TEKAB

INSTRUMENTATION CABLES AS PER BS EN 50288-7 (CU/LSZH/OS/LSZH/SWA/LSZH)

APPLICATION

Suitable for Industrial & Commercial settings for process controls, transmission of analogue / digital signals in instrument & control systems. Ideal for use in conduits, trunking, and in locations protected from physical damage. For installation where fire, smoke emission and toxic fumes create a potential threat to life and equipment.

CONSTRUCTION

Conductor:	Stranded (Class 2) Annealed Plain Copper Conductor to BS EN 60228
Insulation:	Halogen free flame retardant compound (HFFR=LSZH)
Insulation Color:	Single Pair: Black & White Single Triad: Black, White & Red Multi Pair: Black & White with number printed on each cores. Multi Triad: Black, White & Red with number printed on each cores. Other colors are available upon request or as per BS EN 50288-7.
Pair / Triad:	Uniformly twisted insulated conductors with suitable twists per meter.
Assembly:	The required number of unscreened pairs / triads are assembled together with non-hygroscopic fillers (if required) and wrapped with a binder tape.
Overall Screen & Drain Wire:	Aluminum backed Mylar tape (25µm) (AL-PET-Foil) is applied over assembly with 100% coverage and an overlap of 25% with metal side in contact with a stranded tinned copper drain wire of size 0.5 mm2 (class 2).
Inner Sheath:	Extruded Low Smoke Zero Halogen (LSZH) in Black colour. Other colors are available upon request.
Armoring:	A serving of single layer of round galvanized steel wires is applied as per BS EN 10257-1.
Outer Sheath:	Extruded Low Smoke Zero Halogen (LSZH) in Black colour. Other colors are available upon request.
Printing Text on the Outer Sheath:	INSTRUMENTATION CABLE CU/LSZH/OS/LSZH/SWA/LSZH NO OF PAIRS / TRIADS X 2 / 3 X…MM2 500 V BS EN 50288-7 TEKAB YEAR MADE IN UAE LENGTH METER MARKING

TECHNICAL DATA

Operating Temperature: During Normal Operation - 90°C
During Short Circuit Condition - 160°C

Voltage Rating: 500V

Voltage Withstand: 2000 V a.c. r.m.s. for 1 minutes

Insulation Resistance MΩ/km: ≥ 10

Mutual Capacitance nf/km: < 150

Inductance to resistance ratio (L/R) µH/Ω < 25 (up to 1mm²)
< 40 (1.5 mm2)
< 60 (2.5 mm2)

Halogen Acid Gas Emission: 0.5% (BS EN 60754-1)

Smoke Emission: 60% (BS EN 61034-2)

Flame Retardant Test: IEC 60332-3-24 (CAT C), IEC 60332-1-2

* Solid (Class-1) / Flexible (Class-5), Tinned / Thermocouple conductor can be provided upon request.

*** Screening: - Copper Tape / CU-PET tape / Braiding & any other drain wire size can be provided upon request.

**** Other special sheath materials are also available with Flame Retardant: - IEC 60332-3-22 (CAT A), UV / Sunlight Resistant, Oil Resistant, Anti-Termite, Anti-Rodent.

- Construction in core formation also can be provided upon request.
- 300V or any customized voltage grade rated cables up to 600/1000V can be provided upon request.

SERIAL NO.	TEKAB CODE	NO. OF PAIRS (P) / TRIADS (T) X CONDUCTOR SIZE (No. x sq.mm)	NO. OF STRANDS	MINIMUM INSULATION THICKNESS (mm)	APPROX. OVERALL DIAMETER (mm)	APPROX. WEIGHT (kg/km)
1	Z1A7Z1Z2Z1	1P X 0.5	7	0.44	10.5	225
2	Z1A7Z1Z2Z1	2P X 0.5	7	0.44	13.5	350
3	Z1A7Z1Z2Z1	5P X 0.5	7	0.44	16.0	475
4	Z1A7Z1Z2Z1	10P X 0.5	7	0.44	19.5	700
5	Z1A7Z1Z2Z1	12P X 0.5	7	0.44	21.0	775
6	Z1A7Z1Z2Z1	16P X 0.5	7	0.44	24.0	1050
7	Z1A7Z1Z2Z1	20P X 0.5	7	0.44	26.0	1225
8	Z1A7Z1Z2Z1	1P X 0.75	7	0.44	11.0	250
9	Z1A7Z1Z2Z1	2P X 0.75	7	0.44	14.5	400
10	Z1A7Z1Z2Z1	5P X 0.75	7	0.44	17.5	575
11	Z1A7Z1Z2Z1	10P X 0.75	7	0.44	22.0	950
12	Z1A7Z1Z2Z1	12P X 0.75	7	0.44	23.5	1050
13	Z1A7Z1Z2Z1	16P X 0.75	7	0.44	26.0	1275
14	Z1A7Z1Z2Z1	20P X 0.75	7	0.44	28.5	1475

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15	Z1A7Z1Z2Z1	1P X 1.0	7	0.44	11.5	275
16	Z1A7Z1Z2Z1	2P X 1.0	7	0.44	15.0	425
17	Z1A7Z1Z2Z1	5P X 1.0	7	0.44	18.5	625
18	Z1A7Z1Z2Z1	10P X 1.0	7	0.44	23.0	1050
19	Z1A7Z1Z2Z1	12P X 1.0	7	0.44	24.5	1175
20	Z1A7Z1Z2Z1	16P X 1.0	7	0.44	27.5	1425
21	Z1A7Z1Z2Z1	20P X 1.0	7	0.44	30.0	1650
22	Z1A7Z1Z2Z1	1P X 1.5	7	0.44	12.0	300
23	Z1A7Z1Z2Z1	2P X 1.5	7	0.44	16.0	475
24	Z1A7Z1Z2Z1	5P X 1.5	7	0.44	19.5	700
25	Z1A7Z1Z2Z1	10P X 1.5	7	0.44	25.0	1250
26	Z1A7Z1Z2Z1	12P X 1.5	7	0.44	26.5	1400
27	Z1A7Z1Z2Z1	16P X 1.5	7	0.44	30.0	1700
28	Z1A7Z1Z2Z1	20P X 1.5	7	0.44	32.5	1975
29	Z1A7Z1Z2Z1	1P X 2.5	7	0.53	13.5	375
30	Z1A7Z1Z2Z1	2P X 2.5	7	0.53	18.5	625
31	Z1A7Z1Z2Z1	5P X 2.5	7	0.53	23.5	1075
32	Z1A7Z1Z2Z1	10P X 2.5	7	0.53	29.5	1675
33	Z1A7Z1Z2Z1	12P X 2.5	7	0.53	31.5	1875
34	Z1A7Z1Z2Z1	16P X 2.5	7	0.53	36.0	2550
35	Z1A7Z1Z2Z1	20P X 2.5	7	0.53	39.5	3000
36	Z1A7Z1Z2Z1	1T X 0.5	7	0.44	11.0	250
37	Z1A7Z1Z2Z1	2T X 0.5	7	0.44	14.0	375
38	Z1A7Z1Z2Z1	5T X 0.5	7	0.44	17.0	575
39	Z1A7Z1Z2Z1	10T X 0.5	7	0.44	21.5	950
40	Z1A7Z1Z2Z1	12T X 0.5	7	0.44	23.0	1050
41	Z1A7Z1Z2Z1	16T X 0.5	7	0.44	25.5	1250
42	Z1A7Z1Z2Z1	20T X 0.5	7	0.44	27.5	1450
43	Z1A7Z1Z2Z1	1T X 0.75	7	0.44	11.5	275
44	Z1A7Z1Z2Z1	2T X 0.75	7	0.44	15.0	450
45	Z1A7Z1Z2Z1	5T X 0.75	7	0.44	18.5	650
46	Z1A7Z1Z2Z1	10T X 0.75	7	0.44	23.5	1150
47	Z1A7Z1Z2Z1	12T X 0.75	7	0.44	25.0	1275
48	Z1A7Z1Z2Z1	16T X 0.75	7	0.44	28.0	1525
49	Z1A7Z1Z2Z1	20T X 0.75	7	0.44	30.5	1800
50	Z1A7Z1Z2Z1	1T X 1.0	7	0.44	11.5	300

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51	Z1A7Z1Z2Z1	2T X 1.0	7	0.44	15.5	475
52	Z1A7Z1Z2Z1	5T X 1.0	7	0.44	19.0	725
53	Z1A7Z1Z2Z1	10T X 1.0	7	0.44	24.5	1275
54	Z1A7Z1Z2Z1	12T X 1.0	7	0.44	26.0	1425
55	Z1A7Z1Z2Z1	16T X 1.0	7	0.44	29.5	1725
56	Z1A7Z1Z2Z1	20T X 1.0	7	0.44	32.0	2025
57	Z1A7Z1Z2Z1	1T X 1.5	7	0.44	12.5	350
58	Z1A7Z1Z2Z1	2T X 1.5	7	0.44	17.0	550
59	Z1A7Z1Z2Z1	5T X 1.5	7	0.44	21.0	875
60	Z1A7Z1Z2Z1	10T X 1.5	7	0.44	26.5	1500
61	Z1A7Z1Z2Z1	12T X 1.5	7	0.44	28.5	1700
62	Z1A7Z1Z2Z1	16T X 1.5	7	0.44	31.5	2075
63	Z1A7Z1Z2Z1	20T X 1.5	7	0.44	35.5	2675
64	Z1A7Z1Z2Z1	1T X 2.5	7	0.53	14.0	425
65	Z1A7Z1Z2Z1	2T X 2.5	7	0.53	19.5	700
66	Z1A7Z1Z2Z1	5T X 2.5	7	0.53	25.0	1325
67	Z1A7Z1Z2Z1	10T X 2.5	7	0.53	32.5	2300
68	Z1A7Z1Z2Z1	12T X 2.5	7	0.53	34.5	2575
69	Z1A7Z1Z2Z1	16T X 2.5	7	0.53	38.5	3175
70	Z1A7Z1Z2Z1	20T X 2.5	7	0.53	42.5	3775