

FIRE RESISTANT CABLES

OVERALL SHIELDED
CONFORMING TO BS 6387 CWZ EN 50200



TECHNICAL FEATURES

| | |
|------------------------------|--------------------------------------------------|
| Conductor: | Solid bare copper wire |
| Insulation: | High performance ceramifiable Silicone Rubber |
| Drain wire: | Tinned copper |
| Shield: | Aluminium/Polyester 115% coverage |
| Sheath material: | Halogen-free, flame retardant LSOH, Colour Red |
| Standards: | IEC 60332-1 - IEC 60332-3-24 / EN50200 / BS 6387 |
| Core colours identification: | black, red |

APPLICATION

Fire performance power cable, suitable for fire alarm systems and emergency lighting, designed to maintain circuit integrity under fire conditions according to BS6387 Categories C, W & Z: up to 950°C

SPECIAL FEATURES

Flame retardant CEI 20-35 / EN 60332-1
lead Free CEI 20-52

REMARKS

Conform to RoHS
CE acc. to EC Low-Voltage Directive 73/23/EEC and 93/68/EEC
Standard put up: 305 meters drums

Physical characteristics

| ITALICAB part number | | ITAL080 | ITAL081 | ITAL082 | ITAL083 | ITAL084 |
|-----------------------------------|-----------------|----------|----------|----------|----------|----------|
| No. of cores | num | 2c | 2c | 2c | 2c | 2c |
| Conductor size | mm ² | 0,75 | 1,00 | 1,50 | 2,50 | 4,00 |
| Conductor stranding | n.xmm | 1x0,98 | 1x1,13 | 1x1,38 | 1x1,75 | 7x0,83 |
| Drain wire size | mm ² | 0,75 | 1,00 | 1,50 | 2,50 | 4,00 |
| Drain wire stranding | n.xmm | 1x0,98 | 1x1,13 | 1x1,38 | 1x1,75 | 7x0,83 |
| Nom. Diameter of copper conductor | mm | 0,98 | 1,13 | 1,38 | 1,75 | 2,60 |
| Insulation material | type | Silicone | Silicone | Silicone | Silicone | Silicone |
| Nom. Radial Thickness insulation | mm | 0,70 | 0,70 | 0,80 | 0,80 | 1,00 |
| Shield | Yes/No | Yes | Yes | Yes | Yes | Yes |
| Individual shield | Yes/No | No | No | No | No | No |
| Screen (braid) | Yes/No | No | No | No | No | No |
| Sheath material | type | LSOH | LSOH | LSOH | LSOH | LSOH |
| Overall diameter of conductor | mm | 1,90 | 2,50 | 3,00 | 3,50 | 4,50 |
| Nom. Radial sheath thickness | mm | 0,90 | 0,90 | 0,90 | 1,10 | 1,10 |
| Nom. overall outer diameter | mm | 7,50 | 7,80 | 8,70 | 9,90 | 12,00 |

Electrical Characteristics

| | | | | | | |
|--------------------------------------|------|---------|---------|---------|---------|---------|
| Max. DC Resistance conductor at 20°C | Ω/km | 24,5 | 18,1 | 12,10 | 7,41 | 4,61 |
| Min. insulation resistance | Ω/km | 200 | 200 | 200 | 200 | 200 |
| Max. recommended Current at 25°C | Amps | 12 | 18 | 21 | 30 | 40 |
| Max. operating voltage | Vrms | 300/500 | 300/500 | 300/500 | 300/500 | 300/500 |

Miscellaneous

| | | | | | | |
|----------------------------------|-------|------------|------------|------------|------------|------------|
| Operating temperature (3h 950°C) | °C | -40 / +105 | -40 / +105 | -40 / +105 | -40 / +105 | -40 / +105 |
| Max. recommended pulling tension | N | 205 | 265 | 405 | 670 | 1250 |
| Min. bending radius (install) | mm | 75 | 78 | 87 | 99 | 120 |
| Nominal cable weight | kg/km | 67 | 75 | 100 | 143 | 201 |

FIRE TEST TO BS 6387

| | test applied |
|-------------------------------------------------------------------|-------------------------|
| resistance to Fire alone | BS 6387 D 2 3 hours |
| fire test category (A=650°C; B=750°C; C=950°C) for 20 min | BS 6387 D 2 C |
| resistance to Fire with Water | BS 6387 D 2 30 min |
| category W at 650°C for 30 mins, 15 min of water | BS 6387 D 2 W |
| resistance to fire with mechanical shock (one shock every 30 sec) | BS 6387 D 2 15 min |
| category X at 650°C; Y=750°C; Z=950°C | BS 6387 D 2 Z |
| RESISTANCE TO FIRE CEI EN 50200 | |
| resistance to fire with mechanical shock (one shock every 5 min) | EN 50200 OK |
| category (PH15; PH30; PH60; PH90; PH120) temperature 842°C | EN 50200 30 min PH30 |
| resistance to fire with water and shock (one shock every 5 min) | EN 50200-E 30 min |
| category (temperature 842°C, 15 min of water) | EN 50200-E OK |