

LTG5 Series Control Valves

LTG5 Series top guided control valves are specially designed for the control of particular fluids where dead zones inside the valve body are not tolerated due to risk of crystallization, local corrosion, scaling or seizure. These features pertain to top guided LTG1 series, but a different plug-to-stem solid construction is performed in LTG5 valve to avoid any residual areas where fluids can stagnate. Particular care is paid to the packing zone where stagnation of fluid could cause stem corrosion, wear and leaks. Cv and other sizing factors are the same of LTG1 series. Typical applications of these valves are:

- Food industry and drinking water
- Pharmaceutical processes
- Urea, melamine and similar plants

Main features:

- 1 - No dead zones inside the body with reduced contamination and erosion
- 2 - Stem-to-plug solid design which:
 - avoids dead zones inside the bonnet including packing box chamber
 - avoids coupling stem-to-plug which can be affected by local corrosion and consequent loosening
 - provides an excellent alignment between stem and plug with benefit for the packing tightness
 - increases trim stiffness due to oversized stem diameters
- 3 - reduced distance from packing to body inside cavity keeps the packing temperature very close to that of internal fluid so to prevent solidification inside the packing

Technical characteristics:

Body:

- Flanged and butt-welded connections –also plug type is available
- Cast construction – also wrought or by bar for small dimensions
- Face-to-face dimensions as per IEC 60534-3-1 long series
- Sizes: 3/4", 1", 1"1/2, 2", 3", 4", 6"
- Ratings up to ANSI 600 – ANSI 1500 for sizes up to 2" included
- Materials: carbon, Cr-Mo, AISI 316, AISI 316L, duplex, hastelloy for sizes up to 3" – other on request
- Flow direction: – to open
– to close only for balanced plug

Bonnet:

- Flanged to body
- Same materials as body
- seal rings: reinforced braided Teflon or pure graphite

Trim:

- Top guided unbalanced plug – integral with stem
- Guide: an extra-long bush fitted into the bonnet
- Flow characteristic: linear and equi% up to 2" port included modified linear for higher sizes
- Type of plug: contoured or flat for quick opening operation
- Soft seat: teflon insert fitted into the plug
- seat ring: threaded in std design – also welded-in or integral for high corrosive services

Materials:

- Inox, hastelloy, duplex, HVD1, other alloys and coatings on request and when necessary

Leakage Class:

- Std IV – optional V or VI

Actuators:

- Pneumatic diaphragm or piston types
- Electric and electro-hydraulic on request



LTG5 high pressure lug body type for urea service

Item	Part name
1	BODY
2	BONNET
3	STEM
4	STUD
5	NUT
6	BODY GASKET
9	PLUG
10	SEAT RING
11	SEAT GASKET
12	GUIDE BUSHING
13	PACKING FLANGE
14	PACKING STUD
15	PACKING NUT
16	PACKING FOLLOWER
23	SPACER
24	SPACER
25	PACKING BOX

