## SUGGESTED SPECIFICATIONS

## LVC FIGURE 193 BONNETED METAL SEAT KNIFE GATE VALVES, 3"-24"



Valves shall be of the Bonneted Knife Gate Valve type, rated for 150 PSI CWP. Flanges shall be drilled and tapped to ANSI B16.5, Class150 pound standard with raised faces. Flange raised face shall be machined using serrated-spiral or serrated-concentric grooves with a 125-250 RMS finish. Valve bodies shall be cast CF8 or CF8M stainless steel (304 or 316).

The valve bonnet shall be fabricated with 304/316 stainless steel liner, packing box and bonnet flange raised face. Bonnet flange and stiffeners shall be carbon steel (or optional 304 or 316 stainless steel). A gate wiper shall be used between the bonnet flange and the body top flanges. The wiper material shall be UHMWPE.

Valve shall have 304 or 316 SS gate and integral cast stainless steel seat in the valve body. Gate shall be of design and thickness to withstand full 150 PSI rated pressure without permanent deflection to the gate. Gate shall have a rounded, beveled bottom. Seat and gate shall have a fully machined finish for one way shutoff. Minimum of two gate wedges shall be provided to assist seating of the gate against the seat in the lower half of the valve body. Gate guides shall be provided in the upper half of the valve body.

Packing gland shall be cast stainless steel (CF8/CF8M). Packing shall be Teflon lubricated synthetic packing with a minimum of 4 rows of packing. Packing gland bolts, studs and nuts shall be 304 Stainless steel.

Valve yoke shall be cast CF8 (304) stainless steel. Yoke shall be the flat top design to allow bolt-on field installation or conversion of actuators without welding or machining. Valve stem shall be 304/316 stainless steel (same material grade as bonnet liner) with full ACME threads. Stem nut shall be bronze. Stem nut shall be enclosed by the use of a cast stainless steel retainer.

Manually actuated valves shall be hand wheel operated for all sizes. Bevel gear operators are recommended for valves 16" and above where frequent operation is required and/or where used in applications above 75 PSI.

Valves shall be designed, manufactured and tested to MSS SP-81 standard or AWWA C520 standard.

All valves shall be Pratt LVC Fig 193 Bonneted Knife Gate Valve or approved equal.

