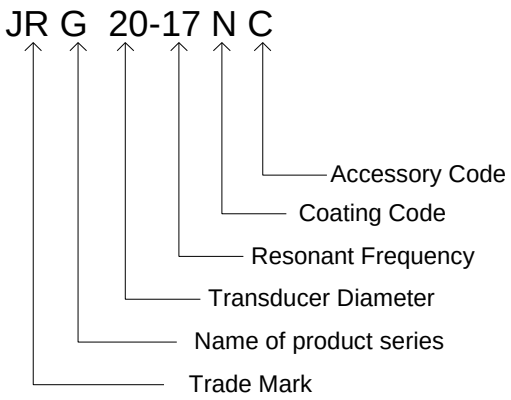
MODEL NO.



MAIN APPLICATIONS

- Nebulizer
- Humidifier
- Other atomizers

FEATURES

- Tiny fog particle (diameter 3 - 6 μm).
- Various coatings selection, anti-corrosive capability.

- Coating Code: N: Nickel; T: Titanium alloy; E: Anti-corrosion
- Accessory Code: including wires, gasket and holder.

SPECIFICATIONS

OUTPUT PERFORMANCE					
Model	Fog Output[2]	Droplet Diameter	Liquid Level	Liquid Temp.	Life Time[1]
	ml/h	μm	mm	°C	hour
JRG12-20	>100	4	30	0~50	10000
JRG12-25	>60	2-3	30	0~50	10000
JRG16-17	>200	4	35	0~50	10000
JRG16-24	>100	4	30	0~50	10000
JRG20-17	>300	4	35	0~50	10000
JRG20-24	>210	2-3	30	0~50	10000
JRG20-25	>200	2-3	30	0~50	10000
JRG20-26	>160	2-3	30	0~50	10000
JRG22-17	>300	4	35	0~50	10000
JRG22-20	>250	4	35	0~50	10000
JRG25-16	>350	4	40	0~50	10000
JRG30-10	>480	6	55	0~50	10000
JRG30-16	>430	4	50	0~50	10000

ELECTRICAL CHARATERISTICS				
Model	Resonant Frequency	Minimum Impedance	Capacitance	Rated Power
	MHz±50kHz	Ω	nF±20%	W
JRG12-20	2.00	<2.5	0.76	15
JRG12-25	2.50	<2.0	0.8	13
JRG16-17	1.68	<2.0	1.0	18
JRG16-24	2.40	<2.0	1.4	13
JRG20-17	1.68	<2.0	1.7	23
JRG20-24	2.40	<2.0	1.4	15
JRG20-25	2.50	<2.0	1.4	13
JRG20-26	2.60	<2.0	1.8	12
JRG22-17	1.68	<2.0	1.7	23
JRG22-20	2.00	<2.0	1.8	20
JRG25-16	1.65	<2.0	1.7	26
JRG30-10	1.00±5%	<2.0	2.1	38
JRG30-16	1.60	<2.0	3.1	35

[1] The life time that is set to be the period of continuous time where the current level of fog production decreased to 70% relative to initial level. The expected service life depends on input power, liquid quality and liquid temperature. For example, the life expectancy can be increased by lowering rated input power.

[2] Fog output also depends on many external factors such as input power, liquid quality, liquid temperature, liquid level (depth), structure of atomizing device, etc.. Some output characteristics curves are shown in this datasheet. All data of fog output and life time are measured under the rated power in pure water with Siansonic fog testing device.

CORROSION RESISTANCE[1]

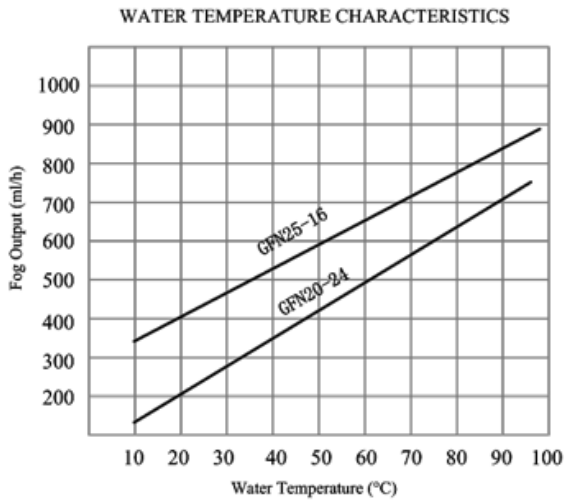
Coating codes: N- Nickel; T- Titanium alloy; E- Anti-corrosion					
Coating	Ph<1 HCl	10% HCl	10% NaOH	30% $C_2H_4O_3$	30% H_2O_2
N	10 hours	10 hours	100 hours	10 hours	100 hours
T	100 hours	20 hours	100 hours	20 hours	100 hours *
E	100 hours	100 hours	100 hours	100 hours	100 hours

[1] Drop corrosive liquid on the working surface of transducer. After a period of time, check the performance in water

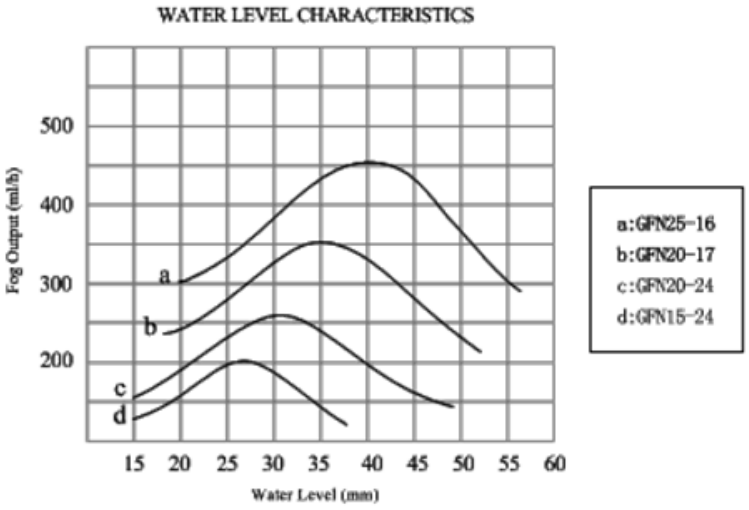
* The T coating is taken off by H2O2 quickly, but the nickel coating layer below T layer is remaining and the transducer works well.

TYPICAL OUTPUT CHARACTERISTICS

Output Characteristics for Various Water Temperature

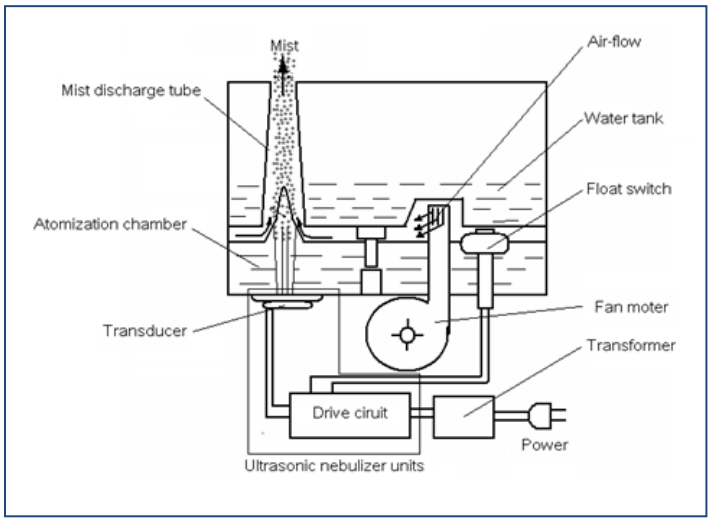


Output Characteristics for Various Water Levels

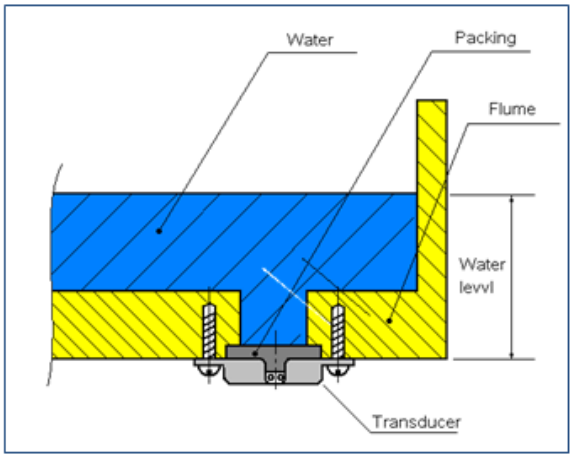


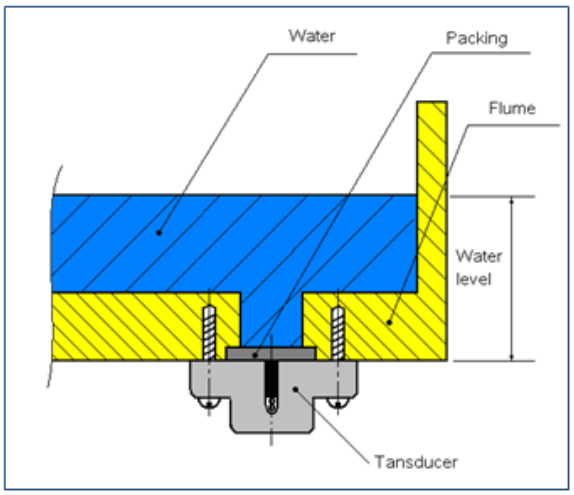
*"GFN" was old part no. which means "JRG" series with nickel coating

EXAMPLE OF AN ATOMIZING EQUIPMENT



INSTALLATION DEMONSTRATION



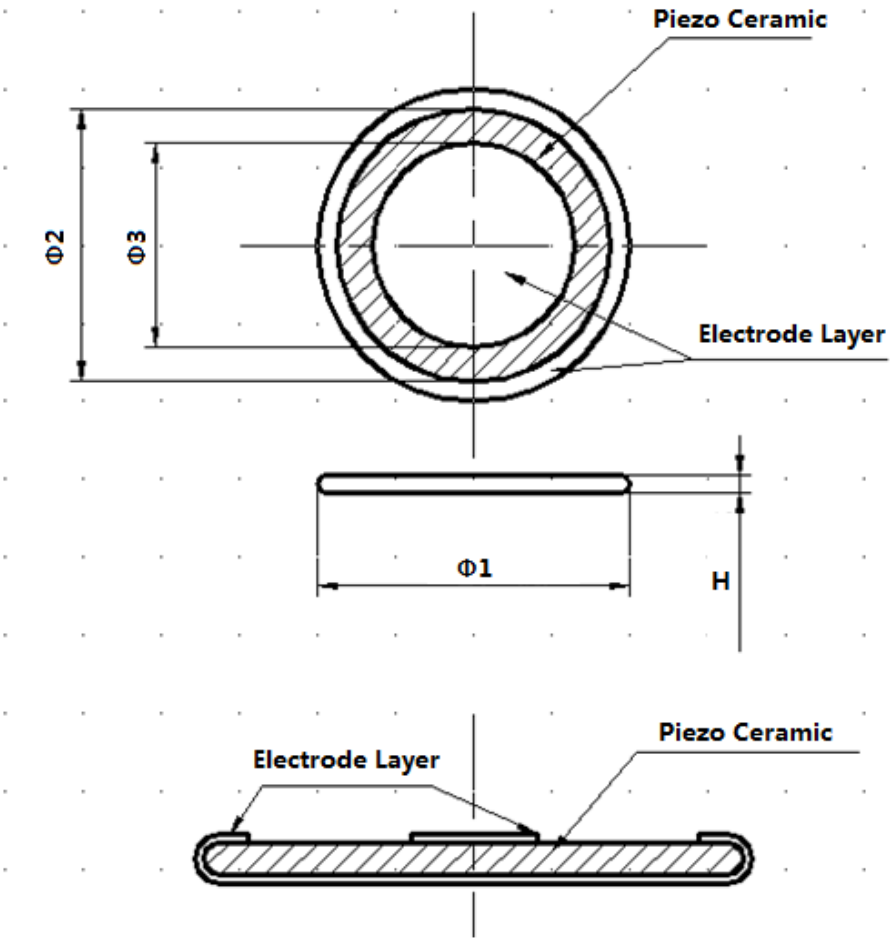


TECHNICAL NOTES

- The transducers (except the anti-corrosion model: coating E) should work in drinking water or similar liquids. If liquids have an acidity of less than pH5, it could make the output performance decay, even permanently destroy the transducer. Therefore, the transducers cannot work in the liquid that is excessively acidic (pH<5).
- Provide a protective “low water” shut-off circuit. The transducers should NEVER work without liquid in contact with them even though in a very short time (a few seconds).
- Design a circuit to assure no voltage difference appears between surface of transducer and water. We highly recommend the float switch for liquid level control. **PLEASE DON’T USE ELECTRODE CONTROL FOR “NO WATER” PROTECTION! OTHERWISE THE TRANSDUCER COATING CAN BE ELECTROLYSED OUT.**
- The surface of transducers should be cleaned at times. It will NOT be considered as the quality problem on transducers, if the atomizing effect of transducers decays due to substances contained in liquid such as Ca, Na, Mg and Si etc. adhering to the transducers surface.

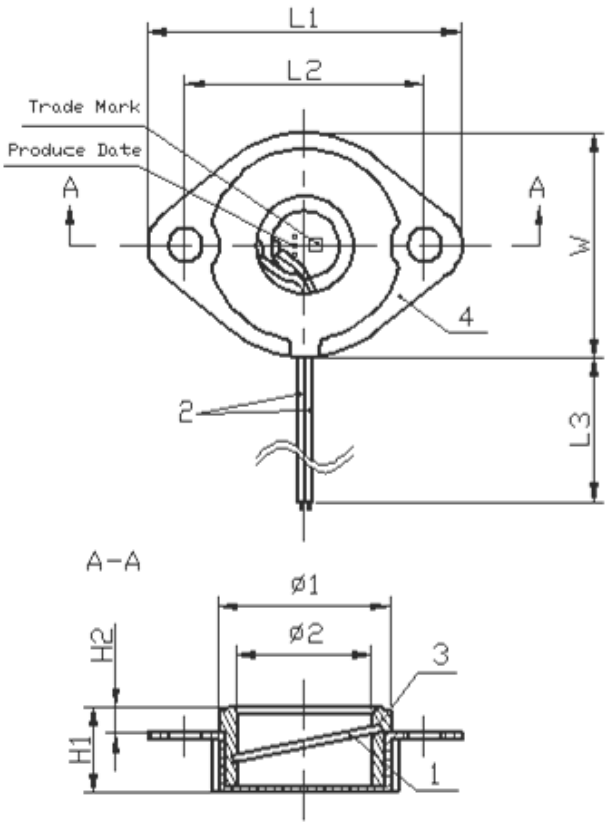
MECHANICAL DIMENSIONS

JRG Accessory Code: No Accessories (disc only)



DIMENSIONS (mm)				
Model	Φ1	Φ2	Φ3	H
JRG20-17	20	17.5	13	1.22
JRG20-24/25/26	20	17.5	10	0.85
JRG22-17	22	19.8	13	1.22
JRG22-20	22	19.8	13	1.0
JRG25-16	25	21.6	13.5	1.22
JRG16-17	16	14.6	10.2	1.22
JRG16-24	16	14.6	10.2	0.85
JRG30-16	30	27.7	18.8	1.3

JRG Accessory Code: C



No.	Qty.	Description
1#	1	Piezoelectric Ceramic
2#	2	Wires
3#	1	Sealing Ring/Gasket
4#	1	Metal Holder

DIMENSIONS (mm)

Model	Φ1	Φ2	H1	H2	L1	L2	L3	W
JRG20-17/24/25/26	23.7	17	11.5	3.5	42	32	80	30
JRG12-20/25	15	9	6.8	2	30	22	60	18.6

Please ask supplier for more accessory options and dimension details

Siansonic Technology Co., Ltd. reserves the right to alter or improve the specification, internal design or manufacturing process at any time, without notice. Please check with your supplier or visit our web site to ensure that you have the current and complete specification for your product before use.

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