



# PAS BS 5308 Part 1 Type 2 PE/CAM/PE/SWA/PVC 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 2 cables are designed where a greater degree of mechanical protection is required namely outdoor / exposed or direct burial at suitable depth.

## CHARACTERISTICS

**Voltage Rating** U<sub>o</sub>/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**  
0.5mm<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**  
PE (Polyethylene)

**Screen**  
Al/PET (Aluminium/Polyester Tape)

**Drain Wire**  
Tinned copper

**Bedding**  
PE (Polyethylene)

**Armour**  
SWA (Galvanised Steel Wire Armour)

**Sheath**  
PVC (Polyvinyl Chloride)

**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<sup>®</sup>

AN ISO/IEC 17025 AND IECCE 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](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 2015/863/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
I0105P1T2CPE**	1P	0.5	11.4
I0175P1T2CPE**	1P	0.75	11.8
I0110P1T2CPE**	1P	1	11.8
I0115P1T2CPE**	1P	1.5	12.9
I0125P1T2CPE**	1P	2.5	13.7
I1T05P1T2CPE**	1T	0.5	11.7
I1T75P1T2CPE**	1T	0.75	12.1
I1T10P1T2CPE**	1T	1	12.3
I1T15P1T2CPE**	1T	1.5	13.5
I1T25P1T2CPE**	1T	2.5	14.3
I0205P1T2CPE**	2P(Q)	0.5	12.3
I0275P1T2CPE**	2P(Q)	0.75	13
I0210P1T2CPE**	2P(Q)	1	13
I0215P1T2CPE**	2P(Q)	1.5	14.3
I0225P1T2CPE**	2P(Q)	2.5	15.3
I0505P1T2CPE**	5P	0.5	17.9
I0575P1T2CPE**	5P	0.75	19.3
I0510P1T2CPE**	5P	1	19.7
I0515P1T2CPE**	5P	1.5	22.1
I0525P1T2CPE**	5P	2.5	24.1
I1005P1T2CPE**	10P	0.5	22.9
I1075P1T2CPE**	10P	0.75	25.5
I1010P1T2CPE**	10P	1	24.3
I1015P1T2CPE**	10P	1.5	28.4
I1025P1T2CPE**	10P	2.5	32.1
I1505P1T2CPE**	15P	0.5	26.4
I1575P1T2CPE**	15P	0.75	28.7
I1510P1T2CPE**	15P	1	28.1
I1515P1T2CPE**	15P	1.5	32.2
I1525P1T2CPE**	15P	2.5	36.4
I2005P1T2CPE**	20P	0.5	29.1
I2075P1T2CPE**	20P	0.75	31.6
I2010P1T2CPE**	20P	1	31.2
I2015P1T2CPE**	20P	1.5	35.7
I2025P1T2CPE**	20P	2.5	41

\* Designates the sheath colour. For each Eland Cables part number replace with the colour code. e.g. I0105P1T2CPEBL = 0.5mm<sup>2</sup> Blue

P = Pairs

Q = Quads

T = Triples

## 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



Click here for more information:

[elandcables.com](http://elandcables.com) | PAS BS 5308 P1 T2 PE/CAM/PE/SWA/PVC Cable

## ELECTRICAL CHARACTERISTICS

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

## 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