



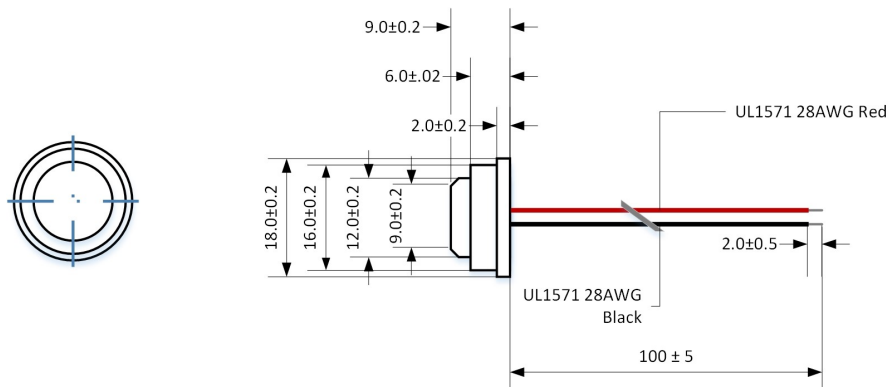
Part Number: HT0008-001

Model Number: AW9Y0200K02Z-01

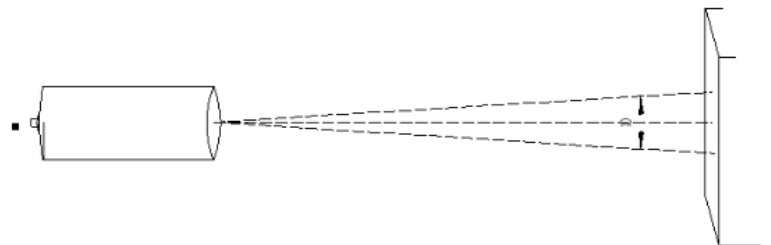
Overview

The Natural Gas flow sensor is the core component of an ultrasonic gas meter, which is an ultrasonic sensor for the gas medium. This gas flow sensor has utilized novel acoustic matching material to enhance the transmission ability of an ultrasonic signal in the gas medium. It can be used in the flow measurement of various gases, such as natural gas, coal gas, etc.

Appearance and Dimensions, Unit: mm



Directivity Test



Overall Sensitivity -6db range

TENTATIVE RELEASE:

This specification is based on design objectives and is strictly Preliminary and subject to change. Test data may exist, but this specification is subject to change based on the results of additional testing and evaluation. Application specific specifications will be produced for approval prior to production product being released.

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Electrical Specifications:

No.	Items	Specification	Note
1	Nominal Drive Frequency	200kHz	
	Nominal Frequency	215±10kHz	By impedance analyzer Agilent 4294A
2	Overall Sensitivity	2.7±1.5Vp-p	With AW tester
			Drive signal: Burst with 15Vp-p
			Drive frequency: 200kHz
			Drive wave number: 12 cycles
			Amplification rate 1000 times
	Distance between the sensor and Ø50PVC pipe reflection target: 200mm		
3	Directivity	15±2°	at -6dB
4	Capacitance	1300 ± 20% pF	At 1kHz, 25 ± 3°C
5	Insulation Resistance	100Mohm Min.	At 100V DC
6	MAX Input Voltage	100Vp-p	Drive 0.6mS, interval 20mS Drive frequency: 200kHz
7	Operating Temperature Range	-20°C ~ +70°C	
8	Storage Temperature Range	-30°C ~ +70°C	
9	Operating Humidity Range	15 ~ 90% RH	Use without condensation
10	Storage Humidity Range	10 ~ 90% RH	Use without condensation
11	MAX Pressure Endurance	0.2MPa	Natural gas
12	IP class	IP65	
13	Pull force	>4.9N	

Standard Test Condition: 25±3 °C, 45 ~ 65% RH

Revision History:

Version	Date (MM/DD/YY)	DWN	Statement
A1	12/31/2013		Specifications

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