

Product Overview

Process Refractometers

2024
2025



The iCS.
Our smallest concentration sensor yet.

Application Highlights

Food & Beverage



Quality control | Dilution or evaporation process control | Dealcoholisation process, Oechsle / Brix measurement | Process monitoring | extraction processes | CIP monitoring, product recovery and interface detection

Sugar, Starch & Sweeteners



Brix measurement of all common sugar types | Monitoring of the crystallisation processes | Impurity detection in condensate | Concentration measurement of starch or sweetener

Chemical, Petrochemical & Chemical Fibre



Concentration measurement of solvents | Urea concentration measurements | Ammonia concentration in fertiliser production | Interface detection in the oil phase separation

Pharmaceutical Industry



Monitoring of chemical reactions | Impurity Detection | Quality control of final products | Monitoring of extraction, mixing, preparation, crystallisation and dissolution processes | In accordance with Pharmacopoeia

Biofuels & Fermentation



Pulp & Paper Industry



Electronics Industry



Mechanical Processing



Tobacco Industry

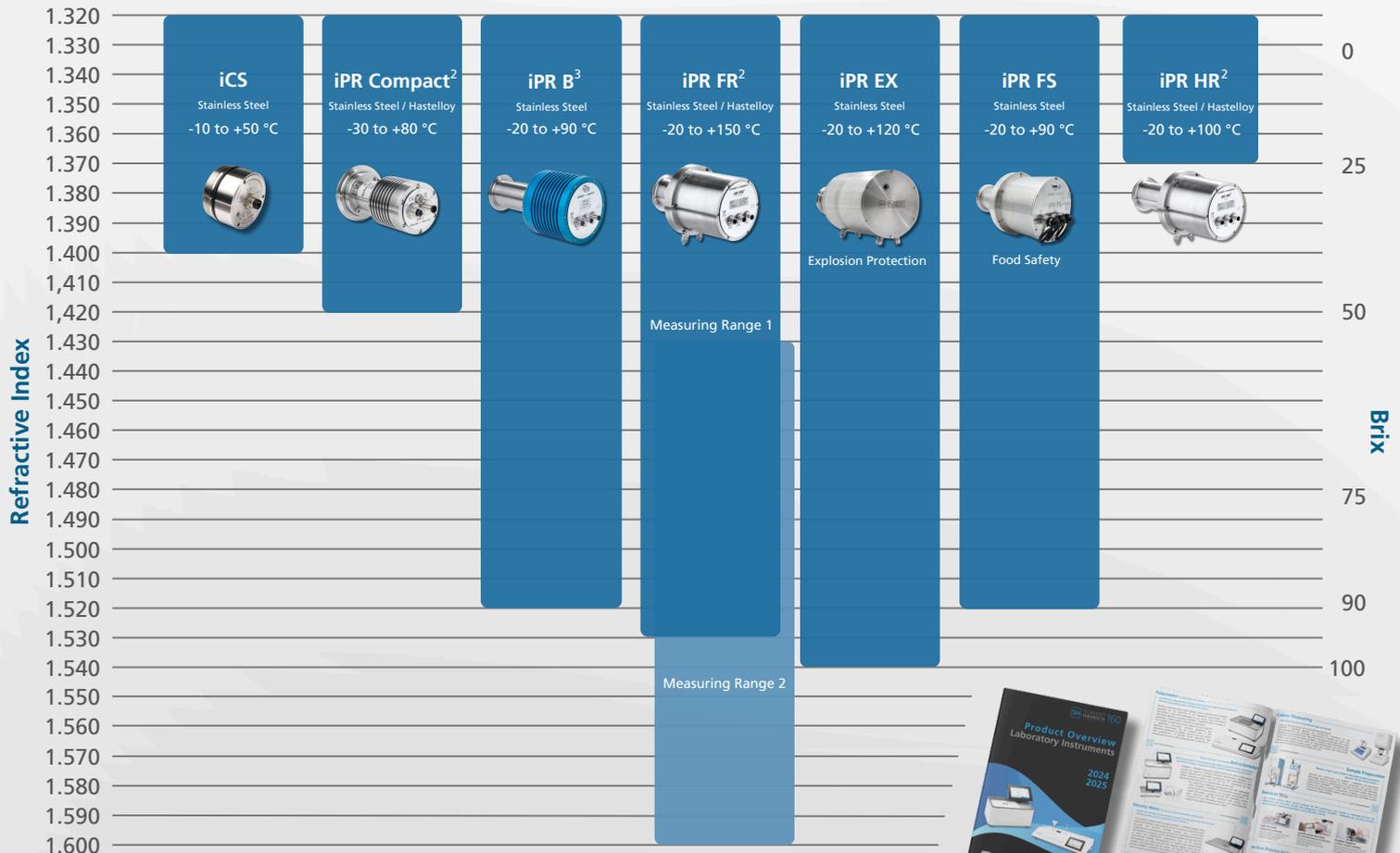


Electricity and Energy Industry



Process Refractometer Overview

Resolution nD / Brix	0,0002 / 0.1	0.0001 / 0.05	0.00001 / 0.01	0.00001 / 0.01	0.000005 / 0.01	0.00001 / 0.01	0.000005 / 0.002
Precision nD / Brix	0.0004 / 0.3	0.0002 / 0.15	0.00014 / 0.1	0.00007 / 0.05	0.00014 / 0.1	0.00014 / 0.1	0.00004 / 0.02



Scan for PDF

Take a look at our laboratory instruments brochure



Small size concentration measurement for various applications

The iCS in-line sensor is designed to measure antifreeze concentration, specifically ethylene glycol, offering a compact and lightweight solution that fits easily even in tight spaces. This sensor not only ensures reliable measurements with minimal maintenance but can also be adapted to specific products. Its simple and flexible integration into processes, along with its cost-effectiveness in implementation and maintenance, make it an attractive choice. Built on proven, long-standing technology, the iCS sensor excels at monitoring ethylene glycol and cooling lubricant concentration, making it an essential tool for various industries.



Scan for technical specifications

iPR-Series

Advancing Process Control - The Excellence of our iPR-Devices

For over 35 years, SCHMIDT + HAENSCH's Inline Process Refractometers (iPR) have set the standard in process monitoring, adept in concentration monitoring, quality control, and detecting impurities. These devices reliably measure refractive index, determining concentrations or mixing ratios quickly and accurately, regardless of turbidity or viscosity. iPRs are compact, with built-in electronics in an IP69K housing, feature a durable LED light, and provide precise, rapid measurements. They comply with hygienic standards suitable for food and pharmaceutical applications, explosion protection when needed, offer user-configurable outputs such as RS232 and 4-20 mA and perform temperature compensation for specific substances, reflecting SCHMIDT + HAENSCH's dedication to innovation and quality in demanding environments.



Scan for technical specifications



Connections & Accessories

Cleaning Solutions

SCHMIDT + HAENSCH provides two automatic cleaning solutions for their devices: a versatile cleaning device using water, steam, or solvent to remove residues on the prism, and a proprietary ultrasonic system for processes where liquid cleaning is not an option.



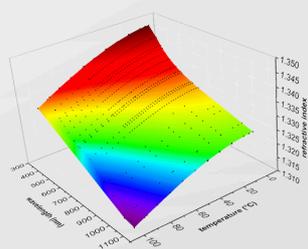
Ultrasonic



Liquid / Steam

Inline Housings

SCHMIDT + HAENSCH's GEA VARINLINE® housings for process instruments offer unparalleled flexibility and hygiene, accommodating multiple instruments within a design that prevents dead spaces, oxidation, and cleaning issues. These housings, capable of withstanding up to 10 bar pressure, are tailored to match pipeline diameters, ensuring optimal flow without separation.



Engineering & Custom Scales

Measurement results with highest accuracy

When implementing a new PAT, it is crucial to get the right results on the first day of installation. Our in-house lab service determines your specific measuring scale for your instrument, which is then provided for your measurements. This will ensure reliable and repeatable process control in the long run.

160

years

Company History

SCHMIDT + HAENSCH has developed from a rich history of engineering and scientific research. The family-run company was founded by Franz Schmidt and Herrmann Haensch in 1864 and has been part of innovative German technology from the beginning.



Franz Schmidt



Herrmann Haensch

Today, our long-standing experience is the foundation of a company culture of reliability, excellence and precision.

Visit our website to find out more about our company and product portfolio:



www.schmidt-haensch.com

