

## LTG1 and LTG2 Control Valves

Globe straight-way, single seat **LTG1 and LTG2** series are very versatile control valves of general use for any applications under moderate p/T service conditions. LTG1 is the standard design with screwed seat ring while LTG2 is the corresponding quick-change version with the same flow coefficients and pressure differentials capability. Due to their simple construction and to their large range of available materials these valves are suitable for a wide range of applications, such as corrosive, dirty, sticking and slightly abrasive fluids. Angle-body LTA special design is also available with the same trims of LTG series.

- Main advantages:**
- **Excellent plug stability** provided by heavy top guiding design
  - **Interchangeable** low noise and anticavitation trim either for std or quick-change design
  - **Tight shut-off class V and VI** also available
  - **Wide flow range capability** is allowed by a great number of reduced capacity trims

### Technical characteristics:

#### Body:

- **Sizes:** 3/4", 1", 1"1/2, 2", 3", 4", 6"
- **Ratings:** up to ANSI 600 /PN100
- **Flanged, butt-welded, SW, and threaded**
- **Cast construction**, also wrought or by bar for smaller dimensions
- Face-to-face dimensions as per IEC 60534 –3-1
- materials: carbon, Cr-Mo and AISI 316 stainless steel
- **Flow direction:** – to open.  
– to close for some flashing applications
- **Materials:** Carbon, Cr-Mo and Stainless Steels

#### Bonnet:

- Bolted to body
- **Extended** for high and low temperatures
- **Bellows seal**
- Special design for cryogenic applications
- Same materials as body

#### Trim:

- **Top guided plug** both in LTG1 and LTG2 constructions
- **Linear, modified linear and Eq% flow characteristics**
- Plug types: – **contoured**  
– **flat disc** for quick opening operation  
– **skirted and drilled BRD design** (linear characteristic) for special services  
– **soft seat** - only for contoured and flat disc

#### Packing:

- **Adjustable** by nuts and follower
- Seal rings: **reinforced braided teflon** or **pure graphite split-rings**
- **Bellows seal**

#### Rangeability:

- $Cv_{max}/Cv_{min}$  **better than 50:1** for 1" port and over

#### Cage (LTG2 only):

- Seat ring clamped into the body by the cage for **quick-change feature**
- Large windows of cage do not affect the inherent flow characteristic (including max Cv) of LTG1 corresponding trims



*LTG2 ANSI 300  
Diaphragm Actuator*

## Seat Ring:

- Threaded in LTG1 model and **clamped-in** in LTG2 model

## Leakage Class (IEC 60534-4):

- Standard: class IV
- Optional: class V and VI

## Actuators:

- Pneumatic diaphragm or Piston type
- Electric and Electro-Hydraulic actuators

## LTA design

Globe types LTG1 and LTG2 are also available with **angle body**.

In this case they are designated as **LTA1** and **LTA2 Control Valves**.

LTA series are special engineered designs. The advantages provided by LTA series are the following:

- 1 - **Different dimensions** for valve inlet and outlet are available
- 2 - Inlet and outlet **ratings** can also be different
- 3 - Centre-to-face dimensions consistent with IEC standard when the connections have the same dimensions
- 4 - **Increased Cv values** in comparison with LTG1 and LTG2 standard body style due to less pressure drop of angle path
- 5 - Trims, characteristics, material and actuators are the same of standard LTG series



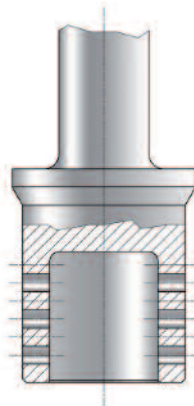
*LTG1 ANSI 600 Electric Actuator*



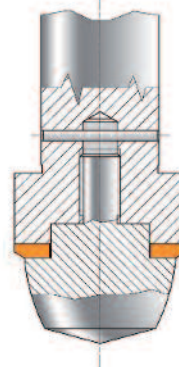
*LTA Control Valve*



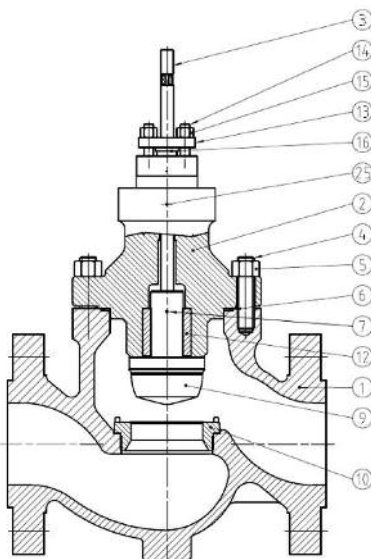
*Standard contoured plug*



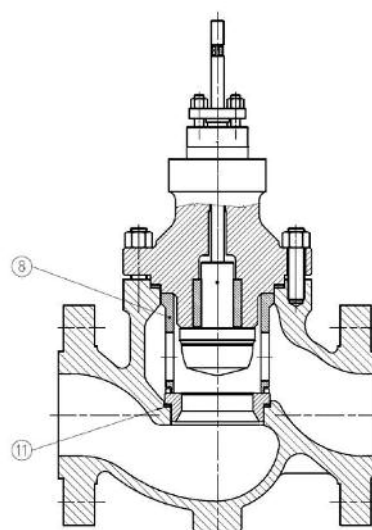
*BRD trim*



*Soft seated plug*



*LTG1 Std contoured plug*



*LTG2 Std contoured plug*

Pos.	Part Name
1	BODY
2	BONNET
3	STEM
4	STUD
5	NUT
6	BODY GASKET
7	PIN
8	CAGE (LTG2 only)
9	PLUG
10	SEAT
11	GASKET (LTG2 only)
12	GUIDE BUSHING
13	PACKING FLANGE
14	PACKING STUD
15	PACKING NUT
16	PACKING FOLLOWER
25	PACKING BOX