



Vertically Integrated, Made in the USA
www.specialtymfg.com

THE SPECIALTY MFG. CO.

5858 Centerville Road
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SMC will quote alternate materials or customize our standard products when quantities ensure competitive pricing.

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687 SERIES POPPET CHECK VALVE 3/4" NPT



Design Considerations

- The 687 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>
White Glass Filled Polypropylene	3/4 Female NPT	3/4 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.
WFP CHK 687-12F12F-B,DP,1/3# = White Glass Filled Polypropylene Check Valve, 3/4 Female NPT Inlet x 3/4 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	3/4 Female NPT
Outlet End	3/4 Female NPT
Seal Option	Buna-N, Ethylene Propylene, Fluoroelastomer (Viton®), 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) 2 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) .7 psi - Hastelloy® (O-Ring Poppet) 1.5 psi - Hastelloy® (O-Ring Poppet) 3 psi - Hastelloy® (O-Ring Poppet) 7 psi - Hastelloy® (O-Ring Poppet) No Spring
Maximum Flow Diameter	0.812 in

Cv	12.5 with 3/4 Female NPT Ends
Maximum Operating Pressure	125 psi
Maximum Operating Temperature	140 °F
Compatibility Statement	<p>It is the sole responsibility of the system designer and user to select products suitable for their specific application requirements and to ensure proper installation, operation, and maintenance of these products.</p> <p>Material compatibility, product ratings and application details should be considered in the selection. Improper selection or use of products described herein can cause personal injury or product damage.</p>
Pricing and Minimum Order Requirement	<p>Our Minimum Order Requirements are \$100.00 Domestic - \$250.00 International. Pricing is based on the quantity ordered.</p> <p>Please indicate a typical order quantity or Estimated Annual Usage when requesting pricing.</p>