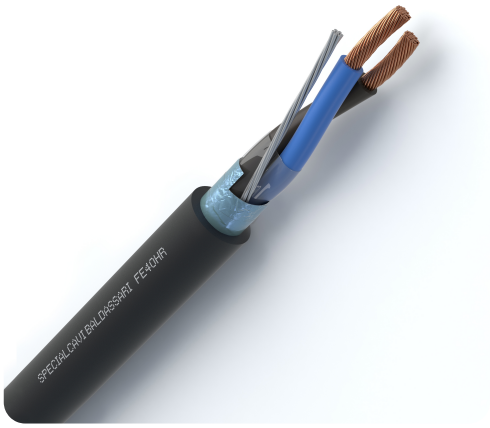
# FE4OHR

## CPR CLASS: EN 50575:2014+A1:2016 Dca-s3,d2,a3




*The product render is for illustration only.*


## Application

Multi-core shielded cable for data transmission between central and peripheral units, ensuring high signal quality in civil and industrial environments. Compliant with EU CPR Regulation 305/11, designed to limit the spread of fire and smoke. Buried laying (direct and with protection) and outdoor laying are allowed.

## Marking

<meters> CE 0987 SPECIALCAVI BALDASSARI FE4OHR <formation> 0.6/1kV DCA-S3,D2,A3 <lot> <year>

## Manufacturing characteristics

**Conductor:** bare copper class 5 flexible, according to CEI 20-29 EN IEC 60228

**Insulation:** crosslinked polyethylene (XLPE) compound, according to CEI 20-11

**Wrapping and protection:** polyester tape

**Screen:** aluminium/polyester tape, with flexible tinned copper drain wire

**Outer sheath:** polyvinyl chloride (PVC) compound, UV resistant

**Outer sheath colour:** black, based on RAL 9005

**Cable geometry:** round

**On request**

- Custom cores and outer sheath colouring

## Reaction to fire - EN 13501-6

Reaction to fire according to EN 13501-6: Class
**Dca**

Reaction to fire according to EN 13501-6: Smoke production
**s3**

Reaction to fire according to EN 13501-6: Flaming droplets/particles
**d2**

Reaction to fire according to EN 13501-6: Acidity
**a3**

## Specify standards

**CPR standard for reaction to fire**

Common test methods for cables under fire conditions - Heat release and smoke production measurement on cables during flame spread test: EN 50399

## Electrical characteristics

**Nominal voltage $U_o$:**
- 600V

**Nominal voltage U:**
- 1000V

**Sheath operating voltage:**
- 600/1000V

**Test voltage:**
- 4,0kV 50Hz A.C. (5 min) c-c
- 3,0kV 50Hz A.C. (1 min) c-s

**Maximum voltage:**
- $U_o$/U 1800/1800V D.C.
- $U_o$/U 693/1200V A.C.

**Minimum insulation resistance:**
- >200MΩxKm

## Temperatures

Permitted cable outer temperature during assembling/handling
**0°C**

Operating temperature range
**-15°C | +90°C**

Maximum conductor temperature
**+90°C**

Maximum short-circuit temperature
**+250°C**

## Product characteristics

| | | |
|---|---|---|
| **Flame retardant** | IEC 60332-1-2 | ✓ |
| | IEC 60332-3-21 (Cat A F/R) | ✗ |
| | IEC 60332-3-22 (Cat A) | ✗ |
| | IEC 60332-3-23 (Cat B) | ✗ |
| | IEC 60332-3-24 (Cat C) | ✗ |
| | IEC 60332-3-25 (Cat D) | ✗ |
| **Low smoke** | EN IEC 61034-2 | ✗ |
| **Halogen Free** | EN IEC 60754-1 | ✗ |
| | EN IEC 60754-2 | ✗ |
| | EN IEC 60754-3 | ✗ |

| | | |
|---|---|---|
| **Oil resistant** | EN IEC 60811-404 | ✗ |
| **Low temperature resistant** | EN 60811-504+505+506 | ✓ |
| **UV resistant** | ISO 4892-2 (QUV A test) | ✓ |
| | Aging hours | 500 h |
| **Ozone resistant** | | ✗ |
| **Hydrocarbons resistant** | ENI 181 | ✗ |
| **Fire resistant** | IEC 60331-1 (diameter > 20 mm) or EN 50200 (diameter < 20 mm) | ✗ |
| **Presence of water** | HD 60364-5-54:2009 | AD7 |
| **Impact resistant** | HD 60364-5-54:2009 | ✗ |

## Laying conditions

**FIXED LAYING** ✓

**INDOOR LAYING** ✓

**LAYING IN AIR WITH PROTECTION** ✓

**MAXIMUM TENSILE STRENGTH DURING INSTALLATION**
0,050 kN copper cross-section of conductors

**MOBILE LAYING** ✗

**OUTDOOR LAYING** ✓

**DIRECTLY BURIED LAYING** ✓

**WITH RODENT PROTECTION** ✗

**OCCASIONAL MOBILE LAYING W/O STRESS** ✗

**LAYING IN FREE AIR** ✓

**BURIED LAYING WITH PROTECTION** ✓

**MINIMUM BENDING RADIUS**
10 times the outer diameter

# FE4OHR

| Nominal cross section conductor [mm²] | Conductor resistance at 20°C [Ohm/Km] |
|---|---|
| 0.50 | 39,0 |
| 0.75 | 26,0 |
| 1.00 | 19,5 |
| 1.50 | 13,3 |

## FE4OHR

| Article code | Formation [n° x mm²] | Twisted/stranded cores | Outer diameter approx [mm] | Weight approx [Kg/Km] | Cores colour | Cores identification standards |
|---|---|---|---|---|---|---|
| FE4OHR05002 | 2 X 0,50 | Cores twisted in a pair | 7,5 | 95 | Blue-Black | - |
| FE4OHR05003 | 3 X 0,50 | Cores twisted in a triple | 7,8 | 104 | Blue-Brown-Black | CEI UNEL 00722 - HD 308 S2 |
| FE4OHR05004 | 4 X 0,50 | Cores twisted in a quad | 8,4 | 117 | Black cores with progressive numbering | - |
| FE4OHR05006 | 6 X 0,50 | Cores stranded in concentric layers | 9,6 | 149 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR05008 | 8 X 0,50 | Cores stranded in concentric layers | 11,3 | 193 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR05010 | 10 X 0,50 | Cores stranded in concentric layers | 12,2 | 213 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR05012 | 12 X 0,50 | Cores stranded in concentric layers | 12,2 | 221 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR05016 | 16 X 0,50 | Cores stranded in concentric layers | 13,6 | 276 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR05020 | 20 X 0,50 | Cores stranded in concentric layers | 15,1 | 327 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR05025 | 25 X 0,50 | Cores stranded in concentric layers | 16,7 | 383 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR05030 | 30 X 0,50 | Cores stranded in concentric layers | 17,5 | 433 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR05036 | 36 X 0,50 | Cores stranded in concentric layers | 18,8 | 494 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR05041 | 41 X 0,50 | Cores stranded in concentric layers | 20,2 | 558 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR07502 | 2 X 0,75 | Cores twisted in a pair | 8,1 | 106 | Blue-Black | - |
| FE4OHR07503 | 3 X 0,75 | Cores twisted in a triple | 8,4 | 120 | Blue-Brown-Black | CEI UNEL 00722 - HD 308 S2 |
| FE4OHR07504 | 4 X 0,75 | Cores twisted in a quad | 9,1 | 139 | Black cores with progressive numbering | - |
| FE4OHR07506 | 6 X 0,75 | Cores stranded in concentric layers | 10,8 | 183 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR07508 | 8 X 0,75 | Cores stranded in concentric layers | 12,4 | 232 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR07510 | 10 X 0,75 | Cores stranded in concentric layers | 13,7 | 271 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR07512 | 12 X 0,75 | Cores stranded in concentric layers | 13,7 | 283 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR07516 | 16 X 0,75 | Cores stranded in concentric layers | 15,2 | 344 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR07520 | 20 X 0,75 | Cores stranded in concentric layers | 16,8 | 412 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR07525 | 25 X 0,75 | Cores stranded in concentric layers | 18,8 | 495 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR07530 | 30 X 0,75 | Cores stranded in concentric layers | 19,6 | 547 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR07536 | 36 X 0,75 | Cores stranded in concentric layers | 21,2 | 644 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |

## FE4OHR

| Article code | Formation [n° x mm²] | Twisted/stranded cores | Outer diameter approx [mm] | Weight approx [Kg/Km] | Cores colour | Cores identification standards |
|---|---|---|---|---|---|---|
| FE4OHR07541 | 41 X 0,75 | Cores stranded in concentric layers | 22,9 | 728 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR10002 | 2 X 1,00 | Cores twisted in a pair | 8,6 | 115 | Blue-Black | - |
| FE4OHR10003 | 3 X 1,00 | Cores twisted in a triple | 8,9 | 131 | Blue-Brown-Black | CEI UNEL 00722 - HD 308 S2 |
| FE4OHR10004 | 4 X 1,00 | Cores twisted in a quad | 9,6 | 155 | Black cores with progressive numbering | - |
| FE4OHR10005 | 5 X 1,00 | Cores stranded in concentric layers | 10,6 | 183 | Black cores with progressive numbering | - |
| FE4OHR10007 | 7 X 1,00 | Cores stranded in concentric layers | 11,4 | 216 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR10008 | 8 X 1,00 | Cores stranded in concentric layers | 13,3 | 265 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR10010 | 10 X 1,00 | Cores stranded in concentric layers | 14,7 | 310 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR10012 | 12 X 1,00 | Cores stranded in concentric layers | 14,7 | 325 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR10016 | 16 X 1,00 | Cores stranded in concentric layers | 16,2 | 399 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR10019 | 19 X 1,00 | Cores stranded in concentric layers | 17,0 | 442 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR10025 | 25 X 1,00 | Cores stranded in concentric layers | 20,1 | 577 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR10030 | 30 X 1,00 | Cores stranded in concentric layers | 21,1 | 652 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR15002 | 2 X 1,50 | Cores twisted in a pair | 9,4 | 137 | Blue-Black | - |
| FE4OHR15003 | 3 X 1,50 | Cores twisted in a triple | 9,8 | 158 | Blue-Brown-Black | CEI UNEL 00722 - HD 308 S2 |
| FE4OHR15004 | 4 X 1,50 | Cores twisted in a quad | 10,8 | 191 | Black cores with progressive numbering | - |
| FE4OHR15005 | 5 X 1,50 | Cores stranded in concentric layers | 11,7 | 225 | Black cores with progressive numbering | - |
| FE4OHR15007 | 7 X 1,50 | Cores stranded in concentric layers | 12,7 | 267 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR15010 | 10 X 1,50 | Cores stranded in concentric layers | 16,4 | 390 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR15012 | 12 X 1,50 | Cores stranded in concentric layers | 16,4 | 412 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR15016 | 16 X 1,50 | Cores stranded in concentric layers | 18,4 | 519 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR15019 | 19 X 1,50 | Cores stranded in concentric layers | 19,3 | 582 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |
| FE4OHR15025 | 25 X 1,50 | Cores stranded in concentric layers | 22,9 | 760 | Black cores with progressive numbering | CEI UNEL 00725 - CEI EN 50334 |