TEKAB

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

APPLICATION

Suitable for Industrial & Commercial settings for process controls, operation of critical systems during fire emergencies, transmission of analogue / digital signals in instrument & control systems, maintaining functionality even under extreme conditions. 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:	MICA + Cross linked polyethylene (XLPE)
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/MICA/XLPE/OS/LSZH/SWA/ LSZH NO OF PAIRS / TRIADS X 2 / 3 X…MM2 500 V BS EN 50288-7 IEC 60331 IEC 60332-1-2 TEKAB YEAR MADE IN UAE LENGTH METER MARKING

TEKAB

TECHNICAL DATA

Operating Temperature: During Normal Operation - 90°C
During Short Circuit Condition - 250°C

Voltage Rating: 500V

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

Insulation Resistance MΩ/km: ≥ 1000

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)

Fire Resistant: IEC 60331

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.

** Flame Retardant Cross linked polyethylene (FR-XLPE) can be provided upon request.

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

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**** 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	MXA7Z1Z2Z1	1P X 0.5	7	0.44	13	350
2	MXA7Z1Z2Z1	2P X 0.5	7	0.44	18.5	650
3	MXA7Z1Z2Z1	5P X 0.5	7	0.44	24	1,050
4	MXA7Z1Z2Z1	10P X 0.5	7	0.44	29	1,450
5	MXA7Z1Z2Z1	12P X 0.5	7	0.44	31	1,600
6	MXA7Z1Z2Z1	16P X 0.5	7	0.44	35.5	2,100
7	MXA7Z1Z2Z1	20P X 0.5	7	0.44	38	2,450
8	MXA7Z1Z2Z1	1P X 0.75	7	0.44	13.5	350
9	MXA7Z1Z2Z1	2P X 0.75	7	0.44	20	725
10	MXA7Z1Z2Z1	5P X 0.75	7	0.44	25	1,350
11	MXA7Z1Z2Z1	10P X 0.75	7	0.44	30	1,600
12	MXA7Z1Z2Z1	12P X 0.75	7	0.44	33	1,975
13	MXA7Z1Z2Z1	16P X 0.75	7	0.44	37	2,400
14	MXA7Z1Z2Z1	20P X 0.75	7	0.44	41	2,775

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15	MXA7Z1Z2Z1	1P X 1.0	7	0.44	14	375
16	MXA7Z1Z2Z1	2P X 1.0	7	0.44	21	750
17	MXA7Z1Z2Z1	5P X 1.0	7	0.44	25.5	1,200
18	MXA7Z1Z2Z1	10P X 1.0	7	0.44	31	1,700
19	MXA7Z1Z2Z1	12P X 1.0	7	0.44	34.5	2,150
20	MXA7Z1Z2Z1	16P X 1.0	7	0.44	38.4	2,575
21	MXA7Z1Z2Z1	20P X 1.0	7	0.44	42	3,000
22	MXA7Z1Z2Z1	1P X 1.5	7	0.44	14.5	400
23	MXA7Z1Z2Z1	2P X 1.5	7	0.44	22	950
24	MXA7Z1Z2Z1	5P X 1.5	7	0.44	27	1,325
25	MXA7Z1Z2Z1	10P X 1.5	7	0.44	33.5	2,091
26	MXA7Z1Z2Z1	12P X 1.5	7	0.44	27	2,400
27	MXA7Z1Z2Z1	16P X 1.5	7	0.44	41	2,900
28	MXA7Z1Z2Z1	20P X 1.5	7	0.44	46	3,775
29	MXA7Z1Z2Z1	1P X 2.5	7	0.53	17	575
30	MXA7Z1Z2Z1	2P X 2.5	7	0.53	24	1,100
31	MXA7Z1Z2Z1	5P X 2.5	7	0.53	30	1,600
32	MXA7Z1Z2Z1	10P X 2.5	7	0.53	32	2,650
33	MXA7Z1Z2Z1	12P X 2.5	7	0.53	41	3000
34	MXA7Z1Z2Z1	16P X 2.5	7	0.53	47	4,050
35	MXA7Z1Z2Z1	20P X 2.5	7	0.53	52	4,800
36	MXA7Z1Z2Z1	1T X 0.5	7	0.44	13.5	375
37	MXA7Z1Z2Z1	2T X 0.5	7	0.44	20	750
38	MXA7Z1Z2Z1	5T X 0.5	7	0.44	25	1,175
39	MXA7Z1Z2Z1	10T X 0.5	7	0.44	30.5	1,650
40	MXA7Z1Z2Z1	12T X 0.5	7	0.44	33	2,050
41	MXA7Z1Z2Z1	16T X 0.5	7	0.44	37.5	2,500
42	MXA7Z1Z2Z1	20T X 0.5	7	0.44	41	2.900
43	MXA7Z1Z2Z1	1T X 0.75	7	0.44	14	400
44	MXA7Z1Z2Z1	2T X 0.75	7	0.44	22	925
45	MXA7Z1Z2Z1	5T X 0.75	7	0.44	20	1,300
46	MXA7Z1Z2Z1	10T X 0.75	7	0.44	33	2,050
47	MXA7Z1Z2Z1	12T X 0.75	7	0.44	35.5	2,375
48	MXA7Z1Z2Z1	16T X 0.75	7	0.44	39.5	2,800
49	MXA7Z1Z2Z1	20T X 0.75	7	0.44	43	3,275
50	MXA7Z1Z2Z1	1T X 1.0	7	0.44	14.5	425

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51	MXA7Z1Z2Z1	2T X 1.0	7	0.44	22.5	975
52	MXA7Z1Z2Z1	5T X 1.0	7	0.44	27	1,375
53	MXA7Z1Z2Z1	10T X 1.0	7	0.44	34	2,200
54	MXA7Z1Z2Z1	12T X 1.0	7	0.44	37	2,550
55	MXA7Z1Z2Z1	16T X 1.0	7	0.44	41	3,075
56	MXA7Z1Z2Z1	20T X 1.0	7	0.44	46	4,000
57	MXA7Z1Z2Z1	1T X 1.5	7	0.44	16	550
58	MXA7Z1Z2Z1	2T X 1.5	7	0.44	23	1,050
59	MXA7Z1Z2Z1	5T X 1.5	7	0.44	28	1,550
60	MXA7Z1Z2Z1	10T X 1.5	7	0.44	36	2,550
61	MXA7Z1Z2Z1	12T X 1.5	7	0.44	38.5	2,850
62	MXA7Z1Z2Z1	16T X 1.5	7	0.44	43	3,475
63	MXA7Z1Z2Z1	20T X 1.5	7	0.44	49	4,550
64	MXA7Z1Z2Z1	1T X 2.5	7	0.53	17.5	650
65	MXA7Z1Z2Z1	2T X 2.5	7	0.53	25.5	1,250
66	MXA7Z1Z2Z1	5T X 2.5	7	0.53	31	1,875
67	MXA7Z1Z2Z1	10T X 2.5	7	0.53	41	3,200
68	MXA7Z1Z2Z1	12T X 2.5	7	0.53	45	4,030
69	MXA7Z1Z2Z1	16T X 2.5	7	0.53	50	4,900
70	MXA7Z1Z2Z1	20T X 2.5	7	0.53	55	5,775