

6

Stirrer

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Stirrer MAZELA® NZJ-1000 series

Compact stirrer for wide application.
Equipped with air purge port.



NZJ-1100

Features

- Unique 2 step speed control function is incorporated. Under the load less than maximum torque, set rotation speed is maintained by feedback control. Under the load over maximum torque, stirring is continued with reduced rotation speed.
- Accurate rotation speed display by pulse-counter. DC brushless motor prevents spark and eliminates troublesome maintenance work.
- Safety features include thermal protector, over current protector, independent power switch.
- Equipped with airpurge port to prevent solvents and acid inlet.
- Drill chuck can be fixed either by manual or by chuck handle.

Specifications

Product Name		Stirrer			
Model		NZJ-1000	NZJ-1100	NZJ-1200	NZJ-1300
Cat. No.		262020	262030	262040	262050
Rotation speed (rpm)		300~3000	120~1200	60~600	30~300
Max. torque	N·m/rpm	0.098/3000	0.245/1200	0.49/600	0.98/300
	kgf·cm/rpm	1/3000	2.5/1200	5/600	10/300
Rotation speed controp		Speed feedback control			
Rotation speed setting & display		Volume setting & digital display			
Safety functions		Thermal protector, Overcurrent protector, Chuck cover			
Additional function		Slow up & down, Free clamp, Air purge port			
Motor		DC brushless motor 40W 0.098N·m (1kgf·cm)/3000rpm			
Stirring rod diameter (mm)		Φ1~8 Drill chuck		Φ1~10 Drill chuck	
Dimensions (mm) & Weight		92W x 130D x 189H 2.5kg			
Power source		200VA AC100V			

■ Chuck cover



Chuck cover is equipped to prevent hair from being wound up during rotation. (PAT)

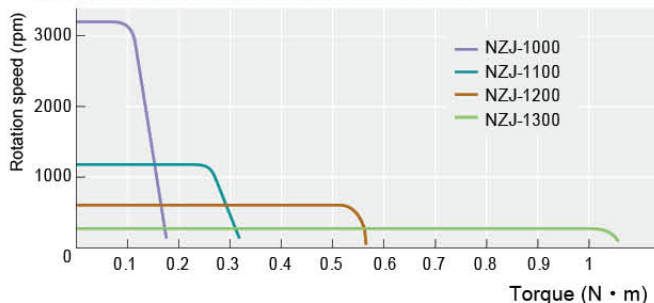
■ Air purge port



Air purge port is equipped. Outside air can be charged into stirrer to prevent solvents and acid inlet into stirrer.

Data

■ Rotation speed (Torque characteristic)



Options

Stand base ZS
Pole height 780mm
Cat. No. 158710

Stand base ZS-2
Pole height 1200mm
Cat. No. 203190



Stirrer MAZELA® ZZ-2121·2221·2321

High torque and compact stirrer



ZZ-2121

Features

- Rotation speed remote control is possible by external signal control.
- Equipped with automatic inversion function. Inversion time can be selected from 5, 10, 20, 30, 45 or 60 seconds.
- Collet chuck firmly fixes shaft even under inversion operation.
- 80W DC brushless motor is strong enough to ensure compact, high torque stirring.

Specifications

Product Name	Stirrer		
Model	ZZ-2121	ZZ-2221	ZZ-2321
Cat. No.	263020	263030	263040
Rotation speed (rpm)	20~1200	10~600	5~300
Max. torque	N·m/rpm	0.392/1200	0.784/600
	kgf·cm/rpm	4/1200	8/600
Rotation speed setting & display	Volume setting & digital display		
Motor	DC brushless motor 80W		
Stirring rod diameter (mm)	Φ8 collet chuck		
Dimensions (mm)	130W x 210D x 158H		
Power source	300VA AC100V		

Point!

Chuck cover



Chuck cover is equipped to prevent hair from being wound up during rotation. (PAT)

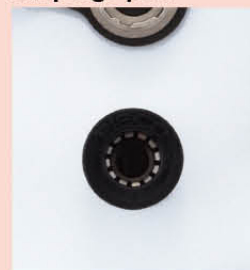
Stirring bar dia.	Cat. No.
φ4	256100
φ6	256110
φ8 (standard)	256120
φ10	256130

Free clamp



Main unit inclination at different angle is possible. Centering of seal, stirring rod, flask is easy.

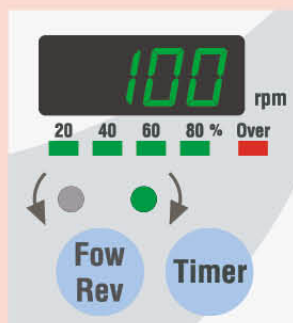
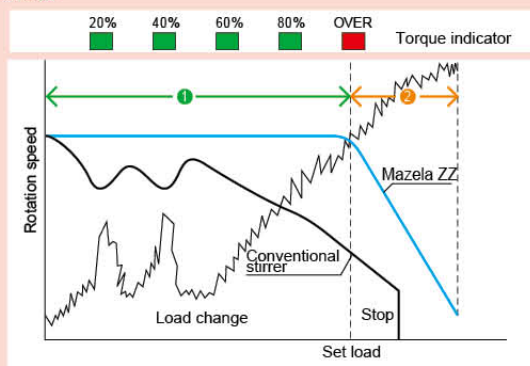
Air purge port



Air purge port is equipped. Outside air can be charged into stirrer to prevent solvents and acid inlet into stirrer.

Point!

Rotation control by speed feedback



- ① Set rotation speed is kept even when load change happens.
- ② When load exceeds limit, rotation continues at reduced speed.

Optional Accessories for stirrer

■ Stirring Seal (Vacuum Stirrer) TBO



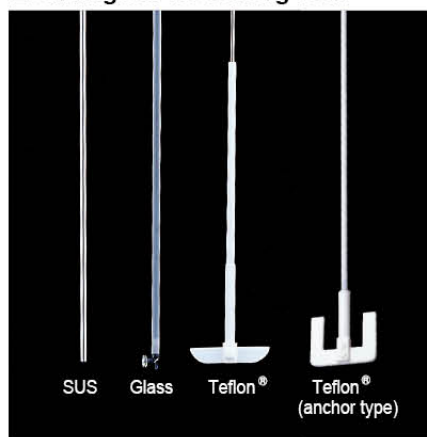
TBO

Features

- Effective for stirring in vacuum or in sealed environment.
- Teflon made stirring seal with common taper joint.
- Can be depressured to 0.13hPa (0.1mmHg) while keeping rotation efficiency.
- Free fixing position to stirring bar.

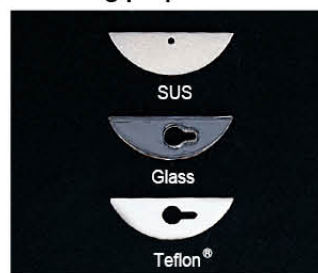
Product Name	Stirring Seal			
Model	TBO			
Cat. No.	121090	121100	121110	121120
Taper joint	¥24	¥29	¥34	¥40

■ Stirring bar for stirring seal



Material	ODxL(propeller)(mm)	Cat. No.
SUS	8×450、w/o slot	121520
	8×495、with slot	121560
	8×600、with slot	121570
Glass	8×450	121490
	8×600	121500
	8×800	121510
Teflon®	T-1 8×450 (80W×17H)	121590
	T-11 8×600 (80W×17H)	203210
	T-12 8×700 (100W×23H)	203220
	T-2 8×600 (120W×23H)	121600
T-3 8×800 (150W×25H)	121610	
Teflon® (anchor)	T-1A 8×450 (60W×40H)	200210
	T-2A 8×600 (80W×60H)	200220

■ Stirring propeller for stirring seal

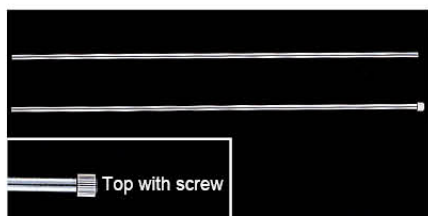


Model	Material	Dimensions(mm)	Cat. No.
G-1	SUS	58W×19H	121450
G-2		71W×19H	121460
E-1	Glass	58W×19H	121430
E-2		71W×19H	121440
F-1	Teflon	58W×19H	121470
F-2		71W×19H	121480

■ Stirring propeller

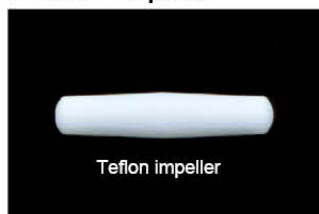
No.	No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	
Shape (SUS304)									
Name	Flat blade	Curved blade	Round	Fan	Curved fan	Angled fan	Compensation fan	Marine propeller	
Stiring status									
Bar diam.	Propeller diam.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	
8mm	30mm	121820	122000	122180	122360	122540	122720	122900	123080
	40mm	121830	122010	122190	122370	122550	122730	122910	123090
	50mm	121840	122020	122200	122380	122560	122740	122920	123100
	60mm	121850	122030	122210	122390	122570	122750	122930	123110
	70mm	121860	122040	122220	122400	122580	122760	122940	123120
	75mm	121870	122050	122230	122410	122590	122770	122950	123130
	80mm	121880	122060	122240	122420	122600	122780	122960	123140
	85mm	121890	122070	122250	122430	122610	122790	122970	123150
	90mm	121900	122080	122260	122440	122620	122800	122980	123160
	100mm	121910	122090	122270	122450	122630	122810	122990	123170
10mm	30mm	121920	122100	122280	122460	122640	122820	123000	123180
	40mm	121930	122110	122290	122470	122650	122830	123010	123190
	50mm	121940	122120	122300	122480	122660	122840	123020	123200
	60mm	121950	122130	122310	122490	122670	122850	123030	123210
	70mm	121960	122140	122320	122500	122680	122860	123040	123220
	80mm	121970	122150	122330	122510	122690	122870	123050	123230
	90mm	121980	122160	122340	122520	122700	122880	123060	123240
100mm	121990	122170	122350	122530	122710	122890	123070	123250	

■ Shaft for stirring propeller
(Cannot be used with stirring seal TBO)



ODxL (mm)	Cat. No.
8×495	121720
8×495 (with screw)	121730
8×800	121760
8×995	121770
10×495	121780
10×800	121800
10×995	121810

■ Teflon® impeller



Product name	Model	ODxL(mm)	Q'ty	Cat. No.
Teflon® impeller	TSB-30	8×30	5	123830
	TSB-40	8×40	5	123840
Teflon® impeller (Octagon)	TOS-15	6.5×15	5	200230
	TOS-20	6.5×20	5	200240
	TOS-25	7.5×25	5	200250
	TOS-30	7.5×30	5	200260
	TOS-35	7.5×35	5	200270
Teflon® impeller (Football)	TFS-15	6×15	5	200280
	TFS-20	10×20	5	200290
	TFS-25	10×25	5	200300
	TFS-30	15×30	5	200310
	TFS-35	15×35	5	200320
Strong teflon® impeller (Octagon)	TFS-40	20×40	5	200330
	TOX-15	6.5×15	1	200340
	TOX-20	6.5×20	1	200350
	TOX-25	7.5×25	1	200360
	TOX-30	7.5×30	1	200370
Strong teflon® impeller (Football)	TOX-35	7.5×35	1	200380
	TFX-15	6×15	1	200390
	TFX-21	10×20	1	240320
	TFX-25	10×25	1	200410
	TFX-30	15×30	1	200420
	TFX-35	15×35	1	200430
	TFX-40	20×40	1	200440

■ Reaction vessels



Jacket type reaction vessel

Model	Capacity	Cat. No.
BJ-5N	500mL	201470
BJ-10N	1000mL	201480
BJ-20N	2000mL	201490
BJ-30N	3000mL	201500
BD-5N	500mL	201510
BD-10N	1000mL	201520
BD-20N	2000mL	201530
BD-30N	3000mL	201540



* BD with drain



Separable round bottom flask

Model	Capacity	Cat. No.
SFR- 5	500mL	200450
SFR-10	1000mL	200460
SFR-20	2000mL	200470



Flask cover

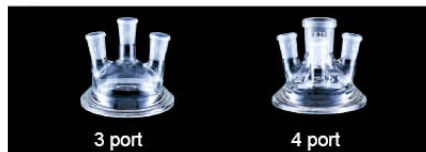
Model	No. of port & Joint	Cat. No.
BC-1N	1 \varnothing 29/38×1	201550
BC-2N	2 \varnothing 29/38×1 \varnothing 15/25×1	201560
BC-3N	3 \varnothing 29/38×1 \varnothing 15/25×2	201570
BC-4N	4 \varnothing 29/38×1 \varnothing 15/25×3	201580
BC-5N	5 \varnothing 29/38×1 \varnothing 15/25×4	201590

■ Reaction vessel (Separable flask)



50mL Cat. No. 261860 100mL Cat. No. 261870 300mL Cat. No. 261880

■ Flask cover



3 port

4 port

■ Flange stopper & O ring



Flange stopper
Cat. No. 261970

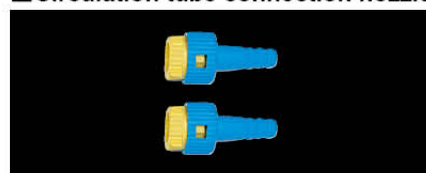
O ring
Cat. No. 261960

■ Reaction vessel holder



Cat. No. 261950

■ Circulation tube connection nozzle



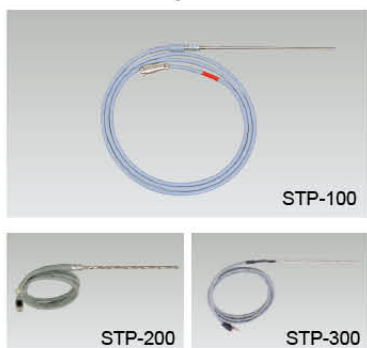
Cat. No. 185260

■ Sensor holder



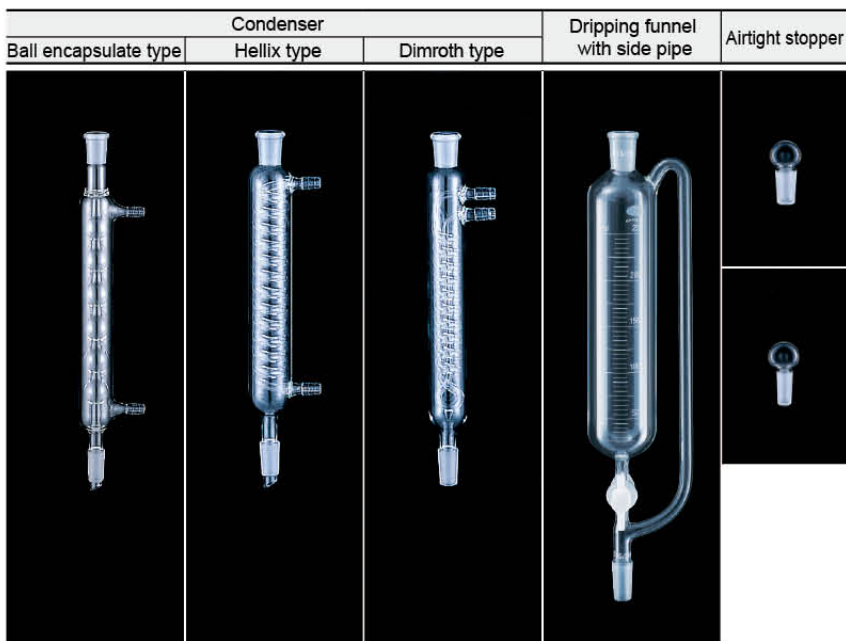
Cat. No. 209340

External temperature sensor



Applicable bath/circulator	Model	Sensor	Cat. No.
NTT-20G	STP-100	Three wire, Pt	114220
	STP-110		203230
	STP-120		203240
NCB-3100 NCB-3300 PCC-7000 NTB-221	STP-200	Four wire, Pt	113620
	STP-210		203250
	STP-220		203260
NCB-1200 NCB-2500 NCB-2600	STP-300	Thermistor	196730

Condenser, Dripping funnel, Airtight stopper



Product name	Length (mm)	Joint (寸)		Cat. No.
		Top	Bottom	
Condenser (with ball)	200	15 / 25	15 / 25	200480
Condenser (Helix)				200490
Condenser (Dimroth)				200500
Dripping funnel	200			200510
Stopper (寸)		29 / 38		200520
		15 / 25		200530

Clamp ZC



ZC
Cat. No. 124560

Firmly holds stirring pole and fix to stand base.

Stand Base ZS



ZS
Cat. No. 158710 (ZS)
Pole height 780mm
Cat. No. 203190 (ZS-2)
Pole height 1200mm

Support stirrer firmly even in case of large capacity vessel.

One touch Coupling CW-1



CW-1
Cat. No. 123480

- One touch mounting of glass or stainless bar.
- Reaction vessel with stirring bar can be set to stirrer.
- Cannot be used with ZZ series.

Flexible Coupling CF-1



CF-1
Cat. No. 123490

- Coupling exclusive for glass stirring bar. Centering of vessel or stirring seal is easy.
- Cannot be used with ZZ series.

Flexible Stirrer FS-1



FS-1
Cat. No. 123570

Magnetic Stirrer with heater RCH-3·1000

Magnetic stirrer with hot plate.



Features

- RCH-3 main body is made of ABS resins and realizes strong chemical resistance, heatproof and self-extinction. It is light weight and with excellent durability.
- RCH-3 hotplate heater is coated with ceramic and provides effective heating by far infrared wave characteristic.
- Digital display of temperature and rotation speed (RCH-1000).
- With external temperature sensor, sample temperature can be directly controlled (RCH-1000).

Specifications

Product Name	Magnetic Stirrer with heater	
Model	RCH-3	RCH-1000
Cat. No.	123919/123918	264280
Rotation speed	100~1500rpm	50~1500rpm
Max. temperature	300°C (plate surface)	310°C (plate surface)
Stirring capacity	50mL~3L (water)	10mL~20L (water)
Rotation speed setting	Volume setting	
Rotation speed display	—	Digital display
Temperature control	Input adjustment	P.I control
Motor	1.8w Induction motor	15W DC brushless motor
Heater	250W	600W
Main unit material	ABS	Aluminum die-cast
Stirring plate dimensions (mm)	Φ150	Φ135
Dimensions (mm) & weight	198W x 225D x 115H 2.4kg	165W x 275D x 90H 3kg
Power source	345VA AC115V/660VA AC220V	630VA AC100V
Accessories	Silicone sheet (1 pce) Top plate cover (1 pce)	External temperature sensor (1 pce)

Options



RCH-1000 + BBS-230RB



RCH-1000 + BBS

BBS

- Various accessories are available.
- Aluminum block receptacle diameter is automatically adjusted to glass vessel (flask) size even when vessel size is differentiated due to workmanship, dilation or shrinkage.
- Aluminum block is coated with chemical resistive white alumite.

Aluminum bath BBS-130AB



- Aluminum bath is filled with bead and can accept various size vessels..

Aluminum bath BBS-130AB

Cat. No. 265770

Aluminum bead 2L

Cat. No. 262250

Tumble preventive device



- prevents tumbling of beaker and triangular flask. (100mL~3L)
Cat. No. 264720

Rotary Evaporator	1
Vacuum Pump & Aspirator	2
Organic Synthesizer	3
Freeze Drier / Spray Drier	4
Shaker	5
Stirrer	6
Tube Pump	7
Low Temperature Cooler	8
Cold Trap	9
Control Temperature Bath	10
Incubator	11
Oven	12
Fermentor	13

Magnetic Stirrer RCX 1100S·1100D

Powerful magnetic stirrer suitable to stir high viscosity samples.



RCX-1100S

RCX-1100D

Features

- Strong upward magnetic force provides stable stirring even when there is space between the vessel and the stirring plate.
- Optional pole can be attached to left, right or back left side of main unit to fix vessels firmly.
- Square and flat stirring plate ensures stable placing of oil bath. Silicone sheet to prevent vessel slipping is provided as standard. Table top cover accepts up to 250°C oil bath.
- Vessel falldown protector is available (Option).
- Service outlet is provided to supply power from stirrer when connected to oil bath.

Specifications

Product Name	Magnetic Stirrer	
Model	RCX-1100S	RCX-1100D
Cat. No.	264260	264270
Rotation speed	50~1600rpm	
Stirring capacity	10mL~20L (water)	
Rotation speed setting	Volume setting	
Rotation speed display	-	Digital display, min. digit 1 rpm
Motor	DC brushless motor 25W	
Stirring plate dimensions (mm)	200W x 200D SUS 304	
Dimensions (mm)	200W x 204D x 80H	
Power source	200VA AC100V	

Silicone mat and top cover provided as standard.

■Silicone mat



Firmly holds vessels.

■Service terminal



Can be connected to oil/water bath.

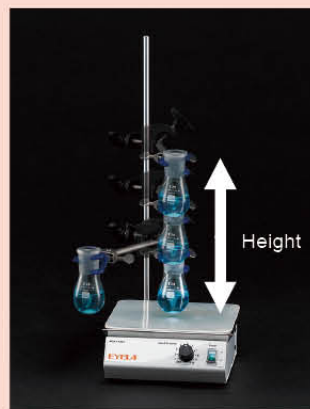
■Top cover



Up to 250°C oil bath can be placed.



Stable and strong stirring both in vertical and horizontal direction.



Even when there is space between table top and bath, strong magnet force ensures wide and stable stirring.

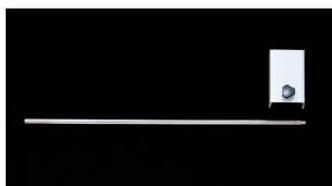
Options



Vessel falling protector
Prevents falling of vessels or flask.
Cat. No. 264720

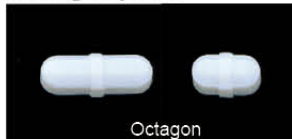


Test tube holder
Up to 9 test tubes ($\Phi 10\sim 18\text{mm}$) can be mounted.
Cat. No. 212300



Pole set
Fix vessels at left/right side or back side.
Cat. No. 265640

Strong impeller



Octagon



Football

Product name	Model	OD x L(mm)	Cat. No.
Teflon® impeller (Octagon)	TOX-15	6.5×15	200340
	TOX-20	6.5×20	200350
	TOX-25	7.5×25	200360
	TOX-30	7.5×30	200370
	TOX-35	7.5×35	200380
Teflon® impeller (Football)	TFX-15	6×15	200390
	TFX-21	10×20	240320
	TFX-25	10×25	200410
	TFX-30	15×30	200420
	TFX-35	15×35	200430
TFX-40	20×40	200440	