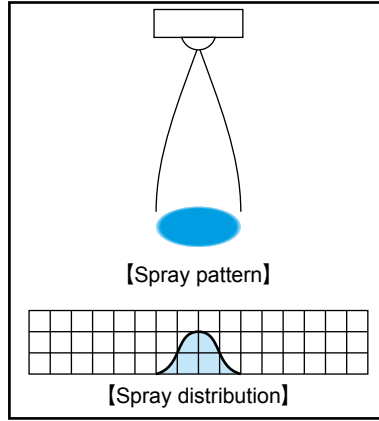


# Clog-resistant Fine Fog Nozzles Full Cone Spray

# SETOJet



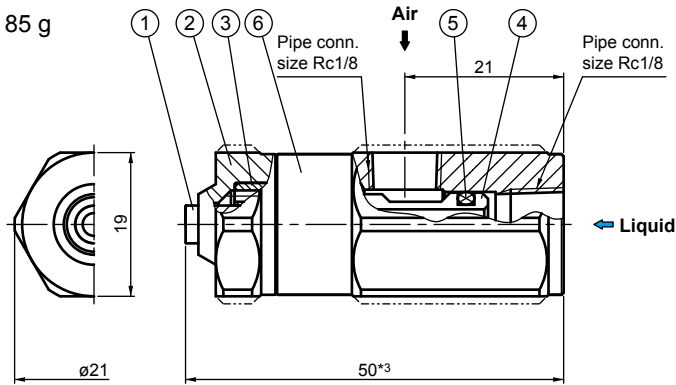
- Full cone spray pneumatic nozzle producing fine atomization with a mean droplet diameter of 60  $\mu\text{m}$  or less.\*1
  - Clog-resistant design. Optimal for spraying viscous liquids.
  - External mixing type (designed to mix air and liquid outside the nozzle for atomization).
- \*1) Droplet diameter measured by laser Doppler method

### APPLICATIONS

- Spraying: Oil, lubricant, mold release agent, honey, aqueous urea, rust preventive, glaze, viscous liquid, slurry

### DRAWING

■ Mass: 85 g



### COMPONENTS AND MATERIALS

No.	Components	Standard materials*2
1	Nozzle tip	S303
2	Nozzle body	S303
3	Air balancer	S303
4	Stem	S303
5	O-ring	FKM
6	Adaptor	S303

Note: Components# 1 and 3 are combined for SETO04\*\* and SETO075\*\*.

\*2) Optional material: S316L

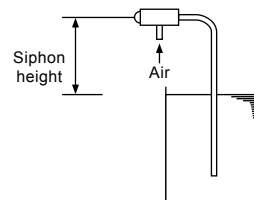
Unit: mm

\*3) As for the models SETO0405, 0407, 0410, 07507 and 07510, the total length is 49.5 mm.

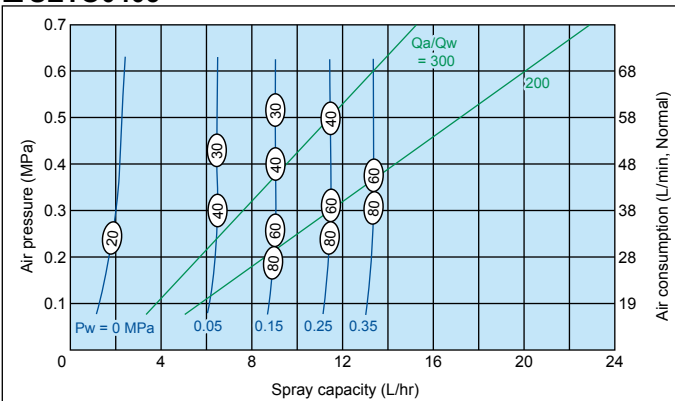
### FLOW-RATE DIAGRAMS

■ How to read the chart

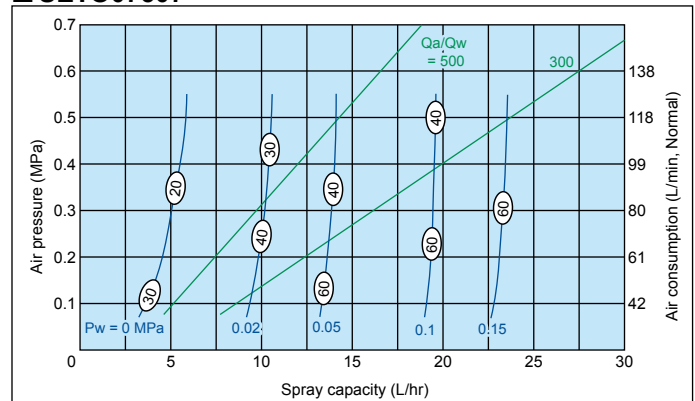
1. The spray capacity shown is for one nozzle.
2. Blue lines (—) represent liquid pressures  $P_w$  in MPa. Green lines (—) represent air-water ratio  $Q_a/Q_w$ .
3. Measured at liquid siphon height of 100 mm when  $P_w$  is 0 MPa.
4. Figures in ovals  $\circ$  indicate Sauter mean diameters ( $\mu\text{m}$ ) measured by laser Doppler method (measured at 300 mm from the nozzle).



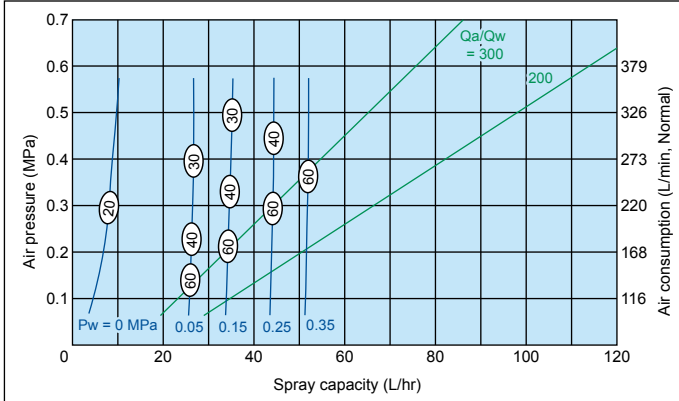
### ■ SETO0405



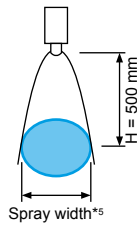
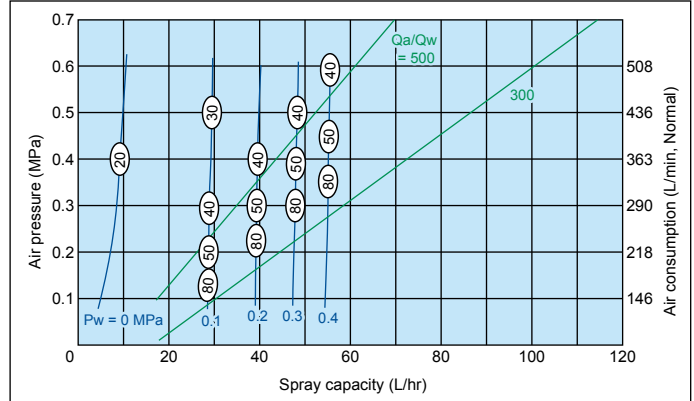
### ■ SETO07507



■ **SETO1510**



■ **SETO2210**



**PERFORMANCE DATA**

Air consumption code	Spray capacity code	Air pressure (MPa)	Air consumption (L/min, Normal)	Spray capacity (L/hr)		Spray width*5 (mm) H = 500 mm	Mean droplet diameter*5 (µm) Laser Doppler method	Free passage diameter (mm)	
				Liquid pressure (MPa)				Liquid	Air
				0 (Siphon)*4	0.05				
04	05	0.3	38	2.0	6.5	130	20-60	0.5	0.1
	07		38	4.0	12.3	130		0.7	0.1
	10		38	7.0	27.7	130		1.0	0.1
075	07		80	5.0	13.9	160		0.7	0.2
	10		80	8.0	27.9	160		1.0	0.2
15	10		220	8.0	27.7	170		1.0	0.3
	20		220	25.0	111.0	170		2.0	0.3
22	10		290	8.0	26.4	180		1.0	0.5
	20		290	26.0	111.0	180		2.0	0.5

\*4) Siphon height: 100 mm.

\*5) Measured at compressed air pressure of 0.3 MPa and liquid pressure of 0 MPa (siphon height of 100 mm).

**HOW TO ORDER** Please inquire or order for a specific nozzle using this coding system.

<Example> SETO 0405 S303 + T S303

**SETO**

**04**

Air consumption code

- 04
- 075
- 15
- 22

**05**

Spray capacity code

- 05
- 07
- 10
- 20

**S303**

Material of nozzle tip

+

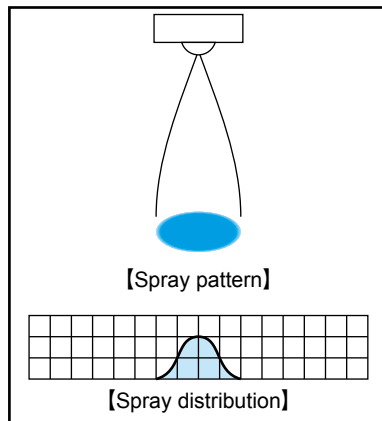
**T**

Type of adaptor

**S303**

Material of adaptor

Note: Configuration and dimensions may be changed when nozzle tip material is different.



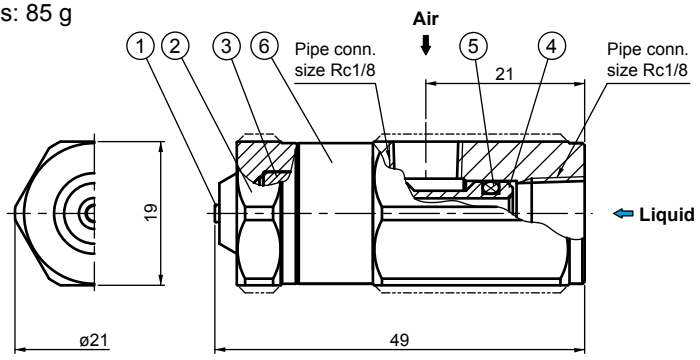
- Full cone spray pneumatic nozzle producing fine atomization with a mean droplet diameter of 40 μm or less.\*1
  - Eddies from air makes further fine atomization.
  - Optimal for spraying viscous liquids.
  - External mixing type (designed to mix air and liquid outside the nozzle for atomization).
- \*1) Droplet diameter measured by laser Doppler method

### APPLICATIONS

- Spraying: Oil, lubricant, mold release agent, honey, aqueous urea, rust preventive, glaze, viscous liquid, slurry

### DRAWING

■ Mass: 85 g



### COMPONENTS AND MATERIALS

No.	Components	Standard materials*2
1	Nozzle tip	S303
2	Nozzle body	S303
3	Air balancer	S303
4	Stem	S303
5	O-ring	FKM
6	Adaptor	S303

Note: Components No. 1 and 3 are combined for SETO04\*\*R and SETO075\*\*R.

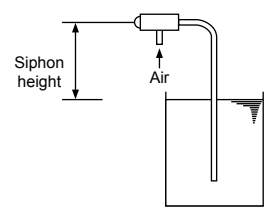
\*2) Optional material: S316L

Unit: mm

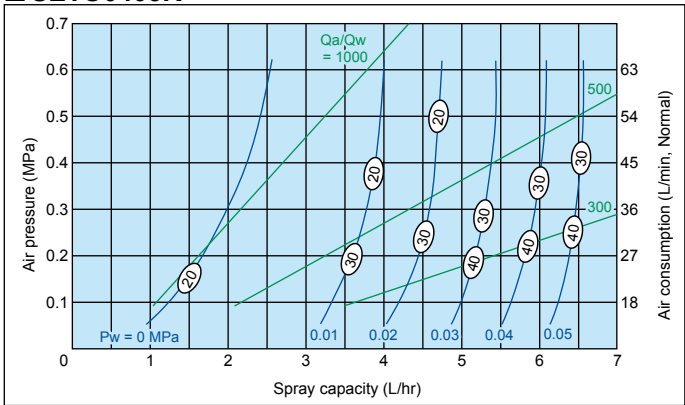
### FLOW-RATE DIAGRAMS

■ How to read the chart

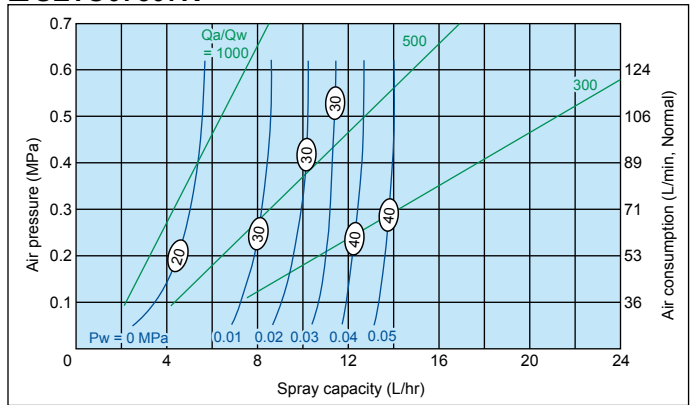
1. The spray capacity shown is for one nozzle.
2. Blue lines (—) represent liquid pressures  $P_w$  in MPa. Green lines (—) represent air-water ratio  $Q_a/Q_w$ .
3. Measured at liquid siphon height of 100 mm when  $P_w$  is 0 MPa.
4. Figures in ovals ○ indicate Sauter mean diameters (μm) measured by laser Doppler method (measured at 300 mm from the nozzle).



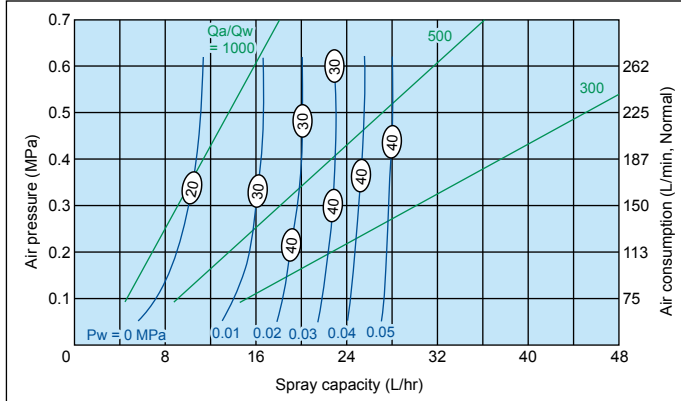
### SETO0405R



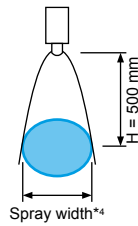
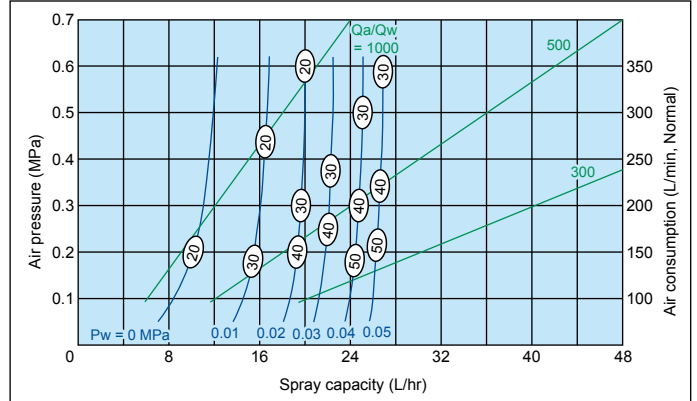
### SETO07507R



■ SETO1510R



■ SETO2210R



**PERFORMANCE DATA**

Air consumption code	Spray capacity code	Air pressure (MPa)	Air consumption (L/min, Normal)	Spray capacity (L/hr)		Spray width*4 (mm) H = 500 mm	Mean droplet diameter*4 (μm) Laser Doppler method	Free passage diameter (mm)	
				Liquid pressure (MPa)				Liquid	Air
				0 (Siphon)*3	0.05				
04	05R	0.3	36	2.0	6.5	130	15-40	0.5	0.1
	07R			4.0	12.3			0.7	0.1
	10R			8.0	27.7			1.0	0.1
075	07R		71	5.0	13.9	160		0.7	0.2
	10R		71	9.0	27.9			1.0	0.2
15	10R		150	10.0	27.7	170		1.0	0.3
22	10R		200	11.0	26.4	180		1.0	0.5

\*3) Siphon height: 100 mm.

\*4) Measured at compressed air pressure of 0.3 MPa and liquid pressure of 0 MPa (siphon height of 100 mm).

**HOW TO ORDER**

Please inquire or order for a specific nozzle using this coding system.

<Example> SETO 0405R S303 + T S303

SETO

04

Air consumption code

- 04
- 075
- 15
- 22

05R

Spray capacity code

- 05R
- 07R
- 10R

S303

Material of nozzle tip

+

T

Type of adaptor

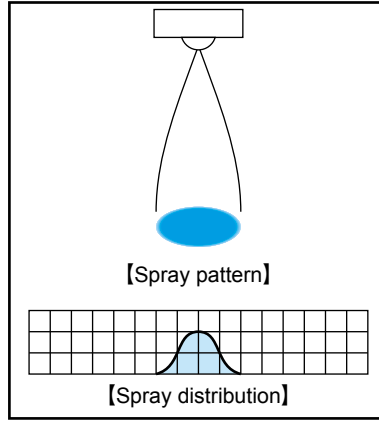
S303

Material of adaptor

Note: Configuration and dimensions may be changed when nozzle tip material is different.

# Clog-resistant Fine Fog Nozzles for Wafer Cleaning

## SETOJet-PTFE

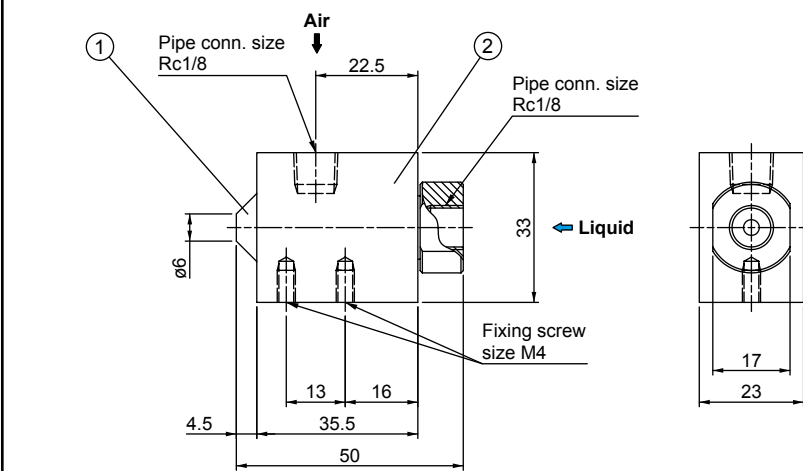


- Pneumatic spray nozzle made of PTFE. Capable of spraying chemical solutions.
- External mixing type preventing contamination.

### APPLICATIONS

- Cleaning: Precise cleaning for semiconductor wafers

### DRAWING



### COMPONENTS AND MATERIALS

No.	Components	Standard materials
1	Nozzle tip	PTFE
2	Nozzle body	PTFE

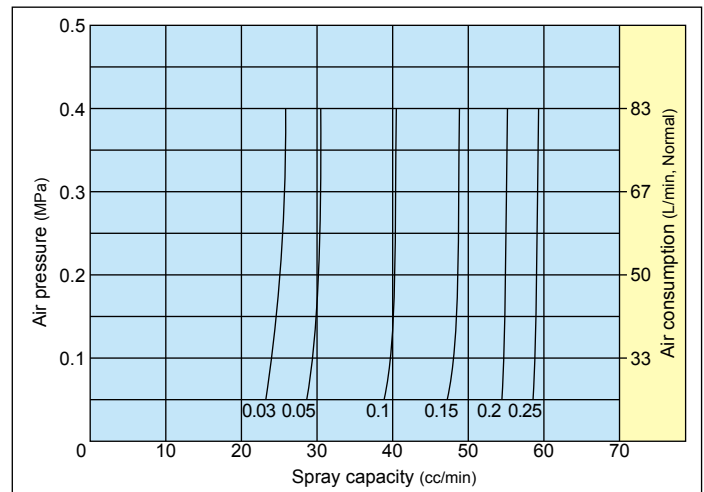
### FLOW-RATE DIAGRAMS

#### How to read the chart

1. The spray capacity shown is for one nozzle.
2. Figures at the foot of each curve indicate liquid pressures in MPa.

#### Note:

This chart is a single example. We can design an optimal nozzle according to your application and purpose.



[Made-to-order product]

Please contact our sales office for details and other specifications.