Air Velocity

S-type Pitot tube

AFMS-160

High temperature resistance
Corrosion resistant, Anti-clogging
Data convert to flow rate quickly

| Feature |

- Stainless steel, high temperature, corrosion resistant
- Large, open tip design resists fouling
- Can be used in harsh environments, exhaust gas emission, environmental protection engineering
- Connect with eYc pressure transmitter PHM33/P064/P063 to measure the dynamic pressure(ΔP) of the airflow in the pipeline and calculate the wind speed and air volume and temperature. ※PMM/P063 with SD06 display function
- Can be customized according to customer needs

| Introduction |

The AFMS-160 “S” type stainless steel pitot tube is designed specifically for flow measurement of dirty, particulate laden air or gas streams typical in smoke stack and other environmental testing. strength, and long term durability.
Designed for measuring the flow velocity of the gas fluid in the chimney and the environment, prevents clogging of soot under harsh conditions, Large, open tip design resists fouling. Monitor or control air velocity or air flow in particulate laden air streams.

Function is to measure a local velocity of the point, can be used in technological research, production, environmental protection, mine ventilation and tunnel construction, is a widely, and can be used to measure the pressure of the fluid.

Application:
Ventilation pipes / Flue industry / Exhaust gas emission / Environmental protection engineering / Air conditioning systems / Vacuum cleaning. Especially high temperature and chimney, wind speed measurement of dusty air and high flow rate in environmental testing.

| Specification |

Item		Function & Parameter
Output	Operating pressure	Max 10 bar
	Operating temperature	800°C
	Measuring medium / coefficient	Air / flow coefficient(K) : 0.84
Installation mounting	Tube / flue installation	Tube type
Material	Measuring tube	SUS316
	Connection screw	Copper or stainless steel (optional)
Connection screw	Installation connection	1 ... 12" below 3/4" PT movable thread 18 ...60 " below 1" PT movable thread
Connecting pipe	Outlet connection	1/8" G inside thread or 1/4" G inside thread
	Length (mm)	25/50/100/150/200/300/450/600/800/1000/1500mm Customization

| Air Velocity formula |

■ Flow rate formula

$$V = K\sqrt{\frac{2}{\rho}\Delta P}$$

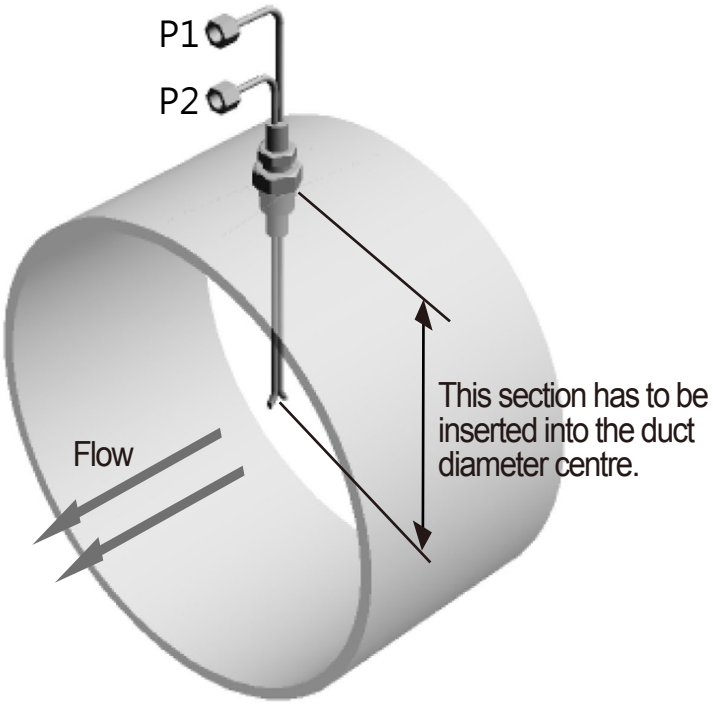
■ Flow formula

$$qv = K\varepsilon A\sqrt{\frac{2}{\rho}\Delta P}$$

$$qm = qv \times \rho$$

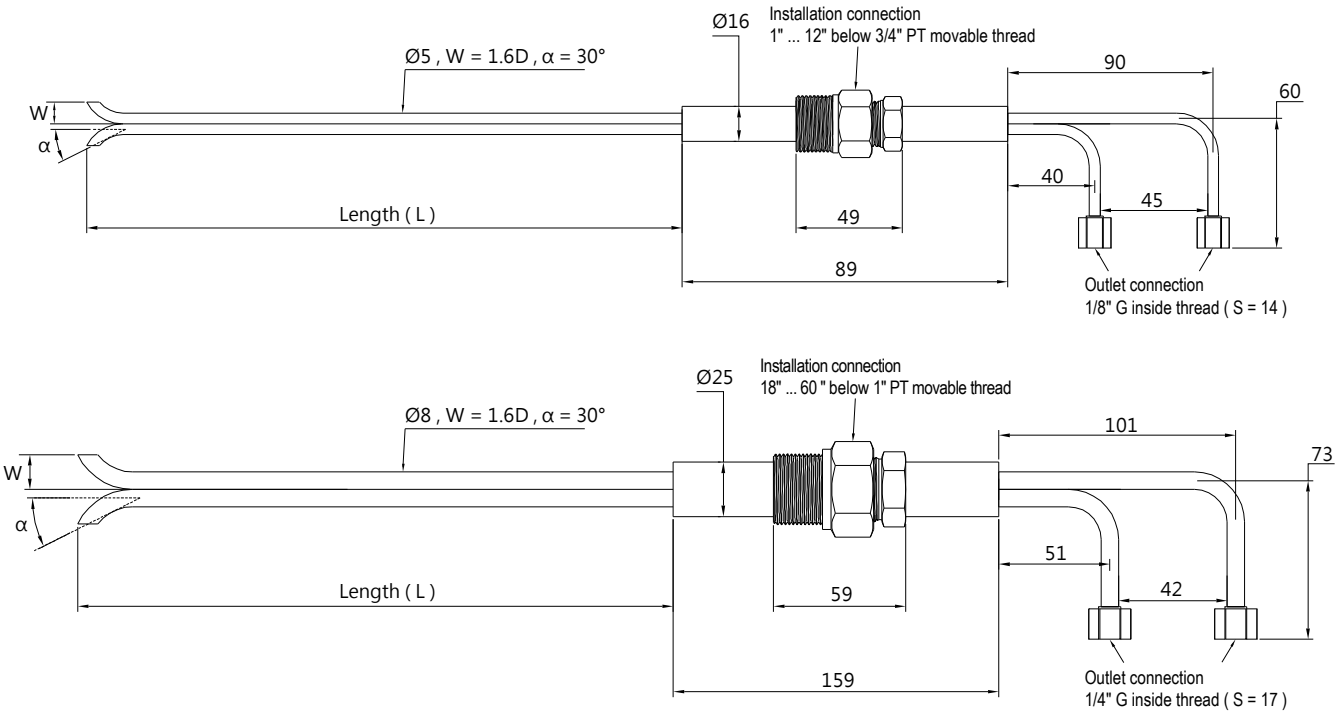
v = velocity of the liquid (m/s)
ΔP = Difference between total pressure and static pressure (dynamic pressure), Pa
ρ = Flow density (kg/m3)
K = Flow coefficient
qv = Volume flow of liquid (m3/s)
qm = Mass flow of liquid (kg/s)
K = Flow coefficient of average flow measuring
ε = Inflation coefficient of liquid going thru measuring tube during operation
A = Cross-sectional area of duct during operation (m2)

| Installation direction |



| Dimension |

Unit : mm



| Ordering Guide |

Length

AFMS-160 - 800

025	25mm(1”)
050	50mm(2”)
100	100mm(4”)
150	150mm(6”)
200	200mm(8”)
300	300mm(12”)
450	450mm(18”)
600	600mm(24”)
800	800mm(32”)
1000	1000mm(40”)
1500	1500mm(60”)
W	Customization

| Additional option（ILAC／TAF）Test report |

Additional option (ILAC/TAF) Test report -Standard Calibration laboratory(Leb number: 3032)

Project	Measurand level or range
Anemometer	0.2 ... 60m/s(8 basic points on average or specified by customer)