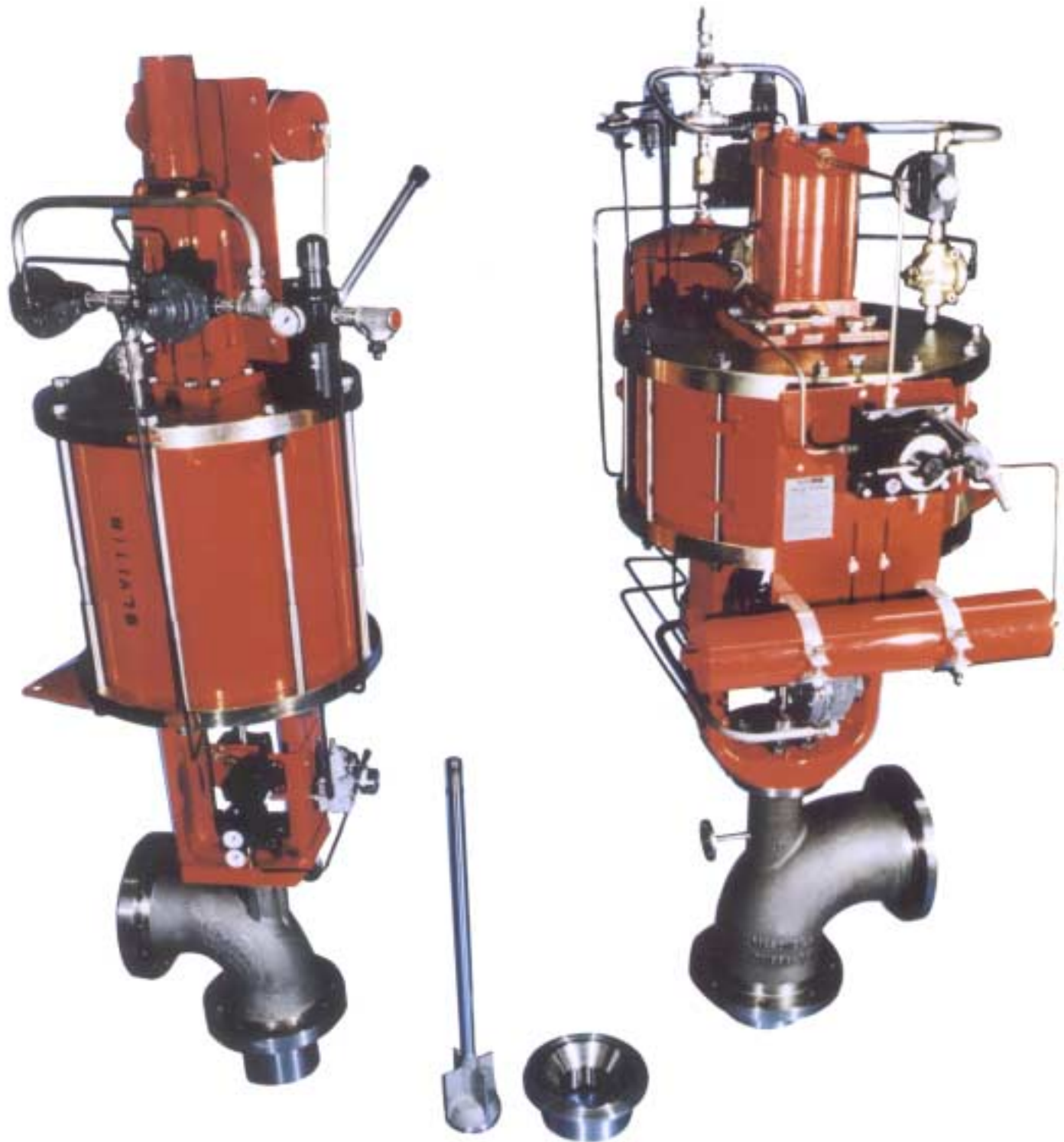


75000 SERIES TANK LEVEL CONTROL VALVES



UNIQUE SWEEP ANGLE DESIGNS ENGINEERED FOR TANK LEVEL CONTROL APPLICATIONS

① FULLY PORTED BODY PASSAGE

Fully ported body changes direction on a sweeping radius, thus reducing body pressure losses and erosion due to fluid impingement.

② MULTIPLE CONFIGURATIONS

Body styles are available in 45°, 60° and 90° designs to suit each application precisely.

③ GASKETLESS SEALING

Seat ring discharge nozzle is a lapped seal to the body requiring no gasket. No crevices to entrap deposits.

④ VESSEL MOUNTING

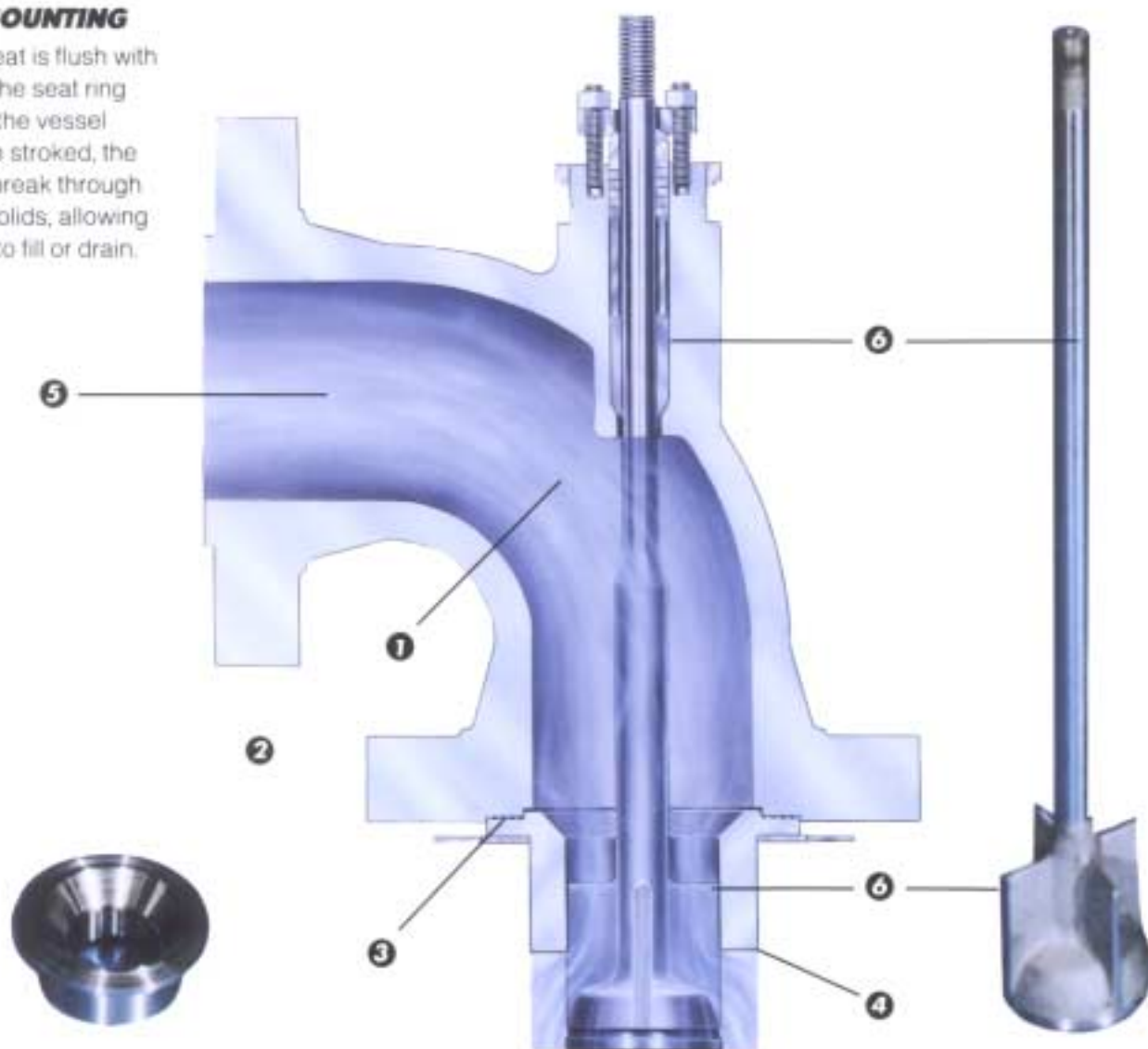
The plug seat is flush with the end of the seat ring and inside the vessel shell. When stroked, the valve can break through a layer of solids, allowing the vessel to fill or drain.

⑤ HIGHER CRITICAL FLOW FACTORS

Flow to close F_L 0.8 and flow to open F_L 0.9. The higher critical flow factor allows efficient pressure reduction and minimizes flashing or cavitation.

⑥ FULLY GUIDED ONE-PIECE PLUG AND STEM

One-piece plug and stem design eliminates troublesome mechanical joints. Guiding is both top and bottom. Top guiding is through a stem bearing, while bottom guiding is with full stroke length flutes on the plug head, thus eliminating vibration and fatigue.



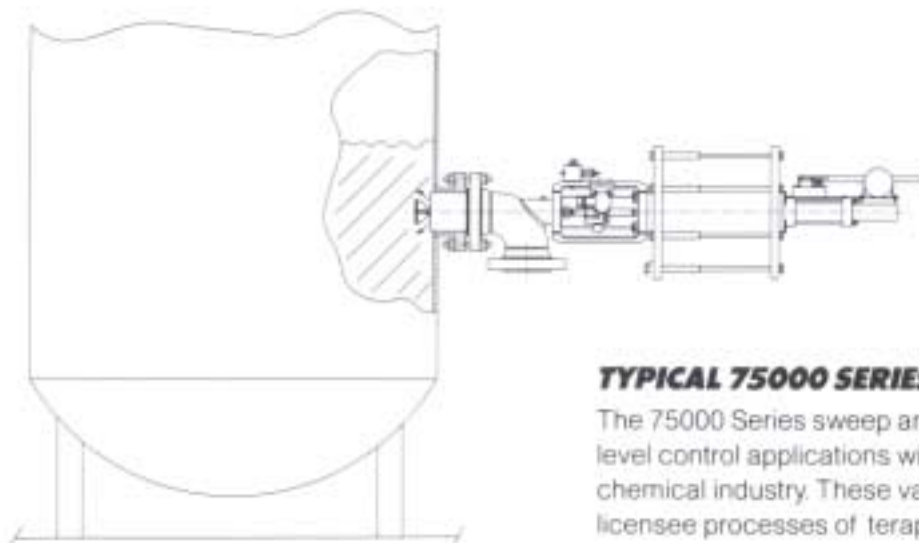
Masonellan-Dresser's unique sweep angle valve designs are coupled with engineered actuation ranging from manual and electric motor, to pneumatic, hydraulic and redundant combinations for failsafe reliability in flow control. Valves are designed and manufactured to suit each specific application.

These 75000 series angle valves are available in 45°, 60° and 90° designs to simplify piping hook-ups and ensure that vertical inlets remain vertical.

A wide variety of alloy steels for body and trim ensure long service life, even in the most severe environments.

Like other Masonellan valves, Series 75000 tank level control valves are backed by over 100 years of control valve experience and our worldwide Masonellan-Dresser service network. The valves are used in a wide variety of applications for reactor or crystalizer tanks.

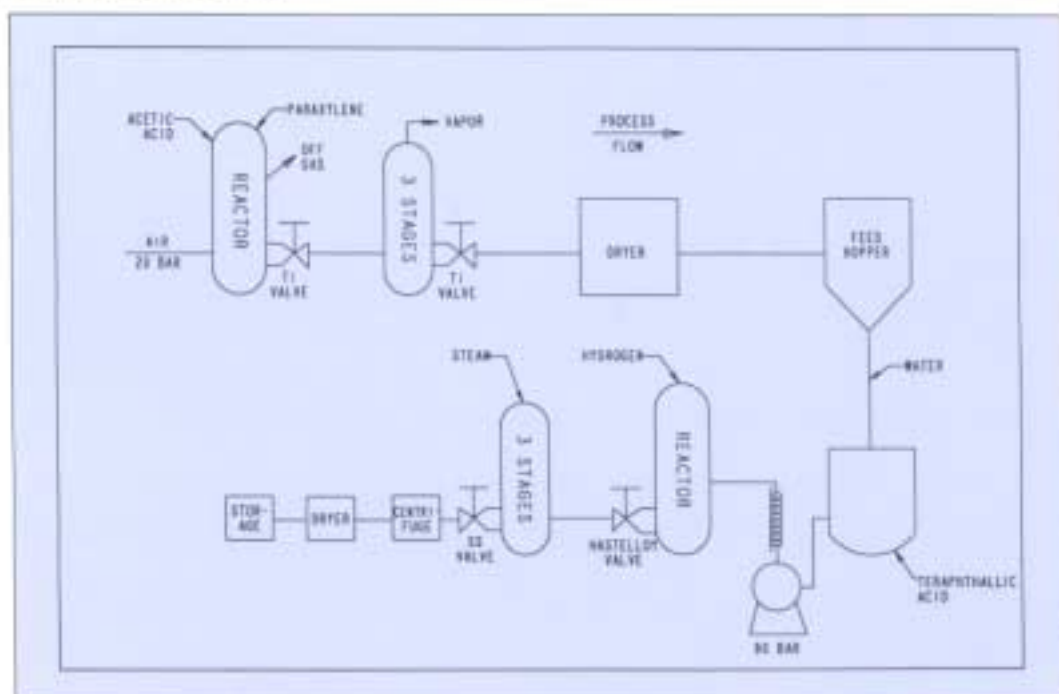
TYPICAL 75000 SERIES TANK DRAIN INSTALLATION



TYPICAL 75000 SERIES TANK DRAIN INSTALLATION

The 75000 Series sweep angle valves were designed primarily for use in level control applications with corrosive or viscous fluids prevalent in the chemical industry. These valves have been extensively applied in licensee processes of terephthalic acid and other volatile chemicals.

PTA PROCESS DIAGRAM

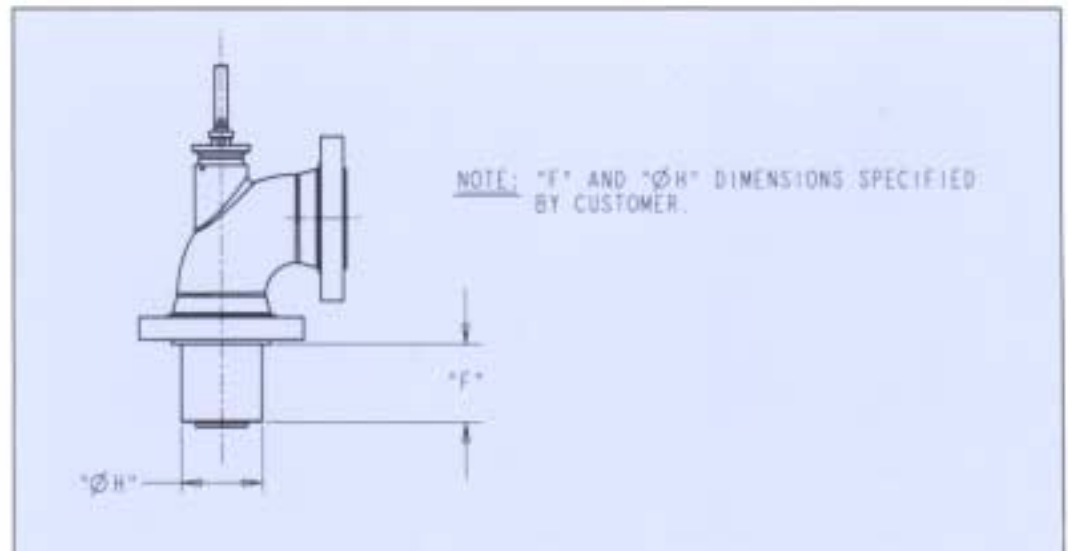
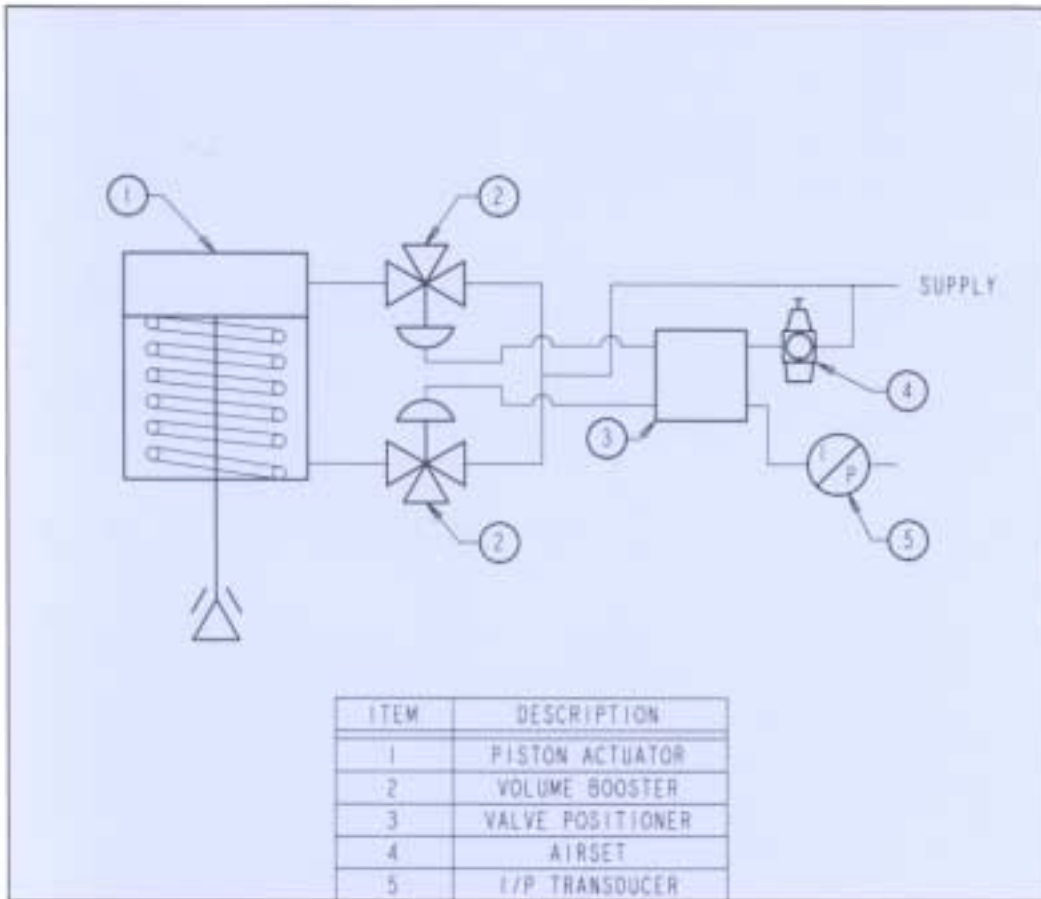


SUPER RESPONSE SCHEMATICS

Masoneilan-Dresser offers years of process control technology experience, including super response control

diagrams—such as the one below—for enhanced process control, valve diagnostics and smart positioners.

TYPICAL SUPER RESPONSE SCHEMATIC FOR ENHANCED CONTROL PERFORMANCE



PUTTING INDUSTRY IN COMPLETE CONTROL FOR OVER 100 YEARS

Why settle for an ordinary valve when you can have a long-term solution? Masoneilan has a century's experience in solving the most difficult control valve problems. As a member of Dresser Valve and Controls Division, we offer control valve expertise second to none.

SERVICE, SUPPORT AND SPARES

Our seasoned, factory trained field service team is on call worldwide for on-site repair, start-up assistance and training. We're known for quick response to virtually any problem you may encounter. For instance, even one-of-a-kind replacement trim can be shipped in 48 hours.



CUSTOM-ENGINEERED VALVES

Masoneilan - Dresser valves are custom-engineered at America's largest specialty control valve facility. No other major valve manufacturer has a full service operation dedicated to the design and production of special service, custom engineered valves.

Take advantage of this unmatched expertise. Our engineers will thoroughly analyze your application and promptly recommend the most technically appropriate and cost effective solution.

We guarantee the rapid response and quick turnaround of a specialty shop, along with the quality and performance of a worldwide corporation.



ACTUATORS AND ACCESSORIES



Damotor



77000 Series with Force Multiplication Actuation



Spring Diaphragm



Innovative Globe Valve with Cylinder Actuator

A comprehensive selection of pneumatic and electro-hydraulic actuators assures an exact match with your requirements and simplifies control system interface. A wide choice of accessories further assures that all your system needs and preferences can be accommodated with LINCOLNLOG style trim.

(Photos not to scale)

SIZE AND RANGE

Size	Class	Seat Dia Max	In ² Area	Seat Dia Min	In ² Area
3"	150/1500	2.50	4.91	1.50	1.77
4"	150/300	3.75	11.04	2.25	3.97
	600	3.50	9.62	2.25	3.97
	900	3.25	8.29	2.25	3.97
	1500	2.75	5.94	2.25	3.97
6"	150	5.25	21.64	2.25	3.97
	300/600	5.00	19.64	2.25	3.97
	900	4.75	17.72	2.25	3.97
	1500	4.50	15.90	2.25	3.97
8"	150/300	6.50	33.18	3.50	9.62
	600/900	6.00	29.27	3.50	9.62
10"	150	8.50	56.75	4.50	15.90
	300/600	8.00	50.26	4.50	15.90
	900	7.50	44.17	4.50	15.90
	1500	6.50	33.18	4.50	15.90

VALVE SELECTION AND SIZING

Due to the flashing characteristics normally experienced in these applications, valve sizing must be handled on a case-by-case basis. Extensive testing has produced sizing calculations which allow the C_v to be predicted within a $\pm 5\%$ error band.

For general guidelines it can be assumed that the F_L value is 0.9 for flow-to-open configurations and 0.8 for flow-to-close. Thus in severe flashing service, the flow-to-open configuration should be used. To determine an approximate flow capacity, the seat areas in the table can be multiplied by 28 for the flow-to-open configuration and 25 for the flow-to-close configuration. To determine final valve sizing, the application should be submitted to the factory for review.

Body Plug Seat Ring	Available in a wide range of materials from carbon steel to special titanium grades, dependent on fluid media and application. Appropriate hard facing and anti-galling treatments applied as required.
Actuators	Double action piston, spring opposed piston and spring opposed diaphragm
Positioners	Pneumatic and instrument to pneumatic
Packing	Graphite packing, braided teflon and teflon V ring (lubricated or purge designs available)
Valve Options	Heating jackets, body purge connections, extended bonnets, 45°, 60°, and 90° configurations

**BUILT TOUGH. FIELD PROVEN
MADE IN U.S.A.**



MANUFACTURING FACILITIES: AUSTRALIA, BRAZIL, CANADA, FRANCE, GERMANY, ITALY, JAPAN, MEXICO, SPAIN, U.S.A.
STANDARDS TO: ISO 9001, ISA, ASME, API, FCI, ANSI, CSA

