

INSTRUMENTATION CABLES AS PER BS EN 50288-7 (CU/MICA/XLPE/IS/OS/PVC/SWA/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, providing robust mechanical protection and durability.

CONSTRUCTION

Conductor:	Stranded (Class 2) Annealed Plain Copper Conductor to BS EN 60228
Insulation:	MICA + Cross linked polyethylene (XLPE)
Insulation Color:	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.
Individual Screen & Drain Wire:	Aluminum backed Mylar tape (25µm) (AL-PET Foil) is applied over each pair / triad 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). All pair shields are electrically isolated from each other.
Assembly:	The required number of screened 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).
Inner Sheath:	Extruded Polyvinyl Chloride (PVC) 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 Polyvinyl Chloride (PVC) in Black colour. Other colors are available upon request.
Printing Text on the Outer Sheath:	INSTRUMENTATION CABLE CU/MICA/XLPE/IS/OS/PVC/SWA/ PVC 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



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 1mm ²) < 40 (1.5 mm ²) < 60 (2.5 mm ²)
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	MXA8A7VZ2V	2P X 0.5	7	0.44	21	750
2	MXA8A7VZ2V	5P X 0.5	7	0.44	25.5	1200
3	MXA8A7VZ2V	10P X 0.5	7	0.44	31.5	1700
4	MXA8A7VZ2V	12P X 0.5	7	0.44	34.5	2125
5	MXA8A7VZ2V	16P X 0.5	7	0.44	39	2550
6	MXA8A7VZ2V	20P X 0.5	7	0.44	42.5	2975
7	MXA8A7VZ2V	2P X 0.75	7	0.44	22	950
8	MXA8A7VZ2V	5P X 0.75	7	0.44	27	1300
9	MXA8A7VZ2V	10P X 0.75	7	0.44	34	2075
10	MXA8A7VZ2V	12P X 0.75	7	0.44	37	2400
11	MXA8A7VZ2V	16P X 0.75	7	0.44	41	2850
12	MXA8A7VZ2V	20P X 0.75	7	0.44	46	3725
13	MXA8A7VZ2V	2P X 1.0	7	0.44	23	975
14	MXA8A7VZ2V	5P X 1.0	7	0.44	28	1400

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15	MXA8A7VZ2V	10P X 1.0	7	0.44	35.5	2275
16	MXA8A7VZ2V	12P X 1.0	7	0.44	38	2525
17	MXA8A7VZ2V	16P X 1.0	7	0.44	42	3050
18	MXA8A7VZ2V	20P X 1.0	7	0.44	48	4025
19	MXA8A7VZ2V	2P X 1.5	7	0.44	24	1050
20	MXA8A7VZ2V	5P X 1.5	7	0.44	29	1500
21	MXA8A7VZ2V	10P X 1.5	7	0.44	37	2500
22	MXA8A7VZ2V	12P X 1.5	7	0.44	40	2775
23	MXA8A7VZ2V	16P X 1.5	7	0.44	46	3800
24	MXA8A7VZ2V	20P X 1.5	7	0.44	50	4425
25	MXA8A7VZ2V	2P X 2.5	7	0.53	26	1200
26	MXA8A7VZ2V	5P X 2.5	7	0.53	33	2000
27	MXA8A7VZ2V	10P X 2.5	7	0.53	42	3025
28	MXA8A7VZ2V	12P X 2.5	7	0.53	46	3850
29	MXA8A7VZ2V	16P X 2.5	7	0.53	52	4732
30	MXA8A7VZ2V	20P X 2.5	7	0.53	56.5	5450
31	MXA8A7VZ2V	2T X 0.5	7	0.44	22	1300
32	MXA8A7VZ2V	5T X 0.5	7	0.44	27	2200
33	MXA8A7VZ2V	10T X 0.5	7	0.44	34	2125
34	MXA8A7VZ2V	12T X 0.5	7	0.44	37	2450
35	MXA8A7VZ2V	16T X 0.5	7	0.44	41	2950
36	MXA8A7VZ2V	20T X 0.5	7	0.44	46	3825
37	MXA8A7VZ2V	2T X 0.75	7	0.44	23	1025
38	MXA8A7VZ2V	5T X 0.75	7	0.44	28	1475
39	MXA8A7VZ2V	10T X 0.75	7	0.44	36	2425
40	MXA8A7VZ2V	12T X 0.75	7	0.44	38.5	2700
41	MXA8A7VZ2V	16T X 0.75	7	0.44	43	3275
42	MXA8A7VZ2V	20T X 0.75	7	0.44	49	4325
43	MXA8A7VZ2V	2T X 1.0	7	0.44	24	1075
44	MXA8A7VZ2V	5T X 1.0	7	0.44	29	1575
45	MXA8A7VZ2V	10T X 1.0	7	0.44	37.5	2600
46	MXA8A7VZ2V	12T X 1.0	7	0.44	40	2900
47	MXA8A7VZ2V	16T X 1.0	7	0.44	46	3975
48	MXA8A7VZ2V	20T X 1.0	7	0.44	50.5	4625

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49	MXA8A7VZ2V	2T X 1.5	7	0.44	25	1550
50	MXA8A7VZ2V	5T X 1.5	7	0.44	30.5	1725
51	MXA8A7VZ2V	10T X 1.5	7	0.44	39	2875
52	MXA8A7VZ2V	12T X 1.5	7	0.44	42	3250
53	MXA8A7VZ2V	16T X 1.5	7	0.44	49	4475
54	MXA8A7VZ2V	20T X 1.5	7	0.44	54	5225
55	MXA8A7VZ2V	2T X 2.5	7	0.53	27	1350
56	MXA8A7VZ2V	5T X 2.5	7	0.53	35	2325
57	MXA8A7VZ2V	10T X 2.5	7	0.53	45.5	4000
58	MXA8A7VZ2V	12T X 2.5	7	0.53	50	4550
59	MXA8A7VZ2V	16T X 2.5	7	0.53	55	5575
60	MXA8A7VZ2V	20T X 2.5	7	0.53	60	6525

