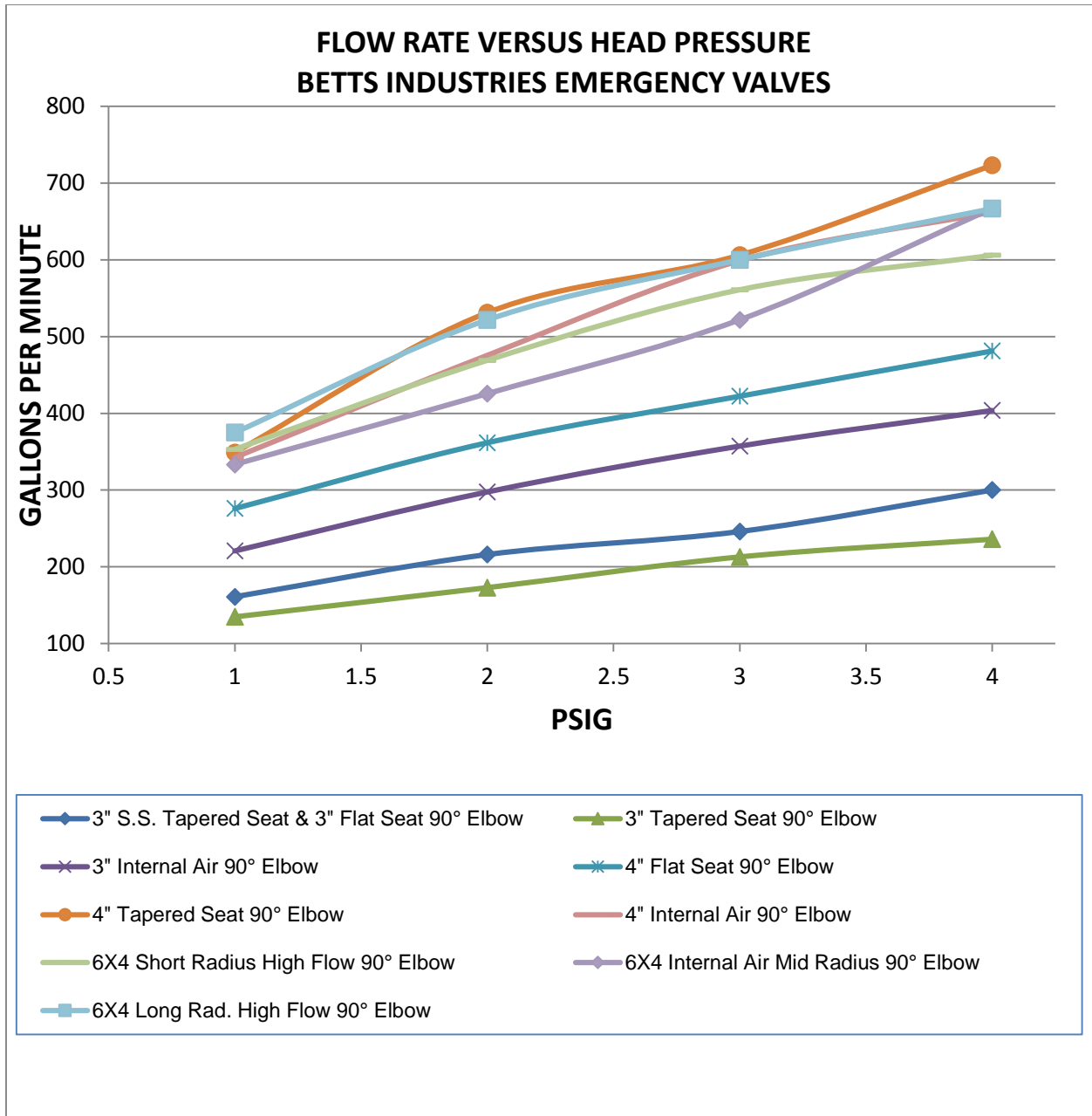


Engineering Bulletin 1-2012

Date: January 9, 2012

Subject: Water Flow Rates of Betts Emergency Valves

The following chart displays flow rate versus head pressure for various Betts Industries Emergency Valves. These results were obtained in experimental conditions using water. Field results will vary.



Engineering Bulletin 1-2012 (continued)

The following table shows flow rates of various Betts Emergency Valves during a gravity discharge test. The gravity discharge test is a method of simulating tank unloading by allowing water to pass through the valve without the addition of air pressure. Betts gravity discharge test is a release of water from a starting height of 80" to a final height of 17." These results were obtained in experimental conditions. Field results will vary.

Valve Style	Gallons per Minute Gravity Discharge Test
3" S.S. Tapered Seat 90° Elbow & 3" Flat Seat 90° Elbow	199
3" Tapered Seat 90° Elbow	156
3" Internal Air 90° Elbow	259
4" Flat Seat 90° Elbow	316
4" Tapered Seat 90° Elbow	439
4" Internal Air 90° Elbow	427
6X4 Short Radius High Flow 90° Elbow	434
6X4 Internal Air Mid Radius 90° Elbow	435
6X4 Long Rad. High Flow 90° Elbow	533