8M
Gland packing	Flexible graphite
Ball seat (Body side)	PCTFE (NPS 2 and smaller) HYPATITE® PTFE (NPS 3 and larger)
Ball seat (insert side)	HYPATITE® PTFE
Gasket	Flexible graphite spiral wound PTFE+Flexible graphite
Bonnet bolt	A320 Gr. B8M
Bonnet nut	A194 Gr. 8M

Dimensions of Class 150 RF-flanged 150UTAZLM

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/2	2	3	4	6	8	10
	DN	15	20	25	40	50	80	100	150	200	250
L		108	117	127	165	178	203	229	267	292	330
H		307	309	331.7	405	421	549.6	565.6	※	※	※
D		130	130	130	160	230	700	700	※	※	※

Dimensions of Class 300 RF-flanged 300UTAZLM

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/2	2	3	4	6	8	10
	DN	15	20	25	40	50	80	100	150	200	250
L		140	152	165	190	216	283	305	403	419	457
H		307	309	331.7	405	421	549.6	※	※	※	※
D		130	130	130	160	400	700	※	※	※	※

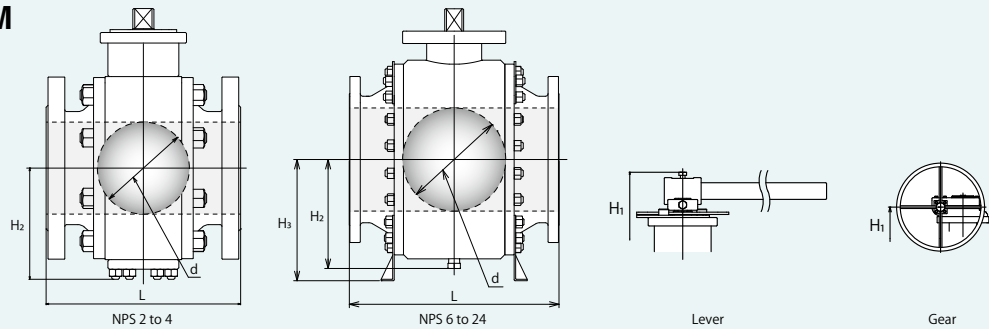
※ Gear operation only. Please contact KITZ Corporation for details.

Class 150 Stainless Steel/Carbon Steel Ball Valves

3-Piece body, Side entry design

T60S/(G)-150UF3TCSM
(Full Bore)

T60S/(G)-150SF3TCS
(Full Bore)



Dimensions of T60S/(G)-150UF3TCSM, T60S/(G)-150SF3TCS

Page 95 for Pressure-Temperature Ratings.

Nominal Size	NPS	2	3	4	6	8	10	12	14	16	18	20	24	
	DN	50	80	100	150	200	250	300	350	400	450	500	600	
Valve operator		Lever					Gear							
Ball bore	in.	1.94	2.94	3.94	5.94	7.94	9.94	11.94	13.19	15.19	17.19	19.19	23.19	
	mm	49	74	100	150	201	252	303	334	385	436	487	589	
L	in.	7	8	9	15.5	18	21	24	27	30	34	36	42	
	mm	178	203	229	394	457	533	610	686	762	864	914	1067	
H ₁	in.	6.26	7.91	10.24	12.83	12.44	14.65	16.02	17.36	20.12	21.69	24.13	27.05	
	mm	159	201	260	326	316	372	407	441	511	551	613	687	
H ₂	in.	3.78	4.57	5.83	7.28	8.7	10.83	-	-	-	-	-	-	
	mm	96	116	148	185	221	275	-	-	-	-	-	-	
H ₃	in.	-	-	-	-	-	-	16.77	17.48	19.61	20.71	24.33	27.44	
	mm	-	-	-	-	-	-	426	444	498	526	618	697	

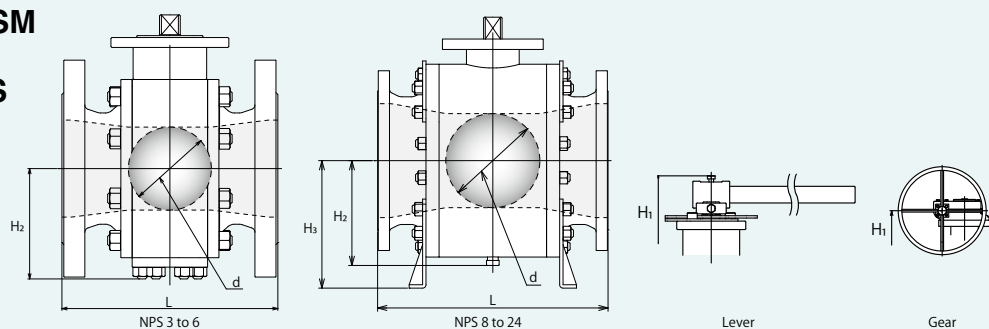
Refer to "Product Range" on Page 6.

Class 150 Stainless Steel/Carbon Steel Ball Valves

3-Piece body, Side entry design

T60S/(G)-150UF3TCRSM
(Reduced Bore)

T60S/(G)-150SF3TCRS
(Reduced Bore)



Dimensions of T60S/(G)-150UF3TCRSM, T60S/(G)-150SF3TCRS

Page 95 for Pressure-Temperature Ratings.

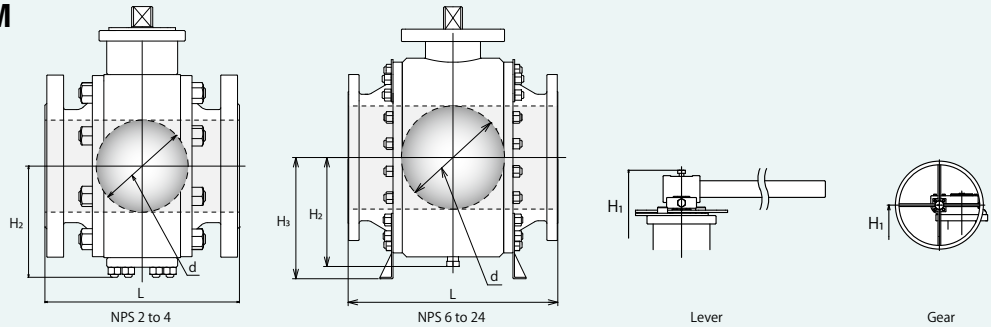
Nominal Size	NPS	3	4	6	8	10	12	14	16	18	20	24	
	DN	80	100	150	200	250	300	350	400	450	500	600	
Valve operator		Lever					Gear						
Ball bore	in.	1.94	2.94	3.94	5.94	7.94	9.94	11.94	13.19	15.19	17.19	19.19	
	mm	49	74	100	150	201	252	303	334	385	436	487	
L	in.	8	9	15.5	18	21	24	27	30	34	36	42	
	mm	203	229	394	457	533	610	686	762	864	914	1067	
H ₁	in.	6.26	7.91	10.24	12.83	12.44	14.65	16.02	17.36	20.12	21.69	24.13	
	mm	159	201	260	326	316	372	407	441	511	551	613	
H ₂	in.	3.78	4.57	5.83	7.28	8.7	10.83	-	-	-	-	-	
	mm	96	116	148	185	221	275	-	-	-	-	-	
H ₃	in.	-	-	-	-	-	-	16.77	17.48	19.61	20.71	24.33	
	mm	-	-	-	-	-	-	426	444	498	526	618	

Class 300 Stainless Steel/Carbon Steel Ball Valves

3-Piece body, Side entry design

T60S/(G-)300UF3TCSM
(Full Bore)

T60S/(G-)300SF3TCS
(Full Bore)



Dimensions of T60S/(G-)300UF3TCSM, T60S/(G-)300SF3TCS

Page 95 for Pressure-Temperature Ratings.

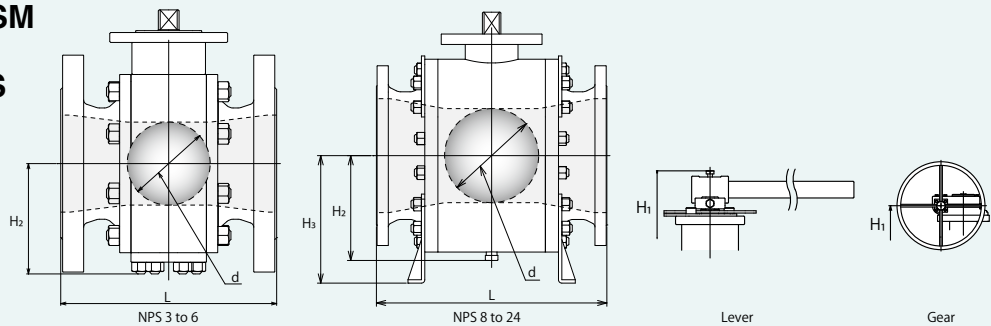
Nominal Size	NPS DN	2 50	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600
Valve operator		Lever					Gear						
Ball bore	in.	1.94	2.94	3.94	5.94	7.94	9.94	11.94	13.19	15.19	17.19	19.19	23.19
	mm	49	74	100	150	201	252	303	334	385	436	487	589
L	in.	8.5	11.13	12	15.88	19.75	22.38	25.5	30	33	36	39	45
	mm	216	283	305	403	502	568	648	762	838	914	991	1143
H ₁	in.	6.26	7.91	10.24	12.83	12.44	14.65	16.34	17.36	20.12	21.69	24.13	27.36
	mm	159	201	260	326	316	372	415	441	511	551	613	695
H ₂	in.	3.78	4.57	5.83	7.28	8.7	10.83	-	-	-	-	-	-
	mm	96	116	148	185	221	275	-	-	-	-	-	-
H ₃	in.	-	-	-	-	-	-	16.85	17.48	19.61	20.71	24.33	27.44
	mm	-	-	-	-	-	-	428	444	498	526	618	697

Class 300 Stainless Steel/Carbon Steel Ball Valves

3-Piece body, Side entry design

T60S/(G-)300UF3TCRSM
(Reduced Bore)

T60S/(G-)300SF3TCRS
(Reduced Bore)



Dimensions of T60S/(G-)300UF3TCRSM, T60S/(G-)300SF3TCRS

Page 95 for Pressure-Temperature Ratings.

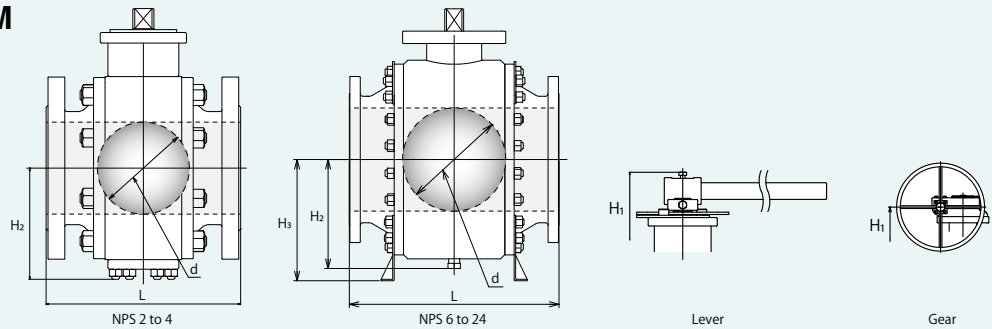
Nominal Size	NPS DN	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	
Valve operator		Lever					Gear						
Ball bore	in.	1.94	2.94	3.94	5.94	7.94	9.94	11.94	13.19	15.19	17.19	19.19	
	mm	49	74	100	150	201	252	303	334	385	436	487	
L	in.	11.13	12	15.88	19.75	22.38	25.5	30	33	36	39	45	
	mm	283	305	403	502	568	648	762	838	914	991	1143	
H ₁	in.	6.26	7.91	10.24	12.83	12.44	14.65	16.34	17.36	20.12	21.69	24.13	
	mm	159	201	260	326	316	372	415	441	511	551	613	
H ₂	in.	3.78	4.57	5.83	7.28	8.7	10.83	-	-	-	-	-	
	mm	96	116	148	185	221	275	-	-	-	-	-	
H ₃	in.	-	-	-	-	-	-	16.85	17.48	19.61	20.71	24.33	
	mm	-	-	-	-	-	-	428	444	498	526	618	

Class 600 Stainless Steel/Carbon Steel Ball Valves

3-Piece body, Side entry design

T60S/(G)-600UF3TCSM
(Full Bore)

T60S/(G)-600SF3TCS
(Full Bore)



Dimensions of T60S/(G)-600UF3TCSM, T60S/(G)-600SF3TCS

Page 95 for Pressure-Temperature Ratings.

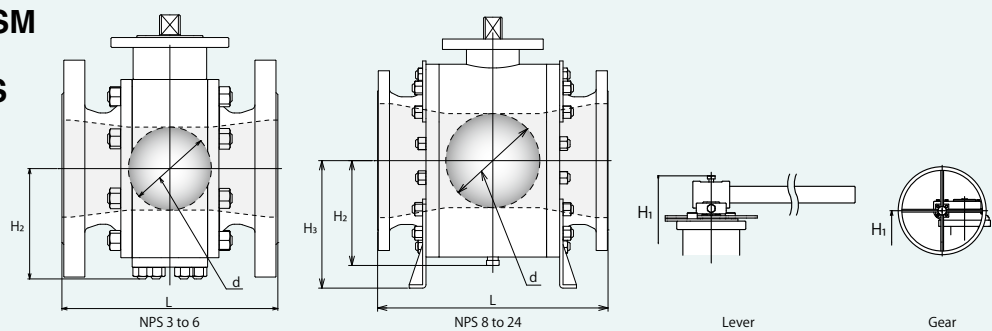
Nominal Size	NPS DN	2	3	4	6	8	10	12	14	16	18	20	24
		50	80	100	150	200	250	300	350	400	450	500	600
Valve operator		Lever						Gear					
Ball bore	in.	1.94	2.94	3.94	5.94	7.94	9.94	11.94	13.19	15.19	17.19	19.19	23.19
	mm	49	74	100	150	201	252	303	334	385	436	487	589
L	in.	11.5	14	17	22	26	31	33	36	39	43	47	55
	mm	292	356	432	559	660	787	838	889	991	1092	1194	1394
H ₁	in.	7.17	9.29	10.35	11.1	13.19	15.04	17.64	18.82	21.26	23.15	25.67	29.49
	mm	182	236	263	282	335	382	448	478	540	588	652	749
H ₂	in.	3.86	4.72	5.91	7.52	9.33	-	-	-	-	-	-	-
	mm	98	120	150	191	237	-	-	-	-	-	-	-
H ₃	in.	-	-	-	-	-	15.08	18.81	18.07	19.57	21.77	25.31	28.39
	mm	-	-	-	-	-	383	427	459	497	553	643	721

Class 600 Stainless Steel/Carbon Steel Ball Valves

3-Piece body, Side entry design

T60S/(G)-600UF3TCRSM
(Reduced Bore)

T60S/(G)-600SF3TCRS
(Reduced Bore)



Dimensions of T60S/(G)-600UF3TCRSM, T60S/(G)-600SF3TCRS

Page 95 for Pressure-Temperature Ratings.

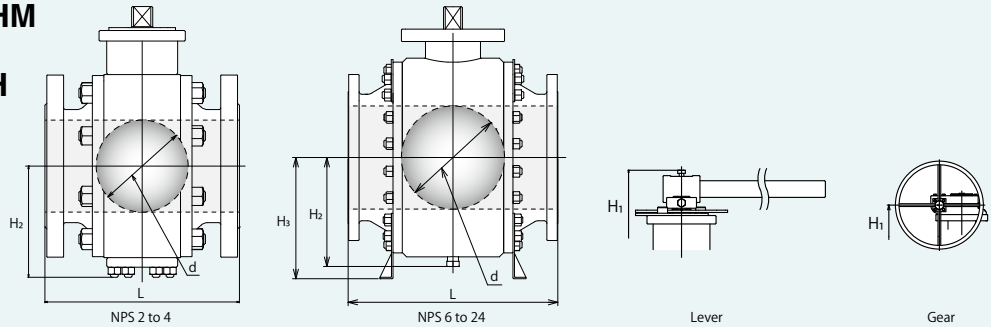
Nominal Size	NPS DN	3	4	6	8	10	12	14	16	18	20	24	
		80	100	150	200	250	300	350	400	450	500	600	
Valve operator		Lever						Gear					
Ball bore	in.	1.94	2.94	3.94	5.94	7.94	9.94	11.94	13.19	15.19	17.19	19.19	
	mm	49	74	100	150	201	252	303	334	385	436	487	
L	in.	14	17	22	26	31	33	36	39	43	47	55	
	mm	356	432	559	660	787	838	889	991	1092	1194	1394	
H ₁	in.	7.17	9.29	10.35	11.1	13.19	15.04	17.64	18.82	21.26	23.15	25.67	
	mm	182	236	263	282	335	382	448	478	540	588	652	
H ₂	in.	3.86	4.72	5.91	7.52	9.33	-	-	-	-	-	-	
	mm	98	120	150	191	237	-	-	-	-	-	-	
H ₃	in.	-	-	-	-	-	15.08	18.81	18.07	19.57	21.77	25.31	
	mm	-	-	-	-	-	383	427	459	497	553	643	

Class 150 Metal Seated Stainless Steel/Carbon Steel Ball Valves (Trim 6H)

3-Piece body, Side entry design

T60M/(G-)150UF3TC6HM
(Full Bore)

T60M/(G-)150SF3TC6H
(Full Bore)



Dimensions of T60M/(G-)150UF3TC6HM, T60M/(G-)150SF3TC6H

Page 95 for Pressure-Temperature Ratings.

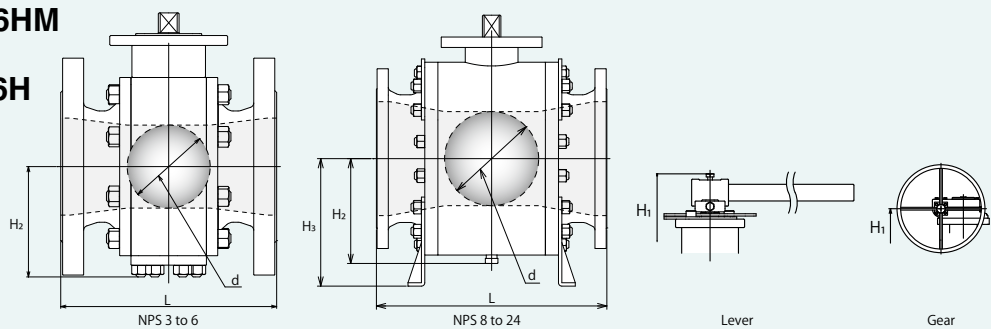
Nominal Size	NPS DN	2 50	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600
Valve operator		Lever						Gear					
Ball bore	in.	1.94	2.94	3.94	5.94	7.94	9.94	11.94	13.19	15.19	17.19	19.19	23.19
	mm	49	74	100	150	201	252	303	334	385	436	487	589
L	in.	7.00	8.00	9.00	15.50	18.00	21.00	24.00	27.00	30.00	34.00	36.00	42.00
	mm	178	203	229	394	457	533	610	686	762	864	914	1067
H ₁	in.	7.44	7.28	9.21	11.14	13.74	15.67	18.23	19.02	22.91	24.09	28.5	31.77
	mm	182	188	234	283	349	398	463	483	582	612	724	807
H ₂	in.	3.94	4.84	5.94	7.52	9.33	11.18	-	-	-	-	-	-
	mm	100	123	151	191	237	284	-	-	-	-	-	-
H ₃	in.	-	-	-	-	-	-	16.89	17.52	19.61	20.75	24.37	27.44
	mm	-	-	-	-	-	-	427	445	499	526	619	698

Class 150 Metal Seated Stainless Steel/Carbon Steel Ball Valves (Trim 6H)

3-Piece body, Side entry design

T60M/(G-)150UF3TCR6HM
(Reduced Bore)

T60M/(G-)150SF3TCR6H
(Reduced Bore)



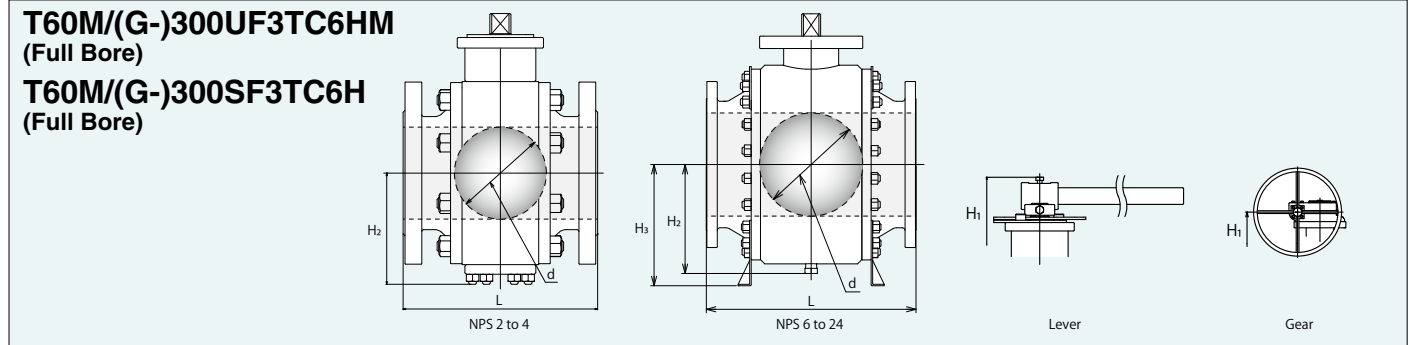
Dimensions of T60M/(G-)150UF3TCR6HM, T60M/(G-)150SF3TCR6H

Page 95 for Pressure-Temperature Ratings.

Nominal Size	NPS DN	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	
Valve operator		Lever						Gear					
Ball bore	in.	1.94	2.94	3.94	5.94	7.94	9.94	11.94	13.19	15.19	17.19	19.19	
	mm	49	74	100	150	201	252	303	334	385	436	487	
L	in.	8.00	9.00	15.50	18.00	21.00	24.00	27.00	30.00	34.00	36.00	42.00	
	mm	203	229	394	457	533	610	686	762	864	914	1067	
H ₁	in.	7.24	7.28	9.21	11.14	13.74	15.67	18.23	19.02	22.91	24.09	28.5	
	mm	187	185	233	283	345	399	464	478	583	611	712	
H ₂	in.	3.94	4.84	5.94	7.52	9.33	11.18	-	-	-	-	-	
	mm	96	123	154	197	241	294	-	-	-	-	-	
H ₃	in.	-	-	-	-	-	-	16.89	17.52	19.61	20.75	24.37	
	mm	-	-	-	-	-	-	436	451	507	534	602	

Class 300 Metal Seated Stainless Steel/Carbon Steel Ball Valves (Trim 6H)

3-Piece body, Side entry design



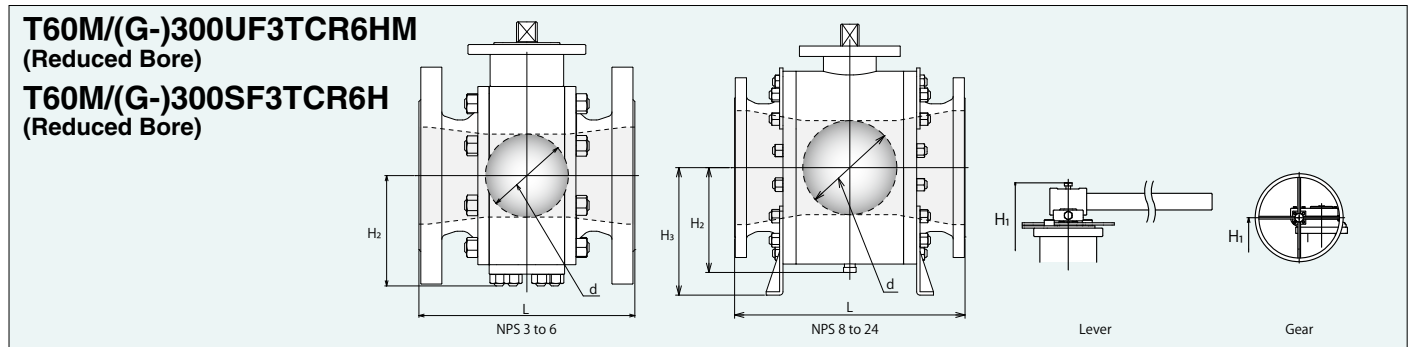
Dimensions of T60M/(G-)300UF3TC6HM, T60M/(G-)300SF3TC6H

Page 95 for Pressure-Temperature Ratings.

Nominal Size	NPS	2	3	4	6	8	10	12	14	16	18	20	24
	DN	50	80	100	150	200	250	300	350	400	450	500	600
Valve operator		Lever						Gear					
Ball bore	in.	1.94	2.94	3.94	5.94	7.94	9.94	11.94	13.19	15.19	17.19	19.19	23.19
	mm	49	74	100	150	201	252	303	334	385	436	487	589
L	in.	8.50	11.13	12.00	15.88	19.75	22.38	25.50	30.00	33.00	36.00	39.00	45.00
	mm	216	283	305	403	502	568	648	762	838	914	991	1143
H ₁	in.	7.24	7.28	9.53	11.69	13.7	15.67	18.58	19.37	22.91	24.29	28.5	31.81
	mm	182	188	242	297	348	398	472	492	582	617	724	808
H ₂	in.	3.94	4.84	5.94	7.52	9.33	11.18	-	-	-	-	-	-
	mm	100	123	151	191	237	284	-	-	-	-	-	-
H ₃	in.	-	-	-	-	-	-	16.89	17.52	19.61	20.75	24.37	27.52
	mm	-	-	-	-	-	-	429	445	498	529	618	699

Class 300 Metal Seated Stainless Steel/Carbon Steel Ball Valves (Trim 6H)

3-Piece body, Side entry design



Dimensions of T60M/(G-)300UF3TCR6HM, T60M/(G-)300SF3TCR6H

Page 95 for Pressure-Temperature Ratings.

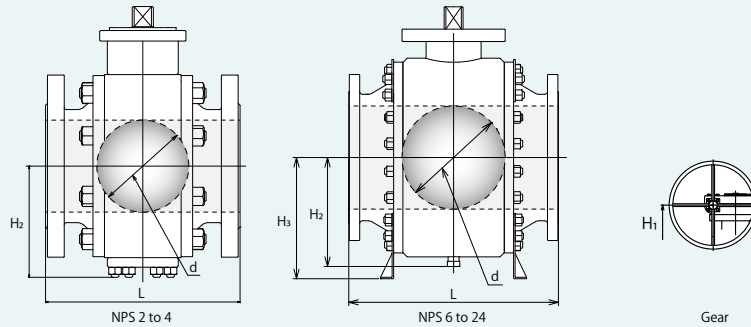
Nominal Size	NPS	3	4	6	8	10	12	14	16	18	20	24	
	DN	80	100	150	200	250	300	350	400	450	500	600	
Valve operator		Lever						Gear					
Ball bore	in.	1.94	2.94	3.94	5.94	7.94	9.94	11.94	13.19	15.19	17.19	19.19	
	mm	49	74	100	150	201	252	303	334	385	436	487	
L	in.	11.13	12.00	15.88	19.75	22.38	25.50	30.00	33.00	36.00	39.00	45.00	
	mm	283	305	403	502	568	648	762	838	914	991	1143	
H ₁	in.	7.24	7.28	9.53	11.69	13.7	15.67	18.58	19.37	22.91	24.29	28.5	
	mm	187	185	241	297	344	399	472	487	583	618	726	
H ₂	in.	3.94	4.84	5.94	7.52	9.33	11.18	-	-	-	-	-	
	mm	96	123	154	197	241	294	-	-	-	-	-	
H ₃	in.	-	-	-	-	-	-	16.89	17.52	19.61	20.75	24.37	
	mm	-	-	-	-	-	-	436	451	507	534	602	

Class 600 Metal Seated Stainless Steel/Carbon Steel Ball Valves (Trim 6H)

3-Piece body, Side entry design

T60M/G-600UF3TC6HM
(Full Bore)

T60M/G-600SF3TC6H
(Full Bore)



Dimensions of T60M/G-600UF3TC6HM, T60M/G-600SF3TC6H

Page 95 for Pressure-Temperature Ratings.

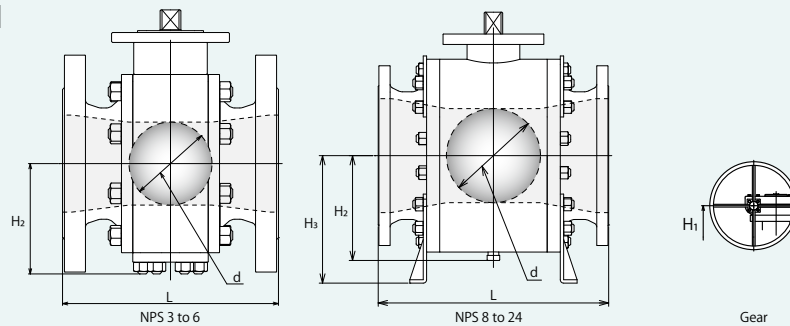
Nominal Size	NPS DN	2 50	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600
Valve operator		Gear											
Ball bore	in.	1.94	2.94	3.94	5.94	7.94	9.94	11.94	13.19	15.19	17.19	19.19	23.19
	mm	49	74	100	150	201	252	303	334	385	436	487	589
L	in.	11.50	14.00	17.00	22.00	26.00	31.00	33.00	35.00	39.00	43.00	47.00	55.00
	mm	292	356	432	559	660	787	838	889	991	1092	1194	1397
H ₁	in.	6.50	8.7	10.35	11.65	14.33	15.83	18.39	21.5	23.66	26.97	28.54	32.2
	mm	168	221	263	296	364	402	467	546	601	685	725	818
H ₂	in.	4.06	5.28	6.5	7.52	9.69	-	-	-	-	-	-	-
	mm	103	134	165	191	246	-	-	-	-	-	-	-
H ₃	in.	-	-	-	-	-	15.12	16.81	18.11	19.61	21.81	24.53	28.39
	mm	-	-	-	-	-	384	427	460	498	554	643	721

Class 600 Metal Seated Stainless Steel/Carbon Steel Ball Valves (Trim 6H)

3-Piece body, Side entry design

T60M/G-600UF3TCR6HM
(Reduced Bore)

T60M/G-600SF3TCR6H
(Reduced Bore)



Dimensions of T60M/G-600UF3TCR6HM, T60M/G-600SF3TCR6H

Page 95 for Pressure-Temperature Ratings.

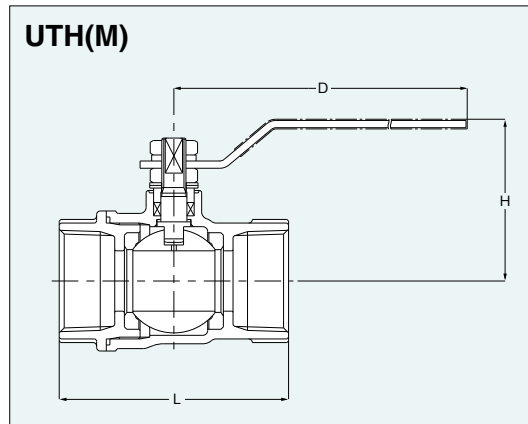
Nominal Size	NPS DN	3 80	4 100	6 150	8 200	10 250	12 300	14 350	16 400	18 450	20 500	24 600	
Valve operator		Gear											
Ball bore	in.	1.94	2.94	3.94	5.94	7.94	9.94	11.94	13.19	15.19	17.19	19.19	
	mm	49	74	100	150	201	252	303	334	385	436	487	
L	in.	14.00	17.00	22.00	26.00	31.00	33.00	35.00	39.00	43.00	47.00	55.00	
	mm	356	432	559	660	787	838	889	991	1092	1194	1397	
H ₁	in.	6.50	8.7	10.35	11.65	14.33	15.83	18.39	21.5	23.66	26.97	28.54	
	mm	165	220	262	296	364	403	468	547	602	685	727	
H ₂	in.	4.06	5.28	6.50	7.52	9.69	-	-	-	-	-	-	
	mm	103	133	165	197	252	-	-	-	-	-	-	
H ₃	in.	-	-	-	-	-	15.12	16.81	18.11	19.61	21.81	24.53	
	mm	-	-	-	-	-	394	436	469	507	563	602	

Type 800 Stainless Steel Ball Valves

Reduced bore, Split body design, Threaded ends

Features

- Blowout-proof stem
- Choice of threaded ends:
 - Rc threads to JIS B0203 (BS 21) (Fig. UTHM)
 - NPT threads to ASME B1.20.1 (Fig. AKUTHM)



Dimensions of UTH(M)

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/4	1 1/2	2
	DN	15	20	25	32	40	50
Ball bore		10	15	20	25	32	40
L		60	70	80	95	108	124
H		49	54	64	68	79	85
D		100	100	130	130	150	150

Materials

Parts	Materials
Body	A351 Gr.CF8 (A351 Gr.CF8M)
Body cap	A351 Gr.CF8 (A351 Gr.CF8M)
Ball	A276 Type 304 or A351 Gr.CF8 (A276 Type 316* or A351 Gr.CF8M*)
Stem	A276 Type 316 or 304
Seat	PTFE
Gland packing	PTFE
Handle	Plastic covered S.S.

End to end dimensions: KITZ standard
* CF8M/316 are available for (M).

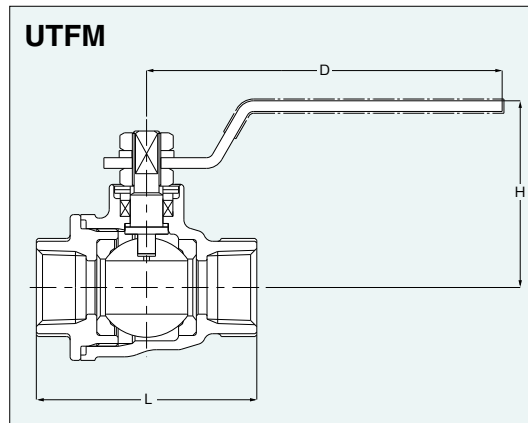
Valve operator Lever operation

Type 1000 Stainless Steel Ball Valves

Full port, Split body design, Threaded ends

Features

- Blowout-proof stem
- Choice of threaded ends:
 - Rc threads to JIS B0203 (BS 21) (Fig. UTFM)
 - NPT threads to ASME B1.20.1 (Fig. AKUTFM)



Dimensions of UTFM

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/4	1 1/2	2
	DN	15	20	25	32	40	50
Ball bore		15	20	25	32	40	50
L		62	73	85	98	108	124
H		53	63	67	75	81	102
D		100	130	130	150	150	200

Materials

Parts	Materials
Body	A351 Gr.CF8M
Body cap	A351 Gr.CF8M
Ball	A276 Type 316 or A351 Gr.CF8M
Stem	A276 Type 316
Seat	HYPATITE® PTFE
Gland packing	PTFE
Gasket	PTFE
Handle	Plastic covered S.S.

End to end dimensions: KITZ standard

Valve operator Lever operation

Page 102 for Pressure-Temperature Ratings.

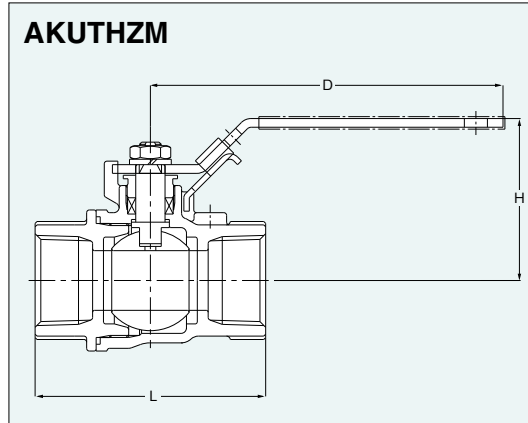
Page 102 for Pressure-Temperature Ratings.

Type 1500/2000 Stainless Steel Ball Valves

Reduced bore, Split body design, Threaded ends

Features

- Blowout-proof stem
- API 607 fire-safe type as option
- NPT threads to ASME B1.20.1



Dimensions of AKUTHZM

Unit: mm

Nominal Size	NPS	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
	DN	8	10	15	20	25	32	40	50
Ball bore		9.5	9.5	10	15	20	25	32	40
L		53	53	62	72	85	94	107	120
H		50.5	50.5	58.5	64	63.5	67.5	83	89
D		100	100	115	115	135	135	155	190

Page 103 for Pressure-Temperature Ratings.

Materials

Parts	Materials
Body	A351 Gr.CF8M
Body cap	A351 Gr.CF8M
Ball	A276 Type 316
Stem	A276 Type 316
Seat	HYPATITE® PTFE
Gland packing	PTFE
Gasket	PTFE
Handle	Plastic covered S.S.

* API 607 fire-safe flexible graphite is optionally available.

End to end dimensions: KITZ standard

Valve operator

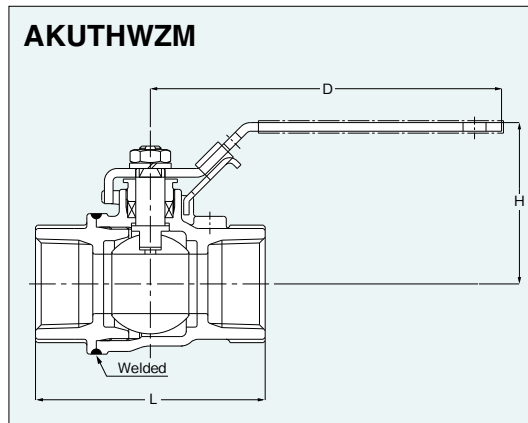
Lever operation with latch lock
Oval handle as option

Type 1500/2000 Stainless Steel Ball Valves

Reduced bore, Welded body design, Threaded ends

Features

- Blowout-proof stem
- API 607 fire-safe type as option
- NPT threads to ASME B1.20.1



Dimensions of AKUTHWZM

Unit: mm

Nominal Size	NPS	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
	DN	8	10	15	20	25	32	40	50
Ball bore		9.5	9.5	10	15	20	25	32	40
L		53	53	62	72	85	94	107	120
H		50.5	50.5	58.5	64	63.5	67.5	83	89
D		100	100	115	115	135	135	155	190

Page 103 for Pressure-Temperature Ratings.

Materials

Parts	Materials
Body	A351 Gr.CF8M
Body cap	A351 Gr.CF8M
Ball	A276 Type 316
Stem	A276 Type 316
Seat	HYPATITE® PTFE
Gland packing	PTFE
Handle	Plastic covered S.S.

* API 607 fire-safe flexible graphite is optionally available.

End to end dimensions: KITZ standard

Valve operator

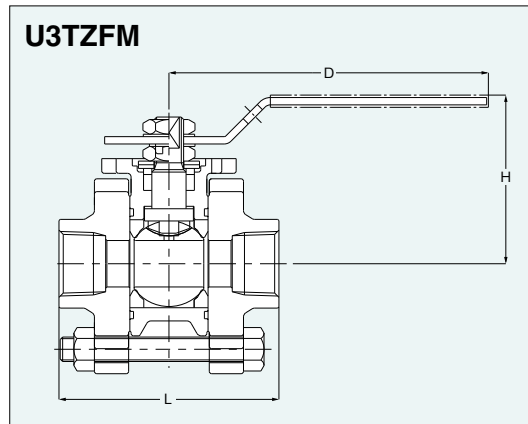
Lever operation with latch lock
Oval handle as option

Type 1000 Stainless Steel Ball Valves

Full bore, 3-piece body design, Threaded or socket welding ends

Features

- Blowout-proof stem
- Swing-away body for maintenance ease
- Choice of threaded ends:
 - Rc threads to JIS B0203 (BS 21) (Fig. U3TZFM)
 - NPT threads to ASME B1.20.1 (Fig. AKU3TZFM)
 - Socket welding ends to JIS B2316 (BS 5351)/ ASME B16.11 (Fig. SWU3TZFM)
 - Socket welding ends to ASME B16.11 (Fig. AWU3TZFM)



Dimensions of U3TZFM

Nominal Size	NPS	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2
	DN	8	10	15	20	25	32	40
Ball bore		10	10	14	19	24	30	38
L		63	63	71	90	103	110	127
H		48	48	60	69	82	88	104
D		120	120	130	130	150	150	180

Unit: mm

Materials

Parts	Materials
Body	A351 Gr.CF8M
Body cap	A351 Gr.CF8M
Ball	A276 Type 316 or A351 Gr.CF8M
Stem	A276 Type 316
Seat	HYPATITE® PTFE
Gland packing	PTFE
Gasket	PTFE
Handle	Plastic covered S.S.

End to end dimensions: KITZ standard

Valve operator

Lever operation
Oval handle as option

Note

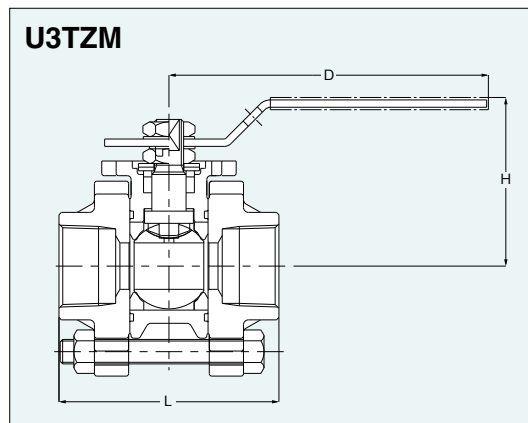
· Use U3TZM for NPS 2.

Type 1000 Stainless Steel Ball Valves

Reduced bore, 3-piece body design, Threaded or socket welding ends

Features

- Blowout-proof stem
- Swing-away body for maintenance ease
- Choice of threaded ends:
 - Rc threads to JIS B0203 (BS 21) (Fig. U3TZM)
 - NPT threads to ASME B1.20.1 (Fig. AKU3TZM)
 - Socket welding ends to JIS B2316 (BS 5351)/ ASME B16.11 (Fig. SWU3TZM)
 - Socket welding ends to ASME B16.11 (Fig. AWU3TZM)



Dimensions of U3TZM

Nominal Size	NPS	1/2	3/4	1	1 1/4	1 1/2	2
	DN	15	20	25	32	40	50
Ball bore		10	14	19	24	30	38
L		63	71	90	103	110	127
H		48	60	69	83	88	104
D		120	130	130	150	150	180

Unit: mm

Materials

Parts	Materials
Body	A351 Gr.CF8M
Body cap	A351 Gr.CF8M
Ball	A276 Type 316 or A351 Gr.CF8M
Stem	A276 Type 316
Seat	HYPATITE® PTFE
Gland packing	PTFE
Gasket	PTFE
Handle	Plastic covered S.S.

End to end dimensions: KITZ standard

Valve operator

Lever operation
Oval handle as option

Note

· Use U3TZFM for NPS 1/4 and 3/8.

Page 102 for Pressure-Temperature Ratings.

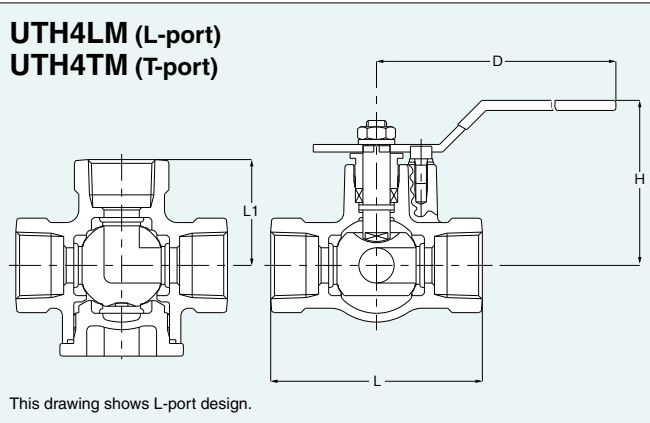
Page 102 for Pressure-Temperature Ratings.

Type 800 Stainless Steel 3-way Ball Valves

Reduced bore, 4-seated, Split body, Threaded ends

- L-port and T-port
- Rc threads to JIS B0203 (BS 21)

UTH4LM (L-port)
UTH4TM (T-port)



Dimensions of UTH4LM, UTH4TM

Unit: mm

Nominal Size	NPS	1/2	3/4	1	1 1/4	1 1/2	2
	DN	15	20	25	32	40	50
Ball bore		10	14	19	25	32	38
L		69	84	96	114	132	150
L1		34.5	42	48	57	66	75
H		63	65	75.5	79.5	95.5	101
D		130	130	150	150	230	230

Page 102 for Pressure-Temperature Ratings.

Materials

Parts	Materials
Body	SCS14A
Body cap	SCS14A
Ball	SUS316 or SCS14A
Stem	SUS316 Cr. plated
Seat	HYPATITE® PTFE
Gland packing	PTFE
Gasket	PTFE
Handle	Plastic covered S.S.

End to end dimensions: KITZ standard

Page 106 for Allowable Port Orientation.

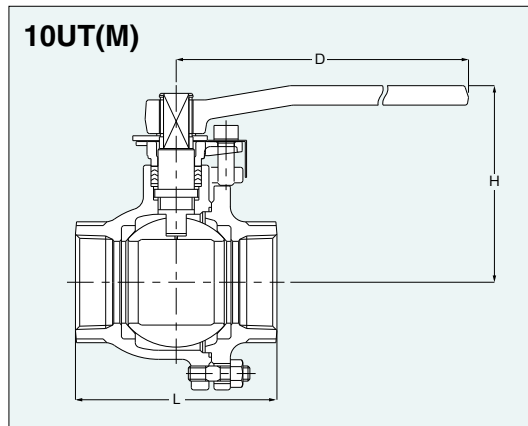
Valve operator
Lever operation

10K Stainless Steel Ball Valves

Full bore, Split body, Side entry design, Threaded ends

- Choice of threaded ends:
 - Rc threads to JIS B0203 (BS 21) (Fig. 10UTM)

10UT(M)



Dimensions of 10UT(M)

Unit: mm

Nominal Size	NPS	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
	DN	10	15	20	25	32	40	50	65	80
Ball bore		10	15	20	25	32	40	50	65	80
L		62	65	80	90	110	120	140	160	182
H		71	102	105	124	130	115	120	155	165
D		130	130	130	160	160	230	230	400	400

Refer to "Product Range" on Page 7.

Page 103 for Pressure-Temperature Ratings.

Materials

Parts	Materials
Body	SCS13A (SCS14A*)
Body cap	SCS13A (SCS14A*)
Ball	SUS316 or SCS14A
Stem	SUS304 (SUS316*)
Seat	PTFE
Gland packing	PTFE
Gasket	PTFE
Handle	Plastic covered S.S.

End to end dimensions: KITZ standard
Wall thickness: ASME B16.34 Class 150
*SCS14A/SUS316 are available for (M).

Valve operator
Lever operation