

CAST BODY KNIFE GATE VALVES

FIG.83, ALL STAINLESS STEEL - FULL PORT - METAL TO METAL SEAT



Design Features

- Locking handwheel nut.
- Provision for lockout lanyard.
- Heavy gate with wide spaced clevis.
- Wiper ring in stuffing box assists sealing during both operating and static conditions.
- TFE impregnated packing for temperature to 450°F/232°C and PH 2-12.
- Full port one piece cast body with integral cast 210° back-up ring and self cleaning seat pocket.
- Full lug pattern. Drilled and tapped to class 150 flanges.
- Easy bolt on conversion to actuator or bevel gear operator.

Designed and tested to conform to MSS-SP81 and TAPPI TIS 405-8 specifications.

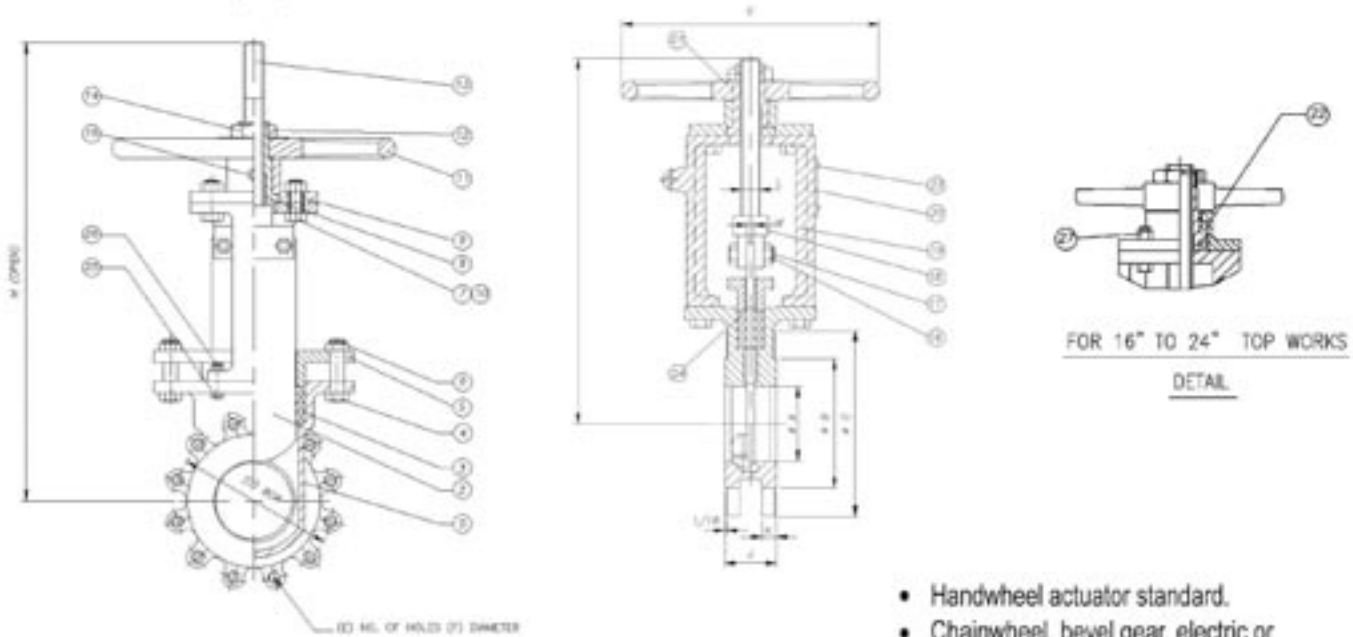
Designed to handle dense mixtures of stock and slurries. The shearing action of the knife gate cuts through solids and cleans the seat as it closes. Valve rated for 150 psi working pressure.



STAINLESS STEEL KNIFE GATE VALVES

FIG.83, STAINLESS STEEL - FULL PORT - METAL TO METAL SEAT

FIG. 83B - CF8M (316)
FIG. 83L - CG8M (317)



- Handwheel actuator standard.
- Chainwheel, bevel gear, electric or pneumatic actuators are available.
- Valves 30" and larger, or in special alloys like CN7m(Alloy 20), Duplex SS, Hastelloy are available on request

DIMENSIONS - INCHES

| VALVE SIZE | A | B | C | D | E | F | G | h | H | J | K | L | M | Weight/lbs |
|------------|-------|----|----|----|----|--------|----|----|----|---|-----|-----|-----|------------|
| 2 | 2 | 3 | 6 | 4 | 4 | 1/4-11 | 8 | 11 | 14 | 1 | 1/2 | 1/2 | 1/2 | 31 |
| 2 1/2 | 2 1/2 | 4 | 7 | 5 | 4 | 1/4-11 | 8 | 12 | 15 | 2 | 1/2 | 1/2 | 1/2 | 35 |
| 3 | 2 1/2 | 5 | 7 | 6 | 4 | 1/4-11 | 10 | 14 | 17 | 2 | 1/2 | 1/2 | 1/2 | 38 |
| 4 | 4 | 6 | 9 | 7 | 8 | 1/4-11 | 10 | 16 | 21 | 2 | 1/2 | 1/2 | 1/2 | 65 |
| 6 | 6 | 8 | 11 | 9 | 8 | 1/4-10 | 14 | 20 | 26 | 2 | 1/2 | 1/2 | 1/2 | 86 |
| 8 | 8 | 10 | 13 | 11 | 8 | 1/4-10 | 14 | 24 | 32 | 2 | 1/2 | 1/2 | 1/2 | 140 |
| 10 | 10 | 12 | 16 | 14 | 12 | 1/4-9 | 18 | 28 | 38 | 2 | 1/2 | 1/2 | 1/2 | 187 |
| 12 | 12 | 15 | 19 | 17 | 12 | 1/4-9 | 18 | 32 | 44 | 3 | 1/2 | 1/2 | 1/2 | 225 |
| 14 | 13 | 16 | 21 | 18 | 12 | 1-8 | 20 | 36 | 50 | 3 | 1/2 | 1/2 | 1/2 | 274 |
| 16 | 15 | 18 | 23 | 21 | 16 | 1-8 | 20 | 43 | 58 | 3 | 1/2 | 1/2 | 1/2 | 410 |
| 18 | 17 | 21 | 25 | 22 | 16 | 1-7 | 24 | 47 | 64 | 3 | 1/2 | 1/2 | 1/2 | 435 |
| 20 | 19 | 23 | 27 | 25 | 20 | 1-7 | 24 | 51 | 70 | 4 | 1 | 1 | 1/2 | 598 |
| 24 | 23 | 27 | 32 | 32 | 20 | 1-7 | 30 | 58 | 82 | 4 | 1 | 1 | 1/2 | 771 |

DIMENSIONS - MILLIMETERS

| VALVE SIZE | A | B | C | D | E | F | G | h | H | J | K | L | M | Weight/kg. |
|------------|-----|-----|-----|-----|----|--------|-----|------|------|-----|----|----|----|------------|
| 50 | 51 | 92 | 152 | 121 | 4 | 1/4-11 | 216 | 302 | 356 | 48 | 13 | 19 | 8 | 14 |
| 65 | 63 | 105 | 178 | 140 | 4 | 1/4-11 | 216 | 321 | 387 | 51 | 13 | 19 | 8 | 16 |
| 80 | 73 | 127 | 191 | 152 | 4 | 1/4-11 | 254 | 364 | 440 | 51 | 13 | 19 | 8 | 17 |
| 100 | 102 | 157 | 229 | 191 | 8 | 1/4-11 | 254 | 427 | 533 | 51 | 13 | 19 | 8 | 30 |
| 150 | 152 | 216 | 279 | 241 | 8 | 1/4-10 | 356 | 522 | 679 | 57 | 16 | 29 | 8 | 39 |
| 200 | 203 | 270 | 343 | 298 | 8 | 1/4-10 | 356 | 614 | 822 | 70 | 16 | 29 | 10 | 64 |
| 250 | 254 | 324 | 406 | 362 | 12 | 1/4-9 | 457 | 722 | 984 | 70 | 19 | 29 | 12 | 85 |
| 300 | 305 | 381 | 483 | 432 | 12 | 1/4-9 | 457 | 824 | 1137 | 76 | 19 | 29 | 15 | 102 |
| 350 | 337 | 413 | 533 | 476 | 12 | 1-8 | 508 | 920 | 1273 | 76 | 21 | 38 | 15 | 125 |
| 400 | 387 | 470 | 597 | 540 | 16 | 1-8 | 508 | 1092 | 1492 | 89 | 22 | 38 | 20 | 186 |
| 450 | 438 | 533 | 635 | 578 | 16 | 1-7 | 610 | 1194 | 1645 | 89 | 24 | 38 | 20 | 198 |
| 500 | 489 | 584 | 699 | 635 | 20 | 1-7 | 610 | 1299 | 1800 | 114 | 25 | 38 | 25 | 272 |
| 600 | 581 | 692 | 813 | 749 | 20 | 1-7 | 762 | 1495 | 2099 | 114 | 25 | 38 | 25 | 350 |

| Item | Description | 83B | 83L |
|------|----------------------|-----------------|------|
| 1 | Body | CF8M | CG8M |
| 2 | Gate | 316 | 317 |
| 3 | Packing | TFE Impregnated | |
| 4 | Gland Bolts | SS 304 | |
| 5 | Gland | CF8M | CG8M |
| 6 | Gland Nuts | SS 304 Nylock | |
| 7 | Sleeve Housing Bolts | SS 304 | |
| 8 | Stem Sleeve | B860 (Bronze) | |
| 9 | Sleeve Housing | CF8 | |
| 10 | Housing Lock Washer | SS 304 | |
| 11 | Handwheel | Ductile Iron | |
| 12 | Handwheel Nut | Plated Steel | |
| 13 | Stem | 304 | |
| 14 | Nut Locking Screw | Plated Steel | |
| 15 | Grease Nipple | Plated Steel | |
| 16 | Clevis Nuts | SS 304 Nylock | |
| 17 | Clevis bolts | SS 304 | |
| 18 | Clevis | CF8 | |
| 19 | Yoke | CF8 | |
| 20 | Nameplate | Aluminium | |
| 21 | Handwheel Key | Steel | |
| 22 | Thrust Bearing | Ball | |
| 23 | Rivets | Aluminium | |
| 24 | Wiper Ring | Hycar | |
| 25 | Yoke Bolts | SS 304 | |
| 26 | Yoke Nuts | SS 304 Nylock | |
| 27 | Housing Nuts | SS 304 Nylock | |

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