# RE-2X(St)H-PiMF/TiMF




## Areas of Use

Used for communication and instrumentation purposes in industries like oil exploration, cement, paper, steel, power generation as well as in intrinsically safe systems in hazardous areas like petrochemical plants and thermal power plants to monitor measuring equipment in process automation applications. HFFR types are less flammable in case of fire, mostly self-extinguishing, have low smoke density and they do not emit poisonous and corrosive gasses during a fire.

## Cable Construction

| | |
|---|---|
| **Conductor** | Stranded Annealed Copper (IEC/EN 60228, Class 2) |
| **Insulation** | XLPE (EN 50290-2-29) |
| **Core Colors** | Pair: Black / White, Numbered Triples: Balck / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered |
| **Separator** | PET Foil |
| **Individual Screen** | Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire) |
| **Lay-up** | Shielded pairs / triples / quads are stranded in layers |
| **Separator** | PET Foil |
| **Overall Screen** | Al-PET Foil (with 7x0.3 mm Tinned Copper Drain Wire) |
| **Outer Sheath** | Halogen Free Flame Retardant Compound (HFFR /LSZH/LSOH/FRNC) (EN 50290-2-27), RAL 9005 - Black, RAL 5015 - Blue (other colors upon request) |
| **Reference Standards** | BS/EN 50288-7 |

## Technical Properties

| | |
|---|---|
| **Operating Voltage** | 500 V* |
| **Test Voltage** | Core - Core: 2000 V; Core - Screen: 1000 V |
| **Conductor Resistance** | 0.50 mm² - ≤36 Ω/km; 0.75 mm² - ≤24.5 Ω/km; 1.00 mm² - ≤18.1 Ω/km; 1.30 mm² - ≤14.2 Ω/km; 1.50 mm² - ≤12.1 Ω/km; 2.50 mm² - ≤7.41 Ω/km |
| **Insulation Resistance** | >5000 M.Ωxkm |
| **Capacitance Unbalance (800 Hz)** | ≤500 pF/500m |
| **Capacitance (@800Hz)** | ≤115 nF/km (Capacitance values may increase by 20% up to 4 pairs) |
| **L/R Ratio** | 0.50 mm²..1.00 mm² - ≤25 µH/Ω; 1.30 mm²..1.50 mm² - ≤40 µH/Ω; 2.50 mm² - ≤60 µH/Ω |
| **Temperature Range** | Fixed: -40 °C .....+90 °C, Flexible: -5 °C .....+50 °C |
| **Flame Retardancy** | IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C) |
| **Smoke Density** | IEC/EN 61034-1 |
| **Amount of Halogen Acid Gas** | IEC/EN 60754-1 |
| **Corrosive Gases Measurement** | IEC/EN 60754-2 |
| **Oil Resistance** | IEC/EN 60811-404, ASTM No 2 oil 70 °C 4 hours |
| **Min. Bending Radius (Fixed)** | 8 x Cable Diameter |

## Cross Section

| Configuration / Cross-Section (mm/mm²) | Cable Diameter (mm) (± 5%) | Copper Weight (kg / km) | ~ Cable Weight (kg / km) |
|---|---|---|---|
| 1x2x0.5 | 5.7 | 14 | 52 |
| 2x2x0.5 | 9.4 | 29 | 109 |
| 3x2x0.5 | 9.9 | 42 | 132 |
| 4x2x0.5 | 11.0 | 54 | 163 |
| 5x2x0.5 | 12.1 | 66 | 194 |
| 6x2x0.5 | 13.1 | 78 | 224 |
| 7x2x0.5 | 13.1 | 91 | 243 |
| 8x2x0.5 | 14.9 | 103 | 286 |
| 10x2x0.5 | 17.0 | 127 | 349 |
| 12x2x0.5 | 17.6 | 152 | 399 |
| 14x2x0.5 | 18.5 | 177 | 446 |
| 16x2x0.5 | 19.7 | 201 | 502 |
| 18x2x0.5 | 20.8 | 226 | 559 |
| 20x2x0.5 | 22.1 | 250 | 618 |
| 24x2x0.5 | 24.7 | 299 | 740 |
| 30x2x0.5 | 26.2 | 373 | 881 |
| 1x2x0.75 | 6.2 | 19 | 61 |
| 2x2x0.75 | 10.3 | 39 | 128 |
| 3x2x0.75 | 11.0 | 57 | 163 |
| 4x2x0.75 | 12.0 | 74 | 197 |
| 5x2x0.75 | 13.3 | 91 | 236 |
| 6x2x0.75 | 14.6 | 108 | 278 |
| 7x2x0.75 | 14.6 | 126 | 303 |
| 8x2x0.75 | 16.6 | 143 | 357 |
| 10x2x0.75 | 18.9 | 177 | 436 |
| 12x2x0.75 | 19.6 | 212 | 500 |
| 14x2x0.75 | 20.7 | 246 | 569 |
| 16x2x0.75 | 22.0 | 281 | 640 |
| 18x2x0.75 | 23.3 | 315 | 713 |
| 20x2x0.75 | 24.7 | 350 | 788 |
| 24x2x0.75 | 27.6 | 419 | 941 |
| 30x2x0.75 | 29.3 | 523 | 1125 |
| 1x2x1 | 6.5 | 24 | 68 |
| 2x2x1 | 10.8 | 49 | 143 |
| 3x2x1 | 11.6 | 72 | 185 |
| 4x2x1 | 12.8 | 94 | 229 |
| 5x2x1 | 14.1 | 117 | 276 |
| 6x2x1 | 15.5 | 139 | 324 |
| 7x2x1 | 15.5 | 161 | 355 |
| 8x2x1 | 17.5 | 184 | 411 |
| 10x2x1 | 20.0 | 228 | 509 |
| 12x2x1 | 20.8 | 273 | 586 |
| 14x2x1 | 21.9 | 318 | 661 |
| 16x2x1 | 23.2 | 363 | 744 |
| 18x2x1 | 24.6 | 407 | 830 |

| | | | |
|---|---|---|---|
| 20x2x1 | 26.1 | 452 | 917 |
| 24x2x1 | 29.3 | 541 | 1107 |
| 30x2x1 | 31.1 | 676 | 1328 |
| 1x2x1.3 | 7.0 | 30 | 80 |
| 2x2x1.3 | 11.6 | 61 | 167 |
| 3x2x1.3 | 12.4 | 89 | 214 |
| 4x2x1.3 | 13.7 | 118 | 267 |
| 5x2x1.3 | 15.1 | 146 | 321 |
| 6x2x1.3 | 16.6 | 174 | 378 |
| 7x2x1.3 | 16.6 | 202 | 416 |
| 8x2x1.3 | 18.8 | 231 | 480 |
| 10x2x1.3 | 21.5 | 287 | 597 |
| 12x2x1.3 | 22.4 | 344 | 687 |
| 14x2x1.3 | 23.6 | 400 | 784 |
| 16x2x1.3 | 25.1 | 456 | 883 |
| 18x2x1.3 | 26.6 | 513 | 985 |
| 20x2x1.3 | 28.2 | 569 | 1088 |
| 24x2x1.3 | 31.5 | 682 | 1300 |
| 30x2x1.3 | 33.6 | 852 | 1574 |
| 1x2x1.5 | 7.2 | 33 | 85 |
| 2x2x1.5 | 12.0 | 68 | 176 |
| 3x2x1.5 | 12.8 | 99 | 228 |
| 4x2x1.5 | 14.2 | 131 | 285 |
| 5x2x1.5 | 15.6 | 162 | 343 |
| 6x2x1.5 | 17.2 | 193 | 404 |
| 7x2x1.5 | 17.2 | 225 | 445 |
| 8x2x1.5 | 19.5 | 256 | 521 |
| 10x2x1.5 | 22.4 | 319 | 647 |
| 12x2x1.5 | 23.1 | 382 | 738 |
| 14x2x1.5 | 24.4 | 445 | 841 |
| 16x2x1.5 | 25.9 | 508 | 949 |
| 18x2x1.5 | 27.5 | 571 | 1058 |
| 20x2x1.5 | 29.2 | 634 | 1180 |
| 24x2x1.5 | 32.7 | 760 | 1409 |
| 30x2x1.5 | 34.8 | 948 | 1708 |
| 1x2x2.5 | 8.5 | 51 | 117 |
| 2x2x2.5 | 14.3 | 103 | 246 |
| 3x2x2.5 | 15.3 | 152 | 323 |
| 4x2x2.5 | 16.9 | 201 | 406 |
| 5x2x2.5 | 18.7 | 250 | 491 |
| 6x2x2.5 | 20.7 | 299 | 586 |
| 7x2x2.5 | 20.7 | 348 | 648 |
| 8x2x2.5 | 23.5 | 397 | 756 |
| 10x2x2.5 | 26.9 | 495 | 937 |
| 12x2x2.5 | 28.0 | 593 | 1084 |
| 14x2x2.5 | 29.5 | 691 | 1238 |
| | | | |

| | | | |
|---|---|---|---|
| 16x2x2.5 | 31.3 | 789 | 1397 |
| 18x2x2.5 | 33.3 | 887 | 1569 |
| 20x2x2.5 | 35.3 | 985 | 1734 |
| 24x2x2.5 | 39.6 | 1181 | 2082 |
| 30x2x2.5 | 42.2 | 1475 | 2525 |

**23.11.2026 8:01**

**Legal Warning:** The information in this catalog is for marketing purposes. 2M Kablo can change this catalog during product development and any requirements. 2M Kablo can always change designs, technical specifications, images and other informations in this catalog without any notice.This catalog is only a guide and is valid at the time of download, not valid for an offer or contract.
If you need more information about the products in this catalog, please contact us via info@2mkablo.com or call +90 (212) 222 8250.