GALAXY V

capillary rheometers

- Comprehensive polymer melt rheology analysis
- Material characterizations
- SQC/SPC programs
- Intrinsic viscosity correlation
- Extrudate swell measurements
Specifications

Barrel Length: 175mm (7 inches)
Barrel Diameter: 9.55mm + 0.005mm (0.3760" + 0.0002")

Drive System:
Stepper motor
Piston Speed:
Model D8052B 0.05 to 300mm per minute (0.002 to 12.0 inches per minute)
Model D8052C 0.10 to 600mm per minute (0.004 to 24.0 inches per minute)
Maximum Testing Force:
Model D8052B 10 kN (2000 lb.)
Model D8052C 5 kN (1000 lb.)
Force Measurement Method:
Load cell standard; barrel mounted pressure transducer optional
Dies:
Tungsten Carbide capillary; many L/D ratios available
Die Swell Measurement:
Optional Laser Micrometer

Temperature Range:
430°C standard
Heat System:
Dual zone electric heater
Temperature Measurement:
Platinum RTD
Temperature Control System:
Adaptive PID temperature control algorithm 0.1°C resolution
Temperature Control Accuracy:
0.1°C, 300°C, 0.2°C, 430°C
Temperature Distribution in Test Area:
+0.5°C

Power Supply:
120 VAC 50/60HZ or 240 VAC 50HZ

Data Processing System:
Personal Computer based
System Software:
KARS (Kayeness Advanced Rheology Software)
ARS Features:
Bagley and Rabinowitsch Corrections, Carreau, Modified Cross, Power Law and polynomial curve fits,
Arrhenius Temperature fit, statistical error estimation, shear rate dependence, time at temperature
relationship, critical shear stress, zero shear viscosity, Intrinsic viscosity correlation

To Order
Specify Model D8052B for 300 mm per minute (12.0 inches per minute) ram speed.
Specify Model D8052C for 600 mm per minute (24.0 inches per minute) ram speed.

Optional Features

<table>
<thead>
<tr>
<th>Option Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>GP8000</td>
<td>80486 DX based personal computer with KARS software installed</td>
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<tr>
<td>KARS</td>
<td>Kayeness Advanced Rheology Software (requires personal computer with math co-processor. Check with factory for system compatibility)</td>
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<tr>
<td>GP7973</td>
<td>Plotter</td>
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<tr>
<td>GP7980</td>
<td>Printer</td>
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<tr>
<td>D7990</td>
<td>Electronic load cell calibration kit</td>
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<tr>
<td>8052-130</td>
<td>High temperature (430°C) operation</td>
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<tr>
<td>8052-140</td>
<td>High force (10 kN 2000 lb.) operation</td>
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<tr>
<td>8052-150</td>
<td>Barrel mounted pressure transducer option</td>
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<tr>
<td>GP7506</td>
<td>Chart recorder for continuous output from load cell or pressure transducer</td>
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<tr>
<td>Laser Mic</td>
<td>Laser Micrometer die swell measuring system</td>
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<tr>
<td>8052-97K</td>
<td>High speed barrel bore cleaning kit</td>
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<tr>
<td>GRAN</td>
<td>High speed mini grinder</td>
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Call or write for more information

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