MDS-7200-Ace-HX



Product Overview

The MDS-7200-Ace-HX Acetone-Hexane Concentration Refractometer is engineered based on the refractive index measurement principle, purpose-built for real-time, inline monitoring of acetone-hexane solution concentrations in chemical, pharmaceutical, and food processing industries. Equipped with a built-in ultrasonic cleaning probe, the device automatically removes buildup from the optical window to ensure long-term stable operation. It offers versatile installation options—including a flow cell configuration—and supports submersible or pipeline bypass layouts with flexible connections such as threaded, flanged, and sanitary clamp fittings.

Featuring automatic temperature compensation, the instrument accommodates medium temperatures from 0 to 100°C (customizable up to 150°C) and a pressure resistance rating of up to 1 MPa. For seamless integration with control systems, it provides a standard 4–20 mA analog output and an RS485 digital interface, with custom communication protocols available upon request. The measurement unit carries an IP67 protection rating, making it highly reliable in humid or mildly dusty environments. By delivering continuous concentration monitoring, it effectively replaces manual sampling and laboratory testing to significantly enhance the timeliness and reliability of process control.

Product Features

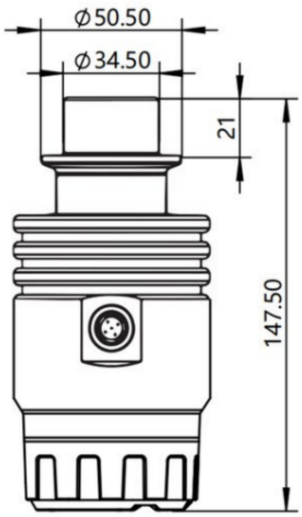
1. Continuous Inline Monitoring: Utilizes advanced refractive index measurement technology to provide continuous inline monitoring of acetone-hexane concentration, eliminating manual sampling and lab testing.
2. Automated Cleaning: Features a standard built-in ultrasonic cleaning probe that automatically clears optical window deposits, ensuring long-term measurement stability.
3. Versatile Installation: Supports flow cell configurations and is compatible with threaded, flanged, and sanitary clamp fittings for seamless integration into diverse pipeline setups.
4. Flexible System Integration: Offers both analog current and digital communication outputs, with customizable protocols available to integrate with various control and automation systems.
5. Reliable Accuracy: Equipped with built-in automatic temperature compensation that corrects for temperature fluctuations, ensuring consistent and dependable concentration readings.

Technical Specifications

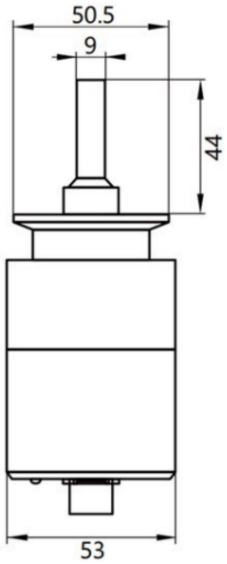
Measurement Range	Acetone-Hexane: 20.0–50.0%
	Refractive Index: 1.33900–1.37103
	0°C to 100°C (Customizable up to 150°C)
Measurement Accuracy	Brix: ±0.20%
	Refractive Index: ±0.00030
	Temperature: ±0.5°C
Resolution	Brix: 0.1%
	Refractive Index: 0.0001
	Temperature: 0.1°C
Output	Analog Output: 4~20mA corresponding to Brix concentration -1.0 ~ 57.0% (Customizable)
	Digital Output: RS485
	Other output methods customizable
Input	DC 24V ±10%, Current <100mA
Measurement Time	Default: 1 measurement per second
Ambient Temperature	0.0~60.0°C
Sample Volume	Immersion measurement
Pressure Resistance	1MPa
Protection Rating	Measurement section: IP67
Installation Method	Threaded, flanged, clamp, etc., customizable

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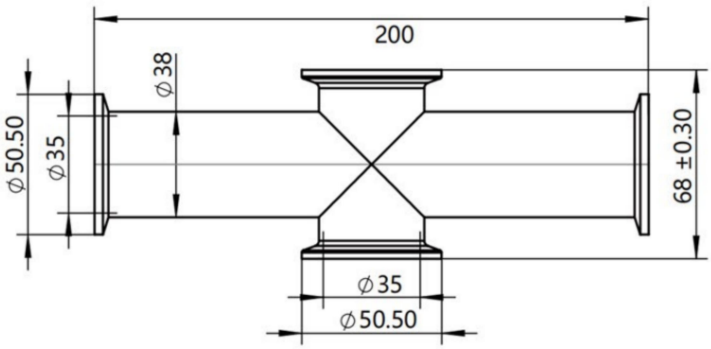
Product Dimensions



Online Liquid Optical Analyzer

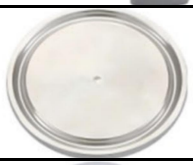


Ultrasonic Cleaning Probe



Flow-through Cell

Product Accessories

Flow-through Cell x 1		Clamp x 4	
Gasket x 4		Plug x 1	
Weld-on quick connector x 2		Lens Protective Cover x 1	

Customizable split-type display

Recommended External Loop Installation



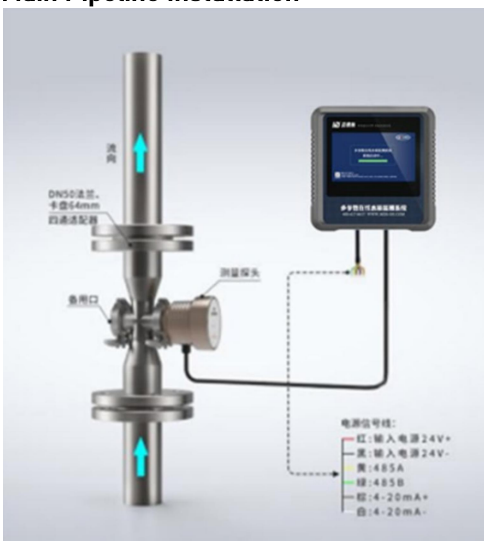
Side-Wall Direct Insertion



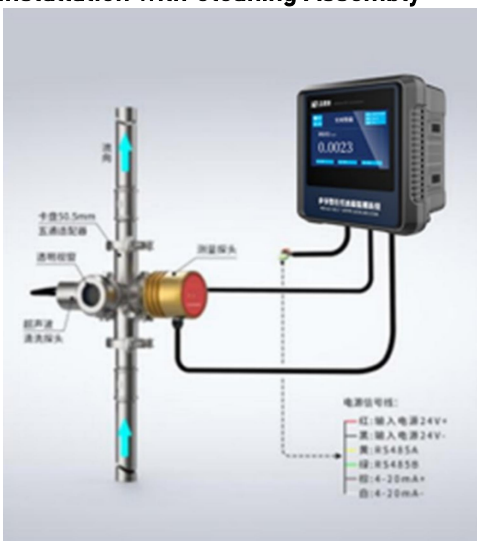
Top Direct Insertion



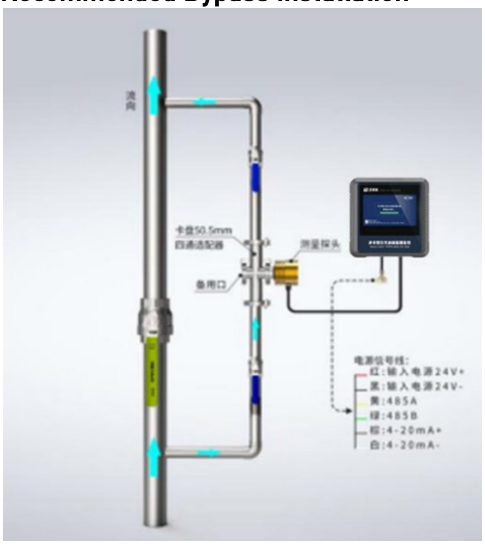
Main Pipeline Installation



Installation with Cleaning Assembly



Recommended Bypass Installation



Product parts



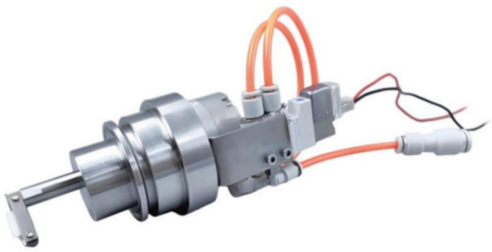
Ultrasonic Cleaning Probe



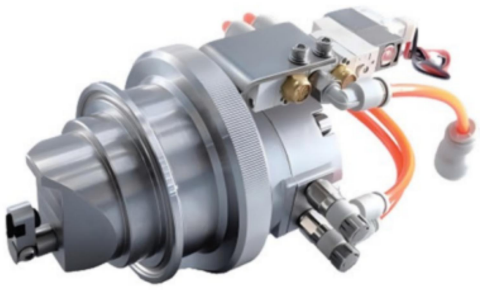
Ultrasonic Cleaning Probe



Ultrasonic Cleaning Probe



Automatic Brush Cleaning Device



Automatic Brush Cleaning Device



Automatic Brush Cleaning Device



High-pressure water/air cleaning unit

Showcase of Engineering Application Examples

