

SOIL > DENSITY DETERMINATION

## BALLOON DENSITY APPARATUS

Code : T067



- The Balloon Density Apparatus is used to determine the in-situ density and unit weight of compacted or undisturbed soils, particularly suitable for fine-grained and granular soils without significant coarse material.
- Utilizing a flexible rubber membrane, the apparatus measures the volume of an excavated hole by displacing water into the cavity, allowing for accurate calculation of soil density when combined with the mass of the excavated soil.
- This method is ideal for field conditions where traditional sand cone methods are impractical, offering a portable and efficient solution for on-site density testing.
- The apparatus is not recommended for soils that are highly organic, saturated, or highly plastic, as these conditions may lead to deformation under the pressures applied during testing.
- Common applications include quality control in road construction, embankment compaction, and other civil engineering projects requiring verification of soil compaction levels.

## **STANDARDS**

ASTM D2167 • AASHTO T205 • NF P94-061-2

## **TECHNICAL SPECIFICATIONS**

- Capacity Options: 1600 mL, 3000 mL, 6000 mL
- Cylinder: Clear with graduations
- Pump Assembly: Hand-operated with pressure gauge and quick-coupler
- Base Plate: Square, compatible with cylinder capacities

## **EQUIPPED WITH**

- Pressure gauge for monitoring internal pressure during testing
- Quick-coupler for efficient connection and disconnection of the pump assembly

## **SUPPLIED WITH**

- 1 x Rubber Balloon

## **ORDERING INFORMATION**

Item	Code
BALLOON DENSITY APPARATUS 1600 ml - ASTM	T067X16AH
BALLOON DENSITY APPARATUS 3000 ml - NF	T067X30FH
BALLOON DENSITY APPARATUS 6000 ml - NF	T067X60FH
RUBBER BALLOON for BALLOON DENSITY APPARATUS 1600 ml - ASTM	T067P001H

RUBBER BALLOON for BALLOON DENSITY APPARATUS 3000 ml - NF

T067P002H

RUBBER BALLOON for BALLOON DENSITY APPARATUS 6000 ml - NF

T067P003H