Dryer, Spray

Yamato

"Pulvis Mini-Spray"

Model GA32

Water Evaporation
Max.1300mℓ/h

Operating Temperature Range
40℃～200℃

Liquid Sample Flux
up to 28mℓ/min.

Spraying Nozzle
for Liquid and Air

A small sized dryer for laboratory use which produces uniformalized fine particles.

The GA32 is a compact spray dryer using a spray dry method which enables simple use for laboratory experiments. It can be used for a wide variety of drying operations, from preliminary examinations for pilot plants to drying operation in general laboratories.

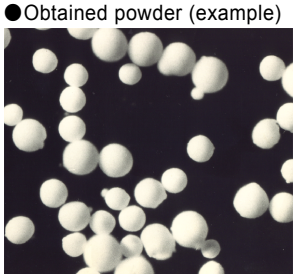
- No danger of damaging foodstuffs, medical products and products that are sensitive to biochemical-heat.
- No oxidation takes place and the water content of the formed powders is low, so that there is no contamination.
- Even a solid body of ca.0.5g can be dried.

Control Panel

- Inlet temperature, outlet temperature and drying air volume are displayed digitally. Condition setting dials and stage level control switch are located on the front panel for easy use.

- In this Spray Dryer, the sample are dried and transformed into a uniform fine powder of amorphous form, so both its solubility and reactivity are extremely high in comparison to crystal.

- Obtained powder (example)



GA32

Easy operation and maintenance

- Inlet temperature, outlet temperature and drying air volume are displayed digitally. Condition setting dials and stage level control switch are located on the front panel for easy use.
- Drying chamber, cyclone, product vessel can be easily detached and cleaned.

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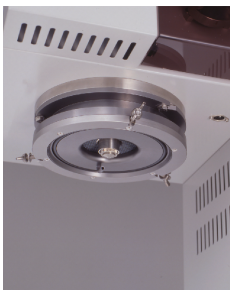
Spraying nozzle

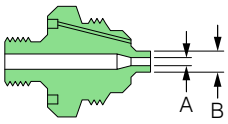
Nozzle size (μm)

Model		1A	1	2A	2	3
Nozzle No.		1650	2050	2050	2850	2850
Ⓕ	A	406	508	508	711	711
	B	1270	1270	1270	1270	1270
Nozzle No.		64	64	70	70	64
Ⓐ	C	1626	1626	1778	1778	1626

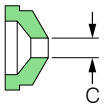
Model 1A : Standard nozzle



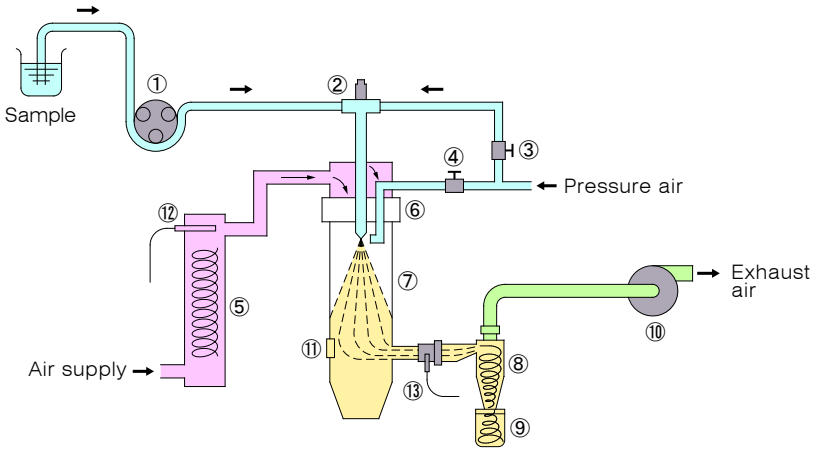
Liquid nozzle Ⓕ



Air nozzle Ⓐ



System diagram



① Fluid Pump
② Spray nozzle
③ Needle valve
④ Electromagnetic valve
⑤ Heater
⑥ Distributor
⑦ Drying chamber
⑧ Cyclone
⑨ Product vessel
⑩ Aspirator
⑪ Cap
⑫ Inlet temperature sensor
⑬ Outlet temperature sensor

Specifications

Model	GB22 (Basic Unit)
■ Structure	
Heater	2 kW
Aspirator	Bypass-type blower
Sample liquid feed pump	Quantitative peristaltic pump, flow rate variable up to 28mℓ/min.
Stirring system	Using an induction motor
Compressed air blowing system	Pulse jet system, an electromagnetic valve and electronic timer
Temperature control range	40℃ ～200℃
Temperature control accuracy	±1℃
Temperature setting and display method	Digital
Dry air flow meter	Digital display
Spray pressure gauge	Burdon tube pressure gauge, measurement range : 0～294kPa (0～3kg/cm²)
■ Standard	
Power source (50/60Hz)	AC 200/230V, single phase 14A/13A
External dimensions(W×D×Hmm)	760×420×1,350
Weight	Approx. 110kg

Model	GF32 (Pulvis Mini Bed Attachment)
■ Structure and Standard	
Water evaporation rate	Max. approx. 1,300mℓ/H
Spray nozzle	Two-liquid nozzle, 1A
Drying chamber	Super-hard glass
Cyclone	Super-hard glass
Product vessel	Super-hard glass
Nozzle orifice cleaning	Pulse jet system (using a compressed air blowing system of Model GB22)
Weight	Approx. 11kg

SINCE 1889
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