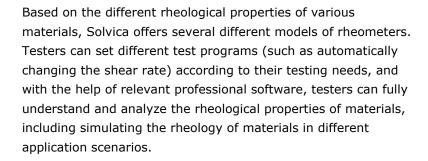


#### **Programmable Rheometers**

# Programmable Rheometer - 1-6M mPa.s

#### **Product Description**

Rotational viscometers are generally used to test the viscosity (also known as apparent viscosity) of Newtonian or non-Newtonian fluids at specific rotational speeds and rotors. However, in the polymer materials industry, such as coatings, inks, and adhesives, almost all resins, emulsions, and the finished materials themselves are non-Newtonian fluids, exhibiting different rheological properties at different shear rates (related to rotational speed and rotor shape). To compare the rheological properties of different materials, a common industry method is to test their thixotropy or dilution index: that is, the proportion of viscosity change measured after increasing or decreasing rotor speed to characterize the degree of shear thinning, or comparing the viscosity change of the material before and after high shear to characterize its degree of thixotropy.





#### **Standards**

GB/T 10247, GB/T 11175, GB/T 22235, ISO 1652, ISO 2555, ISO 3219, ASTM D2196, ASTM D2983



#### **Programmable Rheometers**

# Programmable Rheometer - 1-6M mPa.s

## **Technical Specification**

- 7 inch high definition touchscreen for easy operation, displaying clear and comprehensive information
- High precision micro stepping motor drive with stepless speed regulation, accurate speed control, smooth and silent operation; viscosity accuracy is not affected by fluctuations in AC power frequency
- Built in high precision electronic level; the screen directly displays the leveling status so the operator can quickly level the instrument
- Magnetic spindle mounting and removal reduce the risk of damaging the spindle shaft during assembly and disassembly, improving durability. Robust new spindle shaft design for extended service life
- Switching power adapter with wide input voltage range and excellent anti interference performance
- · High precision encoder for real time sampling; measurement results are displayed instantly, even at low speeds
- Programmable testing, including timed measurements, programmable variable speed measurements, and programmable temperature measurements (with optional small sample adapter and temperature control)
- Generates viscosity-time, viscosity-speed, and viscosity-temperature curves (with optional small sample adapter and temperature control), providing a clear overview of how sample viscosity changes with each parameter
- Continuous viscosity display with audible alarm when the measured value exceeds the instrument's range
- Multiple viscosity units available; dynamic and kinematic viscosity are converted automatically
- The instrument is fully calibrated across the entire measurement range before leaving the factory; users can also perform independent calibration if required
- With the optional rheometer control and data analysis software, the instrument can be controlled via computer and test data can be analyzed and compared to evaluate the rheological properties of different samples



## **Programmable Rheometers**

# Programmable Rheometer - 1-6M mPa.s

### **BGD 168-L**

#### **Main Technical Parameters**

Model	Measurement range (mPa·s)	Rotor speed (rpm)	Standard rotor configuration	Measurement accuracy
BGD 168-L	1 - 6M (1-6.000.0000 mPa.s)	0.1 - 250	LV1, LV2, LV3, LV4 (LV0 optional)	±1.0% of full scale
BGD 168-M	50 - 40M (50-40.000.000 mPa.s)	0.1 - 250	RV2, RV3, RV4, RV5, RV6, RV7 (RV1 optional)	±1.0% of full scale
BGD 168-H	400 - 320M (400-320.000.000 mPa.s	0.1 - 250	RV2, RV3, RV4, RV5, RV6, RV7 (RV1 optional)	±1.0% of full scale

Ordering information: BGD 168-L Programmable Rheometer - 1-6M mPa.s

#### **Disclaimer**

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