#### **Cast Steel Check Valves Bolted Bonnet**

The API BS 1868 series of Swing Check Valves is exceptionally sturdy, rugged and durable, with a reputation for quality, integrity, and long service.

They are designed for tight sealing and ease of operation. The valves are available flanged & butt-weld ends in pressure rating from ASME Class 150 to Class 2500, and in a variety of materials of construction.

Check Valves are of swing-type and bolted-cover construction. They conform to BS 1868 and also meet the general requirements of API 600, including shell wall thickness.

#### Main features

- Bolted body-cover design, seal welded & Valves with pressure seal cover
- Bolted body-cover joints provided with spiral-wound stainless steel gasket and graphite filler for maximum protection against leaks
- Die-formed graphite inner packing rings and braided graphite end rings with Inconel wire reinforcement and corrosion inhibitor
- T-head stem-disc connection of gate valve fully meets strength requirements of API 602 and API 598
- Rolled ACME thread on the stem for smooth operation
- Tapered shoulder on the stem for back seating
- Self-aligning type gland assembly with stud-and-nut tightening
- Integral hard-faced body seat for globe and check valves
- Spring-loaded disc on check valves suitable for no horizontal applications too
- Gate and globe valves can be offered with electrical actuators
- Austenitic SS forging for body and bonnet of Cryogenic valves, resulting in excellent impact strength, minimal heat loss, and resistance to corrosion
- Valves can be offered to NACE MR-0175 and other special NACE requirements

# Cast steel ASME B16.34 Swing Check Valves Pressure Seal Bonnet design

The ASME B16.34 Swing Check, and Y Type Swing Check Valves feature a pressure seal bonnet design for high-pressure services. These valves are extensively used in high pressure and high-temperature steam, oil, gas, chemical, and water applications in thermal power plants, fertilizer plants, petrochemical plants, and refineries. These valves are available in butt weld ends in pressure ratings of Classes 900, 1500 and 2500, and come in carbon steel and alloy steel construction.

### Forged Steel Check Valves (Standard Pattern)

#### Main features

- Bolted Body-Cover design for valves from Class 800 up to Class 2500. Valves with welded bonnet also available on request
- Screwed with a seal-welded body-bonnet design for valves of Class 2500
- Bolted body-bonnet joints provided with spiral-wound stainless steel gasket and graphite filler for maximum protection against leaks
- Die-formed graphite inner packing rings and braided graphite end rings with Inconel wire reinforcement and corrosion inhibitor
- T-head stem-disc connection of gate valve fully meets strength requirements of API 602 and API 598
- Rolled ACME thread on stem for smooth operation
- · Tapered shoulder on the stem for back seating
- Self-aligning type gland assembly with stud-and-nut tightening
- Integral hard-faced body seat for globe and check valves
- Spring-loaded disc on check valves suitable for no horizontal applications too
- Gate and globe valves can be offered with electrical actuators
- Austenitic SS forging for body and bonnet of Cryogenic valves, resulting in excellent impact strength, minimal heat loss and resistance to corrosion
- Valves can be offered to NACE MR-0175 and other special NACE requirements

#### Y PATTERN CHECK VALVES

Forged Steel Y-pattern Check Valves have established themselves in the industry for their rugged and compact design, and reliable service. These valves are offered in Carbon Steel and Alloy Steel. They are available in a range of sizes starting from 1/4" to 2" (in reduced-bore design) and from 3/8" to 1 1/2" (in full-bore design).

The rugged construction ensures an ideal body and Cover, suited to handle high pressure and temperatures - up to 425 0 C in carbon steel and 540 0 C in alloy steel.

The Y-pattern design ensures a near-perfect straight flow which significantly reduces pressure drop and turbulence when compared to conventional designs.

As a standard, valves are supplied with a screwed body-bonnet joint, which ensures ease of inspection and in-line maintenance, thus minimizing downtime.

Y-pattern valves can be offered to NACE MR-0175 and other special NACE requirements.

# Y-pattern Check Valves

Y-pattern Check Valves incorporate the same design and construction features as their globe valve counterparts. The spring-loaded disc minimizes chattering and enables the valve to be installed either in a horizontal or vertical position.

# Descriptions Highligted in Yellow should be placed for

# **Product no**

A)

1,2,4,6

B)

1,4,5

C)

1,3,4,6

D)

1,2,3,4,5,6,7,8,9,10,11,12,13,14,15

E)

1,2,3,5,6

And remaining keywords should have blue color description

- A) Valves By Construction (Swing Check Valve)
- 1) Bolted Bonnet Swing Check Valve
- 2) Pressure Seal Cover Swing Check Valve
- 3) Welded Cover Check Valve
- 4) Swing Check Valve
- 5) Piston Type Lift Check Valve
- 6) Metal to metal seated Swing Check Valve
  - B) Valves By End Connection (Swing Check Valve)
- 1) Flange End Swing Check Valve
- 2) Screwed NPT Piston Type Check Valve
- 3) Socket Weld Piston Type Check Valve
- 4) Buttweld End Swing Check Valve
- 5) RTJ End Swing Check Valve
  - C) Valve By Design (Swing Check Valves)
- 1) BS 1868 Swing Check Valve
- 2) BS 6364 Swing Check Valve
- 3) API 6D Swing Check Valve
- 4) ASME B16.34 Swing Check Valve
- 5) Y Type Piston Type Lift Check Valve
- 6) Y Pattern Swing Check Valve

- D) Valves By Materials (Swing Check Valve)
- 1) A216 WCB Cast Carbon Steel Swing Check Valve
- 2) A216 WCC Cast Carbon Steel Swing Check Valve
- 3) A217 WC6 Cast Alloy Steel Swing Check Valve
- 4) A217 WC9 Cast Alloy Steel Swing Check Valve
- 5) A217 WOO Odst Alloy Otech Owing Officer Valv
- 5) A217 C5 Cast Alloy Steel Swing Check Valve
- 6) A217 CA15 Cast Alloy Steel Swing Check Valve
- 7) A351 CF8 Stainless Steel Swing Check Valve8) A351 CF8M Cast Stainless Steel Swing Check Valve
- 9) A351 CF3 Cast Stainless Steel Swing Check Valve
- 10) A351 CF3M Cast Stainless Steel Swing Check Valve
- 11) A351 CP3M Cast Stalliness Steel Swing Check Valve
- 12) A352 LCB Carbon Steel Swing Check Valve
- 13) A352 LCC Carbon Steel Swing Check Valve
- 14) Duplex Stainless Steel Swing Check Valve
- 15) A105 Forged Carbon Steel Piston Type Lift Check Valve
- 16) A182 FSS304 Stainless Steel Piston Type Lift Check Valve
- 17) A182 FSS16 Stainless Steel Piston Type Lift Check Valve
- 18) A182 F304L Stainless Steel Piston Type Lift Check Valve
- 19) A182 F316L Stainless Steel Swing Check Valve
- 20) A182 F321 Stainless Steel Piston Type Lift Check Valve
- 21) A182 F321H Stainless Steel Piston Type Lift Check Valve
- 22) A182 F51 Duplex Stainless Steel Piston Type Lift Check Valve
- 23) A182 F9 Alloy Steel Piston Type Lift Check Valve
- 24) A182 F91 Alloy Steel Piston Type Lift Check Valve
- 25) A182 F5 Alloy Steel Piston Type Lift Check Valve
- 26) A182 F11 Alloy Steel Piston Type Lift Check Valve
- 27) A182 F22 Alloy Steel Plston Type Lift Check Valve
- 28) A350 LF2 Alloy Steel Piston Type Lift Check Valve

#### E) Valve By Class

- 1) Swing Check Valve Class 150
- 2) Swing Check Valve Class 300
- 3) Swing Check Valve Class 600
- 4) Piston Type Lift Check Valve Class 800
- 5) Swing Check Valve Class 900
- 6) Swing Check Valve Class 2500
- 7) Swing Check Valve Class 4500