

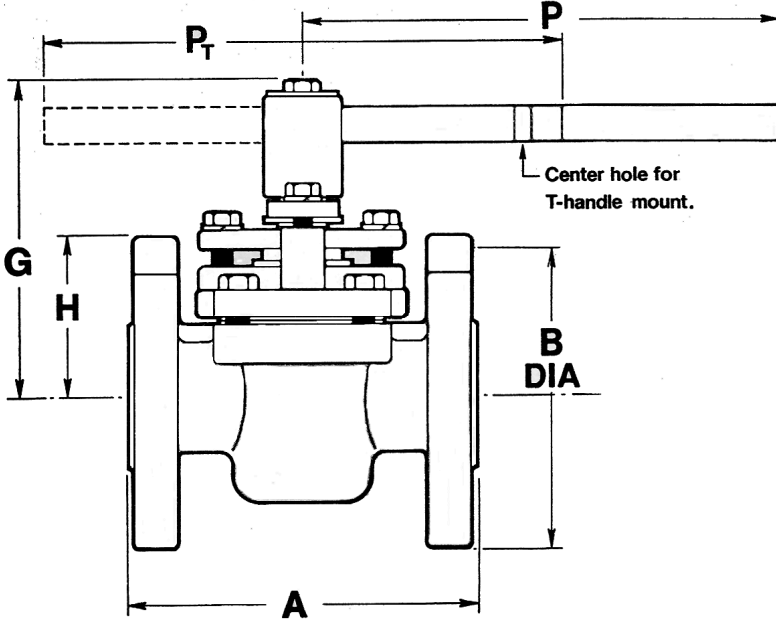
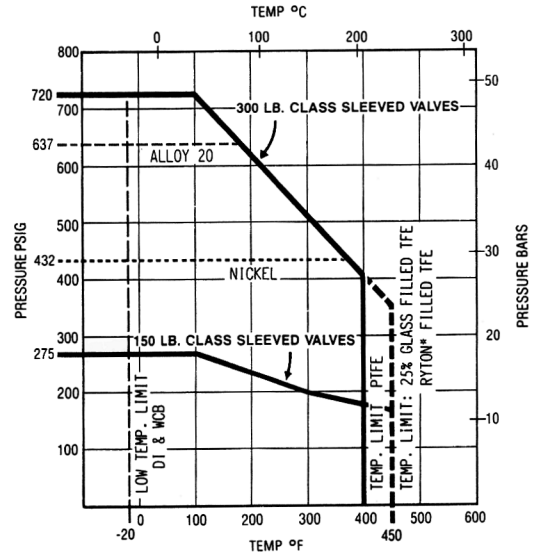


SLEEVED PLUG VALVES

1/2" - 12"

models V022 & V322

PRESSURE-TEMPERATURE RATINGS		
MODEL	CLASS	RATING
V022	150 LB.	180 PSI@400° F.
V322	300 LB.	400 PSI@400° F.



SERVICE RECOMMENDATIONS

Chem-Plug® V-ring top seal sleeved valves have been designed for those applications where the seal around the valve stem must be adjustable. With special preparation these valves can be used for severe and hazardous chemical service such as oxygen and chlorine.

FEATURES

Chem-Plug® models V022 and V322 valves are designed for 150 lb. and 300 lb. ANSI specifications respectively for temperatures ranging from -20°F to 400°F. The bidirectional flow allows more latitude in the design and installation of piping systems. The V022 and V322 valves have a true stuffing box for top seal packing and gland adjustment to reduce leakage by the stem to zero when properly adjusted and maintained. Chem-Plug® sleeved valves with V-ring top seals are adjusted at the factory to hold one and one half times the rated pressure of the valve.

Packing can be adjusted to compensate for normal wear. Like all Chem-Plug® valves, the plug can be adjusted separately from the top seal so that the packing does not have to be readjusted.

The packing can be serviced or replaced without removing the valve from the line.

The solid sleeve is compression molded in virgin PTFE and then sintered. Rytan is also available. This method provides optimum density which minimizes chemical permeation.

Raised sealing rings are cast 360° around the ports for positive in-line sealing. Blow-out lips are cast adjacent to the port openings to prevent sleeve rotation and reduce cold sleeve flow.

The plug is grounded through the thrust washer and plug adjuster.

All flanged Chem-Plug® valves meet the face to face specifications of API 6D (short pattern), API gate valve standard, ANSI B16.10, and ANSI 16.34.

OPERATORS

Wrench operators are standard on all sizes through 3"; manual gear operators are recommended on 4" and 6" sizes. Cast mounting pads are provided on the flanges for rigid mounting of pneumatic, hydraulic, and electric actuators. The pads can be drilled and tapped when specified.

TESTING

Each Chem-Plug® valve is tested for seat leakage according to API Standard 598.

DIMENSIONS and WEIGHTS

SIZE	150lb. 300 lb.	Flange Holes No. Size	A	B	G	H	P	P _T	Weight
1/2	V022	4 .625 2.375	4-1/4	3-1/2	4-9/16 4	1-	8	8-1/2	8
	V322	4 .625 2.625	5-1/2	4-5/8	-9/16	15/16	8	8-1/2	11
3/4	V022	4 .625 2.750	4-5/8	3-7/8	4-9/16 4	2-1/8 2	8	8-1/2	9
	V322	4 .750 3.250	6	4-5/8	-9/16	-3/8	8	8-1/2	12
1	V022	4 .625 3.125	5	4-1/4	4-11/16	2-1/4 2	8	8-1/2	10
	V322	4 .750 3.500	6-1/2	4-7/8	4-11/16	-9/16	8	8-1/2	13
1-1/2	V022	4 .625 3.875	6-1/2	5	6-5/16 6	2-3/4 3	14	14-7/8	19
	V322	4 .875 4.500	7-1/2	6-1/8	-5/16	-1/4	14	14-7/8	25.5
2	V022	4 .750 4.750	7	6	6-5/8 6	3-1/8 3	14	14-7/8	24.5
	V322	8 .750 5.000	8-1/2	6-1/2	-5/8	-3/8	14	14-7/8	31.5
3	V022	4 .750 6.000	8	7-1/2	7-1/4 7	3-3/4 4	23	23-7/8	37.5
	V322	8 .875 6.625	11	8-1/4	-1/4	-1/8	23	23-7/8	51
4	V022	8 .750 7.500	9	9	6-9/16*	24**	25**	59+	
	V322	8 .875 7.875	12	10	6-9/16*	4-1/2 5	24**	25**	86+
6	V022	8 .875 9.500	10-1/2	11	7-5/16*	5-	**	**	112+
	V322	12 .875 10.625	15-7/8	12-1/2	7-5/16*	1/2 6-	**	**	164+
8	V022	8 .875 11.750	11-1/2	13-1/2	10-3/8*	7	**	**	240+
	V322	12 1.000 13.000	16-1/2	15	10-3/8*	7-7/8	**	**	315+
10	V022	12 1.000 14.250	13	16	11-3/8*	8-1/4	**	**	318+
	V322	16 1.125 15.250	18	17-1/2	11-3/8*	9-1/8	**	**	411+
12	V022	12 1.000 17.000	14	19	12-9/16*	9-5/8	**	**	390+
	V322	16 1.250 17.750	CONSULT FACTORY						

* G measured to the top of the plug shaft.

** Gear operator recommended for 4" size and larger.

+ Valve only. Add 38 lb. for gear operator.

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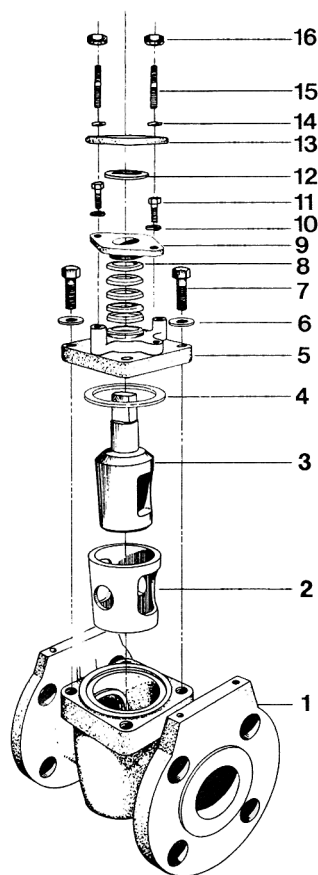
7693 Manchester Hwy. Morrison, TN 37357

Ph. (931) 668-5377 Fax (931) 668-5378

Email sales@smg-global.com

Web Site www.smg-global.com

BILL OF MATERIALS



PART NO.	PART	DUCTILE IRON	CARBON STEEL	OTHER ALLOYS
1	BODY	D.I.A. 395	WCB	AS SPECIFIED
2	SLEEVE	PTFE	PTFE	PTFE
3	PLUG	D.I./ ENP	D.I./ ENP	AS SPECIFIED
4	COVER GASKET	PTFE	PTFE	PTFE
5	COVER	D.I.A. 395	WCB	AS SPECIFIED
6	LOCK WASHER	STEEL	STEEL	STAINLESS STEEL
7	COVER BOLT	B7 STEEL	B7 STEEL	STAINLESS STEEL
8	V-RING PACKING	PTFE	PTFE	PTFE
9	PACKING GLAND	D.I.A. 395	WCB	STAINLESS STEEL
10	LOCK WASHER	STEEL	STEEL	STAINLESS STEEL
11	GLAND SCREW	STEEL	STEEL	STAINLESS STEEL
12	THRUST DISC	CARBON STEEL	CARBON STEEL	CARBON STEEL
13	PLUG ADJUSTER	WCB	WCB	AS SPECIFIED
14	LOCK WASHER	STEEL	STEEL	STAINLESS STEEL
15	ADJUSTER STUD	STEEL	STEEL	AS SPECIFIED
16	HEX NUT	STEEL	STEEL	STAINLESS STEEL

MODEL NUMBER CODES

MATERIAL CODES

SPECIAL FEATURES

ANSI Class	PORTS	DESIGN and END CONNECTION	BODY MATERIAL	PLUG MATERIAL	SLEEVE MATERIAL	OPERATORS	SPECIAL FEATURES
0 = 150 Lb. 1 = 300 Lb.	2 = 2 Way 3 = 3 Way	1 = Lined flanged end 2 = Sleeved flanged end 3 = Sleeved flanged end, jacketed 4 = Sleeved screwed end 5 = Sleeved socket weld end	H = Ductile Iron J = Steel, WCB K = SS, CF8 L = SS, CF8M M = CD4MCU N = Alloy 20 P = Monel Q = Hastelloy B R = Hastelloy C Y = Inconel S = Special	V = Ductile Iron ³ K = SS, CF8 L = SS, CF8M M = CD4MCU N = Alloy 20 P = Monel Q = Hastelloy B R = Hastelloy C Y = Inconel S = Special	F = PTFE R = Ryton* U = UHMWPE T = Glass filled TFE	0 = None 1 = Wrench 2 = Gear, Manual 3 = Electric 4 = Pneumatic 5 = Hydraulic 6 = Special 7 = Wrench with locking device 8 = Gear with locking device 9 = Gear with chain wheel	O = None DT = Drilled, Tapped for actuators DB = Double block and bleed CH = Chlorine prepared OX = Oxygen prepared FS = Grafoil top seal Fire safe (V series) X = Other (specify)**

* Phillips Petroleum Trademark ** Give a complete, accurate description of the special feature when ordering.

³ Electroless nickel plated

Example of Ordering Code:

V022-JLF1-0

This is an example of a V-ring top seal, 150lb. ANSI, 2 Way, flanged end, sleeved plug valve with a carbon steel body, stainless steel plug, PTFE sleeve, wrench operator, and no special features