



Figure I-1. The Microfuge 18 Centrifuge

## SPECIFICATIONS

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*Only values with tolerances or limits are guaranteed data. Values without tolerances are informative data, without guarantee.*

Set speed . . . . .	0 to 14 000 rpm
Set time . . . . .	0 to 30 min, continuous run ( $\infty$ ), or pulse (short run)
Ambient temperature* . . . . .	4°C (39°F) to 35°C (95°F)
Humidity restrictions . . . . .	<80% (noncondensing)
Dimensions	
Width . . . . .	24.0 cm (9.5 in.)
Depth . . . . .	32.0 cm (12.6 in.)
Height, door closed . . . . .	24.5 cm (9.7 in.)
Height, door open . . . . .	39.5 cm (15.6 in.)
Weight . . . . .	13.0 kg (28.7 lb)
Ventilation clearances (sides and rear) . . . . .	7.6 cm (3.0 in.)
Electrical requirements . . . . .	230 VAC, 2 A, 50 Hz 100–120 VAC, 4 A, 50/60 Hz
Electrical supply . . . . .	Class I
Maximum heat dissipation into room under steady-state conditions . . . . .	170 Btu/hr
Noise level 0.91 m (3 ft) in front of centrifuge . . . . .	58 dBa
Installation (overvoltage) category . . . . .	II
Pollution degree . . . . .	2†

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\* The Microfuge 18 centrifuge can be used in a humidity controlled cold room.

† Normally only nonconductive pollution occurs; occasionally, however, a temporary conductivity caused by condensation must be expected.

## AVAILABLE ROTORS

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The F241.5P, rated for 14 000 rpm, is a fixed-angle rotor with a tube angle of 45 degrees from the axis of rotation. The rotor can centrifuge up to twenty-four 1.5 to 2.0-mL reaction-vials, or 250 to 750- $\mu$ L vials in adapters. Refer to the rotor manual (MM-TB-001) for detailed information about the rotor.



### CAUTION

*Use only the F241.5P rotor in the Microfuge 18.*

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## F241.5P Rotor Specifications

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Maximum speed . . . . .	14 000 rpm
Density rating at maximum speed. . . . .	1.2 g/mL
Relative Centrifugal Field* at maximum speed	
at $r_{\max}$ (80 mm) . . . . .	18 000 $\times$ g
Conditions requiring speed reductions . . . . .	see RUN SPEEDS (in rotor manual)
Number of tube cavities . . . . .	24
Nominal tube dimensions (1.5 to 2.0-mL vials) . . . . .	10 $\times$ 31 mm
Nominal tube capacity. . . . .	2 mL
Nominal rotor capacity . . . . .	48 mL
Approximate acceleration time to maximum speed	
(fully loaded) . . . . .	18 seconds
Approximate deceleration time from maximum speed	
(fully loaded) . . . . .	19 seconds
Weight of fully loaded rotor . . . . .	0.57 kg (1.16 lb)
Rotor material . . . . .	polypropylene
Lid material. . . . .	polycarbonate

## SAFETY FEATURES

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The Microfuge 18 centrifuge has been designed and tested to operate safely indoors at altitudes up to 2 000 m (6 562 ft). Safety features include the following.

Safety features include an electromechanical door-locking mechanism that prevents operator contact with spinning rotors. When the door is closed it locks automatically. It can be unlocked only by pressing the DOOR key, and opened only when the power is on and the rotor is at rest.