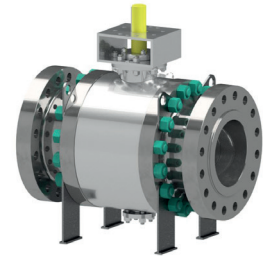


Trunnion mounted

High temperature applications

For continuous operating temperatures over 200 °C (392 °F), standard polymers and elastomers are no longer feasible. In this harsh environment static and dynamic seals are built in graphite-based materials, while the trim is metal seated.



Gas processing



Oil gathering



Power generation



Gas liquefaction



Heavy industry



Gas engines

| Features | Values |
|------------------------|---|
| Pressure rating* | ANSI classes from 150 to 2500 |
| Design temperature* | From -29 °C to +538 °C From -20 °F to +1000 °F |
| Nominal sizes* | 1/2" to 36" NPS 15 to NPS 900 |
| Connections* | <ul style="list-style-type: none"> RF and RTJ flanges as per ASME B16.5, B16.47 and MSS SP-44 Butt welding ends as per ASME B16.25 Threaded and socket weld ends |
| End to end dimensions* | ASME B16.10 |
| Construction* | Side entry bolted body Extended stem for insulation purposes |
| Operator* | <ul style="list-style-type: none"> Bare stem Gear operated Motor operated (pneumatic, hydraulic, gas over oil or electric actuator) |

(* REMARK: Different functional features and/or materials available on request.

Stated temperature ranges are the maximum for which the standard equipment's full performance is fulfilled.

(**) REMARK: If necessary, proper material pups can be welded to the valve to fit connecting pipe material.

Table 1 Features

Materials and Approvals

| Part | Material |
|---------------------|---|
| Metallic materials* | <ul style="list-style-type: none"> High temperature carbon steel (body, connectors**, ball, seats, cover, top flange) Stainless steel (stem) |
| Soft parts* | <ul style="list-style-type: none"> Graphite both for static and dynamic seals Elastomers (FKM, HNBR) back-up seals on top of stem extension |
| Coatings* | HVOF chromium carbide coating (CCC) |

**(*) REMARK: Different functional features and/or materials available on request.
Stated temperature ranges are the maximum for which the standard equipment's full performance is fulfilled.
(**) REMARK: If necessary, proper material pups can be welded to the valve to fit connecting pipe material.**

Table 2 Materials

Product certification:



API 6D
Cert. no.
6D-1170



API 6A
Cert. no.
6A-1252



API 6DSS
Cert. no.
6DSS-0057



IEC 61508 SIL 2
Cert. no.
50 100 13288
REV.005

System certifications:



ISO 9001
Cert. no.
50 100 9927
Rev.006



Pressure Equipment
Directive (PED)
2014/68/EU
Certificate no.
PED-0948-QSH-490-16
REV. 3



ISO 14001
Cert. no.
50 100 13288
REV.005



ISO 45001
Cert. no.
50 100 13322
REV.005

TIV Valves production range has also a wide coverage for fire-safety as per API 607 and API 6FA and for fugitive emissions as per ISO 15848-1. In addition, thanks to a long-term cooperation with international energy companies and EPC contractors, TIV complies with many customers specifications, including design validation procedures.