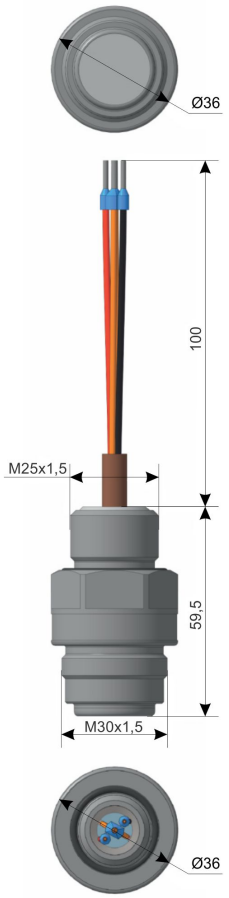
DCT HT series
thermocatalytic sensor

Leading manufacturer of instrumentation since 1997

The DCT HT series sensor is designed **to detect combustible gases, including hydrogen (H2), or vapours within the explosive range in the working area** at the facilities of general industrial use and hazardous industries. The sensor includes a sensing element based on **patented technology and provides high immunity to overloading and poisoning by hydrogen sulfide (H2S) and hexamethyldisilane (HMDS).**

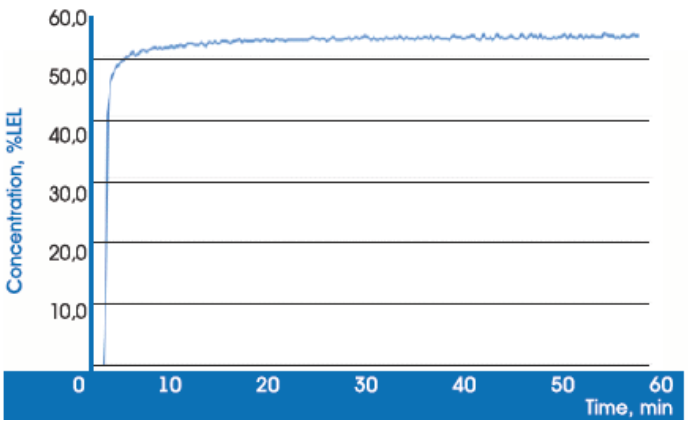
Features and Benefits

- High repeatability of measurement results due to patented sensing element technology
- Temperature stability. Temperature drift is less than 5% of the LFL
- Low response time T90 is less than 10 seconds
- Resistant to catalytic poisoning and overloading
- Rugged construction resistant to shock (fall from a height of 1 m) and vibration loads (up to 150Hz).
- Compliance with the requirements of TRCU 012/ 2011
- Ingress protection is IP65
- Estimated lifetime is 5 years

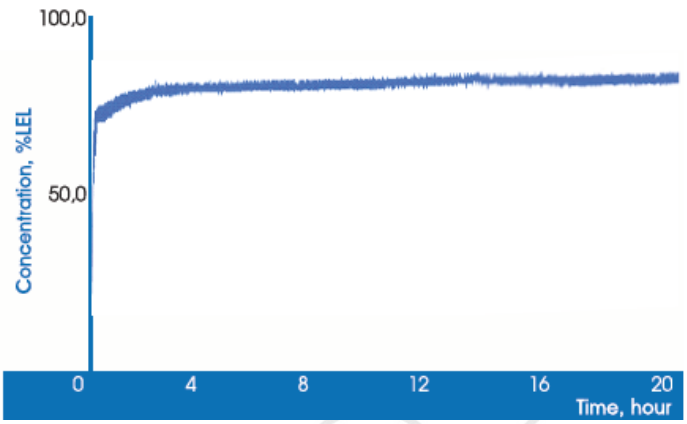


All measurements in mm.

Resistance to H25 is at least 50000 ppm/ hour
The deviation of the output signal
after exposure to 50000 ppm H25 does not exceed
5%LEL



Resistance to HMDS is at least 6000 ppm/ hour
The deviation of the output signal
after exposure to 300 ppm HMDS does not exceed
1%LEL



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Technical specifications*

Temperature Range	-60°C to +155°C
Sensor Current	280±20 мА
Maximum Power	0,75W
Indication Range	0-100% LEL
Resolution	1% LEL
Sensitivity (methane)**	1 mV/% LEL
Maximum Output Deviation	5% LEL
Long Zero Drift	< 1% LEL/month
Long Term Sensitivity Drift	< 3% LEL/month
Drift with Temperature Change	< 5% LEL
Permissible Humidity	0-98% (non-condensing)
Operating pressure	80-120 kPa
Time T90	<10 seconds (methane)
Enclosure Material	Stainless steel
Linearity	0-50% LEL
Power Supply	Voltage stabilized line
Calibration duration	No more than one time per 6 months when operating in clean air
Ingress Protection	IP65
Ex marking	1Ex db IIC T3 Gb
Accessories	Calibration nozzle, flange, explosion-proof terminal box

** Specifications are valid at 20 ° C with 50% relative humidity and 101.3 kPa pressure. When operating conditions change, the output characteristics may change too.*

*** When the oxygen content in the air of the working area is not less than 10% vol.*

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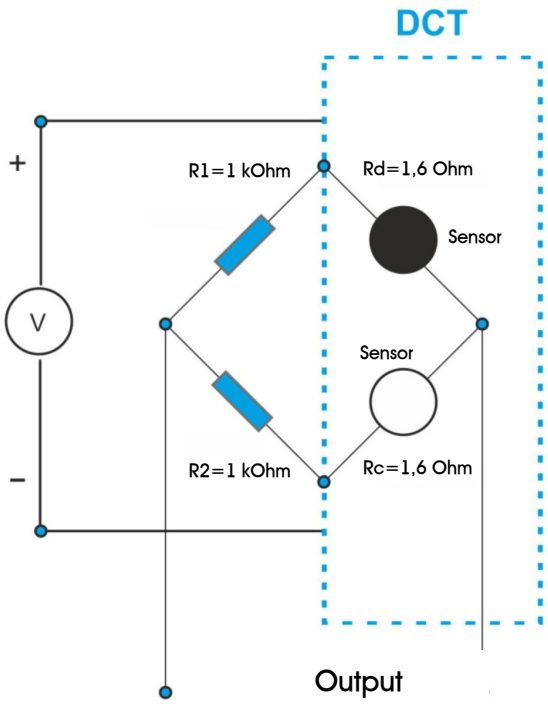
Cross-sensitivity table for methane calibration

№	Gas	Cross Sensitivity Factor
1	CH4	1.00
2	C3H8	0.76
3	C4H10	0.54
4	C5H12	0.43
5	H2	0.63
6	C6H14	0.52
7	C2H6	0.95
8	C2H5OH	0.46
9	C3H6	0.54
10	C2H3Cl	0.77
11	C6H12	1.08
12	CH3OH	0.80
13	C2H4	0.55
14	C6H6	0.59
15	C2H2	0.79
16	C4H6	0.72
17	C5H12O	0.73



DCT HT series connection diagram

ERIS has a policy of continuous development and improvement of its products.
As such the specification for the device outlined in the data sheet may be changed without notice.

Contact details

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