

HIGH-SPEED COOLING CENTRIFUGE

ALS-INS016



DESCRIPTION

A centrifuge is a device that separates fluid components using centrifugal force by spinning samples at high speeds. The Almanac ALS-INS016 HIGH-SPEED COOLING CENTRIFUGE efficiently separate liquids from solids or fluids of differing densities. These models feature high-speed performance combined with advanced cooling technology, ensuring sample integrity and reliable results. Designed for laboratory use, they offer versatile functionality for a wide range of applications, making them essential for fluid component analysis and separation. The ALS-INS016 provides robust, efficient, and precise centrifugation solutions for modern laboratory environments.

KEY FEATURES

- **High-Performance Motor:** Brushless, high-torque motor with maintenance-free operation ensures no carbon powder pollution, delivering fast acceleration and deceleration.
- **Eco-Friendly Cooling:** Fluorine-free compressors with a double cooling cycle provide precise temperature control for optimal sample protection.
- **Smart Touch Control:** The intuitive microprocessor-based touch display shows real time temperature, speed, time, and RCF, making operation a breeze.
- **Customizable Performance:** Store up to 100 programs, each with 10 customizable steps. Choose from 10 acceleration and deceleration profiles for tailored performance.
- **Comprehensive Safety:** Features automatic electric lid lock, protection against over-speed and over-temperature, ensuring reliable operation.
- **Robust & Safe Build:** Powder-coated steel exterior with a corrosion-resistant stainless steel inner chamber and a built-in explosion-proof sleeve offering three-tier protection for maximum safety.
- **Effortless Rotor Handling:** Quick and easy rotor loading without direction marks, thanks to the specialized taper sleeve and automatic rotor detection system.
- **Optimal Centrifugation:** High-quality dampers and an automatic solenoid draining valve provide the best centrifugal results with minimal effort.
- **Automatic Rotor detection:** Features an automatic rotor detection system that ensures precise and seamless identification of the rotor, enhancing safety and operational efficiency.
- **Pre-Set Cooling:** Feature allows the chamber to automatically cool down to a specified temperature before or after a run
- **Short Spin:** Provides quick, high-speed centrifugation for brief intervals

COOLING CENTRIFUGE FAMILY

Model	ALS-INS016A	ALS-INS016B	ALS-INS016C
Max. Speed	16,000 rp	18500 rpm	21000 rpm
Max. RCF	20,600xg	23990xg	30910xg
Max. Capacity	6 × 100ml	4 x 180 ml	4 x 800 ml
Time Range	0- 99hr 59min	0- 99hr 59 min	0- 99hr 59 min
RPM/RCF Convert	Yes	Yes	Yes
Noise (dB)	≤ 58	≤ 58	≤ 58
Temperature	-20°C to +40°C	-20°C +40°C	-20°C +40°C
Acc/Dec	10 kinds	10 kinds	10 kinds
Speed Accuracy	±20 rpm	±20 rpm	±20 rpm
Temperature Accuracy	±1°C	±1°C	±1°C
Supported rotor type	Angle (27) swing (01) plate (01)	Swingout (07), Microplate (02), Angle (23) Vertical (02)	Swing (08), Microplate (03) Fixed rotor (35)
Dimension (LxWxHmm)	513 × 370 × 320 mm	570 × 600 x 340 mm	513 × 370 × 320 mm
Voltage(V/Hz)	AC 220V, 50Hz	AC 220V/110V, 50Hz/60Hz	AC 220V/110V 50Hz/60Hz
Certificates	CE, ISO	CE, ISO & Calibration report are available	CE, ISO & Calibration report are available

COMPATIBLE ROTOR ALS-INS016

No	Type	Max. Speed	Max RCF	Max Vol.
447	Angle	12070	12070	4x8PCR
448	Angle	16080	16080	6x8PCR
449	Angle	13390	13390	8X8PCR
450	Angle	17220	17220	12X8PCR
416	Angle	18510	18510	30X0.5ml
402	Angle	19970	19970	40x0.5ml
401	Angle	17940	17940	12X1.5/2.0ml
403	Angle	20600	20600	24x1.5/2.0ml
404	Angle	19340	19340	30x1.5/2.0ml
444	Angle	12840	12840	48x1.5/2.0ml
405	Angle	19350	19350	16xSml
417	Angle	13950	13950	16x10ml
406	Angle	16370	16370	12x7mI
415	Angle	16460	16460	6x10ml
408	Angle	14510	14510	12x10ml
455	Angle	12730	12730	8x15ml
407	Angle	11840	11840	12x15ml
639	Angle	3080	3080	24x15ml
627	Angle	3830	3830	30x15ml
409	Angle	14510	14510	8x20ml
410	Angle	14000	14000	6x30ml
411	Angle	13480	13480	6x50mI
412	Angle	10810	10810	6x70mI
413	Angle	10310	10310	4x100ml
414	Angle	7280	7280	6x100mI
453	Angle	13560	13560	4x85ml
480	Swing	19920	19920	4x5ml 24
437	Angle	15800	15800	Capillary
607	Plate	2300	2300	2x3x48well

COMPATIBLE ROTOR ALS-INS016

Order No.	Rotor	Max Speed(rpm)	Max Volume (ml)	Max. RCF (×g)
18A-1	Swing out (Round bucket)	4000	4x180ml	2580
18A-2	Microplate rotor (frame type)	4000	2x3x96 well	2020
18A-3	Microplate rotor (box type)	4000	2x3x96 well	1980
18A-4	Swing out	5000	4x1x50ml	4420
18A-5		5000	4x1x100ml	4420
18A-6		4000	4x2x50ml	2820
18A-7		4000	4x4x15ml	2820
18A-8		4000	4x6x10/7ml	2580
18A-9	Angle	14000	4x8PCR	12070
18A-10	Angle	13000	6x8PCR	16080
18A-11	Angle	14000	8x8PCR	13390
18A-12	Angle	13000	12x8PCR	17220
18A-13	Angle	14000	40x0.5ml	19960
18A-14	Angle	18500	12x1.5ml	23990
18A-15	Angle	15000	24x1.5ml	20600
18A-16	Angle	13500	30x1.5ml	19340
18A-17	Angle	11000	48x1.5ml	12840
18A-18	Angle	15000	16×5ml	19350
18A-19	Angle	14000	6x10ml	16460
18A-20	Angle	13000	12x10ml	17030
18A-21	Angle	11000	16x10ml	13950
18A-22	Angle	11000	8x15ml	12730
18A-23	Angle	9000	12x15ml	9590
18A-24	Angle	5000	24×15ml	3500
18A-25	Angle	5000	30x15ml	3830
18A-26	Angle	12000	6x30ml	14000
18A-27	Angle	12000	6x50ml(conic)	16050
18A-28	Angle	12000	6x50ml(round)	15960
18A-29	Angle	11000	4x85ml	13560
18A-30	Angle	10000	4x100ml	10310
18A-31	Angle	8000	6×100ml	7280
18A-32	Angle	12000	24 capillaries	15800
18A-33	Swing out	15000	4x5ml	19920
18A-34	Vertical	16000	16x5ml	16450
18A-35	Vertical	14000	8x30ml	19750

COMPATIBLE ROTOR

Order No.	Rotor	Max Speed(rpm)	Max Volume (ml)	Max. RCF (g)
671	Swing Rotor	4000	4×800 ml	3450
672	Swing Rotor	4000	4x800ml (Plus)	3450
		4000	4x4x96 well	2930
696	Swing Rotor	4000	4x600ml (Oval Cup) for blood bag	3530
696	Swing Rotor	4000	4x500ml(round)	3530
679	Swing Rotor	4000	4x500ml(square)	3450
592	Swing Rotor	4000	4x300ml(round)	3180
694	Microplate rotor	4000	4x4x96 well	2940
673	Microplate rotor	4000	2x4x96 well	3210
676	Microplate rotor	4000	2x3x48 well	2300
690	Swing rotor	4000	4x40x7ml vacuum tube	3270
		4000	4x40x5ml vacuum tube	2890
		4000	4x18x10ml vacuum tube	3130
693	Swing Rotor	4000	Fat bottle	3830
847	Fixed Rotor	16000	4×8 PCR	15760
848	Fixed Rotor	15000	6x8 PCR	21420
849	Fixed Rotor	16000	8x8PCR	17480
850	Fixed Rotor	15000	12x8PCR	22930
802	Fixed Rotor	15000	40×0.5ml	22920
816	Fixed Rotor	18000	30x0.5ml	26660
801	Fixed Rotor	21000	12x1.5ml	30910
803	Fixed Rotor	17000	24x1.5ml	26420
804	Fixed Rotor	13500	30x1.5ml	19340
844	Fixed Rotor	13000	48x1.5ml	17930
805	Fixed Rotor	16000	16×5ml	22020
817	Fixed Rotor	13000	16×10ml	19490
806	Fixed Rotor	16000	12x7ml	21380
815	Fixed Rotor	16000	6×10ml	21500
808	Fixed Rotor	15000	12x10ml	22680
809	Fixed Rotor	15000	8x20ml	22680
855	Fixed Rotor	13000	8x15ml	17790
807	Fixed Rotor	10000	12x15ml	11840
639	Fixed Rotor	5000	24x15ml	3500

ALS-INS016 ROTORS: CONT

378	Fixed Rotor	5000	30x15 ml	3830
810	Fixed Rotor	14000	6x30 ml	19060
811	Fixed Rotor	13000	6x50 ml (conical)	18840
811	Fixed Rotor	13000	6x50 ml (round)	18730
377	Fixed Rotor	5000	4x50 ml	4730
812	Fixed Rotor	12000	6x70 ml	15570
641	Fixed Rotor	5000	12x50 ml	3860
642	Fixed Rotor	4000	24x50 ml	2970
853	Fixed Rotor	13000	4x85 ml	18940
813	Fixed Rotor	12000	4x100 ml	14850
814	Fixed Rotor	12000	6x100 ml	16390
643	Fixed Rotor	4000	12x100 ml	2970
437	Fixed Rotor	12000	24 capillaries	15800
480	Swing Rotor	15000	4x5 ml	19920
435	Vertical rotor	16000	16x5 ml	16450
436	Vertical rotor	14000	8x30ml	19750