FLOW SAFE *HIGH PERFORMANCE* SAFETY RELIEF VALVE

VALUE BY CAPACITY / PERFORMANCE / CONSTRUCTION

Pressure relief valve products are valued in our industry by their capacity capabilities, performance, characteristics and of course, construction durability.

Capacity is determined for all pressure relief valves by calculating the KA value, a function of the valve coefficient of discharge (K) and orifice area (A) contained in the valve. See Reference 2 (below table). By determining KA values for a particular valve series and in comparison to other valve manufacturers you will determine value through capacity for your investment dollar, i.e. the greater the KA value, the greater the value. For examples of Flow Safe valve KA values, please reference the following table:

FLOW SAFE F80 ENHANCED PERFORMANCE CONVENTIONAL			FLOW SAFE HIGH PERFORMANCE POSRV F7000		
Valve Coefficient of Discharge, K (1)	Orifice Size / Area, A (in^2)	= KA Value (2)	K (1)	Valve Size / Area, A (in^2)	= KA Value (2)
.878	-1 / 0.003	.0023	.824	1 x 2 / 0.719	.592
.878	-2 / 0.015	.013	.824	1-1/2 x 3 / 1.767	1.456
.878	-3 / 0.034	.030	.824	2 x 3 / 2.953	2.433
.878	-4 / 0.065	.057	.824	3 x 4 / 6.605	5.442
.878	-6 (D) / 0.149	.131	.824	4 x 6 / 11.437	9.424
.878	-8 (E) / 0.261	.229	.824	6 x 8 / 26.06	21.47
.878	-F / 0.405	.355	.824	8 x 10 / 45.66	37.62
.878	-G / 0.664	.583	.824	12 x 16 / 111.87	92.18
.878	-H / 1.036	.910			
.878	-J / 1.689	1.483			

(1) K = 90% of actual, i.e., the National Board certified coefficient of discharge (Kd). Values listed are for gas media only.

(2) Per API RP 520, $V\ (SCFM) = 6.32CKAP_1 / (MTZ)^{1/2}$

Flow Safe high performance safety relief valves perform like fine-tuned instruments, lifting and reseating with precision control. By utilizing soft seat materials, Flow Safe valves provide value through bubble-tight shutoff performance before and after the lifting and relieving cycles. Precision construction within Flow Safe valves provides for continuous, repeatable and accurate performance. The variety of plastics and elastomers available in Flow Safe valves allow versatility to valve applications in handling a wide variety of applications.

All materials utilized in building Flow Safe high performance valves are of the finest quality. Flow Safe utilizes ASME/ASTM controlled materials, all with full traceability for quality control. Pilot operated style Flow Safe valves utilize integral flanges for strength and durability of performance. All elastomers utilized in Flow Safe high performance valves are of standard materials and sizes providing versatility and reducing cost to the ownership and maintenance of Flow Safe valves.

In summary, Flow Safe valves offer value:

$ By capacity
$ By performance
$ Through ownership, constructed for extended product service.
$ Through easy, low cost maintenance.
$ To our customers, through the latest Next Generation technology.