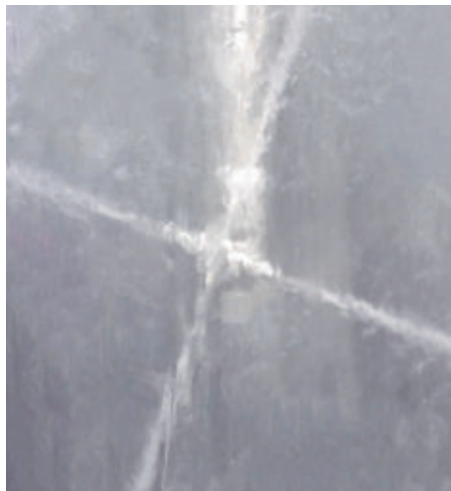
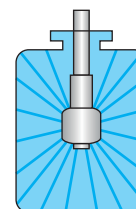




Spray Coverage



360° spray

Note: RJ has two holes in the bottom of the body for drainage.

Features

- Powerful 3D rotational solid stream jet cleans the inside of tanks.
- No external power is needed as rotation is driven solely by the flow of the cleaning liquid.
- Heat-resistant up to 80 deg. C (176 deg. F).³
- Compact design allows for easy installation even if the inlet is small.
- Insertion and removal is easy since the rotating nozzle is not locked into place.
- The RJ3-2L is equipped with two nozzles, and the RJ3-4L with four nozzles.
- A customized option: The submerged type can be left in place during the normal operational use of the tank without affecting its performance during cleaning. For more details, please contact us.

Applications

- Removing tough, sticky and stubborn dirt
- Cleaning of food and beverage tanks
- Cleaning inside the chests (material tanks of paper making), etc.

Basic Specifications

Operating Pressure Range
 1/2F RJ3-2L: 0.2–1.0 MPa (30–145 psi)
 1F RJ3-2L: 0.3–1.0 MPa (45–145 psi)
 1*1/2F RJ3-2L/4L: 0.3–0.8 MPa (45–115 psi)

Spray Capacity²
 25.6–246 L/min

Reach Distance of Spray (RADIUS)
 1/2F RJ3-2L: about 7 m
 1F RJ3-2L: about 9 m
 1*1/2F RJ3-2L-ø7 or ø8: about 10 m
 1*1/2F RJ3-2L-ø9: about 12 m
 1*1/2F RJ3-4L: about 9 m

Max. Temperature³
 80°C (176°F)

Main Material¹
 1/2F&1F RJ: S304, SCS14, UPE, PTFE, PEEK
 1*1/2F RJ: S304, SCS13, UPE, PTFE, PEEK

Weight
 1/2F RJ3-2L: 0.62 kg
 1F RJ3-2L: 1.9 kg
 1*1/2F RJ3-2L: 2.7 kg
 1*1/2F RJ3-4L: 2.8 kg

Rotation Speed
 N/A

Outer Surface Finish
 #320 buffing is optional and available upon request for an additional charge.

▼ Watch rotating & spraying nozzle on YouTube



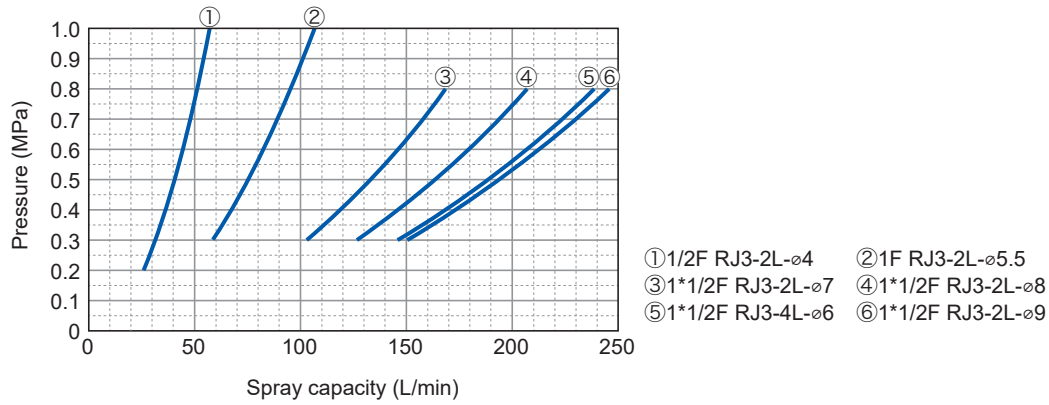
IKEUCHI RJ

¹ In the material code, "S" represents "stainless steel". SCS13 is cast stainless steel equivalent to S304. SCS14 is cast stainless steel equivalent to S316.

² Spray flow rate in the above operating pressure range is for reference only. See the flow-rate diagram and chart for more details.

³ A heat-resistant type, suitable for use over 80°C, is also available as a custom-made option. Please contact us for more details.

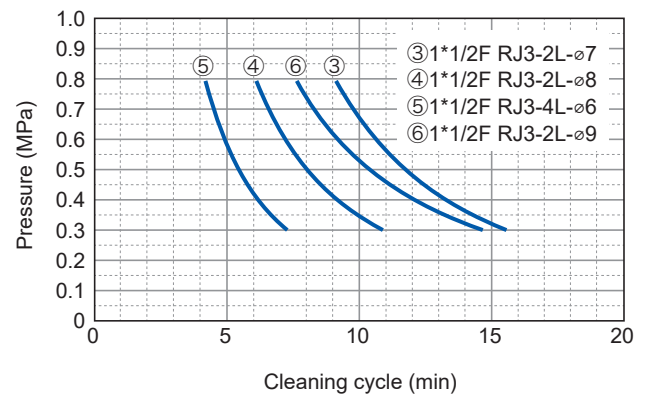
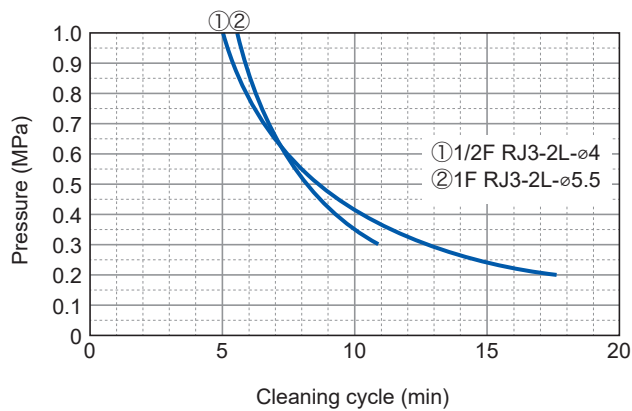
Flow-rate Diagram



Flow-rate Chart

Model No. (RJ3-)	Nozzle orifice diameter (mm)	Pipe conn. size	Spray capacity (L/min) [for reference only]								
			0.2 MPa	0.3 MPa	0.4 MPa	0.5 MPa	0.6 MPa	0.7 MPa	0.8 MPa	0.9 MPa	1.0 MPa
2L-ø4	4	Rc1/2	25.6	31.4	36.2	40.5	44.4	47.9	51.2	54.3	57.3
2L-ø5.5	5.5	Rc1	—	58.3	67.3	75.3	82.4	89.1	95.2	101	106.4
2L-ø7	7	Rc1½	—	103	119	133	146	158	169	—	—
2L-ø8	8	Rc1½	—	127	146	164	179	194	207	—	—
4L-ø6	6	Rc1½	—	146	169	189	207	223	239	—	—
2L-ø9	9	Rc1½	—	151	174	194	213	230	246	—	—

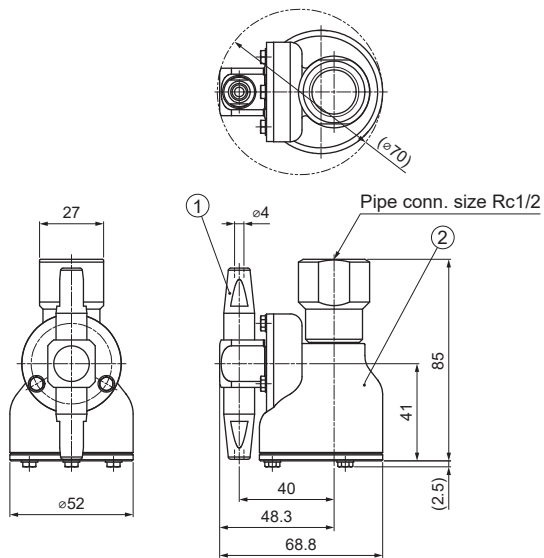
Pressure and Cleaning Cycle



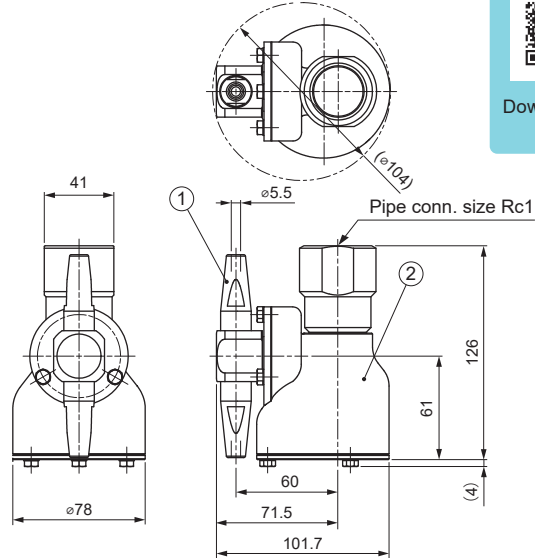
RJ SERIES / ROTARY JETTER / Powerful 3D Rotational Cleaning

Drawing

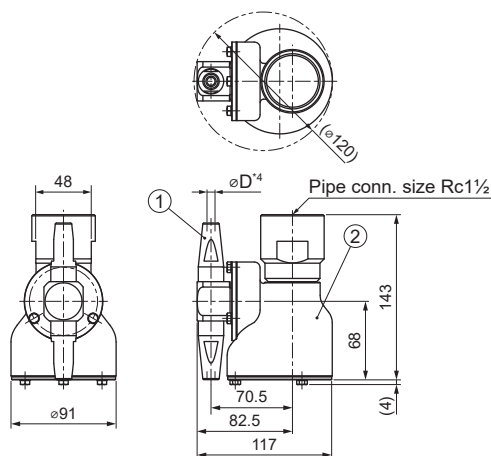
1/2F RJ3-2L (with 2 nozzles)



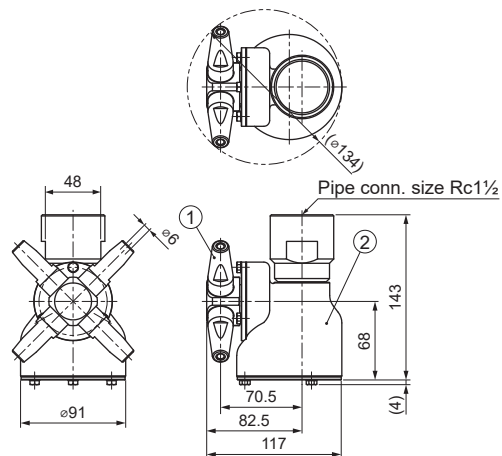
1F RJ3-2L (with 2 nozzles)



1*1/2F RJ3-2L (with 2 nozzles)



1*1/2F RJ3-4L (with 4 nozzles)



*4 Nozzle orifice diameter is shown in ϕD (either $\phi 7$, $\phi 8$, or $\phi 9$).

① Nozzle ② Body

Unit: mm



Download 3D/2D
CAD file

HOW TO ORDER

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

Example: 1*1/2F RJ 3-2L - $\phi 7$

1*1/2F RJ 3 - 2L - $\phi 7$

Pipe Conn.
Size^{*5}

- 1/2F
- 1F
- 1*1/2F

Number of
Nozzles Attached

- 2L (with 2 nozzles)
- 4L (with 4 nozzles)

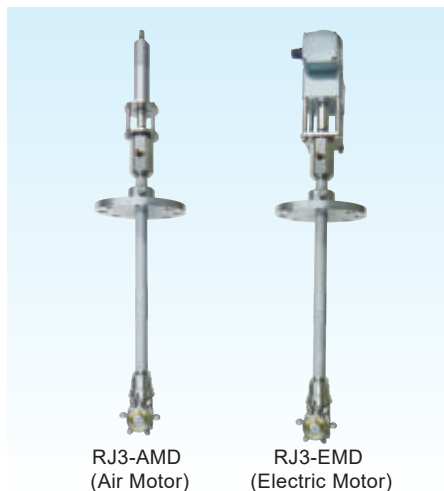
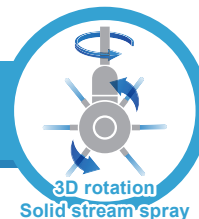
Nozzle Orifice
Diameter

- $\phi 4$ ■ $\phi 5.5$
- $\phi 6$ ■ $\phi 7$
- $\phi 8$ ■ $\phi 9$

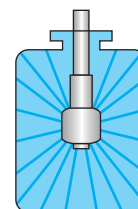
*5 "F" indicates female tapered pipe thread ("Rc" of the ISO standard), e.g. 1/2F = Rc1/2.

RJ3-MD SERIES with Air/Electric Motor for Powerful Cleaning

Made-to-Order



Spray Coverage



360° spray

Cleaning hard
to remove dirt

Features

- 3D rotation solid stream jet powerfully cleans the inside of a tank.
- Stable low-speed rotation with motor maximizes contact time between cleaning surface and cleaning liquid for effective cleaning.
- Models come with two, three, or six nozzles for precision cleaning.
- Heat-resistant up to 80 deg. C (176 deg. F).

Applications

- Removing tough, sticky and stubborn dirt
- Cleaning of reactor vessels in chemical plants

Air Motor

Compressed air drives the motor.
Stainless steel air motor requires no oil to operate.

Electric Motor

Immediate use and stable rotation anywhere a power supply is available. No adjustment required.

Note: There is no ON/OFF switch on the product. Please control the operation by turning ON/OFF the supply of compressed air or electricity.

Basic Specifications

Operating Pressure Range
0.3–15 MPa (45–2,170 psi)

Number of Nozzles Attached
2, 3, or 6

Spray Capacity²
2 nozzles: 4.2–80.3 L/min
3 nozzles: 6.3–98.0 L/min
6 nozzles: 6.4–103.7 L/min

Max. Temperature
80°C (176°F)

Reach Distance of Spray (RADIUS)³
Approx. 1.5–2.5 m

Rotation Speed
RJ3-AMD (air motor): 5–10 rpm
RJ3-EMD (electric motor): 6 rpm (50 Hz), 7.2 rpm (60 Hz)

Cleaning Cycle
RJ3-AMD (air motor): 7.4–3.7 min
RJ3-EMD (electric motor): 6.2 min (50 Hz), 5.2 min (60 Hz)

Main Material¹
S304, SCS14, ABB2 + bronze alloy, UPE (seal),
FKM (O-ring)

Approx. Weight (w/o flange)
RJ3-AMD (air motor): 11–16 kg
RJ3-EMD (electric motor): 14–19 kg

Compressed Air Pressure (only for RJ3-AMD)
0.3–0.5 MPa (45–70 psi)

Air Consumption (only for RJ3-AMD)
100–170 L/min, Normal

Power Voltage (of RJ3-EMD)
100 VAC

Power Consumption (of RJ3-EMD)
40 W

▼ Watch rotating & spraying nozzle on YouTube



IKEUCHI RJ3-MD

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

²Spray flow rate in the above operating pressure range is for reference only. See the flow-rate diagram and chart for more details.

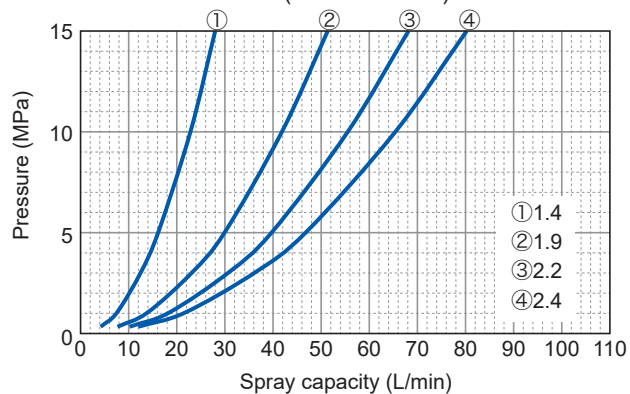
³Spray reach distance varies depending on the number of nozzles attached and the nozzle orifice diameter. Contact us for details.

RJ3-MD SERIES with Air/Electric Motor for Powerful Cleaning

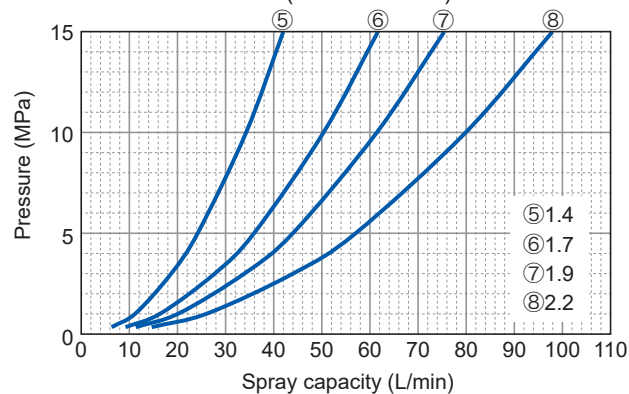
Flow-rate Diagram

① to ⑫ indicate the nozzle orifice diameters.

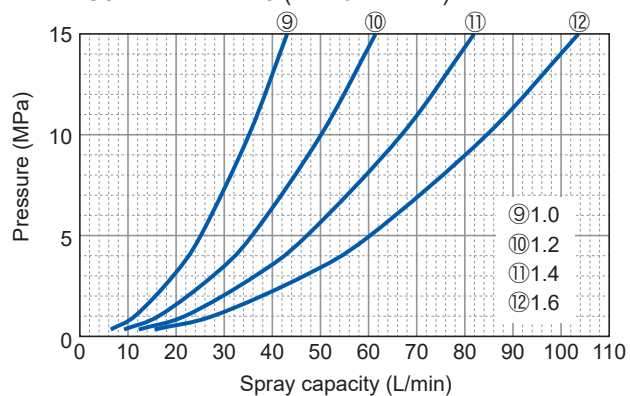
■ RJ3-AMD/EMD-2 (with 2 nozzles)



■ RJ3-AMD/EMD-3 (with 3 nozzles)



■ RJ3-AMD/EMD-6 (with 6 nozzles)



Flow-rate Chart

Number of nozzles attached	Nozzle orifice diameter (mm)	Spray capacity (L/min) [for reference only]					
		0.3 MPa	1 MPa	3 MPa	5 MPa	10 MPa	15 MPa
2	1.4	4.2	7.6	12.5	16.2	22.9	28.0
	1.9	7.7	13.9	23.2	30.0	41.9	51.4
	2.2	10.2	18.4	30.8	39.8	55.6	68.2
	2.4	12.0	21.7	36.3	46.9	65.5	80.3
3	1.4	6.3	11.3	18.8	24.2	34.3	42.0
	1.7	9.2	16.6	27.9	36.0	50.4	61.7
	1.9	11.3	20.4	34.1	44.1	61.5	75.5
	2.2	14.6	26.4	44.3	57.2	80.0	98.0
6	1.0	6.4	11.6	19.5	25.2	35.2	43.1
	1.2	9.2	16.6	27.8	35.9	50.2	61.5
	1.4	12.2	22.1	36.7	47.3	67.0	82.0
	1.6	15.5	28.0	46.9	60.5	84.7	103.7

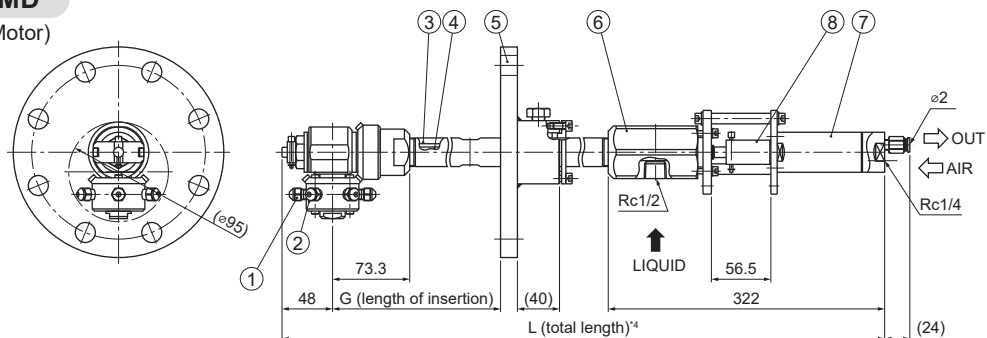
RJ3-MD SERIES with Air/Electric Motor for Powerful Cleaning

Drawing

Unit: mm

RJ3-AMD

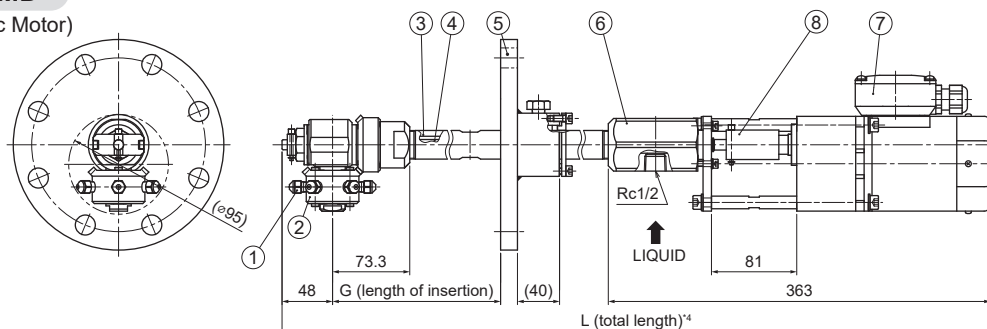
(with Air Motor)



- ① Nozzle ② Nozzle header ③ Pipe (3/4B x Sch160 equiv.) ④ Rotating shaft ⑤ Flange
⑥ Adaptor for high-pressure water supply ⑦ Air motor ⑧ Motor coupling adaptor

RJ3-EMD

(with Electric Motor)



- ① Nozzle ② Nozzle header ③ Pipe (3/4B x Sch160 equiv.) ④ Rotating shaft ⑤ Flange
⑥ Adaptor for high-pressure water supply ⑦ Electric motor ⑧ Motor coupling adaptor

■ Dimensions and weight

Length type	Outer dimensions (mm)		Diameter required for insertion (mm)	Approx. weight (kg) w/o flange
	L (total length) ⁴	G (length of insertion)		
A	AMD 870	150-380	95	11
	EMD 911			14
B	AMD 1370	150-880	95	13
	EMD 1411			16
C	AMD 1870	150-1380	95	15
	EMD 1911			18
D	AMD 2170	150-1680	95	16
	EMD 2211			19

Note:
A diameter of more than 95 mm is needed to insert the nozzle unit.

⁴The total length L differs for each motor. Select from the above A to D.

HOW TO ORDER

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

Example: RJ3-AMD 6 - ϕ 1.4 - 4T5 $\times$ B - BF E*** S304

RJ3 - AMD 6 - ϕ 1.4 - 4T5 $\times$ B - BF E*** S304

Motor Type ⁵	Number of Nozzles	Nozzle Orifice Diameter	Total Length ⁴	Buffing ⁶	Spec. Registration No. ⁷
■AMD ■EMD	■2 ■3 ■6	■1.0-2.4 (See the chart on page 23)	■A ■B ■C ■D	■BF (optional)	

⁵ Indicate "AMD" for air motor, or "EMD" for electric motor.

⁶ Buffing is optional, available for extra charge. Leave blank if buffing is not necessary.

⁷ IKEUCHI will assign a number after specification is determined.

Cleaning hard to remove dirt