



法兰球阀安装使用说明书

Installation, Operation & Maintenance
Instruction
Flanged End Ball Valve



用途 Application

VALPRES阀门适用于室内和室外，阀门的技术特点，如类型、大小、最大工作压力，最大和最小的操作温度，法兰连接，系列号，都标注在阀体表面。阀工作条件不要超出制造商注明的环境和性能参数。

VALPRES valves are suitable for both indoor and outdoor uses. The technical features of the valves, such as type, size, maximum operating pressure, maximum and minimum operating temperature, flange connection, series number, are all indicated on the body. Do not use the valves beyond the operating conditions (both the environmental and the performance ones) or beyond the features stated by manufacturer.

范围 Scope

本说明书适用于法兰连接端球阀。 This instruction applies to flanged end body ball Valves.

储存 Storage

阀门存放的地方不能太潮湿，温度在-10到+60° C之间。如果阀门需要长时间存放，最好不要丢弃包装，一定要将阀门一直存放在包装内。如果阀门没有包装，则必须在阀门的末端加上塑料盖加以保护，塑料盖通常是随产品一起提供的。储存期间应该要保护好阀门，避免液体或其他物质在储存过程中渗透，从而损坏阀球或密封件。因此，阀门储存两年以上后，建议在安装阀门之前检查其功能和密封。

Choose clean sites for storage, not excessively humid and with temperatures between -10 and +60°C. If the products are to be stored for long periods of time, it is best not to remove them from their protective packaging. Keep the valves in the package during storage. If the valves are not packaged, then they must be protected by applying plastic caps to the ends, which are usually supplied with the product, in order to avoid liquid or other to penetrate during storage and thus damage the ball or the seals. Should it appear appropriate to apply products for the preservation and protection of the valve, for this reason, after storage periods of more than two years, it is recommended to check the functionality and the seals before mounting the valve in the line.

使用限制 Warning(Restrictions on use)

温度和压力限制

- 阀体上有球阀在最大和最小温度下所允许的最大操作压力。
- 使用PTFE密封件，操作温度应在-20°C到160°C之间，其他类型的阀座和密封件的操作温度，应咨询工厂的检核。
- 阀的公称压力等级，可表明阀在正常温度状态下的最大工作压力。

禁止节流操作

- 请不要使阀球经常处于半开状态(流量控制)，管道的压力差和流体的冲击将可能导致球或者阀座的损坏。

Temperature and Pressure limit

- The normal maximum operating pressure at maximum or minimum operating temperature is shown on valve body.
- The operating temperature is within -20 °C~60 °C for PTFE seat and sealing. Others seat and sealing operating temperature shall be checked with factory .
- The nominal pressure rating describes body maximum working pressure in cold operating temperature .The working temperature may differ in case using different material of seat, stem packing and body gasket.

Don't throttling operation

- Don't leave the ball partly open (throttling operation), where the pressure drop and/or flow rate damage to the valve seats and/or ball.





安装 Installation

阀门在装上管道的时候，要先检查阀门的状况，确保所有部件都完好无损。操作必须由有经验和合格的工作人员进行。安装人员在安装阀门时，先要将阀门旋转至全开或者全关的位置进行，以避免损坏阀座密封面和球体。安装时要特别小心，不要让任何类型或大小的异物进入管路，否则会危及正确和安全操作阀门和系统本身。

当阀门安装到管道上后，在对管道进行加压之前，必须要检查阀盖、接头、排水阀的拧紧情况、法兰与阀体和盖子之间的螺栓、螺钉的紧固性。

安装完成后，用气体清洗管道，以清除任何残留物、油脂或油或异物。

Check the condition before assembling the valve on the line, making sure that all the parts are intact. operations must be carried out by an experienced and qualified staff.

It is totally the installer's responsibility to couple the valve in the line. Place the valve with the ball fully open or fully closed, in order to avoid damage to the sealing surface of the seats and of the ball itself. Take special care during assembly, not to let foreign objects of any type or size inside the line, for this could jeopardize the correct and safe operation of the valve and the system itself.

Once the valve is connected in the line, before proceeding to the pressurization of the same, it is necessary to: Check the presence of (any) caps, nipples, drain valves and their correct tightening; Check the tightness of bolts and/or screws between the body/flange and body and lids;

It can be done after completing the installation, cleaning the system with inert gases, vapors or liquids (always checking the compatibility of the fluid that is being used, with the valve), to remove any residue, grease or oil, or foreign objects.

- 1、安装前请确认阀门上的标识(如压力、流向、材质等)是否符合使用要求。
- 2、取掉法兰端两边保护盖,在阀完全打开的状态下进行冲洗清洁。
- 3、准备与管道连接前,请冲洗和清除干净管道中所有堆积的杂质(这些物质可能会损坏阀座和球)。
- 4、在安装期间,请不要利用阀的阀杆或手柄(手轮)部分作为起重支点,以避免出现倒塌和其他意外事故。
- 5、本类阀可以放置于管道的任何位置和方向
- 6、安装点附近的管道不可有低垂或者承受外力的现象,可以用管道支架或者支撑物来消除管线的偏离。
- 7、与管道连接后,请用规定的扭距交叉锁紧法兰连接螺栓。

- 1、Before installation, please make sure if the marking on valve (such as pressure, flow direction, material..etc) is accordance with the application requirement.
- 2、Remove the protective cover on both flange end, and clean or flush the valve in fully open position.
- 3、Prior to mounting, flush and clean the pipeline and valve to remove all accumulated extraneous materials.
- 4、During the handling process, do not use the valve stem or handle (wheel) as a fulcrum for the lifting cable to avoid collapse and accidental injury.
- 5、The valve may be fitted in any position and direction in the pipeline.
- 6、Make sure the pipeline at the installation point is not bent down and/or tension, use a pipe hanger or supports for the purpose to eliminate any deviation of the piping.
- 7、Tighten the flange bolt crosswise using the stipulated torque.

操作和使用 Operation and Use

- 1、操作前确认管路和阀已被冲洗干净。
- 2、阀的操作由旋转阀杆(手动或自动控制方式)完成:顺时针旋转1/4圈(90°)时,阀关断,反向旋转1/4圈(90°)时,阀开启。
- 3、当手柄或阀杆顶部沟槽方向与管线平行时,阀门为开启状态。
- 4、操作扭矩将根据阀门的使用周期、系统中的介质、管道压力和阀座类型的不同而有所不同。
- 5、阀门在使用过程中应进行清洗,需要定期检查,以确认密封、阀杆、垫圈、填料和其他备件是否损坏。如果备件损坏,造成故障,应立即停止阀门操作,更换备件。

- 1、Flush the ball valve and pipeline thoroughly again before operation.
- 2、The operation of the valve consists of turning the stem(by manual or automated means)1/4turn(90°)clockwise to close, and 1/4 turn counter-clockwise to open.
- 3、When the handle (if used) and/or stem flats or groove are in line with the pipe, the valve is open.
- 4、Operating torque requirements will vary depending on the length of time between cycles, media in the system, line pressure and type of valve seat.
- 5、Valves shall be cleaned during operation, Periodical checks is necessary in order to verify if sealing, stem, washer, packing and other spare parts is damaged or not. If spare parts is damaged and cause malfunction , stop valve operation and replace spare parts immediately.





维修 Maintenance

拥有较长的使用寿命和免维修期，将依赖以下几个因素：正常的工作条件，保持和谐的温度/压力比，以及合理的腐蚀数据。

注意：●球阀在关闭状态下，阀体内部依旧存在受压流体。

- 维修前，解除管线压力并使阀门处于打开位置。

填料处得再锁紧

- 若填料处有微泄发生，须再锁紧阀杆螺母(12)。
- 注意不要锁太紧，通常再锁30° 到60°，泄露即会停止。

更换阀座和密封件

拆卸

- 使阀处于半开位置，冲洗，清楚阀体内外可能存在的危险物质。
- 关闭球阀，拆掉两边法兰上的连接螺栓和螺母，然后将阀由管线上完全移除。
- 依序拆卸手柄螺母(12)，手柄(14)或驱动装置，阀杆螺母(12)，蝶形弹片(11)。
- 拆卸体盖，将阀盖与阀体分离。
- 确认阀球(3)在“关断”位置，这可以将其较容易的从阀体拿出，随后取出阀座。
- 由阀体中孔向下轻推阀杆(13)直到完全取出，然后取出O型圈(7)及阀杆下填料(8)。

注意：请谨慎操作，以避免擦伤阀杆表面及阀体填料函密封部件。

Long life and maintenance-free of valves can be maintained under normal working conditions and in accordance with pressure/temperature and corrosion data chart.

Warning: ●Ball Valves can trap pressurized fluids in the Ball cavity in closed position.

- Prior to maintenance, relieve the line pressure and put ball in open position

Re-tighten packing

- Should a leakage occur at the gland packing, retighten the stem (gland) nut (12).
- Take care that the stem nut (12) should not be tightened too much, Normally the leakage can be stopped by simply turning the stem nut (12)by 30°~60°

Replacement of seats and seals.

Disassembly

- Place the valve in half-open position and flush the line to remove any hazardous material from the valve body.
- Place the valve in close position; remove both counter flange bolts & nuts and lift valve from line.
- Remove handle nut(12),handle(14)or actuator set,stem nut(12).Spring washer(11)。
- Remove body , separate from body (1).
- Make sure ball in Close position, thus, the ball(3)can be taken out easily from body, then take out ball seat.
- Push stem(13)down into the body cavity and remove, then remove stem O-ring(7), packing(8)from the stem.

Caution: Do not scratch the surface of ball, stem and packing and sealing parts during disassembling.



serie WAFER

Artt. 720006 - 720009
STAINLESS STEEL CARBON STEEL



A RICHIESTA
ON REQUEST
FIRE-SAFE
ATEX EX



Valvola a sfera flangiata ANSI 150 metrico, a passaggio totale.

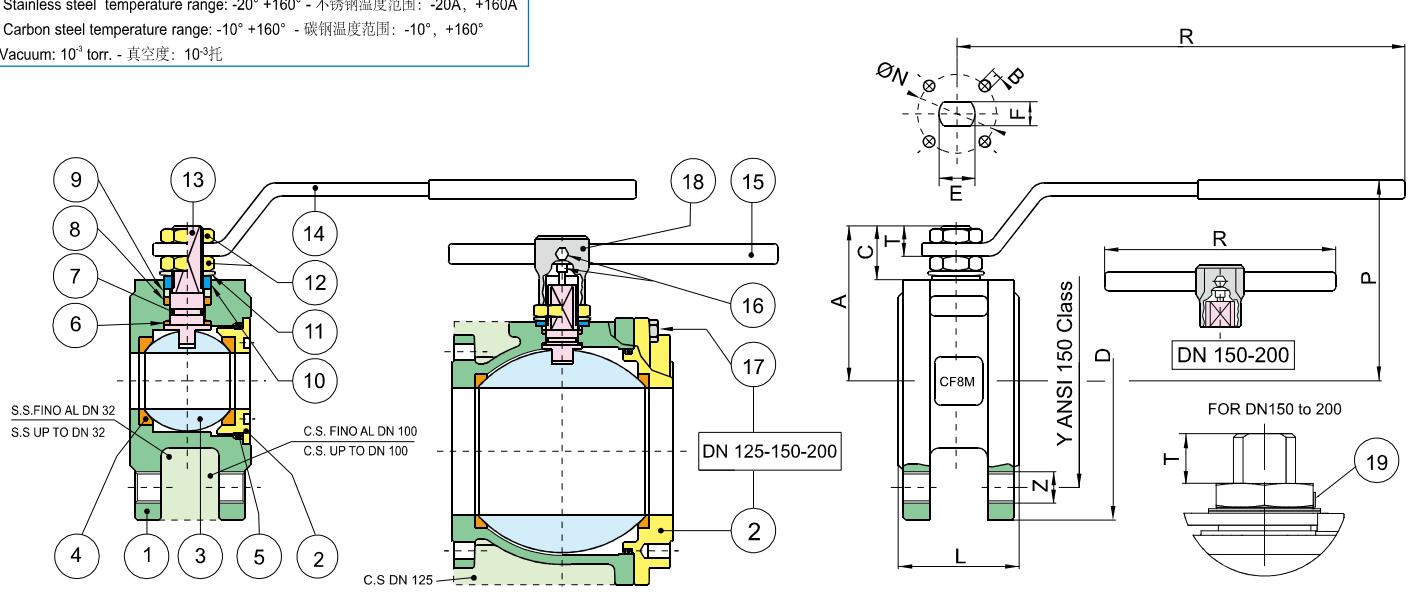
Full bore flanged ball valve ANSI 150 metric.

Vanne à boisseau sphérique à brides ANSI 150 metricque, à passage intégral.

Kompaktflanschkugelhahn ANSI 150 metrisch, mit vollem Durchgang.

全径法兰球阀, 压力 ANSI 150

Stainless steel temperature range: -20° +160° - 不锈钢温度范围: -20A, +160A
Carbon steel temperature range: -10° +160° - 碳钢温度范围: -10°, +160°
Vacuum: 10⁻³ torr. - 真空度: 10⁻³ 托



Art.720006

Art. 720009

POS. 位置	DENOMINAZIONE	PART NAME	DESCRIPTION	TEILBENENNUNG	零部件名称	MATERIALE - MATERIALS - MATERIAUX - WERKSTOFF - MATERIAL	N°P
1	CORPO	BODY	CORPS	GEHÄUSE	阀体	A351-CF8M / A182-F316	ASTM A105 / A216-WCB
2	GHIERA	END CONNECTION	RACCORDS	RING	端部连接	A351-CF8M / A182-F316	ASTM A105 / A216-WCB
3	SFERA	BALL	BILLE	KUGEL	球体	A351-CF8M / A182-F316	A351-CF8 / A182-F304
4	GUARNIZIONE SFERA	BALL SEAT	JOINT DE TENUE BILLE	KUGELDICHTUNG	阀座	P.T.F.E. 聚四氟乙烯	P.T.F.E. 聚四氟乙烯
5	O-RING	O-RING	O-RING	O-RING	O型圈	FKM 氟橡胶(VITON®)	FKM 氟橡胶(VITON®)
6	RONDELLA ASTA	THRUST WASHER	RONDELLE DE L'AXE	SPINDELSCHEIBE	推力垫圈	P.T.F.E. 聚四氟乙烯	P.T.F.E. 聚四氟乙烯
7	O-RING	O-RING	O-RING	O-RING	O型圈	FKM 氟橡胶(VITON®)	FKM 氟橡胶(VITON®)
8	GUARNIZIONE ASTA	STEM SEAT	JOINT DE L'AXE	SPINDELDICHTUNG	阀杆填料	P.T.F.E. 聚四氟乙烯	P.T.F.E. 聚四氟乙烯
9	BUSSOLA PREMIGUARNIZIONE	PACKING GLAND	BAGUE DE PRESSE ETOUPE	VORSPANNRING	密封压盖	CARBON STEEL 碳钢	CARBON STEEL 碳钢
10	RONDELLA MEZZOGIRO	END STOP	RONDELLE	ANSCHLAGSCHEIBE	终点挡板	INOX AISI 不锈钢(DN15 - DN50) CARBON STEEL 碳钢(DN65 - DN150)	INOX AISI 不锈钢(DN15 - DN50) CARBON STEEL 碳钢(DN65 - DN150)
11	MOLLA A TAZZA	SPRING WASHER	RESSORT À DISQUES	TELLERFEDER	弹簧垫圈	CARBON STEEL 碳钢	CARBON STEEL 碳钢
12	DADO	NUT	ECROU	MUTTER	螺母	CARBON STEEL 碳钢	CARBON STEEL 碳钢
13	ASTA	STEM	TIGE	SPINDEL	阀杆	A182-F316	A182 - F304
14	LEVA	HANDLE	POIGNÉE	HANDHEBEL	手柄	CARBON STEEL 碳钢	CARBON STEEL 碳钢
15	LEVA DN150-200	HANDLE DN 150-200	POIGNÉE DN 150-200	HANDHEBEL DN 150-200	DN 150 - 200手柄	CARBON STEEL 碳钢	CARBON STEEL 碳钢
16	VITE	SCREW	VIS	SCHRAUBE	螺丝	CARBON STEEL 碳钢	CARBON STEEL 碳钢
17	VITE	SCREW	VIS	SCHRAUBE	螺丝	CARBON STEEL 碳钢	CARBON STEEL 碳钢
18	CORPO LEVA DN150-200	BODY HANDLE DN150-200	CORPS LEVIER DE COMMAND DN 150-200	HABEL DN150-200	DN 150 - 200 阀柄套	EN-GJL-250	EN-GJL-250
19	RONDELLA ANTISIVITAMENTO	UNSCREWING GROWER	RONDELLE ANTI DÉVISSAGE	SICHERUNGSSCHEIBE	防松垫片	A182-F316	A182-F316

MISURA SIZE	DN	D	Y	Z	L	R	P	A	C	T	E	F	ØN	B	Kv	PN	Kg 720006	Kg 720009
1/2"	15	90	61	4 X M14	35	131	65	47	15,5	9	10	7	32	4 X M5	19,2	20	1,30	1,30
3/4"	20	100	70	4 X M14	40	131	69	51,5	15,5	9	10	7	32	4 X M5	35,0	20	1,80	1,80
1"	25	110	80	4 X M14	46	174	80	61	17	11	12	8	42	4 X M5	64,5	20	2,20	2,70
1 1/4"	32	118	89	4 X M14	54	174	84	64,5	15	11	12	8	42	4 X M5	103,8	20	3,30	4,30
1 1/2"	40	127	99	4 X M14	63,5	250	102	78	24,5	13	16	10	50	4 X M6	174,0	20	3,30	5,10
2"	50	150	121	4 X M16	82	250	111	87	25	13	16	10	50	4 X M6	301,3	20	5,50	8,80
2 1/2"	65	175	140	4 X M16	103	321	128	104,5	25	18	20	14	70	4 X M8	545,7	20	9,60	15,60
3"	80	190	153	4 X M16	122	321	138	115	28,5	18	20	14	70	4 X M8	872,5	20	12,80	20,80
4"	100	220	191	8 X M16	152	381	156	137	34,5	22	24	18	102	4 X M10	1363,3	20	21,10	34,20
5"	125	250	216	8 X M20	196	381	178	159	34	22	24	18	102	4 X M10	2360,3	20	37,50	40,50
6"	150	280	242	8 X M20	232	700	266	201,5	51,5	30	42	30	125	4 X M12	3671,1	20	63,5	63,50
8" *	200	345	298,5	8 X Ø22	457	700	332	288	68	41	42	30	125	4 X M12	6816,6	20	124,00	124,00



VALPRES





重新组装

- 清洗和检查拆下零件, 强烈推荐用备用零件包更换其阀座及阀盖垫圈等密封件.
- 按拆卸的相反顺序进行重组过程.
- 锁紧阀盖.
- 锁紧阀杆螺母(12)
- 用温和的前后运动来旋转阀杆, 逐渐扩展至打开和关闭位置.
- 如有可能, 请在安装回管道前, 按相关标准对阀进行压力测试.

Reassembly

- Reassembly process is reverse sequence of disassembly.
- Clean and inspect all parts, full replacement of all soft parts (seats and seals) is strongly recommended.
- Tighten the end connection
- Tighten the stem nut (12)
- Cycle the valve slowly with gentle back and forth motion to build gradually to full quarter turn.
- If possible, test the valve before placing it back to line for service.

Trouble shooting

故障现象 Problem	原因 Cause	对策 Remedy
内漏 Valve leakage on the line	阀球未完全关闭 Ball incomplete closure	检查操作系统 Check the manoeuvring system
	阀球、阀座磨损 Worn seats/ ball	更换磨损配件 Replace worn parts
	实际工况条件超出了阀门的运行范围 operating conditions exceed the ones established for the project	联系我们 Contact us
外漏 Leakage on the outside	阀杆密封磨损 Damage on the stem seat	更换磨损件 Replace worn parts
	实际工况条件超出了阀门的运行范围 operating conditions exceed the ones established for the project	联系我们 Contact us
阀门不动作 Blocked valve	传动故障 Driving system fault	联系我们 Contact us
	阀腔内有异物 Accumulation of solid particulate in the cavities of the body	清理阀腔并更换磨损件 Clean up cavity of the body and Replace worn parts
	执行机构与阀门连接处断开 Actuator- valve connection's break	联系我们 Contact us

