

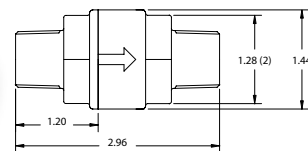
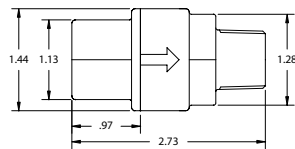
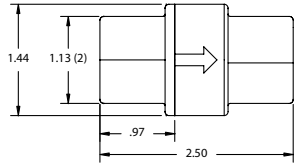


Vertically Integrated, Made in the USA

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685 SERIES CHECK VALVE



Design Considerations

The 685 Series Poppet Check Valve incorporates a thin elastomer disc supported by a poppet that seals on the seat. Pressure in the flow direction moves the seal off the seat first before pressure builds enough to move the poppet away from the seat. The 685 Series Check Valve maximum operating pressure of 125 psi covers a wide range of air and fluid applications. The 685 Check is a compact design with a light cracking pressure, high flow rate, and a positive seal at very low back pressure or slight vacuum. For higher cracking pressure applications, an embedded o-ring poppet is substituted for the standard elastomer disc poppet.

- Maximum Operating Pressure — 125 psi
- Maximum Operating Temperature — 140°F
- Seat Area Open Diameter — .625

Options

Material Options	Black Polypropylene Body & Poppet White Polypropylene Body & Poppet
Seal Options	Buna-N, Ethylene Propylene, Fluoroelastomer (Viton®)
Inlet End Options	1/2 Female NPT, 1/2 Male NPT
Outlet End Options	1/2 Female NPT, 1/2 Male NPT
Cracking Pressure	302 Stainless Spring - 1/3 psi (Disc Poppet - Standard), 1 psi (O-Ring Poppet), 3 psi (O-Ring Poppet), 7 psi (O-Ring Poppet) Hastelloy Spring - 1/3 psi (Disc Poppet), 1 psi (O-Ring Poppet), 3 psi (O-Ring Poppet), 7 psi (O-Ring Poppet), 12 psi (O-Ring Poppet) No Spring

Example of How To Order

Body Material White Filled Poly	Inlet End 1/2 FNPT	Outlet End 1/2 FNPT	Seal Viton®	Spring 3 psi, O-Ring
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SMC Part Number: WFP CHK 685-8F8F-F,3# O-RING

The flow arrow on the body will point from Inlet to Outlet. SMC Part Numbers are a description of the valve as read left to right, Inlet to Outlet.

Example: WFP CHK 685-8F8F-F,3# O-RING = 1/2 FNPT Inlet x 1/2 FNPT Outlet

SMC will quote alternate materials or customize our standard products when quantities ensure competitive pricing.