



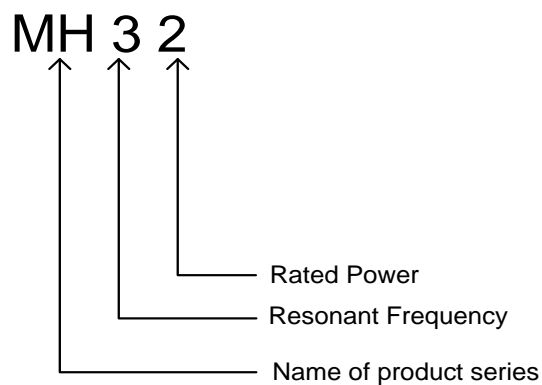
MAIN APPLICATIONS

- Portable Nebulizers
- Medical Inhalant

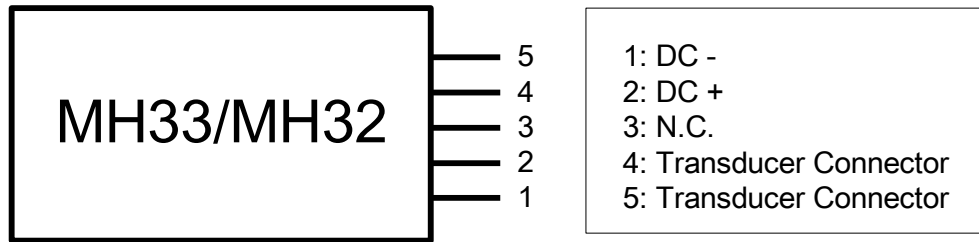
FEATURES

- Very compact design: The size of drive circuit is like a coin;
- Low power: 2-3W, 12Vdc
- No clogging problem;
- Tiny fog particle (diameter 1- 2 μm);
- Very long lifetime: 10000 hours for transducer's life;
- Workable for both water and other liquid inc. corrosive liquid;
- Abundant negative ions produced, about 30000~150000/cm³.

MODEL NO.



PIN CONFIGURATIONS



SPECIFICATIONS

CHARACTERISTICS

Model	Input Voltage	Power	Frequency	Droplet Size	Flow Rate ^[2]	Life Time ^[1]
	V(DC)	W	MHz	µm	ml/h	hour
MH32	12	2	3.0	1-2	>10	10000
MH33	12	3	3.0	1-2	>25	10000

OPERATION CONDITION

Model	Liquid Level ^[3]	Liquid Temperature	Liquid Quality ^[4]
	mm	°C	---
MH32	18-28	0-50	Water or low corrosive liquid
MH33	18-28	0-50	Water or low corrosive liquid

Notes

[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 (fog output) 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.. All data of fog output and life time are measured under the rated power in pure water with Siansonic fog testing device.

[3] Liquid level means the length from the centre of transducer disk to the liquid surface. Please check Fig. 1 for reference. The nebulizer kit can get the best performance by working within the liquid level range shown in the table.

[4] The nebulizer should normally work with water or low corrosive liquid. There is also the anti-corrosion model for the operation with corrosive liquid. The corrosion resistance data of transducer is shown in Page .

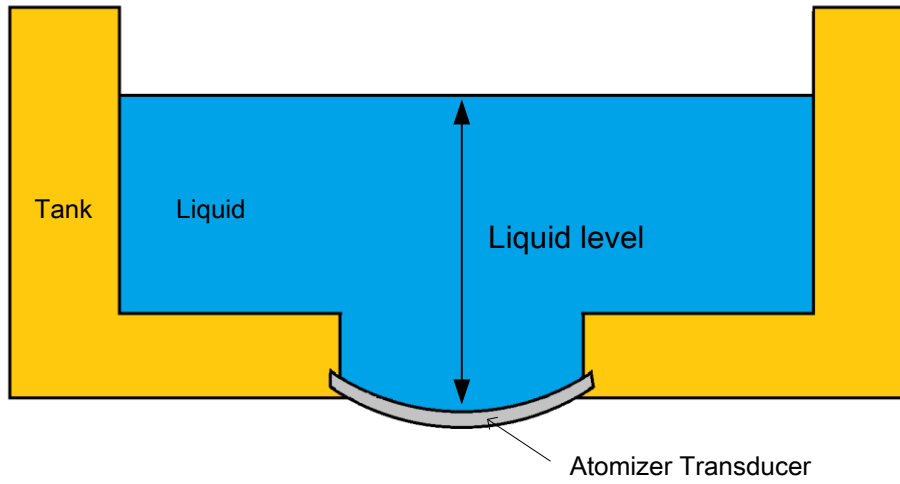


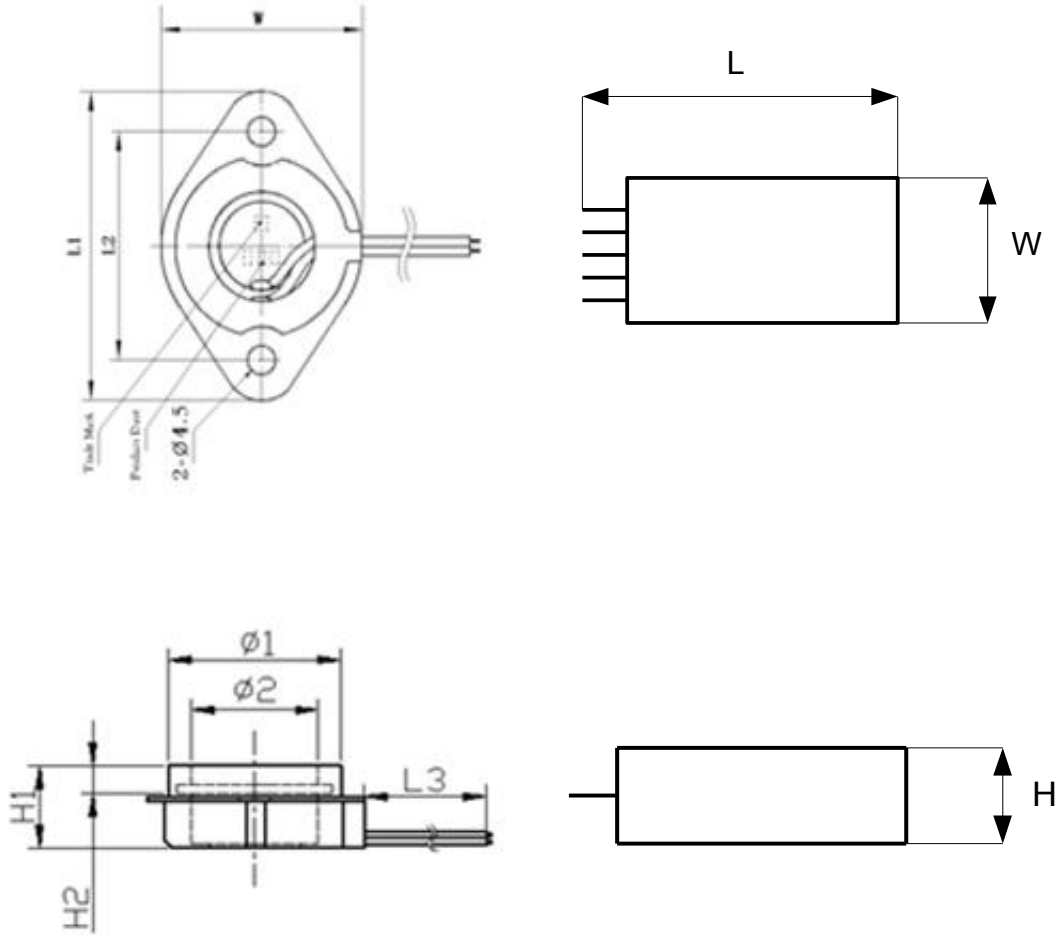
Fig. 1 Demonstration of liquid level

CORROSION RESISTANCE ^[1]

Transducer Coating Codes: N- Nickel; E- Anti-corrosion					
Coating	PH<1 HCl	10% HCl	10% NaOH	30% C ₂ H ₄ O ₃	30% H ₂ O ₂
N	10 hours	10 hours	>100 hours	10 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.

MECHANICAL DRAWING



DIMENSIONS OF THE TRANSDUCER (mm)								
Model	Φ1	Φ2	H1	H2	L1	L2	L3	W
MH32 / MH33	19	12	8.7	2.7	34	26	200	23.5

DIMENSIONS OF DRIVE CIRCUIT (mm)			
Model	L	W	H
MH32	26	15	10
MH33	31	15	10

TECHNICAL NOTES

- **Air cooling should be applied to the heatsink on PCB.** Otherwise, the circuit may be burnt after a long time operation.
- **Please make sure the transducer has been connected to PCB before switching on the circuit.** PCB may 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).
- Make sure there is no voltage difference between surface of transducer and liquid.
- 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.

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.

© Siansonic Technology Co., Ltd. 2012 MNK_MH.1

No part of this publication may be copied, transmitted or stored in a retrieval system or reproduced in any way including, but not limited to, photography, photocopy, magnetic or other recording means, without prior written permission from Siansonic Technology Limited. Instructions for use are available from www.siansonic.com

Siansonic Technology Co., Ltd.

No.1, Xingguang 5th Street, Opto-Mechatronics Industrial Base, Tongzhou Park,
Zhongguan Village Technology Park 101111, Beijing, China

Tel: +86 10 81502288

Fax: +86 10 81502688

E-mail: info@siansonic.com