# Nexans - 6491F BS6387 feuerbeständige Einzeladerleitung 1 kV - LSZH - 1,5 mm² bis 95 mm²



## Beschreibung

Standard-Brandmelde- und Sicherheitskabel. Soft Skin Standard-Brandschutzkabel für den allgemeinen Einsatz in Brandmeldesystemen, Brandmeldeanlagen, Sprachalarmanlagen und Notbeleuchtungskreisen.

Diese Kabel sind so ausgelegt, dass sie unter Brandbedingungen über einen bestimmten Zeitraum weiterhin funktionsfähig bleiben.

## Principais funcionalidades

**Nennspannung**
600/1000 Volt

**Mindestbiegeradius**
6 x Gesamtdurchmesser

**Flammhemmung**
BS EN/IEC 60332-1-2

**Temperaturgrenzen**
Temperaturbereich: -20 °C bis +90 °C

## Padrões

- LPCB-zertifiziert
- IEC/EN 61034-1/2,
- BS EN/IEC 60332-1-2
- IEC/EN 60754-1/2
- BS EN/IEC 60228
- BS6387 Kat. CWZ
- IEC 60331-21
- BS8592

## Construção

- **Leiter**: Klasse 2 Kupferlitzenleiter
- **Brandschutz**: MICA-Glasfaserband
- **Mantel**: Raucharm und halogenfrei (LSZH) gemäß BS 7655
- **Hülle Farbe**: Braun, Schwarz, Grün/Gelb, Grau, Blau, Gelb, Rot, Orange

## Training & Testing Lab

AN ISO/IEC 17025 ACCREDITED FACILITY

**Cleveland Cable Test & Training Lab**
Our state-of-the-art cable testing facility ensures that every cable meets the highest standards of quality and compliance through continuous, rigorous testing.

ISO/IEC 17025 Accredited Testing Laboratory

**CPR**
Die Cleveland Cable Company verpflichtet sich zur Einhaltung der Bauproduktеverordnung (CPR). Soweit zutreffend, wurden alle nach dem 1. Juli 2017 hergestellten Kabel gemäß den CPR-Anforderungen bewertet, wobei alle erforderlichen Unterlagen vorliegen.

## Unser Engagement für Nachhaltigkeit

Wir haben uns als Geschäftspartner, Arbeitgeber und Mitglied der Gemeinschaft dem Weg zur Netto-Null-Emissionsbilanz verschrieben.

Durch nachhaltiges Denken und Handeln bieten wir einen exzellenten Kundenservice und reduzieren gleichzeitig in Zusammenarbeit mit unseren Kunden und Lieferanten die CO2-Emissionen.

**ecovadis**
Die Cleveland Cable Company wurde von EcoVadis, einem weltweit anerkannten Anbieter von Nachhaltigkeitsratings für Unternehmen, unabhängig bewertet. Mit unserer Punktzahl gehören wir zu den besten 35 % der weltweit bewerteten Unternehmen, was unser starkes Engagement für Umwelt, Soziales und Ethik widerspiegelt.

## Nexans - 6491F BS6387 feuerbeständige Einzeladerleitung 1 kV - LSZH - 1,5 mm² bis 95 mm² - Abmessungen

| Referenz | Conductor Size (mm2) | No Of Cores | Stranding(mm) | Overall Diameter(mm) | Weight(Kg/Km) |
|---|---|---|---|---|---|
| 6491F1/5 | 1.5 | 1 | 7/0.53 | 3.3 | 32 |
| 6491F2/5 | 2.5 | 1 | 7/0.67 | 3.75 | 43 |
| 6491F4 | 4 | 1 | 7/0.85 | 4.3 | 55 |
| 6491F6 | 6 | 1 | 7/1.04 | 5 | 85 |
| 6491F10 | 10 | 1 | 7/1.35 | 6.8 | 146 |
| 6491F16 | 16 | 1 | 7/1.70 | 8 | 198 |
| 6491F25 | 25 | 1 | 7/2.14 | 9.7 | 270 |
| 6491F35 | 35 | 1 | 7/2.52 | 10.8 | 360 |
| 6491F50 | 50 | 1 | 19/1.78 | 12.5 | 490 |
| 6491F70 | 70 | 1 | 19/2.14 | 15.2 | 690 |
| 6491F95 | 95 | 1 | 19/2.52 | 16.4 | 940 |

**Single-core 90 °c thermosetting insulated cables, non-armoured, with or without sheath COPPER CONDUCTORS)**
**Reproduced from *BS7671:2018***

## *TABLE 4E1A*

**CURRENT-CARRYING CAPACITY (amperes)**

Ambient temperature: 30°C
Conductor operating temperature:90°C

| Conductor cross sectional area | Reference Method A (enclosed in conduit in thermally insulating wall etc.) | | Reference Method B (enclosed in conduit on a wall or in trunking etc.) | | Reference Method C (clipped direct) | | Reference Method F (in free air or on a perforated cable tray etc horizontal or vertical etc) Touching | | | Reference Method G (in free air) Spaced by one cable diameter | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 cables single phase AC or DC | 3 or 4 cables, three-phase AC | 2 cables single phase AC or DC | 3 or 4 cables, three phase AC | 2 cables single phase AC or DC flat and touching | 3 or 4 cables, three phase AC flat and touching or trefoil | 2 cables single phase AC or DC flat | 3 cables, three phase AC flat | 3 cables, three phase AC trefoil | 2 cables, single-phase AC or DC or 3 cables three-phase AC flat | |
| | | | | | | | | | | Horizontal | Vertical |
| $mm^2$ | A | A | A | A | A | A | A | A | A | A | A |
| 1 | 14 | 13 | 17 | 15 | 19 | 17.5 | - | - | - | - | - |
| 1.5 | 19 | 17 | 23 | 20 | 25 | 23 | - | - | - | - | - |
| 4 | 35 | 31 | 42 | 37 | 46 | 41 | - | - | - | - | - |
| 6 | 45 | 40 | 54 | 48 | 59 | 54 | - | - | - | - | - |
| 10 | 61 | 54 | 75 | 66 | 81 | 74 | - | - | - | - | - |
| 16 | 81 | 73 | 100 | 88 | 109 | 99 | - | - | - | - | - |
| 25 | 106 | 95 | 133 | 117 | 143 | 130 | 161 | 141 | 135 | 182 | 161 |
| 35 | 131 | 117 | 164 | 144 | 176 | 161 | 200 | 176 | 169 | 226 | 201 |
| 50 | 158 | 141 | 198 | 175 | 228 | 209 | 242 | 216 | 207 | 275 | 246 |
| 70 | 200 | 179 | 253 | 222 | 293 | 268 | 310 | 279 | 268 | 353 | 318 |
| 95 | 241 | 216 | 306 | 269 | 355 | 326 | 377 | 342 | 328 | 430 | 389 |
| 120 | 278 | 249 | 354 | 312 | 413 | 379 | 437 | 400 | 383 | 500 | 454 |
| 150 | 318 | 285 | 393 | 342 | 476 | 436 | 504 | 464 | 444 | 577 | 527 |
| 185 | 362 | 324 | 449 | 384 | 545 | 500 | 575 | 533 | 510 | 661 | 605 |
| 240 | 424 | 380 | 528 | 450 | 644 | 590 | 679 | 634 | 607 | 781 | 719 |
| 300 | 486 | 435 | 603 | 514 | 743 | 681 | 783 | 736 | 703 | 902 | 833 |
| 400 | - | - | 683 | 584 | 868 | 793 | 940 | 868 | 823 | 1085 | 1008 |
| 500 | - | - | 783 | 666 | 990 | 904 | 1083 | 998 | 946 | 1253 | 1169 |
| 630 | - | - | 900 | 764 | 1130 | 1033 | 1254 | 1151 | I088 | 1454 | 1362 |
| 800 | - | - | - | - | 1288 | 1179 | 1358 | 1275 | 1214 | 1581 | 1485 |
| 1000 | - | - | - | - | 1443 | 1323 | 1520 | 1436 | 1349 | 1775 | 1671 |

*Where it is intended to connect the cables in this table to equipment or accessories designed to operate at a temperature lower than the maximum operating temperature of the cable, the cables should be rated at the maximum operating temperature of the equipment or accessory (see Regulation 512.1.5). Where it is intended to group a cable in this table with other cables, the cable should be rated at the lowest of the maximum operating temperatures of any of the cables in the group (see Regulation 12. I .5). For cables having flexible conductors see section 2.4 of this appendix for adjustment factors for current-carrying capacity and voltage drop.*

**Single-core 90 °c thermosetting insulated cables, non-armoured, with or without sheath (COPPER CONDUCTORS) Reproduced from *BS7671:2018 Wiring Regulations***

***TABLE 4E1B***

**VOLTAGE DROP (per ampere per metre)**

Conductor operating temperature:90°C

| Conductor cross sectional area | 2 cables, DC | 2 cables, single-phase AC | | | | | | | | | 3 or 4 cables, three-phase AC | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Reference Methods A & B (enclosed in conduit or trunking) | | | References Methods C, F & G (clipped direct, on tray or in free air) | | | | | | Reference Methods A & B (enclosed in conduit or trunking) | | | Reference Methods C, F & G (clipped direct, on tray or in free air) | | | | | | | | |
| | | | | | Cables touching | | | Cables spaced* | | | | | | Cables touching, Trefoil | | | Cables touching, Flat | | | Cables spaced* Flat | | |
| (mm2) | (mV/ Alm) | (mV/A/m) | | | (mV/A/m) | | | (mV/A/m) | | | (mV/A/m) | | | (mV/A/m) | | | (mV/A/m) | | | (mV/A/m) | | |
| 1 | 46 | 46 | | | 46 | | | 46 | | | 40 | | | 40 | | | 40 | | | 40 | | |
| 1.5 | 31 | 31 | | | 31 | | | 31 | | | 27 | | | 27 | | | 27 | | | 27 | | |
| 2.5 | 19 | 19 | | | 19 | | | 19 | | | 16 | | | 16 | | | 16 | | | 16 | | |
| 4 | 12 | 12 | | | 12 | | | 12 | | | 10 | | | 10 | | | 10 | | | 10 | | |
| 6 | 7.9 | 7.9 | | | 7.9 | | | 7.9 | | | 6.8 | | | 6.8 | | | 6.8 | | | 6.8 | | |
| 10 | 4.7 | 4.7 | | | 4.7 | | | 4.7 | | | 4.0 | | | 4.0 | | | 4.0 | | | 4.0 | | |
| 16 | 2.9 | 2.9 | | | 2.9 | | | 2.9 | | | 2.5 | | | 2.5 | | | 2.5 | | | 2.5 | | |
| | | R | X | Z | R | X | Z | R | X | Z | R | X | Z | R | X | Z | R | X | Z | R | X | Z |
| 25 | 1.850 | 1.850 | 0.310 | 1.900 | 1.850 | 0.190 | 1.850 | 1.850 | 0.280 | 1.850 | 1.600 | 0.270 | 1.650 | 1.600 | 0.165 | 1.600 | 1.600 | 0.190 | 1.600 | 1.600 | 0.270 | 1.650 |
| 35 | 1.350 | 1.350 | 0.290 | 1.350 | 1.350 | 0.180 | 1.350 | 1.350 | 0.270 | 1.350 | 1.150 | 0.250 | 1.150 | 1.150 | 0.155 | 1.150 | 1.150 | 0.180 | 1.150 | 1.150 | 0.260 | 1.200 |
| 50 | 0.990 | 1.000 | 0.290 | 1.050 | 0.990 | 0.180 | 1.000 | 0.990 | 0.270 | 1.000 | 0.870 | 0.250 | 0.900 | 0.860 | 0.155 | 0.870 | 0.860 | 0.180 | 0.870 | 0.860 | 0.260 | 0.890 |
| 70 | 0.680 | 0.700 | 0.280 | 0.750 | 0.680 | 0.175 | 0.710 | 0.680 | 0.260 | 0.730 | 0.600 | 0.240 | 0.650 | 0.590 | 0.150 | 0.610 | 0.590 | 0.175 | 0.620 | 0.590 | 0.250 | 0.650 |
| 95 | 0.490 | 0.510 | 0.270 | 0.580 | 0.490 | 0.170 | 0.520 | 0.490 | 0.260 | 0.560 | 0.440 | 0.230 | 0.500 | 0.430 | 0.145 | 0.450 | 0.430 | 0.170 | 0.460 | 0.430 | 0.250 | 0.490 |
| 120 | 0.390 | 0.410 | 0.260 | 0.480 | 0.390 | 0.165 | 0.430 | 0.390 | 0.250 | 0.470 | 0.350 | 0.230 | 0.420 | 0.340 | 0.140 | 0.370 | 0.340 | 0.165 | 0.380 | 0.340 | 0.240 | 0.420 |
| 150 | 0.320 | 0.330 | 0.260 | 0.430 | 0.320 | 0.165 | 0.360 | 0.320 | 0.250 | 0.410 | 0.290 | 0.230 | 0.370 | 0.280 | 0.140 | 0.310 | 0.280 | 0.165 | 0.320 | 0.280 | 0.240 | 0.370 |
| 185 | 0.250 | 0.270 | 0.260 | 0.370 | 0.260 | 0.165 | 0.300 | 0.250 | 0.250 | 0.360 | 0.230 | 0.230 | 0.320 | 0.220 | 0.140 | 0.260 | 0.220 | 0.165 | 0.280 | 0.220 | 0.240 | 0.330 |
| 240 | 0.190 | 0.210 | 0.260 | 0.330 | 0.200 | 0.160 | 0.250 | 0.195 | 0.250 | 0.310 | 0.185 | 0.220 | 0.290 | 0.170 | 0.140 | 0.220 | 0.170 | 0.165 | 0.240 | 0.170 | 0.240 | 0.290 |
| 300 | 0.155 | 0.175 | 0.250 | 0.310 | 0.160 | 0.160 | 0.220 | 0.155 | 0.250 | 0.290 | 0.150 | 0.220 | 0.270 | 0.140 | 0.140 | 0.195 | 0.135 | 0.160 | 0.210 | 0.135 | 0.240 | 0.270 |
| 400 | 0.120 | 0.140 | 0.250 | 0.290 | 0.130 | 0.155 | 0.200 | 0.125 | 0.240 | 0.270 | 0.125 | 0.220 | 0.250 | 0.110 | 0.135 | 0.175 | 0.110 | 0.160 | 0.195 | 0.110 | 0.240 | 0.260 |
| 500 | 0.093 | 0.120 | 0.250 | 0.280 | 0.105 | 0.155 | 0.185 | 0.098 | 0.240 | 0.260 | 0.100 | 0.220 | 0.240 | 0.090 | 0.135 | 0.160 | 0.088 | 0.160 | 0.180 | 0.085 | 0.240 | 0.250 |
| 630 | 0.072 | 0.100 | 0.250 | 0.270 | 0.086 | 0.155 | 0.175 | 0.078 | 0.240 | 0.250 | 0.088 | 0.210 | 0.230 | 0.074 | 0.135 | 0.150 | 0.071 | 0.160 | 0.170 | 0.068 | 0.230 | 0.240 |
| 800 | 0.056 | | - | | 0.072 | 0.150 | 0.170 | 0.064 | 0.240 | 0.250 | | - | | 0.062 | 0.130 | 0.145 | 0.059 | 0.155 | 0.165 | 0.055 | 0.230 | 0.240 |
| 1000 | 0.045 | | - | | 0.063 | 0.150 | 0.165 | 0.054 | 0.240 | 0.240 | | - | | 0.055 | 0.130 | 0.140 | 0.050 | 0.155 | 0.165 | 0.047 | 0.230 | 0.240 |

*NOTE: * Spacings larger than one cable diameter will result in a larger voltage drop.*

DIE IN DIESEM DATENBLATT ENTHALTENEN INFORMATIONEN DIENEN NUR ALS RICHTLINIE UND KÖNNEN OHNE VORHERIGE ANKÜNDIGUNG ODER HAFTUNG GEÄNDERT WERDEN. WIR GEHEN DAVON AUS, DASS DIE INFORMATIONEN ZUM ZEITPUNKT DER VERÖFFENTLICHUNG KORREKT SIND. BITTE BEACHTEN SIE BEI DER AUSWAHL VON KABELZUBEHÖR, DASS DIE TATSÄCHLICHEN KABELABMESSUNGEN AUFGRUND VON FERTIGUNGSTOLERANZEN VARIIEREN KÖNNEN.



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