



203-5(24)V Series Transducer

Description

The 203-5 (24) V Series electronic transducer samples the average Velocity Pressure (flow in FPM) in an air distribution system. This flow signal is obtained by sampling Total Pressure and subtracting the Static Pressure to obtain the Velocity Pressure which is converted to Volts DC for flow in FPM from 0 up to 4000 FPM.

The specially designed 520-86V “pick up” probe furnishes an “amplified” Static Pressure signal. This enhanced pneumatic flow signal to the transducer is converted to V DC to accurately provide flow up to 4000 FPM over the 2 - 10V DC output. Three ranges are available; 0 - 2000 FPM, 0 - 3000 FPM or 0 - 4000 FPM; scaled and calibrated over the 2 V DC to 10V DC signal. See attached for all three flow ranges.

Other typical single point or averaging design pickup probes may be utilized; calibration curves however of flow in V DC will be required for the type and design used by others.

The transducer requires a non-interrupted 24V AC power supply. Transducers are factory pre-calibrated and do not require any field adjustment. The on-board transducer is flow temperature compensated.

When using the flow signal from the 203-5(24)V, the controller may, or may not require the 265-PI Proportional/Integral circuit card. Careful evaluation must be considered before determining if the PI function is necessary. Should the application be required to hold set point less “signal error”, then the PI function is definitely necessary.

Specifications

Models	
203-5A(24)V, Std.	0 - 2000 FPM
203-5B(24)V	0 - 3000 FPM
203-5C(24)V	0 - 4000 FPM
Volts, Input (Nominal)	24V AC
Power @ 24V AC	1VA
Frequency	50/60 Hz
Velocity Span, Std.	0 - 2000 FPM
Output	
Terminal Gnd. & V Out	2.0 - 10.0 V DC
Minimum Load Resistance	10K
Accuracy	± 5%
Repeatability	± 2%
Operating Temperature	+40°F to +120°F
Storage	0°F to 120°F
Humidity (Non-Condensing) Max.	95% RH