



### CSK series Bolted bonnet design

NPS 2–36 (DN 50–900), ASME Classes 150–2500

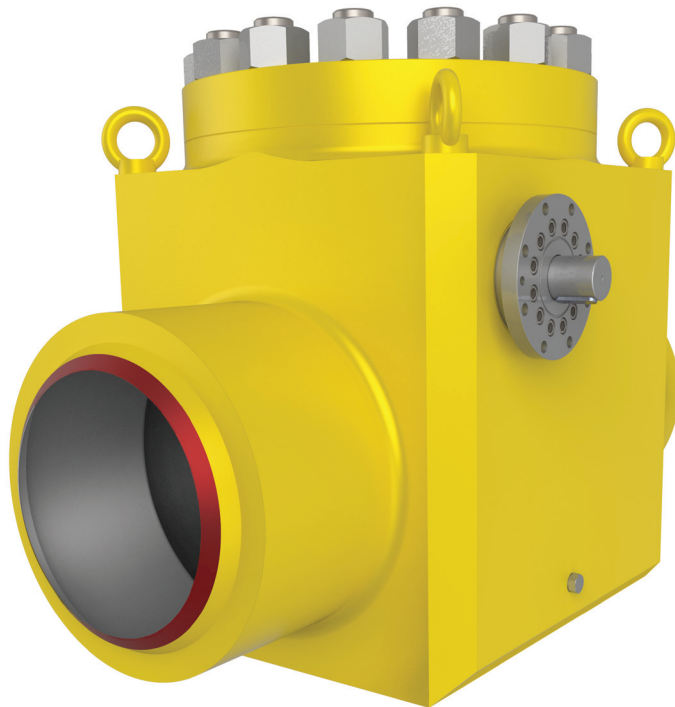
Subsea swing check valves are suitable in water depths to 500 m (1700 ft) and maintain an average service life of 25 years. Available in both forged or cast materials, the design ensures total reliability for high pressure and high temperature services.

The swinging action of the disc away from the seat allows forward flow and when the flow is stopped, the disc returns to the seat, preventing backflow. Swing check valves are suitable for installations in lines where pigging operations

are required for various maintenance services. The piggable design makes the swing check valve ideal for installation in riser pipelines and subsea applications.

Convenience of operation and simple in-line maintenance are essential features of our design. Internal parts can be inspected and repaired without removing the valve off the pipeline even where space is restricted as in the top-entry trunnion ball valve construction.

The valve can be installed in both vertical and horizontal positions and offers unsurpassed quality and reliability—while the simple design minimizes maintenance costs. Material selection is fully customizable to meet customers project specifications.



#### Design features

- Metal-seated with hardfacing on disk and seat.
- Welded-in-seat ring.
- Body/bonnet sealing with a secondary environmental soft seal as additional barrier to seawater ingress into the valve
- Easy in-line maintenance as in the top-entry trunnion ball valve construction.
- Suitable for horizontal and vertical (flow-up) installation.
- Suited for low velocity service.
- Fully piggable design.
- De-clutchable device for lock opening during pipeline cleaning with ROV interface.
- Suitable for flow rates with corrosive and dirty fluids.
- Cathodic protection for the whole system, on request.

#### Specifications

<b>Valve design</b>	As per API 6DSS standard and customer requirements
<b>Body design</b>	Forged or cast bolted one-piece
<b>Temperature range</b>	-76 to 410°F (-60 to 210°C)
<b>Face-to-face</b>	As per API 6D standard
<b>End connections</b>	RF, RTJ as per B16.5 & B16.47 BW, Butt weld as per B16.25 Hub connection

#### Operator

- Automatic

#### Testing & certification

- Compliance with API 6DSS inspection and testing.
- PED 2014/68/UE.
- Hyperbaric validation testing as per API 6DSS.