

公称压力 Pressure Rating	公称尺寸 Dimensions DN	法兰规格 Flange size DN	尺寸Dimensions (mm)							重量 Weight (Kg)
			L	d	D	D1	W	H	ZG	
PN10	15	15×32	50	13	84	-	140	111	ZG ³ / ₈	2
	20	20×40	55	20	94	-	140	112	ZG ³ / ₈	2
	25	25×50	60	25	109	-	150	138	ZG ³ / ₄	3
	32	32×50	70	32	109	-	180	150	ZG ³ / ₄	4
	40	40×65	80	40	129	-	200	170	ZG ³ / ₄	6
	50	50×80	90	51	144	-	250	175	ZG ³ / ₄	9
	65	65×100	110	64	164	-	300	195	ZG ³ / ₄	13
	80	80×125	120	76	194	-	350	216	ZG ³ / ₄	18
	100	100×150	140	88	220	100	350	235	ZG ³ / ₄	28
	125	125×200	170	102	273	127	500	270	ZG ³ / ₄	40
PN16	15	15×32	50	13	84	-	140	111	ZG ³ / ₈	2
	20	20×40	55	20	94	-	140	112	ZG ³ / ₈	2
	25	25×50	60	25	109	-	150	138	ZG ³ / ₄	3
	32	32×50	70	32	109	-	180	150	ZG ³ / ₄	4
	40	40×65	80	40	129	-	200	170	ZG ³ / ₄	6
	50	50×80	90	51	144	-	250	175	ZG ³ / ₄	9
	65	65×100	110	64	164	-	300	195	ZG ³ / ₄	13
	80	80×125	120	76	194	-	350	216	ZG ³ / ₄	18
	100	100×150	140	88	220	100	350	235	ZG ³ / ₄	28
	125	125×200	170	102	273	127	500	270	ZG ³ / ₄	40
PN25	15	15×32	50	13	84	-	140	111	ZG ³ / ₈	2
	20	20×40	55	20	94	-	140	112	ZG ³ / ₈	2
	25	25×50	60	25	109	-	150	138	ZG ³ / ₄	3
	32	32×50	70	32	109	-	180	150	ZG ³ / ₄	4
	40	40×65	80	40	129	-	200	170	ZG ³ / ₄	6
	50	50×80	90	51	144	-	250	175	ZG ³ / ₄	9
	65	65×100	110	64	170	-	300	195	ZG ³ / ₄	13
	80	80×125	120	76	198	-	350	216	ZG ³ / ₄	18
	100	100×150	140	88	227	100	350	235	ZG ³ / ₄	28
	125	125×200	170	102	286	127	500	270	ZG ³ / ₄	40
PN25	150	150×200	200	127	286	150	800	310	ZG ³ / ₄	56
	200	200×250	240	152	340	203	800	380	ZG ³ / ₄	75

结构特点及用途 Structure features and application

保温夹套法兰连接球阀拥有ZL200920110598.4、ZL200920110599.9等专利技术，根据工况和用户要求，可采用增强聚四氟乙烯、对位苯或金属硬密封等多种密封材料。驱动方式可以是手动、蜗轮蜗杆传动、气动或电动。夹套设计压力一般为1.0MPa,也可根据用户要求进行特别设计，保温夹套球阀一般采用较大规格连接法兰，选用时要特别注意。

保温夹套法兰连接球阀适用于CLASS150~CLASS300、PN16~PN40、JIS 10K~JIS20K的各种管路上，用于截断或接通管路中的介质，选用不同的材质，可分别适用于水、蒸汽、油品、液化气、天然气、煤气、硝酸、醋酸、氧化性介质、尿素等多种介质,并能保温防止介质结晶。

According to working condition and customers' requirement, a couple of sealing materials for flanged ends jacketed ball valves may be adopted, such as reinforced PTFE, PPL or other hardened metal. Operation manners are of manual, worm gear, and pneumatic or electric actuators. Design pressure of the jacket is generally 1.0 MPa. As per customers' requirement, special design is available. In general, temperature protection jacketed ball valve is employing big sized

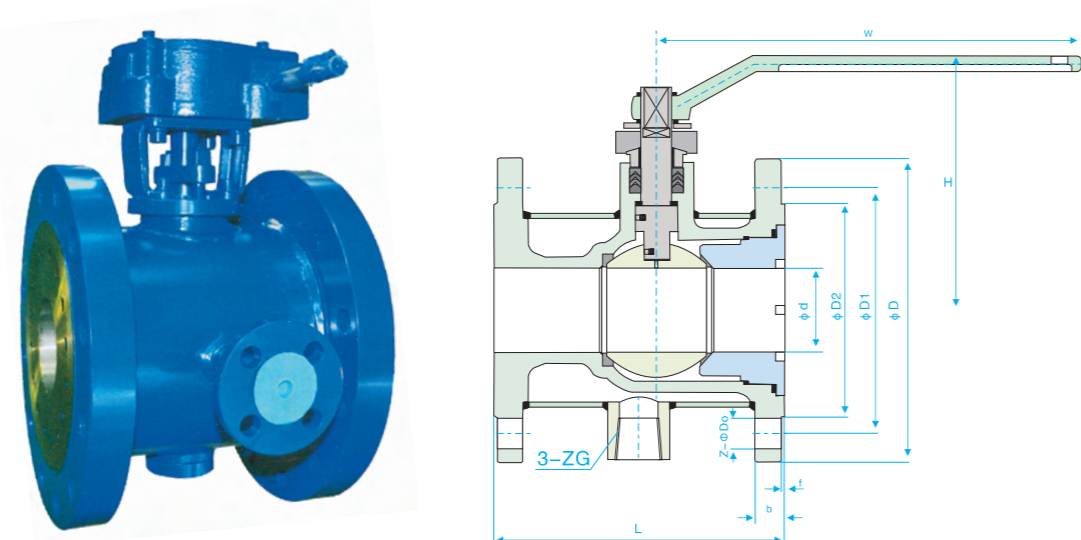
Temperature protection jacketed ball valves are suitable for use on various kinds of pipelines of Class150 ~ Class300, PN16 ~ PN40, JIS10K ~ JIS20K to cut off or turn on the medium in pipelines, being able to protect medium from crystallization. flanges for connection ends, to which attention should be drawn when ordering.

型号、材料及主要参数 Material and Main Valve Data

配管法兰 Pipe flange	公称压力 Pressure Rating	法兰密封面 Flange face	常规产品型号 Type						
			BQ41F-A1C	BQ41F-A1P	BQ41F-A1P8	BQ41F-A1P3	BQ41F-A1R	BQ41F-A1R8	BQ41F-A1R3
ASME B16.5 GB/T9112-9124 HG/T 20615	Class150	凸面 RF	BQ41F-A3	BQ41F-A3P	BQ41F-A3P8	BQ41F-A3P3	BQ41F-A3R	BQ41F-A3R8	BQ41F-A3R3
	Class300		BQ41F-16C	BQ41F-16P	BQ41F-16P8	BQ41F-16P3	BQ41F-16R	BQ41F-16R8	BQ41F-16R3
GB/T9112-9124 HG/T 20592 JB/T 74-90	PN16	凸面 RF	BQ41F-25	BQ41F-25P	BQ41F-25P8	BQ41F-25P3	BQ41F-25R	BQ41F-25R8	BQ41F-25R3
	PN25		BQ41F-40C	BQ41F-40P	BQ41F-40P8	BQ41F-40P3	BQ41F-40R	BQ41F-40R8	BQ41F-40R3
	PN40	凹凸面 MF	BQ41F-K1C	BQ41F-K1P	BQ41F-K1P8	BQ41F-K1P3	BQ41F-K1R	BQ41F-K1R8	BQ41F-K1R3
JIS B2238	10K	凸面 RF	BQ41F-K2	BQ41F-K2P	BQ41F-K2P8	BQ41F-K2P3	BQ41F-K2R	BQ41F-K2R8	BQ41F-K2R3
	20K								
主要零件材料 Main parts material	阀体Body	WCB	ZG1Cr18Ni9Ti 1Cr18Ni9Ti	CF8	CF3	ZG1Cr18Ni12Mo2Ti 1Cr18Ni12Mo2Ti	CF8M	CF3M	
	球体、阀杆 Ball, Stem	2Cr13	1Cr18Ni19Ti	0Cr18Ni9 (304)	00Cr19Ni10 (304L)	1Cr18Ni12Mo2Ti	0Cr17Ni12Mo2 (316)	00Cr17Ni14Mo2 (316L)	
	阀座Seat	增强聚四氟乙烯、对位聚苯、钨钴合金、镍基合金及特种硬化材料 RPTFE、PPL、Stellite、Monel、Special Alloy							
适用工况 Applicable condition	适用介质 Applicable medium	水、蒸汽、油品、煤气、液化气、天然气等 Water, Steam, Oil, Coal gas, Liquefied gas, gas	硝酸类腐蚀性介质 Nitric acid corrosion medium	强氧化性介质 Strong oxidizing medium	醋酸类腐蚀性介质 Acetic acid corrosive medium	尿素类腐蚀性介质 Urea corrosive medium			
	适用温度 Applicable temperature	≤180℃(增强聚四氟乙烯) ≤300℃(对位聚苯) ≤500℃(钨钴合金及特种硬化材料) ≤180℃(RPTFE) ≤300℃(PPL) ≤500℃(Stellite, Special Alloy)							
蜗轮蜗杆传动球阀 worm gear ball valve		将相应的手动型号的BQ后插入“3”表示，示例：Q341F-A1C							
气动球阀 pneumatic ball valve		将相应的手动型号的BQ后插入“6”表示，示例：Q641F-A1C							
电动球阀 electric ball valve		将相应的手动型号的BQ后插入“9”表示，示例：Q941F-A1C							

注：本表我常规法兰连接保温夹套球阀的型号编制、主要零件材料及适用工况，其他要求及其型号编制见球阀型号编制方法。
note: this table is about the model preparation, main parts material and applicable condition of flange ends metal to wafer type jacketed ball valve.

主要尺寸及重量

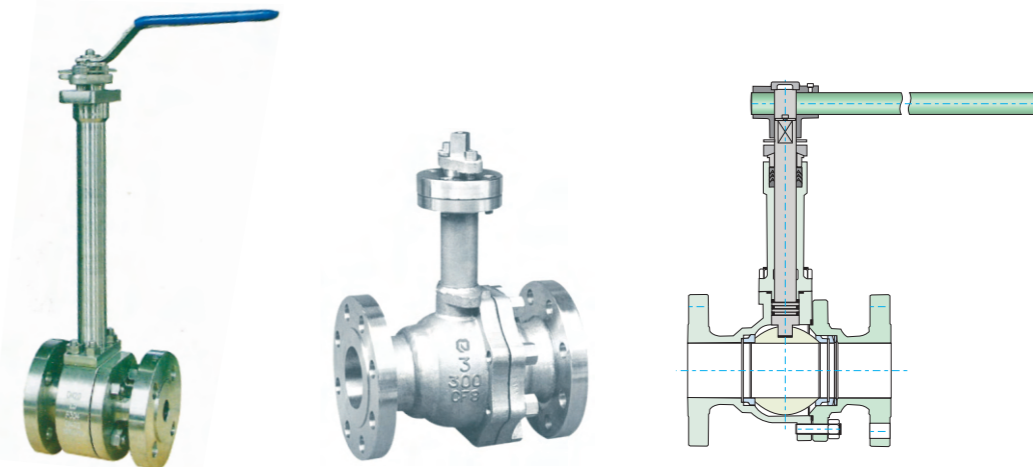


公称压力 Pressure Rating	公称尺寸 Dimensions		法兰规格 Flange size		尺寸Dimensions (mm)										重量 Weight (Kg)
	DN	NPS	DN	NPS	L	D	D1	D2	b	f	Z-φ do	W	H	ZG	
Class150 PN20	15	1/2	15×32	1/2×1/4	108	117	89	64	13	1.6	4-15	140	140	ZG 3/8	3
	20	3/4	20×40	3/4×1/2	117	127	98.5	73	15	1.6	4-15	140	150	ZG 3/8	4
	25	1	25×50	1×2	127	152	120.5	92	16	1.6	4-19	150	160	ZG 1/4	6
	32	1 1/4	32×50	1 1/4×2	140	152	120.5	92	16	1.6	4-19	180	180	ZG 3/4	8
	40	1 1/2	40×65	1 1/2×2 1/2	165	178	139.5	105	18	1.6	4-19	200	180	ZG 3/4	10
	50	2	50×80	2×3	178	190	152.5	127	19	1.6	4-19	250	200	ZG 3/4	14
	65	2 1/2	65×100	2 1/2×4	190	229	190.5	157	24	1.6	8-19	300	210	ZG 3/4	18
	80	3	80×150	3×6	229	279	241.5	216	26	1.6	8-22	350	220	ZG 3/4	25
	100	4	100×200	4×8	254	343	298.5	270	29	1.6	8-22	500	250	ZG 3/4	36
	125	5	125×200	5×8	267	343	298.5	270	29	1.6	8-22	650	270	ZG 3/4	66
Class300 PN50	15	1/2	15×32	1/2×1/4	108	133	98.5	64	19	1.6	4-19	140	150	ZG 3/8	4
	20	3/4	20×40	3/4×1/2	117	156	114.5	73	21	1.6	4-22	140	160	ZG 3/8	5
	25	1	25×50	1×2	127	165	127	92	23	1.6	8-19	150	180	ZG 3/4	8
	32	1 1/4	32×50	1 1/4×2	140	165	127	92	23	1.6	8-19	180	200	ZG 3/4	10
	40	1 1/2	40×65	1 1/2×2 1/2	165	190	149	105	26	1.6	8-22	200	200	ZG 3/4	13
	50	2	50×80	2×3	178	210	168.5	127	29	1.6	8-22	250	220	ZG 3/4	18
	65	2 1/2	65×100	2 1/2×4	190	254	200	157	32	1.6	8-22	300	230	ZG 3/4	23
	80	3	80×150	3×6	229	318	270	216	37	1.6	12-22	350	240	ZG 3/4	36
	100	4	100×200	4×8	254	381	330	270	42	1.6	12-25	500	270	ZG 3/4	58
	125	5	125×200	5×8	267	381	330	270	42	1.6	12-25	650	280	ZG 3/4	90
200	6	150×250	6×10	292	445	387.5	324	48	1.6	16-29	800	320	ZG 3/4	120	
	8	200×350	8×14	330	584	514.5	413	54	1.6	20-32	1000	350	ZG 3/4	210	

公称压力 Pressure Rating	公称尺寸 Dimensions DN	法兰规格 Flange size DN	尺寸Dimensions (mm)										重量 Weight (Kg)
			L	D	D1	D2	b	f	Z-φ do	W	H	ZG	
PN16	15	15×32	108	140	100	78	18	2	4-18	140	140	ZG 3/8	3
	20	20×40	117	150	110	88	18	3	4-18	140	150	ZG 3/8	4
	25	25×50	127	165	125	102	18	3	4-18	150	160	ZG 1/2	6
	32	32×50	140	165	125	102	18	3	4-18	180	180	ZG 3/4	8
	40	40×65	165	185	145	122	18	3	8-18	200	180	ZG 3/4	10
	50	50×80	178	200	160	138	20	3	8-18	250	200	ZG 3/4	14
	65	65×100	190	220	180	158	20	3	8-18	300	210	ZG 3/4	18
	80	80×150	229	285	240	212	22	3	8-22	350	220	ZG 3/4	25
	100	100×200	254	340	295	268	24	3	12-22	500	250	ZG 3/4	36
	125	125×200	267	340	295	268	24	3	12-22	650	270	ZG 3/4	66
PN25	15	15×32	108	140	100	78	18	2	4-18	140	140	ZG 3/8	4
	20	20×40	117	150	110	88	18	3	4-18	140	150	ZG 3/8	5
	25	25×50	127	165	125	102	20	3	4-18	150	160	ZG 1/2	7
	32	32×50	140	165	125	102	20	3	4-18	180	180	ZG 3/4	9
	40	40×65	165	185	145	122	22	3	8-18	200	180	ZG 3/4	11
	50	50×80	178	200	160	138	24	3	8-18	250	200	ZG 3/4	15
	65	65×100	190	235	190	162	24	3	8-22	300	210	ZG 3/4	20
	80	80×150	229	300	250	218	28	3	8-26	350	220	ZG 3/4	30
	100	100×200	254	360	310	278	30	3	12-26	500	250	ZG 3/4	40
	125	125×200	267	360	310	278	30	3	12-26	650	270	ZG 3/4	74
PN40	15	15×32	108	140	100	78	18	2	4-18	140	140	ZG 3/8	4
	20	20×40	117	150	110	88	18	3	4-18	140	150	ZG 3/8	5
	25	25×50	127	165	125	102	20	3	4-18	150	160	ZG 1/2	8
	32	32×50	140	165	125	102	20	3	4-18	180	180	ZG 3/4	10
	40	40×65	165	185	145	122	22	3	8-18	200	180	ZG 3/4	13
	50	50×80	178	200	160	138	24	3	8-18	250	200	ZG 3/4	18
	65	65×100	190	235	190	162	24	3	8-22	300	210	ZG 3/4	23
	80	80×150	229	300	250	218	28	3	8-26	350	220	ZG 3/4	36
	100	100×200	254	375	320	285	34	3	12-30	500	250	ZG 3/4	58
	125	125×200	267	375	320	285	34	3	12-30	650	270	ZG 3/4	90
200	150	150×250	292	450	385	345	38	3	12-33	800	290	ZG 3/4	120
	200	200×350	330	580	510	465	46	3	16-33	1000	330	ZG 3/4	210

注：本表法兰尺寸按GB/9112-9124标准。根据用户要求，法兰尺寸也可按HG/T 20592及JB/T 74-90标准设计制造
Note: this table of flange size is as per standard ASME GB/9112-9124, it also can be designed and produced as per customer's requirement or HG/T 20592, JB/T 74-90.

公称压力 Pressure Rating	公称尺寸 Dimensions DN	法兰规格 Flange size DN	尺寸Dimensions (mm)										重量 Weight (Kg)
			L	D	D1	D2	b	f	Z-φ do	W	H	ZG	
JIS 10K	15	15 × 32	108	135	100	76	16	2	4-19	140	140	ZG $\frac{3}{8}$	3
	20	20 × 40	117	140	105	81	16	2	4-19	140	150	ZG $\frac{3}{8}$	4
	25	25 × 50	127	155	120	96	16	2	4-19	150	160	ZG $\frac{1}{2}$	6
	32	32 × 50	140	155	120	96	16	2	4-19	180	180	ZG $\frac{3}{4}$	8
	40	40 × 65	165	175	140	116	18	2	4-19	200	180	ZG $\frac{3}{4}$	10
	50	50 × 80	178	185	150	126	18	2	8-19	250	200	ZG $\frac{3}{4}$	14
	65	65 × 100	190	210	175	151	18	2	8-19	300	210	ZG $\frac{3}{4}$	18
	80	80 × 150	229	280	240	212	22	2	8-23	350	220	ZG $\frac{3}{4}$	25
	100	100 × 200	254	330	290	262	22	2	12-23	500	250	ZG $\frac{3}{4}$	36
	125	125 × 200	267	330	290	262	22	2	12-23	650	270	ZG $\frac{3}{4}$	66
JIS 20K	15	15 × 32	108	135	100	76	18	2	4-19	140	140	ZG $\frac{3}{8}$	4
	20	20 × 40	117	140	105	81	18	2	4-19	140	150	ZG $\frac{3}{8}$	5
	25	25 × 50	127	155	120	96	18	2	8-19	150	160	ZG $\frac{1}{2}$	8
	32	32 × 50	140	155	120	96	18	2	8-19	180	180	ZG $\frac{3}{4}$	10
	40	40 × 65	165	175	140	116	20	2	8-19	200	180	ZG $\frac{3}{4}$	13
	50	50 × 80	178	200	160	132	22	2	8-23	250	200	ZG $\frac{3}{4}$	18
	65	65 × 100	190	225	185	160	24	2	8-23	300	210	ZG $\frac{3}{4}$	23
	80	80 × 150	229	305	260	230	28	2	12-25	350	220	ZG $\frac{3}{4}$	36
	100	100 × 200	254	350	305	275	30	2	12-25	500	250	ZG $\frac{3}{4}$	58
	125	125 × 200	267	350	305	275	30	2	12-25	650	270	ZG $\frac{3}{4}$	90
	150	150 × 250	292	430	380	345	34	2	12-27	800	290	ZG $\frac{3}{4}$	120
	200	200 × 350	330	540	480	440	40	2	16-33	1000	330	ZG $\frac{3}{4}$	210



用途 Application

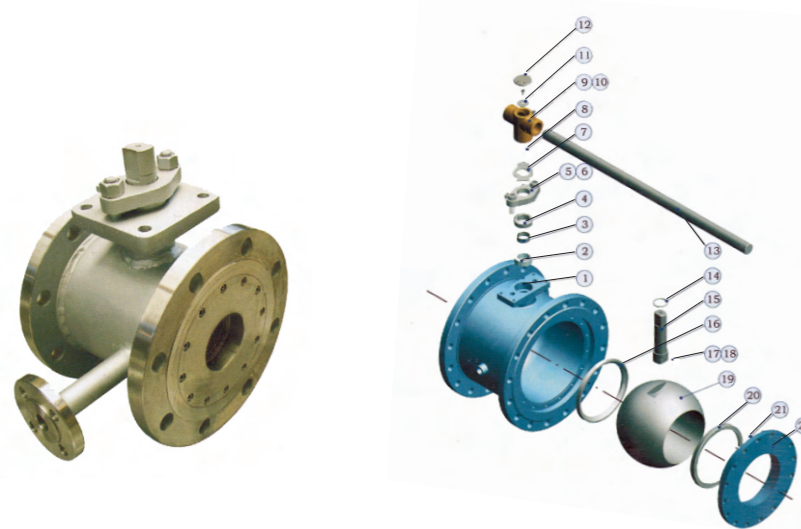
低温球阀适用于CLASS150~CLASS1500、PN16~PN100、JIS 10K~JIS20K的各种管路上，用于截断或接通管路中的介质，选用不同的材质，可分别适用于不同的温度介质，最低工作温度为-196℃低温球阀的驱动方式为手动、蜗轮蜗杆传动、气动或电动、低温球阀一般采用法兰连接，也可采用焊接连接。

The cryogenic ball valve is applicable to different pipeline of Class150 Class1500, PN16~PN100, JIS10K ~ JIS20K. different materials, the cryogenic ball valve is applicable to different working temperature and medium. The minimum temperature for the ball valve is -196°C. The operation of the ball valve can be manual operated, gear operated, pneumatic Operated and motor operated. The end connection usually is flanged ends. However, the welded ends are also optional.

产品范围 Product range

低温球阀分为浮动球阀和低温固定球阀两类，其产品范围、结构长度、连接法兰尺寸等参见浮动球阀和固定球阀数据，对于温度高于-50℃的球阀，一般不采用长颈结构设计，对于温度低于-50℃的球阀，颈部长度一般为250mm,或根据我公司的设计与计算确定。

The cryogenic ball valve has two types: floating ball and trunnion mounted ball. For the range, face to face dimension and flange dimension, please refer to the corresponding data of common floating ball valve and trunnion mounted ball valve. For valves with working temperature above -50°C, long neck design is seldom adopted. For valves with working temperature below -50, the neck length T shall be 250mm, or shall be decided as per our own design and calculation.



法兰连接保温夹套球阀典型结构及零部件组成
Typical drawing of flange type jacketed ball valve and parts composition

- 1-阀体; 1-Body
- 2-填料; 2-Packing
- 3-衬套; 3-Bush
- 4-填料压套; 4-Gland
- 5-填料压板; 5-Gland flange
- 6-螺钉; 6-Bolt
- 7-定位片; 7-Stop collar
- 8-挡圈; 8-Circlip
- 9-扳杆接头; 9-Lever connector
- 10-螺钉; 10-Bolt
- 11-垫圈; 11-Washer
- 12-顶盖; 12-Top cap
- 13-扳杆; 13-Lever
- 14-上密封垫; 14-Thrust washer
- 15-阀杆; 15-Stem
- 16-密封圈; 16-Seal
- 17-弹簧; 17-Spring
- 18-柱塞; 18-Pillar
- 19-球体; 19-Ball
- 20-密封圈; 20-Seal
- 21-螺钉; 21-Bolt
- 22-端盖; 22-Body insert

