

# Duct Smoke Detector range

## Data Sheet



Notifier Series duct smoke detectors are flexible enough to fit configurations from square to rectangular and everything in between.

These units sense smoke in the most challenging conditions, operating in airflow speeds of 0.5m/s to 20m/sec, temperatures of 0°C to 70°C, and a humidity range of 0 to 95 percent (non-condensing).

An improved cover design isolates the detector head from the low-flow feature for simple maintenance. The unit incorporates cover tamper feature to indicate a trouble signal for a removed or improperly installed sensor cover. The duct detector housing provides a 20mm conduit knockout and ample space to facilitate easy wiring and mounting of relay module.

The duct smoke detector can be customised to meet local codes and specifications without additional wiring.

**PLEASE REMEMBER DUCT SMOKE DETECTORS ARE: NOT a substitute for an open area smoke detector, NOT a substitute for early warning detection, and NOT a replacement for a building's regular fire detection system.**

### Features

- Photoelectric, integrated low-flow technology
- Air velocity rating from 0.5m/s to 20m/sec
- Versatile mounting options: square or rectangular configuration
- Broad ranges for operating temperature 0°C to 70°C and humidity (0% to 95% non-condensing)
- Patented sampling tube installs from front or back of the detector with no tools required
- Cover tamper signal
- 20mm conduit knockout for easy wiring access
- Available space within housing to accommodate mounting of relay module
- Easily accessible code wheels on sensor head (sold separately)
- Clear cover for convenient visual inspection

## DNRE intelligent non-relay photoelectric duct smoke detector

The DNRE intelligent non-relay photoelectric duct smoke detector features a pivoting housing that fits both square and rectangular footprints capable of mounting to a round or rectangular duct.



## Specifications

### DNRE non-relay duct smoke detector

#### Mechanical Specification

- Size: (Rectangular) 37 cm L; 12.7 cm W; 6.36 cm D  
(Square) 19.7 cm L; 22.9 cm W; 6.35 cm D
- Weight: 0.82 kg
- Operating Temperature Range: 0°C to 70°C
- Storage Temperature Range: 0° to 70°C
- Operating Humidity Range: 0% to 95% relative humidity non-condensing
- Air Duct Velocity: 0.5 to 20 m/sec

#### Installing the Sampling Tube

- The sampling tube may be installed from the front or back of the detector
- The tube locks securely into place and can be removed by releasing the front or rear locking tab



#### Electrical Specification

- Please see detector head installation manual for electrical specifications

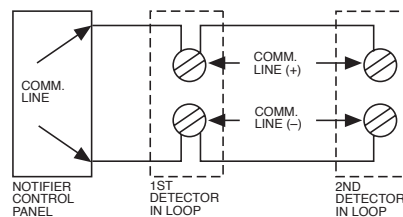
#### Accessory Current Loads at 24 VDC

Device	Standby	Alarm
RI/W/3V	0 mA	12 mA Max.

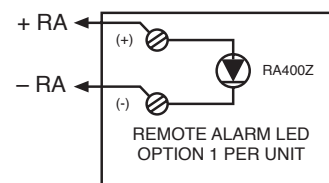
#### Wiring for intelligent non-relay duct smoke detector

- Please refer to DNRE installation manual for more information

#### System wiring diagram for DNRE



#### DNRE to RI/W/3V



## D2E conventional duct smoke detector

The D2E 2-wire photoelectric duct smoke detector features a pivoting housing that fits various applications: both square and rectangular footprints mount to round or rectangular duct work.



## Specifications

### D2E conventional duct smoke detector

#### Mechanical Specification

- Size: (Rectangular) 37 cm L; 12.7 cm W; 6.36 cm D  
(Square) 19.7 cm L; 22.9 cm W; 6.35 cm D
- Weight: 0.82 kg
- Operating Temperature Range: 0°C to 70°C
- Storage Temperature Range: 0° to 70°C
- Operating Humidity Range: 0% to 95% relative humidity non-condensing
- Air Duct Velocity: 0.5 to 20 m/sec

#### Installing the Sampling Tube

- The sampling tube may be installed from the front or back of the detector
- The tube locks securely into place and can be removed by releasing the front or rear locking tab



#### Electrical Specification

- Power supply voltage: 8.5-35 VDC
- Input capacitance: 0.1  $\mu$ F max.
- Reset voltage: 2.5 VDC min.
- Reset time: (with RTS451) 0.03 to 0.3 sec.
- Reset time: (by power down) 0.3 sec. max.
- Power up time: 35 sec. max.
- Alarm response time: 15 sec.
- Sensitivity Test: See detector label

#### Current Requirements: (Using No Accessories)

- Peak standby current: 120 $\mu$ A
- Max. standby current: 60  $\mu$ A (average)
- Max. alarm current: 130 mA

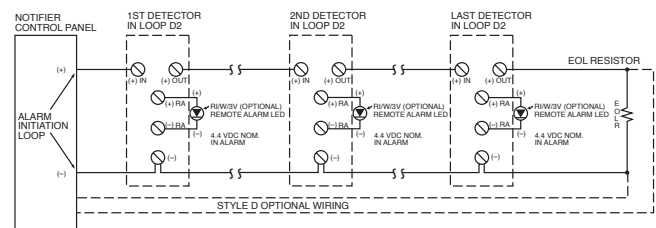
#### Accessory Current Loads at 24 VDC

Device	Standby	Alarm
RI/W/3V	0 mA	12 mA Max.


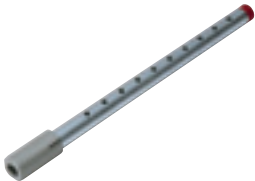
#### Wiring for intelligent non-relay duct smoke detector

- Please refer to the D2E installation manual for more information

#### System wiring diagram for 2-wire duct smoke detectors (powered from initiating device circuit)



## Product Range at a Glance

	Description	Part Number
	2-wire photoelectric low-flow duct smoke detector	D2E
	Intelligent Photoelectric Smoke Detector	DNRE
	Metal sampling tube duct width up to 0.3m	DST1
	Metal sampling tube duct widths 0.3 to 0.6 m	DST1.5
	Metal sampling tube duct widths 0.6 to 1.2 m	DST3
	Metal sampling tube duct widths 1.2 to 2.4 m	DST5
	Metal sampling tube duct widths 2.4 to 3.6 m	DST10
	Remote annunciator alarm LED	RI/W/3V