



PAS/BS 5308 Part 1 Type 1 XLPE/CAM/LSZH Cable



Eland Product Group: I

APPLICATION

PAS (publicly available standard) 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 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. Collectively and individually screened pairs are available within the range where further signal security is required.

CHARACTERISTICS

Voltage Rating U_o/U
300/500V

Temperature Rating
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
XLPE (Cross-Linked Polyethylene)

Screen
Al/PET (Aluminium/Polyester Tape)

Drain Wire
Tinned copper

Sheath
LSZH (Low Smoke Zero Halogen)

Sheath Colour
● Blue ● Black

STANDARDS

PAS/BS 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.



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™.





DIMENSIONS

ELAND PART NO.	NO. OF PAIRS/TRIPLE	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL OVERALL DIAMETER mm
I0105P1T1CL**	1P	0.5	7
I0175P1T1CL**	1P	0.75	7.4
I0110P1T1CL**	1P	1	7.4
I0115P1T1CL**	1P	1.5	8.3
I0125P1T1CL**	1P	2.5	9.1
I1T05P1T1CL**	1T	0.5	7.3
I1T75P1T1CL**	1T	0.75	7.7
I1T10P1T1CL**	1T	1	7.7
I1T15P1T1CL**	1T	1.5	8.9
I1T25P1T1CL**	1T	2.5	9.7
I0205P1T1CL**	2P	0.5	7.9
I0405P1T1CL**	Q	0.5	7.9
I0275P1T1CL**	2P	0.75	8.4
I0475P1T1CL**	Q	0.75	8.4
I0210P1T1CL**	2P	1	8.4
I0215P1T1CL**	2P	1.5	9.7
I0225P1T1CL**	2P	2.5	10.7
I0505P1T1CL**	5P	0.5	13.1
I0575P1T1CL**	5P	0.75	13.8
I0510P1T1CL**	5P	1	14.2
I0515P1T1CL**	5P	1.5	16.4
I0525P1T1CL**	5P	2.5	18.2
I1005P1T1CL**	10P	0.5	17.2
I1075P1T1CL**	10P	0.75	18.9
I1010P1T1CL**	10P	1	18.4
I1015P1T1CL**	10P	1.5	21.6
I1025P1T1CL**	10P	2.5	25.1
I1505P1T1CL**	15P	0.5	19.8
I1575P1T1CL**	15P	0.75	21.9
I1510P1T1CL**	15P	1	21.3
I1515P1T1CL**	15P	1.5	25.4
I1525P1T1CL**	15P	2.5	29.2
I2005P1T1CL**	20P	0.5	22.3
I2075P1T1CL**	20P	0.75	24.6
I2010P1T1CL**	20P	1	24.4
I2015P1T1CL**	20P	1.5	28.5
I2025P1T1CL**	20P	2.5	39.8

P = Pairs
Q = Quad
T = Triple

* Designates the sheath colour. For each Eland Cables part number replace with the colour code e.g. I0105P1T1CLBK=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
	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

CORE IDENTIFICATION

PAIR NO.	A WIRE	B WIRE
1	● Black	● Blue
2	● Black	● Green
3	● Blue	● Green
4	● Black	● Brown
5	● Blue	● Brown
6	● Green	● Brown
7	● Black	○ White
8	● Blue	○ White
9	● Green	○ White
10	● Brown	○ White
11	● Black	● Red
12	● Blue	● Red
13	● Green	● Red
14	● Brown	● Red
15	○ White	● Red
16	● Black	● Orange
17	● Blue	● Orange
18	● Green	● Orange
19	● Brown	● Orange
20	○ White	● Orange
21	● Red	● Orange
22	● Black	● Yellow
23	● Blue	● Yellow
24	● Green	● Yellow
25	● Brown	● Yellow
26	○ White	● Yellow
27	● Red	● Yellow



PAIR NO.	A WIRE	B WIRE
28	● Orange	● Yellow
29	● Black	● Grey
30	● Blue	● Grey
31	● Green	● Grey
32	● Brown	● Grey
33	○ White	● Grey
34	● Red	● Grey
35	● Orange	● Grey
36	● Yellow	● Grey
37	● Black	● Violet
38	● Blue	● Violet
39	● Green	● Violet
40	● Brown	● Violet
41	○ White	● Violet
42	● Red	● Violet
43	● Orange	● Violet
44	● Yellow	● Violet
45	● Grey	● Violet
46	● Black	● Turquoise
47	● Blue	● Turquoise
48	● Green	● Turquoise
49	● Brown	● Turquoise
50	○ White	● Turquoise

Individually screened pairs will be number coded all with Pair 1 colouring

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.