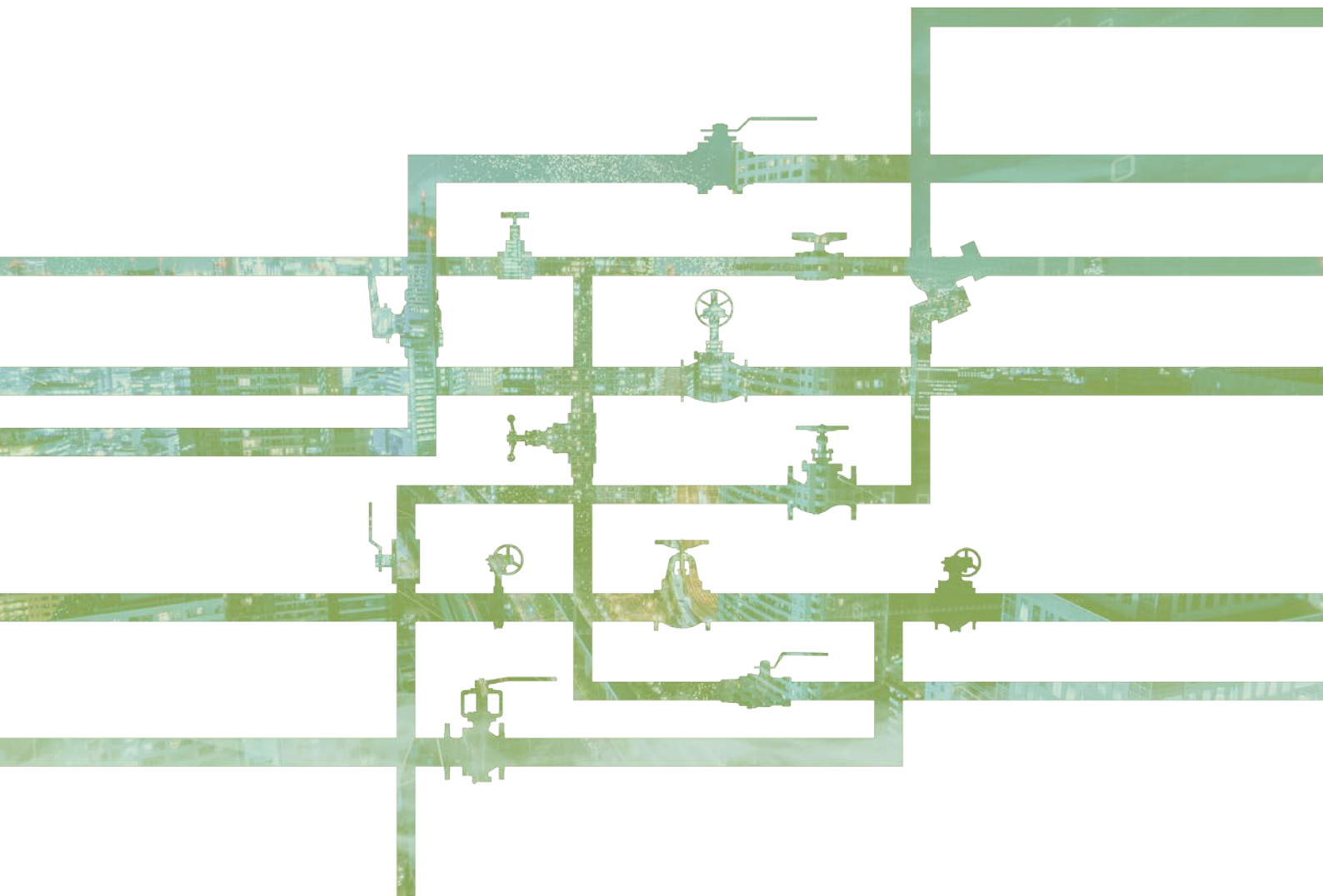




GENERAL CATALOG

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	CPT3 46		
			10K	FE/FF		UE	UEM	AKUEM			
		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	CPT5 48	
				TE		UD			UDM		
		Check	10K	TE	Screwed Bonnet, Rising Stem, Soft Seated (PTFE)	UDB			UDBM	CPT6 49	
					FE/FF	UN					
			10K/200		Lift	UO					
					Swing	UOM			AKUOM		
			10K		FE/FF	UOB			UOBM	CPT7 50	
			Strainer		20K	TE	UY				UYM
		10K		FE/FF	UYB			UYBM			
		Wafer Check	10K	Wafer	Single Plate, Built-in Bypass Valve	10UW				CPT8 51	
			20K		10UWS						
		Stainless Steel Ball Check Valves (K Series)	SS	Ball Check	10K	TE	Ball Check	UFTE			CPT9 52
				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		CPT10 53		
			Type 600		Reduced Bore, Uni-Body	UTK	UTKM	AKUTKM			
						UTKW	UTKMW				
						UTFKW					
			Type 800		Full Body, Split Body	UTFKMW					
						UTFZ					
					Reduced Body, Split Body	UTHM	AKUTHM				
			Type 1000		Full Body, Split Body	UTFM	AKUTFM				
					Reduced Body, Split Body, Long Neck Type for Thermal Insulation	UTHL					
					Reduced Bore, 3pc Body	U3TZM					
						AKU3TZM					
			3000		Reduced Bore, 3pc Body	SWU3TZM	AWU3TZM				
					TE	Reduced Bore, 3pc Body	U3TZFM	AKU3TZFM			
					SW	Reduced Bore, 3pc Body	SWU3TZFM	AWU3TZFM			
			Type 800		TE	Reduced Bore, Welded Body, Antistatic, Blowout Proof, Fire Safe	3000UTKM				
				Reduced Bore, 3-Way, 4-Seat, L or T Port		UTH4LM	UTH4TM				
				600		TE	Reduced Bore, Uni-Body	SCTK	AKSCTK		
			CS	800	SW	Reduced Bore, Welded Body for Threaded Ends, Split Body for Socket Welding Ends, Antistatic, Blowout Proof, Fire Safe	800SCTK			AK800SCTK	CPT11 54
							AW800SCTK				
3000SCTK							AK3000SCTK				
3000	SW	AW3000SCTK				CPT12 55					
		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	TExCOUPLE LOK	Straight (Metric) (Inch)	UN3-EP-		CPT14 57					
			Angle (Metric) (Inch)	UN3-FP-							
		COUPLE LOK	Straight (Metric)	UN26-AP-							
			COUPLE LOK	Straight (Metric)	UN26-CP-						
Brass	Needle	10K	TE	Straight (Metric)	UN26-SP-						
				COUPLE LOK	Straight (Metric)	UN26-CP-					
				SW	Straight (Metric)						
				COUPLE LOK	Straight (Inch)						
Stainless Steel & Brass Miniature Valves	Brass	Needle	10K	TE	Straight	N1-A-		CPT14 57			
						Straight	N2-A-				
						Straight with Lock	N2-AL-				
						Angle	N2-B-				
			20K	TE							

* (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)

AK **800** **U** **TK** **M**

1 2 3 4 5

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

U **N** **26** **-** **A** **P** **-** **xx**

1 2 3 4 5 6

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 ^B	3 3mm
2 1/4 ^B	4 4mm
3 3/8 ^B	6 6mm
4 1/2 ^B	8 8mm
6 3/4 ^B	10 10mm
8 1 ^B	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^B 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																		
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 rd				RoHS				RoHS up to 3 rd					
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					

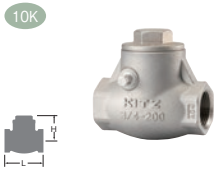
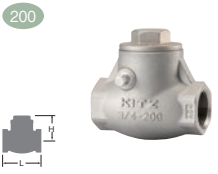
Type	Gate				Gate			Gate			Gate		
Stainless Steel B Series KITZ Standard			 SB IS NRS EAC RoHS			 SB IS NRS EAC RoHS			 SB IS NRS EAC RoHS			 SB IS NRS EAC RoHS	
Fig	UEM				AKUEM			UEB			UEBM		
KCA Code	—				31			—			—		
End Connection	BS21 (JIS B0203)				ASME B1.20.1			JIS B2220* 10K FF			JIS B2220* 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 rd				RoHS up to 3 rd			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		

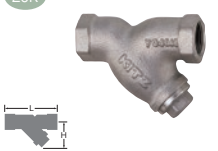
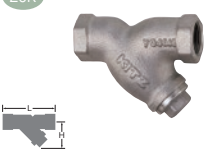
Type	Globe				Globe				Globe				Globe			
Stainless Steel B Series KITZ Standard																
Fig	UAB				UCL				UCLM				AKUCLM			
KCA Code	—				—				—				—			
End Connection	JIS B2220* 5K FF				BS21 (JIS B0203)				BS21 (JIS B0203)				ASME B1.20.1			
inch	mm	L	H	D	L	H	D	L	H	D	L	H	D			
1/4	8				44	68	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 ^B RoHS: Option, EAC: Option				* PTFE up to 1/2 ^B RoHS: Option, EAC: Option				* PTFE up to 1/2 ^B RoHS: Option, EAC: Option			

Type	Globe				Globe				Globe				Globe						
Stainless Steel B Series KITZ Standard																			
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 ^B				RoHS up to 2 ^B				RoHS up to 2 ^B				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						

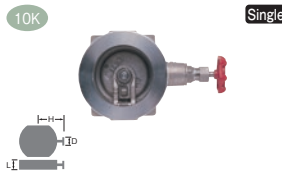
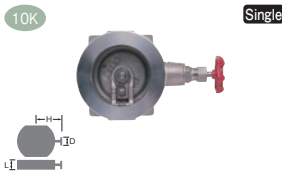
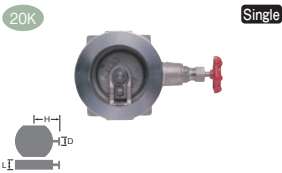
Type	Globe				Globe				Globe				Globe			
Stainless Steel B Series KITZ Standard																
																
																
																
Fig	UJB				UJBM				UD				UDM			
KCA Code	—				—				—				—			
End Connection	JIS B2220* 10K FF				JIS B2220* 10K FF				BS21 (JIS B0203)				BS21 (JIS B0203)			
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 ^B				RoHS up to 2 ^B				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					SB IS RS					SB IS RS					SC					SC	
																					
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		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 ^B				RoHS up to 2 ^B				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																
																
																
																
																
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																
																
																
																
																
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			

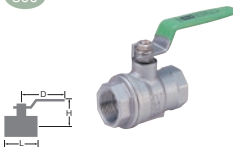
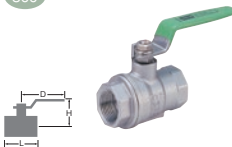
*Height for removing the screen

Type	Wafer Check				Wafer Check				Wafer Check			
Stainless Steel B Series KITZ Standard												
	10UW				10UWS				20UWS			
	—				—				—			
	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	10K 							10K 			10K 		
													
	Fig				UFTA			10UFT			10UFTE		
	KCA Code				—			—			—		
	End Connection				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℃				Air : 0.7MPa at 0℃~+60℃			Non-Shock Water : 0.05~1.4MPa, 0~60℃			Non-Shock Water : 0.05~1.4MPa, 0~60℃		
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	10K FB				10K FB				600 RB				600 RB							
	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	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	44	35	70				
1/2	15	65	102	130	65	102	130	56.5	38	85	56.5	38	85	56.5	38	85				
3/4	20	80	105	130	80	105	130	59	42	85	59	42	85	59	42	85				
1	25	90	124	160	90	124	160	71	47	100	71	47	100	71	47	100				
1 1/4	32	110	130	160	110	130	160	78	52	100	78	52	100	78	52	100				
1 1/2	40	120	113	230	120	113	230	83	63	125	83	63	125	83	63	125				
2	50	140	120	230	140	120	230	100	69	125	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				Uni-Body RoHS: Option				Uni-Body RoHS: Option							

Type	SS Ball					SS Ball					SS Ball					SS Ball								
SS/CS Threaded or Welded Ball Valves	600  RB RoHS					600  RB RoHS					600  RB RoHS					600  FB RoHS								
	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										

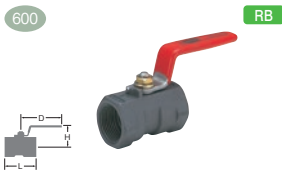
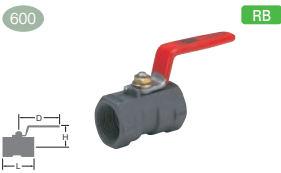
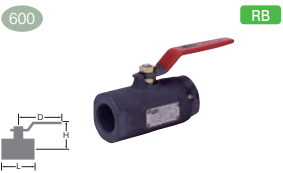
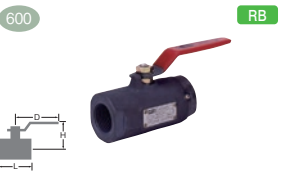
Type	SS Ball				SS Ball			SS Ball			SS Ball		
SS/CS Threaded or Welded Ball Valves	600 				800 			800 			800 		
													
Fig	UTFKMW				UTFZ			UTHM			AKUTHM		
KCA Code	—				—			—			53		
End Connection	BS21 (JIS B0203)				BS21 (JIS B0203)			BS21 (JIS B0203)			ASME B1.20.1		
inch	mm	L	H	D	L	H	D	L	H	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		

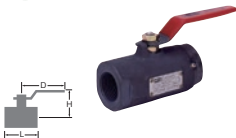
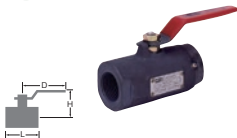
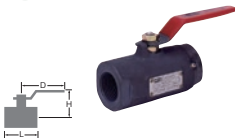
Type	SS Ball					SS Ball			SS Ball			SS Ball				
SS/CS Threaded or Welded Ball Valves	1000  RoHS					1000  RoHS			1000  RoHS			1000  RoHS				
	Fig	UTFM					AKUTFM			UTHL			U3TZM			
KCA Code	—					53F			—			—				
End Connection	BS21 (JIS B0203)					ASME B1.20.1			BS21 (JIS B0203)			BS21 (JIS B0203)				
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			For Thermal Insulation RoHS: Option			3pc Body RoHS: Option				

Type	SS Ball				SS Ball				SS Ball				SS Ball			
SS/CS Threaded or Welded Ball Valves	1000   RB RoHS				1000   RB RoHS				1000   RB RoHS				1000   FB RoHS			
	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	1000   FB RoHS				1000   FB RoHS			1000   FB RoHS			3000   RB		
	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			PTCFE		
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					
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	800 				3000 			3000 			3000 		
													
	Fig				Fig			Fig			Fig		
	KCA Code				KCA Code			KCA Code			KCA Code		
	End Connection				End Connection			End Connection			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	30K  Metric RoHS			30K  Metric RoHS			30K  Metric RoHS			30K  Inch RoHS									
	UN3-AP-			UN3-BP-			UN3-CP-			UN3-CP-									
	KCA Code			—			—			—									
	End Connection			JIS B0203			JIS B0203			COUPLE LOK									
inch		mm		Fig		Threaded		Fig		Threaded		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					
3/8		10		UN3-AP-3		Rc3/8		UN3-BP-3		Rc3/8		UN3-CP-10		10					
		12										UN3-CP-12		12					
1/2		15		UN3-AP-4		Rc1/2								UN3-CP-04					
Body		316SS						316SS						316SS					
Stem		630SS						630SS						630SS					
Gland Packing/O ring		PTFE						PTFE						PTFE					
Handle		ZDC						ZDC						ZDC					
Panel Gasket/Gasket		Asbestos-Free						Asbestos-Free						Asbestos-Free					
Ferrule/Ring														316SS					
Standard/Approval		RoHS: UN3-AP-<GS101>						RoHS: UN3-BP-<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					
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					
Remarks		Metric Tube Series RoHS: Option						Metric Tube Series RoHS: Option						Metric Tube Series RoHS: Option					

Type	Needle (Angle)			Needle (Angle)			Needle (Straight)			Needle (Straight)		
Miniature Valves	30K 		Metric	30K 		Inch	30K 		Metric	30K 		Inch
	RoHS			RoHS			RoHS			RoHS		
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.	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		

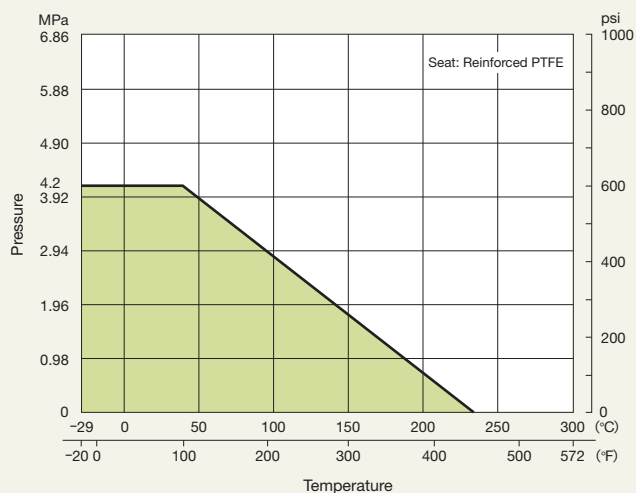
Type	Needle (Angle)				Needle (Angle)				Needle (Straight)				Needle (Straight)			
Miniature Valves	30K 		Metric		30K 		Inch		260K 		Metric		260K 		Metric	
Fig	UN3-FP-				UN3-FP-				UN26-AP-				UN26-CP-			
KCA Code	—				—				—				—			
End Connection	Male (JIS B0203) x COUPLE LOK				Male (JIS B0203) x COUPLE LOK				JIS B0203				COUPLE LOK			
inch	mm	L	D	L	D	L	D	L	D	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	260K		Metric	260K		Inch
	RoHS		RoHS			
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			

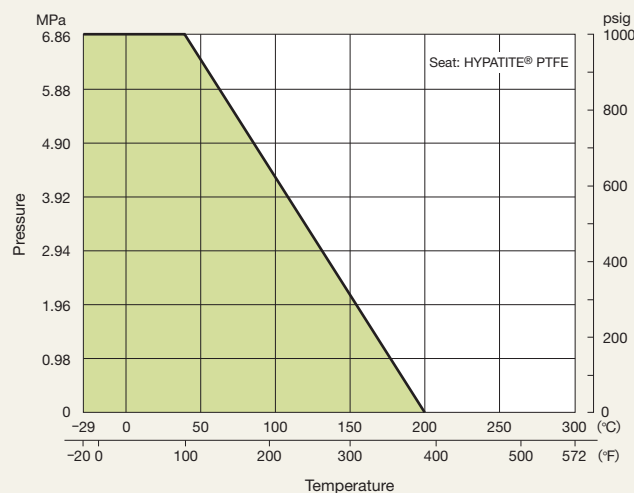
Type	Needle (Straight)		Needle (Straight)		Needle (Straight with lock lever)		Needle (Angle)		
Miniature Valves	10K		20K		20K Drwg		20K Drwg		
	N1-A-		N2-A-		N2-AL-		N2-B-		
	—		—		—		—		
	JIS B0203		JIS B0203		JIS B0203		JIS B0203		
	inch	mm	Fig	Threaded	Fig	Threaded	Fig	Threaded	
1/8	6	N1-A-1	Rc1/8	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

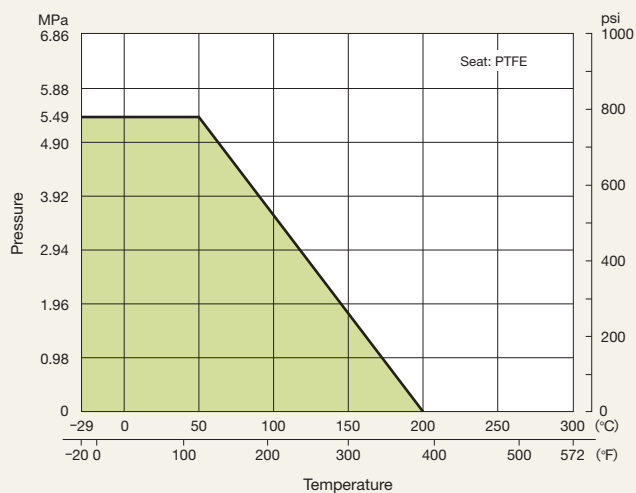
Type 600: SCTK/UTK(M)/AKUTKM/UTK(M)W



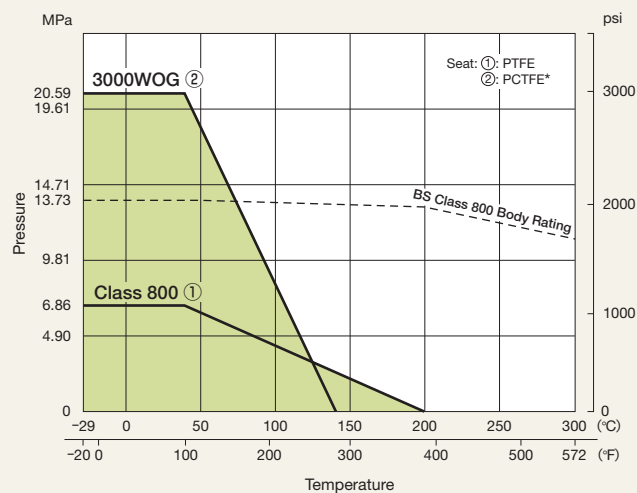
Type 1000: UTFM/AKUTFM/UTHL



Type 800: UTH(M)/AKUTHM

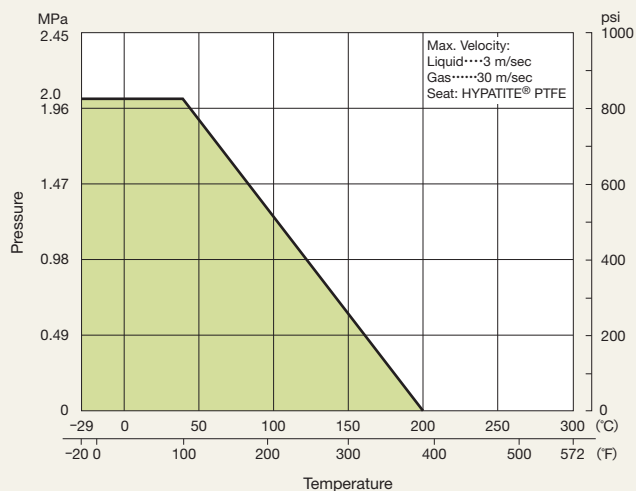


Class 800 and Type 3000: SCTK

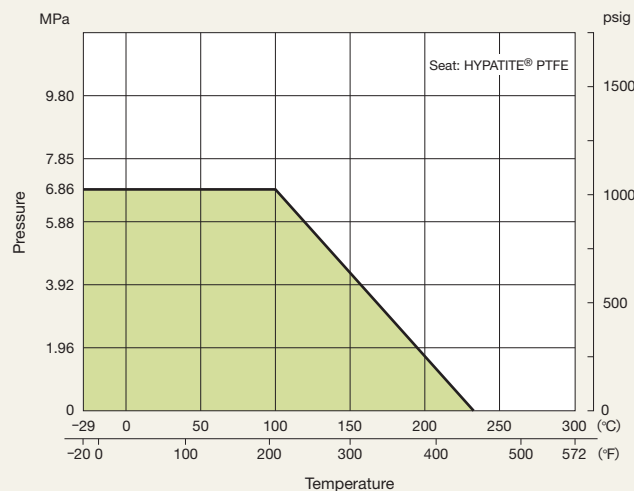


* Polychloro-Trifluoro-Ethylene

Type 800: UTH4LM/4TM



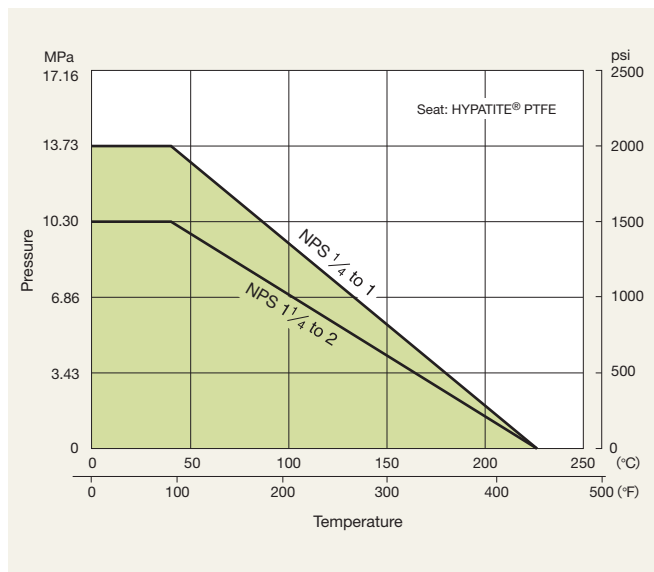
Type 1000: SC3TZ/U3TZ Series



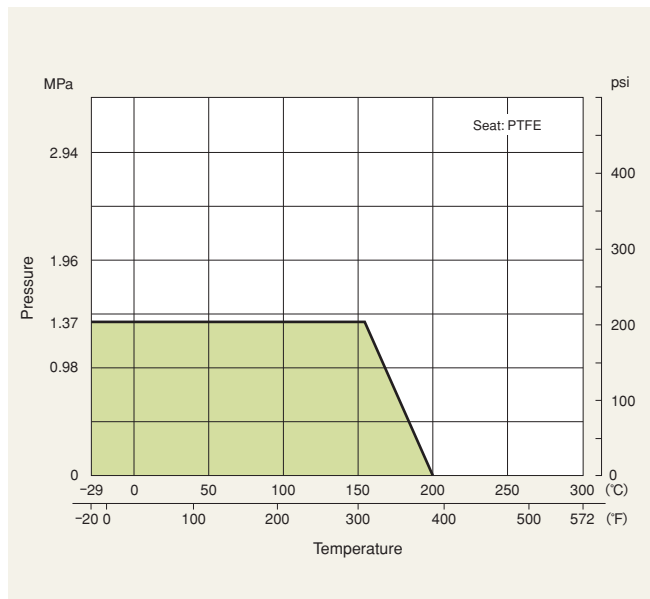
Note: Type 1500 is optionally available

Pressure-Temperature Ratings

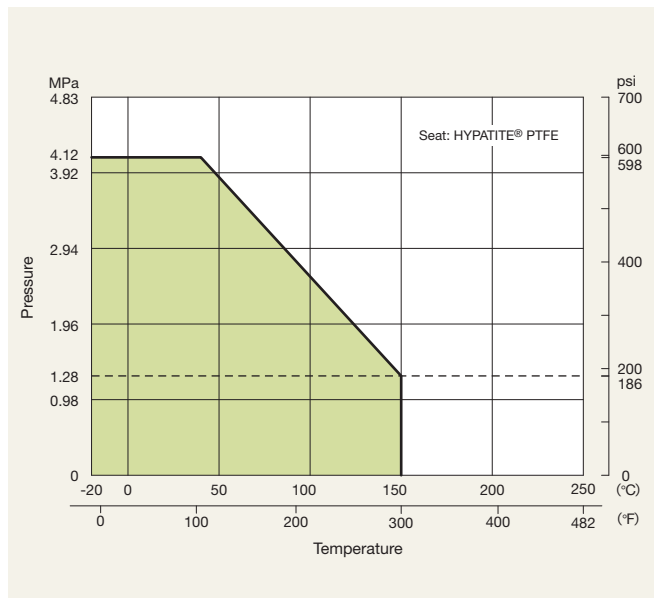
Type 1500/2000: AKSCTHZM/AKSCTHWZM/AKUTHZM/AKUTHWZM



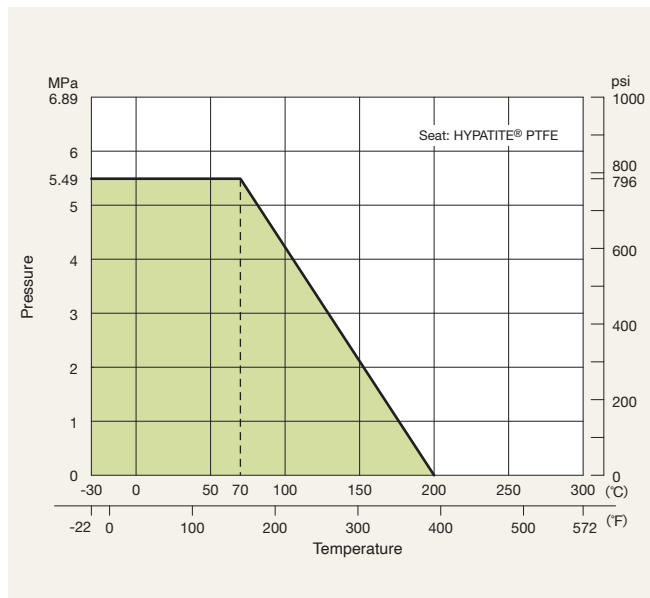
Class 150: AK150UT(M)/10UT(M)



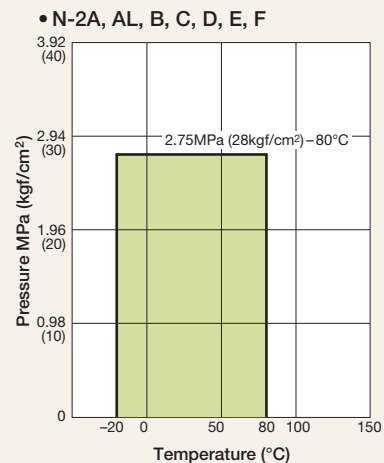
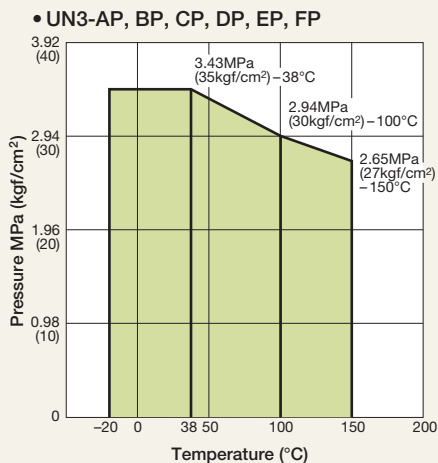
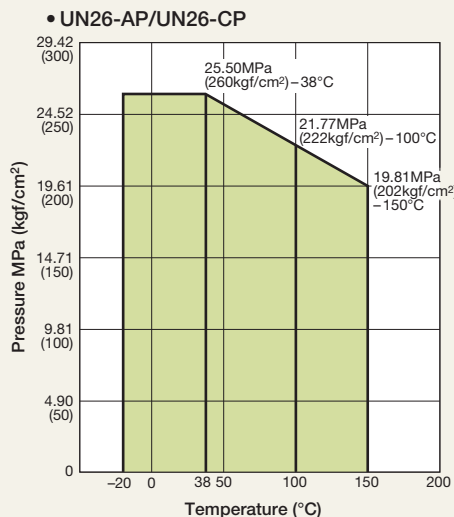
Type 600: UTFK(M)W



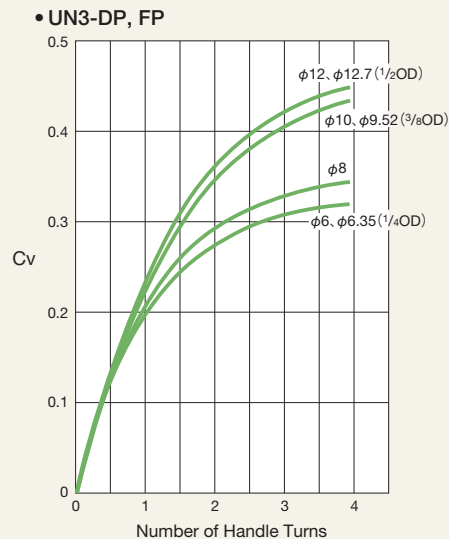
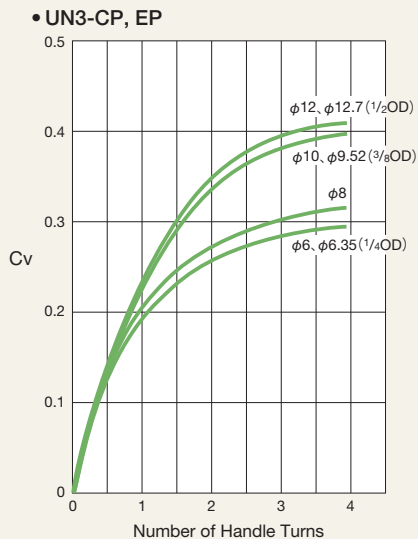
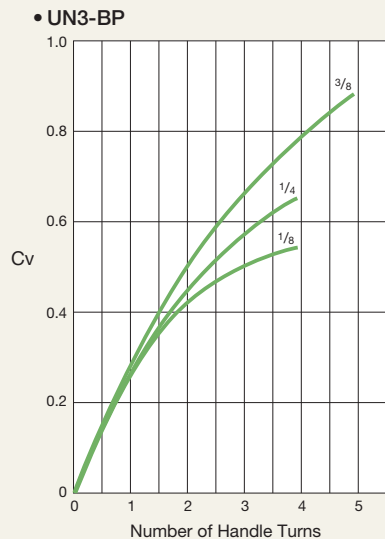
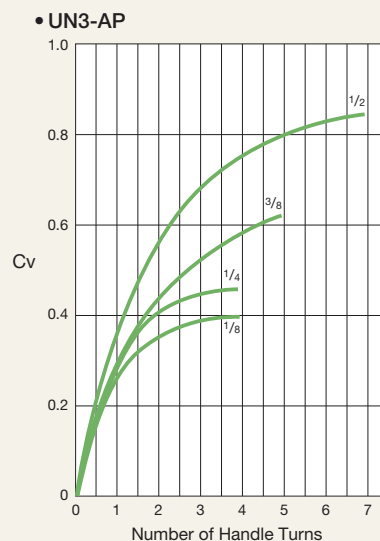
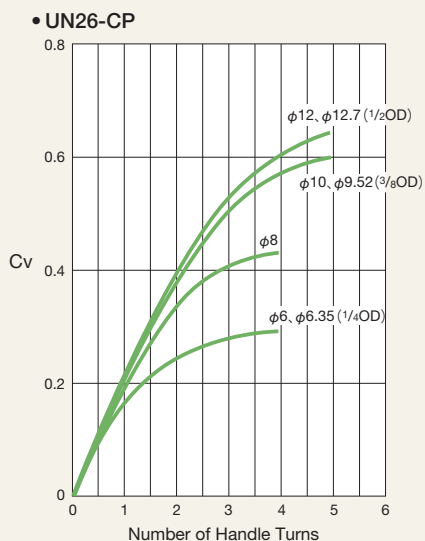
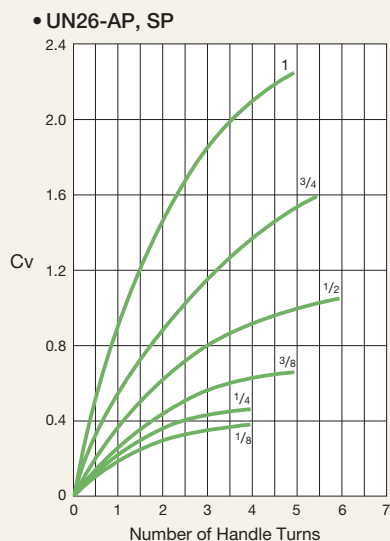
Type 800: UTFZ



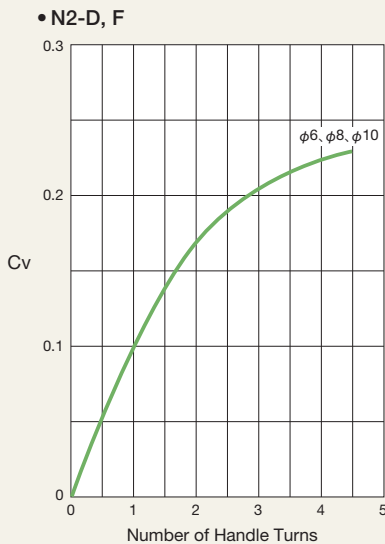
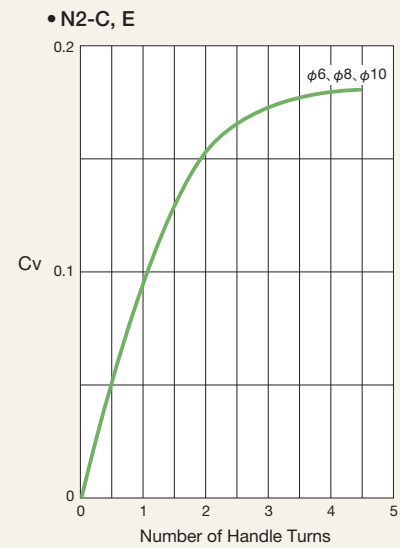
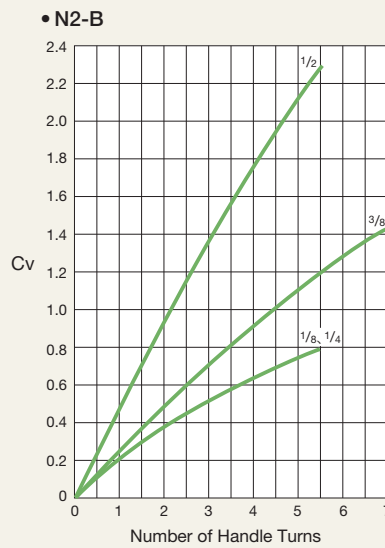
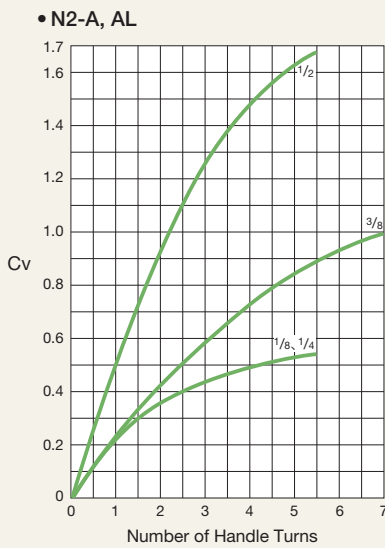
Pressure-Temperature Rating



Flow Characteristics

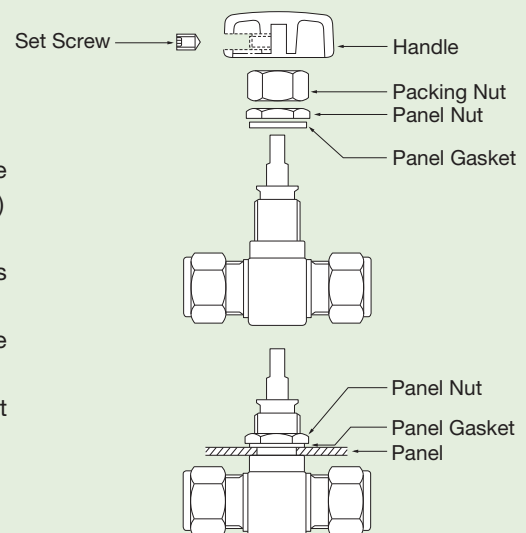


Flow Characteristics



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

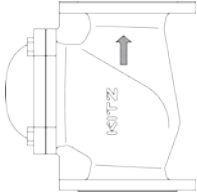
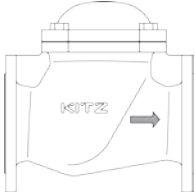
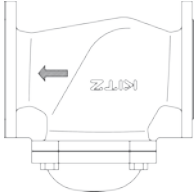
KITZ check valves are backflow prevention valve having superior sealing performance for fluids such as clean water, waste water, sewage water and drainage water that may affect efficiency of existing swing type valves in some cases due to foreign objects trapped in the valve internal parts.

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.

 Vertical installation with downstream side upwards <u>Product Code:</u> 10UFTE 10UFT UFTE 10FCFTN	 Horizontal installation hydraulic head pressure of 0.05 MPa or above in downstream side which has same bore size as the valve.	 Not applicable.
--	---	--

- 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 ²)			
Test Pressure (hydraulic)	Shell Test	2.06 MPa (21 kgf /cm ²)		
	Seat Test Leakage	0.05 to 1.51 MPa (0.5 to 15.4 kgf/cm ²)		
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* ¹		JIS B 2011	JIS B 2031* ²
Valve Mounting Orientation	Horizontal and Vertical Piping	Vertical Piping		

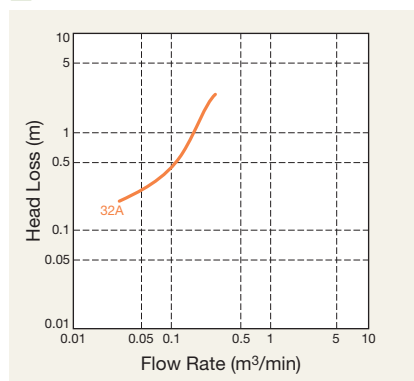
*1: Nominal size 80A and below of 10UFTE are KITZ standard.

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

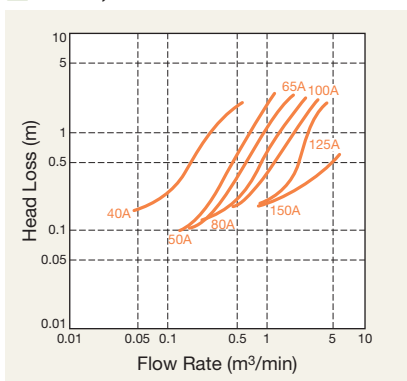
Note) Minimum differential pressure to move the ball is 0.05 MPa (0.5 kgf/cm²). For pump selection, check opening pressure and pressure loss.

Pressure Loss (Clean Water)

UFTE



10UFT, 10FCFTN



10UFTE

