

DUAL PLATE vs SWING CHECK

ADVANTAGES OF GOODWIN WAFER CHECK VALVE vs SWING CHECK VALVE

The short face-to-face design inherently makes the Goodwin Check Valve lighter and more compact than a swing check valve, leading to ease of installation and lower costs. Typically, the Goodwin Wafer Check Valve (Type BR) is less than one quarter the weight and one quarter the face-to-face of a traditional full-bodied swing check valve.

The significant savings in space and weight that are achieved by specifying Goodwin Wafer Check Valves instead of swing check valves are accompanied by a substantially lower purchase price. The comparison table illustrates for a 24" 150# Carbon Steel body valve the relative price saving to be made. Should the valve body material be of Stainless Steel, Duplex Stainless Steel, high nickel alloy or some other high grade material, then the savings that can be made by specifying and using Goodwin Dual Plate Wafer Check Valves escalate.

Generally, with the Goodwin Check Valve:

- ◆ The larger the valve diameter
- ◆ The higher the pressure class
- ◆ The higher the grade of material

- ◆ The greater the cost saving

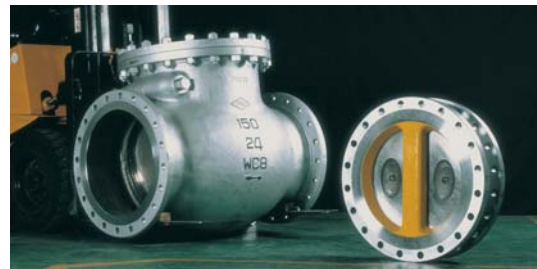
For new construction projects, check valve costs can be reduced by as much as 70% by utilizing Goodwin Wafer Check Valves instead of traditional flanged full-bodied swing check valves.



8" ANSI 150# Swing Check = 128kg
8" ANSI 150# Goodwin Wafer Check = 36kg

FLANGED DUAL PLATE CHECK VALVE VS. SWING CHECK VALVE

Many client company specifications exclude wafer type valves. The Goodwin Flanged Dual Plate Check Valve allows installation in a piping system in a conventional double flanged manner, i.e. studs and nuts per flange connection. Although higher in price than wafer design the flanged style check valve still provides very significant weight, space and cost savings against their traditional swing check valve.



24" ANSI 150# Check Valves
Swing Check: 1346kg Goodwin Flanged Check: 409kg

24" ANSI 150lb Carbon Steel			
Type	Swing Check	Wafer Type BR	Flanged Type BFR
Weight	1346 kg	337 kg	409 kg
Face to Face	51" / 1295 mm	8.75" / 222 mm	8.75" / 222 mm
Cv	20,800	26,511	26,511
Price in US\$	US\$8,240	US\$2,267	US\$3,252

TECHNICAL SUPERIORITY

Additional to the Dual Plate Check Valve offering commercial benefit in terms of its low relative purchase price and lower transportation and installation costs, it also offers improved technical performance providing long term economic benefit and lower life cycle costs.. Energy savings provided by superior valve design and performance in terms of reduced pressure drop can exceed the valve purchase price several times over. Goodwin Dual Plate Check Valves have higher CV values / lower pressure drop losses than swing check valves and are vastly superior in their dynamic response (substantially reducing the propensity for slam associated with swing check valves) as illustrated in the comparison table and graphs.

In summary, the Goodwin Dual Plate Check Valve is both commercially and technically superior to the swing check valve and is now considered the "check valve of choice" in all but the most demanding and critical of applications.

