

THE SPECIALTY MFG. CO.

Custom Is Our Specialty

5858 Centerville Road
St. Paul, MN 55127

ISO 9001:2015
MADE IN THE USA

The Specialty Mfg. Co. will quote alternate materials or customize our standard products when quantities ensure competitive pricing.
Contact Customer Service at (651) 653-0599
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685 SERIES POPPET CHECK VALVE 1/2" NPT



Design Considerations

- The 685 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 at about 1/3 psi before pressure builds enough to move the poppet away from the seat
- Maximum operating pressure of 125 psi covers a wide range of air and fluid applications
- Compact design with a light cracking pressure, high flow rate, and a positive seal at very low back pressure or slight vacuum
- An embedded O-Ring Poppet is supplied for cracking pressure applications 1/2 psi and higher
- Hastelloy® is a superior chemically resistant spring material

Example of how to order

<u>Material</u>	<u>Inlet Port</u>	<u>Outlet Port</u>	<u>Seal</u>	<u>Spring</u>
Black Glass Filled Polypropylene	1/2 Female NPT	1/2 Female NPT	Buna	1/3 psi

Part Numbers are a description of the check valve as read left to right, Inlet Port to Outlet Port.
FP CHK 685-8F8F-B,DP,1/3# = Black Glass Filled Polypropylene Check Valve, 1/2 Female NPT Inlet x 1/2 Female NPT Outlet, Disc Poppet, Buna Seals, 1/3 psi Spring

Specifications

Material	Black Glass Filled Polypropylene, White Glass Filled Polypropylene Black PVDF (Kynar®)
Inlet End	1/2 Male NPT, 1/2 Female NPT
Outlet End	1/2 Male NPT, 1/2 Female NPT
Seal Option	Buna-N, Ethylene Propylene, Fluoroelastomer (Viton®), Silicone, AFLAS® *** Please ask us about Seal Materials not listed above. ***
Spring Option: Cracking Pressure and Material	1/3 psi - 302 Stainless (Disc Poppet) .5 psi - 302 Stainless (O-Ring Poppet) 1 psi - 302 Stainless (O-Ring Poppet) 3 psi - 302 Stainless (O-Ring Poppet) 7 psi - 302 Stainless (O-Ring Poppet) 1/3 psi - Hastelloy® (Disc Poppet) .5 psi - Hastelloy® (O-Ring Poppet) 3 psi - Hastelloy® (O-Ring Poppet) 7 psi - Hastelloy® (O-Ring Poppet) 12 psi - Hastelloy® (O-Ring Poppet) No Spring
Maximum Flow Diameter	0.625 in
Cv	10.2 with 1/2 Female NPT Ends
Maximum Operating Pressure	125 psi
Maximum Operating Temperature	140 °F