

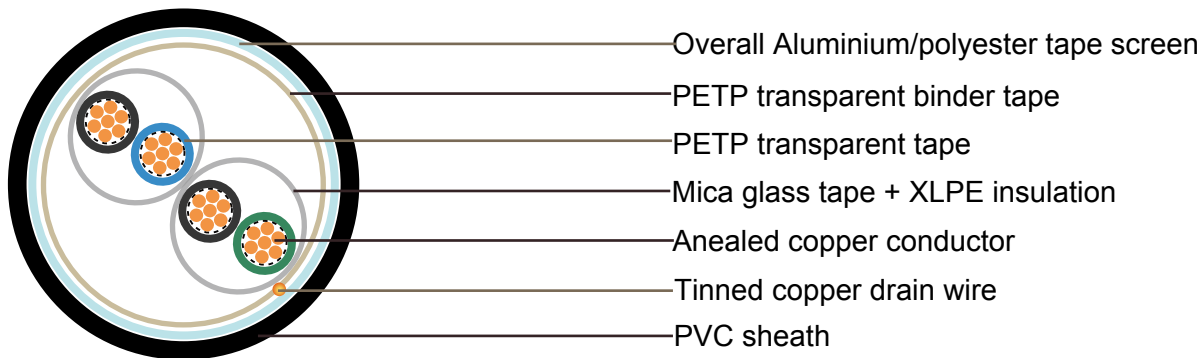


BS5308 Cable Part 1 Type 1 MG-XLPE-OS-LSOH

Application

The unarmoured fire resistant versions (Part 1 Type 1) are typically used in chemical and process industries where there is danger of fire.

Construction



| | |
|--------------------------|---|
| Conductor | Annealed or tinned copper, Class 2 |
| Insulation | Mica glass tape, XLPE (Cross Linked Polyethylene), or PE (optional) |
| Pairing | Two insulated conductors uniformly twisted together with a lay not exceeding 100mm |
| Colour code | See technical information |
| Binder tape | PETP transparent tape |
| Collective screen | Aluminium/polyester tape is applied over the laid up pairs metallic side down in contact with tinned copper drain wire, 0.5mm ² |
| Outer sheath | LSOH(Low Smoke Zero Halogen) sheath Flame retardant to IEC60332-3-22 Fire resistant to IEC60331 Halogen free to IEC60754-1 Low smoke emission to IEC61034-1-2 |
| Sheath colour | Black or blue |



Mechanical and Electrical Properties

Operating temperature: -20°C up to + 90°C(fixed installation)

0°C to +50°C(during operation)

Minimum bending radius: 5 x overall diameter

| | | | | | | |
|--|-----------------------|---------|----------|----------|----------|------|
| Conductor Area Size | mm ² | 0.5 | 0.75 | 1.0 | 1.5 | |
| Conductor Stranding | No. x mm | 7 x 0.3 | 7 x 0.37 | 7 x 0.44 | 7 x 0.53 | |
| Conductor resistance max | ohm/km | 36 | 24.5 | 18.1 | 12.1 | |
| Insulation resistance min | Gohm/km | 5 | 5 | 5 | 5 | |
| Capacitance unbalance at 1 kHz(pair to pair screen) | pF/250m | 250 | | | | |
| Max. Mutual Capacitance @ 1 kHz for Non OS or OS cables (except one-pair and two-pairs) | pF/m | 115 | 115 | 115 | 115 | |
| Max. Mutual Capacitance @ 1 kHz IS/OS cables (include 1 pair and 2 pair) | pF/m | 75 | 75 | 75 | 75 | |
| Max. L/R Ratio for adjacent cores(Inductance/Resistance) | µH/ohm | 25 | 25 | 25 | 40 | |
| Test voltage | Core to core | V | 1000 | 1000 | 1000 | 1000 |
| | Core to screen | V | 1000 | 1000 | 1000 | 1000 |
| Rated voltage max | V | 300/500 | 300/500 | 300/500 | 300/500 | |

Parameter

| No.of Pairs | No.and Dia. of Wires | Nominal Conductor Cross-Sectional Area | Nominal Thickness of Insulation | Nominal Thickness of Sheath | Nominal Dia. of Cable | Approx. Weight |
|-------------|----------------------|--|---------------------------------|-----------------------------|-----------------------|----------------|
| | no./mm | mm ² | mm | mm | mm | kg/km |
| 1 | 7/0.44 | 1 | 0.6 | 1.4 | 7.8 | 89 |
| 2 | 7/0.44 | 1 | 0.6 | 1.4 | 9.2 | 121 |
| 5 | 7/0.44 | 1 | 0.6 | 1.4 | 13.9 | 298 |