



BS5308 Cable Part 1 Type 3 IAM CAM Lead SWA

Applications:

BS5308 lead instrumentation cable for use as underground cable Indoor and outdoor installations, generally used within industrial process plants and for data & voice transmission services. Also used for the interconnection of electrical equipment and instruments, particularly in and around process plants, where transducer generated signals are transmitted through marshalled circuits to panels, controllers and associated devices

Part 1 cables are widely used throughout the petroleum industry.

Type 3 lead sheathed cables are recommended for use where there is a high concentration of hydrocarbons in the soil

Conductors:

1.5sqmm class 2 stranded copper

Insulation:

PE (Polyethylene)

Core identification:

See link in technical information

Screen:

IAM (Individual aluminium mylar) & CAM (collective aluminium mylar)

Sheath/Jacket:

PVC (Polyvinyl-Chloride)

Colour:

Blue

Voltage:

300/500v

Bedding:

PE (Polyethylene)

Armour / Protection:

LC (Lead alloy) SWA (Single wire armour)

Bending Radius:

15 x overall diameter

Temperature range:

Operating -40 to +65 °C, Operating 0 to +50°C

Standards:

BS5308 Part 1 ,Insulated cables, instrumentation, PE

BS6234: Specification for polyethylene insulation and sheath of electric cables



Electrical Characteristics

Conductor size	0.5mm ² (16/.2)	0.75mm ² (24/.2)	1.00mm ² (1/1.13)	1.5mm ² (7/0.53)
Mutual Capacitance:				
a. Cables with only collective screens (except one pair and two pair)- pf/fm	75	75	75	85
b. One pair and two pair cables collectively screened and all cables with individually screened pairs. - pf/fm	115	115	115	120
Conductor resistance: Max resistance: Max dc resistance at 20°C – ohms/Km	39.7	26.5	18.4	12.3
L/R ratio (maximum value) – microH/ohm	25	25	25	40



BS5308 Part 1 Type 3 Collectively screened and armoured - pairs

Conductor size (mm)	Nominal dimensions (mm), Weights and Gland sizes								
	No of Pairs	1	2	5	10	15	20	30	50
0.50 (class 5)	BATT Black Part no	-	-	-	85549	-	85550	-	86398
	BATT Blue Part no	-	85765	-	85431	-	85766	-	-
	Over Bedding	7	7.9	13.1	17.2	19.8	22.3	26.9	33.9
	Over Lead	9.2	10.1	15.3	19.6	22.4	24.9	29.9	37.3
	Under Armour	10.8	11.7	16.9	21.6	24.4	26.9	32.3	40.1
	Over Armour	12.6	13.5	19.4	24.8	27.6	30.1	6.3	45.1
	Overall Diameter	15.4	16.3	22.6	28.4	31.2	33.9	40.5	49.7
	Weight kg/km	620	750	1290	1980	2420	2730	3924	5850
	Gland E2FW	20s	20	25	32	32	40	50s	50
	Gland Part no	88568	88460	88009	88147	88147	88150	88152	88578
0.75 (class 5)	BATT Black Part no	85807	-	-	85953	-	85955	-	-
	BATT Blue Part no	85806	85808	-	-	-	85954	-	-
	Over Bedding	-	-	-	-	-	-	-	-
	Over Lead	-	-	-	-	-	-	-	-
	Under Armour	-	-	-	-	-	-	-	-
	Over Armour	-	-	-	-	-	-	-	-
	Overall Diameter	-	-	-	-	-	-	-	-
	Weight kg/km	-	-	-	-	-	-	-	-
	Gland E2FW	-	-	-	-	-	-	-	-
	Gland Part no	-	-	-	-	-	-	-	-
1.00 (class 1)	BATT Black Part no	-	-	-	-	-	-	-	-
	BATT Blue Part no	-	-	-	-	-	-	-	-
	Over Bedding	7.4	8.4	14.2	18.4	21.3	24.4	29.0	37.3
	Over Lead	9.6	10.6	16.4	20.8	23.9	27.2	32	40.9
	Under Armour	11.2	12.2	18.4	22.8	25.9	29.6	34.4	43.7
	Over Armour	13	14	21.6	26	29.1	33.6	38.4	48.8
	Overall Diameter	15.8	17	25	29.6	32.9	37.6	42.6	53.5
	Weight kg/km	670	880	1670	2280	2750	3670	4570	7180
	Gland E2FW	20	20	25	32	40	40	50s	50
	Gland Part no	88460	88460	88009	88147	88150	88150	88152	88578
1.5 (class 2)	BATT Black Part no	85512	85299	85796	-	-	85891	-	-
	BATT Blue Part no	85888	-	85889	85890	-	-	-	-
	Over Bedding	8.3	9.7	16.4	21.6	25.2	28.5	34.3	43.6
	Over Lead	10.5	11.9	18.8	24.2	28.0	31.5	37.7	47.6
	Under Armour	12.1	13.5	20.8	26.2	30.4	33.9	40.5	50.8
	Over Armour	13.9	16	24	29.4	34.4	37.9	45.5	55.8
	Overall Diameter	16.9	19	27.4	33.2	38.4	42.1	50.1	61
	Weight kg/km	800	1050	2000	2790	3780	4460	6350	9080
	Gland E2FW	20	25	32	32	40	50a	50	63s
	Gland Part no	88460	-	-	-	-	-	-	-



BS5308 Part 1 Type 3 Collectively and individually screened and armoured – Pairs

Conductor size (mm)	No of Pairs	Nominal dimensions (mm), Weights and Gland sizes						
		2	5	10	15	20	30	50
0.50 (class 5)	BATT Black Part no	-	-	-	-	-	-	-
	BATT Blue Part no	-	-	-	-	85767	-	-
	Over Bedding	12	15.2	21.1	24.5	27.3	32.3	41.7
	Over Lead	14.2	17.4	23.7	27.3	30.3	35.5	45.5
	Over Armour	18.3	22.6	28.9	33.7	36.7	41.9	53.3
	Overall Diameter	21.5	26	32.7	37.7	40.9	46.3	58.5
0.75 (class 5)	BATT Black Part no	85809	-	-	-	85812	-	-
	BATT Blue Part no	85810	-	85811	-	-	-	-
	Over Bedding	-	-	-	-	-	-	-
	Over Lead	-	-	-	-	-	-	-
	Over Armour	-	-	-	-	-	-	-
	Overall Diameter	-	-	-	-	-	-	-
1.00 (class 1)	BATT Black Part no	-	-	-	-	85812	-	-
	BATT Blue Part no	-	-	-	-	-	-	-
	Over Bedding	12.8	16.2	22.6	26.2	29.8	35.4	44.9
	Over Lead	15	18.6	25.2	29.2	33	38.8	48.9
	Over Armour	19.1	23.8	30.4	35.6	39.4	46.6	57.1
	Overall Diameter	22.3	28.2	34.2	39.8	43.8	51.4	62.5
1.5 (class 2)	BATT Black Part no	85553	-	-	-	-	-	-
	BATT Blue Part no	-	-	85397	-	-	-	-
	Over Bedding	14.7	18.8	26.5	3.8	34.4	50	52.2
	Over Lead	16.9	21.2	29.5	34	37.8	44.8	56.6
	Over Armour	22.1	26.4	35.9	40.4	45.6	52.6	64.8
	Overall Diameter	25.5	30	40.1	44.8	50.2	57.6	70.6