

Design Features of Shank Safety Relief Valves

BODIES: Relief valve bodies for the 800D, 801D, 801DHC, 803, 812, 813, 804, 804R, 814, 805, 805R, 815, CS5602A, and CS5602B ($\frac{1}{2}$ ", $\frac{3}{4}$ ", and 1" FNPT inlet size) are ductile iron primer painted. Relief valve bodies for the 850, 850R, 851, and 851R ($\frac{3}{4}$ ", 1", and $1\frac{1}{4}$ " MNPT inlet size) and the 901 and 903 ($1\frac{1}{4}$ " and 1 $\frac{1}{2}$ " FNPT inlet size) are available in anodized aluminum or ductile iron primer painted. The low capacity 800 and 801 ($\frac{1}{2}$ " MNPT inlet size) have a one piece steel body, black oxidized. Bodies for the 800QR, 800QRW, 800SS, 801SS and 803QC are stainless steel.

INTERNALS: Lower seats, upper seats, spring guides, and springs are stainless steel.

SEAT MATERIAL: Seat inserts in upper seats are Teflon.

TEMPERATURE AND PRESSURE RATING: $-20^{\circ}\text{ F } (-29^{\circ}\text{ C})$ to $+275^{\circ}\text{ F } (+135^{\circ}\text{ C})$. The allowable working pressure is 500psig for all relief valves.

Application: Suitable for ammonia, refrigerants, and other industrial fluids that are not corrosive or deleterious to ductile iron, aluminum, steel, and Teflon.

Location: Valves relieving to atmosphere may be installed on systems operating as low as $-150^{\circ}\text{ F } (-101^{\circ}\text{ C})$ provided location is in ambient temperatures that are normally above $32^{\circ}\text{ F } (0^{\circ}\text{ C})$.

STANDARD SETTINGS: The 801 series, 801DHC, 812, 813, 804, 804R, 814, 805, 805R, and 815 valves are available in 25 psi intervals at set points from 75 psi to 400 psi. The 800 series, 800QR, 800QRW, 803, and 803QC valves are available in 25 psi intervals from 50 psi to 400 psi. The 850, 850R, 851, 851R, 901, and 903 valves are available in 25 psi intervals at set points of 150 psi to 400 psi. Relief valves are 100% set, tested, and sealed at our factory, and are furnished with a nameplate stamped with catalog number, date code, size, set point, capacity, and ASME Certification Mark with UV designator, indicating National Board-certified. Cyrus Shank will do custom pressure settings, in the certified range, at no extra charge.

PIPING: Cyrus Shank safety relief valves have machined male and female outlet pipe threads that satisfy the requirements of the ASHRAE addendum 15c-2000 piping for new installations.

REPLACEMENT IN KIND: A replacement which satisfies the design specification. (*OSHA 1910.119(b)*)

