Velociti™ Series
ABD-2F and ABD-RT2F

![Gamewell FCI FIRE CONTROL INSTRUMENTS by Honeywell]

Single-Ended Reflected Type Beam Smoke Sensor

Description

The Gamewell-FCI Velociti™ Series, ABD-2F and addressable projected beam smoke sensor is uniquely suited to sense smoke in hostile environments or open areas with high ceilings where spot-type sensors are unsuitable or difficult to install and maintain. It is intended for use in the signaling line circuits with the E3 Series® ILI-MB-E3 and ILI-S-E3 (Velociti mode only). The ABD-2F consists of a combination transmitter/receiver unit and a reflector. When smoke enters the path between the unit and the reflector, it causes a reduction in the signal, and when the smoke level reaches the predetermined threshold, an alarm results.
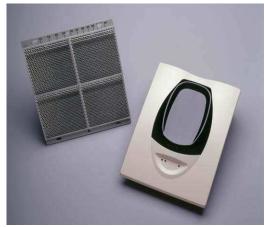
A unique single-ended reflective design offers simpler installation than the traditional transmitter and receiver types of beam sensors. Alignment is swiftly accomplished via an optical sight and a 2-digit signal strength meter integral with the product. Listed for operation from –22° F to 131° F, the ABD-2F can be installed in garages, warehouses and other hostile environments where temperature extremes exceed the capability of spot-type sensors.

The Velociti™ Series uses a communication protocol that substantially increases the speed of communication between the sensors and Gamewell-FCI analog addressable fire alarm controls. These devices operate in a grouped fashion. If one of the devices in the group changes status, the panel's microprocessor stops the group poll and concentrates on the single device. The net effect is response speed up to five times greater than earlier designs.

The unit has four (4), standard sensitivity selections along with two (2), Acclimate settings. When either of the two Acclimate settings are selected, the sensor will automatically adjust its sensitivity using advanced software algorithms to select the optimum sensitivity for the specific environment.

Velociti™ is a trademark and E3 Series® is a registered trademark of Honeywell International Inc.

ABD-2F/RT2F

Features

- Single-ended, reflective design
- Six (6), user-selectable sensitivity levels
- 16 to 328 foot (4.9 to 99.9 m) detection range
- Compatible with the E3 Series® ILI-MB-E3 and ILI-S-E3
- Integral sensitivity test feature (ABD-2SF)
- Digital display - no special tools required
- User-friendly alignment procedure
- Integral automatic gain control compensates for signal deterioration from dust build-up
- Remote test station (optional)

An ISO 9001-2000 Company

SIGNALING
UL LISTED S1913
FM APPROVED 3023594
MEA Approved 219-02-E Vol. VI
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Description (continued)

The ABD-RT2F is equipped with an integral sensitivity test feature consisting of a test filter attached to a servo motor inside the sensor optics. The ABD-RT2F requires an additional, external power supply. Using the remote test station Model RTS451, the motor moves the filter in the path of the light beam, thereby serving as an accurate test of the receiver sensitivity. This test feature allows the user to quickly and easily meet the annual maintenance and test requirements of NFPA 72.

Specifications

Operating Temperature
Range: -22° F to 131° F
                           (-30° C to 55° C)

Operating Humidity
Range: 10% to 93 RH
                           non-condensing

Dimensions:
  Detector: 10" H x 7.5" W x 3.3" D
                           (25.4 H x 19 W x 8.4 D cm)
  Reflector: 16-230 ft. (4.9 x 70.1 m)
                           7.9" H x 9.1" W
                           (20 H x 23 W cm)

Voltage Range: 15 to 32 VDC
Alarm Current: 8.5 mA max.
Standby Current: 2 mA max. avg. @ 24 VDC

Ordering Information

Model	Description
ABD-2F	Single-ended reflected type beam smoke sensor
ABD-RT2F	Single-ended smoke sensor with integral sensitivity test
BEAMLRK	Long range accessory kit (required for applications with a range over 230 ft. (70m)
BEAMMMK	Multi-mount kit (provides ceiling or wall mount capability with increased angular adjustment)
BEAMSMK	Surface mount kit
RTS451	Remote test station
RTS451KEY	Remote test station with key lock