



Detector for explosive gases using catalytic technology –pellistor–.

Available formats:

- RS485 addressable 4 wires connection, compatible with **EUROSONDELCO** & **DURGAS**, and could be installed in parallel up to 16 detectors in the same loop.
- 4-20mA 3 wires connection, compatible with any system provided of 4-20mA inputs.

Detection range from 0 to 100% L.E.L.

Optical indicators of loop and sensor fault

Selecting the gas to be detected by jumper (RS485)

Optional programmable alarm relay (4-20mA) and optional output relay (RS485)

Resistant to silicone vapours (HDMS)

AVAILABLE GASES

Methane, natural gas, butane, propane and hydrogen.

Appropriated 4–20mA detectors calibration at factory requires prior information about the gas to be detected.

DURTEX HC allows the automatic selection of the gas to detect by using a jumper –RS485 detectors–

PLACE / HEIGHT OF INSTALLATION

In those areas where the gas is accumulated, at 1,5 meters away from gas appliances and avoiding air flows.

Coverage area is 16m² approx.

Recommended height of installation:

30 cm. from ceiling: Methane, natural gas, hydrogen

30 cm. from floor: Butane

100 cm. from floor: Propane

MAINTENANCE

DURTEX HC detectors have been calibrated at factory with target gas therefore do not need to be calibrated at installation again.

Check DURTEX HC detectors at least once per year, and follow the instructions of the installation manual for testing and recalibrating operations if required.

WARNING

Do not use these detectors in presence of hydrogen sulphur, fluorine, methyl chloride, trichloroethylene, sulphur dioxide, silicon vapours or sulphydric acid, as presence of these gases can inhibit sensor response or been damaged.

Use wire hose of the correct section for the cable input.

Do not immerse the detector in water or any other liquid.

Do not drill detector box otherwise it will lose its protection grade (IP65)

DURTEX HC has been designed for atmospheres with lower value than 100% L.E.L. of the gas which are calibrated for and with a normal presence of oxygen.

TECHNICAL CHARACTERISTICS

Technology	Catalytic sensor and microprocessor	Pressure limits	80 a 110kPa (0.8 a 1.1 bar)
Voltage supply	10V – 30V DC	Connections 4-20mA	3 wires + earth ground mesh
Maximum consumption	95mA at 12V DC/ 141 relay activated	Connections RS485	4 wires
Max. loop resistance (4-20mA)	250Ω	Loop & sensor fault optical indicator	External (two-coloured led in models 4-20mA)
Max. current output (4-20mA)	21.3 mA (Tip)	Communications state optical indicator	External. (led + digital in RS485)
Fault loop current	< 2mA	Programmable alarm relay module (4-20mA)	2 programmable alarm levels, instantaneous/delayed disconnection with disconnection retard programming. Starting programming: idle mode relay.
Measurement range	0-100% L.E.L. (5% Vol. .Methane) -linear full range-	Coverage area	16 m ² approx.
Resolution	±1% L.E.L. of measurement range	Protection Grade	IP65
Zero deviation	± 10mV/year	Box material	Makrolon & ABS
Span deviation	± 10% L.E.L./year	Cable diameter	6-10mm ²
Stabilization time	< 15 min -all specifications-	Cable type (4-20mA)	Shield type cable 3x1,5mm Ø
Response time T50/T90	6s & 10s respectively	Cable Type (RS485)	4 wires 2x1,5mm 2x0,25mm Ø
Useful life (MTBF)	4 years approx.	Installation max distance	1000m (RS485), 300/400m (4-20mA)
Maintenance time	Recommended once per year	Dimensions -mm-	120 x 160 x 60
Temperature range	-10°C to +50°C	Weight -gr-	288 approx.
Humidity range	0 to 90% HR with no condensation		

GUARANTEE

DURTEX HC detectors are guaranteed against any manufacturing defect for 1 year from the date of purchase. Guarantee conditions are gathered in the installation manual of the detector.

ORDERING INFORMATION

When placing the order please be sure about the correct product code according to the description and, check that it complies with your requirements.

Do not forget to inform about the gas to detect when ordering 4-20mA detectors

RS485 Detectors

CODE	DESCRIPTION
DPLFBPN	Detector for explosive gases (butane-methane-hydrogen)
DPLFBPNr	Detector for explosive gases provided of relay output (butane-methane-hydrogen)

4-20mA Detectors

CODE	DESCRIPTION
DPLF4BUP	Detector for butane/propane
DPLF4BUPr	Detector for butane/propane provided of relay output
DPLF4NAT	Detector for methane/natural gas
DPLF4NATr	Detector para methane/natural gas provided of relay output
DPLF4HID	Detector for hydrogen
DPLF4HIDr	Detector for hydrogen provided of relay output