

### **Features**

- Three-dimensional rotating solid stream jets powerfully clean the inside of a tank.
- No external power is needed as rotation is driven solely by the flow of the cleaning liquid.
- Easy to install, reducing equipment costs.
- The JA3-2S (D180) series is equipped with two nozzles, and the JA3-4S (D180) series with four nozzles.

### **Applications**

180° downward spraying is ideal to clean inside of open-topped tanks and containers.

# **Basic Specifications**

- Operating Pressure Range 1.0–3.0 MPa (150–430 psi)
- Spray Capacity\*2
  JA3-2S (D180): 12–36 L/min
  - JA3-4S (D180): 12–36 L/min JA3-4S (D180): 24–70 L/min
- Reach Distance of Spray (Diameter)
  Approx. 6–9 m
- Max. Temperature 60°C (140°F)
- Number of Nozzles Attached
  JA3-2S (D180) with two nozzles
  JA3-4S (D180) with four nozzles

- Main Material<sup>11</sup> S304, SCS14, S303, PTFE, FKM, S440C
- Weight JA3-2S (D180): 1.9 kg JA3-4S (D180): 2.3 kg
- Rotation Speed<sup>3</sup> 30–60 rpm
- Outer Surface Finish #320 buffing

<sup>&</sup>lt;sup>2</sup> Spray flow rate in the above operating pressure range is for reference only. See the flow-rate diagram and chart for more details.
<sup>3</sup> Set to this range of rotation speed at a pressure specified prior to shipping. The rotation speed varies depending on the applied pressure.

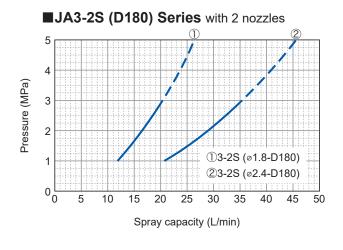


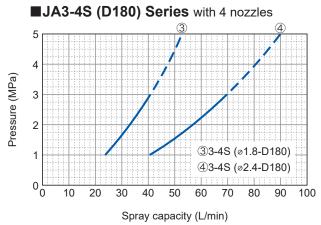
<sup>1</sup> In the material code, "S" represents "stainless steel". SCS14 is cast stainless steel equivalent to S316.

# JA3-D180 SERIES / JET ATTACKER / 3D Rotational Cleaning, 180° Downward Spray

- •The liquid pressure and spray flow rate should be set based on your specific applications and requirements.
- •Models available with two- and four-nozzles, with a nozzle orifice diameter of 1.8 or 2.4 mm.
- •The operating pressure range is 1.0 to 3.0 MPa. When used at higher pressure, the rotation speed will become too high and the spray will become erratic.

# Flow-rate Diagram

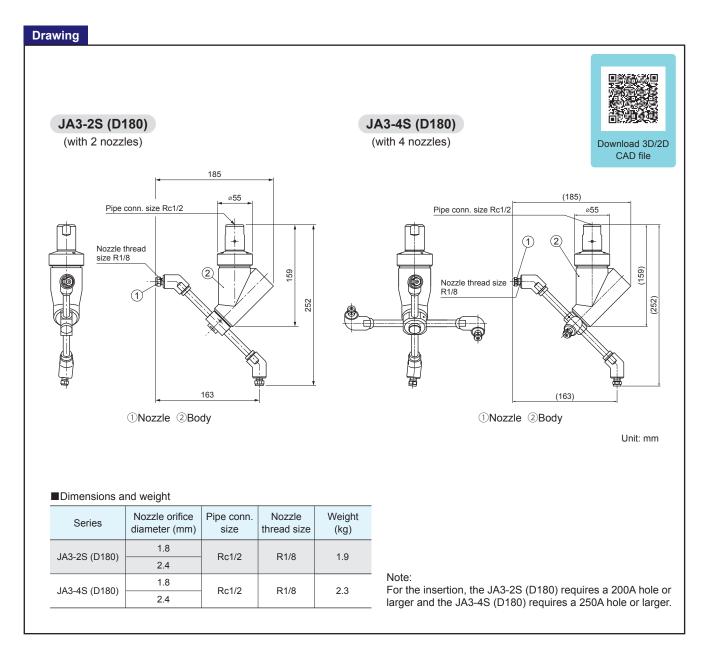




# Flow-rate Chart

Model No. (JA)	Number of nozzles	Nozzle orifice diameter (mm)	Pipe conn. size	Spray capacity (L/min) [for reference only]				
				1.0 MPa	1.5 MPa	2.0 MPa	2.5 MPa	3.0 MPa
3-2S (Ø1.8-D180)	2	1.8	Rc1/2	11.8	14.5	16.7	18.7	20.4
3-2S (Ø2.4-D180)	2	2.4	Rc1/2	20.4	25.0	28.8	32.3	35.3
3-4S (Ø1.8-D180)	4	1.8	Rc1/2	23.6	28.9	33.4	37.3	40.9
3-4S (Ø2.4-D180)	4	2.4	Rc1/2	40	49.0	56.6	63.2	69.3

# JA3-D180 SERIES / JET ATTACKER / 3D Rotational Cleaning, 180° Downward Spray



#### **HOW TO ORDER** To inquire about or order a specific product please refer to this coding system. Example: 1/2F JA 3-2S (Ø1.8-D180) S304 1/2F\*4 JA 3 -- D180) S304 (ø1.8 Number of Nozzle Orifice Nozzles Diameter **=**2 **■**ø1.8 **■**4 **■**Ø2.4 $^{^{2}4}$ "F" indicates female tapered pipe thread ("Rc" of the ISO standard), e.g. $\frac{1}{2}$ F = Rc1/2.