

BS 5308 Part 1 Type 3 - CAM Silicone - 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 (U₀/U)
300/500V

Temperature Rating
+5°C to +50°C
Operating: 200°C

CONSTRUCTION

Conductor

Class 1 solid copper conductor according to BS EN 60228
Class 2 stranded copper conductor according to BS EN 60228
Class 5 flexible copper conductor according to BS EN 60228

Insulation

Silicone rubber ceramic type

Binder Tape

PET (Polyester Tape)

Screen

AL/PET (Aluminium/Polyester Tape)

Drain Wire

Tinned copper

Bedding

LSZH (Low Smoke Zero Halogen) Type LTS3 acc. to BS 7655

Covering

Lead or polyamide cover

Inner Sheath

LSZH (Low Smoke Zero Halogen) Type LTS3 acc. to BS 7655

Armour

Galvanized steel wires

Outer Sheath

LSZH (Low Smoke Zero Halogen) Type LTS3 acc. to BS 7655

Outer Sheath Colour

● Red ● Black

STANDARDS

BS/PAS 5308, BS EN 60228, BS 6234, BS EN 50363, BS EN/IEC 60331-21, BS EN/IEC 60332-1, BS EN/IEC 60332-3-24, BS EN/IEC 61034-2, BS EN/IEC 60754-1 and 2, BS EN/IEC 60332-3-22

THE CABLE LAB[®]

AN ISO/IEC 17025 AND IECIEE 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
IFRP1T3CS**0105	1P	0.5	14.7
IFRP1T3CS**0110	1P	1	15.3
IFRP1T3CS**0115	1P	1.5	16.3
IFRP1T3CS**0125	1P	2.5	17.3
IFRP1T3CS**0175	1P	0.75	15.4
IFRP1T3CS**1T05	1T	0.5	15.3
IFRP1T3CS**1T10	1T	1	15.7
IFRP1T3CS**1T15	1T	1.5	17
IFRP1T3CS**1T25	1T	2.5	17.8
IFRP1T3CS**1T75	1T	0.75	15.8
IFRP1T3CS**0205	2P(Q)	0.5	15.8
IFRP1T3CS**0210	2P (Q)	1	16.3
IFRP1T3CS**0215	2P (Q)	1.5	17.7
IFRP1T3CS**0225	2P (Q)	2.5	18.7
IFRP1T3CS**0275	2P (Q)	0.75	16.6
IFRP1T3CS**0505	5P	0.5	23.1
IFRP1T3CS**0510	5P	1	24
IFRP1T3CS**0515	5P	1.5	27.3
IFRP1T3CS**0525	5P	2.5	29.7
IFRP1T3CS**0575	5P	0.75	24.2
IFRP1T3CS**1005	10P	0.5	29.7
IFRP1T3CS**1010	10P	1	31.7
IFRP1T3CS**1015	10P	1.5	36.9
IFRP1T3CS**1025	10P	2.5	40
IFRP1T3CS**1075	10P	0.75	33
IFRP1T3CS**1505	15P	0.5	34.3
IFRP1T3CS**1510	15P	1	36.4
IFRP1T3CS**1515	15P	1.5	40.8
IFRP1T3CS**1525	15P	2.5	44.2
IFRP1T3CS**1575	15P	0.75	36.8
IFRP1T3CS**2005	20P	0.5	37.5
IFRP1T3CS**2010	20P	1	39.7
IFRP1T3CS**2015	20P	1.5	44.4
IFRP1T3CS**2025	20P	2.5	49.3
IFRP1T3CS**2075	20P	0.75	40.1

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. IFRP1T3CSR0105 = 0.5mm² Red

Colour Codes

COLOUR	Black	Red
CODE	BK	RD

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
	Between Pairs or Adjacent Cores	Between any Core and Screen		
0.5	250	450	>25	25
0.75	250	450	>25	25
1	250	450	>25	25
1.5	250	450	>25	40
2.5	250	450	>25	65

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.