Typical Written Specification for LPD-series

Provide a continuous leak and overfill detection system utilizing electro-optic technology.

Alarm Controller

Alarm console to be NEMA 4X with remote sensor test capability at console utilizing test button. When pressed the test button will test entire system electronics from control panel to the sensor(s). Console to be UL listed to provide intrinsically safe output circuits to electro-optic sensors in Class I, Group D hazardous locations. Console to be OMNTEC Mfg., Inc., Ronkonkoma, NY model ELP21LPD-series. Console must monitor interstitial space and/or piping sump and 90% high level in tank for presence of liquid. Each alarm condition to be visually indicated by a dedicated red L.E.D. indicator for fuel leak or high level or an amber L.E.D. indicator for water leak or low level which is to remain lit until alarm condition is corrected. Each alarm condition to also be audibly annunciated via a 95-decibel piezoelectric pulsing horn which can be silenced via the horn silence button. Console shall also provide a green "system detecting" indicator. Each alarm to have N.O. dry contacts for control purposes, as well as low voltage outputs for NEMA 4X RA-series remote audio / visual alarm panel.

Remote alarm panel

Remote audio / visual NEMA 4X alarm panel is to be mounted by filling area outside hazardous area. Console to be OMNTEC Mfg., Inc., Ronkonkoma, NY model RAseries. Each high level alarm condition to be visually indicated by a dedicated red L.E.D. indicator which is to remain lit until alarm condition is corrected. Each alarm condition to also be audibly annunciated via a 95-decibel piezoelectric pulsing horn with auto time out.

Interstitial sensor and piping sump sensor

Interstitial and/or piping sump sensor to be OMNTEC model PDS (for tank diameters under 6' with steel interstitial and/or piping sump) or PDW (PDWF for dry fiberglass interstitial, PDWS for steel interstitial) product distinguishing series. Sensor(s) to be self diagnostic with dry condition creating a normally closed light beam and an alarm condition opening (refracting) the normally closed light beam. Sensor(s) and console to be UL listed and third party tested as a system.

High level sensor

High level sensor to be OMNTEC L-1 series and be of proper length to alarm at 90% of tank capacity. Sensor(s) to be self diagnostic with dry condition creating a normally closed light beam and an alarm condition opening (refracting) the normally closed light beam. Sensor(s) and console to be UL listed and third party tested as a system.