

Chemical Hydraulic Valve

EXTERNAL VALVE

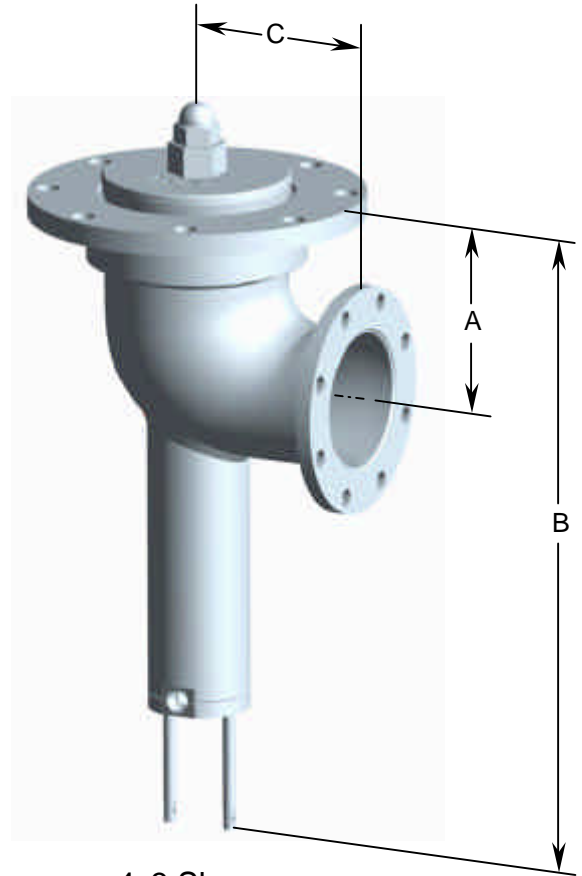
- Replaceable Teflon® Seat
- Removable-Replaceable Disc
- All Seals PTFE
- 2 Piece Replaceable Stem

The Chemical Hydraulic Valve is designed for use with a wide variety of chemicals. A replaceable Teflon® seat and removable disc are provided for ease in repairing should damage occur from dirt or other foreign material. A heavy mounting flange is provided to insure a flat gasketing surface.

¼ NPT Hydraulic connection conveniently located at the base of the piston cylinder. Indicator pins, which move in relation to the piston, show the position of the disc at all times.

This valve does **NOT** contain a shear section. The cargo tank must protect the valve by providing suitable protection as specified in 49 CFR 178.345-8(2).

1,500 psi minimum hydraulic line pressure required to operate valve, but do not exceed 3,000 psi hydraulic line pressure.



4x3 Shown

See section 35 Page 2D for parts list

Size	Assembly No.	Material *	Inlet Flange		Outlet		Dimensions			Wt. (lbs.)	Temp. Range	MAWP
			B.C.	Holes	B.C.	Holes	A	B	C			
4x3 90° Elbow	CH46955SST	316 SS	7.25"	8- ⁹ / ₁₆	4 ⁷ / ₈	8- ⁷ / ₁₆	4 ³ / ₄	16	4 ¹ / ₂	29	-40°F to +400°F	50
	CH46955LHT	316 SS w/ Hastelloy trim**			5 ⁷ / ₈		7 ⁵ / ₈	7 ⁷ / ₈	30.5			
4x4 90° Elbow	CH46949SST	316 SS	7.25"	8- ⁹ / ₁₆	5 ⁷ / ₈	8- ⁷ / ₁₆	7 ⁵ / ₈	16	7 ⁷ / ₈	30.5	-40°F to +400°F	50
	CH46949LHT	316 SS w/ Hastelloy trim**			7 ⁵ / ₈		7 ⁷ / ₈	7 ⁷ / ₈	30.5			

* Material listing is for all wetted surfaces exposed to product during normal operation of valve.

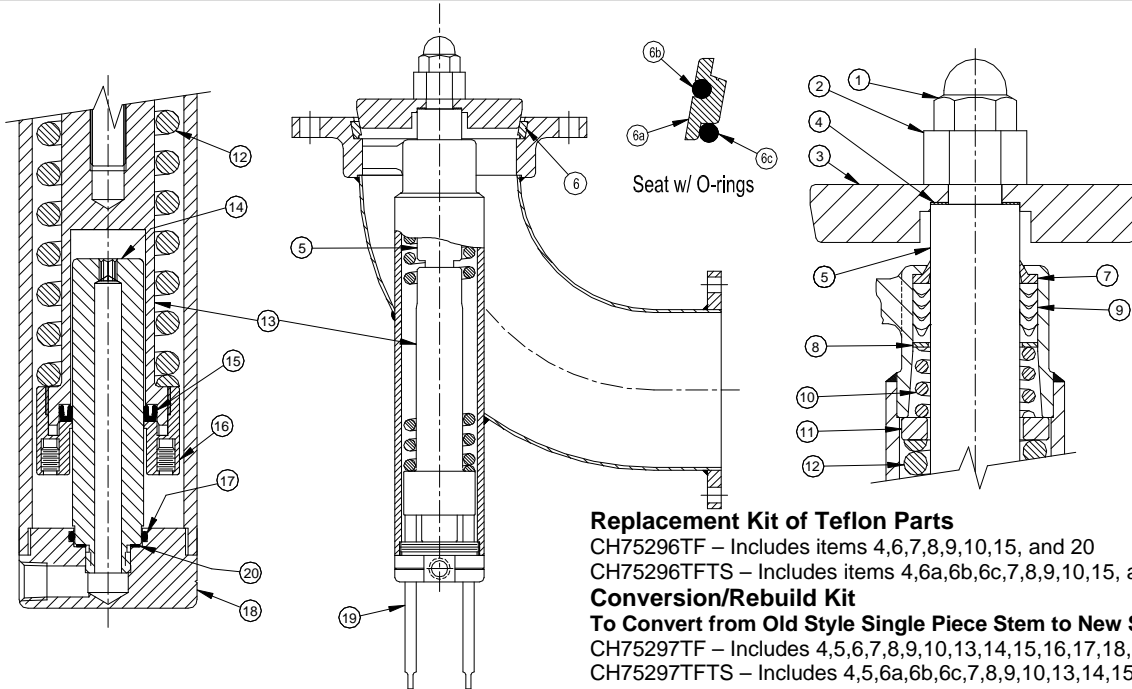
** Hastelloy trimmed valve has a hastelloy C-22 overlay on the disc (3) in the area in contact with the seal (6). The hastelloy overlay reduces the potential of the disc pitting at the seal contact area.

Suffix "017" indicates Teflon Seat w/ Double Tef-Sil O-Ring.

NOTE: A flat mounting surface must be provided for valve seat flange. Recommended mounting pad is MP19752LC, see section 40. For hydraulic pump and distributor, see page 3B or 3C.

PARTS LIST

CHEMICAL HYDRALIC VALVE



Replacement Kit of Teflon Parts

CH75296TF – Includes items 4,6,7,8,9,10,15, and 20

CH75296TFTS – Includes items 4,6a,6b,6c,7,8,9,10,15, and 20

Conversion/Rebuild Kit

To Convert from Old Style Single Piece Stem to New Style 2 Piece Stem

CH75297TF – Includes 4,5,6,7,8,9,10,13,14,15,16,17,18, and 20

CH75297TFTS – Includes 4,5,6a,6b,6c,7,8,9,10,13,14,15,16,17,18, and 20

No.	Description	Req.	Material	Part No.	No.	Description	Req.	Material	Part No.
1	Cap Nut	1	316 Stnls	16672SS	7	Wiper	1	Teflon	15862TF
2	Cap Collar	1	316 Stnls	16671SS	8	Follower Washer-Stuffing Box	1	316 Stnls	19594SS
3	Disc	1	316 Stnls	16743SS	9	Packing Rings-Stuffing Box	Set	Teflon	15759TF
		1	Hast. C-22 Trim	16743LH	10	Spring-Stuffing Box	1	316 Stnls	19616SS
4	Teflon Washer	1	Teflon	16690TF	11	Washer-Main Spring	1	304 Stnls	15684SL
5	Upper Stem Half	1	316 Stnls	28202SS	12	Main Spring	1	Chr. Van.	18850EY
		1	Hastelloy C276	28202HC	13	Lower Stem Half	1	303 Stnls	28201SL
6	Replaceable Seat	1	Teflon	16644TF	14	Piston	1	303 Stnls	75136SL
			Kalrez	16644KA	15	Hydraulic Seal	1	302SS/PTFE	75207SSTF
			Teflon	18897TFTS	16	Seal Retainer Ring	1	303 Stnls	75190SL
6a	Replaceable Seat w/ O-rings	1	Kalrez	18897KA	17	Piston Seal	1	Tef-Sil	75206TS
			Tef-Sil	18246TS	18	Piston Holder	1	316 Stnls	75137SS
6b	Seat O-ring only	1	Kalrez	18246KA	19	Indicator Pins	2	304 Stnls	16133SL
			Tef-Sil	18834TS	20	Seal Washer	1	Fiber	9Z6185
6c	O-ring	1	Tef-Sil	18834TS					

TO REPLACE DISC AND/OR SEAT: Hold cap collar (2) and remove cap nut (1). The disc (3) can then be removed. Care should be taken not to damage or lose Teflon washer (4). Seat 6 can now be removed and a new seal snapped into the groove.

TO REPLACE STUFFING BOX PACKING OR PISTON HYDRAULIC SEAL: Disconnect hydraulic line. Unscrew indicator pins (19) and piston/holder assembly (14) & (18). To ensure disc (6) does not get damaged, hold cap collar (2) stationary while using a spanner wrench to unscrew seal retainer ring (16). See specific instructions below.

TO REPLACE STUFFING BOX PACKING:

If lower stem half (13) remains in valve body after seal retainer ring (16) has been unscrewed, continue to hold cap collar (2) and insert a 1/4" thick x 2" wide piece of plate into the slots on the bottom of lower stem half to unscrew it from the upper stem half. Remove main spring (12), washers (8) & (11) and stuffing box spring (10). Remove old packing (9) and wiper (7) and replace with a full set of new packing and a new wiper.

TO REPLACE PISTON HYDRAULIC SEAL:

If lower stem half (13) unscrews from the upper stem half (5) it will be necessary to clamp lower stem half (13) in a vice to unscrew seal retainer ring (16). After removing seal retainer ring (16) remove old seal and install new hydraulic seal with seal lips facing inwards.

We suggest the use of anti-seize compound on all threads

WARNING Use only genuine BETTS INDUSTRIES INC. replacement parts. Use of substitute parts can impair the proper function of this product and void all warranties.

For more detailed instructions, see maintenance manual