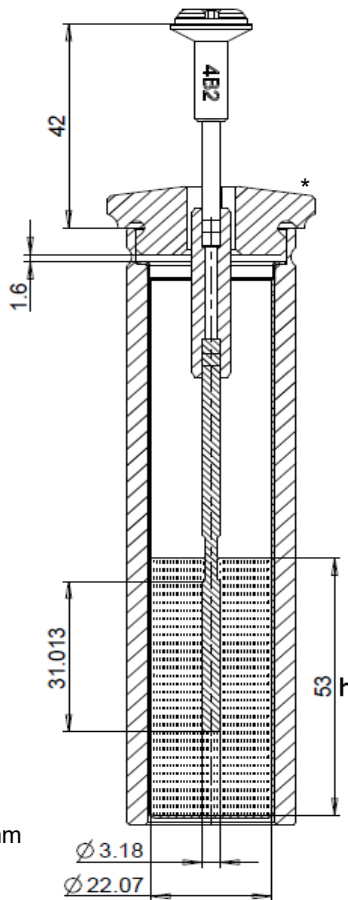


**Measuring System 4B2 Insulated**

 Dimensions in mm  
 h = filling height

**For ASTM D2983/D8210.**

Measuring system consisting of

- 1 spindle 4B2 insulated and
- 1 cup holder D22 with
- 100 pcs. disposable cups D22,

System with defined gap for measuring according to ASTM D2983/D8210. This measuring method requires software package V-Curve.

The spindle is made of stainless steel AISI 316L (1.4545 / 1.4435) and insulated with PEEK (black). Equipped with Toolmaster™ and magnetic coupling.

The spindle is intended for use with Disposable Measuring Cup D22. The cup consists of blank aluminum (Al 99.7/F13). It requires a holder, which is made of hard anodized aluminum.

 Use the system with  
 PTD 175.

\* The cover for DIN spindles visible in the dimensions drawing is not part of the measuring system, but of PTD 175.

- According to ASTM D8210, the typical viscosity for measurement with 4B2 spindle and model L is 900 Pa·s (900 000 mPa·s).
- Calculated possible measuring ranges:

ViscoQC Model	Sample volume mL	SMC <sup>a</sup>	SRC <sup>b</sup>	YMC <sup>c</sup>	Minimum viscosity <sup>d</sup>	Maximum viscosity
					Pa·s	Pa·s
L	20	640	0.209	---	@ 60 rpm: 1.0	@0.3 rpm: 2000
R	20	640	0.209	---	@100 rpm: 6.4	@0.5 rpm: 12800

a. Spindle Multiplier Constant

b. Shear Rate Constant

c. Yield Multiplier Constant – for yield stress determination with vane spindles and V-Curve

d. Specified speed is the maximum standard speed of the specific ViscoQC model.

- The default SCF (Spindle Correction Factor) is 1.
- Calculation of shear rate: Shear rate [1/s] = SRC · Speed [rpm]
- Viscosity limits calculated for a torque range of 10 % to 100 % unless overruled by other limitations.

**TIP:** Sample handling of high-viscosity liquids requires special precautions to avoid trapped bubbles. You may have to prewarm the sample for filling.