



850 Series Fire Detectors - Generation 6

Features:

- Choice of heat, optical, optical and heat multi-sensor or 3oTec triple multi-sensor
- Any Pantone colour available with CPD approval
- Advanced multi-sensor designs
- Built-in line isolator
- Quick and easy to install
- Extended drift compensation
- Two way infra-red communication to the 850EMT Engineering Management Tool
- Fire, isolate and fault LED indications
- Comprehensive range of bases and base accessories

The 850 series fire detectors are designed to be both adaptable and flexible which means they can be used in most premises to protect against a wide range of potential fire risks. They use sophisticated digital signalling to communicate with the MZX Technology fire control panel. Using the 850EMT Engineering Management Tool, which communicates with the detector via a two way infrared link together with a range of bases and accessories, they are quick and easy to install. Colour options allow the detectors to either blend into the decor or be easily spotted against a contrasting background

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850PH Photo Heat Detector

With the ability to detect a wide range of fires from flaming to smouldering types, the combined optical and heat multi-sensor detector is the preferred choice for a range of applications including light industrial, retail and office environments. It operates in a number of approved modes and sensitivities that can be dynamically selected to suit different environmental conditions.



850P Photo Detector

More benign environment where any potential fire will be slow burning can be protected using the optical detector. A choice of sensitivities and modes gives this detector a broad range of applications.



850H Heat Detector

To compliment the range the heat sensor can operate in fixed temperature and rate-of-rise modes with a number of approved sensitivities. Most often used in areas where high levels of dust are present or where the environment precludes the use of smoke detectors.



850PC 3oTec Triple Sensor Detector

For life protection and when the environmental conditions are challenging, the 3oTec detector provides the ultimate in detector performance and false alarm rejection. It is a multi sensor that monitors smoke, heat and CO levels in concert to accurately determine the presence of fire. Applications include industrial, retail, transport hubs, and healthcare. Its false alarm rejection properties make it the ideal choice for hotel bedrooms where steam from bathrooms is a common source of false alarms.



Colour Options

Detectors are supplied white as standard. A range of colours are available, these are supplied as packs of ten detector covers and continuity bases. A sample pack is also available that contains one cover and one base in each of the standard 10 colours. In addition to the 10 stocked shades, any Pantone colour can be supplied as a special order for quantities of 100 or over.



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Detector Bases

The detector bases are designed to snap-fit to the ceiling tile adaptor or can be screw fixed to a ceiling or electrical box in the traditional manner. A park position allows the detector to be mechanically attached to the base without making electrical connection to facilitate the testing of electronic free bases.

4B-C 4" Continuity Base

Use with 850 Series detectors that have built in line isolator. The 4B-C base provides continuity when the detector is removed.



850 EMT Engineering Management Tool

The 850EMT is a commissioning tool that communicates with 850 series fire devices via a two way infrared link. It is designed to speed up and simplify installation and commissioning, reduce the possibility of engineering error and improve health and safety by removing the need for working at height.



Detector Base Accessories

A number of ingeniously designed detector base accessories combine to cut installation time, enhance the installed appearance and mechanically protect the installation.

Ceiling Tile Adaptor CTA

The CTA is used to fix detectors to suspended ceilings and allows the detector to be commissioned and tested before the ceiling is fitted. It can cut the total installation time by 30%.



CTA Adapter Plate

When beacon bases or sounder bases are fixed to the CTA, the adaptor plate is required to provide standard electrical box fixings.



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Euro Mount

For surface cable and mini trunking installations, the Euro Adaptor provides a shallow back-box onto which the detector base is fitted.



Deckhead Mount

The deckhead mount provides an IP55 seal between the mount and the detector base to provide superior environmental protection.



Base 6" Adaptor

For use with U.S. style 6" electrical back boxes or can be fixed directly to a ceiling and used to conceal marks left when older, large diameter detectors are replaced.



Approvals

850PH: EN54-5 and EN54-7, CPD, VdS Type Approval, CEA402 1

850P: EN54-7, CPD, VdS Type Approval

850H: EN54-5, CPD, VdS Type Approval

850PC: EN54-5 and EN54-7, CPD, VdS Type Approval, VdS2806, CEA402 1

SPECIFICATIONS

Technical Specifications

| | Dimensions mm | Weight g | Operating Temp. | Relative Humidity |
|---------------------------|---------------------|----------|---|----------------------|
| 850PH Photo heat detector | Dia. 109 x 43H | 76 | -25 °C to +70 °C | 95% (non-condensing) |
| 850P Photo detector | | 76 | -25 °C to +70 °C | |
| 850H Heat detector | | 81 | -25 °C to +70 °C short-term: to +90 °C | |
| 850PC 3σTec detector | | 94 | -10 °C to +55 °C | |
| 4B-C 4" Continuity Base | Dia. 109 x 23.3H | 53 | -25 °C to +70 °C (+90 °C for short periods) | |
| Ceiling Tile Adaptor CTA | Dia. 165 x 51.5 H | 232 | | |
| CTA Adapter Plate | Dia. 114.5 x 7.5 H | 40 | | |
| Euro Mount | Dia. 110.4 x 20 H | 70 | | |
| Deckhead Mount | Dia. 147.5 x 41.5 H | 288 | | |
| Base 6" Adaptor | Dia. 150.7 x 16.5 H | 50 | | |

Ordering Information

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|-------------|------------------------------------|-------------|---|
| 516.850.051 | 850PH Photo Heat Detector | 517.050.501 | Colour Sample set, pack of 10, one of each cover and base |
| 516.850.052 | 850P Photo Detector | | Orange Pantone 1645C (semi-gloss) pack of 10 cover and base |
| 516.850.053 | 850H Heat Detector | 517.050.502 | Yellow Pantone 102C (gloss) pack of 10 cover and base |
| 516.850.054 | 850PC 3σTec Triple Sensor Detector | | Green Pantone 355C (matt) pack of 10 cover and base |
| 516.850.900 | 850EMT Engineering Management Tool | 517.050.503 | Red Pantone 186C (matt) pack of 10 cover and base |
| 517.050.042 | 4B-C 4" Continuity Base | | Brown Pantone 1615C (matt) pack of 10 cover and base |
| 517.050.060 | Ceiling Tile Adaptor | 517.050.504 | Blue Pantone 639C (gloss) pack of 10 cover and base |
| 517.050.058 | CTA -AP CTA Adaptor Plate | | Pink Pantone 238C (gloss) pack of 10 cover and base |
| 517.050.052 | 4B-EM 4" Euro Mount | 517.050.505 | Sliver Pantone 877C (metallic) pack of 10 cover and base |
| 517.050.054 | 4B-6A 4" to 6" Base Adaptor | | Gold Pantone 873C (metallic) pack of 10 cover and base |
| 517.050.051 | 4B-DHM Deckhead Mount | 517.050.506 | Black Pantone Hexachrome Black C (matt) pack of 10 cover and base |
| 517.050.055 | 4B-DAF 4" Base DIN Address Flag | | |
| 516.800.915 | Standard Address Flag | 517.050.507 | |
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