

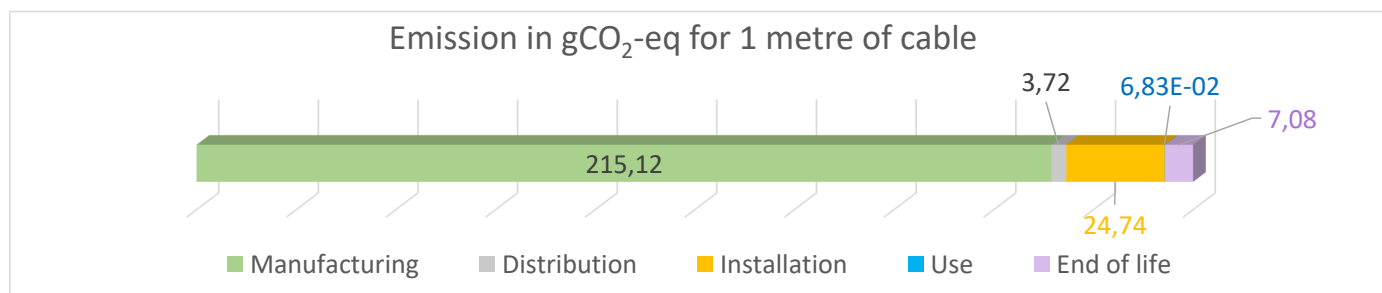
|   |                                    |
|---|------------------------------------|
| LCA study reference: Ecobilan-;Z]BY]-BSBC\BAZ_F->#55%-BZ]->#55-C->#56-B-58,=->%#<'"/> |                                    |
| Self declaration according to ISO 14021   |                                    |
| LCA according to ISO 14040-44   |                                    |
| ECOBILAN software version:  | V27-04                             |
| Database :  | Base CODDE® 2025-04+ supplier data |
| Date of publication:  | 04-03-26                           |

## ECOBILAN OPTICAL FIBRE CABLE\_ACOPTIC

# UND1533 48F M12

### Lifecycle Analysis Results

Carbon equivalent emissions (i.e. carbon footprint in gCO<sub>2</sub>-eq) over the complete life cycle, for 1 metre of cable delivered to our customers at a distance of 1000km by lorry from our manufacturing plant and packaged in 4000m lengths on DC :



| UND1533 48F M12                                 | Carbon Footprint "cradle-to-gate"* | Carbon Footprint "cradle-to-grave"*** |
|---|------------------------------------|---------------------------------------|
| Declared unit<br>(1m of cable = 48 FO )         | 215,1 g CO2-eq.                    | 250,7 g CO2-eq.                       |
| Functional unit<br>(1m of cabled optical fiber) | 4,5 g CO2-eq.                      | 5,2 g CO2-eq.                         |

### Life cycle analysis methodology

Calculation methodology according to the common rules of PCR ed4 and the additional rules of PSR0001 ed4 (Wires & Cables) of the PEpecopassport Program (compliant with the cable PSR IEC TR 62839-1:2025) with the CO<sub>2</sub> emission factors (GWP) of the EIME 6.3 software and its database in version CODDE-2025-04 (Indicators for PEF EF 3.1 - Compliance PEP ed.4, EN15804+A2 v2.0).

Emission factors used: generic data from the CODDE database supplemented by supplier data when available.

### Description of the Life Cycle

The complete life cycle corresponds to the following stages:

- **Manufacturing:** Production, packaging and transport of raw materials, industrial manufacturing processes, end-of-life treatment of manufacturing waste and packaging of the finished product. Factory located in France - ACOME electricity mix (23,5 g CO<sub>2</sub>e/kWh)
- **Distribution:** transport of the cable with its packaging, over a total distance = 1000km by truck
- **Installation :** 5% installation scrap (manufacturing + transport + end of life) and treatment of the packaging waste
- **Use :** Power loss during transmission at 100% of the time over 20 years
- **End of life of the cable:** Transport 1000 km + 100% landfill.

#### Notes:

\* **Cradle-to-gate:** Life cycle assessment of the product from raw material extraction to the factory gate, excluding distribution, use, and end-of-life stages.

\*\* **Cradle-to-grave:** Full life cycle assessment of the product from raw material extraction through manufacturing, transport, use, and end-of-life (recycling, recovery, or disposal).