DNR AND DNRW

Intelligent Photoelectric Duct Smoke Detectors

> **The DNR and DNRW use photoelectric technology to detect smoke and combustion particles present in air moving through an HVAC air handling system.**

The Gamewell-FCI DNR intelligent non-relay photoelectric duct smoke detector and DNRW watertight non-relay photoelectric duct smoke detector feature a pivoting housing that fits both square and rectangular footprints capable of mounting to a round or rectangular duct.

The DNRW duct smoke detector, with its NEMA-4 rating, is listed as a watertight, UV resistant enclosure providing protection against falling dirt, rain, and windblown dust, splashing and hose directed water, allowing operators to use the detector in the most extreme environments.

These units sense smoke in the most challenging conditions, operating in airflow speeds of 100 to 4,000 feet per minute (0.5 – 20.32 m/s), temperatures of -4°F – 158°F (-20°C – 70°C), and a humidity range of 0 – 95 percent (non-condensing.)

An improved cover design isolates the sensor head, which allows for ease of maintenance. A cover tamper feature indicates a trouble signal for a removed or improperly installed sensor cover. The housing provides a 3/4-inch conduit knockout and ample space to facilitate easy wiring and mounting of a relay module.

The Gamewell-FCI DNR duct smoke detectors can be customized to meet local codes and specifications without additional wiring and are compatible with all previous models, including remote test accessories.

ACCESSORIES

Gamewell-FCI provides system flexibility with a variety of accessories, including two remote test stations and different means of visible and audible system annunciation. As with our duct smoke detectors, all duct smoke detectors accessories are UL listed.

FEATURES AND BENEFITS

- Photoelectric, integrated low-flow technology
- Air velocity rating from 100 ft/min – 4,000 ft/min (0.5 m/s – 20.32 m/s)
- Versatile mounting options: square or rectangular configuration
- Broad ranges for operating temperature (-4°F – 158°F, -20°C – 70°C) and humidity (0% – 95% non-condensing)

- Patented sampling tube installs from front or back of the detector with no tools required
- Cover tamper signal
- Increased wiring space with a newly added 3/4" conduit knockout
- Available space within housing to accommodate mounting of a relay module
- Easily accessible code wheels on sensor head (sold separately)

- Clear cover for convenient visual inspection
- Remote testing capability
- Requires com line power only
- Accommodates an addressable relay module, sold separately, for applications requiring a Form-C relay

Honeywell

Gamewell FCI FIRE CONTROL INSTRUMENTS

DNR AND DNRW TECHNICAL SPECIFICATIONS

Size: (Rectangle) 14.38 in (37 cm) Length; 5 in (12.7 cm) Width, 2.5 in (6.6 cm) Depth

Size: (Square) 7.75 in (19.7 cm) Length; 9 in (22.9 cm) Width; 2.5 in (6.35 cm) Depth

Weight: 1.6 lb (0.73 kg)

Operating Temperature Range: -4°F – 158°F (-20°C – 70°C)

Storage Temperature Range: -22°F – 158°F (-30°C – 70°C)

Operating Humidity Range: 0% – 95% relative humidity (non-condensing)

Air Duct Velocity: 100 – 4,000 ft/min (0.5 – 20.32 m/s)

Accessory Current Loads at 24 VDC: RA100Z and RTS151(KEY)

- Standby: 0mA
- Alarm: 12mA max

AGENCY LISTINGS AND APPROVALS

Consult product manual for lists of compatible UL-Listed devices. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL:** S911
- **CSFM:** 3240-1653:0209
- **FM approved**

PRODUCT LINE INFO

DNR: Intelligent non-relay photoelectric low flow smoke detector housing. Requires photoelectric smoke detector (sold separately).

DNRW: Watertight intelligent non-relay photoelectric low flow duct smoke detector housing. Requires photoelectric smoke detector (sold separately). NEMA-4 rated.

ASD-PL3R-IV: Remote test capable addressable low-profile photoelectric smoke detector; ivory; supports CLIP and Velociti® protocols

ASD-PL3R: Remote test capable addressable low-profile photoelectric smoke detector; white; supports Velociti protocol only

ASD-PL3-IV: Addressable low-profile photoelectric smoke detector; ivory; supports CLIP and Velociti protocols

ASD-PL3: Addressable low-profile photoelectric smoke detector; white; supports Velociti protocol only

DCOIL: Remote test coil. Required for older DNR(W) duct detector housing

DUCTCOV: Retrofit DNR cover for manufactured prior to April 2014

DUCTCOVW: Retrofit DNRW cover for manufactured prior to April 2014

DST1: Metal sampling tube duct width up to 1 ft (0.3m)

DST1.5: Metal sampling tube duct widths up to 1 ft – 2 ft (0.3 – 0.6 m)

DST3: Metal sampling tube duct widths up to 2 ft – 4 ft (0.6 – 1.2 m)

DST5: Metal sampling tube duct widths up to 4 ft – 8 ft (1.2 – 2.4 m)

DST10: Metal sampling tube duct widths up to 8 ft – 12 ft (2.4 – 3.7 m)

DH400OE-1: Weatherproof enclosure

ETX: Metal exhaust tube duct, width 1 ft (0.3 m)

M02-04-00: Test magnet

P48-21-00: End cap for metal sampling tubes

RA100Z: Remote annunciator alarm LED

RTS151: Remote test station

RTS151KEY: Remote test station with key lock

IMPORTANT NOTES

- DNR(W) duct detector housings with a date code of 0013 or higher do not require a DCOIL or auxiliary 24 VDC for remote test applications when used with a remote test capable detector.
- DNR(W) duct detector housings with a date code of 0012 or earlier require a DCOIL and auxiliary 24 VDC power for remote test applications.

Gamewell-FCI® and Velociti® are registered trademarks of Honeywell International Inc.

This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice.

Country of origin: Mexico

Honeywell

Gamewell FCI FIRE CONTROL INSTRUMENTS