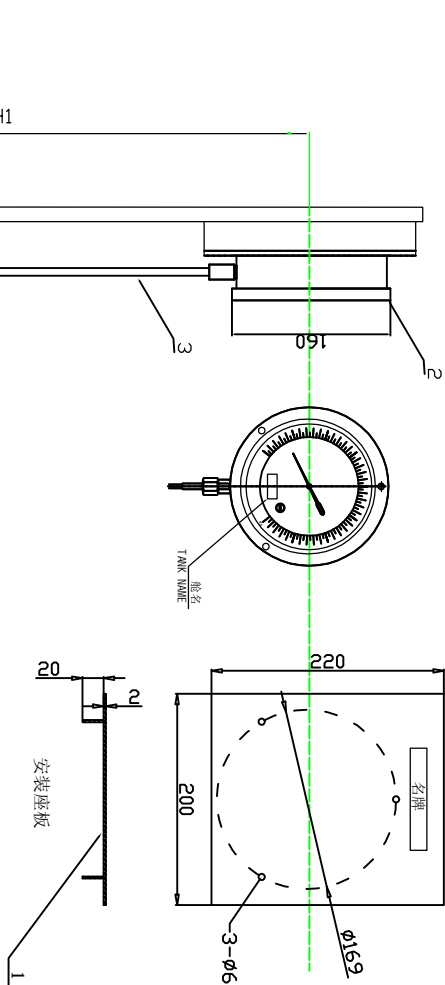


规格参数 SPECIFICATION PARAMETER:

序号 NO.	编号 Code	名称 Name	型号 Type	铭牌内容 Name plate	罐名 Tank name	罐高 (H)	悬挂高度 (H1)	测量高度 (H2)	盲区
1		TOP MOUNTED DIAL LEVEL GAUGE 顶装自力式液位计	SH-SPCG-S			6000	1000	5900	100

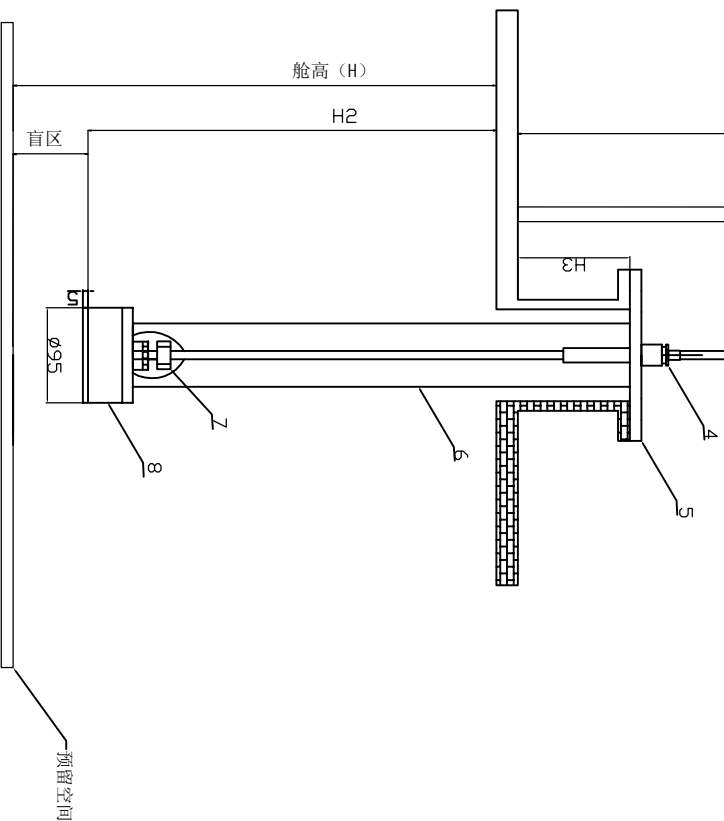


技术要求 TECHNICAL REQUIREMENT:

- 1、显示精度 Measurement accuracy: 2.5级
- 2、工作温度 Working temperature:  $\leq 80^{\circ}\text{C}$
- 3、超程 Overload: 120%满量程 full range
- 4、刻度形式 Scale Type: M/W, 盘面包含液位和体积  
The disk surface contains liquid level and volume
- 5、表壳、护管材质 Gauge shell, protector material: SUS304

法兰标准 FLANGE SIZE:

序号 NO.	型号 TYPE	法兰标准 FLANGE SIZE	外径 O.D	分度圆 P.C.D	孔数 N	孔径 D	厚度 T
1	SH-SPCG-S	GB/T2506-2005 DN100 PN16	$\phi 210$	$\phi 170$	4	$\phi 18$	



8	保护法兰PROTECTION FLANGE	$\phi 90$	SUS304	2	
7	压紧螺母GLAND NUT	M20X1.5	SUS304	1	
6	支撑管HOLD PIPE	$\phi 57$	SUS304	1	
5	安装法兰MOUNTING FLANGE		SUS304	1	
4	压紧螺母GLAND NUT	M20X1.5	SUS304	1	
3	毛细管CAPILLARY TUBE	$\phi 7$	SUS304	1	
2	表盘壳体 DIAL BODY	$\phi 150$	SUS304	1	
1	座板BACK VANNER	220X200	SUS304	1	

序号 NO.	名称 NAME	规格型号 TYPE	材料 MATERIAL	数量 QTY	备注 REMARK
3					
2					
1	认可图 FOR FINAL	2022-07			
0	名称DESCRIPTION	日期DATE	设计DRAW	审核CHKD	比例SCALE
0	顶装自力式表盘液位计 SH-SPCG-S TOP MOUNTED DIAL LEVEL GAUGE				
辽阳双华仪表有限公司 LIAOYANG SHUANGHUA INSTRUMENT Co., Ltd			图号DRAW NO. 202207091045		

UQK-01-C (弯曲型)  
UQK-01-C SERIES

# 浮球液位控制器

FLOATING BALL LIQUID LEVEL CONTROLLER

## 使用说明书

INSTRUCTION MANUAL

辽阳双华仪表有限公司

LIAOYANG SHUANGHUA INSTRUMENT Co.Ltd

## 一. 用途

UQK-01、02、03-C 型浮球液位控制器属于两位式物位仪表，适用于对铜、铝、不锈钢等材料不起腐蚀作用的容器内液位的控制。当液位到达高、底极限位置时，控制器输出触电开关信号，实现液位的报警或启停电泵。可广泛应用于石油、化工等工业部门中。UQK-01、02、03-C 型应用于海洋船舶中。

## 二. 型号及主要技术指标

型 号	UQK-01-C
动作界限	10-30mm
整定方式	不可调
安装方式	水 平(垂直)
工作压力	≤1MPa
工作温度	≤150° C
电源电压	AC220V DC24
触点容量	1.5A , 2.5A, 2.5~0.5A

## 三. 结构原理

控制器由浮球组件与转换机构两部分组成。当被测液位变化时，浮球随之上下移动，使其连杆端部的磁钢做相反方向移动。到达液位两个控制点时，通过同极性磁力的排斥作用，使转换机构中的磁钢迅速被排斥到另一边，使微动开关接通或断开，输出开关信号，用以实现报警或自动控制。

控制器结构，工作原理图见次页。

## 四. 使用须知

1. 被控制介质中，不应含有导磁杂质。
2. 被控介质的液面波动频率及幅值不能太大。
3. UQK-03-C型控制器浮球直径若大于法兰孔径时，容器盖必修是可以拆卸的。

## 五. 定货须知

请注明型号规格、法兰规格，如无特殊要求，将按标准法兰供货。

## I . APPLICATION

The floating ball liquid level controller series UQK-01, 02, 03, which is belonged to two-digit material level instrument, is fit for the liquid level control in the vessels the non-corroded material for copper, aluminium and stainless steel, When the liquid reaches the upper/lower limit level the controller will output a switching signal of contactor to realize the liquid level alarm of start/stop the electric pump, They are suitable for use in Dept of Petroleum, Chemical Industry etc and in Ocean Ships

## II . TYPE AND MAIN TECHNICAL PARAMETER

Type	UQK-01-C
Scope	10-30mm
Adjustment	nonadjustable
Install	horizontal (vertical)
Working pressure	$\leq 1\text{MPa}$
Temperature	$\leq 150^\circ \text{C}$
Voltage	$\sim 220\text{V}$ 100V, 24~240V
Contact Cap	1.5A , 2.5A, 2.5~0.5A

## III. CONSTRUCTION PRINCIPLE

The controller is made up of the floating ball group and the switching mechanism, when the checked liquid level changes, the floating ball will go up and down and the magnetic steel in the connecting rod will move downwards. Then when the floating ball reaches the two controlling point, the magnetic steel of the switching mechanism will be repelled to the another point according to the principle of the like pole magnetic repulsion. Therefore, the 1-1 or 2-2 contactor will switch on or turn off, and the switching on/off signal will be input to realize level alarm and automatic control,

There aren't mechanical movement between the switching mechanism and the floating ball. The switching mechanism is fully separated by the checked liquid level in order not to affect its normally working because of the impurity of the agent. We say, quick operating, reliable working and long servicing life.

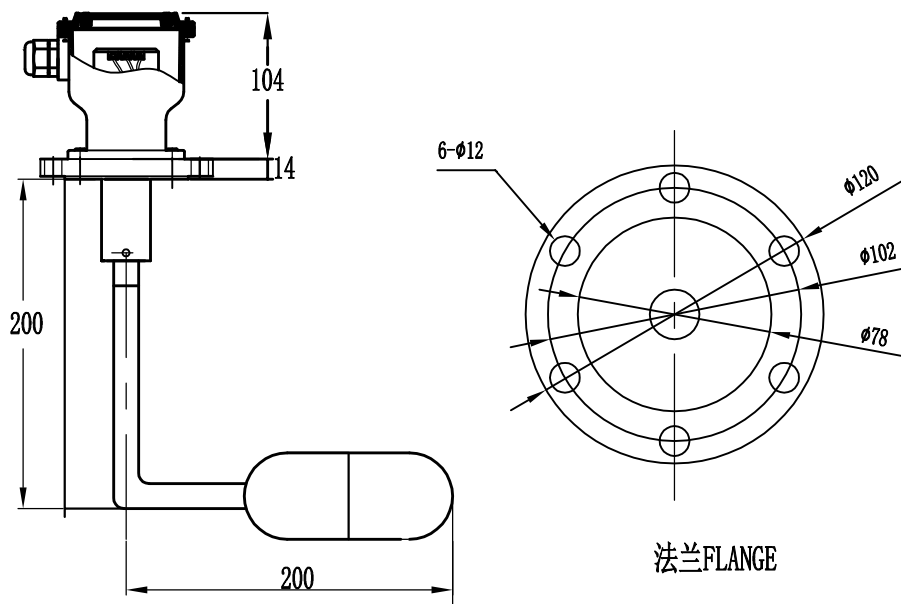
The construction of the controller is shown in fig,1 fig,2 fig,3. The working principle is shown in fig,4.

## IV. USAGE NOTE

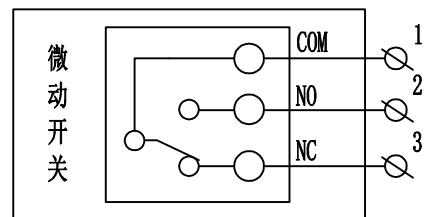
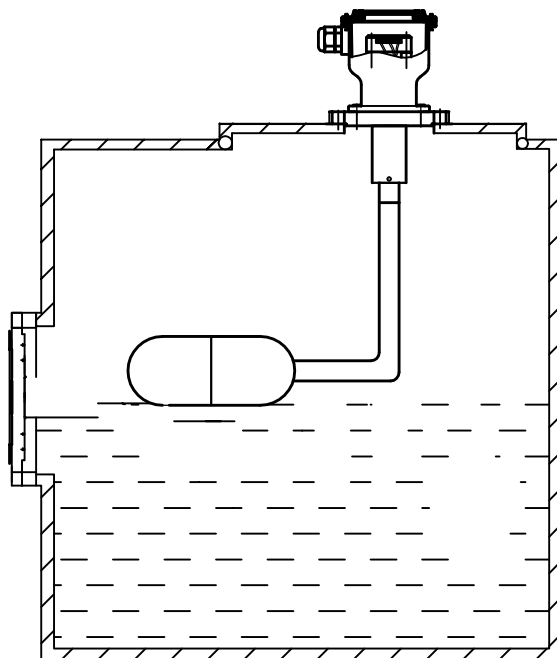
1. There aren't magnetic impurity in the measured agent
2. The frequency and the amplitude of the level fluctuation of agent measured shouldn't be too much
3. If the diameter of the UQK-03 type controller's floating ball is bigger than the bore diameter of the flange, the cover of the vessel can be unloaded.

## V. ORDER GUIDE

When you place an order, please specify the type, the flange standard and specification. If you haven't special requirement, we will supply the order according to the nonstandard.



UQK-01-C



UQK-01, 02, 03安装示意图 Installation diagram

原理图 Schematic diagram

辽阳双华仪表有限公司

地址：辽阳市太子河区荣兴路中段122号

电话：0419-4154068 4153466

传真：0419-4153422

邮编：111000

网址：[www.lyshyb.com](http://www.lyshyb.com)

邮箱：[lyshyb@lyshyb.com](mailto:lyshyb@lyshyb.com)