

**UGS Series color quartz glass level meters**

**Summary**

UGS series color quartz glass level meters with performance of on site indication are made of high-purity quartz tube(99.99%SiO<sub>2</sub>).These meters featured with distinct indication, good sealing performance, high temperature resistance, high pressure resistance, anti-viscosity, long life, convenient rinse and maintenance are widely used to detect and indicate the levels of various vessels and boilers in petroleum, chemical industry, power, metallurgy industry etc.

UGS-A standard color quartz glass level meter is suitable for measuring level of multiple hydrocarbons and oil solutions which are transparent or more transparent medias such as: water, liquid ammonia, petroleum, gasol and alkali liquor at room temperature.It's a widely used on site level meter without blind zone when displaying.

UGS-B/E conventional color quartz glass level meter is suitable for measuring level of multiple hydrocarbons and oil solutions which are transparent or more transparent medias such as: water, liquid ammonia, petroleum, gasol and alkali liquor at room temperature.But there's blind zone when displaying.

UGS-C corrosion resistant color quartz glass level meter is suitable for acidic or alkaline liquids etc.and many organic solvents(especially activity group solvent)while it isn't suitable for measurement of liquid medias such as concentrated nitric acid, chromic acid mixture, chlorinated solvents, aliphatic and aromatic hydrogen.

UGS-D corrosion resistant color quartz glass level meter is suitable for measuring level of corrosive media and level in higher working temperature occasions.Since it adopts the combination of stainless steel with inner lining of polytetrafluoroethylene tee and straight pipes,it has high reliability.However,the disadvantage is that there exists upper and lower blind zone when measuring.

**Structure and principle**

The upper and lower connection flanges connect UGS series color quartz glass level meters with the vessel to compose a communicating vessel,the actual level height of media in vessel can be observed directly.The product adopts optical principle that natural light refracts in liquid.When measuring ,make the liquid be green and gas be red,since they have great contrast,the idication can be distinct and clear.

UGS-A level meter uses elbow to connect main body and valve to eliminate the stress generated by the installation and heat expansion and cold contract effectively.It's featured with installation size error adjustment and easy installation. There are safety steel balls installed in the upper and lower valve,when the glass damages accidently,the steel balls under the pressure in the vessel will automatically seal to stop the liquid flowing out.

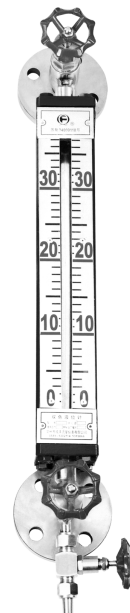
UGS-B series conventional color quartz glass level meters aren't equipped with security check valves,the ones with security check valves are series UGS-E.

UGS-C level meter which adopts inner lining of PP for parts touching the liquid(e.g. valve) can be suitable for most corrosive medias.

UGS-D level meter which adopts the combination of tee and straight pipes with inner lining of PTFE can be suitable for most corrosive medias.

**Technical parameters**

Measuring range:	(300 ~ 2000)mm	
Working pressure:	UGS-A, B, E: 0.6, 1.6, 2.5, 4.0, 6.4, 10.0MPa	
	UGS-C: 0.6MPa	
	UGS-D: 1.6, 2.5MPa	
Working temperature:	UGS-A, B, E: -50 ~ 350℃	
	UGS-C: -20 ~ 80℃	
	UGS-D: -20 ~ 150℃	
Process connection:	HG20592 ~ 20635-97 DN20(DN25, DN40)Convex or plane	
	Other flange standard((e.g. GB, JB/T, HGJ, ANSI, DIN etc.)users should note it in the order.	
The material touching the liquid:	UGS-A, B, E: Carbon steel; 304, 316L	
	UGS-C: Stainless steel with inner lining of PP	
	UGS-D: Stainless steel with inner lining of PTFE	
	Transparent quartz tube: Using special99.99%SiO <sub>2</sub> , of deformation point1077℃, softening point 1730℃, compressive strength1170kg/cm <sup>2</sup> , expansion coefficient5.5 × 10 <sup>-7</sup> , After special process,having high temperature and pressure resistance and excellent mechanical.	
Display range:	UGS-A without blind zone:Measuring range(L)-100mm	
	UGS-B, C, D, E:Measuring range(L)-200mm	
Valve sealing automatically pressure difference: ≥ 0.2MPa		
Heat tracing steam jacket pressure:1.0MPa	Steam jacket joint: G1/2"external thread	
Heat tracing circulating water jacket:1.0MPa	Circulating water jacket joint:G3/4external thread	
Sewage valve:Ball valve, needle valve		



**Type selection chart**

<input type="checkbox"/> UGS- <input type="checkbox"/>	Color quartz glass level meter			
<input type="checkbox"/>	A <input type="checkbox"/>	Standard type,without blind zone, valve with safety device,with sewage valve,temperature-50 ~ 350℃	Basic type	
<input type="checkbox"/>	B <input type="checkbox"/>	Conventional type, valve doesn't with safety device,with sewage valve,temperature-50 ~ 350℃		
<input type="checkbox"/>	C <input type="checkbox"/>	Corrosion resistant type,stainless steel with inner lining of PP,temperature < 80℃		
<input type="checkbox"/>	D <input type="checkbox"/>	Corrosion resistant type,stainless steel with inner lining of PTFE,temperature < 150℃		
<input type="checkbox"/>	E <input type="checkbox"/>	Conventional type,with security check valve,with sewage valve,temperature-50 ~ 350℃		
<input type="checkbox"/>	I <input type="checkbox"/>	Carbon steel	Material	
<input type="checkbox"/>	II <input type="checkbox"/>	Stainless steel		
<input type="checkbox"/>	- <input type="checkbox"/>	06 <input type="checkbox"/>	Working pressure	
<input type="checkbox"/>		10 <input type="checkbox"/>		
<input type="checkbox"/>		16 <input type="checkbox"/>		
<input type="checkbox"/>		25 <input type="checkbox"/>		
<input type="checkbox"/>		40 <input type="checkbox"/>		
<input type="checkbox"/>		63 <input type="checkbox"/>		
<input type="checkbox"/>	- <input type="checkbox"/>	20 <input type="checkbox"/>	Connection bore	
<input type="checkbox"/>		25 <input type="checkbox"/>		
<input type="checkbox"/>		40 <input type="checkbox"/>		
<input type="checkbox"/>	FF <input type="checkbox"/>	Plane	Flange sealing surface	
<input type="checkbox"/>	M <input type="checkbox"/>	Convex		
<input type="checkbox"/>	<input type="checkbox"/>	Measuring range,unit mm	Measuring range	
<input type="checkbox"/>	J1 <input type="checkbox"/>	Steam heating jacket	Heat tracing options	
<input type="checkbox"/>	J2 <input type="checkbox"/>	Circulating water heating jacket		
UGS- <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

