

## UQZ Magnetic Ball Float Liquid Level Transmitter

### Summary

UQZ series magnetic ball float liquid level transmitters have the magnetic ball float as their measuring element. Through magnetic coupling, the ball makes the resistance inside the transducer changes lineally. Then the transducer converts the resistance change into 4-20mA standard current signal and output it. In this way, the transmitter can fulfil automatically checking, controlling and recording. It is suitable for liquid level measurement for different kinds of atmospheric vessels and pressurized containers in petroleum, chemical, power, light industry and pharmaceutical industrial field. It is ideal liquid level instruments for underground storage tanks. It can be classified into side mounted type and top mounted type.

### Main technical parameters

Measuring range: 0~6000mm

Power supply voltage: 24V DC

Output signal: 4~20mA

Load characteristic: see appendix

Measuring accuracy:  $\pm 10\text{mm}$

Ambient temperature:  $-40\sim 80^{\circ}\text{C}$

Operation temperature:  $-20\sim 120^{\circ}\text{C}$

Nominal pressure: 1.6MPa

Flange standard: JB/T82.1-94

Fluid density:  $\geq 0.65\text{g/cm}^3$

Fluid viscosity:  $\leq 1.25\text{St}$

Material of contacting liquid: 1Cr18Ni9Ti

Explosion-proof: d II BT<sub>4</sub>, GYB98281

ia II CT<sub>5</sub>, GYB02469

Protection class: IP65

Power supply inlet: M20  $\times$  1.5 (female thread)

Associated equipment: guard grating ( see guard grating recommendation sheet)

### Structure principle

UQZ series magnetic ball float liquid level transmitter is composed of liquid level sensor and current converter the two parts. The ball float moves with liquid level synchronously to control the dry reed pipe to be on or off so as to make the value of the inner resistance change linearly. Then the current converter changes the resistance value changes into 4-20mA standard current signals and transmits them out.

### Model Selection Sheet

Model	Specification code		Contents
UQZ-			Magnetic ball-float level transmitter
	01		Top-mounted type



	02				Side-mounted type
	-				
	*				Measuring range (please note the neck length value when choose 01)
		d			Isolating explosion
		i			Intrinsic safe explosion-proof
UQZ-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Model selection example: UQZ-01-2000d (neck length: 1000mm) is top mounted, measuring range, isolating explosion, magnetic ball float liquid level transmitter

## UQZ Top Mounted Magnetic Ball Float Liquid Level Transmitter Outline Sketch and Installation Dimensions

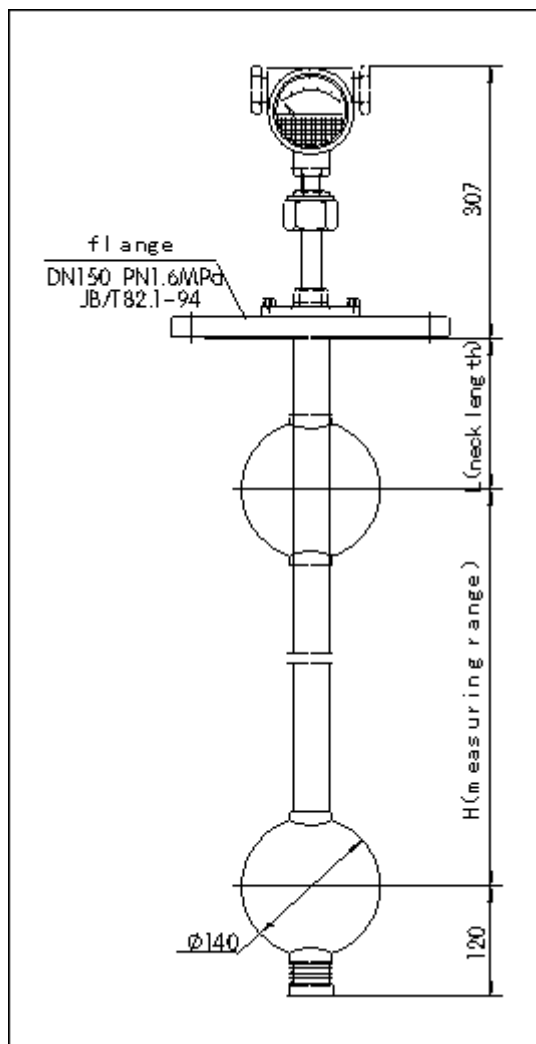


Figure 1

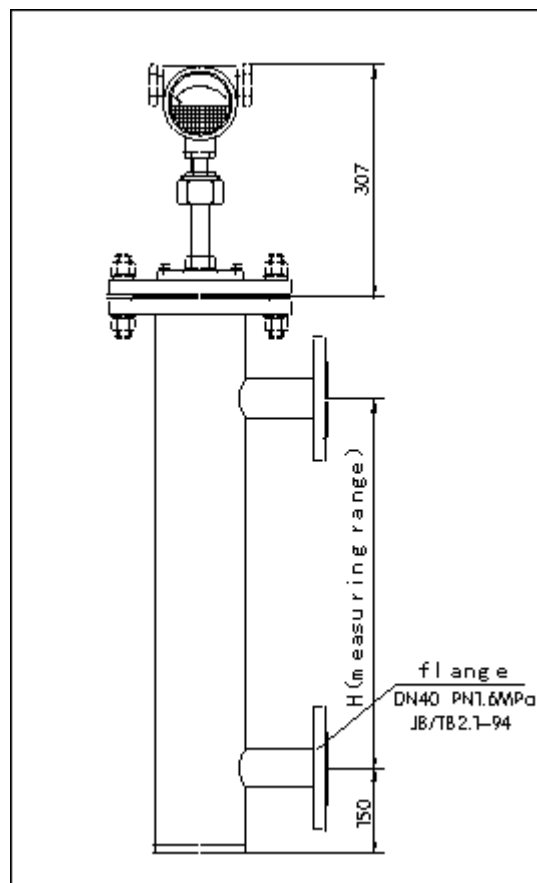


Figure 2

Figure 1 UQZ-01 top mounted magnetic ball float liquid level transmitter Figure

Figure 2 UQZ-02 side mounted magnetic ball float liquid level transmitter