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

APPLICATION

Suitable for process control and automation systems, outdoor and underground installations, petrochemical and oil & gas industries, refineries, chemical plants, and power stations, providing robust mechanical protection and durability & moisture resistance.

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-
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 mm2 (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 & 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/PVC/IS/AL/HDPE/PA/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 1mm²) < 40 (1.5 mm2) < 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.

*** 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	V2A8(L)2YQ4Z2V	2P X 0.5	7	0.44	17	650
2	V2A8(L)2YQ4Z2V	5P X 0.5	7	0.44	20.5	1025
3	V2A8(L)2YQ4Z2V	10P X 0.5	7	0.44	25.5	1400
4	V2A8(L)2YQ4Z2V	12P X 0.5	7	0.44	27	1575
5	V2A8(L)2YQ4Z2V	16P X 0.5	7	0.44	29.5	1800
6	V2A8(L)2YQ4Z2V	20P X 0.5	7	0.44	31.5	2275
7	V2A8(L)2YQ4Z2V	2P X 0.75	7	0.44	18	700
8	V2A8(L)2YQ4Z2V	5P X 0.75	7	0.44	23	1200
9	V2A8(L)2YQ4Z2V	10P X 0.75	7	0.44	27	1600
10	V2A8(L)2YQ4Z2V	12P X 0.75	7	0.44	29	1750
11	V2A8(L)2YQ4Z2V	16P X 0.75	7	0.44	31.5	2050
12	V2A8(L)2YQ4Z2V	20P X 0.75	7	0.44	35	2650
13	V2A8(L)2YQ4Z2V	2P X 1.0	7	0.44	19	750
14	V2A8(L)2YQ4Z2V	5P X 1.0	7	0.44	24	1800
15	V2A8(L)2YQ4Z2V	10P X 1.0	7	0.44	28	1725
16	V2A8(L)2YQ4Z2V	12P X 1.0	7	0.44	30	1925

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17	V2A8(L)2YQ4Z2V	16P X 1.0	7	0.44	33.5	2475
18	V2A8(L)2YQ4Z2V	20P X 1.0	7	0.44	37	2900
19	V2A8(L)2YQ4Z2V	2P X 1.5	7	0.44	20	875
20	V2A8(L)2YQ4Z2V	5P X 1.5	7	0.44	25	1375
21	V2A8(L)2YQ4Z2V	10P X 1.5	7	0.44	30	1950
22	V2A8(L)2YQ4Z2V	12P X 1.5	7	0.44	32	2350
23	V2A8(L)2YQ4Z2V	16P X 1.5	7	0.44	36.5	2850
24	V2A8(L)2YQ4Z2V	20P X 1.5	7	0.44	39.5	3325
25	V2A8(L)2YQ4Z2V	2P X 2.5	7	0.53	23.5	1200
26	V2A8(L)2YQ4Z2V	5P X 2.5	7	0.53	28	1700
27	V2A8(L)2YQ4Z2V	10P X 2.5	7	0.53	35.5	2750
28	V2A8(L)2YQ4Z2V	12P X 2.5	7	0.53	38	3100
29	V2A8(L)2YQ4Z2V	16P X 2.5	7	0.53	42.5	3725
30	V2A8(L)2YQ4Z2V	20P X 2.5	7	0.53	48	4850
31	V2A8(L)2YQ4Z2V	2T X 0.5	7	0.44	18	700
32	V2A8(L)2YQ4Z2V	5T X 0.5	7	0.44	22	1150
33	V2A8(L)2YQ4Z2V	10T X 0.5	7	0.44	26.5	1575
34	V2A8(L)2YQ4Z2V	12T X 0.5	7	0.44	28	1725
35	V2A8(L)2YQ4Z2V	16T X 0.5	7	0.44	31	2025
36	V2A8(L)2YQ4Z2V	20T X 0.5	7	0.44	34	2600
37	V2A8(L)2YQ4Z2V	2T X 0.75	7	0.44	19	750
38	V2A8(L)2YQ4Z2V	5T X 0.75	7	0.44	24	1300
39	V2A8(L)2YQ4Z2V	10T X 0.75	7	0.44	28	1775
40	V2A8(L)2YQ4Z2V	12T X 0.75	7	0.44	30	2000
41	V2A8(L)2YQ4Z2V	16T X 0.75	7	0.44	33.5	2600
42	V2A8(L)2YQ4Z2V	20T X 0.75	7	0.44	37	3075
43	V2A8(L)2YQ4Z2V	2T X 1.0	7	0.44	20	875
44	V2A8(L)2YQ4Z2V	5T X 1.0	7	0.44	24.5	1400
45	V2A8(L)2YQ4Z2V	10T X 1.0	7	0.44	29.5	1950
46	V2A8(L)2YQ4Z2V	12T X 1.0	7	0.44	31	2150
47	V2A8(L)2YQ4Z2V	16T X 1.0	7	0.44	36	2925
48	V2A8(L)2YQ4Z2V	20T X 1.0	7	0.44	39	3350
49	V2A8(L)2YQ4Z2V	2T X 1.5	7	0.44	21	1075
50	V2A8(L)2YQ4Z2V	5T X 1.5	7	0.44	26	1550

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51	V2A8(L)2YQ4Z2V	10T X 1.5	7	0.44	31	2225
52	V2A8(L)2YQ4Z2V	12T X 1.5	7	0.44	34	2750
53	V2A8(L)2YQ4Z2V	16T X 1.5	7	0.44	38.5	3350
54	V2A8(L)2YQ4Z2V	20T X 1.5	7	0.44	42	3925
55	V2A8(L)2YQ4Z2V	2T X 2.5	7	0.53	24.5	1325
56	V2A8(L)2YQ4Z2V	5T X 2.5	7	0.53	29.5	1950
57	V2A8(L)2YQ4Z2V	10T X 2.5	7	0.53	37	3250
58	V2A8(L)2YQ4Z2V	12T X 2.5	7	0.53	40	3675
59	V2A8(L)2YQ4Z2V	16T X 2.5	7	0.53	46	4850
60	V2A8(L)2YQ4Z2V	20T X 2.5	7	0.53	50.5	5825