Static Pressure Probe

Model A-520



- Unique dual orifice design to eliminate air flow error
- ¹/₄" brass hose barb connection for transducer/switch
- Available in 4" and 8" probe lengths
- 6061T-6 aluminum alloy
- Gasketed mounting flange, brass connector and mounting holes guarantee quick and easy installation

The A-520 Static Pressure Probe is designed to pick up static pressure in a duct, plenum, air handler or other HVAC equipment. The probe has two orifices vertically opposite each other to cancel out any air flow induced errors. If a bent tube with a single orifice at the end is used to pick up static pressure in a duct, the air flowing across the probe may cause a small low pressure within the probe. This low pressure acts against the duct static pressure and hence induces an error which is exponentially proportional to the air flow. As the air flow increases, this error will increase, also; and as the flow decreases, the error decreases in an exponential relationship. The engineers at MAMAC Systems resolved this problem with a unique design which incorporates two orifices diametrically opposing each other in a vertical plane. When the air flows across an orifice, it creates a suction towards that orifice. Similarly, when the same air flows across the other orifice, it creates an opposing suction which cancels out the first pressure drop. Regardless of the velocity, the flow error is constantly cancelled out, and the A-520 provides an accurate, repeatable and stable static pressure value. The A-520 Static Pressure Probe is available in 6061T-6 aluminum alloy for standard HVAC applications. The A-520 is available in two probe length options: 4" and 8". The probe is attached to a 1.5" flange with two conveniently-located mounting holes for ease of attachment to the sheet metal. The flange also has a neoprene gasket to seal off the mounting holes. An industry standard $\frac{1}{4}$ hose barb is provided for PVC/copper tubing connection. The A-520 is designed to substantially reduce the installation time required and to provide a convenient method to pick up static pressure in HVAC equipment. Installation is completed by drilling a 3/8" hole in the sheet metal, inserting the probe and securing the assembly by using the mounting flange as a template to mark and drill two holes for the self-tapping sheet metal screws.

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SPECIFICATIONS:

Material: 6061T-6 Aluminum Alloy

Port Connections: 1/4" Brass Hose Barb

Gasket Material: Neoprene

Maximum Pressure: 10 PSIG

Maximum Temperature: 250°C

Maximum Air Flow: Unlimited

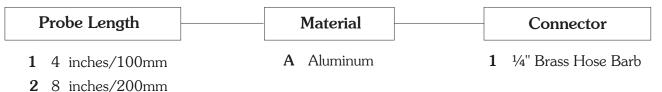
Weight: 1.5 oz. (.68 kg)

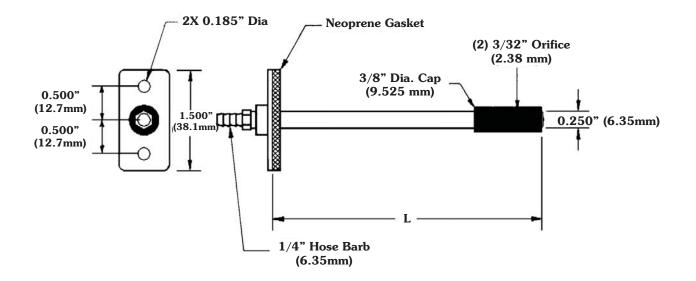
CONFORMANCE & TESTING:

RoHS Compliant EMC Testing:

BS EN 55022:1998, BS EN 55024:1998, EN 61000-3-3, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11

ORDERING INFORMATION: A-520-





CAUTION: Do not use in explosive/hazardous environment or with flammable/combustible media.



MAMAC Systems is the leading global manufacturer of sensors, transducers, control peripherals and web browser based IP appliances. MAMAC products are used for HVAC and environmental controls, remote monitoring, alarming, energy metering and industrial automation.

All MAMAC products are manufactured in the USA.

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