



Swing, Piston and Axial Check Valves

Subsea & Surface Check Valves for 'non-return' applications



APPLICATIONS

- Prevent backflow in pipelines
- Zero leakage requirements
- Protection of upstream equipment
- Severe service
- High temperature
- High pressure
- Corrosive environments
- Oil or gas
- Process isolation
- Protection of rotating equipment

There is an obvious need to protect systems against process back flow and resultant fluid contamination so selecting the right non-return or check valve for an application is vital. The type and composition of the process fluid; working environment; duty and shut off performance; the field life and finally the criticality of zero contamination are all influencing factors in specification development. Check valves are an important defence when dealing with pressure surges so determining the optimum design to meet performance requirements takes expertise.

SWING CHECK VALVE

The disc attached to the underside of the bonnet is designed and manufactured as a one piece construction delivering robust performance in order to manage the severe shock duties sometimes experienced in service.

PISTON CHECK VALVE

Have a piston (or ball) that is guided and spring loaded so that as the upstream pressure varies the piston 'floats'.

AXIAL CHECK VALVE

Is also spring loaded but the 'in line' configuration results in limited pressure drop across the valve. This small, compact design is therefore a proven and reliable option for use in protecting rotating equipment.

OPERATIONAL BENEFITS

- Protection against pressure surges
- Protection against backflow contamination
- Robust design

CONFIGURATIONS

- Swing check - hinged closure mechanism which shuts under reverse flow conditions
- Piston check - utilising a piston and damping mechanism to prevent back flow
- Axial check - has a symmetrical and unrestricted flow path to reduce pressure drop across the valve
- Surface or subsea

OPTIONAL FEATURES

- Flanged, butt weld, socket weld, hub connectors or other proprietary connections
- Counter balance/torsion spring option for additional closing force
- Lock open mechanism for bi-directional flow requirements
- Full or reduced bore
- Metal to metal or soft seated designs
- Duplex trim
- CRA overlays
- Project specific bores



ENGINEERING EXCELLENCE

MANUFACTURING EXPERTISE

PROJECT DELIVERY

FLEXIBILITY OF APPROACH

CONFIDENCE

BEL Valves are leaders in the design and manufacture of critical subsea and surface valves, actuators and controls for the oil and gas industry worldwide.

Specific design and engineering focus is placed on high pressure and high integrity applications to ensure the delivery of optimum solutions for the most hostile environments.

Our enabling technologies ensure the most complex systems can be developed in a reliable and safe manner.



We encourage customers to visit our site and make use of our in-house resources. However, logistics dictate that this is not always possible which is why we have established a network of local support:

- | | |
|----------------|----------|
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