

# PAS BS 5308 Part 2 Type 2 PVC/CAM/PVC/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 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 2 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>0</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**  
PVC (Polyvinyl Chloride)

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

**Drain Wire**  
Tinned copper

**Bedding**  
PVC (Polyvinyl Chloride)

**Armour**  
SWA (Galvanized 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

## ISO/IEC 17025 LABORATORY TESTED

This product is subject to the Quality Assurance protocols of The Cable Lab<sup>®</sup>, 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<sup>®</sup> as meeting the requirements of the BSI RoHS Trusted Kitemark<sup>™</sup>.





## DIMENSIONS

### Collectively Screened

ELAND PART NO.	NO. OF PAIRS/TRIPLE	NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	NOMINAL OVERALL DIAMETER mm
I0105P2T2CP**	1P	0.5	11.4
I0175P2T2CP**	1P	0.75	11.8
I0110P2T2CP**	1P	1	11.8
I0115P2T2CP**	1P	1.5	12.9
I0125P2T2CP**	1P	2.5	13.7
I1T05P2T2CP**	1T	0.5	11.7
I1T75P2T2CP**	1T	0.75	12.1
I1T10P2T2CP**	1T	1	12.3
I1T15P2T2CP**	1T	1.5	13.5
I1T25P2T2CP**	1T	2.5	17.3
I0205P2T2CP**	2P(Q)	0.5	12.3
I0275P2T2CP**	2P(Q)	0.75	13
I0210P2T2CP**	2P(Q)	1	13
I0215P2T2CP**	2P(Q)	1.5	14.3
I0225P2T2CP**	2P(Q)	2.5	15.3
I0505P2T2CP**	5P	0.5	17.9
I0575P2T2CP**	5P	0.75	19.3
I0510P2T2CP**	5P	1	19.7
I0515P2T2CP**	5P	1.5	22.1
I0525P2T2CP**	5P	2.5	24.1
I1005P2T2CP**	10P	0.5	22.9
I1075P2T2CP**	10P	0.75	25.5
I1010P2T2CP**	10P	1	24.3
I1015P2T2CP**	10P	1.5	28.4
I1025P2T2CP**	10P	2.5	32.1
I1505P2T2CP**	15P	0.5	26.4
I1575P2T2CP**	15P	0.75	28.7
I1510P2T2CP**	15P	1	28.1
I1515P2T2CP**	15P	1.5	32.2
I1525P2T2CP**	15P	2.5	36.4
I2005P2T2CP**	20P	0.5	29.1
I2075P2T2CP**	20P	0.75	31.6
I2010P2T2CP**	20P	1	31.2
I2015P2T2CP**	20P	1.5	35.7
I2025P2T2CP**	20P	2.5	41

\* Designates the sheath colour. For each Eland Cables part number replace with the colour code

P = Pairs

Q = Quad

T = Triple

## 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

### Individually and Collectively Screened

NOMINAL CROSS SECTIONAL AREA mm <sup>2</sup>	MUTUAL CAPACITANCE pF/m		MINIMUM INSULATION RESISTANCE AT 20°C mohms/km	MAXIMUM L/R RATIO μH/ohms
	Between Pairs or Adjacent Cores	Between any Core and Screen		
0.5	250	450	>25	25
0.75	250	450	>25	25
1	250	450	>25	25
1.5	250	450	>25	40
2.5	250	450	>25	65

## CORE IDENTIFICATION

PAIR NO.	A WIRE	B WIRE
1	○ White	● Blue
2	○ White	● Orange
3	○ White	● Green
4	○ White	● Brown
5	○ White	● Grey
6	● Red	● Blue
7	● Red	● Orange
8	● Red	● Green
9	● Red	● Brown
10	● Red	● Grey
11	● Black	● Blue
12	● Black	● Orange
13	● Black	● Green
14	● Black	● Brown
15	● Black	● Grey
16	● Yellow	● Blue
17	● Yellow	● Orange
18	● Yellow	● Green
19	● Yellow	● Brown
20	● Yellow	● Grey
21	● White/Blue	● Blue
22	● White/Blue	● Orange
23	● White/Blue	● Green
24	● White/Blue	● Brown
25	● White/Blue	● Grey
26	● Red/Blue	● Blue
27	● Red/Blue	● Orange
28	● Red/Blue	● Green
29	● Red/Blue	● Brown
30	● Red/Blue	● Grey
31	● Blue/Black	● Blue
32	● Blue/Black	● Orange
33	● Blue/Black	● Green
34	● Blue/Black	● Brown
35	● Blue/Black	● Grey
36	● Yellow/Blue	● Blue
37	● Yellow/Blue	● Orange



PAIR NO.	A WIRE	B WIRE
38	Yellow/Blue	Green
39	Yellow/Blue	Brown
40	Yellow/Blue	Grey
41	White/Orange	Blue
42	White/Orange	Orange
43	White/Orange	Green
44	White/Orange	Brown
45	White/Orange	Grey
46	Orange/Red	Blue
47	Orange/Red	Orange
48	Orange/Red	Green
49	Orange/Red	Brown
50	Orange/Red	Grey

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