

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

APPLICATION

Suitable for Industrial & Commercial settings for process controls, transmission of analogue / digital signals in instrument & control systems. 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:	Polyvinyl Chloride (PVC) rated 90°C
Insulation Color:	Multi Pair: Black & White 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).
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 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 - 250°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 < 25 (up to 1mm²)
resistance ratio (L/R) < 40 (1.5 mm²)
μH/Ω < 60 (2.5 mm²)

* 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	V2A8A7V	2P X 0.5	7	0.44	10.5	130
2	V2A8A7V	5P X 0.5	7	0.44	13.0	220
3	V2A8A7V	10P X 0.5	7	0.44	17.5	420
4	V2A8A7V	12P X 0.5	7	0.44	18.5	480
5	V2A8A7V	16P X 0.5	7	0.44	21.0	610
6	V2A8A7V	20P X 0.5	7	0.44	23.5	750
7	V2A8A7V	2P X 0.75	7	0.44	11.0	150
8	V2A8A7V	5P X 0.75	7	0.44	14.5	280
9	V2A8A7V	10P X 0.75	7	0.44	19.0	500
10	V2A8A7V	12P X 0.75	7	0.44	20.5	590
11	V2A8A7V	16P X 0.75	7	0.44	23.5	770
12	V2A8A7V	20P X 0.75	7	0.44	26.0	940
13	V2A8A7V	2P X 1.0	7	0.44	12.0	170
14	V2A8A7V	5P X 1.0	7	0.44	15.5	330
15	V2A8A7V	10P X 1.0	7	0.44	20.0	580
16	V2A8A7V	12P X 1.0	7	0.44	22.0	690
17	V2A8A7V	16P X 1.0	7	0.44	25.0	880
18	V2A8A7V	20P X 1.0	7	0.44	27.5	1100
19	V2A8A7V	2P X 1.5	7	0.44	13.0	220
20	V2A8A7V	5P X 1.5	7	0.44	16.5	420
21	V2A8A7V	10P X 1.5	7	0.44	22.0	720
22	V2A8A7V	12P X 1.5	7	0.44	24.0	860
23	V2A8A7V	16P X 1.5	7	0.44	27.0	1100
24	V2A8A7V	20P X 1.5	7	0.44	30.0	1380
25	V2A8A7V	2P X 2.5	7	0.53	15.5	280
26	V2A8A7V	5P X 2.5	7	0.53	20.0	580

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)
27	V2A8A7V	10P X 2.5	7	0.53	26.5	1050
28	V2A8A7V	12P X 2.5	7	0.53	29.0	1240
29	V2A8A7V	16P X 2.5	7	0.53	33.0	1600
30	V2A8A7V	20P X 2.5	7	0.53	36.5	2010
31	V2A8A7V	2T X 0.5	7	0.44	11.0	170
32	V2A8A7V	5T X 0.5	7	0.44	14.0	310
33	V2A8A7V	10T X 0.5	7	0.44	18.5	530
34	V2A8A7V	12T X 0.5	7	0.44	20.0	610
35	V2A8A7V	16T X 0.5	7	0.44	23.0	800
36	V2A8A7V	20T X 0.5	7	0.44	25.5	970
37	V2A8A7V	2T X 0.75	7	0.44	12.0	200
38	V2A8A7V	5T X 0.75	7	0.44	15.5	390
39	V2A8A7V	10T X 0.75	7	0.44	20.5	660
40	V2A8A7V	12T X 0.75	7	0.44	22.0	770
41	V2A8A7V	16T X 0.75	7	0.44	25.0	1020
42	V2A8A7V	20T X 0.75	7	0.44	28.0	1240
43	V2A8A7V	2T X 1.0	7	0.44	12.5	220
44	V2A8A7V	5T X 1.0	7	0.44	16.5	420
45	V2A8A7V	10T X 1.0	7	0.44	21.5	770
46	V2A8A7V	12T X 1.0	7	0.44	23.5	910
47	V2A8A7V	16T X 1.0	7	0.44	26.5	1190
48	V2A8A7V	20T X 1.0	7	0.44	30.0	1460
49	V2A8A7V	2T X 1.5	7	0.44	13.5	250
50	V2A8A7V	5T X 1.5	7	0.44	18.0	530
51	V2A8A7V	10T X 1.5	7	0.44	23.5	970
52	V2A8A7V	12T X 1.5	7	0.44	25.5	1160
53	V2A8A7V	16T X 1.5	7	0.44	29.5	1490
54	V2A8A7V	20T X 1.5	7	0.44	32.5	1850
55	V2A8A7V	2T X 2.5	7	0.53	16.5	360
56	V2A8A7V	5T X 2.5	7	0.53	21.5	750
57	V2A8A7V	10T X 2.5	7	0.53	28.5	1410
58	V2A8A7V	12T X 2.5	7	0.53	31.0	1650
59	V2A8A7V	16T X 2.5	7	0.53	35.5	2200
60	V2A8A7V	20T X 2.5	7	0.53	39.5	2700