

# PAS BS 5308 Part 1 Type 2 SIL/ICAM/LSZH/SWA/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 of analogue, data or voice types and from a variety of transducers such as pressure, proximity or microphone. Part 1 Type 2 cables are designed where a greater degree of mechanical protection is required or where there is direct burial at a suitable depth. Suitable for fire resistant installations. Individually screened for enhanced signal security.

## CHARACTERISTICS

**Voltage Rating (Uo/U)**  
300/500V

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

**Temperature Rating**  
Fixed: 12 x overall diameter

## CONSTRUCTION

**Conductor**  
0.5mm<sup>2</sup> - 0.75mm<sup>2</sup>: Class 5 flexible copper conductor  
1mm<sup>2</sup> 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

**Inner Sheath**  
LSZH (Low Smoke Zero Halogen)

**Armour**  
SWA (Galvanised steel wires)

**Sheath**  
LSZH (Low Smoke Zero Halogen)

**Sheath Colour**  
● Red ● Black

## STANDARDS

BS/PAS 5308, EN 60228

Flame Retardant according to IEC/EN 60332-1-2, IEC/EN 60332-3-22/24, IEC/EN 60331-21  
Halogen free according to IEC/EN 61034-1/2, IEC/EN 60754-1/2

## THE CABLE LAB<sup>®</sup>

AN ISO/IEC 17025 AND IECCE CBTB 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](http://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 2015/853/EU and Reach Directive EC 1907/2006. RoHS compliance has been tested and confirmed by The Cable Lab<sup>®</sup>.





## DIMENSIONS

ELAND PART NO.	NO. OF PAIRS/TRIPLE	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL OVERALL DIAMETER mm
IFRP1T2SI**0205	2P	0.5	14.6
IFRP1T2SI**0210	2P	1	15.4
IFRP1T2SI**0215	2P	1.5	17.7
IFRP1T2SI**0225	2P	2.5	19.9
IFRP1T2SI**0275	2P	0.75	15.8
IFRP1T2SI**0305	3P	0.5	15.4
IFRP1T2SI**0310	3P	1	16.7
IFRP1T2SI**0315	3P	1.5	18.5
IFRP1T2SI**0325	3P	2.5	20.8
IFRP1T2SI**0375	3P	0.75	16.9
IFRP1T2SI**0505	5P	0.5	18.2
IFRP1T2SI**0510	5P	1	19.9
IFRP1T2SI**0515	5P	1.5	22.6
IFRP1T2SI**0525	5P	2.5	25.9
IFRP1T2SI**0575	5P	0.75	20.1
IFRP1T2SI**1005	10P	0.5	26
IFRP1T2SI**1010	10P	1	27.4
IFRP1T2SI**1015	10P	1.5	31
IFRP1T2SI**1025	10P	2.5	34.9
IFRP1T2SI**1075	10P	0.75	27.7
IFRP1T2SI**1505	15P	0.5	29.1
IFRP1T2SI**1510	15P	1	30.6
IFRP1T2SI**1515	15P	1.5	35.8
IFRP1T2SI**1525	15P	2.5	39.2
IFRP1T2SI**1575	15P	0.75	31
IFRP1T2SI**2005	20P	0.5	31.8
IFRP1T2SI**2010	20P	1	34.8
IFRP1T2SI**2015	20P	1.5	39.7
IFRP1T2SI**2025	20P	2.5	43.4
IFRP1T2SI**2075	20P	0.75	35.2
IFRP1T2SI**3005	30P	0.5	37.2
IFRP1T2SI**3010	30P	1	39.7
IFRP1T2SI**3015	30P	1.5	45.2
IFRP1T2SI**3025	30P	2.5	50.6
IFRP1T2SI**3075	30P	0.75	40.3

P = Pair

\* Designates the sheath colour. For each Eland Cables part number replace with the colour code as listed below e.g. IFRP1T2SIRD0205 = 0.5mm<sup>2</sup> Red

## COLOUR CODES

COLOUR	Black	Red
CODE	BK	RD



## CONDUCTORS

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	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

### Individually and Collectively Screened

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MUTUAL CAPACITANCE pF/m		MINIMUM INSULATION RESISTANCE AT 20°C Gohms/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.