

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

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.

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 mm ² (class 2).
Outer Sheath:	Extruded Polyvinyl Chloride (PVC) in Black colour. Other colors are available upon request.
Printing Text on the Outer Sheath:	INSTRUMENTATION CABLE CU/MICA/XLPE/OS/PVC NO OF PAIRS / TRIADS X 2 / 3 X...MM ² 500 V BS EN 50288-7 IEC 60331 IEC 60332-1-2 TEKAB YEAR MADE IN UAE LENGTH METER MARKING



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 < 150
nf/km:

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

Fire Resistant: IEC 60331

Flame Retardant Test 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.

**** Other special sheath materials are also available with Flame Retardant :- IEC 60332-3-22 (CAT A), IEC 60332-3-24 (CAT C), Low Smoke, 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	MXA7V	1P X 0.5	7	0.44	9	100
2	MXA7V	2P X 0.5	7	0.44	14	150
3	MXA7V	5P X 0.5	7	0.44	18	275
4	MXA7V	10P X 0.5	7	0.44	22.5	450
5	MXA7V	12P X 0.5	7	0.44	24.5	525
6	MXA7V	16P X 0.5	7	0.44	28	675
7	MXA7V	20P X 0.5	7	0.44	31	800
8	MXA7V	1P X 0.75	7	0.44	9	100
9	MXA7V	2P X 0.75	7	0.44	14.5	200
10	MXA7V	5P X 0.75	7	0.44	19	325
11	MXA7V	10P X 0.75	7	0.44	24	550
12	MXA7V	12P X 0.75	7	0.44	26	650
13	MXA7V	16P X 0.75	7	0.44	30	800
14	MXA7V	20P X 0.75	7	0.44	32.2	1000
15	MXA7V	1P X 1.0	7	0.44	9	100
16	MXA7V	2P X 1.0	7	0.44	15	200
17	MXA7V	5P X 1.0	7	0.44	19	375
18	MXA7V	10P X 1.0	7	0.44	25	625
19	MXA7V	12P X 1.0	7	0.44	27	725
20	MXA7V	16P X 1.0	7	0.44	30.5	925

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21	MXA7V	20P X 1.0	7	0.44	34	1,350
22	MXA7V	1P X 1.5	7	0.44	10	125
23	MXA7V	2P X 1.5	7	0.44	15.5	250
24	MXA7V	5P X 1.5	7	0.44	20	425
25	MXA7V	10P X 1.5	7	0.44	26.5	750
26	MXA7V	12P X 1.5	7	0.44	29	875
27	MXA7V	16P X 1.5	7	0.44	32.5	1,125
28	MXA7V	20P X 1.5	7	0.44	37	1,375
29	MXA7V	1P X 2.5	7	0.53	12	175
30	MXA7V	2P X 2.5	7	0.53	18	300
31	MXA7V	5P X 2.5	7	0.53	23.5	575
32	MXA7V	10P X 2.5	7	0.53	30.5	1000
33	MXA7V	12P X 2.5	7	0.53	33.5	1200
34	MXA7V	16P X 2.5	7	0.53	38	1550
35	MXA7V	20P X 2.5	7	0.53	42.5	1925
36	MXA7V	1T X 0.5	7	0.44	9	100
37	MXA7V	2T X 0.5	7	0.44	14	200
38	MXA7V	5T X 0.5	7	0.44	18	350
39	MXA7V	10T X 0.5	7	0.44	24	600
40	MXA7V	12T X 0.5	7	0.44	26	725
41	MXA7V	16T X 0.5	7	0.44	29	900
42	MXA7V	20T X 0.5	7	0.44	32.5	1125
43	MXA7V	1T X 0.75	7	0.44	9.5	125
44	MXA7V	2T X 0.75	7	0.44	15	225
45	MXA7V	5T X 0.75	7	0.44	19.5	425
46	MXA7V	10T X 0.75	7	0.44	26	750
47	MXA7V	12T X 0.75	7	0.44	28	875
48	MXA7V	16T X 0.75	7	0.44	31.5	1100
49	MXA7V	20T X 0.75	7	0.44	35	1375
50	MXA7V	1T X 1.0	7	0.44	10	150
51	MXA7V	2T X 1.0	7	0.44	16	250
52	MXA7V	5T X 1.0	7	0.44	20.5	475
53	MXA7V	10T X 1.0	7	0.44	26.5	850
54	MXA7V	12T X 1.0	7	0.44	29	1000
55	MXA7V	16T X 1.0	7	0.44	33	1300
56	MXA7V	20T X 1.0	7	0.44	36.5	1575

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57	MXA7V	1T X 1.5	7	0.44	11	150
58	MXA7V	2T X 1.5	7	0.44	17	300
59	MXA7V	5T X 1.5	7	0.44	22	575
60	MXA7V	10T X 1.5	7	0.44	28	1025
61	MXA7V	12T X 1.5	7	0.44	31	1200
62	MXA7V	16T X 1.5	7	0.44	35	1550
63	MXA7V	20T X 1.5	7	0.44	39	1950
64	MXA7V	1T X 2.5	7	0.53	12.5	200
65	MXA7V	2T X 2.5	7	0.53	19.5	400
66	MXA7V	5T X 2.5	7	0.53	25.5	800
67	MXA7V	10T X 2.5	7	0.53	33	1400
68	MXA7V	12T X 2.5	7	0.53	36	1675
69	MXA7V	16T X 2.5	7	0.53	41	2200
70	MXA7V	20T X 2.5	7	0.53	46	2725

