



BS 5308 Part 1 Type 2 Armoured LSHF Instrumentation Cable

These cables are ideal for use in industrial and commercial applications where smoke/toxic gas release is a problem in the event of a fire and mechanical damage is a threat. Although they were originally conceived for industrial instrumentation applications BS 5308 cables are now used within a wide variety of industries including commercial building management control.

BS 5308 cables are available with collective aluminium tape (CAT) screening or individual and collective aluminium tape (ICAT) screens to ensure correct signal transmission in noisy electrical environments.

Construction

Type: CAT – Collective Aluminium Tape Screen

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

Type: ICAT – Individual & Collective Aluminium Tape Screen

Plain annealed copper wire conductors to IEC 60228, class 1, 2 or 5, PE 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, PE bedding, GSWA armour, LSHF sheath – black or blue.

Pair Identification:

CAT: Cables up to 50 pair are colour coded in accordance with BS 5308 pt 1, appendix A, see page 194. Two pair cables are twisted as a quad and coloured black, blue, green, brown.

ICAT: Each pair black, 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, IEC 60332-3-24 Cat C

Smoke Emission: IEC 61034-1 & 2

Halogen Emission: IEC 60754-1 & 2

Manufactured

Generally To: BS 5308 Part 1

Increased flame retardant versions to IEC 60332-3-24 Cat C and fire resistant versions to IEC 60331-21 are available on request.

0.6/1kV versions can be manufactured to order.

Part No.	Pairs x mm ²	Conductor Stranding mm	Screen Type	Colour	Weight Kg/Km	Dia over Bedding mm	O/D mm	Cap. pF/m	Conductor Resistance Ohms/Km
Part 1, Type 2 - PE Insulation, Collective Aluminium Tape Screen, PE, GSWA, LSHF sheath									
5312005010H	1 x 2 x 0.5	16/0.2	CAT	Black	237	6.2	11.2	115	39.7
5312007010H	1 x 2 x 0.75	24/0.2	CAT	Black	260	6.7	11.4	115	26.5
5312015010H	1 x 2 x 1.5	7/0.53	CAT	Black	320	7.5	12.7	120	12.3
5312005020H	2 x 2 x 0.5	16/0.2	CAT	Black	287	7.6	12.1	115	39.7
5312007020H	2 x 2 x 0.75	24/0.2	CAT	Black	310	8.4	12.6	115	26.5
5312015020H	2 x 2 x 1.5	7/0.53	CAT	Black	413	9.3	14.1	120	12.3
5312005050H	5 x 2 x 0.5	16/0.2	CAT	Black	530	12.4	17.7	75	39.7
5312007050H	5 x 2 x 0.75	24/0.2	CAT	Black	675	13.8	19.0	75	26.5
5312015050H	5 x 2 x 1.5	7/0.53	CAT	Black	910	15.6	21.9	85	12.3
5312005100H	10 x 2 x 0.5	16/0.2	CAT	Black	917	16.5	22.7	75	39.7
5312007100H	10 x 2 x 0.75	24/0.2	CAT	Black	1170	18.4	25.0	75	26.5
5312015100H	10 x 2 x 1.5	7/0.53	CAT	Black	1383	20.9	28.2	85	12.3
5312005200H	20 x 2 x 0.5	16/0.2	CAT	Black	1550	21.7	28.9	75	39.7
5312007200H	20 x 2 x 0.75	24/0.2	CAT	Black	1725	24.4	31.0	75	26.5
5312015200H	20 x 2 x 1.5	7/0.53	CAT	Black	2400	27.8	35.8	85	12.3

Part No.	Pairs x mm ²	Conductor Stranding mm	Screen Type	Colour	Weight Kg/Km	Dia over Bedding mm	O/D mm	Cap. pF/m	Conductor Resistance Ohms/Km
----------	-------------------------	------------------------	-------------	--------	--------------	---------------------	--------	-----------	------------------------------

Part 1, Type 2 - PE Insulation, Individual & Collective Aluminium Tape Screen, PE, GSWA, LSHF Sheath

5312I05020H	2 x 2 x 0.5	16/0.2	ICAT	Black	457	11.2	16.8	115	39.7
5312I07020H	2 x 2 x 0.75	24/0.2	ICAT	Black	500	12.1	17.6	115	26.5
5312I15020H	2 x 2 x 1.5	7/0.53	ICAT	Black	737	13.6	20.4	120	12.3
5312I05050H	5 x 2 x 0.5	16/0.2	ICAT	Black	757	14.5	20.9	115	39.7
5312I07050H	5 x 2 x 0.75	24/0.2	ICAT	Black	935	15.7	22.0	115	26.5
5312I15050H	5 x 2 x 1.5	7/0.53	ICAT	Black	1187	17.7	25.4	120	12.3
5312I05100H	10 x 2 x 0.5	16/0.2	ICAT	Black	1293	19.3	27.9	115	39.7
5312I07100H	10 x 2 x 0.75	24/0.2	ICAT	Black	1630	20.9	29.5	115	26.5
5312I15100H	10 x 2 x 1.5	7/0.53	ICAT	Black	1847	23.9	33.5	120	12.3
5312I05200H	20 x 2 x 0.5	16/0.2	ICAT	Black	2237	25.7	34.3	115	39.7
5312I07200H	20 x 2 x 0.75	24/0.2	ICAT	Black	2410	27.9	37.8	115	26.5
5312I15200H	20 x 2 x 1.5	7/0.53	ICAT	Black	3053	31.7	42.6	120	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

5312O15051H

