

BS 5308 Part 1 Type 3 - CAM - XLPE - LSZH Instrumentation Cable



Eland Product Group: **I**

APPLICATION

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including those found in the petrochemicals industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity and microphone. Part 1 Type 3 cables are generally designed where a greater degree of mechanical and chemical protection is required or direct burial at a suitable depth. For installations where fire, smoke emission and toxic fumes create a potential risk to life and equipment.

CHARACTERISTICS

Voltage Rating (Uo/U)
300/500V

Operating Temperature
+90°C

CONSTRUCTION

Conductor

Class 1 solid copper conductor
Class 2 stranded copper conductor
Class 5 flexible copper conductor

Insulation

XLPE (Cross-Linked Polyethylene) Type 03 acc. to BS 6234

Binder Tape

PET (Polyester Tape)

Screen

AL/PET (Aluminium/Polyester Tape)

Drain Wire

Tinned copper

Bedding

LSZH (Low Smoke Zero Halogen) Type LTS3

Covering

Lead or polyamide

Inner Sheath

LSZH (Low Smoke Zero Halogen) Type LTS3

Armour

Galvanized steel wires

Outer Sheath

LSZH (Low Smoke Zero Halogen) Type LTS3

Outer Sheath Colour

● Blue ● Black

STANDARDS

PAS 5308 Part 1 Type 3, BS EN 60228, BS 6234, BS 50363, BS EN/IEC 60332-1, BS EN/IEC 60332-3-24

THE CABLE LAB[®]

AN ISO/IEC 17025 AND IECEE CBTL ACCREDITED FACILITY

Our world-class testing facility assures the quality and compliance of this cable through a continuous and rigorous testing regime.



SUSTAINABILITY COMMITMENT

We are on a journey to Net Zero.

We've committed to near-term emissions reductions and a net-zero target with the Science Based Targets initiative and we're a signatory to the United Nations Global Compact Sustainable Development Goals.

Learn more about embodied carbon and our carbon emissions reduction actions, our comprehensive recycling services, and wider ESG activities for sustainable operations at: www.elandcables.com/company/about-us/esg-sustainability



REGULATORY COMPLIANCE

This cable meets the requirements of the Low Voltage Directive 2014/35/EU and the RoHS Directive 2011/65/EU. RoHS compliance has been tested and confirmed by The Cable Lab[®] as meeting the requirements of the BSI RoHS Trusted Kitemark[™].



DIMENSIONS

Collectively Screened

ELAND PART NO.	NO. OF PAIRS/TRIPLE	NOMINAL GROSS SECTIONAL AREA mm ²	NOMINAL OVERALL DIAMETER mm
I0105P1T3CL**	1P	0.5	15.4
I0110P1T3CL**	1P	1	15.8
I0115P1T3CL**	1P	1.5	16.9
I0125P1T3CL**	1P	2.5	18.4
I0175P1T3CL**	1P	0.75	15.6
I1T05P1T3CL**	1T	0.5	16
I1T10P1T3CL**	1T	1	16.4
I1T15P1T3CL**	1T	1.5	17.8
I1T25P1T3CL**	1T	2.5	19.2
I1T75P1T3CL**	1T	0.75	16.2
I0205P1T3CL**	2P(Q)	0.5	16.3
I0210P1T3CL**	2P (Q)	1	17
I0215P1T3CL**	2P (Q)	1.5	19
I0225P1T3CL**	2P (Q)	2.5	20
I0275P1T3CL**	2P (Q)	0.75	16.8
I0505P1T3CL**	5P	0.5	22.6
I0510P1T3CL**	5P	1	25
I0515P1T3CL**	5P	1.5	27.4
I0525P1T3CL**	5P	2.5	29.4
I0575P1T3CL**	5P	0.75	24.8
I1005P1T3CL**	10P	0.5	28.4
I1010P1T3CL**	10P	1	29.6
I1015P1T3CL**	10P	1.5	33.2
I1025P1T3CL**	10P	2.5	38.3
I1075P1T3CL**	10P	0.75	29.4
I1505P1T3CL**	15P	0.5	31.2
I1510P1T3CL**	15P	1	32.9
I1515P1T3CL**	15P	1.5	38.4
I1525P1T3CL**	15P	2.5	43
I1575P1T3CL**	15P	0.75	32.7
I2005P1T3CL**	20P	0.5	33.9
I2010P1T3CL**	20P	1	37.6
I2015P1T3CL**	20P	1.5	42.1
I2025P1T3CL**	20P	2.5	48.6
I2075P1T3CL**	20P	0.75	37.4

P = Pairs

Q = Quad

T = Triple

Eland Part No. shown above designate the sheath colour (). For each colour substitute * for a colour code as listed below. e.g. I0105P1T3CLBK = 0.5mm² Black

Colour Codes

COLOUR	Black	Blue
CODE	BK	BL

CONDUCTORS

NOMINAL CROSS SECTIONAL AREA mm ²	CONDUCTOR CLASS	MAXIMUM DC RESISTANCE OF CONDUCTOR AT 20°C ohms/km
0.5	5	39
0.75	5	26
1	1	18.1
1.5	2	12.1
2.5	2	7.41

ELECTRICAL CHARACTERISTICS

NOMINAL CROSS SECTIONAL AREA mm ²	MUTUAL CAPACITANCE pF/m		MINIMUM INSULATION RESISTANCE AT 20°C mohms/km	MAXIMUM L/R RATIO μH/ohms
	Cables with Collective Screen Only	Cables with Individually Screen Pairs		
0.5	75	115	>5	25
0.75	75	115	>5	25
1	75	115	>5	25
1.5	85	120	>5	40
2.5	85	120	>5	65