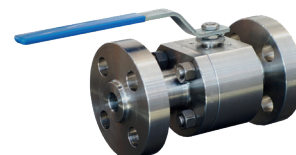


Floating valves

In the **floating valve** by Pietro Fiorentini the ball is not rigidly held on its rotational axis and so is free to float between seats. Sealing is achieved by the action of the pressure, which pushes the ball against a seat and the body construction is two pieces, bolted joint, made by forging, forged or rolled bar. Mainly used for high-pressure transmission systems and for medium pressure gas distribution networks, it is suitable for use with natural gas and previously filtered non-corrosive gases. The floating ball valves are Hydrogen Ready for NG-H2 blending.



Floating units



Gas processing



Oil gathering



Green gas production



Gas transmission HP



Gas distribution MP



Gas distribution LP

Features	Values
Pressure rating*	<ul style="list-style-type: none"> ANSI classes from 150 to 2500 API pressure ratings from 13.8 MPa to 103.5 MPa from 138 barg to 1035 barg
Design temperature*	from -196 °C to +538 °C from -321 °F to +1000 °F
Nominal sizes*	1/2" to 60" NPS 15 to NPS 1500
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 6B and 6BX flanges as per API 6A Threaded and socket weld ends Hub ends as per customer specifications
End to end dimensions*	<ul style="list-style-type: none"> ASME B16.10 API 6A TIV standard for sizes not covered by above specifications As per customer specifications
Top mounting	ISO 5211
Construction*	<ul style="list-style-type: none"> Side entry bolted body Top entry bolted body Side entry welded body Modular bolted body (two balls in one body)
Operator*	<ul style="list-style-type: none"> Bare stem Gear operated Motor operated (pneumatic, hydraulic, gas over oil or electric actuator)

(*) REMARK: Due to normative limitations or technical feasibility, not all combinations of above features and materials are available. Please contact TIV Valves for further information about actual configurations based on service requirements.

Table 1 Features

Materials and Approvals

Part	Material
Metallic materials*	<ul style="list-style-type: none"> Carbon steel and low temperature carbon steel Stainless, duplex and super-duplex stainless steel Exotic alloys
Soft parts*	<ul style="list-style-type: none"> Polymeric (PTFE, RPTFE, PEEK, Devlon-V, PCTFE) Elastomeric (FKM, FFKM, HNBR) Graphite
Coatings*	<ul style="list-style-type: none"> Electroless Nickel Plating (ENP) Weld overlay (316SS, N06625) HVOF (Tungsten or Chromium Carbide Coating)

(*) REMARK: Due to normative limitations or technical feasibility, not all combinations of above features and materials are available. Please contact TIV Valves for further information about actual configurations based on service requirements.

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



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.