

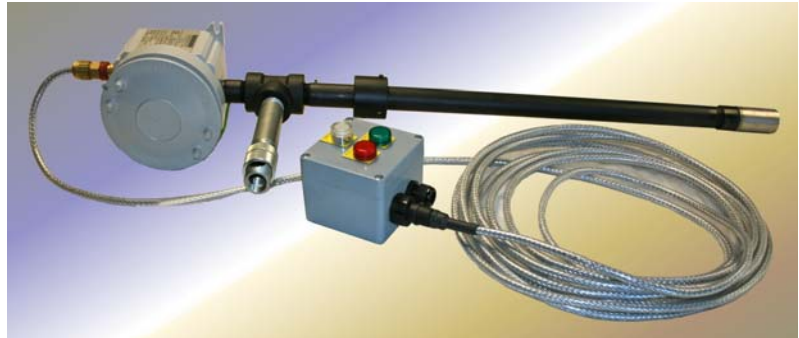
DATASHEET

“Smart” Pilot



Applications

- Burners
 - Natural Draught
 - Forced Draught
 - Fired Heaters
 - Reformers
 - Crackers
 - Boilers



Design Considerations

- Hazardous area classification
- Local type approvals
- Wide range of furnace operating conditions
- Continuous operation
- Fail safe
- Variety of operational modes
- Compact design



Key Features

- Natural or forced draught
- Hazardous or safe area options
- High hydrogen capability
- Ignition and detection (ionisation / flame rectification) by single common electrode
- Transformer and detection module mounted integral with pilot body
- Local and / or remote ignition
- Local and / or remote detection
- Local ignition and detection panels standard or bespoke design
- Many international and national type approvals

Technical Details

Pilot

- **Draught Type** Natural or forced draught
- **Area Classification** EEX-de IIC T6
- **Material** Nozzle shield – AISI 310 Nozzle – BS3146-ANC3B (18Cr 8 Ni)
Electrode tip – Kanthal
- **Finish** Venturi assy – zinc plated Pilot body – etched primer - black
Stainless steel part - natural
- **Insert Length** Min length = 500mm
Max length = 1,500mm (115Vac/127Vac), 2,500mm (230Vac)
- **Distance for removal** Insert Length + 500
- **Liberation** Option 1 – 10,000 kcal/h (pilot nozzle diameter = 38mm)
Option 2 – 25,000 kcal/h (pilot nozzle diameter = 51mm)
- **Fuel Gas** 0.3 to 1.5 kg/cm² Butane, Natural Gas, Refinery Fuel Gas
- **Gas Connection** Threaded ½” NPT Female, Flange ½” ANSI 150#

Ignition Detection Module

- **Area Classification** EEX d IIC T6 - IP66
 - **Material** Grade LM6 cast alloy - RAL 7035 (grey) Epoxy powder coat
 - **Voltage options**
 - Mains /
 - Control
- | | | | | | |
|----------------|------------------|----------------|------------------|----------------|------------------|
| 115Vac / 24Vdc | 115Vac / 115 Vac | 127Vac / 24Vdc | 127Vac / 127 Vac | 230Vac / 24Vdc | 230Vac / 230 Vac |
|----------------|------------------|----------------|------------------|----------------|------------------|
- **Mains Supply Freq.** 50Hz / 60Hz
 - **Power Consumption** 0.5 VA
 - **Spark Outlet Amplitude** 14kV @ 40 mA rms (20kHz)
 - **Remote Flame Signal** Volt Free Contact 2A @230Vac SPCO
 - **Gland Connection** 1 x power in, 1 x control, 1 x other - client to advise if required
 - **Cable Glands** 2 x M20 EEx-d barrier gland, 1 x other - client to advise if required

Indication / Control Unit

- **Area Classification** IIG EEX dem IIC T6 – IP65
- **Material** Glass fibre reinforced polyester resin – natural finish
- **Lamps / Pushbuttons** Red illuminated spark push button - Illuminated when “pilot on”
- **Gland Connection** 1 x to Hamworthy Combustion Ignition / Detection Module
1 x to remote PLC / DCS (client to advise if required)
- **Cable Glands** 1 x EEx e Cable Gland
1 x EEx e Cable Gland (client to advise if required)

For further information on combustion equipment please contact the head office:

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Hamworthy Combustion Engineering Limited reserve the right to make changes and improvements which may necessitate alteration to the specification without prior notice


HAMWORTHY
COMBUSTION

Incorporating:
PEABODY ENGINEERING
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