

# CANNON® miniQV™-X Automatic Viscometer

## A New Approach to in-service Oil Viscosity Measurement

Less Sample  
+ Less Solvent  
+ Less Waste  
+ Less Time  
= **More \$ Value**

- Rapid Analysis – 3 min or less
- Reduced Lab Operating Costs
- Small Sample Volume 4 to 5mL
- Uses Low Cost 17x100 mm
- Standard HDPE Sample Vial
- Low Solvent Usage - 8mL per sample
- Quick Tube Replacement
- High Reliability/Easy Serviceability
- Small Footprint

 **CANNON**  
INSTRUMENT COMPANY®



**CANNON**®

**CANNON® miniQV™-X Quick Automatic Viscometer with 25 place auto sampler****High Performance Automation for In-service Oil Analysis**

The miniQV-X from CANNON Instrument Company offers the laboratory an exciting new tool for convenient and rapid kinematic viscosity (KV) measurement. Occupying roughly the same footprint as a tabletop rotational viscometer, the miniQV-X automates the time-consuming sample measurement and viscometer tube wash/dry procedures associated with the ASTM D445 method, freeing the laboratory technician for other duties. The miniQV-X is designed as a rapid fully-automated viscosity analysis tool - an alternative to slower D445 compliant manual measurements. Operation of the miniQV-X is simple and quick with typical sample-to-sample cycle times of less than three minutes.

**Required accessories**

The miniQV-X requires a computer with the Windows® 98/NT®/XP® operating system. The user must provide a suitable non-pressurized solvent container for each solvent and a waste container

**Viscosity Range:**

- 40°C: 25 to 125 mm<sup>2</sup>/s
- 100°C: 5 to 50 mm<sup>2</sup>/s

**Tube Type:**

- Fast Run D446 Ubbelohde style

**Auto-Sampler:**

- Removable 25 position rotary

**Methodology:**

- Follows most ASTM D445 principles
- Shorter flow times than available by D445 with kinetic energy correction
- ±0.01°C temperature accuracy
- Quick tube wash and dry

**Optional Accessories:**

- Solvent Reservoir with low level alarm
- PC Computer control for up to 4 units
- Central Waste Repository with high level alarm

**Bath Safety features suspend testing for:**

- Bath over temperature
- Low bath liquid
- Empty solvent
- Missing sample vial

**miniQV-X Features:**

- VISCPRO® II software for Windows® 98/NT®/XP®
- Powerful reporting and LIMS connectivity
- The miniQV-X measures flow rates within ±0.001 seconds
- Thermal meniscus detection – eliminates issues caused by opaque samples
- Bath temperature is controlled with accuracy better than ±0.01°C between 40° and 100°
- Low sample volume Ubbelohde style tube 4 to 5mL
- Low solvent consumption- 8mL typical per sample

**miniQV®-X Automatic Viscometer Specifications****Dimensions**

miniQV-X:	254 mm wide x 437 mm deep x 598 mm high (10 x 17.2 x 23.5")
Power Supply:	330 mm wide x 396 mm deep x 172 mm high (13 x 15.6 x 6.8")
Weight:	miniQV-X bath unit: 27 kg (45 lbs); Power Supply: 11 kg (24 lbs); Waste Receiver: 6 kg (13 lbs)
Shipping Weight:	68 kg (130 lbs) with all units/accessories
Operating Conditions:	15°-30°C, 10%-90% RH non-condensing, Installation Category II, Pollution degree 2
Fuse Rating:	115V & 100V Units: M 250V 8A, 1.25 x 0.25"; 230V Unit: M 250V 4A, 1.25 x 0.25"
Compliance:	CE Mark: EMC directive (89/336/EEC); Low voltage directive (73/23/EEC); HI-POT (1900 VDC, 60 sec.)
Computer Requirements	Computer not included, please contact Cannon for specifications.

**miniAV® Order Information****Catalog # Item Description**

9725-A88	miniQV-X 100v 50/60 hz 500 Watts
9725-A89	miniQV-X 115v 50/60 hz 500 Watts
9725-A90	miniQV-X 230v 50/60 hz 500 Watts
P81.1086	120C thermometer (40° C)
P81.1087	121C thermometer (100° C)
P81.2450	DigiSense Thermometer, Digital Kit 115V
P81.2451	DigiSense Thermometer, Digital Kit 230V



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