



# VISCOSITY CUP DIN 53211 WITH INTERCHANGEABLE NOZZLE VF2020 VF2181, VF2022, VF2023, VF2024, VF2025, VF2026, VF2027, VF2028

DATASHEET

## **PRODUCT DESCRIPTION**

The TQC Viscosity Cup DIN 53211 with Interchangeable Nozzle consist of a wide range viscosity cups to measure the viscosity of paint, lacquers and other fluids. Very precise, with fixed stainless steel nozzle. The TQC Viscosity Cup DIN 53211 with Interchangeable Nozzle is available in titanium anodized aluminium and stainless steel. Widely used in laboratory, to be used with stand.



### **BUSINESS**

Laboratory

#### **STANDARDS**

According/similar to DIN 53211

#### **FEATURES**

- A relatively deep well surrounding the top of the cup serves to catch any overflow.
- The design of the cup and orifice eliminate hard to clean recesses.
- The outside dimensions have been chosen to support the TQC stands.
- TQC viscosity cups are made under the continuing quality control procedures.
- Each cup is provided with an engraved unique serial number.

#### **ORDERING INFORMATION**

#### Cup:

VF2020 - TQC Viscosity Cup DIN 53211 for Interchangeable Nozzle (Optional: possible to certify by calibration with certified oils)

#### Nozzles:

VF2181 - TQC Interchangeable Nozzle for Viscosity Cup orifice Ø 1 mm (Similar to DIN 53211)

VF2022 - TQC Interchangeable Nozzle for Viscosity Cup orifice Ø 2 mm (Similar to DIN 53211)

VF2023 - TQC Interchangeable Nozzle for Viscosity Cup orifice Ø 3 mm (Similar to DIN 53211)

VF2024 - TQC Interchangeable Nozzle for Viscosity Cup DIN 53211 orifice Ø 4 mm (Optional: possible to certify by calibration with certified oils)

VF2025 - TQC Interchangeable Nozzle for Viscosity Cup orifice Ø 5 mm (Similar to DIN 53211)

VF2026 - TQC Interchangeable Nozzle for Viscosity Cup orifice Ø 6 mm (Similar to DIN 53211)

VF2027 - TQC Interchangeable Nozzle for Viscosity Cup orifice Ø 7 mm (Similar to DIN 53211)

VF2028 - TQC Interchangeable Nozzle for Viscosity Cup orifice Ø 8 mm (Similar to DIN 53211)





#### **ACCESSORIES**

CL0030 Calibration Certificate (if applicable)

VF2062 Ring stand Type S 10

VF1982 Optional attemperation tank type DIN and ASTM for S20 special stand

VF2061 Tripod stand Type S40B, stainless steel ring incl. Spirit level Dl0076 Stopwatch Type C510 digital LCD-display, 9h. 59 min. 59,99 sec.

VF2053 Viscosity Conversion Disc

VF2067 Attemperation tank TM 1, for DIN- and ASTM-Cups

#### **SPECIFICATIONS**

Cup: titanium anodized aluminium, 100 cc

Nozzle retainer: stainless steel

Nozzle: interchangeable (not incl.)

According to: DIN 53211 (with orifice 4 mm, other orifices similar to DIN 53211)

Weight: 226 gra Max. Width: 84 mm Height: 74 mm

#### USE

- According to the standard all measurements should be made at 23°C. Temperature drift during the test should be kept to a minimum and should not exceed  $\pm$  0,2 °C. Adjust the temperature of the material to be measured if necessary.
- Select the proper orifice to be used from the specification table, which depends on the expected viscosity range of the material to be measured.
- Once the viscosity cup is truly horizontal (this is best achieved using a cup stand and bubble level), cover the exit orifice and fill the cup making sure that the meniscus of the liquid is above the rim of the cup.
- Using the glass draw plate, remove the meniscus into the overflow ring and close the cup.
- The distance between the orifice of the flow cup and the surface of the receiving sample has to be more than 100mm. Open the exit orifice and remove the glass draw plate. Time between the removal of the glass draw plate and the first break in the liquid's flow is measured.

# **SPECIAL CARE**

- Though robust in design, this instrument is precision-machined. Never drop it or knock it over
- Always clean the instrument after use.
- Particular care should be used in cleaning the orifice to avoid leaving deposits or scratches on internal surfaces.
- Clean the instrument using a soft dry cloth. Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This may cause, just like the use of aggressive cleaning agents, permanent damage.
- Never strike the orifice directly when removing it from the cup. Place the dowel rod furnished with the cup against the orifice and strike the dowel with a heavy object such as a paper weight. Prior to inserting an orifice into the cup, insure that the exterior of the orifice and the receiving cone of the cup are clean.
- Always keep the instrument in its case when not in use.
- We recommend annual calibration





#### **DISCLAIMER**

The right of technical modifications is reserved.

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.