

VTE® - SPECIAL APPLICATION SERIES SA16 EXTERNAL WEIGHT & LEVER CHECK VALVE ACCESSORY



OVERVIEW

The Rite® Series SA16 check valve accessory is designed to provide additional external mass to increase the cracking pressure to alter the closing force of the disc during open/close. This valve is used where flexibility is required on-site to alter the closing characteristics of the valve.

SPECIFICATIONS

Size Range	NPS 2" to 24" 50mm to 600mm
Temperature Range	Pending Materials Selected
Operating Pressure	Pending Pressure Class Selected
Body Style	One-Piece Flanged or Wafer Body
Compatibility	Bray 205, 210, or 211 Series
Leakage Rate	API 598

APPLICATIONS

- > Solids handling
- > Vacuum
- > Wastewater

MEDIA

- > Dry Chlorine (Gas or Liquid)
- > Gases
- > Hydrogen
- > Oxygen
- > Water

DESIGN FEATURES

The Rite® Series SA16 check valve accessory offers single door check valve design modification to alter flow conditions:

APPLICATION:

The purpose of equipping a standard Rite® Series Single Door Wafer or Flanged Type Swing Check Valve with an external weight and lever to provide the user with the ability to change the cracking pressure of the valve, within a certain range and/or change the closing characteristics of the valve. A weight is used to provide the necessary torque to close the valve.

GENERAL DESCRIPTION:

The model SA16 is a standard Rite® Series Single Door Swing Check Valve that has been converted, featuring a positive hexagon drive at the disc/hinge/shaft connection. The shaft extends through and is supported by the body at one end, by a bushing in the body, and by a ball bearing designed to reduce friction mounted in a bracket on the opposing side. O-rings seal the shaft, seal bushing and the body to prevent leakage. The weight is supported by a lever mounted to the shaft via a hexagonal connection. The position of the weight along the lever arm is adjustable, allowing fine-tuning of the disc's cracking pressure to either decrease or increase.

Figure 01: SA16 Rear View Closed (Right Hand Mount Displayed and Provided As Standard).



Figure 02: SA16 Rear View Open.



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For body/trim materials user must first refer to and select the appropriate model from the foundation unit Sales Data Sheets.

Series 205	Integral Hard Seat (IHS)
	Seat Ring Hard Seat (SRHS)
	Integral Soft Seat (ISS)
	Seat Ring Soft Seat (SRSS)
Series 210	Integral Hard Seat (IHS)
	Seat Ring Hard Seat (SRHS)
	Integral Soft Seat (ISS)
	Seat Ring Soft Seat (SRSS)
Series 211	Integral Hard Seat (IHS)
	Seat Ring Hard Seat (SRHS)
	Integral Soft Seat (ISS)
	Seat Ring Soft Seat (SRSS)

MATERIAL OPTIONS¹

Seal Bushing	Stainless Steel (ASTM A479 316)
	BUNA-N, EPDM, FKM-A, HNBR, Neoprene
Seal O-Rings (x4)	PTFE-virgin, Teflon encapsulated silicone, Viton
Weight Lever	Steel
Retaining Plate	Steel
Bracket	Steel
Socket Head Screws (x4)	Steel Zinc Plated
Dowel Pins (x2)	Steel Zinc Plated
Ball Bearing	Steel
Round Head Screw	Steel Zinc Plated
Weight	Steel

Note: ¹ Dimensions available in ASME and DIN sizes.
 All external components can be offered in SS where required.
 * Previous Models before July 2024 may have included slightly different material configurations/parts callout lists.

Rite® Series Check Valve Integral Hard Seat type part number: V0215XBZ205**SA16** (For 2", Class 150, Stainless Steel (ASTM A351 CF8M) Body, BUNA-N O-Ring, SS Spacer, Series 205, **Special Application Series SA16**).

Figure 03: SA16 Exploded View.

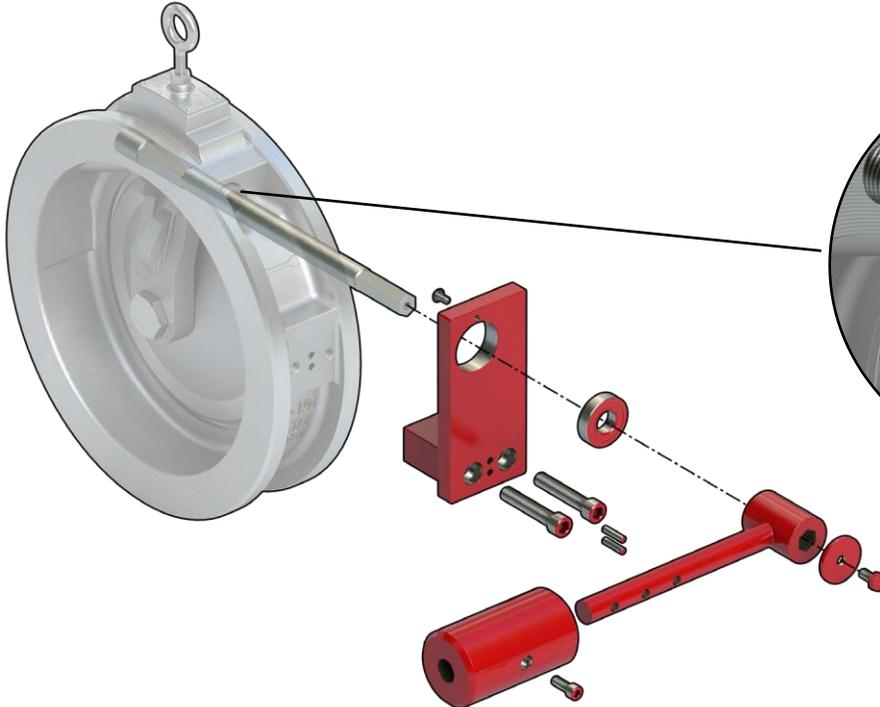
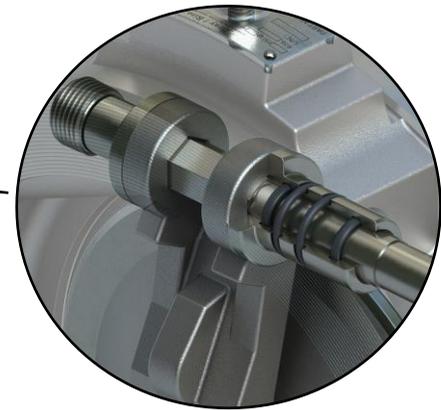


Figure 04: Seal Bushing & O-Ring Close up.



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