

Western Pacific Products, Inc.

Anything In Or On Your Tank – Ready to Ship

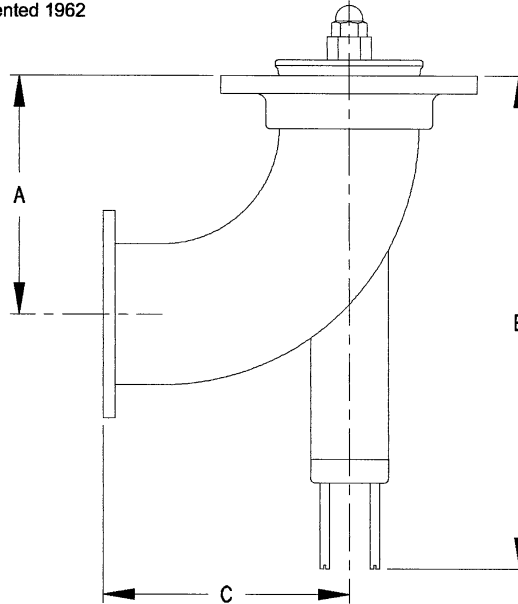
Over 8,000 Part Numbers – Over 26,000 Square Feet of Warehouse – We Ship Worldwide

Chemical Hydraulic Valve

STANDARD VALVE

DESIGNED FOR HANDLING A VARIETY OF PRODUCTS
US PATENT 3,065,949 Patented 1962

- REPLACEABLE TEFLON SEAT**
- REMOVABLE-REPLACEABLE DISC**
- HYDRAULICALLY OPERATED**
- HEAVY MOUNTING FLANGE**
- HEAVY OUTLET FLANGE**



90° VALVE

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, such as seals, etc. A heavy mounting flange is provided to insure a flat surface and improved gasketing surface.

1/4 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.

No shear section provided-for regulated products, protection should be provided by suitable guards as specified in DOT 178.340-8 (d) (ii).

Working Pressure 50 PSI Max.
Temperature 365°F Max.

Valve Dimensions

Size	A	B	C	Inlet Flange			Outlet Flange		
				O.D.	B.C.	N.H.	O.D.	B.C.	N.H.
4x4	7 ⁵ / ₈	14 ¹ / ₂	7 ¹ / ₈	8 ¹ / ₄	7 ¹ / ₄	8- ⁹ / ₁₆	6 ³ / ₈	5 ¹ / ₈	8- ⁷ / ₁₆
4x3	4 ³ / ₄	14 ¹ / ₂	4 ¹ / ₂				5 ⁵ / ₈	4 ⁷ / ₈	8- ⁷ / ₁₆

Size	Style Description	Material	Wt.	Assembly No.
4x4	90° Elbow	Stnls 316	28#	CH45586SST
4x3	90° Elbow	Stnls 316	26.5#	CH45613SST

Valves are available with various replaceable type seats by adding suffix to standard assembly numbers.

Suffix "014" indicates Teflon Seat w/ Kalrez O-Ring.

Suffix "016" indicates Kalrez Seat.

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

NOTE: A flat mounting surface must be provided for valve seat flange. We recommend mounting pad No. MP16590SS, see section 40. For hydraulic pump and distributor, see page 3B or 3C.

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WARREN, PA.

800-677-3711

Signal Hill, (L.A.) CA

(562) 490-0030 • Fax (562) 490-0091

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(817) 740-8077 • (817) 740-1332

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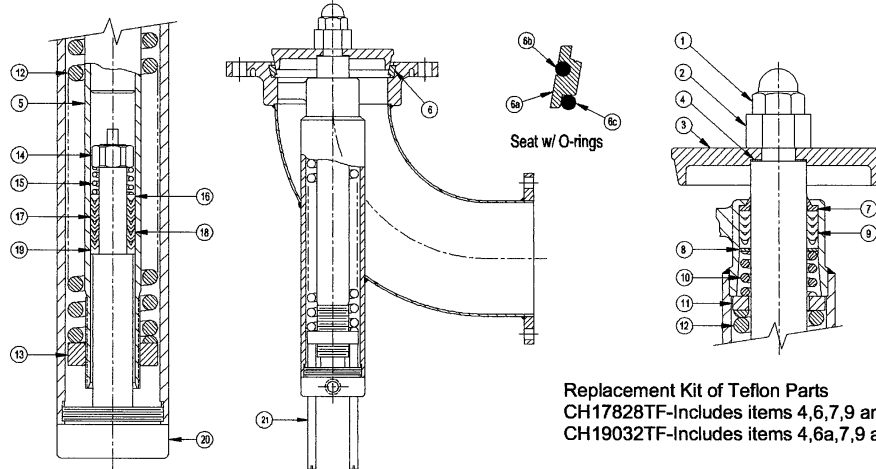
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PARTS LIST

Chemical Hydraulic Valve



No.	Description	Req.	Material	Part No.
1	Cap Nut	1	316 Stnls	16672SS
2	Cap Collar	1	316 Stnls	16671SS
3	Disc	1	316 Stnls	16743SS
4	Teflon Washer	1	Teflon	16690TF
5	Stem	1	316 Stnls	26068SS
6	Replaceable Seat	1	Teflon	16644TF
			Kalrez	16644KA
			Tef-Sil	18897TFS
6a	Replaceable Seat w/ O-rings		Kalrez	18897TFKA
6b	Seat O-ring only	1	Tef-Sil	18246TS
			Kalrez	18246KA
6c	O-ring	1	Tef-Sil	18834TS
7	Wiper	1	Teflon	15862TF
8	Follower Washer-Stuffing Box	1	316 Stnls	19594SS

No.	Description	Req.	Material	Part No.
9	Packing Rings-Stuffing Box	Set	Teflon	15759TF
10	Spring-Stuffing Box	1	316 Stnls	19616SS
11	Washer-Main Spring	1	304 Stnls	15684SL
12	Main Spring	1	Chr. Van.	18850EY
13	Retainer Nut-Main Spring	1	Steel	15612EY
14	Retainer Nut-Piston	1	304 Stnls	15630SL
15	Spring-Piston	1	316 Stnls	15652SS
16	Male Adapter-Piston	1	304 Stnls	15629SL
17	Separator Rings-Piston	4	304 Stnls	15628SL
18	Packing Rings-Piston	Set	Teflon	15634TF
19	Female Adapter-Piston	1	304 Stnls	16732SL
20	Piston	1	304 Stnls	25757SL
21	Indicator Pins	2	304 Stnls	16133SL

MAINTENANCE INSTRUCTIONS

TO REPLACE DISC: Hold nut No.2 and remove nut No.1. The disc No.3 can be removed. Care should be taken not to damage or lose teflon washer No.4.

TO REPLACE STUFFING BOX PACKING: Disconnect hydraulic line. Remove indicator pins No.21 and piston assembly No.20. Use spanner wrench remove nut No.13. This nut loads the main spring and care should be taken in removing not to allow disc to turn and damage the seat. Hold nut No.2 to prevent this. Remove main spring, washers, and stuffing box spring. Remove old packing and replace with a full set of new packing. (If packing has become solid due to solidification of product, it may be necessary to remove stem No.5 to replace packing)

TO REPLACE PISTON PACKING: Disconnect hydraulic line. Remove indicator pins No.21. The piston assembly No.20 may then be removed and packing replaced. Use only full sets of packing for best results.

We suggest the use of NEVER-SEEZ anti-seize and lubricating compound or equal on all threads.

WARNING Use only genuine Betts Industries Inc. replacement parts. Use of substitute parts can impair the proper functioning of this product.

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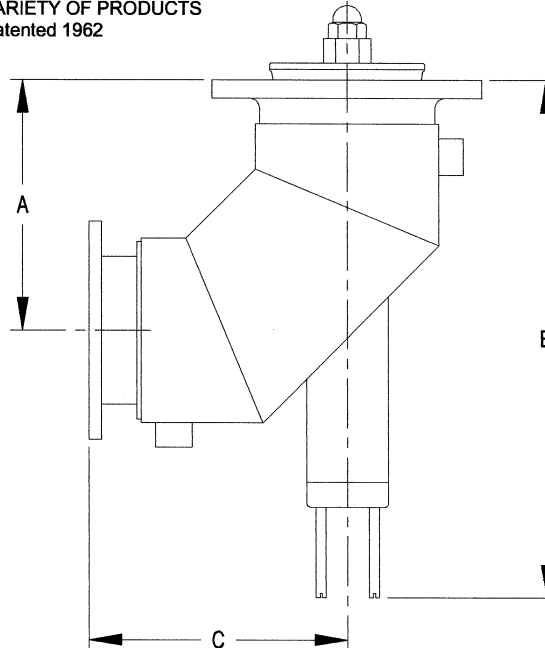
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Chemical Hydraulic Valve

STEAM JACKETED VALVE

DESIGNED FOR HANDLING A VARIETY OF PRODUCTS
US PATENT 3,065,949 Patented 1962

- REPLACEABLE TEFLON SEAT**
- REMOVABLE-REPLACEABLE DISC**
- HYDRAULICLY OPERATED**
- HEAVY MOUNTING FLANGE**
- HEAVY OUTLET FLANGE**



90° VALVE

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, such as seals, etc. A heavy mounting flange is provided to insure a flat surface and improved gasketing surface.

1/4 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.

No shear section provided-for regulated products, protection should be provided by suitable guards as specified in DOT 178.340-8 (d) (ii).

Working Pressure 50 PSI Max.
Temperature 365°F Max.

Valve Dimensions

Size	A	B	C	Inlet Flange			Outlet Flange		
				O.D.	B.C.	N.H.	O.D.	B.C.	N.H.
4x4	7 ⁵ / ₈	14 ¹ / ₂	7 ¹ / ₈	8 ¹ / ₄	7 ¹ / ₄	8 ⁻⁹ / ₁₆	6 ⁷ / ₈	5 ¹ / ₈	8 ⁻¹ / ₁₆
4x3	4 ³ / ₄	14 ¹ / ₂	4 ¹ / ₂				5 ⁵ / ₈	4 ¹ / ₈	8 ⁻¹ / ₁₆

All Steam Connections 1/2" NPT. Steam jacket rated at 150 psi maximum working pressure.

Size	Style Description	Material	Wt.	Assembly No.
4x4	90° Elbow	Stnls 316	35#	CH45616SST
4x3	90° Elbow	Stnls 316	30.4#	CH45618SST

Valves are available with various replaceable type seats by adding suffix to standard assembly numbers.

Suffix "014" indicates Teflon Seat w/ Kalrez O-Ring.

Suffix "016" indicates Kalrez Seat.

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

NOTE: A flat mounting surface must be provided for valve seat flange. We recommend mounting pad No. MP16590SS, see section 40. For hydraulic pump and distributor, see page 3B or 3C.



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Quick Clean Chemical Hydraulic Valve

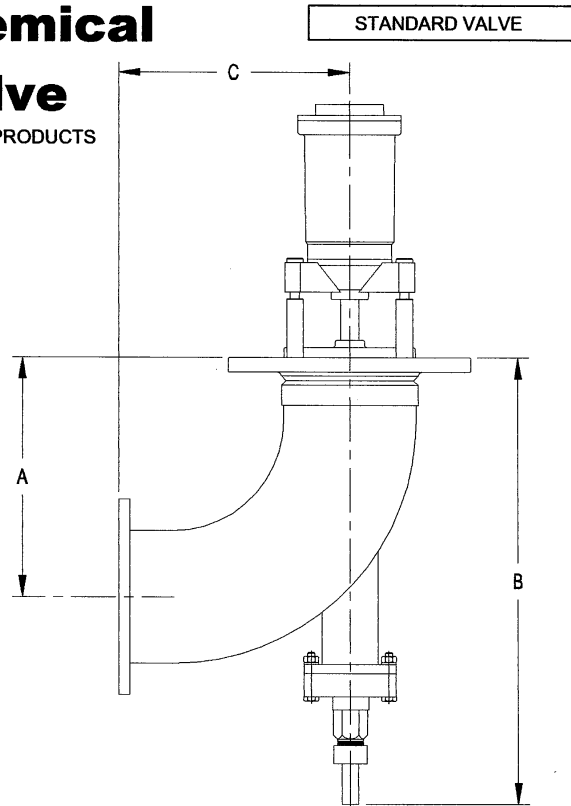
DESIGNED FOR HANDLING A VARIETY OF PRODUCTS
US PATENT 4,934,403

SHEAR SECTION PROVIDED

QUICK DISASSEMBLY

O-RING SEAT

HYDRAULICLY OPERATED



The Quick Clean Chemical Hydraulic Valves are designed to meet the exacting requirements of today's chemical transportation industry. The valves feature quick removable spring housing and hydraulic actuator units and maintenance. Resilient Teflon® encapsulated silicone core o-ring seals and the tapered seat provide positive sealing and product retention. An indicator rod shows whether the valve is open.

VALVE DIMENSIONS

Size	A	B	C	Inlet Flange			Outlet Flange		
				O.D.	B.C.	N.H.	O.D.	B.C.	N.H.
4x3	4 ³ / ₄	12 ¹ / ₄	4 ¹ / ₂	8 ¹ / ₄	7 ¹ / ₄	8 ⁻⁹ / ₁₆	5 ⁵ / ₈	4 ¹ / ₈	8 ⁻⁷ / ₁₆
4x4	8 ⁷ / ₈	15	7 ⁷ / ₈				6 ⁵ / ₈	5 ¹ / ₈	8 ⁻⁷ / ₁₆
4x3*	6 ⁵ / ₃₂	8 ¹ / ₈	4 ¹ / ₂				5 ⁷ / ₈	4 ¹ / ₈	8 ⁻⁷ / ₁₆

Size	Style Description	Material	Wt.	Assembly No.
4x3	90° Elbow	Stnls 316	23.5	CH46312SSTS
4x4	90° Elbow	Stnls 316	25.0	CH46236SSTS
4x3*	Special 90° Elbow	Stnls 316	24.0	CH46420SSTS

NOTE: A flat mounting surface must be provided for valve seat flange. We recommend mounting pad No. MP16590SS, see Section 40. For hydraulic pump and distributor, see Section 35 Page 3B.

*Special 4x3 valve designed as a direct replacement on tanks plumbed for Betts Internal Chemical Hydraulic valves with 4x3 shear elbows (see Section 35 Page 5A)

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PARTS LIST

QUICK CLEAN CHEMICAL HYDRAULIC VALVE

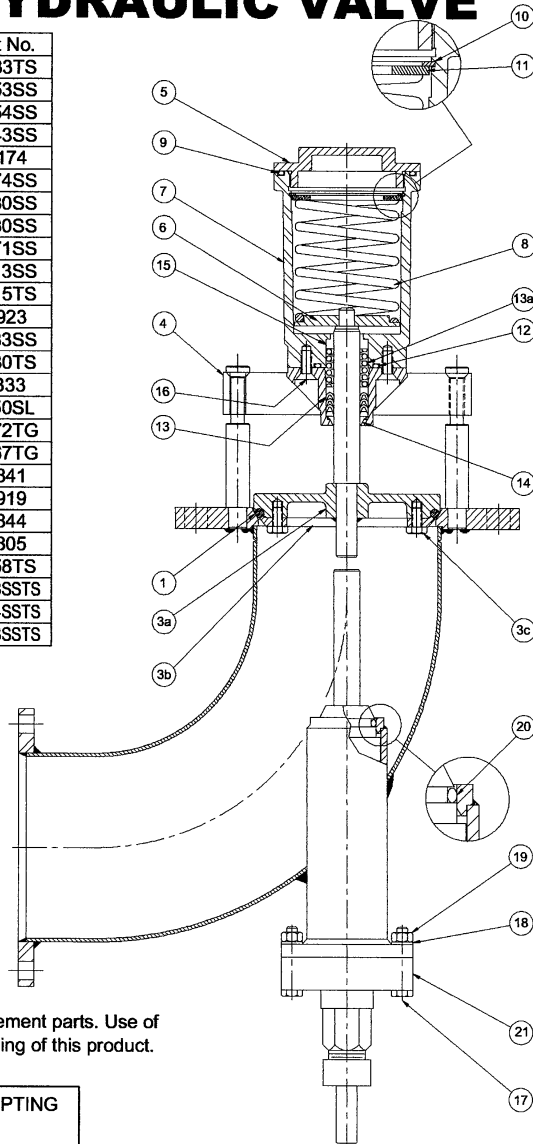
No.	Description	Req.	Material	Part No.
1	Seat O-Ring	1	Tef/Sil	19033TS
3	Stem & O-Ring Holder Assembly	1	Stnls 316	19253SS
3a	Stem & O-Ring Holder	1	Stnls 316	19254SS
3b	Retainer Plate	1	Stnls 316	27443SS
3c	Cap Screws	4	Stnls 316	9Q4174
4	Spider	1	Stnls 316	27174SS
5	Spring Housing Cap	1	Stnls 316	19080SS
6	Spring Washer	1	Stnls 316	18480SS
7	Spring Housing	1	Stnls 316	27371SS
8	Spring	1	Stnls 316	19413SS
9	Housing Cap O-Ring	1	Tef/Sil	19115TS
10	Retainer Ring	1	Stnls 302	9Q4923
11	Washer	1	Stnls 316	19083SS
12	Base O-Ring	1	Tef/Sil	17730TS
13	Packing Set	1	Teflon	8N2833
13a	Packing Spring	1	Stnls 302	19050SL
14	Wiper	1	Teflon	18172TG
15	Bushing	1	Teflon	18467TG
16	Spider Retaining Screw	4	Stnls 316	9Q5841
17	Retainer Bolt	4	Stnls	9Q4919
18	Lockwasher	4	Stnls	9Q5844
19	Retainer Nut	4	Stnls	9Q5805
20	Barrel Cap O-Ring	1	Tef/Sil	18858TS
21	Hyd. Actuator-4x3 Model	1	Stnls	35233SSTS
	Hyd. Actuator-4x4 Model	1	Stnls	35224SSTS
	Hyd. Actuator-Spec. 4x3	1	Stnls	35228SSTS

Spring Housing & Spider Assembly 35232SSTS
Includes items 4-16

Spring Housing Seal Replacement Kit CH19157TF
Includes items 9, 12, 13, 14, 15

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CONSULT MAINTENANCE MANUAL BEFORE ATTEMPTING REPAIRS. MANUALS AVAILABLE UPON REQUEST.



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