



Sigma 2-16P Sigma 2-16KL Sigma 2-16KHL



Benchtop centrifuge

- ambient
- refrigerated
- refrigerated/
heatable

Compact all-rounder with excellent performance

With its unbeatable high RCF with fixed-angle rotors, the Sigma 2-16P is the top of its class. Extensive accessories are available for this compact, high-performance model. That makes the centrifuge a true all-rounder, suitable for a variety of applications.

With rotor identification and selectable speed up to 15,000 rpm, the Sigma 2-16P has everything you expect from a universal centrifuge. The Sigma 2-16KL cooled version easily achieves +4°C at maximum speed. For tasks with blood collection tubes at 37°C, the heatable Sigma 2-16KHL is a good choice.



Sigma 2-16P centrifuge

220–240 V, 50/60 Hz (Part No. 10155)
 120 V, 50/60 Hz (Part No. 10156)
 100 V, 50/60 Hz (Part No. 10157)

Sigma 2-16KL centrifuge

220–240 V, 50/60 Hz (Part No. 10350)
 120 V, 60 Hz (Part No. 10351)
 100 V, 50/60 Hz (Part No. 10352)

Sigma 2-16KHL centrifuge

220–240 V, 50/60 Hz (Part No. 10353)

Device qualification

Sigma Laborzentrifugen GmbH offers various forms of device qualification. For more information, see Products > Qualification on our website: www.sigma-zentrifugen.de



WEEE-REG-No.
DE 76714077



Sigma 2-16P

- Universal laboratory centrifuge for swing-out and fixed-angle rotors
- Spincontrol Universal
- Backlit Start, Stop, and Lid Open buttons
- Sedimentation in swing-out vials up to 4 x 100 ml or up to 20,000 x g in fixed-angle rotor
- Zero-maintenance brushless drive
- Selectable speed up to 15,000 rpm
- Low-speed operation down to 100 rpm also possible
- Rotor identification prevents overspeed operation
- Stainless-steel centrifuge bowl
- Imbalance switch
- Easy lid opening with gas spring support
- Window in lid for independent speed checking
- Produced in compliance with the latest national and international standards (e.g. EN 61010-2-020)



Sigma 2-16KL

Refrigerated version of the Sigma 2-16P.

Additional features:

- Spincontrol L
- Universal laboratory centrifuge with speed range up to 15,300 rpm
- Rotor cooling also possible at standstill; CFC-free R134a refrigerant
- Assured +4 °C at maximum speed



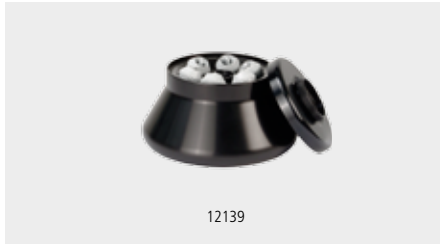
Sigma 2-16KHL

Heatable version of Sigma 2-16KL.

Additional features:

- Maximum rotor temperature +40°C to +60°C, depending on rotor and speed
- All other specifications as for Sigma 2-16KL

Rotors and accessories



| | | | Sigma 2-16P | | Sigma 2-16KL Sigma 2-16KHL | |
|----------------------------------|------------------|---------------------------------------|-------------|----------------|-------------------------------|----------------|
| Aluminium rotors | | Description | Max. [rpm] | Max. RCF [x g] | Max. [rpm] | Max. RCF [x g] |
| Fixed-angle rotor* | (Part No. 12104) | 12 x 8 x 0.2 ml, PCR | – | – | 14,000 | 21,475 |
| Fixed-angle rotor* | (Part No. 12107) | 12 x 8 x 0.2 ml, PCR | 12,000 | 15,777 | – | – |
| Fixed-angle rotor* | (Part No. 12148) | 24 x 1.5–2.0 ml reaction vial | 15,000 | 20,627 | 15,300 | 21,460 |
| Fixed-angle rotor* | (Part No. 12133) | 30 x 1.5–2.0 ml reaction vial | 12,000 | 16,099 | – | – |
| Fixed-angle rotor* | (Part No. 12132) | 30 x 1.5–2.0 ml reaction vial | – | – | 14,000 | 21,913 |
| Fixed-angle rotor* | (Part No. 12141) | 10 x 10 ml round bottom tube | 13,500 | 15,485 | 15,300 | 19,890 |
| Fixed-angle rotor | (Part No. 12072) | 20 x 15 ml Falcon | 4,000 | 2,486 | 4,000 | 2,486 |
| Fixed-angle rotor | (Part No. 12073) | 30 x 15 ml Falcon | 4,000 | 2,486 | 4,000 | 2,486 |
| Fixed-angle rotor* | (Part No. 12139) | 6 x 30 ml round bottom tube | 13,500 | 15,893 | 15,300 | 20,414 |
| Fixed-angle rotor* | (Part No. 12181) | 6 x 50 ml Falcon | 10,000 | 10,621 | 12,000 | 15,294 |
| Fixed-angle rotor | (Part No. 12071) | 12 x 15 ml Falcon 6 x 50 ml Falcon | 4,000 | 2,254 | 4,000 | 2,254 |
| Fixed-angle rotor* | (Part No. 12138) | 4 x 85 ml round bottom tube | – | – | 9,400 | 9,484 |
| Fixed-angle rotor* | (Part No. 12180) | 12 x 5 ml Eppendorf vial | 14,000 | 17,530 | 15,000 | 20,124 |
| Swing-out rotor | (Part No. 11170) | | 4,500 | 3,215 | 5,000 | 3,969 |
| Cyto rotor | (Part No. 11194) | – | – | – | 3,000 | 1,137 |
| Microtiter plate swing-out rotor | (Part No. 11122) | Max./H 56 mm | 3,000 | 1,218 | 3,000 | 1,218 |
| Microtiter plate swing-out rotor | (Part No. 11123) | Max./H 50 mm | 4,000 | 2,129 | 4,000 | 2,111 |
| Swing-out rotor | (Part No. 11124) | 24 x 1.5–2.0 ml reaction vial | 12,500 | 12,927 | 14,000 | 16,215 |
| Microhaematocrit rotor | (Part No. 11409) | 24 x ø 1.5 x 75 mm capillary | 12,000 | 14,489 | 12,000 | 14,489 |

*With hermetic aluminium lid.



More on the Web

A PDF document with information about compatible vials and capacities and a link to the interactive product configuration tool are available on the product website:

www.sigma-zentrifugen.de

› Sigma 2-16P

› Sigma 2-16KL

› Sigma 2-16KHL

Specifications

| | Sigma 2-16P | Sigma 2-16KL | Sigma 2-16KHL |
|-------------------------------------------------------------------------|-----------------|-----------------|------------------|
| Power consumption [W] | 340 | 720 | 720 |
| Maximum capacity [ml] | 4 x 100 | 4 x 100 | 4 x 100 |
| Maximum speed [rpm] | 15,000 | 15,300 | 15,300 |
| Minimum speed [rpm] | 100 | 100 | 100 |
| RFI suppression | EN 61326 | EN 61326 | EN 61326 |
| Height x width x depth [mm] | 300 x 365 x 452 | 310 x 550 x 570 | 310 x 550 x 570 |
| Height with open lid [mm] | 610 | 705 | 705 |
| Weight without rotor [kg] | 32 | 60 | 60 |
| Maximum kinetic energy [Nm] | 7,750 | 9,962 | 9,962 |
| Noise level at maximum speed (approximate) with rotor 12148 [dB (A)] | < 67 | 65 | 65 |
| Noise level at maximum speed (approximate), rotor 11170 [dB (A)] | – | 63 | 63 |
| Maximum acceleration, rotor 12148 [sec] | 33 | 27 | 27 |
| Maximum acceleration, rotor 11170 [sec] | 36 | 22 | 22 |
| Maximum breaking time, rotor 12148 [sec] | 27 | 18 | 18 |
| Maximum breaking time, rotor 11170 [sec] | 20 | 17 | 17 |
| Temperature adjustment range [°C] | – | -10 to +40 | -10 to +60 |



(Part No. 17920)





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