

UHC-517 Magnetic Level Indicator



ISO9001:2008

Changzhou Chengfeng Flowmeter Co., Ltd.

[Summary]

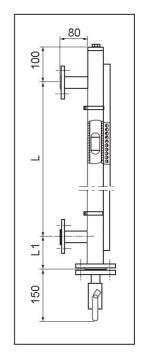
UHC-517 Series magnetically float level meters are suitable for measuring the liquid in open vessel or pressure vessel. With the features of tight sealing and leak proof, the meters can measure safely and reliably the liquid level in the severe conditions, such as: high temperature, high pressure, high 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;ã 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.

[Technical Parameters & Requirement]

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

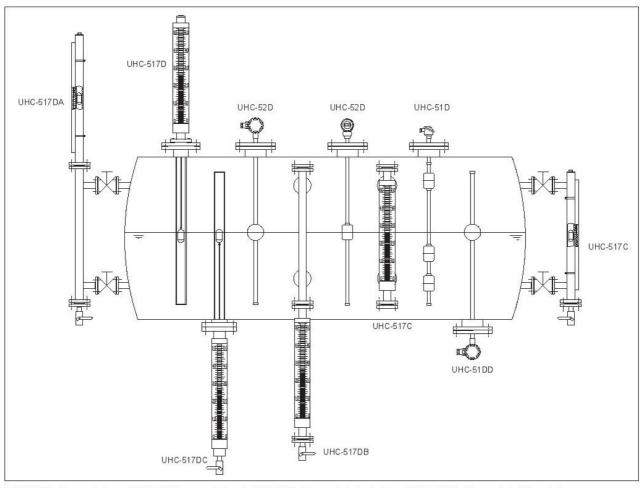
[Type Selection Chart]

UHC-517C	٧	Pla	Plastic turn plate display														
UHC-517D	Ζ	Plastic turn column display											Indication				
UHC-517DA	G	Fluorescence turn column display											Туре				
UHC-517DC	В		Aluminium alloy turn column display											,			
UHC-517DB	IC-517DB O Blank											Remote					
		D	4-2	20m/	A DC	Cou	tput										Device
			0	Bla			•										
			С	BK	-1 Cam driven level switch							1					
	E CK-1 Dry reed level switch								Switch Type								
			F	ΕK	-1 D	ry re	ed I	evel	swi	tch							1
					Sw	witch points(Digital display)								Switch Points			
					Q	Inti	rinsid	nsic safety						Evalories			
					В	Ex	plosion-proof						Explosion Type				
					Т	Eq	uip v	ip with Isolation safety barrier						Туре			
						Р	SS	304									
						R	SS	316,	316	L							Touching liquid
LSI								tainless steel lining PTFE							Materials		
						N		VC							-		
						Z	PP										
							M		Electric heating device					Optional			
							W	Steam jacket/water heating/DN20/G1/2 male threa				thread	Device				
							X	Va	/acuum jacket								
									Α	Wit ala	:h rm(v			cene /pe)	post	display	adjusting
									Wit				cene	post	display	adjusting	
								В	ala	rm(h	oriz	onta	l type))			
								С	With other digital indicating meters					1			
									□ (-90~480)℃						Working		
																	Temp.
										☐ ≤32MPa						Working	
																	Pressure
												Un	it:g/cn	13			Density
													Unit:	L=mm			Flange Centre
					<u> </u>	<u> </u>						<u> </u>				Т	
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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-517DA side mounted ,top display * UHC-517DB side mounted ,bottom display