

Hand Held Refractometer

Operation Instructions

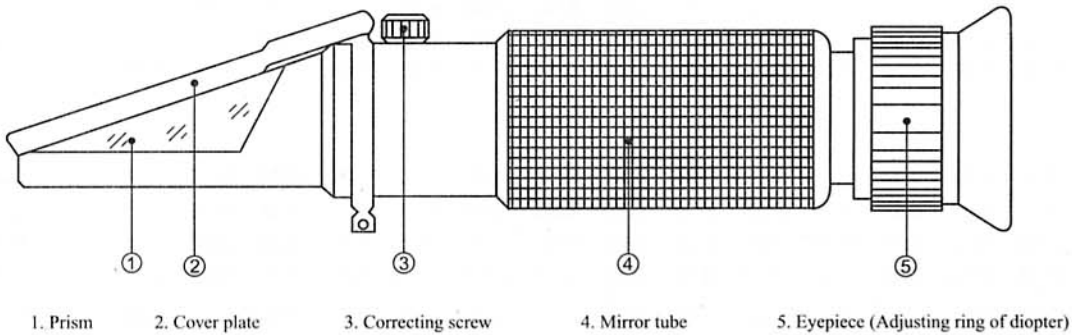
Series _____

No.	Model	Measuring Range	Minimum Scale	Size (mm)	Weight (g)
1	REF101/111	0-10% Brix	0.1%	26/30 x 40 x 190	155
2	REF102/112	0-18% Brix	0.1%or0.2%	26/30 x 40 x 170	185
3	REF103/113/103bp	0-32% Brix	0.2%	26/30 x 40 x 170	175/200/110
4	REF104/114/104bp	28-62% Brix	0.2%	26/30 x 40 x 150	160
5	REF105	45-82% Brix	0.5%	26 x 40 x 150	160
6	REF106/116/106bp	58-90% Brix 38-42% Be' 17-27% Water	1% 0.5% 1%	27/30 x 40 x 160	175
7	REF106c/116c	13-25% Honey moisture	0.1%	27/30 x 40 x 160	175
8	REF106b	58-92% Brix 38-43% Be' 12-27% Water	1% 0.5% 1%	26 x 40 x 125	175
9	REF109	58-92% Brix	0.5%	26 x 40 x 125	175
10	REF109b	1.435-1.520Nd	0.001Nd	26 x 40 x 125	175
11	REF1010	0-50% dextrose	1%	26 x 40 x 125	175

Note: 1. Each of the models in Series catalog with footnote "bp" has a prism base made of black engineering plastics.

2. "Weight" listed here refers to the weight of plain type refractometer.

Name of components _____



Method of operation _____

1. Aim the front end of the refractometer to the direction of bright light, and adjust the adjusting ring of diopter 5 until the reticle can be seen clearly.

2. Adjustment of null: Open the cover plate 2. Drop one or two drops of distilled water on the prism. Close the cover plate and press it lightly. Then adjust the correcting screw 3 to make the light/dark boundary coincide with the null line.

(Adjustment of refractometer with temperature compensation function should be made under the condition of 20°C environmental temperature).

* REF104 Model: Make adjustment by using a saturated sodium chloride solution. The refractive index of the saturated sodium chloride solution is: When temperature is at 15°C, adjust to 29.9%; when it is at 20°C, adjust to 29.6%; when it is at 25°C, adjust to 29.2%.

** REF105, REF106 Model Adjustment of reference: Drop one drop of dioptic oil on the bright surface of the reference block. Open the cover plate (2), stick the reference block on the surface of the prism, and press it lightly with your hand, so that it can not slide down, Rotate and adjust the correcting screw (3) to make the light/dark boundary coincide with the reference line (Brix 78.8%).

*** REF 106c Model Adjustment of reference: The method is the same with that of REF106 Model, except that the light/dark boundary should be adjusted to 19.6%.