Features and Benefits

Tufline® Sleeved Plug Valves, can be furnished with caged plugs to provide soft seat protection in throttling applications and in services with high pressure drops through the valve. The caged plug design allows metal-to-metal throttling while providing metal-to-soft seat shutoff for both automatic and manually controlled applications.

The design is simple and efficient. The cage is located within the plug and is fixed in the valve body. Bearings on the flow cage provide clearance between the plug and cage, allowing the plug to rotate freely.

The cage plug assembly protects the seat from erosion in throttling applications by shielding the soft seat from direct flow impingement at the valve ports. The cage mechanism also serves to reduce turbulence and the cutting action of high velocity liquids, slurries and gaseous vapors by providing a more direct, contoured flow path through the valve.

Available Materials & Sizes

Cage Control Valves are available in sizes 1” through 12”. Standard body material are WCB or CF8M while the standard plug and cage material are CD4MCU. Other sizes and materials are available upon request.
Throttling Pressure Drop Limitations for Plug Control Valves

1. The chart to the right may be used for evaluating throttling pressure drop at any position for valves 4 inch and smaller. Consult the factory for 6” to 12” pressure drop information. *(Note: In the closed position, valve can withstand full pressure drop).*

2. Cage Control Valves have the same pressure-temperature rating as standard valves. Refer to the standard sleeved plug valve pressure-temperature chart for specific material rating.

Plug Valve Trim Options
- Reduced ports: 50%, 25%, 12-1/2%, 6-1/4%, and 3-1/8% of standard Tufline Valve Cv
- V-ports
- Special port shapes for unusual processes are available upon request

Typical Applications
- Waste Sludge
- Raw River Water
- Alum
- Brine
- Sulfuric Acid with Zinc Powder
- 45%-50% KOH in water
- Phosphoric Acid Slurry
- Borax One Supply
- Trona Slurry
- Soda Ash
- Titanium Dioxide
- Scrubber Effluent
- Dilution Liquor
- Green Liquor
- Heavy Black Liquor
- Lime Mud
- Digestor Relief
- Caustic Soda
- Clay Slurry
- Starch Slurry
- Calcium Carbonate
- Fly Ash Slurry
- Tank Bottom Residues
- Sodium Chlorate Solution

Dimensional Data
The Tufline Cage Control modification does not effect or change the dimensions from the standard valve design. Please refer to the appropriate valve type for dimensional information.

Operating Torques
The Tufline Cage Control modification does not effect or change the operating torque from the standard valve design. Please refer to the appropriate valve type for operating torque information.
How to specify

Size & Figure No.
See Quick Reference Selection Table on the previous page

Options
Fire Tested ........ FT
Tertiary Top Seal .... TS

Valve specifications may include multiple options.

Size  066  CCV  FT  6  27  P1  W  C

Service
General Service ... Blank
Other** ... X

Operator
Less Operator .... N
Wrench ............. W
Wrench with locking device . WY
Gear ............... G
Gear with locking device . GZ
Actuator* ........ A

Body
Carbon Steel ... 2
316SS ............ 6
CD4MCu .......... 27
Other(Specify) . X

Sleeve
PTFE ............ P1
15% RPTFE . P2
PFA .......... P6
Tufline-475 . P16
Tufline-600 . P20

Plug & Cage
CD4MCu ...... 27
Other (Specify) . X

* Specify actuator type and available air supply.
** Consult your Xomox Sales Engineer for a wide variety of other available service options.
Worldwide capabilities.

No matter where in the world you are, Xomox technical support and services are available from:

- 16 Manufacturing Facilities
- 18 Service Centers
- 50 Sales Offices
- More than 200 Xomox Authorized Distributors

Product selection.

Xomox offers the broadest line of process valves, actuators, accessories, and related services including:

- Tufline® Process Valves
- Saunders® Diaphragm Valves
- Matryx® Rack & Pinion, Vane Actuators
- Xomox XRP™ Actuators

Global locator.

For a listing of Xomox Manufacturing Facilities, Service Centers, Regional Offices, and Authorized Distributors, visit our web site www.xomox.com.

Xomox literature.

All Xomox catalogs and technical data are available as PDF files at www.xomox.com.

Phone support.

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Phone: 513-745-6000
Fax: 513-745-6093

Corporate strength.

Xomox is a Crane Co. company. Through the Crane Co. association, Xomox offers even greater global capabilities and breadth of product lines.

Xomox Corporation
World Headquarters
4444 Cooper Road
Cincinnati, Ohio 45242

Product responsibility.

Xomox's concern for product performance extends to the product's period of service. We feel it is important for users to also be aware of their responsibilities. Our products are manufactured and used in numerous applications with a wide variety of service conditions. While general guidelines are often furnished, it obviously is not possible to provide complete and specific performance data for every conceivable service condition.

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