



CLARKSON KNIFE GATE VALVES

FIGURE 952

Recommended specifications for conventional lugged style knife gate valves

GENERAL

- The knife gate valve shall fully comply to TAPPI standard TIS 405-8 and MSS-SP-81.
- The valve range offered shall be suitable for installation between AS 2129 C,D and E, ASME 125/150, BS 4504 PN 10 and 16, JIS Table 5 and 10, DIN 2501 Table 10 and 16 flanges.
- The valve shall generally be of rising spindle type in sizes DN 50 - 200 (NPS 2 - 8) and non-rising spindle in sizes DN 250 - 600 (NPS 10 - 24).
- The valve shall be offered in lugged style DN 50 - 600 (NPS 2 - 24).
- The valve shall be capable of 1000 kPa (150 psi) CWP (non-shock) in DN 50 - 600 (NPS 2 - 24) for shut-off in the preferred direction.

VALVE

- The body shall be 316 S/S in sizes DN 50 - 600 (NPS 2 - 24). The valves shall have integral cast gate wedges. A cast arrow on the bodies shall indicate preferred flow direction.
- Stainless steel PTFE tipped gate guides in the body shall be factory adjusted and provide positive gate contact.
- The glandbox shall be 304 stainless steel in sizes DN 50 - 600 (NPS 2 - 24). The glandbox shall be of "self-aligning" type and shall require no shims to facilitate packing the valve. The packing gland shall use two (2) upstand posts as retaining bolts in sizes DN 50 - 200 (NPS 2 - 8) and use four (4) to six (6) standard stud and nut sets on sizes DN 250 - 600 (NPS 10 - 24). These upstand components shall be manufactured from 304 S/S.
- The standard packing in the knifegate valve shall be 2-12 pH PTFE based with special packing material being offered for high cyclic, abrasive services or chemical service.
- The knife, or gate, of the valve shall be made from 316 stainless steel, 304 S/S or SAF 2205. The gate shall have a bevelled edge and be of a high quality finish to extend the service life of the gate, packing and seat.
- The seat in the valve shall be installed in a machined groove in the body and may use a retaining device. When a metal-to-metal seat is required, a seat sealing surface shall be machined onto the knife gate valve body.
- The valve shall use a bronze bushing to provide lubrication for the spindle contact surface. The bushing shall be retained into the bridge of the valve.
- The knife gate spindle shall be made from 304 stainless steel and be single pitch. The handwheel shall be designed to provide "self-locking" service when combined with the single pitch thread on the spindle. The handwheel shall be manufactured from S.G Iron or 304 S/S.
- The spindle to gate connection shall be made via a clevis pin or bolt arrangement.
- The knife gate valve shall possess all the listed requirements. The valve shall be CLARKSON K-NIFE series or approved equivalent.



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