



**ELAND[®]
CABLES**

PAS BS 5308 Part 1 Type 2 XLPE/ICAM/LSZH/SWA/LSZH 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. Individually screened for enhanced signal security.

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: 12 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)

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

Drain Wire
Tinned copper

Bedding
LSZH (Low Smoke Zero Halogen)

Armour
SWA (Galvanised Steel Wire Armour)

Sheath
LSZH (Low Smoke Zero Halogen)

Sheath Colour
● Blue ● Black

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.



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	NOMINAL CROSS SECTIONAL AREA mm ²	NOMINAL OVERALL DIAMETER mm
I0205P1T2ICL**	2P	0.5	15.3
I0275P1T2ICL**	2P	0.75	16
I0210P1T2ICL**	2P	1	15.9
I0215P1T2ICL**	2P	1.5	18.6
I0225P1T2ICL**	2P	2.5	20
I0305P1T2ICL**	3P	0.5	16.4
I0375P1T2ICL**	3P	0.75	17.1
I0310P1T2ICL**	3P	1	17
I0315P1T2ICL**	3P	1.5	19.7
I0325P1T2ICL**	3P	2.5	21.1
I0505P1T2ICL**	5P	0.5	19.1
I0575P1T2ICL**	5P	0.75	20
I0510P1T2ICL**	5P	1	20
I0515P1T2ICL**	5P	1.5	22.5
I0525P1T2ICL**	5P	2.5	25.5
I1005P1T2ICL**	10P	0.5	25.6
I1075P1T2ICL**	10P	0.75	27
I1010P1T2ICL**	10P	1	27
I1015P1T2ICL**	10P	1.5	30.7
I1025P1T2ICL**	10P	2.5	33.9
I1505P1T2ICL**	15P	0.5	28.7
I1575P1T2ICL**	15P	0.75	30.6
I1510P1T2ICL**	15P	1	30.5
I1515P1T2ICL**	15P	1.5	34.6
I1525P1T2ICL**	15P	2.5	39.3
I2005P1T2ICL**	20P	0.5	31.6
I2075P1T2ICL**	20P	0.75	33.8
I2010P1T2ICL**	20P	1	33.7
I2015P1T2ICL**	20P	1.5	39.3
I2025P1T2ICL**	20P	2.5	43.7
I3005P1T2ICL**	30P	0.5	36.4
I3075P1T2ICL**	30P	0.75	39.7
I3010P1T2ICL**	30P	1	39.6
I3015P1T2ICL**	30P	1.5	45.2
I3025P1T2ICL**	30P	2.5	51.6

* Designates the sheath colour. For each Eland Cables part number replace with the colour code e.g. I0105P1T2CLBL = 0.5mm² Blue

P = Pairs

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	MAXIMUM MUTUAL CAPACITANCE pF/m	MINIMUM INSULATION RESISTANCE AT 20°C mohms/km	MAXIMUM L/R RATIO μH/ohms
	Cables with Individually Screened Pairs		
0.5	115	>25	25
0.75	115	>25	25
1	115	>25	25
1.5	120	>25	40
2.5	120	>25	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
25	● Brown	● Yellow
26	○ White	● Yellow
27	● Red	● Yellow
28	● Orange	● Yellow
29	● Black	● Grey
30	● Blue	● Grey
31	● Green	● Grey
32	● Brown	● Grey
33	○ White	● Grey
34	● Red	● Grey
35	● Orange	● Grey



PAIR NO.	A WIRE	B WIRE
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