Technical Information

LSZH Jacketed Cables and Hazardous Locations Reference

Approvals and Standards/Performance Data for Low-Smoke, Zero-Halogen Jacketed Cable

XLPE Insulation	
Physical: (per UL-44)	
Tensile (min)	1500 psi
Elongation (min)	150%
Deformation (max)	3.35
LOI	27

Haloarrest [®] Jac	ket
Physical	
Tensile (min)	1500 ps
Elongation (min)	100%
Tear resistance	74 lbs/inch
LOI	38
Halogen Content	
IEC 754-1	0%
BS6425	0%
MIL-C-24643	<0.2%
NBS Smoke Chamber	(.100″ wall)
Flaming Mode	141 D _m corrected typical
Smoldering Mode	311 D _m corrected typical
Acid Gas	
IEC 754-2	4.3 pH, 28 μS/cm
VDE 0472 Part 813	4.3 pH, 27 μS/cm
Toxicity Index	
NES 713	1

Low-Smoke, Zero-Halogen Jacketed Cable Specifications

18.97

600V, 90°C TC-LS NEC 340/UL 1277 & 1685

Instrumentation

- 18 to 12 AWG, BC or TC
- 90°C XLPE insulation
- UL 44 XHHW-2 90°C dry/wet
- Shielded or unshielded
- Haloarrest jacket

Control or Power

- 14 to 4/0 AWG, BC or TC
- 90°C XLPE insulation
- UL 44 XHHW-2 90°C dry/wet
- Shielded or unshielded
- Haloarrest jacket

Hazardous Locations Cable Reference

Article 500

Class I Division 1 Hazards

- Locations where flammable gases or vapors may exist under normal operating conditions, under frequent repair or maintenance operations, or where breakdown or faulty operation of process equipment might also cause simultaneous failure of electrical equipment.
- Use conduit or MI cable with approved termination fittings.

Class I Division 2 Hazards

- Locations where flammable gases, vapors or volatile liquids are handled either in a closed system, or confined within suitable enclosures, or where hazardous concentrations are normally prevented by positive mechanical ventilation. Areas adjacent to Division 1 areas belong in Division 2.
- Use PLTC, ITC, TC, MC, MV, MI with approved termination fittings.

Class II Division 1

- Locations where combustible dusts exist under normal conditions.
- Use conduit or MI with approved termination fittings.

Class II Division 2

- Locations where combustible dusts exist under abnormal conditions.
- Use conduit or PLTC, ITC, TC, MC with ventilated channel cable trays.
- Use conduit or MC, MI with approved termination fittings.

Class III Division 1

- Locations where easily ignitible fibers and flyings exist under normal conditions.
- Use conduit or MC, MI with approved termination fittings.

Class III Division 2

- Locations where easily ignitible fibers and flyings exist under abnormal conditions.
- Use conduit or MC, MI with approved termination fittings.

Article 504

Intrinsically Safe

- Equipment and wiring that are incapable of releasing sufficient electrical energy under normal or abnormal conditions to cause ignition of a specific hazardous atmospheric mixture in its most easily ignited concentration.
- Use CL3, CL2, PLTC, TC or CM cable, colored light blue, with approved sealing and separation.

Hazardous Location Cable Reference per Canadian Electrical Code CEC Section 18

All Armored cables printed "HL" per CSA C22.2 #174 are rated for all Hazardous Location Classes and Divisions (ie. Class 1, Div. 1).

All Tray Cables printed "TC" per per CSA C22.2 #230 are rated for all Hazardous Location Classes and Division 2 or lower. (ie. Class 1, Div. 2 or lower).

BELDEN For more information, contact Belden Technical Support: 1-800-BELDEN-1 • www.belden.com Belden114@cablecon.kr / 0707-434-7704 / Fax. 02-744-0909 / www.CableCon.co.kr