

PORTABLE REFRACTOMETER OPERATING INSTRUCTIONS

SERIES

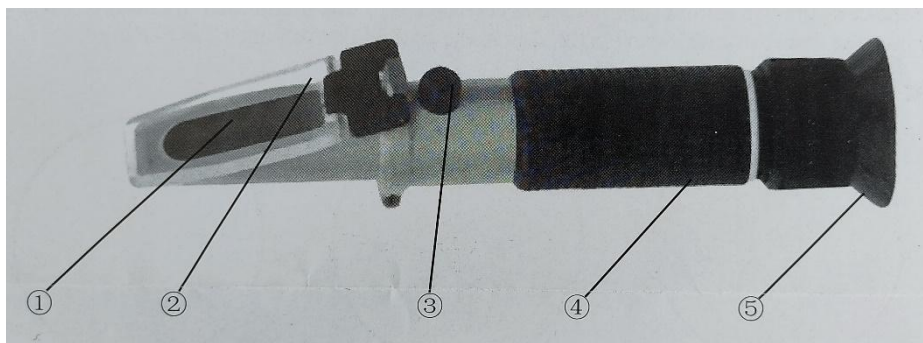
STYLE	MODEL	MEASURING RANGE	RESOLUTION	SIZE $\varnothing$ X L	WEIGHT
	ORD/ATC			ORD/ATC	ORD/ATC
Fruit Juice	FG701/711	0- 140°Oe 0-25 °KMW Babo 0-32% mash sacch	1°Oe 0,2°KMW Babo 0,2 mash sacch	28/30 X 160mm	175g/215g
	FG702/712	0-170°Oe	2°Oe	28/30 X 160mm	175g/215g
	FG703/713	30-140°Oe 0-32% °Brix	1°Oe 0,2% Brix	28/30 X 160mm	175g/215g

ORDinary: If the condition temperature isn't 20°C, it needs to adjust the zero for the measuring accuracy.

ATC(Automatic Temperature Compensation): The ATC device is a built-in type. Its compensation temperature range: 10°C-30°C

NAME OF COMPONENTS

1. Prism
2. Cover plate
3. Correct screw
4. Mirror tube
5. Eyepiece (Adjusting ring of diopter)



APPLICATION

Portable refractometers FG701/711, 702/712, 703/713 were designed for measuring of the common indexes of the fruit juice (the original juice).

FG701/711: °Oe, °KMW Babo and mash sacch

FG702/712: °Oe

FG703/713: °Oe and Brix

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

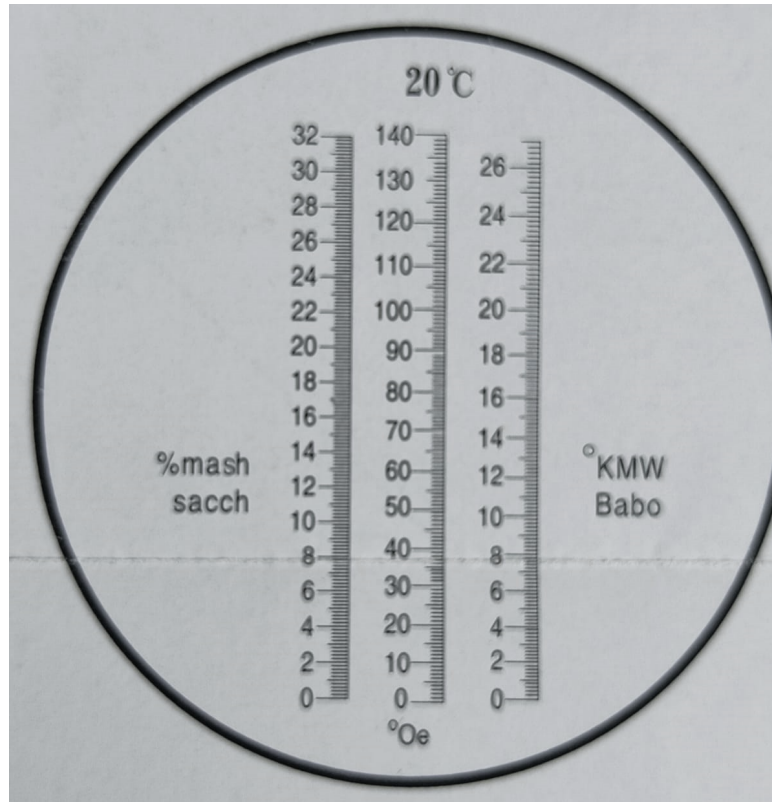
Open the cover plate (2), drop one or two drops of pure distilled water on the surface of the prism. Close the cover plate and press it lightly, then adjust the correct screw (3) to make the light/dark boundary coincide with the water line.

3. Open the cover plate (2) and clean the water on the prism and cover plate by soft cotton flannel, then drop 1-2 drops of the liquid needed to test on the prism surface, close the cover plate and press it lightly, the corresponding dial reading on the light/dark boundary is the degree common indexes of the fruit juice.
4. After measurement, clean away the adherent on the surface of prism and cover plate by moist gauze. After drying, it should be stored perfectly.

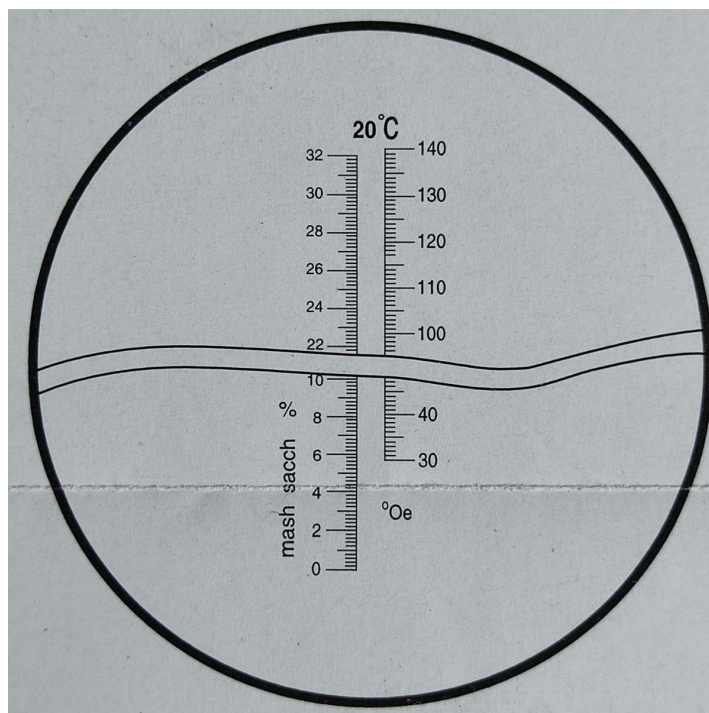
ATTENTIONS AND MAINTENANCE

1. Adjusting the null liquid and specimen should be under the same temperature, if the temperature varied greatly, the null point should be adjusted once per 30 minutes.
2. The prism must be cleaned completely, because any residual impurity on it could cause error during measuring.
3. After usage, don't use water to wash the instrument, so as to avoid water entering into the pipe of the instrument.
4. As it is a kind of precision optical instrument, you should hand it gently and take good care of it, don't touch and scratch the optical surfaces. It should be kept in the environment of dry, clean and non-corrosiveness air, so as to prevent the surface of it turning mouldy and foggy. Please avoid strong shock during transportation.
5. If the consumers use the instrument in accordance with the mentioned method of usage, it guarantees that instrument can't break down, the optical performance can't change.

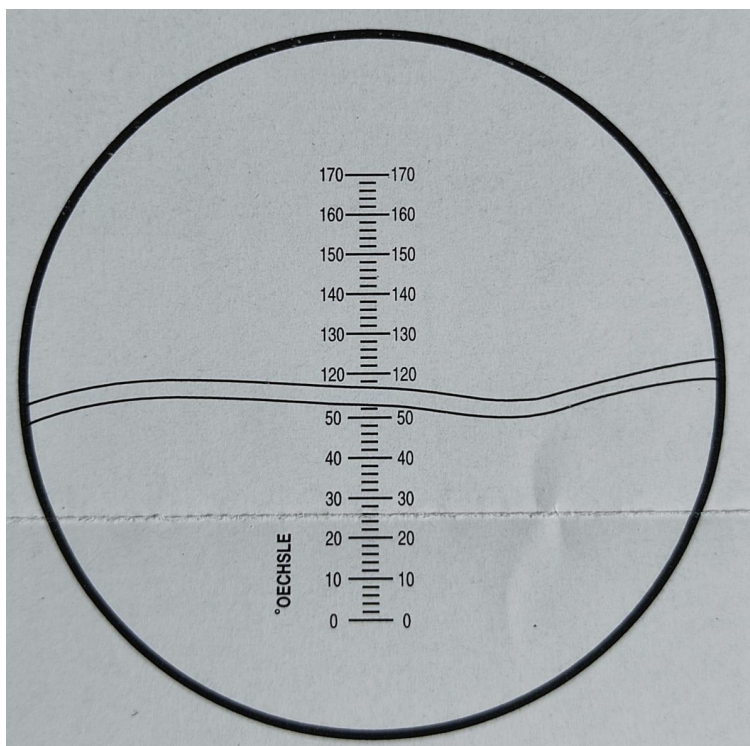
DIALS



FG701/711



FG702/712



FG703/713

ACCESSORY:

1. Plastic pipette 1
2. Screwdriver 1
3. Cotton flannel 1