

INSTRUMENTATION CABLES AS PER BS EN 50288-7 (CU/XLPE/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:	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/XLPE/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 - 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) < 25 (up to 1mm²)
< 40 (1.5 mm²)
μH/Ω < 60 (2.5 mm²)

* 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 60332-1-2, 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	XA8A7VZ2V	2P X 0.5	7	0.44	14.5	400
2	XA8A7VZ2V	5P X 0.5	7	0.44	18.5	675
3	XA8A7VZ2V	10P X 0.5	7	0.44	23.5	1125
4	XA8A7VZ2V	12P X 0.5	7	0.44	25	1250
5	XA8A7VZ2V	16P X 0.5	7	0.44	27	1475
6	XA8A7VZ2V	20P X 0.5	7	0.44	29.5	1700
7	XA8A7VZ2V	2P X 0.75	7	0.44	16.5	550
8	XA8A7VZ2V	5P X 0.75	7	0.44	20	800
9	XA8A7VZ2V	10P X 0.75	7	0.44	25	1275
10	XA8A7VZ2V	12P X 0.75	7	0.44	26.5	1425
11	XA8A7VZ2V	16P X 0.75	7	0.44	29.5	1700
12	XA8A7VZ2V	20P X 0.75	7	0.44	32	1950
13	XA8A7VZ2V	2P X 1.0	7	0.44	17	580
14	XA8A7VZ2V	5P X 1.0	7	0.44	22	1000
15	XA8A7VZ2V	10P X 1.0	7	0.44	26	1400

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16	XA8A7VZ2V	12P X 1.0	7	0.44	28	1575
17	XA8A7VZ2V	16P X 1.0	7	0.44	31	1850
18	XA8A7VZ2V	20P X 1.0	7	0.44	34.5	2400
19	XA8A7VZ2V	2P X 1.5	7	0.44	18	650
20	XA8A7VZ2V	5P X 1.5	7	0.44	23	1100
21	XA8A7VZ2V	10P X 1.5	7	0.44	28	1600
22	XA8A7VZ2V	12P X 1.5	7	0.44	30	1775
23	XA8A7VZ2V	16P X 1.5	7	0.44	33.5	2325
24	XA8A7VZ2V	20P X 1.5	7	0.44	37	2775
25	XA8A7VZ2V	2P X 2.5	7	0.53	21	825
26	XA8A7VZ2V	5P X 2.5	7	0.53	26	1375
27	XA8A7VZ2V	10P X 2.5	7	0.53	33	2225
28	XA8A7VZ2V	12P X 2.5	7	0.53	36	2575
29	XA8A7VZ2V	16P X 2.5	7	0.53	39.5	3100
30	XA8A7VZ2V	20P X 2.5	7	0.53	45	4075
31	XA8A7VZ2V	2T X 0.5	7	0.44	16	525
32	XA8A7VZ2V	5T X 0.5	7	0.44	19	750
33	XA8A7VZ2V	10T X 0.5	7	0.44	24.5	1250
34	XA8A7VZ2V	12T X 0.5	7	0.44	26	1398
35	XA8A7VZ2V	16T X 0.5	7	0.44	29	1675
36	XA8A7VZ2V	20T X 0.5	7	0.44	31	1925
37	XA8A7VZ2V	2T X 0.75	7	0.44	17	600
38	XA8A7VZ2V	5T X 0.75	7	0.44	22	1025
39	XA8A7VZ2V	10T X 0.75	7	0.44	26	1450
40	XA8A7VZ2V	12T X 0.75	7	0.44	28	1625
41	XA8A7VZ2V	16T X 0.75	7	0.44	31	1950
42	XA8A7VZ2V	20T X 0.75	7	0.44	35	2500
43	XA8A7VZ2V	2T X 1.0	7	0.44	18	625
44	XA8A7VZ2V	5T X 1.0	7	0.44	22.5	1100
45	XA8A7VZ2V	10T X 1.0	7	0.44	27	1600
46	XA8A7VZ2V	12T X 1.0	7	0.44	29	1800
47	XA8A7VZ2V	16T X 1.0	7	0.44	33	2375
48	XA8A7VZ2V	20T X 1.0	7	0.44	36.5	2825
49	XA8A7VZ2V	2T X 1.5	7	0.44	19	700

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50	XA8A7VZ2V	5T X 1.5	7	0.44	24	1250
51	XA8A7VZ2V	10T X 1.5	7	0.44	29	1850
52	XA8A7VZ2V	12T X 1.5	7	0.44	31	2075
53	XA8A7VZ2V	16T X 1.5	7	0.44	36	2825
54	XA8A7VZ2V	20T X 1.5	7	0.44	39	3275
55	XA8A7VZ2V	2T X 2.5	7	0.53	22.5	1050
56	XA8A7VZ2V	5T X 2.5	7	0.53	27	1575
57	XA8A7VZ2V	10T X 2.5	7	0.53	35	2650
58	XA8A7VZ2V	12T X 2.5	7	0.53	37.5	3050
59	XA8A7VZ2V	16T X 2.5	7	0.53	42	3750
60	XA8A7VZ2V	20T X 2.5	7	0.53	48	4900

