

YKND Vibration Online Viscometer



With the rapid development of automation control technology, people are increasingly dissatisfied with obtaining viscosity parameters from the laboratory to control product quality. The YKND vibration online viscometer is an online analytical instrument specifically designed for direct viscosity measurement in the industrial field. It uses a solid rod-shaped element that rotates and oscillates along its axial direction at a certain frequency. The sensor has only one exposed element, allowing fluid to flow freely on the sensor surface. When this element shears the fluid, it loses energy due to changes in viscosity resistance; this energy loss is detected by electronic circuitry and converted into a displayable viscosity reading by a processor. This instrument can measure very thick and viscous media by changing the shape of the sensor element, thus offering a wide viscosity measurement range. Because the fluid shearing is achieved through vibration, there are no moving parts, seals, or bearings. It can be widely used for accurate viscosity measurement in industrial fields and laboratories.

To meet users' personalized needs, reaction vessels typically have few openings, which are located at the top and far from the liquid surface, making viscosity measurement difficult. To address this issue, our company has specially developed an online viscometer with a long insertion length, allowing direct insertion into the liquid surface from the top. Insertion lengths typically range from 500mm to 4000mm, with an insertion diameter of 89mm. It can be equipped with a DN100 flange for online viscosity measurement and control in reaction vessels.

Yuke Customized Online Viscometer Features:

1. Wide Range of Models: We have designed various types and models of online viscometers to measure fluids with different viscosities, ranging from 1 to over 5 million centipoises.
2. Exceptional Testing Accuracy and Stability: Our online viscometers are designed with a temperature compensation system. They can measure the actual fluid viscosity under different process conditions and provide timely control when the viscosity exceeds the range.
3. Non-standard customization is available for various other viscosity values and different size ranges.



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Specification data :

Items	YKND-LSPBBFD	YKND-LSPCBFD	YKND-LSPDBFD
Viscosity range	0-100cp	0-1000cp	0-50000cp
Viscosity accuracy	±3%	±3%	±3%
Temperature range	-50~120℃	-50~450℃	-50~300℃
Temperature accuracy	±0.5 level	±0.5 level	±0.5 level
Ambient temperature	-20~60℃	-20~60℃	-20~60℃
Material	316L		
Medium temperature	-50~150℃	-50~450℃	-50~300℃
Flange connection	DN50 PN1.6Mpa		
Flange Standard	HG20592		
Output signal	Viscosity: 4-20mA DC		
Cable interface	M20×1.5		
Power supply	24V DC		
Probe insertion depth	220mm	150mm	220mm
Protection level	IP67		
Explosion-proof standard	ExdIIBT4		
USB to 485 connector			
PC debugging software			
Communication interface	modubas		
On-site explosion-proof unit, separate 3M+3M 8-core cable and viscometer connection			