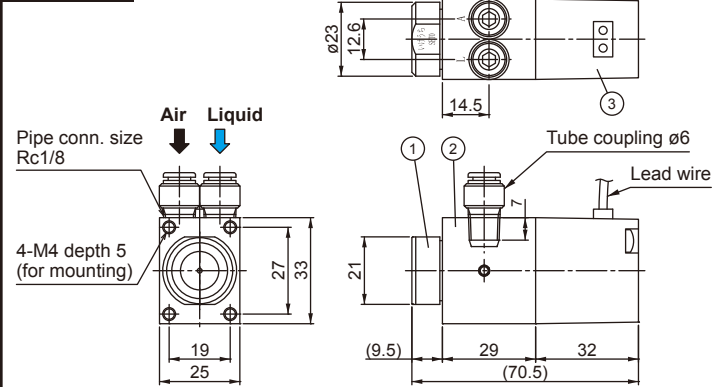


- Fast response action with solenoid activation: Intermittent pulse spray with 0.02 sec/shot and as little as 0.006 cc/shot is possible.
- Ideal for applying a small amount of coating with protective agents, etc.
- IP65, IP67 (dust-proof and water-proof) structure.
- SETO07503R-I+SD is an internal mixing outer air type (the other SETO models are external mixing type).

APPLICATIONS

- Spraying release agent for metal molds
 - Intermittent minimal spray coating
 - Mold cooling
- Note: As this nozzle includes stainless steel parts, not all liquids can be used. Contact us for details.

DRAWING

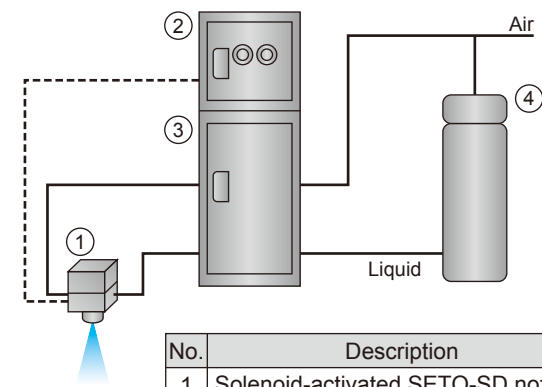


COMPONENTS AND MATERIALS

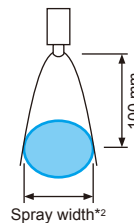
No.	Main components	Standard materials
1	Nozzle body	Aluminum alloy (tip: S303)
2	Adaptor	Aluminum alloy
3	Solenoid assembly	Various materials

Unit: mm

HOW TO USE



No.	Description
1	Solenoid-activated SETO-SD nozzle
2	Solenoid control panel
3	Pressurized flow control unit
4	Liquid pressurization tank (required only if oil-based release agent is used)



PERFORMANCE DATA

Nozzle code	Air pressure (MPa)	Spray capacity (L/hr) & Air consumption (L/min, Normal)								Spray width*2 (mm)	Mean droplet diameter*3 (µm)	Free passage diameter (mm)	Weight (g)			
		Liquid pressure (MPa)														
		0 *1		0.05		0.13		0.2						0.3		Laser Doppler method
Liquid	Air	Liquid	Air	Liquid	Air	Liquid	Air	Liquid	Air	Liquid	Air					
07503R-I	0.2	—	—	—	—	1.0	50	3.2	48	—	—	40-50	15-25	0.3	0.4	180
	0.3	—	—	—	—	—	—	0.9	66	4.0	64					
	0.4	—	—	—	—	—	—	—	1.9	80	—					
0405R	0.3	2.0	36	6.5	36	—	—	—	—	—	—	—	0.5	0.1	—	
07507R	0.3	5.0	71	13.9	71	—	—	—	—	—	—	—	0.7	0.2	—	
2210R	0.3	10.0	200	26.4	200	—	—	—	—	—	—	—	1.0	0.5	—	

*1) Spray capacity and air consumption at liquid pressure of 0 MPa (liquid siphon feed) are measured at 100 mm siphon height.

*2) Spray width measured at spray distance of 100 mm from nozzle.

*3) 07503R-I: Sauter mean diameters measured at compressed air pressure of 0.2 MPa and liquid pressure of 0.13 MPa.

0405R, 07507R, 2210R: Sauter mean diameters measured at compressed air pressure of 0.3 MPa and liquid pressure of 0 MPa (siphon height of 100 mm).

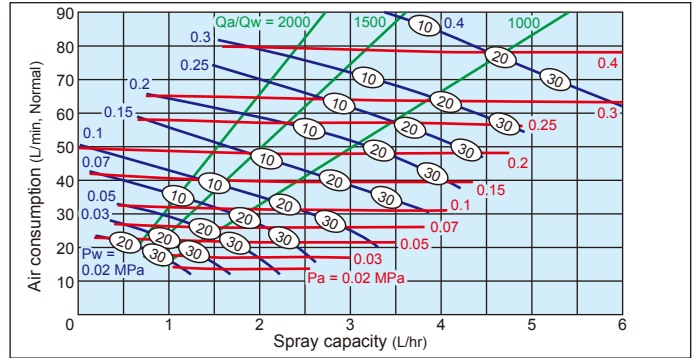
Valve function	Min. operating time (sec)	Max. operating pressure (MPa)	Current (A)	Voltage (VDC)	Max. allowable temperature
Single solenoid, normally closed	ON: 0.02 OFF: 0.02	0.5 for both air/liquid	0.26	24	50°C (120°F)

FLOW-RATE DIAGRAMS

■ How to read the chart

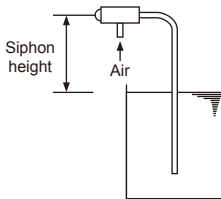
1. The spray capacity shown is for one nozzle.
2. **Red lines** (—) represent compressed air pressures P_a in MPa.
- Blue lines** (—) represent liquid pressures P_w in MPa.
- Green lines** (—) represent air-water ratio Q_a/Q_w .
3. Numbers in ovals \bigcirc indicate Sauter mean diameters (μm) measured by laser Doppler method (measured at 300 mm from the nozzle).

■ **SETO07503R-I+SD**

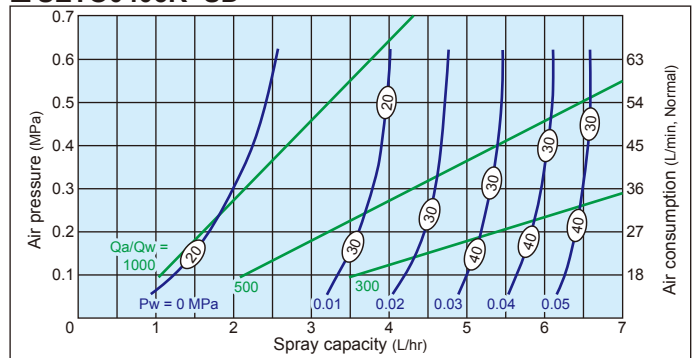


■ How to read the chart

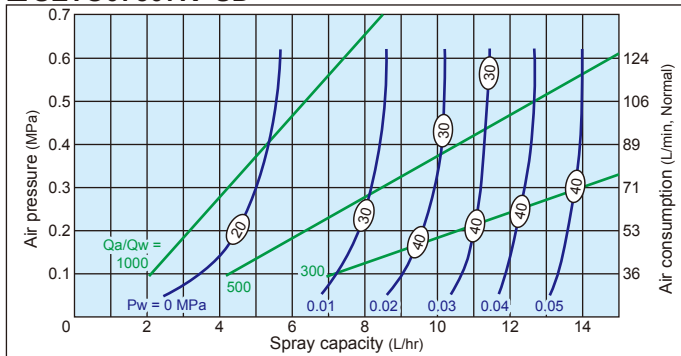
1. The spray capacity shown is for one nozzle.
2. **Blue lines** (—) represent liquid pressures P_w in MPa.
- Green lines** (—) represent air-water ratio Q_a/Q_w .
3. Measured at 100 mm liquid siphon height with P_w at 0 MPa.
4. Numbers in ovals \bigcirc indicate Sauter mean diameters (μm) measured by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



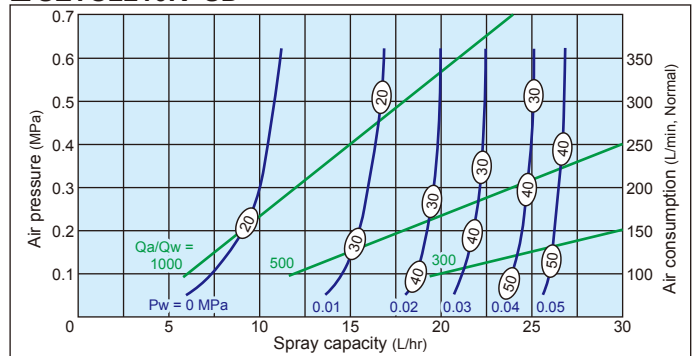
■ **SETO0405R+SD**



■ **SETO07507R+SD**



■ **SETO2210R+SD**



SETO-SD

HOW TO ORDER

To inquire about or order a specific product please refer to this coding system.

<Example> SETO 07503R-I +SD AL

SETO **07503R-I** + SD AL

Nozzle code

- **07503R-I**
- **0405R**
- **07507R**
- **2210R**