

# CONVALVE SPECIALIST IN VALVE AUTOMATION







# SLEEVE TYPE SOFT SEAT PLUG VALVE

### **DESCRIPTION**

The **Sleeve Type Soft Seat Plug Valve** is a high-performance valve designed for reliable cutting and connection of pipeline media across industries such as petroleum, chemical, pharmaceutical, chemical fertilizer, and power. Featuring a bayonet-type tapered plug with self-lubricated PTFE bushings, this valve ensures superior sealing without metal-to-metal contact, minimizing friction and extending service life. Its double-channel groove seal design maintains zero leakage during operation, accommodates thermal expansion, and provides a self-cleaning function for viscous or scaling media. With a compact cavity-free structure, two-way flow capability, and customizable materials and end connections, the valve delivers durability, flexibility, and easy installation under nominal pressures of CLASS150~900LB and temperatures ranging from -29°C to 180°C.

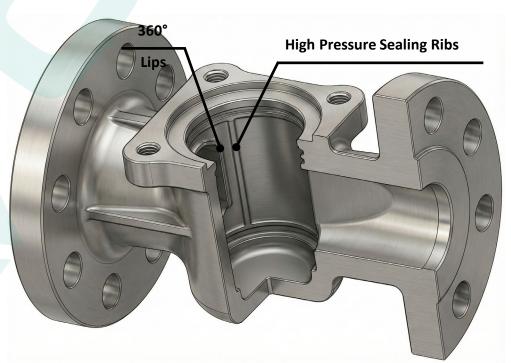
### **FEATURES**

Sleeve type soft sealing plug valve. Bayonet type tapered plug valves are self lubricated PTFE bushing embedded in the body and are pressurized to prevent leakage between the bushing and the body.

Taper plug valves in use of cutting sleeve type has no sealing grease injection may cause pollution, two-way flow, adopting low torque, unique 360° metal lip protection and fixed card sets, make direct contact with no metal to metal seal parts, for taper plug valves of cutting sleeve type has the good seal performance.

Its applicable scope is wide, the friction factor is small, the service life is long, and is the non-metal metal seal, may reduce to the plug processing request, therefore to the small and medium caliber plug valve more generally uses the bush structure form.

- 1. The valve body inlet and outlet end window is designed as a double-channel groove seal ring structure, the plug in the process of rotation, the sealing pressure between the sealing pair in the gradual change, until the full open or closed position, produce enough seal pressure, sealing pair to zero leakage.
- 2. Double channel groove sealing ring can not only make PTFE bushing stable in the valve body does not produce displacement, but also can absorb the microdeformation caused by the change of temperature bushing, at the same time between the bushing and the plug has a strong wiping effect and improve the service life of the sealing surface.
- 3. PTFE bushing, according to the use of temperature and working medium using different materials of filler, good lubrication, long life.
- 4. The sealing of the valve is through the sealing surface around the jacket. Unique 360° metal lip protection fixed card sets.
- 5. The valve has no cavity, the medium is not easy to accumulate.
- 6. The metal lip can provide self-cleaning function when the plug rotates, which is suitable for viscous and easy scaling conditions.
- 7. Two-way flow, more convenient to use and install.
- 8. Material and end connection dimensions of parts can be reasonably selected and matched according to actual working conditions or user requirements to meet various engineering requirements.



No cavities. No contamination. There are no body cavities where flow media can accumulate and contaminate future processing. This cavity-free design also prevents sticking.

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## **TECHNICAL DATA AND SPECIFICATIONS**

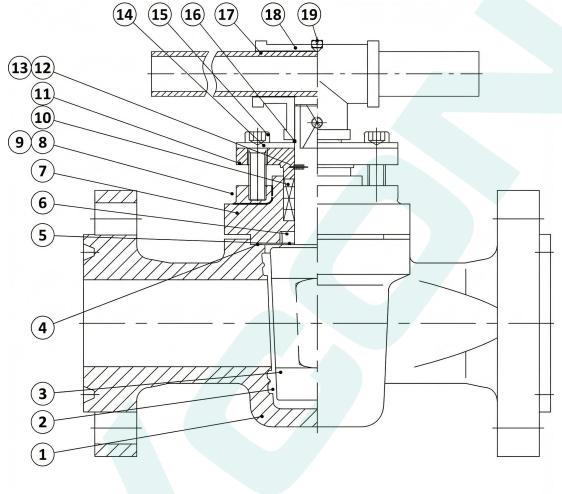
## THE TECHNICAL SPECIFICATION

ITEM	SPECIFICATION
Structure Form	BC
Drive Mode	Manual, Electric, Pneumatic
Design Criteria	API 6D / API 599 / BS 5353 / GB/T 22130
Structural Length Standard	API 6D / ASME B16.10 / EN 558
Flange Connection Standard	ASME B16.5 / EN 1092 / HG/T 20592
Welding Connection Standard	ASME B16.25 / ASME B36.10
NPT Connection Standard	ASME B1.20.1
Pressure Temperature Rating	ASME B16.34
Inspection Standard	API 6D / API 598
Fire Protection Standard	API 607

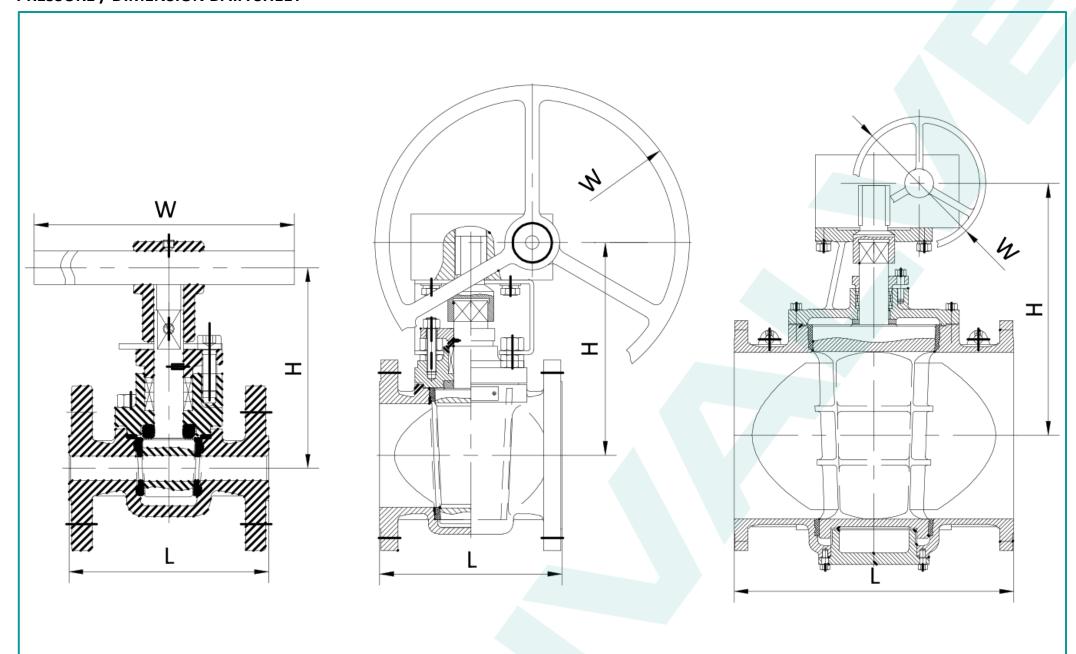
## PRODUCT PERFORMANCE SPECIFICATION

NOMINAL PRESSURE (LB)	SHELL TEST PRESSURE (MPA)	SEAL TEST PRESSURE (MPA)	SUITABLE TEMPERATURE (°C)	APPLICABLE MEDIUM	
150	3.0	2.2			
300	7.5	5.5	4 190°C	Water Steens Oil	
600	15.0	11.0	< 180°C	Water, Steam, Oil	
900	22.5	16.5			

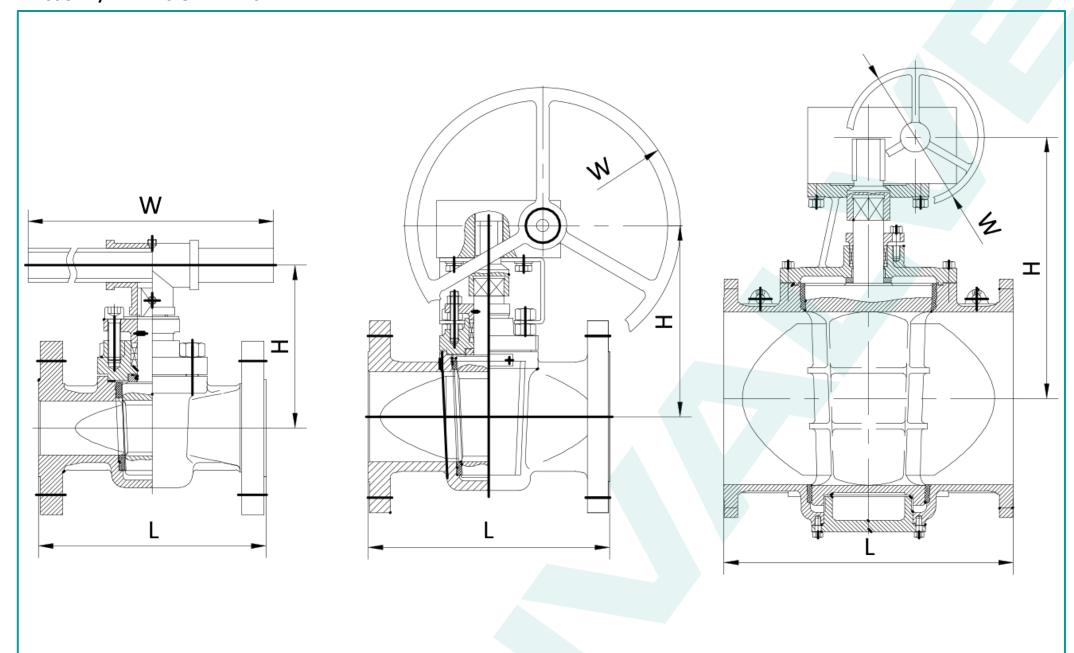
## CONSTRUCTION



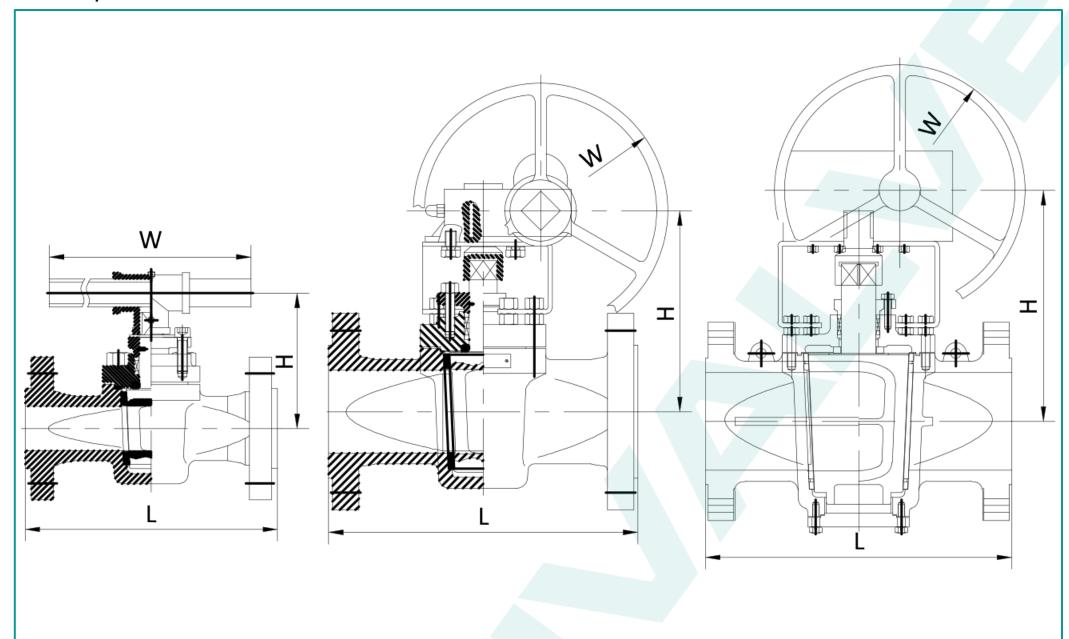
0	PART NAME	MATERIAL
1	BODY	A216 WCB, A351 CF8/CF8M/CF3/CF3M, 904L, CD4MCu
2	SLEEVE	PTFE, RPTFE, PPL
3	PLUG	A216 WCB, A351 CF8/CF8M/CF3/CF3M, 904L, CD4MCu
4	GASKET	PTFE, RPTFE, PPL
5	GASKET	PTFE, RPTFE, PPL
6	THRUST PAD	SS304 / SS316
7	BONNET	A216 WCB, A351 CF8/CF8M/CF3/CF3M, 904L
8	BOLT	A193 B7/B8/B8M
9	NUT	A194 2H/8/8M
.0	PACKING	Flexible Graphite / PTFE
.1	GLAND	A216 WCB, A351 CF8/CF8M/CF3/CF3M, 904L
.2	SPRING	SS304
.3	ANTISTATIC SPRING	SS304
.4	POSITIONING PIECE	SS304 / CS-Zn
.5	HEX SCREW	A193 B7/B8/B8M
.6	CIRCLIP	SS304
.7	HANDLE	CS-Zn
.8	HANDLE SET	CS-Zn
.9	SET SCREW	CS-Zn
	1 2 3 4 5 6 7 8 9 0 1 1 2 3 4 5 6 7 8	BODY SLEEVE BROWN ABOUT ABOUT BROWN



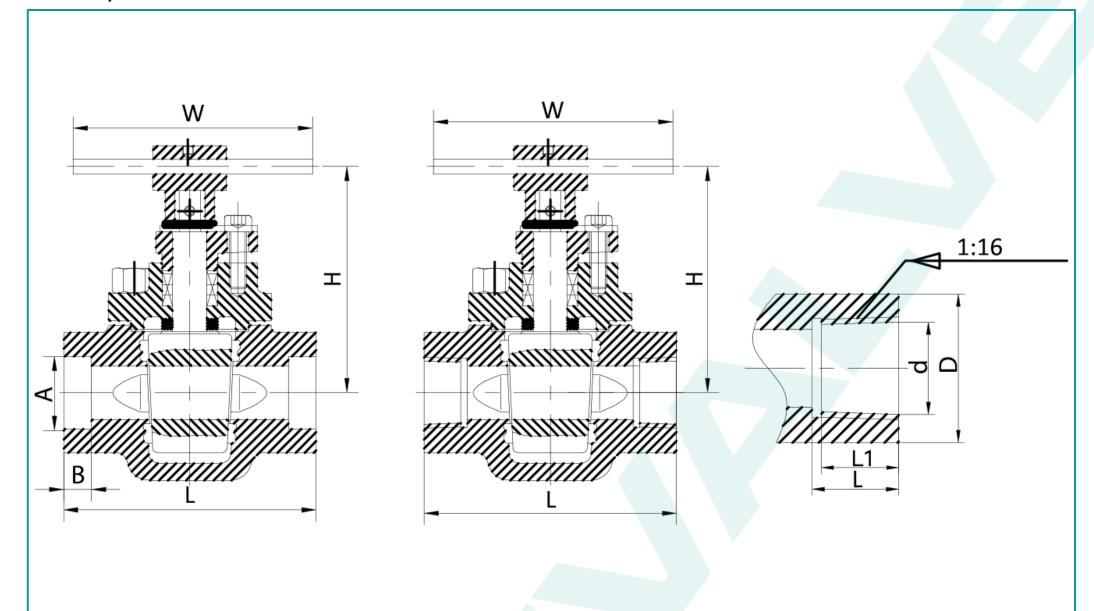
MODEL		SLEEVE TYPE SOFT SEAT PLUG VALVE - 150LB															
PRESSURE		150 LB															
SIZE		DN 15 1/2"	DN 20 3/4"	DN 25 1"	DN 40 1 1/2"	DN 50 2"	DN 8 3"	DN 100 4"	DN 150 6"	DN 200 8"	DN 250 10"	DN 300 12"	DN 350 14"	DN 400 16"	DN 450 18"	DN 500 20"	DN 600 24"
	L-RF	108	118	127	165	178	203	229	267	292	330	356	-	-	-	-	-
Short Type	L-BW	152	178	203	229	267	330	356	457	521	559	635	-	-	-	-	-
	L-RTJ	-	-	-	-	191	216	241	279	305	343	368	-	-	-	-	-
	L-RF	-	-	-	-	-	ı	-	394	457	533	610	-	-	-	-	-
Regular Type	L-BW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L-RTJ	-	-	-	-	-	-	-	406	470	546	622	-	-	-	-	-
	L-RF	-	-	-	-		-	-	-	-	533	610	686	762	864	914	1067
Venturi Type	L-BW	-	-	-	-	-	-	-	-	-	599	635	686	762	864	914	1067
	L-RTJ	-	-	-	-	-	-	-	-	-	546	622	699	775	876	927	1080
	L-RF	- (	-	-	-	267	343	432	546	622	660	762	-	-	-	-	-
Full Bore	L-BW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L-RTJ	-	-	-	-	279	356	445	559	635	673	775	-	-	-	-	-
н	Н		79	88	109	120	145	215	285	350	365	480	540	625	735	-	895
W		300	300	400	400	500	600	800	460	600	600	600	600	600	600	600	600



MODEL		SLEEVE TYPE SOFT SEAT PLUG VALVE - 300LB															
PRESSURE		300 LB															
SIZE		DN 15 1/2"	DN 20 3/4"	DN 25 1"	DN 40 1 1/2"	DN 50 2"	DN 8 3"	DN 100 4"	DN 150 6"	DN 200 8"	DN 250 10"	DN 300 12"	DN 350 14"	DN 400 16"	DN 450 18"	DN 500 20"	DN 600 24"
	L-RF	140	152	165	190	216	283	305	403	419	457	502	-	-	-	-	-
Short Type	L-BW	152	178	203	229	267	330	356	457	521	559	635	-	-	-	-	-
	L-RTJ	-	-	-	-	232	298	321	419	435	473	518	-	-	-	-	-
	L-RF	-	-	-	-	-	-	-	403	502	568	-	-	-	914	991	1143
Regular Type	L-BW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	L-RTJ	-	-	-	-	-	-	-	419	518	584	-	-	-	930	1010	1165
	L-RF	-	-	-	-	_	-	-	403	419	457	502	762	838	914	991	1143
Venturi Type	L-BW	-	-	-	-	-	-	-	457	521	559	635	762	838	914	991	1143
	L-RTJ	-	-	-	-	-	-	-	419	435	473	518	778	854	930	1010	1165
	L-RF	-	-	-	-	283	387	457	559	686	826	965	-	-	-	-	-
Full Bore	L-BW	-	-	-	-	283	387	457	559	686	826	965	-	-	-	-	-
	L-RTJ	-	-	-	-	298	403	473	575	702	841	981	-	-	-	-	-
н		71	79	88	109	120	145	215	285	350	365	480	540	625	735	-	895
W		300	300	400	400	500	600	800	460	600	600	600	600	600	600	600	600



MODEL PRESSURE							SLEE	VE TYPE S	SOFT SEA	T PLUG V	/ALVE - 6	500LB					
			600 LB														
SIZE		DN 15 1/2"	DN 20 3/4"	DN 25 1"	DN 40 1 1/2"	DN 50 2"	DN 8 3"	DN 100 4"	DN 150 6"	DN 200 8"	DN 250 10"	DN 300 12"	DN 350 14"	DN 400 16"	DN 450 18"	DN 500 20"	DN 600 24"
	L-RF	165	190	216	229	292	356	432	559	660	787	-	-	-	-	-	-
Regular Type	L-BW	165	190	216	229	292	356	432	559	660	787	-	-	-	-	-	-
	L-RTJ	-	-	-	-	295	359	435	562	664	791	-	-	-	-	-	-
	L-RF	-	-	-	-	-	-	-	559	660	787	838	889	991	1092	1194	1295
Venturi Type	L-BW	-	-	-	-	-	-	-	559	660	787	838	889	991	1092	1194	1295
	L-RTJ	-	-	-	-	-	-	-	562	664	791	841	892	994	1095	1200	1305
	L-RF	-	-/	-	-	330	445	508	660	794	940	1067	-	-	-	-	-
Full Bore	L-BW	-	-	-	-	-	-	559	711	845	1016	1067	-	-	-	-	-
	L-RTJ	-	-	-	-	333	448	511	664	797	943	1070	-	-	-	-	-
н		95	105	125	135	160	185	285	385	405	10	545	595	625	680	800	865
W		300	400	400	450	600	800	460	460	600	600	600	600	600	600	600	600



MODEL		SLEEVE TYPE SOFT SEAT PLUG VALVE - 150-800LB											
PRE	ESSURE	150-800 LB											
	SIZE	DN 15 1/2"	DN 20 3/4"	DN 25 1"	DN 40 1 1/2"	DN 50 2"							
	sw	82	118	118	140	165							
L	NPT	82	118	118	140	165							
	BW	82	118	118	140	165							
SW	A	21.7	27.1	33.8	48.6	61.1							
SVV	В	9.6	12.7	12.7	12.7	15.8							
	d	18.48	23.67	29.87	44.7	56.74							
	L	17	17	20	23	23							
NPT	L1	14	14	17	20	20							
	Pitch	1.814	1.814	2.209	2.209	2.209							
	Teeth/Inc	14	14	11.5	11.5	11.5							
	Н	100	100	105	125	145							
	W	400	400	500	600	800							