

MR 23i - HIGH SPEED MULTI-FUNCTION CENTRIFUGE

For Every Application

**HIGH SPEED
CENTRIFUGES**

Simplicity of Operation

The use of the JOUAN MR 23i is facilitated by the interactive VIDEOset controller. A and graphic display of all parameters ensures quick and easy programming. The parameters displayed include speed, RCF, time, temperature, rotor, integral, acceleration and braking rates plus a real time graph of the run.

Unique AUTO-LOCK Rapid Rotor Exchange

Most multi-function centrifuges are only used with one rotor due to the complexity of rotor exchange. JOUAN has developed and patented AUTO-LOCK® which lets you exchange rotors in 5 seconds. This allows full utilisation of the centrifuge.

Sample Protection

The powerful refrigeration system in the JOUAN MR 23i ensures samples are maintained at 4°C even at maximum speed. This precise temperature control ensures no sample degradation and better quality of separation leading to improved results.

Application

For high volume RNA extractions, most protocols use microtubes and require at least 14,000 x g. For a higher throughput, 1.5 ml conical tubes can be spun in the JOUAN MR 23i. The user can achieve over 21,000 x g with these tubes, in the 6 x 50 ml conical rotor (11174732) with adaptors (11174606). This saves time and increases volume.



- Simplicity of Operation
- Unique AUTO-LOCK® Rapid Rotor Exchange
- Sample Protection
- Reproducibility
- 36,668 x g in Silence

| Specifications | MR 23i |
|-------------------------|---------------------------------------|
| Max. speed | 23,000 rpm |
| Max. RCF | 36,668 x g |
| Max. capacity | 6 x 100 ml |
| Temp range | -8°C to +40°C |
| Dims (H x W x D) | 14 x 23 x 25 in 360 x 585 x 635 mm |
| Dims (H x W x D) crated | 22 x 29 x 31 in 570 x 730 x 790 mm |
| Weight (net/gross) | 187/221 lb 85/100 kg |
| Cat. N° (120V / 60Hz) | 11174730 |

Reproducibility


JOUAN ensures results through the use of the integral factor. Regardless of the sample volume or run speed, the total separating force is absolutely the same every time optimising sample preparation and quality.

36,668 x g in Silence

As the JOUAN MR 23i is used in the laboratory next to the user, low noise levels are essential. An induction motor ensures a noise level less than 57 dBA for a pleasant working environment.



Biological Safety

Look out for the  marking indicating that the centrifuge accessory has been successfully tested for biological containment.

MR 23i Rotor Choice and Accessories



AM 100.13 Angle Rotor

6 x 100 ml, Ø 38.5 mm
13,000 rpm
18,516 x g, 28°
Cat. N° **11174710**



AM 50.14 Angle Rotor

8 x 50 ml, Ø 29.5 mm
14,000 rpm
21,255 x g, 28°
Cat. N° **11174709**

Adaptors (set of 6)

11174713 50 ml, Ø 29 mm
11174714 50 ml con, Ø 30 mm
11174724 30 ml Cor*, Ø 24 mm
11174725 25 ml Cor*, Ø 24 mm
11174726 15 ml Cor* / Oak*,
Oak*, Ø 18 mm
11174715 30-38 ml, Ø 25.5 mm
11174716 15 ml con, Ø 17 mm
11174717 2 x 10 ml, Ø 16 mm
11174718 4 x 1.5-2 ml, Ø 11 mm

Adaptors

57312031 30 ml Cor*, Ø 24 mm
57312026 24 ml Cor*, Ø 24 mm
57312016 15 ml Cor*, Ø 18 mm

Adaptors (set of 8)

11174599 30 / 38 ml, Ø 25 mm
11174604 15 ml con, Ø 17 mm
85240287 13 ml, Ø 17 mm
11174612 12 ml, Ø 17 mm
11174600 10 ml, Ø 16 mm



AM 10.17 Sealable Angle Rotor

10 x 10 ml, Ø 16.3 mm
16,600 rpm
26,186 x g, 40°
Cat. N° **11174707**



AM 2.19 Sealable Angle Rotor

28 x 1.5 - 2 ml, Ø 11 mm
19,200 rpm
30,086 x g, 45°
Cat. N° **11174706**

Accessories

11174722 Sealing lid

Accessories

11174722 Sealing lid

Adaptors (set of 10)

11174607 6 ml, Ø 13 mm
11174603 1.5 / 2 ml, Ø 11 mm

Adaptors (set of 20)

41174928 0.5 / 0.8 ml, Ø 8 mm
11174631 0.2 ml PCR, Ø 6.5 mm
41174938 0.25 / 0.5 ml, Ø 6 mm

Please Note:

Unless otherwise stated adaptors are for 1 tube (bottle) only

*Cor. = COREX®

*Oak. = Oak Ridge



AM 50C.13 Angle Rotor

6 x 50 ml conical, Ø 29.8 mm
13,000 rpm
21,160 x g, 40°
Cat. N° **11174732**

Adaptors (set of 4)

11174606 15 ml con, Ø 17 mm
11177378 10 ml, Ø 16 mm



AM 38.15 Sealable Angle Rotor

8 x 38 ml, Ø 25.5 mm
15,300 rpm
23,292 x g, 30°
Cat. N° **11174708**

Accessories

11174722 Sealing lid

Adaptors (set of 8)

11174611 16 ml, Ø 18 mm
11174601 13 ml, Ø 17 mm
11174602 10 ml, Ø 16 mm
11174610 5 ml, Ø 12.5 mm



AM 2.18 Sealed Angle Rotor

24 x 1.5 - 2 ml, Ø 11 mm
18,750 rpm
33,016 x g, 45°
Cat. N° **11174728**

Accessories

11175642 Spare sealing lid

Adaptors (set of 20)

41174928 0.5 / 0.8 ml, Ø 8 mm
11174631 0.2 ml PCR, Ø 6.5 mm
41174938 0.25 / 0.5 ml, Ø 6 mm



AM 2.21 Sealed Angle Rotor

12 x 1.5 - 2 ml, Ø 11 mm
21,500 rpm
32,041 x g, 45°
Cat. N° **11174705**

Adaptors (set of 20)

41174928 0.5 / 0.8 ml, Ø 8 mm
11174631 0.2 ml PCR, Ø 6.5 mm
41174938 0.25 / 0.5 ml, Ø 6 mm

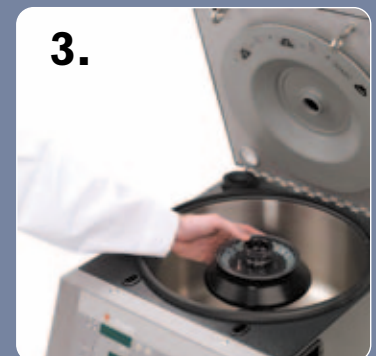
AUTO-LOCK®, simply...



1.



2.

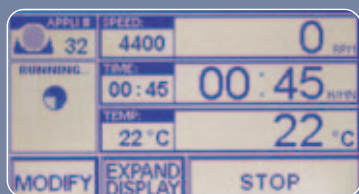


3.

Accessory

85240979 Rotor Exchanger

In less than 5 seconds you can install any of the twelve rotors, thanks to the AUTO-LOCK® system. This patented device allows the JOUAN MR 23i to combine the function of several units for the price of one!



VIDEOset Controller

The graphical display of the JOUAN MR 23i makes use of the centrifuge intuitive with on screen instructions.

MR 23i Rotor Choice and Accessories



AM 2.23 Unsealed Angle Rotor

12 x 1.5 - 2 ml, Ø 11 mm
23,000 rpm
36,668 x g, 45°
Cat. N° **11174704**



DRM 6.14 Drum Rotor

6 racks
14,300 rpm
16,461 x g, 90°
Cat. N° **11174703**

Adaptors (set of 20)

41174928 0.5 / 0.8 ml, Ø 8 mm
11174631 0.2 ml PCR, Ø 6.5 mm
41174938 0.25 / 0.5 ml, Ø 6 mm

Racks

11174561 10 x 1.5 / 2 ml
11174573 20 x 0.5 / 0.8 ml
11174574 20 x 0.7 ml
11174563 21 x 0.6 ml
11174562 32 x 0.25 / 0.4 ml



MTM 6.4 Swing-Out Rotor

6 x microplates / 2 x deepwell blocks
4,500 rpm
2,604 x g, 90°
Cat. N° **11174712**

Accessories

11174207 Rubber cushion for flexible microtitre plate

Please Note:

Unless otherwise stated adaptors are for 1 tube (bottle) only



SWM 180.5 Swing-Out Rotor

4 x 200 ml, Ø 57 mm

4,400 rpm

3,074 x g, 90°

Cat. N° 11174711

Accessories

11174720 Standard buckets (4)

11174721 Sealed buckets (4)

25241177 Spare sealing lid

26436809 Lid seal

11174210 Sealed carriers (4) - 50 ml conical

11174606 Adaptors (4) - 15 ml conical, Ø 17 mm

11177378 Adaptors (4) - 10 ml, Ø 16 mm

11174209 Sealed carriers (4) - 15 ml conical

41193271 200 ml PP bottles (6) with caps

See following pages for insert guide.



MR23i Insert Guide (SWM 180.5 swing-out rotor)



SWM 180.5 Swing-Out Rotor

4 x 200 ml, Ø 57 mm

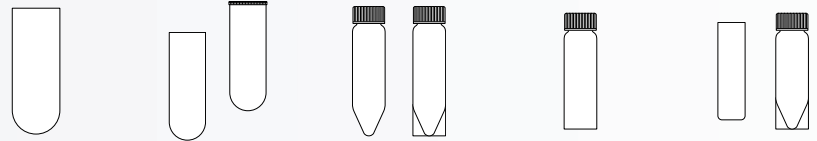
4,400 rpm






3,074 x g, 90°

Cat. N° 11174711

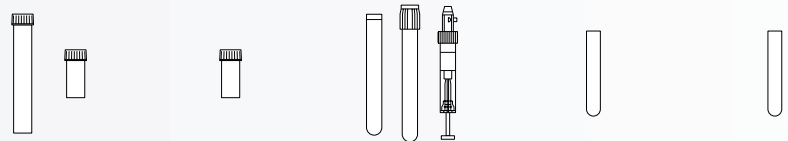
Insert Guide - for bucket N°s 11174720 and 11174721



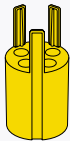
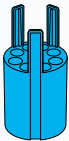
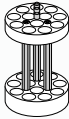
Tube



| | | | | | |
|--------------------|--|--|--|--|--|
| Volume (ml) | 100 | 50 | 50 | 25 | 25 |
| Length (mm) | 80/121 | 80/123 | 86/123 | 87/124 | 86/125 |
| Cap Ø (mm) | 45.5 | 42 | 46 | 46 | 46 |
| Adaptor |  |  |  |  |  |
| Hole Ø (mm) | 45.5 | 33 | 30 | 30 | 25/30 |
| Capacity/insert | 1 | 1 | 1 | 1 | 1 |
| Shape | round | round | conical/skirt | flat/skirt | flat/skirt |
| Cat. N° (set of 4) | 11174181 | 11174501 | 11174528* | 11174526 | 11174527 |

Tube



| | | | | | |
|--------------------|---|---|---|---|---|
| Volume (ml) | 5/10 | 5 | 5/7 | 5/6 | 5 |
| Length (mm) | 42/105 | 42 | 60/120 | 60/118 | 72/115 |
| Cap Ø (mm) | 20 | 20 | 18 | 13.8 | 12.5 |
| Adaptor |  |  |  |  |  |
| Hole Ø (mm) | 17.5 | 17.5 | 14 | 13.8 | 12.5 |
| Capacity/insert | 5 | 5 | 5 | 9 | 12 |
| Shape | flat | flat | round | round | round |
| Cat. N° (set of 4) | 11174534 | 11174533 | 11174504 | 11174505 | 11174577 |

* For buckets without lid



SWM 180.5 Standard Bucket
(11174720)



SWM 180.5 Sealed Bucket
(11174721)

| | | | | |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| | | | | |
| 20 | 15 | 15 | 12 | 10/15 |
| 80/120 | 122 | 60/117 | 79/120 | 61/121 |
| 22.8 | 23 | 17.5 | 23 | 18 |
| | | | | |
| 22.8 | 17.5 | 17.5 | 17.5 | 16 |
| 3 | 1 | 7 | 3 | 5 |
| round | conical* | round | flat | round |
| 11174502 | 11174723 | 11174183 | 11174509 | 11174503 |

| | |
|-----------------|-----------------|
| | |
| 3/5 | 1.5 |
| 45/116 | 45/120 |
| 12.5 | 17 |
| | |
| 12.5 | 11.5 |
| 12 | 6 |
| round | cryotubes |
| 11174506 | 11174508 |