

HARDNESS TESTER

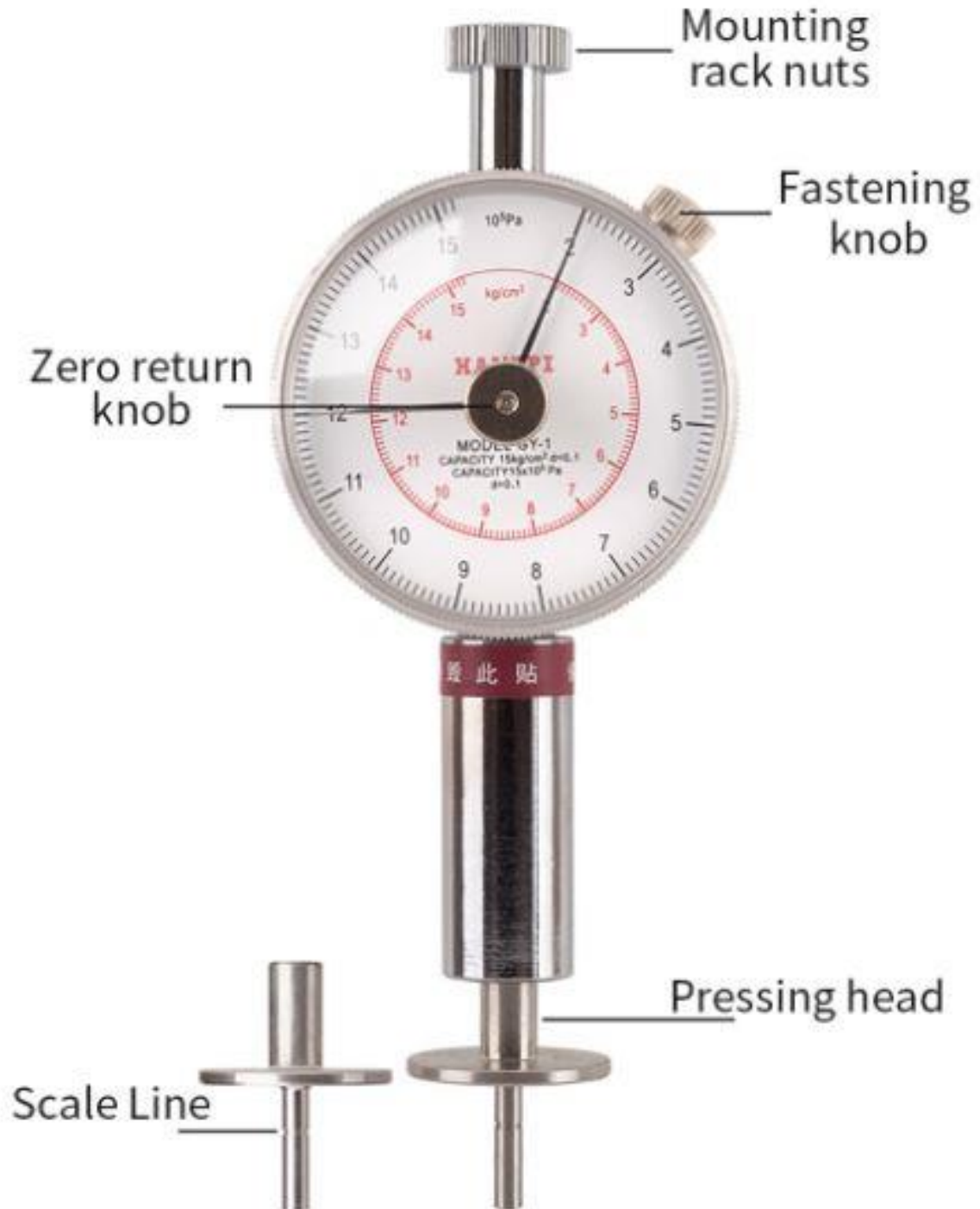
Fruit hardness can be measured

GY-1/GY-2/GY-3



PART 02

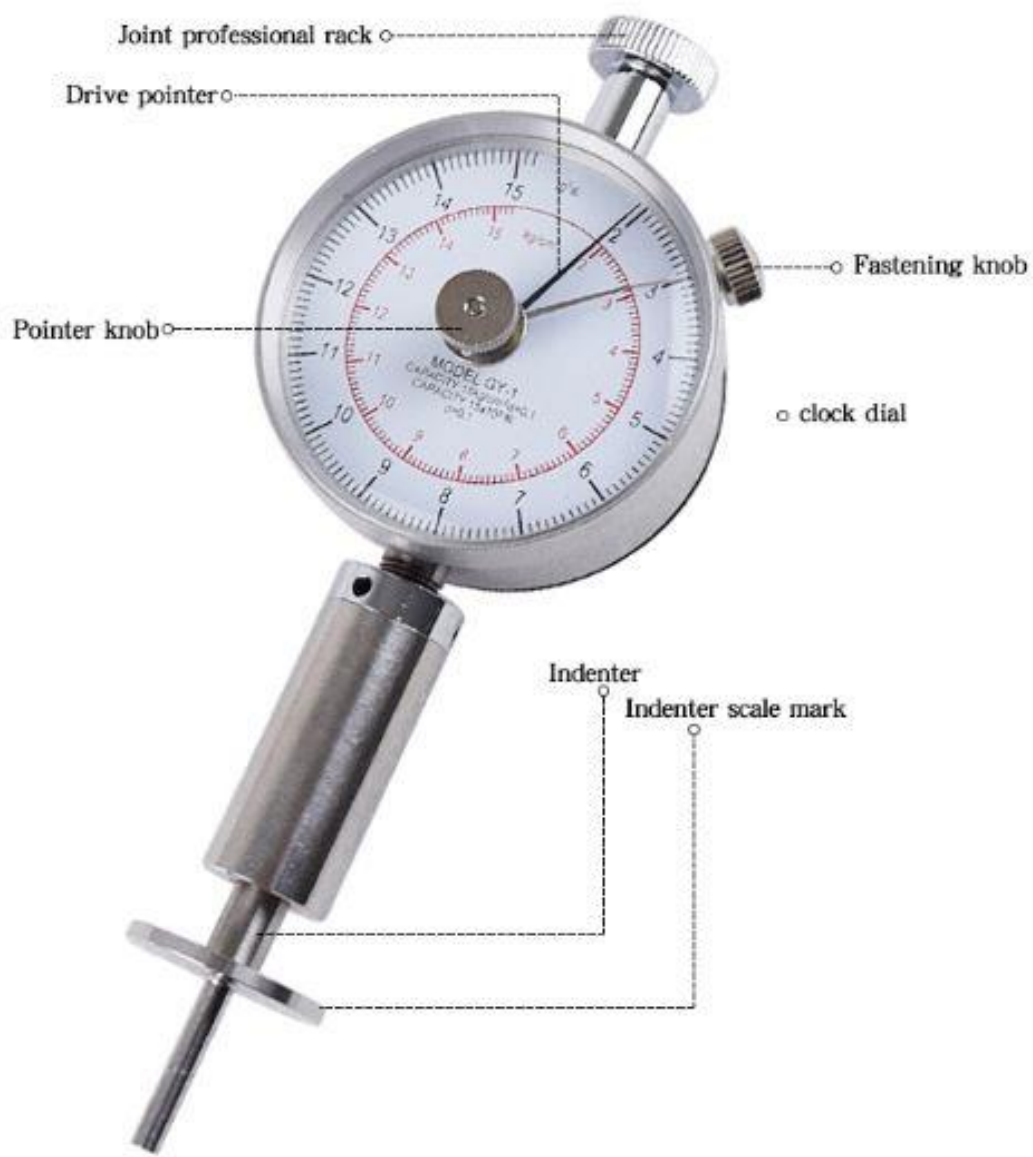
Panel Description



PART 03

Product Size





PART 05 | Model selection



Product Parameters

$$P=N/S$$

Fruit firmness refers to the pressure (N) of the force-measuring spring per unit area (S) of the fruit, and their ratio is defined as the fruit hardness (P)

P=The hardness value of the tested fruit is 10^6 Pa or (kg per square centimeter)

N = Force N or (kg) that the force measuring spring presses on the fruit surface

S = Square centimeter of the stressed area of the fruit

GY-3 fruit hardness tester

Suitable for hardness measurement of soft and hard fruits etc.

When connecting a small indenter, use the inner ring scale to read the number

When connecting a large indenter, use the outer ring scale to read

PART 06

Fruit hardness reference table

Fruit type	Hardness
Apples	8.0-9.2kg/cm ²
Plum	3.4-4.2kg/cm ²
Peach	10.0-13.5kg/cm ²
Pear	7.5-7.7kg/cm ²
Kiwi	8.2kg/cm ²
Peach	9.1-13.4kg/cm ²
Grapes	0.2-1.3kg/cm ²
Strawberry	0.55-0.68kg/cm ²

Pointer dual unit display



$$1\text{KG}=10\text{N}$$

Measurement on the KG and MPa is the default force area of 1 square centimeter, then 1KG in 1cm² pressure is.

$$10\text{N}/1\text{cm}^2 = 10\text{N}/10^{-4} \text{ 平米} = 10^5 \text{ Pa}$$

Model number	GY-1	GY-2	GY-3	
Scale indication	2-15kg/cm ² (x 10 ⁵ Pa)	0.5-4kg/cm ² (x 10 ⁵ Pa)	0.5-12kg/cm ² (x 10 ⁵ Pa)	1 -24kg/cm ² (x 10 ⁵ Pa)
Sensor size	Φ3.5mm	Φ3.5mm	Φ11mm	Φ8mm
Division value	0.1kg/cm ² (x 10 ⁵ Pa)	0.02kg/cm ² (x 10 ⁵ Pa)	0.1kg/cm ² (x 10 ⁵ Pa)	0.2kg/cm ² (x 10 ⁵ Pa)
Indenter indentation depth	10mm			
Dimensions	140*60*30mm			
Net weight	0.5kg			

How to use

Before measurement

Rotate the dial to align the driving pointer with the first tick mark on the dial (GY-1 type is scale line 2, GY-2 and GY-3 type is scale line 0.5);

Cut off about 1cm² of the fruit skin.

Under measurement

Hold the hardness tester with your hand, make the hardness tester perpendicular to the surface of the tested fruit, and press the indenter into the fruit evenly. At this time, the driving pointer starts to drive the indicator pointer to rotate. When the indenter is pressed to the scale line (10 mm), it stops and the pointer indicates The reading is the firmness of the fruit, taking the average of three times.

After measurement

Rotate the zero knob to reset the pointer to the initial tick mark

Note: Fruit hardness over 10KG/cm² must be equipped with a hardness tester bracket.