TEKAB

INSTRUMENTATION CABLES AS PER BS EN 50288-7 (CU/MICA/XLPE/AL/HDPE/PA/SWA/PVC)

APPLICATION

Suitable for Industrial & Commercial settings for process controls, operation of critical systems during fire emergencies, outdoor and underground installations, petrochemical and oil & gas industries, refineries, chemical plants, and power stations, providing robust mechanical protection and durability, moisture resistance, maintaining functionality even under extreme conditions.

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 & Multi- Layer Sheath:	An Aluminum (AL) Foil (0.20mm) coated on up side with a protective plastic coating (0.05mm) is applied longitudinally over the core assembly with a minimum overlap of 3 mm. A stranded tinned copper drain wire of 0.5mm2 (class 2) runs longitudinally in contact with the Aluminum side of the Aluminum tape. A black extruded bedding of Flame-Retardant High-Density Polyethylene compound meeting the requirement of ASTM 1248 Type 3 shall be applied over the Aluminum Foil and shall be bonded to the Aluminum Foil. Over the High-Density Polyethylene bedding a protective sheath 0.3 mm of Polyamide shall be extruded.
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/AL/HDPE/PA/ SWA/PVC NO OF PAIRS / TRIADS X 2 / 3 X…MM2 500 V BS EN 50288-7 IEC 60331 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 1mm²) < 40 (1.5 mm2) < 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: - 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	MX(L)2YQ4Z2V	1P X 0.5	7	0.44	16	525
2	MX(L)2YQ4Z2V	2P X 0.5	7	0.44	22	925
3	MX(L)2YQ4Z2V	5P X 0.5	7	0.44	26	1225
4	MX(L)2YQ4Z2V	10P X 0.5	7	0.44	31	1650
5	MX(L)2YQ4Z2V	12P X 0.5	7	0.44	34	2000
6	MX(L)2YQ4Z2V	16P X 0.5	7	0.44	38	2450
7	MX(L)2YQ4Z2V	20P X 0.5	7	0.44	41.5	2800
8	MX(L)2YQ4Z2V	1P X 0.75	7	0.44	17	550
9	MX(L)2YQ4Z2V	2P X 0.75	7	0.44	23	1000
10	MX(L)2YQ4Z2V	5P X 0.75	7	0.44	27	1325
11	MX(L)2YQ4Z2V	10P X 0.75	7	0.44	33	2000
12	MX(L)2YQ4Z2V	12P X 0.75	7	0.44	36	2275
13	MX(L)2YQ4Z2V	16P X 0.75	7	0.44	40.5	2750
14	MX(L)2YQ4Z2V	20P X 0.75	7	0.44	45	3525

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15	MX(L)2YQ4Z2V	1P X 1.0	7	0.44	17	575
16	MX(L)2YQ4Z2V	2P X 1.0	7	0.44	24	1050
17	MX(L)2YQ4Z2V	5P X 1.0	7	0.44	28	1400
18	MX(L)2YQ4Z2V	10P X 1.0	7	0.44	35	2175
19	MX(L)2YQ4Z2V	12P X 1.0	7	0.44	37	2425
20	MX(L)2YQ4Z2V	16P X 1.0	7	0.44	42	2925
21	MX(L)2YQ4Z2V	20P X 1.0	7	0.44	46	3750
22	MX(L)2YQ4Z2V	1P X 1.5	7	0.44	17.5	600
23	MX(L)2YQ4Z2V	2P X 1.5	7	0.44	25	1125
24	MX(L)2YQ4Z2V	5P X 1.5	7	0.44	29	1525
25	MX(L)2YQ4Z2V	10P X 1.5	7	0.44	37	2425
26	MX(L)2YQ4Z2V	12P X 1.5	7	0.44	39	2700
27	MX(L)2YQ4Z2V	16P X 1.5	7	0.44	45	3650
28	MX(L)2YQ4Z2V	20P X 1.5	7	0.44	49	4200
29	MX(L)2YQ4Z2V	1P X 2.5	7	0.53	19	700
30	MX(L)2YQ4Z2V	2P X 2.5	7	0.53	27	1275
31	MX(L)2YQ4Z2V	5P X 2.5	7	0.53	33	2000
32	MX(L)2YQ4Z2V	10P X 2.5	7	0.53	41	3000
33	MX(L)2YQ4Z2V	12P X 2.5	7	0.53	45.5	3750
34	MX(L)2YQ4Z2V	16P X 2.5	7	0.53	51	4600
35	MX(L)2YQ4Z2V	1T X 0.5	7	0.44	17	575
36	MX(L)2YQ4Z2V	2T X 0.5	7	0.44	23	1025
37	MX(L)2YQ4Z2V	5T X 0.5	7	0.44	27	1350
38	MX(L)2YQ4Z2V	10T X 0.5	7	0.44	33	2075
39	MX(L)2YQ4Z2V	12T X 0.5	7	0.44	36	2350
40	MX(L)2YQ4Z2V	16T X 0.5	7	0.44	40.5	2825
41	MX(L)2YQ4Z2V	20T X 0.5	7	0.44	45	3650
42	MX(L)2YQ4Z2V	1T X 0.75	7	0.44	17	600
43	MX(L)2YQ4Z2V	2T X 0.75	7	0.44	24	1100
44	MX(L)2YQ4Z2V	5T X 0.75	7	0.44	29	1500
45	MX(L)2YQ4Z2V	10T X 0.75	7	0.44	36	2375
46	MX(L)2YQ4Z2V	12T X 0.75	7	0.44	38	2650
47	MX(L)2YQ4Z2V	16T X 0.75	7	0.44	42.5	3150
48	MX(L)2YQ4Z2V	20T X 0.75	7	0.44	48	4100

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49	MX(L)2YQ4Z2V	1T X 1.0	7	0.44	18	625
50	MX(L)2YQ4Z2V	2T X 1.0	7	0.44	25	1150
51	MX(L)2YQ4Z2V	5T X 1.0	7	0.44	29.5	1600
52	MX(L)2YQ4Z2V	10T X 1.0	7	0.44	37	2525
53	MX(L)2YQ4Z2V	12T X 1.0	7	0.44	39.5	2850
54	MX(L)2YQ4Z2V	16T X 1.0	7	0.44	45	3850
55	MX(L)2YQ4Z2V	20T X 1.0	7	0.44	49	4400
56	MX(L)2YQ4Z2V	1T X 1.5	7	0.44	18	675
57	MX(L)2YQ4Z2V	2T X 1.5	7	0.44	26	1225
58	MX(L)2YQ4Z2V	5T X 1.5	7	0.44	31	1750
59	MX(L)2YQ4Z2V	10T X 1.5	7	0.44	39	2850
60	MX(L)2YQ4Z2V	12T X 1.5	7	0.44	42	3200
61	MX(L)2YQ4Z2V	16T X 1.5	7	0.44	48	4300
62	MX(L)2YQ4Z2V	20T X 1.5	7	0.44	53	5050
63	MX(L)2YQ4Z2V	1T X 2.5	7	0.53	20	800
64	MX(L)2YQ4Z2V	2T X 2.5	7	0.53	28	1450
65	MX(L)2YQ4Z2V	5T X 2.5	7	0.53	35	2350
66	MX(L)2YQ4Z2V	10T X 2.5	7	0.53	45	3950
67	MX(L)2YQ4Z2V	12T X 2.5	7	0.53	48	4450