



Handheld refractometer - Overview technical data; scales; measurement ranges & accuracy


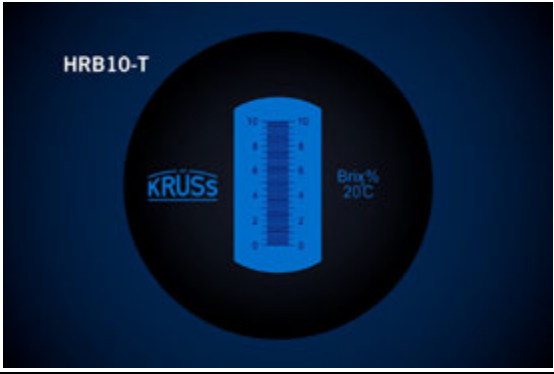

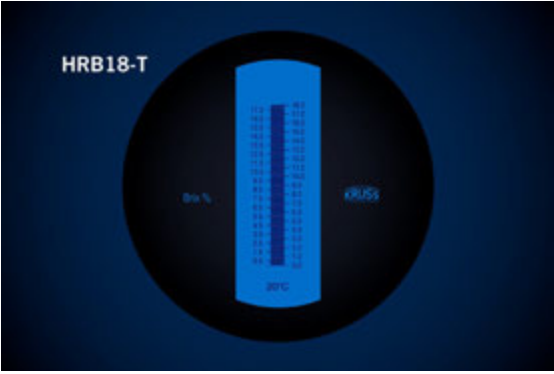

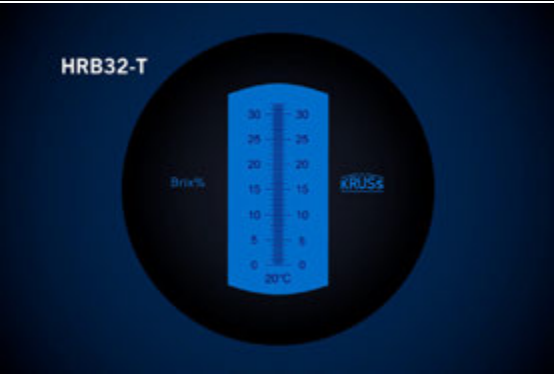




Our high quality devices differ mainly in the selectable scales, e.g. for the determination of the salt content, water content in honey, serum protein content, Oechsle, Brix and potential alcohol content as well as ethylene- and propylene glycol content. No manual conversion is required thanks to the scales and application errors are ruled out. The majority of our handheld refractometers are equipped with an automatic temperature compensation. The measured values are therefore already corrected to 20 °C when taking a reading.

Order number/device model	Scales	Measurement Range	Measuring accuracy
HRB10-T	▪ Scale: Brix	▪ Measurement Range: 0–10 %Brix	▪ Measuring accuracy: ±0.1 %Brix
HRB18-T	▪ Brix	▪ 0–18 %Brix	▪ ±0.1 %Brix
HRB32-T	▪ Brix	▪ 0–32 %Brix	▪ ±0.2 %Brix
HRB62-T	▪ Brix	▪ 28–62 %Brix	▪ ±0.2 %Brix
HRB92-T	▪ Brix	▪ 58–92 %Brix	▪ ±0.5 %Brix
	▪ Baumé	▪ 38–43 °Bé	▪ ±0.5 °Bé
	▪ Water content in honey	▪ 12–27 % Water content in honey	▪ ±0.5 % Water content in honey
HRB90	▪ Brix (with thermometer 6–36 °C)	▪ 0–90 %Brix	▪ ±0.2 %Brix
HRH30 -T	▪ Water content in honey	▪ 12-30 % Water content in honey	▪ ±0.1 % Water content in honey
HRND	▪ Determination of refractive index (with thermometer 6–36 °C)	▪ 1.3330–1.5170	▪ ±0.0005
HRS10-T	▪ Salinity (NaCl)	▪ 0–10 %	▪ ±0.1 %
	▪ Specific gravity	▪ 1.000-1.070	▪ ±0.001
HRS28-T	▪ Salinity (NaCl)	▪ 0–28 %	▪ ±0.2 %
HRM18-T	▪ Determination of refractive	▪ 1.3330–1.3600	▪ ±0.0005
	▪ Serum protein	▪ 0–12 g/dl	▪ ±0.2 g/dl
	▪ Specific gravity of urine (UG)	▪ 1.000–1.050 UG	▪ ±0.002 UG
HRO32-T	▪ Brix	▪ 0–32 %Brix	▪ ±0.2 %Brix
	▪ Oechsle	▪ 30–130 °Oe	▪ ±1 °Oe
	▪ Potential alcohol content	▪ 4.4–19 % alcohol	▪ ±0.1 % alcohol
HRKFZ-T	▪ Ethylene and propylene glycol content (antifreez)	▪ -50–0 °C	▪ ±5 °C
	▪ Battery acid	▪ 1.10–1.30 g/cm ³	▪ ±0.01 g/cm ³
HRKFZG-T	▪ Battery fluid	▪ 1.10–1.40 g/cm ³	▪ ±0.01 g/cm ³
	▪ G11/12 & G13	▪ -50–0 °C	▪ ±1 °C
	▪ Windshield wiper water (ethanol & isopropanol)	▪ -40–0 °C	▪ ±5 °C


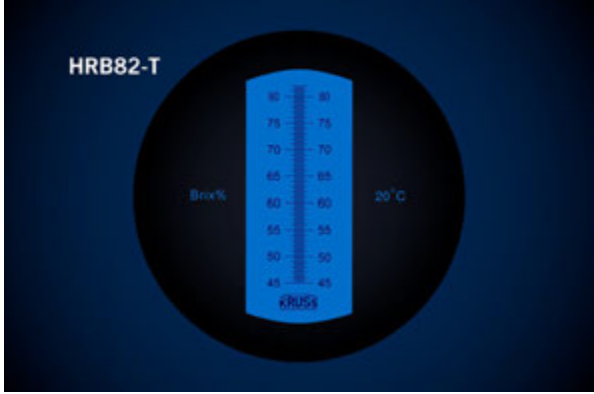

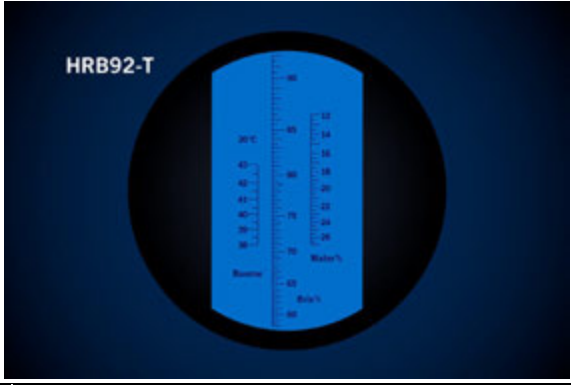

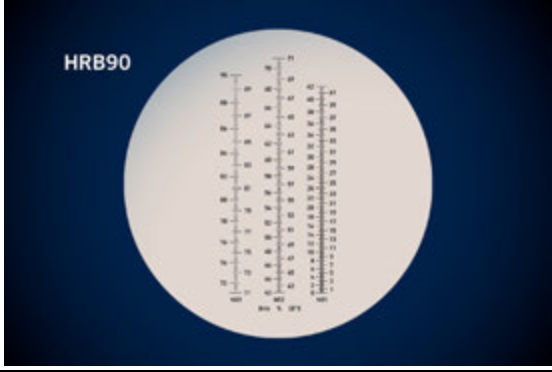

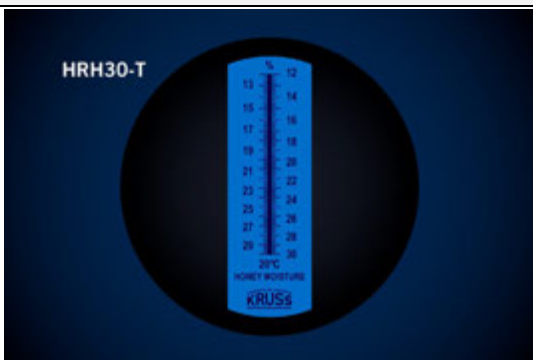


Handheld refractometer device details and scales

Order number	Handheld refractometer	
Order number: HRB10-T - Handheld refractometer with Brix scale for measurement range 0 - 10 %Brix.		
<p>Scale:</p> <ul style="list-style-type: none">▪ Brix▪ Length: 19 cm	 <p>A blue handheld refractometer with a white measurement window and a blue handle. A small yellow 'e' mark is visible below the device.</p>	 <p>The view through the eyepiece shows a circular field with a blue scale from 0 to 10. The scale is labeled 'Brix%' and '20°C'. The 'KRÜSS' logo is visible on the left side of the scale.</p>
Order number: HRB18-T - Handheld refractometer with Brix scale for measurement range 0 - 18 %Brix		
<p>Scale:</p> <ul style="list-style-type: none">▪ Brix▪ Length: 19 cm	 <p>A blue handheld refractometer with a white measurement window and a blue handle. A small yellow 'e' mark is visible below the device.</p>	 <p>The view through the eyepiece shows a circular field with a blue scale from 0 to 18. The scale is labeled 'Brix%' and '20°C'. The 'KRÜSS' logo is visible on the right side of the scale.</p>
Order number: HRB32-T - Handheld refractometer with Brix scale for measurement range 0 - 32 %Brix.		
<p>Scale:</p> <ul style="list-style-type: none">▪ Brix▪ Length: 17 cm	 <p>A blue handheld refractometer with a white measurement window and a blue handle. A small yellow 'e' mark is visible below the device.</p>	 <p>The view through the eyepiece shows a circular field with a blue scale from 0 to 30. The scale is labeled 'Brix%' and '20°C'. The 'KRÜSS' logo is visible on the right side of the scale.</p>
Order number: HRB62-T - Handheld refractometer with Brix scale for measurement range 28 - 62 %Brix.		
<p>Scale:</p> <ul style="list-style-type: none">▪ Brix▪ Length: 15.5 cm	 <p>A blue handheld refractometer with a white measurement window and a blue handle. A small yellow 'e' mark is visible below the device.</p>	 <p>The view through the eyepiece shows a circular field with a blue scale from 28 to 62. The scale is labeled 'Brix%' and '20°C'. The 'KRÜSS' logo is visible at the bottom of the scale.</p>


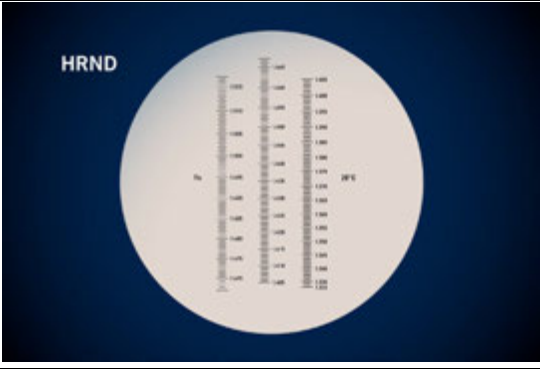

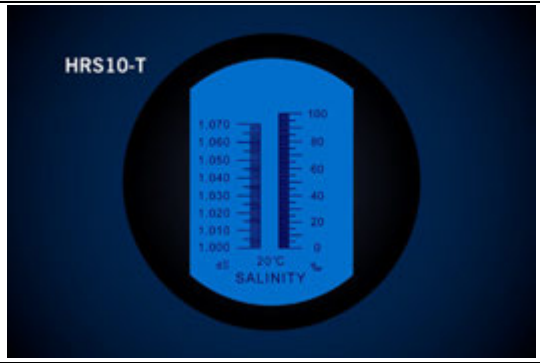

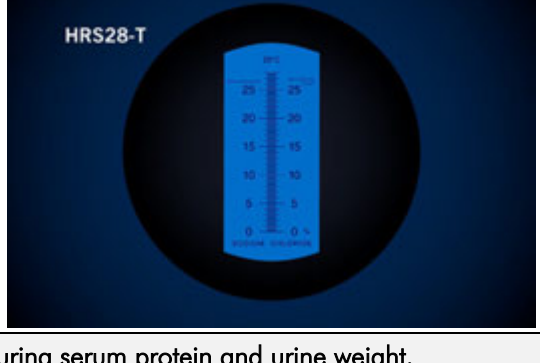




Handheld refractometer device details and scales

Order number	Handheld refractometer	
Order number: HRB82-T - Handheld refractometer with Brix scale for measurement range 45 - 82 %Brix.		
<p>Scales:</p> <ul style="list-style-type: none">■ Brix■ Length: 14.5 cm		
Order number: HRB92-T - Handheld refractometer for honey measurement (IHC2002). With measuring scales for %Brix, hney water content and Baumé.		
<p>Scales:</p> <ul style="list-style-type: none">■ Brix■ Baumé■ Water content in honey■ Length: 15.5 cm		
Order number: HRB90 - Handheld refractometer with Brix scale for universal use. Equipped with a thermometer		
<p>Scale:</p> <ul style="list-style-type: none">■ Brix (with thermometer 6-36 °C)■ Length: 20 cm		
Order number: HRH30-T - Handheld refractometer for honey measurement (IHC2002). Suitable for measuring the water content in honey in the range 12 - 30 %		
<p>Scale:</p> <ul style="list-style-type: none">■ Water content in honey■ Length: 17 cm		


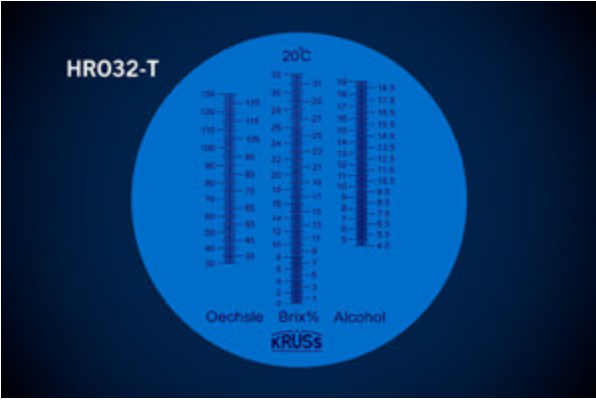

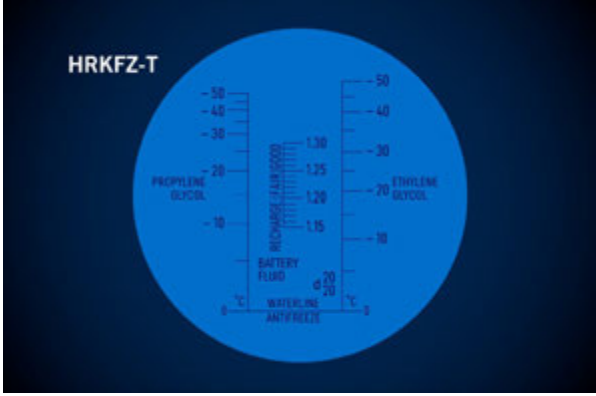


Handheld refractometer device details and scales

Order number	Handheld refractometer	
Order number: HRND - Handheld refractometer for universal use with refractive index scale, equipped with a thermometer.		
<p>Scale:</p> <ul style="list-style-type: none"> Refractive index (with thermometer 6-36 °C) Length: 20 cm 		
Order number: HRS10-T - Manual salt handheld refractometer for salt content of NaCl (salinity) in the range 0 - 10 % and specific gravity D 20/20		
<p>Scale:</p> <ul style="list-style-type: none"> Salt content (NaCl) Specific density (D 20/20) Length: 19 cm 		
Order number: HRS28-T - Manual salt handheld refractometer for salt content of NaCl (salinity) in the range 0 - 28 %		
<p>Scale:</p> <ul style="list-style-type: none"> Salt content (NaCl) Length: 17 cm 		
Order number: HRM18-T - Handheld refractometer for measuring serum protein and urine weight.		
<p>Scale:</p> <ul style="list-style-type: none"> Refractive index Serum protein Specific urine weight (UG) Length: 17 cm 		



Handheld refractometer device details and scales

Order number	Handheld refractometer	
Order number: HRO32-T - Handheld refractometer for measuring alcohol in Oechsle and potential alcohol content		
<p>Scale:</p> <ul style="list-style-type: none"> ■ Brix ■ Oechsle ■ Potential alcohol content ■ Length: 15.5 cm 		
Order number: HRKFZ-T - Manual automotive handheld refractometer for measuring antifreeze (ethylene or propylene) and battery acid		
<p>Scale:</p> <ul style="list-style-type: none"> ■ Ethylene glycol ■ Propylene glycol ■ Battery acid ■ Length: 15.5 cm 		
Order number: HRKFZG-T - Handheld refractometer for measuring antifreeze (G11/G12, G13), Windscreen wiper fluid and battery acid		
<p>Scale:</p> <ul style="list-style-type: none"> ■ G11/12 ■ G13 ■ Battery fluid ■ Windscreen wiper fluid (ethanol) ■ Windscreen wiper fluid (SFR1 - Isopropanol) ■ Length: 15.5 cm 	