

PAS/BS 5308 Part 1 Type 1 SIL/ICAM/LSZH (Fire Resistant) Cable



Eland Product Group: I

APPLICATION

Publicly Available Standard (PAS) BS 5308 cables are designed to carry communication and control signals in a variety of installation types including those found in the petrochemical industry. The signals can be analogue, data or voice type and from a variety of transducers such as pressure, proximity and microphone. Part 1 Type 1 cables are generally designed for indoor use and in environments where mechanical protection is not required. Suitable for fire resistant installations. Individually screened for enhanced signal security.

CHARACTERISTICS

Voltage Rating U_o/U
300/500V

Operating Temperature
Fixed: -40°C to +80°C
Flexed: 0°C to +50°C

Minimum Bending Radius
Fixed: 6 x overall diameter

CONSTRUCTION

Conductor
0.5mm² - 0.75mm²: Class 5 flexible copper conductor
1mm² and above: Class 2 stranded copper conductor

Insulation
Silicone rubber ceramic type

Individual and Collective Screen
Al/PET (Aluminium/Polyester Tape)

Drain Wire
Tinned copper

Sheath
LSZH (Low Smoke Zero Halogen)

Sheath Colour
● Red ● Black ● Blue

STANDARDS

BS/PAS 5308, EN 60228,

Flame Retardant according to IEC/EN 60332-1-2, IEC/EN 60332-3-22, IEC/EN 60332-3-24

Halogen Free according to IEC/EN 61034-1/2, IEC/EN 60754-1/2

THE CABLE LAB[®]

AN ISO/IEC 17025 AND IECCE 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 is compliant with European Regulation EN 50575, the Construction Products Regulation.



This cable meets the requirements of the Low Voltage Directive 2014/35/EU, the RoHS Directive 2015/65/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab[®].





DIMENSIONS

ELAND PART NO.	NO. OF PAIRS	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL OVERALL DIAMETER mm
IFRP1T1SI**0205	2P	0.5	10
IFRP1T1SI**0275	2P	0.75	11
IFRP1T1SI**0210	2P	1	10.7
IFRP1T1SI**0215	2P	1.5	13
IFRP1T1SI**0225	2P	2.5	14.3
IFRP1T1SI**0505	5P	0.5	13.4
IFRP1T1SI**0575	5P	0.75	14.5
IFRP1T1SI**0510	5P	1	14.3
IFRP1T1SI**0515	5P	1.5	16.8
IFRP1T1SI**0525	5P	2.5	19.3
IFRP1T1SI**1005	10P	0.5	19.4
IFRP1T1SI**1075	10P	0.75	21.1
IFRP1T1SI**1010	10P	1	20.8
IFRP1T1SI**1015	10P	1.5	24.2
IFRP1T1SI**1025	10P	2.5	26.9
IFRP1T1SI**1505	15P	0.5	22.3
IFRP1T1SI**1575	15P	0.75	24.2
IFRP1T1SI**1510	15P	1	23.8
IFRP1T1SI**1515	15P	1.5	27.8
IFRP1T1SI**1525	15P	2.5	31
IFRP1T1SI**2005	20P	0.5	25
IFRP1T1SI**2075	20P	0.75	27.2
IFRP1T1SI**2010	20P	1	26.8
IFRP1T1SI**2015	20P	1.5	31.5
IFRP1T1SI**2025	20P	2.5	35.2
IFRP1T1SI**3005	30P	0.5	29.2
IFRP1T1SI**3075	30P	0.75	32.1
IFRP1T1SI**3010	30P	1	31.5
IFRP1T1SI**3015	30P	1.5	37
IFRP1T1SI**3025	30P	2.5	42

P = Pairs

* Designates the sheath colour. For each Eland Cables part number replace with the colour code e.g. IFRP1T1SIBK0205 = 0.5mm² Black



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.