# **Solid Stream Jet with ON/OFF Control**







SO-CM



- Extra-fine solid stream nozzles with high spray impact.
- · Anti-drip design.
- Quick ON/OFF spray response.
- Spray ON/OFF can be regulated by turning the pilot air ON/OFF.

# [STANDARD PRESSURE]

0.3 MPa

#### [APPLICATIONS]

Trimming: Paper making Cutting: Timber, food Others: Marking, cleaning of precision machine parts, injection of chemicals, deburring

### SO-CC SERIES

| Structure | Spray ON/OFF can be regulated by switching the pilot<br>air ON/OFF. The pilot air activates an internal piston to<br>regulate the spray. |
|-----------|--|
| Material  | • S303   |
| Weight    | • 170 g  |

Max. operating pressure: 1.0 MPa

[Note] Appearance and dimensions may differ slightly depending on material and

# DRAWING Unit: mm Pilot air Nut (S304 equiv.) 9 10 size Rc1/8 Holder (S303) Bolt (S304 equiv.) The above frame shows the parts included in the optional mounting adaptor. M8 depth 6.5 11) Liquid Liquid Pipe conn. size Rc1/8 ø1\*¹ 35 57 \*1Hole ø1 is for air relief. ①Nozzle orifice ②Packing (PTFE) ③Cap ④Adaptor ⑤O-ring (FKM) 6Lock nut 7Sleeve (PTFE) 8Piston 9Y-packing (NBR)

10 Spring (S304) 11 Spring cap

# **Mounting Adaptor (optional)**

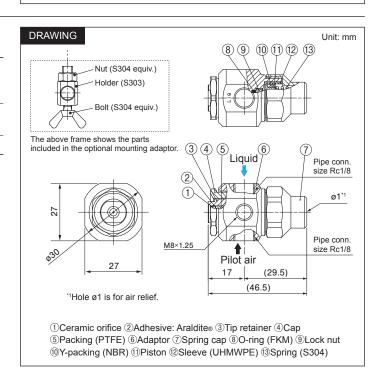
A mounting adaptor (ø10 or ø8) is available to attach the SO-CC/ SO-CM series nozzle to a pole and spray in the desired direction.

#### **SO-CM** SERIES (with ceramic orifice)

| Structure | Spray ON/OFF can be regulated by switching the pilot<br>air ON/OFF. The pilot air activates an internal piston to<br>regulate the spray. |
|-----------|--|
| Material  | Nozzle orifice: ceramic Metal parts: S303  |
| Weight    | • 150 g  |

Max. operating pressure: 0.5 MPa

[Note] Appearance and dimensions may differ slightly depending on material and



#### ■SO-CC Series

| Orifice       | Spray capacity (L/min) |            |            |            |            |  |
|---------------|------------------------|------------|------------|------------|------------|--|
| diameter code | 0.1<br>MPa             | 0.3<br>MPa | 0.5<br>MPa | 0.8<br>MPa | 1.0<br>MPa |  |
| Ø0.3          | 0.04                   | 0.07       | 0.09       | 0.11       | 0.13       |  |
| Ø0.4          | 0.07                   | 0.12       | 0.16       | 0.20       | 0.22       |  |
| Ø0.5          | 0.11                   | 0.18       | 0.24       | 0.30       | 0.34       |  |
| Ø0.6          | 0.15                   | 0.27       | 0.34       | 0.43       | 0.49       |  |
| Ø0.7          | 0.21                   | 0.36       | 0.46       | 0.58       | 0.65       |  |
| Ø0.8          | 0.27                   | 0.47       | 0.60       | 0.76       | 0.85       |  |
| Ø0.9          | 0.34                   | 0.59       | 0.76       | 0.96       | 1.07       |  |
| Ø1.0          | 0.42                   | 0.73       | 0.94       | 1.19       | 1.33       |  |

[Note] These nozzles are manufactured for specific orifice diameters, therefore the spray capacity is not guaranteed.

#### **SO-CM Series**

| Orifice       | Spray capacity (L/min) |            |  |  |
|---------------|------------------------|------------|--|--|
| diameter code | 0.3<br>MPa             | 0.5<br>MPa |  |  |
| Ø0.3          | 0.08                   | 0.10       |  |  |
| Ø0.4          | 0.14                   | 0.17       |  |  |
| Ø0.5          | 0.20                   | 0.25       |  |  |
| Ø0.6          | 0.29                   | 0.36       |  |  |
| Ø0.7          | 0.39                   | 0.49       |  |  |
| Ø0.8          | 0.51                   | 0.65       |  |  |
| Ø0.9          | 0.61                   | 0.78       |  |  |
| Ø1.0          | 0.75                   | 0.97       |  |  |

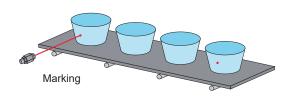
[Note] These nozzles are manufactured for specific orifice diameters, therefore the spray capacity is not guaranteed.

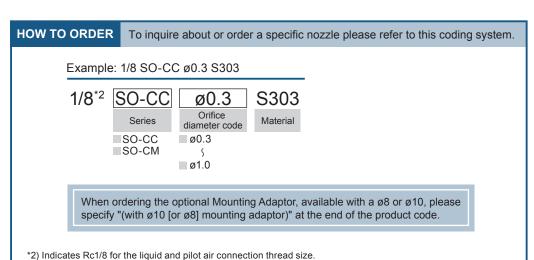
# **Operation Time Chart**

The pilot air ON/OFF controls the spray operation.

| Pilot air | OFF  | ON    | OFF  | ON    | OFF  |
|-----------|------|-------|------|-------|------|
| Liquid    | Stop | Spray | Stop | Spray | Stop |

# **Example of Use**









- Supply liquid pressure at 0.5 MPa or less for the SO-CM series, and 1.0 MPa or less for the SO-CC series.
- Supply pilot air pressure between 0.2 and 0.5 MPa.
- For better shut off and to prevent dripping, purge the air between the solenoid valve and the nozzle when it is shut off, using a 3-way solenoid valve.