



## BS5308 Part 2 Type 2 IAM CAM SWA PVC

### Applications:

BS5308 PVC insulated armoured instrumentation cable, part 2, type 2  
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 2** cables are common to the chemical and petrochemical industries

**Type 2** armoured cables are suitable for burial underground

### Conductors:

0.5sqmm & 0.75sqmm class 5 Flexible copper, 1.5sqmm & 2.5sqmm class 2 stranded copper

### Insulation:

PVC (Polyvinyl chloride) to IEC 60502

### Core identification:

Please see colour code link in technical information

### Armour/Protection:

SWA (Single wire armour)

### Screen:

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

### Sheath/Jacket:

PVC

### Colour:

Black or Blue

### Voltage:

300/500v

### Temperature range:

Operating -15 to +65°C Installation 0 to 50°C

### Bending Radius:

6 x overall diameter

### Standards:

BS5308 Part 2 Insulated cables, instrumentation, PE

BS EN 60332-3-Cat C



## 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) |
|---|----------------------------|-----------------------------|------------------------------|-----------------------------|
| Mutual Capacitance:   |                            |                             |                              |                             |
| a. Pair or adjacent cores   | 250                        | 250                         | 250                          | 250                         |
| 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 2 Type 2 Collectively Screened and Armoured**

| 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><br><b>(0.5mm<sup>2</sup>)</b>                                | BATT part no Blue                                | 85365 | 85026 | 85308 | 85235 | -     | 85366 | -     | -     |
|   | BATT part no Black                               | 85406 | 85368 | 85369 | 75270 | -     | 85371 | 85372 | -     |
|   | 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                                     | 240   | 290   | 510   | 880   | 1200  | 1500  | 1900  | 2900  |
|   | Gland CW /Size                                   | 20s   | 20s   | 20    | 25    | 25    | 32    | 40    | 50s   |
|   | Gland part no                                    | 88591 | 88591 | 88592 | 88593 | 88593 | 88594 | 88893 | 88919 |
| <b>24/0.20</b><br><b>(0.75mm<sup>2</sup>)</b><br><b>Generally to BS5308</b> | BATT part no Blue                                | 85130 | 85627 | 85135 | 85136 | -     | 85137 | 85218 | 85588 |
|   | BATT part no Black                               | 85131 | 85134 | 85036 | 85151 | -     | 85180 | 85222 | 85432 |
|   | Under Armour                                     | 7.3   | 8.3   | 14.3  | 18.7  | 21.4  | 24.5  | 29.5  | 37.4  |
|   | Over Armour                                      | 9.1   | 10.1  | 16.8  | 21.9  | 24.6  | 27.7  | 33.5  | 41.4  |
|   | Overall Diameter                                 | 11.7  | 12.9  | 19.8  | 25.3  | 28.2  | 31.3  | 37.5  | 45.8  |
|   | Weight Kg/KM                                     | 270   | 310   | 710   | 1200  | 1500  | 1700  | 2500  | 3500  |
|   | Gland CW /Size                                   | 20s   | 20s   | 25    | 32    | 32    | 32    | 40    | 50    |
|   | Gland part no                                    | 88591 | 88591 | 88593 | 88594 | 88594 | 88594 | 88893 | 88894 |
| <b>7/0.53</b><br><b>(1.5mm<sup>2</sup>)</b>                                 | BATT part no Blue                                | 85127 | 85275 | 85278 | 85213 | -     | 85129 | 85248 | 85588 |
|   | BATT part no Black                               | 85126 | 85210 | 85266 | 85247 | -     | 85128 | 85276 | -     |
|   | 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                                     | 300   | 390   | 870   | 1500  | 1900  | 2400  | 3300  | 5200  |
|   | Gland CW /Size                                   | 20s   | 20s   | 25    | 32    | 32    | 40    | 40    | 63s   |
|   | Gland part no                                    | 88591 | 88591 | 88593 | 88594 | 88594 | 88893 | 88893 | 88918 |

**BS5308 Part 2 Type 2 Individual and Collective Screen Armoured**

| Conductor size (mm)   | Nominal dimensions (mm), Weights and Gland sizes |   |       |       |       |      |       |      |      |          |
|---|--|---|-------|-------|-------|------|-------|------|------|----------|
|   | No of Pairs                                      | 1 | 2     | 5     | 10    | 15   | 20    | 30   | 50   | 4 Triple |
| <b>16/0.20</b><br><b>(0.5mm<sup>2</sup>)</b>                                | BATT part no Blue                                | - | -     | -     | -     | -    | -     | -    | -    | -        |
|   | BATT part no Black                               | - | -     | 85592 | -     | -    | -     | -    | -    | -        |
|   | Under Armour                                     | - | 12    | 15.2  | 21.1  | 24.5 | 27.3  | 32.3 | 41.7 | -        |
|   | Over Armour                                      | - | 13.8  | 17.7  | 24.3  | 27.7 | 30.5  | 36.3 | 46.7 | -        |
|   | Overall Diameter                                 | - | 16.8  | 20.9  | 27.9  | 31.3 | 34.3  | 40.5 | 51.5 | -        |
|   | Weight Kg/KM                                     | - | 450   | 750   | 1300  | 1500 | 1900  | 2700 | 4200 | -        |
|   | Gland CW /Size                                   | - | -     | 25    | -     | -    | -     | -    | -    | -        |
|   | Gland part no                                    | - | -     | 88593 | -     | -    | -     | -    | -    | -        |
| <b>24/0.20</b><br><b>(0.75mm<sup>2</sup>)</b><br><b>Generally to BS5308</b> | BATT part no Blue                                | - | 85273 | 85603 | 85269 | -    | 85172 | -    | -    | -        |
|   | BATT part no Black                               | - | 85577 | 85526 | 85388 | -    | 85527 | -    | -    | -        |
|   | 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                                     | - | 490   | 801   | 1800  | 1900 | 2200  | 3500 | 5000 | -        |
|   | Gland CW /Size                                   | - | 20    | 25    | 32    | -    | 50s   | -    | -    | -        |
|   | Gland part no                                    | - | 88592 | 88593 | 88594 | -    | 88919 | -    | -    | -        |
| <b>7/0.53</b><br><b>(1.5mm<sup>2</sup>)</b>                                 | BATT part no Blue                                | - | -     | -     | -     | -    | -     | -    | -    | -        |
|   | BATT part no Black                               | - | 85334 | 85335 | 85338 | -    | 85339 | -    | -    | 85668    |
|   | Under Armour                                     | - | 14.7  | 18.8  | 26.5  | 30.8 | 34.4  | 41   | 52.2 | 1.10     |
|   | Over Armour                                      | - | 17.2  | 22    | 29.7  | 34.8 | 38.4  | 46   | 56.7 | 1.60     |
|   | Overall Diameter                                 | - | 20.4  | 25.4  | 33.5  | 38.8 | 42.6  | 50.8 | 62.6 | 21.86    |
|   | Weight Kg/KM                                     | - | 660   | 1000  | 1700  | 2100 | 2800  | 3600 | 5200 | -        |
|   | Gland CW /Size                                   | - | -     | 32    | 40    | -    | 50s   | -    | -    | -        |
|   | Gland part no                                    | - | -     | 88594 | 88893 | -    | 88919 | -    | -    | -        |