

# D282A-DH Replacement Duct Smoke Detector Head (24 VDC)

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- ▶ 24 VDC replacement detector head for D300A and D300A-HV Conventional Duct Detector Housings
- ▶ Easy head removal for cleaning and servicing
- ▶ Flashing LED power on indicator

The D282A-DH Replacement Duct Smoke Detector Head detects the large smoke particles which typically result from wood, paper, and fabric combustion. It is a conventional 24 VDC photoelectric smoke detector head for use with the D300A and D300A-HV conventional duct detector housing units. It uses an infrared (IR) LED light source and a silicon photo diode to measure light reflected from particulates in a detection chamber. After two consecutive measurements exceeding the threshold level, the unit signals an alarm condition. The detection chamber, designed for reliable smoke entry characteristics, is protected by a micro-fine insect screen to minimize nuisance alarms. The sensitivity stability and high signal-to-noise ratio of this detector permits its use in a wide range of environmental conditions. The detector head has a moisture-proof reed switch that reacts to an external magnet for testing. The magnet test simulates a 4% to 6% smoke obscuration, which places the detector in an alarm condition. This test is especially useful in environmentally unstable or clean areas. There are built-in LEDs that flash to indicate the unit is powered. The LEDs latch on steady in an alarm condition.

## Certifications and approvals

| Region    | Certification |                                                      |
|-----------|---------------|------------------------------------------------------|
| USA       | UL            | UROX: Smoke - Automatic Fire Detectors (UL268 and A) |
|           | CSFM          | see our website                                      |
| Hong Kong | HKFSD         | J-005/C/026                                          |

## Installation/configuration notes

### Compatible Products

The following products are compatible with the D282A-DH Replacement Duct Smoke Detector Head:

| Category          | Product ID | Product Description                           |
|-------------------|------------|-----------------------------------------------|
| Control Panels    | D7022      | Two-zone FACP                                 |
|                   | D7024      | Conventional FACP's                           |
|                   | D7024-EX P | Conventional FACP's for export                |
| Detector Housings | D300A      | Duct smoke detector with housing              |
|                   | D300A-HV   | High-voltage duct smoke detector with housing |

## Installation

The D282A-DH installs quickly and easily into the D300A and D300A-HV. Remove the four screws that hold the housing unit's cover in place, twist the existing detector head counter-clockwise to remove it, insert the replacement head, turn it clockwise, replace the housing unit's cover and tighten the screws.

## Parts included

| Quant. | Component                          |
|--------|------------------------------------|
| 1      | D282A-DH replacement detector head |
| 1      | Literature pack                    |

## Technical specifications

### Environmental Considerations

|                          |                                |
|--------------------------|--------------------------------|
| Relative Humidity:       | 10% to 85% non-condensing      |
| Temperature (operating): | +32°F to +120°F (0°C to +49°C) |

### Mechanical Properties

|                        |                 |
|------------------------|-----------------|
| Color:                 | Bone white      |
| Dimensions (diameter): | 4 in. (10.2 cm) |

### Power Requirements

#### Current

|          |                                                                   |
|----------|-------------------------------------------------------------------|
| Alarm:   | Depends on housing; refer to the D300A or D300A-HV specifications |
| Standby: | 0.045 mA                                                          |
| Surge:   | 0.16 mA                                                           |

#### Voltage

|            |                      |
|------------|----------------------|
| Operating: | 15.0 VDC to 33.0 VDC |
|------------|----------------------|

## Ordering information

### D282A-DH Replacement Duct Smoke Detector Head (24 VDC)

Detects the large smoke particles which typically result from wood, paper, and fabric combustion  
Order number **D282A-DH**

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