

# RESEARCH CENTRIFUGES

Range of Low Speed centrifuges for General Research Applications, with a wide range of Horizontal Swing Out and Fixed Angle Rotor Heads.

### General Features:

- Sturdy and safe steel body
- Anti vibrator mounting of motor assembly and the whole centrifuge
- Specifically designed drive motor and electronics manufactured in house
- Double walled lid with see through window for observation and calibration. Electrical/ Electronic/ Mechanical lid lock
- Corrosion resistant epoxy coated centrifuge chamber
- TC 8100 F/ MP 800 provided with Hydraulic lid lifting and holding
- TC 8100 F/ MP 800 provided with Auto-Rotor Identification.
- TC 8100 F/ MP 800 provided with Short-Spin.
- Control panel with soft touch key pad for ease of operation
- LCD Display of setting and working parameters
- Speed Programmable by setting required RCF value
- Display of Working speed / Working RCF value
- Remaining Time
- Rotor Head selection from system library and programmable
- Over speed protection by selecting and programming required rotor
- Imbalance detection & Auto safety switch off with error message on screen
- Programmed electronic lid lock release in case of power failure
- Safety soft start programmed to start / restart for drive motor
- At start programmed to start count down timer when the set speed attained
- Safety Lid lock programmed which allows the centrifuge to start only when lid is locked and prevent lid opening during centrifugation with 'Lid Open' error message when lid not locked.

### Technical Specifications and Programmable features:

Specifications	TC 8100 D	TC 8100 F	MP 800
Drive Motor	AC/DC Universal	Brushless AC Induction	Brushless AC Induction
Control system	Digital programmable	Microprocessor with VFD Programmable	Microprocessor with VFD Programmable
Program Memory	Last used Program	25 Program	99 Program
Speed Range- depending on rotor head	200 to 7000 RPM	200 to 10000 RPM	200 to 10000 RPM
Timer	1 to 99 minutes & infinite mode	1 to 120 Minutes & infinite mode	1 to 120 minutes & infinite mode
Acceleration / Deceleration time	30 to 300 Seconds	12 to 510 Seconds	12 to 510 Seconds
Temperature control	N.A	N.A	N.A.
<b>DISPLAYS</b>			
Rotor Head Speed/ RCF Value	Working Speed/ Working RCF value	Working Speed/ Working RCF value	Working Speed/ Working RCF value
Time	Remaining Time	Remaining Time	Remaining Time
Imbalance	Auto Switch off + Error Message	Auto Switch off + Error Message	Auto Switch off + Error Message + Indication
Lid Open	Error Message	Error Message	Error Message + Safe lid open indication
Alarm on completion	Audible	Audible	Audible

### CHOICE OF SWING OUT & FIXED ANGLE ROTOR HEAD FOR USE WITH TC 8100 D/TC 8100 F & MP 800

Centrifuge Model				TC 8100 D		TC 8100 F / MP 800		
	Rotor Model	No.tube x ml	Tube Type	Rotor Type	Max.RPM	Max.RCF	Max.RPM	Max.RCF
TC 8101	4 Place Swing Out (Horizontal) Rotor Head suitable to carry different carriers listed below. To be ordered with the required carrier from below list.							
Tube carriers suitable for use with TC 8101 Rotor Head ( To be ordered with the Rotor Head)								
TC 8101A	4 x 200	P.P. Tube	Swing Out	5200	5050	5200	5050	
TC 8101 B	4 x 100	P.P. Tube	Swing Out	6100	6600	6100	6600	
TC 8101 C	4 x 18-RIA (5 )	P.P. Tube	Swing Out	5200	4200	5200	4200	
TC 8101 V	4 x 9 -2/3/4 ml	Vaccutainer Size 12x82 mm	Swing Out	5200	4200	5200	4200	
TC 8101 VL	4 x 9 -5/6 ml	Vaccutainer size 12x102 mm	Swing Out	5200	4200	5200	4200	
TC 8101 J	4 x 15	P.P./Glass	Swing Out	4500	2780	4500	2780	
TC 8101 D	4 Place Swing Out (Horizontal) Rotor Head suitable to carry different carriers listed below. To be ordered with the required carrier from below list.							
Tube carriers suitable for use with TC 8101 D Rotor Head (To be ordered with the Rotor Head)								
TC 8101 E	4 x 27 RIA	5 ml RIA/ 2/3/4 ml Vaccutainer size 12x82 mm	Swing Out	5200	4200	5200	4200	
TC 8101 F	4x 21	2/3/5 ml Vaccutainer size 12.5 x82 mm	Swing Out	5200	4200	5200	4200	
TC 8101 I	4 x 15	6 ml Vaccutainer	Swing Out	5200	4200	5200	4200	
TC 8109	4 x250	P.P. Bottles	Swing Out	5200	4200	5200	4200	
TC 8107	4 x 1 MTP/PCR	96 well MTP Deepwell PCR	Swing Out	3400	1700	3400	1700	
TC 8108	2 x 2 MTP	96 well MTP 85x127 mm	Swing Out	3400	1700	3400	1700	
TC 8024	2 x 4 MTP	96 well MTP 85x127 mm	Swing Out	3400	1700	3400	1700	
TC 8110	4 x 250	P.P. Bottle	Angle	7000	7250	7000	7250	
TC 8102	12 x 25	P.P. Tube	Angle	7000	7100	7000	7100	
TC 8103	6 x 200	P.P. Bottle	Angle	7000	7250	7000	7250	
TC 8104	8 x 100	P.P. Tube	Angle	7000	7100	7000	7100	
TC 8105	12 x 50	P.P.Tube	Angle	7000	7100	7000	7100	
TC 8106	36 x 15	P.P.Tube	Angle	7000	7100	7000	7100	
TC 4115 F	18 x 15	P.P.Tube	Angle	7000	7100	10000	10500	
TC 4111 F	24 x 1.5/2	Eppendorff	Angle	7000	7100	10000	10500	
TC 4118 F	24 x 3 / 4	Vaccutainer	Angle	7000	5000	10000	10400	
TC 8136	36 x 3/5/6	Vaccutainer	Angle	7000	7100	7000	7100	
TC 8146	46 x 3/4/5	Vaccutainer	Angle	7000	7100	7000	7100	

Note: Wide range of Reduction adaptors increase the versatility of the rotor heads. Rotor Heads for special application tubes can be designed, manufactured and supplied.

### Technical Data:

Model	TC 8100 D	TC 8100 F	MP 800
Width x Depth x Height (mm)	450 x 570 x 510	450 x 570 x 510	450 x 570 x 510
Max. Speed (RPM)	7000	10000	10000
Max. RCF (g)	7250	10500	10500
Weight (Kgs.)	50	50	50
Connected Load (kVa)	0.75	0.75	0.75

\* Optional: F Series & MP Series model can be provided with Data Downloading through computer software using RS 232/485 port Interface & Automatic lid opening after completion of run.



Research Centrifuge - TC 8100 D

TC 8106



Research Centrifuge - TC 8100 F

TC 4111F



Research Centrifuge - MP 800