

UQK-400 FLOAT LEVEL CONTROLLER

Summary

The UQK-400 float level controller consists of float, connecting rod, iron core unit, and magnetic switches / signal conversion device. The float moves with level changes in the vessel and makes connecting rod and iron core unit move. Through the magnetic coupling effect, the position change of magnetic steel in the iron core makes micro switch or reed switch acting to realize the functions of level controlling and alarming.



Technical Parameters

- **Mounting type:** Side-mounted
- **Control length:** 60mm ~ 120mm
- **Accuracy:** Level controlling: ± 4 mm
- **Interface controlling:** ± 6 mm
- **Nominal pressure:** ≤ 6.3 MPa
- **Wetted material:** 304、316L or on request
- **Nominal diameter:** DN80
- **Flange standard:** HG/T20592-2009, HG/T20615-2009 or on request
- **Ambient temperature:** -40 C ~ $+80$ C
- **Medium temperature:** -40 C ~ $+150$ C
- **Service life:** $\geq 5 \times 10^5$
- **Medium density:** For level controlling: $\rho \geq 0.6$ g/cm³
For interface controlling: $\rho_1 - \rho_2 \geq 0.16$ g/cm³
- **Medium viscosity:** ≤ 1 St (10^{-4} m²/S)
- **Power supply inlet:** G1/2"(female thread) or on request
- **Explosion-proof:** Explosion isolation type Exd II CT1 ~ CT5/T6 Gb
Intrinsic safe type Exia II CT1 ~ CT5/T6 Ga
- **IP Rating:** IP66
- **Safety barrier (see safety barrier recommendation sheet)**

Contact Capacity

Switch type	Max. Voltage AC	Max. Current (A)	Contact Type	Contact Resistance ($\geq \Omega$)	Switching speed (\geq ms)	Service life (\leq 104 times)
Reed switch	250V	1	SPDT	0.03	3	50
Micro switch	250V	5	SPDT	0.03	3	50

Note:

24V DC is only for intrinsically safe type.

Model Selection Table

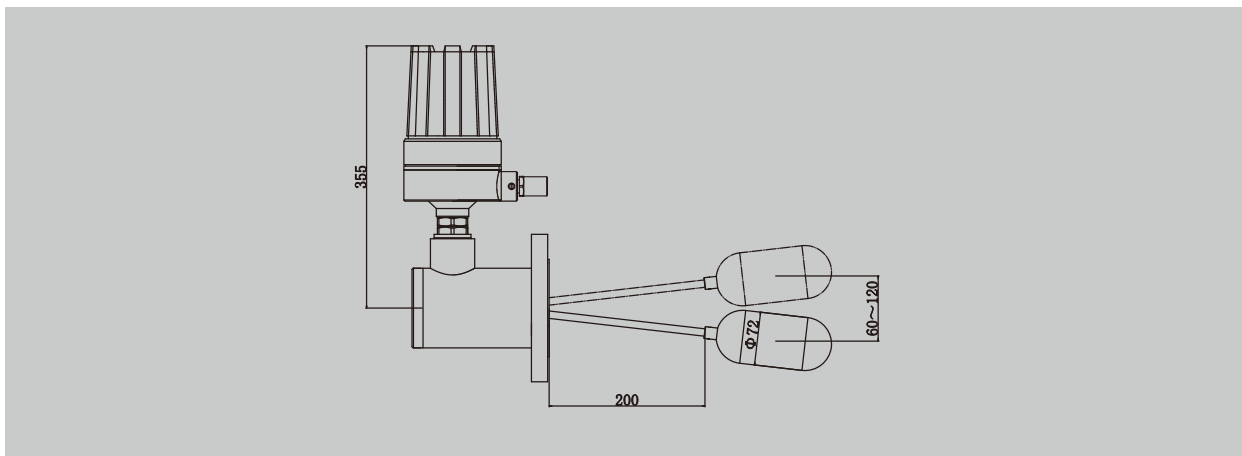
Model	Code				Content
UQK-400					Float level controller
	1				Reed switch
	3				Micro switch
		x			Upper or lower limit
			*		Medium density (g/cm ³)
				i	Intrinsically safe type
				d	Explosion isolating type
UQK-400	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Example

UQK-4003X0.8d is UQK400 float level controller, micro switch, upper or lower limit alarm, medium density is 0.8g/cm³, explosion isolating .

Outline Drawing and Installation

1. Structure and size as follows



2. Safety barrier recommendation sheet

Dandong Top Electronics Instrument Co., Ltd	TP5041 – EX TP5045-EX
Shanghai Automation Instrument Institute	CS8041-EX CS8045-EX

Order Information

- Model Fluid name Operating pressure Operating temperature
- Flange standard Wetted material Fluid density The number and position of alarm
- Other special requirements