

System - 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, copper spring and pure silver contacts
- SPDT 5 amp 250 VAC
- Mounts on round and at 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

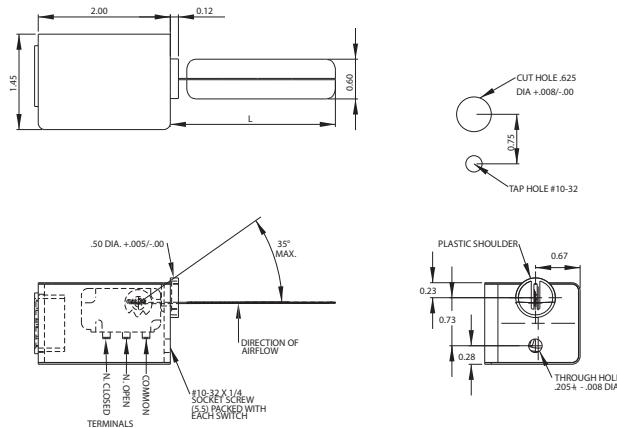
In order to determine the best sensitivity rating, use the ROTRON "Determinator Kit." The kit consists of a switch together with a complete set of 8 actuating vanes. By interchanging these vanes on the switch it is possible to

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.



Part/Model Number

		AFS2C/1003	AFS2C/1353	AFS2C/1603	AFS2C/1803	AFS2C/2003	AFS2C/2453	AFS2C/3003	AFS2C/4003
Specification	Units	041101	041102	041103	041104	041105	041106	041107	041108
Max Length	Inches mm	2.50 63.5	1.91 48.5	1.63 41.4	1.41 35.8	1.09 27.7	0.91 23.1	0.78 19.8	0.72 18.3

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 $\pm 15\%$ except: * denotes $\pm 20\%$.

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AMETEK TECHNICAL & INDUSTRIAL PRODUCTS

75 North Street, Saugerties, NY 12477

USA: +1 215-256-6601 - Europe: +44 (0) 845 366 9664 - Asia: +86 21 5763 1258

Customer Service Fax: +1 215.256.1338

www.ametektip.com