

INSIGHT II

scanners

INTEGRATED FLAME SCANNER WITH TWO INTERNAL FLAME RELAYS

Type 95DSS3



The FIREYE InSight II Type 95DSS3 flame scanners are micro-processor based flame scanners utilizing both solid state infrared (IR) and ultraviolet (UV) sensors.

The FIREYE InSight II flame scanners incorporate two internal flame relays with adjustable ON/OFF thresholds and two 4-20 mA analog outputs, thereby eliminating the need for a remote flame amplifier.

The FIREYE InSight II scanners are powered by 24 Vdc and have electronic self checking. Model 95DSS3-1 has one 8-pin and one 12-pin electrical cable quick disconnect. Models 95DSS3-1CEX and -1WICEX have internal terminal blocks for cable connection. The scanners have either an attached Keypad & VFD display, or an infrared transmitter for a remote handheld keypad / display.

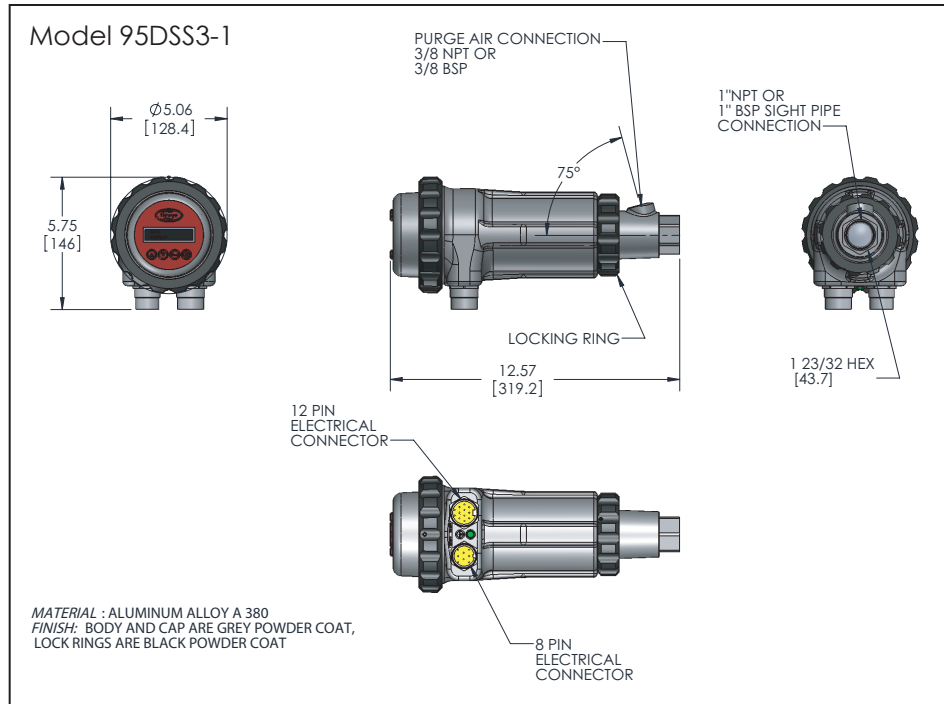
INSIGHT II SCANNER FEATURES

Features

Models

| | 95DSS3-1 | 95DSS3-1CEX | 95DSS3-1WICEX |
|--|--------------------|-------------|---------------|
| Infrared & Ultraviolet Sensors | ✓ | ✓ | ✓ |
| Flame Relays (2) | ✓ | ✓ | ✓ |
| Fault Relay | ✓ | ✓ | ✓ |
| 4-20 mA Outputs (2) | ✓ | ✓ | ✓ |
| Modulation Frequency Selections | 21 | 21 | 21 |
| Memory Files | 4 | 4 | 4 |
| Communications | ✓ | ✓ | ✓ |
| Auto Config | ✓ | ✓ | ✓ |
| NEMA 4X, IP66 Housing | ✓ | ✓ | ✓ |
| Keypad & VFD Display | ordered separately | ✓ | |
| IR Transmitter for remote handheld display | ordered separately | | ✓ |
| Area Classification: | | | |
| Class I DIV 2, Group A,B,C,D,F,G | ✓ | | |
| Ex nA nC IIC T4 | ✓ | | |
| Ex d IIC T6 | | ✓ | ✓ |

INSIGHT II SCANNER DIMENSIONS



INSIGHT II SCANNER SPECIFICATIONS

MECHANICAL:

| | |
|-----------------------------------|--|
| Housing Material: | Cast aluminum with gray polyester powder coat finish |
| Housing Weight: | 5.9 lbs (2.69kg), 7.1 lbs (3.22kg) "CEX" models, flange additional |
| Environmental: | NEMA 4X, IP66 |
| Area Classification: | 95DSS3-1: Class I Div 2, Groups A, B, C, D, Class II Div 2, Groups F & G 95DSS3-1CEX, -1WICEX: Ex d IIC T6 |
| Mounting: | Requires one of two threaded mounting flanges, ordered separately (see below) |
| Mounting Flanges: | Contains an integral heat-insulating female thread insert (heat insulating nipple not required). |
| Flange Threads: | P/N 60-2919-1 1" NPT female pipe mount with 3/8" NPT female cooling air connection. P/N 60-2919-2 1" BSP female pipe mount with 3/8" BSP female cooling air connection. |
| Mounting Flange Weight: | 0.62 lbs (0.28kg) |
| Cooling / Purge Air Requirements: | Source: Clean, dry cool Volume: 4 SCFM (113 l/min) at 3/8" threaded mounting flange, or 1 inch "Y" fitting, mounted on scanner sight pipe. Temperature near the upper limit of the scanner operating range and/or use with dirty/dusty fuels may require up to 15 SCFM (425 l/min). |
| Temperature Rating: | -40° to +150°F (-40°C to +65°C) |
| Humidity: | 0% to 95% relative humidity, non-condensing |

ELECTRICAL:

| | |
|------------------------|--|
| Input Power: | 24 Vdc, +10%, -15% supply current .035 A, 8.5 VA |
| Electrical Connection: | 8-pin and 12-pin screw type quick disconnect (non-CEX). "CEX" models have internal terminal blocks |
| Relay Output: | FLAME RELAY 1, SPDT (1 N.O., 1 N.C.) FLAME RELAY 2, SPDT (1 N.O., 1 N.C.) FAULT RELAY, SPST (1 N.O.) |
| Contact Rating: | Minimum: 10mA @ 5 Vdc Maximum: 100 mA @ 30 Vdc, 100 mA @ 50 Vac |
| Analog Output: | Two, 4-20 mA dc current, referenced to 24 Vdc common, maximum connected load: 750 ohms |
| Operator Interface: | P/N 95DISP-1 Alpha -Numeric Display with five push button keys. P/N 95WIDISP-2 Infrared Transmitter, used in conjunction with P/N 95WIHH-2 hand-held communications tool. |
| Cable Specification: | P/N 59-546 (8-conductor), P/N 59-547 (12-conductor): Multi-core, 8 and 12 conductor (color coded), 18- AWG, with foil wrap and overall braided shield and drain wire. PLTC-ER rating. Maximum cable length 1000 feet (305 meters) Cable Jacket: PVC / black (flame-retardant, low smoke, zero halogen) Temperature Rating: -40 F to +221 F (-40 C to +105 C) P/N 59-546 Nominal O.D. 0.44" (11.2 mm), maximum O.D. 0.48" (12.2mm) P/N 59-547 Nominal O.D. 0.52" (13.2 mm), maximum O.D. 0.56" (14.2mm) Maximum cable length 1000 feet (305 meters) |



Thinking Beyond the Traditional...

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