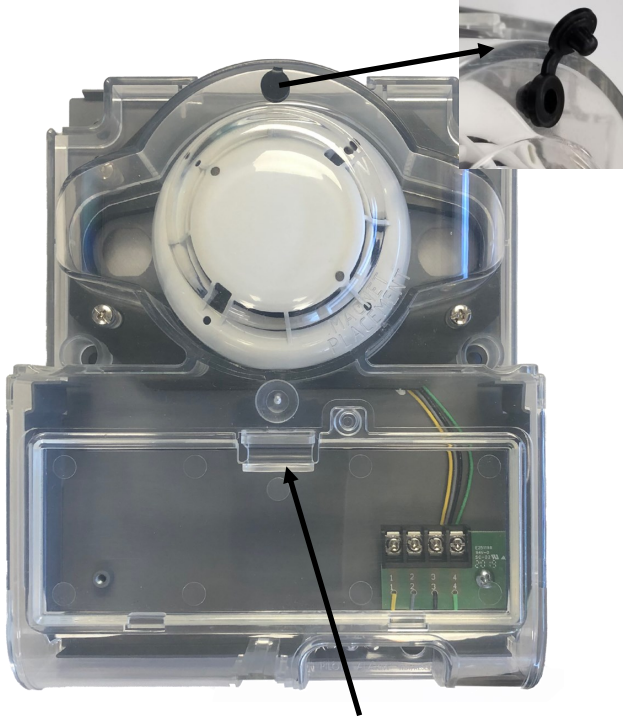# DH-100-A - ANALOG DUCT DETECTOR

Smoke port for testing without cover removal

Wiring Access hatch for wiring maintenance without cover removal

STANDARD FEATURES

- Air Low Flow 100FPM Listed
- Detects and limits the spread of smoke throughout building HVAC ducts
- Compatible with building automation and fire alarm systems
- Installs quickly and easily
- No screens or filters to clean
- Rugged gray steel back box with clear cover
- Accessories - Remote LED alarm indication capability
- UL 268A Listed

APPLICATION

The HOCHIKI AMERICA DH-100-A Analog duct smoke detector provides early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial, Industrial and Residential applications. The DH-100-A is designed to prevent the recirculation of smoke in areas by the air handling systems, fans and blowers. Complete systems may be shut down in the event of smoke detection. The HOCHIKI AMERICA DH-100-A operates on a DCP powered loop.

PRODUCT DESCRIPTION

The DH-100-A is designed and built to meet all local requirements, as well as the NFPA regulations regarding duct smoke detectors. The DH-100-A is provided with output terminals for remote status indicators. Air sampling is accomplished by two tubes which protrude into the duct. An exhaust tube of on standard length (7.5") is supplied in the installation kit with the smoke duct unit. Once the duct width has been determined the air intake sampling tubes must be ordered. Sampling tubes are supplied in three standard lengths 2.5ft., 5 ft. and 10ft. and cut to size to fit the duct.
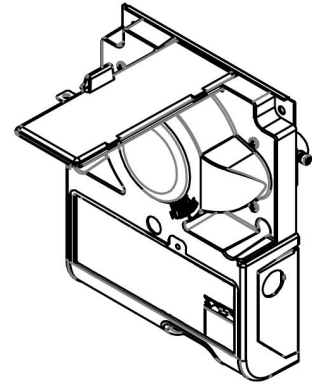
SPECIFICATIONS

Duct Detector Model #	DH-100-A		
Detector Head Model	ALN-DH		
Detector Head Type	Analog Photoelectric		
Communication	DCP Powered Loop		
Standby Current	450µA		
Alarm Current	30mA (max)		
Sensitivity Test Method	Smoke Port		
Air Velocity	100 to 4000 ft/min.		
Ambient Temperature	32°F to 100°F (0°C to 38°C)		
Humidity	10% to 93% Relative Humidity (non-condensing)		
Housing Material	18 G.A. steel backbox, clear plastic cover		
Finish	Grey Powder Coat Enamel		
Dimensions	9 1/8"L x 7 1/4"W x 2 1/4"H		
Maximum Net Weight	3lbs.		
Sampling Tubes	2.5ft.	Model: STS-2.5	P/N: 0400-01580
	5ft.	Model: STS-5.0	P/N: 0400-01590
	10ft.	Model: STS-10.0	P/N: 0400-01570

Specifications subject to change without notice.

PRODUCT LISTINGS

SIGNALING
UL LISTED
S1383

California State Fire Marshal
3240-0410:0155

ISO 9001:2015 CERTIFIED

Find latest revision at **www.hochiki.com**

DH-100-A - ANALOG DUCT DETECTOR

ELECTRICAL INSTALLATION

A. GENERAL INFORMATION

Wiring must conform to applicable local codes, ordinances and regulations covering these types of devices. Wire the detectors according to the engineering drawings for the particular job requirements. These detectors are not intended for open area protection, nor should they be used for open air protection. Refer to NFPA 90A and NFPA 72 for general and additional information on Duct Smoke Detectors concerning operation and installation. Terminals are suitable for up to #14 gauge wire.
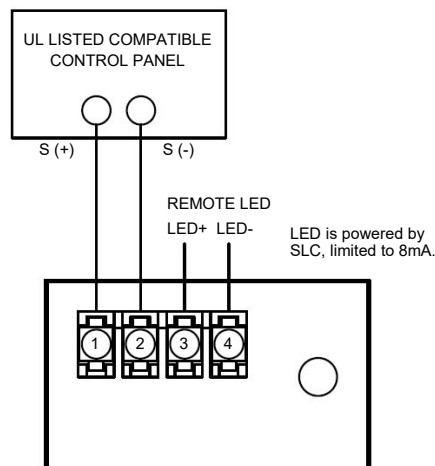
B. DETECTOR WIRING

With power source de-energized, wire all connections. The wiring access hatch cover can be stored at the top of the unit. Return cover before restoring power.

DH-100-A Access Hatch Cover Temporary Storage

C. TERMINAL BOARD WIRING

UL LISTED COMPATIBLE
CONTROL PANEL

S (+)   S (-)

REMOTE LED

LED+   LED-

LED is powered by
SLC, limited to 8mA.

1   2   3   4

SPECIFICATIONS

SLC Applied Voltage	**Rated Range 25.3 - 39.5 VDC**
SLC Current Consumption	**Alarm 30mA Max**
(includes detector)	**Normal Standby 450µA**
Operating Temperature Range	**0°C (32°F) ~ 38°C (100°F)**
Storage Temperature Range	**-30°C (22°F) ~ 70°C (158°F)**
Maximum Relative Humidity	**93% RH non-condensing**
Air Velocity	**100 - 4,000 FPM**
Sensitivity	**0.70 - 3.74% / FT @ 100 FPM**
	0.70 - 3.38% / FT @ 300 FPM
	0.70 - 3.39% / FT @ 1000 FPM
	0.70 - 3.83% / FT @ 2000 FPM
	0.70 - 4.00% / FT @ 3000 FPM
	0.70 - 4.00% / FT @ 4000 FPM
Environment	**Indoor dry use only, Duct Side or Top**
Dimensions	**7.5"W X 9.5"H X 2.5"D**
Weight	**Approximately 3.0lb**