

BS 5308 Part 2 Type 2 - ICAM - 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 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. Individually and collectively screened pairs are available within the range.

CABLE STANDARDS

BS/PAS 5308, BS EN 60228, BS 6234, BS EN 50363, BS EN/IEC 60332-1, BS EN/IEC 60332-3-24



The electrical and dimensional properties of this product are measured by the Technical and Quality Assurance department at the Eland Cables laboratory. Cable performance in respect of conductor resistance, construction quality (workmanship), dimensional consistency, and other parameters are verified to published standards and approved product drawings. Conformance to RoHS (Restriction of the use of Hazardous Substances) is determined and confirmed.

CONSTRUCTION

Conductor

Class 1 solid, Class 2 stranded or Class 5 flexible copper conductor according to BS EN 60228 (previously BS 6360)

Insulation

PVC (Polyvinyl Chloride) Type T11 according to BS EN 50363

Screen

AL/PET (Aluminium/Polyester Tape)

Drain Wire

Tinned copper

Bedding

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

Armour

Galvanized SWA (Steel Wire Armour)

Sheath

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

CHARACTERISTICS

Voltage Rating (U_o/U)

300/500V

Temperature Rating

Fixed: -30°C to +70°C

Flexed: -5°C to +50°C

Minimum Bending Radius

Fixed: 18 x overall diameter

Sheath Colour

● Blue ● Black

DIMENSIONS

Individually and Collectively Screened

ELAND PART NO.	NO. OF PAIRS/TRIPLE	NOMINAL GROSS SECTIONAL AREA mm ²	NOMINAL OVERALL DIAMETER mm
I0205P2T2ICP**	2P	0.5	15.3
I0275P2T2ICP**	2P	0.75	16
I0210P2T2ICP**	2P	1	15.9
I0215P2T2ICP**	2P	1.5	18.6
I0225P2T2ICP**	2P	2.5	20
I0305P2T2ICP**	3P	0.5	15.9
I0375P2T2ICP**	3P	0.75	16.6
I0310P2T2ICP**	3P	1	16.8
I0315P2T2ICP**	3P	1.5	20.1
I0325P2T2ICP**	3P	2.5	23.5
I0505P2T2ICP**	5P	0.5	19.1
I0575P2T2ICP**	5P	0.75	20
I0510P2T2ICP**	5P	1	20
I0515P2T2ICP**	5P	1.5	22.5
I0525P2T2ICP**	5P	2.5	25.5
I1005P2T2ICP**	10P	0.5	25.6
I1075P2T2ICP**	10P	0.75	27
I1010P2T2ICP**	10P	1	27
I1015P2T2ICP**	10P	1.5	30.7
I1025P2T2ICP**	10P	2.5	33.9
I1505P2T2ICP**	15P	0.5	28.7
I1575P2T2ICP**	15P	0.75	30.6
I1510P2T2ICP**	15P	1	30.5
I1515P2T2ICP**	15P	1.5	34.6
I1525P2T2ICP**	15P	2.5	39.3
I2005P2T2ICP**	20P	0.5	31.6
I2075P2T2ICP**	20P	0.75	33.8
I2010P2T2ICP**	20P	1	33.7
I2015P2T2ICP**	20P	1.5	39.3
I2025P2T2ICP**	20P	2.5	43.7
I3005P2T2ICP**	30P	0.5	36.4
I3075P2T2ICP**	30P	0.75	39.7
I3010P2T2ICP**	30P	1	39.6
I3015P2T2ICP**	30P	1.5	45.2
I3025P2T2ICP**	30P	2.5	51.6

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

Individually and Collectively Screened Cables

NOMINAL CROSS SECTIONAL AREA mm ²	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 COLOURS

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

PAIR NO.	A WIRE	B WIRE
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
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