

## Super Speed Centrifuge



Brand : Beckman Coulter

Model : J2-MC

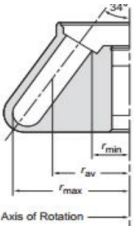
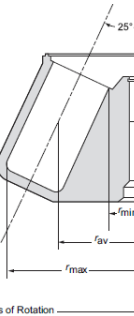
Custodian : Nuntanat Kitisrivorapan

Location : K647 Room, 6<sup>th</sup> Floor, Chaloeprakiet Building, Phyathai Campus

### Description and Specifications:

Maximum speed	16,000 rpm
Time setting	Up to 99 hours 59.9 min, “hold” or continuous operation.
Rotor temperature	-20 to 40 °C
Temperature control	±2°C
Acceleration	Select from 3 acceleration rates (maximum)
Deceleration	Select from 3 deceleration rates (maximum)
Operating modes	Select NORMAL, ZONAL, or PROGRAM LOCK operation.

## Rotor

Rotor Profile and Name	Max Speed <sup>a</sup> / RCF/ K Factor	Critical Speed Range <sup>b</sup> (rpm)	Radial Distances (mm)			Number of Tubes x Nominal Capacity of Largest Tube	Nominal Rotor Capacity
			$r_{max}$	$r_{av}$	$r_{min}$		
 <p>JA-20 (34° Angle)</p>	16,000 rpm 48,400 × g 770	600 to 800	108	70	30	8 × 50 mL	400 mL
 <p>JA-14 (25° Angle)</p>	12,000 rpm 30,100 × g 1764	600 to 800	137	86	35	6 × 250 mL	1500 mL

**Application:** General-Purpose, Large-Volume, And Multi-Tube Processing

*Relative Centrifugal Fields for the JA-20 Rotor.*

*Entries in this table are calculated from the formula*

$$RCF = 1.12 r(RPM/1000)^2$$

*And then rounded to three significant digits.*

Rotor speed (rpm)	Relative Centrifuge Field (× g)		
	At $r_{max}$ (108 mm)	At $r_{av}$ (70 mm)	At $r_{min}$ (32 mm)
16000	31000	20100	9180
15500	29100	18800	8610
15000	27200	17600	8070
14500	25400	16500	7540
14000	23700	15400	7030
13500	22100	14300	6530
13000	20400	13300	6060
12500	18900	12300	5600
12000	17400	11300	5160
11500	16000	10400	4740
11000	14600	9490	4340
10500	13300	8640	3950
10000	12100	7840	3580
9500	10900	7080	3240
9000	9800	6350	2900
8500	8740	5660	2590
8000	7740	5020	2290
7500	6800	4410	2020
7000	5910	3840	1760
6500	5110	3310	1510
6000	4360	2820	1290
5500	3660	2370	1080
5000	3020	1960	896
4500	2450	1590	726
4000	1940	1250	573
3500	1480	960	439

*Relative Centrifugal Fields for the JA-14 Rotor.*

*Entries in this table are calculated from the formula*

$$RCF = 1.12 r(RPM/1000)^2$$

*And then rounded to three significant digits.*

Rotor speed (rpm)	Relative Centrifuge Field (× g)		
	At $r_{max}$ (137 mm)	At $r_{av}$ (86 mm)	At $r_{min}$ (35 mm)
14000	30100	18900	7680
13000	25900	16300	6620
12000	22100	13900	5640
11000	18600	11700	4740
10000	15300	9630	3920
9000	12400	7800	3180
8000	9820	6160	2510
7000	7520	4720	1920
6000	5520	3470	1410
5000	3840	2410	980
4000	2460	1540	627
3000	1380	866	352
2000	613	385	156
1000	153	96	39