

# PAS BS 5308 Part 1 Type 1 MICA/XLPE/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 or 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** Uo/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**  
0.5mm<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**  
MICA Tape + XLPE (Cross-Linked Polyethylene)

**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 60332-3-24

## ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab®, an ISO/IEC 17025 accredited cable testing laboratory. Testing includes vertical flame, conductor resistance, tensile & elongation, and dimensional consistency, verified to published standards and approved product drawings.



8578



FS 672069



EMS 672067



OHS 672066

## 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 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™.



EM 634267





## DIMENSIONS

ELAND PART NO.	NO. OF PAIRS	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL OVERALL DIAMETER mm
IFRP1T1IL**0205	2P	0.5	12.2
IFRP1T1IL**0275	2P	0.75	13
IFRP1T1IL**0210	2P	1	12.9
IFRP1T1IL**0215	2P	1.5	14.7
IFRP1T1IL**0225	2P	2.5	16.1
IFRP1T1IL**0505	5P	0.5	15.5
IFRP1T1IL**0575	5P	0.75	16.9
IFRP1T1IL**0510	5P	1	16.7
IFRP1T1IL**0515	5P	1.5	19.7
IFRP1T1IL**0525	5P	2.5	21.6
IFRP1T1IL**1005	10P	0.5	22.6
IFRP1T1IL**1075	10P	0.75	24.3
IFRP1T1IL**1010	10P	1	24
IFRP1T1IL**1015	10P	1.5	27.6
IFRP1T1IL**1025	10P	2.5	30.5
IFRP1T1IL**1505	15P	0.5	25.9
IFRP1T1IL**1575	15P	0.75	28
IFRP1T1IL**1510	15P	1	27.6
IFRP1T1IL**1515	15P	1.5	32
IFRP1T1IL**1525	15P	2.5	35.4
IFRP1T1IL**2005	20P	0.5	29.1
IFRP1T1IL**2075	20P	0.75	31.7
IFRP1T1IL**2010	20P	1	31
IFRP1T1IL**2015	20P	1.5	36.1
IFRP1T1IL**2025	20P	2.5	40.5
IFRP1T1IL**3005	30P	0.5	34.4
IFRP1T1IL**3075	30P	0.75	37.2
IFRP1T1IL**3010	30P	1	36.7
IFRP1T1IL**3015	30P	1.5	43
IFRP1T1IL**3025	30P	2.5	47.7

P = Pairs

\* Designates the sheath colour. For each Eland Cables part number replace with the colour code as below e.g. IFRP1T1ILRD0205 = 0.5mm<sup>2</sup> Red

## COLOUR CODES

COLOUR	Blue	Black	Red
CODE	BL	BK	RD



Click here for more information:

[elandcables.com](http://elandcables.com) | PAS BS 5308 P1 T1 MICA/XLPE/ICAM/LSZH Cable

## 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

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
	Cables with Collective Screen Only	1 Pair, 2 Pairs, 1 Triple Collectively Screened	Cables with Individually Screened Pairs		
0.5	75	115	115	>5	25
0.75	75	115	115	>5	25
1	75	115	115	>5	25
1.5	85	120	120	>5	40
2.5	85	120	120	>5	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.