

采用先进的球体和阀座硬化技术 Advanced hardening technology employed for ball and seat

祺隆公司金属硬密封球阀的球体与阀座完全采用金属对金属的密封方式，为了确保阀门在各种温度和压力下的可靠密封，针对用户的不同使用工况和要求，可以采用多种先进的球体和阀座的硬化技术，包括超音速喷涂、镍基喷焊、表面特殊硬化、硬质合金喷焊以及采用高强度高硬度陶瓷材料等，球体和阀座的表面硬度一般可以达到HRC60以上，最高可达HRC74以上。密封面材料耐温一般可达540℃，最高可达980℃。材料的结合强度可以达到10000PSI以上。密封面材料还具有很好的耐磨擦、耐冲击等性能。祺隆金属硬密封球阀能够适用于绝大多数的苛刻工况条件。

Metal to metal sealed design has been employed perfectly for the ball and seat, which has also adopted the advanced hardening technologies, such as ultra-sonic spray coating, nickel base spray welding, surface specially hardening, stellite spray welding, ceramic material with high strength and hardness, and so on. Surface hardness of the ball and seat may generally reach more than HRC60. Maximum is up to HRC74, and application temperature of the material may be up to 540°C. Maximum is 980°C. Combining strength of the material gets to more than 10000 PSI. Besides, the surface materials possess also very good resistance properties of friction and impact. Metal to metal sealed ball valves made by QILONG are suitable for use in most criticle working conditions.

金属硬密封球阀的结构设计特点

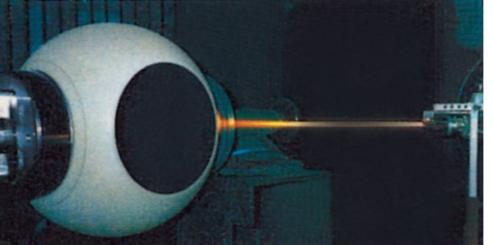
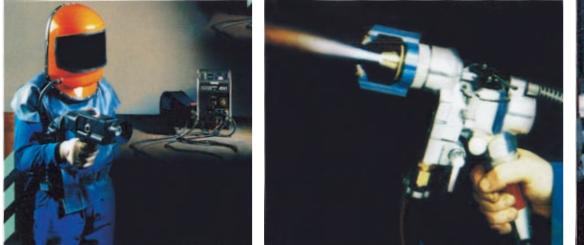
Design features of metal to metal sealed ball valve

祺隆公司金属硬密封球阀除了具有防止误操作、防止阀杆飞出、设置驱动装置安装平台等结构特点外，还具有如下独特的特点。

Except for such features as wrong operation prevention, stem blow-out proof, mounting pad provided, the metal to metal sealed ball valves made by QILONG posses the following unique features.

采用先进的球体和阀座硬化技术

Advanced hardening technology employed for ball and seat



球体及阀座的超音速喷涂
Ultra-sonic spray coating for ball and seat

防止阀门在高温下的涨死 Valve stuck prevented under high temperature

高温工况下由于热膨胀而容易引起球体与阀座的涨死，从而导致阀门无法开启。祺隆金属硬密封球阀采用了蝶簧或弹簧加载的独特密封结构，在高温下零部件的热膨胀可以被蝶簧或弹簧所吸收，故能够保证阀门在高温下不会被涨死，并能够在高温下灵活启闭。

In the case of high temperature working condition the valve seat and ball would easily get stuck due to heat expansion, and the valve could not be open. Metal to metal sealed ball valves made by QILONG employ the patented design of beveling spring loading, which would absorb the heat expansion of parts caused by the beveling spring. So, it is ensured that the valve would not get stuck and be open and close easily in the case of high temperature condition.

完全的防火结构设计 An entire fire safe structure

阀门的密封面采用金属对金属密封结构，填料采用柔性石墨，垫片采用不锈钢+柔性石墨结构。因此，阀门即使在火灾情况下也能确保可靠的密封

The metal to metal sealed structure has been adopted for the valve sealing surface design. Packing is so designed with graphite, and gasket is so designed with stainless steel, plus graphite that the valve can assure reliable tightness even if under fire condition.

双阻断及泄放功能 Double-block and bleed function

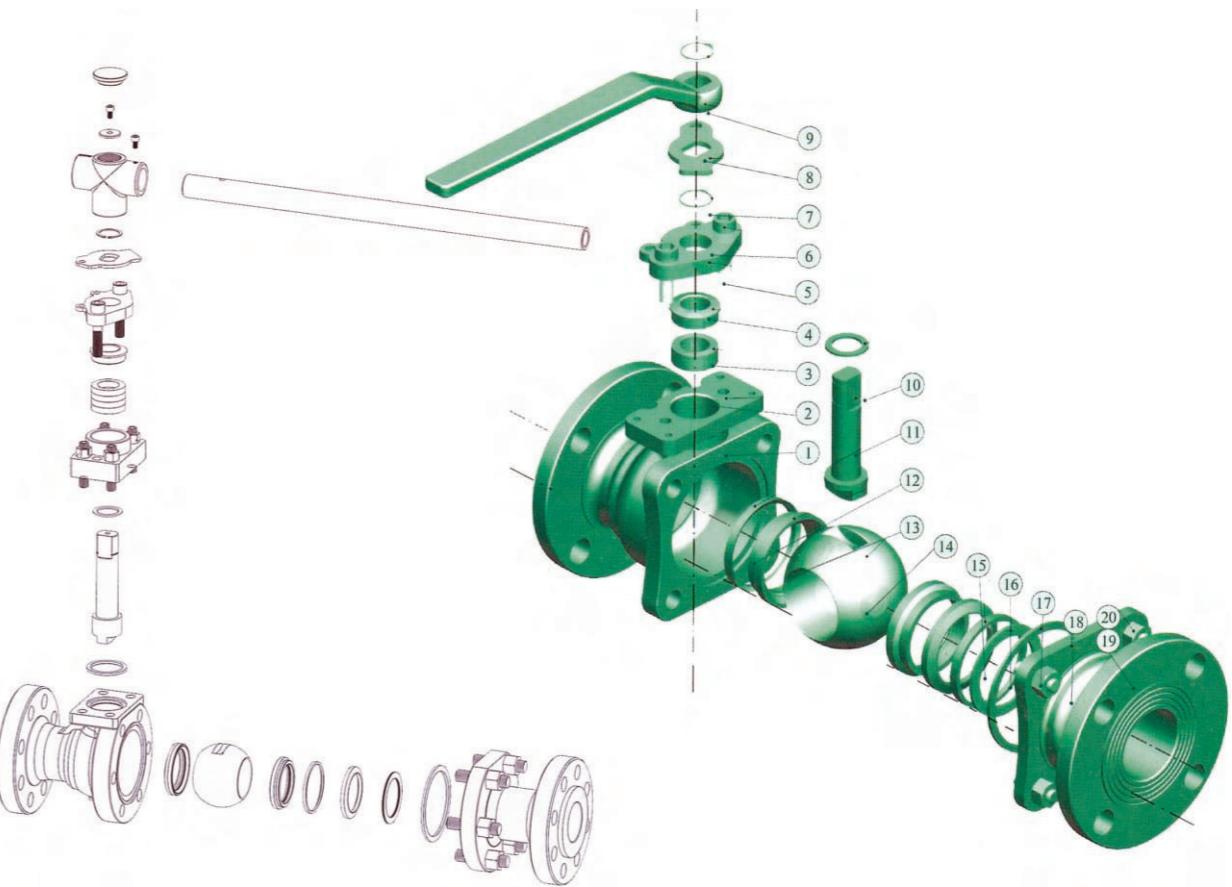
祺隆金属硬密封固定球阀一般采用球前阀座密封结构。金属硬密封固定球阀的两个阀座能独立切断进口端和出口端的介质，实现双阻断功能。当球阀关闭时，即使阀门进口两端同时受压，阀门中腔和两端通道也可以被相互阻断，中腔内的剩余介质可以通过泄放阀排除。

祺隆金属硬密封浮动球阀采用球后阀座密封结构。一般采用单向密封，并在阀体上标有流向。如用户有特殊要求，可以采用祺隆双向密封的专利结构。

QILONG's metal to metal sealed trunnion mounted ball valve is in general of the front ball sealing structure .Actually, two seats of the metal to metal sealed trunnion ball valve can both cut off separately the medium atinlet and out let to realize double-block function. When the valve is closed, the body cavity and both thebore ends can be blocked with each other even if both ends of the valve are under pressure at the same time. Where as the medium left in the body cavity may relieve through the relief valve.

QILONG's metal to metal sealed floating ball valve is of behind ball sealing structure, employing in general single direction tightness. The flow direction is indicated on the valve body. If specially required by customers, QILONG's patent of bi-direction Sealling design maybe selected.

金属硬密封浮动球阀
Metal to metal sealed floating ball valve



金属硬密封浮动球阀典型结构及零部件组成 Typical drawing of metal to metal sealed floating ball valve and parts composition

- 1-阀体；2-填料；3-填料压套；4-填料压板；5-螺钉；6-挡圈；7-定位片；8-扳手；9-挡圈；10-上密封垫；11-阀杆；12-阀座密封垫；13-阀座；14-球体；15-压圈；16-蝶簧；17-垫片；18-阀盖；19-螺柱；20-螺母。
- 1 -Body; 2 -Packing; 3 -Gland; 4 -Gland flange; 5 -Bolt; 6 -Circlip; 7 -Stop collar; 8 -Lever; 9 -Circlip; 10 -Thrust washer; 11 -Stem; 12 -seat seal washer; 13 -Seat; 14 -Ball; 15 -pressing ring ;16 -Spring; 17 -Gasket; 18 -Bonnet; 19 -Packing; 20 -Nut

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									
ASME B16.5 GB/T9112-9124 HG/T 20615	Class150	凸面 RF	Q41Y-A1C	Q41Y-A1P	Q41Y-A1P8	Q41Y-A1P3	Q41Y-A1R	Q41Y-A1R8	Q41Y-A1R3			
	Class300		Q41Y-A3	Q41Y-A3P	Q41Y-A3P8	Q41Y-A3P3	Q41Y-A3R	Q41Y-A3R8	Q41Y-A3R3			
	Class600		Q41Y-A6	Q41Y-A6P	Q41Y-A6P8	Q41Y-A6P3	Q41Y-A6R	Q41Y-A6R8	Q41Y-A6R3			
	Class900		Q41Y-A9	Q41Y-A9P	Q41Y-A9P8	Q41Y-A9P3	Q41Y-A9R	Q41Y-A9R8	Q41Y-A9R3			
	Class1500		Q41Y-A15	Q41Y-A15P	Q41Y-A15P8	Q41Y-A15P3	Q41Y-A15R	Q41Y-A15R8	Q41Y-A15R3			
GB/T9112~9124 HG/T 20592 JB/T 74~90	PN16	凸面 RF	Q41Y-16C	Q41Y-16P	Q41Y-16P8	Q41Y-16P3	Q41Y-16R	Q41Y-16R8	Q41Y-16R3			
	PN25		Q41Y-25	Q41Y-25P	Q41Y-25P8	Q41Y-25P3	Q41Y-25R	Q41Y-25R8	Q41Y-25R3			
	PN40	凹凸面 MF	Q41Y-40	Q41Y-40P	Q41Y-40P8	Q41Y-40P3	Q41Y-40R	Q41Y-40R8	Q41Y-40R3			
	PN63		Q41Y-63	Q41Y-63P	Q41Y-63P8	Q41Y-63P3	Q41Y-63R	Q41Y-63R8	Q41Y-63R3			
	PN100		Q41Y-100	Q41Y-100P	Q41Y-100P8	Q41Y-100P3	Q41Y-100R	Q41Y-100R8	Q41Y-100R3			
主要零件 Main parts material	阀体Body	WCB A105	ZG1Cr18Ni9Ti 1Cr18Ni9Ti	CF8 304	CF3 304L	ZG1Cr18Ni12Mo2Ti 1Cr18Ni12Mo2Ti	CF8M 316	CF3M 316L				
	阀杆Stem	2Cr13	1Cr18Ni9Ti	0Cr18Ni9 (304)	00Cr19Ni10 (304L)	1Cr18Ni12Mo2Ti	0Cr17Ni12Mo2 (316)	00Cr17Ni14Mo2 (316L)				
	球体Ball	2Cr13+镍基合金 (或钨钴合金)	1Cr18Ni9Ti +镍基合金 (或钨钴合金)	0Cr18Ni9 +镍基合金 (或钨钴合金)	00Cr19Ni10 +镍基合金 (或钨钴合金)	1Cr18Ni12Mo2Ti +镍基合金 (或钨钴合金)	0Cr17Ni12Mo2 +镍基合金 (或钨钴合金)	00Cr17Ni14Mo2 +镍基合金 (或钨钴合金)				
	阀座Seat	2Cr13+硬质合金	1Cr18Ni9Ti +硬质合金	0Cr18Ni9 +硬质合金	00Cr19Ni10 +硬质合金	1Cr18Ni12Mo2Ti +硬质合金	0Cr17Ni12Mo2 +硬质合金	00Cr17Ni14Mo2 +硬质合金				
	垫片Gasket	304+柔性石墨缠绕垫片 304+Flexible graphite gasket			316+柔性石墨缠绕垫片 316+Flexible graphite gasket		316L+柔性 石墨缠绕垫片 316L+Flexible graphite gasket					
	填料Packing	柔性石墨 Flexible graphite										
适用工况 Applicable condition	适用介质 Applicable medium	非腐蚀性介质或弱腐蚀性介质 Non-corrosive medium or Weak corrosive medium		硝酸类腐蚀介质 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	≤425°C	≤540°C		≤425°C	≤540°C	≤455°C					
涡轮蜗杆传动金属硬密封球阀 worm gear Metal to metal sealed Floating ball valve		在相应的手动型号的Q后插入“3”表示，示例：Q341Y-A1C										
气动金属硬密封球阀 pneumatic Metal to metal sealed Floating ball valve		在相应的手动型号的Q后插入“6”表示，示例：Q641Y-A1C										
电动金属硬密封球阀 electric Metal to metal sealed Floating ball valve		在相应的手动型号的Q后插入“9”表示，示例：Q941Y-A1C										
缩径金属硬密封球阀 reduced bore Metal to metal sealed Floating ball valve		在相应的全通径球阀的型号前加“S”表示，示例：SQ941Y-A1C										
注：本表为常规法兰连接金属硬密封球阀的型号编制、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 metal sealed ball valve.												

主要尺寸及重量 Main sizes and weights

金属硬密封浮动球阀的主要尺寸及重量参见浮动球阀，金属硬密封浮动球阀的连接法兰尺寸及结构长度尺寸与浮动球阀相同。

Refer to that of floating ball valve for main dimensions and weights of metal to metal sealed floating ball valve. The flange dimensions and face to face dimensions are the same as that of floating ball valve.

产品范围 Products range

金属硬密封浮动球阀的产品范围见下表。
Products range of metal to metal sealed floating ball valve as follows.

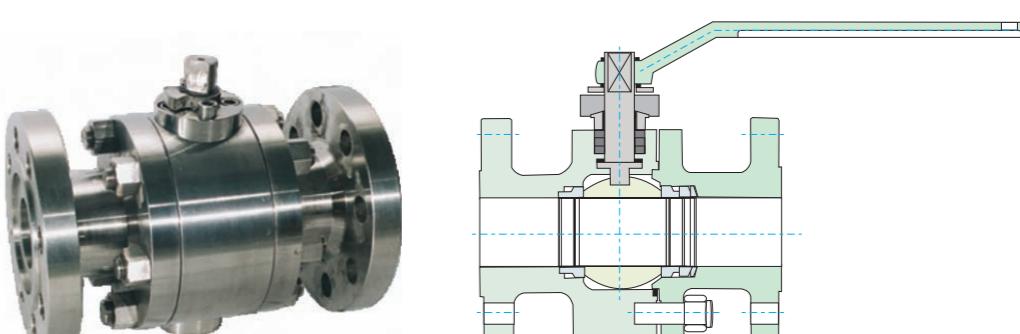
公称尺寸 Dimensions	DN	15	20	25	32	40	50	65	80	100	125	150
	NPS	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6
公称压力 Stage or nominal pressure	Class150 PN20	☆	☆	☆	☆	☆	☆	☆	☆	△	△	△
	Class300 PN50	☆	☆	☆	☆	☆	☆	△	△	△	—	—
	Class600 PN110	☆	☆	☆	☆	☆	△	△	△	—	—	—
	Class900 PN150	☆	☆	☆	☆	△	△	△	—	—	—	—
	Class1500 PN260	☆	☆	☆	☆	△	△	—	—	—	—	—
	PN16	☆	☆	☆	☆	☆	☆	☆	☆	△	△	△
	PN25	☆	☆	☆	☆	☆	☆	☆	☆	△	△	△
	PN40	☆	☆	☆	☆	☆	☆	☆	☆	△	△	△
	PN63	☆	☆	☆	☆	☆	△	△	△	△	—	—
	PN100	☆	☆	☆	☆	☆	△	△	△	△	—	—

注：对于手动球阀，☆表示采用扳手，△表示采用蜗轮蜗杆传动。
Note: For the manual ball valve, ☆ indicates that Lever is suggested , △ indicates that worm gear is suggested.

锻钢金属硬密封浮动球阀 Forged steel metal to metal sealed floating ball valve

祺隆公司的金属硬密封浮动球阀一般采用铸钢阀体、根据用户要求，也可采用锻钢阀体，锻钢球阀的法兰连接尺寸、结构长度等主要尺寸与铸钢球阀相同。

QILONG's metal to metal sealed floating ball valve is in general employing casting steel valve body. If required by customers, forged steel valve body is also available, of which the flange dimensions and face to face dimensions are the same as that of cast steel ball valve.

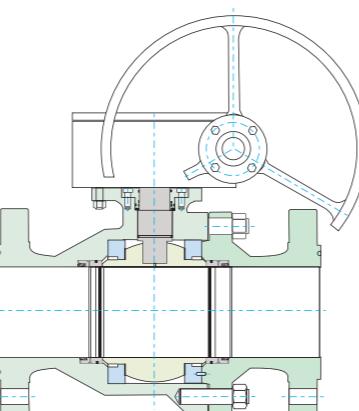


锻钢金属硬密封浮动球阀

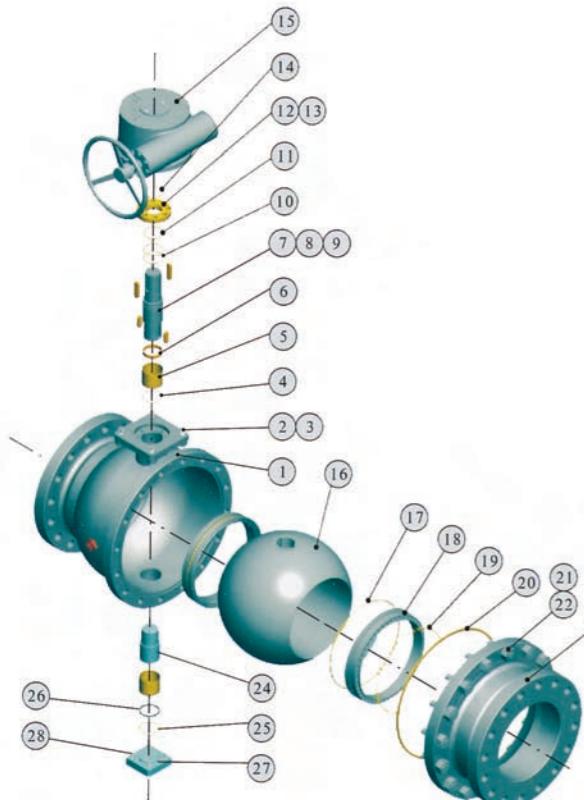
Forged steel Metal to metal sealed Floating ball valve

金属密封固定球阀

Metal to metal sealed trunnion mounted ball valve



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1-阀体;	1-Body	16-球体;	16-Ball
2-螺柱;	2-Stud	17-O型圈;	17-O ring
3-螺母;	3-Nut	18-阀座;	18-Seat
4-O型圈;	4-O ring	19-弹簧;	19-Spring
5-轴套;	5-Bush	20-垫片;	20-Gasket
6-隔圈;	6-Washer	21-螺柱;	21-Stud
7-阀杆;	7-Stem	22-螺母;	22-Nut
8-键;	8-Key	23-阀盖;	23-Bonnet
9-键;	9-Key	24-下轴;	24-Trunnion
10-O型圈;	10-O ring	25-O型圈;	25-O ring
11-垫片;	11-Gasket	26-调整垫;	26-Adjusting cushion
12-压盖;	12-Gland	27-下端盖;	27-Down end cap
13-螺钉;	13-Bolt	28-螺钉;	28-Bolt
14-O型圈;	14-O ring		
15-蜗轮蜗杆传动装置;	15-Worm gear transmission device		

金属硬密封固定球阀典型结构及零件组成
Typical drawing of metal to metal sealed trunnion mounted ball valve and parts composition

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												
			Q347Y-A1C	Q347Y-A1P	Q347Y-A1P8	Q347Y-A1P3	Q347Y-A1R	Q347Y-A1R8	Q347Y-A1R3						
ASME B16.5 GB/T9112-9124 HG/T 20615	Class150	凸面 RF	Q347Y-A3	Q347Y-A3P	Q347Y-A3P8	Q347Y-A3P3	Q347Y-A3R	Q347Y-A3R8	Q347Y-A3R3						
	Class300		Q347Y-A6	Q347Y-A6P	Q347Y-A6P8	Q347Y-A6P3	Q347Y-A6R	Q347Y-A6R8	Q347Y-A6R3						
	Class600		Q347Y-A9	Q347Y-A9P	Q347Y-A9P8	Q347Y-A9P3	Q347Y-A9R	Q347Y-A9R8	Q347Y-A9R3						
	Class900		Q347Y-A15	Q347Y-A15P	Q347Y-A15P8	Q347Y-A15P3	Q347Y-A15R	Q347Y-A15R8	Q347Y-A15R3						
	Class1500		Q347Y-A25	Q347Y-A25P	Q347Y-A16P8	Q347Y-A25P3	Q347Y-A25R	Q347Y-A25R8	Q347Y-A25R3						
	Class2500		Q347Y-16C	Q347Y-16P	Q347Y-25P8	Q347Y-16P3	Q347Y-16R	Q347Y-16R8	Q347Y-16R3						
GB/T9112-9124 HG/T 20592 JB/T 74-90	PN16	凸面 RF	Q347Y-25	Q347Y-25P	Q347Y-25P8	Q347Y-25P3	Q347Y-25R	Q347Y-25R8	Q347Y-25R3						
	PN25		Q347Y-40	Q347Y-40P	Q347Y-40P8	Q347Y-40P3	Q347Y-40R	Q347Y-40R8	Q347Y-40R3						
	PN40		Q347Y-63	Q347Y-63P	Q347Y-63P8	Q347Y-63P3	Q347Y-63R	Q347Y-63R8	Q347Y-63R3						
	PN63		Q347Y-100	Q347Y-100P	Q347Y-100P8	Q347Y-100P3	Q347Y-100R	Q347Y-100R8	Q347Y-100R3						
	PN100		Q347Y-160	Q347Y-160P	Q347Y-160P8	Q347Y-160P3	Q347Y-160R	Q347Y-160R8	Q347Y-160R3						
	PN160														
主要零件 材料 Main parts material	阀体Body	WCB A105	ZG1Cr18Ni9Ti 1Cr18Ni9Ti	CF8 304	CF3 304L	ZG1Cr18Ni12Mo2Ti 1Cr18Ni12Mo2Ti	CF8M 316	CF3M 316L							
	阀杆Stem	2Cr13	1Cr18Ni19Ti	0Cr18Ni9 (304)	00Cr19Ni10 (304L)	1Cr18Ni12Mo2Ti	0Cr17Ni12Mo2 (316)	00Cr17Ni14Mo2 (316L)							
	球体Ball	2Cr13+镍基合金 (或钨钴合金)	1Cr18Ni19Ti +镍基合金 (或钨钴合金)	0Cr18Ni9 +镍基合金 (或钨钴合金)	0Cr19Ni10 +镍基合金 (或钨钴合金)	1Cr18Ni12Mo2Ti +镍基合金 (或钨钴合金)	0Cr17Ni12Mo2 +镍基合金 (或钨钴合金)	00Cr17Ni14Mo2 +镍基合金 (或钨钴合金)							
	阀座Seat	2Cr13+硬质合金	1Cr18Ni19Ti +硬质合金	0Cr18Ni9 +硬质合金	00Cr19Ni10 +硬质合金	1Cr18Ni12Mo2Ti +硬质合金	0Cr17Ni12Mo2 +硬质合金	00Cr17Ni14Mo2 +硬质合金							
适用工况 Applicable condition	适用介质 Applicable medium	非腐蚀性介质或弱腐蚀性介质 Non-corrosive medium or Weak corrosive medium	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	≤425°C	≤540°C	≤425°C	≤540°C	≤425°C	≤540°C	≤455°C							
手动金属硬密封球阀 manual Metal to metal sealed trunnion mounted ball valve				将相应的手动型号的Q后插入“3”表示，示例：Q347Y-A1C											
气动金属硬密封球阀 pneumatic Metal to metal sealed trunnion mounted ball valve				将相应的手动型号的Q后插入“6”表示，示例：Q647Y-A1C											
电动金属硬密封球阀 electric Metal to metal sealed trunnion mounted ball valve				将相应的手动型号的Q后插入“9”表示，示例：Q947Y-A1C											
缩径金属硬密封球阀 reduced bore Metal to metal sealed trunnion mounted ball valve				将相应的全通径球阀的型号前加“S”表示，示例：SQ947Y-A1C											
注：本表为常规法兰连接蜗轮蜗杆硬密封球阀的型号编制、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。 金属硬密封固定球阀分为常温和高温型，当使用温度大于180°C，订货时应注明使用温度。															
Note: This table is about the model preparation,main parts material and applicable condition of flange ends matal to metal sealed trunnion mounted ball valve with gear operation. And the matal to metal sealed trunnion mounted ball valves have normal temperature type and high temperature type,please make a notice when order the valve used in 180°C condition even higher.															

主要尺寸及重量 Main sizes and weights

金属硬密封固定球阀的主要尺寸及重量参见固定球阀，金属硬密封固定球阀的连接尺寸及结构长度尺寸与固定球阀相同。

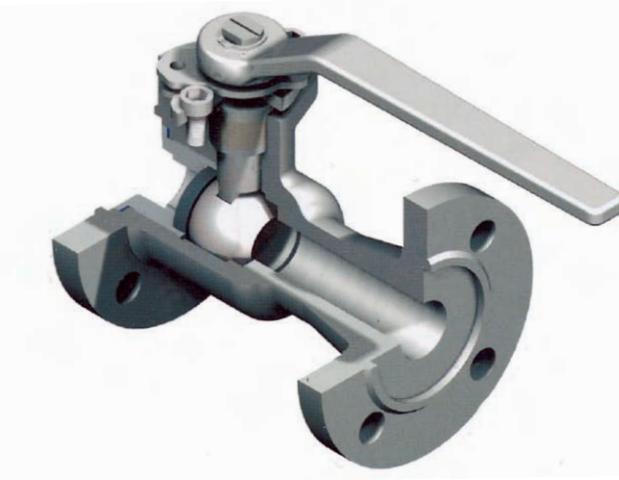
Refer to that of trunnion mounted ball valve for main sizes and weights of metal to metal sealed trunnion mounted ball valve,of which the flange dimensions and face to face dimensions are the same as that of trunni on mounted ball valve.

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产品范围 Products range

金属硬密封固定球阀的产品范围见下表。
Products range of metal to metal sealed trunnion ball valve is as below table

公称尺寸 Dimensions	DN	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400
NPS	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	48	56	
公称压力 Pressure Rating	Class150 PN20	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	
	Class300 PN50	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	
	Class600 PN110	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	
	Class900 PN150	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	
	Class1500 PN260	△	△	△	△	△	△	△	△	△	△	—	—	—	—	—	—	
	Class2500 PN420	△	△	△	△	△	△	△	△	△	△	—	—	—	—	—	—	
	PN16	△	△	△	△	△	△	△	△	△	△	—	—	—	—	—	—	
	PN25	△	△	△	△	△	△	△	△	△	△	—	—	—	—	—	—	
	PN40	△	△	△	△	△	△	△	△	△	△	—	—	—	—	—	—	
	PN63	△	△	△	△	△	△	△	△	△	△	—	—	—	—	—	—	
	PN100	△	△	△	△	△	△	△	△	△	△	—	—	—	—	—	—	
	PN160	△	△	△	△	△	—	—	—	—	—	—	—	—	—	—	—	



用 途 Application

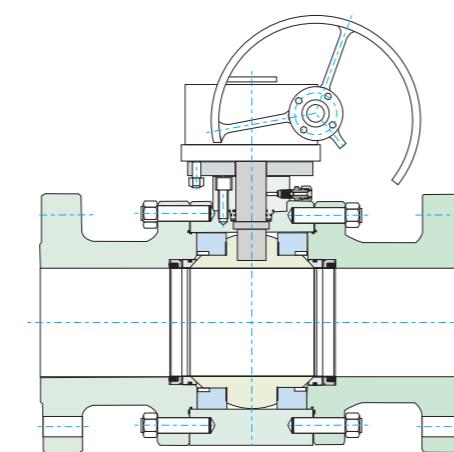
整体式球阀适用于Class150~Class300、PN16~40、JIS10K~20K的各种管道上，用于截断或接通管路中的介质，选用不同的材质，可分别适用于水、蒸汽、油品、液化气、天然气、煤气、硝酸、醋酸、氧化性介质、尿素等多种介质。整体式球阀的驱动方式为手动、蜗轮蜗杆传动、气动或电动。整体式球阀采用法兰连接，缩径。

One piece body ball valve is suitable for using on various kinds of pipelines of Class150 to Class300, PN16 to PN40, JI S10K to JIS20K to turn off or on the pipeline medium, of which operation manners are of manual, worm gear, pneumatic or electric actuators, being of flange connection with reduced bore.

锻钢金属硬密封浮动球阀 Forged steel metal to metal sealed trunnion ball valve

祺隆公司的金属硬密封固定球阀一般采用铸钢阀体、根据用户要求，也可采用锻钢阀体，锻钢金属硬密封固定球阀的法兰连接尺寸及结构长度等主要尺寸与铸钢固定球阀相同。

QILONG company's metal to metal sealed trunnion mounted ball valve is in general employing casting steel body. As per customers' requirement, forged steel body is also available, of which the flange dimensions and face to face dimensions are the same cast steel trunnion mounted ball valve.



锻钢金属硬密封固定球阀
Forged steel metal to metal sealed trunnion ball valve

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(法兰连接手动整体式球阀) Conventional product model(Flange ends manual alone piece body ball valve)															
			QZ41F-A1C	QZ41F-A1P	QZ41F-A1P8	QZ41F-A1P3	QZ41F-A1R	QZ41F-A1R8	QZ41F-A1R3									
ASME B16.5 GB/T9112-9124 HG/T 20615	Class150	凸面 RF	QZ41F-A3	QZ41F-A3P	QZ41F-A3P8	QZ41F-A3P3	QZ41F-A3R	QZ41F-A3R8	QZ41F-A3R3									
	Class300		QZ41F-16C	QZ41F-16P	QZ41F-16P8	QZ41F-16P3	QZ41F-16R	QZ41F-16R8	QZ41F-16R3									
GB/T9112-9124 HG/T 20592 JB/T 74-90	PN16	凸面 RF	QZ41F-25	QZ41F-25P	QZ41F-25P8	QZ41F-25P3	QZ41F-25R	QZ41F-25R8	QZ41F-25R3									
	PN25		QZ41F-40	QZ41F-40P	QZ41F-40P8	QZ41F-40P3	QZ41F-40R	QZ41F-40R8	QZ41F-40R3									
	PN40		QZ41F-K1C	QZ41F-K1P	QZ41F-K1P8	QZ41F-K1P3	QZ41F-K1R	QZ41F-K1R8	QZ41F-K1R3									
JIS B2238	10K	凹凸面 MF	QZ41F-K2	QZ41F-K2P	QZ41F-K2P8	QZ41F-K2P3	QZ41F-K2R	QZ41F-K2R8	QZ41F-K2R3									
	20K		WCB A105	ZG1Cr18Ni9Ti 1Cr18Ni9Ti	CF8 304	CF3 304L	ZG1Cr18Ni12Mo2Ti 1Cr18Ni12Mo2Ti	CF8M 316	CF3M 316L									
主要零件 Main parts material	球体、阀杆 Ball、Stem	2Cr13	1Cr18Ni9Ti	0Cr18Ni9 (304)	00Cr19Ni10 (304L)	1Cr18Ni12Mo2Ti (316)	0Cr17Ni12Mo2 (316)	00Cr17Ni14Mo2 (316L)										
	密封面 sealing surface	增强聚四氟乙烯、对位苯、钴钨合金、镍基合金及特种硬化材料 PTFE、PPL、MONE、STELLTEL、SPECIAL ALLOY																
	适用工况 Applicable condition	<table border="1"> <tr> <td>适用介质 Applicable medium</td> <td>水、蒸汽、油品、煤气、液化气、天然气等 Water, Steam Oils, Coal gas, Liquefied gas, gas</td> <td>硝酸类腐蚀性介质 Nitric acid corrosion medium</td> <td>强氧化性介质 Strong oxidizing medium</td> <td>醋酸类腐蚀性介质 Acetic acid corrosive medium</td> <td>尿素类腐蚀性介质 Urea corrosive medium</td> </tr> <tr> <td>适用温度 Applicable temperature</td> <td colspan="5"><180°C (增强聚四氟乙烯)、<300°C (对位苯)、<500°C (钴钨合金、镍基合金及特种硬化材料) <180°C (PTFE)、<300°C (PPL)、<500°C (MONE, STELLTEL, SPECIAL ALLOY)</td> </tr> </table>						适用介质 Applicable medium	水、蒸汽、油品、煤气、液化气、天然气等 Water, Steam Oils, 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°C (增强聚四氟乙烯)、<300°C (对位苯)、<500°C (钴钨合金、镍基合金及特种硬化材料) <180°C (PTFE)、<300°C (PPL)、<500°C (MONE, STELLTEL, SPECIAL ALLOY)			
适用介质 Applicable medium	水、蒸汽、油品、煤气、液化气、天然气等 Water, Steam Oils, 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													
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涡轮蜗杆传动球阀 worm gear ball valve			将相应的手动型号的Q后插入“3”表示，示例：QZ41F-A1C															
气动球阀 pneumatic ball valve			将相应的手动型号的Q后插入“6”表示，示例：QZ641F-A1C															
电动球阀 electric ball valve			将相应的手动型号的Q后插入“9”表示，示例：QZ941F-A1C															

注：本表为常规法兰连接手动整体式球阀的型号编制、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 matal to metal sealed ball valve.