

INSTRUMENTATION CABLES AS PER BS EN 50288-7 (CU/PVC/IS/OS/PVC/SWA/PVC)

APPLICATION

Suitable for Industrial & Commercial settings for process controls, transmission of analogue / digital signals in instrument & control systems, providing robust mechanical protection and durability.

CONSTRUCTION

Conductor:	Stranded (Class 2) Annealed Plain Copper Conductor to BS EN 60228
Insulation:	Polyvinyl Chloride (PVC) rated 90°C
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/PVC/IS/OS/PVC/SWA/PVC NO OF PAIRS / TRIADS X 2 / 3 X...MM2 500 V BS EN 50288-7 TEKAB YEAR MADE IN UAE LENGTH METER MARKING



TECHNICAL DATA

Operating Temperature:	During Normal Operation - 90°C During Short Circuit Condition - 160°C
Voltage Rating:	500V
Voltage Withstand:	2000 V a.c. r.m.s. for 1 minutes
Insulation Resistance MΩ/km:	≥ 10
Mutual Capacitance nf/km:	< 250
Inductance to resistance ratio (L/R) μH/Ω	< 25 (up to 1mm ²) < 40 (1.5 mm ²) < 60 (2.5 mm ²)

* Solid (Class-1) / Flexible (Class-5), Tinned / Thermocouple conductor can be provided upon request.

** PVC 70°C & PVC 105°C rated cables 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 60332-1-2, 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	V2A8A7VZ2V	2P X 0.5	7	0.44	14.5	425
2	V2A8A7VZ2V	5P X 0.5	7	0.44	18.5	725
3	V2A8A7VZ2V	10P X 0.5	7	0.44	24.5	1225
4	V2A8A7VZ2V	12P X 0.5	7	0.44	25	1350
5	V2A8A7VZ2V	16P X 0.5	7	0.44	27	1600
6	V2A8A7VZ2V	20P X 0.5	7	0.44	29.5	1825
7	V2A8A7VZ2V	2P X 0.75	7	0.44	16.5	600
8	V2A8A7VZ2V	5P X 0.75	7	0.44	20	875
9	V2A8A7VZ2V	10P X 0.75	7	0.44	25	1375
10	V2A8A7VZ2V	12P X 0.75	7	0.44	26.5	1550
11	V2A8A7VZ2V	16P X 0.75	7	0.44	29.5	1825
12	V2A8A7VZ2V	20P X 0.75	7	0.44	32	2100
13	V2A8A7VZ2V	2P X 1.0	7	0.44	17	625
14	V2A8A7VZ2V	5P X 1.0	7	0.44	22	1075
15	V2A8A7VZ2V	10P X 1.0	7	0.44	26	1500
16	V2A8A7VZ2V	12P X 1.0	7	0.44	28	1700
17	V2A8A7VZ2V	16P X 1.0	7	0.44	31	2000

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18	V2A8A7VZ2V	20P X 1.0	7	0.44	34	2600
19	V2A8A7VZ2V	2P X 1.5	7	0.44	18	700
20	V2A8A7VZ2V	5P X 1.5	7	0.44	23	1200
21	V2A8A7VZ2V	10P X 1.5	7	0.44	28	1725
22	V2A8A7VZ2V	12P X 1.5	7	0.44	30	1925
23	V2A8A7VZ2V	16P X 1.5	7	0.44	33.5	2500
24	V2A8A7VZ2V	20P X 1.5	7	0.44	37	3000
25	V2A8A7VZ2V	2P X 2.5	7	0.53	21	900
26	V2A8A7VZ2V	5P X 2.5	7	0.53	26	1475
27	V2A8A7VZ2V	10P X 2.5	7	0.53	33	2400
28	V2A8A7VZ2V	12P X 2.5	7	0.53	36	2775
29	V2A8A7VZ2V	16P X 2.5	7	0.53	39.5	3350
30	V2A8A7VZ2V	20P X 2.5	7	0.53	45	4400
31	V2A8A7VZ2V	2T X 0.5	7	0.44	16	575
32	V2A8A7VZ2V	5T X 0.5	7	0.44	19	800
33	V2A8A7VZ2V	10T X 0.5	7	0.44	24.5	1350
34	V2A8A7VZ2V	12T X 0.5	7	0.44	26	1500
35	V2A8A7VZ2V	16T X 0.5	7	0.44	29	1800
36	V2A8A7VZ2V	20T X 0.5	7	0.44	31	2075
37	V2A8A7VZ2V	2T X 0.75	7	0.44	17	650
38	V2A8A7VZ2V	5T X 0.75	7	0.44	22	1100
39	V2A8A7VZ2V	10T X 0.75	7	0.44	26	1575
40	V2A8A7VZ2V	12T X 0.75	7	0.44	28	1750
41	V2A8A7VZ2V	16T X 0.75	7	0.44	31	2100
42	V2A8A7VZ2V	20T X 0.75	7	0.44	34.5	2700
43	V2A8A7VZ2V	2T X 1.0	7	0.44	18	675
44	V2A8A7VZ2V	5T X 1.0	7	0.44	22.5	1200
45	V2A8A7VZ2V	10T X 1.0	7	0.44	27	1725
46	V2A8A7VZ2V	12T X 1.0	7	0.44	29	1950
47	V2A8A7VZ2V	16T X 1.0	7	0.44	33	2575
48	V2A8A7VZ2V	20T X 1.0	7	0.44	36.5	3050
49	V2A8A7VZ2V	2T X 1.5	7	0.44	19	750
50	V2A8A7VZ2V	5T X 1.5	7	0.44	24	1350
51	V2A8A7VZ2V	10T X 1.5	7	0.44	29	2000
52	V2A8A7VZ2V	12T X 1.5	7	0.44	31	2250

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53	V2A8A7VZ2V	16T X 1.5	7	0.44	36	3050
54	V2A8A7VZ2V	20T X 1.5	7	0.44	39	3525
55	V2A8A7VZ2V	2T X 2.5	7	0.53	22.5	1125
56	V2A8A7VZ2V	5T X 2.5	7	0.53	27	1700
57	V2A8A7VZ2V	10T X 2.5	7	0.53	35	2850
58	V2A8A7VZ2V	12T X 2.5	7	0.53	37.5	3300
59	V2A8A7VZ2V	16T X 2.5	7	0.53	42	4050
60	V2A8A7VZ2V	20T X 2.5	7	0.53	48	5300

