

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



**SCHMIDT
HAENSCH**
innovators by tradition since 1864

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

Food Safety Inline Process Refractometer

Measurement principle	Total internal reflection refractometer
Measuring scales	Sucrose (Brix) (already included) Up to 4 scales freely definable
Measuring range	1.32000 - 1.52000 RI / 0 - 90 Brix
Accuracy	$\pm 0,00014$ RI / ± 0.1 Brix at 25°C
Resolution	0.00001 RI / 0.01 Brix
Reproducibility	0.00007 RI / 0.05 Brix
Process temperature	- 10 to + 90 °C
Ambient temperature	- 10 to + 50 °C
Temperature measurement accuracy	± 0.1 °C
Temperature measurement	NTC sensor for measurement of sample temperature placed inside the prism
Process pressure	0 - 10 bar
Interface standard	2 insulated 4 - 20 mA analog outputs 2 digital output switch (up to 1 A) 1 serial output (RS232)
Interface optional	1 serial output (RS485 or USB)
Mechanical interface standard	VariVent type N 1.4404 Stainless steel
Dimensions	256.6 mm x Ø 136 mm
Weight	approx. 3790 g
IP class	IP69K
Light source, wavelength	LED, 589 nm
Power supply	24 V DC
Current consumption	< 120 mA (20 - 28 V)
Wetted parts	Sapphire, 1.4404 Stainless steel, PEEK
Housing material	1.4404 Stainless steel

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

