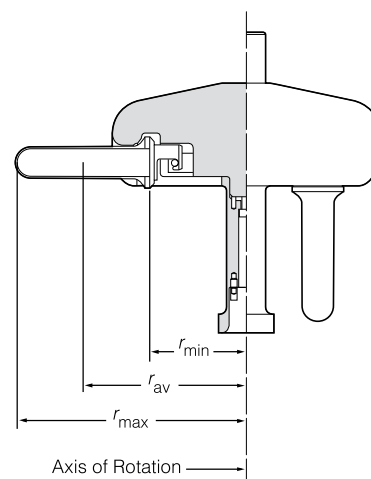


## SW 41 Ti Rotor

U.S. Pat. No. 3,393,864;  
 Japanese Pat. No. 739,613;  
 British Pat. No. 1,145,005;  
 German Pat. No. 1,598,174.



## SPECIFICATIONS

Maximum speed	41 000 rpm
Density rating at maximum speed	1.2 g/mL
Relative Centrifugal Field* at maximum speed	
At $r_{\max}$ (153.1 mm)	288 000 $\times g$
At $r_{\text{av}}$ (110.2 mm)	207 000 $\times g$
At $r_{\min}$ (67.4 mm)	127 000 $\times g$
$k$ factor at maximum speed	124
$k'$ factors at maximum speed (5 to 20% sucrose gradient; 5°C)	
When particle density = 1.3 g/mL	335
When particle density = 1.5 g/mL	307
When particle density = 1.7 g/mL	295
Conditions requiring speed reductions	see RUN SPEEDS
Number of buckets	6
Available tubes	see Table 1
Nominal tube dimensions (largest tube)	14 $\times$ 89 mm
Nominal tube capacity (largest tube)	13.2 mL
Nominal rotor capacity	79.2 mL
Approximate acceleration time to maximum speed (fully loaded)	
in an Optima XL ultracentrifuge	7 min
in an L8M ultracentrifuge	6 min
Approximate deceleration time from maximum speed (fully loaded)	
in an Optima XL ultracentrifuge	7 min
in an L8M ultracentrifuge	5 min
Weight of fully loaded rotor	6.4 kg (14 lb)
Rotor material	titanium

\* 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:

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

where  $r$  is the radius in millimeters,  $\omega$  is the angular velocity in radians per second ( $2\pi \text{RPM}/60$ ), and  $g$  is the standard acceleration of gravity ( $9807 \text{ mm/s}^2$ ). After substitution:

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