

# Elcometer 2210 Zahn Viscosity Dip Cups



Elcometer 2210 Zahn Viscosity Dip Cups

A small, U-shaped cup suspended from a looped wire. This method is ideal for measuring the consistency of paints, varnishes and similar products.

Simply dip the cup into the product to be measured, lift it out and measure how long it takes for the contents to empty through the orifice.

Five cups with different orifice sizes are available, ranging from 5 to 1840cSt.

**At a glance:**

Made of stainless steel

Easy to use on-site or during production

Expressed in seconds (s) flow time but can be converted to Centistokes (cSt)

**Viscosity**

The extent to which a liquid resists a tendency to flow is defined as viscosity. In the coatings industry, this behaviour is one of the key parameters.

Elcometer manufactures and supplies a wide range of viscosity gauges from flow cups and dip cups to rotational viscometers

Flow Cups: The process of flow through an orifice can often be used as a relative measurement and classification of viscosity. This measured kinematic viscosity is generally expressed in seconds of flow time which can be converted into Centistokes using a viscosity disc calculator.

Dip Cups: Using the same principle to the flow cups, dip cups – Frikmar, Zahn, Shell, etc – can be used to provide a quick viscosity measurement on the shop floor or on site

Rotational: Rotational viscometers are used to determine the viscosity of liquids which do not depend solely on temperature and pressure. The behaviour of non-Newtonian liquids can be determined using a range of rotational viscometers.

Part Number		Description	Cup No.	Orifice Diameter	Range (cSt) <sup>1</sup>
Without Certificate	With Certificate				
K0002210M001	K0002210M001C <sup>(e)</sup>	Elcometer 2210 Zahn Dip Cup Can be used in accordance with: ASTM D 1084, ASTM D 4212	1	1.8mm	5 – 56
K0002210M002	K0002210M002C <sup>(e)</sup>		2	2.7mm	21 – 231
K0002210M003	K0002210M003C <sup>(e)</sup>		3	3.8mm	146 – 848
K0002210M004	K0002210M004C <sup>(e)</sup>		4	4.3mm	222 – 1110
K0002210M005	K0002210M005C <sup>(e)</sup>		5	5.3mm	460 – 1840

<sup>1</sup> For information only

<sup>(e)</sup> Efflux Time Certificate

## Elcometer Viscosity Cup Standard Calibration Oils



Elcometer 2410 Calibration Oils

**At a glance:**

To check the viscosity cup's calibration and certify it for ISO purposes

The specific drain time is dependent on the cup type

Replace your liquid with the standard oils to measure drain time

In order to check a viscosity cup's calibration or to certify it for ISO purposes, it is imperative that viscosity cup standard calibration oils are used.

Standard oils have a specified drain time, dependent upon the viscosity cup type (Ford, Shell, Zahn, etc) and the orifice size or cup number used.

To check the viscosity cup, use the standard viscosity oils in place of the liquid and measure the drain time.

Specific calibration oils can only be used with specific flow and dip cups. Please refer to the table below to establish which oil is required for each cup.

All viscosity oils are supplied in ½ litre (1 pint) bottles.

Part Number	Range at 25°C (77°F)	Cup Type	Cup No.	Model	Orifice Diameter
K0002410M021	20 – 34cSt	Zahn Dip Cup	1	Elcometer 2210/1	1.8mm
K0002410M022	60 – 120cSt	Zahn Dip Cup	2	Elcometer 2210/2	2.7mm
K0002410M023	100 – 230cSt	Zahn Dip Cup	3	Elcometer 2210/3	3.8mm
K0002410M024	200 – 460cSt	Zahn Dip Cup	3	Elcometer 2210/3	3.8mm
K0002410M025	350 – 850cSt	Zahn Dip Cup	4	Elcometer 2210/4	4.3mm
K0002410M026	600 – 1600cSt	Zahn Dip Cup	5	Elcometer 2210/5	5.3mm

## Related Products



Elcometer 7300 Stopwatch

**Elcometer 7300 High Precision Stopwatch:**  
Measuring intervals: 1/100 second for 30 minutes and 1 second for 24 hours. Time / calendar display, 12/24 hour mode.

**Part Number:** K0007300M201



Elcometer 2400 Conversion Disc

**Elcometer 2400 Conversion Disc:**  
Allows viscosity (cSt) and flow times of different cups to be compared.

**Part Number:** KT002400N003



Elcometer Dip Cup Stand

**Elcometer Dip Cup Stand:**  
A useful, compact way of storing dip cups when not in use. Can hold up to 5 cups. Suitable for Zahn, Shell & Lory cups

**Part Number:** K0002999M001

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