4×3 Quick Clean Chemical Hydraulic Valve (Steam Jacketed)

Betts Quick Clean Chemical Hydraulic Valve with steam jacket body is classified as an internal self-closing stop valve and is widely used on DOT407 and 412 cargo tanks. The key features of the Quick Clean are a rapid removal spring housing assembly, a self-contained hydraulic actuator, a smooth tapered seat and a steam jacket body with two ¾" NPT fittings which allows for the valve to be heated for use with temperature sensitive products. The 316-stainless body with an optional Hastelloy® overlay seat and replaceable Teflon™ encapsulated main seal make this a versatile and proven valve that satisfies the many requirements of the chemical transportation industry.

A sacrificial shear section is standard with the Quick Clean Valve and meets the requirements of 49CFR §178.345-8 as tested and verified per TTMA RP84.

Valve must not be subjected to rapid thermal shock which can cause damage to the valve or steam jacket body. Heating or cooling should be gradual and controlled. Caution should also be used to ensure liquid does not freeze in steam jacket.

See standard Quick Clean Valve page (Section 35 Page 7A) for additional details on actuator.

- **Valve MAWP:** 50 psi [3.4 bar]
- **Min. bursting pressure:** 200 psi [13.8 bar]
- **Working temperature range:** -40°F to 400°F [-40°C to 204°C]
- **Max. steam jacket pressure:** 150 psi [10.3 bar]
- **Hydraulic line pressure:** Minimum 1200 psi [83 bar] Maximum 3,500 psi [241 bar]
- **Hyd. volume to fully open valve:** 1.01 in^3 [16.6 ml]
- **Fb-max per TTMA RP 86:** 4×3 – 19,300 lbs [8,754 kg], 4×4 – 10,800 lbs [4,899 kg]
  - *A solid flat mounting surface must be provided. Recommended mounting pad is MP19752LC.*

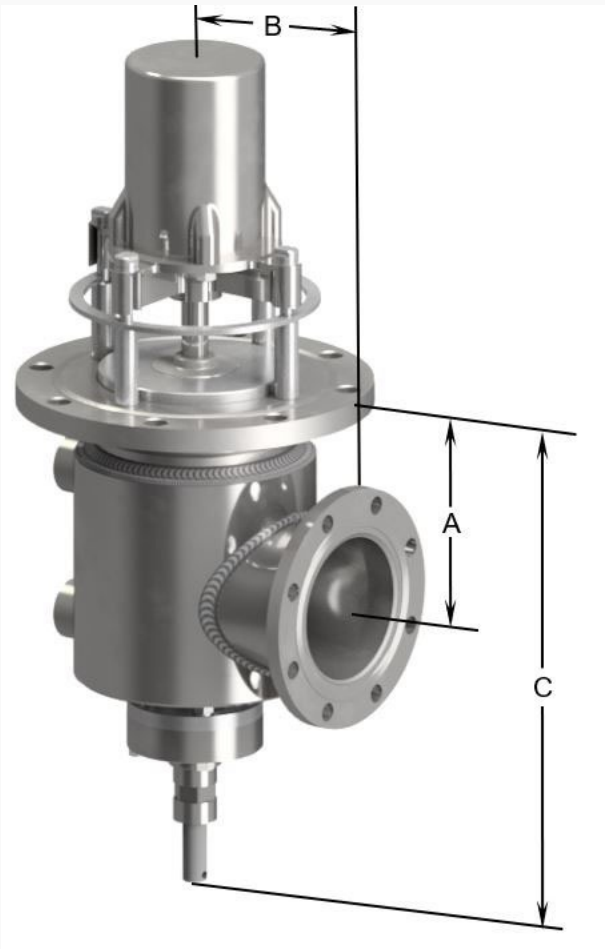
- *Recommended hydraulic pump is HP46982ALSL and hydraulic distributor is CH16283.*

Assembly Part #	Material*	Inlet Flange (4" Sump)	Outlet(TTMA)	Dims.	Wt. lb. [kg]
CH46867SSTS	316 SS	**B.C.:** 07.25" [184 mm] **8 Holes:** 0.563" [14.3 mm]	**B.C.:** 04.88" [124 mm] **8 Holes:** 0.438" [11.1 mm]	**A:** 4.75" [121 mm] **B:** 4.50" [114 mm] **C:** Closed 12.05" [307 mm] Open 10.87" [276mm]	31 [14.1]
CH46867LHTS	316 SS w/ Hastelloy®**	**B.C.:** 07.25" [184 mm] **8 Holes:** 0.563" [14.3 mm]	**B.C.:** 04.88" [124 mm] **8 Holes:** 0.438" [11.1 mm]	**A:** 4.75" [121 mm] **B:** 4.50" [114 mm] **C:** Closed 12.05" [307 mm] Open 10.87" [276mm]	31 [14.1]

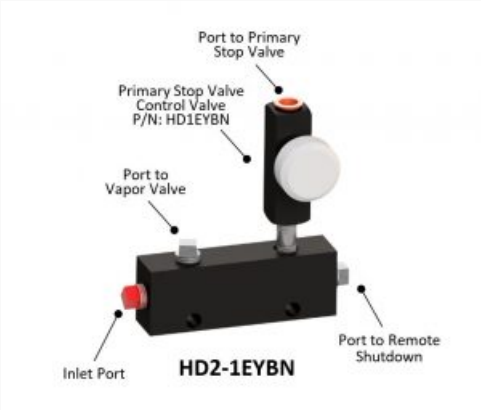
***Material listing is for all wetted surfaces exposed to product during normal operation valve.**

****Part number ending in "LHTS" provides a valve with a Hastelloy® C-22 overlay on the seat to fortify the area in contact with the O-ring.**

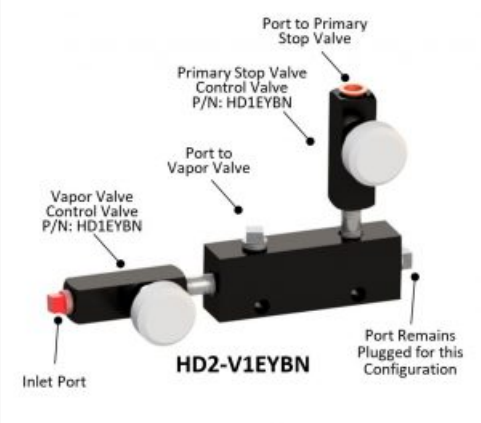
- **A solid flat mounting surface must be provided. Recommended mounting pad is MP19752LC. (Section 40)**
- **Recommended hydraulic pump HP46982ALSL and hydraulic distributor CH16283. (Section 35)**



Hydraulic Distributor (Basic Configuration)



Hydraulic Distributor for Single Compartment



Hydraulic Distributor with Vapor Valve Isolator

Hydraulic Pump (Hand Jack)

Betts prides itself in being able to provide products that meet a customer's specific needs. As a result we do offer modifications to our product standards. While not every request is always feasible, we do our best to meet your specific needs. In many cases this modification is noted by adding a suffix to the end of the standard part number. The following is a non-inclusive list of common options that are available for this product line . If the options listed below do not meet your requirements please contact one of Betts' Customer Service Representatives for further assistance. Please note that some product modifications may result in extended lead times.

CH46870SSTS – 4×3 Special Extended Body
A dimension = 6.16″
B dimension = 4.50″
C dimension = 14.03″
Hydraulic Actuator = 35228SSTS

External Chemical Hydraulic Valve Maintenance Manual #MM-CH001
External Chemical Hydraulic Valve Maintenance Manual #MM-CH002

Chemical Hydraulic Product Family:
S35P01A

EB-1-20: Important Maintenance and New Seal Design for Quick Clean.
EB3-03: Plumbing Schematic for Hydraulic Valve System
EB8-08: Important design modification alert for Betts' Hydraulic Valves.

External Chemical Hydraulic Valve Maintenance Video #MV-CH002

⚠ **WARNING**: This product can expose you to chemicals including Chromium (hexavalent compounds) which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to: www.P65Warnings.ca.gov. For additional information on Betts products and Proposition 65 list please see: http://www.bettsind.com/prop-65/