Pitot tube

Description

The pitot tube is used for measuring air flow in ducts. It produces a small differential pressure which varies with the velocity of the air. This pitot tube has multiple ports along the length of the pitot which produce an average of the air speed in the duct. It is easy to install and cost effective. It offers simple, low cost installation into pipes and ducts, and high energy savings due to its low unrecovered pressure loss. There are no moving parts or sharp edges to wear, so long term accuracy can be maintained.It contains a rubber cap,Plastic base and two 1 meters length air tube.

Features:
-Air Flow Measurement
-Low Installation Costs
-Long Term Accuracy
-Minimal Unrecovered Pressure Loss

Pitot Extrusion   Air tube   Plastic Base   Rubber cap   Screw

Specifications

Probe	Material	Aluminium alloy
	Dimensions	7.8 x 19.5mm (0.3"x 0.8")
	Tubing inner diameter	Φ3.8mm
Rubber cap	Material	Rubber
	Connections	To suit 4mm (0.16") i/d PVC air tubing
Duct flange	Material	ABS
	Dimensions	30 x 75mm (1.2"X 3")
Air tube	Material	PU
	Dimensions	inside and out side diameter Φ 4 x Φ6mm length 1m

19.5mm
5.3mm
R1.9
R3.9
5.400
7.8mm
R0.5
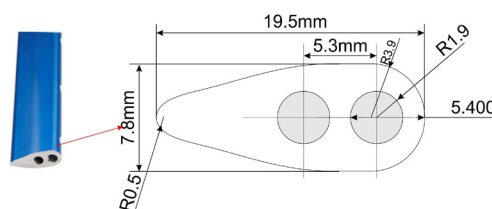
Part Number Scheme

PITO-250

Code	Description
PITO	Pitot Tube

Code	Pitot Length
100	4"
150	6"
200	8"
250	10"
300	12"
1000	39"
*	Other custom lengths are available, no minimum order

Insertion Length A

Overall Length B

75mm

30mm
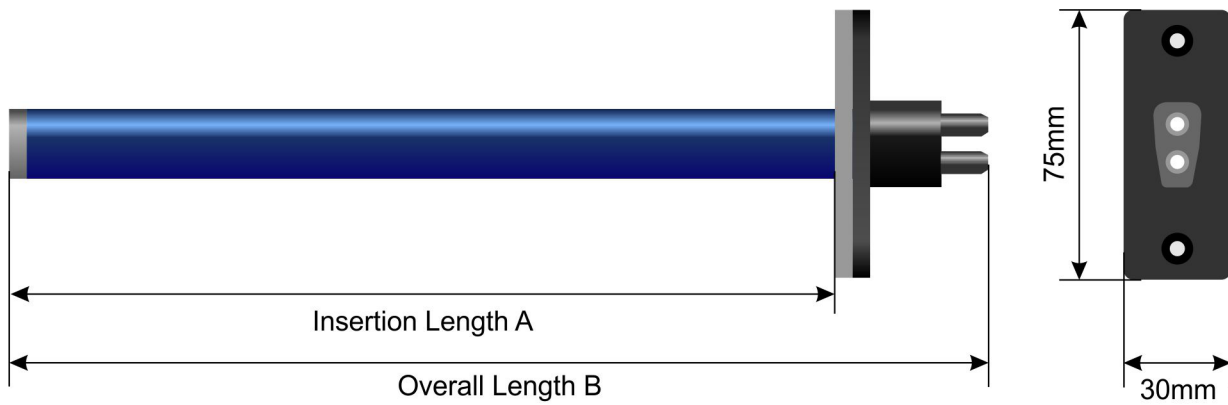
Insertion Length A (mm)	Overall Length B (mm)
150	193
200	243
250	293
300	343
1000	1043
Other custom lengths are available, no minimum order	

K Factor

Velocity (KM/H)	Pitot length(mm) / Fan speed(Hz)	150	200	250	300	350	Average (mBar)	Comments / Remarks
25.2	60	0.420	0.421	0.427	0.424	0.451	0.429	
23.7	55	0.360	0.365	0.377	0.368	0.393	0.373	
21.7	50	0.306	0.307	0.314	0.308	0.332	0.313	
19.8	45	0.245	0.250	0.258	0.251	0.269	0.255	
17.7	40	0.197	0.195	0.198	0.195	0.208	0.199	
15.1	35	0.146	0.148	0.149	0.147	0.156	0.149	
12.6	30	0.103	0.101	0.102	0.100	0.107	0.103	
9.6	25	0.060	0.060	0.059	0.056	0.059	0.059	
7.4	20	0.032	0.033	0.034	0.034	0.036	0.034	

Fan Speed (Hz)	Left Side (KM/H)	Center (KM/H)	Right Side (KM/H)	Averge Speed (KM/H)
60	25.1	24.8	25.6	25.2
55	23.6	23.3	24.1	23.7
50	21.7	21.2	22.2	21.7
45	19.6	19.4	20.3	19.8
40	17.7	17.4	17.9	17.7
35	15.1	14.8	15.4	15.1
30	12.8	12.4	12.6	12.6
25	9.6	9.4	9.7	9.6
20	7.7	7.2	7.4	7.4

Velocity(KM/H) column data in up table is same as Average speed(KM/H) column data in below table.
Average speed(KM/H)=(left side(KM/H) + center(KM/H) + right side(KM/H)) /3
Average(mBar)=(150column + 200column + 250column + 300column+ 350column) /5

Pitot tube

Instructions for installation

1 Duct orientation and sensor mounting

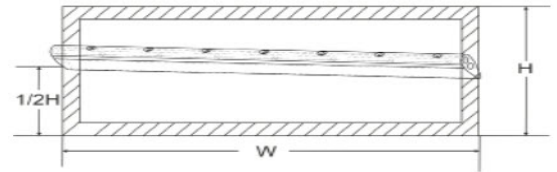| circular duct installation	square or rectangular duct installation
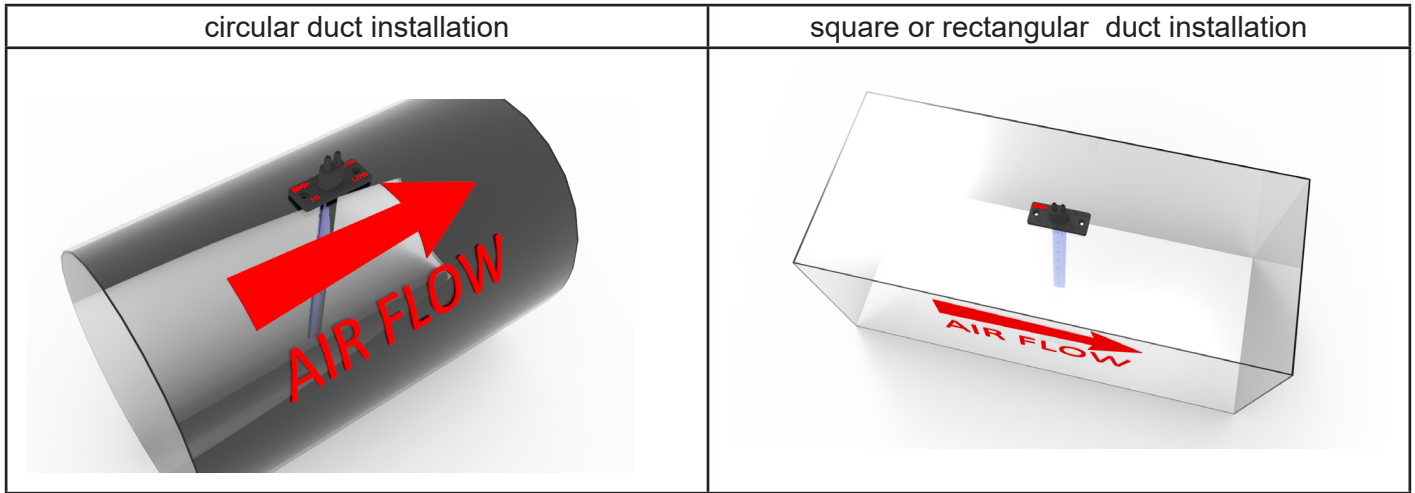
2 Instructions for installation

Step1:The primary station can be installed in any position on vertial or horizontal lines.However consideration to easy accesss of insrument connections should be given.

Step2:See location instrctions for best reselts.

Step3:Drill a 1-7/8" hole in the center of the duct or pipe where the sensor is to be installed.Drill a 1/2" hole on the opposite side for the double support.

Step4:Attach opposite end-guide rod and pass through both holes.Ensure correct direction of flow.Secure mounting plate to duct or pipe with (2) self-tapping screws.

Prefererred Mounting