



**NON-CONDUCTIVE
HYDROCARBON
LIQUIDS LEAK DETECTION
SYSTEM
(HLLDS)**

Product Function and Features



3L-DF/SP (Supervising and Locating Panel with Event Log):

- LCD with backlight – 4 lines, up to 35 characters
- Monitoring units – up to 40 units of 3L-DF/SM50 modules.
- Sensing Cable Length – up to 1,000m
(25 m x 40pcs 3L-DF/SM50 Modules)
- Cable break location identification.
- Communication interface with BMS/EMS &
High level RS485/Modbus interface protocol
- 4 x Relay (2-Trouble relay & 2-Leak relay)
- Alarm by Buzzer (90dB max.) and LED indicator



3L-DF/SM50: (Sensor Module)

- Sensing Cable Length – up to 25m per module.
- Visual Alarm by LED light indicator.

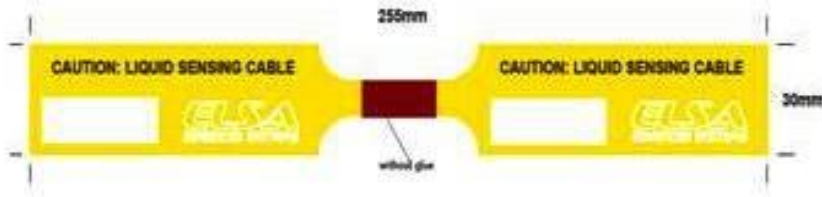
Product Function and Features



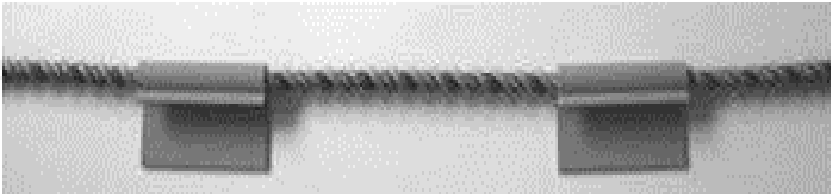
3L-HCS : HydroCarbon Sensing Cable

- Sensing technology : Based on semiconductive elastomeric material swelling property when in contact with non-conductive liquids of hydrocarbon (such as Diesel, Fuel, Crude Oil & etc).
- HCS cable shall consist of five wires enclosed within a PE braided sleeves (to protect the wires physically) throughout its whole length and terminated with a male and female connectors at each end respectively.
- No false alarm : It is non-sensitive to water, dirt, pressure, vibration, etc.
- High reliability : it remain reusable after simple cleaning solvents.
- Typical response time :
 - Gasoline, Light Naphtha : 2 min 30 sec.
 - Diesel, Oil, Jet Fuel : 5 min.
 - Crude Oil : 30 – 60 min (depend on oil viscosity).
- Typical diameter : 10 mm.
- Standard length : 2 m and 5 m (offer other customized length upon request)

Accessories

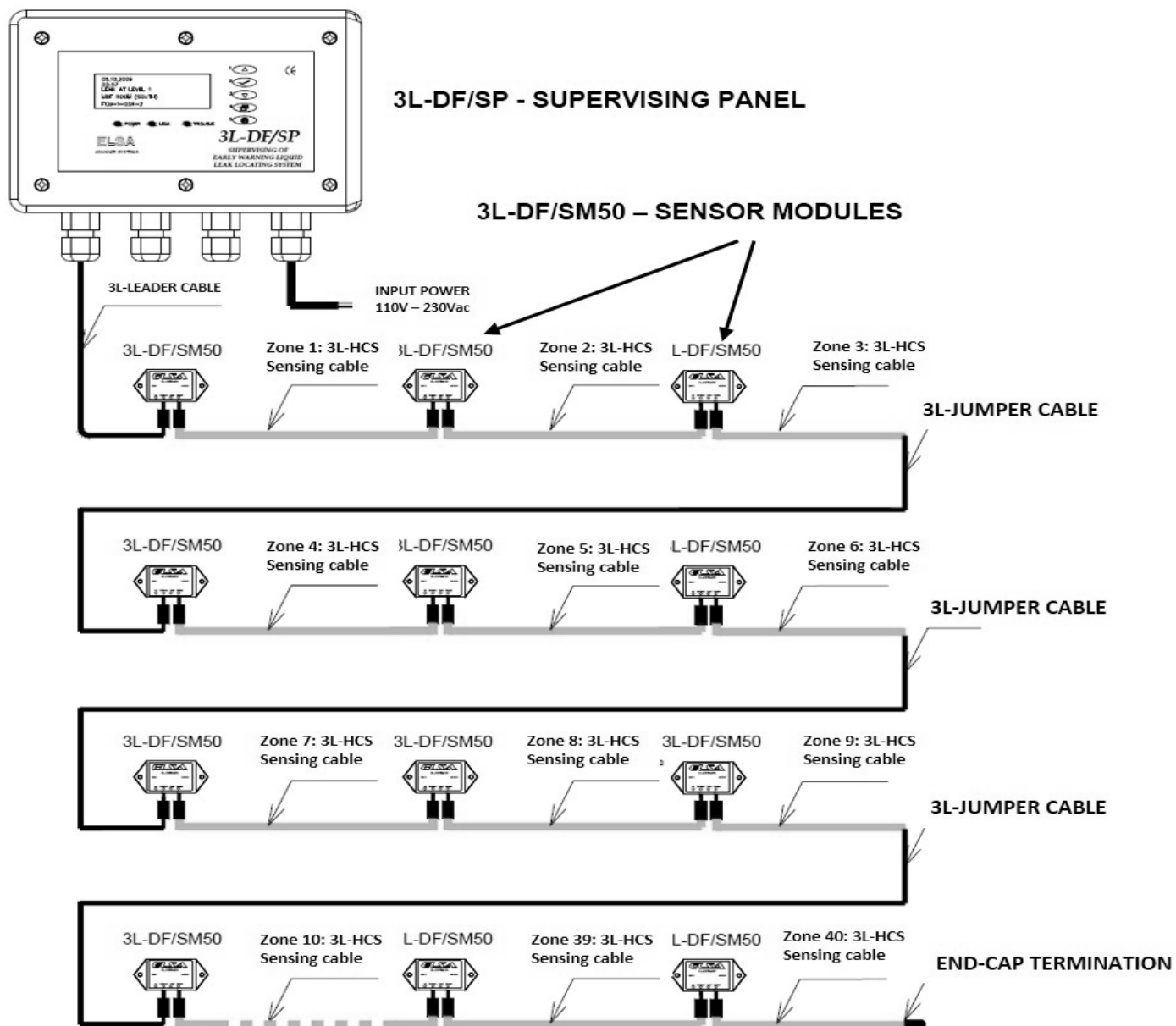


3L-T/L(HCS): Labeling Tag (Self adhesive)



3L-HDC/2ST(HCS) : Hold down clips(Self adhesive)

Typical Hydrocarbon Liquid Leak Detection System Layout





THANK YOU !

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