## HR SERIES | MANUAL HAND-HELD REFRACTOMETERS

### **Quick on-site measurements!**

Manual handheld refractometers are for fast everyday use. They are particularly easy to use and very sturdy. Various scales and additional functions ensure that there is exactly the right handheld refractometer for many application areas. This makes for reliability when reading, as the measured value does not first have to be converted.

Some models have an automatic temperature compensation feature which increases measurement precision for measurements which are performed at 10–40 °C instead of 20 °C. For calibration, distilled water is required, or else a small calibration plate is provided.



### Fields of application

Determination of mixing ratios, quality and quantity inspection in the following industries:

- Beverages
- Food
- Sugar / sweeteners
- Chemicals
- Flavours
- Petrochemicals
- Cosmetics / hygiene
- Metalworking
- Pharmaceuticals
- Water / effluent
- Education / research









# Version 5.3 | Status: May 2019 | Subject to modifications and errors.

# **OVERVIEW OF HANDHELD REFRACTOMETERS**



ORDER NUMBER	HANDHELD REFRACTOMETERS
HRB10-T	Handheld refractometer, determination of Brix, measurement range 0–10% Brix, measurement accuracy $\pm 0.1$ % Brix
HRB18-T	Handheld refractometer, determination of Brix, measurement range 0–18%Brix, measurement accuracy ±0.1%Brix
HRB32-T	Handheld refractometer, determination of Brix, measurement range 0–32% Brix, measurement accuracy $\pm 0.2\%$ Brix
HRB62-T	Handheld refractometer, determination of Brix, measurement range 28–62 %Brix, measurement accuracy ±0.2 %Brix
HRB82-T	Handheld refractometer, determination of Brix, measurement range $45-82\%$ Brix, measurement accuracy $\pm 0.2\%$ Brix
HRB92-T	Handheld refractometer, determination of Brix, determination of Baumé, determination of water content in honey, measurement range 58–92 %Brix, 38–43 °Bé, 12–27 % water content in honey, measurement accuracy 0.5 %Brix, ±0.5 °Bé, ±0.5 % water content in honey
HRB90	Handheld refractometer, determination of Brix, measurement range 0–90%Brix, measurement accuracy $\pm 0.2$ %Brix (with thermometer 6–36 °C)
HRH30-T	Handheld refractometer, determination of water content in honey, measurement range 12–30% water content in honey, measurement accuracy ±0.1% water content in honey
HRND	Handheld refractometer, determination of refractive index, measurement range 1.3330–1.5170, measurement accuracy $\pm 0.0005$ (with thermometer 6–36°C)
HRS10-T	Handheld refractometer, determination of salinity (NaCl), specific gravity (D 20/20), measurement range 0–10%, $1.000-1.070$ , measurement accuracy $\pm 0.1\%$ , $\pm 0.001$
HRS28-T	Handheld refractometer, determination of salinity (NaCl), measurement range 0–28%, measurement accuracy $\pm 0.2\%$
HRM18-T	Handheld refractometer, determination of refractive index, serum protein and specific gravity of urine, measurement range 1.3330–1.3600, 0–12 g/dl, 1.000–1.050 UG, measurement accuracy ±0.0005, ±0.2 g/dl, ±0.002 UG
HRO32-T	Handheld refractometer, determination of Oechsle, determination of Brix and potential alcohol content, measurement range 0–32%Brix, 30–130°Oe, 4.4–19% alcohol, measurement accuracy ±0.2%Brix, ±1°Oe, ±0.1% alcohol
HRKFZ-T	Handheld refractometer, battery fluid and radiator antifreeze tester for ethylene and propylene glycol content, measurement range antifreeze: -50–0°C, battery acid: 1.10–1.30 g/cm³, measurement accuracy antifreeze: ±5°C, battery acid: ±0.01 g/cm³



