

KWS-250 Online NH₄-N Ammonia Nitrogen Sensor

Introduction

The KWS-250 integrated online ammonia nitrogen sensor is fabricated using a PVC membrane-based ammonium ion selective electrode for testing ammonium ion content in water with temperature compensation to ensure fast, simple, accurate and economical testing.

Feature

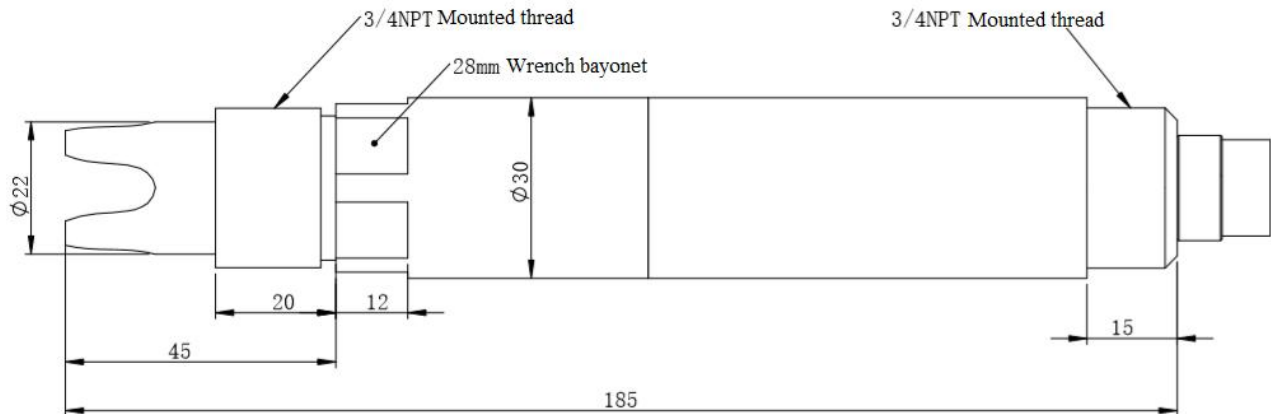
- Signal output: RS-485 bus, Modbus/RTU protocol, convenient to connect to PLC, DCS, industrial control computer, general controller, paperless recording instrument or touch screen and other third-party equipment.
- The patented ammonium ion probe, the internal reference solution oozes extremely slowly from the microporous salt bridge at a pressure of at least 100 KPa (1 Bar). Such a reference system is very stable and has a longer electrode life than conventional industrial electrodes.
- Easy to install: 3/4 NPT thread (pipe thread) for easy submersible installation or installation in pipes and tanks.
- IP68 protection grade.



Technical Specifications

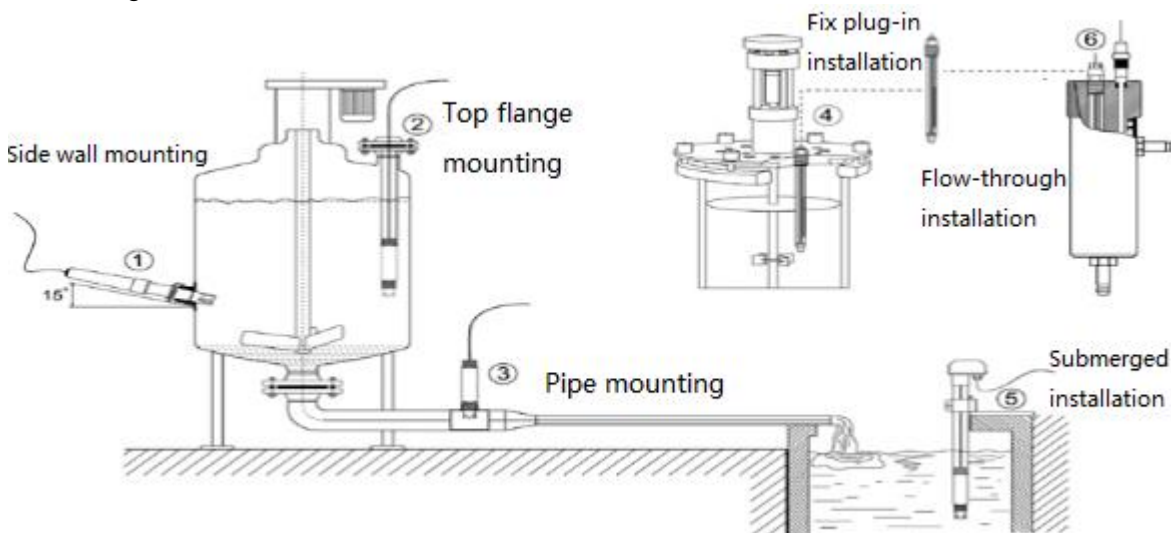
Model	KWS-250
Range	0~10mg/L or 0~100mg/L
Resolution	0.01mg/L
Accuracy	±10% or ±1mg/L, which is bigger
Operating Temperature	0~40℃
Work Pressure	<0.1MPa
Ph Range of Medium	4~10 pH
Temperature Compensation	automatic temperature compensation (Pt1000)
Power Supply	12~24VDC ±10%
Output	RS485, Modbus/RTU
Material	PVC and POM
Installation	3/4"NPT, submersible installation
Cable Length	5m, customizable
Calibration	two-point calibration
Power Consumption	<0.3W@12V
Protection Grade	IP68

Dimension



Installation

Note: The sensor should not be installed upside down or horizontally when installed, at least at an angle of 15 degrees or more.



Electrical connection

- Red wire-power cord (12~24V)
- Black wire-ground wire (GND)
- Blue Line-485A
- White Line-485B
- Bare wire-shield layer

After the wiring is completed, it should be carefully checked to avoid the wrong connection before the power is turned on.

Cable specification: Considering that the cable is immersed in water (including sea water) or exposed to air for a long time, the cable has a certain corrosion resistance. All interfaces of cable outer diameter $\Phi 6$ mm, have been waterproof.