

Class	Type	Connection	Feature	Model	Page	inch (mm)	8	10	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500			
10K	Globe	Screw	UB	M10KSG	16																								
				M10KFG	16																								
		Flange	BB,IS	M10KFGI	16																								
				M10KFGO	16																								
		Screw	UB	Soft Seating	M10KSD	16																							
					M10KFD	16																							
	Flange	BB,IS	Soft Seating	M10KFDI	16																								
				M10KFDO	16																								
	Needle	Screw	UB,IS	M10KSN	17																								
				M10KFN	17																								
	Bellows	Flange	BB,OS	Soft Seating	M10KFGB	17																							
					M10KFDB	17																							
	Gate	Screw	BB,IS	Soft Seating	M10KSS	17																							
					M10KFS	17																							
		Flange	BB,OS&Y	M10KFSO	17																								
				D10KFSO	17																								
	Lift Check	Screw	UC	Soft Seating	M10KSC	18																							
					M10KFC	18																							
		Flange	UC	Soft Seating	M10KSCD	18																							
					M10KFCD	18																							
	Swing Check	Flange	BC	M10KFCS	18																								
Strainer	Flange		M10KFT	18																									
Ball	Screw	1 size	Reduced Bore	For City Gas	BM10KS2B	20																							
					BM10KF2B	20																							
	Flange	Full Bore			BM10KFOB	20																							
					BM10KF1B	20																							
	Screw	1 size	Reduced Bore	For City Gas	BM10KS2L	20																							
					BM10KF2L	20																							
	Flange	Full Bore				BM10KFUL	20																						
						BM10KS2G	21																						
	Screw	1 size	Reduced Bore	For Underground city gas line		BM10KF2G	21																						
						BM10KFOG	21																						

# CLASS 10K

## GLOBE, GATE, CHECK VALVES AND STRAINERS

### ◆ Features

- 10K valves have 13Cr Stainless steel trim and are designed to use up to 300°C.
- 10K valves are applicable to some sort of special fluids, changing packings, gasket and trim materials.

### ◆ Type

- Globe, Gate and Needle valves:** Ductile iron body and bonnet, union or bolted bonnet, insided screw for small sizes 50mm and under, outside screw and yoke for larger sizes, 13Cr stainless steel trim.
- Bellows valves:** Ductile iron body and bonnet, bolted bonnet, outside screw & yoke, 18Cr-8Ni-1/2Mo-low Co stainless steel bellows, hard-faced disc and body seat ring.
- Check valves:** Ductile iron body, 13Cr stainless steel or carbon steel cover, 13Cr-low Si stainless steel disc, 13Cr stainless steel or 13Cr stainless steel deposited seat ring.
- Strainers:** Ductile iron body, ductile or malleable iron bolted cover, 50 mesh 13Cr stainless steel screen for strainer size of 50mm and under and 40 mesh for 65mm.
- Ball Valves:** Ductile iron bodies, 18Cr-8Ni stainless steel ball, PTFE or FT (PTFE-PPFA) seats, 13Cr stainless steel stem.

### ◆ Applicable fluids, temperatures and pressures

Max. working temperature for each fluid (°C)	Steady flow water	Oil/Air/Steam/Pulsating water						LPG	City gas					
		80	120	80	120	183	220		250	300	120	80	120	
Globe valve	Standard Needle valve		1.37			-	1.18		0.98					
	Bellows valve					1.18								
Gate Valve	Reinforced PTFE Disc		1.37			-	1.18		-					
	Standard		1.37			-	1.18		0.98					
Check Valve	Reinforced PTFE Disc		1.37			-	0.98		-					
	NBR Disc	1.37		1.37		-	-		-					
Ball Valve	For general application		1.37			-	1.28		-	0				
	For gas									1.18			0.98	

Unit: MF

### ◆ Inspection pressure

Type	Inspection Item	Shell test				Seat leakage test	
		Hydrostatic test	Air test	Hydrostatic test	Air test		
Globe valve/Needle valve/Gate valve,/Check valve/		2.06		1.51			
Ball valve for general- and high temperature-application							
Bellows valve			1.37			1.37	
Ball valve for gas			1.77			1.30	

Unit: MPa

### ▲ Note:

- 1) HF (Co Cr-W Alloy depositing) seating is recommended to use in the following conditions:
  1. For steam piping of nominal size 150A(6B) or larger.
  2. For high pressure steam of 0.98 Mpa (10 kgf/cm<sup>2</sup>) or higher, and when open/close frequency is high.
  3. When valve is used for dry fluid.
  4. For piping using chemical and so on requiring corrosion resistance, and when 18 Cr-8Ni stainless steel is used for the material of valve trim.
- 2) When using valves at the temperature 180°C and over, heat-resisting painting as option is recommended.
- 3) Please consult with us when valve is used at the temperature of -10°C and below.

### 10K Swing Check Valve, Strainer

MODEL	M10KFCS	
TYPE	Swing Check Valve	
FEATURE		
FIGURE		
BODY COVER	FCD-S SS400	
DISC	SUS403;Nminal size 40-100A	
BODY SEATRING	S28C+13Cr. stainless faced;Nminal size 125-300A	
GASKET	SUS403 H1215	
MODEL	M10KFT	
NOMINAL SIZE	L	H
1/2B	15A	
3/4	20	
1	25	
1 1/4	32	
1 1/2	40	118
2	50	126
2 1/2	65	146
3	80	161
4	100	176
5	125	250
6	150	270
8	200	330
10	250	390
12	300	450

MODEL	M10KFT	
TYPE	Strainer	
FEATURE		
FIGURE		
BODY COVER	FCD-S FCMB-S35;Nminal size 15-50A FCD-S;Nminal size 65-300A	
SCREEN	SUS304 50mesh;Nminal size 15-50A 40mesh;Nminal size 65-300A	
GASKET	H1215	
MODEL	M10KFT	
NOMINAL SIZE	L	H
1/2B	15A	68
3/4	20	77
1	25	91
1 1/4	32	137
1 1/2	40	150
2	50	170
2 1/2	65	290
3	80	310
4	100	279
5	125	400
6	150	480
8	200	600
10	250	730
12	300	850

