



离心机柜/17927 Trolley
(w x d x h) (490 x 647 x 497 mm)



离心机柜/17926 Trolley
(w x d x h) (670 x 650 x 497 mm)



大容量台式高速离心机
Centrifuge

4-16S

技术参数	Technical data	4-16S	4-16KS
功率	Power consumption [W]	1,680	2,280
最大容量 (ml)	Max. capacity [ml]	6x250/4x750	6x250/4x750
最高转速[rpm]	Max. speed [rpm]	13,500	15,000
最大相对离心力[xg]	Max.RCF[xg]	20,376	25,155
干扰抑制标准	Interference suppression	EN 61326	EN 61326
尺寸: 高x宽x长[mm]	Height x Width x Depth [mm]	489x496x650	689x670x650
重量 (无转子) [kg]	Weight without rotor [kg]	82	124
最大动能[Nm]	Kinetic energy max. [Nm]	50,486	63,897
最高转速下, 噪音水平 (约) [dB (A)]	Noise level at max. speed (approx.)		
No.12449 转子在13,500rpm时	Rotor 12449 at 13,500 rpm [dB (A)]	<70	<61
No.11150 转子在4,500rpm时	Rotor 11150 at 4,500 rpm [dB (A)]	<73	<62
最快加速时间[秒] No. 11150+13350转子	Max. acceleration rotor 11150 + 13350 [sec]	24	41
No. 12130转子	rotor 12130 [sec]	35	34
最快减速时间[秒] No. 11150+13350转子	Max. acceleration rotor 11150 + 13350 [sec]	29	43
No. 12130转子	rotor 12130 [sec]	38	40
温度设定范围	Temperature setting range	-	-20°C ~ +40°C



大容量台式高速冷冻离心机
Refrigerated Centrifuge

4-16KS

德国原装进口
MADE IN GERMANY

SIGMA 4-16S No. 10380 (220 – 240 V, 50/60 Hz),

- 通用大容量离心机，可配多种角转子和水平转子，转速范围100~13,500rpm，精确度±1rpm
- Spincontrol S 控制面板
- 气动弹簧，轻松开盖
- 最大容量4x750ml，多种适配器，满足多种离心需求
- 免维护无碳刷变频电机，微控制器控制转速、离心力和时间
- 双重自动盖锁
- 也适用于低速离心（如：细胞沉降）
- 磁性转头自动识别、防止转头超速运转
- 不锈钢腔体
- 不平衡保护
- 紧急开盖
- 符合国际安全标准EN 61010-2-020
- 机盖上具有观察窗，便于测速、控制
- 启动、停止、开关键采用背光灯按键

- Universal table top centrifuge; speed range up to 13.500 rpm
- Various angle and swing-out rotors available
- Control unit Spincontrol S
- Lid can easily be opened due pneumatic swing support
- Maximum capacity of 4x750 ml down to microtubes with different adapters in the same bucket
- Maintenance-free induction drive motor A Microcontroller controls speed or gravitational field,time
- 2 Motorized lid locks
- Suitable for low speeds e.g. for cell sedimentation, accuracy +/-1 rpm
- Magnetic rotor identification prevents the rotor from overspeeding
- Stainless steel bowl
- Imbalance switch
- No need to open the casing for emergency lid lock release
- Produced according to national and international safety regulations (e.g.EN 61010-2-020)
- Window in the centrifuge lid for external speed control
- Backlighted keys for start,stop,lid lpen

SIGMA 4-16KS No. 10385 (220 – 240 V, 50 Hz),

- Sigma 4-16S的冷冻型号
- 通用大容量台式冷冻离心机最高转速达15,000rpm
- 转子静止预冷，采用无氟环保制冷剂R404 a
- 保证所有转子在最高转速下运转时的温度在4°C以下

- refrigerated version of 4-16S
- Universal refrigerated table top centrifuge; speed range up to 15.000 rpm
- Possibility of precooling the rotors during standstill Refrigerant CFC-free (R404a)
- Guaranteed 4°C at max. speed for all rotors

SIGMA 4-16KHS No. 10389 (220 – 240 V, 50 Hz)

- Sigma 4-16KS 的加热型号
- 温度控制范围+40°C~+60°C，取决于转子和速度

- heated version of 4-16KS
- Max.Rotortemperature 40°C up to 60°C depending on rotor and speed

SIGMA 4-16KRL (220 – 240 V, 50 Hz)

机械手系统，参见单独彩页
For Robot systems / Separate brochure

**生物安全转子
Biosafe rotor**

转子/Rotor No.	4-16S		4-16KS	
	max. rpm	max. RCF[xg]	max. rpm	max. RCF[xg]
11650 + 1 x 13421	4,200	3,096	4,700	3,877
11650 + 2 x 13450	4,200	3,708	4,700	4,643
11660 + 1 x 13421	4,200	3,096	4,700	3,877
11660 + 2 x 13450	4,200	3,708	5,100	5,467

- 11650** 铝合金水平转子，配4个吊篮，no. 13421,13450
- 11660** 不锈钢水平转子，配4个吊篮，no. 13421,13450
- 13421** 酶标板吊篮，板高=60 mm，1套=4个
- 13450** 圆形吊篮，可用密封盖NO17170，可放适配器（NO.17649~17699,13654），1套=2个
- 11650** Aluminum swing-out rotor for 4 buckets no. 13421, 13450
- 11660** Stainless steel swing-out rotor for 4 buckets no. 13421, 13450
- 13421** Bucket for microtiter- and deepwellplates, incl. plate holder, max. height = 60 mm, 1 set = 4 pcs.
- 13450** Round bucket, sealable with cap no. 17170, for adapter, (no. 17649 - 17699, 13654), 1 set = 2 pcs.
- 用于吊篮13450的适配器，1套=2个
Adapter for bucket 13450, 1 set = 2 pcs.**
- 17653** 26 x 1.5/2.0 ml, max. Ø 11 mm, e.g. no. 15008, 15040
- 17651** 20 x 4~7 ml, max. Ø 15.5/18 x 50 - 75 mm, e.g. Monovette, Primavette,
- 17652** 36 x 5 ml, max. Ø 12.5 x 60 - 80 mm, e.g. no. RIA tube 15060, hemolyse tubes
- 17656** 22 x 5~6 ml, max. Ø 13.5/17.5 x 70~90 mm, e.g. no. RIA tube 15060 Vacutainer -, hemolyse tubes
- 17654** 32 x 7 ml, max. Ø 12.5 x 85 - 115 mm, e.g. no. 15007, 15027
- 17658** 19 x 9~15 ml, max. Ø 17.2/19.5 x 85~115 mm, e.g. no. 15015, 15020, 15022, 15023, 15024 and Monovettes 9~10 ml
- 17655** 20 x 10~12 ml, max. Ø 16.2/18 x 65~90 mm, e.g. no. 15000, 15010, 15039
- 17659** 12 x 15 ml culture no. 15115, cap Ø max. 23 mm
- 17660** 15 x 15 ml culture no. 15115 cap Ø max. 22 mm*
- 17670** 8 x 25~30 ml, max. Ø 25.4/30 x 90~115 mm, e.g. no. 15025, 15026, 15029, 15030, 15032, 15033
- 17662** 7 x 30 ml, max. Ø 25/31 x 65 - 95 mm, e.g. Barloworld Scientific Ltd.
- 17676** 7 x 40~50 ml max. Ø 29/32 x 90~115 mm, e.g. 13055, 15051, 15052
- 17675** 4 x 50 ml, max. Ø 35/38 x 90~115 mm, e.g. 15049, 15056, 15050
- 17677** 5 x 50 ml culture, e.g. no. 15151, Nunc, Corning, Falcon and Greiner
- 17678** 5 x 50 ml culture, max. Ø 29,4/36 x 90~115 mm**
- 17649** 7 x 50 ml culture, max. Ø 29/36 x 90~115 mm*
- 17685** 3 x 78 - 85 ml, max. Ø 38/40 x 90~110 mm, e.g. no. 13085, 15076, 15080
- 17690** 2 x 100 ml, max. Ø 45/47 x 85~110 mm, e.g. no. 15100, 15102, 15103, 15106
- 17692** 1 x 125 ml, max. Ø 51 x 90 - 115 mm, e.g. no. 15125
- 17694** 1x 150~250 ml culture angle 88°, max. Ø 60 x 120~140 mm* e.g. Fakon 175, 225 ml, Labcon 175, 225 ml
- 17696** 1 x 200 ml approx., max. Ø 57 x 90~115 mm, e.g. no. 15202, 15203
- 17693** 1 x 150 ml~200 ml culture, angle 60°, max. Ø 61.5 x 140 mm e.g. no. 15175, 15174
- 17698** 1 x 250 ml, max. Ø 61.5 x 90~125 mm, e.g. no. 13255, 15247, 15249
- 13654** 1 x 400 ml, max. Ø 85 x 118 mm, e.g. no. 15401
- 13654** 1 x 500 ml, Ø 85 x 130~173 mm, e.g. no. 15501
- 17682** 1 x 500 ml culture, no. Corning 431123, angle 75°, Ø 96 x 150 mm*
- 13456** 1 x 650 ml, Ø 100 x 111 mm, cap 17123

* 无吊篮盖 17170/ without bucket cap 17170
** 带沿/with rim



转子/Rotor No.	4-16S		4-16KS	
	max. rpm	max. RCF[xg]	max. rpm	max. RCF[xg]
11150 + 2 x 13215	4,500	4,120	5,100	5,292
11150 + 2 x 13220	4,100	3,007	4,100	3,007
11150 + 2 x 13221	4,500	3,622	5,100	4,653
11150 + 2 x 13233	4,500	3,668	5,100	4,711
11150 + 2 x 13234	4,300	3,680	4,300	3,680
11150 + 2 x 13235	4,500	4,302	5,100	5,525
11150 + 2 x 13236	4,500	4,256	5,100	5,467
11150 + 2 x 13350	4,500	4,302	5,100	5,525

11150 水平转子, 需配4个吊篮, No. 13215,13220,13221,13233,13234,13235, 13236,13350

1套=2个

13215 方形吊篮, 可配适配器, NO.18000~18200 可配盖子, max. 管长度115mm
 13220 酶标板吊篮, 板高51mm
 13221 酶标板吊篮, 板高56mm
 13233 适配器50x5ml RIA管
 13234 适配器4x100ml, Ø 45x92~100mm NO. 15100,15102,15103,15106, 已含橡胶垫16051
 13235 适配器7x50ml 尖底
 13236 适配器具 12x15ml 尖底
 13350 圆形吊篮, 可配密封盖 No.17134或17135用于圆形适配器Ø85mm, (No.17344~17404), 500ml离心瓶 No. 15500,15501
 17112 方形聚砜密封盖
 17134 圆形铝制密封盖
 17135 圆形聚砜密封盖
 11151 水平转子48x15ml 全套, (11150+2x13215+2x18015+48x15023)

11150 Swing-out rotor for 4 buckets no. 13215, 13220, 13221, 13233, 13234, 13235, 13236, 13350

1 set = 2 pcs.

13215 Rectangular bucket for adapter no. 18000 - 18200 (next page), sealable with cap no. 17112, max. tube length 115 mm
 13220 Bucket for microtiter plates, max. height of plates 51 mm
 13221 Bucket for microtiter plates, incl. plate holder no. 17979, max. height of plates 56 mm
 13233 Multiple carrier for 50 x tubes approx. 5 ml, max. Ø 12.5 x 70 - 90 mm, e.g. RIA tube no. 15060
 13234 Multiple carrier for 4 x 100 ml, Ø 45 x 92 - 100 mm e.g. no. 15100, 15102, 15103, 15106, incl. rubber cushion no. 16051
 13235 Multiple carrier for 7 culture tubes 50 ml no. 15151
 13236 Multiple carrier for 12 culture tubes 15 ml no. 15115
 13350 Round bucket, sealable with cap no. 17134 or 17135, for round carriers Ø 85 mm (no. 17344 - 17404), 500 ml bottles no. 15501
 17112 Rectangular polysulfone sealing cap
 17134 Round aluminium sealing cap
 17135 Round polysulfone sealing cap
 11151 Swing-out rotor 48 x 15 ml complete, no. 11150, incl. 2 sets rectangular buckets no. 13215, 2 sets rectangular carriers no. 18015 and 48 PP-tubes 15 ml no. 15023



适用于吊篮13350的适配器, 1套=2个
 Adapter for bucket 13350, 1 set = 2 pcs.

17350 24 x 0.5/0.75 ml, max. Ø 8/10 x 28/31 mm, e.g. no. 15005
 17353 20 x 1.5/2.2 ml, max. Ø 11 mm, e.g. no. 15008, 15040
 17351 12 x 4~7 ml, max. Ø 15.5/18 x 50~75 mm, e.g. Monovettes 4 ml
 17352 25 x 5 ml, max. Ø 12.5/13.5 x 65~80 mm, e.g. no. RIA tube 15060, hemolyse tubes
 17356 16 x 5~6 ml, max. Ø 13.5/17.5 x 70~90 mm, e.g. no. RIA tubes,15060, Vacutainer, hemolyse
 17354 16 x 7 ml, max. Ø 12.5 x 85~115 mm, e.g. no. 15007, 15027
 17355 12 x 10~12 ml, max. Ø 16.2/19 x 65~90 mm, e.g. no. 15000, 15010, 15039
 17358 12 x 10~15 ml, max. Ø 17.2/19.5 x 90~115 mm, e.g. no. 15015, 15020, 15022, 15023, 15024 and Monovettes 9~10 ml
 17359 9 x 15 ml culture, max. cap Ø 23 mm, e.g. no. 15115, Falcon, Corning and Greiner tubes
 17360 10 x 15 ml culture, max. cap Ø 22 mm, Falcon, Greiner, tubes
 17370 5 x 25~30 ml, max. Ø 25.4/29 x 85~115 mm, e.g. no. 15025, 15026, 15029, 15030, 15032, 15033
 17362 5 x 30 ml, max. Ø 25/31 x 65~95 mm**
 17376 4 x 40~50 ml, max. Ø 29/34 x 85~110 mm, e.g. no. 15051, 15052, 13055
 17375 3 x 50 ml, max. Ø 35/38 x 90~110 mm, e.g. no. 15049, 15050, 15056
 17377 4 x 50 ml culture, e.g. no. 15151, Nunc, Corning, Falcon and Greiner
 17378 4 x 50 ml**, max. Ø 29.4/36 x 90~120 mm
 17385 1 x 78~85 ml, max. Ø 38/40 x 85~115 mm, e.g. no. 13085, 15076, 15080
 17390 1 x 100 ml, max. Ø 45/50 x 85~110 mm, e.g. no. 15100, 15102, 15103, 15106
 17395 1 x 125 ml, max. Ø 51 x 90~115 mm, e.g. no. 15125
 17401 1 x 175~200 ml, max. Ø 57.5 x 90~150 mm, e.g. no. 15201, 15206, 15250, 15251, 15254
 17393 1 x 175~250 ml with pointed bottom angle 60°, max. Ø 61.5 x 120~165 mm, e.g. no. 15174, 15175, Nunc Nalge
 17402 1 x 150~250 ml with pointed bottom angle 88°, max. Ø 60 x 120~140 mm, e.g. Nalge 150 and 200 ml, Labcon 175, 250 ml
 17400 1 x 200 ml, max. Ø 57 x 90~115 mm, e.g. no. 15202, 15203
 17347 1 x 250 ml, max. Ø 61.5 x 90~125 mm, e.g. no. 15247, 15249, 13255
 15401 1 x 400 ml PP Ø 85 x 118 mm, incl. screw cap
 15501 1 x 500 ml, PP Ø 85 x 135 mm, incl. screw cap*

* 单个瓶/Single bottle ** 带沿/with rim

32 x 1.5 / 2.0 ml 水平转子/ Swing out rotor

转子/Rotor No.	4-16S		4-16KS	
	max. rpm	max. RCF[xg]	max. rpm	max. RCF[xg]
11148	12,000	13,523	13,200	16,363
No.	适配器/Adapter		离心管/tubes	
13021	0.2 ml PCR		15042	
13000	0.4 ml Reaction vials		15014	
13002	0.5 ml / 0.75 ml Reaction vials		15005	



	4-16S		4-16KS	
转子/Rotor No.	max. rpm	max. RCF[xg]	max. rpm	max. RCF[xg]
11156 + 3 x 13127	4,500	4,324	4,800	4,920

- 11156 六位水平转子, 需配吊篮13127
 13127 方形吊篮, 可配密封盖17112 (No.18002~18200), max.管长度115mm, 1套=2个
- 17112 方型吊篮盖, 用于吊篮13127, 聚砜材质, 1套=2个
- 11156 Sixplace rotor for buckets 13127
 13127 Rectangular bucket, sealable with cap no. 17112, for rectangular carriers (no. 18002 - 18200), max. tube length 115 mm, 1 set = 2 pcs.
- 17112 Rectangular cap for 13127, PSU, 1 set = 2 pcs.
 用于吊篮13127的适配器, 1套=2个
Adapter for bucket 13127, 1 set = 2 pcs.
- 18002 20 x 1.5/2.0 ml, max. Ø 11 mm, e.g. no. 15008, 15040
 18005 20 x 5 ml, flat and round bottom, max. Ø 12.2 x 60 ~ 75 mm, e.g. no. RIA 15060
 18105 20 x 5 ml, flat and round bottom, max. Ø 12.2 x 60 ~ 75 mm, e.g. no. RIA 15060, **decantable**
 18009 20 x 5 ~ 6 ml, max. Ø 12.8 x 70 ~ 90 mm, e.g. no. Hemolyse, RIA 15060
 18012 12 x 6 ~ 7 ml, max. Ø 13.5/18 x 65 ~ 90 mm, e.g. Vacutainer
 18007 20 x 7 ml, max. Ø 12.3 x 80 ~ 105 mm, e.g. no. 15007, 15027
 18107 20 x 7 ml, max. Ø 12.3 x 80 ~ 105 mm, e.g. no. 15007, 15027 **decantable**
 18010 12 x 10 ~ 12 ml, max. Ø 16.8/17.5 x 60 ~ 85 mm, e.g. no. 15000, 15010, 15039
 18015 12 x 10 ~ 15 ml, max. Ø 17 x 90 ~ 105 mm, e.g. no. 15015, 15020, 15022, 15023, 15024
 18115 12 x 10 ~ 15 ml, max. Ø 17 x 90 ~ 105 mm, e.g. no. 15015, 15020, 15022, 15023, 15024 **decantable**
 18016 4 x 15 ml culture e.g. no. 15115
 18018 6 x 15 ml culture ^{**}e.g. no. 15115
 18017 10 x 15 ml, max. Ø 17.5/19.5 x 80 ~ 112 mm, e.g. 15015, 15020, 15022, 15023, 15024, Monovettes 9 - 10 ml
 18025 5 x 25 ml, max. Ø 24 x 85 ~ 105 mm, e.g. no. 15025, 15026
 18030 5 x 27 ~ 30 ml, max. Ø 25.4/27.5 x 80 ~ 110 mm, e.g. no. 15029, 15030, 15032
 18022 2 x 30 ml, max. Ø 25/31 x 65 ~ 95 mm
 18051 2 x 40 ~ 50 ml, max. Ø 29/35 x 80 ~ 110 mm, e.g. no. 13055, 15051, 15052
 18050 2 x 50 ml, max. Ø 35/38 x 85 ~ 110 mm, e.g. no. 15049, 15050, 15056
 18052 2 x 50 ml culture e.g. no. 15151
 18053 2 x 50 ml culture* max. Ø 29.5/36 x 85 ~ 118 mm
 18085 1 x 78 ~ 85 ml, max. Ø 38/40 x 85 ~ 112 mm, e.g. no. 13085, 15076, 15080
 18100 1 x 100 ml, max. Ø 45.5/48 x 85 ~ 110 mm, e.g. no. 15100, 15102, 15103, 15106
 18125 1 x 125 ml, max. Ø 51 x 90 ~ 120 mm, e.g. no. 15125
 18250 1 x 175 ~ 200 ml, max. Ø 57 x 90 ~ 137 mm, e.g. no. 15201, 15206
 18200 1 x 200 ml, max. Ø 57 x 90 ~ 115 mm, e.g. no. 15202, 15203
- * 带沿/with rim
 ** 无吊篮盖17112 /without cap 17112



	4-16S		4-16KS	
Rotor No.	max. rpm	max. RCF[xg]	max. rpm	max. RCF[xg]
11118 + 13218	5,700	5,485	5,700	5,485

- 11118 全套酶标板水平转子, 板高80mm
 13218 酶标板吊篮, 板高80mm, 1套=2个
 17108 聚砜密封盖, 1套=2个
 17118 夹子, 1套=2个
 17978 酶标板固定器, 1套=2个
- 11118 Swing-out rotor for microtiter plates complete, incl. 2 carriers no. 13218, incl. plate holder no. 17978, max. height of plates 80 mm
 13218 Bucket for microtiter plates, sealable with cap no. 17108, incl. plate holder no. 17978, max. height of plates approx. 80 mm, 1 set = 2 pcs.
 17108 Polysulfone sealing cap, clear, incl. 4 clips no. 17118, 1 set = 2 pcs.
 17118 Clip for lid no. 17108, 1 set = 2 pcs.
 17978 Plate holder for bucket no. 13218, 1 set = 2 pcs.



离心机生产校准证, 用于单个转子 Created during production. Centrifuge with one rotor		
	Sigma 4-16S	Sigma 4-16KS, 4-16KHS
速度和时间校准证 Calibration certificate for speed and time	No. 17714	No. 17714
温度、速度和时间校准证 Calibration certificate for temperature speed and time	-	No. 17715
安装操作确认 IQOQ	No. 17710	No. 17711
增加一个转子的IQ/OQ For a further rotor	No. 17712	No. 17712



12449



12174



12269



12265



12356



13255



15247



15249

4-16S

4-16KS

容量/Capacity	转子/Rotor No.	离心管/tubes	max. rpm	max. RCF[xg]	max. rpm	max. RCF[xg]
48 x 1.5/2.0 ml Biosafe	12449	15008, 15040	13,500	20,376	15,000	25,155
100 x 1.5/2.0 ml	12201	15008, 15040	9,000	14,761	9,600	16,795

适配器/Adapter	货号/Order No.
0.2 ml PCR	13021 15042
0.4 ml	13000 15014
0.5 / 0.75 ml	13002 15005

20 x 10 ml	12168	15000, 15039	12,500	17,119	14,000	21,475
12 x 15 ml Culture	12170	15115	12,500	17,496	13,500	20,376
24 x 15 ml Culture	12174	15115	10,000	15,531	12,000	20,285

12 x 30 ml	12172	15029, 15032	12,500	19,216	14,000	21,475
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适配器/Adapter	货号/Order No.
10 ml	13059 15000, 15039

8 x 50 ml Biosafe	12266	15051, 15052	12,500	17,469	14,000	21,913
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适配器/Adapter	货号/Order No.
15 ml	16018 15022
15 ml glass	16018 15085
15 ml round bottom	13062
30 ml glass	16030 15086

8 x 50 ml Culture Biosafe	12269	15151	12,500	18,168	13,500	21,191
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适配器/Adapter	货号/Order No.
15 ml Culture	13060 15115
50 ml round bottom	13079 15051, 15052

6 x 85 ml Biosafe	12265	15076, 15080	12,500	18,517	14,000	23,228
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适配器/Adapter	货号/Order No.
10 ml	13084 15000, 15039
15 ml glass	16019 15085
15 ml Culture	13081 15115
15 ml round bottom	13063
30 ml	13083 15029, 15032
30 ml glass	16031 15086
50 ml Culture	13080 15151
50 ml	13082 15051, 15052



1.5 / 2.0 ml



10 ml 15 ml Kultur



30 ml



50 ml



50 ml Kultur



80 ml

容量/Capacity	转子/Rotor No.	离心管/tubes	max. rpm	max. RCF[xg]	max. rpm	max. RCF[xg]
6 x 250 ml Biosafe	12356	13255, 15247, 15249	8,000	10,375	9,000	13,131

适配器/Adapter	货号/Order No.
9 x 1.5 / 2.0 ml	14122 15008, 15040
6 x 10 ml	14124 15000, 15039
4 x 15 ml Culture	14125 15115
2 x 30 ml	14127 15029, 15032
1 x 50 ml	14129 15051, 15052
1 x 50 ml Culture	14131 15151
1 x 85 ml	14134 13085, 15076, 15080

用在4-16KHS中/In 4-16KHS
转子最高温度+50°C/max. Rotortemp. +50°C



控制面板 Spincontrol S



显示屏	Display	TFT
纯文本人机对话窗口	Plain text pop up windows	+
显示界面设定和实际值显示	Permanent display preselected, current values	+
显示尺寸	Display shows dimensions	+
语言	Languages	
时间控制	Timer	10 sec - 99 h 59 min
定速计时	Timing after set speed has been reached, switchable	+; +
时间步增[秒]	Time increments [sec]	60; 1
短时运行	Short run	+
连续运行	Continous run	+
速度步增[r/min] ¹	Speed increments [rpm] ¹	10; 1
显示速度和相对离心力	Display speed and g-force	+
离心力步增[xg]	G-force increments [xg]	10; 1
温度步增[°C]	Temperature increments [°C]	1
单位转换°C, °F	Switchable °C, °F	+
静止预冷 ¹	Standstill cooling, switchable ¹	+; +
静止加热 ²	Standstill heating, switchable ²	+; +
快速预冷程序 ¹	Rapid cooling program: Rapid_temp ¹	+
过温保护, 过温容忍度可调 ¹	Start refused with exceeded temperature ¹ tolerance, tolerance preselectable	+; +
程序	Programs	60
程序命名	User defined program name	+
程度列表显示所有参数	Program list shows all parameters	+
线性加速曲线	Linear acceleration curves	10
二次方加速曲线	Quadratic acceleration curves	10
用户自定义加速曲线	User defined acceleration curves	10
线性减速曲线	Linear deceleration curves	10
二次方减速曲线	Quadratic deceleration curves	10
用户自定义减速曲线	User defined deceleration curves	10
无阻尼制动	Brakeless	+
减速曲线组合	Combination deceleration a. brakeless	+
无阻尼从1000至150rpm可选	from 1000 - 150 rpm selectable	
自动开盖, 可选	Auto lid open, switchable	+; +
声音报警	Accoustic signal, switchable	+; +
声音长度预选	Signal length preselectable	+
静态背光显示	Optical display stillstand	+
转数统计, 每个转子	Counting cycles centrifuge, each rotor	+; +
转子寿命对话框	Pop up window end of rotor life time	+
运行结束自动开盖	Automatic lid opening at the end of the run, switchable	+; +
提供所有转子参数	All rotors pre programmed	
速度、离心力、半径	speed, g-force, radius	+
最大半径调节	Max. radius decreaseable	
密度>1.2g/cm ³ 最大转速计算	Calculation for liquid density >1.2 g/cm ³	+
延迟启动	Start delay	+
控制面板锁定	Controlunit lockable	+
密码保护	Code protection	+
运行监控	Run monitoring	+
微电脑控制	Microprocessor controlled	+

¹仅4-16KS, 4-16KHS/only for 4-16KS, 4-16KHS²仅4-16KHS/only for 4-16KHS