

BS 5308 Part 2 Type 1 Unarmoured Instrumentation Cable

Originally developed for communications and signalling within the process control industry BS 5308 part 2 cables are now widely used in other industrial applications. The screening combination offers excellent protection from electromagnetic interference. These cables are suitable for fixed installation when there is no risk of mechanical damage.

Construction

Type: CAT – Collective Aluminium Tape Screen

Plain annealed copper wire conductors to IEC 60228, class 1, 2 or 5, PVC insulation, laid up as cores or twisted into pairs or triples, overall aluminium/polyester foil screen and 0.5mm² tinned copper drain wire, RP-PVC sheath – black or blue.

Type: ICAT – Individual & Collective Aluminium Tape Screen

Plain annealed copper wire conductors to IEC 60228, class 1, 2 or 5, PVC insulation, cores twisted into pairs or triples, each pair aluminium/polyester foil screen and 0.5mm² tinned copper drain wire, units laid up, collective aluminium/polyester foil screen and 0.5mm² tinned copper drain wire, RP-PVC sheath – black or blue.

Pair Identification:

CAT: Cables up to 50 pair are colour coded in accordance with BS 5308 pt 2, appendix A, see page 194. Two pair cables are twisted as a quad and coloured blue, green, orange, brown.

ICAT: Each pair white, blue and numbered.

Technical Information

Voltage Rating: 300/500V

Temperature Rating: +65°C (minimum 0°C for installation)

Conductor Stranding: IEC 60228 Class 1, 2 or 5 plain copper conductors

L/R Ratio: 0.5mm² & 0.75mm² = 25 µH/Ohm
1.5mm² = 40 µH/Ohm

Flame Retardant: IEC 60332-1-2

Manufactured

Generally To: BS 5308 Part 2

0.6/1kV versions can be made to order.

RP-PVC is a reduced propagation version of PVC producing no more than 15% HCl emissions if burnt. It is not Low Smoke Halogen Free.

Part No.	Pairs x mm ²	Conductor Stranding mm	Screen Type	Colour	Weight Kg/Km	O/D mm	Cap. pF/m	Conductor Resistance Ohms/Km
Part 2, Type 1 - PVC Insulation, Collective Aluminium Tape Screen, RP-PVC Sheath								
5321O05010	1 x 2 x 0.5	16/0.2	CAT	Black	54	6.8	250	39.7
5321O07010	1 x 2 x 0.75	24/0.2	CAT	Black	73	7.0	250	26.5
5321O15010	1 x 2 x 1.5	7/0.53	CAT	Black	84	7.8	250	12.3
5321O05020	2 x 2 x 0.5	16/0.2	CAT	Black	75	7.7	250	39.7
5321O07020	2 x 2 x 0.75	24/0.2	CAT	Black	105	8.0	250	26.5
5321O15020	2 x 2 x 1.5	7/0.53	CAT	Black	129	9.1	250	12.3
5321O05050	5 x 2 x 0.5	16/0.2	CAT	Black	187	12.9	250	39.7
5321O07050	5 x 2 x 0.75	24/0.2	CAT	Black	255	14.0	250	26.5
5321O15050	5 x 2 x 1.5	7/0.53	CAT	Black	310	15.5	250	12.3
5321O05100	10 x 2 x 0.5	16/0.2	CAT	Black	310	17.0	250	39.7
5321O07100	10 x 2 x 0.75	24/0.2	CAT	Black	430	18.4	250	26.5
5321O15100	10 x 2 x 1.5	7/0.53	CAT	Black	570	20.3	250	12.3
5321O05200	20 x 2 x 0.5	16/0.2	CAT	Black	527	22.1	250	39.7
5321O07200	20 x 2 x 0.75	24/0.2	CAT	Black	740	24.2	250	26.5
5321O15200	20 x 2 x 1.5	7/0.53	CAT	Black	1043	26.9	250	12.3

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Part No.	Pairs x mm ²	Conductor Stranding mm	Screen Type	Colour	Weight Kg/Km	O/D mm	Cap. pF/m	Conductor Resistance Ohms/Km
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Part 2, Type 1 - PE Insulation, Unarmoured, Individual & Collective Aluminium Tape Screen, RP-PVC sheath

5321105020	2 x 2 x 0.5	16/0.2	ICAT	Black	130	11.7	250	39.7
5321107020	2 x 2 x 0.75	24/0.2	ICAT	Black	190	12.5	250	26.5
5321115020	2 x 2 x 1.5	7/0.53	ICAT	Black	230	14.4	250	12.3
5321105050	5 x 2 x 0.5	16/0.2	ICAT	Black	217	14.3	250	39.7
5321107050	5 x 2 x 0.75	24/0.2	ICAT	Black	300	16.0	250	26.5
5321115050	5 x 2 x 1.5	7/0.53	ICAT	Black	410	18.5	250	12.3
5321105100	10 x 2 x 0.5	16/0.2	ICAT	Black	403	19.6	250	39.7
5321107100	10 x 2 x 0.75	24/0.2	ICAT	Black	530	22.3	250	26.5
5321115100	10 x 2 x 1.5	7/0.53	ICAT	Black	730	26.1	250	12.3
5321105200	20 x 2 x 0.5	16/0.2	ICAT	Black	667	25.4	250	39.7
5321107200	20 x 2 x 0.75	24/0.2	ICAT	Black	930	29.2	250	26.5
5321115200	20 x 2 x 1.5	7/0.53	ICAT	Black	1283	34.2	250	12.3

Capacitance figures are mutual @1kHz

For a **Blue** sheath change the last character of the part number (0) to 1

Larger pair counts and triple configurations are available on request

