

UHC-517 Magnetic Level Indicator

MC

ISO9001:2008

Changzhou Chengfeng Flowmeter Co., Ltd.

[Summary]

UHC-517 Series magnetically float level meters are suitable for measuring the liquid in open vessel or pressure vessel. With the features of tight sealing and leak proof, the meters can measure safely and reliably the liquid level in the severe conditions, such as: high temperature, high pressure, high viscosity, strong corrosion. The meters are featured also without blind zone, distinct indication, easy reading and wide measuring range.

With liquid level switch as optional part, the meter can realize liquid level upper and lower limit alarm and control. With liquid level transmission sensor as optional part, the meter can convert the liquid level signal into two-wire system (4-20)mA standard signal, realizes long distance detection, indication, recording and controlling.

This series meters are widely used in the liquid level measurement and control of electricity, petroleum, chemical industry, metallurgy, environment protection, ship building, civil construction, food and other industries.

[Working Principle]

Level meter structure bases on the principle of by pass, the liquid lever in the main pipe is as same as that in the vessel device. According to Archimedes Theorem, the buoyancy force of magnetic float in the liquid is equal to the floater weight, floater floats on the surface of liquid, the floater in the main pipe of level meter will move up and down with the movement of level in the vessel measured. The permanent steel magnet in the floater will turn 180_jã through the red-white turn post in the magnetic coupling drive indicator. When liquid lever rises, the



turn post turns white side to red one, when the lever lowers, turn post turns red side to white one. The red and white interface of indicator is the actual height of media level in the vessel. Thus the level indication is realized.

Main technical parameters	Technical requirement		
Measuring range(300 ~ 15000)mm	1. The heating jacket level meter is proper for		
Measuring accuracy: ± 10mm	the media with large viscosity or easy crys- tallization in low temperature.		
Media density: ≥0.45g/cm³	2. When the side mounted level meter length in the order is \geq 4000mm, the support flange shall be added in the center.		
Working pressure:0.6、1.6、2.5、6.3、32MPa			
Working temperature:-90 $^\circ\!\mathrm{C}$ ~ 480 $^\circ\!\mathrm{C}$	3. The connection flange of bottom mounted		
Connection flange:HG20592-20635-97	or top mounted level meter shall be ≥ 80 mm.		
The user shall give clear indication of other standards.	Note: The special requirement can be indicated separately when placing an order.		

[Technical Parameters & Requirement]

[Type Selection Chart]

UHC-517C	V	Plastic turn plate display					
UHC-517D	Ζ	Plastic	Plastic turn column display				
UHC-517DA	G	Fluore	Fluorescence turn column display				
UHC-517DC	В	Aluminium alloy turn column display					
UHC-517DB							
				A DC	coutput		Remote Device
		0	Bla				
		C					
		E					
		F					
			Switch points(Digital display)				
			Q Intrinsic safety				- · ·
			B Explosion-proof			Explosion	
		T Equip with Isolation safety barrier				Туре	
			P SS304				
			R SS316,316L			Touching liquid	
			L Stainless steel lining PTFE			Materials	
			N PVC			Materials	
			Z PP				
			M Electric heating device			Optional	
				W Steam jacket/water heating/DN20/G1/2 male thread			Device
					X	Vacuum jacket	
						A With fluorescene post display adjusting alarm(vertical type)	
						With fluorescene post display adjusting	
						B alarm(horizontal type)	
						C With other digital indicating meters	
						□ (-90~480)°C	Working
							Temp.
						□ ≤32MPa	Working
							Pressure
						Unit:g/cm3	Density
						Unit:L=mm	Flange Centre
							Flange Size
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[Installation, Usage & Maintenance]

- 1. It should be mounted vertically to ensure free move of floating ball part within the tube.
- 2. It is suggested to mount cut-off valve between container and the indicator for convenience of cutting off medium in washing and repairing the indicator.
- 3. There must be no magnetic conductive material near main body of the indicator. Otherwise normal working of it would be affected.
- 4. After installation completion, it should be rectified with magnet steel attracting pillar for once revival resulting in that part below zero point is red and that above zero point is white.
- 5. The lower valve should be opened to make liquid flow into the tube stably avoiding sharp rise with floating ball part resulting in being out of order. (If it appears, it should be rectified again with magnetic steel after its stability.)
- 6. The floating ball part should be taken out of main tube of the indicator before delivery to keep it from damage during transportation. It will be installed again into the tube with cautions of keeping its heavier end upside after completion of installation the indicator, and opening sewage exhaust flange on the bottom.
- 7. You may open sewage exhaust screw for cleaning depending on medium situation



[Installation Schematic Diagram]

* UHC-517C side mounted * UHC-517D top mounted * UHC-517DA side mounted ,top display * UHC-517DB side mounted ,bottom display