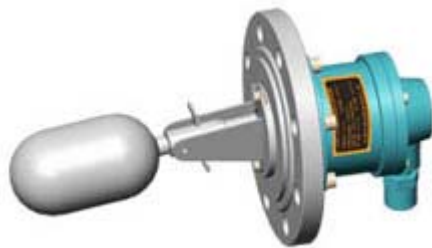


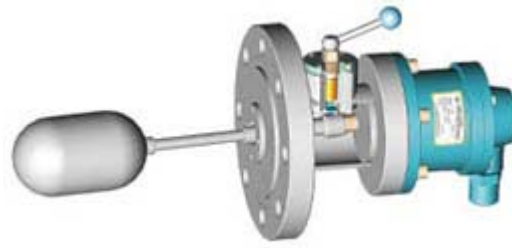
UQK(S)-100 Ball Float Liquid Level Controller

Summary

UQK series ball float liquid level controllers are suitable for fluid level or interface controlling and alarm for different kinds of open or pressurized vessels in production process in petroleum, chemical, power, paper-making and food industries, etc.



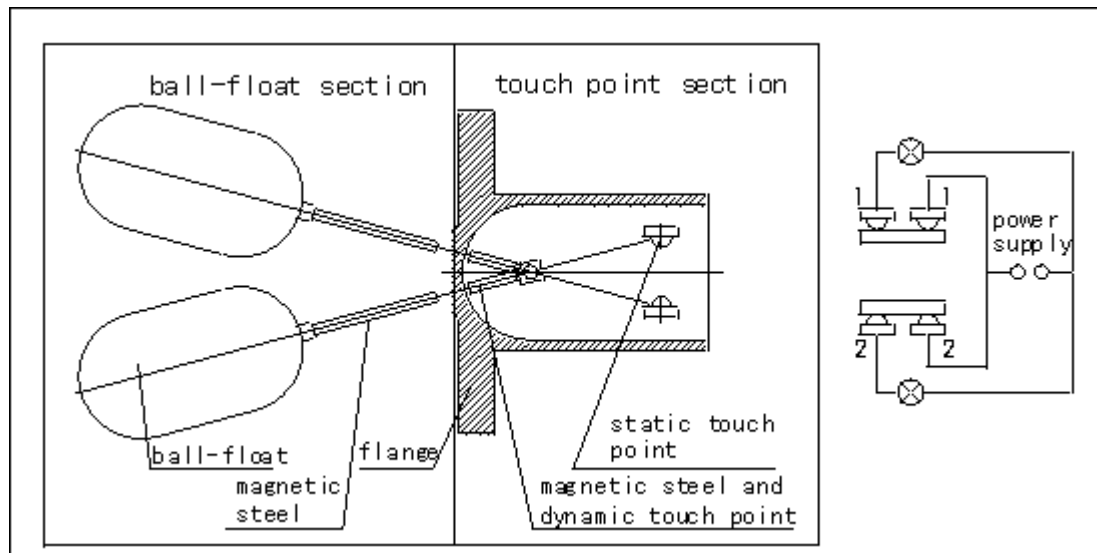
UQK Type



UQKS Type

Structure Principle

UQK(S)-100 ball float liquid level controller belongs to two controlling positions level instrument. It is composed of ball float unit and contact unit. When the liquid level change, the ball float position changes correspondingly and makes the magnet steel end of the ball rod nod up and down. According to magnet like pole repellency principle, the magnet steel mounted in contact unit goes up and down at reverse direction. Moving contact switches on or off with the fixed contacts 1-1 and 2-2 to make alarm system alarm and pump start and stop. The controllers can be classified into common type and self-checking type. For the self-checking ball float liquid level controller, it can be checked by pressing outside handle to test the float ball acting or not during the operation. So, It is very convenient for timing and repairing.



UQK(S) series ball-float liquid level controller structure principle sketch

Main Technical Parameters

Contact capacity: AC200VA, DC50W (Ex-proof only for 24V);

Power supply : 220VAC, 24VDC;

Permissible current: AC0.9A, DC2A;
 Ambient temperature: -20°C ~ 40°C
 Operation temperature: -40 ~ 150
 Medium density: 0.65g/cm³
 Wetted material : 1Cr18Ni9Ti
 Flange standard: On request
 Power supply inlet: M20×1.5 (female thread)
 Protection class: IP54
 Associated equipment: guard grating (see guard grating recommendation sheet)

Technical Parameter Table for Different Kinds of Models

Model	Nominal diameter (DN)	Nominal pressure (MPa)	Action range (mm)	Adjustment mode	Installation type
UQK(S)-101	DN80	4.0MPa	10	Non-adjustable	Horizontal
UQK(S)-1011			60		
UQK(S)-1012			40	Adjustable stepless	Vertical
UQK(S)-102			45 ~ 550	Step Adjustable	Horizontal
UQK(S)-103			10 ~ 1000	Adjustable stepless)	Vertical
UQK(S)-104	DN40		10	Non-adjustable	Outside horizontal

Explosion-proof

Explosion-proof type	Explosion-proof sign	Explosion-proof certificate number
Exd-proof	d BT4	GYB02415
Ex-proof	ia CT4	GYB98445

UQK(S) SERIES BALL FLOAT LIQUID LEVEL CONTROLLER STRUCTURE PRINCIPLE SKETCH

Model Selection Table

Model	Code		Code meaning	
UQK-			Common ball-float level controller	
UQKS-			Self-checking ball-float level controller	
	1		101 type	
	2		102 type (neck length is no more than 70mm for self-checking)	
	3		103 type (neck length is no more than 70mm for self-checking)	
	4		104 type	
	5		1011 type	
	6		1012 type	
		A		1.0MPa
		B		4.0MPa
		*		Neck length 70≤L≤200mm(L=70mm,needn't mark)
			d	Isolating explosion type
		i	Intrinsically safe explosion-proof type	
UQK-				
UQKS-				

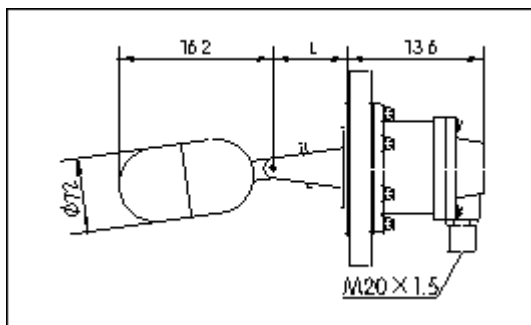
Model selection example

UQK-1B150d is common type UQK101, nominal pressure 4.0MPa, neck length 150mm, isolating explosion ball float liquid level controller.

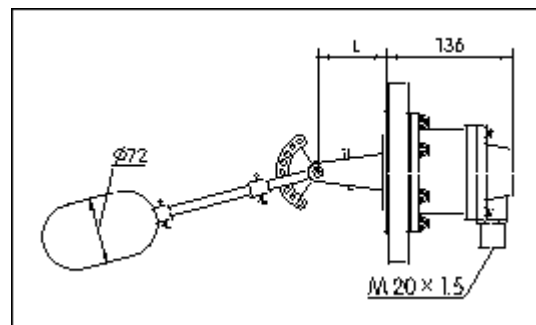
UQKS-1B150d is self-checking type UQKS101, nominal pressure 4.0MPa, neck length 150mm, isolating explosion ball float liquid level controller.

Outline Sketch and Installation Dimensions

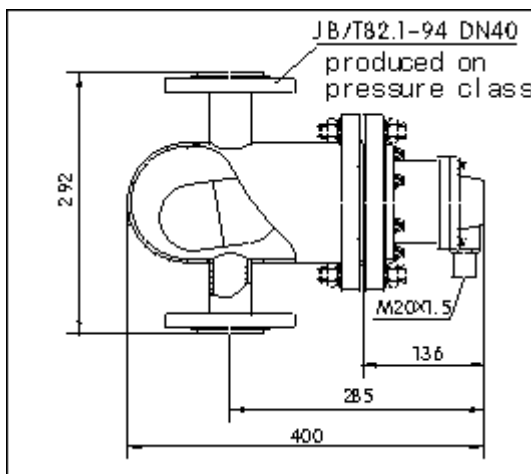
Common type UQK-100 series



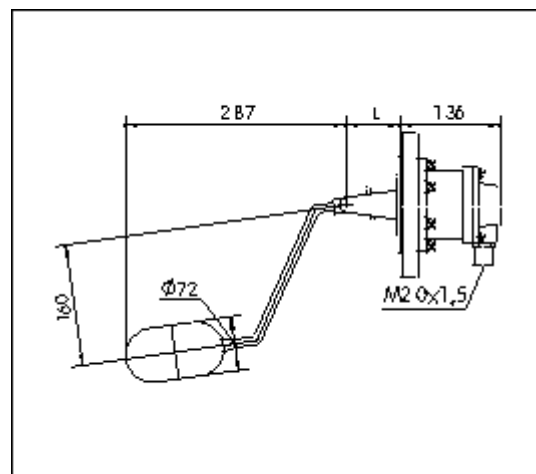
UQK-101 Type



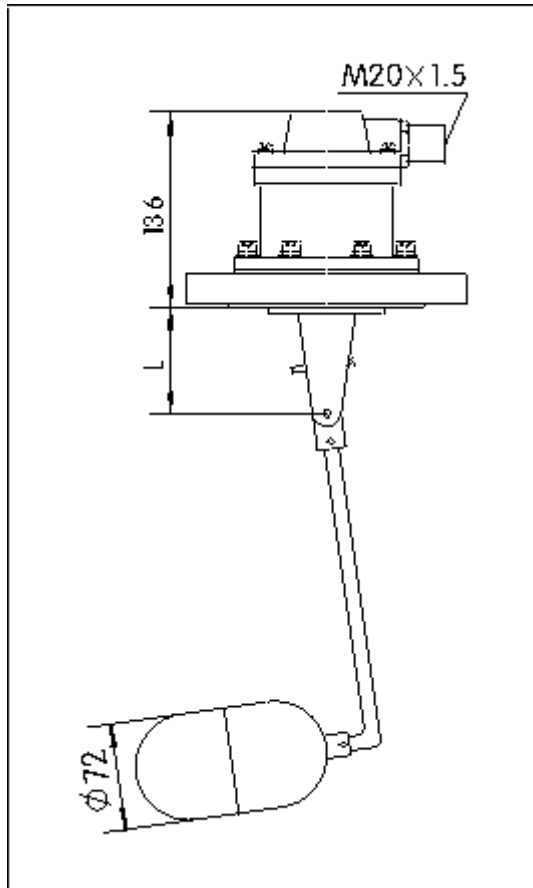
UQK-102 Type



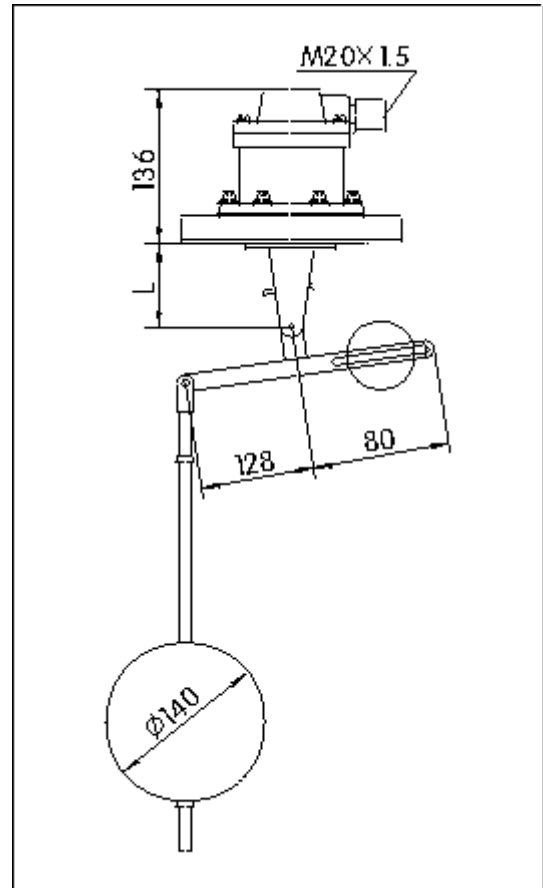
UQK-104 Type



UQK-1011 Type

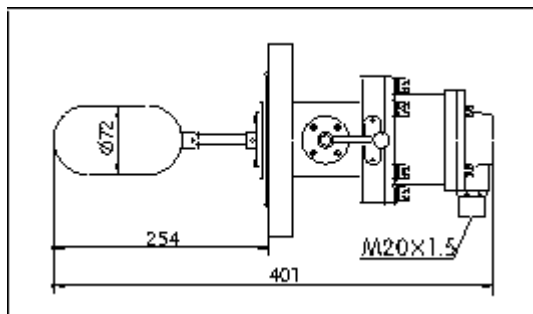


UQK-1012 Type

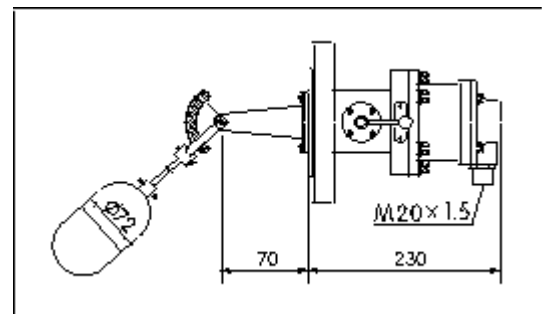


UQK-103 Type

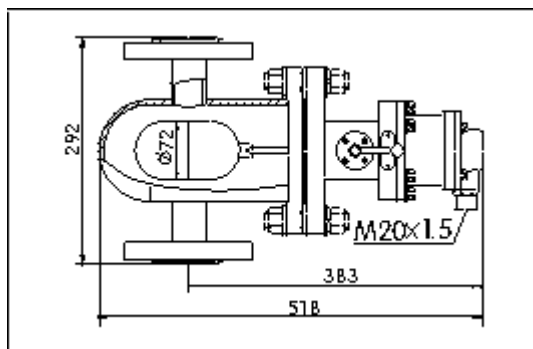
Self-checking UQKS-100 series



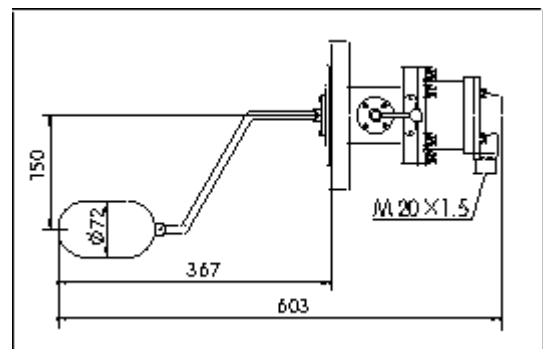
UQKS-101 Type



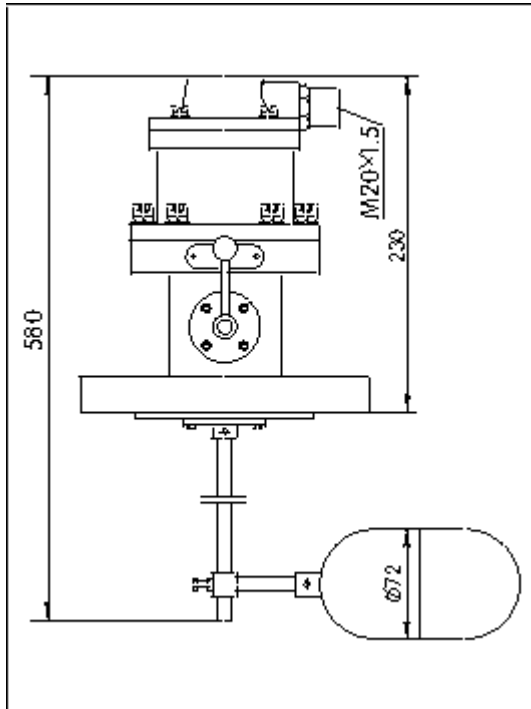
UQKS-102 Type



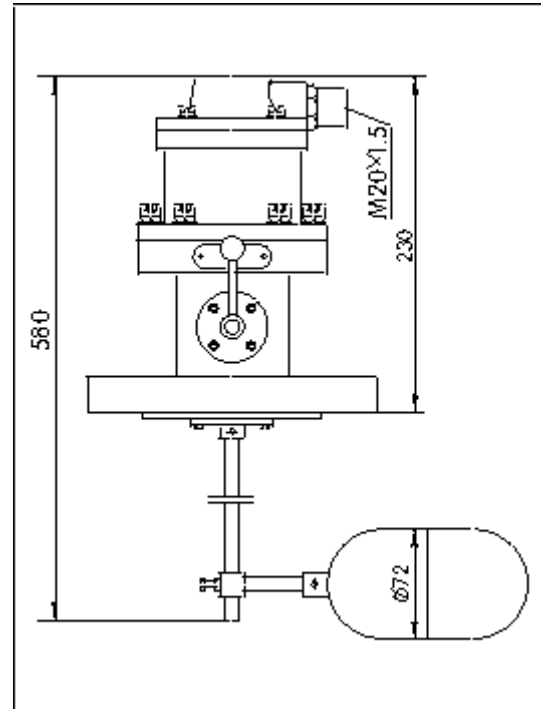
UQKS-104 Type



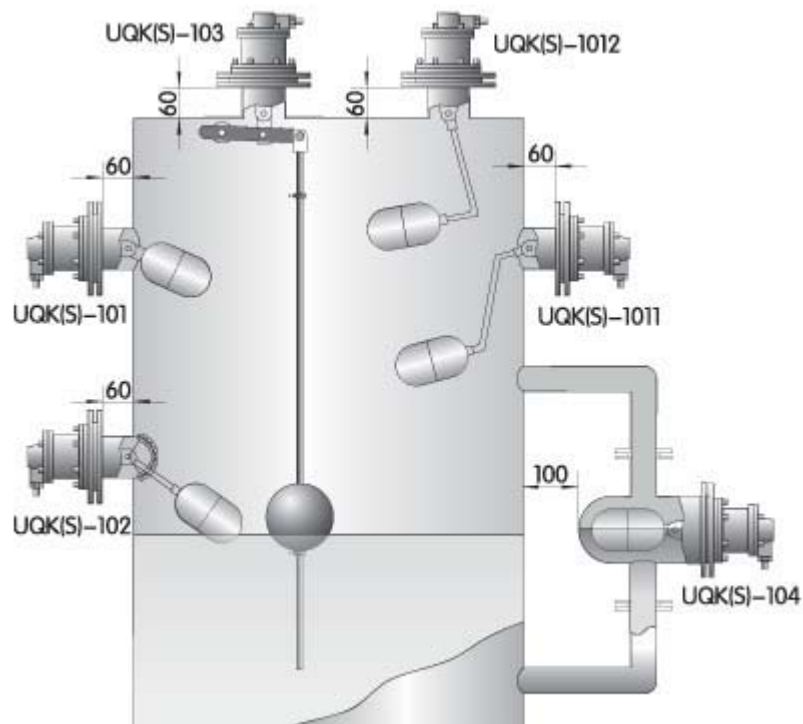
UQKS-1011 Type



UQKS-1012 Type



UQKS-1013 Type



Installation schematic plan

Guard Grating Recommendation Sheet

Shanghai Intrinsic Instrument System Co., Ltd	LS4041-Ex
Shanghai Automation Instrument Institute	GS8041-Ex, GS8045-Ex
Longfei Groups	LF1045
British Company	MTL3046B, MTL5042, MTL706 ⁺
Germany P+F	KFD2-STC3-Ex1
Dandong Top Electronics Instrument Co., Ltd	TP5041-Ex, TP5045-Ex