WAFS-104 INSERTION TYPE THERMAL MASS FLOW SENSOR

WISE AIR 4.0®

MEASURE TO MANAGE

2025

Smart Measurement Solutions for Compressed Air and Gases

WISEAIR TECHNOLOGIES INDIA LLP

www.wiseair.in

About Us

Our Vision At WiseAir Technologies is to Offer Our Customers With Innovative and Advanced Measurement Solutions for Compressed Air and Gases at Affordable Costs. With Over 22 Years Experience in The Field of Compressed Air Management, We Have Developed Products that are More Accurate, Smart, Reliable, State-Of-The-Art and Easy to Use. We Aim to Transform The Traditional Manufacturing and Industrial Practices With Our Latest Smart Technologies. Hence We Primarily Focus On Offering Products Which Use Large-Scale Machine To Machine Communication (M2M) and Industrial Internet of Things (IIoT) To Provide Increased Automation, Improved Communication, Self Monitoring To Analyze and Diagnose Issues Without The Need For Human Intervention. Our “WA“ Range of Smart IIOT Sensors, Can Be Easily Networked Together With Manufacturing And Energy Management Softwares. This Connectivity Allows For Seamless Data Collection, Exchange and Analysis To Potentially Facilitate Improvements In Productivity And Efficiency Resulting In Huge Economic Benefits.

Our Network

Our Smart Sensors are Developed with Design and Technology Support from Our Partners Across North America, Europe and Asia. With Our Strong Network of Partners, we offer Seamless and Best-in-Class Service to Our Customers.

Artificial Intelligence & Machine Learning Software

Our software are programmed to analysis and self Diagnose the Measured Datas

Smart IIOT Sensors

For measurement of Flow, Power, Dew Point and Pressure

Product Experts

Product Specialists with Decades of Experience in Compressed Air Measurement and Management

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INTRODUCING THE WAFS-104
INSERTION TYPE THERMAL MASS FLOW SENSOR

Technical Data Sheet

Measuring Range	
Flow Range	0(0.1) ... 250 Nm/s
Accuracy	±(1% reading + 0.3% Full Scale)
Sample Rate	Sample Rate
Reference Cond	20°C, 1 bar(a) - ISO 1217 (Programmable)
Processed Medium (Gas Type)	Compressed Air, Argon (Ar), Carbon Dioxide (CO_2), Helium (He), Hydrogen (H_2), Natural Gas (Ng), Nitrogen (N_2), Nitrous Oxide (N_20), Oxygen(O_2) For use in other gases, Specify gas Composition

Communication Output	
Analog (Standard)	4...20 mA (Isolated) / Pulse Output
Digital (Standard)	RS485, MODBUS RTU Protocol
Connector	2 x 5 - pin M12, Female

Power Supply	
Input	18 to 30V / 5W

Display	
Display	1.5" LCD with Capacitive Touch Panel

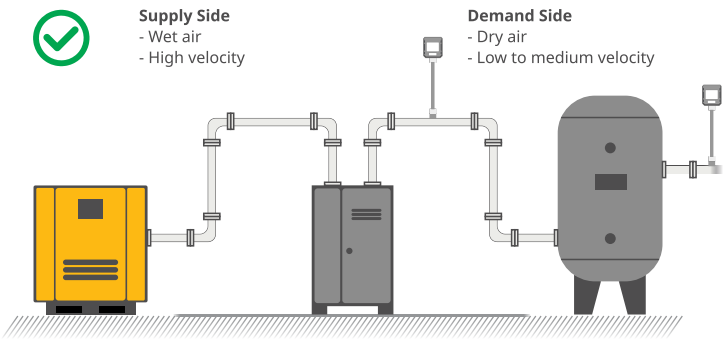
Operating Environment	
Op. Temp	-30 ... +70 °C
Medium Temp	-40 ... 150 °C
Op. Pressure	0...5.0 MPa (>1.6 MPa need Installation Device)

Others	
Casing	Aluminium
Process Conn	G1/2" (ISO 228-1)
EMC	According to IEC 61326-1

FULL DIGITAL SIGNAL PROCESSING FOR HIGHER PRECISION AND BETTER STABILITY

- Thermal Mass Flow, Independent of Temperature and Pressure Change, Integrated Temperature Measurement.
- Ultra-Wide 1:2500 Turndown Ratio, Measurement Range from 0.1 Nm/s to 250 Nm/s.
- Full Electrical Isolation thoroughly Filter out Disturbance 1.5" Ultra-Wide Viewing Angle LCD with Capacitive Touch.
- No Moving Parts, Low Pressure Drop.
- Standard Rs485 Modbus RTU Interface and 4-20mA Current / Pulse Output.
- Suitable for Dn20 to Dn300, can be Installed Online through 1/2" Ball Valve Under Pressure.

Correct Installation



COLOUR GRAPHIC DISPLAY FOR ONLINE VALUES AND SENSOR SETTING

Flow Range

Pipe Size		Flow Range (cfm)		
DN	ID(mm)	Min Flow (cfm)	Std. Range Max Flow (cfm)	High Range Max Flow (cfm)
20	20	0.06	79	166
25	25	0.12	124	260
32	32	0.18	204	425
40	40	0.29	319	666
50	50	0.41	499	1040
65	65	0.71	843	1757
80	80	1.06	1278	2662
100	100	1.65	1996	4160
125	125	2.59	3120	6499
150	150	3.77	4493	9360
200	200	6.65	7986	16639
250	250	10.42	12479	25999
300	300	14.95	17970	37439

Ordering Code

- **WAFS 104 - A**

  Thermal Mass Flow Sensor Insertion Type 250mm Shaft, Measuring Range 0..250 Nm/s, 1.5" Display with Capacitive Touch Panel.

- **WAFS 104 - B**

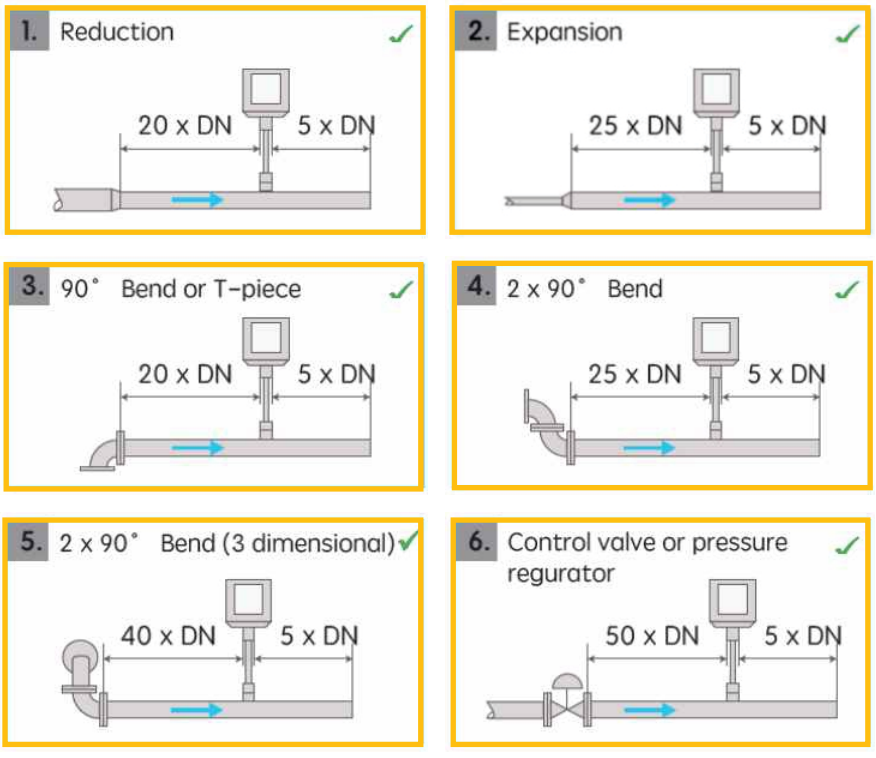
  Thermal Mass Flow Sensor Insertion Type 400mm Shaft, Measuring Range 0..250 Nm/s 1.5" Display with Capacitive Touch Panel.

Applications

- **Thermal Mass Flow Meters are Widely Used in Industrial Processes, Chemical, Petrochemical, Power Engineering, etc.**
- **Compressed Air Consumption Measurement.**
- **Determination of Gas Leakage / Leakage Rate.**
- **Gas Consumption Measurement of a Single Machine / Plant.**
- **Process Gas Measurement, such as Nitrogen, Carbon Dioxide, Oxygen, etc.**
- **Nitrogen Generator.**

Correct Installation

DN = Pipe Diameter



For More Info
SCAN HERE

UNDERSTAND COMPRESSED AIR SYSTEM DYNAMIC WITH OUR ADVANCED MEASUREMENT SOLUTIONS

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