

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 (Uo/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

THE CABLE LAB[®]

AN ISO/IEC 17025 AND IECEE 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 2015/853/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	NOMINAL WEIGHT kg/km
I0205P1T2ICL**	2P	0.5	15.3	316
I0275P1T2ICL**	2P	0.75	16	349
I0210P1T2ICL**	2P	1	15.9	361
I0215P1T2ICL**	2P	1.5	18.6	431
I0225P1T2ICL**	2P	2.5	20	542
I0305P1T2ICL**	3P	0.5	16.4	352
I0375P1T2ICL**	3P	0.75	17.1	393
I0310P1T2ICL**	3P	1	17	411
I0315P1T2ICL**	3P	1.5	19.7	526
I0325P1T2ICL**	3P	2.5	21.1	601
I0505P1T2ICL**	5P	0.5	19.1	454
I0575P1T2ICL**	5P	0.75	20	544
I0510P1T2ICL**	5P	1	20	575
I0515P1T2ICL**	5P	1.5	22.5	802
I0525P1T2ICL**	5P	2.5	25.5	978
I1005P1T2ICL**	10P	0.5	25.6	844
I1075P1T2ICL**	10P	0.75	27	984
I1010P1T2ICL**	10P	1	27	1044
I1015P1T2ICL**	10P	1.5	30.7	1474
I1025P1T2ICL**	10P	2.5	33.9	1813
I1505P1T2ICL**	15P	0.5	28.7	1065
I1575P1T2ICL**	15P	0.75	30.6	1428
I1510P1T2ICL**	15P	1	30.5	1515
I1515P1T2ICL**	15P	1.5	34.6	1857
I1525P1T2ICL**	15P	2.5	39.3	2536
I2005P1T2ICL**	20P	0.5	31.6	1468
I2075P1T2ICL**	20P	0.75	33.8	1695
I2010P1T2ICL**	20P	1	33.7	1812
I2015P1T2ICL**	20P	1.5	39.3	2450
I2025P1T2ICL**	20P	2.5	43.7	3043
I3005P1T2ICL**	30P	0.5	36.4	1862
I3075P1T2ICL**	30P	0.75	39.7	2382
I3010P1T2ICL**	30P	1	39.6	2558
I3015P1T2ICL**	30P	1.5	45.2	3197
I3025P1T2ICL**	30P	2.5	51.6	4032

* 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