

Raman Rxn-40 probe

Designed to promote versatility and materials compatibility



Benefits:

- Customizable to your process
- Robust design with a range of process connections
- In situ/no transfer lines or fast-loops required
- Faster, simpler installation
- Support for a range of chemical processes and corrosivity requirements
- Ensures safety and meets regulatory requirements
- Suitable for hazardous/classified environments

Specs at a glance

- **Laser wavelength** 532 nm, 785 nm, 1000 nm
- **Wetted materials** Metal: C276 alloy, 316L stainless steel, or Grade 2 titanium Window: High-purity sapphire
- **Hazardous area certifications** ATEX, CSA, IECEx

More information and current pricing:

www.at.endress.com/KR40

Field of application: The Raman Rxn-40 probe is a sealed immersion probe for in situ Raman spectroscopy of liquid-phase samples in a laboratory or process plant setting. The process connection for the Raman Rxn-40 can be swaged, compression-mounted, flange-mounted, or installed in an Endress+Hauser flow cell, and is NeSSI compatible. These versatile options allow for direct insertion in slip-streams, drain-values, reactors, circulation loops, blend headers, and inlet or outlet pipework.

Features and specifications

Liquids

Measuring principle

Raman spectroscopy

Liquids

Laser wavelength

532 nm, 785 nm, 1000 nm

Spectral coverage

Probe spectral coverage is limited by the coverage of the analyzer being used.

Temperature

Temperature, Rxn-40 probe:
-30 to 150 °C

Relative humidity

20-95% non-condensing

Maximum laser power into probehead (mW)

<499

Sample interface

Temperature, Rxn-40 mini configuration:

-30 to 120 °C (316L stainless steel)

-30 to 150 °C (C276 alloy)

-30 to 150 °C (Grade 2 Titanium)

Temperature ramp: ≤30 °C/min

Temperature, Rxn-40:

-30 to 120 °C (316L stainless steel)

-30 to 280 °C (C276 alloy)

-30 to 300 °C (Grade 2 Titanium)

Temperature ramp: ≤30 °C/min

Flange: ASME B16.5 and DIN EN1092 Type B flanges available upon request

Relative humidity: up to 95%, non-condensing

Liquids

Pressure

Min pressure (Bara): Full vacuum (0 Bara) but not ultrahigh vacuum (UHV) where outgassing maybe a concern

Max pressure (Barg):
68.5 (316L stainless steel)
74.0 (C276 alloy)
29.0 (Grade 2 titanium)

Wetted materials

Metal: C276 alloy, 316L stainless steel, or Grade 2 titanium
Window: High-purity sapphire

Fiber optic cable

Cable sold separately

Length

Rxn-40 mini configuration immersible length: 36 mm
Rxn-40: Maximum immersible length is dependent on material choice

Diameter (mm)

12.7, 19.05, 25.4

Hazardous area certifications

ATEX, CSA, IECEx

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