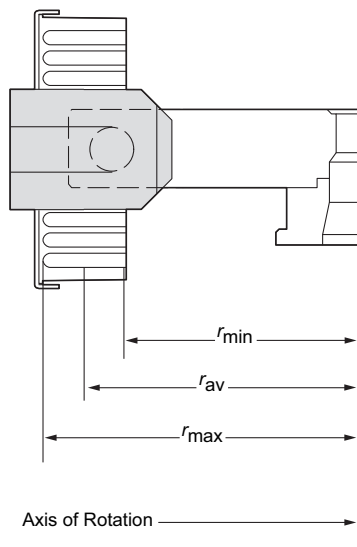
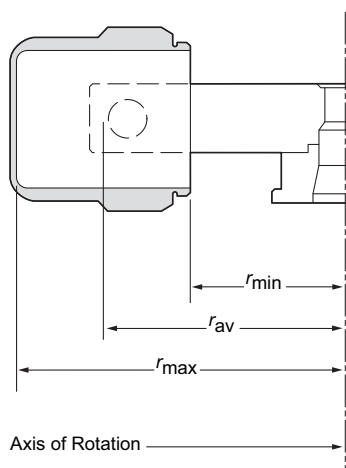


TS-5.1-500 ROTOR

SPECIFICATIONS



Maximum speed (buckets)	5 100 rpm
Maximum speed (microplate carriers)	4 100 rpm
Critical speed range*	500 to 700 rpm
Density rating at maximum speed	1.2 g/mL
Relative Centrifugal Field [†] at maximum speed (buckets)	
At r_{max} (190.0 mm)	5 530 × g
At r_{av} (138.5 mm)	4 030 × g
At r_{min} (87.0 mm)	2 530 × g
Relative Centrifugal Field at maximum speed (microplate carriers)	
At r_{max} (160.0 mm)	3 010 × g
At r_{av} (136.5 mm)	2 570 × g
At r_{min} (113.0 mm)	2 130 × g
Conditions requiring speed reductions	see RUN SPEEDS
Maximum allowable imbalance of opposing loads	20 grams
Number of buckets or carriers	4
Available labware	see Tables 1 and 2
Nominal dimensions (largest bottle)	85 × 135 mm
Nominal capacity (largest bottle)	500 mL
Nominal rotor capacity	2 L
Approximate acceleration time to maximum	
speed (fully loaded)	59 sec
Approximate deceleration time from maximum	
speed (fully loaded)	47 sec
Weight of fully loaded rotor	9.7 kg (21.4 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 ($2\pi \text{ RPM} / 60$), and g is the standard acceleration of gravity (9807 mm/s^2). After substitution:

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