



MARQMETRIX®

MEASUREMENT MADE SIMPLE

CONTACT US

BALLPROBE® - 0.125 IN.

0.125 in. (3.2mm) diameter, for small volume & precise spatial applications with TouchRaman® immersion technology

DESIGNED FOR MICROWELL MEASUREMENTS

The MarqMetrix® 0.125 in. BallProbe is our smallest diameter TouchRaman immersion contact probe.

Designed to make measurements in small-volume microwells and make highly resolved spatial measurements, this probe is constructed from stainless steel 316L, UV grade-sapphire, and an epoxy seal with wide chemical compatibility. The probe is designed to fit into the individual wells of microwell plates, but can also be used in moderate chemical laboratory and light-process applications.

SIMPLY TOUCH & MEASURE

MarqMetrix BallProbe technology utilizes an exclusively sourced, high-grade spherical sapphire lens. The short focal length of the spherical optic allows for TouchRaman—where users simply touch the probe to the sample—yielding highly reproducible sampling of liquids, solids, slurries, powders and heterogeneous mixtures.

The simplicity of use allows non-specialists to collect high-quality data and eliminates user-to-user variation.

This is the smallest diameter product in the MarqMetrix BallProbe product line

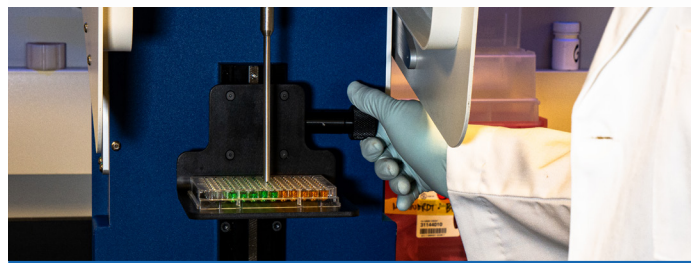


FEATURES & BENEFITS

- Immersion contact probe for touch measurements in small volume microwells
- Measures liquids, solids, slurries, powders, and heterogeneous mixtures
- Simple design for measurement accuracy and reproducibility
- Can be used in moderate chemical laboratory and light-process applications

APPLICATIONS

- Biopharmaceutical manufacturing
- Pharmaceutical manufacturing
- Food and beverage processing
- Polymer and plastic manufacturing
- Hazardous chemical applications



For more information contact:

206-971-3625

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The power of Raman, the simplicity of MarqMetrix

Visit MarqMetrix.com



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Featuring a 3mm ball lens, the BallProbe—0.125 in. is compatible with standard 0.125 in. compression fittings for porting into processes.

Due to the probe's small form-factor, the effective collection volume is less than 1 nanoliters (nL). Raman analysis of small (uL) volumes can be performed in low volume conical vials with almost no interference from the vial.

With sensitivity comparable to that of the larger BallProbes, the 0.125 in. BallProbe is perfect for analysis of small volume, difficult-to-access samples, monitoring continuous-flow and micro-batch reactors, among other applications.

MarqMetrix also offers a disposable 0.125 in. tip for use when interrogating harmful, sensitive or biological samples where safety, sterility and contamination are critical priorities.



Specifications

Standard Probe Length	1 in. (25mm)
Probe OD (Outside Diameter)	0.125 in. (3.175mm)
Sample Working Distance	TouchRaman (Sample contacts BallProbe lens)
Continuous Operating Temperature Range	-20°C to 150°C
Pressured Design Condition	6,000psi (413 bar)
Compatible Laser Wavelengths	500-1100nm

Operating Conditions

Suitable for intermittent exposure to most dilute and concentrated acids (hot & cold), bases and most organic solvents including ethanol, THF, ethyl acetate, acetone, DCM, toluene, pentane and acetonitrile

Avoid exposure to aqua regia, heated formic acid, mixed acid, TFAA

Wetted Materials

Probe Body	0.125 in. (3.2mm) OD Stainless steel 316L
Immersion Optics	3mm diameter UV-grade sapphire ball
Sealing Materials	High-temperature epoxy

Optical Properties

Made with high purity UV-grade sapphire ball lens aligned along the C-axis, eliminating response variability due to birefringence

Related Products

All-In-One Process Raman System - A single-unit spectrometer, laser, and acquisition computer

BallProbe® - 0.25 in. diameter, a larger diameter BallProbe for more demanding process or laboratory applications

Fiber BallProbe® - filtered fiber optic interface specifically designed for the MarqMetrix BallProbe and MarqMetrix Raman All-In-One

Proximal BallProbe® - Non-contact sampling probes for the analysis of in-motion samples through physical barriers

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