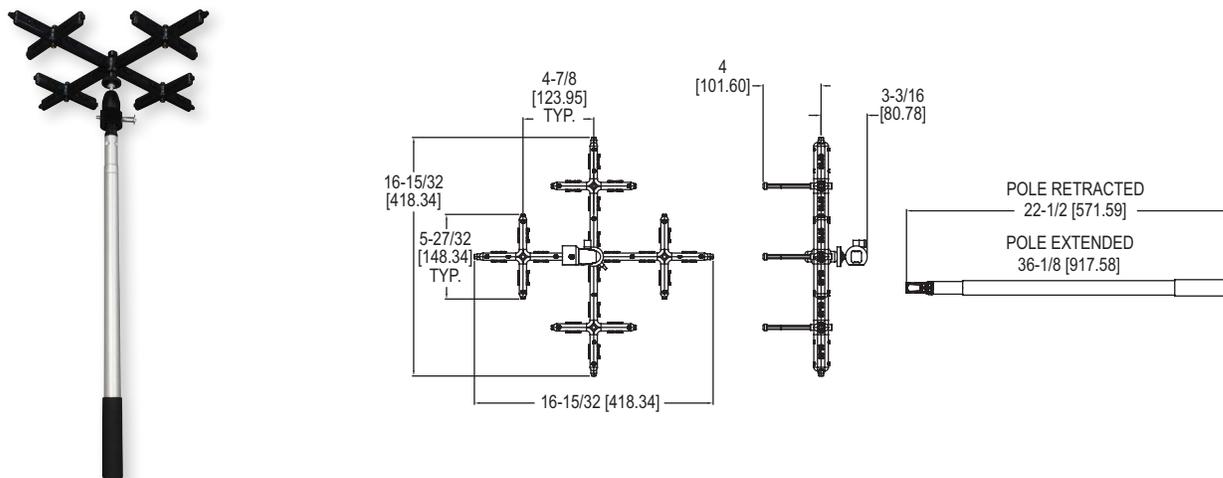




## Model 160G Averaging Air Flow Grid

### Specifications - Installation and Operating Instructions



The **Model 160G Averaging Air Flow Grid** is a precision sensing instrument used to measure face air velocity on grills, diffusers, registers, exhaust hoods, coils, filters, dampers and similar restrictions. With its 16 sensing points, the 160G Air Flow Grid provides an average flow sensing area across its 16.5" length and width. Included color coded tubing connects to the integral barbed fittings, providing a differential pressure signal to a gage or manometer where the readings can be converted into a velocity or flow reading. The 160G comes standard with an extendable pole offering a maximum reach of approximately 48". The ball pivot joint and tightening nut allows the user to position the sensing grid at any angle in any direction for ease of use in hard to reach locations. Store in the separate UHH-C2 hard carrying case with foam cut-outs perfectly sized for the 160G, as well as various other instruments in the AQT1 Air Quality Test Instruments line.

#### Assembly

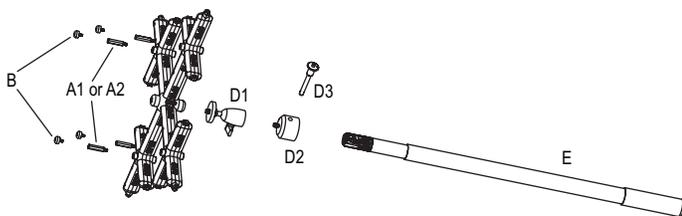


Figure 1

#### Attach the Stand-Offs

The 160G comes with two sets of stand-offs (Parts A1 and A2 in Figure 1) that are different heights and they can be connected to each other to form a third different height. The stand-offs ensure the air flow grid is sitting perpendicular to the grill to get the most accurate readings. Once the proper height stand-off is chosen, the bumpers (Part B in Figure 1) should be attached to the stand-offs to prevent the 160G from scratching the surface around the grill. The stand-offs can be screwed into the top side of the air flow grid.

#### SPECIFICATIONS

**Service:** Air or compatible gases.

**Wetted Materials:** Grid: Black polycarbonate; Ball pivot joint: AL, plastic; Handle: Aluminum; Standoffs: Aluminum with rubber bumpers, two sets: 1.25" (31.7 mm) and 2" (50.8 mm), 1/8" ID / 1/4" OD; Tubing: Two 10' (3 m) lengths of silicone rubber.

**Accuracy:** ±2% FS.

**Temperature Limits:** -40 to 257°F (-40° to 125°C).

**K Factor:** 0.84.

**Range:** 1000 to 5000 FPM (5 to 25 m/s).

**Process Connection:** 1/8 to 1/4" ID tubing.

**Weight:** 1.75 lb (0.79 kg).

**Agency Approvals:** RoHS.

#### Attach the Handle

One extendable pole is included to reach a maximum of 48". The pole (Part E in Figure 1) will slide into the bottom feature on the adapter (Part D2 in Figure 1) and affix to the adapter with the push button pin (Part D3 in Figure 1). The adapter will then thread into the female thread on the ball pivot joint (Part D1 in Figure 1). Next, the male thread on the ball pivot joint will thread into the air flow grid on the opposite side of the stand-offs. The plastic nut on the ball pivot will lock the air flow grid in place and prevent it from spinning once it is tightened. Finally, the user can adjust the ball pivot to adjust the angle at which the air flow grid is going to measure. In order to adjust the angle of the air flow grid, the user will loosen the plastic wing nut located on the side of the ball pivot and tighten at desired angle.

#### Connect Tubing

The tubing provided with the air flow grid is color coordinated to help identify which tube is going to the high pressure port and which tube is going to the low pressure ports on both the manometer and the air flow grid. For return air grill, the pressure port on the side of the swivel is the total/dynamic pressure (high pressure) and the pressure port on side of the stand-offs is the static (low pressure). For a supply air grill, the ports would be reversed.

#### MAINTENANCE/REPAIR

Upon final installation of the Model 160G, no routine maintenance is required. The Model 160G is not field serviceable and should be returned if repair is needed. Field repair should not be attempted and may void warranty.

#### WARRANTY/RETURN

Refer to "Terms and Conditions of Sales" in our catalog and on our website. Contact customer service to receive a Return Goods Authorization number before shipping the product back for repair. Be sure to include a brief description of the problem plus any additional application notes.