

## Environmental Product Declaration

### Prysmian CVTC® Low Voltage Tray Cables

Prysmian's CVTC® product line consist of multi-conductor copper industrial cables with a flame-retardant cross-linked polyethylene (XLPE) insulation and flame-retardant, sunlight-resistant polyvinyl chloride (PVC) jacket.



With 150 years of experience in over 50 countries around the globe, Prysmian is the world leader in the energy and telecom cable industry. Prysmian offers the broadest range of services and know-how in the industry. Each year, Prysmian manufactures thousands of miles of underground and submarine cables and systems for power transmission and distribution, as well as medium and low voltage cables for the construction and infrastructure sectors. The company produces a comprehensive range of optical fibers, copper cables, and connectivity systems for voice, video, and data transmission for the telecommunication sector.

Prysmian is a leader in the industry and a pioneer in sustainability initiatives. The company has adopted a science-based approach and adheres to EPA standards to achieve net-zero emission targets for Scope 1 and 2 by 2035 and Scope 3 by 2050. Scan the QR code below to learn more about Prysmian's sustainability initiatives.



CVTC® Instrumentation Cable, UL Type PLTC, 300 V, Multi-Conductor  
CVTC® Instrumentation Cable, UL Type TC, 600 V, Multi-Conductor  
CVTC® Control Cable, UL Type TC-ER, 600 V, Multi-Conductor  
CVTC® Power Cable, UL Type TC-ER, 600 V, Multi-Conductor  
CVTC® Flexible VFD, UL Type TC-ER, 600 V; UL Flexible Motor Supply and  
WTTC, 1000 V, Multi-Conductor  
CVTC® Flexible VFD, UL Type TC-ER, Multi-Conductor, 2000 V



# Environmental Product Declaration

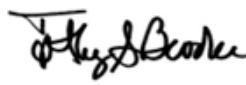



According to  
ISO 14025, EN 15804+A2,  
ISO 14040, ISO 14044

## Prysmian CVTC® Low Voltage Tray Cables

Data Cables

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025 and EN 15804+A2. EPDs rely on Life Cycle Assessment (LCA) to provide information on a number of environmental impacts of products over their life cycle. Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc. Accuracy of Results: EPDs regularly rely on estimations of impacts, and the level of accuracy in estimation of effect differs for any particular product line and reported impact. Comparability: EPDs are not comparative assertions and are either not comparable or have limited comparability when they cover different life cycle stages, are based on different product category rules or are missing relevant environmental impacts. EPDs from different programs may not be comparable.

EPD PROGRAM AND PROGRAM OPERATOR NAME, ADDRESS, LOGO, AND WEBSITE	ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428
GENERAL PROGRAM INSTRUCTIONS AND VERSION NUMBER	ASTM General Program Instructions. Version 8.0. April 29, 2020.
MANUFACTURER NAME AND ADDRESS	Prysmian Group 4 Tesseneer Road Highland Heights, KY 41076
DECLARATION NUMBER	EPD936
DECLARED PRODUCT & FUNCTIONAL UNIT OF DECLARED UNIT	Prysmian CVTC® Low Voltage Tray Cables Functional Unit = To transmit energy expressed for 1A over a distance of 1km during 40 years and a 100% use rate, in accordance with the relevant standards shown in the product technical data sheets. Lifetime and use rate correspond to the application of energy distribution network as defined in the table given in Appendix 6.1. of the specific rules for wire, cables and accessories.
REFERENCE PCR AND VERSION NUMBER	Product Category Rules for Electrical, Electronic and HVAC-R Products, v4.0, 2021. PEP ecopassport Program: Product Specific Rules for Wires, Cables and Accessories, v4.0, 2022.
DESCRIPTION OF PRODUCT APPLICATION/USE	These Prysmian cable products are primarily used in building applications.
PRODUCT REFERENCE SERVICE LIFE (RSL) DESCRIPTION	40 Years
MARKETS OF APPLICABILITY	North America
DATE OF ISSUE	March 3, 2025
PERIOD OF VALIDITY	5 Years
EPD TYPE	Product Specific
DATASET VARIABILITY	N/A
EPD SCOPE	Cradle-to-Grave
YEAR(S) OF REPORTED PRIMARY DATA	2023
LCA SOFTWARE & VERSION NUMBER	LCA for Experts v10.7.0.183
LCI DATABASE(S) & VERSION NUMBER	Sphera Managed Content & USLCI v2.0
LCIA METHODOLOGY & VERSION NUMBER	TRACI 2.1; CML 4.1
The sub-category PCR review was conducted by:	
This declaration was independently verified in accordance with ISO 14025: 2006. The "PEP ecopassport Program: Product Category Rules for Electrical, Electronic and HVAC-R Products, v4.0, 2021." based on EN 15804:2012+A2:2019, serves as the core PCR. The supporting PSR is the "PEP ecopassport Program: Product Specific Rules for Wires, Cables and Accessories, v4.0, 2022."	
<input type="checkbox"/> INTERNAL <input checked="" type="checkbox"/> EXTERNAL	
This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:	
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:	
 Timothy S Brooke	
 Thomas P Gloria, Ph. D Industrial Ecology Consultants	

Environmental declarations from different programs (ISO 14025) may not be comparable.

Comparison of the environmental performance using EPD information shall consider all relevant information modules over the full life cycle of the products within the building.

This PCR allows EPD comparability only when the same functional requirements between products are ensured and the requirements of EN 15804:2012+A2:2019 are met. It should be noted that different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared. The owner of the declaration shall be liable for the underlying information and evidence; ASTM, or its affiliates, shall not be liable with respect to manufacturer information, life cycle assessment data, and evidence.

# Environmental Product Declaration



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Prysmian CVTC® Low Voltage Tray Cables  
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## General Information

### Description of Company/Organization

Prysmian, a global provider of cabling solutions, is leading the charge in the energy transition and digital transformation. With 150 years of experience in over 50 countries around the globe, the company's business strategy is a testament to its understanding of market dynamics, focusing on the development of resilient, high-performing, sustainable, and innovative cable solutions across the Transmission, Power Grid, Electrification, and Digital Solutions segments.

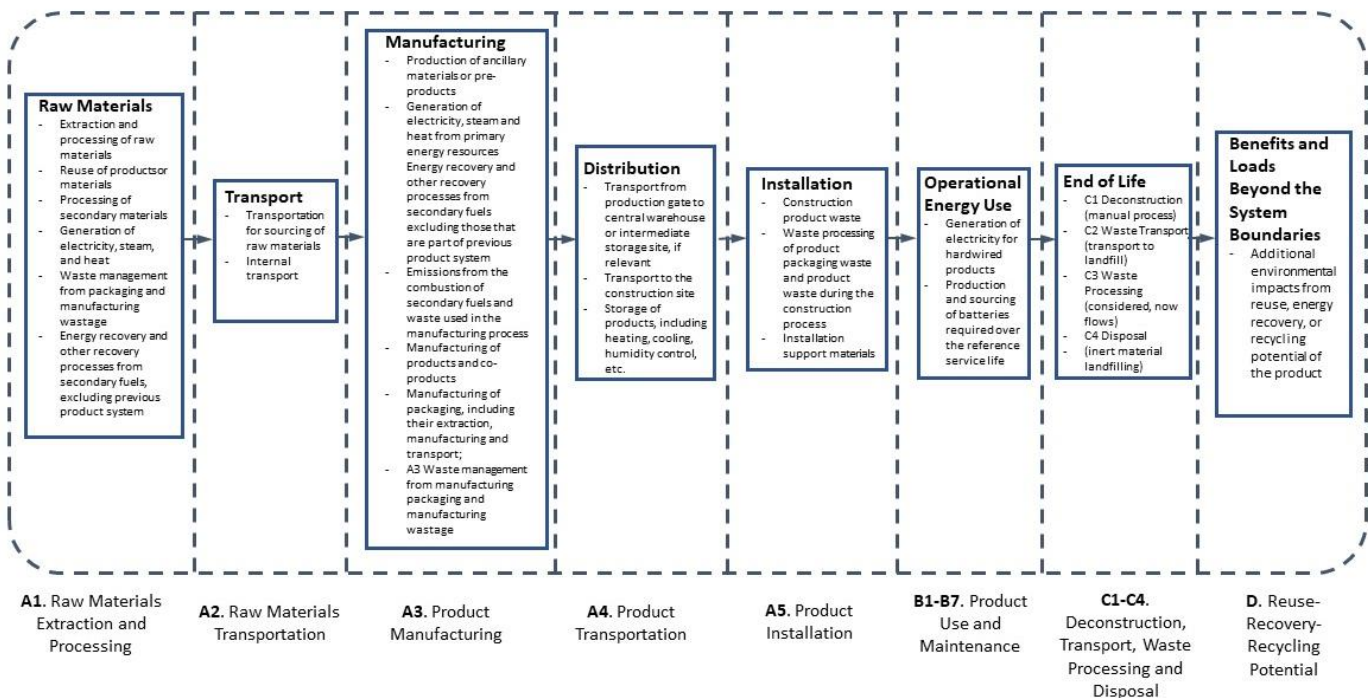
### Product Description

Prysmian's CVTC® product line consists of instrumentation and control multi-conductor cables for a wide range of industrial applications in free air, raceways or direct burial and in wet or dry locations. The CVTC® control cable is permitted for Exposed Run (ER) use in accordance with NEC for 3 or more conductors and for use in Class I, Division 2 industrial hazardous locations per NEC. The CVTC® product line has excellent electrical, thermal, and physical properties.

Additional features include:

- 90°C Temperature Rating per UL, wet or dry
- UV/sunlight-resistant, moisture resistant, and flame resistant insulation
- Meets cold bend tests at -25°C
- CVTC® control cable and VFD cable meets the crush and impact requirements of Type MC cable
- CVTC® VFD cables feature a dual shield to provide maximum shield coverage required for Variable Frequency Drive (VFD) applications.

### Flow Diagram



# Environmental Product Declaration



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## Manufacturer Specific EPD

This product-specific EPD was developed based on the cradle-to-grave (modules A1-D) life cycle assessment. The EPD accounts for raw material extraction and processing, transport, product manufacturing, distribution, installation, use, maintenance, disposal, and potential benefits and loads following the end of life disposal. Manufacturing data were gathered directly from company personnel. For EPDs with product groups, an impact assessment was completed for each product and the highest impacts were reported as representations of the product group. The rest of the products in each group are represented through scaling factor tables and can be independently calculated.

## Application

The CVTC® instrumentation and control cables are ideal for a wide range of applications, including but not limited to: audio, intercom, control, energy management and alarm circuits. The CVTC® instrumentation cable can be installed in ducts, cable trays, conduit, or class 3 circuits in accordance with NEC.

The CVTC® VFD 600 V cable is intended for use with AC motors controlled by pulse-width modulated inverter in VFD applications rated up to 1000 V. The CVTC® VFD 600 V cable product line may be installed in aerial, conduit, open tray and underground duct/installations.

The CVTC® VFD 2000 V cable is intended for use with AC motors controlled by pulse-width modulated inverter in VFD applications rated up to 2000 V. These motor drive systems require cables that are designed to prevent radio frequency interference (RFI) which can lead to malfunction.

## Material Composition

The primary product components and/or materials must be indicated as a percentage mass to enable the user of the EPD to understand the composition of the product in delivery status.

The average composition of a Prysmian 500/4+2G CVTC 600V M4 cable is as follows:

Material	Percentage in mass (%)
	Maximum
Conductor	92.22%
Jacketing	4.53%
Insulation	3.15%
Tape	0.10%
Total	100.00%

# Environmental Product Declaration



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## Technical Details

For the declared product, the following technical data in the delivery status must be provided with reference to the test standard:

Technical Data
Spec 1150/1200 - CVTC® Instrumentation Cable, UL Type PLTC, 300 V, Multi-Conductor
Spec 2350/2400 - CVTC® Instrumentation Cable, UL Type TC, 600 V, Multi-Conductor
Spec 4500 - CVTC® Control Cable, UL Type TC-ER, 600 V, Multi-Conductor
Spec 4550 - CVTC® Power Cable, UL Type TC-ER, 600 V, Multi-Conductor
Spec 4560/4565/4570 - CVTC® Flexible VFD, UL Type TC-ER, 600 V; UL Flexible Motor Supply and WTTC, 1000 V, Multi-Conductor
Spec 4575/4580 - CVTC® Flexible VFD, UL Type TC-ER, 2000 V, Multi-Conductor

## Prysmian CVTC® Low Voltage Tray Cables

Data Cables

### Placing on the Market / Application Rules

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The standards that can be applied for CVTC® Instrumentation Cables, 300 V are:

- UL 13 Type PLTC
- UL 1581
- EPA 40 CFR, Part 261
- RoHS Compliant

The standards that can be applied for CVTC® Instrumentation Cables, 600 V are:

- UL 1277 Type TC
- UL 1581
- ICEA S-73-532/NEMA WC57
- EPA 40 CFR, Part 261
- RoHS Compliant

The standards that can be applied for CVTC® Control Cables, 600 V are:

- UL 1277 Type TC-ER for 3 or more conductors
- UL 44 Type XHHW-2
- UL 1581
- ICEA S-73-532/NEMA WC57
- EPA 40 CFR, Part 261
- RoHS Compliant

The standards that can be applied for CVTC® Power Cables, 600 V are:

- UL 1277 Type TC-ER
- UL 44 Type XHHW-2
- UL 1581
- ICEA S-95-658/NEMA WC70
- EPA 40 CFR, Part 261
- RoHS Compliant

The standards that can be applied for CVTC® VFD Flexible Motor Supply Cables, 600 V are:

- UL 1277 Type TC-ER
- UL 2277 1000 V Flexible Motor Supply Cable and 1000 V Wind Turbine Tray Cable
- UL 44 Type RHH or RHW-2 conductors
- UL 1581
- ICEA S-95-658/NEMA WC70
- CSA C22.2 No. 210 1000V AWM I/II A/B FT4 SR
- EPA 40 CFR, Part 261
- RoHS Compliant

The flame standards that can be applied for Prysmian CVTC® Low Voltage Tray Cables are:

- UL 1581/UL 2556 VW-1 Flame
- UL 1685 Vertical Flame Test (600 V and 2000 V only)
- IEEE 383 Flame (does not include Flexible Motor Supply)
- IEEE 1202/CSA FT4 Flame (600 V and 2000 V only)
- ICEA T-29-520 Flame (600 V and 2000 V only, does not include Flexible Motor Supply)

The standards that can be applied for CVTC® VFD Cables, 2000 V are:

- UL 1277 Type TC-ER
- UL 44 Type RHH or RHW-2 conductors
- UL 1581
- EPA 40 CFR, Part 261
- RoHS Compliant

### Properties of Declared Product as Shipped

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Prysmian CVTC® Low Voltage Tray Cables are cut to standard lengths and packed in non-returnable wood reels.

# Environmental Product Declaration



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Prysmian CVTC® Low Voltage Tray Cables  
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## Methodological Framework

### Functional Unit

Name	Value	Unit
Functional unit	To transmit energy expressed for 1A over a distance of 1km during 40 years and a 100% use rate, in accordance with the relevant standards shown in the product technical data sheets. Lifetime and use rate correspond to the application of energy distribution network as defined in the table given in Appendix 6.1. of the specific rules for wire, cables and accessories.	
Maximum Mass	6087	kg
Conversion factor to 1 kg	1.6E-04	-

### System Boundary

This is a cradle to grave Environmental Product Declaration. The following life cycle phases were considered:

Product Stage			Construction Process Stage		Use Stage							End of Life Stage*				Benefits and Loads Beyond the System Boundaries
Raw material supply	Transport	Manufacturing	Transport from gate to the site	Construction/ installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction /demolition	Transport	Waste processing	Disposal	Reuse-Recovery- Recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Description of the System Boundary Stages Corresponding to the PCR

(X = Included; MND = Module Not Declared)

\*This includes provision of all materials, products and energy, packaging processing and its transport, as well as waste processing up to the end-of waste state or disposal of final residues.



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## Reference Service Life

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The reference service life of a properly installed Prysmian CVTC® Low Voltage Tray Cables cable is 40 years.

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## Allocation

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Allocation of manufacturing was determined by mass, in kilogram per kilometer.

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## Cut-off Criteria

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Processes whose total contribution to the final result, with respect to their mass and in relation to all considered impact categories, is less than 1% can be neglected. The sum of the neglected processes may not exceed 5% by mass of the considered impact categories. For that a documented assumption is admissible.

For Hazardous Substances the following requirements apply:

- The Life Cycle Inventory (LCI) of hazardous substances will be included, if the inventory is available.
- If the LCI for a hazardous substance is not available, the substance will appear as an input in the LCI of the product, if its mass represents more than 0.1% of the product composition.
- If the LCI of a hazardous substance is approximated by modeling another substance, documentation will be provided.

This EPD is in compliance with the cut-off criteria. No processes were neglected or excluded. Capital items for the production processes (machine, buildings, etc.) were not taken into consideration.

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## Data Sources

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Primary data were collected for every process in the product system under the control of Prysmian. Secondary data from the Sphera database were utilized when necessary. These data were evaluated and have temporal, geographic, and technical coverage appropriate to the scope of the product category.

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## Data Quality

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The data sources used are complete and representative of global systems in terms of the geographic and technological coverage and are a recent vintage (i.e. less than ten years old). The data used for primary data are based on direct information sources of the manufacturers. Secondary data sets were used for raw materials extraction and processing, end of life, transportation, and energy production flows. Wherever secondary data is used, the study adopts critically reviewed data for consistency, precision, and reproducibility to limit uncertainty.

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## Period Under Review

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The period under review is the full calendar year of 2023.

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## Treatment of Biogenic Carbon

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The uptake and release of biogenic carbon throughout the product life cycle follows EN15805+A2 Section 6.4.4.

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## Comparability and Benchmarking

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A comparison or an evaluation of EPD data is only possible if all data sets to be compared were created according to EN 15804+A2 and the building context, respectively the product-specific characteristics of performance, are taken into account. Environmental declarations from different programs may not be comparable. Full conformance with the PCR allows for EPD comparability only when all stages a product's life cycle have been considered. However, variations and deviations are possible.



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## Estimates and Assumptions

### End of Life

In the End of Life phase, copper is assumed to have a 60% recycling rate in accordance with the PEP PCR.

## Units

The LCA results within this EPD are reported in SI units.

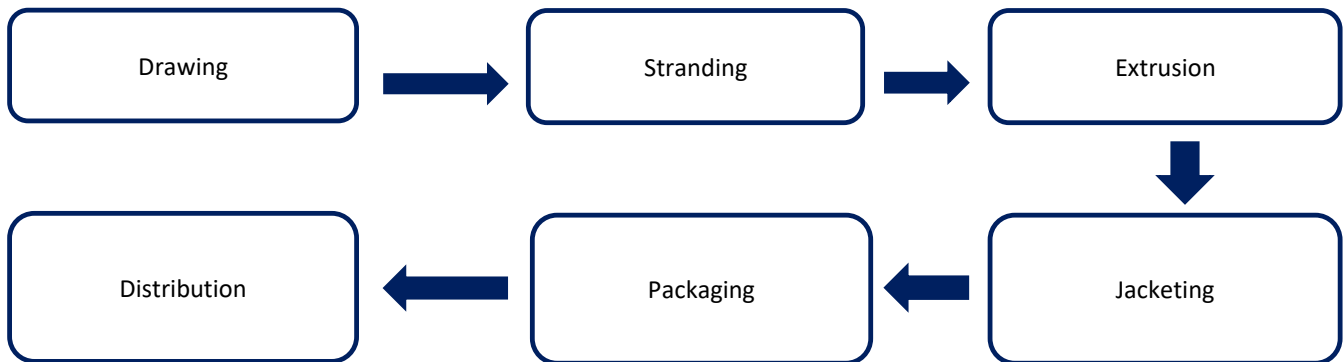
## Additional Environmental Information

### Background data

For life cycle modeling of the considered products, the LCA for Experts Software System for Life Cycle Engineering, developed by Sphera, is used. The Sphera database contains consistent and documented datasets which are documented online. To ensure comparability of results in the LCA, the basic data of the Sphera database were used for energy, transportation, and auxiliary materials.

## Manufacturing

This study includes the impacts from seven of Prysmian's manufacturing facilities which produce data center and tray cables. Conductor materials come either pre-drawn or go through a drawing process at the manufacturing site. The conductor then goes through a stranding process. Jacketing is extruded to size and applied to cables as appropriate along with any insulation or additional cable components. The cables are packaged on reels and sent to customer.



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## Packaging

All packaging is fully recyclable. The packaging material is composed of a wooden reel.

Material	Quantity (% By Weight)
	Maximum
Paper	0.00%
Metal	0.00%
Plastic	0.00%
Wood	100.00%
Total	100.00%

## Transportation

Transport to Building Site (A4)		
Name	Max	Unit
Fuel type	Diesel	
Liters of fuel	38	l/100km
Transport distance	800	km
Capacity utilization (including empty runs)	85	%
Gross density of products transported	-	kg/m <sup>3</sup>
Weight of products transported	6087	kg
Volume of products transported	-	m <sup>3</sup>
Capacity utilization volume factor	-	-

## Product Installation

Prysmian has established guidelines in HSE for installation processes, beginning with the development of a HSE plan. The HSE plan will be developed with specific site Environmental and Health concerns that might arise during installation process. Management and installation team will all be trained on the HSE plan prior to installation.

Installation into the building (A5)		
Name	Max	Unit
Water consumption	-	m <sup>3</sup>
Other energy carriers	-	MJ
Product loss per functional unit	3.04E+02	kg
Waste materials at construction site	4.71E+02	kg
Output substance (recycle)	1.68E+02	kg
Output substance (landfill)	1.12E+02	kg
Output substance (incineration)	0.00E+00	kg
Packaging waste (recycle)	1.52E+02	kg
Packaging waste (landfill)	3.80E+01	kg
Packaging waste (incineration)	0.00E+00	kg
Direct emissions to ambient air*, soil, and water	1.08E+02	kg CO <sub>2</sub>
VOC emissions	-	kg

\*CO2 emissions to air from disposal of packaging

Reference Service Life		
Name	Value	Unit
Reference Service Life	40	years
Replacements	0	-

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## Product Use

No cleaning, maintenance, repair, or refurbishment is required.

The operational energy use is presented under the assumption that the cable experiences a current of 1 Amp. The equation used to calculate the use phase is:

$$E = Z * I^2 * \Delta t$$

Where:

Z = linear resistivity of the cable in  $\Omega/\text{km}$ , provided by Prysmian

L = current in A, assumption is 1 A

$\Delta t$  = use time in seconds, assumption is 40 years

Operational Energy Use (B6)		
Name	Max	Unit per RSL
Water consumption (from tap, to sewer)	-	m <sup>3</sup>
Electricity consumption	25.24	kWh
Other energy carriers	-	MJ
Equipment output	-	kW
Direct emissions to ambient air, soil, and water	-	kg

## Disposal

The product can be mechanically disassembled to separate the different materials. The majority of components are disposed of through waste incineration with energy recovery or landfilled, in accordance with the PCR.

End of life (C1-C4)		
Name	Max	Unit
Collected separately	3.37E+03	kg
Collected as mixed construction waste	2.25E+03	kg
Reuse	0.00E+00	kg
Recycling	3.37E+03	kg
Landfilling	2.25E+03	kg
Incineration with energy recovery	0.00E+00	kg
Removals of biogenic carbon	-	kg

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## Re-use Phase

Re-use of the product is not common, but a large amount of the metals in this material will be recycled.

Re-Use, recovery, And/Or Recycling Potential (D)		
Name	Max	Unit
Net energy benefit from energy recovery from waste treatment declared as exported energy in C3 (R>0.6)	0.00	MJ
Net energy benefit from thermal energy due to treatment of waste declared as exported energy in C4 (R<0.6)	0.00	MJ
Net energy benefit from material flow declared in C3 for energy recovery	0.00	MJ
Process and conversion efficiencies	-	
Further assumptions for scenario development (e.g. further processing technologies, assumptions on correction factors);	These products are almost entirely metals and the recycling rate from the PCR and the benefit for module D is calculated by the benefit of recycling product at the end of life.	

## System Boundary

This is a cradle to grave Environmental Product Declaration. The following life cycle phases were considered:

Product Stage			Construction Process Stage		Use Stage							End of Life Stage*				Benefits and Loads Beyond the System Boundaries
Raw material supply	Transport	Manufacturing	Transport from gate to the site	Construction/ installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction /demolition	Transport	Waste processing	Disposal	Reuse-Recovery- Recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Description of the System Boundary Stages Corresponding to the PCR

(X = Included; MND = Module Not Declared)

\*This includes provision of all materials, products and energy, packaging processing and its transport, as well as waste processing up to the end-of waste state or disposal of final residues.

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## LCA Results - Maximum Impact - Results for Prysmian CVTC® Low Voltage Tray Cables

Please see the system boundary diagram above for an explanation of the A1-D life cycle stages. The below results all represent the Prysmian CVTC® Low Voltage Tray Cables with the highest impact, which is the Prysmian CVTC® Low Voltage Tray Cables. For all other cables in this product series, please see the scaling factors below to calculate their impacts.

Results shown below were calculated using TRACI 2.1 Methodology.

### TRACI 2.1 Impact Assessment

Parameter	Parameter	Unit	A1-A3	A4	A5	B6	C2	C3	C4	D	Total
GWP	Global warming potential	kg CO <sub>2</sub> -Eq.	2.50E+04	4.52E+02	1.82E+03	1.14E+01	2.27E-09	2.36E+02	3.34E+01	-6.11E+03	2.76E+04
ODP	Depletion potential of the stratospheric ozone layer	kg CFC-11 Eq.	3.45E-07	1.71E-08	3.95E-08	1.32E-12	8.59E-20	1.93E-13	1.81E-12	2.05E-07	4.02E-07
AP Air	Acidification potential for air emissions	kg SO <sub>2</sub> -Eq.	1.91E+02	2.71E+00	1.28E+01	1.45E-02	1.36E-11	6.96E-02	2.09E-01	-1.68E+02	2.07E+02
EP	Eutrophication potential	kg N-Eq.	6.70E+00	1.50E-01	5.11E-01	1.20E-03	7.56E-13	1.95E-03	9.23E-03	-2.61E+00	7.37E+00
SP	Smog formation potential	kg O <sub>3</sub> -Eq.	1.71E+03	7.47E+01	1.73E+02	2.10E-01	3.76E-10	4.73E-01	3.90E+00	-1.81E+02	1.96E+03
FFD	Fossil Fuel Depletion	MJ-surplus	3.46E+04	7.99E+02	2.78E+03	1.22E+01	4.02E-09	1.15E+01	5.71E+01	-3.82E+03	3.83E+04

\*Stages B1 through B7 and C1 through C4 have been considered and only those with non-zero values have been reported

Results shown below were calculated using CML 2001 - April 2013 Methodology.

### CML 4.1 Impact Assessment

Parameter	Parameter	Unit	A1-A3	A4	A5	B6	C2	C3	C4	D	Total
GWP	Global warming potential	kg CO <sub>2</sub> -Eq.	2.52E+04	4.53E+02	1.83E+03	1.15E+01	2.28E-09	2.37E+02	3.37E+01	-6.12E+03	2.77E+04
ODP	Depletion potential of the stratospheric ozone layer	kg CFC-11 Eq.	3.37E-07	1.71E-08	3.91E-08	7.83E-11	8.58E-20	1.14E-11	1.07E-10	9.23E-08	3.93E-07
AP Air	Acidification potential for air emissions	kg SO <sub>2</sub> -Eq.	2.03E+02	2.23E+00	1.28E+01	1.39E-02	1.12E-11	5.80E-02	1.95E-01	-1.97E+02	2.18E+02
EP	Eutrophication potential	kg(PO <sub>4</sub> ) <sup>3</sup> -Eq.	1.15E+01	3.97E-01	1.03E+00	1.53E-03	2.00E-12	5.06E-03	2.18E-02	-1.85E+00	1.29E+01
POCP	Formation potential of tropospheric ozone photochemical oxidants	kg ethane-Eq.	9.67E+00	2.60E-01	8.83E-01	1.20E-03	1.31E-12	1.96E-03	1.57E-02	-8.66E+00	1.08E+01
ADPE	Abiotic depletion potential for non-fossil resources	kg Sb-Eq.	7.12E+00	1.88E-07	3.56E-01	1.39E-06	9.44E-19	1.87E-06	1.04E-05	-1.11E+01	7.48E+00
ADPF	Abiotic depletion potential for fossil resources	MJ	3.30E+05	5.76E+03	2.41E+04	1.39E+02	2.90E-08	1.09E+02	4.32E+02	-2.91E+04	3.61E+05

\*Stages B1 through B7 and C1 through C4 have been considered and only those with non-zero values have been reported

# Environmental Product Declaration



According to  
ISO 14025, EN 15804+A2,  
ISO 14040, ISO 14044

Prysmian CVTCC® Low Voltage Tray Cables

Data Cables

Results below contain the resource use throughout the life cycle of the product.

EN15804+A2											
Parameter	Parameter	Unit	A1-A3	A4	A5	B6	C2	C3	C4	D	Total
GWP-total	Climate change - total	kg CO <sub>2</sub> -Eq.	2.52E+04	4.54E+02	1.84E+03	1.16E+01	2.28E-09	2.37E+02	3.37E+01	-6.00E+03	2.77E+04
GWP-fossil	Climate change - fossil	kg CO <sub>2</sub> -Eq.	2.53E+04	4.54E+02	1.83E+03	1.16E+01	2.28E-09	2.37E+02	3.37E+01	-6.12E+03	2.78E+04
GWP-biogenic	Climate change - biogenic	kg CO <sub>2</sub> -Eq.	-1.08E+02	0.00E+00	1.08E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GWP-luluc	Climate change - land use and land use change	kg CO <sub>2</sub> -Eq.	4.36E+00	0.00E+00	2.45E-01	1.18E-03	0.00E+00	6.16E-03	2.02E-01	-5.38E+01	4.81E+00
ODP	Ozone depletion	kg CFC-11 Eq.	1.83E-07	1.18E-08	2.45E-08	6.65E-11	5.92E-20	9.71E-12	9.09E-11	1.63E-08	2.19E-07
AP	Acidification	mol H <sup>+</sup> Eq.	2.34E+02	3.01E+00	1.53E+01	1.57E-02	1.51E-11	3.82E-02	2.40E-01	-2.13E+02	2.53E+02
EP-freshwater	Eutrophication aquatic freshwater	kg P Eq.	1.02E-01	1.29E-04	5.27E-03	6.43E-06	6.50E-16	3.66E-06	7.67E-05	2.36E-02	1.07E-01
EP-marine	Eutrophication aquatic marine	kg N Eq.	2.84E+01	1.16E+00	2.75E+00	3.47E-03	5.82E-12	8.15E-03	6.17E-02	-3.69E+00	3.23E+01
EP-terrestrial	Eutrophication terrestrial	mol N Eq.	3.10E+02	1.26E+01	3.00E+01	3.75E-02	6.35E-11	1.75E-01	6.79E-01	-3.08E+01	3.54E+02
POCP	Photochemical ozone formation	NMVOE Eq.	8.76E+01	3.41E+00	8.45E+00	1.01E-02	1.71E-11	2.26E-02	1.89E-01	-1.94E+01	9.97E+01
ADP-minerals&metals	Depletion of abiotic resources - minerals and metals	kg Sb Eq.	7.13E+00	0.00E+00	3.57E-01	1.12E-06	0.00E+00	6.71E-07	2.18E-06	-1.11E+01	7.49E+00
ADP-fossil	Depletion of abiotic resources - fossil fuels	mol N Eq.	3.80E+05	5.81E+03	2.66E+04	1.93E+02	2.92E-08	1.14E+02	4.45E+02	-1.54E+04	4.13E+05
WDP	Water use	m <sup>3</sup> world Eq. deprived	1.14E+04	0.00E+00	5.68E+02	2.29E+00	0.00E+00	1.85E+01	3.86E+00	-5.39E+03	1.20E+04
PM	Particulate matter emissions	Disease incidence	3.96E-03	1.19E-05	2.11E-04	1.45E-07	5.97E-17	4.31E-07	3.00E-06	-4.87E-04	4.19E-03
IRP	Ionizing radiation, human health	kBq U235 Eq.	1.66E+03	1.02E-16	7.95E+01	1.59E+00	5.14E-28	1.74E-01	5.39E-01	5.29E+02	1.74E+03
ETP-fw	Ecotoxicity (freshwater)	CTUe	1.57E+05	8.42E+03	1.90E+04	3.09E+01	4.24E-08	1.13E+02	2.96E+02	-8.81E+04	1.85E+05
HTP-c	Human toxicity, cancer effects	CTUh	-8.90E-05	1.22E-07	-4.29E-06	1.54E-09	6.15E-19	2.99E-09	6.05E-09	7.32E-06	-9.31E-05
HTP-nc	Human toxicity, non-cancer effects	CTUh	1.59E-03	8.33E-06	9.09E-05	2.62E-08	4.19E-17	2.68E-07	2.34E-07	6.01E-04	1.69E-03
SQP	Land use related impacts/Soil quality	dimensionless	2.35E+04	0.00E+00	1.13E+03	2.14E+01	0.00E+00	1.03E+01	1.22E+02	-2.15E+05	2.48E+04

Results below contain the resource use throughout the life cycle of the product.

Resource Use											
Parameter	Parameter	Unit	A1-A3	A4	A5	B6	C2	C3	C4	D	Total
RPR <sub>E</sub>	Renewable primary energy as energy carrier	MJ	2.28E+04	0.00E+00	1.05E+03	4.98E+01	0.00E+00	7.24E+00	7.76E+01	-4.53E+04	2.40E+04
RPR <sub>M</sub>	Renewable primary energy resources as material utilization	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
NRPR <sub>E</sub>	Nonrenewable primary energy as energy carrier	MJ	3.80E+05	5.81E+03	2.66E+04	1.93E+02	0.00E+00	1.14E+02	4.45E+02	-1.54E+04	4.13E+05
NRPR <sub>M</sub>	Nonrenewable primary energy as material utilization	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
SM	Use of secondary material	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
RSF	Use of renewable secondary fuels	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
NRSF	Use of nonrenewable secondary fuels	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
RE	Energy recovered from disposed waste	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.50E+01	0.00E+00
FW	Use of net fresh water	m <sup>3</sup>	2.65E+02	0.00E+00	1.32E+01	7.00E-02	0.00E+00	4.30E-01	1.20E-01	-1.86E+01	2.79E+02

\*All use phase and disposal stages have been considered and only those with non-zero values have been reported

# Environmental Product Declaration



According to  
ISO 14025, EN 15804+A2,  
ISO 14040, ISO 14044

Prysmian CVTC® Low Voltage Tray Cables  
Data Cables

Results below contain the output flows and wastes throughout the life cycle of the product.

## Output Flows and Waste Categories

Parameter	Parameter	Unit	A1-A3	A4	A5	B6	C2	C3	C4	D	Total
HWD	Hazardous waste disposed	kg	8.88E-03	0.00E+00	4.44E-04	1.12E-07	0.00E+00	1.95E-08	1.11E-07	5.15E-03	9.32E-03
NHWD	Non-hazardous waste disposed	kg	6.75E+02	0.00E+00	2.80E+02	5.53E-02	0.00E+00	2.08E+01	2.26E+03	1.23E+04	3.24E+03
HLRW	High-level radioactive waste	kg	1.83E+01	0.00E+00	8.92E-01	1.93E-02	0.00E+00	2.01E-03	4.66E-03	5.36E+00	1.92E+01
ILLRW	Intermediate- and low-level radioactive waste	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
CRU	Components for re-use	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
MR	Materials for recycling	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
MER	Materials for energy recovery	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
EE	Recovered energy exported from system	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.50E+01	0.00E+00

*\*All use phase and disposal stages have been considered and only those with non-zero values have been reported*

## Biogenic Carbon Content

Parameter	Unit	A1-A3	A4	A5	B6	C2	C3	C4	D	Total
Biogenic Carbon Content in Product	kg C	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
Biogenic Carbon Content in Accompanying Packaging	kg C	-3.95E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-3.95E+02

*\*All use phase and disposal stages have been considered and only those with non-zero values have been reported*



# Environmental Product Declaration

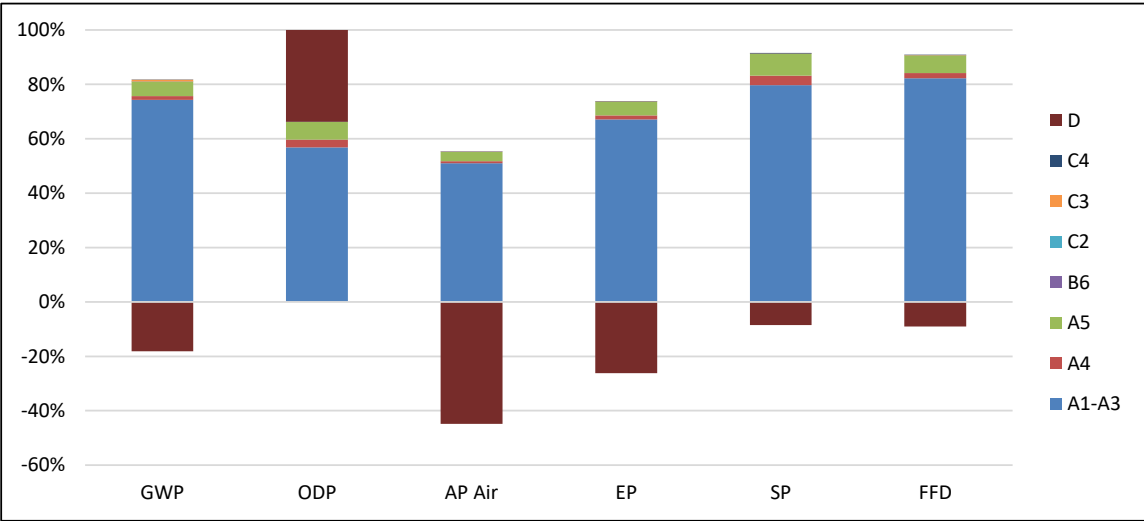
Prysmian CVTC® Low Voltage Tray Cables  
Data Cables



According to  
ISO 14025, EN 15804+A2,  
ISO 14040, ISO 14044

## LCA Interpretation - Maximum Impact - Results for Prysmian CVTC® Low Voltage Tray Cables

The production life cycle stage (A1-A3) dominates the impacts across all impact categories. This is due to the upstream production of raw materials used in the product, along with energy use in the manufacturing of the product. The D reuse, recovery, and recycling potential stage shows as a negative value and accounts for the benefit of energy recovery during incineration, and the benefit from recycling material at the end-of-life for a product. Though the energy use (B6) phase does not have a large impact, this is due to the functional unit of 1 AMP, lifetime use may be larger than 1 AMP.



## System Boundary

This is a cradle to grave Environmental Product Declaration. The following life cycle phases were considered:

Product Stage			Construction Process Stage		Use Stage							End of Life Stage*				Benefits and Loads Beyond the System Boundaries
Raw material supply	Transport	Manufacturing	Transport from gate to the site	Construction/ installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction /demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Description of the System Boundary Stages Corresponding to the PCR

(X = Included; MND = Module Not Declared)

\*This includes provision of all materials, products and energy, packaging processing and its transport, as well as waste processing up to the end-of waste state or disposal of final residues.

Scaling Factor Tables

For EPDs with product groups, an impact assessment was completed for each product and the highest impacts were reported as representations of the product group. The rest of the products in each group are represented through scaling factor tables and can be independently calculated.

To use these scaling factors, you will need the result from the tables in section 'LCA Results - Maximum Impact' and the chosen cable you are investigating. The scaling factors multiplied by the results above will be the results for that particular cable. For example, if you wanted to know how much GWP impact came from the A1-A3 stage of the example product, you would follow the equation below:

	Scaling Factor	*	Results	=	Final GWP
CVTC® 16 AWG/12C O/A Shield E1	1.75E-02	*	2.50E+04	=	4.37E+02

This equation can be used for all steps of the life cycle, where the scaling factor from each stage is multiplied by the results shown in this study in order to get any of the results. The scaling factors below are split into A1-A3 factors, which have each main impact category distinct from the others. This is due to the fact that the manufacturing site and the raw materials used in each cable can vary tremendously in these category. The A4-D categories are mostly based on weight of the cable, the individual impact category does not have as much variability and can be assumed to be the same. C2-D will all have the same scaling factor, and therefore, the scaling factor for these can be used in the equation above for any individual category. These scaling factors can be used for each methodology, including the TRACI 2.1 impacts, CML 4.1 impacts and EN15804+A2 impacts, from the results section.

To adjust for more operational energy use than one amp, you will need the result from the tables in section 'LCA Results - Maximum Impact', the chosen cable you are investigating, and your expected amperage over 40 years. The scaling factors multiplied by the results above will be the operational use results for that particular cable, multiplied by the squared amperage. For example, if you wanted to know how much 100 Amps would increase the B6 stage GWP for the example product, you would follow the equation below:

	Scaling Factor	*	Results	*	Amperage- squared	=	Final GWP
CVTC® 16 AWG/12C O/A Shield E1	1.09E+01	*	1.14E+01	*	100²	=	1.24E+06

# Environmental Product Declaration



According to  
ISO 14025, EN 15804+A2,  
ISO 14040, ISO 14044

Prysmian CVTTC® Low Voltage Tray Cables  
Data Cables

	A1 - A3							A4	A5	B6	C2 - D
	GWP	ODP	AP	EP	PCOP	FFD/ADP	Resources				
CVTTC® 16 AWG/12C O/A Shield E1	1.75E-02	1.67E-02	5.69E-02	6.58E-02	6.52E-02	4.04E-02	1.96E-02	1.96E-02	1.96E-02	1.09E+01	1.96E-02
CVTTC® 16 AWG/2C O/A Shield E1	5.02E-03	4.63E-03	1.77E-02	2.04E-02	2.03E-02	1.23E-02	5.63E-03	5.63E-03	5.63E-03	1.09E+01	5.63E-03
CVTTC® 16 AWG/3C O/A Shielded Pairs O/A Shield E1	1.51E-02	1.35E-02	4.57E-02	5.28E-02	5.24E-02	3.28E-02	1.63E-02	1.63E-02	1.63E-02	1.09E+01	1.63E-02
CVTTC® 16 AWG/4C O/A Shield E1	6.87E-03	6.46E-03	2.20E-02	2.55E-02	2.53E-02	1.57E-02	7.68E-03	7.68E-03	7.68E-03	1.09E+01	7.68E-03
CVTTC® 16 AWG/12C E2	2.06E-02	2.03E-02	6.03E-02	6.97E-02	6.91E-02	4.39E-02	2.28E-02	2.28E-02	2.28E-02	1.00E+01	2.28E-02
CVTTC® 16 AWG/19C E2	3.08E-02	3.05E-02	8.52E-02	9.85E-02	9.78E-02	6.29E-02	3.37E-02	3.37E-02	3.37E-02	1.00E+01	3.37E-02
CVTTC® 14 AWG/2C FLAT E2	3.90E-03	3.83E-03	1.28E-02	1.48E-02	1.47E-02	9.13E-03	4.45E-03	4.45E-03	4.45E-03	1.00E+01	4.45E-03
CVTTC® 14 AWG/3C E2	5.79E-03	5.71E-03	1.87E-02	2.16E-02	2.15E-02	1.33E-02	6.52E-03	6.52E-03	6.52E-03	1.00E+01	6.52E-03
CVTTC® 14 AWG/3C Shielded + 14 AWG GRD E2	1.40E-02	1.36E-02	4.14E-02	4.78E-02	4.74E-02	3.00E-02	1.54E-02	1.54E-02	1.54E-02	1.00E+01	1.54E-02
CVTTC® 14 AWG/4C E2	7.32E-03	7.22E-03	2.27E-02	2.62E-02	2.60E-02	1.63E-02	8.16E-03	8.16E-03	8.16E-03	1.00E+01	8.16E-03
CVTTC® 14 AWG/5C E2	8.86E-03	8.75E-03	2.67E-02	3.09E-02	3.06E-02	1.93E-02	9.83E-03	9.83E-03	9.83E-03	1.00E+01	9.83E-03
CVTTC® 14 AWG/7C E2	1.17E-02	1.16E-02	3.35E-02	3.87E-02	3.84E-02	2.45E-02	1.29E-02	1.29E-02	1.29E-02	1.00E+01	1.29E-02
CVTTC® 14 AWG/9C E2	1.64E-02	1.62E-02	5.07E-02	5.86E-02	5.82E-02	3.64E-02	1.81E-02	1.81E-02	1.81E-02	1.00E+01	1.81E-02
CVTTC® 12 AWG/12C E2	2.85E-02	2.83E-02	7.15E-02	8.27E-02	8.21E-02	5.43E-02	3.10E-02	3.10E-02	3.10E-02	1.09E+01	3.10E-02
CVTTC® 12 AWG/19C E2	4.57E-02	4.52E-02	1.16E-01	1.34E-01	1.33E-01	8.79E-02	4.98E-02	4.98E-02	4.98E-02	1.09E+01	4.98E-02
CVTTC® 12 AWG/2C FLAT E2	5.28E-03	5.20E-03	1.51E-02	1.75E-02	1.74E-02	1.11E-02	5.91E-03	5.91E-03	5.91E-03	1.09E+01	5.91E-03
CVTTC® 12 AWG/3C BWG	7.90E-03	7.80E-03	2.22E-02	2.57E-02	2.55E-02	1.64E-02	8.73E-03	8.73E-03	8.73E-03	1.09E+01	8.73E-03
CVTTC® 12 AWG/3C E2	7.90E-03	7.80E-03	2.22E-02	2.57E-02	2.55E-02	1.64E-02	8.73E-03	8.73E-03	8.73E-03	1.09E+01	8.73E-03
CVTTC® 12 AWG/3C + 12 AWG GRD E2	9.43E-03	9.33E-03	2.33E-02	2.69E-02	2.68E-02	1.78E-02	1.03E-02	1.03E-02	1.03E-02	1.09E+01	1.03E-02
CVTTC® 12 AWG/3C Shielded + 12 AWG GRD E2	1.82E-02	1.77E-02	4.92E-02	5.68E-02	5.64E-02	3.65E-02	1.98E-02	1.98E-02	1.98E-02	1.09E+01	1.98E-02
CVTTC® 12 AWG/3C Shielded + 16 AWG/3C GRD E2	1.70E-02	1.66E-02	6.51E-02	7.52E-02	7.46E-02	4.49E-02	2.00E-02	2.00E-02	2.00E-02	1.09E+01	2.00E-02

# Environmental Product Declaration



According to  
ISO 14025, EN 15804+A2,  
ISO 14040, ISO 14044

## Prysmian CVTC® Low Voltage Tray Cables

Data Cables

	A1 - A3							A4	A5	B6	C2 - D
	GWP	ODP	EP	AP	PCOP	FFD/ADP	Resources				
CVTC® 12 AWG/4C E2	1.01E-02	9.96E-03	2.71E-02	3.13E-02	3.10E-02	2.02E-02	1.11E-02	1.11E-02	1.11E-02	1.09E+01	1.11E-02
CVTC® 12 AWG/5C E2	1.24E-02	1.22E-02	3.26E-02	3.77E-02	3.74E-02	2.44E-02	1.35E-02	1.35E-02	1.35E-02	1.09E+01	1.35E-02
CVTC® 12 AWG/7C E2	1.76E-02	1.74E-02	4.71E-02	5.44E-02	5.40E-02	3.52E-02	1.93E-02	1.93E-02	1.93E-02	1.09E+01	1.93E-02
CVTC® 12 AWG/9C E2	2.25E-02	2.22E-02	5.99E-02	6.92E-02	6.87E-02	4.47E-02	2.46E-02	2.46E-02	2.46E-02	1.09E+01	2.46E-02
CVTC® 10 AWG/12C E2	4.46E-02	4.40E-02	1.09E-01	1.26E-01	1.25E-01	8.37E-02	4.91E-02	4.91E-02	4.91E-02	1.26E+01	4.91E-02
CVTC® 10 AWG/12C Shielded M4	4.90E-02	4.83E-02	1.31E-01	1.51E-01	1.50E-01	9.84E-02	5.51E-02	5.51E-02	5.51E-02	1.26E+01	5.51E-02
CVTC® 10 AWG/2C FLAT E2	7.69E-03	7.58E-03	2.01E-02	2.32E-02	2.30E-02	1.52E-02	8.55E-03	8.55E-03	8.55E-03	1.26E+01	8.55E-03
CVTC® 10 AWG/2C Shielded M4	1.11E-02	1.09E-02	3.60E-02	4.16E-02	4.13E-02	2.58E-02	1.28E-02	1.28E-02	1.28E-02	1.26E+01	1.28E-02
CVTC® 10 AWG/3C BWG	1.17E-02	1.15E-02	3.03E-02	3.50E-02	3.48E-02	2.29E-02	1.29E-02	1.29E-02	1.29E-02	1.26E+01	1.29E-02
CVTC® 10 AWG/3C E2	1.16E-02	1.14E-02	2.97E-02	3.43E-02	3.40E-02	2.25E-02	1.27E-02	1.27E-02	1.27E-02	1.26E+01	1.27E-02
CVTC® 10 AWG/3C + 10 AWG GRD BOY	1.40E-02	1.39E-02	3.15E-02	3.64E-02	3.62E-02	2.48E-02	1.52E-02	1.52E-02	1.52E-02	1.26E+01	1.52E-02
CVTC® 10 AWG/3C + 10 AWG GRD E2	1.40E-02	1.39E-02	3.15E-02	3.64E-02	3.62E-02	2.48E-02	1.52E-02	1.52E-02	1.52E-02	1.26E+01	1.52E-02
CVTC® 10 AWG/3C Shielded + 10 AWG GRD	2.52E-02	2.46E-02	6.16E-02	7.11E-02	7.06E-02	4.71E-02	2.73E-02	2.73E-02	2.73E-02	1.26E+01	2.73E-02
CVTC® 10 AWG/3C Shielded + 14 AWG/3C	2.30E-02	2.25E-02	8.02E-02	9.27E-02	9.19E-02	5.65E-02	2.68E-02	2.68E-02	2.68E-02	1.26E+01	2.68E-02
CVTC® 10 AWG/4C E1	1.60E-02	1.58E-02	4.27E-02	4.94E-02	4.90E-02	3.20E-02	1.78E-02	1.78E-02	1.78E-02	1.26E+01	1.78E-02
CVTC® 10 AWG/4C E2	1.59E-02	1.56E-02	4.20E-02	4.86E-02	4.82E-02	3.15E-02	1.76E-02	1.76E-02	1.76E-02	1.26E+01	1.76E-02
CVTC® 10 AWG/4C Shielded M4	1.89E-02	1.86E-02	5.65E-02	6.53E-02	6.48E-02	4.13E-02	2.15E-02	2.15E-02	2.15E-02	1.26E+01	2.15E-02
CVTC® 10 AWG/5C E2	1.96E-02	1.94E-02	5.14E-02	5.94E-02	5.89E-02	3.87E-02	2.16E-02	2.16E-02	2.16E-02	1.26E+01	2.16E-02
CVTC® 10 AWG/7C E2	2.59E-02	2.56E-02	6.29E-02	7.27E-02	7.22E-02	4.83E-02	2.83E-02	2.83E-02	2.83E-02	1.26E+01	2.83E-02
CVTC® 10 AWG/9C E2	3.39E-02	3.35E-02	8.46E-02	9.77E-02	9.70E-02	6.43E-02	3.69E-02	3.69E-02	3.69E-02	1.26E+01	3.69E-02
CVTC® 8 AWG/3C + 10 AWG GRD M4	2.26E-02	2.23E-02	5.86E-02	6.77E-02	6.72E-02	4.42E-02	2.49E-02	2.49E-02	2.49E-02	1.53E+01	2.49E-02
CVTC® 8 AWG/3C Shielded + 14 AWG/3C	3.20E-02	3.14E-02	1.10E-01	1.27E-01	1.26E-01	7.78E-02	3.74E-02	3.74E-02	3.74E-02	1.53E+01	3.74E-02
CVTC® 8 AWG/3C Shielded + 8 AWG GRD	3.99E-02	3.89E-02	1.08E-01	1.25E-01	1.24E-01	8.04E-02	4.40E-02	4.40E-02	4.40E-02	1.53E+01	4.40E-02
CVTC® 8 AWG/4C + 10 AWG GRD M4	2.85E-02	2.82E-02	7.29E-02	8.42E-02	8.36E-02	5.52E-02	3.13E-02	3.13E-02	3.13E-02	1.53E+01	3.13E-02
CVTC® 6 AWG/2C Shielded M4	2.00E-02	2.05E-02	1.18E-01	7.78E-02	7.71E-02	4.36E-02	1.54E-02	1.54E-02	1.54E-02	2.04E+01	1.54E-02
CVTC® 6 AWG/3C + 8 AWG GRD M4	2.59E-02	2.70E-02	1.39E-01	7.29E-02	7.22E-02	4.22E-02	1.69E-02	1.69E-02	1.69E-02	2.04E+01	1.69E-02
CVTC® 6 AWG/3C Shielded + 12 AWG/3C	3.85E-02	3.90E-02	2.06E-01	1.51E-01	1.50E-01	8.67E-02	3.40E-02	3.40E-02	3.40E-02	2.04E+01	3.40E-02
CVTC® 6 AWG/4C + 8 AWG GRD M4	3.29E-02	3.43E-02	1.82E-01	9.38E-02	9.29E-02	5.37E-02	2.08E-02	2.08E-02	2.08E-02	2.04E+01	2.08E-02
CVTC® 6 AWG/4C Shielded M4	3.23E-02	3.36E-02	1.96E-01	1.09E-01	1.08E-01	6.09E-02	2.14E-02	2.14E-02	2.14E-02	2.04E+01	2.14E-02

# Environmental Product Declaration



According to  
ISO 14025, EN 15804+A2,  
ISO 14040, ISO 14044

Prysmian CVTC® Low Voltage Tray Cables  
Data Cables

CVTC® 4 AWG/2C Shielded M4	3.38E-02	3.33E-02	9.24E-02	1.07E-01	1.06E-01	6.88E-02	3.77E-02	3.77E-02	3.77E-02	1.26E+01	3.77E-02
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# Environmental Product Declaration



According to  
ISO 14025, EN 15804+A2,  
ISO 14040, ISO 14044

Prysmian CVTTC® Low Voltage Tray Cables  
Data Cables

	A1 - A3							A4	A5	B6	C2 - D
	GWP	ODP	EP	AP	PCOP	FFD/ADP	Resources				
CVTTC® 4 AWG/3C + 8 AWG GRD M4	7.05E-02	7.02E-02	9.51E-02	1.10E-01	1.09E-01	8.99E-02	7.34E-02	7.34E-02	7.34E-02	1.26E+01	7.34E-02
CVTTC® 4 AWG/3C Shielded + 12 AWG/3C	8.54E-02	8.49E-02	1.37E-01	1.58E-01	1.57E-01	1.20E-01	8.96E-02	8.96E-02	8.96E-02	1.26E+01	8.96E-02
CVTTC® 2 AWG/3C + 6 AWG GRD M4	1.10E-01	1.10E-01	1.39E-01	1.61E-01	1.61E-01	1.36E-01	1.14E-01	1.14E-01	1.14E-01	7.65E+00	1.14E-01
CVTTC® 2 AWG/3C Shielded + 10 AWG/3C	1.35E-01	1.35E-01	2.36E-01	2.11E-01	2.10E-01	1.67E-01	1.32E-01	1.32E-01	1.32E-01	7.65E+00	1.32E-01
CVTTC® 1 AWG/3C + 6 AWG GRD M4	1.44E-01	1.44E-01	2.24E-01	1.97E-01	1.96E-01	1.66E-01	1.41E-01	1.41E-01	1.41E-01	6.33E+00	1.41E-01
CVTTC® 1/0 AWG/3C + 6 AWG GRD M4	1.75E-01	1.75E-01	2.48E-01	2.25E-01	2.24E-01	1.96E-01	1.73E-01	1.73E-01	1.73E-01	5.08E+00	1.73E-01
CVTTC® 1/0 AWG/3C Shielded + 6 AWG/3C	1.96E-01	1.96E-01	3.09E-01	2.95E-01	2.94E-01	2.40E-01	1.95E-01	1.95E-01	1.95E-01	5.08E+00	1.95E-01
CVTTC® 2/0 AWG/3C + 6 AWG GRD M4	2.16E-01	2.16E-01	2.85E-01	2.67E-01	2.67E-01	2.38E-01	2.14E-01	2.14E-01	2.14E-01	3.92E+00	2.14E-01
CVTTC® 2/0 AWG/3C Shielded + 6 AWG/3C	2.38E-01	2.38E-01	3.51E-01	3.43E-01	3.42E-01	2.85E-01	2.37E-01	2.37E-01	2.37E-01	3.92E+00	2.37E-01
CVTTC® 2/0 AWG/4C + 4 AWG GRD M4	2.92E-01	2.92E-01	3.46E-01	3.38E-01	3.37E-01	3.13E-01	2.92E-01	2.92E-01	2.92E-01	3.92E+00	2.92E-01
CVTTC® 3/0 AWG/3C Shielded + 5 AWG/3C	2.90E-01	2.90E-01	3.89E-01	3.88E-01	3.87E-01	3.34E-01	2.90E-01	2.90E-01	2.90E-01	3.09E+00	2.90E-01
CVTTC® 4/0 AWG/3C + 4 AWG GRD M4	3.39E-01	3.39E-01	3.75E-01	3.71E-01	3.71E-01	3.53E-01	3.39E-01	3.39E-01	3.39E-01	2.41E+00	3.39E-01
CVTTC® 4/0 AWG/3C Shielded + 4 AWG/3C	3.92E-01	3.92E-01	4.90E-01	5.04E-01	5.03E-01	4.45E-01	3.96E-01	3.96E-01	3.96E-01	2.41E+00	3.96E-01
CVTTC® 4/0 AWG/4C + 4 AWG GRD M4	4.44E-01	4.43E-01	4.84E-01	4.97E-01	4.97E-01	4.70E-01	4.47E-01	4.47E-01	4.47E-01	2.41E+00	4.47E-01
CVTTC® 250 kcmil/3C + 4 AWG GRD M4	4.02E-01	4.01E-01	4.83E-01	4.81E-01	4.80E-01	4.38E-01	4.03E-01	4.03E-01	4.03E-01	2.03E+00	4.03E-01
CVTTC® 350 kcmil/3C + 3 AWG GRD M4	5.58E-01	5.59E-01	6.63E-01	6.11E-01	6.10E-01	5.78E-01	5.51E-01	5.51E-01	5.51E-01	1.45E+00	5.51E-01
CVTTC® 350 kcmil/3C	6.31E-01	6.31E-01	7.38E-01	7.49E-01	7.48E-01	6.86E-01	6.34E-01	6.34E-01	6.34E-01	1.45E+00	6.34E-01
CVTTC® 500 kcmil/3C + 2 AWG GRD M4	7.62E-01	7.62E-01	7.79E-01	7.96E-01	7.96E-01	7.79E-01	7.65E-01	7.65E-01	7.65E-01	1.00E+00	7.65E-01
CVTTC® 500 kcmil/3C + 1 AWG/3C GRD M4	8.56E-01	8.58E-01	9.07E-01	8.41E-01	8.41E-01	8.44E-01	8.47E-01	8.47E-01	8.47E-01	1.00E+00	8.47E-01
CVTTC® 500 kcmil/3C Shielded + 1 AWG/3C GRD M4	8.68E-01	8.69E-01	9.72E-01	9.68E-01	9.67E-01	9.13E-01	8.68E-01	8.68E-01	8.68E-01	1.00E+00	8.68E-01
CVTTC® 500 kcmil/4C + 2 AWG GRD M4	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
CVTTC® 600 kcmil/3C + 2 AWG GRD M4	9.17E-01	9.18E-01	1.01E+00	9.55E-01	9.55E-01	9.30E-01	9.09E-01	9.09E-01	9.09E-01	8.30E-01	9.09E-01

# Environmental Product Declaration



According to  
ISO 14025, EN 15804+A2,  
ISO 14040, ISO 14044

Prysmian CVTC® Low Voltage Tray Cables  
Data Cables

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## Additional Environmental Information

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### Environmental and Health During Manufacturing

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Prysmian has an established HSE Management System in place at its manufacturing sites. Site programs ensure that OSHA and environmental requirements are met or exceeded to help ensure the safety and health of all employees, contractors, and guests.

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### Environmental and Health During Installation

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There is no harmful emissive potential. No damage to health or impairment is expected under normal use corresponding to the intended use of the product.

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### Extraordinary Effects

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#### Fire

N/A

#### Water

N/A

#### Mechanical Destruction

N/A

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### Delayed Emissions

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Global warming potential is calculated using the TRACI 2.1 and CML 4.1 impact assessment methodologies. Delayed emissions are not considered.

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### Environmental Activities and Certifications

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Prysmian North America manufacturing sites strive to meet or exceed all applicable federal, state, and local environmental regulations. All manufacturing sites are ISO 14001:2015 Certified.

Prysmian maintains a variety of certifications based on the widely accepted industry standards:

- Quality Management System certifications (ISO9001/TL9000)
- Environmental Management System certifications (ISO14001)
- Health and Safety Management System certifications (ISO45001)

These certificates can be downloaded from our company website here: <https://www.prysmian.com/en>

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### Further Information

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## References

- PCR PEP ecopassport Program: Product Category Rules for Electrical, Electronic and HVAC-R Products, v4.0, 2021.
- PSR PEP ecopassport Program: Product Specific Rules for Wires, Cables and Accessories, v4.0, 2022.
- LCA for Experts v10.7.0.183 Sphera Solutions GmbH. LCA for Experts Software System and Database for Life Cycle Engineering. Version 10.7.0.183 (software).
- ISO 14025 ISO 14025:2011-10, Environmental labels and declarations — Type III environmental declarations — Principles and procedures.
- ISO 14040 ISO 14040:2009-11, Environmental management — Life cycle assessment — Principles and framework.
- ISO 14044 ISO 14044:2006-10, Environmental management — Life cycle assessment — Requirements and guidelines.
- EN 15804+A2 EN 15804:2012+A2:2019/AC:2021 - Sustainability of construction works - Environmental Product Declarations - Core rules for the product category of construction products
- ASTM 2020 ASTM International General Program Instructions v8.0, April 29, 2020
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# Environmental Product Declaration



According to  
ISO 14025, EN 15804+A2,  
ISO 14040, ISO 14044

Prysmian CVTC® Low Voltage Tray Cables  
Data Cables

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## Contact Information

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### Study Commissioner

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- For more information, visit our website at  
<https://www.prysmian.com/en>

- Technical Support for product technical questions at  
<https://www.prysmian.com/en/contact-us>  
- Contact our sustainability team:

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### LCA Practitioner

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