Betts™ INDUSTRIES, INC. WARREN, PA.

Engineering Bulletin 3-2000

Date: May 10, 2000 – Revised: February 9, 2010

Subject: MAWP and Bursting Pressure Ratings for Betts Valves

United States Department of Transportation 49CFR §178.345-9(b) states:

"Each hose, piping, stop valve, lading retention fitting and closure for each cargo tank must be designed for a bursting pressure of the greater of 100 psig or four times the MAWP."

CAN/CSA-B620-03 states:

"All piping and each stop-valve, lading retention fitting, and closure shall be designed for a MAWP not less than 172 kPa (25 psig) and not less than the MAWP of the tank. The bursting pressure shall be not less than four times the MAWP."

Betts Industries certifies the below listed valves for MAWP and minimum bursting pressures as shown.

Valve Description	Material of Construction	Maximum Operating Pressure * (psig)	Valve MAWP (psig)	Minimum Bursting ** Pressure (psig)
Manifold Valve	Steel, Aluminum	5	25	100
Pressure Manifold Valve	Steel, Aluminum	75	75	300
Air Manifold Assembly	Aluminum	25	25	100
Q.R.B. Style Hydrolet Valve	Stainless, Aluminum	35	35	140
Bolted "T" Style Hydrolet	Steel, Aluminum	35	35	140
Flush Valve	Steel, Stainless, Aluminum	5	5	100
Rear Head Valve	Steel, Stainless, Aluminum	5	5	100
3" & 4" Gate Valve	Steel, Stainless, Aluminum	50	50	200
3" & 4" Sliding Valve	Steel, Stainless, Aluminum	50	50	200
6" Sliding Valve	Steel, Stainless	50	50	200
2", 3" & 4" Wet-R-Dri Valve	Aluminum, Grey Iron	75	75	300
5", 6" & 8" Wet-R-Dri Valve	Aluminum	50	50	200
12" Wet-R-Dri Valve	Aluminum, Stainless	20	20	100
3" Ecliptic Valve	Stainless	100	100	400
3", 4" Emergency Valve (Manual & External Air Actuator)	Stainless, Aluminum	25	25	100
6" x 4" High Flow EV	Aluminum	9	25	100
3" Internal Air EV	Aluminum	25	35	140
4" Internal Air EV	Aluminum	18	35	140
6" x 4" Internal Air EV	Aluminum	21	35	140
6" x 6" EV (Manual & External Air Actuator)	Aluminum	12	25	100
Internal & External Chemical Hydraulic Emergency Valves	Stainless	50	50	200
Quick Clean Chemical Hydraulic Valves	Stainless	50	50	200

* Maximum Operating Pressure is the recommended maximum tank pressure at which the valve should be used. This value may be limited by the method of actuation. Example: The maximum operating pressure for air-operated emergency valves is based on the tank pressure the valve can open against while 80 psi line pressure is supplied to the actuator. For additional information see specific valve catalog page.

** Minimum Bursting Pressure is **NOT** the pressure at which the valve will rupture. Minimum Bursting Pressure is a pressure to which the valve was proof-tested in order to establish the given rating.