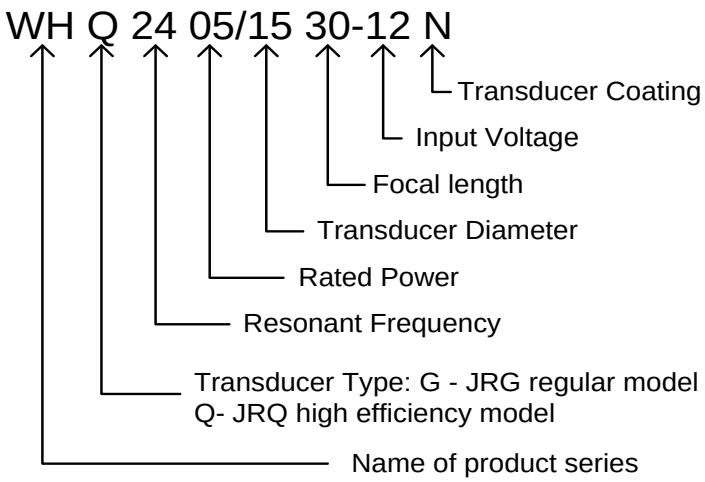
MODEL



MAIN APPLICATIONS

- Nebulizer
- Humidifier
- Other atomizers

FEATURES

- Flexible for OEM design
- Tiny fog particle (diameter 1- 4 μm).
- Work in both water and other liquid inc. corrosive liquid
- Abundant negative ions produced, about 30000～150000/cm^3.

SPECIFICATIONS

CHARACTERISTICS					
Model	Input Voltage	Power	Droplet Size	Flow Rate[2]	Life Time[1]
	V(DC)	W	μm	ml/h	hour
WHG1730/20-48	48	30	4-5	>380	3000
WHG1723/20-48*hot*	48	23	4-5	>300	10000
WHG1720/20-36*hot*	36	22	4-5	>250	10000
WHG2415/20-24*hot*	24	15	3	>180	10000
WHQ1718/2060-36	36	18	4	>250	10000
WHQ2018/2060-36	36	18	3	>250	10000
WHQ2412/2060-24	24	12	2-3	>150	10000
WHQ2407/1530-12*hot*	12	7	2-3	>70	10000
WHQ2405/1530-12	12	5	2-3	>50	15000
WHQ2403/1530-12	12	3	2-3	>30	20000
WHQ3005/1530-12*hot*	12	5	1-2	>40	15000
WHQ3003/1530-12*hot*	12	3	1-2	>25	20000
WHQ3002/1530-05*hot*	5	2	1-2	>5	20000

Frequency	Water Level	Water Temp.	Water Quality	Weight
MHz	mm	°C	---	kg
1.7	30-40	0-50	Pure Water	0.08
1.7	30-40	0-50	Pure Water	0.08
1.7	30-40	0-50	Pure Water	0.08
2.4-2.5	25-35	0-50	Pure Water	0.08
1.7	25-35	0-50	Pure Water	0.08
2.0	25-35	0-50	Pure Water	0.08
2.4-2.6	25-35	0-50	Pure Water	0.08
2.4-2.6	18-28	0-50	Pure Water	0.08
2.4-2.6	18-28	0-50	Pure Water	0.08
2.4-2.6	18-28	0-50	Pure Water	0.07
3.0	18-28	0-50	Pure Water	0.07
3.0	18-28	0-50	Pure Water	0.07
3.0	18-28	0-50	Pure Water	0.07

[1] The life time that is set to be the period of continuous time where the current level of fog production decreased to 60% 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] Flow rate also depends on many external factors such as input power, droplet size (frequency), 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]

Transducer 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] To estimate the corrosion resistance of transducers, drop some corrosive liquid on the working surface of transducer. After a period of time, check the fog output in water which needs to reach the rated value.

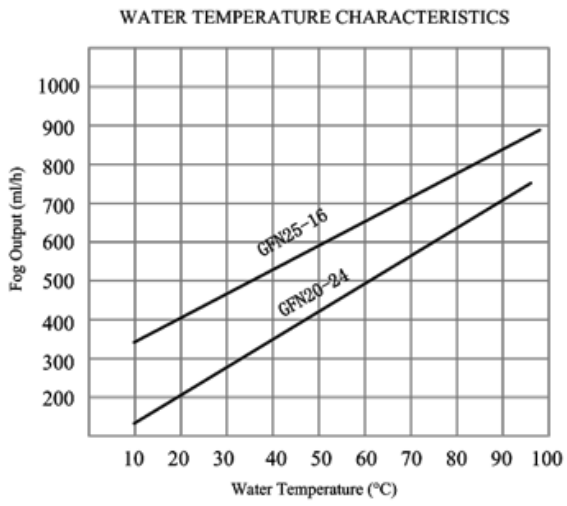
* The T coating is taken off by H2O2 quickly, but the nickel coating layer below T layer is remaining and the transducer works well.

DIMENSIONS OF THE TRANSDUCER (mm) *Drawing in page 7*								
Model	**Φ1**	**Φ2**	**H1**	**H2**	**L1**	**L2**	**L3**	**W**
WHG1730/20-48	23.7	17	11.5	3.5	42	32	300	30
WHG1723/20-48	23.7	17	11.5	3.5	42	32	300	30
WHG1720/20-36	23.7	17	11.5	3.5	42	32	300	30
WHG2415/20-24	23.7	17	11.5	3.5	42	32	300	30
WHQ1718/2060-36	23.7	17	11.5	3.5	42	32	300	30
WHQ2018/2060-36	23.7	17	11.5	3.5	42	32	300	30
WHQ2412/2060-24	23.7	17	11.5	3.5	42	32	300	30
WHQ2407/1530-12	19	12	8.7	2.7	34	26	200	23.5
WHQ2405/1530-12	19	12	8.7	2.7	34	26	200	23.5
WHQ2403/1530-12	19	12	8.7	2.7	34	26	200	23.5
WHQ3005/1530-12	19	12	8.7	2.7	34	26	200	23.5
WHQ3003/1530-12	19	12	8.7	2.7	34	26	200	23.5

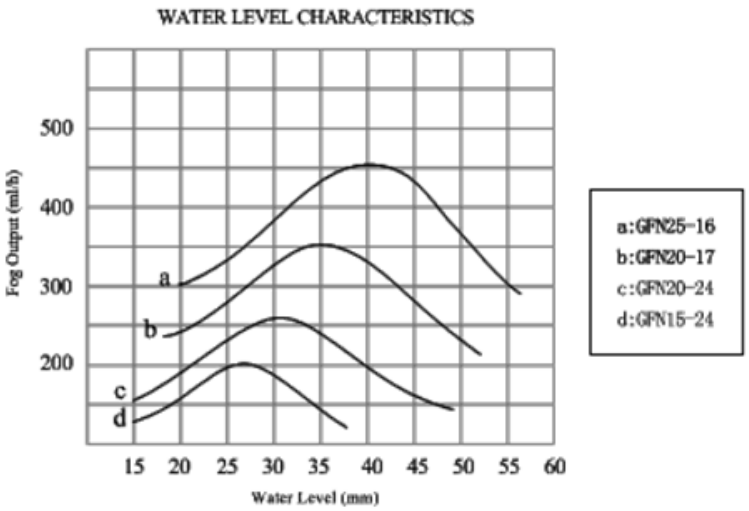
DIMENSIONS OF PCB (mm) *Drawing in page 7*					
Model	**H3**	**L4**	**L5**	**L6**	**W1**
WHG1730/20-48	36	70	63	55	41
WHG1723/20-48	36	70	63	55	41
WHG1720/20-36	36	70	63	55	41
WHG2415/20-24	32	60	53	45	36
WHQ1718/2060-36	36	70	63	55	41
WHQ2018/2060-36	32	60	53	45	36
WHQ2412/2060-24	32	60	53	45	36
WHQ2407/1530-12	32	60	53	45	36
WHQ2405/1530-12	32	60	53	45	36
WHQ2403/1530-12	32	60	53	45	36
WHQ3005/1530-12	32	60	53	45	36
WHQ3003/1530-12	32	60	53	45	36

OUTPUT CHARACTERISTICS

Output Characteristics for Various Water Temperature



Output Characteristics for Various Water Levels

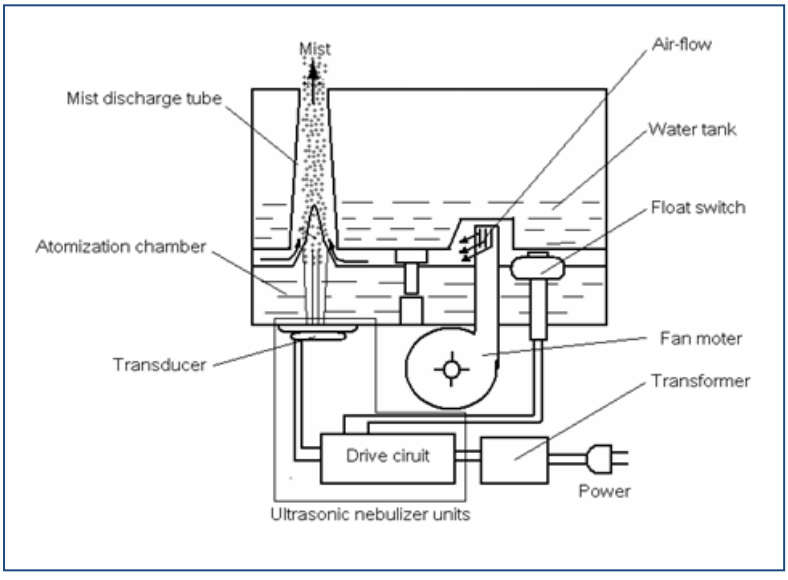


*"GFN" was old part no. which means "JRG" series with nickel coating

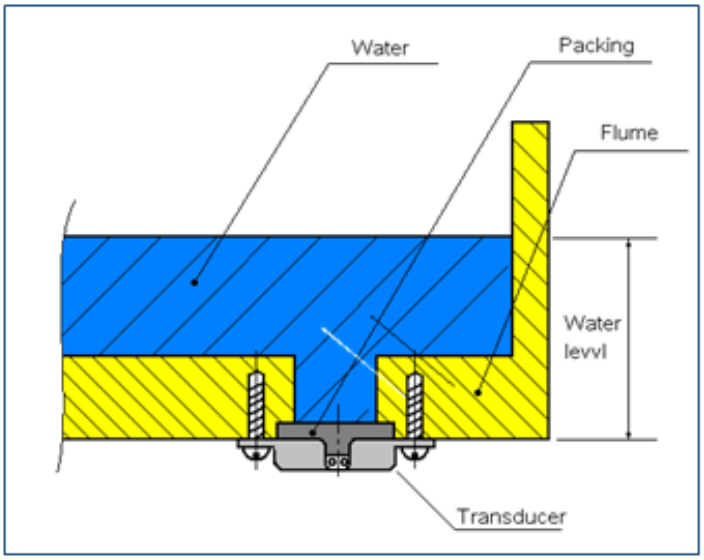
TECHNICAL NOTES (IMPORTANT)

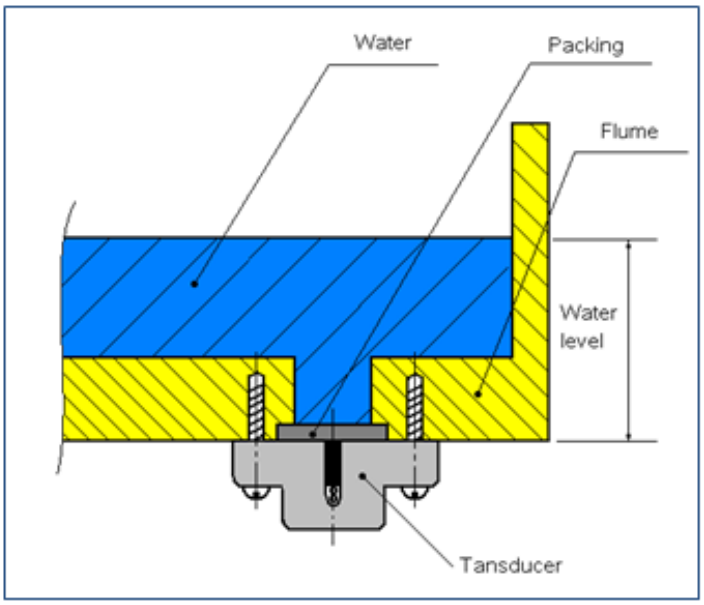
- Air cooling MUST be applied to the heatsink on PCB. Otherwise, the circuit will be burnt shortly.
- 'VR' port on the PCB is used for power control by connecting a 5.1kΩ voltage regulator (variable resistor). When 'VR' port is in 'short-circuit', the power is full. When 'VR' port is off, the power is zero. Therefore, 'VR' port is normally used for the power switch as well.
- Please make sure the transducer has been connected to PCB before switching on the circuit. PCB will be burnt without the transducer connected.
- The transducers should NEVER work without liquid in contact with them even though in a very short time (a few seconds). Recommend to provide a protective "low liquid" shut-off circuit.
- Make sure 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 "LOW WATER" PROTECTION! OTHERWISE THE TRANSDUCER COATING CAN BE ELECTROLYZED OUT.
- Transducers (except the anti-corrosion model) 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, if the liquid is strong acid (PH<5), you should select anti-corrosion model or contact us for technical suggestions.
- 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.

EXAMPLE OF AN ATOMIZING EQUIPMENT



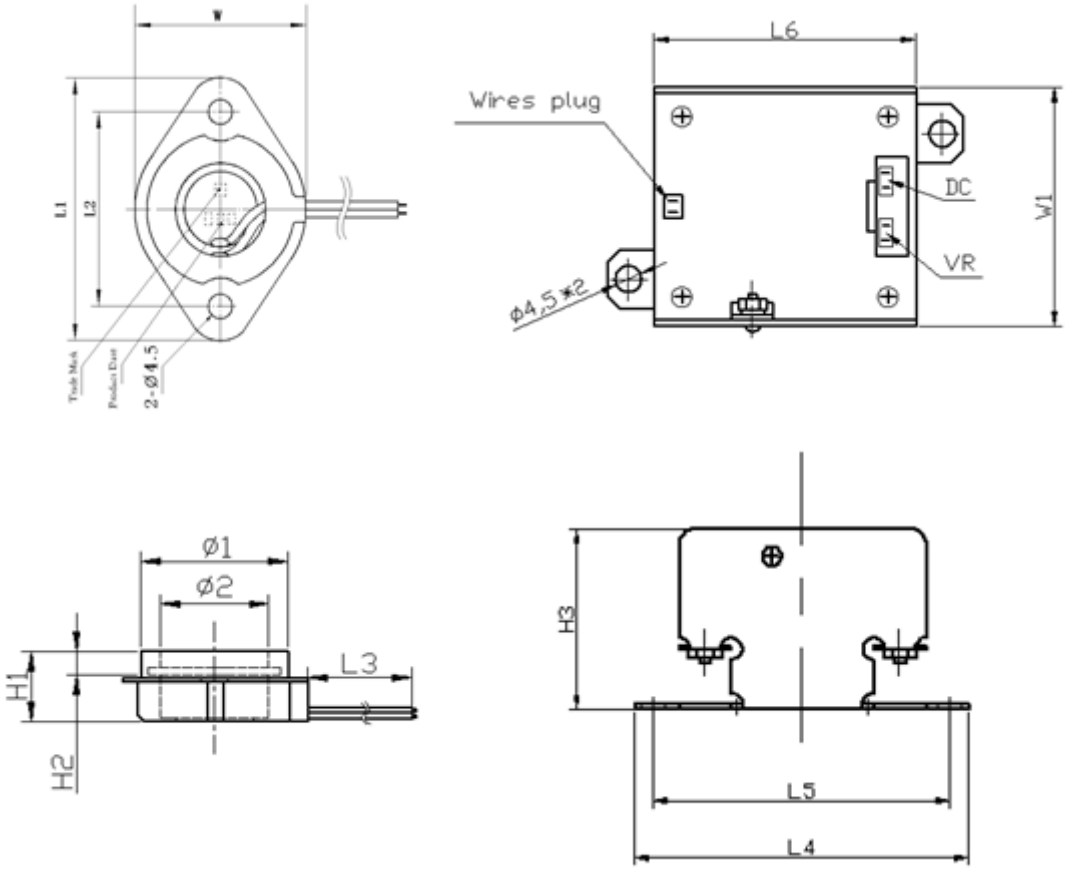
INSTALLATION DEMONSTRATION





MECHANICAL DRAWING

WH



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