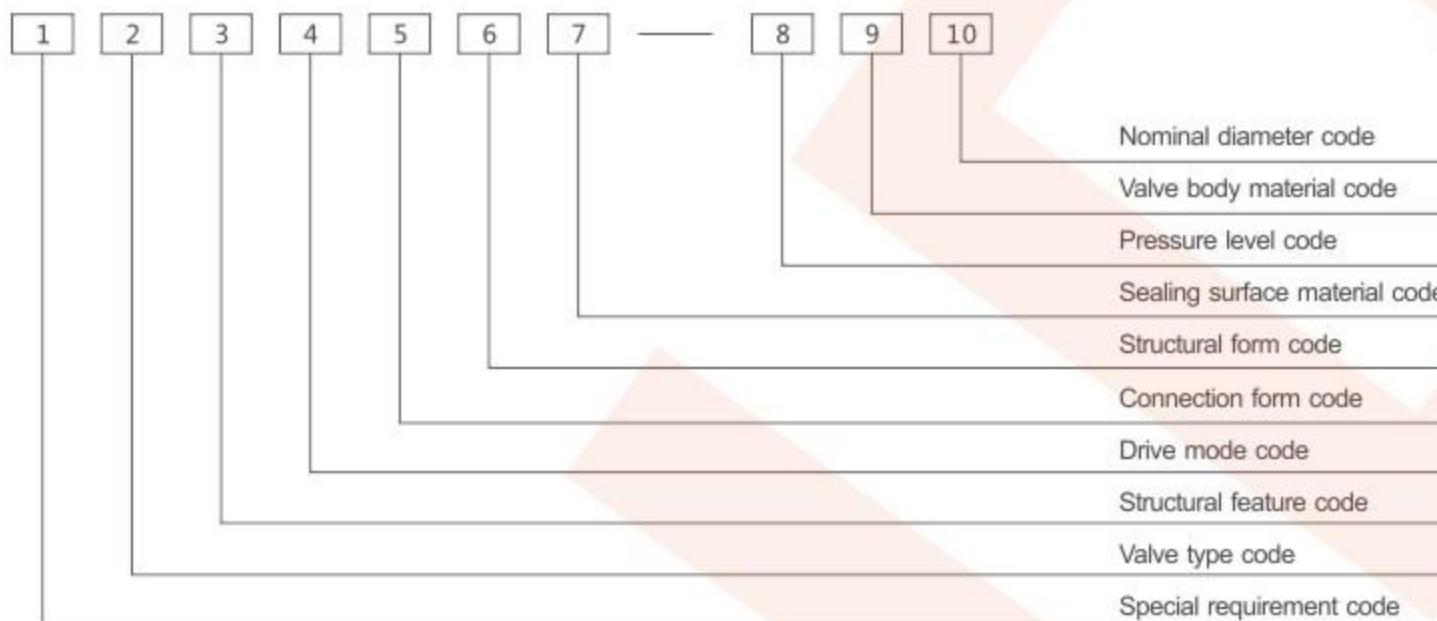


## VALVE MODEL COMPILED METHOD

### Preparation instructions



### Special requirement code

Code	Meaning	Code	Meaning	Code	Meaning
K	Sulfur resistant type	L	Extended rod type	P	Slagging type
D	Low temperature type	B	Insulation type	LX	Two-phase flow pattern
W	Bellows type	C	With purging type	NM	Wear-resistant type
F	Fireproof type	Ds	Water sealed type	HH	Slow closing type

Note:

- ① If there is no specified internal material for sulfur resistant valves, the selection of internal material will be based on our company's standards;
- ② Low temperature valves need to indicate the minimum temperature so that our company can take appropriate process measures
- ③ Extended stem valves require the height of the valve's extended stem to be executed.
- ④ The type with blowing should indicate whether it is equipped with one blowing hole or two blowing holes. One code is C1, and two codes are C2.

### Valve type code

Valve category	Code	Valve category	Code	Valve category	Code	Valve category	Code
Gate valve	Z	General ball valve	Q	throttle valve	L	Y-shaped filter	YG
Water seal gate valve	Zs	Rail ball valve	Qg	butterfly valve	D	Basket filter	LG
Knife gate valve	Zd	Integrated ball valve	Qy	Telescopic butterfly valve	SD	sampling valve	Y
Check valve	H	Top mounted ball valve	Qs	Shown on the discharge valve	Fs	Slurry valve	LJ
Axial flow check valve	ZLH	Top mounted ball valve	Qd	Lower display of discharge valve	Fx	Bi-directional pressure bearing surface rotary valve	SXQ
Throughflow check valve	GLH	Fully welded ball valve	Qw	Plunger valve	U	Antibiotic shut-off valve	JK
Butterfly Check Valve	HE	V-shaped ball valve	Qv	Plug valve	X	Oxygen shut-off valve	Jy
Ball check valve	HQ	Globe valve	J	Stop check valve	JH	Oxygen shut-off valve	Jh

Structural feature code (applicable to pipeline ball valves, other valve codes are omitted)

Code	Meaning	Code	Meaning
W	Welding structure of body and cover	G	Spherical (GWB type) fully welded pipeline ball valve

## VALVE MODEL COMPILATION METHOD

### Drive mode code

Code	Valve category	Code	Valve category	Code	Valve category	Code	Valve category
3	Worm gear transmission	6	Pneumatic (without manual)	8	Qi Guan	9	Electric
4	Spur gear transmission	6S	Pneumatic with manual operation	7	Hydrodynamic	9B	Anti riot electric
5	Bevel gear transmission	6K	Qikai	8	Pneumatic hydraulic	省略	Manual

### Connection form code

Code	Connection form	Code	Connection form	Code	Connection form	Code	Connection form
R	Raised face flange	M	Raised face flange	T	Tenon flange	B	Butt welding
F	Concave flange	J	Replace the link flange	G	Grooved flange		
1	Internal thread	8	Clamp connection	W	Clamp connection		
2	External thread	9	Ferrule	S	Socket welding		

Note: The flange and welding end codes are our company codes. If a national standard code is required, the flange connection code is 4, and the welding end code is 6. When ordering, it is necessary to indicate the type of flange and welding method.

### Structural form code

#### Gate valve

Structural style			Code
Rising Stem	Wedge	Elastic gate valve	0
		Single ram	1
		Double ram	2
		Single ram	3
		Double ram	4
	Parallel type	Single ram	5
		Double ram	6
		Single ram	7
		Double ram	8
Non-rising Stem	Wedge		
	Parallel type		

#### Ball valve

Structural style			Code
Float	Straight through type		1
	Y-shaped	Three-way equation	2
	L-shaped		4
	T-shaped		5
Regular	Straight through type		7
	Cross connection		6
	L-shaped	Three-way equation	8
	T-shaped		9

#### Globe valve, Throttle valve, Slurry valve

Structural style		Code
Straight through type		1、2
Angular equation		3、4
DC type		5
Balance	Straight through type	6
	Angular equation	7

#### Butterfly valve

Structural style		Code	Structural style		Code
Sealed type	Midline type	1	Sealed type	Midline type	6
	Double eccentricity	2		Double eccentricity	7
	Triple eccentricity	3		Triple eccentricity	8
	Linkage mechanism	4		Linkage mechanism	9

#### Check valve

Structural style		Code
Lifting	Straight through type	1
	vertical	2
	Angular equation	3
Swing	Unipetal	4
	Multi petal type	5
	Double petal type	6

#### Plug

Structural style		Code
Filler	Straight through type	3
	T-shaped three-way	4
	Four way equation	5
Oil seal	Straight through type	7
	T-shaped three-way	8

## VALVE MODEL COMPILATION METHOD

### Pressure reducing valve

Structural style	Code
Thin film type	1
Bunsen membrane type	2
Piston type	3
Bellows type	4
Lever type	5

### Hydrophobic valve

Structural style	Code
Floating ball type	1
Bimetallic sheet type	7
Pulse type	8
Thermodynamic	9

### Sealing surface material code

Valve seat sealing surface material	Code	Valve seat sealing surface material	Code	Valve seat sealing surface material	Code
Iron based alloy	H	Monel alloy	M	PTFE+carbon fiber+Cu	FC
teflon	F	Babbitt alloy	B	PTFE+carbon fiber	FS
rubber	X	Babbitt alloy	A	three hundred and four	P
Rubber lining	J	copper alloy	T	three hundred and sixteen	R
Hard alloy/Taili alloy	Y	Para Polyphenylene PPL	FP	Lined with polytetrafluoroethylene (fully lined)	F4
Direct processing of the body	W	Polyether ether ketone PEEK	FP	Lined with perfluoroethylene (fully lined)	F46
Reinforced polytetrafluoroethylene	FR	Molybdenum dragon	FM	Inner lining F4/plate CF8	F4/P
High temperature polytetrafluoroethylene	FG	Nylon	N	Inner lining F46/plate CF8	F46/P

**Pressure level code:** nominal pressure is expressed in kilograms (bar), and pound level is expressed in actual numbers

### Valve body material code

Material	Code	Material	Code	Material	Code
A105	C1	1Cr5Mo	I1	304/0Cr18Ni9	P1
WCB	C2	ZGCr5Mo	I2	Cf8	P2
LCB	C3	F11	I3	1Cr18Ni9Ti	P3
LF1	C4	C5	I4	304/00Cr18Ni10	PI1
LCC	C5	WC5	I5	Cf3	PI2
LF2	C6	WC6	I6	316/00Cr18Ni12Mo2Ti	R1
12CrMoV	V1	15CrMo	I7	CF8M	R2
15CrMoV	V2	TA2	A	316/00Cr17Ni14Mo2Ti	RI1
F22	V3	Monel alloy	M	CF3M	RI2
WC9	V4	Malleable iron	K	Nodular cast iron	Q

Note: ① For grey cast iron valves with PN ≤ 1.6MPa, this code is omitted;

② For carbon steel valve bodies with PN ≥ 2.5MPa, this code is omitted;

**Nominal diameter code:** Omit the full diameter, and add S after the diameter for valves with reduced diameter.

## VALVE MODEL COMPILATION METHOD

### Valve Reference Standards

Valve type		Design and manufacturing	Structure length	Connection end	Inspection test	Shell wall thickness
Gate valve	General gate valve	National Standard	GB/ 12234	GB/T 12221	GB/T 9113 HG 20592 JB/T 79	GB/T 26480 GB/T 13927
	Flat gate valve		JB/ 5298 GB/T 23300			
	Knife gate valve		JB/ T8691			
	Gate valve/flat gate valve	American Standard	API 600 API 602 API 6D	ASME B16.10 API 6D	ASME B16.5 ASME B16.47 ASME B16.11 ASME B16.25	API 598 API 6D
	Knife gate valve		MSS SP-81 MSS SP-135			
Globe valve		American Standard	GB/T 12235	GB/T 12221	GB/T 9113 HG 20592 JB/T 79	GB/T 26480 GB/T 13927
		American Standard	BS 1873 API 602	ASME B16.10	ASME B16.5 ASME B16.47 ASME B16.11 ASME B16.25	API 598
Check valve		American Standard	GB/T 12236	GB/T 12221	GB/T 9113 HG 20592 JB/T 79	GB/T 26480 GB/T 13927
		American Standard	BS 1868 API 594 API 602 API 6D	ASME B16.10 API 6D	ASME B16.5 ASME B16.47 ASME B16.11 ASME B16.25	API 598 API 6D
Ball valve		American Standard	GB/T 12237	GB/T 12221	GB/T 9113 HG 20592 JB/T 79	GB/T 26480 GB/T 13927
		American Standard	API 608 API 6D	ASME B16.10 API 6D	ASME B16.5 ASME B16.47 ASME B16.11 ASME B16.25	API 598 API 6D
Butterfly valve		American Standard	GB/T 12238	GB/T 12221	GB/T 9113 HG 20592 JB/T 79	GB/T 13927 GB/T 26480
		American Standard	API 609	API 609	ASME B16.5 ASME B16.47	API 598

## VALVE MODEL COMPILATION METHOD

### Valve Reference Standards

Valve type		Design and manufacturing	Structure length	Connection end	Inspection test	Shell wall thickness
Plug	National Standard	GB/T 22130	GB/T 12221	GB/T 9113 HG 20592 JB/T 79	GB/T 26480 GB/T 13927	GB/T 12224
	American Standard	API 599 API 6D	ASME B16.10	ASME B16.5 ASME B16.47 ASME B16.11 ASME B16.25	API 598 API 6D	ASME B16.34
Drain valve		GB/T 22654	GB/T 12250	GB/T 9113 HG 20592 JB/T 79	GB/T 12251	GB/T 12224
Diaphragm valve		GB/T 12239	GB/T 12221	GB/T 9113 HG 20592 JB/T 79	GB/T 26480 GB/T 13927	GB/T 12224
Pressure relief valve		GB/T 12244 GB/T 12246	JB/T 2250	GB/T 9113 HG 20592 JB/T 79	GB/T 12245	GB/T 12224
Power station valve		JB/T 3595	GB/T 12221 ASME B16.10	GB/T 9113 HG 20592 JB/T 79 ASME B16.5 ASME B16.25	JB/T 3595	GB/T 26640 ASME B16.34

### Performance specifications

Nominal pressure	PN	Class
	2.5~420	150~2500Lb
Shell (strength) test	1.5 times the material pressure rating at 38° C (100F)	
High pressure sealing test (water)	1.1 times the material pressure rating at 38 ° C (100F)	
Low pressure sealing test (gas)	0.4~0.7MPa	
Specifications	15~1000	1/2"~40"
Applicable temperature (° C)	-196~550	
Applicable medium	Water, steam, oil products, liquefied gas, natural gas, nitric acid, acetic acid	