

## Fire Detection Duty Probe

**Product Code:**  
**FDD**



### Description:

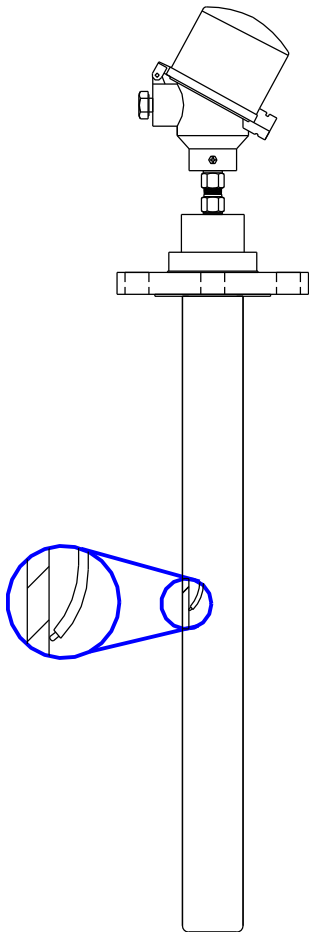
Operators of tank farms containing storage vessels with inflammable vapours, need early warning of sudden temperature rises.

The FDD temperature sensor enables this warning by utilising four thermocouples positioned at opposite sides of the protection tube and at varying points along the tube length.

Each thermocouple is maintained in firm contact with the inside wall of the protection tube to ensure a fast response to temperature change. The four thermocouples are connected in a parallel arrangement to provide a single average temperature value. The thermocouple output signal is then fed to the temperature transmitter in the connection head providing a 4 to 20mA output signal.

### Specification:

<b>PROTECTION TUBE</b>	44.50mm in diameter x 500mm long with a 1.63mm wall thickness in 316L stainless steel. Nominal length 500mm.
<b>TANK CONNECTION</b>	DN50 PN16/105 flange (or to customer specification) in 316L stainless steel.
<b>SEALING GLAND</b>	A sealing gland with a Teflon® sealant is located between the mounting flange and the connection head to ensure no movement of the thermocouples.
<b>CONNECTION HEAD</b>	A duplex connection head in die cast aluminium containing a ceramic connection block or a temperature transmitter. Environmentally rated to IP67 and with a cable entry screwed M20.
<b>THERMOCOUPLE SENSOR</b>	Four single type K (NiCr/NiAl) in 1.5mm OD sheaths and in 310 stainless steel. The thermocouple outputs are parallel connected to provide a single average output signal.
<b>TEMPERATURE TRANSMITTER</b>	Head mounted with type 'K' thermocouple input and providing a 4 to 20mA output when energised by an external, nominal 24V DC supply.



**Datasheet : 056**

### Accessories



Thermowells



Mineral Insulated Sensors



Conax Soft Sealant Glands



LD probe



MD Probe



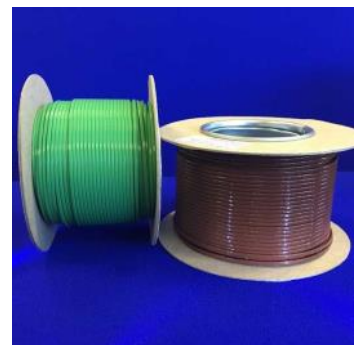
Furnace Probe



Range of PR Transmitters



Compression Fittings



Thermocouple Cable