GTX series Bolted bonnet design

NPS 2-36 (DN 50- 900), ASME Classes 150-2500 NPS 1¹³/₁₆-16³/₄ (DN 46-425), API Classes 5000-10000

GTX series valves are specifically design for on-off services and are suited to withstand all types of high abrasive services under high pressure and temperature conditions.

The valve is equipped with a wedge and segment. The system achieves its positive seal capacity by mechanically expanding the gate and segment against the seats due to the thrust exerted by the stem.



Specifications

| Valve design | As per API 6D or API 6A standards and customer requirements |
|-------------------|--------------------------------------------------------------------------------------------------------|
| Body design | Forged or cast bolted one-piece |
| Temperature range | -150 to 662°F (-101 to 350°C) |
| Face-to-face | As per API 6D or API 6A standard |
| End connections | RF, RTJ as per B16.5 & B16.47 BW, Butt weld as per B16.25 Hub connection 6B, 6BX as per API6A |

In both in closed and open position, the expansion creates a tight seal against the upstream and downstream seats. During the valve stroke, this unique design resists expansion of the gate, allowing it to slide, avoiding wear of seats and gate.

Valves are piggable in the fully open position and generate pressure drop across the valve equal to the inside diameter of the connecting pipe. Material selection is fully customizable to meet customers project specifications.

Design features

- Metal-seated with hardfacing on wedge and seats.
- Secondary seals in pure Graphite.
- Anti-static device.
- Anti-blowout stem.
- O-ring /lip seal configuration.
- Fully piggable design.
- Negligible pressure drop in fully open position.
- Relief valve in the body cavity.
- Easy in line maintenance.
- Customized design for horizontal stem installation or vertical pipeline installation available.

Operator

- Manual: Gear with handwheel.
- Actuated: Linear pneumatic/hydraulic/electric.

Testing & certification

- Compliance with inspection and testing: API 6D, ISO 5208, and API 598 or API 6A.
- Fire safe and fire tested as per API 6FA/607.
- Fugitive Emission as per ISO15848
- PED 2014/68/UE.
- Available as per API 6A:
 Product specification levels PSL 1, 2, 3, 3G, and 4.

 Performance requirement levels PR1, PR2.
 Design validation as per PR2F.

