

# BS 5308 Part 1 Type 3 - CAM - PE - PVC Instrumentation Cable



Eland Product Group: I

## APPLICATION

BS 5308 cables are designed to carry communication and control signals in a variety of installation types including those found in the petrochemicals industry. The signals can be of analogue, data or voice type and from a variety of transducers such as pressure, proximity and microphone. Part 1 Type 3 cables are generally designed where a greater degree of mechanical and chemical protection is required or direct burial at a suitable depth.

## CHARACTERISTICS

**Voltage Rating (Uo/U)**  
300/500V

**Operating Temperature**  
+75°C

## CONSTRUCTION

### Conductor

Class 1 solid copper conductor according to BS EN 60228  
Class 2 stranded copper conductor according to BS EN 60228  
Class 5 flexible copper conductor according to BS EN 60228

### Insulation

PE (Polyethylene) Type 03 according to BS 6234

### Binder Tape

PET (Polyester Tape)

### Screen

AL/PET (Aluminium/Polyester Tape)

### Drain Wire

Tinned copper

### Bedding

PE (Polyethylene) Type 03 according to BS 6234

### Covering

Lead or polyamide

### Inner Sheath

PE (Polyethylene) Type 03 according to BS 6234

### Armour

Galvanized steel wires

### Outer Sheath

PVC (Polyvinyl Chloride) Type TM1 according to BS EN 50363

### Outer Sheath Colour

● Blue ● Black

## STANDARDS

BS/PAS 5308, BS EN 60228, BS EN 6234, BS EN 50363,  
BS EN/IEC 60332-1, BS EN/IEC 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 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
I0105P1T3CP**	1P	0.5	15.4
I0175P1T3CP**	1P	0.75	15.6
I0110P1T3CP**	1P	1	15.8
I0115P1T3CP**	1P	1.5	16.9
I0125P1T3CP**	1P	2.5	18.4
I1T05P1T3CP**	1T	0.5	16
I1T75P1T3CP**	1T	0.75	16.2
I1T10P1T3CP**	1T	1	16.4
I1T15P1T3CP**	1T	1.5	-
I1T25P1T3CP**	1T	2.5	19.2
I0205P1T3CP**	2P(Q)	0.5	16.3
I0275P1T3CP**	2P(Q)	0.75	16.8
I0210P1T3CP**	2P(Q)	1	17
I0215P1T3CP**	2P(Q)	1.5	19
I0225P1T3CP**	2P(Q)	2.5	20
I0505P1T3CP**	5P	0.5	22.6
I0575P1T3CP**	5P	0.75	24.8
I0510P1T3CP**	5P	1	25
I0515P1T3CP**	5P	1.5	27.4
I0525P1T3CP**	5P	2.5	29.4
I1005P1T3CP**	10P	0.5	28.4
I1075P1T3CP**	10P	0.75	29.4
I1010P1T3CP**	10P	1	29.6
I1015P1T3CP**	10P	1.5	33.2
I1025P1T3CP**	10P	2.5	38.3
I1505P1T3CP**	15P	0.5	31.2
I1575P1T3CP**	15P	0.75	32.7
I1510P1T3CP**	15P	1	32.9
I1515P1T3CP**	15P	1.5	38.4
I1525P1T3CP**	15P	2.5	43
I2005P1T3CP**	20P	0.5	33.9
I2075P1T3CP**	20P	0.75	37.4
I2010P1T3CP**	20P	1	37.6
I2015P1T3CP**	20P	1.5	42.1
I2025P1T3CP**	20P	2.5	48.6

P = Pairs

Q = Quad

T = Triple

\*Eland Part No. shown above designate the sheath colour (\*). For each colour substitute \* for a colour code as listed below. e.g. I0105P1T3CPBK = 0.5mm<sup>2</sup> Black

## Colour Codes

COLOUR	Black	Blue
CODE	BK	BL



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

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
	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

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.