



# **CR 30NX**

High-Speed Refrigerated Centrifuge











#### All rotors maintained at 4°C at maximum rotor speed.

Powerful refrigeration system with appropriate vacuum control

#### Low-noise

With the latest noise reduction system, the operating sound level is 56dB; the quietest in this class high-speed refrigerated centrifuges, as of June 2018.

#### Dual sensor System for safe and secure operations

- 1. rotor speed
- 2. rotor temperature
- 3. rotor ID
- 4. vacuum level

#### MFRS: Mist filter refresh system

Rotating the filter regularly by the motor, oil is removed from the filter and returned to the vacuum pump.

#### New rotor ID detection and self-locking rotor system

Rotor model and its maximum speed are automatically identified just the rotor is placed on the drive shaft. In addition, rotor system is self-locking and no need install the rotor by screw, same as existing himac high-speed centrifuges.



## Useful functions

#### Data communication system

Remote operation and monitoring: "himac View"



With your iPhone or Android phone.

Optional log management software himac LogManager



(Digital signature, audit trail, and encrypted data files, etc. are available.)

#### Door lock with Door Open Passcode





#### Door opener foot switch (option)



#### Rotor cover detection sensor with alert function



Rotor cover detection sensor prevents rotors from spinning without rotor covers.

#### Multilingual Display (10 Languages)



- English
- •German
- •French
- Spanish
- ·Italian Portuguese
- Russian
- ·Chinese (simplified)
- Korean
- ·Japanese

<sup>\*</sup>Power-saving mode (auto stand-by), User Administration with User Lockout, etc. are also available.



#### Over 100,000 Xg swing rotor and 100,000 Xg angle rotor

Do you need an ultracentrifuge, because you need over 100,000Xg for a swing rotor centrifugation? With 110,000Xg swing rotor centrifugation, CR30NX and top loading swing rotor R25ST supports your Rate zonal centrifugation or Isopycnic centrifugation.

Or with 110,000Xg angle rotor centrifugation, CR30NX supports your cell fractionation.

#### Separation examples

- · Virus and Viral particle by Pelleting
- · Exosome by Pelleting or by Density gradient centrifugation
- Protein by Pelleting or by Density gradient centrifugation
- · Organelle (Microsome) by Pelleting

Easy setting "Top Loading System"



#### 6,000mL rotors

And, in CR30NX, two types of 6,000mL rotors are available; R7A (6X1,000mL bottle) and R9A2 (4X1,500mL bottle).





### Line-up rotors

Type of Rotor	Material No.	Model	Max. Speed (rpm)	Max. RCF (Xg)	Nominal Capacity
Swinging bucket	5721302400	R25ST	25,000	110,000	6 X 40mL
	5721302401	R5S4	4,700	3,100	12 X Microplate
	5721302402	R4SS	4,000	2,900	40 X 15mL *
Fixed angle	5721302101	R30AT	30,000	110,000	8 X 50mL
	5721302102	R27A	27,000	88,400	8 X 50mL
	5721302103	R22A6	22,000	55,100	12 X 10mL
	5721302104	R22A4	22,000	55,200	30 X 2mL
	5721302105	R21A2	21,000	50,000	6 X 30mL
	5721221005	R20A2	20,000	48,000	8 X 50mL
	5721302107	R19A2	19,000	50,000	8 X 50mL(himac 50TC tube)
	5721302108	R19A	19,000	45,600	6 X 80mL
	5721302109	R17A	17,000	40,900	14 X 50mL
	5721302110	R16A2	16,000	36,100	10 X 50mL (himac 50TC tube) 10 X 15mL (himac 15TC tube)
	5721302111	R16A3	16,000	40,100	6 X 250mL
	5721302112	R10A3	10,000	18,800	6 X 500mL
	5721302113	R10A5	10,000	18,900	6 X 500mL (Nalgene® **)
	5721302114	R9A	9,000	15,300	4 X 1,000mL
	5721302115	R9A2	8,500	15,100	4 X 1,500mL
	5721072100	R7A	7,000	11,100	6 X 1,000mL
Horizontal	5721302700	R10H	10,000	13,000	4 X Microplate
Soil Dehydration	5721302800	R11D2	11,000	15,800	4 X 100mL
Continuous Flow	5721302600	R18C2	18,000	35,100	1,000mL
	5721302601	R10C2	10,000	14,290	3,200mL

\*Availability of R4SS rotor's adapters,contact your nearest sales representative.

\*\*Nalgene® is a registered trademark of Thermo Fisher Scientific or its subsidiaries.

About the use of conventional high-speed rotors with CR30NX, contact your nearest sales representative.



R19A2 @ 50,000Xg \*with himac 50mL TC tubes!

R16A2



R16A2 @ 36,100Xg \*with himac 50mL & 15mL TC tubes!

High Performance himac TC tubes!



5721411049 himac 15TC TUBE (100pcs/set) 5721411170 himac 50TC TUBE (100pcs/set)

### **Specifications**

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Maximum speed	30,000 rpm (R30AT)		
Maximum RCF	by swing rotor 110,000 X g(R25ST), by angle rotor 110,000 Xg (R30AT)		
Maximum nominal capacity	6L (6 X 1,000 mL by R7A or 4 X 1,500mL by R9A2)		
Set speed range	300 rpm to 30,000 rpm *		
Set temperature range	-20°C to +40°C		
Temperature Accuracy	±2°C **		
Timer	1 sec. to 99 min. 59 sec. (in increments of 1 sec.) with HOLD function or 1 min. to 99 hr. 59 min. (in increments of 1 min.) with HOLD function		
Acceleration/Deceleration Mode	Accel: 11 modes, Decel: 10 modes and 2 variable deceleration slope functions		
Memory-based programmed	1,000 programs		
Drive Unit	Induction motor (Inverter)		
Refrigerator	Rotary inverter compressor (Refrigerant: R410A)		
Rotor stop signal	Select from 5 melodies, beep and mute		
Interface connection	LAN X 1, USB X 1		
Safety functions	Door interlock, Dual overspeed detector, Imbalance detector, Over-temperature detector, Rotor cover detector ***		
Noise level	Less than 56(dBA)		
Heat output	Less than 1.2kW ****		
Power requirements	Single Phase, AC200/208/220/230/240V +/ -10%, 50/60Hz, 30A Three-phase four-wire: AC 380/400/415V( ***** ) +/-10%, 50/60Hz, 2×16A		
Dimensions	708 mm (W) X 892 mm (D) X 866 mm (H) (Height to the table: 865 mm)		
Weight	310 Kg		
Installation Environment	Ambient temperature for operation : 2℃ to 40 ℃ Ambient temberature for assuring performance: 15℃ to 25℃		
Material No.	5721300011: Areas except North America and Europe 5721300012: EU region 5721300014: EU region (Three-phase four-wire) 5721300013: North America		

<sup>\*</sup> R9A2 rotor's minimum rotation speed is 2,000 rpm

- \*\* Temerature calibration may be required depending on users' operating conditions and operating environments.
- \*\*\*Depend on the conditions, it may not be detected. Securely mount the rotor cover.
- \*\*\*\* When R30AT rotor runs at 30,000 rpm

  \*\*\*\*\* Unbalanced three-phase(two-phase used). Neutral connection required.



For sale and proper use of you machine, carefully read and follow the instructions in the instruction mannual.

- All specifications are subject to change without advance notice.
- Actual color may vary from the color of the photos on this catalogue, due to printing conditions.
- $\bullet \ \, \text{Due to safety reasons, installation environments, operating environments and conditions may be restricted.}$
- Unless specifically mentioned, products and/or operation panel of the photos are standard specification.
   For further information, please contact our sales representative.

#### Eppendorf Himac Technologies Co., Ltd. **Sales Department**

2-5-12, Higashikanda, Chiyoda-ku, Tokyo 101-0031 Japan

Tel: +81-3-5829-3616 Fax: +81-3-5829-3613 https://www.himac-science.com/

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