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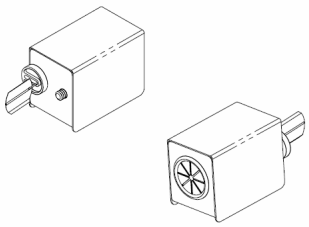
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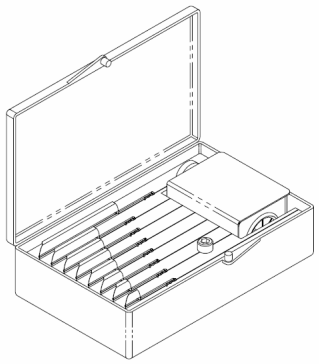
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Find the *Ametek / EG and G / Rotron 2B* at our website: *Click HERE*

Airflow Switches



AIRFLOW SWITCH
WITH VANE



DETERMINATOR KIT

FEATURES

- 8 air velocity ratings
- Interchangeable actuating vanes
- Weight: 4.5 oz (0.13 Kg)
- SPDT 5 amp 250 VAC
- Mounts on round and flat ducts with single screw
- Life expectancy – 500,000 Operations

APPLICATION

The Rotron model 2C airflow 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 vain 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 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 air. The switch is designed for commercial application but has been used satisfactorily on certain military projects. Its acceptability on military projects is left to the evaluation of the purchaser.

Ambient temperature range of -40 ° C to +85 ° C.

ELECTRICAL RATING

The contact arrangement of the switch is single pole double throw. No other contacts are available. An opening or closing contact can therefore be obtained when the switch actuates.

The UL recognized component rating is 5 amps at 250 volt AC. The life expectancy of the contacts at this full load figure is 500,000 operations.

DETERMINATOR KIT

In order to determine the best sensitivity rating (that is, vane type number) of the Rotron model 2C airflow switch required for any application, use the Rotron “Determinator Kit”. The kit consists of a model 2C 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.

APPLICATION NOTES

In order to select the proper rating of a velocity operating switch, it is necessary to determine the velocity of the air in the duct at the point of insertion of the switch. This can be done by experiment or calculation. The cubic feet per minute (CFM) value of air which passes through the duct is a volume figure and should not be confused with the ft/min. value which is a velocity figure. The relation is:

$$\frac{\text{CFM}}{\text{Area}} = \text{ft / min.}$$

Whereby the area is expressed in square feet. Therefore, if the CFM delivery of the fan or blower can be estimated accurately, the air velocity in the duct at the point of insertion can be calculated.

CONSTRUCTION

- Switch frame and cover are made of aluminum
- Actuating arm and lightweight vane are made of stainless steel
- The snap action switch mechanism is housed in a phenolic enclosure
- Solder terminals of silver plated brass
- The spring material in the switch is stainless steel and the remaining contacts are of silver alloy

AMETEK®
AEROSPACE & DEFENSE
Rotron / Airtechnology Products

Specifications subject to change without notice

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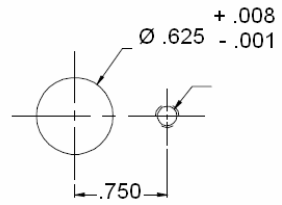
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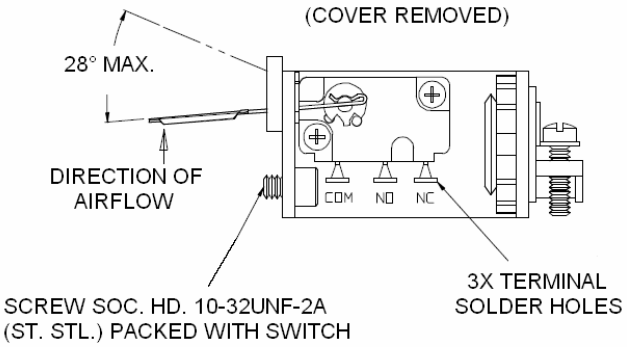
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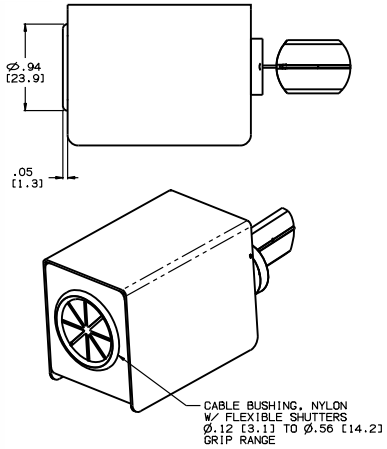
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AIRFLOW SWITCH DIMENSIONS

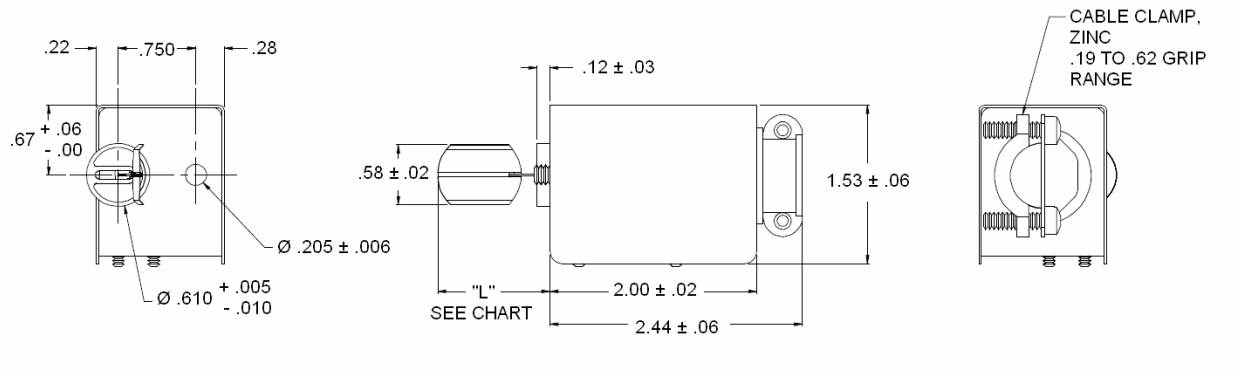


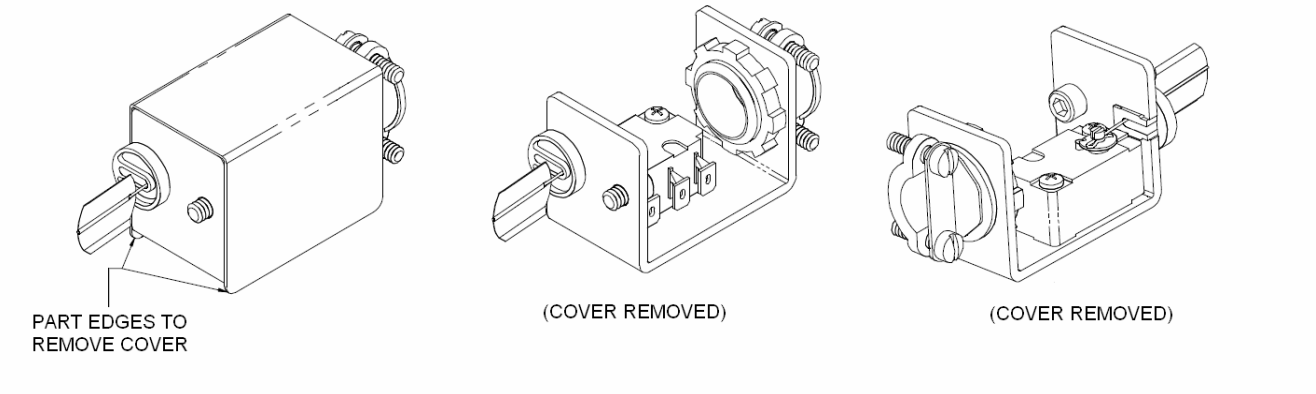
DRILLING PLAN FOR CUSTOMER MOUNTING





DETAIL-A





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ROTRON MODEL 2C AIRFLOW SWITCHES WILL ACTUATE AND DE-ACTUATE IN AN AIRSTREAM OF THE FOLLOWING VELOCITY IN FT/MIN FOR "STANDARD" AIR (29.9 INCH Hg, 70°F)

PART NUMBER				VERTICAL-UP AIR STREAM		HORIZONTAL AIR STREAM				VERTICAL-DOWN AIR STREAM	
						ARM HORIZONTAL		ARM VERTICAL VANE DOWN			
W/ ZINC CABLE CLAMP	W/ NYLON CABLE BUSHING PER DETAIL-A	TYPE NO.	"L" DIM	INCREASE AIR FT/MIN ACTUATE	DECREASE AIR FT/MIN DEACTUATE	INCREASE AIR FT/MIN ACTUATE	DECREASE AIR FT/MIN DEACTUATE	INCREASE AIR FT/MIN ACTUATE	DECREASE AIR FT/MIN DEACTUATE	INCREASE AIR FT/MIN ACTUATE	DECREASE AIR FT/MIN DEACTUATE
041111	041101	1003	2.50	950	850	850	650	750	615	N/A	N/A
041112	041102	1353	1.91	1125	1030	1200	970	1200	890	1000	685
041113	041103	1603	1.63	1340	1212	1400	1095	1400	1130	1200	865
041114	041104	1803	1.41	1550	1450	1600	1335	1500	1375	1400	1115
041115	041105	2003	1.09	1800	1675	2000	1580	2000	1580	1850	1425
041116	041106	2453	0.91	2340	2120	2400	1867	2270	2035	2300	1950
041117	041107	3003	0.78	2925	2500	2800	2420	2880	2570	2800	2395
041118	041108	4003	0.72	3050	3000	3500	3000	3500	3000	3500	3000

NOTES:

1 - AIRFLOW FIGURES LISTED ARE TYPICAL AS RECORDED IN A LABORATORY TEST SET-UP FOR CONTROLLED LAMINAR FLOW CONDITIONS AND ARE USED ONLY AS A GUIDE. FOR ACTUAL REQUIREMENTS IN A SPECIFIC APPLICATION, IT IS RECOMMENDED THAT THE "DETERMINATOR KIT" BE USED TO DETERMINE EXACT REQUIREMENTS

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