



API Lifting Plug Valve

Overview

Lifting plug valves are simple and rugged, making them suitable for severe applications at high temperatures or highly abrasive or erosive materials, chemical / petrochemical products (cracking applications) crystallizing fluids, cryogenic fluids, abrasive fluids.

The core structure of a lift-type plug valve is a "plug + lifting mechanism". When opening, the valve stem first lifts the plug from the valve seat, then rotates it 90° to fully open; when closing, the operation is reversed, and the plug falls and fits tightly against the valve seat. It solves the problem of hard friction between the plug and the valve seat during opening and closing in ordinary plug valves, and is an improved version of the traditional plug valve.



TECHNICAL SPECIFICATION

Structural style	BC
Driving mode	BB-BG-QS&Y Hand wheel、bevel gear、wrench
Design standard	API599、API6D
Structure length	ASME B16.10
Connecting flange	ASME B16.5
Test and inspection	API598.API6D

Note:the size of serial valve connecting flange can be designed according to customers' requirement.

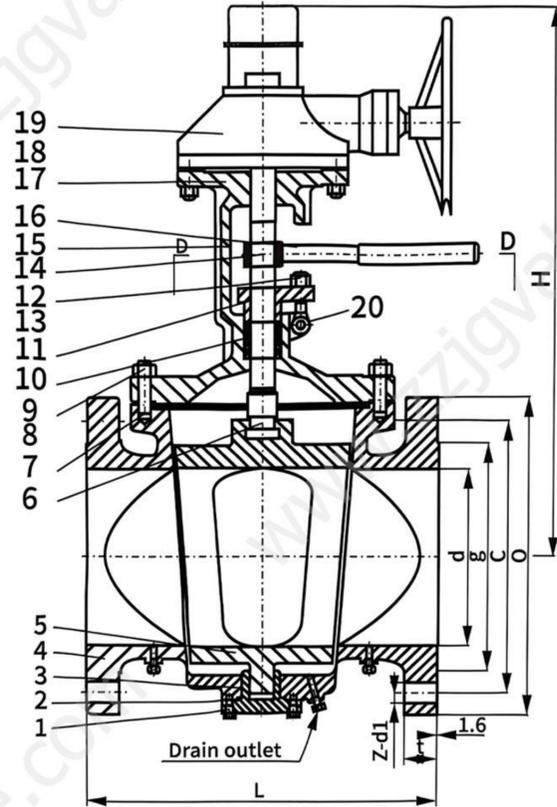
PRODUCT PERFORMANCE SPECIFICATION

Norminal pressure (LB)	Shell test (MPa)	Sealing test (MPa)	Suitable temp (°C)	Suitable medium
150	3.0	2.2	-29-550°C	Water, gas and oil.
300	7.7	5.62		
600	15.4	11.23		
900	23.0	16.85		
1500	38.3	28.10		
2500	63.80	46.80		





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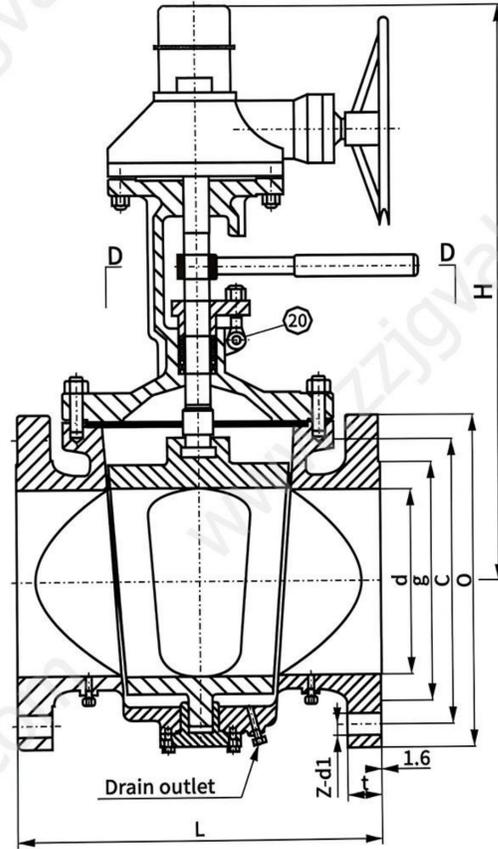
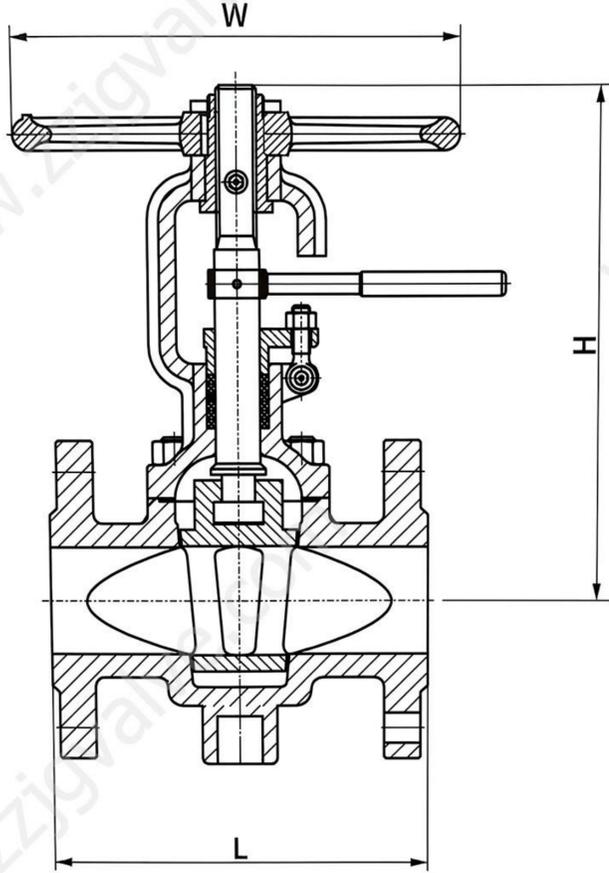
MAIN PARTS MATERIALS

NO.	Part Name	Material
1	Bolt	A193 B16
2	Gasket	SS304 + Graphite
3	Bottomcover	A217 C5
4	Body	ASTMA216 WCB, ASTMA217 WC1, WC6, WC9, C5 ASTMA351 CF8, CF8M, CF3, CF3M
5	Plug	ASTMA216 WCB, ASTMA217 WC1, WC6, WC9, C5 ASTMA351 CF8, CF8M, CF3, CF3M
6	Stem	A276410
7	Gasket	Flexible graphite + stainless steel, PTFE
8	Bolt	ASTMA193 B7, A320 B8, A193 B8M
9	Nut	ASTMA194 2H, A194 8, A194 8M
10	Packing	Flexible graphite, PTFE
11	Gland	ASTMA216 WCB, ASTMA217 WC1, WC6, WC9, C5 ASTMA351 CF8, CF8M, CF3, CF3M
12	Bolt	ASTMA193 B7, A320 B8, A193 B8M
13	Nut	ASTMA194 2H, A194 8, A194 8M
14	Pin	SS304
15	Valve cover	ASTMA216 WCB, ASTMA217 WC1, WC6, WC9, C5 ASTMA351 CF8, CF8M, CF3, CF3M
16	Handle	ASTMA216 WCBASTMA351 CF8, CF8M, CF3, CF3M
17	Bolt	ASTMA193 B7, A320 B8, A193 B8M
18	Nut	ASTMA194 2H, A194 8, A194 8M
19	Gear	UCA
20	Pin	SS304





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MAIN DIMENSIONS

TSX543W/TSX43W-150LB

Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
	in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14
L		108	117	127	140	165	178	190	203	229	254	267	292	330	356	381
H		190	195	225	260	280	310	250	395	300	470	535	590	630	680	720
W		180	180	180	220	220	220	250	250	300	350	350	400	500	500	600

TSX543W/TSX43W-300LB

Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
	in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14
L		140	152	165	178	190	216	241	283	305	381	403	419	457	502	762
H		190	195	225	260	280	310	340	395	435	470	535	590	630	680	720
W		180	180	180	220	220	220	250	250	300	350	350	400	500	500	600

TSX543W/TSX43W-600LB

Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
	in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14
L		165	190	216	229	241	292	330	356	432	508	559	660	787	838	889
H		190	195	225	260	280	310	340	395	435	470	535	590	630	680	720
W		180	180	180	220	220	220	250	250	300	350	350	400	500	500	600

TSX543W/TSX43W-900LB

Size	mm	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
	in	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14
L		216	229	254	279	305	368	419	381	457	559	610	737	838	965	1029
H		190	195	225	260	280	310	340	395	435	470	535	590	630	680	720
W		180	180	180	220	220	220	250	250	300	350	350	400	500	500	600

