

# 柯普乐<sup>®</sup> 旁路腔体 (BZG)

KSR KUEBLER® External Chamber (BZG)

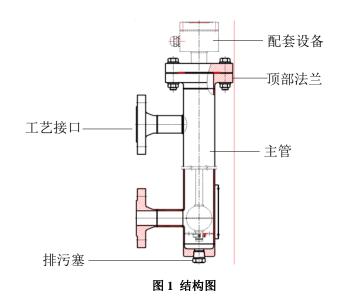
安装和操作说明书

Mounting and operating instructions

上海柯普乐自动化仪表有限公司 Shanghai KSR-KUEBLER Automation Instrument Co., Ltd.

# 工作原理

BZG 旁路腔体通过至少两个工艺接口与罐体连接,形成一个连通器,可将罐体内介质等高引入旁路腔体内。筒体内可安装配套设备,对液位进行测量、报警或控制等。配套设备可以是浮球液位变送器、磁性浮球开关、磁致伸缩液位变送器等浮球类设备,或是导波雷达、音叉、光电式开关等无浮球类设备,具体请参照配套设备的使用说明书。



## 适用范围

耐腐蚀性强,适用于各种工业场所,广泛应用于化工、石油化学、天然气、制药业、海上勘探、造船业、发电厂、动力装置、机器制造业、纯净水净化装置、饮料和食品工业等。

#### 结构安装

BZG 通过工艺接口与罐体安装,将上、下工艺接口(法兰、螺纹、焊接端等)与罐体上的相应接口对齐,安装、紧固,即可完成安装。 拆卸掉顶部法兰的紧固件,可以将配套设备从旁路腔体内取出。

警告! 当设备内的液体是有压、有毒、易燃的危险性液体时,安装前应放 空设备内的液体,必要时应进行冲洗,待内部干净后再进行安装。

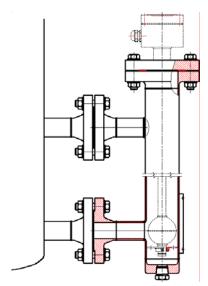


图 2 安装示意图

**电气接线** 请参考相应配套设备的使用说明书。

信号调试 请参考相应配套设备的使用说明书。

**触点保护** 请参考相应配套设备的使用说明书。

**防爆说明** 请参考相应配套设备的使用说明书。

#### 使 用

- **1.** 如果旁路腔体内有碎屑或铁粉类杂质,可能会对浮球类设备的使用产生影响,应进行清理之后方可投入使用:
- **2.** 旁路腔体工作时,其内部所受的压力极限在每台设备的技术指标中都已规定,如果使用中的压力超过了所规定的指标,旁路腔体就有可能被损坏;
- **3.** 旁路腔体使用时设备内的液面变化应平稳过渡,出现有突变时,配套设备的输出可能会出现反常现象,此时只要待液面重新稳定后信号即会立刻恢复正常:

#### 注意:

- 旁路腔体工作时应避免强烈的振动;
- 旁路腔体不能在强磁场的环境工作(配套设备为磁性工作原理时); 更多配套设备的使用信息及注意事项,请参照相应的使用说明书。

#### 日常维护

- **1.**旁路腔体工作时一般不用进行特别的维护,只是当工作介质的流动性和 洁净度不够理想时,旁路腔体旁路管要经常排污,并对变送器或开关进行 清洗:
- **2.** 如果旁路腔体一经工作后又需经长期的停用,此时应将旁路腔体旁路管内、配套设备表面工作介质冲洗干净;
- 3. 对于浮球类配套设备,应对浮球及导管表面进行经常的清洗;
- **4.** 对于浮球类配套设备,长期不用时其浮子最好能与导管适当分开,以避免浮子的磁性长期作用于开关内的干簧,造成长期静态工作而影响开关的使用性能;

# 故障检查

正确操作下,旁路腔体一般不会损坏。配套设备的故障检查请参见相应的使用说明书。

#### 质量保证

在用户按文件规定使用的前提下,从发货日起 12 个月的保证期内,产品因质量问题而不能正常工作或不符合文件的技术条件时将给予无偿修理或更换。

产品附件

装箱单;产品说明书;产品合格证;用户附加定购的配件或附件。

特别声明:本手册以中文版本为标准,英文版本仅供参考

# Operating Principle

BZG external chamber is connected to tank by 2 process connection and become a communicating vessel. There's supporting equipment mounted in the chamber for level measuring, alarm or controlling. Supporting equipment may be float level transmitter, magnetic float switch etc... which's with a float; or guided wave radar level gauge, turning fork level gauge, optoelectronic etc... which's without float. Please refer to each manual to get more information of supporting equipment.

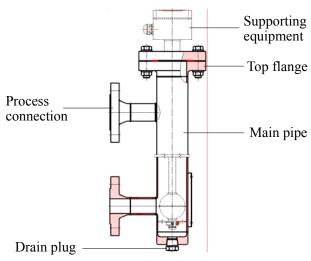


Fig.1 Structure

#### Application

Available for applications in all areas of industry through use of highly corrosion resistant materials, such as: chemical, petrochemical, natural gas, pharmaceutical industry, marine exploration, shipbuilding, power plants, machinery manufacturing, water purification devices, food and beverage etc.

# Structure and installation

BZG is mounted to tank by process connection. Aligning process connection of the BZG to corresponding of tank, than install, fastening to finish. Remove supporting equipment from BZG by dismounting fasteners of the top flange.

**Warning!** In the event that liquid in container is pressurized, toxic, flammable, and dangerous, it shall be emptied before the installation and flushed if necessary; and installation shall not be performed until the inside of the container is cleaned.

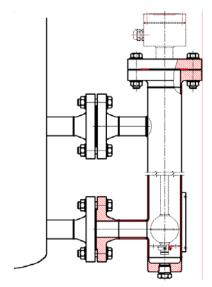


Fig. 2 Installation description

# Electrical Connection

Please refer to corresponding supporting equipment manual.

# Signal Commissioning

Please refer to corresponding supporting equipment manual.

#### Circuit Protection

Please refer to corresponding supporting equipment manual.

# Information on Explosion-proof

Please refer to corresponding supporting equipment manual.

#### **Application**

- 1. If there is any foreign substance such as scrap or iron powder inside the external chamber when it's working, the channel for movement of float may be clogged, then float type equipment's working may be influenced;
- **2.** When the external chamber's under operating, the allowable pressure limit of the external chamber is stipulated in technical specification; of the pressure is above the specified limit, the external chamber may be damaged:
- **3.** The change of liquid level in container shall be stable when the external chamber is under operating, if sudden change happens, the output of corollary equipment may be abnormal, at this time, the signal can get right immediately after the level has settled down again.

#### Attention:

#### Note:

- Strong vibration should be avoided when external chamber is working;
- External chamber can't work beside strong magnetic environment.

For more operation information and attention, please refer to each's manual.

#### Maintenance

- 1. In general, no special maintenance is necessary for external chamber when operation. In the event that fluidity and cleanliness of working medium is not good, regular cleaning shall be carried out for external chamber;
- 2. In the case of lengthy stoppages of the external chamber after running, be sure to clean the working medium on the surface of the external chamber;
- 3. For float type corollary equipment, float and guide tube surface should be cleaned usually.
- **4.** If the external chamber is shut down for a longer period of time, for float type corollary equipment, it's better to separate float with guide tube to avoid reed's non-effective because of long-term influence of magnet.

### Troubleshooting

1. In general, external chamber would not be damaged under correct operation. Troubleshooting of supporting equipment is reference to each's manual.

#### Warranty

Under the prerequisite that users operate the product according to stipulations in relative documents, within the guarantee period of 12 months from shipping date, if the products cannot operate normally due to quality issues or be not in accordance with technical conditions stipulated in documents, they can be repaired or replaced free of charge.

#### **Accessories**

Packing list; product instructions; product certificate; additional fittings or accessories to be ordered by customer.

Special Statement: This manual is subject to Chinese, English is only for reference.



# 中国

# 上海柯普乐自动化仪表有限公司

地址: 上海市松江区玉阳路 699 弄 2 号

电话: +86 21 33521288 传真: +86 21 67741420

邮政编码: 201600

电子邮箱: info@ksr-kuebler.com.cn 公司网址: www.ksr-kuebler.com.cn

### China

# Shanghai KSR- KUEBLER Automation Instrument Co., Ltd.

Add: No.2, Lane 699 Yuyang Road Songjiang District, Shanghai China

Tel: +86 21 33521288 Fax: +86 21 67741420

Zip: 201600

E-mail: info@ksr-kuebler.com.cn Website: www.ksr-kuebler.com.cn