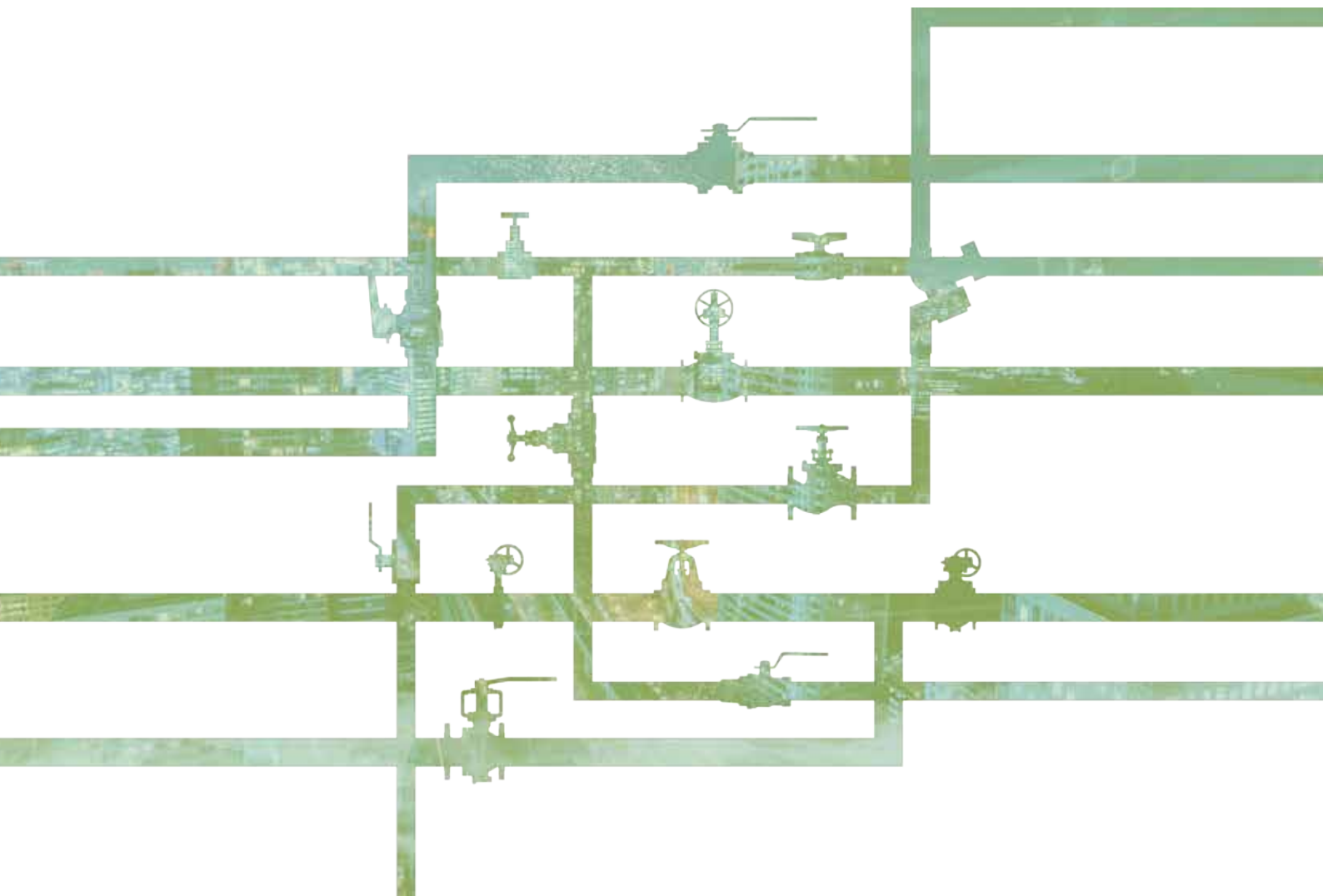


**KITZ**

GENERAL CATALOG

# Compact SS/CS Valves & Miniature



# INDEX

CPT

Compact SS/CS Valves & Miniature

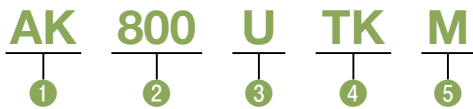
Title	Body Material	Type	Class	End Connection*	Features*	Fig	Page		
KITZ Standard Stainless Steel Gate/Globe/Check Valves & Strainers (B Series)	SS	Gate	10K/200	TE	SB, NRS	UEL UELM AKUELM UE UEM AKUEM UEB UEBM	CPT3 46		
			10K	FE/FF					
		Globe	5K	FE/FF	SB, RS	UAB	CPT4 47		
			10K			UCB			
			10K/200	TE		UCL UCLM AKUCLM UJ UJM AKUJM			
			10K	FE/FF		UJB UJBM			
				TE		UD UDM			
				FE/FF		Screwed Bonnet, Rising Stem, Soft Seated (PTFE) UDB UDBM			
		Check	10K	TE	Lift	UN	CPT5 48		
			10K/200		Swing	UO			
					10K	UOM AKUOM			
		Strainer	20K	TE	Y-Pattern, 40 Mesh	UOB UOBM	CPT6 49		
			10K	FE/FF		UY UYM UYB UYBM			
		Wafer Check	10K	Wafer	Single Plate, Built-in Bypass Valve	10UW 10UWS 20UWS	CPT7 50		
20K									
Ball Check	10K	TE	Ball Check	UFTE	CPT7 50				
	Air Vent		-	Air Vent Valve		UFTA			
Ball Check	10K	TE/RF	Ball Check	10UFT 10UFTE					
Stainless & Carbon Steel Compact Floating Ball Valve	SS	Ball	10K	TE	FB, Split Body	10UT 10UTM	CPT8 51		
			Type 600		Reduced Bore, Uni-Body	UTK UTKM AKUTKM UTKW UTKMW			
					Type 800	Full Body, Split Body	UTFKW UTFKMW		
			Type 1000			Reduced Body, Split Body	UTFZ	CPT9 52	
					Full Body, Split Body	UTHM AKUTHM			
					Reduced Body, Split Body, Long Neck Type for Thermal Insulation	UTFM AKUTFM			
					Reduced Bore, 3pc Body	UTHL			
					3000	SW	Reduced Bore, 3pc Body	U3TZM AKU3TZM	CPT10 53
						TE	Reduced Bore, 3pc Body	SWU3TZM AWU3TZM U3TZFM AKU3TZFM	
			SW			Reduced Bore, 3pc Body	SWU3TZFM AWU3TZFM		
			Type 800		TE	Reduced Bore, Welded Body, Antistatic, Blowout Proof, Fire Safe	3000UTKM		
			CS		600	TE	Reduced Bore, 3-Way, 4-Seat, L or T Port	UTH4LM UTH4TM	CPT11 54
					800		Reduced Bore, Uni-Body	SCTK AKSCTK 800SCTK AK800SCTK	
					3000		SW	Reduced Bore, Welded Body for Threaded Ends, Split Body for Socket Welding Ends, Antistatic, Blowout Proof, Fire Safe	AW800SCTK 3000SCTK AK3000SCTK AW3000SCTK
TE									
Stainless Steel & Brass Miniature Valves	SUS316/SUSU630	Needle	30K	TE	Straight (Metric)	UN3-AP-	CPT13 56		
				Angle (Metric)	UN3-BP-				
				COUPLE LOK	Straight (Metric) (Inch)	UN3-CP-			
				Angle (Metric) (Inch)	UN3-DP-				
			260K	TE	Straight (Metric) (Inch)	UN3-EP-			
				COUPLE LOK	Angle (Metric) (Inch)	UN3-FP-			
				SW	Straight (Metric)	UN26-AP-			
				COUPLE LOK	Straight (Metric)	UN26-CP-			
	Brass	20K	TE	10K	Straight (Metric)	UN26-SP-	CPT14 57		
				20K	Straight (Inch)	UN26-CP-			
	Brass	20K	TE	Straight	N1-A-	CPT14 57			
				Straight	N2-A-				
				Straight with Lock	N2-AL-				
				Angle	N2-B-				

\* (Abbreviation) TE: Threaded Ends, FE: Flanged Ends, RF: Raised Face, SW: Socket Welding Ends  
SB: Screwed Bonnet, NRS: Non Rising Stem, RS: Rising Stem, FB: Full Bore, RB: Reduced Bore

# PRODUCT CODING

## Compact SS/CS Valves except Miniature

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



### 1 End Connection

- None ..... Threaded Ends (BS/JIS)
- AK ..... Threaded Ends (NPT)
- AW ..... Socket Welding Ends

### 2 Pressure Class

- None ..... KITZ Standard
- 10 ..... 10K
- 20 ..... 20K
- 800 ..... Class 800
- 3000 ..... Type 3000

### 3 Symbol of Shell Material

- U ..... Stainless Steel
- SC ..... Carbon Steel

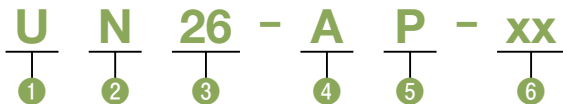
### 4 Valve Type

- E, EL, EB ..... Gate
- AB, CB, CL, J, JB ..... Globe
- D, DB ..... Soft Seated Globe
- N ..... Lift Check
- O, OB ..... Swing Check
- W ..... Wafer Check (NBR Seat)
- WS ..... Wafer Check (Metal Seat)
- Y, YB ..... Strainer
- UFT, UFTE ..... Ball Check
- T, TK, TF, TFK, TH, THL, TH4L/T, 3TZ, 3TZF ..... Ball

### 5 Trim

- None ..... 304SS
- M ..... 316SS

## Miniature Valves



### 1 Body Material

- U ..... 316 Stainless Steel
- None ..... Forged Brass

### 2 Service Application

- N ..... Needle Valves for General Flow Control

### 3 Pressure Class

- 1 ..... 10K
- 2 ..... 20K
- 3 ..... 30K
- 26 ..... 260K

### 4 Design & End Connection

- A ..... Straight/Threaded
- B ..... Angle/Threaded
- C ..... Straight/COUPLE LOK Type
- D ..... Angle/COUPLE LOK Type
- E ..... Straight/COUPLE LOK Type & Threaded
- F ..... Angle/COUPLE LOK Type & Threaded
- S ..... Straight/Socket Weld

### 5 Auxiliary Items

- P ..... Complete with Nut for Panel Tap
- L ..... With Locking Lever

### 6 Nominal Size

Threaded End	Metric Tubing End
1 ..... 1/8 <sup>B</sup>	3 ..... 3mm
2 ..... 1/4 <sup>B</sup>	4 ..... 4mm
3 ..... 3/8 <sup>B</sup>	6 ..... 6mm
4 ..... 1/2 <sup>B</sup>	8 ..... 8mm
6 ..... 3/4 <sup>B</sup>	10 ..... 10mm
8 ..... 1 <sup>B</sup>	12 ..... 12mm

#### Inch Tubing End (Outside Diameter)

01 ..... 1/8 (3.17mm)
02 ..... 1/4 (6.35mm)
03 ..... 3/8 (9.52mm)
04 ..... 1/2 (12.70mm)

















### (Example)

















- UN3-EP-6-2 (A)-(B)
- (A) 6mm Tubing End
- (B) 1/4<sup>B</sup> Threaded End

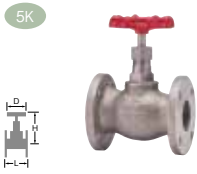
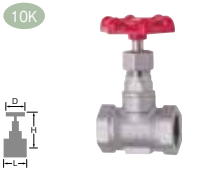
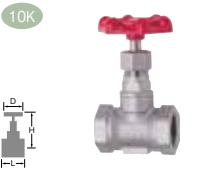
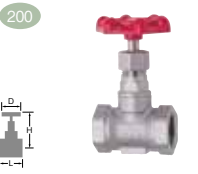


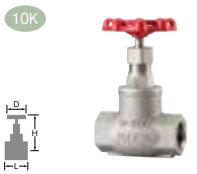
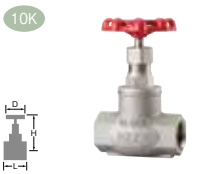
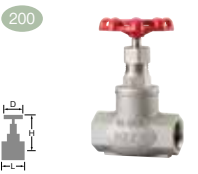
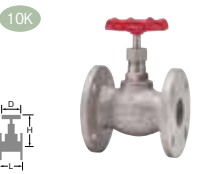
### CAUTION

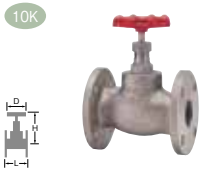
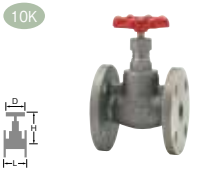


Valves introduced in this catalog are not designed to be used in toxic gases.

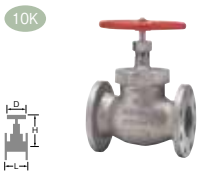
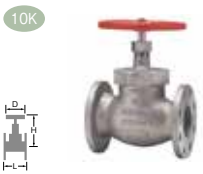


Type	Gate			Gate			Gate			Gate			
Stainless Steel B Series KITZ Standard			 SB IS NRS			 SB IS NRS			 SB IS NRS			 SB IS NRS	
													
Fig	UEL			UE			UELM			AKUELM			
KCA Code	-			-			-			31			
End Connection	BS21 (JIS B0203)			BS21 (JIS B0203)			BS21 (JIS B0203)			ASME B1.20.1			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
1/2	15	54	96	70				54	96	70			
3/4	20	58	101	70				58	101	70			
1	25	65	112	80				65	112	80			
1 1/4	32	74	123	80				74	123	80			
1 1/2	40	76	150	100				76	150	100			
2	50	87	167	100				87	167	100			
2 1/2	65				115	248	135				115	248	135
3	80				130	275	155				130	275	155
4	100				155	315	200				155	315	200
Body	CF8			CF8M			CF8M			CF8M			
Bonnet	CF8			CF8M			CF8M			CF8M			
Stem	304SS + Hard Cr Plating			316SS			316SS + Hard Cr Plating			316SS + Hard Cr Plating			
Disc	CF8			CF8M			CF8M			CF8M			
Gland Packing	Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided			
Hand Wheel	ZDC/Aluminum Die-Cast			Aluminum Die-Cast/DI			ZDC/Aluminum Die-Cast			ZDC/Aluminum Die-Cast			
Standard/Approval	RoHS			RoHS up to 3 <sup>B</sup>			RoHS			RoHS up to 3 <sup>B</sup>			
Service Condition	Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			
Reference Page	Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			
Remarks	RoHS: Option EAC: Option			RoHS: Option EAC: Option			RoHS: Option EAC: Option			RoHS: Option EAC: Option			





Type	Gate			Gate			Gate			Gate			
Stainless Steel B Series KITZ Standard			 SB IS NRS			 SB IS NRS			 SB IS NRS			 SB IS NRS	
													
Fig	UEM			AKUEM			UEB			UEBM			
KCA Code	-			31			-			-			
End Connection	BS21 (JIS B0203)			ASME B1.20.1			JIS B2220* 10K FF			JIS B2220* 10K FF			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
1/2	15							85	99	70			
3/4	20							95	105	70			
1	25							100	116	80	100	116	80
1 1/4	32							110	128	80	110	128	80
1 1/2	40							125	170	100	125	170	100
2	50							140	188	100	140	188	100
2 1/2	65	115	248	135	115	248	135	170	248	135	170	248	135
3	80	130	275	155	130	275	155	190	275	135	190	275	135
4	100	155	315	200	155	315	200						
Body	CF8M			CF8M			CF8			CF8M			
Bonnet	CF8M			CF8M			304SS/CF8			316SS/CF8M			
Stem	316SS			316SS			304SS			316SS			
Disc	CF8M			CF8M			CF8			CF8M			
Gland Packing	Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided			
Hand Wheel	Aluminum Die-Cast/DI			Aluminum Die-Cast/DI			ZDC/Aluminum Die-Cast			Aluminum Die-Cast/DI			
Standard/Approval	RoHS up to 3 <sup>B</sup>			RoHS up to 3 <sup>B</sup>			RoHS			RoHS			
Service Condition	Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			
Reference Page	Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			
Remarks	RoHS: Option EAC: Option			RoHS: Option EAC: Option			* Except Flange Thickness RoHS: Option, EAC: Option			* Except Flange Thickness RoHS: Option, EAC: Option			


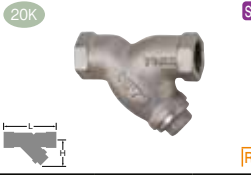


Type	Globe			Globe			Globe			Globe			
Stainless Steel B Series KITZ Standard													
	SB IS RS EAC RoHS			SB IS RS EAC RoHS			SB IS RS EAC RoHS			SB IS RS EAC RoHS			
Fig	UAB			UCL			UCLM			AKUCLM			
KCA Code	-			-			-			-			
End Connection	JIS B2220* 5K FF			BS21 (JIS B0203)			BS21 (JIS B0203)			ASME B1.20.1			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
1/4	8				44	68	55	44	68	55	44	68	55
3/8	10	73	106	70	48	68	55	48	68	55	48	68	55
1/2	15	85	106	70	52	68	55	52	68	55	52	68	55
3/4	20	95	108	70	60	93	60	60	93	60	60	93	60
1	25	108	119	80	72	100	70	72	100	70	72	100	70
1 1/4	32	120	142	90	80	122	80	80	122	80	80	122	80
1 1/2	40	135	155	90	90	138	90	90	138	90	90	138	90
2	50	155	186	115	100	153	100	100	153	100	100	153	100
Body	CF8			CF8			CF8M			CF8M			
Bonnet	CF8			CF8			CF8M			CF8M			
Stem	304SS + Hard Cr Plating			304SS + Hard Cr Plating			316SS + Hard Cr Plating			316SS + Hard Cr Plating			
Disc	304SS			304SS			316SS			316SS			
Gland Packing	Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided *			Flexible Graphite+PTFE Braided *			Flexible Graphite+PTFE Braided *			
Hand Wheel	ZDC/Aluminum Die-Cast			ZDC/Aluminum Die-Cast			ZDC/Aluminum Die-Cast			ZDC/Aluminum Die-Cast			
Standard/Approval	RoHS			RoHS			RoHS			RoHS			
Service Condition	Pressure-Temperature: 0.5 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			
Reference Page	Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			
Remarks	* Except Flange Thickness RoHS: Option, EAC: Option			* PTFE up to 1/2 <sup>B</sup> RoHS: Option, EAC: Option			* PTFE up to 1/2 <sup>B</sup> RoHS: Option, EAC: Option			* PTFE up to 1/2 <sup>B</sup> RoHS: Option, EAC: Option			

Type	Globe			Globe			Globe			Globe			
Stainless Steel B Series KITZ Standard													
	SB IS RS EAC RoHS			SB IS RS EAC RoHS			SB IS RS EAC RoHS			SB IS RS EAC RoHS			
Fig	UJ			UJM			AKUJM			UCB			
KCA Code	-			-			33			-			
End Connection	BS21 (JIS B0203)			BS21 (JIS B0203)			ASME B1.20.1			JIS B2220* 10K FF			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
3/8	10	55	109	60	55	109	60	55	109	60	73	106	70
1/2	15	65	111	60	65	111	60	65	111	60	85	106	70
3/4	20	80	112	70	80	112	70	80	112	70	95	108	70
1	25	90	142	90	90	142	90	90	142	90	108	119	80
1 1/4	32	105	150	90	105	150	90	105	150	90	120	142	90
1 1/2	40	120	171	100	120	171	100	120	171	100	135	155	90
2	50	140	189	115	140	189	115	140	189	115	155	186	115
2 1/2	65	180	253	180	180	253	180	180	253	180			
3	80	200	280	225	200	280	225	200	280	225			
Body	CF8			CF8M			CF8M			CF8			
Bonnet	CF8			CF8M			CF8M			304SS/CF8			
Stem	304SS + Hard Cr Plating			316SS + Hard Cr Plating			316SS + Hard Cr Plating			304SS + Hard Cr Plating			
Disc	304SS/CF8			316SS/CF8M			316SS/CF8M			304SS			
Gland Packing	Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided			
Hand Wheel	ZDC/Aluminum Die-Cast/DI			ZDC/Aluminum Die-Cast/DI			ZDC/Aluminum Die-Cast/DI			ZDC/Aluminum Die-Cast			
Standard/Approval	RoHS up to 2 <sup>B</sup>			RoHS up to 2 <sup>B</sup>			RoHS up to 2 <sup>B</sup>			RoHS			
Service Condition	Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			
Reference Page	Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			
Remarks	RoHS: Option EAC: Option			RoHS: Option, EAC: Option			RoHS: Option, EAC: Option			* Except Flange Thickness RoHS: Option, EAC: Option			




Type	Globe			Globe			Globe			Globe			
Stainless Steel B Series KITZ Standard													
	EAC RoHS			EAC RoHS			EAC RoHS			EAC RoHS			
Fig	UJB			UJBM			UD			UDM			
KCA Code	-			-			-			-			
End Connection	JIS B2220* 10K FF			JIS B2220* 10K FF			BS21 (JIS B0203)			BS21 (JIS B0203)			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
3/8	10	85	109	60	85	109	60	55	109	60	55	109	60
1/2	15	85	111	60	85	111	60	65	112	60	65	112	60
3/4	20	95	112	70	95	112	70	80	113	70	80	113	70
1	25	110	142	90	110	142	90	90	143	90	90	143	90
1 1/4	32	130	150	90	130	150	90	105	150	90	105	150	90
1 1/2	40	150	171	100	150	171	100	120	171	100	120	171	100
2	50	180	189	115	180	189	115	140	189	115	140	189	115
2 1/2	65	210	253	180	210	253	180						
3	80	240	280	225	240	280	225						
Body	CF8			CF8M			CF8			CF8M			
Bonnet	CF8			CF8M			CF8			CF8M			
Stem	304SS + Hard Cr Plating			316SS + Hard Cr Plating			304SS + Hard Cr Plating			316SS + Hard Cr Plating			
Disc	304SS/CF8			316SS/CF8M			PTFE			PTFE			
Gland Packing	Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided			
Hand Wheel	ZDC/Aluminum Die-Cast/DI			ZDC/Aluminum Die-Cast/DI			ZDC/Aluminum Die-Cast			ZDC/Aluminum Die-Cast			
Standard/Approval	RoHS up to 2 <sup>B</sup>			RoHS up to 2 <sup>B</sup>			RoHS			RoHS			
Service Condition	Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			
Reference Page	Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			
Remarks	* Except Flange Thickness RoHS: Option, EAC: Option			* Except Flange Thickness RoHS: Option, EAC: Option			RoHS: Option, EAC: Option			RoHS: Option, EAC: Option			





Type	Globe			Globe			Lift Check			Swing Check			
Stainless Steel B Series KITZ Standard													
	EAC RoHS			EAC RoHS			EAC RoHS			EAC RoHS			
Fig	UDB			UDBM			UN			UO			
KCA Code	-			-			-			-			
End Connection	JIS B2220* 10K FF			JIS B2220* 10K FF			BS21 (JIS B0203)			BS21 (JIS B0203)			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
3/8	10							55	50				
1/2	15	85	112	60	85	112	60	65	53		65	45	
3/4	20	95	113	70	95	113	70	80	54		80	55	
1	25	110	143	90	110	143	90	90	62		90	61	
1 1/4	32	130	150	90	130	150	90	105	66		105	71	
1 1/2	40	150	171	100	150	171	100	120	76		120	72	
2	50	180	189	115	180	189	115	140	85		140	81	
2 1/2	65	210	252	180	210	252	180				180	93	
3	80	240	277	225	240	277	225				200	104	
Body	CF8			CF8M			CF8			CF8			
Bonnet/Cap	CF8			CF8M			304SS/CF8			304SS/CF8			
Stem/Hinge Pin	316SS + Hard Cr Plating			316SS + Hard Cr Plating						304SS			
Disc	PTFE			PTFE			CF8			CF8			
Gland Packing	Flexible Graphite+PTFE Braided			Flexible Graphite+PTFE Braided									
Hand Wheel	ZDC/Aluminum Die-Cast/DI			ZDC/Aluminum Die-Cast/DI									
Standard/Approval	RoHS up to 2 <sup>B</sup>			RoHS up to 2 <sup>B</sup>			RoHS			RoHS			
Service Condition	Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			
Reference Page	Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			
Remarks	* Except Flange Thickness RoHS: Option, EAC: Option			* Except Flange Thickness RoHS: Option, EAC: Option			RoHS: Option, EAC: Option			RoHS: Option, EAC: Option			

Type	Swing Check			Swing Check			Swing Check			Swing Check			
Stainless Steel B Series KITZ Standard													
	EAC RoHS			EAC RoHS			EAC RoHS			EAC RoHS			
Fig	UOM			AKUOM			UOB			UOBM			
KCA Code	-			34			-			-			
End Connection	BS21 (JIS B0203)			ASME B1.20.1			JIS B2220* 10K FF			JIS B2220* 10K FF			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
1/2	15	65	45		65	45		85	45		85	45	
3/4	20	80	55		80	55		95	55		95	55	
1	25	90	61		90	61		110	61		110	61	
1 1/4	32	105	71		105	71		130	71		130	71	
1 1/2	40	120	72		120	72		150	72		150	72	
2	50	140	81		140	81		180	81		180	81	
2 1/2	65	180	93		180	93		210	93		210	93	
3	80	200	104		200	104		240	104		240	104	
Body	CF8M			CF8M			CF8			CF8M			
Bonnet/Cap	316SS/CF8M			316SS/CF8M			304SS/CF8			316SS/CF8M			
Stem/Hinge Pin	316SS			316SS			304SS			316SS			
Disc/Screen	CF8M			CF8M			CF8			CF8M			
Standard/Approval	RoHS			RoHS			RoHS			RoHS			
Service Condition	Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			
Reference Page	Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			
Remarks	RoHS: Option, EAC: Option			RoHS: Option, EAC: Option			* Except Flange Thickness RoHS: Option, EAC: Option			* Except Flange Thickness RoHS: Option, EAC: Option			

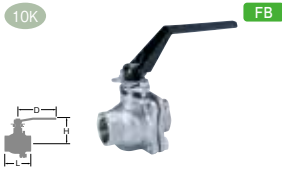



Type	Strainer			Strainer			Strainer			Strainer			
Stainless Steel B Series KITZ Standard													
	EAC RoHS			EAC RoHS			EAC RoHS			EAC RoHS			
Fig	UY			UYM			UYB			UYBM			
KCA Code	-			-			-			-			
End Connection	BS21 (JIS B0203)			BS21 (JIS B0203)			JIS B2220* 10K FF			JIS B2220* 10K FF			
inch	mm	L	H	*H1	L	H	*H1	L	H	*H1	L	H	*H1
1/4	8	65	50	66	65	50	66	110	50	67	110	50	67
3/8	10	70	50	67	70	50	67	120	58	79	120	58	79
1/2	15	85	58	79	85	58	79	130	66	91	130	66	91
3/4	20	100	64	89	100	64	89	150	78	109	150	78	109
1	25	115	76	107	115	76	107	170	93	131	170	93	131
1 1/4	32	135	89	127	135	89	127	190	103	144	190	103	144
1 1/2	40	150	98	139	150	98	139	220	121	173	220	121	173
2	50	180	115	167	180	115	167						
2 1/2	65	220	156	214	220	156	214						
3	80	250	192	266	250	192	266						
Body	CF8			CF8M			CF8			CF8M			
Bonnet/Cap/Cover	CF8			CF8M			CF8			CF8M			
Disc/Screen	304SS			316SS			304SS			316SS			
Gasket	Reinforced PTFE			Reinforced PTFE			Reinforced PTFE			Reinforced PTFE			
Standard/Approval	RoHS			RoHS			RoHS			RoHS			
Service Condition	Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			Pressure-Temperature: 1.0 MPa: 180°C			
Reference Page	Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			Design, Packing/Gasket, P-T Rating: Page SS18&19			
Remarks	40-mesh, RoHS: Option			40-mesh, RoHS: Option			* Except Flange Thickness 40-mesh, RoHS: Option			* Except Flange Thickness 40-mesh, RoHS: Option			

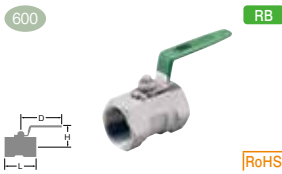



\*Height for removing the screen

Type	Wafer Check			Wafer Check			Wafer Check			
Stainless Steel B Series KITZ Standard										
	10UW			10UWS			20UWS			
Fig	10UW			10UWS			20UWS			
KCA Code	-			-			-			
End Connection	Wafer (JIS 10K)			Wafer (JIS 10K)			Wafer (JIS 20K)			
inch	mm	L	H	D	L	H	D	L	H	D
2	50	60	147	60	60	148	60	60	142	60
2 1/2	65	67	155	60	67	156	60	67	158	60
3	80	73	163	60	73	164	60	73	163	60
4	100	73	175	60	73	176	60	73	176	60
5	125	89	189	70	89	189	70	89	189	70
6	150	98	202	70	98	203	70	98	203	70
8	200	127	229	70	127	229	70	127	229	70
10	250	146	280	90	146	284	90	146	284	90
12	300	181	307	90	181	310	90	181	310	90
Body	CF8 + NBR			CF8 + Metal Seat			CF8 + Metal Seat			
Bonnet/Cap	CF8			CF8			CF8			
Stem/Hinge pin	304SS			304SS			304SS			
Disc/Screen	CF8			CF8			CF8			
Gasket	Flexible Graphite + PTFE Braded			Flexible Graphite + PTFE Braded			Flexible Graphite + PTFE Braded			
Service Condition	W.O.G. 80°C (1.4MPa) (DO NOT USE for Flammable Gas or Toxic Gas.)			W.O.G. 120°C (1.4MPa) (DO NOT USE for Flammable Gas or Toxic Gas.)			W.O.G. 120°C (3.4MPa) (DO NOT USE for Flammable Gas or Toxic Gas.)			
Reference Page	Features: Page BR35			Features: Page BR35			Features: Page BR35			
Remarks	Built-in Bypass Valve Single Plate Type			Built-in Bypass Valve Single Plate Type			Built-in Bypass Valve Single Plate Type			

Type	Ball Check			Air Vent			Ball Check			Ball Check			
Stainless Steel K Series KITZ Standard													
	UFTE			UFTA			10UFT			10UFTE			
Fig	UFTE			UFTA			10UFT			10UFTE			
KCA Code	-			-			-			-			
End Connection	BS21 (JIS B0203)			BS21 (JIS B0203)			JIS B2220 10K RF			JIS B2220 10K RF			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
1/4	8				80								
3/8	10				80								
1/2	15	105	59.5										
3/4	20							190	87				
1	25							200	100.5		200	97	
1 1/4	32							220	123.5		220	120.5	
1 1/2	40							240	150		240	146	
2	50							290	187		290	187	
3	80							410	275		410	275	
4	100										500	366	
Body	CF8			CF8			CF8			CF8			
Bonnet/Cap/Cover	CF8			CF8			CF8			CF8			
Disc	NBR			EPDM			NBR			NBR			
O ring/Gasket	NBR						NBR			NBR			
Plug	304SS									304SS			
Service Condition	Non-Shock Water : 0.05~1.4MPa, 0~60°C			Air : 0.7MPa at 0°C~+60°C			Non-Shock Water : 0.05~1.4MPa, 0~60°C			Non-Shock Water : 0.05~1.4MPa, 0~60°C			
Reference Page	Features & Pressure Loss: Page CPT19&20						Features & Pressure Loss: Page CPT19&20			Features & Pressure Loss: Page CPT19&20			
Remarks	Vertical Installation Only			Vertical Installation Only			Vertical Installation Only			Vertical & Horizontal			



Type	SS Ball			SS Ball			SS Ball			SS Ball			
SS/CS Threaded or Welded Ball Valves													
Fig	10UT			10UTM			UTK			UTKM			
KCA Code	-			-			-			-			
End Connection	BS21 (JIS B0203)			BS21 (JIS B0203)			BS21 (JIS B0203)			BS21 (JIS B0203)			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
1/4	8							39	31	60	39	31	60
3/8	10	62	72	130	62	72	130	44	35	70	44	35	70
1/2	15	65	102	130	65	102	130	56.5	38	85	56.5	38	85
3/4	20	80	105	130	80	105	130	59	42	85	59	42	85
1	25	90	124	160	90	124	160	71	47	100	71	47	100
1 1/4	32	110	130	160	110	130	160	78	52	100	78	52	100
1 1/2	40	120	113	230	120	113	230	83	63	125	83	63	125
2	50	140	120	230	140	120	230	100	69	125	100	69	125
2 1/2	65	160	154	400	160	154	400						
3	80	182	163	400	182	163	400						
Body & Cap	CF8			CF8M			CF8			CF8M			
Stem	304SS			316SS			304SS/316SS			316SS			
Ball	304SS/CF8			316SS/CF8M			304SS/316SS/CF8/CF8M			316SS/CF8M			
Ball Seat	PTFE			PTFE			G/F PTFE			G/F PTFE			
Gland Packing	PTFE			PTFE			G/F PTFE			G/F PTFE			
Gasket	PTFE			PTFE									
Handle	DI			DI			SS			SS			
Bore	Full Bore			Full Bore			Reduced Bore			Reduced Bore			
Standard/ Approval							RoHS			RoHS			
Reference Page	P-T Rating : Page CPT16			P-T Rating : Page CPT16			P-T Rating : Page CPT15			P-T Rating : Page CPT15			
Remarks	Split Body			Split Body			RoHS: Option			RoHS: Option			


Type	SS Ball			SS Ball			SS Ball			SS Ball			
SS/CS Threaded or Welded Ball Valves													
Fig	AKUTKM			UTKW			UTKMW			UTFKW			
KCA Code	52			-			-			-			
End Connection	ASME B1.20.1			BS21 (JIS B0203)			BS21 (JIS B0203)			BS21 (JIS B0203)			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
1/4	8	39	31	60	39	24	35	39	24	35			
3/8	10	44	35	70	44	29	40	44	29	40			
1/2	15	56.5	38	85	56.5	34	55	56.5	34	55	62	46	60
3/4	20	59	42	85	59	37	55	59	37	55	73	49	60
1	25	71	47	100	71	41	69	71	41	69	85	59	82
1 1/4	32	78	52	100									
1 1/2	40	83	63	125									
2	50	100	69	125									
Body & Cap	CF8M			CF8			CF8M			CF8			
Stem	316SS			304SS/316SS			316SS			304SS			
Ball	316SS/CF8M			304SS/316SS/CF8/CF8M			316SS/CF8M			304SS			
Ball Seat	G/F PTFE			G/F PTFE			G/F PTFE			HYPATITE® PTFE			
Gland Packing	G/F PTFE			G/F PTFE			G/F PTFE			FKM			
Gasket										PTFE			
Handle	SS			ZDC			ZDC			SS			
Bore	Reduced Bore			Reduced Bore			Reduced Bore			Full Bore			
Standard/ Approval	RoHS			RoHS			RoHS						
Reference Page	P-T Rating : Page CPT15			P-T Rating : Page CPT15			P-T Rating : Page CPT15			P-T Rating : Page CPT16			
Remarks	Uni-Body RoHS: Option			Uni-Body, Butterfly (Wing) Handle RoHS: Option			Uni-Body, Butterfly (Wing) Handle RoHS: Option			Split Body, Butterfly (Wing) Handle			

Type	SS Ball			SS Ball			SS Ball			SS Ball			
SS/CS Threaded or Welded Ball Valves													
Fig	UTFKMW			UTFZ			UTHM			AKUTHM			
KCA Code	-			-			-			53			
End Connection	BS21 (JIS B0203)			BS21 (JIS B0203)			BS21 (JIS B0203)			ASME B1.20.1			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
3/8	10				58	47	100						
1/2	15	62	46	60	62	53	100	60	47	100	60	48	100
3/4	20	73	49	60	73	63	130	70	53	100	70	54	100
1	25	85	59	82	85	67	130	80	63	130	80	64	130
1 1/4	32				98	76	150	95	67	130	95	68	130
1 1/2	40				108	82	150	108	79	150	108	79	150
2	50				124	101	200	124	85	150	124	85	150
Body & Cap	CF8M			CF8			CF8M			CF8M			
Stem	316SS			304SS			316SS			316SS			
Ball	316SS/CF8M			304SS/CF8			316SS/CF8M			316SS/CF8M			
Ball Seat	HYPATITE® PTFE			HYPATITE® PTFE			PTFE			PTFE			
Gland Packing	FKM			PTFE			PTFE			PTFE			
Gasket	PTFE			PTFE			PTFE			PTFE			
Handle	SS			SS			SS			SS			
Bore	Full Bore			Full Bore			Reduced Bore			Reduced Bore			
Standard/Approval	-			RoHS			RoHS			RoHS			
Reference Page	P-T Rating : Page CPT16			P-T Rating : Page CPT16			P-T Rating : Page CPT15			P-T Rating : Page CPT15			
Remarks	Split Body, Butterfly (Wing) Handle			Split Body RoHS: Option			Split Body RoHS: Option			Split Body RoHS: Option			

Type	SS Ball			SS Ball			SS Ball			SS Ball			
SS/CS Threaded or Welded Ball Valves													
Fig	UTFM			AKUTFM			UTHL			U3TZM			
KCA Code	-			53F			-			-			
End Connection	BS21 (JIS B0203)			ASME B1.20.1			BS21 (JIS B0203)			BS21 (JIS B0203)			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
1/2	15	62	53	100	62	53	100	60	76	100	63	48	120
3/4	20	73	63	130	73	63	130	70	80	100	71	60	130
1	25	85	67	130	85	67	130	80	85	130	90	69	130
1 1/4	32	98	75	150	98	75	150	95	99	130	103	83	150
1 1/2	40	108	81	150	108	81	150	108	105	150	110	88	150
2	50	124	102	200	124	102	200	124	113	150	127	104	180
Body & Cap	CF8M			CF8M			CF8			CF8M			
Stem	316SS			316SS			304SS			316SS			
Ball	316SS/CF8M			316SS/CF8M			304SS/CF8			316SS/CF8M			
Ball Seat	HYPATITE® PTFE			HYPATITE® PTFE			HYPATITE® PTFE			HYPATITE® PTFE			
Gland Packing	PTFE			PTFE			PTFE			PTFE			
Gasket	PTFE			PTFE			PTFE			PTFE			
Handle	SS			SS			SS			SS			
Bore	Full Bore			Full Bore			Reduced Bore			Reduced Bore			
Standard/Approval	RoHS			RoHS			RoHS			RoHS			
Reference Page	P-T Rating : Page CPT15			P-T Rating : Page CPT15			P-T Rating : Page CPT15			P-T Rating : Page CPT15			
Remarks	RoHS: Option			RoHS: Option			RoHS: Option			3pc Body RoHS: Option			





Type	SS Ball			SS Ball			SS Ball			SS Ball			
SS/CS Threaded or Welded Ball Valves													
Fig	AKU3TZM			SWU3TZM			AWU3TZM			U3TZFM			
KCA Code	-			-			-			-			
End Connection	ASME B1.20.1			BS5351			ASME B16.11			BS21 (JIS B0203)			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
1/4	8										63	48	120
3/8	10										63	48	120
1/2	15	63	48	120	63	48	120	63	48	120	71	60	130
3/4	20	71	60	130	71	60	130	71	60	130	90	69	130
1	25	90	69	130	90	69	130	90	69	130	103	82	150
1 1/4	32	103	83	150	103	83	150	103	83	150	110	88	150
1 1/2	40	110	88	150	110	88	150	110	88	150	127	104	180
2	50	127	104	180	127	104	180	127	104	180			
Body & Cap	CF8M			CF8M			CF8M			CF8M			
Stem	316SS			316SS			316SS			316SS			
Ball	316SS/CF8M			316SS/CF8M			316SS/CF8M			316SS/CF8M			
Ball Seat	HYPATITE® PTFE			HYPATITE® PTFE			HYPATITE® PTFE			HYPATITE® PTFE			
Gland Packing	PTFE			PTFE			PTFE			PTFE			
Gasket	PTFE			PTFE			PTFE			PTFE			
Handle	SS			SS			SS			SS			
Bore	Reduced Bore			Reduced Bore			Reduced Bore			Full Bore			
Standard/Approval	RoHS			RoHS			RoHS			RoHS			
Reference Page	P-T Rating : Page CPT15			P-T Rating : Page CPT15			P-T Rating : Page CPT15			P-T Rating : Page CPT15			
Remarks	3pc Body RoHS: Option			3pc Body RoHS: Option			3pc Body RoHS: Option			3pc Body RoHS: Option			





Type	SS Ball			SS Ball			SS Ball			SS Ball			
SS/CS Threaded or Welded Ball Valves													
Fig	AKU3TZFM			SWU3TZFM			AWU3TZFM			3000UTKM			
KCA Code	327F			-			327FS			-			
End Connection	ASME B1.20.1			BS5351			ASME B16.11			BS21 (JIS B0203)			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
1/4	8	63	48	120	63	48	120	63	48	120	88	45	100
3/8	10	63	48	120	63	48	120	63	48	120	88	45	100
1/2	15	71	60	130	71	60	130	71	60	130	88	45	100
3/4	20	90	69	130	90	69	130	90	69	130	90	58	115
1	25	103	82	150	103	82	150	103	82	150	105	57	115
1 1/4	32	110	88	150	110	88	150	110	88	150			
1 1/2	40	127	104	180	127	104	180	127	104	180	130	72	160
2	50										150	82	230
Body & Cap	CF8M			CF8M			CF8M			316SS			
Stem	316SS			316SS			316SS			329J1			
Ball	316SS/CF8M			316SS/CF8M			316SS/CF8M			316SS			
Ball Seat	HYPATITE® PTFE			HYPATITE® PTFE			HYPATITE® PTFE			PTFE			
Gland Packing	PTFE			PTFE			PTFE			PTFE			
Gasket	PTFE			PTFE			PTFE			HYPATITE® PTFE			
Handle	SS			SS			SS			SS			
Bore	Full Bore			Full Bore			Full Bore			Reduced Bore			
Standard/Approval	RoHS			RoHS			RoHS			RoHS			
Reference Page	P-T Rating : Page CPT15			P-T Rating : Page CPT15			P-T Rating : Page CPT15			P-T Rating : Page CPT15			
Remarks	3pc Body RoHS: Option			3pc Body RoHS: Option			3pc Body RoHS: Option			Welded Body			





Type	SS 3-Way 4-Seats Ball L-Port					SS 3-Way 4-Seats Ball T-Port				
SS/CS Threaded or Welded Ball Valves										
Fig	UTH4LM					UTH4TM				
KCA Code	-					-				
End Connection	BS21 (JIS B0203)					BS21 (JIS B0203)				
	inch	mm	L	L1	H	D	L	L1	H	D
	1/2	15	69	34.5	63	130	69	34.5	63	130
	3/4	20	84	42	65	130	84	42	65	130
	1	25	96	48	76	150	96	48	76	150
	1 1/4	32	114	57	80	150	114	57	80	150
	1 1/2	40	132	66	96	230	132	66	96	230
	2	50	150	75	101	230	150	75	101	230
Body & Cap	CF8M					CF8M				
Stem	316SS					316SS				
Ball	316SS/CF8M					316SS/CF8M				
Ball Seat	HYPATITE® PTFE					HYPATITE® PTFE				
Gland Packing	PTFE					PTFE				
Gasket	PTFE					PTFE				
Handle	SS					SS				
Bore	Reduced Bore					Reduced Bore				
Standard/Approval	RoHS: UTH4LM<GS101>					RoHS: UTH4TM<GS101>				
Reference Page	P-T Rating : Page CPT15 Port Orientation : Page TECH1					P-T Rating : Page CPT15 Port Orientation : Page TECH1				
Remarks	Split Body RoHS: Option					Split Body RoHS: Option				

Type	CS Ball			CS Ball			CS Ball			CS Ball				
SS/CS Threaded or Welded Ball Valves														
Fig	SCTK			AKSCTK			800SCTK			AK800SCTK				
KCA Code	-			-			-			-				
End Connection	BS21 (JIS B0203)			ASME B1.20.1			BS21 (JIS B0203)			ASME B1.20.1				
	inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
	1/4	8	39	30	60	39	30	60	88	45	100	88	45	100
	3/8	10	44	35	70	44	35	70	88	45	100	88	45	100
	1/2	15	56.5	38	85	56.5	38	85	88	45	100	88	45	100
	3/4	20	59	42	85	59	42	85	90	54	115	90	54	115
	1	25	71	47	100	71	47	100	105	58	115	105	58	115
	1 1/4	32	78	52	100	78	52	100	117	65	135	117	65	135
	1 1/2	40	83	63	125	83	63	125	130	70	135	130	70	135
	2	50	100	69	125	100	69	125	150	80	150	150	80	150
Body & Cap	WCB			WCB			A105			A105				
Stem	304SS/316SS			304SS/316SS			316SS			316SS				
Ball	304SS/316SS			304SS/316SS			316SS			316SS				
Ball Seat	G/F PTFE			G/F PTFE			PTFE			PTFE				
Gland Packing	G/F PTFE			G/F PTFE			PTFE			PTFE				
Gasket							HYPATITE® PTFE			HYPATITE® PTFE				
Handle	SS			SS			CS			CS				
Bore	Reduced Bore			Reduced Bore			Reduced Bore			Reduced Bore				
Reference Page	P-T Rating : Page CPT15			P-T Rating : Page CPT15			P-T Rating : Page CPT15			P-T Rating : Page CPT15				
Remarks	Split Body			Split Body			Welded Body			Welded Body				

Type	CS Ball			CS Ball			CS Ball			CS Ball			
SS/CS Threaded or Welded Ball Valves													
Fig	AW800SCTK			3000SCTK			AK3000SCTK			AW3000SCTK			
KCA Code	-			-			-			-			
End Connection	ASME B16.11			BS21 (JIS B0203)			ASME B1.20.1			ASME B16.11			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D
1/4	8	170	44	100	88	45	100	88	45	100	170	44	100
3/8	10	170	44	100	88	45	100	88	45	100	170	44	100
1/2	15	170	44	100	88	45	100	88	45	100	170	44	100
3/4	20	176	54	115	90	54	115	90	54	115	176	54	115
1	25	196	57	115	105	58	115	105	58	115	196	57	115
1 1/4	32	210	65	135	117	67	160	117	67	160	210	65	160
1 1/2	40	226	70	135	130	72	160	130	72	160	226	70	160
2	50	262	81	150	150	82	230	150	82	230	262	81	230
Body & Cap	A105			A105			A105			A105			
Stem	316SS			329J1SS			329J1SS			329J1SS			
Ball	316SS			316SS			316SS			316SS			
Ball Seat	PTFE			PCTFE			PCTFE			PCTFE			
Gland Packing	PTFE			PTFE			PTFE			PTFE			
Gasket	HYPATITE® PTFE			HYPATITE® PTFE			HYPATITE® PTFE			HYPATITE® PTFE			
Handle	CS			CS			CS			CS			
Bore	Reduced Bore			Reduced Bore			Reduced Bore			Reduced Bore			
Reference Page	P-T Rating : Page CPT15			P-T Rating : Page CPT15			P-T Rating : Page CPT15			P-T Rating : Page CPT15			
Remarks	Split Body			Welded Body			Welded Body			Split Body			

Type	Needle (Straight)		Needle (Angle)		Needle (Straight)		Needle (Straight)		
Miniature Valves									
Fig	UN3-AP-		UN3-BP-		UN3-CP-		UN3-CP-		
KCA Code	-		-		-		-		
End Connection	JIS B0203		JIS B0203		COUPLE LOK		COUPLE LOK		
inch	mm	Fig	Threaded	Fig	Threaded	Fig	Tube O.D.	Fig	Tube O.D.
1/8	6	UN3-AP-1	Rc1/8	UN3-BP-1	Rc1/8	UN3-CP-6	6		
1/4	8	UN3-AP-2	Rc1/4	UN3-BP-2	Rc1/4	UN3-CP-8	8	UN3-CP-02	1/4
3/8	10	UN3-AP-3	Rc3/8	UN3-BP-3	Rc3/8	UN3-CP-10	10	UN3-CP-03	3/8
	12					UN3-CP-12	12		
1/2	15	UN3-AP-4	Rc1/2					UN3-CP-04	1/2
Body	316SS		316SS		316SS		316SS		
Stem	630SS		630SS		630SS		630SS		
Gland Packing/O ring	PTFE		PTFE		PTFE		PTFE		
Handle	ZDC		ZDC		ZDC		ZDC		
Panel Gasket/Gasket	Asbestos-Free		Asbestos-Free		Asbestos-Free		Asbestos-Free		
Ferrule/Ring					316SS		316SS		
Standard/Approval	RoHS: UN3-AP-<GS101>		RoHS: UN3-BP-<GS101>		RoHS: UN3-CP-<GS101>		RoHS: UN3-CP-<GS101>		
Service Conditions	2.65MPa for 150°C & lower, 2.94MPa for 100°C & lower, 3.43MPa for 38°C down to -20°C		2.65MPa for 150°C & lower, 2.94MPa for 100°C & lower, 3.43MPa for 38°C down to -20°C		2.65MPa for 150°C & lower, 2.94MPa for 100°C & lower, 3.43MPa for 38°C down to -20°C		2.65MPa for 150°C & lower, 2.94MPa for 100°C & lower, 3.43MPa for 38°C down to -20°C		
Reference Page	P-T Rating & Flow Characteristics: Page CPT17&18		P-T Rating & Flow Characteristics: Page CPT17&18		P-T Rating & Flow Characteristics: Page CPT17&18		P-T Rating & Flow Characteristics: Page CPT17&18		
Remarks	Metric Tube Series RoHS: Option		Metric Tube Series RoHS: Option		Metric Tube Series RoHS: Option		Inch Tube Series RoHS: Option		

Type	Needle (Angle)		Needle (Angle)		Needle (Straight)		Needle (Straight)		
Miniature Valves									
	Metric		Inch		Metric		Inch		
Fig	UN3-DP-		UN3-DP-		UN3-EP-		UN3-EP-		
KCA Code	-		-		-		-		
End Connection	COUPLE LOK		COUPLE LOK		Male (JIS B0203) x COUPLE LOK		Male (JIS B0203) x COUPLE LOK		
inch	mm	Fig	Tube O.D.	Fig	Tube O.D.	Fig	Tube O.D.	Fig	Tube O.D.
1/8	6	UN3-DP-6	6			UN3-EP-6-2	6		
1/4	8	UN3-DP-8	8	UN3-DP-02	1/4	UN3-EP-8-2	8	UN3-EP-02-2	1/4
1/4	10					UN3-EP-10-2	10		
3/8	10					UN3-EP-10-3	10	UN3-EP-03-2	3/8
1/4	12					UN3-EP-12-2	12		
3/8	12					UN3-EP-12-3	12		
3/8								UN3-EP-03-3	3/8
Body	316SS		316SS		316SS		316SS		
Stem	630SS		630SS		630SS		630SS		
Gland Packing/O ring	PTFE		PTFE		PTFE		PTFE		
Handle	ZDC		ZDC		ZDC		ZDC		
Panel Gasket/Gasket	Asbestos-Free		Asbestos-Free		Asbestos-Free		Asbestos-Free		
Ferrule/Ring	316SS		316SS		316SS		316SS		
Standard/Approval	RoHS: UN3-DP-<GS101>		RoHS: UN3-DP-<GS101>		RoHS: UN3-EP-<GS101>		RoHS: UN3-EP-<GS101>		
Service Conditions	2.65MPa for 150°C & lower, 2.94MPa for 100°C & lower, 3.43MPa for 38°C down to -20°C		2.65MPa for 150°C & lower, 2.94MPa for 100°C & lower, 3.43MPa for 38°C down to -20°C		2.65MPa for 150°C & lower, 2.94MPa for 100°C & lower, 3.43MPa for 38°C down to -20°C		2.65MPa for 150°C & lower, 2.94MPa for 100°C & lower, 3.43MPa for 38°C down to -20°C		
Reference Page	P-T Rating & Flow Characteristics: Page CPT17&18		P-T Rating & Flow Characteristics: Page CPT17&18		P-T Rating & Flow Characteristics: Page CPT17&18		P-T Rating & Flow Characteristics: Page CPT17&18		
Remarks	Metric Tube Series RoHS: Option		Inch Tube Series RoHS: Option		Metric Tube Series RoHS: Option		Inch Tube Series RoHS: Option		

Type	Needle (Angle)		Needle (Angle)		Needle (Straight)		Needle (Straight)		
Miniature Valves									
	Metric		Inch		Metric		Metric		
Fig	UN3-FP-		UN3-FP-		UN26-AP-		UN26-CP-		
KCA Code	-		-		-		-		
End Connection	Male (JIS B0203) x COUPLE LOK		Male (JIS B0203) x COUPLE LOK		JIS B0203		COUPLE LOK		
inch	mm	L	D	L	D	L	D	L	D
1/8	6	UN3-FP-6-2	6			UN26-AP-1	Rc1/8	UN26-CP-6	6
1/4	8	UN3-FP-8-2	8	UN3-FP-02-2	1/4	UN26-AP-2	Rc1/4	UN26-CP-8	8
1/4	10	UN3-FP-10-2	10					UN26-CP-10	10
3/8	10	UN3-FP-10-3	10	UN3-FP-03-2	3/8	UN26-AP-3	Rc3/8		
1/4	12	UN3-FP-12-2	12						
3/8	12	UN3-FP-12-3	12					UN26-CP-12	12
3/8				UN3-FP-03-3	3/8				
1/2	15					UN26-AP-4	Rc1/2		
3/4	20					UN26-AP-6	Rc3/4		
1	25					UN26-AP-8	Rc1		
Body	316SS		316SS		316SS		316SS		
Stem	630SS		630SS		630SS		630SS		
Gland Packing/O ring	PTFE		PTFE		PTFE		PTFE		
Handle	ZDC		ZDC		ZDC		ZDC		
Panel Gasket/Gasket	Asbestos-Free		Asbestos-Free		Asbestos-Free		Asbestos-Free		
Ferrule/Ring	316SS		316SS		316SS		316SS		
Standard/Approval	RoHS: UN3-FP-<GS101>		RoHS: UN3-FP-<GS101>		RoHS: UN26-AP-<GS101>		RoHS: UN3-CP-<GS101>		
Service Conditions	2.65MPa for 150°C & lower, 2.94MPa for 100°C & lower, 3.43MPa for 38°C down to -20°C		2.65MPa for 150°C & lower, 2.94MPa for 100°C & lower, 3.43MPa for 38°C down to -20°C		19.81MPa for 150°C & lower, 21.774MPa for 100°C & lower, 25.50MPa for 38°C down to -20°C		19.81MPa for 150°C & lower, 21.774MPa for 100°C & lower, 25.50MPa for 38°C down to -20°C		
Reference Page	P-T Rating & Flow Characteristics: Page CPT17&18		P-T Rating & Flow Characteristics: Page CPT17&18		P-T Rating & Flow Characteristics: Page CPT17&18		P-T Rating & Flow Characteristics: Page CPT17&18		
Remarks	Metric Tube Series RoHS: Option		Inch Tube Series RoHS: Option		Metric Tube Series RoHS: Option		Inch Tube Series RoHS: Option		

Type	Needle (Straight)		Needle (Straight)		
Miniature Valves					
	Metric		Inch		
Fig	UN26-SP-		UN26-CP-		
KCA Code	-		-		
End Connection	JIS B2316(Socket weld)		COUPLE LOK		
inch	mm	Fig	Threaded	Fig	Tube O.D.
1/8	6	UN26-SP-1	1/8		
1/4	8	UN26-SP-2	1/4	UN26-CP-02	1/4
3/8	10	UN26-SP-3	3/8	UN26-CP-03	3/8
1/2	15	UN26-SP-4	1/2	UN26-CP-04	1/2
3/4	20	UN26-SP-6	3/4		
1	25	UN26-SP-8	1		
Body	316SS		316SS		
Stem	630SS		630SS		
Gland Packing/O ring	PTFE		PTFE		
Handle	ZDC		ZDC		
Panel Gasket/Gasket	Asbestos-Free		Asbestos-Free		
Ferrule/Ring			316SS		
Standard/Approval	RoHS: UN3-SP-<GS101>		RoHS: UN3-CP-<GS101>		
Service Conditions	19.81MPa for 150°C & lower, 21.774MPa for 100°C & lower, 25.50MPa for 38°C down to -20°C		19.81MPa for 150°C & lower, 21.774MPa for 100°C & lower, 25.50MPa for 38°C down to -20°C		
Reference Page	P-T Rating & Flow Characteristics: Page CPT17&18		P-T Rating & Flow Characteristics: Page CPT17&18		
Remarks	Metric Tube Series RoHS: Option		Inch Tube Series RoHS: Option		

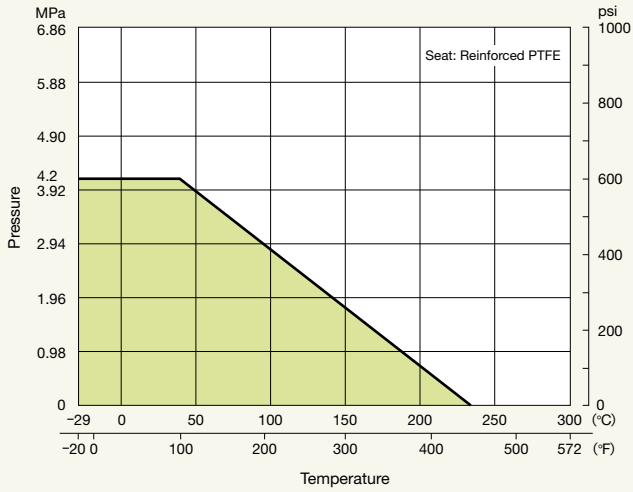
Type	Needle (Straight)		Needle (Straight)		Needle (Straight with lock lever)		Needle (Angle)		
Miniature Valves									
	10K		20K		20K		20K		
Fig	N1-A-		N2-A-		N2-AL-		N2-B-		
KCA Code	-		-		-		-		
End Connection	JIS B0203		JIS B0203		JIS B0203		JIS B0203		
inch	mm	Fig	Threaded	Fig	Threaded	Fig	Threaded	Fig	Threaded
1/8	6	N1-A-1	Rc1/8	N2-A-1	Rc1/8	N2-AL-1	Rc1/8	N2-B-1	Rc1/8
1/4	8	N1-A-2	Rc1/4	N2-A-2	Rc1/4	N2-AL-2	Rc1/4	N2-B-2	Rc1/4
3/8	10	N1-A-3	Rc3/8	N2-A-3	Rc3/8	N2-AL-3	Rc3/8	N2-B-3	Rc3/8
1/2	15			N2-A-4	Rc1/2	N2-AL-4	Rc1/2	N2-B-4	Rc1/2
Body	C3771		C3771		C3771		C3771		
Stem	C3531		C3531		C3531		C3531		
Gland Packing/O ring	NBR		NBR		NBR		NBR		
Handle	ZDC		ZDC		ZDC		ZDC		
Gasket			Nylon				Nylon		
Service Conditions	1.37MPa for 80°C & lower		2.75MPa for 80°C & lower		2.75MPa for 80°C & lower		2.75MPa for 80°C & lower		
Reference Page	P-T Rating & Flow Characteristics: Page CPT17&18		P-T Rating & Flow Characteristics: Page CPT17&18		P-T Rating & Flow Characteristics: Page CPT17&18		P-T Rating & Flow Characteristics: Page CPT17&18		
Remarks	*Dezincification Resistant Brass		*Dezincification Resistant Brass		*Dezincification Resistant Brass		*Dezincification Resistant Brass		

# Pressure-Temperature Ratings

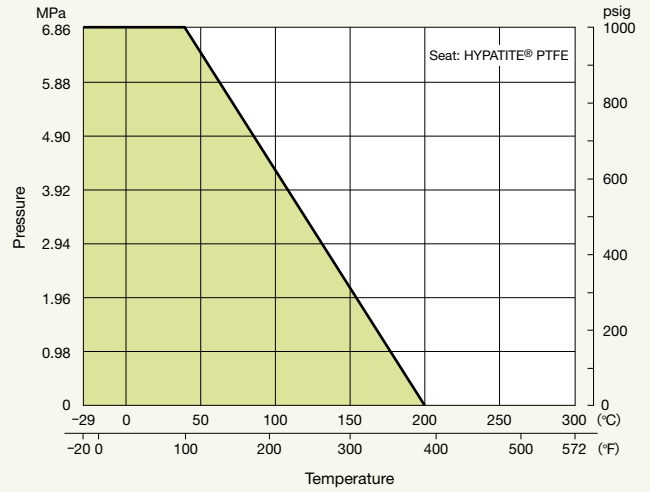
CPT

Compact SS/CS Valves & Miniature

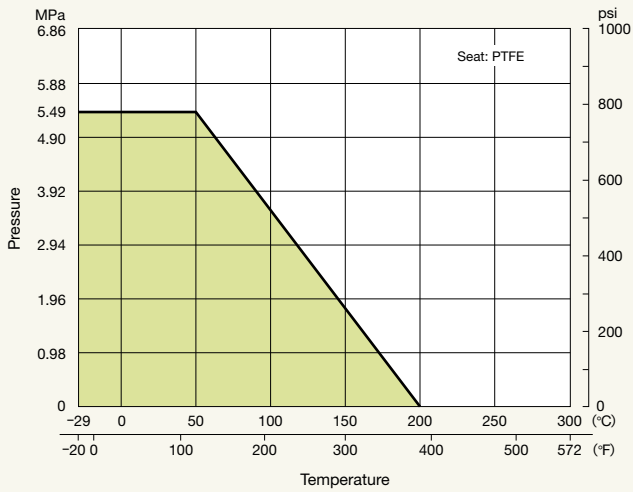
## Type 600: SCKT/UTK(M)/AKUTKM/UTK(M)W



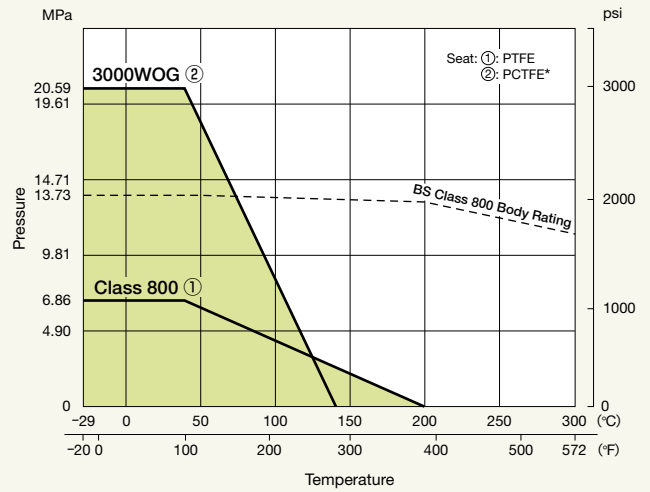
## Type 1000: UTFM/AKUTFM/UTHL



## Type 800: UTH(M)/AKUTHM

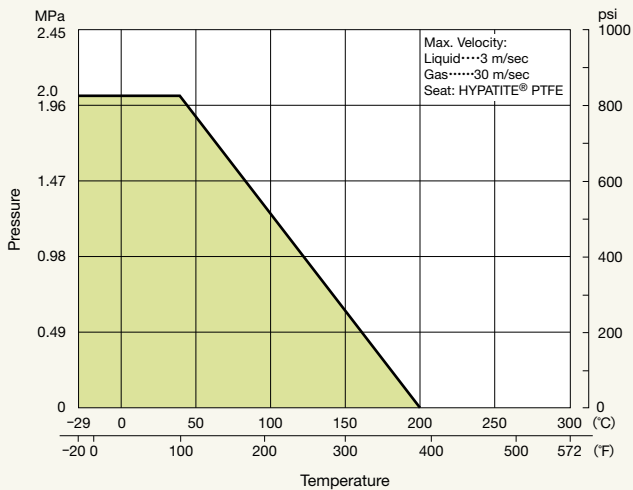


## Class 800 and Type 3000: SCKT

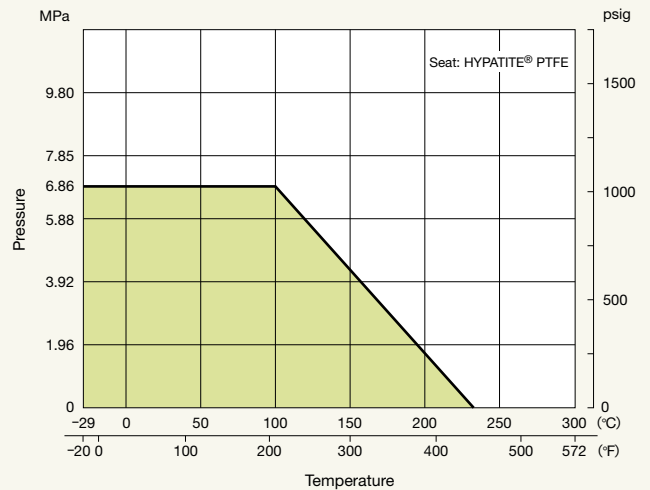


\* Polychloro-Trifluoro-Ethylene

## Type 800: UTH4LM/4TM



## Type 1000: SC3TZ/U3TZ Series

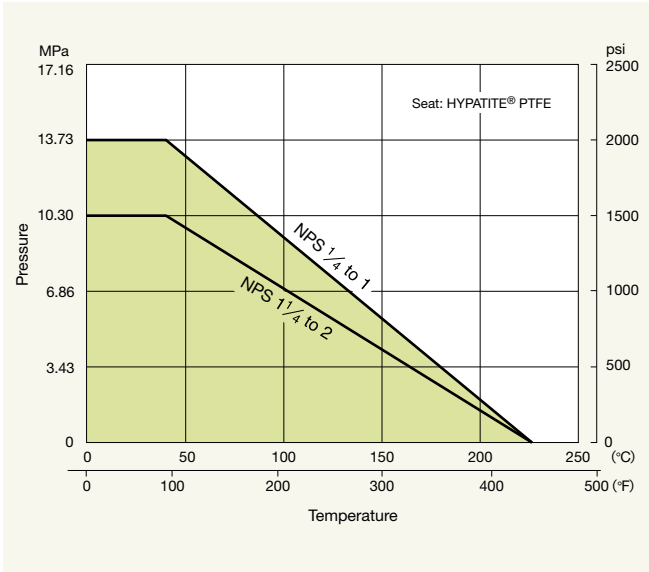


Note: Type 1500 is optionally available

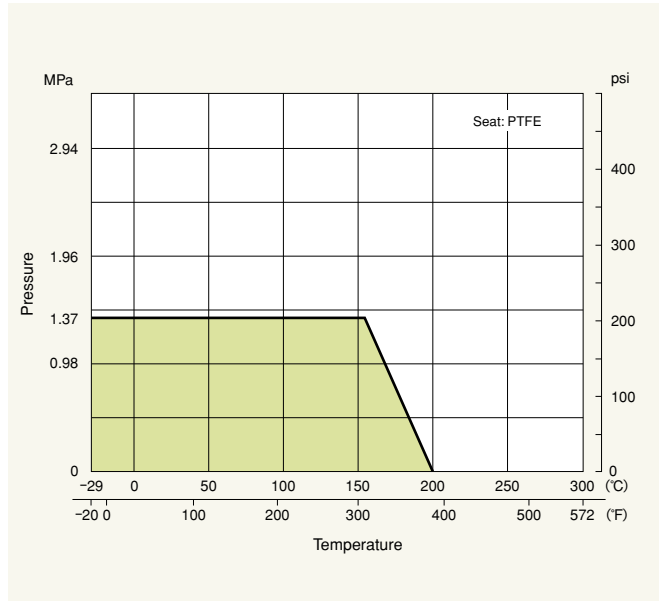


# Pressure-Temperature Ratings

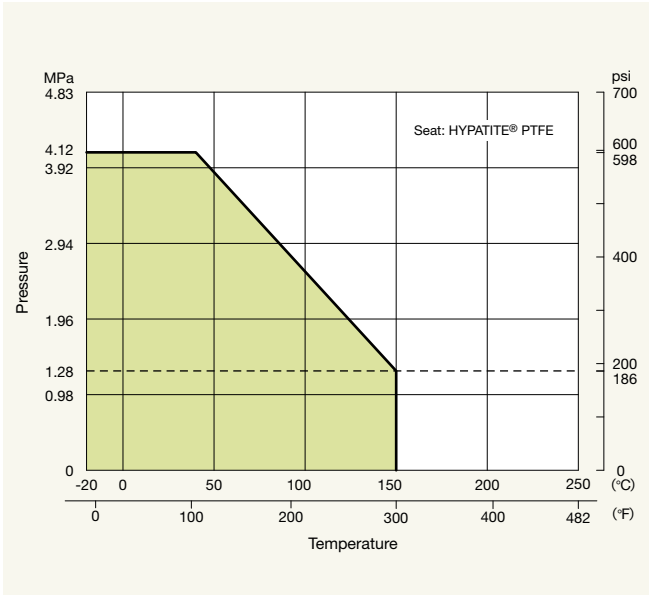
**Type 1500/2000:**  
AKSCTHZM/AKSCTHWZM/AKUTHZM/AKUTHWZM



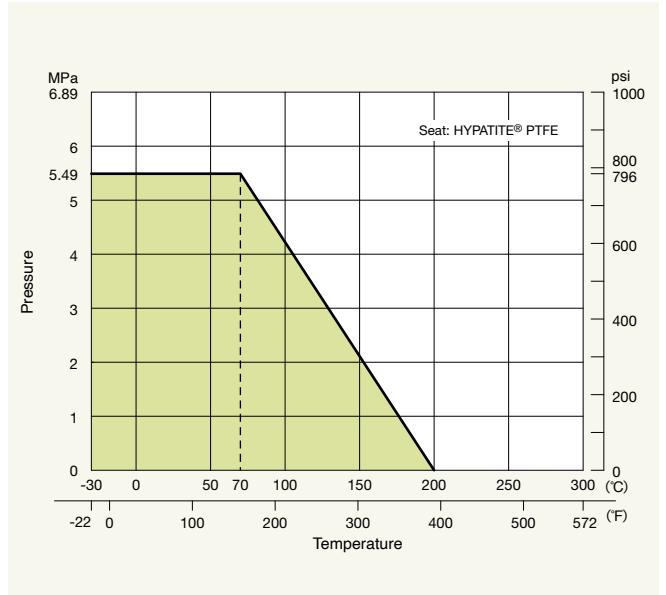
**Class 150:AK150UT(M)/10UT(M)**



**Type 600:UTFK(M)W**

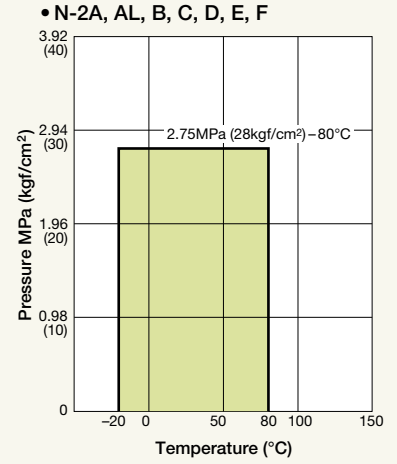
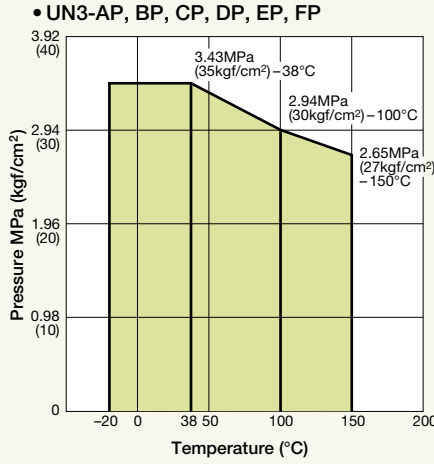
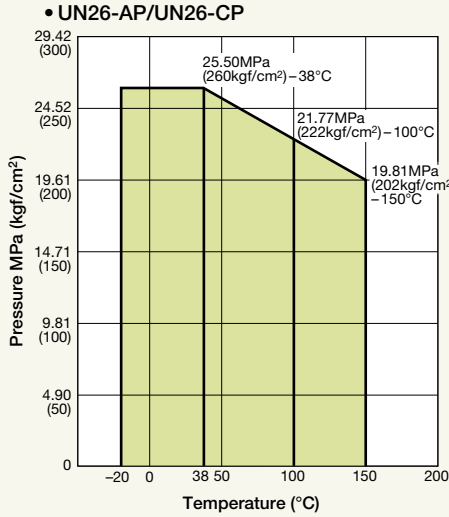


**Type 800:UTFZ**

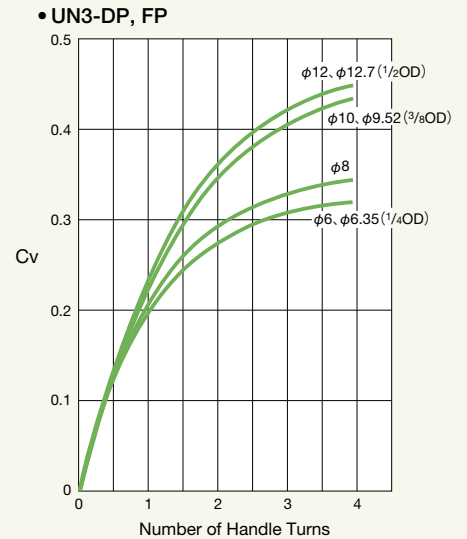
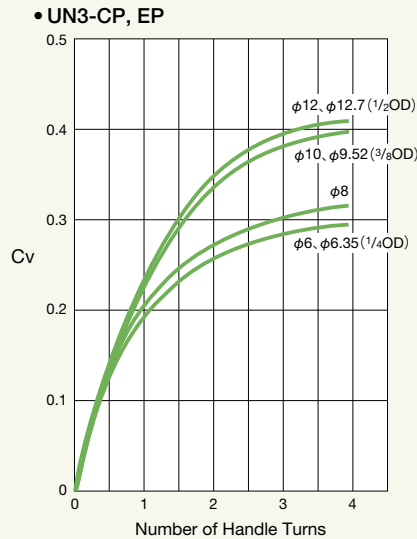
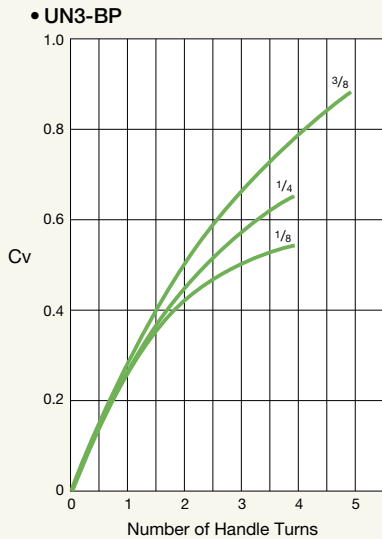
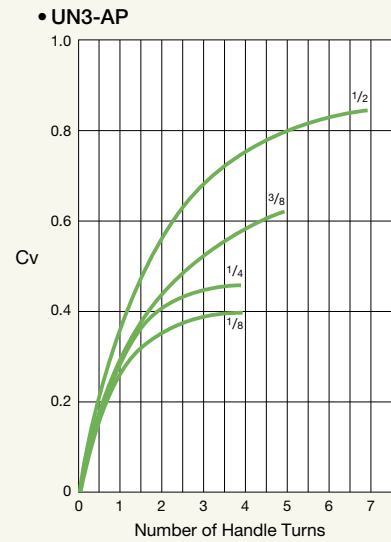
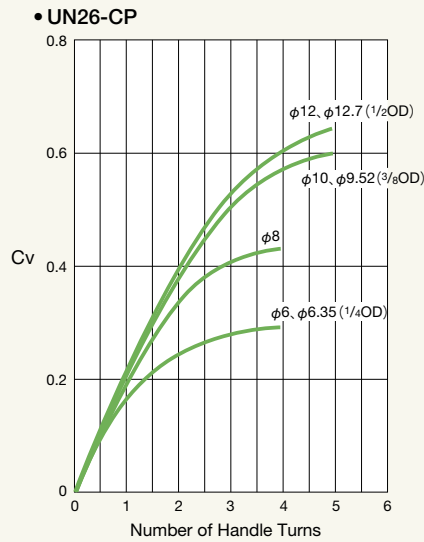
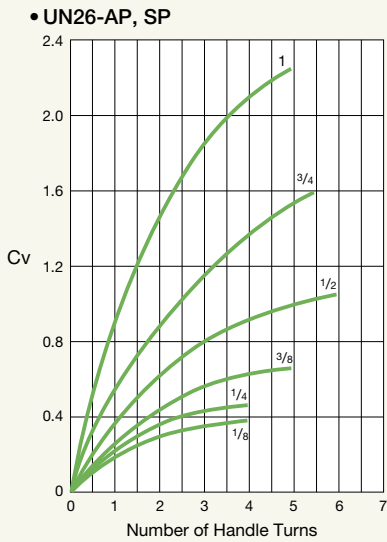


# Pressure-Temperature Rating/Flow Characteristics

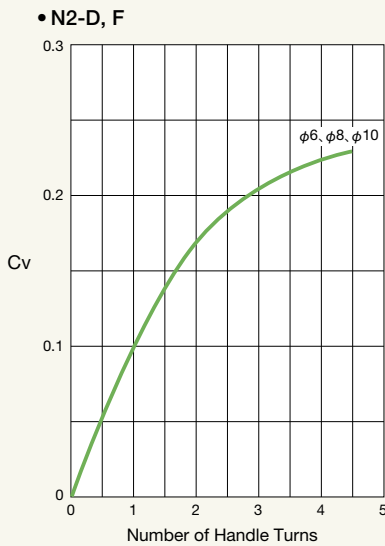
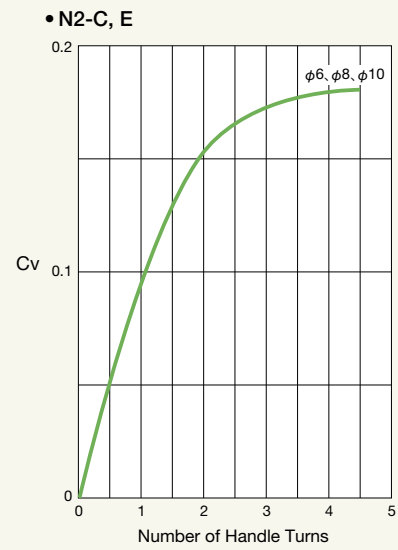
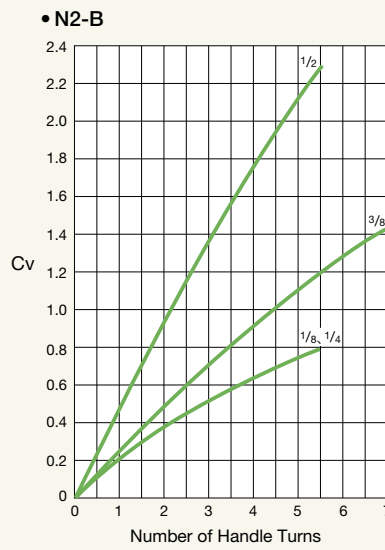
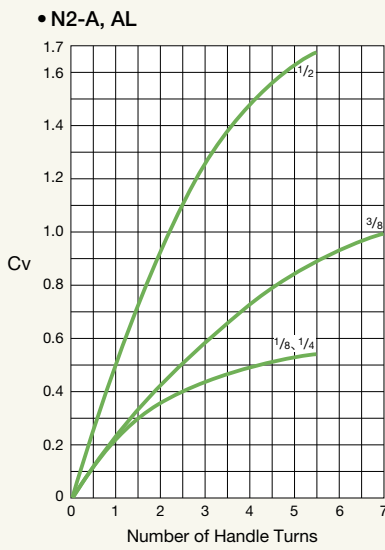
## Pressure-Temperature Rating



## Flow Characteristics

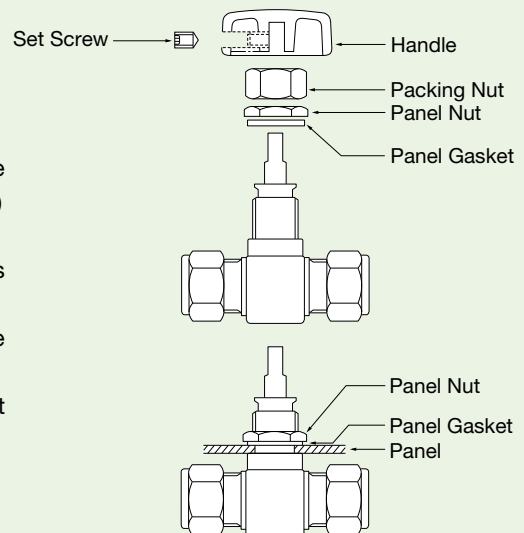


Flow Characteristics



Panel Mounting Procedures for KITZ Stainless Steel Miniature Valves

1. Loosen set screw which locks the handle and remove the handle with an Allen Wrench if Nominal Size 2.5 (Nominal Screw Size 2.5)
2. Remove packing nut, panel nut, then panel gasket.
3. Place the valve through hole on the panel. Required hole size is dimension D3 of valve size plus 0.5mm.
4. Fit the panel gasket and tighten panel nut to securely mount the valve.
5. Tighten packing nut, place the handle and lock the handle with set screw to complete assembly.




## Design Features

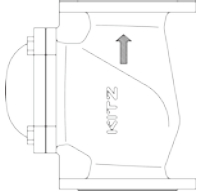
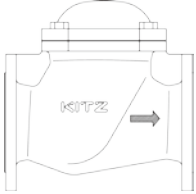
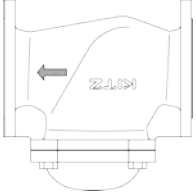
KITZ check valves are backflow prevention valve having superior sealing performance for fluids such as clean water, waste water, sewage water and drainage water that may affect efficiency of existing swing type valves in some cases due to foreign objects trapped in the valve internal parts.

Valves covered in this manual are ball type check valves that have no obstructive parts in the valve interior and can handle fluids containing foreign objects.

Furthermore, flanged end ball check valves with vent hole(s) can be installed horizontally or vertically.

 **CAUTION**

(1) Make sure to install the valve under specified installation conditions to ensure its sealing performance.  
See the valve mounting orientation of each product type shown below.

 <p>Vertical installation with downstream side upwards <u>Product Code:</u> 10UFTE 10UFT UFTE 10FCFTN</p>	 <p>Horizontal installation hydraulic head pressure of 0.05 MPa or above in downstream side which has same bore size as the valve.</p>	 <p>Not applicable.</p>
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- 1.1 Non-obstructive structure of ball-shaped disc prevents entanglement of foreign objects from the service fluid.
- 1.2 Ball-shaped rubber disc slides into the seating position by back-pressure of the fluid and provides excellent sealing performance.
- 1.3 Pressure loss is low due to the valve body shape design based on fluid engineering.

## Product Names and Product Coding

Product Name	Product Coding
Cast Iron Nylon 11-lined Flanged End Ball Check Valve	10FCFTN
Stainless Steel Flanged End Ball Check Valve	10UFT
Stainless Steel Flanged End Ball Check Valve with Vent Hole	10UFTE
Stainless Steel Threaded End Ball Check Valve with Vent Hole	UFTE

## Specifications

Product Code	10UFTE	10UFT	UFTE	10FCFTN
Service Temperature Range	0°C to 60°C			
Service Pressure Range	0.05 to 1.37 MPa (0.5 to 14.0 kgf/cm <sup>2</sup> )			
Test Pressure (hydraulic)	Shell Test	2.06 MPa (21 kgf/cm <sup>2</sup> )		
	Seat Test Leakage	0.05 to 1.51 MPa (0.5 to 15.4 kgf/cm <sup>2</sup> )		
Pipe Connection	JIB B 2238 10K Standard (RF)	JIS B 0203 Threaded End	JIS B 2239 10K Standard (FF)	
Face-to-Face Dimensions	JIS B 2002	JIS B 2011	JIS B 2002	
Wall Thickness	ASME B 16.34 Class 150* <sup>1</sup>	JIS B 2011	JIS B 2031* <sup>2</sup>	
Valve Mounting Orientation	Horizontal and Vertical Piping	Vertical Piping		

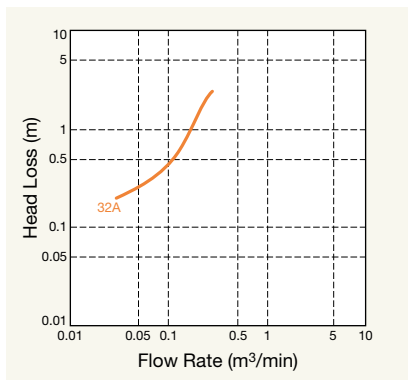
\*1: Nominal size 80A and below of 10UFTE are KITZ standard.

\*2: Nominal size 40A does not comply with JIS B 2031.

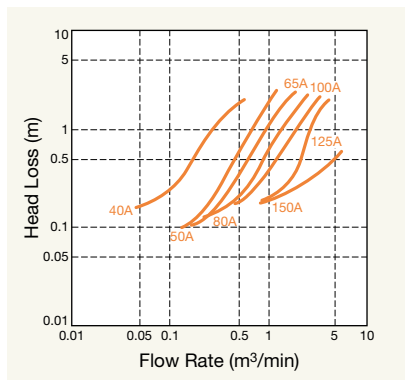
Note) Minimum differential pressure to move the ball is 0.05 MPa (0.5 kgf/cm<sup>2</sup>). For pump selection, check opening pressure and pressure loss.

## Pressure Loss (Clean Water)

### UFTE



### 10UFT, 10FCFTN



### 10UFTE

