



## BS5308 Cable Part1 Type2 XLPE CAM SWA LSZH

<b>Applications:</b>	BS5308 LSZH instrumentation cable. Indoor 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
<b>Conductors:</b>	0.5sqmm & 0.75sqmm class 5 Flexible copper 1.5sqmm class 2 stranded copper
<b>Insulation:</b>	XLPE (Cross linked polyethylene)
<b>Core identification:</b>	See colour code link in technical section
<b>Screen:</b>	CAM (Collective aluminium mylar)
<b>Bedding:</b>	LSZH (Low smoke zero halogen)
<b>Armour / Protection:</b>	SWA (Single wire armour)
<b>Sheath/Jacket:</b>	LSZH (Low smoke zero halogen)
<b>Colour:</b>	Black or Blue
<b>Voltage:</b>	300/500v
<b>Temperature range:</b>	Operating -20 to +90°C
<b>Bending Radius:</b>	6 x overall diameter
<b>Binder tape:</b>	A non-hydroscopic binder tape is applied over the cable assembly
<b>Standards:</b>	BS5308 Part 1 ,Insulated cables, instrumentation, PE : <b>Part 1</b> cables are widely used throughout the petroleum industry. <b>Type 2</b> armoured cables are suitable for burial underground <b>LSZH</b> sheath used in areas where exposure to toxic fumes would cause a threat



### Electrical Characteristics

Conductor size	0.5mm <sup>2</sup> (16/.2)	0.75mm <sup>2</sup> (24/.2)	1.00mm <sup>2</sup> (1/1.13)	1.5mm <sup>2</sup> (7/0.53)
<b>Mutual Capacitance:</b>				
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	18.5	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
<b>16/0.20 (0.5mm<sup>2</sup>)</b>	BATT part no Black	85290	85291	85434	85360	-	85520	85321	-
	BATT part no Blue	-	-	-	-	-	-	-	-
	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	88593	88594	88594	88893	88919
<b>24/0.20 (0.75mm<sup>2</sup>) Generally to BS5308</b>	BATT part no Black	85561	85562	85564	85565	-	85567	85403	85589
	BATT part no Blue	85409	85373	-	85554	85566	86237	-	-
	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
<b>1/1.13 (1.00mm<sup>2</sup>)</b>	BATT part no Black	-	-	-	-	-	-	85823	-
	BATT part no Blue	-	-	-	-	-	-	-	-
	Under Armour	7.4	8.4	14.2	18.4	21.3	24.4	29	37.3
	Over Armour	9.2	10.2	16.7	20.9	24.5	27.6	32.2	41.3
	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
<b>7/0.53 (1.5mm<sup>2</sup>)</b>	BATT part no Black	85292	85293	85288	85249	-	85391	-	-
	BATT part no Blue	85524	85437	85245	85319	-	-	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	35.7	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	88594	88919	88918



**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
<b>16/0.20</b> <b>(0.5mm<sup>2</sup>)</b>	BATT part no Black	-	85746	85158	85106	-	85108	-	85899
	BATT part no Blue	-	85329	85422	85538	-	-	-	-
	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	85593	85594	88893	88919	88918
<b>24/0.20</b> <b>(0.75mm<sup>2</sup>)</b> Generally to BS5308	BATT part no Black	-	85612	85598	85590	85614	85591	-	-
	BATT part no Blue	-	85560	85110	85017	-	-	-	-
	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
<b>1/1.13</b> <b>(1.00mm<sup>2</sup>)</b>	BATT part no Black	-	-	-	-	-	-	-	-
	BATT part no Blue	-	-	-	-	-	-	85826	-
	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
<b>7/0.53</b> <b>(1.5mm<sup>2</sup>)</b>	BATT part no Black	-	85081	85091	85216	-	85043	-	-
	BATT part no Blue	-	85379	85522	85236	-	-	-	-
	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	-	20.4	25.4	33.5	38.8	42.6	50.8	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
<b>16/0.20 (0.5mm<sup>2</sup>)</b>	BATT part no Black	-	-	-	-	-	-	-	-
	BATT part no Blue	-	-	-	-	-	-	-	-
	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
	Overall Diameter	11.5	17.1	18.1	19.5	23.7	26.9	29.3	33.3
	Weight Kg/KM	242	530	590	650	1020	1260	1450	1950
<b>24/0.20 (0.75mm<sup>2</sup>)</b> Generally to BS5308	BATT part no Black	85462	-	-	-	85430	-	-	-
	BATT part no Blue	-	-	-	-	85552	-	-	-
	Under Armour	6.7	11.9	13	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
	Overall Diameter	11.5	17.6	18.7	21.5	24.8	27	31	32.5
	Weight Kg/KM	260	560	640	930	1150	1220	1650	2000
<b>1/1.13 (1.00mm<sup>2</sup>)</b>	BATT part no Black	-	-	-	-	-	-	-	85827
	BATT part no Blue	-	-	-	-	-	-	-	-
	Under Armour	6.9	2.1	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
	Overall Diameter	11.7	17.7	19	21.1	24.7	28.1	30.7	35.1
	Weight Kg/KM	270	600	680	780	1200	1500	1800	2400
<b>7/0.53 (1.5mm<sup>2</sup>)</b>	BATT part no Black	85425	85263	-	-	-	-	-	-
	BATT part no Blue	85184	-	-	-	-	-	-	-
	Under Armour	8.1	14.1	15.5	17.5	21.2	25.3	28	32.1
	Over Armour	10	16.7	18.8	20.8	24.5	29.4	32.1	36.2
	Overall Diameter	12.9	20	22.1	24.3	28.2	33.3	36.2	40.5
	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
<b>16/0.20 (0.5mm<sup>2</sup>)</b>	BATT part no Black	-	-	-	-	-	-	-	-
	BATT part no Blue	-	-	-	-	-	-	-	-
	Under Armour	7	12.9	14.4	15.9	19	23.2	25.8	29.5
	Over Armour	8.9	15.5	17	19.2	22.3	26.5	29.9	33.6
	Overall Diameter	11.8	18.6	20.3	22.5	25.8	30.2	33.8	37.7
	Weight Kg/KM	270	600	800	920	1150	1500	2000	2350
<b>24/0.20 (0.75mm<sup>2</sup>)</b> Generally to BS5308	BATT part no Black	85562	-	-	-	-	-	-	-
	BATT part no Blue	-	-	-	-	-	-	-	-
	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
	Overall Diameter	12.3	20	22.1	24.2	27.9	33.4	36.6	41
	Weight Kg/KM	290	690	920	1050	1350	2000	2250	2850
<b>1/1.13 (1.00mm<sup>2</sup>)</b>	BATT part no Black	-	-	-	-	-	-	-	-
	BATT part no Blue	-	-	-	-	-	-	-	-
	Under Armour	7.5	14.1	15.5	17.5	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
	Overall Diameter	12.3	20	22.1	24.2	27.9	33.4	36.6	41
	Weight Kg/KM	300	715	960	1100	1450	2100	2400	3000
<b>7/0.53 (1.5mm<sup>2</sup>)</b>	BATT part no Black	85293	-	-	-	-	-	-	-
	BATT part no Blue	-	-	-	-	-	-	-	-
	Under Armour	8.8	16.6	18.2	20.5	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
	Overall Diameter	13.6	23.4	25	27.5	32	38.5	42	48.1
	Weight Kg/KM	350	1020	1170	1360	1800	2650	3050	4200

