



### CABLE STRUCTURE

|                            |                                                                                                                  |
|----------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Conductor</b>           | Electrolytic annealed, class 5 stranded plain copper wires (tinned conductor on request)                         |
| <b>Insulation</b>          | PVC compound, TI52 type (EN 50290-2-21)                                                                          |
| <b>Core Identification</b> | Up to including 10 cores DIN 47100 core colors<br>Above 10 cores black cores with or without a green yellow core |
| <b>Seperator</b>           | Polyester tape                                                                                                   |
| <b>Screen</b>              | Tinned copper wire braiding                                                                                      |
| <b>Sheath</b>              | PVC compound, TM52 type (EN 50290-22)                                                                            |
| <b>Color</b>               | Grey                                                                                                             |

### MAIN CHARACTERISTICS

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Construction</b>           | Based on TS 13755, VDE 0812                  |
| <b>General Requirements</b>   | EN 50290-2-20                                |
| <b>Guide to Use</b>           | Based on. EN 50565-1/2, VDE 891 Part 1 to 10 |
| <b>Electrical Tests</b>       | EN 50395                                     |
| <b>Non - electrical Tests</b> | EN 50396, EN 50290                           |
| <b>Conductor Resistance</b>   | IEC 60228, VDE 0295, BS 6360                 |
| <b>Flame Retardant</b>        | IEC 60332-1-2                                |

### OPERATING CHARACTERISTICS

|                                      |                               |
|--------------------------------------|-------------------------------|
| <b>Rated Voltage</b>                 | 300/500 V (U <sub>0</sub> /U) |
| <b>AC Test Voltage</b>               | 2 kV                          |
| <b>Working Temperature</b>           | -30°C to +70°C                |
| <b>Conductor Short-Circuit Temp.</b> | 160°C (Max. 5 sec)            |
| <b>Min. Bending Radius</b>           | Based on. VDE 0891 - Part 5   |
| <b>Current Carrying Capacities</b>   | Based on VDE 0298-4 Tab.11    |

**For all sections :**

**Mutual capacitance :** Approx 120 nF/km

**Inductivity :** Approx 0,65 mH/km

### APPLICATIONS

These cables are used for data transmission, signalling and monitoring in automation, audio/vision, security and control systems indoor where electromagnetic disturbances exists.



| Cross Section (mm²) | Nominal Overall Diameter (mm) | Approximate Weight (kg / km) | Min.Bending Radius (fixed installation) (mm) | Max. Resistance of Conductors at 20°C (ohm / km) |
|---------------------|-------------------------------|------------------------------|----------------------------------------------|--------------------------------------------------|
| 2x0,50              | 5,50                          | 39                           | 41                                           | 39,00                                            |
| 2x0,75              | 5,90                          | 46                           | 44                                           | 26,00                                            |
| 2x1                 | 6,30                          | 53                           | 47                                           | 19,50                                            |
| 2x1,5               | 6,70                          | 62                           | 50                                           | 13,30                                            |
| 2x2,5               | 7,38                          | 84                           | 55                                           | 7,98                                             |
| 3x0,50              | 5,80                          | 48                           | 44                                           | 39,00                                            |
| 3x0,75              | 6,30                          | 56                           | 47                                           | 26,00                                            |
| 3x1                 | 6,70                          | 67                           | 50                                           | 19,50                                            |
| 3x1,5               | 7,18                          | 82                           | 54                                           | 13,30                                            |
| 3x2,5               | 8,08                          | 114                          | 61                                           | 7,98                                             |
| 4x0,50              | 6,30                          | 57                           | 47                                           | 39,00                                            |
| 4x0,75              | 6,70                          | 68                           | 50                                           | 26,00                                            |
| 4x1                 | 7,28                          | 83                           | 55                                           | 19,50                                            |
| 4x1,5               | 7,78                          | 101                          | 58                                           | 13,30                                            |
| 4x2,5               | 8,68                          | 142                          | 65                                           | 7,98                                             |
| 5x0,50              | 6,80                          | 69                           | 51                                           | 39,00                                            |
| 5x0,75              | 7,38                          | 85                           | 55                                           | 26,00                                            |
| 5x1                 | 8,18                          | 107                          | 61                                           | 19,50                                            |
| 5x1,5               | 8,68                          | 128                          | 65                                           | 13,30                                            |
| 5x2,5               | 9,48                          | 175                          | 71                                           | 7,98                                             |
| 6x0,5               | 7,38                          | 82                           | 55                                           | 39,00                                            |
| 6x0,75              | 8,08                          | 103                          | 61                                           | 26,00                                            |
| 6x1                 | 8,68                          | 123                          | 65                                           | 19,50                                            |
| 6x1,5               | 9,38                          | 150                          | 70                                           | 13,30                                            |
| 6x2,5               | 10,18                         | 207                          | 76                                           | 7,98                                             |
| 7x0,5               | 7,38                          | 86                           | 55                                           | 39,00                                            |
| 7x0,75              | 8,08                          | 108                          | 61                                           | 26,00                                            |
| 7x1                 | 8,68                          | 130                          | 65                                           | 19,50                                            |
| 7x1,5               | 9,38                          | 160                          | 70                                           | 13,30                                            |
| 7x2,5               | 10,18                         | 222                          | 76                                           | 7,98                                             |
| 8x0,50              | 8,58                          | 113                          | 64                                           | 39,00                                            |
| 8x0,75              | 9,28                          | 136                          | 70                                           | 26,00                                            |

| Cross Section (mm <sup>2</sup> ) | Nominal Overall Diameter (mm) | Approximate Weight (kg / km) | Min.Bending Radius (fixed installation) (mm) | Max. Resistance of Conductors at 20°C (ohm / km) |
|----------------------------------|-------------------------------|------------------------------|----------------------------------------------|--------------------------------------------------|
| 8x1                              | 9,98                          | 163                          | 75                                           | 19,50                                            |
| 8x1,5                            | 10,98                         | 206                          | 82                                           | 13,30                                            |
| 8x2,5                            | 11,98                         | 282                          | 90                                           | 7,98                                             |
| 10x0,50                          | 9,18                          | 121                          | 69                                           | 39,00                                            |
| 10x0,75                          | 9,98                          | 147                          | 75                                           | 26,00                                            |
| 10x1                             | 10,98                         | 183                          | 82                                           | 19,50                                            |
| 10x1,5                           | 11,88                         | 227                          | 89                                           | 13,30                                            |
| 10x2,5                           | 12,98                         | 317                          | 97                                           | 7,98                                             |
| 12x0,50                          | 9,48                          | 137                          | 71                                           | 39,00                                            |
| 12x0,75                          | 10,38                         | 168                          | 78                                           | 26,00                                            |
| 12x1                             | 11,38                         | 210                          | 85                                           | 19,50                                            |
| 12x1,5                           | 12,18                         | 259                          | 91                                           | 13,30                                            |
| 12x2,5                           | 13,68                         | 374                          | 103                                          | 7,98                                             |
| 14x0,50                          | 9,88                          | 153                          | 74                                           | 39,00                                            |
| 14x0,75                          | 10,98                         | 193                          | 82                                           | 26,00                                            |
| 14x1                             | 11,88                         | 237                          | 89                                           | 19,50                                            |
| 14x1,5                           | 12,78                         | 295                          | 96                                           | 13,30                                            |
| 14x2,5                           | 14,28                         | 426                          | 107                                          | 7,98                                             |
| 16x0,50                          | 10,38                         | 173                          | 78                                           | 39,00                                            |
| 16x0,75                          | 11,58                         | 218                          | 87                                           | 26,00                                            |
| 16x1                             | 12,48                         | 267                          | 94                                           | 19,50                                            |
| 16x1,5                           | 13,68                         | 340                          | 103                                          | 13,30                                            |
| 16x2,5                           | 15,08                         | 484                          | 113                                          | 7,98                                             |
| 18x0,50                          | 11,08                         | 197                          | 83                                           | 39,00                                            |
| 18x0,75                          | 12,08                         | 242                          | 91                                           | 26,00                                            |
| 18x1                             | 13,08                         | 297                          | 98                                           | 19,50                                            |
| 18x1,5                           | 14,38                         | 378                          | 108                                          | 13,30                                            |
| 18x2,5                           | 15,78                         | 539                          | 118                                          | 7,98                                             |
| 19x0,50                          | 11,08                         | 200                          | 83                                           | 39,00                                            |
| 19x0,75                          | 12,08                         | 246                          | 91                                           | 26,00                                            |
| 19x1                             | 13,08                         | 304                          | 98                                           | 19,50                                            |
| 19x1,5                           | 14,38                         | 388                          | 108                                          | 13,30                                            |

| Cross Section (mm²) | Nominal Overall Diameter (mm) | Approximate Weight (kg / km) | Min.Bending Radius (fixed installation) (mm) | Max. Resistance of Conductors at 20°C (ohm / km) |
|---------------------|-------------------------------|------------------------------|----------------------------------------------|--------------------------------------------------|
| 19x2,5              | 15,78                         | 556                          | 118                                          | 7,98                                             |
| 24x0,50             | 12,78                         | 247                          | 96                                           | 39,00                                            |
| 24x0,75             | 14,18                         | 312                          | 106                                          | 26,00                                            |
| 24x1                | 15,38                         | 385                          | 115                                          | 19,50                                            |
| 24x1,5              | 16,88                         | 490                          | 127                                          | 13,30                                            |
| 24x2,5              | 18,90                         | 723                          | 142                                          | 7,98                                             |
| 25x0,50             | 13,08                         | 263                          | 98                                           | 39,00                                            |
| 25x0,75             | 14,58                         | 333                          | 109                                          | 26,00                                            |
| 25x1                | 15,78                         | 409                          | 118                                          | 19,50                                            |
| 25x1,5              | 17,18                         | 520                          | 129                                          | 13,30                                            |
| 25x2,5              | 19,40                         | 766                          | 146                                          | 7,98                                             |
| 30x0,50             | 13,68                         | 300                          | 103                                          | 39,00                                            |
| 30x0,75             | 14,98                         | 372                          | 112                                          | 26,00                                            |
| 30x1                | 16,48                         | 469                          | 124                                          | 19,50                                            |
| 30x1,5              | 17,78                         | 590                          | 133                                          | 13,30                                            |
| 30x2,5              | 20,00                         | 874                          | 150                                          | 7,98                                             |
| 32x0,50             | 14,18                         | 319                          | 106                                          | 39,00                                            |
| 32x0,75             | 15,58                         | 397                          | 117                                          | 26,00                                            |
| 32x1                | 17,08                         | 500                          | 128                                          | 19,50                                            |
| 32x1,5              | 18,60                         | 637                          | 140                                          | 13,30                                            |
| 32x2,5              | 20,80                         | 932                          | 156                                          | 7,98                                             |
| 36x0,50             | 14,68                         | 352                          | 110                                          | 39,00                                            |
| 36x0,75             | 16,28                         | 446                          | 122                                          | 26,00                                            |
| 36x1                | 17,68                         | 554                          | 133                                          | 19,50                                            |
| 36x1,5              | 19,50                         | 717                          | 146                                          | 13,30                                            |
| 36x2,5              | 21,70                         | 1048                         | 163                                          | 7,98                                             |
| 40x0,50             | 15,28                         | 390                          | 115                                          | 39,00                                            |
| 40x0,75             | 16,98                         | 495                          | 127                                          | 26,00                                            |
| 40x1                | 18,50                         | 623                          | 139                                          | 19,50                                            |
| 40x1,5              | 20,20                         | 795                          | 152                                          | 13,30                                            |
| 40x2,5              | 22,60                         | 1165                         | 170                                          | 7,98                                             |