

Inline Refractometer

L-Rix 2100 / L-Rix 3100



A Sensor as Unique as You

We bring you what you have long been waiting for: an inline refractometer for continuous Brix concentration monitoring in metalworking machines (e.g. cooling lubricants, aqueous polymer quenching fluids), industrial processes, and fruit and vegetable processing. L-Rix 2100 and L-Rix 3100 provide a unique combination of best-in-class quality, price, accuracy, and compactness.



Increase the lifetime of tools and machines



Optimize the quality of manufactured products

for years

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downtime



Minimize maintenance costs



Ensure reliable Master performance challenging industrial conditions



L-Rix 2100 and L-Rix 3100

Production perfection

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Continuous concentration monitoring is crucial since concentration is a key parameter for production perfection in various processes. It prevents the wear and tear of cutting tools and optimizes the quality of the cooling lubricant – which directly influences the surface finish, as well as the dimensional accuracy of the machined part. In food processing it ensures consistent quality and reduction of production losses. With our sensor we enable continuous Brix monitoring – ensuring optimal concentration and operational parameters, as well as minimal resource usage, all the time.

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Unparalleled precision

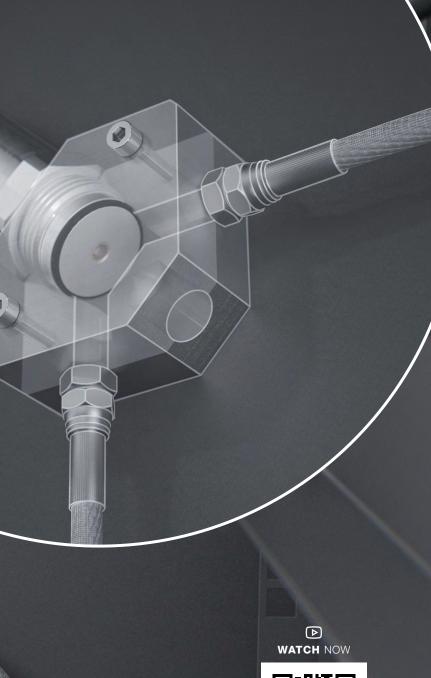
In this class, L-Rix delivers unparalleled, error-eliminating precision and compactness:

- \rightarrow Up to ±0.15° Brix accuracy
- → Compact design more than 3x smaller than comparable instruments on the market

We give you access to these high-accuracy instruments at a competitive price point, so that you benefit from an ideal balance between cost and performance. This unique combination of affordability with superior accuracy makes your investment absolutely worth it.

Supreme quality

The instrument is a testament to supreme quality: Built of sapphire, it is produced in a 'clean room' to prevent any dust particles becoming embedded in it, which would jeopardize the final product. There is built-in self-diagnosis so you can identify coating build-up and prevent inaccurate readings. We provide an IO-Link interface also delivering diagnostic information.





Continuous performance

With L-Rix you are up-and-running fast: L-Rix comes preconfigured. Once installed, there's no need to worry about it. Its durable design ensures 15+ years of operation in tough industrial environments. This all reduces downtime, minimizes maintenance costs, and ensures continuous reliable performance in challenging industrial conditions, for years to come.

	L-Rix 2100	L-Rix 3100
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LED status indication	\checkmark	
Measuring range	1.3268 nD to 1.3830 nD (0 °Brix to 30 °Brix)	1.3268 nD to 1.4215 nD (0 °Brix to 50 °Brix)
Accuracy	±0.20 °Brix	±0.15 °Brix
Repeatability	±0.10 °Brix	±0.075 °Brix
Housing	Stainless steel 1.4305 and plastic material	
Process wetted parts	Sapphire (Al ₂ O ₃ – 99.997 %), Stainless steel 1.4305, VICTREX FG 200 (PEEK)	Sapphire (Al ₂ O ₃ – 99.997 %), Stainless steel 1.4404, VICTREX FG 200 (PEEK)
Process connection	G1" Male, according to DIN/ISO 228	
Process temperature and pressure	0 °C to 60 °C, 0 bar to 10 bar	
Ambient temperature	-5 °C to +55 °C	
Output parameters	°Brix and temperature	
Communication	IO-Link, analog (4 mA to 20 mA)	
PLC connection	M12 sealed connector with single cable for power supply and 2x analog output	
Power supply	DC 24 V (range 20 30), SELV/PELV (Class 2 circuits)	
Apparent Ohmic resistance	240 Ohm to 500 Ohm	
Dimensions (length x diameter)	114 mm x 34 mm	
Protection class	IP65, IP67	
Cleaning (using AP adapter with cleaning connection)	Water or approved cleaning agents – up to 60 °C, 5 bar max.	
Storage conditions: ambient temperature and relative humidity	-40 °C to +70 °C, 10 % to 100 %	
Certifications and approvals		

Reliable. Compliant. Qualified.

Our well-trained and certified technicians are ready to keep your instrument running smoothly.





Maximum uptime

Warranty program

*When installed together with the VARIVENT® adapter

Mechanical and electrical integration:





 \rightarrow Connection adapter G1/4"







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Short response times



A global service network

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