

- L** LABORATORY
- P** PROCESS
- S** SOFTWARE
- A** AUTOMATION



**SCHMIDT  
HAENSCH**  
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# iPR FS

## EHEDG Certified Inline Process Refractometer

With its certified hygienic design it is suitable for  
almost all applications in food and beverage production



## SPECIFICATIONS

## iPR FS (Food Safety)

|                           |  |
|---------------------------|--|
| Measuring scales          | Refractive Index (RI), Sucrose (Brix) (already included) Up to 4 scales freely definable   |
| Measuring range           | 1.32000 - 1.52000 RI / 0 - 85 Brix   |
| Resolution                | 0.00001 RI / 0.01 Brix   |
| Accuracy                  | $\pm 0,00014$ RI* / $\pm 0.1$ Brix*  |
| Reproducibility           | $\pm 0.00014$ RI / $\pm 0.1\%$ Brix  |
| Ambient temperature       | - 10°C to + 50°C   |
| Sample temperature        | 0°C to + 90°C  |
| Temperature measurement   | NTC sensor for measurement of sample temperature placed inside the prism   |
| Interfaces                | 2 insulated 4 - 20 mA analog outputs<br>2 digital output switch (up to 1 A)<br>1 serial output (RS232, alternatively RS485 or USB) |
| Power supply              | 24 V DC  |
| Prism                     | Sapphire   |
| Light source / wavelength | 589 nm, LED  |
| Process pressure (max.)   | MPa (145 psi, 10 bar)  |
| Process contact material  | Sapphire, Stainless steel  |
| Mounting accessories      | VariVent (Tuchenhagen) or APV  |

\* Standard conditions (589 nm, 20°C)

**Food safety requires certification according to European standard EHEDG.  
This is comparable to AAA.**

- Hygienic design
- Rounded edges
- No slotted screws
- CIP/SIP possible (60 min max.)
- Material in contact with media: stainlesssteel, sapphire, PEEK
- Determination of dry substance
- Determination of mass percent
- Brix measurement
- Standard scales (Brix, Oechsle, Zeiss, Fat, Honey)
- with automatic temperature compensation

### Typical applications of the model

- Sugar industry
- Beverages
- Food (oil from palm, corn, sunflower, soya)
- Essential oil in aroma
- Sweets and chocolate



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