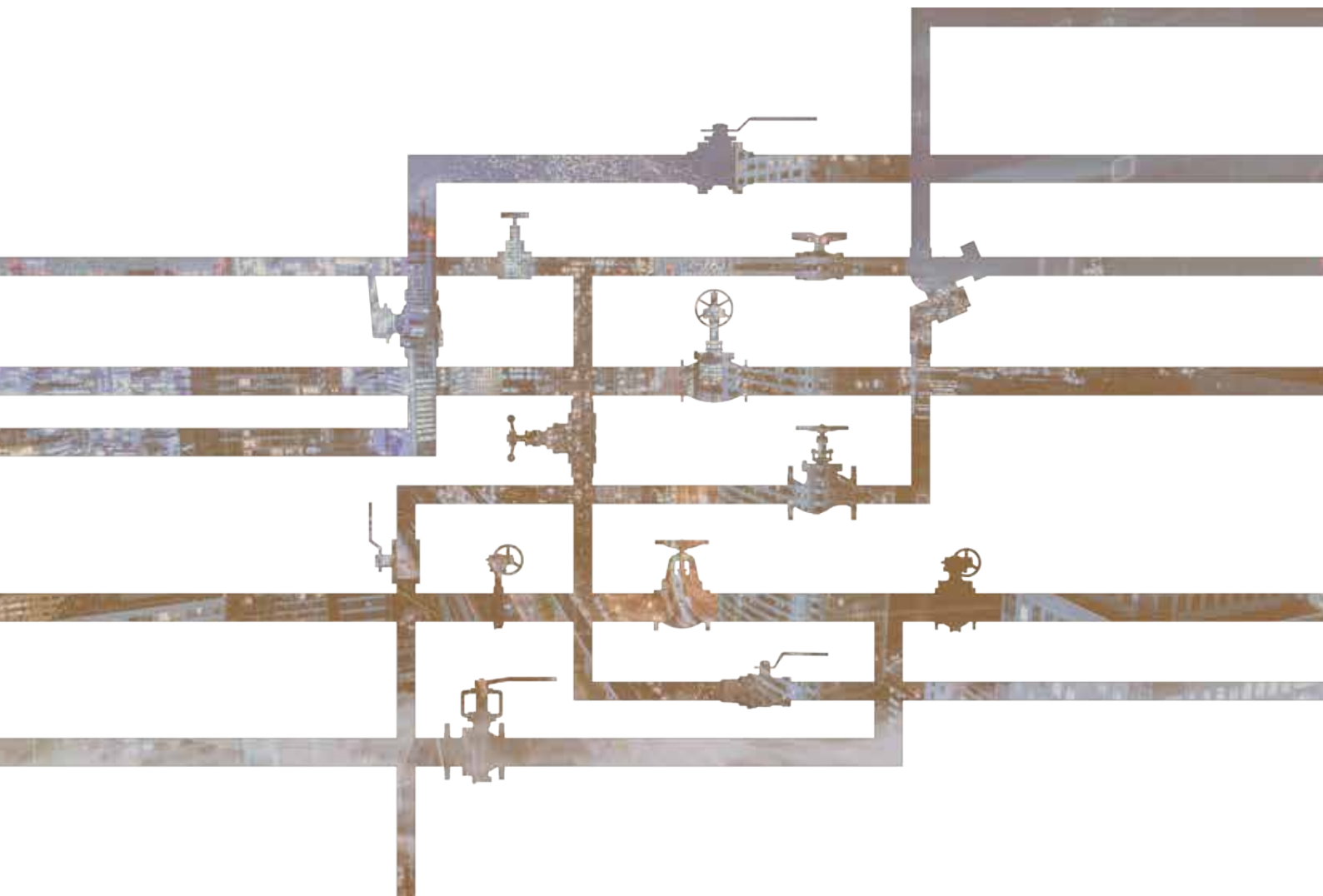


KITZ

GENERAL CATALOG

Cast Iron



INDEX

| Title | Body Material | Type | Class | End Connection | Features | Fig | Page | | | |
|------------------|---------------|--------------|-----------------------------|----------------|--|--------------------------------|--------------------------------|-----------------|----------|-----------|
| Cast Iron Valves | CI | Gate | 5K | FE/FF | BB, OS&Y | 5FCM | C12 67 | | | |
| | | | 10K | | | 10FCL | | 10FCLS | 10FCLU | |
| | | | 125 | | | 125FCL | | 125FCLS | | |
| | | | EN PN16 | EN16FCL | | EN16FCLM | | | | |
| | | | EN PN25 | (PHOX)EN25FCLE | | | | | | |
| | | | 10K | FE/FF | | BB, IS, NRS, with Indicator | 10FCWI | C13 68 | | |
| | | 125 | BB, IS, NRS | | 125FCWI | | | | | |
| | | EN PN16 | BB, IS, NRS | | EN16FCW | EN16FCWI | | | | |
| | | 10K | BB, IS, NRS, with Indicator | | 10FCHI | C14 69 | | | | |
| | | 125 | BB, OS&Y | | 125FCHI | | | | | |
| | | EN PN16 | BB, OS&Y | | 10FCJ | | | | | |
| | | Globe | 10K | FE/FF | BB, OS&Y | 10FCJS | 10FCJU | C15 70 | | |
| | | | 125 | | BB, OS&Y | 125FCJ | 125FCJS | | | |
| | | | EN PN16 | | BB, OS&Y | EN16FCJ | EN16FCJM | | | |
| | | | Check | | 10K | FE/FF | Swing, BC | 10FCO | 10FCOS | C16 71 |
| | | | | | 125 | | Swing, BC, with Rubber Seat | 10FCOU | 10FCOUR | |
| | | | | | EN PN16 | | Swing, BC, with Counter Weight | 10FCO-C | 125FCO | |
| | | EN PN25 | | Swing, BC | EN16FCO | | EN16FCOM | | | |
| | | 10K | | Wafer | Wafer Type with Bypass Valve, Dual Plate | | 10FWZ | C17 72 | | |
| | | 125 | | | Wafer Type, Dual Plate | | 125FWNB | | 125FWNBE | |
| | | EN PN16 | Wafer Type, Dual Plate | | PN16FWNB | PN16FWNBME | | | | |
| | | Strainer | 10K | FE/FF | Y-Pattern, BC | 10FCY | C18 73 | | | |
| | | | 125 | | Y-Pattern, BC | 125FCY | | 125FCETY<Z0P02> | | |
| | | | EN PN16 | | Y-Pattern, BC | EN16FCY | | EN16FCYM | | |
| | | DI | EN PN25 | FE/RF | Ductile Iron, Y-Pattern, BC | (PHOX)EN25FDYBE | C19 74 | | | |
| | | Nylon Lining | Gate | 10K | TE | BB, OS&Y | | 5FCMN | | |
| | | | | | | BB, OS&Y | | 10FCLN | | |
| | | | | | | Swing, BC | | 10FCJN | | |
| | | | | | | Swing, BC, with Counter Weight | | 10FCON | | |
| | | Check | 10K | TE | Swing, BC, with Counter Weight | 10FCO-C | | | | |
| | | | | | Ball Check, BC | 10FCFTN | | | | |
| | | Strainer | 10K | TE | Y-Pattern, BC | 10FCYN | | | | |
| | | | | | Y-Pattern, BC | 10FCY | | | | |
| | | CI | Ball | FE/FF | TE | FB | 10FCT | | | |
| | | | | | | FB | (G-)10FCTB | | | |
| | | | | | | RB | 10FCTR | | | |
| FB | 125FCTB | | | | | | | | | |
| RB | 125FCTR | | | | | | | | | |
| FB, 3-way | 10FCTB2L | | | | | | | | | |
| RB, 3-way | 10FCTR2L | | | | | | | | | |

* (Abbreviation) FE: Flanged Ends, FF: Flat Face Ends, RF: Raised Face Ends, TE: Threaded Ends
 BB: Bolted Bonnet, OS&Y: Outside Screw & Yoke, BC: Bolted Cover, IS: Inside Screw, NRS: Non Rising Stem, RS: Rising Stem, FB: Full Bore, RB: Reduced Bore

PRODUCT CODING

Cast Iron Valves

(Note: Some products do not follow this coding system)

G - 10 FC O U R

1 2 3 4 5 6

1 Valve Operation

None Handwheel or Lever
 G Gear

2 Pressure Class

5 5K
 10 10K
 PN16 or EN16 PN16
 EN25---E PN25
 125 Class 125

3 Symbol of Shell Material

FC Cast Iron
 F Cast Iron
 FD Ductile Iron

4 Valve Type





L Gate (OS&Y)
 W or H Gate (NRS, IS)
 WI or HI Gate with Indicator
 J Globe
 O Swing Check
 WZ Wafer Check with By-Pass
 WNBM Wafer Check
 Y Strainer
 ETY Strainer
 T or TB FB ball
 TR RB ball





5 Trim









None Bronze
 U 304SS
 S 403SS
 M 316SS









6 Others

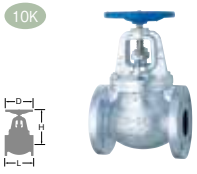
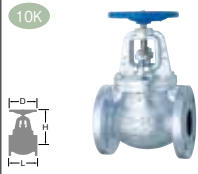


R Rubber Seat
 N Nylon Lining
 -C With Counter Weight



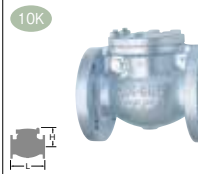
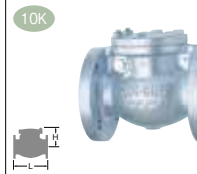
| Type | Gate | | | | Gate | | | | Gate | | | | Gate | | | |
|----------------------|---|-----|------|-----|---|------|-----|-----|--|-----|-----|------|---|--|--|--|
| Cast Iron |  | | | |  | | | |  | | | |  | | | |
| | 5K | | | | 10K | | | | 10K | | | | 10K | | | |
| Fig | 5FCM | | | | 10FCL | | | | 10FCLS | | | | 10FCLU | | | |
| End Connection | JIS B2239 5K FF | | | | JIS B2239 10K FF | | | | JIS B2239 10K FF | | | | JIS B2239 10K FF | | | |
| inch | mm | L | H | D | L | H | D | L | H | D | L | H | D | | | |
| 11/2 | 40 | | | | 165 | 305 | 160 | 165 | 305 | 160 | 165 | 305 | 160 | | | |
| 2 | 50 | 160 | 329 | 160 | 180 | 343 | 170 | 180 | 343 | 170 | 180 | 343 | 170 | | | |
| 2 1/2 | 65 | 170 | 383 | 170 | 190 | 390 | 170 | 190 | 390 | 170 | 190 | 390 | 170 | | | |
| 3 | 80 | 180 | 437 | 170 | 200 | 464 | 200 | 200 | 464 | 200 | 200 | 464 | 200 | | | |
| 4 | 100 | 200 | 534 | 225 | 230 | 548 | 250 | 230 | 548 | 250 | 230 | 548 | 250 | | | |
| 5 | 125 | 220 | 629 | 225 | 250 | 649 | 280 | 250 | 649 | 280 | 250 | 649 | 280 | | | |
| 6 | 150 | 240 | 727 | 250 | 270 | 760 | 300 | 270 | 760 | 300 | 270 | 760 | 300 | | | |
| 8 | 200 | 260 | 920 | 280 | 290 | 957 | 350 | 290 | 957 | 350 | 290 | 957 | 350 | | | |
| 10 | 250 | 300 | 1135 | 350 | 330 | 1169 | 400 | 330 | 1169 | 400 | 330 | 1169 | 400 | | | |
| 12 | 300 | | | | 350 | 1364 | 450 | 350 | 1364 | 450 | 350 | 1364 | 450 | | | |
| 14 | 350 | | | | 381 | 1561 | 500 | 381 | 1561 | 500 | 381 | 1561 | 500 | | | |
| 16 | 400 | | | | 406 | 1795 | 600 | 406 | 1795 | 600 | 406 | 1795 | 600 | | | |
| 18 | 450 | | | | | | | 432 | 1999 | 600 | 432 | 1999 | 600 | | | |
| 20 | 500 | | | | | | | 457 | 2232 | 680 | 457 | 2232 | 680 | | | |
| 24 | 600 | | | | | | | 508 | 2644 | 760 | 508 | 2644 | 760 | | | |
| Body | FC200 | | | | FC200 | | | | FC200 | | | | FC200 | | | |
| Bonnet | FC200 | | | | FC200 | | | | FC200 | | | | FC200 | | | |
| Stem | C3771 | | | | C3771 | | | | 403SS | | | | 304SS | | | |
| Disc | FC200 | | | | FC200 | | | | FC200 | | | | FC200 | | | |
| Body/Disc Seat Rings | CAC406 | | | | CAC406 | | | | 403SS | | | | 304SS | | | |
| Gland Packing | Asbestos-free (P/A4531K) | | | | Asbestos-free (P/A4531K) | | | | Asbestos-free (P/A4531K) | | | | Asbestos-free (P/A4531K) | | | |
| Gasket | Asbestos-free (T/1995) | | | | Asbestos-free (T/1995) | | | | Asbestos-free (T/1995) | | | | Asbestos-free (T/1995) | | | |
| Bolt/Nut | CS | | | | CS | | | | CS | | | | CS | | | |
| Standard/Approval | JIS B2031 | | | | JIS B2031 for 2 ^B -12 ^B | | | | JIS B2031 for 2 ^B -12 ^B | | | | JIS B2031 for 2 ^B -12 ^B | | | |
| Reference Page | P-T Rating : Page CI10 | | | | P-T Rating : Page CI10 | | | | P-T Rating : Page CI10 | | | | P-T Rating : Page CI10 | | | |

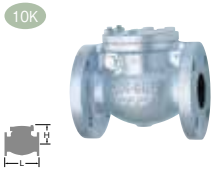
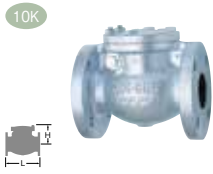
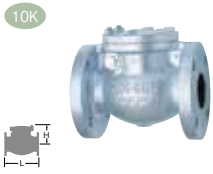
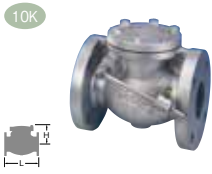
| Type | Gate | | | | Gate | | | | Gate | | | | Gate | | | |
|----------------------|---|-----|------|-----|---|------|-----|-----|--|-----|-----|------|---|--|--|--|
| Cast Iron |  | | | |  | | | |  | | | |  | | | |
| | 125 | | | | 125 | | | | PN16 | | | | PN16 | | | |
| Fig | 125FCL | | | | 125FCLS | | | | EN16FCL | | | | EN16FCLM | | | |
| End Connection | ASME B16.1 CI.125FF | | | | ASME B16.1 CI.125FF | | | | EN 1092-2 PN16 RF | | | | EN 1092-2 PN16 RF | | | |
| inch | mm | L | H | D | L | H | D | L | H | D | L | H | D | | | |
| 1 1/2 | 40 | 178 | 329 | 160 | 178 | 329 | 160 | 178 | 343 | 170 | 178 | 343 | 170 | | | |
| 2 | 50 | 190 | 383 | 170 | 190 | 382 | 170 | 190 | 389 | 170 | 190 | 389 | 170 | | | |
| 2 1/2 | 65 | 203 | 437 | 170 | 203 | 437 | 170 | 203 | 462 | 200 | 203 | 462 | 200 | | | |
| 3 | 80 | 229 | 534 | 225 | 229 | 534 | 225 | 229 | 547 | 250 | 229 | 547 | 250 | | | |
| 4 | 100 | 254 | 629 | 225 | 254 | 628 | 225 | 254 | 648 | 280 | 254 | 648 | 280 | | | |
| 5 | 125 | 267 | 727 | 250 | 267 | 726 | 250 | 267 | 759 | 300 | 267 | 759 | 300 | | | |
| 6 | 150 | 292 | 920 | 280 | 292 | 920 | 280 | 292 | 956 | 350 | 292 | 956 | 350 | | | |
| 8 | 200 | 330 | 1135 | 350 | 330 | 1135 | 350 | 330 | 1168 | 400 | 330 | 1168 | 400 | | | |
| 10 | 250 | 356 | 1364 | 450 | 356 | 1364 | 450 | 356 | 1363 | 450 | 356 | 1363 | 450 | | | |
| 12 | 300 | 381 | 1561 | 500 | 381 | 1561 | 500 | | | | | | | | | |
| Body | FC200 | | | | FC200 | | | | EN-JL1030 | | | | EN-JL1030 | | | |
| Bonnet | FC200 | | | | FC200 | | | | FC200 | | | | FC200 | | | |
| Stem | C3771 | | | | 403SS | | | | C3771 | | | | 316SS | | | |
| Disc | FC200 | | | | FC200 | | | | FC200 | | | | FC200 | | | |
| Body/Disc Seat Rings | CAC406 | | | | 403SS | | | | CAC406 | | | | 316SS | | | |
| Gland Packing | Asbestos-free (P/A4531K) | | | | Asbestos-free (P/A4531K) | | | | Asbestos-free (P/A4531K) | | | | Asbestos-free (P/A4531K) | | | |
| Gasket | Asbestos-free (T/1995) | | | | Asbestos-free (T/1995) | | | | Graphite (P/6633) | | | | Graphite (P/6633) | | | |
| Bolt/Nut | CS | | | | CS | | | | CS | | | | CS | | | |
| Standard/Approval | MSS SP-70: Option | | | | MSS SP-70: Option | | | | | | | | | | | |
| Reference Page | P-T Rating : Page CI10 | | | | P-T Rating : Page CI10 | | | | P-T Rating : Page CI10 | | | | P-T Rating : Page CI10 | | | |





| Type | Gate | | | Gate | | | Gate | | | Gate | | | |
|----------------------|---|-------|--------|---|-----|-----|--|-----|-----|---|-----|-----|-----|
| Cast Iron |  | | |  | | |  | | |  | | | |
| |  | | |  | | |  | | |  | | | |
| Fig | (PHOX)EN25FCLE | | | 10FCWI | | | 125FCWI | | | EN16FCW | | | |
| End Connection | EN 1092-2 PN25 RF | | | JIS B2239 10K FF | | | ASME B16.1 Cl.125FF | | | EN 1092-2 PN16 RF | | | |
| inch | mm | L | H | D | L | H | D | L | H | D | L | H | D |
| 11/2 | 40 | | | | 165 | 285 | 160 | | | | | | |
| 2 | 50 | 215.9 | 385 | 175 | 180 | 313 | 180 | 178 | 249 | 140 | 178 | 271 | 180 |
| 2 1/2 | 65 | 241.3 | 437 | 200 | 190 | 344 | 180 | 190 | 287 | 160 | 190 | 297 | 180 |
| 3 | 80 | 282.5 | 493 | 254 | 200 | 401 | 200 | 203 | 247 | 160 | 203 | 352 | 200 |
| 4 | 100 | 304.8 | 611 | 300 | 230 | 444 | 250 | 229 | 397 | 180 | 229 | 394 | 250 |
| 5 | 125 | 381 | 716 | 300 | 250 | 517 | 280 | 254 | 459 | 225 | 254 | 451 | 280 |
| 6 | 150 | 403.2 | 813 | 348 | 270 | 577 | 300 | 267 | 510 | 225 | 267 | 518 | 300 |
| 8 | 200 | 419.1 | 1023.5 | 400 | 290 | 693 | 350 | 292 | 635 | 300 | 292 | 618 | 350 |
| 10 | 250 | 457 | 1211 | 457 | 330 | 814 | 400 | 330 | 762 | 350 | 330 | 760 | 400 |
| 12 | 300 | 502 | 1386 | 457 | 350 | 925 | 450 | 356 | 873 | 350 | 356 | 867 | 450 |
| Body | EN-JL1030 | | | FC200 | | | FC200 | | | EN-JL1030 | | | |
| Bonnet | FC200 | | | FC200 | | | FC300 | | | EN-JL1030 | | | |
| Stem | C3771 | | | C3771BD | | | C3771 | | | C3771 | | | |
| Disc | FC200 | | | FC200 | | | FC300 | | | EN-JL1030 | | | |
| Body/Disc Seat Rings | CAC406 | | | CAC406 | | | CAC406 | | | CAC406 | | | |
| Gland Packing | Asbestos-free (P/A4531K) | | | Asbestos-free (P/A4531K) | | | Asbestos-free (P/A4531K) | | | P6619W | | | |
| Gasket | Graphite (P/6633) | | | Asbestos-free (T/1995) | | | Asbestos-free (T/1995) | | | DP1102 | | | |
| Bolt/Nut | CS | | | CS | | | CS | | | CS | | | |
| Standard/Approval | | | | JIS B2031 for 2 ^B -12 ^B | | | MSS SP-70: Option | | | | | | |
| Reference Page | P-T Rating : Page CI10 | | | P-T Rating : Page CI10 | | | P-T Rating : Page CI10 | | | P-T Rating : Page CI10 | | | |
| Remarks | | | | * with Indicator | | | * with Indicator | | | | | | |

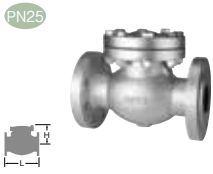
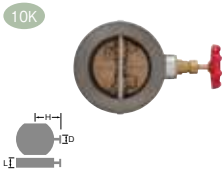


| Type | Gate | | | Gate | | | Gate | | | Globe | | | |
|----------------------|---|-----|-----|---|-----|-----|--|-----|-----|---|-----|-----|-----|
| Cast Iron |  | | |  | | |  | | |  | | | |
| |  | | |  | | |  | | |  | | | |
| Fig | EN16FCWI | | | 10FCHI | | | 125FCHI | | | 10FCJ | | | |
| End Connection | EN 1092-2 PN16 RF | | | JIS B2239 10K FF | | | ASME B16.1 Cl.125FF | | | JIS B2239 10K FF | | | |
| inch | mm | L | H | D | L | H | D | L | H | D | L | H | D |
| 1 1/2 | 40 | 178 | 271 | 180 | 140 | 210 | 140 | 140 | 213 | 140 | 190 | 261 | 160 |
| 2 | 50 | 190 | 297 | 180 | 146 | 250 | 140 | 146 | 249 | 140 | 200 | 274 | 180 |
| 2 1/2 | 65 | 203 | 352 | 200 | 159 | 285 | 160 | 159 | 287 | 160 | 220 | 301 | 180 |
| 3 | 80 | 229 | 394 | 250 | 165 | 350 | 160 | 165 | 347 | 160 | 240 | 353 | 225 |
| 4 | 100 | 254 | 451 | 280 | 171 | 400 | 180 | 171 | 397 | 180 | 290 | 403 | 280 |
| 5 | 125 | 267 | 518 | 300 | 190 | 460 | 225 | 190 | 459 | 225 | 360 | 465 | 300 |
| 6 | 150 | 292 | 618 | 350 | 210 | 515 | 225 | 210 | 510 | 225 | 410 | 531 | 350 |
| 8 | 200 | 330 | 760 | 400 | 241 | 635 | 300 | 241 | 635 | 300 | 500 | 618 | 450 |
| 10 | 250 | 356 | 867 | 450 | 273 | 760 | 350 | | | | | | |
| 12 | 300 | | | | 305 | 870 | 350 | | | | | | |
| Body | EN-JL1030 | | | FC300 | | | FC300 | | | FC200 | | | |
| Bonnet | EN-JL1030 | | | FC300 | | | FC300 | | | FC200 | | | |
| Stem | C3771 | | | C3771BE | | | C3771 | | | C3771 | | | |
| Disc | EN-JL1030 | | | FC300/CAC406 for 1 1/2 ^B | | | CAC406 or FC300 | | | CAC406 or FC200 | | | |
| Body/Disc Seat Rings | CAC406 | | | CAC406 | | | CAC406 | | | CAC406 | | | |
| Gland Packing | P6619W | | | Asbestos-free (P/A4531K) | | | Asbestos-free (P/A4531K) | | | Asbestos-free (P/A4531K) | | | |
| Gasket | DP1102 | | | Asbestos-free (T/1995) | | | Asbestos-free (T/1995) | | | Graphite (P/6633) | | | |
| Bolt/Nut | CS | | | CS | | | CS | | | CS | | | |
| Standard/Approval | | | | | | | | | | JIS B2031 | | | |
| Reference Page | P-T Rating : Page CI10 | | | P-T Rating : Page CI10 | | | P-T Rating : Page CI10 | | | P-T Rating : Page CI10 | | | |
| Remarks | * with Indicator | | | * with Indicator | | | * with Indicator | | | | | | |

| Type | Globe | | | | | Globe | | | | | Globe | | | | | Globe | | | | |
|----------------------|---|-----|-----|-----|-----|---|-----|-----|-----|-----|--|-----|-----|---|---|---|--|--|--|--|
| Cast Iron |  | | | | |  | | | | |  | | | | |  | | | | |
| | 10K | | | | | 10K | | | | | 125 | | | | | 125 | | | | |
| Fig | 10FCJS | | | | | 10FCJU | | | | | 125FCJ | | | | | 125FCJS | | | | |
| End Connection | JIS B2239 10K FF | | | | | JIS B2239 10K FF | | | | | ASME B16.1 Cl.125FF | | | | | ASME B16.1 Cl.125FF | | | | |
| inch | mm | L | H | D | L | H | D | L | H | D | L | H | D | L | H | D | | | | |
| 11/2 | 40 | 190 | 261 | 160 | 190 | 261 | 160 | | | | | | | | | | | | | |
| 2 | 50 | 200 | 274 | 180 | 200 | 274 | 180 | 203 | 274 | 180 | 203 | 274 | 180 | | | | | | | |
| 2 1/2 | 65 | 220 | 301 | 180 | 220 | 301 | 180 | 216 | 301 | 180 | 216 | 300 | 180 | | | | | | | |
| 3 | 80 | 240 | 353 | 225 | 240 | 353 | 225 | 241 | 353 | 225 | 241 | 353 | 225 | | | | | | | |
| 4 | 100 | 290 | 403 | 280 | 290 | 403 | 280 | 292 | 403 | 280 | 292 | 403 | 280 | | | | | | | |
| 5 | 125 | 360 | 465 | 300 | 360 | 465 | 300 | 330 | 465 | 300 | 330 | 465 | 300 | | | | | | | |
| 6 | 150 | 410 | 533 | 350 | 410 | 533 | 350 | 356 | 531 | 350 | 356 | 533 | 350 | | | | | | | |
| 8 | 200 | 500 | 618 | 450 | 500 | 618 | 450 | 495 | 618 | 450 | 495 | 618 | 450 | | | | | | | |
| 10 | 250 | 620 | 669 | 450 | 620 | 669 | 450 | | | | | | | | | | | | | |
| 12 | 300 | 700 | 756 | 500 | 700 | 756 | 500 | | | | | | | | | | | | | |
| Body | FC200 | | | | | FC200 | | | | | FC200 | | | | | FC200 | | | | |
| Bonnet | FC200 | | | | | FC200 | | | | | FC200 | | | | | FC200 | | | | |
| Stem | 403SS | | | | | 304SS | | | | | C3771 | | | | | 403SS | | | | |
| Disc | 403SS or FC200 | | | | | 304SS or FC200 | | | | | CAC406 or FC200 | | | | | 403SS or FC200 | | | | |
| Body/Disc Seat Rings | 403SS | | | | | 304SS | | | | | CAC406 | | | | | 403SS | | | | |
| Gland Packing | Asbestos-free (P/A4531K) | | | | | Asbestos-free (P/A4531K) | | | | | Asbestos-free (P/A4531K) | | | | | Asbestos-free (P/A4531K) | | | | |
| Gasket | Graphite (P/6633) | | | | | Asbestos-free (T/1995) | | | | | Asbestos-free (T/1995) | | | | | Asbestos-free (T/1995) | | | | |
| Bolt/Nut | CS | | | | | CS | | | | | CS | | | | | CS | | | | |
| Standard/Approval | JIS B2031 | | | | | JIS B2031 | | | | | MSS SP-70: Option | | | | | MSS SP-70: Option | | | | |
| Reference Page | P-T Rating : Page CI10 | | | | | P-T Rating : Page CI10 | | | | | P-T Rating : Page CI10 | | | | | P-T Rating : Page CI10 | | | | |

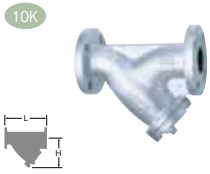



| Type | Globe | | | | | Globe | | | | | Swing Check | | | | | Swing Check | | | | |
|----------------------|---|-----|-----|-----|-----|---|-----|-----|-----|---|--|-----|---|---|---|---|--|--|--|--|
| Cast Iron |  | | | | |  | | | | |  | | | | |  | | | | |
| | PN16 | | | | | PN16 | | | | | 10K | | | | | 10K | | | | |
| Fig | EN16FCJ | | | | | EN16FCJM | | | | | 10FCO | | | | | 10FCOS | | | | |
| End Connection | EN 1092-2 PN16 RF | | | | | EN 1092-2 PN16 RF | | | | | JIS B2239 10K FF | | | | | JIS B2239 10K FF | | | | |
| inch | mm | L | H | D | L | H | D | L | H | D | L | H | D | L | H | D | | | | |
| 1 1/2 | 40 | | | | | | | 190 | 108 | | 190 | 108 | | | | | | | | |
| 2 | 50 | 203 | 277 | 180 | 203 | 277 | 180 | 200 | 113 | | 200 | 113 | | | | | | | | |
| 2 1/2 | 65 | 216 | 307 | 180 | 216 | 307 | 180 | 220 | 123 | | 220 | 123 | | | | | | | | |
| 3 | 80 | 241 | 353 | 225 | 241 | 353 | 225 | 240 | 149 | | 240 | 145 | | | | | | | | |
| 4 | 100 | 292 | 404 | 280 | 292 | 404 | 280 | 290 | 165 | | 290 | 165 | | | | | | | | |
| 5 | 125 | 330 | 467 | 300 | 330 | 467 | 300 | 360 | 207 | | 360 | 207 | | | | | | | | |
| 6 | 150 | 356 | 533 | 350 | 356 | 533 | 350 | 410 | 225 | | 410 | 225 | | | | | | | | |
| 8 | 200 | 495 | 620 | 450 | 495 | 620 | 450 | 500 | 271 | | 500 | 268 | | | | | | | | |
| 10 | 250 | 622 | 665 | 450 | 622 | 665 | 450 | 620 | 319 | | 620 | 319 | | | | | | | | |
| 12 | 300 | | | | | | | 700 | 356 | | 700 | 356 | | | | | | | | |
| 14 | 350 | | | | | | | | | | 787 | 381 | | | | | | | | |
| Body | EN-JL1030 | | | | | EN-JL1030 | | | | | FC200 | | | | | FC200 | | | | |
| Bonnet | FC200 | | | | | FC200 | | | | | FC200 | | | | | FC200 | | | | |
| Stem | C3771 | | | | | 316SS | | | | | C3771BD | | | | | 403SS | | | | |
| Disc | CAC406 or FC200 | | | | | 316SS or FC200 | | | | | CAC406 or FC200 | | | | | 403SS or FC200 | | | | |
| Body/Disc Seat Rings | CAC406 | | | | | 316SS | | | | | CAC406 | | | | | 403SS/304SS | | | | |
| Gland Packing | P/6619W | | | | | P/A4532K | | | | | | | | | | | | | | |
| Gasket | Graphite (P/6633 or 6630) | | | | | Graphite (P/6633 or 6630) | | | | | Asbestos-free (T/1995) | | | | | P/6630 or 6633 | | | | |
| Bolt/Nut | CS | | | | | CS | | | | | CS | | | | | CS | | | | |
| Standard/Approval | | | | | | | | | | | JIS B2031 for 2 nd -8 th | | | | | JIS B2031 for 2 nd -8 th | | | | |
| Reference Page | P-T Rating : Page CI10 | | | | | P-T Rating : Page CI10 | | | | | P-T Rating : Page CI10 | | | | | P-T Rating : Page CI10 | | | | |

| Type | Swing Check | | | | Swing Check | | | | Swing Check | | | | Swing Check | | | |
|----------------------|---|-----|-----|---|---|-----|---|-----|--|---|-----|-----|---|--|--|--|
| Cast Iron |  | | | |  | | | |  | | | |  | | | |
| | 10K | | | | 10K | | | | 10K | | | | 10K | | | |
| Fig | 10FCOU | | | | 10FCOR | | | | 10FCOUR | | | | 10FCOU-C | | | |
| End Connection | JIS B2239 10K FF | | | | JIS B2239 10K FF | | | | JIS B2239 10K FF | | | | JIS B2239 10K FF | | | |
| inch | mm | L | H | D | L | H | D | L | H | D | L | H | D | | | |
| 11/2 | 40 | 190 | 108 | | 190 | 106 | | 190 | 106 | | | | | | | |
| 2 | 50 | 200 | 113 | | 200 | 111 | | 200 | 111 | | 200 | 111 | | | | |
| 2 1/2 | 65 | 220 | 123 | | 220 | 121 | | 220 | 121 | | 220 | 121 | | | | |
| 3 | 80 | 240 | 145 | | 240 | 145 | | 240 | 145 | | 240 | 145 | | | | |
| 4 | 100 | 290 | 165 | | 290 | 165 | | 290 | 165 | | 290 | 165 | | | | |
| 5 | 125 | 360 | 207 | | 360 | 207 | | 360 | 207 | | 360 | 207 | | | | |
| 6 | 150 | 410 | 225 | | 410 | 225 | | 410 | 225 | | 410 | 225 | | | | |
| 8 | 200 | 500 | 268 | | 500 | 268 | | 500 | 268 | | 500 | 268 | | | | |
| 10 | 250 | 620 | 319 | | 620 | 315 | | 620 | 315 | | | | | | | |
| 12 | 300 | 700 | 356 | | 700 | 356 | | 700 | 356 | | | | | | | |
| 14 | 350 | 787 | 381 | | | | | | | | | | | | | |
| Body | FC200 | | | | FC200 | | | | FC200 | | | | FC200 | | | |
| Bonnet | FC200 | | | | FC200 | | | | FC200 | | | | FC200 | | | |
| Stem | 304SS | | | | C3771BD | | | | C3771BD | | | | 304SS | | | |
| Disc | 304SS or FC200 | | | | 304SS+NBR or FC200+NBR | | | | 304SS+NBR or FC200+NBR | | | | 304SS or FC200 | | | |
| Body/Disc Seat Rings | 403SS/304SS | | | | CAC406 | | | | 304SS | | | | 304SS | | | |
| Gasket | P/6630 or 6633 | | | | P/6630 or 6633 | | | | P/6630 or 6633 | | | | P/6630 or 6633 | | | |
| Bolt/Nut | CS | | | | CS | | | | CS | | | | CS | | | |
| Standard/Approval | JIS B2031 for 2 ^B -8 ^B | | | | | | | | | | | | | | | |
| Reference Page | P-T Rating : Page CI10 | | | | P-T Rating : Page CI10 | | | | P-T Rating : Page CI10 | | | | P-T Rating : Page CI10 | | | |
| Remarks | | | | | NBR Disc Seat | | | | NBR Disc Seat | | | | Counter Weight | | | |


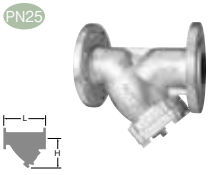
| Type | Swing Check | | | | Swing Check | | | | Swing Check | | | | Swing Check | | | |
|----------------------|---|-----|-----|---|---|-----|---|-----|--|---|-----|-----|---|--|--|--|
| Cast Iron |  | | | |  | | | |  | | | |  | | | |
| | 125 | | | | 125 | | | | PN16 | | | | PN16 | | | |
| Fig | 125FCO | | | | 125FCOS | | | | EN16FCO | | | | EN16FCOM | | | |
| End Connection | ASME B16.1 CI.125FF | | | | ASME B16.1 CI.125FF | | | | EN 1092-2 PN16 RF | | | | EN 1092-2 PN16 RF | | | |
| inch | mm | L | H | D | L | H | D | L | H | D | L | H | D | | | |
| 2 | 50 | 203 | 113 | | 203 | 113 | | 203 | 111 | | 203 | 111 | | | | |
| 2 1/2 | 65 | 216 | 123 | | 216 | 123 | | 216 | 121 | | 216 | 121 | | | | |
| 3 | 80 | 241 | 143 | | 241 | 143 | | 241 | 145 | | 241 | 145 | | | | |
| 4 | 100 | 292 | 175 | | 292 | 175 | | 292 | 165 | | 292 | 165 | | | | |
| 5 | 125 | 330 | 207 | | 330 | 207 | | 330 | 207 | | 330 | 207 | | | | |
| 6 | 150 | 356 | 225 | | 356 | 225 | | 356 | 225 | | 356 | 225 | | | | |
| 8 | 200 | 495 | 268 | | 495 | 268 | | 495 | 268 | | 495 | 268 | | | | |
| 10 | 250 | 622 | 319 | | 622 | 319 | | 622 | 315 | | 622 | 315 | | | | |
| 12 | 300 | 698 | 356 | | 698 | 356 | | 698 | 356 | | 698 | 356 | | | | |
| 14 | 350 | | | | 787 | 381 | | | | | | | | | | |
| Body | FC200 | | | | FC200 | | | | EN-JL1030 | | | | EN-JL1030 | | | |
| Bonnet | FC200 | | | | FC200 | | | | FC200 | | | | FC200 | | | |
| Stem | CAC406 or FC200 | | | | 403SS | | | | C3771 | | | | 316SS | | | |
| Disc | CAC406 | | | | 403SS | | | | CAC406 or FC200 | | | | 316SS or FC200 | | | |
| Body/Disc Seat Rings | CAC406 | | | | 403SS | | | | CAC406 | | | | 316SS | | | |
| Gasket | Asbestos-free (T/1995) | | | | Asbestos-free (T/1995) | | | | P/6633 | | | | P/6633 | | | |
| Bolt/Nut | CS | | | | CS | | | | CS | | | | CS | | | |
| Standard/Approval | MSS SP-71: Option | | | | MSS SP-71: Option | | | | | | | | | | | |
| Reference Page | P-T Rating : Page CI10 | | | | P-T Rating : Page CI10 | | | | P-T Rating : Page CI10 | | | | P-T Rating : Page CI10 | | | |

| Type | Swing Check | | | Wafer Check | | | Wafer Check | | | Wafer Check | | | |
|----------------------|---|-------------------|-----|---|-----------------|-----|--|-------------------|---|--|-------------------|---|-----|
| Cast Iron |  | | |  | | |  | | |  | | | |
| | Fig (PHOX)EN25FCOE | | | 10FWZ | | | 125FWNB | | | 125FWNBE | | | |
| End Connection | | EN 1092-2 PN25 RF | | | Wafer (JIS 10K) | | | Wafer (Class 125) | | | Wafer (Class 125) | | |
| inch | mm | L | H | D | L | H | D | L | H | D | L | H | D |
| 11/2 | 40 | | | | 54 | 126 | 55 | | | | | | |
| 2 | 50 | 267 | 135 | | 56 | 140 | 70 | 54 | | 105 | 54 | | 105 |
| 2 1/2 | 65 | 292 | 150 | | 56 | 148 | 70 | 54 | | 124 | 54 | | 124 |
| 3 | 80 | 318 | 166 | | 59 | 153 | 70 | 57 | | 137 | 57 | | 137 |
| 4 | 100 | 356 | 190 | | 66 | 166 | 70 | 64 | | 175 | 64 | | 175 |
| 5 | 125 | 400 | 206 | | 72 | 180 | 70 | 70 | | 197 | 70 | | 197 |
| 6 | 150 | 444 | 244 | | 78 | 214 | 80 | 76 | | 222 | 76 | | 222 |
| 8 | 200 | 533 | 291 | | 96 | 241 | 80 | 95 | | 279 | 95 | | 279 |
| 10 | 250 | 622 | 337 | | 109 | 289 | 90 | 108 | | 340 | 108 | | 340 |
| 12 | 300 | 711 | 383 | | 145 | 315 | 90 | 143 | | 410 | 143 | | 410 |
| 14 | 350 | | | | 184 | 328 | 90 | | | | | | |
| 16 | 400 | | | | 191 | 355 | 90 | | | | | | |
| 18 | 450 | | | | 204 | 386 | 90 | | | | | | |
| Body | EN-GJL-250 | | | FC250+NBR | | | A126 CL.B+NBR | | | A126 CL.B+EPDM | | | |
| Bonnet | EN-GJL-250 | | | C3771/CAC406 | | | B584 C83600 | | | B584 C83600 | | | |
| Stem | BS970 304S15 | | | 304SS | | | 304SS/Spring 316SS | | | 304SS/Spring 316SS | | | |
| Disc | EN-GJL-250 | | | CAC406 | | | B584 C83600 | | | B584 C83600 | | | |
| Body/Disc Seat Rings | BS1400 LG2 | | | | | | | | | | | | |
| Gasket | PTFE | | | | | | | | | | | | |
| Bolt/Nut | CS | | | | | | | | | | | | |
| Service Conditions | | | | 80°C W.O.G. : 1.4MPa | | | 16bar at 80°C Non-shock Water (NBR Seat), 16bar at 100°C Non-shock Water (EPDM Seat) | | | 16bar at 80°C Non-shock Water (NBR Seat), 16bar at 100°C Non-shock Water (EPDM Seat) | | | |
| Reference Page | P-T Rating : Page CI10 | | | Features: Page BR35 | | | | | | | | | |
| Remarks | | | | Built-in Bypass Valve Dual Plate Type | | | Dual Plate Type | | | Dual Plate Type | | | |





| Type | Wafer Check | | | Wafer Check | | | |
|--------------------|--|--------------|---|--|--------------|---|-----|
| Cast Iron |  | | |  | | | |
| | Fig PN16FWNB | | | PN16FWNBME | | | |
| End Connection | | Wafer (PN16) | | | Wafer (PN16) | | |
| inch | mm | L | H | D | L | H | D |
| 2 | 50 | 54 | | 109 | 54 | | 109 |
| 2 1/2 | 65 | 54 | | 129 | 54 | | 129 |
| 3 | 80 | 57 | | 144 | 57 | | 144 |
| 4 | 100 | 64 | | 164 | 64 | | 164 |
| 5 | 125 | 70 | | 194 | 70 | | 194 |
| 6 | 150 | 76 | | 220 | 76 | | 220 |
| 8 | 200 | 95 | | 275 | 95 | | 275 |
| 10 | 250 | 108 | | 331 | 108 | | 331 |
| 12 | 300 | 143 | | 386 | 143 | | 386 |
| 14 | 350 | 184 | | 446 | 184 | | 446 |
| 16 | 400 | 191 | | 498 | 191 | | 498 |
| 18 | 450 | 203 | | 558 | 203 | | 558 |
| 20 | 500 | 213 | | 620 | 213 | | 620 |
| 24 | 600 | 222 | | 737 | 222 | | 737 |
| Body | A126 CL.B+NBR | | | A126 CL.B+EPDM | | | |
| Stem/Hinge Pin | 304SS/Spring 316SS | | | 304SS/Spring 316SS | | | |
| Disc | CF8M | | | CF8M | | | |
| Service Conditions | 16bar at 80°C Non-shock Water (NBR Seat), 16bar at 100°C Non-shock Water (EPDM Seat) | | | 16bar at 80°C Non-shock Water (NBR Seat), 16bar at 100°C Non-shock Water (EPDM Seat) | | | |
| Remarks | Dual Plate Type | | | Dual Plate Type | | | |




| Type | Y-Strainer | | | | | Y-Strainer | | | Y-Strainer | | | Y-Strainer | | |
|--------------------|--|-----|-----|------|-----|---|------|------|--|------|-----|---|------|--|
| Cast Iron |  | | | | |  | | |  | | |  | | |
| | 10K | | | | | 125 | | | 125 | | | PN16 | | |
| Fig | 10FCY | | | | | 125FCY | | | 125FCETY<Z0P02> | | | EN16FCY | | |
| End Connection | JIS B2239 10K FF | | | | | ASME B16.1 Cl.125FF | | | ASME B16.1 Cl.125FF | | | EN 1092-2 PN16 RF | | |
| inch | mm | L | H | H1** | L | H | H1** | L | H | H1** | L | H | H1** | |
| 3/8 | 10 | 115 | 46 | 63 | | | | | | | | | | |
| 1/2 | 15 | 125 | 57 | 81 | | | | | | | | | | |
| 3/4 | 20 | 140 | 62 | 90 | | | | | | | | | | |
| 1 | 25 | 150 | 77 | 114 | | | | | | | | | | |
| 1 1/4 | 32 | 170 | 90 | 134 | | | | | | | | | | |
| 1 1/2 | 40 | 190 | 100 | 145 | | | | | | | | | | |
| 2 | 50 | 230 | 138 | 173 | 250 | 157 | 207 | | | | 250 | 168 | 208 | |
| 2 1/2 | 65 | 305 | 207 | 288 | 285 | 207 | 288 | | | | 285 | 212 | 289 | |
| 3 | 80 | 360 | 237 | 334 | 315 | 237 | 334 | | | | 315 | 242 | 335 | |
| 4 | 100 | 415 | 278 | 387 | 370 | 278 | 387 | | | | 370 | 284 | 388 | |
| 5 | 125 | 465 | 321 | 445 | 420 | 321 | 445 | | | | 420 | 325 | 446 | |
| 6 | 150 | 515 | 367 | 497 | 490 | 367 | 497 | | | | 490 | 370 | 497 | |
| 8 | 200 | 580 | 457 | 622 | 570 | 457 | 622 | | | | 570 | 440 | 589 | |
| 10 | 250 | 680 | 536 | 743 | 680 | 536 | 743 | | | | 680 | 515 | 694 | |
| 12 | 300 | 800 | 625 | 869 | 800 | 625 | 869 | | | | 800 | 600 | 818 | |
| 14 | 350 | 950 | 741 | 1031 | 950 | 741 | 1031 | | | | | | | |
| 16 | 400 | | | | | | | 1100 | 750 | 1129 | | | | |
| 18 | 450 | | | | | | | 1200 | 784 | 1172 | | | | |
| 20 | 500 | | | | | | | 1250 | 857 | 1293 | | | | |
| Body | FC200 | | | | | FC200 | | | FC200 | | | EN-JGL-200 | | |
| Cap/Cover | C3771BE /FC200 for 2 ^b & over | | | | | FC200 | | | FC200 | | | EN-JGL-200 | | |
| Screen | 304SS(Punched Plate) | | | | | 304SS(Punched Plate) | | | 304SS(Punched Plate) | | | 304SS | | |
| Gasket | T/1995 | | | | | T/1995 | | | Graphite | | | Non asbestos Sheet | | |
| Bolt/Nut | CS | | | | | CS | | | CS | | | CS | | |
| Plug | 304SS | | | | | 304SS | | | 304SS | | | 304SS | | |
| Service Conditions | 120°C Non-shock Water: 1.4MPa, 120°C Water,Oil,Air.: 1.0MPa, 120°C Gas: 0.2MPa, Saturated Steam: 0.7MPa | | | | | | | | | | | | | |
| Reference Page | | | | | | P-T Rating : Page CI10 | | | P-T Rating : Page CI10 | | | P-T Rating : Page CI10 | | |
| Remarks | Screwed Cap up to 1 1/2 ^b | | | | | | | | | | | | | |

**Height for removing the screen

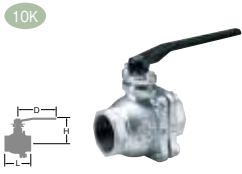
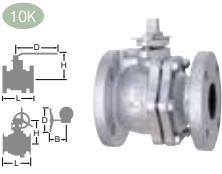
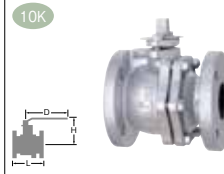
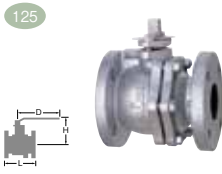
| Type | Y-Strainer | | | | | Y-Strainer | | |
|----------------|---|-----|-----|------|-----|---|------|--|
| Cast Iron |  | | | | |  | | |
| | PN16 | | | | | PN25 | | |
| Fig | EN16FCYM | | | | | (PHOX)EN25FDYBE | | |
| End Connection | EN 1092-2 PN16 RF | | | | | EN 1092-2 PN25 RF | | |
| inch | mm | L | H | H1** | L | H | H1** | |
| 2 | 50 | 250 | 168 | 208 | 216 | 140 | 180 | |
| 2 1/2 | 65 | 285 | 212 | 289 | 241 | 162 | 219 | |
| 3 | 80 | 315 | 242 | 335 | 283 | 184 | 258 | |
| 4 | 100 | 370 | 284 | 388 | 305 | 225 | 339 | |
| 5 | 125 | 420 | 325 | 446 | 381 | 280 | 388 | |
| 6 | 150 | 490 | 370 | 497 | 403 | 318 | 441 | |
| 8 | 200 | 570 | 440 | 589 | 521 | 405 | 606 | |
| 10 | 250 | 680 | 515 | 694 | 635 | 485 | 722 | |
| 12 | 300 | 800 | 600 | 818 | 749 | 580 | 890 | |
| Body | EN-JGL-200 | | | | | EN1563 EN-GJS-450 | | |
| Cap | EN-JGL-200 | | | | | EN1563 EN-GJS-450 | | |
| Screen | 316SS | | | | | 304SS(Punched Plate) | | |
| Gasket | Non asbestos Sheet | | | | | Non-asbestos | | |
| Bolt/Nut | CS | | | | | | | |
| Plug | SS | | | | | 304SS | | |
| Reference Page | P-T Rating : Page CI10 | | | | | P-T Rating : Page CI10 | | |

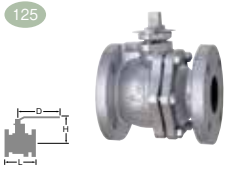
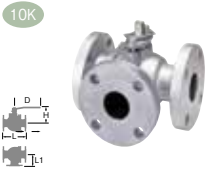
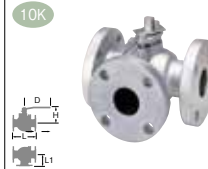
**Height for removing the screen

| Type | Gate | | | | Gate | | | | Globe | | | Swing Check | | |
|---------------------------|---|-----|------|-----|---|------|-----|-----|--|-----|-----|---|---|--|
| Cast Iron Nylon Lining |  | | | |  | | | |  | | |  | | |
| | 5K | | | | 10K | | | | 10K | | | 10K | | |
| Fig | 5FCMN | | | | 10FCLN | | | | 10FCJN | | | 10FCON | | |
| End Connection | JIS B2239 5K FF | | | | JIS B2239 10K FF | | | | JIS B2239 10K FF | | | JIS B2239 10K FF | | |
| inch | mm | L | H | D | L | H | D | L | H | D | L | H | D | |
| 2 | 50 | | | | 180 | 343 | 170 | 200 | 274 | 180 | 200 | 116 | | |
| 2 1/2 | 65 | 170 | 383 | 170 | 190 | 390 | 170 | 220 | 301 | 180 | 220 | 126 | | |
| 3 | 80 | 180 | 437 | 170 | 200 | 464 | 200 | 240 | 353 | 225 | 240 | 153 | | |
| 4 | 100 | 200 | 534 | 225 | 230 | 548 | 250 | 290 | 403 | 280 | 290 | 170 | | |
| 5 | 125 | 220 | 629 | 225 | 250 | 649 | 280 | 360 | 466 | 300 | 360 | 217 | | |
| 6 | 150 | 240 | 727 | 250 | 270 | 760 | 300 | 410 | 534 | 350 | 410 | 235 | | |
| 8 | 200 | 260 | 920 | 280 | 290 | 957 | 350 | 500 | 620 | 450 | 500 | 273 | | |
| 10 | 250 | 300 | 1135 | 350 | 330 | 1169 | 400 | | | | | | | |
| 12 | 300 | | | | 350 | 1364 | 450 | | | | | | | |
| Body | FC200+Nylon Lining | | | | FC200+Nylon Lining | | | | FC200+Nylon Lining | | | FC200+Nylon Lining | | |
| Bonnet/Cap/Cover | FC200+Nylon Lining | | | | FC200+Nylon Lining | | | | FC200+Nylon Lining | | | FC200+Nylon Lining | | |
| Stem/Hinge Pin | C3771BD | | | | C3771BD | | | | C3771BD | | | C3771BD | | |
| Disc | CAC406 up to 6 ⁹ /FC200 | | | | CAC406 up to 6 ⁹ /FC200 | | | | CAC406 up to 4 ⁹ /FC200 | | | CAC406 | | |
| Body/Disc Seat Rings | CAC406 | | | | CAC406 | | | | CAC406 | | | CAC406 | | |
| Gland Packing | P/A4531K or P/A4532K | | | | P/A4531K or P/A4532K | | | | P/A4531K or P/A4532K | | | | | |
| Gasket | T/1995 | | | | T/1995 | | | | T/1995 | | | T/1938 | | |
| Standard/Approval | JIS B2031,JWWA E-236 | | | | JIS B2031,JWWA E-236 | | | | JIS B2031,JWWA E-236 | | | JIS B2031,JWWA E-236 | | |
| Service Conditions | 0°C~+60°C, Fresh Water 0.7MPa, Water/Oil 0.5MPa | | | | 0°C~+60°C, Fresh Water 1.4MPa, Water/Oil 1.0MPa | | | | 0°C~+60°C, Fresh Water 1.4MPa, Water/Oil 1.0MPa | | | 0°C~+60°C, Fresh Water 1.4MPa, Water/Oil 1.0MPa | | |

| Type | Swing Check | | | | Ball Check | | | | Y-Strainer | | |
|---------------------------|---|-----|-----|---|---|-----|---|-----|--|------|--|
| Cast Iron Nylon Lining |  | | | |  | | | |  | | |
| | 10K | | | | 10K | | | | 10K | | |
| Fig | 10FCON-C | | | | 10FCFTN | | | | 10FCYN | | |
| End Connection | JIS B2239 10K FF | | | | JIS B2239 10K FF | | | | JIS B2239 10K FF | | |
| inch | mm | L | H | D | L | H | D | L | H | H1** | |
| 1 1/2 | 40 | | | | 190 | 101 | | | | | |
| 2 | 50 | 200 | 116 | | 200 | 105 | | 230 | 139 | 173 | |
| 2 1/2 | 65 | 220 | 126 | | 220 | 127 | | 305 | 210 | 288 | |
| 3 | 80 | 240 | 153 | | 240 | 150 | | 360 | 238 | 334 | |
| 4 | 100 | 290 | 170 | | 290 | 188 | | 415 | 282 | 387 | |
| 5 | 125 | 360 | 217 | | 360 | 235 | | 465 | 325 | 445 | |
| 6 | 150 | 410 | 235 | | 410 | 280 | | 515 | 373 | 497 | |
| 8 | 200 | 500 | 273 | | | | | 580 | 457 | 622 | |
| 10 | 250 | | | | | | | 680 | 536 | 743 | |
| Body | FC200+Nylon Lining | | | | FC200+Nylon Lining | | | | FC200+Nylon Lining | | |
| Bonnet/Cap/Cover | FC200+Nylon Lining | | | | FC200+Nylon Lining | | | | FC200+Nylon Lining | | |
| Stem/Hinge Pin | 304SS | | | | | | | | | | |
| Disc/Ball/Screen | CAC406 | | | | NBR* | | | | 304SS | | |
| Body/Disc Seat Rings | CAC406 | | | | | | | | | | |
| Gland Packing/O ring | | | | | NBR* | | | | | | |
| Gasket/O ring | T/1938 | | | | NBR* | | | | T/1995 | | |
| Standard/Approval | | | | | | | | | JWWA Z-52 | | |
| Service Conditions | 0°C~+60°C, Fresh Water 1.4MPa, Water/Oil 1.0MPa | | | | 0°C~+60°C, Fresh Water 0.05~1.4MPa | | | | 0°C~+60°C, Fresh Water 1.4MPa, Water/Oil 1.0MPa | | |
| Reference Page | | | | | Features & Pressure Loss: Page CPT21&22 | | | | | | |
| Remarks | Counter Weight | | | | *EPDM Option | | | | | | |

**Height for removing the screen

| Type | Ball | | | | | Ball | | | | Ball | | | Ball | | |
|--------------------|---|-----|-----|-----|--|---|-----|------|-----|--|-----|------|---|-----|------|
| Cast Iron |  | | | | |  | | | |  | | |  | | |
| | 10K FB | | | | | 10K FB | | | | 10K RB | | | 125 FB | | |
| Fig | 10FCT | | | | | 10FCTB/G-10FCTB | | | | 10FCTR | | | 125FCTB | | |
| End Connection | BS21 (JIS B0203) | | | | | JIS B2239 10K FF | | | | JIS B2239 10K FF | | | ASME B16.1 Cl.125FF | | |
| inch | mm | L | H | D | | L | H | D | B | L | H | D | L | H | D |
| 3/8 | 10 | 72 | 71 | 130 | | | | | | | | | | | |
| 1/2 | 15 | 80 | 102 | 130 | | 110 | 102 | 130 | | | | | | | |
| 3/4 | 20 | 85 | 105 | 130 | | 120 | 105 | 130 | | | | | | | |
| 1 | 25 | 95 | 124 | 160 | | 130 | 124 | 160 | | | | | | | |
| 1 1/4 | 32 | 120 | 128 | 160 | | 140 | 128 | 160 | | | | | | | |
| 1 1/2 | 40 | 120 | 114 | 230 | | 165 | 114 | 230 | | | | | | | |
| 2 | 50 | 140 | 121 | 230 | | 180 | 121 | 230 | | | | | 178 | 121 | 230 |
| 2 1/2 | 65 | 160 | 154 | 400 | | 190 | 154 | 400 | | | | | 190 | 154 | 400 |
| 3 | 80 | 182 | 163 | 400 | | 200 | 163 | 400 | | | | | 203 | 163 | 400 |
| 4 | 100 | | | | | 230 | 199 | 460 | | | | | 229 | 199 | 460 |
| 5 | 125 | | | | | 300 | 219 | 460 | | 250 | 200 | 460 | | | |
| 6 | 150 | | | | | 340 | 292 | 1000 | | 270 | 220 | 460 | 394 | 292 | 1000 |
| 8 | 200 | | | | | 450 | 352 | 1500 | | 290 | 295 | 1000 | 457 | 352 | 1500 |
| 10 | 250 | | | | | 533 | 477 | 500 | 363 | 330 | 355 | 1500 | | | |
| Body & Cap | FC200 | | | | | FC200 | | | | FC200 | | | A126 CL. B | | |
| Stem | 403SS | | | | | 403SS | | | | 403SS | | | 403SS | | |
| Ball | 304SS/CF8 | | | | | 304SS/CF8 | | | | 304SS/CF8 | | | 304SS/CF8 | | |
| Ball Seat | PTFE | | | | | PTFE | | | | PTFE | | | PTFE | | |
| Gland Packing | PTFE | | | | | PTFE | | | | PTFE | | | PTFE | | |
| Gasket | PTFE | | | | | PTFE | | | | PTFE | | | PTFE | | |
| Handle | DI/CS | | | | | DI/CS | | | | DI/CS | | | DI/CS | | |
| Bore | Full Bore | | | | | Full Bore | | | | Reduced Bore | | | Full Bore | | |
| Service Conditions | 120°C Non-shock Water 1.4MPa, 120°C W.O.G. 1.0MPa, Saturated Steam 0.7MPa | | | | | | | | | | | | | | |
| Reference Page | | | | | | P-T Rating : Page C113 | | | | P-T Rating : Page C113 | | | P-T Rating : Page C113 | | |
| Remarks | | | | | | Gear ope for 10 ⁸ | | | | | | | | | |

| Type | Ball | | | | | 3-way, 2-seats, L port Ball | | | | 3-way, 2-seats, L port Ball | | | |
|---------------------------|---|-----|-----|------|--|---|-----|-----|-----|--|-----|------|-----|
| Cast Iron Nylon Lining |  | | | | |  | | | |  | | | |
| | 125 RB | | | | | 10K FB | | | | 10K RB | | | |
| Fig | 125FCTR | | | | | 10FCTB2L | | | | 10FCTR2L | | | |
| End Connection | ASME B16.1 Cl.125FF | | | | | JIS B2239 10K FF | | | | JIS B2239 10K FF | | | |
| inch | mm | L | H | D | | L | H | D | L1 | L | H | D | L1 |
| 1 1/2 | 40 | | | | | 210 | 114 | 230 | 105 | | | | |
| 2 | 50 | | | | | 220 | 123 | 230 | 110 | | | | |
| 2 1/2 | 65 | | | | | 250 | 156 | 400 | 125 | | | | |
| 3 | 80 | | | | | 260 | 163 | 400 | 130 | | | | |
| 4 | 100 | | | | | 330 | 203 | 460 | 165 | | | | |
| 5 | 125 | | | | | | | | | 370 | 205 | 460 | 185 |
| 6 | 150 | 267 | 220 | 460 | | | | | | 430 | 225 | 460 | 215 |
| 8 | 200 | 292 | 295 | 1000 | | | | | | 540 | 295 | 1000 | 270 |
| 10 | 250 | 330 | 355 | 1500 | | | | | | | | | |
| Body & Cap | A126 CL. B | | | | | FC200 | | | | FC200 | | | |
| Stem | 403SS | | | | | 403SS | | | | 403SS | | | |
| Ball | 304SS/CF8 | | | | | 304SS/CF8 | | | | 304SS/CF8 | | | |
| Ball Seat | PTFE | | | | | PTFE | | | | PTFE | | | |
| Gland Packing | PTFE | | | | | PTFE | | | | PTFE | | | |
| Gasket | PTFE | | | | | PTFE | | | | PTFE | | | |
| Handle | DI/CS | | | | | DI/CS | | | | DI/CS | | | |
| Bore | Reduced Bore | | | | | Full Bore | | | | Reduced Bore | | | |
| Reference Page | P-T Rating : Page C113 | | | | | P-T Rating : Page C113 Port Orientation : Page TECH1 | | | | P-T Rating : Page C113 Port Orientation : Page TECH1 | | | |

Cast Iron Valves

Conditions of Fluids and Maximum Permissible Pressures

Unit: MPa

| Standards | | 5K | | 10K | | | 10K | |
|--------------------------------------|---|--------------------------|--|--------------------------------|-----------------------------------|---------------------|--|----------------------|
| Nominal Pressure | | JIS B2031 | | JIS B2031 | | | KITZ Standard | |
| Valve Type | | Outside Screw Gate Valve | Outside Screw Gate Valve | Globe Valve, Swing Check Valve | Inside Screw Gate Valve | Valve 350 A or more | FC300 Valve | |
| Disc Seat Structure | | Press-fit Seat | Screw Seat | Screw Seat | | Press-fit Seat | Screw Seat | Press-fit Seat |
| Main Section | | CAC406 | CAC 406 13 Chrome 18-8 Stainless Steel | CAC 406 | 13 Chrome 18-8 Stainless Steel | CAC 406 | CAC 406 13 Chrome 18-8 Stainless Steel | CAC 406 13 Chrome |
| Maximum Permissible Working Pressure | Steady Flow Below 120°C | 0.7 | 1.4 | 1.4 | – | 1.4 | 1.0 | 1.0 |
| | Oil, Pulsating Flow and Water Below 120°C | 0.5 | 1.0 | 1.0 | – | 1.0 | 0.9 | 0.9 |
| | Saturated Steam | 0.2 | 0.7 | 0.7 | – | 0.2 | 0.7 | 0.7 |
| | Gas Below 120°C | 0.2 | 0.2 | 0.2 | – | 0.2 | 0.2 | 0.2 |
| | 120°C | – | – | – | 1.4 | – | – | – |
| | 220°C | – | – | – | 1.0 | – | – | – |

- Use may be prohibited or restricted by the High Pressure Gas Safety Law and other regulations. Use the valve within legal limits.
- Maximum allowable pressure at intermediate temperatures between 120°C and 220°C is based on the proportional interpolation method.

Basic Design Specifications

| Nominal Pressure | JIS5K/10K | Class 125 | 10K |
|------------------------|------------|--------------|------------|
| Face-to-Face Dimension | JIS B 2031 | ASME B 16.10 | KITZ Std. |
| End Flange Dimension | JIS B 2239 | ASME B 16.1 | JIS B 2239 |
| Wall Thickness | JIS B 2031 | KITZ Std. | |

Material Specifications for Grey Iron Casting

| Mechanical Properties | JIS Materials | | |
|--|---------------|-------|-------|
| | FC200 | FC250 | FC300 |
| Tensile Strength (N/mm ²) min. | 200 | 250 | 300 |
| Brinell Hardness (HB) Max. | 235 | 248 | 269 |

| ASTM A126 Class B | Tensile Strength (min) | 31ksi |
|-----------------------------|----------------------------|----------|
| Transverse Test Requirement | Face at Center, Min. | 3,300 lb |
| | Deflection at Center, Min. | 0.12in |

Class 125 Valves Pressure-Temperature Ratings Maximum Allowable Non-Shock Pressure

| Temperature | Class 125 | |
|-------------|-------------|--------------|
| | Size 1 – 12 | Size 14 – 24 |
| °C | bar | |
| -29 to 65 | 13.8 | 10.3 |
| 80 | 13.3 | 9.8 |
| 100 | 12.7 | 9.2 |
| 120 | 12.1 | 8.6 |
| 140 | 11.5 | 8.0 |
| 160 | 10.8 | 7.4 |
| 178* | - | 6.9 |

*178°C to reflect temperature of saturated steam at 8.6 bar.

Simplified Material Indication (as referred to on each page)

Bronze Trim : Iron Body with Bronze Trim

13 Cr. Trim : Iron Body with 13 Cr. Trim

18-8 Trim : Iron Body with 18 Cr.-8 Ni Trim

Certification by JIS Mark

Industrial Standardization Law of Japan provides an effective measure to promote the introduction of high-level quality assurance system of manufacture and processing. Wherever KITZ valves are identified with JIS Mark, it is officially certified that such valves are produced under strict quality assurance procedures and practices to satisfy the designated quality level stably and constantly.

Valve Position Indicators

Valve position indicator is provided on gate valves with inside screw design as illustrated. Opening or closing a valve does not move the vertical position of the stem. Instead, position indicator visually indicates three valve operating positions—fully opened, fully closed, or half opened.



Trim Materials

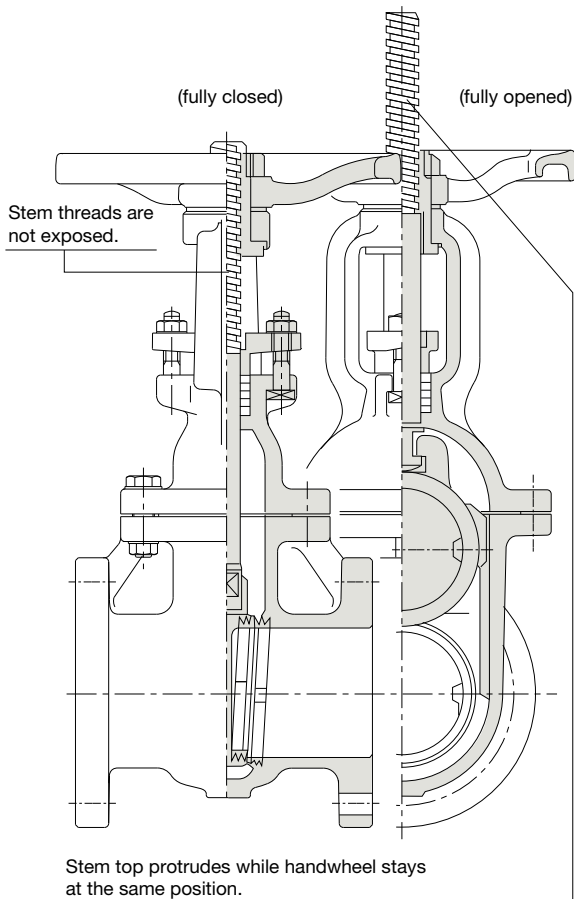
KITZ cast iron valves are provided with one of three trim materials given in the table below for versatility of service applications.

Color codes are given on a name plate of gate or globe valves and on the cover of swing check valves.

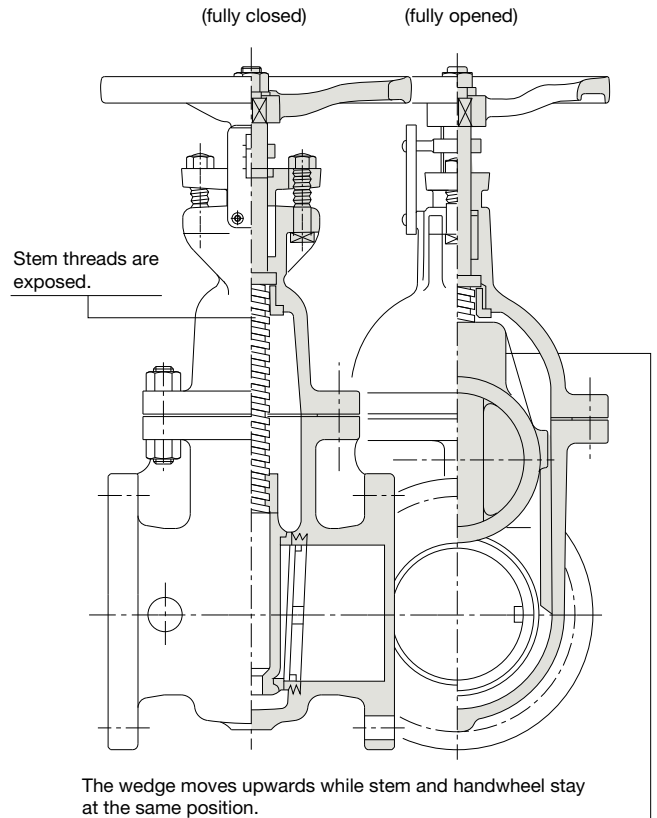
| Trim Material | Color Coding | Suffix of Fig. |
|---------------------------|--------------|----------------|
| Bronze Seats / Brass Stem | None | - |
| 13 Cr. Seats / Stem | Orange | S |
| 18-8 Seats / Stem | Green | U |

Outside Screw (O.S.) Valves and Inside Screw (I.S.) Valves

Outside Screw Gate Valve



Inside Screw Gate Valve



Outside Screw Gate Valves

Stem threads are not exposed to the fluid, and valve opening operation moves the stem upwards while the handwheel stays at the same position. Valve operating position can be visually determined by observing the stem travel. KITZ Fig. FCM, FCL, FCLS, and FCLU are designed this way.

Outside Screw Globe Valves

Stem and handwheel move upwards or downwards at the same time, following valve opening or closing operation. All KITZ globe valves are provided with this design.

Inside Screw Gate Valves

Stem threads are exposed to the fluid. Opening the valve does not make the stem or handwheel move. Thus, the valve operating position is not visible. Position indicator is provided for this reason.

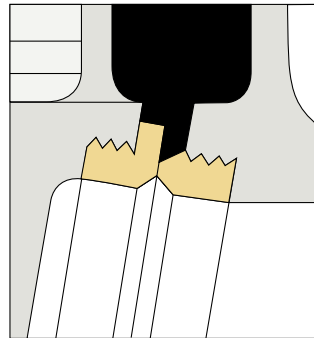
Inside screw gate valves are generally designed shorter than outside screw gate valves and the stem and handwheel always at the same position. For this feature, inside screw gate valves are widely employed for underground installation or service in narrow areas with limited room. KITZ Fig. FCWI and FCHI are designed this way.

Asbestos-free Packings and Gaskets

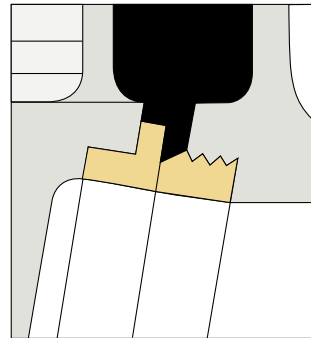
KITZ has led the industry in employing asbestos-free sealers for all cast iron valves, meeting the requirement of pollution-free valve materials. PTFE-impregnated glass fiber gland packings and compressed glass and aramid fiber gaskets are the standard sealers for KITZ cast iron valves.

Mounting of Seat Rings

In case of KITZ cast iron gate valves, seat rings are mounted on the valve disc by means of either threading or press-fitting. For example, 10K outside screw gate valves are provided with threaded seat rings that are ideal for saturated steam service. Or, 10K inside screw gate valves are provided with mechanically press-fit seat rings by means of a patented special process to suit them also for saturated steam service. All KITZ cast iron globe and check valves are provided with threaded seat rings.



Threaded Seat Ring

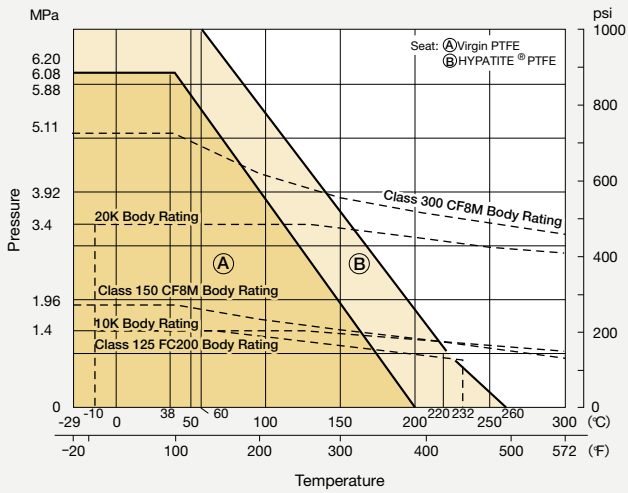


Press-fit Seat Ring

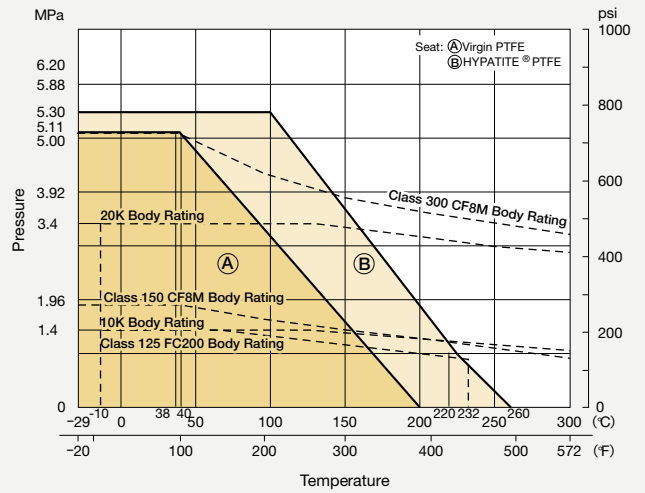
Pressure-Temperature Ratings

Cast Iron

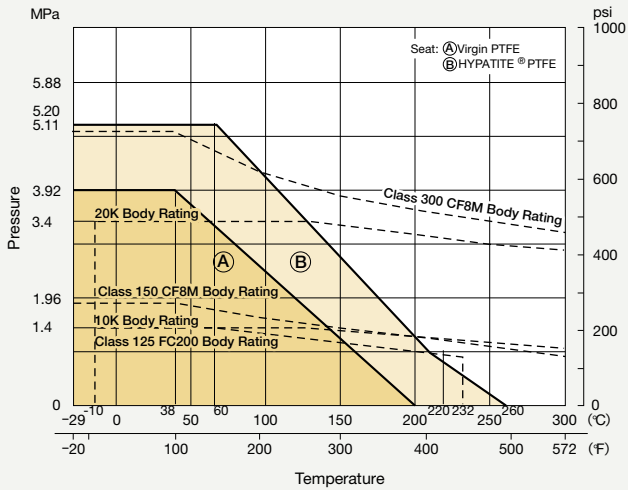
■ 150UTB(M)/150UTBT/10/125FCTB(2L) : NPS 1/2^B, 3/4^B
 10/125FCTR(2L) : NPS 1/2^B to 1^B



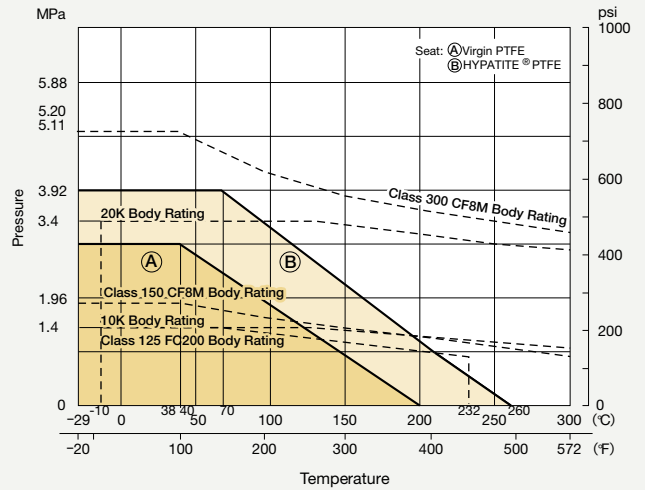
■ 150UTB(M)/150UTBT/10/125FCTB(2L) : NPS 1^B to 2 1/2^B
 10/125FCTR(2L) : NPS 1/2^B to 3^B



■ 150UTB(M)/150UTBT/10/125FCTB(2L) : NPS 3^B, 4^B
 10/125FCTR(2L) : NPS 4^B, 5^B



■ 150UTB(M)/150UTBT/10/125FCTB(2L) : NPS 5^B, 6^B
 10/125FCTR(2L) : NPS 6^B, 8^B



■ 150UTB(M)/150UTBT/10/125FCTB(2L) : NPS 8^B, 10^B
 10/125FCTR(2L) : NPS 10^B, 12^B

