



BS5308 Cable Part 1 Type 2 IAM CAM SWA

Applications:

BS5308 part 1 type 2 armoured instrumentation cable suitable for use underground. 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 2 armoured cables are suitable for burial underground

Conductors:

0.5sqmm & 0.75sqmm class 5 Flexible copper,
1.0sqmm class 1 solid copper,
1.5sqmm class 2 stranded copper

Insulation:

PE (Polyethylene)

Core identification:

Please see colour code link in technical information

Screen:

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

Sheath/Jacket:

PVC (Polyvinyl-Chloride)

Colour:

Black or Blue

Voltage:

300/500v

Bedding:

PE (Polyethylene)

Armour / Protection:

SWA (Single wire armour)

Bending Radius:

6 x overall diameter

Temperature range:

Operating -40 to +65°C. Installation 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 2 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
16/0.20 (0.5mm²)	BATT part no Black	85123	85113	85120	85030	-	85307	-	-
	BATT part no Blue	85001	85227	85018	85029	-	85711	-	-
	Under Armour	7	7.9	13.1	17.2	19.8	22.3	26.9	33.9
	Over Armour	8.8	9.7	14.9	19.7	23	25.5	30.1	37.9
	Overall Diameter	11.4	12.3	17.9	22.9	26.4	29.1	33.9	42.1
	Weight Kg/KM	210	260	470	810	1160	1370	1760	2730
	Gland CW /Size	20s	20s	20	25	32	32	40	50s
	Gland part no	88591	88591	88592	88594	88594	88893	88919	88919
24/0.20 (0.75mm²) Generally to BS5308	BATT part no Black	85251	85416	85418	85419	-	85501	-	-
	BATT part no Blue	85250	85619	85583	85620	85566	85621	85605	-
	Under Armour	7.3	8.3	14.3	18.7	21.4	24.5	29.5	37.4
	Over Armour	9.1	10.1	15.8	21.9	24.6	27.7	33.5	41.4
	Overall Diameter	11.7	12.9	18.8	25.3	28.2	31.3	37.5	45.8
	Weight Kg/KM	240	290	600	1080	1310	1560	2290	3620
	Gland CW /Size	20s	20s	25	25	32	32	40	50
	Gland part no	88591	88591	88593	88593	88594	88594	88893	88439
1/1.13 (1.00mm²)	BATT part no Black	85181	85187	85031	85454	-	85645	-	-
	BATT part no Blue	85226	85267	85633	-	-	-	-	-
	Under Armour	7.4	8.4	14.2	18.4	21.3	24.4	29.0	37.3
	Over Armour	9.2	1.2	16.7	20.9	24.5	27.6	32.2	41.4
	Overall Diameter	11.8	13	19.7	24.3	28.1	31.2	36.2	45.7
	Weight Kg/KM	230	280	690	980	1370	1670	2160	3440
	Gland CW /Size	20s	20s	25	25	32	32	40	50
	Gland part no	88591	88591	88593	88593	88594	88594	88893	88439
7/0.53 (1.5mm²)	BATT part no Black	85012	85243	85118	85494	-	85689	-	-
	BATT part no Blue	85011	85478	85688	85311	-	85690	85769	-
	Under Armour	8.3	9.7	16.4	21.6	25.2	28.5	34.3	43.6
	Over Armour	10.1	11.5	18.9	24.8	28.4	31.7	38.3	48.6
	Overall Diameter	12.9	14.3	22.1	28.4	32.2	25.7	42.5	53.4
	Weight Kg/KM	310	400	850	1600	1850	2400	3000	5000
	Gland CW /Size	20s	20s	25	32	32	40	50s	63s
	Gland part no	88591	88591	88593	88594	88594	88593	88919	88918
7/0.67 (2.5mm²)	BATT part no Black	85691	-	-	-	-	-	-	-
	BATT part no Blue	-	-	-	-	-	-	-	-
	Under Armour	8.5	-	-	-	-	-	-	-
	Over Armour	10.3	-	-	-	-	-	-	-
	Overall Diameter	13.1	-	-	-	-	-	-	-
	Weight Kg/KM	363	-	-	-	-	-	-	-
	Gland CW /Size	-	-	-	-	-	-	-	-
	Gland part no	-	-	-	-	-	-	-	-



BS5308 Part 1 Type 2 Individual and Collective Screen Armoured – Pairs

Conductor size (mm)	Nominal dimensions (mm), Weights and Gland sizes								
	No of Pairs	1	2	5	10	15	20	30	50
16/0.20 (0.5mm²)	BATT part no Black	-	85002	85111	85281	85061	85325	-	-
	BATT part no Blue	-	85015	85027	85047	85060	85070	85087	85096
	Under Armour	-	12	15.2	21.1	23.2	27.3	32.3	41.7
	Over Armour	-	13.7	17.7	24.3	26.4	30.5	36.3	46.7
	Overall Diameter	-	16.7	20.9	27.9	30	34.3	40.5	51.5
	Weight Kg/KM	-	450	750	1280	1440	1810	2610	4180
	Gland CW /Size	-	20	25	25	32	40	50s	63s
	Gland part no	-	88592	88593	88593	88594	88893	88919	88918
24/0.20 (0.75mm²) Generally to BS5308	BATT part no Black	-	85254	85257	85064	-	85098	-	-
	BATT part no Blue	-	85253	85165	85104	-	85304	-	-
	Under Armour	-	12.8	16.3	22.7	26.4	29.8	35.5	45
	Over Armour	-	14.6	18.8	25.9	29.6	33.8	39.5	50
	Overall Diameter	-	17.6	22	29.5	33.4	37.8	43.9	55
	Weight Kg/KM	-	500	950	1650	1800	2400	3100	4900
	Gland CW/Size	-	20	25	32	32	50s	50s	63s
	Gland part no	-	88592	88593	88594	88594	88919	88919	88918
1/1.13 (1.00mm²)	BATT part no Black	-	85404	85477	85332	-	-	-	-
	BATT part no Blue	-	85107	86198	85326	-	-	-	-
	Under Armour	-	12.8	16.2	22.6	26.2	29.8	35.4	44.9
	Over Armour	-	14.6	18.7	25.8	29.4	33.8	39.4	49.9
	Overall Diameter	-	17.6	21.9	29.4	33.2	37.8	43.8	54.9
	Weight Kg/KM	-	520	950	1690	1800	2500	3300	5300
	Gland CW /Size	-	20	25	32	32	50s	50	63s
	Gland part no	-	88592	88593	88594	88594	88919	88439	88918
7/0.53 (1.5mm²)	BATT part no Black	-	-	85217	85152	-	85381	85534	-
	BATT part no Blue	-	85019	85033	85055	85063	85079	85089	-
	Under Armour	-	14.7	18.8	26.5	30.8	34.4	41	52.2
	Over Armour	-	17.2	22	29.7	34	38.4	46	57.2
	Overall Diameter	-	204	25.4	33.5	38.8	42.6	5.8	62.6
	Weight Kg/KM	-	750	1200	1900	2500	3100	4000	6400
	Gland CW/Size	-	25	32	40	40	50s	50	63
	Gland part no	-	88593	88594	88893	88893	88919	88439	88895



BS5308 Part 1 Type 2 Collectively screed and armoured – triples

Conductor size (mm)	Nominal dimensions (mm), Weights and Gland sizes								
	No of Pairs	1T	3T	4T	5T	8T	12T	15T	20T
16/0.20 (0.5mm ²)	BATT part no Black	85163	-	-	-	-	-	-	-
	BATT part no Blue	85116	-	-	-	-	-	-	-
	Overall Diameter	11.5	17.1	18.1	19.5	23.7	26.9	29.3	33.3
	Under Armour	6.5	11.5	12.4	13.5	17	20	22.4	25.4
	Over Armour	8.3	14	15	16	20.2	23.2	25.6	29.4
	Weight Kg/KM	242	530	590	650	1020	1260	1450	1950
24/0.20 (0.75mm ²) Generally to BS5308	BATT part no Black	85252	-	-	-	-	85729	-	-
	BATT part no Blue	-	-	-	-	-	-	-	-
	Overall Diameter	11.5	17.6	18.7	21.5	24.8	27.0	31	32.5
	Under Armour	6.7	11.9	13.0	14.5	18	21	23.8	25.2
	Over Armour	8.5	14.5	15.6	17.7	21.3	23.3	27.1	28.5
	Weight Kg/KM	260	560	640	930	1150	1220	1650	2000
1/1.13 (1.00mm ²)	BATT part no Black	-	-	-	-	-	-	-	-
	BATT part no Blue	-	-	-	-	-	-	-	-
	Overall Diameter	11.7	17.7	19	21.1	24.7	28.1	30.7	35.1
	Under Armour	6.9	12.1	13.3	14.7	17.9	21.1	23.5	26.9
	Over Armour	8.7	14.6	15.9	17.8	21.2	24.4	26.8	31
	Weight Kg/KM	270	600	680	780	1200	1500	1800	2400
7/0.53 (1.5mm ²)	BATT part no Black	85114	85622	-	-	-	-	-	-
	BATT part no Blue	85139	-	-	-	-	-	-	-
	Overall Diameter	12.9	20.0	22.1	24.3	28.2	33.3	36.2	40.5
	Under Armour	8.1	14.1	15.5	17.5	21.2	25.3	28.0	32.1
	Over Armour	10	16.7	18.8	20.8	24.5	29.4	32.1	36.2
	Weight Kg/KM	320	740	970	1150	1500	2150	2500	3050

BS5308 Part 1 Type 2 Collectively screened and armoured - quads

Conductor size (mm)	Nominal dimensions (mm), Weights and Gland sizes								
	No of Pairs	1Q	3Q	4Q	5Q	8Q	12Q	15Q	20Q
16/0.20 (0.5mm ²)	BATT part no Black	85113	-	-	-	-	-	-	-
	BATT part no Blue	85227	-	-	-	-	-	-	-
	Overall Diameter	11.8	18.6	20.3	22.5	25.8	30.2	33.8	37.7
	Under Armour	7.0	12.9	14.4	15.9	19.0	23.2	25.8	29.5
	Over Armour	8.9	15.5	17.0	19.2	22.3	26.5	29.9	33.6
	Weight Kg/KM	270	600	800	920	1150	1500	2000	2350
24/0.20 (0.75mm ²) Generally to BS5308	BATT part no Black	85416	-	-	-	-	-	-	-
	BATT part no Blue	85619	-	-	-	-	-	-	-
	Overall Diameter	12.3	20	22.1	24.2	27.9	33.4	36.6	41
	Under Armour	7.5	14.1	15.5	17.4	20.9	25.4	28.2	32.4
	Over Armour	9.4	16.7	18.8	20.7	24.2	29.5	32.4	36.5
	Weight Kg/KM	290	690	920	1050	1350	2000	2250	2850
1/1.13 (1.00mm ²)	BATT part no Black	85187	-	-	-	-	-	-	-
	BATT part no Blue	85267	-	-	-	-	-	-	-
	Overall Diameter	12.2	20	22.1	24.2	27.9	33.4	36.6	41
	Under Armour	7.5	14.1	15.5	17.4	20.9	25.4	28.2	32.4
	Over Armour	9.4	16.7	18.8	20.7	24.2	29.5	32.4	36.5
	Weight Kg/KM	300	715	960	1100	1450	2100	2400	3000
7/0.53 (1.5mm ²)	BATT part no Black	85243	-	-	-	-	-	-	-
	BATT part no Blue	85478	-	-	-	-	-	-	-
	Overall Diameter	13.6	23.4	25	27.5	32	38.5	42	48.1
	Under Armour	8.8	16.6	18.2	230.5	24.8	30.1	33.4	38.3
	Over Armour	10.7	19.9	21.5	23.8	28.1	34.2	37.5	43.4
	Weight Kg/KM	350	1020	1170	1360	1800	2650	3050	4200