DURAN® electrónica

DURTEX HC

Detector for explosive gases using catalytic technology



Detector for explosive gases using catalytic technology –pellistor-.

Available formats:

- RS485 addressable 4 wires connection, compatible with **EUROSONDELCO, SIEMENS CC62P DURGAS & SIEDEGAS**, 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 $16m^2$ 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
Voltage supply	10V – 30V DC
Maximum consumption	95mA at 12V DC/ 141 relay activated
Max. loop resistance (4-20mA)	250Ω
Max. current output (4-20mA)	21.3 mA (Tip)
Fault loop current	< 2mA
Measurement range	0-100% L.E.L. (5% Vol. .Methane) -linear full range-
Resolution	±1% L.E.L. of measurement range
Zero deviation	± 10mV/year
Span deviation	± 10% L.E.L./year
Stabilization time	< 15 min –all specifications-
Response time T50/T90	6s & 10s respectively
Useful life (MTBF)	4 years approx.
Maintenance time	Recommended once per year
Temperature range	-10ºC to +50ºC
Humidity range	0 to 90% HR with no condensation

Pressure limits	80 a 110kPa (0.8 a 1.1 bar)
Connections 4-20mA	3 wires + earth ground mesh
Connections RS485	4 wires
Loop & sensor fault optical indicator	External (two-coloured led in models 4-20mA)
Communications state optical indicator	External. (led + digital in RS485)
Programmable alarm relay module (4-20mA)	2 programmable alarm levels, instantaneous/delayed disconnection with disconnection retard programming. Starting programming: idle mode relay.
Coverage area	16 m^2 approx.
Protection Grade	IP65
Box material	Makrolon & ABS
Cable diameter	6-10mm^2
Cable type (4-20mA)	Shield type cable 3x1,5mm Ø
Cable Type (RS485)	4 wires 2x1,5mm 2x0,25mm Ø
Installation max distance	1000m (RS485), 300/400m (4-20mA)
Dimensions -mm-	120 x 160 x 60
Weight -gr-	288 approx.

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

bsi. ISO 9001 Quality Management FS82426

C/ Tomás Bretón, 50
28045 MADRID - España
Tel.- + 34 91 528 93 75 Fax.- + 34 91 527 58 19
duran@duranelectronica.com - www.duranelectronica.com

DURAN® electrónica