

UQZ MAGNETIC FLOAT LEVEL TRANSMITTER

Summary

UQZ series magnetic float level transmitter uses the magnetic ball float as its measuring element. Through the magnetic coupling principle, the resistance in the sensor is linearly changed, and the change of resistance is converted into 4-20mA standard current signal output by the converter. It can realize the automatic level check, control and record. The instrument is suitable for petroleum, chemical, electric power, light industry and pharmaceutical industries such as sewage treatment and various types of atmospheric and pressurized containers in the medium level measurement, especially for underground storage tanks. It has side-mounted and top-mounted according to the different installation types.

Working Principle

UQZ series Magnetic Float Level Transmitter is composed of two parts: level sensor and current converter. The float synchronously changes with the liquid level, controls the Hall switch suction or disconnection so that the resistance of the sensor changes linearly, and then the transformation of resistance is converted to 4-20mA standard current signal output by converter.



Technical Parameters

- **Measuring range:** 100~6000mm(Can be made beyond the range)
- **Flange standard:** HG/T20592-2009, HG/T20615-2009 or on request
- **Power supply:** 24 VDC
- **Output signal:** 4~20mA (with HART Protocol)
- **Accuracy:** ±10mm
- **Ambient temperature:** -40℃~+80℃
- **Fluid temperature:** -20℃~+120℃
- **Nominal pressure:** ≤2.5MPa
- **Fluid density:** ≥0.65g/cm³
- **Fluid viscosity:** ≤1.25St
- **Wetted material:** 304, 316L or on request
- **Explosion-proof:** Ex d II CT1-T5/T6 Gb, Ex ia II CT1-T5/T6 Ga
- **Ingress protection:** IP66
- **EMC:** EN 61326-1
- **Nominal diameter:** DN150, DN100
- **Electrical connection:** M20×1.5 (female thread) or on request

Model Selection Table

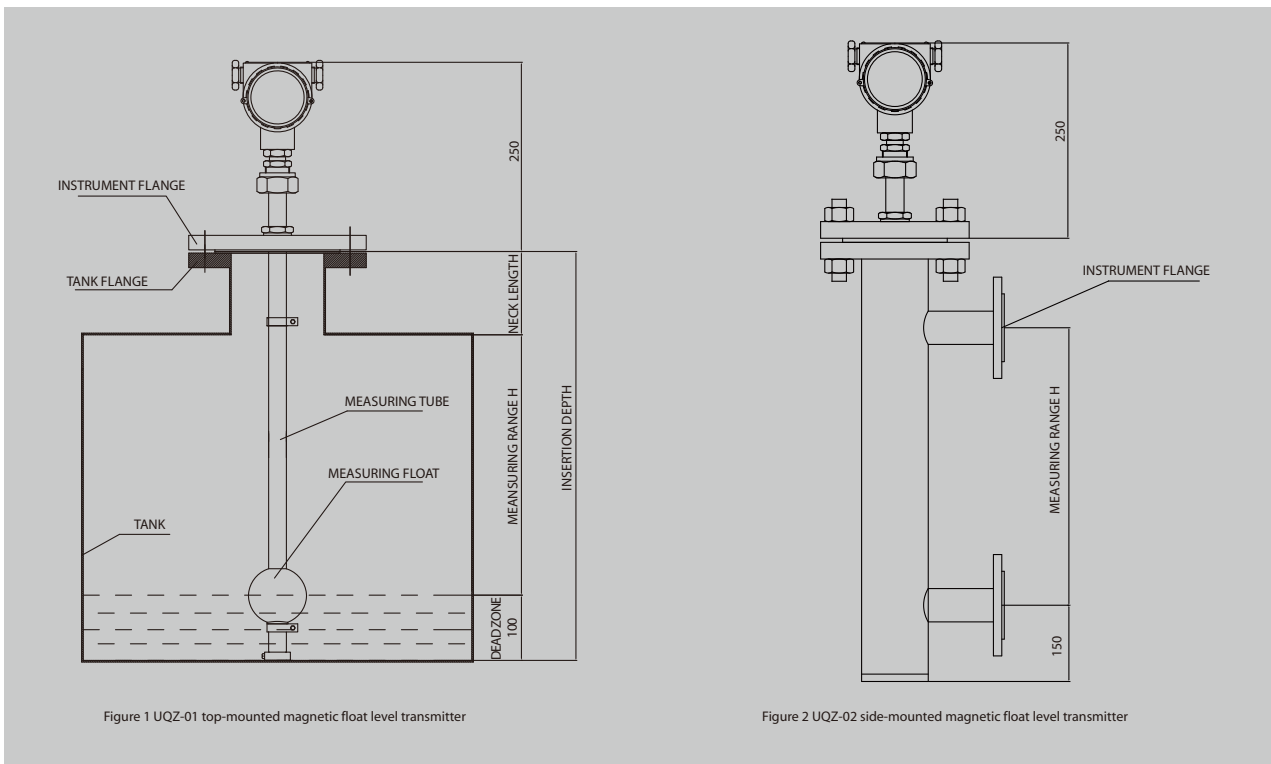
Model	Code				Contents
UQZ-					Magnetic Float Level Transmitter
	01				Top mounted
	02				Side mounted
		-			
			*		Measuring range (please mention the neck length when select 01)
				d	Explosion-proof
				i	Intrinsic safety
UQZ-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Example of Model Selection

UQZ-01-2000d (neck length: 1000mm), Magnetic Float Level Transmitter, top mounted, measuring range: 2000mm, explosion-proof type, neck length:1000mm.

Outline Drawing and Installation

The structural form and mounting dimensions are shown in the figure below.



Ordering Information

- Select according to model selection table
 - Wetted material
 - Flange standard
- | | |
|---------------------------------|------------------------------------|
| Medium name and density | Operating pressure and temperature |
| Neck length or insertion length | Measuring range |