



## Multi-Point Air Velocity Pitot Tubes AV-MP\*\*ABS

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### Description

The AV-MP\*\*ABS range of Air Velocity Pitot Tubes can be used with our ranges of Air Differential Pressure Sensors to calculate airflow in larger ducts or in areas of turbulent airflow. The units come in pairs suitable for duct sizes up to 2 Metres.



#### **Features**

- Gaskets included for duct sealing
- Push on connectors for 5mm ID PVC tubing
- Use with DF, PTH or PA-LP range of Air DP sensors

# **Technical Specification**

Probe: 25mm diameter ABS

Nipples: Brass to suit 5mm ID PVC tubing Flange: 52mm diameter Chromed Steel

Lengths: See order codes

#### **Order Codes**

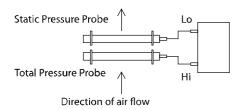
AV-MP600-ABS Multi-point Velocity Probe - 600mm AV-MP700-ABS Multi-point Velocity Probe - 700mm AV-MP800-ABS Multi-point Velocity Probe - 800mm AV-MP1000-ABS Multi-point Velocity Probe - 1000mm AV-MP1250-ABS Multi-point Velocity Probe - 1250mm AV-MP1500-ABS Multi-point Velocity Probe - 1500mm AV-MP1750-ABS Multi-point Velocity Probe - 1750mm AV-MP2000-ABS Multi-point Velocity Probe - 2000mm

#### Installation

For round ducts, install probes side-by-side approx. 100mm apart. If they are to be mounted near a bend in the duct then mount them above each other approx. 100mm apart. Mark and drill the duct work using the mounting flange provided as a template.

- The total pressure probe should be turned so that the holes face directly into the airflow and locked into position using the screws on the flange.
- Adjust the static pressure probe so that the holes face the direction when the differential pressure measured corresponds to the measurement of air velocity using a vane anemometer.

### **Connection to DP Sensor**



# Calculation

Air Velocity =  $\sqrt{\frac{2 \times \text{Velocity Pressure}}{1.2}}$ 

The measurement of a suitably connected Air Differential Pressure sensor can be used to calculate the Air Velocity and is represented by the equation above.







## Air Differential to Pressure

<b>18</b> 194.40		<b>17</b> 173.40	<b>16</b> 153.60	<b>15</b> 135.00	<b>14</b> 117.60	<b>13</b> 101.40	<b>12</b> 86.40	<b>11</b> 72.60	10 60.00	9 48.60	8 38.40	7 29.40	<b>6</b> 21.60	<b>5</b> 15.00	4 9.60	<b>3</b> 5.40	<b>2</b> 2.40	1 0.60	0 0.00	M/sec 0
	196.57	175.45	155.53	136.81	119.29	102.97	87.85	73.93	61.21	49.69	39.37	30.25	22.33	15.61	10.09	5.77	2.65	0.73	0.01	0.1
	198 74	177.50	157.46	138.62	120.98	104 54	89.30	75.26	62.42	50.78	40.34	31.10	23.06	16.22	10.58	6.14	2.90	0.86	0.02	0.2
	200.93	179.57	159.41	140.45	122.69	106.13	90.77	76.61	63.65	51.89	41.33	31.97	23.81	16.85	11.09	6.53	3.17	1.01	0.05	0.3
	203.14	181.66	161.38	142.30	124.42	107.74	92.26	77.98	64.90	53.01	42.34	32.86	24.58	17.50	11.62	6.94	3.46	1.18	0.10	0.4
300 1	205.35	183.75	163.34	144 15	126 15	109.35	93.75	79.35	66.15	54.15	43.35	33.75	25.35	18.16	12.15	7.35	3.75	1.35	0.15	0.5
330 50	207.58	185.86	165.34	146.02	127.90	110.98	95.26	80.74	67.42	55.30	44.38	35.66	26.14	18.82	12.70	7.78	4.06	1.54	0.22	0.6
222 85	209.81	187.97	167.33	147.89	129.65	112.61	96.77	82.13	68.69	56.45	45.41	35.57	26.93	19.49	13.25	8.21	4.37	1.73	0.29	0.7
335 33	212.06	190.10	169.34	149.78	131.42	114.26	98.30	83.54	69.98	57.62	46.46	36.50	27.74	20.18	13.82	8.66	4.70	1.94	0.38	0.8
<b>27 61</b>	214.33	192.25	171.39	151.69	133.21	115.93	99.85	84.97	71.29	58.81	47.53	37 45	28.57	20.89	14.41	9.13	5.05	2.17	0.49	0.9

M/sec	0	01	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
20	240.00	242.41	244.82	247.25	249.70	252 15	254.62	257.09	259.58	262.09
21	264.60	267.13	269.66	272.21	274.78	277 35	279.94	282.53	285.14	287 77
23	290.40	293.05	295.70	298.37	301.06	303 75	306.46	309.17	311.90	314.65
z	317.40	320.17	322.94	325.73	328.54	331.35	334.18	337.01	339.86	342 73
24	345.60	348.49	351.38	354 29	357.22	360 15	363.10	366.05	369.02	372 01
25	375.00	378.01	381.02	384 05	387 10	390 15	393.22	396.29	399.38	402 49
26	405.60	408.73	411.86	415.01	418.18	421 35	424.54	427.73	430.94	434 17
27	437 40	440.65	433.90	447 17	450 46	453.75	457.06	460.37	463.70	467 05
28	470.40	473.77	477 14	480.53	483.94	487 35	490.78	494.21	497.66	501 13
29	504.60	508.09	511.58	515.09	518.62	522 15	525 70	529.25	532.82	536.41
3	540.00	543.61	547 22	550.85	554.50	558.15	561.82	585.49	569 18	572.89
<u> </u>	576.60	580.33	584.06	587.81	591.58	595.35	599 14	602.93	606.74	610.57
ಜ	614.40	618.25	622.10	625.97	629.86	633.75	637.66	641.57	645.50	649 45
ಜ	653.40	657.37	661.34	665 33	669.34	673 35	677 38	681.41	685 46	689.53
<b>3</b> 2	693.60	697.69	701.78	705.89	710.02	714 15	718.30	722 45	726.62	730.81
딿	735.00	739.21	743.42	747.65	751.90	756 15	760.42	764.69	768.98	773.29
<b>3</b> 6	777.60	781.93	786.26	790.61	794.98	799.35	803.74	808.13	812.54	816.97
37	821.40	825.85	830.30	834.77	839.26		848.26	852.77	857.30	861.85
딿	866.40	870.97	875.54	880.13	884 74	843.75	893.98	898.61	903.26	907 93
<b>3</b> 8	912.60		010.01			843.75 889.35				