

Rheometer (MCR 302)

IMA-TechSheet #102170 V2



Rheometer "MCR 302" with temperature control cover



Cone plate Experimental set-up



*Tribology measuring system:
"Pin-on-Disk" method*

Description:

- Modular Rheometer for different rheological investigations
- Highly dynamic EC motor, air bearing
- Real-time position control
- Automatic gap control, normal force sensor
- Active temperature control of cover and sample holder: -40 °C to 200 °C
- Tribology measuring cell for pin-on-disk tests
- Measuring cone: \varnothing 25 mm, angle 1°
- Measuring plate: \varnothing 25 mm

Technical Data

- Max. torque: 200 mNm
- Min. torque rotation: 1 nNm
- Min. torque oscillation: 0,5 nNm
- Angular velocity: 10^{-9} - 314 rad/s
- Normal force: 0,005 – 50 N

Available Test Methods

- Rheological investigations on lubricants with and without viscoelastic behaviour:
 - Deformation/shear rate controlled
 - Shear stress controlled
- According to standards:
 - DIN 51810-1
 - DIN 51810-2
 - DIN 53019-1
 - DIN 53019-2
 - DIN EN ISO 3219
- Tribological pin-on-disk tests