

Air Flow Switches

DBSL

DESCRIPTION

Duct air flow switches.

APPLICATION

Control and monitor air and non aggressive gases flow in ducts, chambers, etc., of heating, cooling, and air conditioning equipment.

FEATURES

- NEMA 1 & 4 housing
- Cut-in and cut-out
- Stainless steel paddle
- Brass level

SPECIFICATIONS

Type of operation	On/Off, single-stage, micro switch
Output	1 SPDT, or 2 SPDT, 24/250 VAC, 15 (8) A
Flow rate switching	
- Cut-out	Min. 197 ft/min (1.0 m/sec)* Max. 1,575 ft/min (8.0 m/sec)
- Cut-in	Min. 492 ft/min (2.5 m/sec) Max. 1,811 ft/min (9.2 m/sec)
Flow rate setting adjustment	Internal screw
Sensing element	Paddle
Paddle size	3.2 x 6.9 in. (80 x 175 mm)
Paddle w/level - Length	7.9 in. (200 mm)
Flow applications	Air and non aggressive gases
Paddle material	Stainless steel
Paddle level material	Brass
Permissible ambient temperature	
- Housing	-40°F to 185°F (-40°C to 85°C)
- Paddle	14°F to 185°F (-10°C to 85°C)
Permissible ambient humidity	10..90% RH, non-condensing
Wire	
- Connection	Terminal with wire retaining screws
- Size	Maximum 14 AWG (2.5 mm ²)
Cable entry	M20 fitting, replaceable by 1/2" conduit connector
Housing	
- Material	Base: Steel, galvanized Cover: ABS, fire retardant
- Color	Dark gray/blue
- Protection	NEMA 1 (IP 40), or NEMA 4 (IP 65)
- Dimensions	4.3 x 2.8 x 2.8 in. (108 x 70 x 72 mm)
Installation	Duct mounted
Ship weight	1.6 lb (0.7 kg)



certified ISO 9001 

Part Numbers

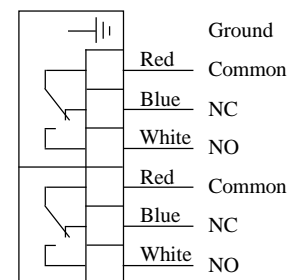
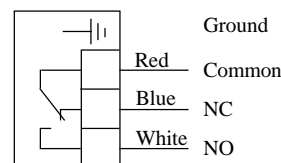
- 1 SPDT, NEMA 1
- 1 SPDT, NEMA 4
- 2 SPDT, NEMA 1
- 2 SPDT, NEMA 4

- DBSL-1EPL-1US
- DBSL-1EPL-4US
- DBSL-1EPLB-1US
- DBSL-1EPLB-4US
- DBSL-1EPL

DBSL-1EPLB

WIRING DIAGRAM

- Increased flow and attained cut-in setting:
Red & White connected
- Decreased flow and attained cut-out setting:
Red & Blue connected



* Factory calibrated to minimum cut-out switching / high sensitivity
To adjust for less sensitivity / higher flow rate, turn adjustment screw located below switch clockwise.

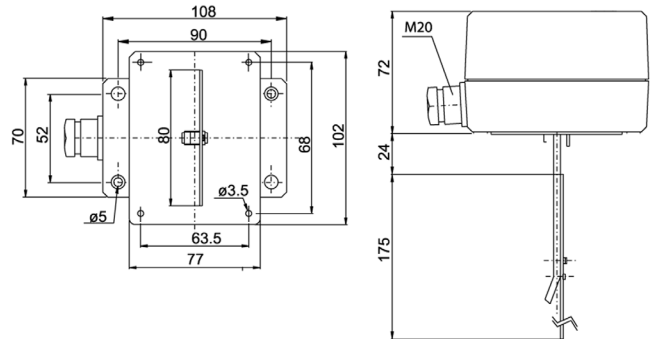
INSTALLATION

The flow switch should be mounted into a duct or chamber where the air paddle can freely point horizontally downwards. To avoid air swirl and paddle instability, straight zones should be provided for a length of 5 times the diameter of duct upstream and downstream from the installation location.

NOTE

The units are factory calibrated to the minimum switch-off value. To increase the set value, adjust the range screw clockwise. Due to the risk of fracture at air speeds of higher than 984 ft/min (5.0 m/sec), the paddle must be cut off on the marked side. When the paddle is cut off, the minimum cut-out value increases from 197 ft/min (1.0 m/sec) to 492 ft/min (2.5 m/sec).

DBSL DIMENSIONS (mm)



Authorized Distributor:
ControlSystemsUsa.com
Houston, TX USA
832-615-3588
sales@ControlSystemsUsa.com