



### Features

- Optimized tinned copper braid with Aluminum/Polyester foil tape shielding system provides 100% coverage and an effective EMI shield for isolation of the high frequency currents and potentials, and an effective low impedance path to ground for AC drive applications.
- Better physical & wet electrical properties than halogen free IEC cables
- Insulation Resistance Constant,  $K = 10,000 \text{ Vs } 1,360$  for HF85 per IEC 60092-351
- Limited Smoke
- Zero Halogen content

### Performance Standards

- Listed by UL as Type X110, rated for 110°C
- Listed by ITS (ETL) as Type LSX, IEEE 1580 and is rated 90°C
- Passes IEEE 1202 & FT-4 at 70,000 Btu/hr Vertical Tray Flame Tests
- Single conductors pass the UL VW-1 flame test per UL-44/UL-1581
- Type approved by ABS, DNV GL and Lloyd's Register NA
- Armored & Sheathed cables are suitable for use in Class 1, Division 1 and Zone 1 hazardous locations
- Unarmored cables are suitable for use in Class 1, Division 2 and Zone 2 hazardous locations
- IEEE 45/1580 Tests:
  - Halogen Content –  $0\% < 0.2\%$
  - Acid Gas –  $0.5\% < 2\%$
  - Smoke Index –  $8.85 < 25$
  - Toxicity Index –  $0.6 < 1.5$
- IEC Tests:
  - Passes IEC 60332-1-2 & -2-2 Flame Tests
  - Passes EN 50265-2-1 & -2 Flame Tests
  - Smoke Density, IEC 61034, Light Transmittance = 96%
  - $Ph > 4.3$ , per IEC 60754
  - Conductivity  $\leq 10 \mu\text{S}\cdot\text{mm}^{-1}$ , per IEC 60754
  - Halogen Acid, IEC 60754, Pass

### Scope

Exane® ZH-VFD low smoke zero halogen (LSZH), power Marine Shipboard Cables, bridge the performance gap between the premium Exane-125 Type P cables and the IEC HF cables. The Exane ZH, LSZH insulation is radiation cross-linked and provides outstanding physical properties, resistance to abrasion, cut-through, low and high temperature, sunlight, flame. It is a low-smoke, zero halogen material that is extremely tough and durable and withstands the arduous environmental conditions experienced in offshore mobile drilling units (MODU), FPSO's & TLP's for oil and gas drilling rigs. It provides the low-smoke, non corrosive characteristics that have been deemed to be critical for the crew quarters in MODU's. Exane ZH is ITS (ETL) listed to IEEE 1580 as Type LSX, a low-smoke, zero halogen cable that also meets the IEC HF requirements. It is also listed by Underwriters Laboratories (UL) to UL 1309/CSA C22.2 No. 245.

### Construction

- Conductor:** AWG – Flexible Tinned Copper, per IEEE 1580. Sq mm – IEC 60228 Class 5 TC. Available on request
- Insulation:** Irradiation Cross-Linked Exane-ZH, Type LSXLPO (IEEE 1580)
- Color Code:** As specified by customer. Standard – Black, White, Red, Grounds – Green
- Shield:** Optimized T.C. braid + Foil Tape with 100% coverage
- Inner Jacket:** Black, Cross-Linked, LSZH, Type L (IEEE 1580) & Type SHF-2 (IEC)
- Armor (optional):** Bronze Braid – Standard. Tinned Copper Braid – Optional
- Outer Jacket (optional):** Black, Cross-Linked, LSZH, Type L (IEEE 1580) & Type SHF-2 (IEC)
- Temperature Rating:** UL – 110°C; IEEE – 90°C  
RSCC Wire & Cable – 125°C