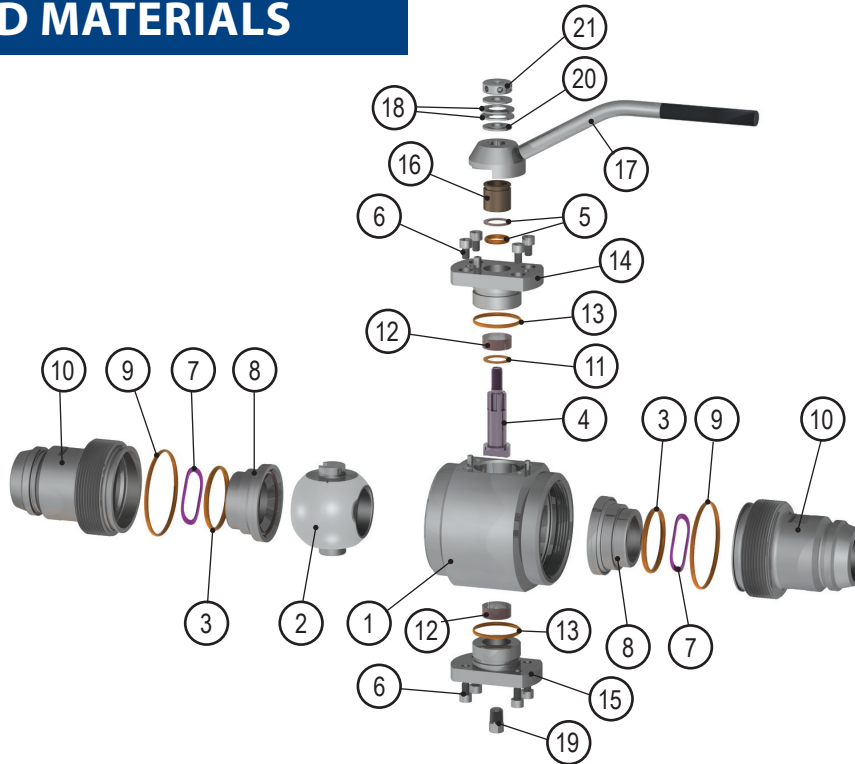


## Threaded three-piece, trunnion mounted ball valve

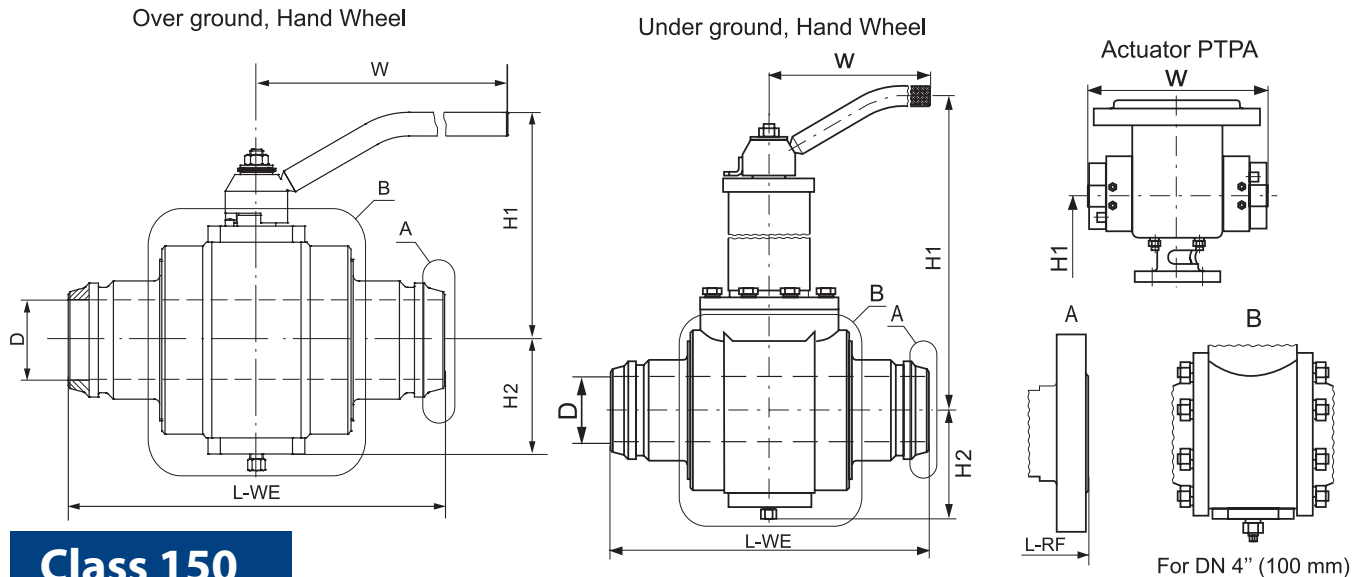
### PARTS AND MATERIALS



Number	Part	Standard	Low Temperature Service	Standard & Low Temperature Service	Stainless Steel		Sour Service	
		ASTM	ASTM	GOST	ASTM	GOST	ASTM	GOST
1	Body	ASTM A 105	ASTM A352-LCB A350 LF2	20 ГМЛ, 20 ГЛ	ASTM A351-CF8M	10X17H13M2T, 08X18H10T	ASTM A105	09Г2С, 20ГА (S+P ≤ 0,03%)
2	Ball	ASTM A 105/ENP	ASTM A182-F216 A350-LF2 + ENP	A350-LF2 + ENP	ASTM A182 F316	10X17H13M2T, 08X18H10T	ASTM A105/ENP	A350-LF2 + ENP
3	Seat Ring	PTFE	PTFE	Polyurethane	PTFE	HNBR+PTFE	PTFE	HNBR+PTFE
4	Stem	ASTM A182-F6a	ASTM A182-F316	40X+Cr	ASTM A182 F316	10X17H13M2T, 08X18H10T	ASTM A182-F6a	09Г2С+Cr (S+P ≤ 0,03%)
5	Packing Set	HNBR	HNBR	HNBR	HNBR+PTFE	HNBR+PTFE	HNBR	HNBR
6	Bolt	ASTM A193-B7	ASTM A320-L7M	30XMA	ASTM A193-B8	10X17H13M2T, 08X18H10T	ASTM A193-B7M	30XMA
7	Spring	Inconel	Inconel	Inconel	Inconel	Inconel	Inconel	Inconel
8	Seat	ASTM A350-LF2	ASTM A350-LF2+Zn	09Г2С+ZN	ASTM A182 F316	10X17H13M2T, 08X18H10T	ASTM A350-LF2+Zn	09Г2С+ZN
9	Body Ring	316SS+Graphite	316SS+Graphite	S.S.+Graphite	316SS+Graphite	S.S.+Graphite	316SS+Graphite	S.S.+Graphite
10	Closure	ASTM A 105	ASTM A352-LCB A350 LF2	20 ГМЛ, 20 ГЛ	ASTM A351-CF8M	10X17H13M2T, 08X18H10T	ASTM A105	09Г2С, 20ГА (S+P ≤ 0,03%)
11	Thrust Washer	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE	PTFE
12	Bearing	316+PTFE+MoS2	316+PTFE+MoS2	316+PTFE+MoS2	316+PTFE+MoS2	316+PTFE+MoS2	316+PTFE+MoS2	316+PTFE+MoS2
13	Gasket	316SS+Graphite	316SS+Graphite	S.S.+Graphite	316SS+Graphite	S.S.+Graphite	316SS+Graphite	S.S.+Graphite
14	Top Flange	ASTM A 105	ASTM A352-LCB A350 LF2	20 ГМЛ, 20 ГЛ	ASTM A351-CF8M	10X17H13M2T, 08X18H10T	ASTM A105	09Г2С, 20ГА (S+P ≤ 0,03%)
15	Lower Flange	ASTM A 105	ASTM A352-LCB A350 LF2	20 ГМЛ, 20 ГЛ	ASTM A351-CF8M	10X17H13M2T, 08X18H10T	ASTM A105	09Г2С, 20ГА (S+P ≤ 0,03%)
16	Gland Cap	S.S.	S.S.	08X18H10T	S.S.	08X18H10T	S.S.	08X18H10T
17	Hand Wheel	ASTM A 105	ASTM A352-LCB A350 LF2	20 ГМЛ, 20 ГЛ	ASTM A351-CF8M	10X17H13M2T, 08X18H10T	ASTM A105	09Г2С, 20ГА (S+P ≤ 0,03%)
18	Spring	Inconel	Inconel	60C2A	S.S.	60C2A	S.S.	60C2A
19	Drain	ASTM A 105	ASTM A352-LCB A350 LF2	20 ГМЛ, 20 ГЛ	ASTM A351-CF8M	10X17H13M2T, 08X18H10T	ASTM A105	09Г2С, 20ГА (S+P ≤ 0,03%)
20	Washer	ASTM A 194-2H	ASTM A 194-7M	09Г2С+Zn	ASTM A 194-8	09Г2С+Zn	ASTM A 194-2HM	09Г2С+Zn
21	Nut	ASTM A 194-2H	ASTM A 194-7M	09Г2С+Zn	ASTM A 194-8	09Г2С+Zn	ASTM A 194-2HM	09Г2С+Zn

## Threaded three-piece, trunnion mounted ball valve

### DIMENSIONS AND DRAWING



### Class 150

NPS, in	D, mm/in	L-WE, mm/in	L-RF, mm/in	H1, mm/in	H2, mm/in	W, mm/in	Weight, kg/lb	Operation	Installation	Torque N.m
2	49/1.93	216/8.5	178/7	155/6.1	95/3.7	270/10.6	18/39.6	Hand Wheel	Over ground	49
				395/15.6		308/12.1	62/136.6	Actuator*		
3	81/3.19	283/11.1	203/8	200/7.9	125/4.9	300/11.8	41/90.2	Hand Wheel	Over ground	115.2
				440/17.3		308/12.1	75/165.2	Actuator*		
				2220/87.4		300/11.8	88/193.4	Hand Wheel	Under ground	
				2460/96.9		308/12.1	123/270.3	Actuator*		
4	100/3.94	305/12	229/9	217/8.5	133/5.2	500/19.7	55/121.1	Hand Wheel	Over ground	190
				475/18.7		308/12.1	89/196	Actuator*		
				2235/88		500/19.7	114/251.1	Hand Wheel	Under ground	
				2475/97.4		308/12.1	148/326	Actuator*		

### Class 300

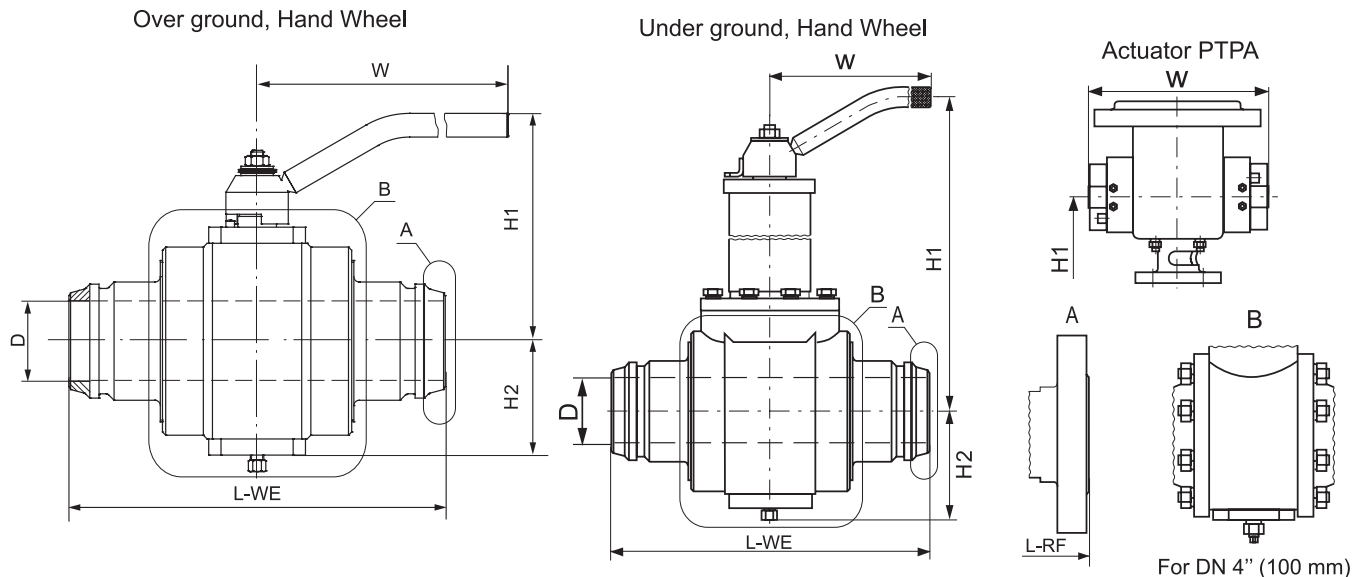
NPS, in	D, mm/in	L-WE, mm/in	L-RF, mm/in	H1, mm/in	H2, mm/in	W, mm/in	Weight, kg/lb	Operation	Installation	Torque N.m/lbf.in
2	49/1.93	216/8.5	216/8.5	155/6.1	95/3.7	270/10.6	18/39.6	Hand Wheel	Over ground	103.5
				395/15.6		308/12.1	62/136.6	Actuator*		
3	81/3.19	283/11.1	283/11.1	200/7.9	125/4.9	300/11.8	41/90.3	Hand Wheel	Over ground	255
				440/17.3		308/12.1	75/165	Actuator*		
				2220/87.4		300/11.8	88/193	Hand Wheel	Under ground	
				2460/93.9		308/12.1	122/268.7	Actuator*		
4	100/3.94	305/12	305/12	217/8.5	133/5.2	500/19.7	55/121.1	Hand Wheel	Over ground	426
				475/18.7		308/12.1	89/196	Actuator*		
				2235/88		500/19.7	114/251	Hand Wheel	Under ground	
				2475/97.4		308/12.1	148/326	Actuator*		

\*Actuators selection is subject to customer requirements.

All the dimensions and weights are indicated for valves with stock PTPA actuators.

## Threaded three-piece, trunnion mounted ball valve

### DIMENSIONS AND DRAWING



### Class 600

NPS, in	D, mm/in	L-WE, mm/in	L-RF, mm/in	H1, mm/in	H2, mm/in	W, mm/in	Weight, kg/lb	Operation	Installation	Torque N.m/lbf.in
2	49/1.93	292/11.5	292/11.5	155/6.1	95/3.7	270/10.6	18/39.6	Hand Wheel	Over ground	155
				395/15.6		308/12.1	62/136.6	Actuator*		
3	81/3.19	356/14	356/14	200/7.9	125/4.9	300/11.8	41/90.3	Hand Wheel	Over ground	375
				440/17.3		308/12.1	75/165	Actuator*		
				2220/87.4		300/11.8	88/194	Hand Wheel	Under ground	
				2460/93.9		308/12.1	122/268.7	Actuator*		
4	100/3.94	432/17	432/17	217/8.5	133/5.2	500/19.7	55/121.1	Hand Wheel	Over ground	645
				475/18.7		308/12.1	89/196	Actuator*		
				2235/88		500/19.7	114/251	Hand Wheel	Under ground	
				2475/97.4		308/12.1	148/326	Actuator*		

### Class 900

NPS, in	D, mm/in	L-WE, mm/in	L-RF, mm/in	H1, mm/in	H2, mm/in	W, mm/in	Weight, kg/lb	Operation	Installation	Torque N.m/lbf.in
2	49/1.93	368/14.5	368/14.5	155/6.1	95/3.7	360/14.2	28/62	Hand Wheel	Over ground	**
3	81/3.19	381/15	381/15	200/7.9	125/4.9	348/13.7	55/165	Hand Wheel	Over ground	**

\*Actuators selection is subject to customer requirements.

All the dimensions and weights are indicated for valves with stock PTPA actuators.

\*\* Upon request.