# Product Environmental Profile

| | |
|---|---|
| Family technical name: | KLARO FG16OR16 |
| Family brand name: | KLARO FG16OR16 |
| Reference product name : | KLARO FG16OR16 3G2,5 |



| 484 | 2,20216 | 25,1 | 13037 |
|---|---|---|---|
| kg $CO_2$ eq. | kg Sb eq. | $m^3$ | MJ |
| Climate change - total | Resource use - minerals & metals (ADPe) | Net use of fresh water | Total Primary Energy |

*The above environmental impacts are "cradle to gate" or "Manufacturing phase" values (A1-A3) for 1km of cable*

| | | | |
|---|---|---|---|
| Registration number : | NXNS-00775-V01.01-EN | Drafting rules : | PEP-PCR-ed4-EN-2021 09 06 |
| | | Supplemented by : | PSR-0001-ed4-EN-2022 11 16 |
| Verifier accreditation N°: | VH42 | Information and reference documents : | **www.pep-ecopassport.org** |
| Date of issue : | 06-2026 | Validity period: | **5 years** |

**Independent verification of the declaration and data, in accordance with ISO 14025 : 2006**

Internal ☐ External ☒

The PCR review was conducted by a panel of experts chaired by Julie Orgelet (DDemain)

PEPs are compliant with XP C08-100-1:2016 and EN 50693:2019 or NF E38-500 :2022
The components of the present PEP may not be compared with components from any other program.

Document complies with ISO 14025:2006 "Environmental labels and declarations. Type III environmental declarations"

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## Nexans Corporate Social Responsibility commitment

Corporate Social Responsibility which is the confluence between environmental, economic and social aspects, is an integral part of the Nexans's strategy. Nexans has been supporting the **United Nations Global Compact** since December 2008 and has implemented internal action plans to integrate Sustainable Development at all levels. It includes responsible governance, healthy and safe working environment for employees, reduced global carbon footprint through the **Nexans Carbon Neutrality strategy.**




## Reference Product description

### KLARO FG16OR16 3G2,5

Cable suitable for energy supply in industry, building sites and construction industry. For fixed wiring indoors and outdoors, even wet (AD7); for direct and indirect underground wiring. Suitable for installation at open air, on walls, metal structures, cable trays, pipes, wiring holders and similar devices. Suitable for bundle installations in environments at risk of fire.
Cable manufactured according to CEI UNEL 35318 (energy) or CEI UNEL 35322 (control), CPR Regulation compliant to Class Cca

## Products covered:

The aforementioned products belong to the category power transmission wires and cables of the Product Specific Rules (PSR) for Wires, Cables and Accessories (PSR-0001) of the PEP ecopassport® program.

The PEP concern all the products in the range KLARO FG16OR16 and the reference product of the PEP is KLARO FG16OR16 3G2,5.

## Functional unit:

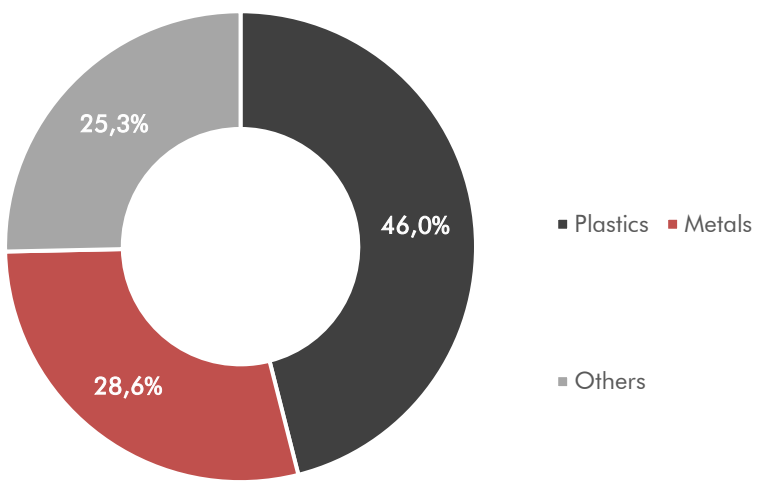
To transmit energy expressed for 1A over a distance of 1km during 30 years and a 70% use rate, in accordance with the relevant standards, detailed in the data sheet available on our website www.latrivenetacavi.com.
Lifetime and use rate correspond to the Building - Residential / Tertiary / Industrial application as defined in the table given in Appendix 1 of the specific rules for wires, cables and accessories."

This PEP has been drawn up considering the following parameters:

- 1 km for manufacturing, distribution and end-of-life stages
- 1 km and 1 A for the use stage

The potential impact of the use stage shall be calculated by the PEP user considering the real amperage through the product during the use phase by multiplying the impact by the square of the intensity. This PEP is valid in the intensity range taking into account the maximum allowable intensity.

## Constituent materials




The total mass of the reference product and packaging is 203,51 kg/km. Constituent materials are distributed as given in the graph.

The product contains 17,4% of recycled metals.

Nexans has implemented necessary procedures to ensure product compliance with the relevant standards when products are put on the market.

## II. LIFE CYCLE ASSESSMENT

### Manufacturing

- All the products in the range KLARO FG16OR16 are manufactured in Brendola - Italy.
- The electricity mix model for the manufacturing stage is from Italy >1 kV.
- The reference year for the collected LCI is 2025
- All Nexans sites in Italy have implemented a certified Environmental Management System according to ISO14001 standard.

#### Packaging designed to reduce environmental impacts:

- Packaging was designed according to the applicable standard (Directive 94/62/EC).
- The packaging considered to transport the reference product is a Wooden drum. It is considered to be used 1 time.

### Distribution

The transportation scenario for the impact assessment of the distribution stage is intracontinental, considering:

- 3500 km covered by truck.

### Installation

Installation processes for the reference product are considered out of the scope of the study, according to the Product Specific Rules document for "Wires, Cables and Accessories" from PEP ecopassport® program. Only 5% of product losses and packaging disposal is considered inthis stage

### Use

The use scenario considers the operation of the reference product in Building - Residential / Tertiary / Industrial, with:

- Reference Lifetime (RLT) = 30 years
- Use rate = 70%

**Considering the aforementioned hypotheses, the energy consumption over the RLT at use stage is 2936 kWh/km.**

*This value is calculated for I=1 A. For the effective consumption of the cable installed, multiply the value given by the square of intensity.*

- The electricity mix considered at use stage is Europe ≤1 kV.
- No maintenance is necessary to ensure the operation of the cable during the considered reference lifetime.

The reference lifetime mentioned in this PEP corresponds to an average data used for impact calculation, taking into account the average time a cable might be installed in a system before being disposed. **It CANNOT BE considered as an equivalent to the guaranteed product technical lifetime.**

### End-of-life

- The transportation scenario chosen for the impact analysis associated with end-of-life stage is 1000 km covered by truck.
- The assumed electricity mix model for end-of-life stage is Europe ≤1 kV.

The cables are recycled through a grinding process for the separation of polymers and metal parts.

The separated materials are then assumed to be recycled, incinerated or landfilled according to default scerios given in the PEF ANNEX C_V2.1_May2020 :

| End of life scenario per material considered | | | |
|---|---|---|---|
| Material | Recycling | Incineration | Landfill |
| Aluminium | 85% | 7% | 8% |
| Copper | 95% | 2% | 3% |
| Steel | 85% | 7% | 8% |
| Other metals | 0% | 45% | 55% |
| PE | 23% | 35% | 43% |
| PP | 18% | 37% | 45% |
| PVC | 32% | 31% | 37% |
| Other plastics | 29% | 32% | 39% |
| Other materials | 0% | 0% | 100% |

If the customer wants to recycle their cables at the end-of-life, Nexans has the know-how of cables recycling at their end-of-life through the structure named Nexans Recycling Services (recycling.services@nexans.com), to offer a complete solution for the recycling of polymers and metals.

## III. ENVIRONMENTAL IMPACTS

The reference product KLARO FG16OR16 3G2,5 belongs to the Product Category Rules (PEP-PCR-ed4-EN-2021 09 06) and Product Specific Rules (PSR-0001-ed4-EN-2022 11 16) from the PEP ecopassport® program. According to the PCR, the life cycle impact assessment of the reference product takes into account manufacturing, distribution, installation, use and end-of-life stages.

All the necessary hypotheses to evaluate the environmental impacts of the reference product lifecycle are presented in the previous sections (electricity mix models, use scenario, etc). The software used to perform the evaluation is EIME 6.3.4-11, with the Nexans-2025-04 database.

Representativeness: the study is representative of cable production in Italy with a intracontinental scenario for distribution. The electricity model for use is Europe ≤1 kV and the model for end-of-life is Europe ≤1 kV.

### Impact results for 1000 m of KLARO FG16OR16 3G2,5

**Mandatory indicators:**

| Environmental indicator/flows | Unit | A1-Raw materials | A2-Transport to manufacturer | A3-Manufacturing process | *Total manufacturing A1-A3* | A4-Distribution to customer | A5-Installation* | B6-Use** (for 1 A) | C1-C4-End of life | TOTAL (for 1 A) |
|---|---|---|---|---|---|---|---|---|---|---|
| Climate change - total (GWP) | kg CO eq. | 3,70E+02 | 4,17E+01 | 7,22E+01 | *4,84E+02* | 3,27E+01 | 6,67E+01 | 1,19E+03 | 7,36E+01 | 1,84E+03 |
| Climate change - fossil (GWPf) | kg CO eq. | 3,60E+02 | 4,17E+01 | 1,01E+02 | *5,03E+02* | 3,27E+01 | 3,53E+01 | 1,16E+03 | 7,29E+01 | 1,80E+03 |
| Climate change - biogenic (GWPb) | kg CO eq. | 7,86E+00 | 1,05E-04 | -2,91E+01 | *-2,13E+01* | 1,34E-04 | 3,13E+01 | 2,62E+01 | 6,99E-01 | 3,70E+01 |
| Climate change - land use & land use change (GWPlu) | kg CO eq. | 2,76E+00 | 3,88E-05 | 7,73E-05 | *2,76E+00* | 4,95E-05 | 1,29E-01 | 0,00E+00 | 1,38E-05 | 2,89E+00 |
| Ozone layer depletion (ODP) | kg CFC-11 eq. | 5,18E-05 | 3,31E-07 | 2,11E-06 | *5,42E-05* | 3,97E-07 | 2,87E-06 | 5,08E-06 | 1,42E-06 | 6,40E-05 |
| Acidification potential of soil and water (AP) | mol H+ eq. | 3,30E+00 | 6,88E-01 | 6,44E-01 | *4,63E+00* | 5,17E-02 | 2,66E-01 | 6,21E+00 | 2,60E-01 | 1,14E+01 |
| Eutrophication - freshwater (Epf) | kg PO43- eq. | 2,03E-02 | 1,01E-04 | 2,57E-03 | *2,30E-02* | 1,22E-04 | 1,11E-03 | 2,84E-03 | 2,66E-04 | 2,73E-02 |
| Eutrophication - marine (Epm) | kg N eq. | 5,16E-01 | 1,55E-01 | 1,23E-01 | *7,94E-01* | 9,37E-03 | 4,71E-02 | 7,27E-01 | 4,67E-02 | 1,62E+00 |
| Eutrophication - terrestrial (Ept) | mol N eq. | 5,64E+00 | 1,70E+00 | 1,43E+00 | *8,77E+00* | 1,03E-01 | 5,38E-01 | 1,17E+01 | 6,31E-01 | 2,17E+01 |
| Photochemical ozone formation - human health (POCP) | kg NMVOC eq. | 1,33E+00 | 4,44E-01 | 3,44E-01 | *2,11E+00* | 3,32E-02 | 1,29E-01 | 2,30E+00 | 1,41E-01 | 4,72E+00 |
| Resource use - minerals & metals (ADPe) | kg Sb eq. | 2,20E+00 | 9,71E-06 | 9,84E-05 | *2,20E+00* | 1,17E-05 | 1,03E-01 | 3,85E-04 | 2,42E-05 | 2,31E+00 |
| Resource use - fossils (ADPf) | MJ | 7,61E+03 | 6,54E+02 | 1,78E+03 | *1,00E+04* | 5,81E+02 | 6,73E+02 | 2,85E+04 | 1,24E+03 | 4,10E+04 |
| Water use (WU) | m3 eq. | 2,68E+02 | 9,75E-01 | 7,54E+02 | *1,02E+03* | 1,18E+00 | 4,87E+01 | 9,00E+01 | 5,84E+00 | 1,17E+03 |
| Use of renewable primary energy excluding renewable primary energy used as raw material | MJ | 1,40E+02 | 1,69E+00 | 2,71E+02 | *4,12E+02* | 1,83E+00 | 3,67E+01 | 6,66E+03 | 1,87E+02 | 7,30E+03 |
| Use of renewable primary energy used as raw material (PERM) | MJ | 0,00E+00 | 0,00E+00 | 4,06E+02 | *4,06E+02* | 0,00E+00 | 2,03E+01 | 0,00E+00 | 0,00E+00 | 4,26E+02 |
| Total use of renewable primary energy resources (PERT) | MJ | 1,40E+02 | 1,69E+00 | 6,77E+02 | *8,19E+02* | 1,83E+00 | 5,70E+01 | 6,66E+03 | 1,87E+02 | 7,73E+03 |
| Non-renewable primary energy excluding non-renewable primary energy resources used as raw | MJ | 8,13E+03 | 6,54E+02 | 1,72E+03 | *1,05E+04* | 5,81E+02 | 6,97E+02 | 2,85E+04 | 1,24E+03 | 4,15E+04 |
| Use of non renewable primary energy resources used as raw materials (PENRM) | MJ | 1,65E+03 | 0,00E+00 | 5,94E+01 | *1,71E+03* | 0,00E+00 | 7,74E+01 | 0,00E+00 | 0,00E+00 | 1,79E+03 |
| Total use of non-renewable primary energy resources (PENRT) | MJ | 9,78E+03 | 6,54E+02 | 1,78E+03 | *1,22E+04* | 5,81E+02 | 7,75E+02 | 2,85E+04 | 1,24E+03 | 4,33E+04 |
| Use of secondary material (SM) | kg | 3,80E-02 | 0,00E+00 | 0,00E+00 | *3,80E-02* | 0,00E+00 | 1,78E-03 | 0,00E+00 | 0,00E+00 | 3,98E-02 |
| Use of renewable secondary fuels (RSF) | MJ | 0,00E+00 | 0,00E+00 | 0,00E+00 | *0,00E+00* | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| Use of non renewable secondary fuels (NRSF) | MJ | 0,00E+00 | 0,00E+00 | 0,00E+00 | *0,00E+00* | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| Net use of fresh water (FW) | m3 | 7,55E+00 | 2,27E-02 | 1,75E+01 | *2,51E+01* | 2,74E-02 | 1,19E+00 | 2,10E+00 | 1,15E-01 | 2,85E+01 |
| Hazardous waste disposed (HWD) | kg | 6,20E+00 | 1,07E-01 | 3,58E+00 | *9,89E+00* | 1,37E-01 | 5,25E+00 | 3,28E+01 | 1,52E+01 | 6,32E+01 |
| Non hazardous waste disposed (NHWD) | kg | 6,37E+01 | 2,85E+00 | 1,19E+01 | *7,85E+01* | 3,04E+00 | 5,93E+00 | 1,79E+02 | 7,05E+00 | 2,73E+02 |
| Radioactive waste disposed | kg | 8,91E-02 | 2,21E-03 | 4,72E-03 | *9,61E-02* | 2,40E-03 | 5,12E-03 | 4,22E-02 | 2,49E-03 | 1,48E-01 |
| Components for reuse (CRU) | kg | 0,00E+00 | 0,00E+00 | 0,00E+00 | *0,00E+00* | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| Materials for recycling (MFR) | kg | 2,70E-03 | 0,00E+00 | 2,41E+00 | *2,42E+00* | 0,00E+00 | 2,60E+00 | 0,00E+00 | 3,16E+01 | 3,66E+01 |
| Materials for energy recovery (MER) | kg | 4,36E-04 | 0,00E+00 | 5,05E-02 | *5,09E-02* | 0,00E+00 | 6,54E-03 | 0,00E+00 | 8,28E-02 | 1,40E-01 |
| Exported Energy (EE) | MJ | 0,00E+00 | 0,00E+00 | 0,00E+00 | *0,00E+00* | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |

* Installation stage includes only 5% product lossses & packaging disposal. Impacts related to installation processes might be completed by the PEP user.

**Energy losses in use phase are calculted for 1A current intensity, the PEP user must multiply this impact by square of real current intensity

| Environmental indicator/flows | Unit | Total |
|---|---|---|
| Biogenic carbon content - product (BC-pro) | kg of C | 0,00E+00 |
| Biogenic carbon content - packaging (BC-pack) | kg of C | 1,09E+01 |

Biogenic carbon storage is calculated according to the -1/+1 assessment methodology & according to EN 16485.

## Optional indicators:

| Environmental indicator/flow | Unit | A1-Raw materials | A2-Transport to manufacturer | A3-Manufacturing process | *Total A1-A3* | A4-Distribution to customer | A5-Installation* | B6-Use** (for 1 A) | C1-C4-End of life | TOTAL (for 1 A) |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Primary Energy (TPE) | MJ | 9,92E+03 | 6,55E+02 | 2,46E+03 | *1,30E+04* | 5,83E+02 | 8,32E+02 | 3,51E+04 | 1,43E+03 | 5,10E+04 |
| EF-particulate matter (EF-PM) | Disease occurance | 3,60E-05 | 3,70E-06 | 4,01E-06 | *4,37E-05* | 4,43E-07 | 2,39E-06 | 4,86E-05 | 2,03E-06 | 9,72E-05 |
| Ionising radiation, human health (IR) | kg U235 eq. | 3,17E+01 | 9,39E-01 | 1,57E+01 | *4,83E+01* | 1,16E+00 | 6,69E+00 | 1,55E+03 | 4,93E+01 | 1,66E+03 |
| Ecotoxicity, freshwater (Eco-fw) | CTUe | 3,52E+03 | 7,58E+02 | 2,99E+02 | *4,57E+03* | 9,54E+02 | 4,41E+02 | 1,78E+03 | 8,70E+02 | 8,62E+03 |
| Human toxicity, cancer (HT-c) | CTUh-c | 4,00E-06 | 5,25E-09 | 1,09E-07 | *4,12E-06* | 6,41E-09 | 2,00E-07 | 1,47E-07 | 1,36E-07 | 4,61E-06 |
| Human toxicity, non-cancer (HT-nc) | CTUh-nc | 1,32E-05 | 1,01E-07 | 2,88E-07 | *1,36E-05* | 1,22E-07 | 7,03E-07 | 3,48E-06 | 3,02E-07 | 1,82E-05 |
| Land use (LU) | No dimension | 6,26E+02 | 1,10E-01 | 5,98E+01 | *6,86E+02* | 1,40E-01 | 3,23E+01 | 3,15E+01 | 1,07E+00 | 7,51E+02 |

Environmental indicators are calculated according to JRC method - EF3.1.

## V. EXTRAPOLATION RULES FOR THE PRODUCT FAMILY KLARO FG16OR16

### General information

The extrapolation rules have been calculated based on the environment impact assessment results of 3 products in the range KLARO FG16OR16. The reference product is KLARO FG16OR16 3G2,5. The weight of reference product is 174,414 kg/km.

The reference product has 2 active conductor(s) and a resistivity of 15,96 ohm/km.

The extrapolation rules below apply to 1000m of product. In the following sections, the product weight is expressed in kg for 1000m of cable, where applicable.

### Extrapolation rules for each life cycle stage

| | Life cycle stage | Applicable extrapolation principle | Formula to calculate each environmental indicator | Example: If the product weight is 184,414 kg/km, each indicator value shall be calculated with: | Mean deviation of extrapolation rule |
|---|---|---|---|---|---|
| | A1-Raw materials | Linear variation versus weight | Indicator = a x Cable weight + b | Indicator = (184,414 x a) + b | 22,36% |
| | A2-Transport to manufacturer | Linear variation versus weight | Indicator = a x Cable weight + b | Indicator = (184,414 x a) + b | 1,89% |
| | A3-Manufacturing process | Linear variation versus weight | Indicator = a x Cable weight + b | Indicator = (184,414 x a) + b | 4,18% |
| | A4-Distribution to customer | Linear variation versus weight | Indicator = a x Cable weight + b | Indicator = 184,414 x a + b. | 1,36% |
| | A5-Installation | Linear variation versus weight | Indicator = a x Cable weight + b | Indicator = 184,414 x a + b. | 9,01% |
| | B6-Use | Variation versus resistivity ratio | Indicator = (Product Resistivity / Reference product Resistivity) x (Nb of active conductors / Nb of active conductors in the reference product) x Indicator value for Reference Product | Example: If the product resistivity is 1,2 ohm/km & has 1 active conductor, Indicator = (1,2/15,96) x (1/2) x indicator of reference product. | 0,00% |
| | C1-C4-End of life | Linear variation versus weight | Indicator = a x Cable weight + b | Indicator = (184,414 x a) + b | 2,81% |

### Table to be considered for extrapolation calculations of different life cycle stages:

| | A1-Raw materials | | | | A2-Transport to manufacturer | | A3-Manufacturing process | | A4-Distribution to customer | | A5-Installation | | C1-C4 End of life | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | a | b | a | b | a | b | a | b | a | b | a | b | a | b |
| GWP | 4,49E+00 | -3,59E+02 | - | - | 3,03E-01 | -1,02E+01 | 4,38E-01 | -5,43E+00 | 1,86E-01 | 8,83E-01 | 4,72E-01 | -7,50E+00 | 3,20E-01 | 1,74E+01 |
| GWPf | 4,44E+00 | -3,62E+02 | - | - | 3,03E-01 | -1,02E+01 | 5,90E-01 | 1,74E+00 | 1,86E-01 | 8,83E-01 | 3,08E-01 | -1,49E+01 | 3,17E-01 | 1,73E+01 |
| GWPb | 1,02E-02 | 5,67E+00 | - | - | 3,90E-07 | 3,61E-05 | -1,52E-01 | -7,17E+00 | 7,60E-07 | 3,61E-06 | 1,63E-01 | 7,53E+00 | 3,11E-03 | 1,60E-01 |
| GWPlu | 3,54E-02 | -3,23E+00 | - | - | 1,44E-07 | 1,33E-05 | 2,21E-07 | 3,90E-05 | 2,81E-07 | 1,34E-06 | 1,65E-03 | -1,50E-01 | 7,53E-08 | 6,41E-07 |
| ODP | 1,06E-07 | 3,32E-05 | - | - | 1,42E-09 | 8,31E-08 | 1,16E-08 | 3,26E-07 | 2,25E-09 | 1,07E-08 | 7,26E-09 | 1,63E-06 | 7,10E-09 | 1,83E-07 |
| AP | 3,66E-02 | -2,85E+00 | - | - | 8,54E-03 | -7,57E-01 | 3,53E-03 | 7,16E-02 | 2,93E-04 | 1,39E-03 | 2,53E-03 | -1,57E-01 | 1,17E-03 | 5,62E-02 |
| Epf | 2,04E-04 | -1,46E-02 | - | - | 4,26E-07 | 2,65E-05 | 1,45E-05 | 9,63E-05 | 6,94E-07 | 3,30E-06 | 1,04E-05 | -6,70E-04 | 1,16E-06 | 6,50E-05 |
| Epm | 5,26E-03 | -3,71E-01 | - | - | 1,94E-03 | -1,74E-01 | 7,52E-04 | 2,40E-03 | 5,32E-05 | 2,53E-04 | 4,25E-04 | -2,37E-02 | 1,98E-04 | 1,23E-02 |
| Ept | 5,74E-02 | -4,04E+00 | - | - | 2,13E-02 | -1,90E+00 | 7,88E-03 | 1,67E-01 | 5,84E-04 | 2,78E-03 | 4,72E-03 | -2,47E-01 | 2,70E-03 | 1,62E-01 |
| POCP | 1,31E-02 | -8,53E-01 | - | - | 5,51E-03 | -4,89E-01 | 1,88E-03 | 4,70E-02 | 1,89E-04 | 8,97E-04 | 1,12E-03 | -5,56E-02 | 6,22E-04 | 3,30E-02 |
| ADPe | 4,25E-03 | 1,40E+00 | - | - | 4,13E-08 | 2,48E-06 | 3,79E-07 | 3,25E-05 | 6,62E-08 | 3,15E-07 | 1,98E-04 | 6,55E-02 | 1,98E-07 | -9,49E-06 |
| ADPf | 7,86E+01 | -5,08E+03 | - | - | 4,26E+00 | -7,94E+01 | 1,12E+01 | -1,01E+02 | 3,30E+00 | 1,57E+01 | 5,50E+00 | -2,19E+02 | 7,27E+00 | -1,08E+01 |
| WU | 1,91E+00 | -5,99E+01 | - | - | 4,09E-03 | 2,57E-01 | 1,81E+00 | 4,35E+02 | 6,69E-03 | 3,18E-02 | 1,78E-01 | 1,77E+01 | 2,32E-02 | 1,80E+00 |
| PÈRE | 1,98E-01 | 9,98E+01 | - | - | 8,59E-03 | 1,95E-01 | 1,73E+00 | -2,72E+01 | 1,04E-02 | 4,95E-02 | 1,80E-01 | 6,45E+00 | 9,48E-01 | 2,34E+01 |
| PERM | 0,00E+00 | 0,00E+00 | - | - | 0,00E+00 | 0,00E+00 | 2,13E+00 | 9,56E+01 | 0,00E+00 | 0,00E+00 | 1,06E-01 | 4,78E+00 | 0,00E+00 | 0,00E+00 |
| PERT | 1,98E-01 | 9,98E+01 | - | - | 8,59E-03 | 1,95E-01 | 3,86E+00 | 6,84E+01 | 1,04E-02 | 4,95E-02 | 2,86E-01 | 1,12E+01 | 9,48E-01 | 2,34E+01 |
| PENRE | 7,59E+01 | -4,38E+03 | - | - | 4,26E+00 | -7,94E+01 | 1,09E+01 | -1,16E+02 | 3,30E+00 | 1,57E+01 | 5,38E+00 | -1,87E+02 | 7,27E+00 | -1,08E+01 |
| PENRM | 1,27E+01 | -2,99E+02 | - | - | 0,00E+00 | 0,00E+00 | 3,07E-01 | 1,48E+01 | 0,00E+00 | 0,00E+00 | 5,91E-01 | -1,39E+01 | 0,00E+00 | 0,00E+00 |
| PENRT | 8,85E+01 | -4,67E+03 | - | - | 4,26E+00 | -7,94E+01 | 1,12E+01 | -1,01E+02 | 3,30E+00 | 1,57E+01 | 5,97E+00 | -2,00E+02 | 7,27E+00 | -1,08E+01 |
| SM | 4,78E-04 | -4,31E-02 | - | - | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 2,23E-05 | -2,01E-03 | 0,00E+00 | 0,00E+00 |
| RSF | 0,00E+00 | 0,00E+00 | - | - | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| NRSF | 0,00E+00 | 0,00E+00 | - | - | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| FW | 6,15E-02 | -2,96E+00 | - | - | 9,53E-05 | 5,98E-03 | 4,16E-02 | 1,02E+01 | 1,56E-04 | 7,40E-04 | 4,90E-03 | 3,40E-01 | 4,90E-04 | 3,03E-02 |
| HWD | 9,42E-02 | -8,54E+00 | - | - | 3,99E-04 | 3,69E-02 | 2,28E-02 | -2,04E-01 | 7,77E-04 | 3,69E-03 | 2,99E-02 | 7,22E-01 | 6,66E-02 | 3,59E+00 |
| NHWD | 1,79E-01 | 3,06E+01 | - | - | 1,50E-02 | 2,55E-01 | 7,06E-02 | -2,20E-01 | 1,72E-02 | 8,20E-02 | 2,41E-02 | 1,90E+00 | 3,43E-02 | 1,12E+00 |
| RWD | 1,10E-03 | -9,62E-02 | - | - | 1,12E-05 | 2,59E-04 | 2,73E-05 | 9,88E-05 | 1,37E-05 | 6,49E-05 | 5,63E-05 | -4,36E-03 | 1,21E-05 | 3,88E-04 |
| CRU | 0,00E+00 | 0,00E+00 | - | - | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| MFR | 3,39E-05 | -3,06E-03 | - | - | 0,00E+00 | 0,00E+00 | 1,05E-02 | 7,44E-01 | 0,00E+00 | 0,00E+00 | 1,01E-02 | 9,80E-01 | 9,79E-02 | 1,46E+01 |
| MER | 5,47E-06 | -4,94E-04 | - | - | 0,00E+00 | 0,00E+00 | 6,34E-04 | -5,70E-02 | 0,00E+00 | 0,00E+00 | 8,38E-05 | -7,64E-03 | 1,07E-03 | -9,87E-02 |
| EE | 0,00E+00 | 0,00E+00 | - | - | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| TPE | 8,87E+01 | -4,57E+03 | - | - | 4,27E+00 | -7,92E+01 | 1,51E+01 | -3,29E+01 | 3,31E+00 | 1,57E+01 | 6,25E+00 | -1,89E+02 | 8,21E+00 | 1,25E+01 |
| EF-PM | 4,09E-07 | -3,32E-05 | - | - | 4,47E-08 | -3,87E-06 | 2,26E-08 | 3,04E-07 | 2,52E-09 | 1,20E-08 | 2,41E-08 | -1,66E-06 | 1,01E-08 | 2,86E-07 |
| IR | 2,65E-01 | -1,20E+01 | - | - | 3,79E-03 | 2,74E-01 | 1,50E-01 | -9,56E+00 | 6,57E-03 | 3,12E-02 | 4,43E-02 | -5,70E-01 | 2,90E-01 | -5,62E-01 |
| Eco-fw | 2,25E+01 | -3,59E+02 | - | - | 2,90E+00 | 2,46E+02 | 1,62E+00 | 3,96E+01 | 5,42E+00 | 2,58E+01 | 2,41E+00 | 4,30E+01 | 3,49E+00 | 2,56E+02 |
| HT-c | 5,31E-08 | -4,94E-06 | - | - | 2,16E-11 | 1,46E-09 | 1,14E-09 | -8,24E-08 | 3,64E-11 | 1,73E-10 | 2,62E-09 | -2,41E-07 | 1,67E-09 | -1,46E-07 |
| HT-nc | 1,30E-07 | -8,56E-06 | - | - | 4,25E-10 | 2,67E-08 | 1,49E-09 | 3,97E-08 | 6,94E-10 | 3,30E-09 | 6,49E-09 | -3,81E-07 | 1,24E-09 | 8,47E-08 |
| LU | 7,32E+00 | -6,16E+02 | - | - | 4,08E-04 | 3,77E-02 | 1,42E-01 | 3,48E+01 | 7,94E-04 | 3,78E-03 | 3,49E-01 | -2,70E+01 | 4,79E-03 | 2,42E-01 |

## VI. PRODUCTS COVERED BY THE PEP

The products covered by the given PEP are represented in the below table with a: ●
The below table also provides the maximun linear resistance (ohm/km) of core at 20°C in D.C for 120 wires according to the standard IEC 60228 for each cable included in the cable in the family KLARO FG16OR16.

| Section ($mm^2$) | Resistance (ohm/km) | N° of CONDUCTORS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 14 | 16 | 19 | 24 | 27 | 30 | 37 | 40 | 48 |
| 0,5 | - | | | | | | | | | | | | | | | | | | | | |
| 0,75 | - | | | | | | | | | | | | | | | | | | | | |
| 1 | - | | | | | | | | | | | | | | | | | | | | |
| 1,5 | 13,3 | | ● | ● | ● | ● | | | | | | | | | | | | | | | |
| 2,5 | 7,98 | | ● | ● | ● | ● | | | | | | | | | | | | | | | |
| 4 | 4,95 | | ● | ● | ● | ● | | | | | | | | | | | | | | | |
| 6 | 3,3 | | ● | ● | ● | ● | | | | | | | | | | | | | | | |
| 10 | - | | | | | | | | | | | | | | | | | | | | |
| 16 | - | | | | | | | | | | | | | | | | | | | | |
| 25 | - | | | | | | | | | | | | | | | | | | | | |
| 35 | - | | | | | | | | | | | | | | | | | | | | |
| 50 | - | | | | | | | | | | | | | | | | | | | | |
| 70 | - | | | | | | | | | | | | | | | | | | | | |
| 95 | - | | | | | | | | | | | | | | | | | | | | |
| 120 | - | | | | | | | | | | | | | | | | | | | | |
| 150 | - | | | | | | | | | | | | | | | | | | | | |
| 185 | - | | | | | | | | | | | | | | | | | | | | |
| 240 | - | | | | | | | | | | | | | | | | | | | | |
| 300 | - | | | | | | | | | | | | | | | | | | | | |
| 400 | - | | | | | | | | | | | | | | | | | | | | |
| 500 | - | | | | | | | | | | | | | | | | | | | | |
| 630 | - | | | | | | | | | | | | | | | | | | | | |
| 800 | - | | | | | | | | | | | | | | | | | | | | |
| 1000 | - | | | | | | | | | | | | | | | | | | | | |
| 1200 | - | | | | | | | | | | | | | | | | | | | | |
| 1400 | - | | | | | | | | | | | | | | | | | | | | |
| 1600 | - | | | | | | | | | | | | | | | | | | | | |
| 1800 | - | | | | | | | | | | | | | | | | | | | | |
| 2000 | - | | | | | | | | | | | | | | | | | | | | |
| 2500 | - | | | | | | | | | | | | | | | | | | | | |

For all products covered by this PEP, weight (kg/km) of each product & number of active conductors* in the cable are mentioned in the technical datasheet, which can be obtained from the Nexans website.

*Number of active conductors = total number of conductors - neutral conductor (if applicable). If there is no neutral conductor in the cable, the number of active conductors = total number of conductors. The technical datasheet mentions if there is a neutral or not in a given cable.