

The CANNON V-2020 viscometers are easy-to-use, affordable rotational viscometers for the determination of dynamic viscosity. They measure the viscous drag of a liquid against a rotating spindle. With available spindles, the low viscosity LV-2020 measures viscosity from 1 mPa·s [cP] to 2,000,000 mPa·s [cP] while the moderate viscosity MV-2020 measures viscosity from 100 mPa·s [cP] to 13,000,000 mPa·s [cP]. Both instruments offer 18 selectable speeds ranging from 0.3 rpm to 100 rpm.

Common Applications

- Inks
- Oils
- Solvents
- Creams
- Food
- Paints

V-2020

Rotational Viscometer

For Dynamic Viscosity Measurement of Low and Moderate Viscosity Materials

Product Features & Benefits

Versatile applicability

- Viscosity range:
 - LV-2020: 1 mPa·s [cP] to 2,000,000 mPa·s [cP], depending on the spindle* selected, for low viscosity materials, e.g. inks, oils and solvents
 - MV-2020: 100 mPa·s [cP] to 13,000,000 mPa·s [cP], depending on the spindle** selected, for moderate viscosity materials, e.g. creams, food and paints
- 18 selectable spindle speeds ranging from 0.3 rpm to 100 rpm
- Provides simultaneous measurement of viscosity and torque and determines rheological properties at different shear rates when material is tested with the same spindle at various speeds

Accurate and precise results

- Torque measurement accuracy: $\pm 1.0\%$ of range in use
- Repeatability: $\pm 0.2\%$ of range in use

Easy to use

- Simple controls allow quick and easy selection of available spindle/speed options
- Just select spindle/speed, turn on the viscometer and read the displayed viscosity
- No calculation required. Viscosity data is automatically calculated and displayed in cP, P, mPa·s or Pa·s
- Keypad interface displays test control parameters [spindle/speed] and measured values [% torque, viscosity]
- Front position bubble level enables convenient adjustment of vertical position
- Auto range button automatically determines and displays maximum [100%] attainable torque viscosity for the selected spindle and speed

Low cost and transportable

- Compact instrument transports easily in carrying case [included]
- An economical choice for dynamic viscosity determinations

*Optional UL adapter is required to achieve 1 mPa·s [cP] viscosities. Included spindles measure to 15 mPa·s [cP]

**Optional RV-1 spindle is required to achieve 100 mPa·s [cP] viscosities. Included spindles measure to 400 mPa·s [cP]



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V-2020 Rotational Viscometer

Ordering Information

V-2020 Rotational Viscometers come with spindles, a spindle guard leg, a standard lab stand and carrying case. The MV-2020 includes 6 spindles. The LV-2020 includes 4 spindles.

Description	Part #
LV-2020 Rotational Viscometer	
115 VAC, 50/60 Hz	9725-B10
230 VAC, 50/60 Hz	9725-B15
MV-2020 Rotational Viscometer	
115 VAC, 50/60 Hz	9725-B20
230 VAC, 50/60 Hz	9725-B25

Replacement Parts & Options

Description	Part #
Standard LV-2020 Replacement Spindles	
LV-1 [61] replacement: for LV-2020	17.3000
LV-2 [62] replacement: for LV-2020	17.3001
LV-3 [63] replacement: for LV-2020	17.3002
LV-4 [64] replacement: for LV-2020	17.3003
Standard MV-2020 Replacement Spindles	
RV-2 replacement: for MV-2020	17.1731
RV-3 replacement: for MV-2020	17.1732
RV-4 replacement: for MV-2020	17.1726
RV-5 replacement: for MV-2020	17.1729
RV-6 replacement: for MV-2020	17.1733
RV-7 replacement: for MV-2020	17.1734
Spindle guard leg, LV-2020 [replacement]	17.1742
Spindle guard leg MV-2020 [replacement]	17.1741
Carrying case for V-2020 [replacement]	17.1738
Lab stand, model A [replacement]	17.1739
UL adapter kit [includes one sample chamber w/ spindle, water jacket, attachment hardware and case]	17.1721
RV-1 spindle for MV-2020	17.2998
Thermosel System w/Spindle 115V	17.1704
Thermosel System w/Spindle 230V	17.1705
Silicone viscosity standards	See CANNON Standards brochure

Product Specifications

Dimensions [W x D x H]	27.6 cm x 29.8 cm x 41.5 cm [10.9 in x 11.7 in x 16.4 in]
Weight	7.7 kg [17.0 lb]
Shipping dimensions [W x D x H]	48.0 cm x 25.0 cm x 38.0 cm [19.0 in x 10.0 in x 15.0 in]
Shipping weight [with all items]	9.0 kg [20.0 lb]
Available spindle speeds	0.3 rpm, 0.5 rpm, 0.6 rpm, 1.0 rpm, 1.5 rpm, 2.0 rpm, 2.5 rpm, 3.0 rpm, 4.0 rpm, 5.0 rpm, 6.0 rpm, 10 rpm, 12 rpm, 20 rpm, 30 rpm, 50 rpm, 60 rpm, 100 rpm
Viscosity range	LV-2020: 1 mPa·s [cP] to 2,000,000 mPa·s [cP] MV-2020: 100 mPa·s [cP] to 13,000,000 mPa·s [cP] *Options required to achieve lower viscosity ranges [see front of flyer for additional details]
Torque measurement accuracy	± 1.0% of range in use
Repeatability	± 0.2% of range in use
Operating conditions	0 °C to 40 °C, 20% to 80% relative humidity [non-condensing]
Electrical specifications	115 VAC, 50/60 Hz; 230 VAC, 50/60 Hz; <20 watts power consumption
Compliance	CE Mark; EMC directive [2004/108/EC]

CANNON Instrument Company® provides a variety of physical property testing equipment and consumables [vials, bath fluids, and reference materials] for your testing needs. To learn more, contact sales@cannoninstrument.com.



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