

## DUCT DETECTORS

### Intellia- Addressable Duct Detector Housing

The Intellia Duct Smoke Detector provides early detection of smoke in the air moving through heating and ventilation (HVAC) ducts in commercial and industrial premises. Its purpose is to prevent the recirculation of smoke from an area on fire to areas unaffected by the fire.

Duct smoke detector EBI-50 is designed to accept a intelligent detector head.

The Intellia series of products are all compatible with the ALC-board of an FX-panel.

### Features

The duct smoke detector is fitted to the side, the top or the bottom of the ventilation duct and has two tubes which extend into the air duct through holes in the duct wall. The perforated sampling tube which spans the duct is placed in the airflow upstream of the exhaust tube which causes a pressure differential in the duct detector. Air is sucked up the sampling tube, across the detector and exhausted back into the air duct.

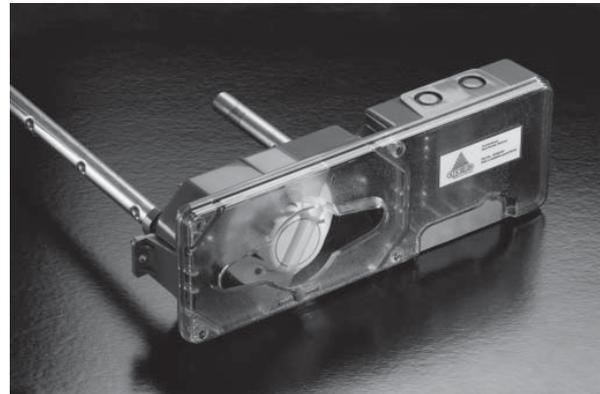
### Mechanical installation

The duct smoke detector is designed to operate in ducts with a width of between 300 mm and 3000 mm. A sampling tube of 360 mm, suitable for duct widths up to 540 mm, is supplied as standard.

Longer sampling tubes for wider ducts may be ordered separately:

- 53541-170APO, 150 - 750 mm
- 53541-171APO, 750 - 1500 mm
- 53541-172APO, 1500 - 3000 mm

The tubes should be long enough to reach from one side of the duct to the other and it may be necessary to use a tube that is too long and cut it to slightly more than the duct width. Since the tube needs to be supported on both sides a hole should be cut in the opposite wall of the air duct to allow the tube to protrude slightly. The tube must be closed with the small red bung provided. The exhaust tube does not need to extend across the duct and is therefore supplied at a fixed length.



### Technical data

Dimensions	343 x 114 x 64 mm
Weight	1,13 kg
Operating temperature	0-70 °C
Humidity (no condensation)	10-80% RH
IP Rating	IP20
Product codes	
EBI-50 Duct Detector Housing	0672 0050
Tubes:	
53541-170APO, 150 - 750mm	0672 0051
53541-171APO, 750 - 1500mm	0672 0052
53541-172APO, 1500 - 3000 mm	0672 0053
Suitable detectors:	
EDI-20 Optical Smoke detector	0672 0220

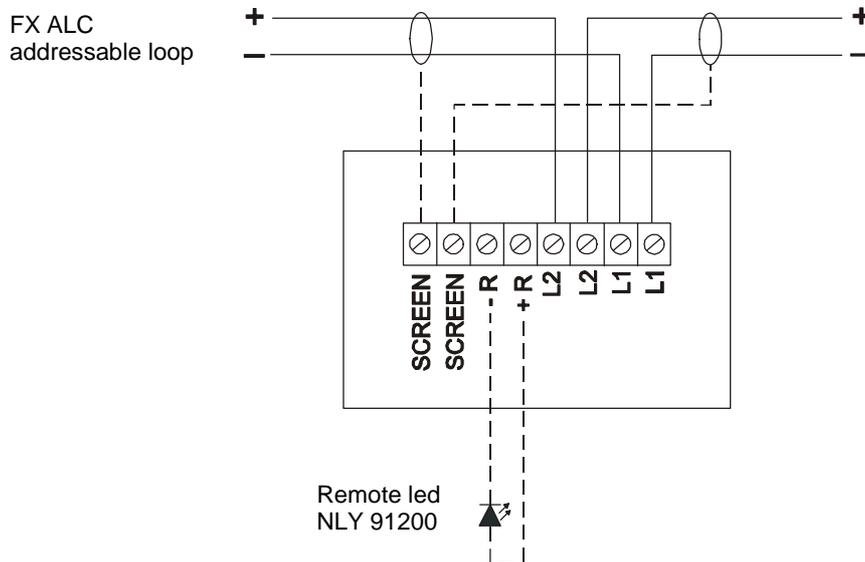
Pelco reserves the right to modifications.

### Electrical installation

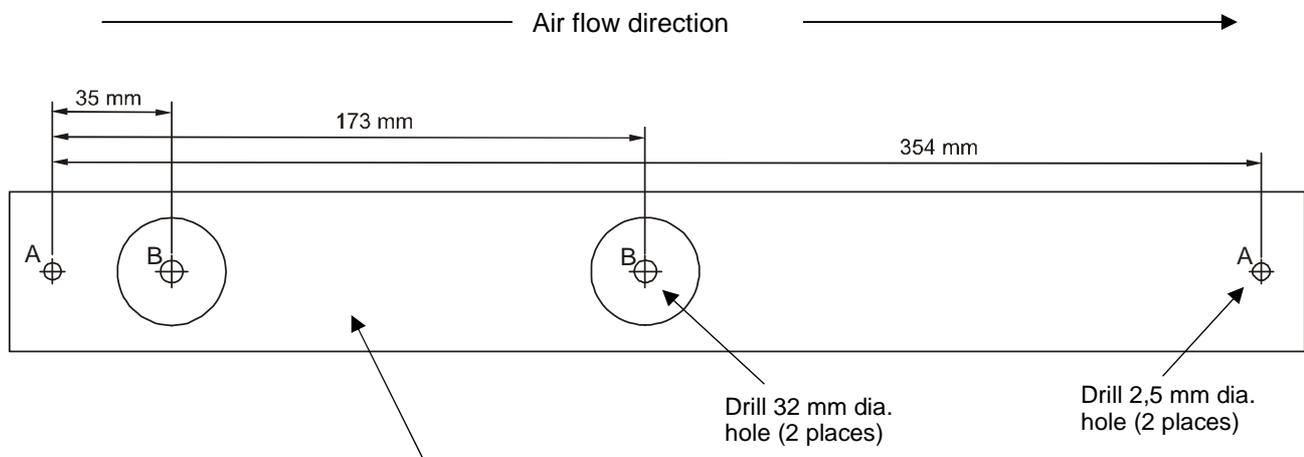
The duct smoke detector is supplied as a housing with a base fitted for Intellia detectors. Pelco recommends to use Intellia optical smoke detector EDI-20 with EBI-50 Duct Detector Housing.

**Wiring connections**

The duct smoke detector accepts solid or stranded wiring up to 2.5mm<sup>2</sup>.



**Dimensions of mechanical installation**



**DUST SMOKEDETECTOR MOUNTING TEMPLATE**

1. Remove backing from template, lay flat, and secure to duct in desired location.
2. Center punch at target centers (4 places).
3. Drill (2) 2.5 mm dia. holes at target "A" centers.
4. Drill pilot holes at target "B" centers and cut (2) 32 mm dia. holes, using a hole saw or punch.
5. See manual for further mounting instructions.