

685 Series Poppet Check Valve



Configure your exact valve



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

Specifications:

Material	Black Glass Filled Polypropylene, White Glass Filled Polypropylene Black PVDF (Kynar®)		
Inlet End	1/2 Male NPT, 1/2 Female NPT, 5/8 Barb		
Outlet End	1/2 Male NPT, 1/2 Female NPT		
Seal Option	Buna-N, Ethylene Propylene, Fluoroelastomer (Viton®), Silicone, AFLAS®, Perfluoroelastomer (Kalrez®) *** 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) No Spring	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)	
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		

Example of how to order:

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

Part Number FP CHK 685-8F8F-B,DP,1/3#

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