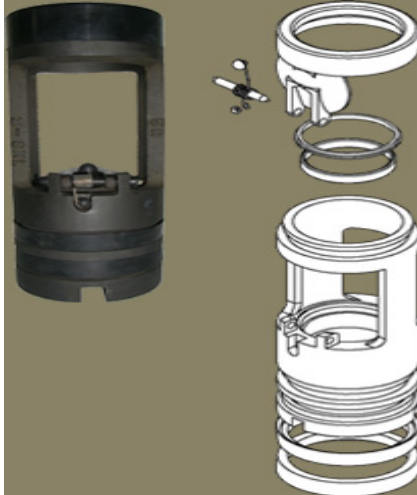
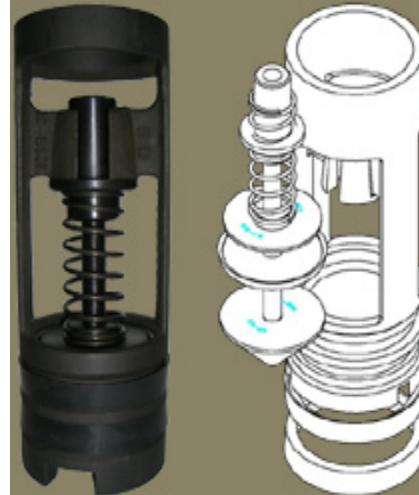


## Drill Pipe Float Valve

### Elastomer Specification Certificate



Model G Drill Pipe Float Valve



Model F Drill Pipe Float Valve

### Seal and Shock Absorber Elastomer Information

The following is the generally accepted industry application for elastomers.

| Application      | Material                      | ASTM D2000     | Temperature Range                      |
|------------------|-------------------------------|----------------|--|
| Standard         | Nitrile (BUNA, NBR)           | BF, BG, BK, CH | -10° F to +212° F<br>-23° C to +100° C |
| H <sub>2</sub> S | Hydrogenated Nitrile (HNBR)   | DH             | -22° F to +300° F<br>-30° C to +149° C |
| High Temp        | Fluoroelastomer DuPont Viton® | HK             | -40° F to +400° F<br>-40° C to +204° C |

The seals and shock absorbers are engineered and manufactured to comply with the ASTM D2000 designation. The temperature ratings are in accordance with the ASTM D2000 designations.

American Society of Testing and Materials (ASTM) provide a standardized method of required physical properties of a rubber product, based primarily on its Type (Heat Resistance) and Class (Oil Resistance).

The most common general classification system is ASTM D 2000 Standard Classification System for rubber products. It is to aid in the selection of practical rubber products for specific environments. It also provides a line call-out designation for the specification of materials.

All drilling and production programs, including equipment selection, should be reviewed and approved by the customer's drilling and production engineering staff. Individual well conditions may call for alternate designs.