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the brand of valve reliability

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— Distributed by —

Printed in Japan
MIX Paper from responsible sources FSC® C017759
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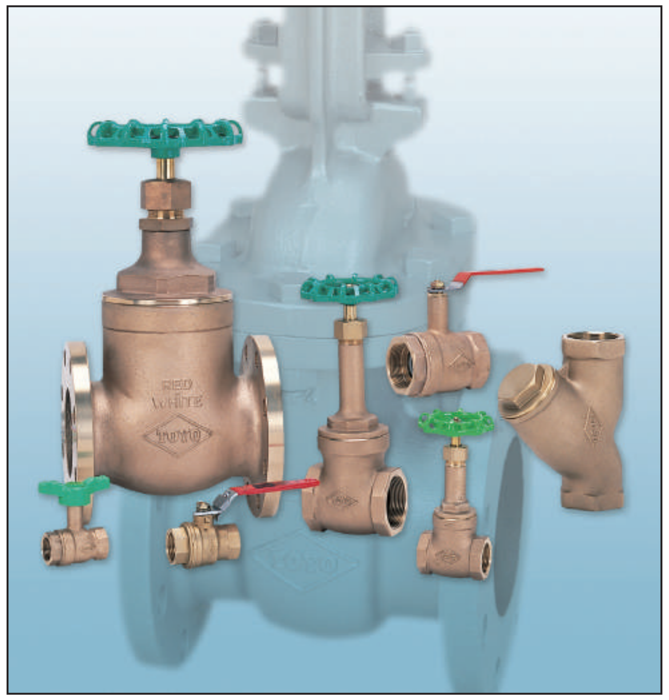
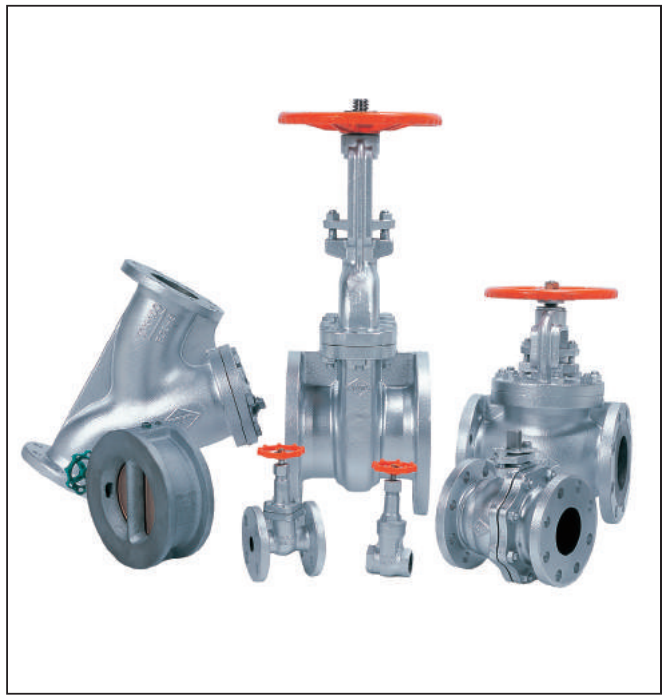
1810①KZ

RED-WHITE TOYO

TOYO Products Catalog

Bronze, Brass, Cast Iron, Butterfly and Stainless Steel Valves





ToyoValve

Standard Product Range

Bronze

Product Code (Old FIG)	Fig (New FIG)	Size (inch)	Pressure	Type	End Connection	Remarks	Page
005	J10-BG	¼–3	10K	Globe	Threaded (Rc)		
065	J10-BNS	⅜–2	10K	Swing Check	Threaded (Rc)		
097	10-BO	1½–2	10K	Foot	Threaded (Rc)		
204	150-BS-NR-NPT	½–2	Class 150	Gate (Inside Screw)	Threaded (NPT)	with Barcode/Instruction Manual with Lead Warning/ Export Packing	
204A	150-BS-N	⅜–3	Class 150	Gate (Inside Screw)	Threaded (Rc)		7
204A	150-BS-NR-NPT<UC8R1>	½–2	Class 150	Gate (Inside Screw)	Threaded (NPT)	with Barcode (On Request Basis)/Instruction Manual/ Export Packing	
205A	150-BSF-N	½–4	Class 150	Gate (Inside Screw)	Flanged (JIS)		
205A	150-BSF-N-F150H-LG	½–4	Class 150	Gate (Inside Screw)	Flanged (ASME)	Light Green Handle	
205A	150-BSF-NR-F150-<UC8R1>	½–4	Class 150	Gate (Inside Screw)	Flanged (ASME)	with Barcode (On Request Basis)/Instruction Manual/ Export Packing	7
206	125E-BS-NR-NPT	¼–4	Class 125	Gate (Inside Screw)	Threaded (NPT)	with Barcode/Instruction Manual with Lead Warning/ Export Packing	
206A	125E-BS-N	¼–4	Class 125	Gate (Inside Screw)	Threaded (Rc)	Light Green Handle	7
206A	125E-BS-NR-NPT<UC8R1>	¼–4	Class 125	Gate (Inside Screw)	Threaded (NPT)	with Barcode (On Request Basis)/Instruction Manual/ Export Packing	
206A	125E-BS-NR-NPT<UL1R1>	¼–4	Class 125	Gate (Inside Screw)	Threaded (NPT)	with Export Packing	
206A	125E-BS-NR-NPT<UL1R3>	½–4	Class 125	Gate (Inside Screw)	Threaded (NPT)	with Export Packing/Trustgram	
206A	125E-BS-NR-PF<EG1R1>	⅜–3	Class 125	Gate (Inside Screw)	Threaded (BSP)	Red-Yellow Handle, with Barcode/Export Packing	
206ALF	L125E-BS-NR-NPT<UC8R1>	½–2	Class 125	Gate (Inside Screw)	Threaded (NPT)	Lead Free, with Instruction Manual/Export Packing	
206P	125E-BS-N-PN25-	½–2	PN25 (Body Marking Class 125)	Gate (Inside Screw)	Threaded (Rc)		7
207A	125E-BS-SE-N	⅜–4	Class 125	Gate (Inside Screw)	Solder End (ASME)	Name Plate (Open/Close Indication Mark only)	
207A	125E-BS-SE-NR<UC8R1>	⅜–4	Class 125	Gate (Inside Screw)	Solder End (ASME)	with Barcode (On Request Basis)/Instruction Manual/ Export Packing	
207A	125E-BS-SE-NR<UL1R1>	½–1	Class 125	Gate (Inside Screw)	Solder End (JIS)	with Export Packing	
207A	125E-BS-SE-NR<ZS2R1>	½–2	Class 125	Gate (Inside Screw)	Solder End (BS864)	with Simple Export Packing with Instruction Manual	7
207ALF	L125E-BS-SE-NR<UC8R1>	½–2	Class 125	Gate (Inside Screw)	Solder End (ASME)	Lead Free, with Instruction Manual/Export Packing	
207P	125E-BS-SE-NR<Z01R2>	½–2	PN25 (Body Marking Class 125)	Gate (Inside Screw)	Solder End (BS864)		7
208	125-BSR-NR-NPT	½–2	Class 125	Gate (Inside Screw)	Threaded (NPT)	with Barcode/Instruction Manual with Lead Warning/ Export Packing	
209	150-BSR-N	½–2	Class 150	Gate (Inside Screw)	Threaded (Rc)		7
209	150-BSR-NR-NPT<UL1R1>	½–2	Class 150	Gate (Inside Screw)	Threaded (NPT)	with Export Packing	7
210	100N-BG-NR-NPT	¼–3	Class 100	Globe	Threaded (NPT)	with Barcode/Instruction Manual with Lead Warning/ Export Packing	
210A	100N-BG-N	¼–3	Class 100	Globe	Threaded (Rc)		8
210A	100N-BG-N(N)	¼–3	Class 100	Globe	Threaded (Rc)	Body/Disc ASTM B62	
210A	100N-BG-NR-NPT<UC8R1>	¼–3	Class 100	Globe	Threaded (NPT)	with Barcode (On Request Basis)/Instruction Manual/ Export Packing	
210A	100N-BG-NR-PF<EG1R1>	½–2	Class 100	Globe	Threaded (BSP)	Red-Yellow Handle, with Barcode/Export Packing	
210P	100N-BG-N-PN16-	½–2	PN16 (Body Marking Class 100)	Globe	Threaded (Rc)		
211A	125C-BG-N	¼–3	Class 125	Globe	Threaded (Rc)		8
211A	125C-BG-NR-NPT<UC8R1>	¼–3	Class 125	Globe	Threaded (NPT)	with Barcode (On Request Basis)/Instruction Manual/ Export Packing	
211ALF	L125C-BG-NR-NPT<UC8R1>	½–2	Class 125	Globe	Threaded (NPT)	Lead Free, with Instruction Manual/Export Packing	
212A	125C-BG-SE-NR<UC8R1>	½–2	Class 125	Globe	Solder End	with Barcode (On Request Basis)/Instruction Manual/ Export Packing	
212ALF	L125C-BG-SE-NR<UC8R1>	½–2	Class 125	Globe	Solder End	Lead Free, with Instruction Manual/Export Packing	
213A	150E-BG-N	¼–3	Class 150	Globe	Threaded (Rc)		8
213A	150E-BG-NR-NPT<UL1R1>	½–3	Class 150	Globe	Threaded (NPT)	with Export Packing	
213P	150E-BG-N-PN25-B62-	½–2	PN25 (Body Marking Class 150)	Globe	Threaded (Rc)	Body/Disc ASTM B62	8
215	150E-BGF-N	½–4	Class 150	Globe	Flanged (JIS)		
215A	150E-BGF-N-F150H-LG	½–4	Class 150	Globe	Flanged (ASME)	Light Green Handle	8
220	125C-BD-NR-NPT	⅜–3	Class 125	Globe	Threaded (NPT)	PTFE Disc, with Barcode/Instruction Manual with Lead Warning/Export Packing	
220A	125C-BD-N	¼–3	Class 125	Globe	Threaded (Rc)	G/F PTFE Disc	8
220A	125C-BD-NR-NPT<UC8R1>	⅜–3	Class 125	Globe	Threaded (NPT)	G/F PTFE Disc, with Barcode (On Request Basis)/ Instruction Manual/Export Packing	
220A	125C-BD-NR-NPT<UL1R1>	⅜–3	Class 125	Globe	Threaded (NPT)	PTFE Disc, with Export Packing	
220A	125C-BD-NR-PF<EG1R1>	½–2	Class 125	Globe	Threaded (BSP)	PTFE Disc, Red-Yellow Handle, with Barcode/Export Packing	
221	150-BD-N	½–2	Class 150	Globe	Threaded (Rc)	PTFE Disc	8
221A	150-BD-NR-NPT	½–2	Class 150	Globe	Threaded (NPT)	PTFE Disc, with Barcode/Instruction Manual with Lead Warning/Export Packing	
221A	150-BD-NR-NPT<UC8R1>	½–2	Class 150	Globe	Threaded (NPT)	PTFE Disc, with Barcode (On Request Basis)/ Instruction Manual/Export Packing	
230A	150E-BN-N	⅜–3	Class 150	Lift Check	Threaded (Rc)		9
230A	150E-BN-NR-NPT<UC8R1>	⅜–3	Class 150	Lift Check	Threaded (NPT)	with Barcode (On Request Basis)/Export Packing	
230P	150E-BN-N-PN25-	½–2	PN25 (Body Marking Class 150)	Lift Check	Threaded (Rc)		9
230P	150E-BN-N-PN25-(N)	½–2	PN25 (Body Marking Class 150)	Lift Check	Threaded (Rc)	Body/Disc ASTM B62	
234	125-BNS-N	⅜–3	Class 125	Swing Check	Threaded (Rc)		9
236	125H-BNS-NR-NPT	¼–3	Class 125	Swing Check	Threaded (NPT)	with Barcode/Export Packing	
236A	125H-BNS-N	¼–3	Class 125	Swing Check	Threaded (Rc)		9

Product Code (Old FIG)	Fig (New FIG)	Size (inch)	Pressure	Type	End Connection	Remarks	Page
236A	125H-BNS-N(N)	¼-3	Class 125	Swing Check	Threaded (Rc)	Body/Disc ASTM B62	
236A	125H-BNS-NR-NPT<UC8R1>	¼-3	Class 125	Swing Check	Threaded (NPT)	with Barcode (On Request Basis)/Export Packing	
236A	125H-BNS-NR-NPT<UL1R1>	¼-3	Class 125	Swing Check	Threaded (NPT)	with Export Packing	
236A	125H-BNS-NR-NPT<UL1R3>	½-3	Class 125	Swing Check	Threaded (NPT)	with Export Packing/Trustgram	
236A	125H-BNS-NR-PF<EG1R1>	½-2	Class 125	Swing Check	Threaded (BSP)	Red-Yellow Handle, with Barcode/Export Packing	
236ALF	L125H-BNS-NR-NPT<UC8R1>	½-2	Class 125	Swing Check	Threaded (NPT)	Lead Free, with Export Packing	
236P	125H-BNS-N-PN16-	½-2	PN25 (Body Marking Class 125)	Swing Check	Threaded (Rc)		
236T	125H-BDNS-NR-NPT	⅜-2	Class 125	Swing Check	Threaded (NPT)	PTFE Disc	
236T	125H-BDNS-NR-NPT<UC8R1>	⅜-2	Class 125	Swing Check	Threaded (NPT)	PTFE Disc, with Barcode (On Request Basis)/Export Packing	
236TLF	L125H-BDNS-NR-NPT<UC8R1>	½-2	Class 125	Swing Check	Threaded (NPT)	Lead Free, PTFE Disc, with Export Packing	
237	125H-BNS-SE-NR	⅜-3	Class 125	Swing Check	Solder End	with Barcode/Export Packing	
237A	125H-BNS-SE-NR<UC8R1>	½-3	Class 125	Swing Check	Solder End	with Barcode (On Request Basis)/Export Packing	
237ALF	L125H-BNS-SE-NR<UC8R1>	½-2	Class 125	Swing Check	Solder End	Lead Free, with Export Packing	
238	150H-BNS-N	⅜-3	Class 150	Swing Check	Threaded (Rc)		9
238	150H-BNS-NR-NPT	⅜-3	Class 150	Swing Check	Threaded (NPT)	with Barcode/Export Packing	
238	150H-BNS-NR-NPT<Z01R1>	⅜-3	Class 150	Swing Check	Threaded (NPT)	with Export Packing	9
250A	200-BDR-R-NPT<UC8R1>	½-1	Class 200	Fancoil	Threaded (NPT)	For Adjusting/Straight Type, with Barcode (On Request Basis)/Instruction Manual/Export Packing	
251A	200-BDRL-R-NPT<UC8R1>	½-1	Class 200	Fancoil	Threaded (NPT)	For Adjusting/Angle Type, with Barcode (On Request Basis)/Instruction Manual/Export Packing	
252A	200-BDRS-R-NPT-W/H<UC8R1>	½-1	Class 200	Fancoil	Threaded (NPT)	For Changing/Straight Type, with Barcode (On Request Basis)/Instruction Manual/Export Packing	
253A	200-BDRLS-R-NPT-W/H<UC8R1>	½-1	Class 200	Fancoil	Threaded (NPT)	Angle Type, with Barcode (On Request Basis)/Instruction Manual/Export Packing	
260A	150E-BL-N	¼-3	Class 150	Angle	Threaded (Rc)		8
260A	150E-BL-NR-NPT	¼-3	Class 150	Angle	Threaded (NPT)	with Barcode/Instruction Manual with Lead Warning/Export Packing	
260A	150E-BL-NR-NPT<UC8R1>	¼-3	Class 150	Angle	Threaded (NPT)	with Barcode (On Request Basis)/Instruction Manual/Export Packing	
272	H-BS-N(CAC406)	⅜-3	Class 125	Gate (Inside Screw)	Threaded (Rc)	Body/Disc CAC406	
272	RH-N	⅜-3	Class 125	Gate (Inside Screw)	Threaded (Rc)		
272A	RH-NR-NPT<UL1R2>	½-3	Class 125	Gate (Inside Screw)	Threaded (NPT)	Red handle/with Export Packing	
272P	H-BS(B62)PN16-	½-3	PN16 (Body Marking Class 125)	Gate (Inside Screw)	Threaded (Rc)	Orange Handle, Body/Disc ASTM B62	7
275A	H-BS-N	⅜-3	Class 125	Gate (Inside Screw)	Threaded (Rc)		
275P	H-BS-PN16-	⅜-3	PN16	Gate (Inside Screw)	Threaded (Rc)	PN16	7
280	125S-BS-NR-NPT	⅜-2	Class 125	Gate (Inside Screw)	Threaded (NPT)		
280A	125S-BS-NR-NPT<UC8R1>	⅜-2	Class 125	Gate (Inside Screw)	Threaded (NPT)	with Barcode (On Request Basis)/Instruction Manual/Export Packing	
293	125-BSRU-NR-NPT<UC8R1>	½-2	Class 125	Gate (Inside Screw)	Threaded (NPT)	Union Bonnet, with Barcode (On Request Basis)/Instruction Manual/Export Packing	
298	150-BSRU-N	½-2	Class 150	Gate (Inide Screw)	Threaded (Rc)	Union Bonnet	
298	150-BSRU-NR-NPT	½-2	Class 150	Gate (Inside Screw)	Threaded (NPT)	Union Bonnet, with Barcode/Instruction Manual with Lead Warning/Export Packing	
298	150-BSRU-NR-NPT<UC8R1>	½-2	Class 150	Gate (Inside Screw)	Threaded (NPT)	Union Bonnet, with Barcode (On Request Basis)/Instruction Manual/Export Packing	8
318A	300-BSRU-NR-NPT	½-2	Class 300	Gate (Outside Screw)	Threaded (NPT)	Union Bonnet, with Barcode/Instruction Manual with Lead Warning/Export Packing	
318A	300-BSRU-NR-NPT<UC8R1>	½-2	Class 300	Gate (Inside Screw)	Threaded (NPT)	Union Bonnet, with Barcode (On Request Basis)/Instruction Manual/Export Packing	8
335	N300-BG-NR-NPT<UC8R1>	⅜-2	Class 300	Globe	Threaded (NPT)	with Barcode (On Request Basis)/Instruction Manual/Export Packing	
360	N300-BNS-N	½-2	Class 300	Swing Check	Threaded (Rc)		
360	N300-BNS-NR-NPT<UC8R1>	½-2	Class 300	Swing Check	Threaded (NPT)	with Barcode (On Request Basis)/Export Packing	9
365	10-BNW	1½-8	10K	Wafer Check	Flanged (JIS 10K)		9
380	150-BT-N	½-3	Class 150	Strainer	Threaded (Rc)		9
380	150-BT-N-B62-	½-3	Class 150	Strainer	Threaded (Rc)	Body/Disc ASTM B62	10
380A	150-BT-NR-NPT<UC8R1>	½-2	Class 150	Strainer	Threaded (NPT)	with Barcode (On Request Basis)/Instruction Manual/Export Packing	
380P	150-BT-N-PN25-	½-2	PN25 (Body Marking Class 150)	Strainer	Threaded (Rc)		10
5011	BX-N	½-2	Class 400	Ball (Standard Bore)	Threaded (Rc)	Long Neck Type	10
5011T	BX-N-T	½-2	Class 400	Ball (Standard Bore)	Threaded (Rc)	Long Neck/T-handle Type	10
5090	BOV	⅜-2	10K	Ball (Full Bore)	Threaded (Rc)		
5091	BOX-N	½-2	10K	Ball (Full Bore)	Threaded (Rc)	Long Neck/Lever Type	11

Brass

Product Code (Old FIG)	Fig (New FIG)	Size (inch)	Pressure	Type	End Connection	Remarks	Page
277P	RSD	½-2	PN16	Gate (Inside Screw)	Threaded (Rc)	For Singapore	
5026	600RC-N	¼-3	Class 600	Ball (Full Bore)	Threaded (Rc)		10
5026N	600RC-NR-NPT<Z01R1>	¼-3	Class 600	Ball (Full Bore)	Threaded (NPT)	with Export Packing	10
5026W	600RC-N-T	¼-2	Class 600	Ball (Full Bore)	Threaded (Rc)	Wing Handle Type	10
5041	600RP-LL-R-NPT<UC8R1>	¼-2	Class 600	Ball (Full Bore)	Threaded (NPT)	Latch Lock Lever Type, with Barcode (On Request Basis)/Instruction Manual/Export Packing	
5041S	600RP-LL-R-316-NPT<UC8R1>	¼-2	Class 600	Ball (Full Bore)	Threaded (NPT)	Latch Lock Lever Type, Trim 316SS, with Barcode (On Request Basis)/Instruction Manual/Export Packing	
5042A	RP-AD-R-NPT<UC8R1>	¼-2	Class 600	Ball (Full Bore)	Threaded (NPT)	Latch Lock Lever Type, with Exhaust System, with Barcode (On Request Basis)/Instruction Manual/Export Packing	
5043	600RP-SE-LL-R<UC8R1>	½-2	Class 600	Ball (Full Bore)	Threaded (NPT)	Latch Lock Lever Type, Solder End, with Barcode (On Request Basis)/Instruction Manual/Export Packing	
5043S	600RP-SE-LL-R-316-<UC8R1>	½-2	Class 600	Ball (Full Bore)	Threaded (NPT)	Latch Lock Lever Type, Solder End, Trim 316, with Barcode (On Request Basis)/Instruction Manual/Export Packing	
5044A	RP-NK	¼-3	Class 600	Ball (Full Bore)	Threaded (Rc)		10
5044A	RP-NK-NPT	¼-3	Class 600	Ball (Full Bore)	Threaded (NPT)		
5044A	RP-NK-R-NPT<UL1R3>	¼-3	Class 600	Ball (Full Bore)	Threaded (NPT)	with Export Packing/Trustgram	
5044ALF	LRP-NK-NPT	¼-3	Class 600	Ball (Full Bore)	Threaded (NPT)	Lead Free, with Instruction Manual/Export Packing	

Product Code (Old FIG)	Fig (New FIG)	Size (inch)	Pressure	Type	End Connection	Remarks	Page
5044W	RP-NK-T-NPT	¼–2	Class 600	Ball (Full Bore)	Threaded (NPT)	Wing Handle, with Barcode/Instruction Manual	
5044WLF	LRP-NK-T-NPT	¼–2	Class 600	Ball (Full Bore)	Threaded (NPT)	Lead Free, Wing Handle, with Instruction Manual	
5045A	RB-3N	¼–2	Class 400	Ball (Standard Bore)	Threaded (Rc)		11
5045A	RB-3N-R-NPT<UC8R1>	¼–2	Class 400	Ball (Standard Bore)	Threaded (NPT)	with Barcode (On Request Basis)/Instruction Manual/ Export Packing	
5046	RP-CA-R-NPT<UC8R1>	½–¾	Class 600	Ball (Full Bore)	Threaded (NPT)	with Cap Chain, with Barcode (On Request Basis)/Instruction Manual/Export Packing	
5046LF	LRP-CA-R-NPT<UC8R1>	½–¾	Class 600	Ball (Full Bore)	Threaded (NPT)	Lead Free, with Cap Chain, with Instruction Manual/ Export Packing	
5049A	RP-SE-NK	⅜–3	Class 600	Ball (Full Bore)	Solder End	Lever Type, with Barcode/Instruction Manual	
5049ALF	LRP-SE-NK	½–3	Class 600	Ball (Full Bore)	Solder End	Lead Free, Lever Type, with Instruction Manual	
5049W	RP-SE-T-NK	⅜–3	Class 600	Ball (Full Bore)	Solder End	Wing Handle Type, with Barcode/Instruction Manual	
5049WLF	LRP-SE-T-NK	½–2	Class 600	Ball (Full Bore)	Solder End	Lead Free, Wing Handle Type, with Instruction Manual	
5080	RZ-N	¼–2	Class 600	Ball (Reduced Bore)	Threaded (Rc)	One Piece, Lever Type	10
5080W	RZ-N-T	¼–¾	Class 600	Ball (Reduced Bore)	Threaded (Rc)	One Piece, T-Handle Type	10

Cast Iron

Product Code (Old FIG)	Fig (New FIG)	Size (inch)	Pressure	Type	End Connection	Remarks	Page
381A	YA125-FTF<UC1R1>	2–20	Class 125	Strainer	Flanged (ASME)	with Barcode/Instruction Manual	
381AE	YA125-FTF<Z0T01>	2–20	Class 125	Strainer	Flanged (ASME)		16
381E	YA125-FTF-PN16-<Z0T01>	2–20	PN16 (Body Marking Class 125)	Strainer	Flanged (PN16)		16
400A	YA125-FGF<UC1R1>	2–12	Class 125	Globe	Flanged (ASME)	with Barcode/Instruction Manual	
400AE	YA125-FGF<Z0T01>	2–12	Class 125	Globe	Flanged (ASME)		15
400E	YA125-FGF-PN16-<Z0T01>	2–12	PN16 (Body Marking Class 125)	Globe	Flanged (PN16)		15
405E	YA125-FGF-F10KFF<Z0T01>	2–12	Class 125	Globe	Flanged (JIS10K)		15
405J	J10-FGF	2–8	10K	Globe	Flanged (JIS10K)		
405JS	J10-FGF-S	2–12	10K	Globe	Flanged (JIS10K)	Trim 13Cr	
405JU	J10-FGF-U	2–8	10K	Globe	Flanged (JIS10K)	Trim 304SS	
409	J10-FGF-CN	2½–8	10K	Globe	Flanged (JIS10K)	Nylon Lining	
410E	YA125-FSF-F10KFF<Z0T01>	2–12	Class 125	Gate (Inside Screw)	Flanged (JIS10K)		14
415A	YA125-FSF<UC1R1>	2–12	Class 125	Gate (Inside Screw)	Flanged (ASME)	with Barcode/Instruction Manual	
415AE	YA125-FSF<Z0T01>	2–12	Class 125	Gate (Inside Screw)	Flanged (ASME)		14
415E	YA125-FSF-PN16-<Z0T01>	2–12	PN16 (Body Marking Class 125)	Gate (Inside Screw)	Flanged (PN16)		14
420E	YA125-FSRF-F10KFF<Z0T01>	2–12	Class 125	Gate (Outside Screw)	Flanged (JIS10K)		14
421A	YA125-FSRF<UC1R1>	2–12	Class 125	Gate (Outside Screw)	Flanged (ASME)	with Barcode/Instruction Manual	
421AE	YA125-FSRF<Z0T01>	2–12	Class 125	Gate (Outside Screw)	Flanged (ASME)		14
423E	(PHOX)EN25-FSRF	2–12	PN25	Gate (Outside Screw)	Flanged (ASME)		15
425J	J10-FSRF	1½–14	10K	Gate (Outside Screw)	Flanged (JIS10K)		
425J	J5-FSRF	2–12	5K	Gate (Outside Screw)	Flanged (JIS5K)		
430E	YA125-FNSF-F10KFF<Z0T01>	2–20	Class 125	Swing Check	Flanged (JIS10K)		15
433E	(PHOX)EN25-FNSF	2–12	PN25	Swing Check	Flanged (ASME)		15
435A	YA125-FNSF<UC1R1>	2–20	Class 125	Swing Check	Flanged (ASME)	with Barcode/Instruction Manual	
435AE	YA125-FNSF<Z0T01>	2–20	Class 125	Swing Check	Flanged (ASME)		15
435DJ	J10-FDNSF	2–6	10K	Swing Check	Flanged (JIS10K)	NBR Seat	
435E	YA125-FNSF-PN16-<Z0T01>	2–20	PN16 (Body Marking Class 125)	Swing Check	Flanged (PN16)		15
435J	J10-FNSF	1½–10	10K	Swing Check	Flanged (JIS10K)		
435JS	J10-FNSF-S	1½–14	10K	Swing Check	Flanged (JIS10K)	Trim 13Cr	
435JU	J10-FNSF-U	1½–14	10K	Swing Check	Flanged (JIS10K)	Trim 304SS	
437J	J10-FNSF-U-W/CW	2–8	10K	Swing Check	Flanged (JIS10K)	Trim 304SS, with Counter Weight	
439	J10-FNSF-CN	2½–8	10K	Swing Check	Flanged (JIS10K)	Nylon Lining	
440	10-FNW	1½–18	10K	Wafer Check	Flanged (JIS10K)	with Bypass Valve *Seat:EPDM Optional (No Additional Charge)	16
442F	E150-FNW	2–12	Class 150	Wafer Check	Flanged (JIS10K)	Disc:Bronze Seat:NBR without Bypass Valve *Disc:316SS Optional (Additional Charge) *Seat:EPDM Optional (No Additional Charge)	16
443B	E16-FNW	2–18	PN16	Wafer Check	Flanged (PN16)	Disc:Bronze Seat:NBR without Bypass Valve *Disc:316SS Optional (Additional Charge) *Seat:EPDM Optional (No Additional Charge)	16
450	10-FTF-N	2–14	10K	Strainer	Flanged (JIS10K)		
450E	YA125-FTF-F10KFF<Z0T01>	2–20	Class 125	Strainer	Flanged (JIS10K)		16
459	10-FTF-CN	2½–12	10K	Strainer	Flanged (JIS10K)	Nylon Lining	
461	10-FOF	2½–8	10K	Foot	Flanged (JIS10K)		
470L	10-FBF-N-L	½–8	10K	Ball (Full Bore)	Flanged (JIS10K)	Lever Type	16
473L	125-FBF-N-L	2–4	Class 125	Ball (Full Bore)	Flanged (ASME)	Lever Type	
500B	EN16-FSRF	2–12	PN16	Gate (Outside Screw)	Flanged (PN16)		14
501B	EN16-FSF	2–12	PN16	Gate (Inside Screw)	Flanged (PN16)		14
510B	EN16-FGF	2–12	PN16	Globe	Flanged (PN16)		15
510E	YA125-FGF-S-PN16-<Z0T01>	2–12	PN16 (Body Marking Class 125)	Globe	Flanged (PN16)	Trim 13Cr	15
511E	YA125-FSRF-S-PN16-<Z0T01>	2–12	PN16 (Body Marking Class 125)	Gate (Outside Screw)	Flanged (PN16)	Trim 13Cr	14
513E	YA125-FSF-S-PN16-<Z0T01>	2–12	PN16 (Body Marking Class 125)	Gate (Inside Screw)	Flanged (PN16)	Trim 13Cr	14
514	125-FSRF	2–12	Class 125	Gate (Outside Screw)	Flanged (ASME)		14
530U	EN16-FTF	2–12	PN16	Strainer	Flanged (PN16)		16

Ductile Iron

Product Code (Old FIG)	Fig (New FIG)	Size (inch)	Pressure	Type	End Connection	Remarks	Page
600A	10-DG-N	¼–2	10K	Globe	Threaded (Rc)	Screwed In Bonnet	18
600AT	10-DD-N	⅜–2	10K	Globe	Flanged (JIS10K)	Screwed In Bonnet, R-PTFE Disc	
602A	10-DSR-N	½–2	10K	Gate (Inside Screw)	Threaded (Rc)	Screwed In Bonnet	18
607L	10-DBF-N-L	½–8	10K	Ball (Full Bore)	Flanged (JIS10K)	Lever Type	21
610A	10-DGF-N	½–2	10K	Globe (Inside Screw)	Flanged (JIS10K)	Screwed In Bonnet	19
610AT	10-DDF-N	½–2	10K	Globe (Inside Screw)	Flanged (JIS10K)	Screwed In Bonnet, R-PTFE Disc	
611A	10-DGF-N(BB)	2–8	10K	Globe (Outside Screw)	Flanged (JIS10K)	Bolted Bonnet	19
611A	10-DGF-N-W/GB	10"	10K	Globe (Outside Screw)	Flanged (JIS10K)	Bolted Bonnet, Gear Type	
612A	10-DSRF-N	½–2	10K	Gate (Inside Screw)	Flanged (JIS10K)	Bolted Bonnet	18
613A	10-DSRF-N(BB)	2–12	10K	Gate (Outside Screw)	Flanged (JIS10K)	Bolted Bonnet	18
614	10-DN-N	½–2	10K	Lift Check	Threaded (Rc)		20
615A	10-DNSF-N	2–8	10K	Swing Check	Flanged (JIS10K)		19
618	10-DTF-N	2–8	10K	Strainer	Flanged (JIS10K)		20
620A	16-DG-N	½–2	16K	Globe (Inside Screw)	Threaded (Rc)	Union Bonnet	19
622A	16-DSR-N	½–2	16K	Gate (Inside Screw)	Threaded (Rc)	Union Bonnet	18
624A	16-DN-N	½–2	16K	Lift Check	Threaded (Rc)		20
628	16-DT-N	½–2	16K	Strainer	Threaded (Rc)		20
630A	16-DGF-N	½–2	16K	Globe (Inside Screw)	Flanged (JIS16K)	Union Bonnet	19
631	16-DGF-N(BB)	2–8	16K	Globe (Outside Screw)	Flanged (JIS16K)	Bolted Bonnet	19
632A	16-DSRF-N	½–2	16K	Gate (Inside Screw)	Flanged (JIS16K)	Union Bonnet	18
633	16-DSRF-N(BB)	2–12	16K	Gate (Outside Screw)	Flanged (JIS16K)	Bolted Bonnet	18
634A	16-DNF-N	½–2	16K	Lift Check	Flanged (JIS16K)		20
635A	16-DNSF-N	2–8	16K	Swing Check	Flanged (JIS16K)		19
638	16-DTF-N	¾–12	16K	Strainer	Flanged (JIS16K)		20
640A	20-DG-N	⅜–2	20K	Globe (Inside Screw)	Threaded (Rc)	Union Bonnet	19
642A	20-DSR-N	½–2	20K	Gate (Inside Screw)	Threaded (Rc)	Bolted Bonnet	18
644A	20-DN-N	½–2	20K	Gate	Threaded (Rc)		20
645	20-DNW	1½–18	20K	Wafer Check	Threaded (Rc)		20
648A	20-DT-N	⅜–2	20K	Strainer	Threaded (Rc)		21
650A	20-DGF-N	⅜–2	20K	Globe (Inside Screw)	Flanged (JIS20K)	Union Bonnet	19
651A	20-DGF-N(BB)	2–8	20K	Globe (Outside Screw)	Flanged (JIS20K)	Bolted Bonnet	19
652A	20-DSRF-N	½–1½	20K	Gate (Inside Screw)	Flanged (JIS20K)	Bolted Bonnet	18
653A	20-DSRF-N(BB)	2–12	20K	Gate (Outside Screw)	Flanged (JIS20K)	Bolted Bonnet	18
654A	20-DNF-N	½–2	20K	Lift Check	Flanged (JIS20K)		20
655A	20-DNSF-N	2–8	20K	Swing Check	Flanged (JIS20K)		20
658A	20-DTF-N	⅜–2	20K	Strainer	Flanged (JIS20K)		21
678E	(PHOX)EN25-DTF	2–12	PN25	Strainer	Flanged (PN25)		21

Stainless Steel

Product Code (Old FIG)	Fig (New FIG)	Size (inch)	Pressure	Type	End Connection	Remarks	Page
800	UG-N	¼–2	10K	Globe	Threaded (Rc)		26
800J	UGF-N	½–2	10K	Globe	Flanged (JIS10K)		26
801	K150-UGF-VA	2–8	Class 150	Globe	Flanged (ASME)	KITZ Brand	
801J	10-UGF-VA	2–4	10K	Globe	Flanged (JIS10K)	TOYO Brand 2–4" Only, Other Size KITZ Brand	26
802	US-N	½–2	10K	Gate (Inside Screw)	Threaded (Rc)		26
802J	USF-N	½–2	10K	Gate (Inside Screw)	Flanged (JIS10K)		26
803J	10-USRF-VA	½–10	10K	Gate (Outside Screw)	Flanged (JIS10K)	TOYO Brand 1/2–10" Only, Other Size KITZ Brand	26
804	UNS-N	½–2	10K	Swing Check	Threaded (Rc)		26
804J	UNSF-N	½–2	10K	Swing Check	Flanged (JIS10K)		27
805	K150-UNSF-VA	2–8	Class 150	Swing Check	Flanged (ASME)	KITZ Brand	
805J	10-UNSF-VA	2–8	10K	Swing Check	Flanged (JIS10K)	TOYO Brand 2–8" Only, Other Size KITZ Brand	26
806	10-UNW	1½–12	10K	Wafer Check	Flanged (JIS10K)		27
807J	10-UTF-VA	2½–10	10K	Strainer	Flanged (JIS10K)		26
809	UT-N	½–2	10K	Strainer	Threaded (Rc)		27
809J	UTF-N	½–2	10K	Strainer	Flanged (JIS10K)		27
813J	20-USRF-VA	½–10	20K	Gate (Outside Screw)	Flanged (JIS20K)	TOYO Brand 1/2–10" Only, Other Size KITZ Brand	
824J	10-UNF-VA	½–1½	10K	Lift Check	Flanged (JIS10K)	TOYO Brand 1/2–11/2" Only, Other Size KITZ Brand	26
830	UD-N	⅜–2	10K	Globe	Threaded (Rc)	PTFE Disc	
830J	UDF-N	½–2	10K	Globe	Flanged (JIS10K)	PTFE Disc	
851	K150-UMGF-VA	2–8	Class 150	Globe	Flanged (ASME)	KITZ Brand	
853J	10-UMSRF-VA	½–10	10K	Gate (Outside Screw)	Flanged (JIS10K)	TOYO Brand 1/2–10" Only, Other Size KITZ Brand	
3011L	A10-UBF-L	½–8	10K	Ball (Full Bore)	Flanged (JIS10K)	PTFE Seat, Lever Type	27
3550	UZ-N	¼–2	Class 600	Ball (Reduced Bore)	Threaded (Rc)	One Piece, PTFE Seat, Lever Type	
3550W	UZ-N-T	¼–¾	Class 600	Ball (Reduced Bore)	Threaded (Rc)	One Piece, PTFE Seat, T-handle Type	27
3060	10-UB-N	⅜–2	10K	Ball (Full Bore)	Threaded (Rc)	Split Type	27
4580	UMU	½–2	Class 800	Ball (Standard Bore)	Threaded (Rc)	PTFE Seat, Lever Type	
4760A	UMO2-	½–2	Class 800	Ball (Full Bore)	Threaded (Rc)	PTFE Seat, Lever Type	

Aluminum Butterfly Valves

Product Code (Old FIG)	Fig (New FIG)	Size (inch)	Pressure	Type	End Connection	Remarks	Page
550LA	10ALM-N-LU<Z0T01>	1½–6	10K	Butterfly	Wafer (JIS10K)	Seat:NBR, Disc:304SS, Lever Type *Compatible with JIS5K, Class 125/150, PN10/16	23
550LA	10ALM-N-LUE<Z0T01>	1½–6	10K	Butterfly	Wafer (JIS10K)	Seat:EPDM, Disc:304SS, Lever Type *Compatible with JIS5K, Class 125/150, PN10/16	23
550GA	10ALM-N-GU<Z0T01>	1½–8	10K	Butterfly	Wafer (JIS10K)	Seat:NBR, Disc:304SS, Gear Type *Compatible with JIS5K, Class 125/150, PN10/16	23
550GA	10ALM-N-GUE<Z0T01>	1½–8	10K	Butterfly	Wafer (JIS10K)	Seat:EPDM, Disc:304SS, Gear Type *Compatible with JIS5K, Class 125/150, PN10/16	23
550GA	10ALM-N-GE<Z0T01>	10–12	10K	Butterfly	Wafer (JIS10K)	Seat:EPDM, Disc:316SS, Gear Type *Compatible with JIS5K(10"&12"), Class 125/150(N/A), PN10/16(10" only)	23
552-UEL	PN10ALZ-N-LUE<Z0T01>	2–8	10K	Butterfly	Wafer (PN10)	Seat:EPDM, Disc:304SS, Lever Type, Neck/Plate Engineering Plastic *Compatible with JIS5K, Class 125/150, PN10/16	23
552-UEG	PN10ALZ-N-GUE<Z0T01>	2–8	10K	Butterfly	Wafer (PN10)	Seat:EPDM, Disc:304SS, Gear Type, Neck/Plate Engineering Plastic *Compatible with JIS5K, Class 125/150, PN10/16	23

Ductile Iron Butterfly Valves

Product Code (Old FIG)	Fig (New FIG)	Size (inch)	Pressure	Type	End Connection	Remarks	Page
560-UNSG	10L2-N-U	2–24	10K	Butterfly	Wafer (JIS10K)	Seat:NBR, Disc:304SS, Gear Type, Short Neck Type	
560-UESG	10L2-N-UE	2–24	10K	Butterfly	Wafer (JIS10K)	Seat:EPDM, Disc:304SS, Gear Type, Short Neck Type	
562-UNSG	10L2-N-U<Z0T02>	2–24	10K	Butterfly	Wafer (JIS10K)	Seat:NBR, Disc:304SS, Gear Type, Long Neck Type	24
562-UESL	10L1-N-UE	2–6	10K	Butterfly	Wafer (JIS10K)	Seat:EPDM, Disc:304SS, Lever Type, Long Neck Type	24
562-UESG	10L2-N-UE<Z0T02>	2–24	10K	Butterfly	Wafer (JIS10K)	Seat:EPDM, Disc:304SS, Gear Type, Long Neck Type	24
562-UESG	10L2-N-UEL	2–24	10K	Butterfly	Wafer (JIS10K)	Seat:EPDM, Disc:304SS, Gear Type, Long Neck Type, Dew Condensation Type	
570-UESG	20L2-N-UE	2–24	20K	Butterfly	Wafer (JIS20K)	Seat:EPDM,Disc:304SS, Gear Type	25
907-BNSG	150L2-N-B<Z0T05>	14–24	Class 150	Butterfly	Wafer (Class 150)	Seat:NBR, Disc:Alminium Bronze, Gear Type	
917-BNSL	200L1-N-B<Z0T06>	2–8	Class 200	Butterfly	Wafer (Class 200)	Seat:NBR, Disc:Alminium Bronze, Lever Type	24
917-BNSL-2	200L1-NR-B	2–8	Class 200	Butterfly	Wafer (Class 200)	Seat:NBR, Disc:Alminium Bronze, Lever Type, with Barcode/Instruction Manual	
917-BNSG	200L2-N-B<Z0T06>	2–12	Class 200	Butterfly	Wafer (Class 200)	Seat:NBR, Disc:Alminium Bronze, Gear Type	24
917-BNSG-2	200L2-NR-B	2–12	Class 200	Butterfly	Wafer (Class 200)	Seat:NBR, Disc:Alminium Bronze, Gear Type, with Barcode/Instruction Manual	
917-BESL-2	200L1-NR-BE	2–8	Class 200	Butterfly	Wafer (Class 200)	Seat:EPDM, Disc:Alminium Bronze, Lever Type, with Barcode/Instruction Manual	
917-BESG-2	200L2-NR-BE	2–12	Class 200	Butterfly	Wafer (Class 200)	Seat:EPDM, Disc:Alminium Bronze, Gear Type, with Barcode/Instruction Manual	
917-DNSL	200L1-N<Z0T06>	2–8	Class 200	Butterfly	Wafer (Class 200)	Seat:NBR, Disc:Ductile, Lever Type	23
917-DNSG	200L2-N<Z0T06>	2–12	Class 200	Butterfly	Wafer (Class 200)	Seat:NBR, Disc:Ductile, Gear Type	23
918-BNSL-2	200L1L-NR-B	2–8	Class 200	Butterfly	Lug (Class 200)	Seat:NBR, Disc:Alminium Bronze, Lever Type, with Barcode/Instruction Manual	
918-BNSG-2	200L2L-NR-B	2–12	Class 200	Butterfly	Lug (Class 200)	Seat:NBR, Disc:Alminium Bronze, Gear Type, with Barcode/Instruction Manual	
918-BESL-2	200L1L-NR-BE	2–8	Class 200	Butterfly	Lug (Class 200)	Seat:EPDM, Disc:Alminium Bronze, Lever Type, with Barcode/Instruction Manual	
918-BESG-2	200L2L-NR-BE	2–12	Class 200	Butterfly	Lug (Class 200)	Seat:EPDM, Disc:Alminium Bronze, Gear Type, with Barcode/Instruction Manual	
957-DNSL	PN16L1-N<Z0T04>	2–8	PN16	Butterfly	Wafer (PN16)	Seat:NBR, Disc:Ductile, Lever Type	24
957-DNSG	PN16L2-N<Z0T04>	2–24	PN16	Butterfly	Wafer (PN16)	Seat:NBR, Disc:Ductile, Gear Type	24
957-MESL	PN16L1-N-UME<Z0T04>	2–8	PN16	Butterfly	Wafer (PN16)	Seat:EPDM, Disc:316SS, Lever Type	24
957-MESG	PN16L2-N-UME<Z0T04>	2–24	PN16	Butterfly	Wafer (PN16)	Seat:EPDM, Disc:316SS, Gear Type	24

Forged Steel

Product Code (Old FIG)	Fig (New FIG)	Size (inch)	Pressure	Type	End Connection	Remarks	Page
900C	S800-SF-G	¼–2	Class 800	Globe	Threaded (Rc)	Hard Faced (Seat only)	
900CW	S800-SF-GW	¼–2	Class 800	Globe	Socket Weld (ASME/JIS)	Hard Faced (Seat only)	
910C	S800-SF-SR	⅜–2	Class 800	Gate	Threaded (Rc)	Hard Faced (Seat only)	
910C	S800-SF-SR-NPT	½–2	Class 800	Gate	Threaded (NPT)	Hard Faced (Seat only)	
910CW	S800-SF-SRW	⅜–2	Class 800	Gate	Socket Weld (ASME/JIS)	Hard Faced (Seat only)	
920C	S800-SF-N	⅜–2	Class 800	Lift Check	Threaded (Rc)	Hard Faced (Seat only)	
920CW	S800-SF-NW	⅜–2	Class 800	Lift Check	Socket Weld (ASME/JIS)	Hard Faced (Seat only)	

Cast Steel

Product Code (Old FIG)	Fig (New FIG)	Size (inch)	Pressure	Type	End Connection	Remarks	Page
712A	150-SSRF	2–12	Class 150	Gate (Outside Screw)	Flanged (Class 150)	Hard Faced (Seat only)	
722A	300-SSRF	2–6	Class 300	Gate (Outside Screw)	Flanged (Class 300)	Hard Faced (Seat only)	
710A	150-SGF	2–6	Class 150	Globe	Flanged (Class 150)	Hard Faced (Seat only)	

Type	Gate	Gate	Gate	Gate	Gate
Bronze and Brass	125 	PN25 Body Marking: Class 125 	PN16 	PN16 Body Marking: Class 125 	150 
Fig	125E-BS-N	125E-BS-N-PN25-	H-BS-PN16-	H-BS(B62)PN16-	150-BS-N
Product Code	206A	206P	275P	272P	204A

Size inch	Size mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	D1
1/4	8	42	75	48												
3/8	10	42	75	48										43	87	48
1/2	15	45	81	48	45	81	48	43	76	48	43	76	48	48	96	55
3/4	20	50	90	55	50	90	55	48	86	55	48	86	55	53	112	63
1	25	57	106	63	57	106	63	53	98	63	53	98	63	62	123	70
1 1/4	32	61	119	70	61	119	70	60	118	70	60	118	70	69	141	80
1 1/2	40	67	135	80	67	135	80	63	126	70	63	126	70	75	164	90
2	50	74	159	90	74	159	90	71	154	80	71	154	80	86	197	100
2 1/2	65	90	201	110				87	180	90	87	180	90	105	224	110
3	80	100	223	125				96	211	100	96	211	100	116	261	125
4	100	140	302	160												

Body	Cast Bronze	Cast Bronze	Cast Bronze	Cast Bronze	Cast Bronze
Bonnet/Cap	Cast Bronze	Cast Bronze	Cast Bronze	Cast Bronze	Forged Brass
Stem	Dezincification Resistant Brass	Dezincification Resistant Brass	Dezincification Resistant Brass	Dezincification Resistant Brass	Dezincification Resistant Brass
Disc/Ball	Dezincification Resistant Brass or Cast Bronze	Dezincification Resistant Brass or Cast Bronze	Cast Bronze	Cast Bronze	Cast Bronze
Packing	Aramid Fibers Graphite	Aramid Fibers Graphite	Aramid Fibers Graphite	Aramid Fibers Graphite	Aramid Fibers Graphite
Hand Wheel	Aluminum Die-Cast	Aluminum Die-Cast			Aluminum Die-Cast
Note	Screwed Bonnet (Size 2 1/2 to 4) Inside Screw Non Rising Stem	Screwed Bonnet (Size 2 1/2 to 4) Inside Screw Non Rising Stem	Non-rising Stem	Non-rising Stem	Screwed Bonnet Inside Screw Non Rising Stem

Type	Gate	Gate	Gate	Gate	Gate
Bronze and Brass	150 	125 	PN25 Body Marking: Class 125 	150 	150 
Fig	150-BSF-NR-F150-<UC8R1>	125E-BS-SE-NR<ZS2R1>	125E-BS-SE-NR<Z01R2>	150-BSR-N	150-BSR-NR-NPT<UL1R1>
Product Code	205A	207A	207P	209	209

Size inch	Size mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	D1
1/2	15	75	96	55	46	81	48	46	81	48	51	137	55	51	137	55
3/4	20	80	112	63	61	90	55	61	90	55	56	157	70	56	157	70
1	25	95	123	70	72	106	63	72	106	63	66	180	70	66	180	70
1 1/4	32	110	142	80	78	119	70	78	119	70	68	216	80	68	216	80
1 1/2	40	120	165	90	87	135	80	87	135	80	74	257	90	74	257	90
2	50	140	197	100	102	159	90	102	159	90	84	296	100	84	296	100
2 1/2	65	165	224	110												
3	80	190	263	140												
4	100	230	309	225												

Body	Cast Bronze	Cast Bronze	Cast Bronze	Cast Bronze	Cast Bronze
Bonnet/Cap	Forged Brass or Cast Bronze	Cast Bronze	Cast Bronze	Cast Bronze	Cast Bronze
Stem	Dezincification Resistant Brass	Dezincification Resistant Brass	Dezincification Resistant Brass	Cast Bronze	Cast Bronze
Disc/Ball	Cast Bronze	Dezincification Resistant Brass or Cast Bronze	Dezincification Resistant Brass/Bronze	Cast Bronze	Cast Bronze
Packing	Aramid Fibers Graphite	Aramid Fibers Graphite	Aramid Fibers Graphite	Aramid Fibers Graphite	Aramid Fibers Graphite
Hand Wheel	Zinc Die-Cast or Aluminum Die-Cast or Ductile Iron	Aluminum Die-Cast		Aluminum Die-Cast	Aluminum Die-Cast
Note	Screwed Bonnet Inside Screw Non Rising Stem	Inside Screw Non Rising Stem	Non-rising Stem Solid Wedge Disc	Screwed Bonnet Inside Screw	Screwed Bonnet Inside Screw

Type		Gate			Gate			Globe			Globe			Globe		
Bronze and Brass		150 			300 			100 			125 			125 		
Fig		150-BSRU-NR-NPT<UC8R1>			300-BSRU-NR-NPT<UC8R1>			100N-BG-N			125C-BG-N			125C-BD-N		
Product Code		298			318A			210A			211A			220A		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	D1
1/4	8							40	67	48	44	67	48			
3/8	10							42	68	48	44	69	48	53	88	55
1/2	15	51	137	55	51	150	70	48	69	55	53	77	63	57	101	63
3/4	20	56	158	70	56	173	80	53	81	63	65	99	70	66	111	70
1	25	66	181	70	66	194	80	63	95	70	77	108	80	76	120	80
1 1/4	32	68	216	80	74	228	100	73	104	80	85	137	90	88	140	90
1 1/2	40	74	257	90	84	273	110	81	127	90	100	160	100	100	156	100
2	50	84	297	100	98	313	125	94	147	100	119	179	110	120	184	110
2 1/2	65							115	178	110	150	202	125	147	210	125
3	80							131	200	125	178	242	160	162	230	140
Body		Cast Bronze			Cast Bronze			Cast Bronze			Cast Bronze			Cast Bronze		
Bonnet/Cap		Cast Bronze			Cast Bronze			Forged Brass			Forged Brass or Cast Bronze					
Stem		Cast Bronze			Cast Bronze			Dezincification Resistant Brass			Cast Bronze			Dezincification Resistant Brass		
Disc/Ball		Cast Bronze			Cast Bronze			Cast Bronze			Cast Bronze			R-PTFE		
Packing		Flexible Graphite & Aluminum			Flexible Graphite & Aluminum			Aramid Fibers Graphite			Aramid Fibers Graphite					
Hand Wheel		Aluminum Die-Cast			Aluminum Die-Cast			Aluminum Die-Cast			Aluminum Die-Cast					
Note		Union Bonnet Inside Screw			Union Bonnet Inside Screw			Screwed Bonnet Inside Screw			Screwed Bonnet Inside Screw					

Type		Globe			Globe			Globe			Globe (Angle)			Globe		
Bronze and Brass		150 			PN25 Body Marking: Class 150 			150 			150 			150 		
Fig		150E-BG-N			150E-BG-N-PN25-B62-			150-BD-N			150E-BL-N			150E-BGF-N-F150H-LG		
Product Code		213A			213P			221			260A			215A		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	D1
1/4	8	44	67	48							21	67	48			
3/8	10	44	69	48							24	69	48			
1/2	15	53	80	63	53	80	63	64	114	63	28	80	63	83	80	63
3/4	20	65	94	70	65	94	70	78	138	90	34	94	70	88	95	70
1	25	77	104	80	77	104	80	90	156	100	40	104	80	100	105	80
1 1/4	32	85	127	90	85	127	90	105	183	110	47	127	90	113	127	90
1 1/2	40	100	145	100	100	145	100	120	186	110	52	145	100	120	145	100
2	50	119	173	110	119	173	110	145	212	125	61	173	110	145	173	110
2 1/2	65	139	199	125							74	199	125	165	198	125
3	80	158	214	140							85	214	140	177	214	140
4	100													220	259	160
Body		Cast Bronze			Cast Bronze			Cast Bronze			Cast Bronze			Cast Bronze		
Bonnet/Cap		Forged Brass or Cast Bronze			Forged Brass			Forged Brass or Cast Bronze			Forged Brass or Cast Bronze			Forged Brass or Cast Bronze		
Stem		Dezincification Resistant Brass			Dezincification Resistant Brass			Dezincification Resistant Brass			Dezincification Resistant Brass			Dezincification Resistant Brass		
Disc/Ball		Cast Bronze			Cast Bronze			G/F+PTFE			Cast Bronze			Cast Bronze		
Packing		Aramid Fibers Graphite			Aramid Fibers Graphite			Aramid Fibers Graphite			Aramid Fibers Graphite			Aramid Fibers Graphite		
Hand Wheel		Aluminum Die-Cast						Aluminum Die-Cast			Aluminum Die-Cast			Aluminum Die-Cast		
Disc Holder								Forged Brass/Cast Bronze								
Note		Screwed Bonnet Inside Screw			Rising Stem Screwed Bonnet			Union Bonnet Inside Screw			Screwed Bonnet Inside Screw			Screwed Bonnet Inside Screw		

Type		Swing Check		Swing Check		Swing Check		Swing Check		Swing Check	
Bronze and Brass		125 		125 		PN16 Body Marking: Class 125 		150 		150 	
Fig		**125-BNS-N**		**125H-BNS-N**		**125H-BNS-N-PN16-**		**150H-BNS-N**		**150H-BNS-NR-NPT<Z01R1>**	
Product Code		234		236A		236P		238		238	
Size inch	mm	L	H	L	H	L	H	L	H	L	H
1/4	8			54	40						
3/8	10	53	39	54	40			54	39	54	39
1/2	15	60	39	56	40	56	40	60	39	60	39
3/4	20	70	45	70	49	70	49	72	49	72	49
1	25	80	52	80	58	80	58	84	58	84	58
1 1/4	32	92	62	95	71	95	71	99	70	99	70
1 1/2	40	102	67	110	80	110	80	113	79	113	79
2	50	122	79	128	95	128	95	131	95	131	95
2 1/2	65	150	91	156	114			162	114	162	114
3	80	165	102	184	131			186	132	186	132
Body		Cast Bronze		Cast Bronze		Cast Bronze		Cast Bronze		Cast Bronze	
Bonnet/Cap		Forged Brass		Forged Brass		Forged Brass		Forged Brass		Forged Brass	
Disc/Ball		Forged Brass		Cast Bronze		Cast Bronze		Cast Bronze		Cast Bronze	
Hinge Pin		Forged Brass		Copper		Copper		Copper		Copper	
Plug		Brass Rod		Brass Rod		Brass Rod		Brass Rod		Brass Rod	
Arm								Cast Bronze		Cast Bronze	
Note		Screwed Cap		Screwed Cap Y Pattern		Screwed Cap Y Pattern		Screwed Cap Y Pattern		Screwed Cap Y Pattern	

Type		Swing Check		Swing Check		Lift Check		Wafer Check			Strainer	
Bronze and Brass		300 		150 		PN25 Body Marking: Class 150 		10K 			150 	
Fig		**N300-BNS-N**		**150E-BN-N**		**150E-BN-N-PN25-**		**10-BNW**			**150-BT-N**	
Product Code		360		230A		230P		365			380	
Size inch	mm	L	H	L	H	L	H	L	H	D1	L	H
3/8	10			44	26							
1/2	15	60	42	53	28	53	28				80	49
3/4	20	72	51	65	34	65	34				100	57
1	25	84	61	77	42	77	42				115	70
1 1/4	32	99	74	85	50	85	50				135	82
1 1/2	40	113	83	100	56	100	56	54	132	55	160	98
2	50	131	98	119	67	119	67	56	139	70	195	121
2 1/2	65			139	79			56	146	70	230	148
3	80			158	91			59	152	70	240	180
4	100							66	165	70		
5	125							72	183	70		
6	150							78	208	80		
8	200							96	237	80		
10	250											
12	300											
Body		Cast Bronze		Cast Bronze		Cast Bronze		Cast Bronze			Cast Bronze	
Bonnet/Cap		Cast Bronze		Forged Brass or Cast Bronze		Forged Brass					Forged Brass	
Disc/Ball		Cast Bronze		Cast Bronze		Cast Bronze						
Hinge Pin		Copper										
Plug		Brass Rod										
Gasket											Non-Asbestos Sheet	
Screen											Stainless Steel	
Seat								NBR				
O ring											FKM	
Arm		Cast Bronze										
Note		Screwed Cap Y Pattern		Screwed Cap		Screwed Cap		FPM or EPDM available By-pass valve mounted			Screwed Cap	

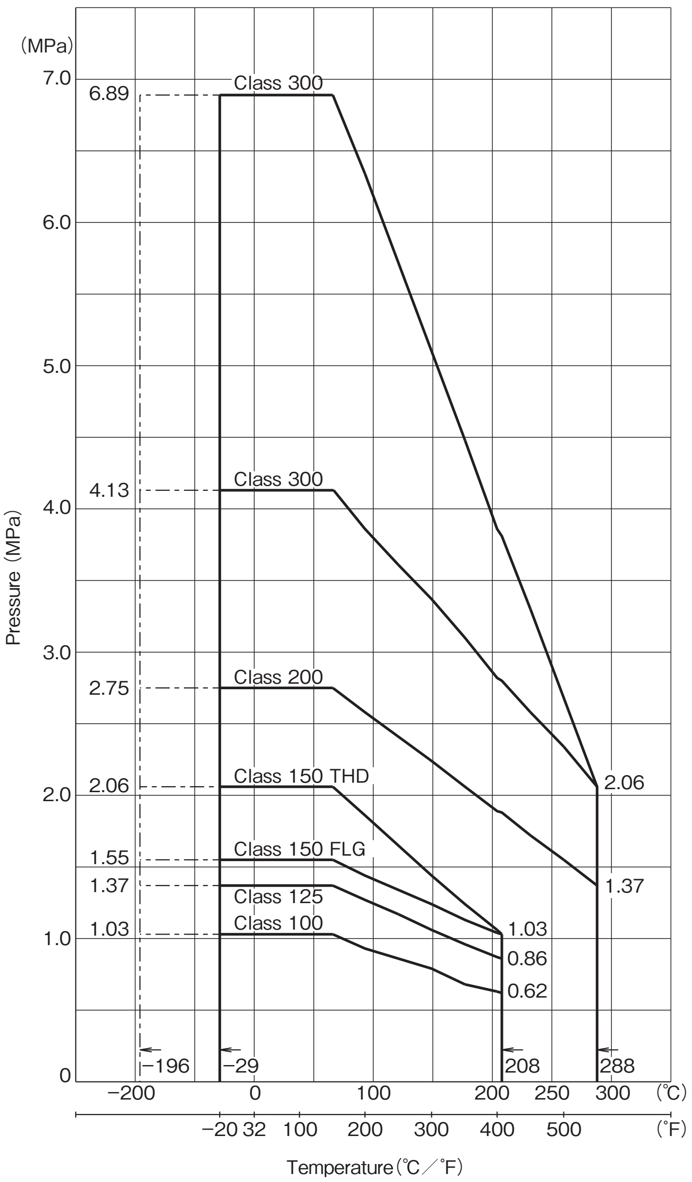
Type		Strainer			Strainer			Ball Valves			Ball Valves			Ball Valves		
Bronze and Brass		150 			PN25 Body Marking: Class 150 			400  Reduced Bore			400  Reduced Bore			600 		
Fig		**150-BT-N-B62-**			**150-BT-N-PN25-**			**BX-N**			**BX-N-T**			**RP-NK**		
Product Code		380			380P			5011			5011T			5044A		
inch	Size mm	L	H		L	H		L	H	D1	L	H	D1	L	H	D1
1/4	8													42	37	70
3/8	10													42	37	70
1/2	15	80	49		80	49		56	75	80	56	79	82	53	40	80
3/4	20	100	57		100	57		65	79	80	65	83	82	60	44	80
1	25	115	70		115	70		78	83	110	78	90	94	72	50	110
1 1/4	32	135	82		135	82		86	98	110	86	105	94	84	55	110
1 1/2	40	160	98		160	98		96	102	110	96	109	94	92	65	150
2	50	195	121		195	121		109	109	140	109	124	120	110	72	150
2 1/2	65	230	148											138	101	200
3	80	240	180											167	103	300
Body		Cast Bronze			Cast Bronze			Cast Bronze			Cast Bronze			Forged Brass		
Bonnet/Cap		Forged Brass			Forged Brass											
Stem								Dezincification Resistant Brass			Dezincification Resistant Brass			Dezincification Resistant Brass		
Disc/Ball								SCS13A			SCS13A			Brass/Chrome Plated or Stainless Steel		
Gasket		Non-Asbestos Sheet			Non-Asbestos Sheet											
Screen		Stainless Steel			Stainless Steel											
Seat								PTFE			PTFE			PTFE		
O ring		FKM			FKM			FKM						FKM		
Note		Screwed Cap			Screwed Cap			Long neck for thermal insulation			Long neck for thermal insulation T-Handle			UL/FM/CSA approved (up to 50mm)		

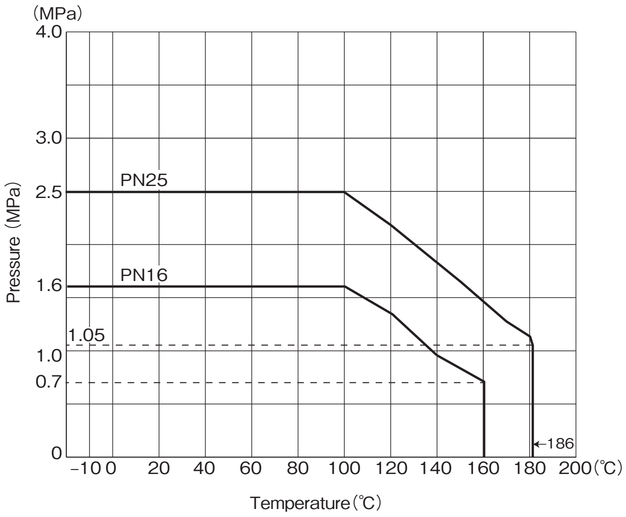
Type		Ball Valves			Ball Valves			Ball Valves			Ball Valves			Ball Valves		
Bronze and Brass		600  Full Bore			600  Full Bore			600  Full Bore			600  Standard Bore			600  Standard Bore		
Fig		**600RC-N**			**600RC-N-T**			**600RC-NR-NPT<Z01R1>**			**RZ-N**			**RZ-N-T**		
Product Code		5026			5026W			5026N			5080			5080W		
inch	Size mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	D1
1/4	8	50	37	70	50	38	60	50	37	70	39	31	60	39	25	39
3/8	10	50	37	70	50	38	60	50	37	70	44	36	70	44	29	40
1/2	15	65	40	80	65	43	65	65	40	80	56.5	41	85	56.5	35	55
3/4	20	68	44	80	68	47	65	68	44	80	59	44	85	59	39	55
1	25	79	50	110	79	57	100	79	50	110	71	48	100			
1 1/4	32	86	55	110	86	62	100	86	55	110	78	54	100			
1 1/2	40	96	65	150	96	76	120	96	65	150	83	65	125			
2	50	109	72	150	109	83	120	109	72	150	100	72	125			
2 1/2	65	138	100	200				138	100	200						
3	80	167	112.5	300				167	112.5	300						
Body		Forged Brass			Forged Brass			Forged Brass			Forged Brass			Forged Brass		
Stem		Brass/Nickel Plated			Brass/Nickel Plated			Brass/Nickel Plated			Dezincification Resistant Brass			Dezincification Resistant Brass		
Disc/Ball		Brass/Chrome Plated			Brass/Chrome Plated			Brass/Chrome Plated			Stainless Steel/ Brass/Chrome Plated			Brass/Chrome Plated		
Packing											G/F PTFE			G/F PTFE		
Seat		PTFE			PTFE			PTFE			G/F+PTFE			G/F+PTFE		
O ring		FKM			FKM			FKM								
Note					T-Handle						One piece body			One piece body T-Handle		

Type		Ball Valves			Ball Valves			Ball Valves		
Bronze and Brass		10K  Full Bore			10K  Full Bore			400  Reduced Bore		
Fig		BOV			BOX-N			RB-3N		
Product Code		5090			5091			5045A		
Size inch	Size mm	L	H	D1	L	H	D1	L	H	D1
1/4	8							40	30	60
3/8	10	49	39	80				46	35	70
1/2	15	62	45	100	56	75	80	67	45	80
3/4	20	71	48	100	65	79	80	68	48	80
1	25	83	54	130	77	85	110	79	55	110
1 1/4	32	96	59	130	96	102	110	89	60	110
1 1/2	40	106	70	150	98	110	140	100	65	110
2	50	125	77	150	119	118	140	115	75	140
Body		Cast Bronze			Cast Bronze			Forged Brass		
Stem		Forged Brass			SUS304			Dezincification Resistant Brass		
Disc/Ball		SUS304			SCS13A			Brass/Chrome Plated		
Packing								G/F PTFE		
Seat		PTFE			PTFE			PTFE		
O ring		FKM			FKM			FKM		
Note					Long neck for thermal insulation			L-port 3 way, 2 seat		

Pressure-Temperature Ratings

Bronze and Brass Valves(Extracted from MSS SP-80)





Pressure Temperature Rating

Service Temperature (℃)	PN16 (MPa)	PN25 (MPa)
−10 to 66	1.6	2.5
100		
120	1.35	2.18
150	0.95	1.65
170	0.7	1.28
180	−	1.13
186	−	1.05
198	−	−
200	−	−

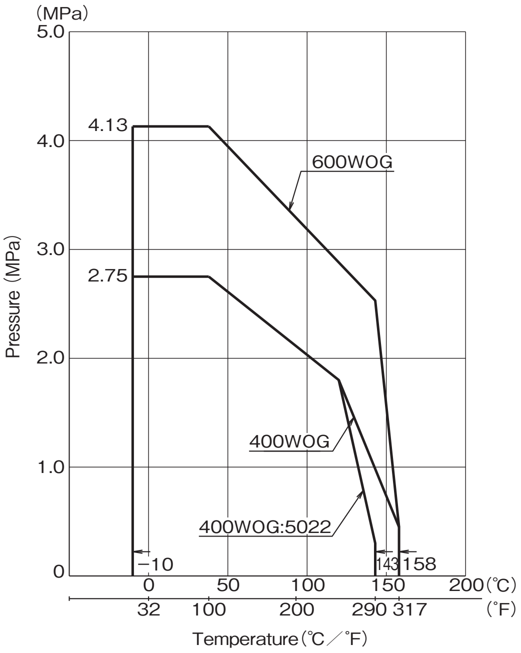
Pressure-Temperature Ratings

Service temperature		100	125	150		200	300	
		THD			FLG	THD		
°C	°F	Mpa	Mpa	Mpa	Mpa	Mpa	Mpa	Mpa
-29-66	-20-150	1.03	1.37	2.06	1.55	2.75	4.13	6.89
93	200	0.93	1.27	1.86	1.44	2.58	3.86	6.34
121	250	0.86	1.17	1.65	1.34	2.41	3.61	5.72
149	300	0.79	1.06	1.44	1.24	2.24	3.37	5.10
177	350	0.68	0.96	1.24	1.13	2.06	3.10	4.48
204	400	0.63	—	—	—	1.89	2.82	3.86
208	406	0.62	0.86	1.03	1.03	—	—	—
232	450	—	—	—	—	1.72	2.58	3.30
260	500	—	—	—	—	1.55	2.34	2.68
288	550	—	—	—	—	1.37	2.06	2.06
Saturated steam		0.68	0.86	1.03	1.03	1.37	2.06	2.06
Test pressure	shell water	1.55	2.06	3.10	2.41	4.13	6.20	10.34
	seat air	0.55	0.55	0.55	0.55	0.55	0.55	0.55

NOTE: Class 100 outside of MSS SP-80

Pressure-Temperature Ratings

Ball Valves

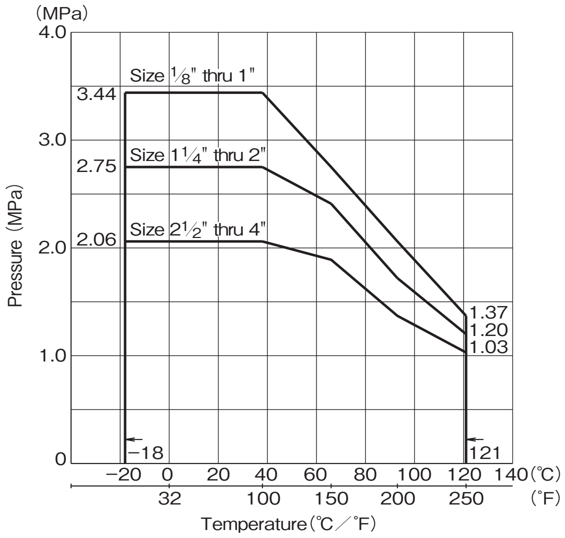


Pressure-Temperature Ratings

Class	WOG38℃ (3°F) Mpa	Test pressure shell (water) Mpa	Test pressure seat (air) Mpa
400WOG	2.75	4.13	0.55
600WOG	4.13	6.20	0.55

Do not use products in flammable or toxic gas.

Solder



Pressure-Temperature Ratings

Joint material	Working temperature		Maximum working gage pressure			Test pressure	
			1/8"thru 1"	1¼"thru 2"	2½"thru 4"	shell	seat
	°C	°F	Mpa	Mpa	Mpa	water	air
ASTM B32 Alloy Grade 50A 〔Notes(1)、(2)〕	38	100	1.37	1.20	1.03	2.06Mpa	0.55Mpa
	66	150	1.03	0.86	0.68		
	93	200	0.68	0.62	0.51		
	121	250	0.58	0.51	0.34		
ASTM B32 Alloy Grade 95TA 〔Note(2)〕	38	100	3.44	2.75	2.06		
	66	150	2.75	2.41	1.89		
	93	200	2.06	1.72	1.37		
	121	250	1.37	1.20	1.03		

Notes: (1) The Safe Drinking Water Act Amendment of 1986 prohibits the use in potable water systems of any solder having a lead content in excess of 0.2%.

(2) The safe working pressure-rating for a solder end valve is restricted to the lower pressure-rating.

JIS Standard Valves

Bronze Gate, Globe and Check Valves (JIS B2011)

1. Fluid

Water, oil, gas, air and steam. However, flammable gas and toxic gas are excluded.

2. Relationship between the temperature of the fluid and the maximum permissible pressure (hereinafter referred to as the "pressure-temperature criteria") shall be in accordance with Table 1. However, the fluid shall not be frozen.

3. In the case where the use of valves is prohibited or restricted by the High Pressure Gas Safety Act and othe regulations, the user shall use them within the framework of laws and ordinances.

Nominal pressure	Temperature of fluid (ºC)	Max. permissble working temp.[c](MPa)
5K	–29 to 120 159[a]	0.7 0.5
10K	–29 to 120 185[b]	1.4 1.0

a) It shall be the maximum service temperature, and in the case of a gate valve, it shall be 134ºC.
b) It shall be the maximum service temperature, and in the case of a gate valve, it shall be 171ºC.
c) The maximum permissible pressure at an intermediate temperature between a temperature above 120ºC and the maximum service temperature shall be obtained by proportional interpolation.

Unit: MPa

Standards		5K	10K			
Nominal pressure		JIS B2031	JIS B2031			
Valve type		Outside screw gate valve	Outside screw gate valve	Glove valve, Swing check valve		Inside screw gate valve
Disc seat structure		Press-fit seat	Screw 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
Maximum permissble working pressure	Steady flow below 120 degrees in centigrade	0.7	1.4	1.4	–	1.4
	Oil, pulsating flow and water bel ow 120 degrees in centigrade	0.5	1.0	1.0	–	1.0
	Saturated steam*1	0.2	0.7	0.7	–	0.2
	Gas below 120 degrees in centigrade*2	0.2	0.2	0.2	–	0.2
	120 degrees in centigrade	–	–	–	1.4	–
	220 degrees in centigrade	–	–	–	1.0	–

*1 When the main section is made of 18-8 stainless steel and used for steam piping, it is necessary to weld hardened metal cladding on the seat surface. Please designate the same together with the steam specification. When it is used for saturated steam at a pressure of 0.5 MPa or more, please designate accordingly.
*2 Such gases as set forth in the High Pressure Gas Safety Act shall be excluded. Gases–Gases other than flammable and toxic gases

Type		Gate			Gate			Gate			Gate			Gate		
Cast Iron		125			125			PN16 Body Marking: Class 125			125			125		
Fig		125-FSRF			YA125-FSRF<Z0T01>			YA125-FSRF-S-PN16-<Z0T01>			YA125-FSRF-F10KFF<Z0T01>			YA125-FSF<Z0T01>		
Product Code		514			421AE			511E			420E			415AE		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	D1
2	50	178	357	160	178	337	180	178	328	160	178	328	160	178	319	180
$2^1/_2$	65	190	382	170	190	412	180	190	382	170	190	382	170	190	358	180
3	80	203	438	170	203	482	200	203	436	170	203	436	170	203	401	200
4	100	229	532	225	229	569	250	229	532	225	229	532	225	229	457	250
5	125	254	627	225	254	672	280	254	627	225	254	627	225	254	523	280
6	150	267	725	250	267	783	300	267	726	250	267	726	250	267	602	300
8	200	292	919	280	292	985	355	292	919	280	292	919	280	292	711	360
10	250	330	1134	350	330	1196	407	330	1134	350	330	1134	350	330	812	400
12	300	356	1360	450	356	1390	450	356	1363	450	356	1363	450	356	941	450
Body		Cast Iron			Cast Iron			Cast Iron			Cast Iron			Cast Iron		
Bonnet/Cap/Cover		Cast Iron			Cast Iron			Cast Iron			Cast Iron			Cast Iron		
Stem		Stainless Steel			Forged Brass			Stainless Steel			Forged Brass			Forged Brass		
Disc		Cast Iron			Cast Iron			Cast Iron			Cast Iron			Cast Iron		
Packing		Non-asbestos			Non-asbestos						Non-asbestos			Non-asbestos		
Trim		Bronze			Bronze			13Cr			Bronze			Bronze		

Type		Gate			Gate			Gate			Gate			Gate		
Cast Iron		PN16 Body Marking: Class 125			PN16 Body Marking: Class 125			125			PN16			PN16		
Fig		YA125-FSF-PN16-<Z0T01>			YA125-FSF-S-PN16-<Z0T01>			YA125-FSF-F10KFF<Z0T01>			EN16-FSRF			EN16-FSF		
Product Code		415E			513E			410E			500B			501B		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	D1
2	50	178	319	180	178	319	180	178	319	180	178	360	180	178	275	180
$2^1/_2$	65	190	358	180	190	358	180	190	358	180	190	416	180	190	311	180
3	80	203	401	200	203	401	200	203	401	200	203	458	180	203	339	180
4	100	229	457	250	229	457	250	229	457	250	229	561	200	229	393	200
5	125	254	523	280	254	523	280	254	523	280	254	669	250	254	454	250
6	150	267	602	300	267	602	300	267	602	300	267	747	280	267	501	280
8	200	292	711	360	292	711	360	292	711	360	292	964	300	292	592	300
10	250	330	812	400	330	812	400	330	812	400	330	1165	360	330	732	360
12	300	356	941	450	356	941	450	356	941	450	356	1374	400	356	852	400
Body		Cast Iron			Cast Iron			Cast Iron			Cast Iron			Cast Iron		
Bonnet/Cap/Cover		Cast Iron			Cast Iron			Cast Iron			Cast Iron			Cast Iron		
Stem		Stainless Steel			Stainless Steel			Forged Brass			Stainless Steel			Stainless Steel		
Disc		Cast Iron			Cast Iron			Cast Iron			Cast Iron			Cast Iron		
Trim		Bronze			13Cr			Bronze			Bronze			Bronze		
Note								Body Marking: MSS standard indicating "125S 200WOG" Connection JIS B2239 10K-FF			Outside screw Rising Stem			Outside screw Rising stem		

Type		Gate			Globe			Globe			Globe			Globe		
Cast Iron		PN25 NO IMAGE			PN16 Body Marking: Class 125 NO IMAGE			PN16 Body Marking: Class 125 NO IMAGE			125 NO IMAGE			125 NO IMAGE		
Fig		(PHOX)EN25-FSRF			YA125-FGF<Z0T01>			YA125-FGF-S-PN16-<Z0T01>			YA125-FGF-PN16-<Z0T01>			YA125-FGF-F10KFF<Z0T01>		
Product Code		423E			400AE			510E			400E			405E		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	D1
2	50	215.9	385	175	203	277	180	203	318	200	203	318	200	203	277	180
2 1/2	65	241.3	437	200	216	307	180	216	333	200	216	333	200	216	307	180
3	80	282.5	493	254	241	353	225	241	361	200	241	361	200	241	353	225
4	100	304.8	611	300	292	404	280	292	390	250	292	390	250	292	404	280
5	125	381	716	300	330	467	300	330	439	300	330	439	300	330	467	300
6	150	403.2	813	348	356	533	350	356	477	300	356	477	300	356	533	350
8	200	419.1	1023.5	400	495	620	450	495	452	360	495	452	360	495	620	450
10	250	457	1211	457				622	624	440	622	624	440			
12	300	502	1386	457				698	735	600	698	735	600			
Body		Cast Iron			Cast Iron			Cast iron			Cast Iron			Cast Iron		
Bonnet/Cap/Cover		Cast Iron			Cast Iron			Cast Iron			Cast Iron			Cast Iron		
Stem		Forged Brass			Brass			Stainless Steel			Forged Brass			Forged Brass		
Disc		Cast Iron			Cast Iron			Stainless Steel/Cast Iron			Cast Bronze/Stainless Steel			Cast Bronze/Cast Iron		
Packing		Graphite			Non-asbestos			Non-asbestos			Non-asbestos					
Hand Wheel/Lever		Cast Iron														
Trim		Bronze			Bronze			13Cr			Bronze					
Note		Bolted bonnet Outside screw & yoke Test Pressure：Shell 3.75MPa (Water)														

Type		Globe			Swing Check			Swing Check			Swing Check			Swing Check		
Cast Iron		PN16 NO IMAGE			125 NO IMAGE			PN16 Body Marking: Class 125 NO IMAGE			125 NO IMAGE			EN25 NO IMAGE		
Fig		EN16-FGF			YA125-FNSF<Z0T01>			YA125-FNSF-PN16-<Z0T01>			YA125-FNSF-F10KFF<Z0T01>			(PHOX)EN25-FNSF		
Product Code		510B			435AE			435E			430E			433E		
Size inch	mm	L	H	D1	L	H		L	H		L	H		L	H	
2	50	203	322	200	203	153		203	153		203	153		267	135	
2 1/2	65	216	338	200	216	162		216	162		216	162		292	150	
3	80	241	359	200	241	176		241	176		241	176		318	166	
4	100	292	392	250	292	220		292	220		292	220		356	190	
5	125	330	438	300	330	226		330	226		330	226		400	206	
6	150	356	503	300	356	307		356	307		356	307		444	244	
8	200	495	552	360	495	325		495	325		495	325		533	291	
10	250				622	384		622	384		622	384		622	337	
12	300				698	426		698	426		698	426		711	383	
Body		Cast Iron			Cast Iron			Cast Iron			Cast Iron			Cast Iron		
Bonnet/Cap/Cover		Cast Iron			Cast Iron			Cast Iron			Cast Iron					
Stem		Stainless Steel														
Disc		Cast Iron			Cast Iron			Cast Iron			Cast Iron			Cast Iron		
Packing		Graphite														
Hinge Pin					Stainless Steel			Stainless Steel			Stainless Steel					
Body/Ball Seat		Bronze														
Note														Bolted cover Test Pressure: Shell 3.75MPa (Water)		

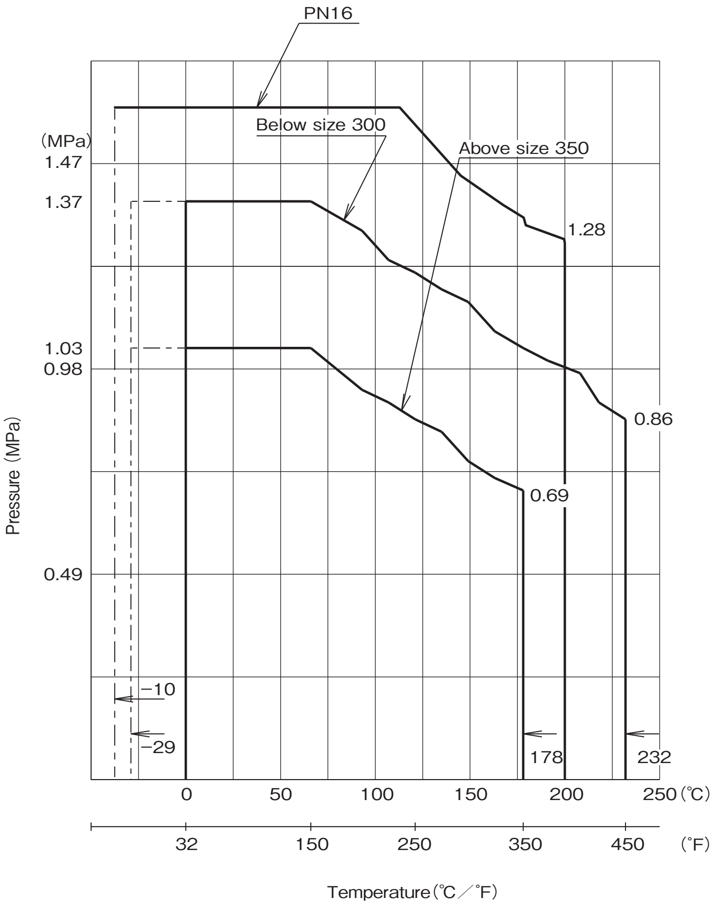
Type		Swing Check			Wafer Check			Wafer Check			Wafer Check			Strainer		
Cast Iron		PN16 NO IMAGE			150 			P 			10K 			125 NO IMAGE		
Fig		EN16-FNSF-UM			E150-FNW			E16-FNW			10-FNW			YA125-FTF<Z0T01>		
Product Code		520M			442F			443B			440			381AE		
Size inch	mm	L	H		L	H					L	H		L	H	
1 1/2	40										54	128				
2	50	203	154		54	105					56	143		225	178	
2 1/2	65	216	162		54	124					56	150		273	176	
3	80	241	176		57	137					59	156		292	195	
4	100	292	220		64	175					66	169		352	246	
5	125	330	226		70	197					72	183		391	300	
6	150	356	307		76	222					78	216		476	321	
8	200	495	325		95	279					96	243		453	398	
10	250	622	384		108	340					109	270		610	483	
12	300	695	426		143	410					145	315		762	560	
14	350										184	330				
16	400										191	355				
18	450										204	388				
Body		Cast Iron			Cast Iron			Cast Iron			Cast Iron			Cast Iron		
Bonnet/Cap/Cover		Cast Iron			Cast Bronze									Cast Iron		
Disc		Cast Iron						Cast Bronze/Stainless Steel			Cast Bronze					
Hinge Pin		Stainless Steel														
Screen														Stainless Steel		
Seat Rubber					NBR			NBR/EPDM			NBR					

Type		Strainer			Strainer			Strainer			Ball		
Cast Iron		PN16 Body Marking: Class 125 NO IMAGE			125 NO IMAGE			PN16 NO IMAGE			10K NO IMAGE Full Bore		
Fig		YA125-FTF-PN16-<Z0T01>			YA125-FTF-F10KFF<Z0T01>			EN16-FTF			10-FBF-N-L		
Product Code		381E			450E			530U			470L		
Size inch	mm	L	H		L	H		L	H		L	H	D1
1/2	15										110	102	130
3/4	20										120	105	130
1	25										130	124	160
1 1/4	32										140	128	160
1 1/2	40										165	114	230
2	50	225	178		250	168		220	178		180	121	230
2 1/2	65	273	176		285	212		270	177		190	154	400
3	80	292	195		315	242		290	195		200	163	400
4	100	352	246		370	284		350	243		230	199	460
5	125	391	300		420	325		390	274		300	219	460
6	150	476	321		490	370		440	320		340	292	1000
8	200	453	398		570	440		540	397		450	352	1500
10	250	610	483		680	515		660	480				
12	300	762	560		800	600		720	557				
14	350				950	740							
Body		Cast Iron			Cast Iron			Cast Iron			Cast Iron		
Bonnet/Cap/Cover		Cast Iron			Cast Iron			Cast Iron			Cast Iron		
Stem											SUS403		
Disc/Ball											Stainless Steel		
Packing											PTFE		
Gasket											PTFE		
Screen		Stainless Steel			Stainless Steel			Stainless Steel					
Body/Ball Seat											PTFE		

Pressure-Temperature Ratings

Cast Iron Valves (Extracted from MSS SP-70, 71 & 85)

Class 125 Gate, Globe and Check Valves

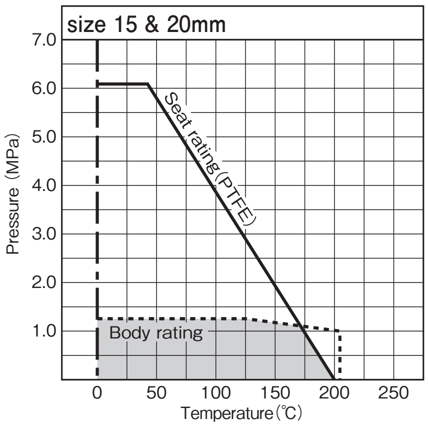


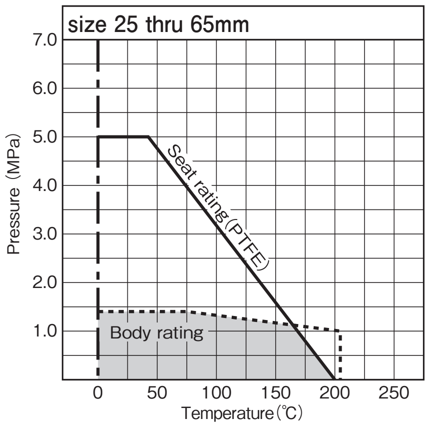
Pressure-Temperature Ratings

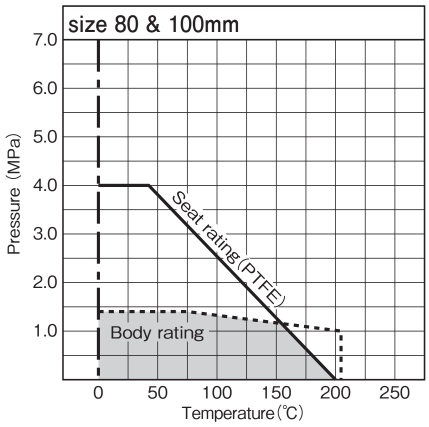
Temperature		Size 50 thru 300	Above size 350
°C	°F	Mpa	Mpa
-29-66	-20-150	1.37	1.03
93	200	1.31	0.93
107	225	1.24	0.90
121	250	1.21	0.86
135	275	1.17	0.83
149	300	1.14	0.76
163	325	1.07	0.72
178	350	1.03	0.69
191	375	1.00	
208	400	0.97	
218	425	0.90	
232	450	0.86	
Saturated steam		0.86	0.68
Test pressure shell	water	2.41	1.83
Test pressure seat	air	0.55	0.55

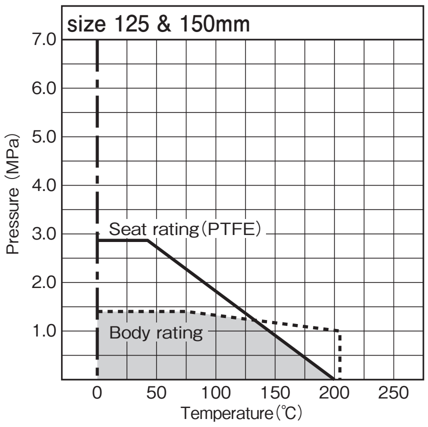
Service Temperature (℃)	PN16
−10 to 66	1.6
100	
120	
150	1.44
170	1.37
180	1.34
186	1.32
198	1.29
200	1.28

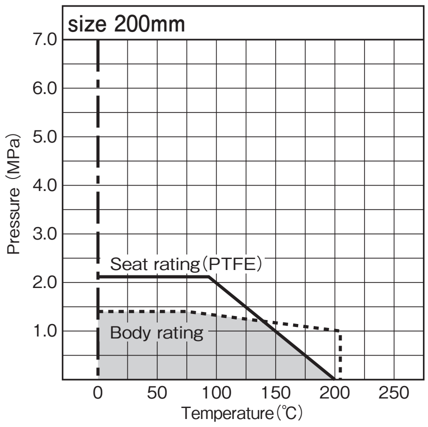
10K Cast Iron Ball Valves











Type		Gate			Gate			Gate			Gate			Gate		
Ductile Iron		10K 			10K 			10K 			16K 			16K 		
Fig		**10-DSR-N**			**10-DSRF-N**			**10-DSRF-N(BB)**			**16-DSR-N**			**16-DSRF-N**		
Product Code		602A			612A			613A			622A			632A		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	D1
1/2	15	60	150	60	90	164	70				65	163	70	108	163	70
3/4	20	70	171	70	100	165	70				75	182	80	117	164	70
1	25	75	198	80	110	188	80				80	212	90	127	187	80
1 1/4	32	85	233	90	120	219	90				90	245	100	140	219	90
1 1/2	40	95	274	100	130	253	100				100	285	115	165	253	100
2	50	105	318	115	140	285	115	178	352	200	110	330	135	178	285	115
2 1/2	65							190	410	200						
3	80							203	479	250						
4	100							229	566	250						
5	125							254	667	300						
6	150							267	779	300						
8	200							292	969	350						
10	250							330	1181	400						
12	300							356	1404	450						
Body		Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron		
Bonnet/Cap/Cover		Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron		
Stem		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Disc		Stainless Steel			Stainless Steel						Stainless Steel					
Note		Screwed ends			Screwed ends						Screwed ends					

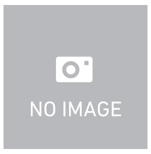
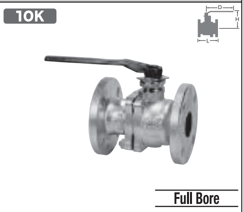
Type		Gate			Gate			Gate			Gate			Globe		
Ductile Iron		16K 			20K 			20K 			20K 			10K 		
Fig		**16-DSRF-N(BB)**			**20-DSR-N**			**20-DSRF-N**			**20-DSRF-N(BB)**			**10-DG-N**		
Product Code		633			642A			652A			653A			600A		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	D1
1/4	8													50	108	60
3/8	10													55	108	60
1/2	15				70	175	90	108	175	90				65	122	70
3/4	20				75	177	90	117	177	90				80	125	80
1	25				85	214	100	127	214	100				90	146	90
1 1/4	32				95	241	115	140	241	115				105	160	100
1 1/2	40				105	277	135	165	277	135				120	180	115
2	50	178	352	200	115	301	135				216	395	200	140	198	135
2 1/2	65	190	410	200							241	450	200			
3	80	203	479	250							283	520	250			
4	100	229	566	250							305	595	250			
5	125	254	667	300							381	725	300			
6	150	267	779	300							403	820	350			
8	200	292	993	350							419	1070	400			
10	250	330	1181	400							457	1247	450			
12	300	356	1404	450							502	1451	500			
Body		Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron		
Bonnet/Cap/Cover		Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron		
Stem		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Body Seat		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Note					Screwed ends									Screwed ends		

Type		Globe			Globe			Gate			Globe			Globe		
Ductile Iron		10K 			10K 			16K 			16K 			16K 		
Fig		10-DGF-N			10-DGF-N(BB)			16-DG-N			16-DGF-N			16-DGF-N(BB)		
Product Code		610A			611A			620A			630A			631		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	D1
1/2	15	85	122	70				70	122	80	108	122	80			
3/4	20	95	125	80				85	128	80	117	128	80			
1	25	110	146	90				95	147	100	127	146	100			
1 1/4	32	130	160	100				110	165	115	140	165	115			
1 1/2	40	150	180	115				125	182	115	165	182	115			
2	50	180	198	135	203	302	200	145	196	135	203	198	135	203	302	200
2 1/2	65				216	317	225							216	313	225
3	80				241	356	250							241	356	250
4	100				292	377	250							292	377	250
5	125				356	460	300							356	460	300
6	150				406	524	350							406	524	350
8	200				495	585	400							495	585	400
Body		Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron		
Bonnet/Cap/Cover		Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron		
Stem		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Disc		Stainless Steel						Stainless Steel			Stainless Steel			Stainless Steel/Ductile Iron		
Body Seat		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Note								Screwed ends								

Type		Globe			Globe			Globe			Swing Check			Swing Check		
Ductile Iron		20K 			20K 			20K 			10K 			16K 		
Fig		20-DG-N			20-DGF-N			20-DGF-N(BB)			10-DNSF-N			16-DNSF-N		
Product Code		640A			650A			651A			615A			635A		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H		L	H	
3/8	10	75	136	70	110	136	70									
1/2	15	78	138	80	110	138	80									
3/4	20	91	157	100	120	157	100									
1	25	105	178	115	130	178	115									
1 1/4	32	122	202	135	160	202	135									
1 1/2	40	135	210	135	180	210	135									
2	50	160	239	180	230	239	180	267	243	225	203	120		203	120	
2 1/2	65							292	347	250	216	130		216	135	
3	80							318	382	250	241	145		241	145	
4	100							356	457	300	292	160		292	165	
5	125							400	534	350	330	195		330	200	
6	150							444	593	400	356	215		356	260	
8	200							559	697	560	495	255		495	317	
Body		Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron		
Bonnet/Cap/Cover		Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron		
Stem		Stainless Steel			Stainless Steel			Stainless Steel								
Disc		Stainless Steel (hard facing)			Stainless Steel (hard facing)			Stainless Steel (hard facing)			Stainless Steel			Stainless Steel		
Body Seat		Stainless Steel (hard facing)			Stainless Steel (hard facing)			Stainless Steel (hard facing)			Stainless Steel			Stainless Steel		

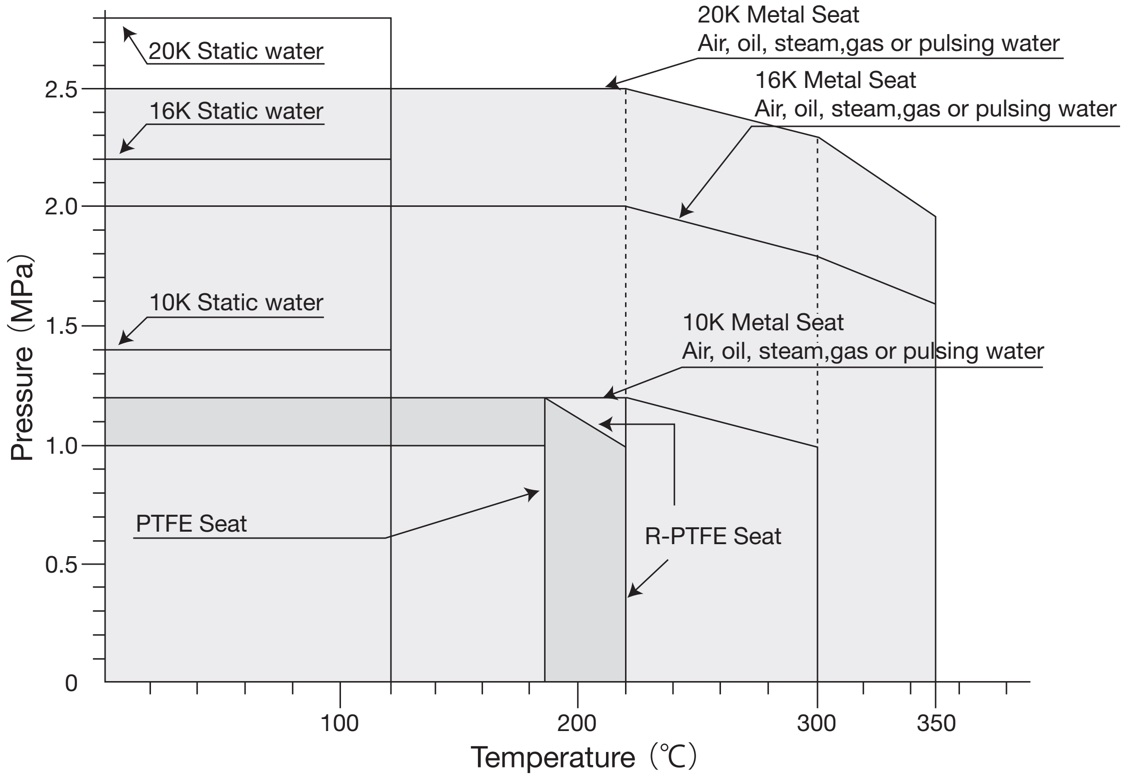
Type		Swing Check			Lift Check			Lift Check			Lift Check			Lift Check		
Ductile Iron		20K 			10K 			16K 			16K 			20K 		
Fig		**20-DNSF-N**			**10-DN-N**			**16-DN-N**			**16-DNF-N**			**20-DN-N**		
Product Code		655A			614			624A			634A			644A		
Size inch	mm	L	H		L	H		L	H		L	H		L	H	
1/2	15				65	39		70	50		108	50		78	56	
3/4	20				80	42		85	53		117	53		91	60	
1	25				90	48		95	61		127	61		105	68	
1 1/4	32				105	56		110	69		140	69		122	80	
1 1/2	40				120	65		125	75		165	75		135	85	
2	50	267	135		140	73		145	87		203	87		160	99	
2 1/2	65	292	145													
3	80	318	160													
4	100	356	185													
5	125	400	220													
6	150	444	240													
8	200	533	275													
Body		Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron		
Bonnet/Cap/Cover		Ductile Iron			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel (hard facing)		
Disc		Stainless Steel/Carbon Steel						Stainless Steel			Stainless Steel			Stainless Steel		
Body Seat		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel (hard facing)		

Type		Lift Check			Wafer Check			Strainer			Strainer			Strainer		
Ductile Iron		20K 			20K 			10K 			16K 			16K 		
Fig		**20-DNF-N**			**20-DNW**			**10-DTF-N**			**16-DT-N**			**16-DTF-N**		
Product Code		654A			645			618			628			638		
Size inch	mm	L	H		L	H	D1	L	H	H1	L	H	H1	L	H	H1
1/2	15	110	56								85	60	85			
3/4	20	120	60								100	65	95	140	63	91
1	25	130	68								115	75	110	150	77	114
1 1/4	32	160	80								135	90	130	170	90	134
1 1/2	40	180	85		54	128	55				150	100	145	190	100	146
2	50	230	99		56	133	55	230	138	172	180	115	170	250	168	218
2 1/2	65				60	150	70	305	212	290				305	212	285
3	80				67	156	70	360	242	340				360	242	340
4	100				68	169	70	415	284	391				415	284	391
5	125				83	183	70	465	325	450				465	325	450
6	150				95	216	80	515	370	502				515	370	502
8	200				127	243	80	580	462	645				580	462	645
10	250				140	290	90							680	536	757
12	300				181	315	90							800	625	882
14	350				184	330	90									
16	400				191	355	90									
18	450				204	388	90									
Body		Ductile Iron			Ductile Iron+NBR			Ductile Iron			Ductile Iron			Ductile Iron		
Bonnet/Cap/Cover		Stainless Steel			Cast Bronze			Ductile Iron			Forged Brass			Ductile Iron/Forged Brass		
Stem		Stainless Steel (hard facing)														
Disc/Ball					Cast Bronze											
Screen								Stainless Steel			Stainless Steel			Stainless Steel		
Body/Ball Seat		Stainless Steel (hard facing)														

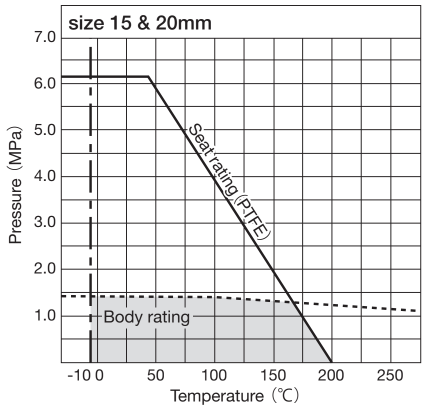
Type		Strainer			Strainer			Strainer			Ball		
Ductile Iron		20K 			20K 			PN25 			10K 		
Fig		**20-DT-N**			**20-DTF-N**			**(PHOX)EN25-DTF**			**10-DBF-N-L**		
Product Code		648A			658A			678E			607L		
Size inch	mm	L	H		L	H		L	H		L	H	D1
3/8	10	80	65		120	65							
1/2	15	85	65		125	65					108	106	130
3/4	20	100	70		140	70					117	109	130
1	25	115	83		160	85					127	130	160
1 1/4	32	135	120		185	124					140	135	160
1 1/2	40	150	130		200	135					165	115	230
2	50	180	152		250	163		216	140		178	120	230
2 1/2	65							241	162		190	153	400
3	80							283	184		203	162	400
4	100							305	225		229	199	460
5	125							381	280		356	219	460
6	150							403	318		394	293	1000
8	200							521	405		457	352	1500
10	250							635	485				
12	300							749	580				
Body		Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron		
Bonnet/Cap/Cover		Ductile Iron			Ductile Iron			Ductile Iron			Ductile Iron		
Stem											Stainless Steel		
Disc/Ball											Stainless Steel		
Screen		Stainless Steel (40 mesh)			Stainless Steel (40 mesh)			Stainless Steel					

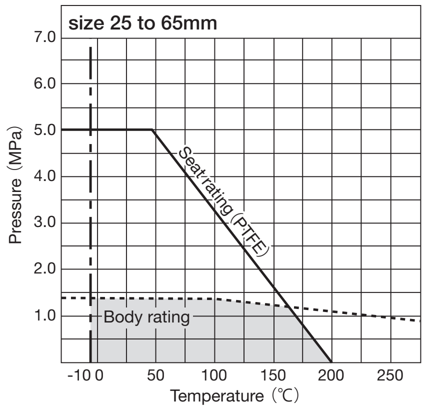
Pressure - Temperature Ratings

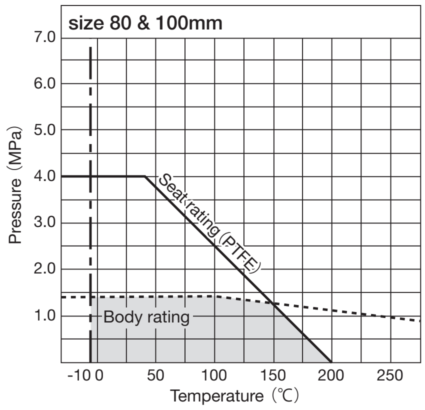
GATE, GLOBE, CHECK, STRAINER / SCREWED, FLANGED ENDS

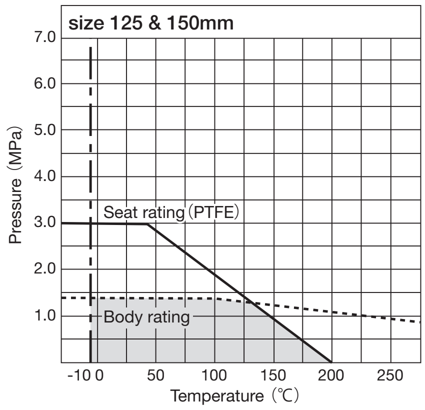


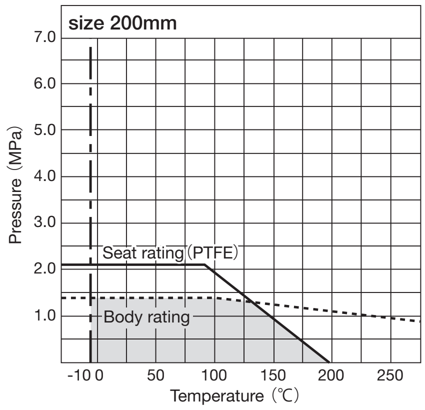
10K DUCTILE IRON BALL VALVES 10-DBF-N-L (607L)









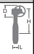


Type		Butterfly			Butterfly			Butterfly			Butterfly			Butterfly		
Butterfly		10K 			10K NO IMAGE			10K 			10K 			10K 		
Fig		PN10ALZ-N-LUE<Z0T01>			PN10ALZ-N-GUE<Z0T01>			10ALM-N-LU<Z0T01>			10ALM-N-LUE<Z0T01>			10ALM-N-GU<Z0T01>		
Product Code		552-UEL			552-UEG			550LA			550LA			550GA		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	D1
$1^1/_2$	40							33	162	188	33	162	188	33	200.5	100
2	50	43	170	87	43	170	87	33	162	188	43	166.5	188	43	205	100
$2^1/_2$	65	46	178	107	46	178	107	33	162	188	46	174.5	188	46	213	100
3	80	46	188	122	46	188	122	46	184.5	188	46	184.5	188	46	223	100
4	100	52	198	152	52	198	152	52	194.5	188	52	194.5	188	52	233	100
5	125	56	242	178	56	242	178	56	239	260	56	239	260	56	269	100
6	150	56	254	208	56	254	208	56	251	260	56	251	260	56	281	100
8	200	60	280	257	60	280	257							60	335	140
Body		Aluminum Die-cast			Aluminum Die-cast			Aluminum Die-cast			Aluminum Die-cast			Aluminum Die-cast		
Stem		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Disc		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Seat Rubber		EPDM			EPDM			NBR			EPDM			NBR		

Type		Butterfly			Butterfly			Butterfly			Butterfly		
Butterfly		10K 			10K 			200 NO IMAGE			200 		
Fig		10ALM-N-GUE<Z0T01>			10ALM-N-GE<Z0T01>			200L1-N<Z0T06>			200L2-N<Z0T06>		
Product Code		550GA			550GA			917-DNSL			917-DNSG		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1
$1^1/_2$	40	56	281	100									
2	50	60	335	140				43	191	90	43	194	90
$2^1/_2$	65	33	200.5	100				46	199	104	46	202	104
3	80	43	205	100				46	217	124	46	236	124
4	100	46	213	100				52	227	146	52	246	146
5	125	46	223	100				56	265	176	56	274	176
6	150	52	233	100				56	277	206	56	286	206
8	200	56	269	100				60	295	257	60	325	257
10	250				68	445	170				68	381	312
12	300				78	470	170				78	406	364
Body		Aluminum Die-cast			Aluminum Die-cast			Ductile Iron			Ductile Iron		
Stem		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Disc		Stainless Steel			Stainless Steel			Ductile Iron			Ductile Iron		
O ring					EPDM								
Seat Rubber		EPDM			EPDM			NBR			NBR		

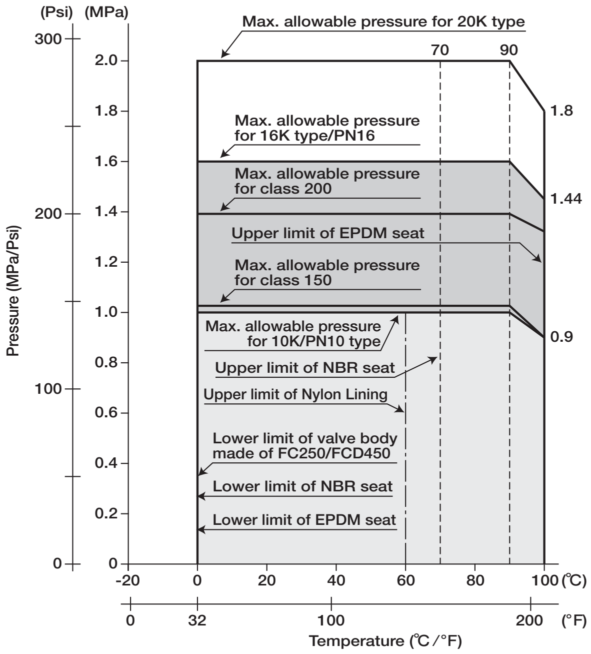
Type		Butterfly			Butterfly			Butterfly			Butterfly			Butterfly		
Butterfly		200 NO IMAGE			200 			PN16 NO IMAGE			PN16 			PN16 NO IMAGE		
Fig		200L1-N-B<Z0T06>			200L2-N-B<Z0T06>			PN16L1-N<Z0T04>			PN16L2-N<Z0T04>			PN16L1-N-UME<Z0T04>		
Product Code		917-BNSL			917-BNSG			957-DNSL			957-DNSG			957-MESL		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	D1
2	50	43	194	90				43	191	90	43	194	90	43	194	90
$2^{1}/_{2}$	65	46	202	104	46	202	104	46	199	104	46	202	104	46	202	104
3	80	46	236	124	46	236	124	46	217	124	46	236	124	46	236	124
4	100	52	246	146	52	246	146	52	227	146	52	246	146	52	246	146
5	125	56	274	176	56	274	176	56	265	176	56	274	176	56	274	176
6	150	56	286	206	56	286	206	56	277	206	56	286	206	56	286	206
8	200	60	325	257	60	325	257	60	295	257	60	325	257	60	325	257
10	250				68	381	312				68	381	312			
12	300				78	406	364				78	406	364			
14	350										78	461	407			
16	400										102	516	466			
18	450										114	540	522			
20	500										127	623	575			
24	600										154	671	680			
Body		Ductile Iron			Ductile Iron						Ductile Iron			Ductile Iron		
Bonnet								Ductile Iron								
Stem		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Disc		Aluminum Die-cast			Aluminum Die-cast			Ductile Iron			Ductile Iron			Stainless Steel		
Seat Rubber		NBR			NBR			NBR			NBR			EPDM		

Type		Butterfly			Butterfly			Butterfly			Butterfly		
Butterfly		PN16 			10K 			10K 			10K 		
Fig		PN16L2-N-UME<Z0T04>			10L2-N-U<Z0T02>			10L1-N-UE			10L2-N-UE<Z0T02>		
Product Code		957-MESG			562-UNSG			562-UESL			562-UESG		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1
2	50	43	194	90	43	206	80	43	191	180	43	206	80
$2^{1}/_{2}$	65	46	202	104	46	214	80	46	199	180	46	214	80
3	80	46	236	124	46	252	110	46	217	180	46	252	110
4	100	52	246	146	52	262	110	52	227	180	52	262	110
5	125	56	274	176	56	290	110	56	265	230	56	290	110
6	150	56	286	206	56	302	110	56	277	230	56	302	110
8	200	60	325	257	60	365	170				60	365	170
10	250	68	381	312	68	461	250				68	461	250
12	300	78	406	364	78	486	250				78	486	250
14	350	78	461	407	78	562	310				78	562	310
16	400	102	516	466	102	617	310				102	617	310
18	450	114	540	522	114	641	319				114	641	319
20	500	127	623	575	127	728	360				127	728	360
24	600	154	671	680	154	776	360				154	776	360
Body		Ductile Iron			Ductile Iron			Ductile Iron			Cast Iron		
Stem		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Disc		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
O ring					NBR						EPDM		
Seat Rubber		EPDM			NBR			EPDM			EPDM		

Type		Butterfly		
Butterfly		20K  		
Fig		20L2-N-UE		
Product Code		570-UESG		
Size inch	Size mm	L	H	D1
2	50	43	194	80
$2^1/_2$	65	46	202	80
3	80	46	236	110
4	100	52	246	110
5	125	56	274	110
6	150	56	286	110
8	200	60	325	170
10	250	68	381	250
12	300	78	406	250
14	350	78	445	310
16	400	102	500	310
18	450	114	540	360
20	500	127	589	500
22	5050	154	646	500
24	600	154	671	500
Body		Ductile Iron		
Stem		Stainless Steel		
Disc		Stainless Steel		
Seat Rubber		EPDM		

Pressure-Temperature Rating

■ Rubber Seat



Note: 1. The maximum allowable working pressure is affected by the mating flange when installing the valve with JIS5K flanges.
Static water flow: 0.7MPa
Pulsated water flow: 0.6MPa

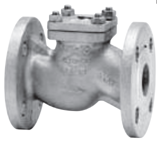
● Application of Pressure-Temperature Rating

(1) This diagram is prepared with based on maximum allowable working pressure and temperature, pressure-temperature characteristics of EPDM in JIS B2032 (Wafer type rubber-seated butterfly valves).
In actual application, it is necessary to expect the safety allowance in consideration of piping design conditions, etc.
Generally, the following safety allowance is recommended.
◯ For large size
10 - 15%.
◯ For pulsated flow or steam (Teflon® or metal seat)
20 - 25%.

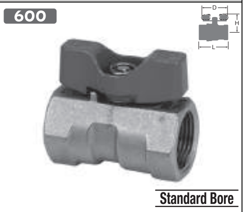
(2) In case of applying some regulations, such as Japanese government standards, etc., it may be restricted in material, temperature, design, strength, etc. Beforehand, please refer to related regulation or standard.

(3) In JIS B2032, the maximum allowable flow verocity of fluid when the valve is fully opened is specified as 3m/s at nominal pressure 10K and 4m/s at nominal pressure 16K, and 30m/s in case of gas. If the flow verocity exceeds these criteria, the pipe diameter should be revised.

⚠ Caution:
1. A rubber seat (NBR/EPDM) may deteriorate at an early stage in service for hot water supply line.
2. An EPDM seated butterfly valve shall not be used for all oil applications.

Type		Gate			Globe			Swing Check			Lift Check			Strainer		
VA Series		10K 			10K 			10K 			10K 			10K 		
Fig		**10-USRF-VA**			**10-UGF-VA**			**10-UNSF-VA**			**10-UNF-VA**			**10-UTF-VA**		
Product Code		803J			801J			805J			824J			807J		
Size inch	mm	L	H	D1	L	H	D1	L	H		L	H		L	H	
$^1/_2$	15	108	201	90												
$^3/_4$	20	117	211	90							117	76				
1	25	127	224	100							127	76				
$1^1/_4$	32	140	240	100							140	84				
$1^1/_2$	40	165	284	140							165	85				
2	50	178	336	160	203	234	160	203	121							
$2^1/_2$	65	190	474	180	216	247	180	216	134					270	160	
3	80	203	494	200	241	292	200	241	148					290	197	
4	100	229	523	225	292	324	250	292	162					340	233	
5	125	254	606	250				330	192					490	267	
6	150	267	711	250				356	217					440	320	
8	200	292	924	300				495	264					540	380	
10	250	330	1126	350										760	538	
Body		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Bonnet/Cap/Cover		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Stem		Stainless Steel			Stainless Steel											
Disc/Ball		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel					
Hinge Pin								Stainless Steel								
Plug								Stainless Steel								
Screen														Stainless Steel		
Arm								Stainless Steel								

Type		Gate			Gate			Globe			Globe			Swing Check		
U Series		10K 			10K 			10K 			10K 			10K 		
Fig		**US-N**			**USF-N**			**UG-N**			**UGF-N**			**UNS-N**		
Product Code		802			802J			800			800J			804		
Size inch	mm	L	H	D1	L	H	D1	L	H	D1	L	H	D1	L	H	
$^1/_4$	8							44	68	55						
$^3/_8$	10							48	68	55						
$^1/_2$	15	54	97	70	85	100	70	52	68	55	85	112	70	65	45	
$^3/_4$	20	58	102	70	95	106	70	60	94	70	95	113	70	80	55	
1	25	65	112	80	100	116	80	72	101	70	110	143	100	90	61	
$1^1/_4$	32	74	123	80	110	128	80	80	124	90	130	152	100	105	71	
$1^1/_2$	40	78	150	100	125	170	100	90	138	90	150	172	110	120	72	
2	50	87	167	100	140	188	100	100	153	100	180	190	125	140	81	
Body		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Bonnet/Cap/Cover					Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Stem		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel					
Disc/Ball		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Packing		Flexible Graphite+PTFE Braided Packing			Flexible Graphite+PTFE Braided Packing			Flexible Graphite+PTFE Braided Packing			Flexible Graphite+PTFE Braided Packing					
Hinge Pin														Stainless Steel		
Plug														Stainless Steel		

Type		Swing Check			Strainer			Strainer			Ball			Ball		
U Series																
Fig		**UNSF-N**			**UT-N**			**UTF-N**			**UZ-N**			**UZ-N-T**		
Product Code		804J			809			809J			3550			3550W		
Size inch	mm	L	H		L	H		L	H		L	H	D1	L	H	D1
1/4	8										39	31	60	39	25	39
3/8	10										44	36	70	44	29	40
1/2	15	85	45		85	60		120	58		56.5	41	85	56.5	35	55
3/4	20	95	55		100	65		130	66		59	44	85	59	39	55
1	25	110	61		115	77		150	78		71	48	100			
1 1/4	32	130	71		135	90		170	93		78	54	100			
1 1/2	40	150	72		150	100		190	104		83	65	125			
2	50	180	81		180	115		220	122		100	72	125			
2 1/2	65															
3	80															
4	100															
5	125															
6	150															
8	200															
10	250															
12	300															
Body		Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel			Stainless Steel		
Bonnet/Cap/Cover					Stainless Steel			Stainless Steel								
Stem		Stainless Steel									Stainless Steel			Stainless Steel		
Disc/Ball		Stainless Steel									Stainless Steel			Stainless Steel		
Hinge Pin		Stainless Steel														
Plug		Stainless Steel														
Screen					Stainless Steel			Stainless Steel								
Seat											R-PTFE			R-PTFE		
Note														T-Handle		

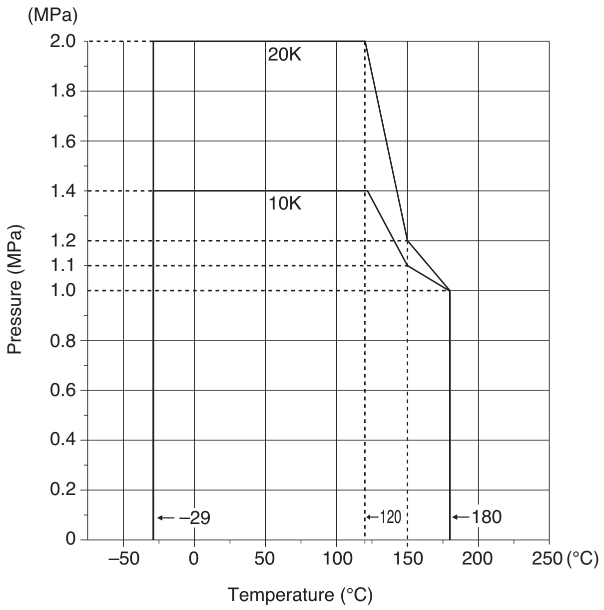
Type		Ball		
F Ball				
Fig		**A10-UBF-L**		
Product Code		3011L		
Size inch	mm	L	H	D1
1/2	15	108	81	130
3/4	20	117	84	130
1	25	127	93	160
1 1/4	32	140	97	160
1 1/2	40	165	113	230
2	50	178	120	230
2 1/2	65	190	150	400
3	80	203	161	400
4	100	229	189	460
5	125	356	209	800
6	150	394	262	980
8	200	457	317	1971
Body		Stainless Steel		
Bonnet/Cap/Cover		Stainless Steel		
Stem		Stainless Steel		
Disc/Ball		Stainless Steel		

Type		Wafer Check		
Wafer				
Fig		**10-UNW**		
Product Code		806		
Size inch	mm	L	H	D1
1/4	8			
3/8	10			
1/2	15			
3/4	20			
1	25			
1 1/4	32			
1 1/2	40	54	118	63
2	50	60	126	63
2 1/2	65	67	134	63
3	80	73	138	63
4	100	73	151	63
5	125	86	174	70
6	150	98	188	70
8	200	127	215	70
10	250	146	254	80
12	300	181	282	80
Body		Stainless Steel		
Disc/Ball		Stainless Steel		
Seat Rubber		NBR		

Pressure－Temperature Ratings

U-Series Stainless Steel Valves

■Gate, Globe, and Check Valves, strainers
/screwed & flanged ends

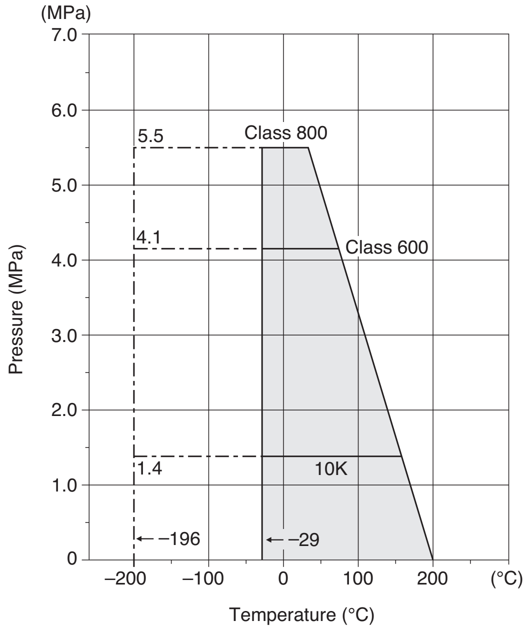


Service conditions		10K MPa	20K (Fig.809) MPa
Static water	Less than 120°C	1.4	2.0
Air, oil, gas, steam	Less than 150°C	1.1	1.2
	Less than 180°C	1.0	1.0

*Do not use our products in flammable or toxic gas service.

U-Series Stainless Steel Valves

■Ball Valves / screwed end type
UZ-N (3550), UZ-N-T (3550W), UMU (4580), UM02- (4760A) or 10-UB-N (3060)



Service conditions	600WOG MPa	800WOG MPa	10K MPa
Water, oil, gas,	4.1	5.5	1.4
Saturated steam	1.0	1.0	1.0

*Do not use our products in flammable or toxic gas service.

Pressure – Temperature Ratings

VA-Series Stainless Steel Valves

■JIS Flanged Valves

(MPa)

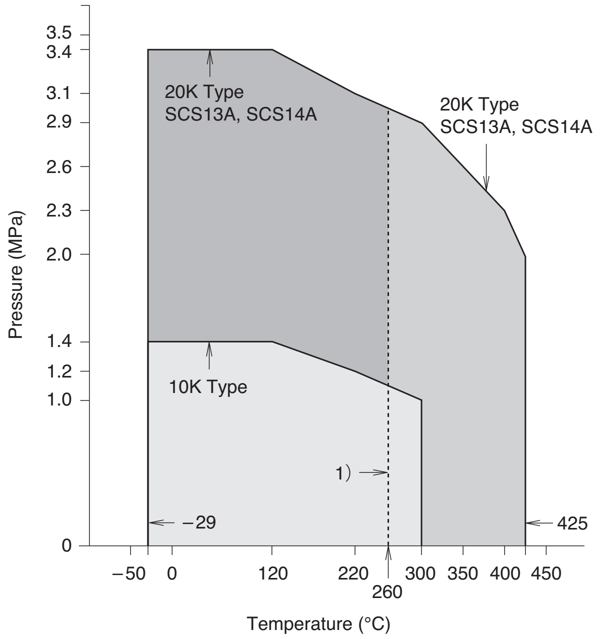
	Nominal pressure	10K	20K
	Body material	SCS13A, SCS14A	SCS13A, SCS14A
Temperature	below 120°C	1.4	3.4
	220°C	1.2	3.1
	300°C	1.0	2.9
	350°C	—	2.6
	400°C	—	2.3
	425°C	—	2.0

Notes:

1) The max. working temperature for standard products is restricted to 260°C by gland packing, gasket or material.

2) In case of use at 260°C and above, applicable selection for gland packing & gasket is required.

3) Do not use our products in flammable or toxic gas service.



VA-Series Stainless Steel Valves

■ASME B16.34 Table 2-2.1A & 2-2.2A

Service temperature		Class 150		Class 300	
		A351 Gr. CF8 (SCS13A)	A351 Gr. CF8M (SCS14A)	A351 Gr. CF8 (SCS13A)	A351 Gr. CF8M (SCS14A)
(°C)	(°F)	MPa	MPa	MPa	MPa
–29 –38	–20 –100	1.90	1.90	4.96	4.96
93	200	1.62	1.65	4.14	4.27
149	300	1.41	1.48	3.65	3.86
204	400	1.24	1.34	3.24	3.55
260	500	1.17	1.90	3.00	3.31
316	600	0.965	0.965	2.86	3.10
343	650	0.862	0.862	2.83	3.07
371	700	0.758	0.758	2.79	2.96
399	750	0.655	0.655	2.76	2.93
427	800	0.552	0.552	2.72	2.86
454(2)	850	0.448	0.448	2.69	2.79
482(2)	900	0.345	0.345	2.65	2.72
510(2)	950	0.241	0.241	2.59	2.65
538(2)	1000	0.138	0.138	2.24	2.52
566(2)	1050	0.138(1)	0.138(1)	2.14	2.48
593(2)	1100	0.138(1)	0.138(1)	1.79	2.24
621(2)	1150	0.138(1)	0.138(1)	1.34	1.90
649(2)	1200	0.138(1)	0.138(1)	1.07	1.41
677(2)	1250	0.138(1)	0.138(1)	0.758	1.240
704(2)	1300	0.138(1)	0.138(1)	0.586	0.965
732(2)	1350	0.138(1)	0.138(1)	0.414	0.724
760(2)	1400	0.138(1)	0.138(1)	0.345	0.517
788(2)	1450	0.103(1)	0.138(1)	0.241	0.414
816(2)	1500	0.069(1)	0.138(1)	0.172	0.276

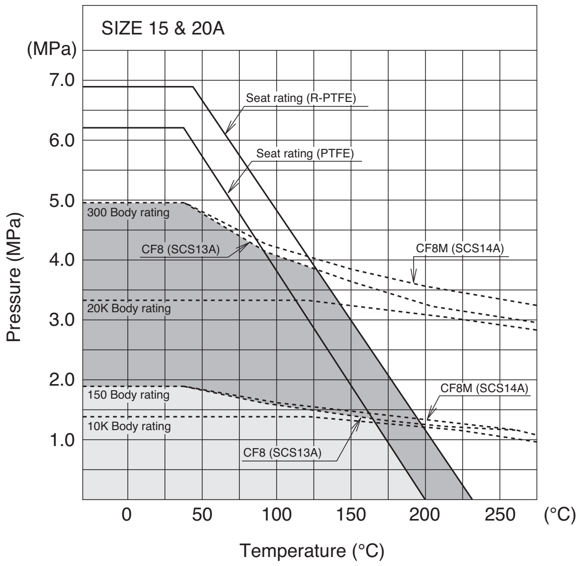
Note:

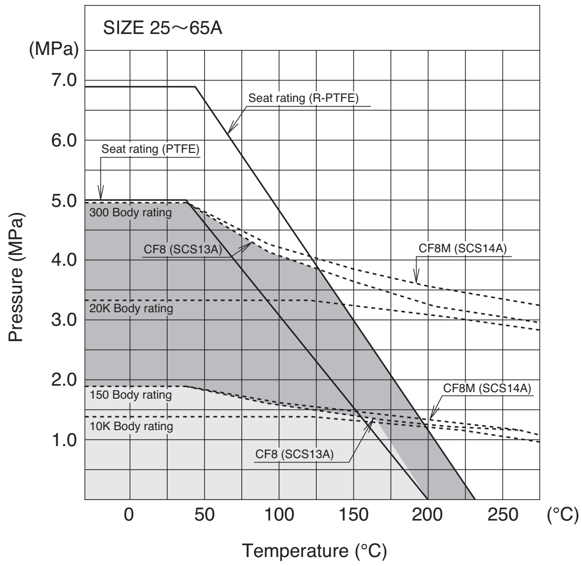
(1) For welding end valves only. Flanged ends ratings terminate at 1000°F.

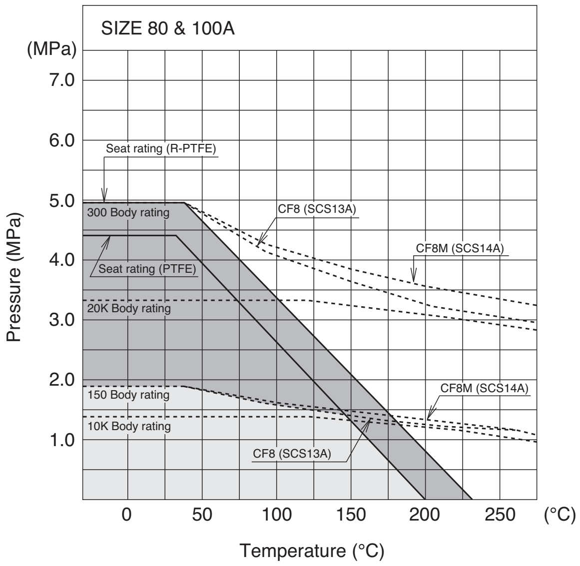
(2) Permissible, but please consult our sales staff or contributor for usage above 450°C.

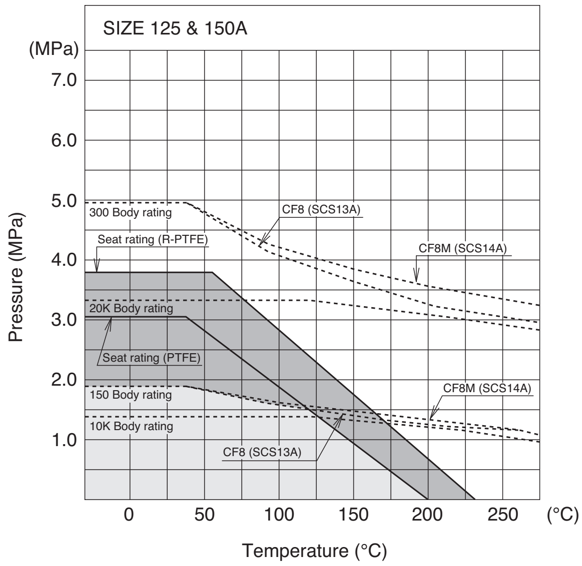
Pressure–Temperature Ratings

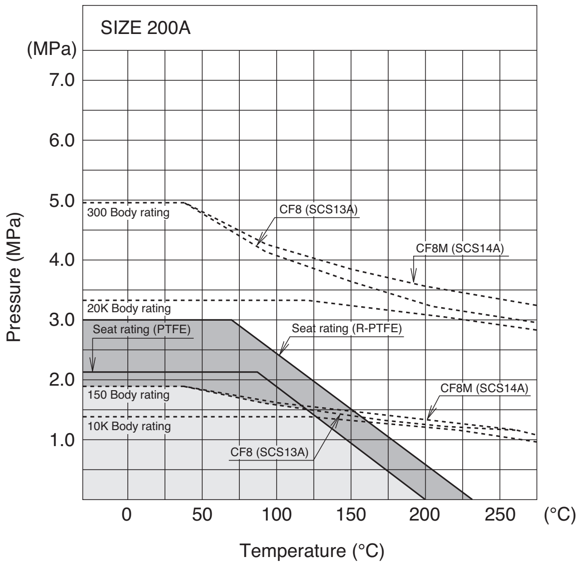
10/20K, Class 150/300 Stainless Steel Flanged Ball Valves











Pressure–Temperature Ratings of Wafer Check Valves

■Rubber Seat (with Bypass-Valve)

Fig. 10-UNW (806), 10K

Service conditions \ Seat material		NBR	FKM	EPDM
		MPa	MPa	MPa
Static water	below 80°C	1.4	1.4	1.4
	above 120°C	—	—	1.4
Oil, water, air	below 80°C	1.0	1.0	1.0
	above 120°C	—	1.0	1.0

Note: An EPDM seat shall not be used for all oil application.

Notes

1) Refer to the individual specification sheet or the drawing for details of a product.

2) Main units of this catalog are shown in SI (MPa, °C, millimeter).

3) Refer to the attached P-T ratings about applicable pressure and temperature.

4) The non-asbestos product is used for the gland packing and gasket of bronze, brass and cast iron valves as a manufacturer's standard. Please consult about other products.

5) Bronze and cast iron strainers have the perforated metal screen equivalent to 12-16 meshes. Other meshes of the screen are also available upon request. Please consult KITZ sales staff for details.

6) Legends

d: Port diameter(mm)

(L, H, D: shown on each page)

7) Teflon is Du Pont's tradename.

Products guarantee

Term of a guarantee: Within one year after the date of delivery from our factory to the original customer.

Contents of a guarantee: If the installations and the service conditions (such as pressure, temperature, fluid, etc.) are proper, necessary replacement and repair of our product will be carried out without charge.

Guarantee exceptions: Please keep in mind that the above articles of guarantee will not apply to the case owing to the following reasons:

1) Non-compliance of the customer with the technical instructions furnished by our catalog and specification sheet

2) Natural disaster incidents, such as a fire, flood damage, an earthquake, and falling stone

3) Reconstruction or repair by any third party other than KITZ Corporation.

4) Deterioration (such as shot rust, degradation, chemical changes, etc.)

5) Any other matter resulting from the damage not being regarded as manufacturer's responsibility

In addition, you will be required necessary charge for repair or exchange of parts on failure or damage by the guarantee exceptions. Please contact our sales staff or agency for details.

The specification and the performance term of our product indicated in this catalog are based on the internationally governed standards and specifications, our products experience or the design calculation and our in-house examination.

When using the product beyond the service conditions mentioned in this catalog, users are requested to consult KITZ Corporation for further advice in advance, or to conduct the verification or evaluation for the performance under users' responsibility. We shall not be liable for any damages resulting from lack of aforementioned procedures by the customer.

Items mentioned in this catalog are subject to change without prior notice to the customers.

Don't use our products in flammable or toxic gas services.