



TECHNICAL BULLETIN

598a

6000 PSI CHECK VALVES MODELS 684 & 955

GENERAL INFORMATION

Two sizes are offered. The model 955 is 1/4" pipe thread size. The model 684 is 1/2" pipe thread and handles higher flow rates. Check valves permit flow only in one direction in a gas or liquid line thus eliminating the possibility of back flow. The 955 valve offers the unique feature of permitting flow from either the male or female thread end by reversing the internal spring and poppet.

The internal design of both valves are similar. The larger 864 model was introduced in 1978. It has proven so reliable over the years the design was used in the smaller 955 valve a few years later. They use a standard O ring seal. This insures bubble tight sealing even with slight differential pressures in the reverse direction. In the event the seal is damaged, it can be easily changed. With flow in the forward direction the valves open easily since a light spring can be used with an O ring seal. They handle the full range of rated flows without chatter or noise common to some check valves.

TECHNICAL SPECIFICATIONS

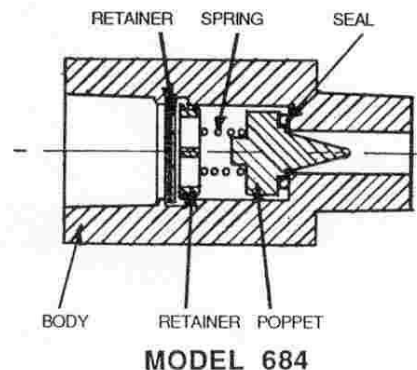
- Maximum pressure ---- 6000 PSI (40 MPa)
- Maximum differential pressure across valve - 6000 PSI
- Opening pressure ---- 5 to 10 PSI
- Flow coefficient
 - model 955 ----- $C_v = 0.22$ (3/16" orifice)
 - model 684 ----- $C_v = 0.55$ (9/32" orifice)
- Fluids ----- gases or liquids
- Ports
 - model 955 ----- inlet 1/4" M NPT; outlet, 1/4" FNPT
 - model 955R ----- inlet 1/4" FNPT; outlet, 1/4" MNPT
 - model 684 ----- inlet 1/2" MNPT; outlet, 1/2" FNPT
- Size
 - model 955 ----- 1" hex by 2.4" long
 - model 684 ----- 1 3/8" hex by 2.5" long
- Materials -----
 - body - anodized aluminum
 - internals - brass
 - seal - Viton
 - spring - stainless steel

TYPICAL APPLICATIONS

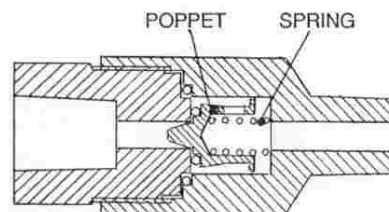
- Used between compressors and separators to prevent leak down via compressor valves and rings and to permit easy unloading of the compressor
- Filling station control and logic
- Numerous other control and logic functions in gas and liquid lines
- Control in cascade filling systems

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MODEL 684



MODEL 955R