

INSTRUMENTATION CABLES AS PER BS EN 50288-7 (CU/MICA/XLPE/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:	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).
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/OS/PVC/SWA/ 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 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	MXA7VZ2V	1P X 0.5	7	0.44	13	350
2	MXA7VZ2V	2P X 0.5	7	0.44	18.5	650
3	MXA7VZ2V	5P X 0.5	7	0.44	24	1,050
4	MXA7VZ2V	10P X 0.5	7	0.44	29	1,450
5	MXA7VZ2V	12P X 0.5	7	0.44	30.5	1,600
6	MXA7VZ2V	16P X 0.5	7	0.44	35	2,100
7	MXA7VZ2V	20P X 0.5	7	0.44	38	2,450
8	MXA7VZ2V	1P X 0.75	7	0.44	11	350
9	MXA7VZ2V	2P X 0.75	7	0.44	20	725
10	MXA7VZ2V	5P X 0.75	7	0.44	20.5	1,350
11	MXA7VZ2V	10P X 0.75	7	0.44	30	1,600
12	MXA7VZ2V	12P X 0.75	7	0.44	33	1,975
13	MXA7VZ2V	16P X 0.75	7	0.44	37	2,400
14	MXA7VZ2V	20P X 0.75	7	0.44	41	2,775

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15	MXA7VZ2V	1P X 1.0	7	0.44	11	375
16	MXA7VZ2V	2P X 1.0	7	0.44	20.5	750
17	MXA7VZ2V	5P X 1.0	7	0.44	25	1,200
18	MXA7VZ2V	10P X 1.0	7	0.44	31	1,700
19	MXA7VZ2V	12P X 1.0	7	0.44	34	2,150
20	MXA7VZ2V	16P X 1.0	7	0.44	38	2,575
21	MXA7VZ2V	20P X 1.0	7	0.44	42	3,000
22	MXA7VZ2V	1P X 1.5	7	0.44	12	400
23	MXA7VZ2V	2P X 1.5	7	0.44	22	950
24	MXA7VZ2V	5P X 1.5	7	0.44	27	1,325
25	MXA7VZ2V	10P X 1.5	7	0.44	33.5	2,091
26	MXA7VZ2V	12P X 1.5	7	0.44	36.5	2,400
27	MXA7VZ2V	16P X 1.5	7	0.44	41	2,900
28	MXA7VZ2V	20P X 1.5	7	0.44	46	3,775
29	MXA7VZ2V	1P X 2.5	7	0.53	16	575
30	MXA7VZ2V	2P X 2.5	7	0.53	24	1,100
31	MXA7VZ2V	5P X 2.5	7	0.53	30	1,600
32	MXA7VZ2V	10P X 2.5	7	0.53	38	2,650
33	MXA7VZ2V	12P X 2.5	7	0.53	41	3000
34	MXA7VZ2V	16P X 2.5	7	0.53	47	4,050
35	MXA7VZ2V	20P X 2.5	7	0.53	52	4,800
36	MXA7VZ2V	1T X 0.5	7	0.44	13	375
37	MXA7VZ2V	2T X 0.5	7	0.44	20	750
38	MXA7VZ2V	5T X 0.5	7	0.44	25	1,175
39	MXA7VZ2V	10T X 0.5	7	0.44	30	1,650
40	MXA7VZ2V	12T X 0.5	7	0.44	33	2,050
41	MXA7VZ2V	16T X 0.5	7	0.44	37	2,500
42	MXA7VZ2V	20T X 0.5	7	0.44	41	2,900
43	MXA7VZ2V	1T X 0.75	7	0.44	11	400
44	MXA7VZ2V	2T X 0.75	7	0.44	22	925
45	MXA7VZ2V	5T X 0.75	7	0.44	26	1,300
46	MXA7VZ2V	10T X 0.75	7	0.44	32.5	2,050
47	MXA7VZ2V	12T X 0.75	7	0.44	35.5	2,375
48	MXA7VZ2V	16T X 0.75	7	0.44	39	2,800
49	MXA7VZ2V	20T X 0.75	7	0.44	43	3,275
50	MXA7VZ2V	1T X 1.0	7	0.44	12	425

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51	MXA7VZ2V	2T X 1.0	7	0.44	22	975
52	MXA7VZ2V	5T X 1.0	7	0.44	27	1,375
53	MXA7VZ2V	10T X 1.0	7	0.44	34	2,200
54	MXA7VZ2V	12T X 1.0	7	0.44	37	2,550
55	MXA7VZ2V	16T X 1.0	7	0.44	41	3,075
56	MXA7VZ2V	20T X 1.0	7	0.44	46	4,000
57	MXA7VZ2V	1T X 1.5	7	0.44	16	550
58	MXA7VZ2V	2T X 1.5	7	0.44	23	1,050
59	MXA7VZ2V	5T X 1.5	7	0.44	28	1,550
60	MXA7VZ2V	10T X 1.5	7	0.44	36	2,550
61	MXA7VZ2V	12T X 1.5	7	0.44	38.5	2,850
62	MXA7VZ2V	16T X 1.5	7	0.44	43	3,475
63	MXA7VZ2V	20T X 1.5	7	0.44	49	4,550
64	MXA7VZ2V	1T X 2.5	7	0.53	17.5	650
65	MXA7VZ2V	2T X 2.5	7	0.53	25.5	1,250
66	MXA7VZ2V	5T X 2.5	7	0.53	31	1,875
67	MXA7VZ2V	10T X 2.5	7	0.53	40.5	3,200
68	MXA7VZ2V	12T X 2.5	7	0.53	45	4,030
69	MXA7VZ2V	16T X 2.5	7	0.53	50	4,900
70	MXA7VZ2V	20T X 2.5	7	0.53	55	5,775