

# KAL-L THERMAL AIR FLOW SWITCH



Flow  
Pressure  
Level  
Temperature  
measurement  
monitoring  
control



- Negligible Pressure Loss
- No Moving Parts
- Adjustable Response Time
- Temperature Compensated
- Easy to Install

S5



## USA

KOBOLD Instruments Inc.  
1801 Parkway View Drive  
USA-Pittsburgh, PA 15205  
☎ +1 412-788-2830  
Fax +1 412-788-4890  
E-mail: info@koboldusa.com



## CANADA

KOBOLD Instruments Canada Inc.  
9A Aviation  
Pointe-Claire, QC H9R 4Z2  
☎ +1 514-428-8090  
Fax +1 514-428-8899  
E-mail: kobold@kobold.ca

Visit KOBOLD Online at  
[www.kobold.com](http://www.kobold.com)

Model:  
KAL-L

The Kobold KAL-L flow switch allows rapid detection of flow rate change of non-hazardous gases. Fast reaction times are guaranteed by the KAL-L's analog electronic design. Through use of two RTDs... one to sense flow and the other to detect ambient temperature, the switch can compensate for thermal changes in its surroundings. This "smart" behavior minimizes erroneous switching due to spurious changes caused by things such as the weather.

Any conceivable pipe size can be accommodated by the KAL-L's insertion style design. Knowledge of the flow velocity in your system is all that you need to make the KAL-L work.

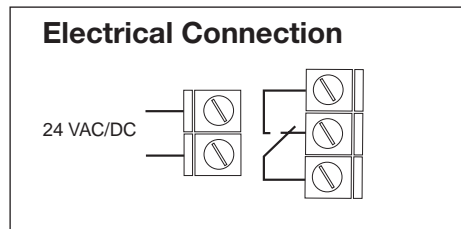
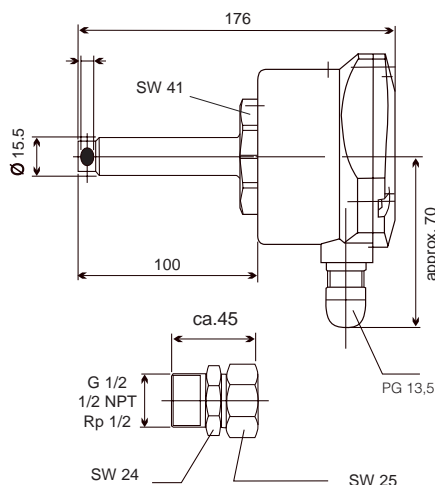
### Specifications

- Range:** 3.3 - 66 ft/sec  
@20°C, 14.5 PSIA  
(restricted span for other pressure and temperature conditions)
- Switchpoint:** potentiometer adjustable
- Accuracy:** ±10% of flow rate
- Reproducibility:** ±1% of flow rate
- Display**
  - Flow Rate:** 8-LED flow trend
  - Switch Status:** two-color LED
- Maximum Temperature Gradient** 30°K(°C)/min  
@ 8m/s, 90°C
- Response Time:** 1 to 60 sec (adjustable)
- Warm-up Time:** 30 sec
- Maximum Pressure:** 120 PSIG
- Maximum Temperature**
  - Process:** -10°F to +250°F
  - Ambient:** +15°F to +140°F
- Wetted Parts:** Ni-plated brass
- Housing Material:** Nylon
- Electrical Data**
  - Power Supply:** 24 VDC/VAC  
-15%/+10%
  - Switch:** Qty. 1 - SPDT
    - Max. Voltage:** 250 VAC
    - Max. Current:** 4 A
    - Max. Power:** 1,000 VA
  - Wiring Connector**
    - Standard:** PG13.5 cable gland
    - Optional:** 1/2" NPT conduit
    - Protection:** NEMA 4



### KOBOLD KAL-L Flow Switch

#### Dimensions (millimeter)



#### KAL-L Ordering Information

Fitting	Order Number
1/2" NPT	KAL-8115
2-Bolt Flange	KAL-8115FL
Smooth Shank	KAL-8100
Options:	-C: Conduit Hub -M12: Quick disconnect