Specifications

Rosand RH2000

If you are unsure as to specifying an appropriate rheometer model for your application, Malvern recommend contacting us for further advice and/or a sample test and evaluation report.

Understanding the application under consideration, and the associated rheological test requirements, is a key factor in selecting the most appropriate rheometer system.

General

Number of bores:
Single bore (RH2100 model). Twin bores (RH2200 model).

Maximum force:
12kN (standard). 20kN (option).

Frame stiffness:
100kN.

Maximum speed:
600mm/min (standard). 1200mm/min (high speed option).

Dynamic range in speed:
>120,000:1. (240,000:1 with high speed option).

Speed uncertainty:
<0.1%

Temperature range:
Ambient to 400°C (standard). Ambient to 500°C (high temperature option).
5°C to 200°C (low temperature cooling coil option).

Temperature control range:
<±0.1°C.

Bore diameter:
15mm (standard) 9.5mm; 12mm; 19mm; 24mm (bore options).

Barrel bore length:
250mm.

Barrel material:
Nitrided steel (standard). Hastelloy; Stainless Steel (barrel options).

Pressure transducer ranges:
30,000psi; 20,000psi; 10,000psi; 5,000psi; 1,500psi; 500psi.

Dies:
Tungsten carbide: precision ±5µm.

Die diameter:
0.5mm to 2mm (in 0.5mm increments) and 3mm as standard. (Other diameters, including fine bore dies, available to special order).

Atmospheric control:
Nitrogen purge for dry, inert test conditions (option).

Weights and dimensions (base)

Dimensions (W, D, H):
Rheometer base unit: 550mm, 650mm, 1100mm Electronics box: 340mm, 530mm, 650mm
Weight:
Rheometer base unit: 120kg (without accessories) Electronics box: 30kg

Operating environment

Power:
Single phase AC 230V 50Hz 16A.
Temperature:
15°C – 40°C.
Humidity:
35% - 80% non-condensing.

Rosand RH7 e RH10

If you are unsure as to specifying an appropriate rheometer model for your application, Malvern recommend contacting us for further advice and/or a sample test and evaluation report. Understanding the application under consideration, and the associated rheological test requirements, is a key factor in selecting the most appropriate rheometer system.

General

Dimensions (W, D, H):
700mm, 580mm, 2450mm (without accessories).
Maximum drive force:
50kN (RH7); 100kN (RH10).
Frame stiffness:
250kN.
Maximum speed:
600mm/min (RH7); 1200mm/min (RH10).
Dynamic range in speed:
240,000:1.
Speed uncertainty:
<0.1%
Temperature range:
Ambient to 400ºC (standard). Ambient to 500ºC (high temperature option). 5ºC to 200ºC (low temperature cooling coil option).
Temperature control range:
<±0.1°C.

Bore diameter:
15mm (standard). 9.5mm; 12mm; 19mm; 24mm (bore options).
Barrel bore length:
290mm.
Barrel material:
Nitrided steel (standard). Hastelloy; Stainless Steel (barrel options).
Pressure transducer ranges:
30,000psi; 20,000psi; 10,000psi; 5,000psi; 1,500psi; 500psi.
Dies:
Tungsten carbide: precision ±5µm.
Die diameter:
0.5mm to 2mm (in 0.5mm increments) and 3mm as standard. (Other diameters, including fine bore dies, available to special order)
Atmospheric control:
Nitrogen purge for dry, inert test conditions (option).

Weight and dimensions

Dimensions (W, D, H):
700mm, 580mm, 2450mm (without accessories)
Weight:
350kg (without accessories)

Operating environment

Power:
Three phase 220V/ Three phase and Neutral 415V 16A
Temperature:
15°C – 40°C.
Humidity:
35% - 80% non-condensing.