



UQK-60、UQK-61 系列浮球(浮筒)液位开关

UQK-60 AND UQK-61 SERIES FLOAT (DISPLACER) LIQUID LEVEL SWITCH

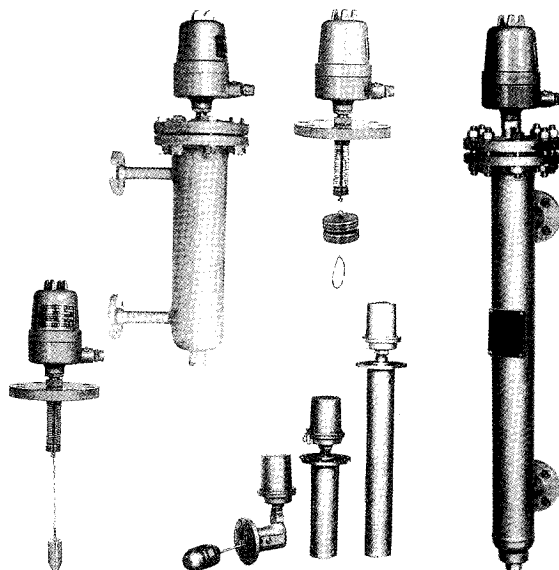
概述 INTRODUCTION

UQK-60系列浮球(浮筒)液位开关是引进国外先进产品技术开发制造的产品, 结构合理, 可靠性高, 适用于石化、电力、食品、医药等行业对生产过程中各种的高温、高压及敞口容器的液位控制、报警、故障连锁等。

在设计制造时, 考虑了石油化工行业引进设备中过程连接形式, 是同类进口产品的替换产品。

UQK-60 series float(displacer) liquid level switches are exploited and manufactured on base of foreign advanced technology. Logical in structure, reliable in operation, they are suitable for liquid level control, alarm and failure interlocking in high temperature, high pressure or open vessels in the field of petroleum chemical, electric power, foodstuff and pharmacy etc.

At design, considering the connection mode of import equipment in petroleum chemical industry, it can substitute import similar products.



结构原理 STRUCTURE PRINCIPLE

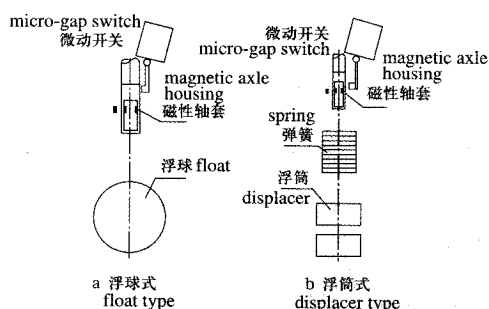
如测量元件是浮球, 当液位变化时, 浮球与液位同步变化, 磁性轴套与浮球刚性连接, 液位上升, 磁性轴套随之上升, 进入磁钢作用区, 磁钢吸合, 开关动作, 从而输出控制信号。

如测量元件是浮筒, 浮筒挂在一根平衡弹簧上, 当液体上升时, 液体对浮筒所产生的浮力增大, 弹簧产生位移, 磁性轴套也随之移动, 进入磁钢作用区, 磁钢吸合, 开关动作, 从而输出控制信号。

If measuring element is float, the float change with liquid level. Since magnetic bearing sleeve is connected to float rigidly, so liquid level increasing, bearing sleeve increases accordingly and enters into alnico effecting area. Alnico pull-up, and switch operates and outputs control signal.

If measuring element is displacer, the displacer hangs on a balance spring. When liquid level increases, the buoyance acting on displacer increases, which results in spring displacing. And magnetic bearing sleeve moves with it and enters into alnico effecting area. Alnico pull-up, and switch operates and outputs control signal.

结构原理图 STRUCTURE PRINCIPLE



主要技术参数

MAIN TECHNICAL PARAMETERS

输出信号 output: 一常开, 一常闭, 二常开, 二常闭
one normal open, one normal close,
two normal open and two normal close.

触点容量 contact capacity: 250VAC 5A,
24VDC 50mA

工作温度 operating temperature:

标准型 standard: -40~200 °C

高温型 high temperature: -200~400 °C

环境温度 ambient temperature: -40~70 °C

介质粘度 medium viscosity: $\leq 1st (10^{-4}m^2/s)$

工作寿命 operating life: $\geq 10^5$ 次

防爆标志 safe classification: 隔爆型 explosion proof d ⅡBT4
本安型 intrinsically safe ib ⅡCT5

材质 material:

浮球、浮筒、重锤 float, displacer and weight:

1Cr18Ni9Ti 不锈钢

法兰 flange: 碳钢 carbon steel、1Cr18Ni9Ti 不锈钢

控制器外壳 enclosure: 铝合金 aluminum alloy

介质密度 medium specific gravity: 0.4~3.0g/cm³

介质密度差 specific gravity difference: $\geq 0.16 g/cm^3$

工作压力 operating pressure: 4.0, 6.3, 10.0MPa

基本误差 basic error: 液位控制 level control: 4mm

界位控制 interface control: 12mm

蒸汽夹套接头 heating jacket joint: G1/2" 外螺纹 outer thread

电气接口 electric connection:

M20 × 1.5 内螺纹 inner thread

过程连接 process connection:

螺纹连接 thread: G1" 或 1" NPT

法兰连接 flange:

侧装式 side-mounted DN25 PN4.0 凸面 convex

顶装式 top-mounted DN100 PN4.0 凸面 convex

法兰标准 JB/T82.2-94, 其它法兰标准如 GB、HGJ、ANSI 等请用户注明。Flange standard JB/T82.2-94.