

RITE® SERIES 205 SINGLE DOOR WAFER TYPE SWING CHECK VALVE SEAT RING HARD SEAT



OVERVIEW

The Rite® Series 205 wafer combination swing check valves are flow activated and Rite® sized. The Rite® Series Check Valve inlet ports and disc have been shape optimized to achieve a fully open position at low flow rates (3 ft/s on average).

SPECIFICATIONS

Size Range	NPS 2" to 48"
	50mm to 1200mm
Temperature Range	Cryogenic to High Temperature (Pending Materials Selected)
Operating Pressure	ASME (150, 300, 600, 900, 1500)
	DIN (PN10, 16, 25, 40, 64, 100, 150, 250)
Body Style	One-Piece Wafer Body Seat Ring Type
Leakage Rate	API 598

APPLICATIONS

- > Chemical Processing
- > Electrolysis
- > Facilities/Skid
- > HVAC
- > Marine
- > Nuclear
- > Oil Transport
- > Petrochemical
- > Power Generation
- > Refrigeration
- > Storage & Transport
- > Tank Trucks
- > Water

MEDIA

- > Acids
- > Alkalis
- > Corrosive Chemicals
- > Dry Chlorine (Gas or Liquid)
- > Gases
- > Hydrogen
- > Oxygen
- > Water

DESIGN FEATURES

The Series 205 hard seated check valves offer:

SINGLE DOOR DESIGN:

Below numbered list can be referenced on various figures throughout document.

- 1** Combination design utilizing both gravity + spring makes the valve easy to open/close, reducing water hammer.
- 2** Limited movement of internal parts during operation extends service life.
- 3** Elliptical inlet shape designed to accelerate line media through the valve.
- 4** Optimal diameter for high flow capacity.
- 5** Short face to face, reducing weight and space between flanges.
- 6** Low cracking pressure design.
- 7** Quick response time (ideal for process lines with varying flows & control valves).
- 8** Customizable modular design, allows for adding optional special accessories to meet customer application requirements.
- 9** Cost & energy efficiency, requiring only one set of flange studs which span the valve, reducing in-service vibration.
- 10** Higher grade material as standard on seat ring type design enhances life expectancy.

Figure 01: Seat Ring Hard Seat Cutaway Front View.

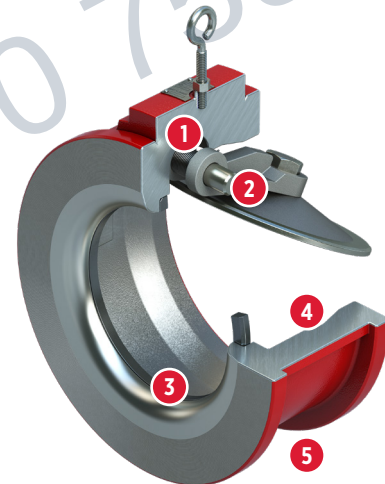
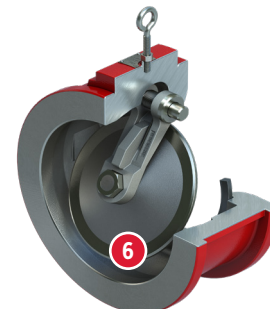


Figure 02: Seat Ring Hard Seat Cutaway Rear View.



Valve Design	API 594
Accessories Available	H100, SA01, SA1, SA2, SA3, SA4, SA4A, SA6, SA7, SA10, SA16, SA40, SA40A, SA50, SA54, etc.
Testing Standard	ASME B16.34, API 598
Face-to-Face	API 594

Certifications	API 6FD (Carbon Steel Body)
	CE/PED
	CRN
Approvals	NSF-61

Note: ¹Dimensions available in ASME and DIN sizes.

