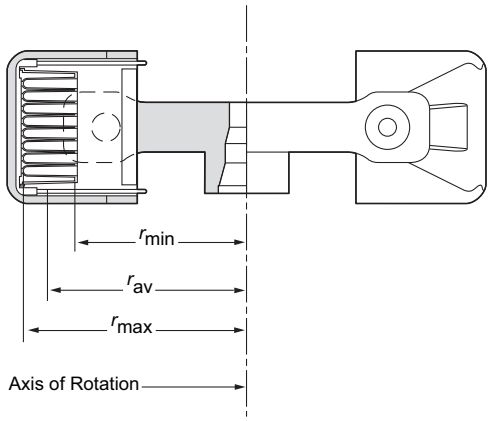
S5700 ROTOR



SPECIFICATIONS

Maximum speed	5 700 rpm
Critical speed range*	1200 to 1400 rpm
Density rating at maximum speed	1.2 g/mL
Relative Centrifugal Field† at maximum speed (deepwell plates)	
At r_{max} (168.5 mm)	6 130 × *g*
At r_{av} (153.4 mm)	5 580 × *g*
At r_{min} (138.6 mm)	5 040 × *g*
Conditions requiring speed reductions	see RUN SPEEDS
Maximum allowable imbalance of opposing loads	10 grams
Maximum load per bucket	590 grams
Number of buckets	2
Available labware	see Table 1
Approximate acceleration time to maximum speed (fully loaded)	47 sec
Approximate deceleration time from maximum speed (fully loaded)	49 sec
Weight of fully loaded rotor	7.9 kg (17.4 lb)
Rotor material	aluminum

* The critical speed range is the range of speeds over which the rotor shifts so as to rotate about its center of mass. Passing through the critical speed range is characterized by some vibration.

† Relative Centrifugal Field (RCF) is the ratio of the centrifugal acceleration at a specified radius and speed ($r\omega^2$) to the standard acceleration of gravity (*g*) according to the following formula:

$$RCF = \frac{r\omega^2}{g}$$

where *r* is the radius in millimeters, ω is the angular velocity in radians per second (2π RPM / 60), and *g* is the standard acceleration of gravity (9807 mm/s^2). After substitution:

$$RCF = 1.12\, r \left(\frac{RPM}{1000}\right)^2$$