

## DNR / DNRW

### Intelligent Non-Relay Duct Detector

The DNR Intelligent non-relay photoelectric duct smoke detector housing and DNRW watertight non-relay photoelectric duct smoke detector housing (head not included) are for use with Honeywell Farenhyt Series fire alarm control panels (FACPs).

The DNR and DNRW feature a pivoting housing that is flexible enough to fit configurations from square to rectangular. They feature low-flow technology that enables duct smoke detection throughout a broad range of airflow environments. Many difficult to solve HVAC applications occur in low airflow duct applications where reliable smoke detection is critical. These duct detectors can detect smoke at air speed velocities of 100 feet per minute or greater, while continuing the same reliable performance to 4000 feet per minute.

By sampling air currents passing through a duct and giving dependable performance for shutdown of fans, blowers, and air conditioning systems, the DNR and DNRW prevent the spread of toxic smoke and fire gases through the protected area.

The intelligent duct detectors communicate and are continuously monitored through the FACP signaling line circuit (SLC) loop. Detector sensitivity changes caused by dirt, temperature, or humidity are reported to the FACP, allowing compensation algorithms to maintain the detector's set sensitivity. An advanced indication at the panel identifies the detector address, allowing for selected maintenance to be performed as needed.

#### INSTALLATION

The DNR and DNRW are designed for use in air handling systems that have air velocities or 100 to 4000 feet per minute (0.5 – 20.3 m/s).



**DNR**

## FEATURES & BENEFITS

- Photoelectric, integrated low-flow technology (IDP-Photo or IDP-PhotoR detector head sold separately)
- Air velocity rating from 100 to 4000 feet per minute (0.5 to 20.32 meters per second)
- Support for Class B or Class A wiring
- Patented sampling tube installs from front or back of the detector with no tools required
- Available space within housing to accommodate mounting of relay module
- Easy to clean
- Provides trouble signal in the event the sensor cover is removed or improperly installed
- Easily accessible code wheels on sensor head (IDP-Photo sold separately)
- UL recognized field replaceable power and sensor boards
- Transparent cover for convenient visual inspection
- UL 268A listed
- Remote testing capability
- DNRW is listed as a watertight enclosure allowing for use in the most extreme environments
- CSFM Listed
- MEA Listed - 225-02-E Vol. V

# DNR / DNRW Technical Specifications

## PHYSICAL

**(Rectangular):** 14.38" (37 cm) L x 5" (12.7 cm) W x 2.5" (6.6 cm) D

**(Square):** 7.75" (19.7cm) L x 9" (22.9cm) W x 2.5" (6.35cm) D

**Weight:** 1.6 lb.

## ENVIRONMENTAL

**Operating Temperature:** -4°F to -158°F (-20°C to -70°C)

**Humidity:** 0 to 95% non-condensing)

## AIR VELOCITY

100 to 4000 ft/min (0.5 – 20.3 m/s)

## ELECTRICAL

Please see detector head installation manual for electrical specifications

## ORDERING INFORMATION

**DNR:** Intelligent non-relay duct smoke detector

**DNRW:** Watertight non-relay duct smoke detector

**IDP-PhotoR:** Addressable Photoelectric Detector with remote test capability (not included with DNR)

**IDP-Relay:** Addressable Relay Module, must be added if relay function is required, (fits in housing)

## ACCESSORIES

**DST1:** Metal Sampling Tube Duct Width up to 1'

**DST1-5:** Metal Sampling Tube Duct Widths 1' - 2'

**DST3:** Metal Sampling Tube Duct Widths 2' - 4'

**DST5:** Metal Sampling Tube Duct Widths 4' - 8'

**DST10:** Metal Sampling Tube Duct Widths 8' - 12'

**DH400OE-1:** Weatherproof Enclosure

**EXT:** Metal Exhaust Tube Duct width 1'

**RA100Z:** Remote LED Annunciator

**DCOIL:** Duct Accessory Coil. (see important note for detail)

**RTS151:** Magnetic Remote Test station

**RTS151KEY:** Key-Activated Remote Test station

**M02-04-00:** Test Magnet

**P48-21-00:** Replacement End Cap for Metal Sampling Tube

## COMPATIBILITY

The DNR and DNRW are compatible with the following Farenhyt Series FACPs:

- IFP-2100 / ECS / RFP-2100
- IFP-2000 / ECS / RPS-2000
- IFP-1000 / ECS
- IFP-300 / ECS
- IFP-100 / ECS
- IFP-75
- IFP-50
- IFP-25

For a complete listing of all compliance approvals and certifications, please visit [www.farenhyt.com](http://www.farenhyt.com).

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For Technical Support, Please call 800-446-6444.

## For more information

Learn more about Honeywell's Farenhyt Series and other products available by visiting [www.farenhyt.com](http://www.farenhyt.com)

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