

# CHOOSING YOUR MICROVISC CHIP

VROC (Viscometer-Rheometer-on-a-Chip) combines microfluidic and MEMS (Micro-Electro-Mechanical Systems) technologies to measure dynamic viscosity over a wide dynamic range of operation. The *microVISC* portable, small sample viscometers come with multiple chip configurations that are dependent on your application and what you are trying to measure.

# A

## SMALL SAMPLE LOW VISCOSITY

Minimum viscosity: 0.2 mPa-s  
Maximum viscosity: 100 mPa-s  
Maximum shear rate: 5,800 1/s

A chip flow channels range from 50 - 300 $\mu$ m and measure sample volumes as small as 100  $\mu$ L

# B

## SMALL SAMPLE MEDIUM VISCOSITY

Minimum viscosity: 0.2 mPa-s  
Maximum viscosity: 3,000mPa-s  
Maximum shear rate: 5,800 1/s

B chip flow channels range from 50 - 300 $\mu$ m and measure sample volumes as small as 100  $\mu$ L

# C

## SMALL SAMPLE HIGH VISCOSITY

Minimum viscosity: 10 mPa-s  
Maximum viscosity: 14,000 mPa-s  
Maximum shear rate: 5,800 1/s

C chip flow channels range from 50 - 300 $\mu$ m and measure sample volumes as small as 100  $\mu$ L

### microVISC viscometer specifications:

- Minimum Sample Volume: 100  $\mu$ L
- Shear Rate Range, 1/s: 1.7 ~ 5,800
- Viscosity Range, mPa-s (cP): 0.2 ~ 20,000
- Temperature Range (with Optional Temperature Controller): 18 ~ 50 °C
- Accuracy: 2% of Reading
- Repeatability: 0.5% of Reading

*\*Shear rate max can potentially vary depending on sample*