ENVIRONMENTAL PRODUCT DECLARATION (EPD) CommScope FIST-MSC Cable Terminations/Attachments



COMMSCOPE®

At CommScope, we believe that corporate responsibility and sustainability means making decisions that have a positive impact on our people, planet and bottom line.

CommScope's leaders have adopted a philosophy on corporate responsibility that embraces our core company values and holds us accountable to produce smart solutions that respect our people and our planet:

Meaningful integrity is a decisive personal and company-wide commitment to enable faster, smarter and more sustainable solutions while demonstrating the utmost respect for our human and natural resources.

This philosophy finds form in three pillars:

- Environmental
- Social
- Governance

Our commitment enables us to invest wisely in our future. By utilizing innovative technology, intelligent engineering and energy-efficient designs, we're building sustainable networks that make our customers more agile while also preserving the natural ecosystems from which we source our raw materials.



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CommScope® Product FIST™- MSC Cable Terminations





According to ISO 14025, EN 15804 + A2

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025, 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	General Program Instructions. Version 8.0. April 29, 2020		
MANUFACTURER NAME AND ADDRESS	CommScope, Inc. 3642 E US Highway 7	0, Claremont, North Carolina 28610	
DECLARATION NUMBER	EPD 1070		
DECLARED PRODUCT & FUNCTIONAL UNIT OR DECLARED UNIT	CommScope® FIST TM -MSC (Modular S Functional Unit = 1 assembled piece of c	plice Closure) Cable Terminations cable termination for a reference lifetime of 25 years	
REFERENCE PCR AND VERSION NUMBER	PEP ecopassport Program: Part A PCR B PSR Specific Rules for Wire Cables ar	for Electrical, Electronic and HVAC-R Products and Part nd Accessories	
DESCRIPTION OF PRODUCT APPLICATION/USE		Closure are designed to provide secure, universal, and ange of cable constructions and diameters (1–27 mm), etwork applications	
PRODUCT RSL DESCRIPTION (IF APPL.)	25 Years		
MARKETS OF APPLICABILITY	Europe		
DATE OF ISSUE	September 24, 2025		
PERIOD OF VALIDITY	5 Years		
EPD TYPE	Product Specific		
RANGE OF DATASET VARIABILITY	N/A		
EPD SCOPE	Cradle-to-Grave		
YEAR(S) OF REPORTED PRIMARY DATA	2024		
LCA SOFTWARE DATABASE(S) & VERSION NUMBER	SimaPro 10.2.0.0 & ecoinvent 3.11		
LCIA METHODOLOGY & VERSION NUMBER	CML- IA Baseline 3.11, TRACI 2.2 and E	EN15804+A2 (adapted) 1.03	
The sub-category PCR review was conducted by:		Hy Beother	
This declaration was independently verified in accorda ecopassport Program PCR for electrical, electronic and on EN 15804:2012 + A2:2019, serves as the core PCF ☐ INTERNAL ☒EXTERNAL	d HVAC-R products", v4.0, 2021 based	Timothy S Brooke ASTM International	
This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:		Thomas Sprin	
This life cycle assessment was independently verified in accordance with ISO 14044 and reference PCR by: 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.





According to ISO 14025, EN 15804 + A2

General Information

Description of Company/Organization

CommScope (NASDAQ: COMM) helps design, build and manage wired and wireless networks around the world. Corporate responsibility and sustainability drive us to make decisions that benefit people, society, the planet and our bottom line. We enable faster, smarter and more sustainable solutions while respecting human and natural resources. Innovative technology, intelligent engineering and energy-efficient design help us meet our goals. CommScope builds sustainable networks that make our customers more agile, simultaneously helping to preserve the natural ecosystems from which we source components and materials.

Product Description

The cable termination units (CTUs) in the CommScope FIST-MSC Modular Splice Closure are designed to provide secure, universal, and damage-free cable retention for a wide range of cable constructions and diameters (1–27 mm), supporting both feeder and distribution network applications. CTUs enable fully wraparound and remote cable preparation and installation, accommodate central or dual strength member and aramid yarn terminations, and allow for easy re-entry or future network upgrades without disturbing existing cables. These terminations are compatible with all fiber types, and can be used in underground, ground-level, and aerial installations, ensuring reliable performance and flexibility for diverse deployment scenarios.

Product Type: Cable termination units and Brackets

Product Characteristics: Universal cable compatibility, superior cable retention, ease of installation and Re-entry flexibility, integrated grounding option, and Flexible adapters and modular approach

This EPD covers following FIST-MSC Cable termination products:

Product Specification	Unit Size	Max cable size
CTU-S	Small	Up to 7 mm
CTU-L	Large	Up to 16 mm
CTU-G	Giant	Up to 27 mm
CTU-G-GRND	Giant-grounding	Up to 27 mm

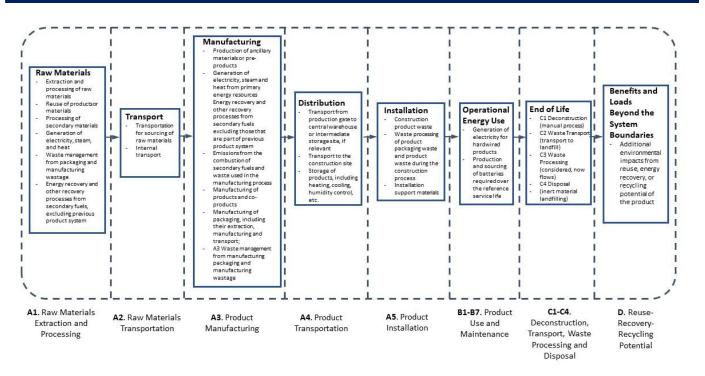
Product Specification	Fixation material	Max number of cables
CTU-BRKT-1	Tie-wraps	Up to 8 cables
CTU-BRKT-2	Hose clamps and dual- strength members	Up to 3 cables





According to ISO 14025, EN 15804 + A2

Flow Diagram



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, disposal, and potential benefits and loads following the end-of-life disposal. An impact assessment was completed for each cable terminations type and the product type with the highest impact is reported. Other product types are represented through the scaling factor table and can be independently calculated.

Application

Cable terminations provide universal, secure, and damage-free retention for cables and microtubes, supporting a wide range of cable constructions including central or dual strength member and aramid yarn terminations. The system enables fully wraparound and remote cable preparation and CTU installation, allows opening of gel segments while cable retention remains in place, and is suitable for feeder and distribution network applications.

Material Composition

The primary product materials are indicated as a percentage mass to enable the user of the EPD to understand the composition of the product in delivery status. The composition of the reference Cable termination product is as follows:

Product type: CTU-BRKT-2		
Material type Mass percentage		
Zinc alloy	51.87 %	
Stainless steel	45.50 %	
others	2.64 %	
Total	100%	



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		
General Specifications		
Product Type	Cable Termination Bracket	
Product Series	FIST-MSC	
Max cable capacity	Up to 3 cables	
Fixation materials	Hose clamps and dual-strength member fix devices	
Network Area Type	Distribution, Feeder	
Product & Packaging weight	0.114 kg & 0.013 kg	
Quality Management	ISO 9001:2015	
Compliance	ROHS	

Properties of Declared Product as Shipped

CommScope FIST-MSC cable termination kits include a cable termination unit (with or without grounding wire), adapter plate, metal bands, hose clamps, tie wraps, and hex wrench. The selection of fixation materials and sizes depends on the CTU type, and the diameter of the cables being installed. Metal bands are primarily used for securing cables within the CTUs, while tie wraps and hose clamps are utilized with the brackets to fix cables onto the adapter plate, providing flexibility and compatibility with standard field installation practices.



Cable Termination Units



Cable Termination Brackets



Methodological Framework

Functional Unit

The declaration refers to the functional unit of one assembled piece of CTU-BRKT-2 Cable termination.

Name	Value	Unit
Functional Unit	1	Assembled piece
Maximum Mass	0.127	kg

System Boundary

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

Life Cycle Stage	Life Cycle Module	Module	X = Included/ Not Included
	Raw Material Supply & Parts manufacturing	A1	Х
Product Stage	Transport	A2	X
	Assembly process	А3	Х
Construction	Transport from gate to the site	A4	Х
Process Stage	Installation process	A5	Х
	Use	B1	Х
	Maintenance	B2	Х
	Repair	В3	Х
Use Stage	Replacement	B4	Х
	Refurbishment	B5	Х
	Operational energy use	В6	Х
	Operational water use	В7	X
	Deconstruction/ demolition	C1	Х
E - 1 - (1:(- (1*	Transport	C2	Х
End of Life Stage*	Waste processing	C3	Х
	Disposal	C4	Х
Benefits and Loads Beyond the System Boundaries	Reuse-Recovery-Recycling potential	D	х

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

Notes:

- There are no activities in the Modules B1-B7 and C1 as the values are "0"
- Module D is reported but excluded from the total life cycle results as it falls outside the system boundary

CommScope® Product FIST™- MSC Cable Terminations





According to ISO 14025, EN 15804 + A2

Reference Service Life

The reference service life of Cable termination Units/Brackets is 25 years.

Allocation

Allocation was determined on a per piece basis for the system.

Cut-off Criteria

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 this, a documented assumption is permissible.

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.

Data Sources

Primary data were collected for every process in the product system under the control of CommScope. Secondary data from the ecoinvent 3.11 database were utilized when necessary. These data were evaluated and have temporal, geographic, and technical coverage appropriate to the scope of the product category.

Data Quality

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). Primary data are based on direct information from 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.

Period Under Review

The period under review is the full calendar year of 2024.

Treatment of Biogenic Carbon

The uptake and release of biogenic carbon throughout the product life cycle follows EN15804+A2 Section 6.4.4.

Comparability and Benchmarking

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.

Units

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



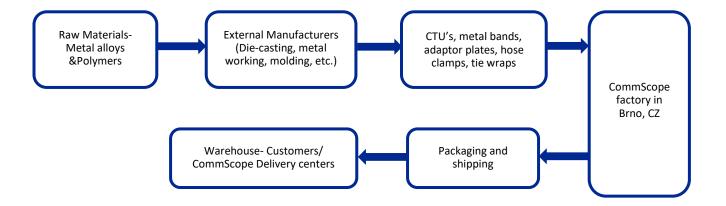
Additional Environmental Information

Background Data

For life cycle modeling of the considered products, Simapro- LCA software tool, developed by PRé-Sustainability, is used. The ecoinvent database contains consistent and documented datasets which are documented online. To ensure comparability of results in the LCA, data from the ecoinvent database were used for materials, energy, transportation, and waste treatment.

Manufacturing

The manufacturing process for CommScope FIST-MSC cable terminations begin with the sourcing of raw materials such as zinc alloy, stainless steel, polyethylene, and polyamide. These materials are delivered to external manufacturers, where they undergo various processes: die casting for CTU units, sheet metal and metal working for cable attachment strips and hex wrenches and injection molding for plastic tie wraps. The finished components are then packaged and shipped to the CommScope production site in Brno, CZ (CZ18), where they are consolidated for final distribution. From there, products are dispatched to either CommScope delivery centers or directly to customer warehouses for end use.



Packaging

The packaging for this product consists of plastic bags for individual unit protection, corrugated fiberboard for bulk packaging, and wooden pallets primarily used for transportation.

Quantity % by Weight		
Material Maximum		
LD-PE bags	23.70 %	
Cardboard	47.39 %	
Wood	28.91 %	
Total	100 %	



Transformation

Transport to Installation Site (A4)			
Description	Value Unit		
Transport type	Truck/ lorry > 32 metric ton		
Fuel type/ Liters of Fuel	Diesel, compliant with EURO5		
Liters of Fuel	35 l/100 km		
Transport Distance (average)	725	km	
Capacity Utilization	85 %		
Weight of one assembled bracket with packaging transported (maximum)	0.127	kg	

Product Installation

The CTU-BRKT-2 kit contains adaptor plate, 2 ejot screws, hose clamps. These kits are ordered and delivered either separately or together with other FIST-MSC products. This variant of CTU Bracket can hold up to 3 cables (2 on the sides and 1 in the middle of adaptor plate). Installation is fully manual, involving only the removal and disposal of packaging waste, with no auxiliary materials, or energy consumption involved; the process is tool-less, produces no installation scrap.

Installation into the building (A5)		
Name	Max	Unit
Auxiliary materials	-	kg
Water consumption	-	m³
Other resources	-	kg
Electricity consumption	-	kWh
Other energy carriers	-	MJ
Product loss per functional unit	0.00E+00	kg
Waste materials at construction site	0.00E+00	kg
Output substance (recycle)	0.00E+00	kg
Output substance (landfill)	0.00E+00	kg
Output substance (incineration)	0.00E+00	kg
Packaging waste (recycle)	6.40E-03	kg
Packaging waste (landfill)	5.96E-03	kg
Packaging waste (incineration)	4.52E-03	kg
Direct emissions to ambient air*, soil, and water	0.00E+00	kg CO ₂
VOC emissions	-	kg

^{*}CO2 emissions to air from disposal of packaging





Reference Service Life		
Name	Value	Unit
Reference Service Life	25	years
Declared product properties (at the gate) and finishes, etc.	-	
Design application parameters (if instructed by the manufacturer), including the references to the appropriate practices and application codes	-	
An assumed quality of work, when installed in accordance with the manufacturer's instructions	-	
Outdoor environment, (for outdoor applications), e.g. weathering, pollutants, UV and wind exposure, building orientation, shading, temperature	-	
Indoor environment (for indoor applications), e.g. temperature, moisture, chemical exposure	-	
Usage conditions, e.g. frequency of use, mechanical exposure	-	
Maintenance e.g. required frequency, type and quality and replacement of components	-	

Product Use

No cleaning, maintenance, repair, replacement or refurbishment is required. There is no operational energy or water use.

Operational Energy Use (B6)		
Name	Value	Unit
Ancillary materials specified by material	-	kg
Net freshwater consumption	-	m³
Electricity consumption	-	kWh
Power output of equipment	-	kWh
Characteristic performance	-	-
Further assumptions for scenario development	-	-

Disposal

The product can be manually disassembled to separate different individual parts or materials for disposal. Most of the parts are disposed through waste incineration with energy recovery or landfilled, in accordance with the PCR.

End of Life (C2-C4)		
Name	Max	Unit
Collected separately	9.80E-02	kg
Collected as mixed waste	0.00E+00	kg
Reuse	0.00E+00	kg
Recycling	7.84E-02	kg
Landfilling	1.96E-02	kg
Incineration with energy recovery	0.00E+00	kg
Energy conversion- Electricity	20	%
Energy conversion- Heat	50	%

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According to ISO 14025, EN 15804 + A2

Re-use Phase

Re-use of the product is not common. However, energy in the form of heat and electricity has been recovered from the waste processing of packaging materials at the Installation stage (A5) and waste processing of product materials at the end-of-life disposal stage (C2-C4). Energy recovery for the incineration of polymer materials were calculated according to Appendix D of the Part A PCR.

Energy recovery Potential (D)		
Name	Max	Unit
Net energy benefit of energy recovery from packaging wastes incineration (A5-Installation) in the form of heat	6.59E-02	MJ
Net energy benefit of energy recovery from packaging wastes incineration (A5-Installation) in the form of electricity	2.64E-02	MJ
Net energy benefit of energy recovery from product wastes incineration (C2-C4 End of life Disposal) in the form of heat	0.00E+00	MJ
Net energy benefit of energy recovery from product wastes incineration (C2-C4 End of life Disposal) in the form of electricity	0.00E+00	MJ
Total Net energy benefits of energy recovery in the form of heat	6.59E-02	MJ
Total Net energy benefits of energy recovery in the form of electricity	2.64E-02	MJ

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LCA Results - Maximum Impact for the Product "CTU-BRKT-2"

Results shown below were calculated using the CML-IA baseline V3.11 / EU25 methodology

CML-IA baseline- Impact Assessment								
Impact category	Unit	Total	A1-A3	A4	A5	C2	C4	D
Abiotic depletion	kg Sb eq	5.42E-05	5.42E-05	2.73E-08	5.36E-09	2.99E-08	1.80E-10	-5.21E-09
Abiotic depletion (fossil fuels)	MJ	9.28E+00	8.95E+00	1.39E-01	2.82E-02	1.53E-01	2.98E-03	-2.79E-02
Global warming (GWP100a)	kg CO2 eq	8.41E-01	8.11E-01	9.65E-03	1.06E-02	1.06E-02	1.22E-04	-2.39E-03
Ozone layer depletion (ODP)	kg CFC-11 eq	7.70E-09	7.31E-09	1.69E-10	3.37E-11	1.86E-10	2.72E-12	-3.27E-11
Photochemical oxidation	kg C2H4 eq	2.03E-04	1.99E-04	1.48E-06	8.38E-07	1.63E-06	3.69E-08	-4.49E-07
Acidification	kg SO2 eq	3.65E-03	3.59E-03	2.44E-05	5.85E-06	2.67E-05	6.35E-07	-1.01E-05
Eutrophication	kg PO4 eq	2.70E-03	2.60E-03	6.66E-06	7.80E-05	7.31E-06	1.59E-07	-8.05E-06

^{*}Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

Results shown below were calculated using TRACI 2.2 V1.00/ US-Canadian 2008 Methodology

TRACI 2.2- Impact Assessment								
Impact category	Unit	Total	A1-A3	A4	A5	C2	C4	D
Ozone depletion	kg CFC-11 eq	9.55E-09	9.03E-09	2.24E-10	4.45E-11	2.46E-10	3.60E-12	-4.17E-11
Global warming	kg CO2 eq	8.34E-01	8.03E-01	9.56E-03	1.01E-02	1.05E-02	1.20E-04	-2.38E-03
Smog	kg O3 eq	5.23E-02	5.07E-02	6.82E-04	1.73E-04	7.49E-04	2.08E-05	-1.02E-04
Acidification	kg SO2 eq	3.80E-03	3.74E-03	2.84E-05	7.05E-06	3.12E-05	7.76E-07	-9.81E-06
Freshwater eutrophication	kg P eq	3.40E-04	3.29E-04	3.99E-07	1.09E-05	4.38E-07	6.54E-09	-1.05E-06
Marine eutrophication	kg N eq	4.99E-04	4.84E-04	5.84E-06	2.39E-06	6.41E-06	1.76E-07	-1.00E-06

^{*}Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

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According to ISO 14025, EN 15804 + A2

Results shown below were calculated using EN 15804 + A2 (adapted) V1.03 Methodology.

Impact category	Unit	Total	A1-A3	A4	A5	C2	C4	D
Acidification	mol H+ eq	4.47E-03	4.40E-03	3.21E-05	7.79E-06	3.52E-05	8.59E-07	-1.19E-05
Climate change	kg CO2 eq	8.37E-01	8.01E-01	9.71E-03	1.50E-02	1.07E-02	1.23E-04	-3.08E-03
Climate change - Biogenic	kg CO2 eq	1.54E-05	-2.54E-03	5.93E-06	2.54E-03	6.51E-06	6.00E-08	0.00E+00
Climate change - Fossil	kg CO2 eq	8.32E-01	8.03E-01	9.70E-03	8.32E-03	1.07E-02	1.23E-04	-2.39E-03
Climate change - Land use and LU change	kg CO2 eq	1.13E-03	1.12E-03	3.48E-06	7.23E-07	3.83E-06	6.97E-08	-7.08E-06
Ecotoxicity, freshwater	CTUe	1.89E+01	1.88E+01	1.66E-02	7.20E-02	1.83E-02	2.17E-04	-5.44E-03
Ecotoxicity, freshwater - inorganics	CTUe	1.88E+01	1.87E+01	1.60E-02	7.19E-02	1.75E-02	2.03E-04	-5.39E-03
Ecotoxicity, freshwater - organics	CTUe	1.03E-01	1.02E-01	6.62E-04	1.64E-04	7.27E-04	1.46E-05	-5.39E-05
Particulate matter	Disease.	6.68E-08	6.45E-08	9.82E-10	2.01E-10	1.08E-09	1.98E-11	-4.25E-11
Eutrophication, marine	kg N eq	9.43E-04	9.15E-04	1.09E-05	5.07E-06	1.20E-05	3.30E-07	-2.17E-06
Eutrophication, freshwater	kg P eq	5.86E-04	5.85E-04	6.85E-07	1.79E-07	7.52E-07	1.07E-08	-2.24E-06
Eutrophication, terrestrial	mol N eq	9.77E-03	9.49E-03	1.19E-04	3.01E-05	1.30E-04	3.60E-06	-1.86E-05
Human toxicity, cancer	CTUh	1.17E-09	1.16E-09	1.59E-12	5.87E-13	1.74E-12	2.21E-14	-3.99E-13
Human toxicity, cancer - inorganics	CTUh	8.24E-10	8.22E-10	6.81E-13	3.79E-13	7.48E-13	7.22E-15	-2.51E-13
Human toxicity, cancer - organics	CTUh	3.41E-10	3.39E-10	9.04E-13	2.08E-13	9.92E-13	1.49E-14	-1.49E-13
Human toxicity, non-cancer	CTUh	2.13E-08	2.11E-08	9.14E-11	3.89E-11	1.00E-10	4.97E-13	-1.81E-11
Human toxicity, non-cancer - inorganics	CTUh	2.09E-08	2.06E-08	8.57E-11	3.36E-11	9.41E-11	4.34E-13	-1.76E-11
Human toxicity, non-cancer - organics	CTUh	4.29E-10	4.12E-10	5.67E-12	5.21E-12	6.22E-12	6.33E-14	-5.44E-13
Ionising radiation	kBq U-235 eq	6.66E-02	6.62E-02	1.59E-04	3.22E-05	1.75E-04	1.80E-06	-1.57E-03
Land use	Pt	6.69E+00	6.35E+00	1.43E-01	3.01E-02	1.57E-01	5.90E-03	-8.01E-03
Ozone depletion	kg CFC11 eq	8.95E-09	8.46E-09	2.12E-10	4.22E-11	2.33E-10	3.42E-12	-3.99E-11
Photochemical ozone formation	kg NMVOC eq	3.09E-03	2.97E-03	5.09E-05	1.25E-05	5.59E-05	1.30E-06	-5.92E-06
Resource use, fossils	MJ	1.03E+01	1.00E+01	1.42E-01	2.87E-02	1.56E-01	3.00E-03	-5.56E-02
Resource use, minerals and metals	kg Sb eq	5.42E-05	5.42E-05	2.73E-08	5.36E-09	2.99E-08	1.80E-10	-5.14E-09
Water use	m3 depriv.	2.60E-01	2.59E-01	6.45E-04	-7.96E-04	7.08E-04	1.31E-04	-5.29E-04

^{*}Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

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According to ISO 14025, EN 15804 + A2

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

	Parameters	Unit	Total	A1-A3	A4	A5	C2	C4	D
PERE	Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	2.07E+00	2.06E+00	2.19E-03	4.55E-04	2.40E-03	2.81E-05	-1.25E-02
PERM	Use of renewable primary energy resources used as raw materials	MJ	2.03E-01	2.03E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	Total use of renewable primary energy resources	MJ	2.27E+00	2.27E+00	2.19E-03	4.55E-04	2.40E-03	2.81E-05	-1.25E-02
PENRE	Use of non-renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	1.10E+01	1.07E+01	1.51E-01	3.05E-02	1.66E-01	3.20E-03	-5.78E-02
PENR M	Use of non-renewable primary energy resources used as raw materials	MJ	3.08E-01	3.08E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	Total use of non-renewable primary energy resources	MJ	1.13E+01	1.10E+01	1.51E-01	3.05E-02	1.66E-01	3.20E-03	-5.78E-02
SM	Use of secondary material	kg	5.82E-02	5.82E-02	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
NRSF	Use of non-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
FW	Net use of fresh water	m³	2.87E-01	2.86E-01	6.47E-04	-7.96E-04	7.10E-04	1.31E-04	-5.27E-04

^{*}Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

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According to ISO 14025, EN 15804 + A2

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

EN 158	EN 15804 +A2- Waste Categories and Output Flows								
	Parameters	Units	Total	A1-A3	A4	A5	C2	C4	D
HWD	Hazardous waste disposed	kg	3.78E-03	3.71E-03	4.05E-06	6.53E-05	4.45E-06	4.39E-08	-6.03E-05
NHWD	Non-hazardous waste disposed	kg	1.53E-01	9.94E-02	1.22E-02	8.37E-03	1.34E-02	1.96E-02	-1.40E-04
RWD	Radioactive waste disposed	kg	1.68E-05	1.68E-05	3.91E-08	7.91E-09	4.29E-08	4.38E-10	-4.03E-07
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
MFR	Materials for recycling	kg	7.84E-02	0.00E+00	0.00E+00	0.00E+00	7.84E-02	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
EE	Exported energy	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

^{*}Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study



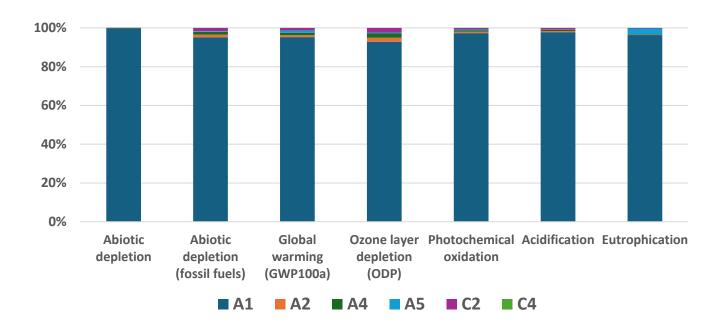


According to ISO 14025, EN 15804 + A2

LCA Interpretation - Maximum Impact for the Product "CTU-BRKT-2"

The overall impact results below based on CML method demonstrates that the vast majority of environmental impacts for this product—across all Impact categories are overwhelmingly attributed to the A1-A3 stages, which represent raw material extraction, processing, and manufacturing. This pattern reflects the significant influence of raw material production and manufacturing processes on the product's life cycle impacts. The limited impact from end-of-life (C2-C4) is largely due to the presence of metals in the product, which are commonly recovered and recycled at end-of-life, thus reducing the environmental burdens associated with disposal and diminishing the relative significance of this stage.

These results underscore that efforts to reduce the overall environmental impacts of this product should focus primarily on improvements in the early product stages (A1-A3), particularly in sourcing and processing raw materials.







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 the group are represented through scaling factor tables and can be independently calculated for the results based on CML method.

The table below presents the scaling factors for the FIST-MSC Cable terminations (CTU's & Brackets) product group. To determine the impact results for these products, multiply the respective scaling factor by the LCA results provided in the Maximum Impact section. This approach ensures consistent and transparent calculation of environmental impacts across all products in the group.

		Product Types								
	CTU-BRKT-2	СТ	U-S	СТ	J-L	CTU-G				
Impact category	Total & A1-A3	Total	A1-A3	Total	A1-A3	Total	A1-A3			
Abiotic depletion	1	0.65	0.65	1.40	1.40	2.11	2.12			
Abiotic depletion (fossil fuels)	1	0.18	0.17	0.36	0.35	0.49	0.49			
Global warming (GWP100a)	1	0.17	0.16	0.35	0.34	0.48	0.47			
Ozone layer depletion (ODP)	1	0.17	0.17	0.34	0.32	0.45	0.44			
Photochemical oxidation	1	0.19	0.19	0.38	0.38	0.53	0.53			
Acidification	1	0.24	0.24	0.52	0.52	0.74	0.74			
Eutrophication	1	0.19	0.18	0.40	0.40	0.55	0.56			

		Product Types					
	CTU-G	-GRND	СТИ-В	RKT-1			
Impact category	Total	A1-A3	Total	A1-A3			
Abiotic depletion	2.99	3.00	0.31	0.31			
Abiotic depletion (fossil fuels)	0.60	0.59	0.47	0.46			
Global warming (GWP100a)	0.58	0.57	0.45	0.43			
Ozone layer depletion (ODP)	0.56	0.55	0.44	0.43			
Photochemical oxidation	1.04	1.05	0.50	0.50			
Acidification	1.47	1.49	0.38	0.37			
Eutrophication	0.80	0.81	0.34	0.31			

The scaling factors are reported only for the A1-A3 life cycle stages, as these stages account for the majority of the total environmental impacts for the product group.

CommScope® Product FIST™- MSC Cable Terminations





According to ISO 14025, EN 15804 + A2

Additional Environmental Information

Environmental and Health During Manufacturing

CommScope values employees' health, safety and well-being. To this end, we maintain a robust company-wide environment, health and safety (EHS) management system. This is an integrated program based on the requirements of the International Standards of ISO45001 and ISO14001. To support this integrated EHS management system, CommScope utilizes a web-based platform, the BSI Entropy™ tool. This tool supports the management of our EHS processes and operations at the corporate and facility level. All EHS management system records (policies, procedures, method statements, health and safety risk assessments, environmental aspect/impact assessments, legal requirements, permits, training, internal and external audits, incidents and implemented CAPA, KPIs, and other records related to EHS) are maintained and managed in Entropy. In addition, 90% of CommScope manufacturing facilities are certified according to the ISO14001 and ISO45001 standards. Our vision and commitments are detailed in our EHS Policy.

CommScope understands the need to address the environmental impacts of its products and services. CommScope engages product development teams in designing innovative and more sustainable solutions across a product's life cycle—from design and manufacturing to product use and end of life.

CommScope is committed to demonstrating a high standard of global product compliance practices. Through this commitment, we actively monitor global environmental trends and emerging regulatory requirements that may affect our products, operations, supply chain, and customer base. We are committed to be compliant with all applicable environmental product related legal and other requirements. To achieve this, we have a global organization comprising environmental specialists, engineers, and product compliance experts who are constantly ensuring our compliance status is maintained. We manage our compliance using a cross-functional approach with our engineers, designers, quality organization, supply chain organization, and production.

CommScope is committed to upholding the human rights of its employees. To ensure our employees are treated with dignity and respect, we follow a well-established Code of Ethics and Business Conduct and Labor Policy that align with recognized standards and guidelines from the International Labor Organization, the United Nations Global Compact, the UN Universal Declaration of Human Rights, SA8000 and applicable laws.





According to ISO 14025, EN 15804 + A2

Environmental and Health During Installation

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.

Extraordinary Effects

Fire

No extraordinary effects to the environment can be anticipated during exposure to fire.

Water

Contains no substances that have any impact on water in case of flood.

Mechanical Destruction

No danger to the environment can be anticipated during mechanical destruction.

Delayed Emissions

Global warming potential is calculated using the CML- IA Baseline 3.11, TRACI 2.2 and EN15804+A2 (adapted) 1.03 impact assessment methodologies. Delayed emissions are not considered.

Environmental Activities and Certifications

Our Sustainability Report details CommScope's efforts to operate the business ethically and with integrity; protect the environment; maintain the health, safety and well-being of our workforce; and support the communities in which we operate. To learn more, view our comprehensive Sustainability Report at https://www.commscope.com/corporate-responsibility-and-sustainability/.

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

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

These certificates can be downloaded from our company website:

https://www.commscope.com/corporate-responsibility-and-sustainability/philosophy/#certifications

Product sustainability certifications including EPDs and Health Product Declarations (HPDs) can be downloaded from our company website:

https://www.commscope.com/corporate-responsibility-and-sustainability/product-sustainability/certifications/

Further Information

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-	PSR	PEP ecopassport Program Product Specific Rules specific for Wires, Cables and Accessories, v4.0, 2022
-	LCA tool & Databases	Simapro Craft version 10.2.0.0 of LCA software & ecoinvent 3.11, Industry data 2.0 databases.
-	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
-	Characterization Method	IPCC. 2021. Climate Change 2021. The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson, delmotte, V., et al] Cambridge University Press, Cambridge, UK and New York, NY, USA (http://www.ipcc.ch/report/ar6/wg1/).
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-	Characterization Method	Jenkin M.E., & Hayman G.D. Photochemical ozone creation potentials for oxygenated volatile organic compounds: sensitivity to variations in kinetic and mechanistic parameters. Atmospheric Environment. 1999, 33 (8) pp. 1275-1293.
-	Characterization Method	WMO. 1999. Scientific Assessment of Ozone Depletion: 1998, World Meteorological Organization Global Ozone Research and Monitoring Project - Report No. 44, WMO, Geneva.
-	Characterization Method	Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers- version 1.2, January 2017.

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Contact Information

Study Commissioner



For more information, visit our website at https://www.commscope.com/

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- Contact Corporate Responsibility & Sustainability team for sustainability questions at sustainability@commscope.com

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