

Z 323 ■ Z 323 K High Performance Centrifuge

Z323 Series
High Performance
Centrifuges



HERMLE
Labnet

Z 323 Series

Z 323 and Refrigerated Z 323 K

These high performance centrifuges accept all of the same rotors as the Z 300 series, plus high speed rotors capable of producing up to 26,810 x g. Higher speed and g-force expand the use of the Z 323 and Z 323 K to a range of applications in areas such as molecular biology and basic research.

A powerful microprocessor controls operation. Parameters are set using easy turn knobs while their values are shown on large digital displays. Speed can be set and displayed in rpm or RCF. Proper calculation of g-force with different sized tubes and adapters is ensured by a radius correction feature. Braking intensity can be set to ten different levels. Run parameters, including rotor type, can be saved to the 10 program memory. Repetitive runs are achieved by simply pressing the start button. A maintenance-free induction drive provides quiet operation and quick acceleration and deceleration.

A continuous flow of air through the chamber of the Z 323 keeps sample temperature from rising significantly above ambient. The powerful refrigeration system in the Z 323 K can cool all rotors below 0°C, even at maximum speed. At the touch of a button, the chamber and rotor are precooled to the appropriate temperature.

Safety features incorporated into the Z 323 series include automatic rotor recognition, overspeed protection and imbalance sensors.

- Maximum speed 17,000 rpm/26,810 x g with microtube rotor
- Capacity for up to 4 x 100 ml
- Swing out rotors for tubes and microplates
- High speed rotors for 85, 50 and 30 ml tubes, up to 20,980 x g
- Microprocessor control with g-force conversion, rotor ID and program memory



SPECIFICATIONS

Speed Range:	250 rpm to 17,000 rpm
Maximum RCF:	26,810 x g
Maximum Capacity:	4 x 100ml
Timer:	1 to 60 min. or continuous
Temperature:	-10°C to +40°C
Dimensions:	
Z323	39.4 X 54.6 X 36.9cm / 15.5 x 21.5 x 14.5in
Z323-K	68.6 x 54.6 x 36.9cm / 27 x 21.5 x 14.5in

Accessories

Swing-out rotors / carriers / adapters

C0323-72 (w/covers) C0323-71 (w/o covers)



Max Capacity: 4 x 100ml
5,000 rpm / 3,910 x g
Centrifugal Radius: 14cm

Tube inserts for C0323-71 and C0323-72

Tube Size	Item no.	Tubes/Rotor
100ml or 80ml (40mm)	C0320-720	4
50ml conical	C0320-728	4
50ml round	C0320-729	4
50ml round (34mm)	C0320-728	4
15 ml conical (w/o lid)	C0320-726	8
15 ml conical (w/ lid)	C0320-726x	4
10 ml (16, 17 x 100mm)	C0320-724	16
7ml (13 x 100mm)	C0320-730	16
5ml (12 x 75mm)	C0320-725	28
1.5/2.0ml (10 x 39mm)	C0320-721	4

C0300-12



Max Capacity: 4 x 100ml
4,500 rpm / 3,350 x g
Centrifugal Radius: 14.8cm

Tube inserts for C0323-71 and C0323-72

Tube Size	Item no.	Tubes/Rotor
100ml (44mm)	C0300-120	4
85ml (38mm)	C0300-121	4
50ml conical	C0300-122	4
15 ml conical	C0300-123	8
10 ml (16, 17 x 100mm)	C0300-124	28
7ml (13 x 100mm)	C0300-125	36
5ml (12 x 75mm)	C0300-126	28

Economy Swing-out rotors

C0300-15



Max Capacity: 8 x 15ml
5,000 rpm / 4,164 x g
Centrifugal Radius: 14.9cm

C0300-50



Max Capacity: 8 x 15ml
5,000 rpm / 4,164 x g
Centrifugal Radius: 14.9cm

Accessories

Microplate Rotors

C0382-50



Max Capacity: 2 x 3microplates
3,500 rpm / 1,500 x g
Centrifugal Radius: 11cm

C0300-16



Max Capacity: 2 x 3microplates
4,500 rpm / 2,762 x g
Centrifugal Radius: 12.2cm

Fixed Angle Rotors, Micro



Order number: C-0252-87

Maximum speed: 17,000rpm
RCF value: 26,810 x g
Centrifugal radius: 8.3 cm

1.5/2.0 ml microtube (Ø 11 x 42 mm)

No adapter needed

Adapters for 0.5 ml tubes, set of 6

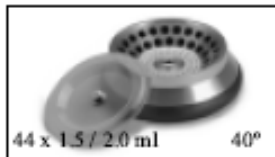
C-1205

Adapters for 0.25 and 0.4 ml tubes, set of 6

C-1206

Adapters for 0.2 ml thermal cycling tubes, set of 6

C-1222



Order number: C-0252-9

Maximum speed: 13,500rpm
RCF value: 17,110 x g
Centrifugal radius: 8.4 cm

1.0/2.0 ml microtube (Ø 11 x 42 mm)

No adapter needed

Adapters for 0.5 ml tubes, set of 6

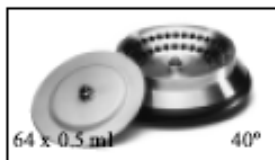
C-1205

Adapters for 0.25 and 0.4 ml tubes, set of 6

C-1206

Adapters for 0.2 ml thermal cycling tubes, set of 6

C-1222

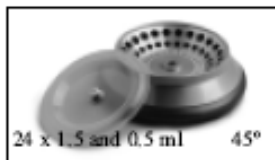


Order number: C-0252-43

Maximum speed: 13,500rpm
RCF value: 16,700 x g
Centrifugal radius: 8.2 cm

0.5/0.6 ml microtubes (Ø 8 x 32 mm)

No adapter needed



Order number: C-0252-55

Maximum speed: 13,500rpm
RCF value: 17,110 x g
Centrifugal radius: 8.4 cm

0.5/0.6 ml and 1.5/2.0 ml microtubes

No adapter needed

Adapters for 0.5 ml tubes, set of 6

C-1205

Adapters for 0.25 and 0.4 ml tubes, set of 6

C-1206

Adapters for 0.2 ml thermal cycling tubes, set of 6

C-1222

Adapters for use in 1.5/2.0 ml spaces only



Order number: C-0252-20

Maximum speed: 13,500rpm
RCF value: 16,708 x g
Centrifugal radius: 8.2 cm

2.0 ml cryovials (12.5 x 48 mm)

No adapter needed

Not for use in Z 300 series.

Accessories

Fixed Angle Rotors



Order number: C-0323-81

Maximum speed: 3500rpm
RCF value: 2000 x g
Centrifugal radius: 14.6 cm

10 to 15 ml, round or conical Ø16-17.5 x 112 mm
7 ml insert (Ø 13 x 100 mm)
5 ml insert (Ø 10-12 x 75 mm)
1.5 ml insert (Ø 11 x 42 mm)

No insert needed
C-0230-19
C-0230-17
C-0230-20



Order number: C-0300-96

Maximum speed: 6000rpm
RCF value: 4306 x g
Centrifugal radius: 10.7 cm

15 ml conical (Ø17.5 x 112 mm)
10 to 15 ml insert (Ø16 to 17 x 100 mm)
7 ml insert (Ø 13 x 100 mm)
5 ml insert (Ø 10 to 12 x 75 mm)
1.5 ml insert (Ø 11 x 42 mm)

No insert needed
C-0200-10
C-0230-19
C-0230-17
C-0230-20



Order number: C-0300-97

Maximum speed: 6000rpm
RCF value: 3863 x g
Centrifugal radius: 9.6 cm

50 ml conical (Ø30 x 116 mm)
15 ml conical bottom insert (Ø 17.5 x 112 mm)
15 ml round bottom insert (Ø 16 to 17 x 100 mm)

No adapter needed
C0232-8
C0232-8A

Inserts C0230-17, -19 and -20 (see above) can be used inside C0232-8



Order number: C-0252-85

Maximum speed/RCF: 13,500rpm
RCF value: 19,960 x g
Centrifugal radius: 9.8 cm

12 ml, (Ø 16 x 98 to 109 mm)
10 ml insert (Ø 16 x 80 mm)

No insert needed
C-0252-85A

Not for use in Z 300 series.



Order number: C-0382-76

Maximum speed/RCF: 13,500rpm
RCF value: 19,960 x g
Centrifugal radius: 10.3 cm

30 ml (Ø 25 x 90 to 106 mm)
16 ml insert (Ø 18 x 97 to 103 mm)
15 ml insert (Ø 17 x 97 to 103 mm)

No insert needed
C-0360-76C
C-0360-76A

Not for use in Z 300 series.



Order number: C-0382-91

Maximum speed: 13,500rpm
RCF value: 19,960 x g
Centrifugal radius: 9.5 cm

50 ml round (Ø 28.5 x 92 to 107 mm)
30 ml insert (Ø 25 x 105 mm)
30 ml insert (Ø 25 x 92 to 95 mm)
16 ml insert (Ø 18 x 105 mm)
15 ml insert (Ø 17 x 105 mm)
15 ml insert (Ø 17 x 100 mm)

No insert needed
C-0360-91B
C-0360-91C
C-0360-91A
C-0360-91D
C-0360-91Y

Not for use in Z 300 series.



Order number: C-0382-78

Maximum speed: 13,500rpm
RCF value: 20,980 x g
Centrifugal radius: 10.3 cm

85 ml (Ø 38 x 113 mm)
50 ml conical (Ø 29 x 116 mm)
50 ml round (Ø 28.5 x 105 mm)
30 ml (Ø 25 x 90 to 103 mm)

No insert needed
C-0360-94D
C-0360-94A
C-0360-94B

Not for use in Z 300 series.

Accessories

Centrifuge Tube Guide



1.5 ml
(11 x 42 mm)



5 ml
(12 x 75 mm)



7 ml
(13 x 100 mm)



10 - 15 ml
(16 x 100 mm)



15 ml conical
(17 x 120 mm)



30 ml high speed
(25.5 x 92 mm)



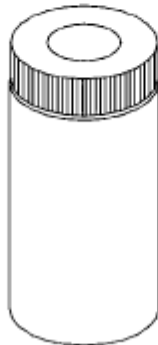
50 ml high speed
(28.5 x 104mm)



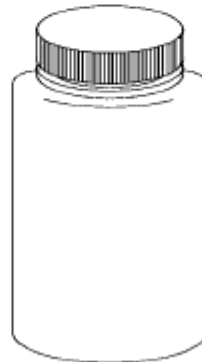
50 ml conical
(29 x 115 mm)



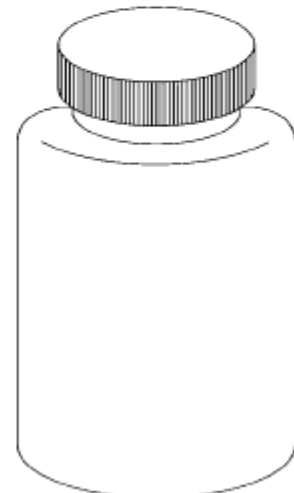
85 ml high speed
(38 x 101 mm)



250 ml
(60 x 124 mm)



500 ml
(80 x 125 mm)



1000 ml
(97 x 170 mm)