

RELIEF VALVES... TECHNICAL INFORMATION

DESIGN INFORMATON

Our safety valve design features the most reliable method of safely relieving pressure. The virgin Teflon seal, mated with the stainless steel multiple crown ring, provides an outstanding sealing action. This combination assures a non-stick and accurate pop-off pressure release. The design incorporates a special extra lift, pop-open feature for high relieving capacity.

1. **LOWER SEAT.** Our highly polished stainless steel lower seat has triple crown sealing rings that are located at slightly different heights to provide compound sealing ability with the mating Teflon ring. This assures for a positive and leak-proof seal at any set pressure.
2. **UPPER SEAT.** A wing guided, stainless steel upper seat provides an excellent guidance for the high lift and reseating action.
3. **VIRGIN TEFLON RING.** A high quality virgin Teflon ring is locked positively into place in the upper seat by crimping the upper seat inward from both inside and outside to seal the ring. The ring is then machined smooth for an accurate seating surface.
4. **STAINLESS STEEL SPRING GUIDE.** The stainless steel uniform load spring guide has a spherical tip together with a spherical pit in the upper seat which provides for a concentric and axial spring force that will load the upper seat uniformly for a tight seal.
5. **STAINLESS STEEL SPRING.** The high quality, stainless steel wire springs have extra coils and a low pitch to provide a very uniform and concentric spring rate performance.
6. **VALVE BODY DESIGN.** Our valve body is designed with heavy thickness sections to withstand the stresses of the pressure chamber area. It is cast from ductile iron which meets the ASME—SA 395 grade 60-40-18 requirements.

