

## Air Flow Switch

### FEATURES

- 8 air velocity ratings available in single pole double throw design
- Interchangeable stainless steel actuating vanes, black enameled aluminum housing and cover, beryllium copper spring and pure silver contacts
- SPDT 5 amp 250 VAC
- Mounts on round and flat ducts with single screw
- 500,000 operations life expectancy
- Operates reliably in ambient temperatures of -35°C to +85°C.
- Weight: 4.5 oz (0.13 kg)

### DETERMINATOR KIT - PART NO. 041100

In order to determine the best sensitivity rating, use the Rotron "Determinator Kit." The kit consists of a switch together with a complete set of 8 actuating vanes. By interchanging these vanes on the switch it is possible to

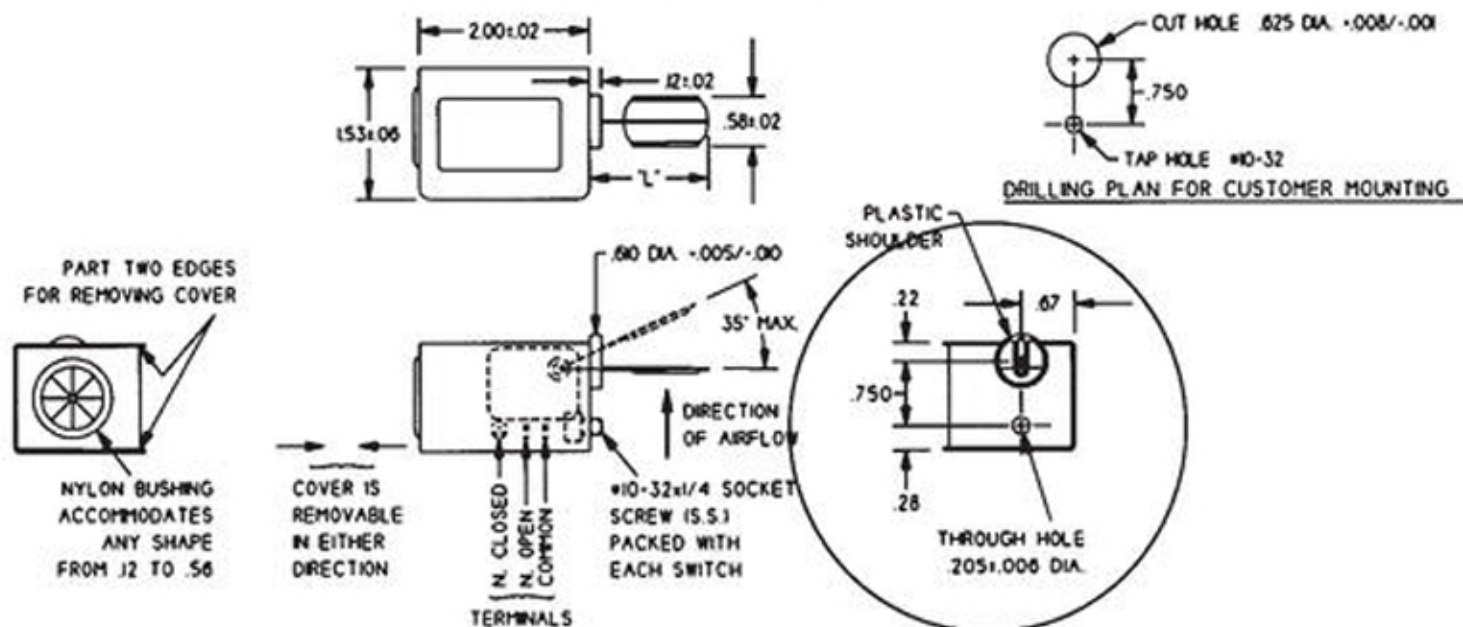
quickly determine which vane size has the sensitivity rating required in any particular experimental set-up.

### HOW IT WORKS

The Rotron Air Flow Switch is actuated by air velocity rather than air pressure. It is designed for easy mounting on the outside of an air duct with a small lightweight stainless steel vane protruding through a hole in the duct into the airstream. A snap action switch is actuated when the velocity pressure against the vane moves it in the direction of the air flow. As the velocity of the airstream decreases for any reason the vane moves back towards its original position and the switch deactuates.

The switch can be used as an interlock for on-off purposes, or as a marginal safety device where the electrical contacts are operated at a predetermined minimum flow rate.

Model	Part No.	"L" Max
AFS 2C/1003	041101	2.50"
AFS 2C/1353	041102	1.91"
AFS 2C/1603	041103	1.63"
AFS 2C/1803	041104	1.41"
AFS 2C/2003	041105	1.09"
AFS 2C/2453	041106	0.91"
AFS 2C/3003	041107	0.78"
AFS 2C/4003	041108	0.72"



### Actuation/Deactuation Velocities (FPM / M/S)

Model	Part No.	Arm - Horizontal Airstream - Horizontal		Arm - Vertical Vane Down Airstream - Horizontal		Arm - Horizontal Airstream - Vertical-Up		Arm - Horizontal Airstream - Vertical-Down	
		Actuate	Deactuate	Actuate	Deactuate	Actuate	Deactuate	Actuate	Deactuate
AFS 2C/1003	041101	735 (3.73)	630 (3.20)	750 (3.81)	615* (3.12)	785 (3.99)	700 (3.55)	NOT USABLE	NOT USABLE
AFS 2C/1353	041102	1025 (5.21)	970 (4.93)	1000 (5.08)	890 (4.52)	1125 (5.71)	1030 (5.23)	720* (3.66)	685* (3.48)
AFS 2C/1603	041103	1215 (6.17)	1095 (5.56)	1225 (6.22)	1130 (5.74)	1340 (6.81)	1212 (6.16)	1040 (5.28)	865* (4.39)
AFS 2C/1803	041104	1460 (7.42)	1335 (6.78)	1500 (7.62)	1375 (6.98)	1550 (7.87)	1450 (7.37)	1280 (6.50)	1115* (5.66)
AFS 2C/2003	041105	1790 (9.09)	1580 (8.02)	1760 (8.94)	1580 (8.02)	1800 (9.14)	1675 (8.51)	1595* (8.10)	1425* (7.24)
AFS 2C/2453	041106	2120 (10.77)	1867 (9.48)	2270 (11.53)	2035 (10.34)	2340 (11.89)	2120 (10.77)	2125 (10.79)	1950 (9.91)
AFS 2C/3003	041107	2690 (13.66)	2420 (12.29)	2880 (14.63)	2570 (13.05)	2925 (14.86)	2700 (13.71)	2780 (14.12)	2395 (12.17)
AFS 2C/4003	041108	3720 (18.90)	3485 (17.70)	3870 (19.66)	3520 (17.88)	4000 (20.32)	3680 (18.69)	3760 (19.10)	3565 (18.11)

NOTE: All figures are ±15% except: \* denotes ±20%.