

Measuring instruction tube inserts

You will find a wide range of plug-in caps on our website. But how do you find the right cap size? Under the motto 'To measure is to know', we show you step by step how to find the right tube insert size.

TIPS

1. It is best to always measure the tube or furniture leg and not the insert itself. In fact, measuring the insert itself can give an incorrect measurement value!
2. Measure accurately and in millimetres, preferably with a calliper gauge.

Measuring instructions step by step

The correct size of the insert is based on the outer tube size and it's wall thickness (material thickness). Step by step, we will show you how to measure the outer tube size and wall thickness of the tube or furniture leg:

1. Using a caliper or other measuring instrument, measure the outside dimensions of the tube. (*Fig. 1*)



Figure 1 - Measuring the **outer tube size** with a caliper. Outcome example: **25mm**

2. Next, measure the wall thickness. There are two ways to do this: :
 - I. Using a caliper, measure the thickness of the tube wall. This gives a material thickness in millimeters, which is therefore the wall thickness (*Fig. 2*)
 - II. Measure the internal dimension of the tube or the internal length or width of a tube (*Fig. 3*)



Figure 2 - Measuring the wall thickness with a caliper gauge. In this example, the wall thickness is 2 mm



Figure 3 - Measuring the inner tube size with a caliper. In this example, the inside measurement is 21 mm

- If you take measurements as in Figure 3, then use the calculation below to calculate the wall thickness:

$$\text{Wall thickness} = \frac{\text{Outer tube dimension} - \text{inner tube dimension}}{2}$$

$$\text{Wall thickness} = \frac{\text{Outer tube length} - \text{inner tube length}}{2}$$

In the case of the round tube from this example, that would be:

$$\frac{\text{Outer } \varnothing 25 \text{ mm} - \text{inner } \varnothing 21 \text{ mm}}{2} = \mathbf{2 \text{ mm wall thickness}}$$

- Now that both the wall thickness and the tube size are known, you can use the filters on our website to select the measured tube size ('Tube size') and then the wall thickness ('Version'). After filtering, a selection of inserts suitable for the relevant tube size and wall thickness will be displayed..

Filter by	
Tube size..	Version..

Particulars

Wall thickness – clamping range

Most inserts feature a clamping range regarding the wall thickness. In other words, these inserts are suitable for various wall thicknesses. For instance, the range for wall thicknesses of 2-3 mm. However, there are some inserts that only accommodate one specific wall thickness. Inserts with a clamping range are therefore more versatile than those with one specific wall thickness.

Exceptions

Two types of inserts are excluded from the measuring instruction. These are 'Round plugs, flat, heavy quality' and 'Round plugs, convex, heavy quality'. These plugs are based on the inside dimensions of the tube and are therefore suitable for only specific wall thickness.

Any questions?

For questions or advice, we are happy to assist you.