

# Thermo Scientific HAAKE Viscotester iQ Rheometer Series

## Compact and versatile rheometers for demanding QC applications

### Discover the individual, intuitive and intelligent rheometer series

The Thermo Scientific™ HAAKE™ Viscotester™ iQ Rheometers are the Quality Control instruments of choice for acquiring simple viscosity curves, as well as for more complex rheological investigations in rotation or oscillation. Used as a standalone unit, or controlled by software, its size and footprint make the HAAKE Viscotester iQ Rheometers a portable unit for mobile use, or as an important tool in the quality control laboratory. The rheometers are available with a robust ball-bearing or a sensitive air-bearing.

#### Intuitive.

##### The rheometers that make QC more convenient for you.

- Breakthrough concept – self-explaining setup and handling
- Smart lift function for convenient, accurate and reproducible gap setting
- Measuring geometries designed for optimized handling and easy exchange
- Correct and precise sample filling for parallel plates as well as cone and plate geometries

#### Individual.

##### The rheometers that meet your demands in QC.

- Sensitive air-bearing or ultra robust ball-bearing model
- Sophisticated design for easy exchange between different measuring configurations
- Exchangeable self-contained Peltier or liquid controlled temperature modules
- Broad scope of measuring geometries
- Multiple ways of operation – standalone, with Thermo Scientific HAAKE RheoApp™ USB-Application or with the Thermo Scientific HAAKE RheoWin™ Software

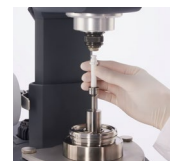
#### Intelligent.

##### The rheometers that guide you through your measurement challenges.

- Highly dynamic, powerful EC motor for enhanced measuring flexibility in rotation and oscillation mode
- Touch screen display for visualization of numerical and graphical measurement results
- User guidance for measuring and evaluation procedures with online data range assessment
- “Connect Assist” technology – quick coupling and automatic recognition of measuring geometries and temperature modules



USB memory stick for data transfer



Measuring geometries with “Connect Assist”



Quick bayonet mountings

## Select from different configurations and a broad accessory portfolio

The HAAKE Viscotester iQ Rheometers are available as

- Lab stand configuration for measurements in large containers or for individual setups
- Configuration for coaxial cylinder geometries
- Vane rotor setup for relative tests in the original sample container
- Configuration for cone-plate and parallel plate geometries



Technical data	HAAKE Viscotester iQ	HAAKE Viscotester iQ Air
Bearing type:	Ball Bearing	Air-Bearing
Measuring modes:		
In rotation	Controlled Rate (CR), Controlled Stress (CS)	
In oscillation <sup>a</sup>	Controlled Deformation (CD), Controlled Stress (CS)	
Angular velocity range		
	0.001 rad/s – 157 rad/s	
	0.01 rpm – 1500 rpm	
Angular resolution	1.25 $\mu$ rad	
Torque range	0.2 mNm – 100 mNm	0.01 mNm – 100 mNm
Torque resolution	0.01 mNm	0.001 mNm
Shear stress range <sup>b</sup>	0.7 Pa – 63660 Pa	0.04 Pa – 63660 Pa
Shear rate range <sup>b</sup>	0.004 s <sup>-1</sup> – 11415 s <sup>-1</sup>	
Frequency range	0.1 Hz – 20 Hz <sup>a</sup>	0.1 Hz – 50 Hz
Minimum deflection angle <sup>a</sup>	10 $\mu$ rad	
Viscosity range:		
In rotation <sup>b</sup>	0.001 Pa s – 600000 Pa s	
In oscillation	5 Pa s and higher <sup>a</sup>	0.03 Pa s and higher
Measuring geometries	Coaxial cylinders, double-gap cylinders, parallel plates, cones, vane rotors	
Temperature range:		
Universal Peltier controlled Module (TM-PE-C)	Coaxial cylinders: -5 °C <sup>c</sup> up to 160 °C, Plates and cones: 0 °C <sup>c</sup> up to 140 °C	
Universal Liquid controlled Module (TM-LI-C32 / -C48)	Coaxial cylinders: -20 °C up to 180 °C <sup>d</sup> , Plates and cones: -10 °C up to 160 °C <sup>d</sup>	
Peltier controlled Plate (TM-PE-P)	0 °C <sup>c</sup> up to 160 °C	
Liquid controlled Plate (TM-LI-P)	-20 °C up to 180 °C <sup>d</sup>	
Electrically controlled Cylinder (TM-EL-C) <sup>e</sup>	up to 300 °C	
Interfaces:		
TCP/IP-Ethernet	for communication with PC	
USB	1 port for HAAKE Viscotester iQ Rheo flash drive, 2 ports for keyboard or barcode reader	
Dimensions (W x D x H) <sup>f</sup>	270 mm x 500 mm x 500 mm	
Weight <sup>f</sup>	18 kg	
Autoswitch power supply	100 – 240 VAC, 50 / 60 Hz	

<sup>a</sup> HAAKE Viscotester iQ: option. HAAKE Viscotester iQ Air: standard content of delivery.

<sup>b</sup> Depending on the measuring geometry used. Calculated theoretical values.

<sup>c</sup> Depending on ambient temperature.

<sup>d</sup> Depending on the circulator model and the bath liquid.

<sup>e</sup> Available for pressure cell configuration.

<sup>f</sup> HAAKE Viscotester iQ Rheometer incl. Peltier temperature module, heat exchanger and measuring geometry.

**Contact us** today to discuss your needs.

With decades of application know-how in our worldwide demonstration labs, we can assist you in realizing your specific application needs and goals. Talk to our experts today and learn what options are available.

Learn more at [thermofisher.com/ViscotesteriQ](https://thermofisher.com/ViscotesteriQ)

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