

HR-Series | Manual Hand-held Refractometers

These are precision instruments for determining the solid contents dissolved in liquids, such as sugar, salt, serumprotein in blood and starch. A few drops of the sample is placed on the refractometer prism and the index of refraction is measured. From this, dissolved solids can be determined in seconds.

This method is very useful for process or quality control of beet or cane sugar, fruit juices, jam, vegetable juices, soft drinks, and canned foods to name a few applications. The hand refractometer fits in every pocket! Delivered in a handy storage case with conversion tables.

Fields of application:

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

- Pulp and paper industries
- Chemical industry
- Beverage industry
- Food industry
- Sugar and sweetener industry
- Textiles industry
- Metalworking industry
- Petrochemical industry
- Wastewater management

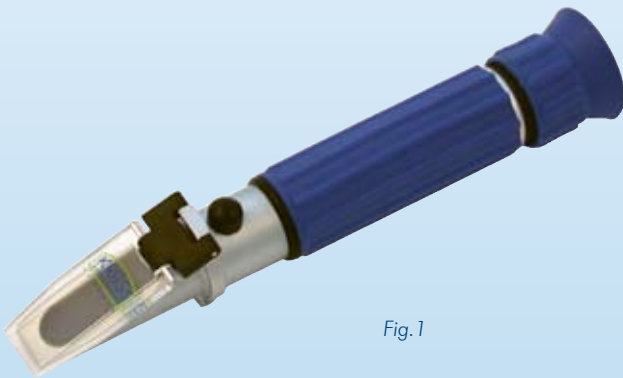


Fig.1



Fig.2



Fig.4



Fig.3

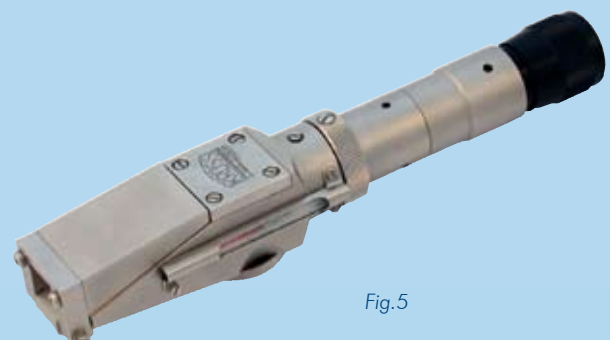


Fig.5

Manual Hand-held Refractometers

Model	Fig. No.	Measurement range	Accuracy	Scale division	Temperature-compensation	Thermo-meter	Application
HR10	Fig. 1	0-10% Brix	0.1%	0.1%	-	-	For sugar concentration in fruit juices, soft drinks, vegetables, foods and cooling lubricants
HR18-01	Fig. 1	0-18% Brix	0.1%	0.1%	-	-	For sugar concentration in fruit juices, soft drinks, vegetables, foods and cooling lubricants
HR20	Fig. 1	0-20% Brix	0.2%	0.2%	-	-	For sugar concentration in fruit juices, soft drinks, vegetables, foods and cooling lubricants
HRN32	Fig. 2	0-32% Brix	0.2%	0.2%	-	-	For sugar concentration in fruit juices, soft drinks, vegetables, foods and cooling lubricants
HRT32	Fig. 2	0-32% Brix	0.2%	0.2%	automatic	-	For sugar concentration in fruit juices, soft drinks, vegetables, foods and cooling lubricants
HRN62	Fig. 3	28-62% Brix	0.2%	0.2%	-	-	For analysing chemical and technical liquids, such as oils, fats, coolants, lubricants
HRT62	Fig. 3	28-62% Brix	0.2%	0.2%	automatic	-	For analysing chemical and technical liquids, such as oils, fats, coolants, lubricants
HRN82	Fig. 3	45-82% Brix	0.5%	0.5%	-	-	For analysing chemical and technical liquids, such as oils, fats, coolants, lubricants
HR92	Fig. 3	58-92% Brix; 38-45° Baume; 17-27% Water	0.5%	0.5% Brix; 0.5° Baume; 1% Water	-	-	For examination of highly concentrated sugars, determination of water content in honey and analysing fats, lubricants and cooking oil
HRH30	Fig. 3	58-90% Brix	0.1%	0.1%	-	-	For examination of highly concentrated sugars, determination of water content in honey and analysing fats, lubricants and cooking oil
HR900	Fig. 5	0-90% Brix	0.2%	0.2%	-	10°-40°C	Universal hand refractometer with stage switch for all ranges. Adjustable prisms for sharp contours, direct and indirect light guidance for measurement of clear and opaque substances
HR901	Fig. 5	1.333-1.517 nD	0.0005nD	0.0005 nD	-	10°-40°C	Universal hand refractometer with stage switch for all ranges. Adjustable prisms for sharp contours, direct and indirect light guidance for measurement of clear and opaque substances
HR27-100	Fig. 2	0-100‰ Salt	0.1%	0.1%	-	-	For salinity analysis
HRS16	Fig. 2	0-160‰ Salt; 1.333-1.373n	0.2%	0.2%	-	-	For salinity analysis
HR146	Fig. 2	0-28% Salt	0.2%	0.2%	-	-	For the measurement of serum protein and specific urine weight
HRM18	Fig. 2	0-12 g/dl; 1.333-1.360 nD; 1.000-1.050 UW	0.2 g/dl; 0.0005 nD; 0.02 UW	0.2 g/dl; 0.0005 nD; 0.02 UW	-	-	For the measurement of serum protein and specific urine weight
HRMT18	Fig. 2	0-12 g/dl; 1.333-1.360 nD; 1.000-1.050 UW	0.00	0.2 g/dl; 0.0005 nD; 0.02 UW	automatic	-	For the measurement of serum protein and specific urine weight
HRO32	Fig. 2	0-32% Brix; 30-130° Oechsle; 4.4-18.5% Alcohol	0.2%	0.2% Brix; 1° Oechsle; 0.1% Alcohol	-	-	For the measurement of oechsle and alcohol content in must
HROT32	Fig. 2	0-32% Brix; 30-130° Oechsle; 4.4-18.5% Alcohol	0.2%	0.2% Brix; 1° Oechsle; 0.1% Alcohol	automatic	-	For the measurement of Brix, oechsle and alcohol content in must
HRKFZ1	Fig. 2	0-50°C; 1.10-1.30 Battery fluid; Ethylene- and propylenglycol	Ethylene- Propylen: 5° Battery fluid:0.01	Ethylene- Propylen: 5° Battery fluid: 0.01	-	-	Anti freeze and battery fluid tester
HR25-800	Fig. 4	0-80% Brix	1 %	0.5% Brix	-	-	Universal hand refractometer with stage switch for all ranges. Adjustable prisms for sharp contours, direct and indirect light guidance for measurement of clear and opaque substances