

INSTRUMENTATION CABLES AS PER BS EN 50288-7 (CU/XLPE/OS/LSZH/SWA/LSZH)

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. For installation where fire, smoke emission and toxic fumes create a potential threat to life and equipment.

CONSTRUCTION

Conductor:	Stranded (Class 2) Annealed Plain Copper Conductor to BS EN 60228
Insulation:	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 Low Smoke Zero Halogen (LSZH) 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 Low Smoke Zero Halogen (LSZH) in Black colour. Other colors are available upon request.
Printing Text on the Outer Sheath:	INSTRUMENTATION CABLE CU/XLPE/OS/LSZH/SWA/LSZH 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) μH/Ω	< 25 (up to 1mm ²) < 40 (1.5 mm ²) < 60 (2.5 mm ²)
Halogen Acid Gas Emission:	0.5% (BS EN 60754-1)
Smoke Emission:	60% (BS EN 61034-2)
Flame Retardant Test:	IEC 60332-3-24 (CAT C), 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), 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	XA7Z1Z2Z1	1P X 0.5	7	0.44	10.5	225
2	XA7Z1Z2Z1	2P X 0.5	7	0.44	13.5	350
3	XA7Z1Z2Z1	5P X 0.5	7	0.44	16.0	475
4	XA7Z1Z2Z1	10P X 0.5	7	0.44	19.5	700
5	XA7Z1Z2Z1	12P X 0.5	7	0.44	21.0	775
6	XA7Z1Z2Z1	16P X 0.5	7	0.44	24.0	1050
7	XA7Z1Z2Z1	20P X 0.5	7	0.44	26.0	1225
8	XA7Z1Z2Z1	1P X 0.75	7	0.44	11.0	250
9	XA7Z1Z2Z1	2P X 0.75	7	0.44	14.5	400
10	XA7Z1Z2Z1	5P X 0.75	7	0.44	17.5	575
11	XA7Z1Z2Z1	10P X 0.75	7	0.44	22.0	950
12	XA7Z1Z2Z1	12P X 0.75	7	0.44	23.5	1050
13	XA7Z1Z2Z1	16P X 0.75	7	0.44	26.0	1275
14	XA7Z1Z2Z1	20P X 0.75	7	0.44	28.5	1475

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)
15	XA7Z1Z2Z1	1P X 1.0	7	0.44	11.5	275
16	XA7Z1Z2Z1	2P X 1.0	7	0.44	15.0	425
17	XA7Z1Z2Z1	5P X 1.0	7	0.44	18.5	625
18	XA7Z1Z2Z1	10P X 1.0	7	0.44	23.0	1050
19	XA7Z1Z2Z1	12P X 1.0	7	0.44	24.5	1175
20	XA7Z1Z2Z1	16P X 1.0	7	0.44	27.5	1425
21	XA7Z1Z2Z1	20P X 1.0	7	0.44	30.0	1650
22	XA7Z1Z2Z1	1P X 1.5	7	0.44	12.0	300
23	XA7Z1Z2Z1	2P X 1.5	7	0.44	16.0	475
24	XA7Z1Z2Z1	5P X 1.5	7	0.44	19.5	700
25	XA7Z1Z2Z1	10P X 1.5	7	0.44	25.0	1250
26	XA7Z1Z2Z1	12P X 1.5	7	0.44	26.5	1400
27	XA7Z1Z2Z1	16P X 1.5	7	0.44	30.0	1700
28	XA7Z1Z2Z1	20P X 1.5	7	0.44	32.5	1975
29	XA7Z1Z2Z1	1P X 2.5	7	0.53	13.5	375
30	XA7Z1Z2Z1	2P X 2.5	7	0.53	18.5	625
31	XA7Z1Z2Z1	5P X 2.5	7	0.53	23.5	1075
32	XA7Z1Z2Z1	10P X 2.5	7	0.53	29.5	1675
33	XA7Z1Z2Z1	12P X 2.5	7	0.53	31.5	1875
34	XA7Z1Z2Z1	16P X 2.5	7	0.53	36.0	2550
35	XA7Z1Z2Z1	20P X 2.5	7	0.53	39.5	3000
36	XA7Z1Z2Z1	1T X 0.5	7	0.44	11.0	250
37	XA7Z1Z2Z1	2T X 0.5	7	0.44	14.0	375
38	XA7Z1Z2Z1	5T X 0.5	7	0.44	17.0	575
39	XA7Z1Z2Z1	10T X 0.5	7	0.44	21.5	950
40	XA7Z1Z2Z1	12T X 0.5	7	0.44	23.0	1050
41	XA7Z1Z2Z1	16T X 0.5	7	0.44	25.5	1250
42	XA7Z1Z2Z1	20T X 0.5	7	0.44	27.5	1450
43	XA7Z1Z2Z1	1T X 0.75	7	0.44	11.5	275
44	XA7Z1Z2Z1	2T X 0.75	7	0.44	15.0	450

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)
45	XA7Z1Z2Z1	5T X 0.75	7	0.44	18.5	650
46	XA7Z1Z2Z1	10T X 0.75	7	0.44	23.5	1150
47	XA7Z1Z2Z1	12T X 0.75	7	0.44	25.0	1275
48	XA7Z1Z2Z1	16T X 0.75	7	0.44	28.0	1525
49	XA7Z1Z2Z1	20T X 0.75	7	0.44	30.5	1800
50	XA7Z1Z2Z1	1T X 1.0	7	0.44	11.5	300
51	XA7Z1Z2Z1	2T X 1.0	7	0.44	15.5	475
52	XA7Z1Z2Z1	5T X 1.0	7	0.44	19.0	725
53	XA7Z1Z2Z1	10T X 1.0	7	0.44	24.5	1275
54	XA7Z1Z2Z1	12T X 1.0	7	0.44	26.0	1425
55	XA7Z1Z2Z1	16T X 1.0	7	0.44	29.5	1725
56	XA7Z1Z2Z1	20T X 1.0	7	0.44	32.0	2025
57	XA7Z1Z2Z1	1T X 1.5	7	0.44	12.5	350
58	XA7Z1Z2Z1	2T X 1.5	7	0.44	17.0	550
59	XA7Z1Z2Z1	5T X 1.5	7	0.44	21.0	875
60	XA7Z1Z2Z1	10T X 1.5	7	0.44	26.5	1500
61	XA7Z1Z2Z1	12T X 1.5	7	0.44	28.5	1700
62	XA7Z1Z2Z1	16T X 1.5	7	0.44	31.5	2075
63	XA7Z1Z2Z1	20T X 1.5	7	0.44	35.5	2675
64	XA7Z1Z2Z1	1T X 2.5	7	0.53	14.0	425
65	XA7Z1Z2Z1	2T X 2.5	7	0.53	19.5	700
66	XA7Z1Z2Z1	5T X 2.5	7	0.53	25.0	1325
67	XA7Z1Z2Z1	10T X 2.5	7	0.53	32.5	2300
68	XA7Z1Z2Z1	12T X 2.5	7	0.53	34.5	2575
69	XA7Z1Z2Z1	16T X 2.5	7	0.53	38.5	3175
70	XA7Z1Z2Z1	20T X 2.5	7	0.53	42.5	3775