

# VG 95218 Part 61 (LMGSGO)

HALOGEN FREE, FLAME RETARDANT LIGHT POWER CABLE



## CABLE STRUCTURE

|                            |                                                                                                |
|----------------------------|------------------------------------------------------------------------------------------------|
| <b>Conductor</b>           | Electrolytic, stranded, copper wire to DIN EN 60228 Class 2                                    |
| <b>Insulation</b>          | Halogen free cross linked polymeric compound                                                   |
| <b>Core Identification</b> | According to VG 95218 part 61                                                                  |
| <b>Covering of Cores</b>   | At up to 4 cores wrapped foil or extruded compound<br>More than 4 cores wrapped polyester foil |
| <b>Screen</b>              | Copper wire braiding screen with separating foil over and under braid                          |
| <b>Outer Sheath</b>        | Halogen free, cross-linked elastomeric compound.                                               |

## STANDARDS & MAIN CHARACTERISTICS

|                                          |                                       |
|------------------------------------------|---------------------------------------|
| <b>Construction</b>                      | VG 95218 Part 61                      |
| <b>Max Permissible Operating Voltage</b> | AC 550V / DC 825V                     |
| <b>AC Test Voltage</b>                   | 2,5 kV                                |
| <b>Working Temperature</b>               | -30°C / + 90°C                        |
| <b>Min Bending Radius (Fixed)</b>        | 5xD for all types                     |
| <b>General Requirements and Tests</b>    | VG 95218-2                            |
| <b>Current Ratings</b>                   | VG 95218-5                            |
| <b>Flame Retardant</b>                   | IEC 60332 /1, IEC 60332 / 3-24 Cat. C |
| <b>Halogen Content</b>                   | IEC 60754 / 1 - 2                     |
| <b>Smoke Density</b>                     | IEC 61034 / 1-2 ( DIN EN 50268/1-2)   |

Lowest installation temperature: -15°C

### Application

Used as fixed installation cable in light power, control, distribution and lighting electrical systems in most areas, below and above deck on Navy vessels.

Comply the general requirements of BV 3400 (Specification for Cable Systems of German Navy Vessels). These cables are not suitable for permanent installation in and under water.

# VG 95218 Part 61 (LMGSCO)

| Designation<br>as per VG95218<br>Part.61<br>Dash No | Cores x<br>size       | Number<br>of<br>the single<br>wires<br>(min) | Wall<br>thickness of<br>insulation<br>nominal | Wall<br>thickness<br>of sheath | Outer<br>Diameter<br>(min- max.) |      | Cable<br>Weight<br>Approx. | Min.<br>Bending<br>Radius<br>Fixed<br>Installed | Conductor<br>resistance<br>at (20°C)<br>(max) | Insulation<br>resistance<br>(20°C)<br>(min) |
|-----------------------------------------------------|-----------------------|----------------------------------------------|-----------------------------------------------|--------------------------------|----------------------------------|------|----------------------------|-------------------------------------------------|-----------------------------------------------|---------------------------------------------|
|                                                     | No. x mm <sup>2</sup> |                                              | mm                                            | mm                             | mm                               | mm   | kg/km                      | mm                                              | (Ω/km)                                        | (MΩ.km)                                     |
| A019                                                | 2 x 1,5               | 7                                            | 0,4                                           | 0,8                            | 7,0                              | 8,0  | 102                        | 40                                              | 12,2                                          | 600                                         |
| A020                                                | 2 x 2,5               | 7                                            | 0,4                                           | 0,8                            | 7,7                              | 8,8  | 138                        | 44                                              | 7,56                                          | 500                                         |
| A021                                                | 3 x 1,5               | 7                                            | 0,4                                           | 0,8                            | 7,2                              | 8,4  | 120                        | 42                                              | 12,2                                          | 600                                         |
| A022                                                | 3 G 1,5               | 7                                            | 0,4                                           | 0,8                            | 7,2                              | 8,4  | 120                        | 42                                              | 12,2                                          | 600                                         |
| A023                                                | 3 x 2,5               | 7                                            | 0,4                                           | 0,8                            | 8,0                              | 9,4  | 170                        | 47                                              | 7,56                                          | 500                                         |
| A024                                                | 3 G 2,5               | 7                                            | 0,4                                           | 0,8                            | 8,0                              | 9,4  | 170                        | 47                                              | 7,56                                          | 500                                         |
| A025                                                | 4 x 1,5               | 7                                            | 0,4                                           | 0,8                            | 7,8                              | 9,4  | 150                        | 47                                              | 12,2                                          | 600                                         |
| A026                                                | 4 x 2,5               | 7                                            | 0,4                                           | 0,8                            | 8,7                              | 10,4 | 205                        | 52                                              | 7,56                                          | 500                                         |
| A027                                                | 5 x 1,5               | 7                                            | 0,4                                           | 0,8                            | 8,3                              | 9,6  | 170                        | 48                                              | 12,2                                          | 600                                         |
| A028                                                | 5 G 1,5               | 7                                            | 0,4                                           | 0,8                            | 8,3                              | 9,6  | 170                        | 48                                              | 12,2                                          | 600                                         |
| A107                                                | 5 G 2,5               | 7                                            | 0,4                                           | 1,0                            | 10,5                             | 12,0 | 215                        | 60                                              | 7,56                                          | 500                                         |
| A005 (*) / A116 (**)                                | 7 x 1,5               | 7                                            | 0,4                                           | 1,0                            | 9,3                              | 10,8 | 225                        | 54                                              | 12,2                                          | 600                                         |
| A105 (*) / A117 (**)                                | 7 G 1,5               | 7                                            | 0,4                                           | 1,0                            | 9,3                              | 10,8 | 225                        | 54                                              | 12,2                                          | 600                                         |
| A017 (*) / A118 (**)                                | 7 x 2,5               | 7                                            | 0,4                                           | 1,0                            | 10,3                             | 12,0 | 300                        | 60                                              | 7,56                                          | 500                                         |
| A108 (*) / A119 (**)                                | 7 G 2,5               | 7                                            | 0,4                                           | 1,0                            | 10,3                             | 12,0 | 300                        | 60                                              | 7,56                                          | 500                                         |
| A006 (*) / A120 (**)                                | 10 x 1,5              | 7                                            | 0,4                                           | 1,0                            | 10,8                             | 12,5 | 290                        | 63                                              | 12,2                                          | 600                                         |
| A106 (*) / A121 (**)                                | 10 G 1,5              | 7                                            | 0,4                                           | 1,0                            | 10,8                             | 12,5 | 290                        | 63                                              | 12,2                                          | 600                                         |
| A007 (*) / A122 (**)                                | 12 x 1,5              | 7                                            | 0,4                                           | 1,0                            | 12,0                             | 13,5 | 330                        | 68                                              | 12,2                                          | 600                                         |
| A008 (*) / A123 (**)                                | 14x1,5                | 7                                            | 0,4                                           | 1,0                            | 12,7                             | 14,2 | 370                        | 71                                              | 12,2                                          | 600                                         |
| A009 (*) / A124 (**)                                | 16x1,5                | 7                                            | 0,4                                           | 1,0                            | 13,2                             | 14,8 | 420                        | 74                                              | 12,2                                          | 600                                         |
| A010 (*) / A125 (**)                                | 19x1,5                | 7                                            | 0,4                                           | 1,0                            | 13,9                             | 15,3 | 480                        | 77                                              | 12,2                                          | 600                                         |
| A011 (*) / A126 (**)                                | 24x1,5                | 7                                            | 0,4                                           | 1,0                            | 15,5                             | 17,5 | 625                        | 88                                              | 12,2                                          | 600                                         |
| A012 (*) / A127 (**)                                | 27x1,5                | 7                                            | 0,4                                           | 1,0                            | 16,6                             | 18,3 | 685                        | 92                                              | 12,2                                          | 600                                         |
| A013 (*) / A128 (**)                                | 33x1,5                | 7                                            | 0,4                                           | 1,0                            | 17,5                             | 19,5 | 815                        | 98                                              | 12,2                                          | 600                                         |
| A018 (*) / A129 (**)                                | 37x1,5                | 7                                            | 0,4                                           | 1,0                            | 20,0                             | 22,0 | 950                        | 110                                             | 12,2                                          | 600                                         |

(\*) Black cores with numbers

(\*\*) White cores with numbers

G : with green/yellow core

x : without green/yellow core