

JFS

BEIJING JOINT FLOW SYSTEM CO.



PLUG VALVE



LIFTING TYPE METAL SEATED PLUG VALVE

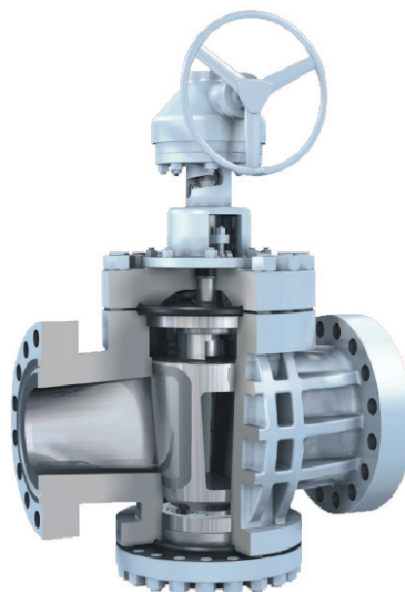
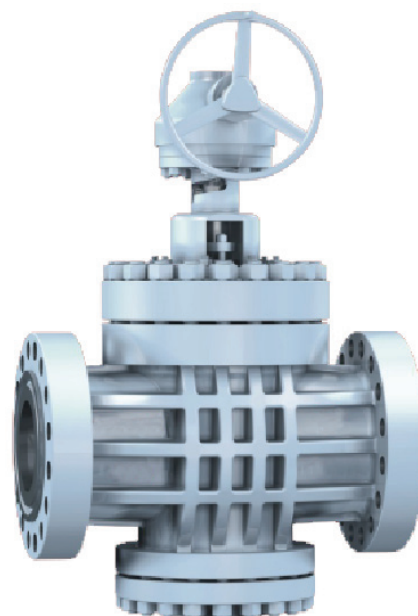
Plug valves are extremely versatile valves that are found widely in industrial applications, especially petroleum pipelines, chemical processing and related fields, and power plants. Lifting Type Metal Seal Plug Valve not only has the advantage of low flow resistance and closing for metal seal ball valve, but also possesses the features of non-friction for sealing surface and low torque to open which used as an on/off valve in the pipeline of high pressure and temperature working conditions.

FEATURE

- Easy to operate
- Efficient economical flow.
- High capacity.
- Regulate the flow of liquids.
- Self-adjusting stem seal.
- Poison free Epoxy coating surface can meet different media requirements. The Epoxy thickness is not less than 0.3mm.
- Easy to maintain, and reduces plugging problems
- Less erosion, longer service life and reduced pumping costs
- Low torque to open

WORKING PRINCIPLE

Lifting type metal seal plug valve, with special structure and different working principle. The general plug valve is operated by the lever with a 90 degrees turn to open and close. But the lifting type metal seal plug valve is operate by the hand wheel which similar with the gate valve. The stem connected with the plug by a 'T' slot. In the middle of the stem, a guide pin across it with two rollers at both ends. The rollers run in the guide slot of the bonnet, the guide slot consists of two straight and one spiral travels. The stem forced by the pin to lift and down then rotate, the straight travel slot drives the stem to lift and down, while the spiral one does the stem to turn 90 degrees. To open the valve, anti-clockwise turn the hand wheel, plug breaks away from the body sealing, then the rollers slip into the spiral travel slot which leads to plug rotate 90 degrees to achieve to open.



LIFTING TYPE METAL SEATED PLUG VALVE

TECHNICAL SPECIFICATION

- Rating: 150lb, 300lb, 600lb, 900lb, 1500lb
- Size: NPS2~NPS40 (DN50~DN1000)
- Suitable temperature: < 600℃ (standard)
- Applicable specification
 - 1) Face to face: ASME B16.10
 - 2) Flange connection: ASME B16.5
 - 3) Inspection and pressure test: API598
- Body material: WCB, C5, WC6, WC9, CF8, CF8M, CF3, CF3M etc

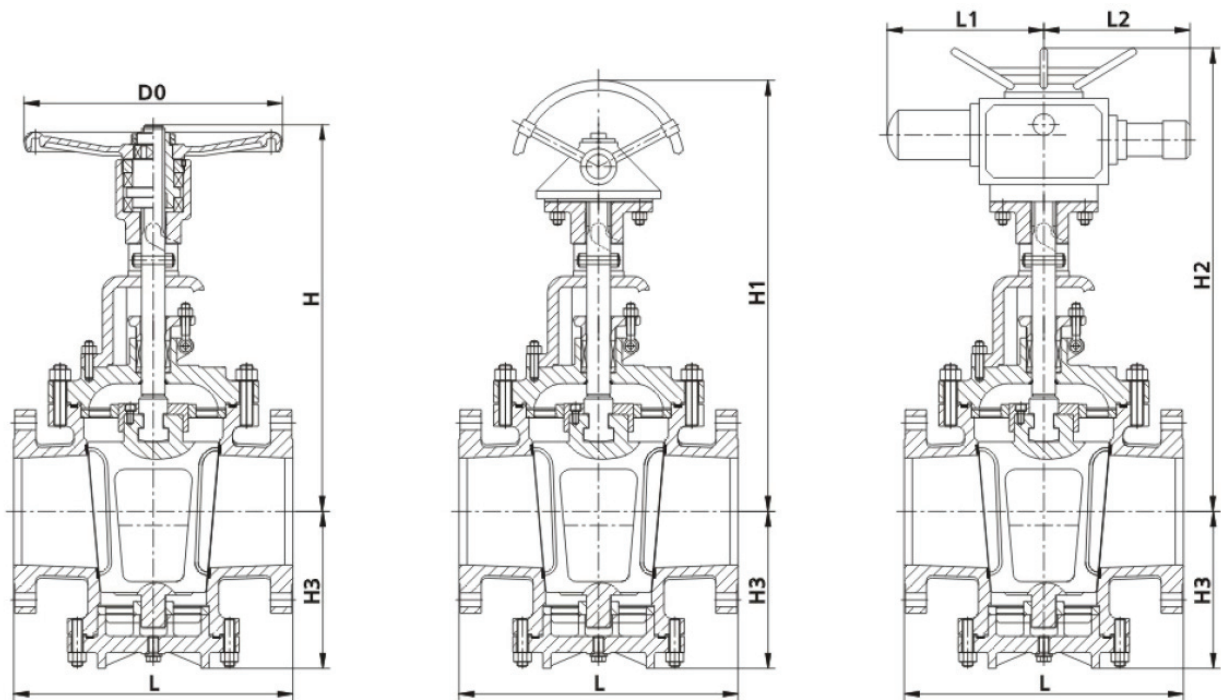
PARTS LIST



No.	Parts Name	Material
1	Bevel Gear	Cast Iron
2	Yoke	Cast Iron / Carbon steel
3	Packing	
4	Bonnet	Cast Iron / Stainless Steel
5	Upper Support Plate	
6	Stem	Carbon steel / Stainless Steel
7	Plug	Carbon steel / Stainless Steel
8	Body	Carbon steel / Stainless Steel
9	Lower Support Plate	
10	Bottom Cap	

LIFTING TYPE METAL SEATED PLUG VALVE

DIMENSION (Class 150)

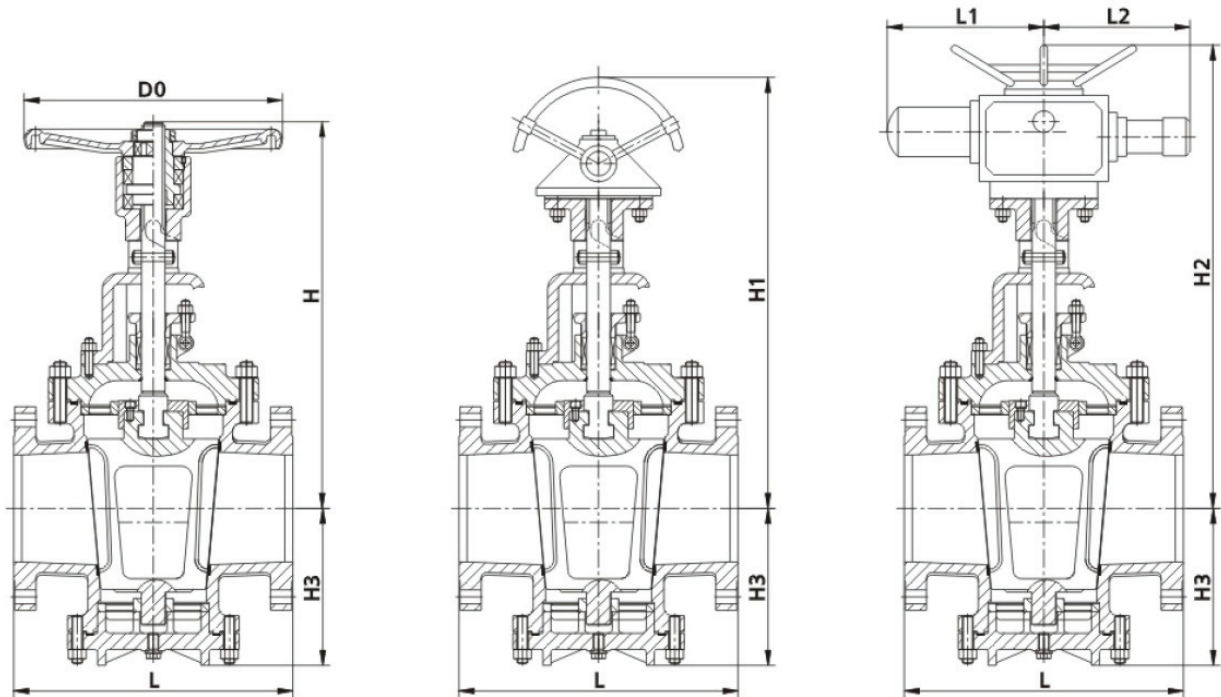


DN	NPS	L	D0	H	H1	H2	H3	L1	L2
50	2"	216	240	420	-	-	124	-	-
80	3"	282	240	470	-	-	152	-	-
100	4"	305	260	510	-	-	186	-	-
150	6"	394	360	590	-	-	220	-	-
200	8"	457	400	670	-	-	258	-	-
250	10"	533	450	765	-	-	296	-	-
300	12"	610	520	1020	1090	1125	338	467	394
350	14"	686	600	1121	1170	1220	382	597	413
400	16"	762	650	1200	1260	1350	410	730	455
450	18"	864	-	-	1410	1510	440	800	505
500	20"	914	-	-	1620	1710	500	800	505
600	24"	1067	-	-	1860	1930	580	885	568
700	28"	1245	-	-	2160	2240	650	885	568
800	32"	1372	-	-	2480	2530	740	885	568
900	36"	1524	-	-	2840	2910	800	920	580
1000	40"	1727	-	-	3230	3320	870	920	580

*12" & above have gear operator and electric actuator as standard.

LIFTING TYPE METAL SEATED PLUG VALVE

DIMENSION (Class 300)

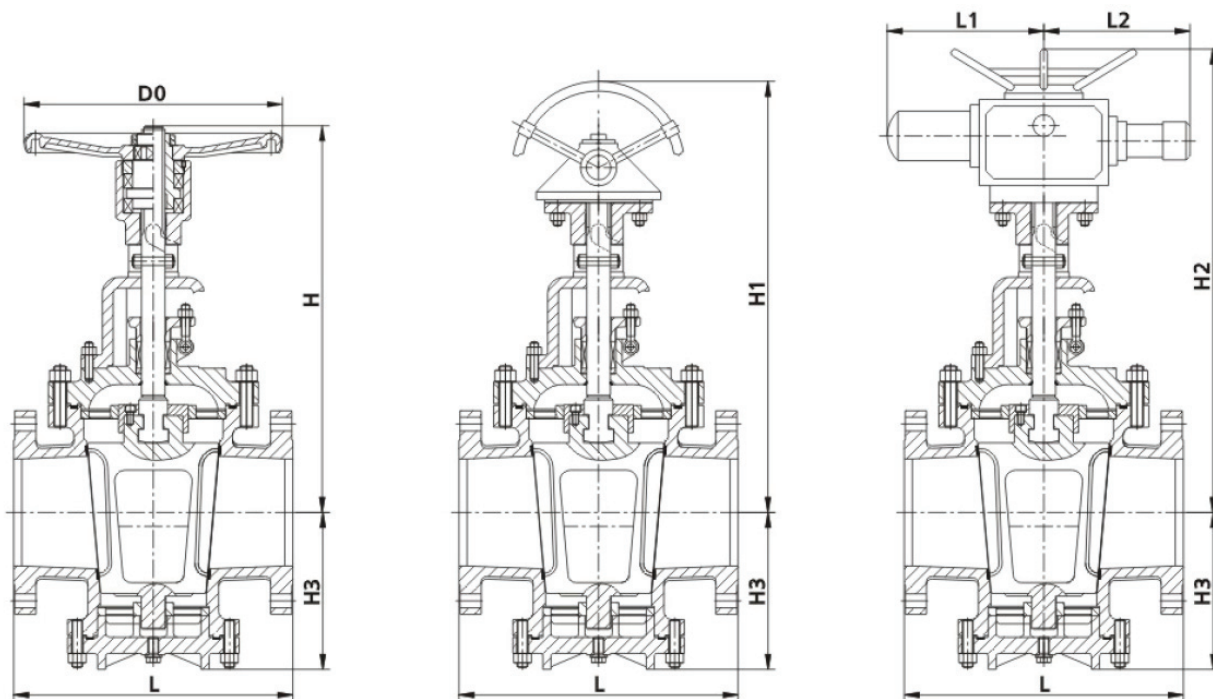


DN	NPS	L	D0	H	H1	H2	H3	L1	L2
50	2"	50	2"	216	240	420	-	-	164
80	3"	80	3"	282	240	470	-	-	192
100	4"	100	4"	305	260	510	-	-	226
150	6"	150	6"	403	360	600	-	-	260
200	8"	200	8"	502	400	680	-	-	293
250	10"	250	10"	568	520	780	860	915	336
300	12"	300	12"	711	600	985	1065	1165	378
350	14"	350	14"	762	650	1120	1200	1280	422
400	16"	400	16"	838	-	-	1298	1370	445
450	18"	450	18"	914	-	-	1460	1580	480
500	20"	500	20"	991	-	-	1680	1740	550
600	24"	600	24"	1143	-	-	1930	1990	630
700	28"	700	28"	1346	-	-	2240	2290	680
800	32"	800	32"	1524	-	-	2580	2630	770
900	36"	900	36"	1727	-	-	2950	3010	830
1000	40"	1000	40"	1930	-	-	3350	3420	900

*10" & above have gear operator and electric actuator as standard.

LIFTING TYPE METAL SEATED PLUG VALVE

DIMENSION (Class 600)

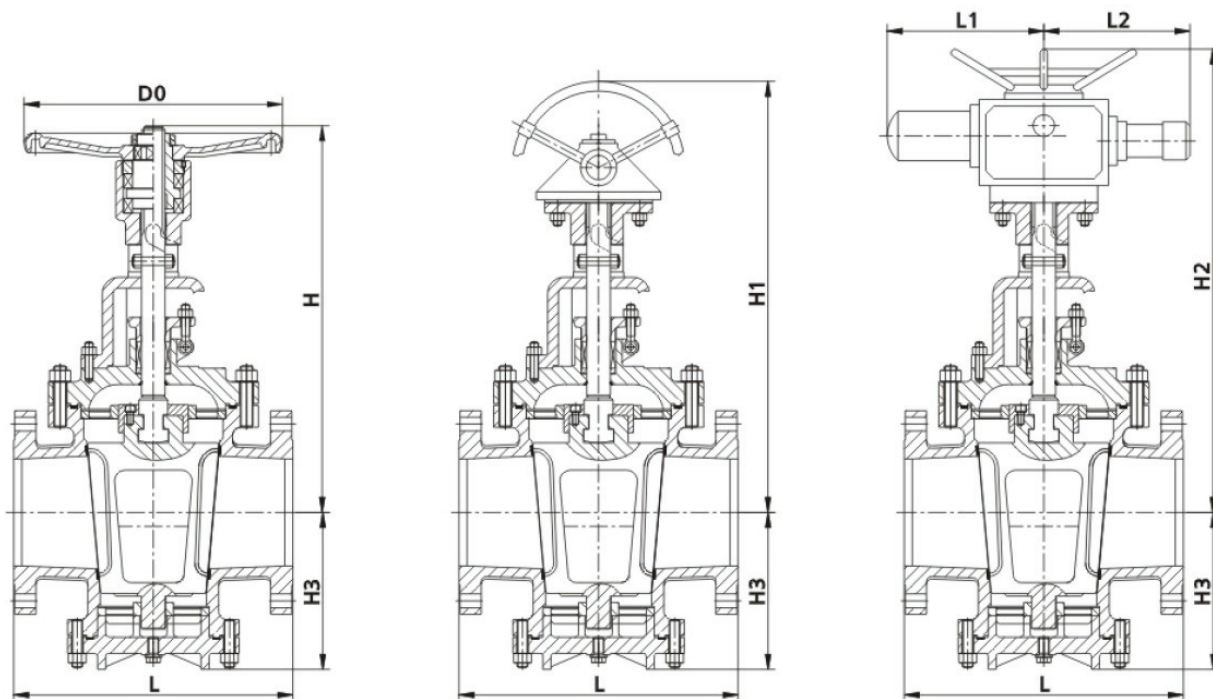


DN	NPS	L	D0	H	H1	H2	H3	L1	L2
50	2"	292	260	430	-	-	184	-	-
80	3"	356	320	480	-	-	212	-	-
100	4"	432	12	515	-	-	245	-	-
150	6"	559	400	610	635	652	278	597	413
200	8"	660	520	890	920	956	320	730	455
250	10"	787	600	950	1010	1083	358	800	505
300	12"	838	-	-	1200	1272	398	800	505
350	14"	889	-	-	1270	1335	440	885	568
400	16"	991	-	-	1410	1489	475	885	568
450	18"	1092	-	-	1600	1688	508	885	568
500	20"	1194	-	-	1810	1870	560	920	580
600	24"	1397	-	-	2250	2320	650	920	580
650	26"	1448	-	-	2510	2590	735	920	580
700	28"	1549	-	-	2790	2870	820	920	580
750	30"	1651	-	-	2985	3055	910	920	580
800	32"	1778	-	-	3205	3325	1015	1067	620
850	34"	1930	-	-	3450	3565	1130	1067	620
900	36"	2083	-	-	3665	3730	1250	1067	620

*6" & above have gear operator and electric actuator as standard.

LIFTING TYPE METAL SEATED PLUG VALVE

DIMENSION (Class 900)

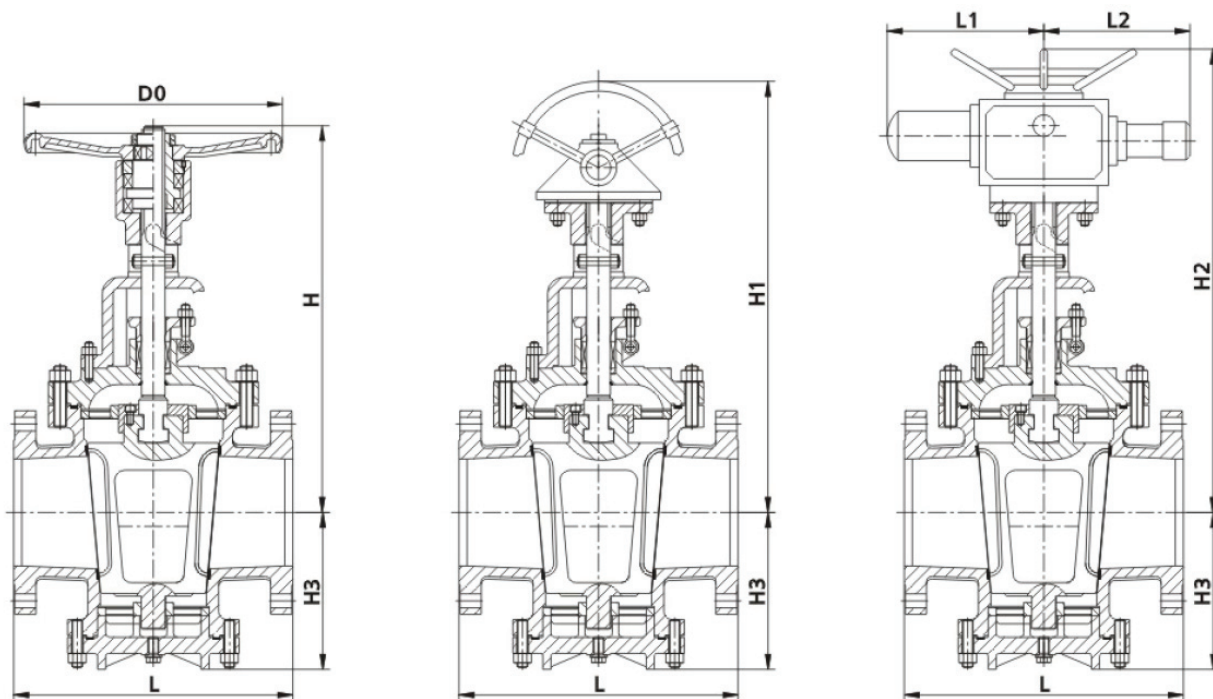


DN	NPS	L	D0	H	H1	H2	H3	L1	L2
50	2"	368	300	460	-	-	196	-	-
80	3"	381	350	495	-	-	230	-	-
100	4"	457	400	650	-	-	265	-	-
150	6"	610	-	765	795	820	305	597	413
200	8"	737	-	-	1081	1165	349	730	455
250	10"	838	-	-	1175	1235	392	800	505
300	12"	965	-	-	1335	1375	438	800	505
350	14"	1029	-	-	1495	1560	485	885	568
400	16"	1130	-	-	1670	1735	530	920	580
450	18"	1219	-	-	1890	1945	575	920	580
500	20"	1321	-	-	2060	2135	620	1067	620
600	24"	1549	-	-	2235	2330	685	1067	620

*6" & above have gear operator and electric actuator as standard.

LIFTING TYPE METAL SEATED PLUG VALVE

DIMENSION (Class 1500)



DN	NPS	L	D0	H	H1	H2	H3	L1	L2
50	2"	368	350	510	-	-	260	-	-
80	3"	470	400	560	-	-	295	-	-
100	4"	546	-	-	715	880	335	730	455
150	6"	705	-	-	905	1035	380	800	505
200	8"	832	-	-	1150	1280	425	800	505
250	10"	991	-	-	1265	1390	485	885	568
300	12"	1130	-	-	1400	1545	510	885	568
350	14"	1257	-	-	1560	1675	565	885	568
400	16"	1384	-	-	1710	1815	625	920	586
450	18"	1537	-	-	1975	2045	670	1067	620
500	20"	1664	-	-	2180	2325	745	1067	620

*4" & above have gear operator and electric actuator as standard.