

ENVIRONMENTAL PRODUCT DECLARATION

BELDEN COPPER DATA NETWORKING CABLE

NON-PLENUM INCLUDING CMR RISER, CM, CM-LS, CMG, LSZH AND OSP RATED



Belden Data Networking Non-Plenum Copper Cabling



At Belden, our core values include customers defining our success, and continuously improving. These are rooted in our culture and everyday business practices. These values provide the foundation of our commitment to corporate responsibility, human rights, environmental stewardship, employee health and safety, ethical business practices, philanthropy and equal opportunity.

As we continue to pursue transparency throughout our business operations, we are focused on the three pillars of sustainability: social, environmental, and economic factors.

To succeed with our customers we need to listen to our customers. Producing transparency documents is a priority and a significant part of our sustainability initiative.

As continuously improving is our way of life, the life cycle analysis data used in this report is carefully evaluated and interpreted, guiding our future product development strategy and manufacturing practices.



ENVIRONMENTAL PRODUCT DECLARATION





Belden: 10GXST™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10®, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025 and ISO 21930. 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.



PROGRAM OPERATOR	UL Environment	
DECLARATION HOLDER	Belden	
DECLARATION NUMBER	4787524121.102.1	
DECLARED PRODUCT	Riser Rated Copper Data Networking Cable	
REFERENCE PCR	PCR for EPDs: Wire & Cable PCR 2013:1.0	
DATE OF ISSUE	October 5, 2016	
PERIOD OF VALIDITY	5 years	
CONTENTS OF THE DECLARATION	Product definition and information about building physics Information about basic material and the material's origin Description of the product's manufacture Indication of product processing Information about the in-use conditions Life cycle assessment results Testing results and verifications	
The PCR review was conducted by:	Environment and Development Foundation	
	PCR Addendum: UL Environment	
This declaration was independently verified in accordance with ISO 14025 by Underwriters Laboratories <input type="checkbox"/> INTERNAL <input checked="" type="checkbox"/> EXTERNAL		
	Wade Stout, ULE EPM	
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:		
	Thomas Gloria, Life-Cycle Services, LLC	



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Product Definition and Information

Company Description

For more than 100 years, customers who have required unsurpassed performance and durability for signal transmission have counted on the Belden brand. In the 20th century that trust was built on high-performance wire and cable products. Today, Belden designs, manufactures and sells a comprehensive portfolio of cable, connectivity and networking products for the transmission of signals for data, sound and video applications.

Belden has a recognized reputation for doing business in a responsible and ethical manner. As we continue to pursue sustainability throughout our business operations, we are focused on the triple bottom line: social, environmental, and financial factors. One of our commitments is to innovate and continue to offer environmentally-friendly and LEED certified products to customers looking for sustainable alternatives to traditional products. This declaration is part of that commitment.

Product Description

Seventy-one premise data cable product sets are listed below with their definitions and part number codes. The list includes CMR (riser), CM, CM-LS, LSZH and outdoor rated products. Their constructions include two and four pair horizontal cable, patch cordage and cross-connect, and twenty-five pair backbone. All conform to TIA standards, mainly TIA 568-C.2, and/or ISO/IEC 11801:2002 specifications. All products are third party verified to communications standards and to appropriate Category (TIA) or Class (ISO) requirements. All are available in a variety of packaging types including plastic reels, boxes and reel-in-boxes.

The following list divided up as follows:

Two brands - **Belden and Mohawk**

Three sections - **1-Indoor Products, 2-Low Smoke Zero Halogen Products, 3-Outdoor Products**

Each section may contain:

- Category 6A UTP Products
- Category 6A Shielded Products
- Category 6 UTP Products
- Category 6 Shielded Products
- Category 5e UTP Products
- Category 5e Shielded Products
- Category 3 UTP Products
- Miscellaneous



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Belden Brand

Indoor Products

- **Category 6A UTP Products**

- **10GXS** - Part numbers: 10GXS12, 10GXS32
10GXS Category 6A enhanced to 625MHz exemplifies simplicity and elegance in design. It is the smallest fully TIA Category 6A compliant horizontal cable product on the market that offers 10dB of alien crosstalk headroom while capable of delivering 100W of PoE. Belden's 10GX System using 10GXS cable is the gold standard for cabling infrastructure robustness. The cable construction is four pair (bond-pair optional), 23 AWG solid bare copper conductors, polyolefin insulation, patented EquiSpline™ & EquiBlock™ technologies, ripcord, and a flame retardant PVC jacket.
- **10GX** - Part numbers: 10GX12, 10GX32
10GX Category 6A horizontal cables are enhanced to 625MHz and improved performance over TIA Category 6A requirements. The cable construction is four pair (bond-pair optional), 23 AWG solid bare copper conductors, polyolefin insulation, patented Double-H spline technology, ripcord, and a flame retardant PVC jacket.

- **Category 6A Shielded Products**

- **10GX** - Part numbers: 10GX52F, 10GX62F
10GX F/UTP Category 6A are horizontal cables enhanced to 625MHz with improved performance over TIA Category 6A requirements. The cable construction is four pair (bond-pair optional), 23 AWG solid bare copper conductors, polyolefin insulation, patented X-spline, overall foil tape with drain wire, ripcord, and a flame retardant PVC jacket.

- **Category 6 UTP Products**

- **DataTwist 4800** (Category 6E+) – Part numbers: 4812, 7851A
DataTwist 4800 UTP horizontal cables are guaranteed to 600MHz. They provide significant headroom and robust data transmission performance for today's most demanding applications. With 9% better insertion loss and PSNEXT 8dB better than TIA 568-C.2, these cables support the industry's most powerful Category 6 networking solution: Belden System 4800. Their large conductor size increases PoE efficiency and lowers temperature rise. The cable construction is four pair (bond-pair optional), 23 AWG solid bare copper conductors, polyolefin insulation, patented spline technology, ripcord, and a flame retardant PVC jacket.
- **DataTwist 3600** (Category 6E) - Part numbers: 3612, 3632
DataTwist 3600 UTP horizontal cables are guaranteed to 400MHz. They provide increased bandwidth and signal-to-noise margins. Their smaller diameter, low insertion loss, and 7.7dB PSACR headroom over TIA 568-C.2 make possible the unique Category 6 networking solution: Belden System 3600. The cable construction is four pair (bond-pair optional), 23 AWG solid bare copper conductors, polyolefin insulation, patented spline technology, ripcord, and a flame retardant PVC jacket.
- **DataTwist 2400** (Category 6+) - Part numbers: 2412
DataTwist 2400 UTP horizontal cables provide increased bandwidth and signal-to-noise margins and are guaranteed to 350MHz. Their smaller diameter, low insertion loss, and 3.7dB PSACR headroom over TIA 568-C.2 makes possible the unique Category 6 networking solution: Belden System 2400. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, patented separator tape technology, ripcord, and a flame retardant PVC jacket.
- **MediaTwist** (Category 6+) – Part number: 1872A
MediaTwist UTP horizontal cables provide increased bandwidth and signal-to-noise margins and are guaranteed to 350MHz. Their unique crescent moon shape, low insertion loss, and 3dB PSNEXT headroom over TIA 568-C.2 make possible the unique Category 6 networking solution: Belden System



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2400. The cable construction is four bonded-pair, 23 AWG solid bare copper conductors, polyolefin insulation, ripcord, and a flame retardant flat PVC jacket.

- DataTwist 6 (Category 6) – Part numbers: 5663U6, LAN6R, 7881A
DataTwist 6 UTP horizontal cables provide compliance to TIA 568-C.2 up to 250MHz. The cable construction is four, 23 AWG solid bare copper conductors, polyolefin insulation, ripcord, and a flame retardant flat PVC jacket.
- MediaTwist Patch Cordage (Category 6+) - Part numbers: 1875GA, 1875GB
MediaTwist UTP patch cables are TIA 568-C.2 compliant, RJ-45 compatible for direct attach runs and are guaranteed to 350MHz for increased bandwidth. The cable construction is four bonded-pair, 24 AWG stranded tinned copper conductors, polyolefin insulation, no ripcord, and a flame retardant flat PVC jacket.
- DataTwist 6 Patch Cordage (Category 6) - Part number: 7883A
These Category 6 UTP patch cables are TIA 568-C.2 compliant, RJ-45 compatible for direct attach runs and are guaranteed to 250MHz. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, a central square filler, ripcord, and a flame retardant PVC jacket.
- DataTwist 6 Cross Connect (Category 6) - Part number: XCGB4
This Category 6 UTP cross connect cable is TIA 568-C.2 compliant and guaranteed to 250MHz. The cable construction is four pair, 24 AWG solid bare copper conductors, flame retardant insulated, 4 pair cabled together with no jacket.
- **Category 6 Shielded Products**
 - DataTwist 2400 (Category 6+) - Part numbers: 2412F
DataTwist 2400 F/UTP horizontal cables provide increased bandwidth and signal-to-noise margins and are guaranteed to 350MHz. The overall foil shield helps protect against unwanted EMI/RFI. Their smaller diameter, low insertion loss, and 2.7dB PSACR headroom over TIA 568-C.2 makes possible the unique Category 6 networking solution: Belden Shielded System 2400. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, patented X-Spline technology, overall foil tape with drain wire, no ripcord, and a flame retardant PVC jacket.
 - DataTwist 6 (Category 6) - Part numbers: 1351A
DataTwist 6 F/UTP horizontal cables provide performance meeting TIA 568-C.2. The overall foil shield helps protect against unwanted EMI/RFI. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, patented X-Spline technology, an overall foil tape with drain wire, no ripcord, and a flame retardant PVC jacket.
- **Category 5e UTP Products**
 - DataTwist 1200 (Category 5E) - Part numbers: 1212, 1700A, 1702A (Siamese), 1700S6 (six 1700A's)
DataTwist 1200 UTP horizontal cables are guaranteed to 350MHz and exceed the TIA Category 5e requirements. They have excellent PSNEXT (+6dB), PSACR (+8dB) and return loss characteristics. DataTwist 1200 cables are part of the industry's most powerful Category 5e solution: Belden System 1200. The cable construction is four pair (bonded-pair optional), 2x4pr (bonded-pair) or 6X bundle (bonded-pair), 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, and a flame retardant PVC jacket. (1700S6 is Banana Peel)
 - DataTwist 5e (Category 5e) - Part numbers: 1583A, 1583B, 1588A (2pr), 5663U5
DataTwist 5e UTP horizontal cables are guaranteed to 100MHz and exceed the TIA Category 5e requirements. The cable construction is two or four pair, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, and a flame retardant PVC jacket.
 - DataTwist 350 (Category 5E) - Part numbers: 1752A
DataTwist 350 UTP patch cables are RJ-45 compatible for direct attach runs and guaranteed to 350MHz. They exceed TIA 568-C.2 requirements with excellent PSNEXT (+3dB), PSACR (+3dB) and



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return loss characteristics. The cable construction is four bonded-pair, 24 AWG stranded tinned copper conductors, polyolefin insulation, no ripcord, and a flame retardant PVC jacket.

- DataTwist 5 & 5e (Category 5, 5e) - Part numbers: 1867A, (#26 Cat 5), 1592A (Cat 5e)
UTP patch cables are guaranteed to 100MHz and exceed the TIA Category 5, or 5e requirements. The cable construction is four pair, 26 or 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, and a flame retardant PVC jacket.

- **Category 5e Shielded Products**

- DataTwist 1200 (Category 5E) - Part numbers: 1212F
DataTwist 1200 F/UTP horizontal cables provide increased bandwidth and signal-to-noise margins and are guaranteed to 350MHz. The overall foil shield helps protect against unwanted EMI/RFI. They have excellent PSNEXT (+6dB), PSACR (+8dB) and return loss characteristics. DataTwist 1200 F/UTP cables are part of the industry's most powerful Category 5e solution: Belden Shielded System 1200. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, an overall foil tape with drain wire, no ripcord, and a flame retardant PVC jacket.
- DataTwist 5e (Category 5e) - Part numbers: 1533R, 1624R*
DataTwist 5e F/UTP horizontal cables provide performance meeting TIA 568-C.2. The overall foil shield helps protect against unwanted EMI/RFI. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, an overall foil tape with drain wire, no ripcord, and a flame retardant PVC jacket. *Cat5 not Cat5e
- DataTwist 5 (Category 5) - Part numbers: 1668A (Siamese)
DataTwist 5 F/UTP horizontal cables are guaranteed to 100MHz and exceed the TIA Category 5 requirements. The cable construction is four pair, 2x4pr, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, and a flame retardant PVC jacket in a siamese configuration.

- **Category 3 UTP Products**

- DataTwist 3 (Category 3) - Part numbers: 1229A1, 1229A2, 1227A1 (2pr)
Category 3 horizontal cables provide performance meeting TIA 568-C.2 Category 3. The cable construction is two or four pair, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, and a flame retardant PVC jacket.
- DataTwist 3 (Category 3) - Part numbers: 1232A1
This cable passes TIA 568-C.2 Category 3 requirements and has a bandwidth of 16MHz. The cable construction is twenty-five (25) pair, 24 AWG solid bare copper conductors, polyolefin insulation, and a flame retardant PVC jacket.

- **MISCELLANEOUS**

- Telephone Cable - Part numbers: 1242A
Four conductor, 22 AWG solid bare copper conductors, polyolefin insulation, and a flame retardant PVC jacket.

Low Smoke Zero Halogen Products

- **Category 6A UTP Products**

- 10GX - Part Numbers: 10GX24, 10GX44
10GX Category 6A horizontal cables are enhanced to 625MHz and improved performance over TIA Category 6A requirements. The cable construction is four pair (bond-pair optional), 23 AWG solid bare copper conductors, polyolefin insulation, patented Double-H spline technology, ripcord, and a flame retardant LSZH jacket.

- **Category 6 UTP Products**

- DataTwist 4800 (Category 6E+) – Part numbers: 7851NH
DataTwist 4800 UTP horizontal cables are guaranteed to 600MHz. They provide significant headroom and robust data transmission performance for today's most demanding applications. With 9% better



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insertion loss and PSNEXT 8dB better than TIA 568-C.2, these cables support the industry's most powerful Category 6 networking solution: Belden System 4800. Their large conductor size increases PoE efficiency and lowers temperature rise. The cable construction is four pair (bond-pair optional), 23 AWG solid bare copper conductors, polyolefin insulation, patented spline technology, ripcord, and a flame retardant LSZH jacket.

- **DataTwist 3600** (Category 6E) - Part numbers: 3624
DataTwist 3600 UTP horizontal cables are guaranteed to 400MHz. They provide increased bandwidth and signal-to-noise margins. Their smaller diameter, low insertion loss, and 7.7dB PSACR headroom over TIA 568-C.2 make possible the unique Category 6 networking solution: Belden System 3600. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, patented spline technology, ripcord, and an LSZH jacket.
- **DataTwist 2400** (Category 6+) - Part numbers: 2424
DataTwist 2400 UTP horizontal cables provide increased bandwidth and signal-to-noise margins and are guaranteed to 350MHz. Their smaller diameter, low insertion loss, and 3.7dB PSACR headroom over TIA 568-C.2 makes possible the unique Category 6 networking solution: Belden System 2400. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, patented separator tape technology, ripcord, and a flame retardant LSZH jacket.

- **Category 5e UTP Products**

- **DataTwist 5e** (Category 5e) - Part numbers: 1583ANH
DataTwist 5e UTP horizontal cables are guaranteed to 100MHz and exceed the TIA Category 5e requirements. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, and a flame retardant LSZH jacket.

Outdoor Products

- **Category 6A UTP Products**

- **Category 6A Shielded Products**

- **Category 6 UTP Products**

- **OSP** (Category 6) - Part numbers: OSP6U
This cable passes TIA 568-C.2 Category 6 requirements and has a bandwidth of 250MHz. It is outside plant rated, impervious to moisture and can be placed slab-on-grade, in conduit or buried. The cable core is flooded with gel to prevent water ingress. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, patented X-Spline technology, gel filling, ripcord, and a polyolefin jacket.
- **OSP CM-LS** (Category 6) - Part numbers: 2143A
This cable passes TIA 568-C.2 Category 6 requirements and has a bandwidth of 250MHz. It is outside plant and CM-LS rated, impervious to moisture and can be placed slab-on-grade, in conduit or buried. Since rated CM-LS this product can transition from outdoors to indoors and go beyond the 50ft transition limit. The cable core is flooded with gel to prevent water ingress. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, patented X-Spline technology, gel filling, ripcord, and a polyolefin jacket.
- **CMR/CMX Outdoor** (Category 6) - Part numbers: 2146A
This cable passes TIA 568-C.2 Category 6 requirements and has a bandwidth of 250MHz. It is riser and CMX Outdoor which gives it sunlight (UV) and light moisture resistance. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, film separator, and an outdoor PVC jacket.

- **Category 6 Shielded Products**



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- **Category 5e UTP Products**

- OSP (Category 5e) - Part numbers: 7997A
This cable passes TIA 568-C.2 Category 5e requirements and has a bandwidth of 100MHz. It is outside plant rated, impervious to moisture and can be placed slab-on-grade, in conduit or buried. The cable core is flooded with gel to prevent water ingress. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, gel filling, ripcord, and a polyolefin jacket.
- OSP CM-LS (Category 5e) - Part numbers: 2137A
This cable passes TIA 568-C.2 Category 5e requirements and has a bandwidth of 100MHz. It is outside plant and CM-LS rated, impervious to moisture and can be placed slab-on-grade, in conduit or buried. Since rated CM-LS this product can transition from outdoors to indoors and go beyond the 50ft transition limit. The cable core is flooded with gel to prevent water ingress. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, gel filling, ripcord, and a polyolefin jacket.
- CMR/CMX Outdoor (Category 5e) - Part numbers: 1594A
This cable passes TIA 568-C.2 Category 5e requirements and has a bandwidth of 100MHz. It is riser and CMX Outdoor which gives it sunlight (UV) and light moisture resistance. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, and an outdoor PVC jacket.

- **Category 5e Shielded Products**

Mohawk Brand **Indoor Products**

- **Category 6A UTP Products**

- GigaLAN 10 Small Diameter – Part Numbers: M59155 to M59164, M59179 to M59188
Category 6A unshielded twisted pair (UTP) GigaLAN 10 SMALL DIAMETER is an open architecture cable design for use in horizontal cabling systems per ANSI/TIA-568-C and ISO/IEC 11801:2002 Class EA. The cable exceeds ANSI/TIA-568-C.2 and ISO/IEC 11801:2002 Category 6A alien crosstalk requirements by 7.5dB. This patented cable consists of #23 AWG solid bare copper polyolefin insulated conductors, assembled into four tightly twisted pairs, utilizing a patented FlexWeb® core separator, an alien crosstalk barrier, and ripcord under a PVC jacket.
- GigaLAN 10 - Part Numbers: M58650 to M58653, M58688 to M58693
Category 6A unshielded twisted pair (UTP) GigaLAN 10 is an open architecture cable design for use in horizontal cabling systems per ANSI/TIA-568-C and ISO/IEC 11801:2002 Class EA. The cable exceeds ANSI/TIA-568-C.2 and ISO/IEC 11801:2002 Category 6A electrical requirements. This patented cable consists of #23 AWG solid bare copper polyolefin insulated conductors, assembled into four tightly twisted pairs, utilizing a patented FlexWeb® core separator, and a ripcord under a PVC jacket.
- XGO - Part Numbers: M58876 to M58885
XGO Category 6A unshielded twisted pair (UTP) is an open architecture cable design for use in horizontal cabling systems per ANSI/TIA-568-C and ISO/IEC 11801:2002 Class EA. The cable exceeds ANSI/TIA-568-C.2 and ISO/IEC 11801:2002 Category 6A electrical requirements. This patented cable consists of #23 AWG solid bare copper polyolefin insulated conductors, assembled into four tightly twisted pairs, utilizing a patented FlexWeb® core separator, and a ripcord under a fluted PVC jacket.

- **Category 6A Shielded Products**

- XGO F/UTP - Part Numbers: M58816, M58817, M58894 to M58901



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XGO F/UTP Category 6A is a robust, 500MHz high performance data cable that is designed, manufactured and tested to exceed ANSI/TIA-568-C.2 performance standards. A foil shield offers a cost-effective solution to block alien crosstalk. This patented cable consists of #23 AWG solid bare copper polyolefin insulated conductors, assembled into four tightly twisted pairs, utilizing a patented FlexWeb® core separator, overall foil shield with drain wire, and a ripcord under a PVC jacket.

- **Category 6 UTP Products**

- GigaLAN (Category 6E+) – Part Numbers: M57418 to M57422, M57621, M57867 to M57870
GigaLAN UTP horizontal cable is tested to 750MHz and one of the highest performing unshielded twisted pair cables available. Large conductor size increases PoE efficiency and lowers temperature rise. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, patented FlexWeb® technology, ripcord, and a flame retardant PVC jacket.
- AdvanceNet (Category 6E) - Part numbers: M56889, M57202 to M57210
AdvanceNet UTP horizontal cable is tested to 650MHz and performs as a mid-grade unshielded twisted pair product. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, patented FlexWeb® technology, ripcord, and a flame retardant PVC jacket.
- 6Lan Plus (Category 6+) - Part numbers: M58795, M58804 to M58806, M58919, M58920, M58922 to M58925
6LAN Plus UTP horizontal cable is tested to 625MHz and provides guaranteed 3dB crosstalk margin over TIA 568C.2. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, flat separator tape, ripcord, and a flame retardant PVC jacket.
- 6LAN (Category 6) – Part numbers: M58291 to M58300
6LAN UTP horizontal cables are tested to 550MHz and meet or exceed TIA 568-C.2 requirements. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, ripcord, and a flame retardant PVC jacket.
- AdvanceLink (Category 6+) Part numbers: M57507 to M57509, M57511, M57512, M57517 to M57520, M58204
AdvanceLink patch cordage exceeds the requirements of TIA 568-C.2 Category 6, is tested to 650MHz and is RJ-45 compatible for direct attach runs. The cable construction is four, 24 AWG stranded tinned copper conductors, polyolefin insulation, no ripcord, and a flame retardant PVC jacket.

- **Category 6 Shielded Products**

- Category 6 F/UTP (Category 6) - Part numbers: M58155 to M58164
Category 6 F/UTP horizontal cables provide performance meeting TIA 568-C.2 and tested to 550MHz. The overall foil shield helps protect against unwanted EMI/RFI. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, patented FlexWeb® technology, an overall foil tape with drain wire, no ripcord, and a flame retardant PVC jacket.

- **Category 5e UTP Products**

- MegaLAN (Category 5E) - Part numbers: M55989, M56094, M56095, M56165, M56167, M56670, M56746, M56954, M57048, M57129
MegaLAN UTP horizontal cable is tested to 400MHz and exceeds the TIA Category 5e requirements. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, and a flame retardant PVC jacket.
- 5e LAN (Category 5e) - Part numbers: M57552 to M57557, M58007 to M58010
5eLAN UTP horizontal cable is tested to 200MHz and exceeds the TIA Category 5e requirements. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, and a flame retardant PVC jacket.
- MegaLink (Category 5e)- Part numbers: M56726, M56985, M57071, M57073 to M57076, M57216



ENVIRONMENTAL PRODUCT DECLARATION



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Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

MegaLink patch cordage Category 5e UTP patch cables are TIA 568-C.2 compliant, RJ-45 compatible for direct attach runs and tested to 400MHz. The cable construction is four pair, 24 AWG stranded tinned copper conductors, polyolefin insulation, no ripcord, and a flame retardant PVC jacket.

- **Category 5e Shielded Products**

- **MegaLAN F/UTP (Category 5E)** - Part numbers: M55987, M57370 to M57378
MegaLAN F/UTP horizontal cable is tested to 400MHz and exceeds TIA Category 5e PSNEXT requirements by 5dB. The overall foil shield helps protect against unwanted EMI/RFI. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, an overall foil shield, no ripcord, and a flame retardant PVC jacket.
- **5e LAN F/UTP (Category 5e)** - Part numbers: M58145, M58195 to M58203
5e LAN F/UTP horizontal cable is tested to 200MHz and exceeds TIA 568-C.2 Category 5e requirements. The overall foil shield helps protect against unwanted EMI/RFI. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, an overall foil shield with drain wire, no ripcord, and a flame retardant PVC jacket.
- **5e LAN F/UTP (Category 5e)** - Part numbers: M58208 to M58217
5e LAN F/UTP patch cable is tested to 100MHz and exceeds TIA 568-C.2 Category 5e requirements. The overall foil shield helps protect against unwanted EMI/RFI. The cable construction is four pair, 26 AWG solid bare copper conductors, polyolefin insulation, an overall foil shield with drain wire, no ripcord, and a flame retardant PVC jacket.

Low Smoke Zero Halogen Products

- **Category 6A UTP Products**

- **GigaLAN 10** - Part Numbers: M58958
Category 6A unshielded twisted pair (UTP) GigaLAN 10 is an open architecture cable design for use in horizontal cabling systems per ANSI/TIA-568-C and ISO/IEC 11801:2002 Class EA. The cable exceeds ANSI/TIA-568-C.2 and ISO/IEC 11801:2002 Category 6A electrical requirements. This patented cable consists of #23 AWG solid bare copper polyolefin insulated conductors, assembled into four tightly twisted pairs, utilizing a patented FlexWeb® core separator, and a ripcord under an LSZH jacket.

- **Category 6 UTP Products**

- **Category 5e UTP Products**

- **5e LAN (Category 5e)** - Part numbers: M58510
5e LAN UTP horizontal cable is tested to 200MHz and exceeds the TIA Category 5e requirements. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, and a flame retardant LSZH jacket.

- **Category 5e Shielded Products**

- **MegaLAN (Category 5E)** - Part numbers: M57577
MegaLAN F/UTP horizontal cable is tested to 400MHz and exceeds the TIA Category 5e requirements. The overall foil shield helps protect against unwanted EMI/RFI. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, an overall foil shield with drain wire, ripcord, and a flame retardant LSZH jacket.

Outdoor Products

- **Category 6A UTP Products**

- **Category 6A Shielded Products**

- **Category 6 UTP Products**



ENVIRONMENTAL PRODUCT DECLARATION



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Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10®, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

- LAN-Trak OSP (Category 6) - Part numbers: M57622
This cable passes TIA 568-C.2 Category 6 requirements and has a bandwidth of 250MHz. It is outside plant rated, impervious to moisture and can be placed slab-on-grade, in conduit or buried. The cable core is flooded with gel to prevent water ingress. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, patented FlexWeb®, gel filling, ripcord, and a polyolefin jacket.
- VersaLAN OSP CM-LS (Category 6) - Part numbers: M58772
This cable passes TIA 568-C.2 Category 6 requirements and has a bandwidth of 250MHz. It is outside plant and CM-LS rated, impervious to moisture and can be placed slab-on-grade, in conduit or buried. Since rated CM-LS this product can transition from outdoors to indoors and go beyond the 50ft transition limit. The cable core is flooded with gel to prevent water ingress. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, patented FlexWeb®, gel filling, ripcord, and a polyolefin jacket.
- VersaLAN CMR/CMX Outdoor (Category 6) - Part numbers: M59200
This cable passes TIA 568-C.2 Category 6 requirements and has a bandwidth of 250MHz. It is riser and CMX Outdoor which gives it sunlight (UV) and light moisture resistance. The cable construction is four pair, 23 AWG solid bare copper conductors, polyolefin insulation, film separator, and an outdoor PVC jacket.
- **Category 6 Shielded Products**
- **Category 5e UTP Products**
 - OSP (Category 5e) - Part numbers: M58790, M57561, M56871
This cable passes TIA 568-C.2 Category 5e requirements and has a bandwidth of 100MHz. It is outside plant rated, impervious to moisture and can be placed slab-on-grade, in conduit or buried. The cable core is flooded with gel to prevent water ingress. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, gel filling, ripcord, and a polyolefin jacket.
 - OSP CM-LS (Category 5e) - Part numbers: M58762
This cable passes TIA 568-C.2 Category 5e requirements and has a bandwidth of 100MHz. It is outside plant and CM-LS rated, impervious to moisture and can be placed slab-on-grade, in conduit or buried. Since rated CM-LS this product can transition from outdoors to indoors and go beyond the 50ft transition limit. The cable core is flooded with gel to prevent water ingress. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, gel filling, ripcord, and a polyolefin jacket.
 - CMR/CMX Outdoor (Category 5e) - Part numbers: M58926
This cable passes TIA 568-C.2 Category 5e requirements and has a bandwidth of 100MHz. It is riser and CMX Outdoor which gives it sunlight (UV) and light moisture resistance. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, and an outdoor PVC jacket.
- **Category 5e Shielded Products**
 - LAN-Trak OSP Corrugated Aluminum (Category 5e) - Part numbers: M57562
This cable passes TIA 568-C.2 Category 5e requirements and has a bandwidth of 100MHz. It is outside plant rated, impervious to moisture and can be placed slab-on-grade, in conduit or buried. A foil shield protects the cables signal from EMI/RFI. The cable core is flooded with gel to prevent water ingress. The cable construction is four pair, 24 AWG solid bare copper conductors, polyolefin insulation, gel filling, inner polyolefin jacket, corrugated aluminum, and an outer polyolefin jacket.



ENVIRONMENTAL PRODUCT DECLARATION



Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

All Mohawk part numbers are referenced back to a primary code, which aligns with the blue jacketed product. If a code representing the blue product appears in the following tables of this document, all part numbers represented in this table are included into the LCA and resulting EPD. All parts referenced here are reel packaging. If you want reel-in-box, add a RB after the part number. If you want an Unreel package, add a B after the part number.

Trade Name	Primary Code	Associated Part Numbers								
	Blue	White	Pink	Yellow	Gray	Green	Red	Orange	Black	Violet
GigaLAN 10@ Small Diameter	M59156	M59155	M59157	M59158	M59159	M59160	M59161	M59162	M59163	M59164
Category 6A (special)	M59180	M59179	M59181	M59182	M59183	M59184	M59185	M59186	M59187	M59188
GigaLAN@10	M58650	M58651	M58688	M58652	M58653	M58689	M58690	M58691	M58692	M58693
XGO™	M58876	M58877	M58880	M58878	M58879	M58881	M58882	M58883	M58884	M58885
XGO™F/UTP	M58816	M58817	M58896	M58894	M58895	M58897	M58898	M58899	M58900	M58901
GigaLAN®	M57419	M57418	M57867	M57420	M57422	M57421	M57621	M57868	M57869	M57870
AdvanceNet™	M57202	M56889	M57203	M57204	M57205	M57206	M57207	M57208	M57209	M57210
6 LAN™Plus	M58804	M58805	M58949	M58920	M58806	M58922	M58923	M58924	M58925	M58795
6 LAN™	M58292	M58291	M58293	M58294	M58295	M58296	M58297	M58298	M58299	M58300
AdvanceLink™	M57508	M57507	M58204	M57511	M57509	M57512	M57519	M57518	M57520	M57517
Category 6 F/UTP	M58156	M58155	M58157	M58158	M58159	M58160	M58161	M58162	M58163	M58164
MegaLAN®	M56167	M55989	M56094	M56095	M56746	M56165	M56670	M56954	M57129	M57048
5e LAN®	M57553	M5754	M57555	M57556	M57552	M57557	M58008	M58009	M58010	M58007
MegaLink™	M57076	M56726	M57570	M56985	M57071	M57075	M57073	M57074	M57216	M57077
MegaLAN® F/UTP	M57370	M55987	M57371	M57372	M57373	M57374	M57375	M57376	M57377	M57378
5e LAN® F/UTP	M58196	M58195	M58197	M58198	M58145	M58199	M58200	M58201	M58202	M58203
5e LAN® F/UTP Patch	M58209	M58208	M58210	M58211	M58212	M58213	M58214	M58215	M58216	M58217

Table 1. Mohawk Part Number Reference

Manufacturing Locations

These data cables are manufactured in the Monticello, Kentucky; Richmond, Indiana; and Nogales, Mexico. Primary data for the life cycle assessment has been provided by each of these facilities and a weighted average has been conducted for each product.

Applications and Uses

These products are used in risers and other pathways in buildings and outdoors for OSP cables.. Applications for these products include IEEE 802.3: 10BASE-T through 10GBASE-T LAN and WLAN applications; CDDI; Token Ring; ATM;



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Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

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broadband and baseband analog video; voice and multimedia systems; data center I/O consolidation; data center server virtualization; consolidation of network interconnects; back-bone aggregation; parallel processing and high speed computing; stacking switches and switch-to-switch links; storage area networks; aggregation of ethernet channels; real-time intensive financial transactions; streaming video; animation; scientific modeling; and medical imaging.

Material Inputs

The raw materials for these non-plenum data networking cables are listed in Table 2. Table 3 details the average packaging materials associated with each product. Table one is a reference to convert to SI units.

Conversion	Lbs.	Kg
Pounds to Kilograms	1	0.4536

Table 2: SI Unit Conversion (0.4536kg/lb.)

Material (lb/100ft)	1227A1	1229A1	1229A2	1242A	1212/ M56167	1212F/ 1533R/ M57370	1583A/ 5663U5/ M57553	1583B
Jacket	0.54	0.73	0.87	0.57	0.69	1.18	0.62	0.66
PVC Colorant	<0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Insulation	0.10	0.21	0.31	0.16	0.22	0.31	0.20	0.15
HDPE Colorant	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
FEP Colorant	-	-	-	-	-	-	-	-
Binder/Ripcord/Yarns	-	-	-	-	0.01	-	0.01	0.01
Conductor	0.55	1.15	1.71	0.76	1.07	1.26	0.96	1.07
Crossweb/Filler	-	-	-	-	-	-	-	-
Filling Compound	-	-	-	-	-	-	-	-
Tape	-	-	-	-	-	0.25	-	-
Total	1.20	2.10	2.90	1.50	2.00	3.00	1.80	1.90

Table 3: Material Inputs for Non-Plenum Copper Data Networking Cables (lbs/100 ft)



ENVIRONMENTAL PRODUCT DECLARATION



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Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Material (lb/100ft)	1592A/ M57076	1594A/ M58926	1624R	1668A	1700A	1700S6	1702A	1752A
Jacket	0.66	1.08	1.19	1.63	0.69	6.27	1.36	0.70
PVC Colorant	<0.01	0.01	0.01	0.03	0.01	0.04	0.02	<0.01
Insulation	0.23	0.21	0.33	0.69	0.25	1.59	0.52	0.26
HDPE Colorant	0.01	<0.01	<0.01	0.01	<0.01	0.02	0.01	<0.01
FEP Colorant	-	-	-	-	-	-	-	-
Binder/Ripcord/Yarns	-	-	-	0.01	0.01	0.04	0.01	-
Conductor	1.20	1.00	1.21	2.28	1.05	6.74	2.19	1.14
Crossweb/Filler	-	-	-	-	-	-	-	-
Filling Compound	-	-	-	-	-	-	-	-
Tape	-	-	0.26	0.55	-	-	-	-
Total	2.10	2.30	3.00	5.20	2.00	14.70	4.10	2.10
Material (lb/100ft)	1867A	M58196	M58209	1588A	10GX12/ M58650	10GX32	10GX52F	10GX62F
Jacket	0.54	1.18	0.76	0.67	1.21	1.35	1.80	1.75
PVC Colorant	0.01	0.01	<0.01	0.01	<0.01	0.01	0.01	0.01
Insulation	0.18	0.31	0.23	0.10	0.34	0.40	0.65	0.31
HDPE Colorant	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
FEP Colorant	-	-	-	-	-	-	-	-
Binder/Ripcord/Yarns	-	-	-	0.01	0.01	0.01	0.02	0.02
Conductor	0.68	1.25	0.86	0.52	1.39	1.49	1.40	1.29
Crossweb/Filler	-	-	-	-	0.64	0.74	-	0.31
Filling Compound	-	-	-	-	-	-	-	-
Tape	-	0.25	0.15	-	-	-	0.21	0.20
Total	1.40	3.00	2.00	1.30	3.60	4.00	4.10	3.90

Table 3: Material Inputs for Non-Plenum Copper Data Networking Cables (lbs/100 ft)



ENVIRONMENTAL PRODUCT DECLARATION



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Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Material (lb/100ft)	10GXS12/ M59156/ M59180	10GXS32	1872A	1875GB/ 1875GA	2146A/ M59200	2412/ M58804	2412F/ M58156/ 1351A	3612/ M57202
Jacket	0.87	0.79	1.57	1.37	1.26	1.31	1.51	0.75
PVC Colorant	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01
Insulation	0.38	0.36	0.32	0.29	0.28	0.50	0.47	0.27
HDPE Colorant	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01
FEP Colorant	-	-	-	-	-	-	<0.01	-
Binder/Ripcord/Yarns	0.01	0.01	0.01	-	0.01	0.01	0.00	0.01
Conductor	1.17	1.24	1.28	1.12	1.34	2.17	1.46	1.19
Crossweb/Filler	0.61	0.64	-	-	-	0.09	0.32	0.26
Filling Compound	-	-	-	-	-	-	-	-
Tape	0.25	0.24	-	-	-	-	0.33	-
Total	3.30	3.30	3.20	2.80	2.90	4.10	4.10	2.50
Material (lb/100ft)	3632	4812/ M57419	5663U6/ M58292/ LAN6R/ 7881A	7851A	7883A	M57508	M58816	M58876
Jacket	0.78	0.89	0.73	1.08	0.69	0.98	1.34	2.15
PVC Colorant	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
Insulation	0.28	0.33	0.27	0.34	0.22	0.20	0.61	0.34
HDPE Colorant	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
FEP Colorant	-	-	-	-	-	-	<0.01	-
Binder/Ripcord/Yarns	0.01	0.01	0.01	0.01	-	-	-	0.01
Conductor	1.25	1.54	1.29	1.45	1.07	1.06	1.46	1.33
Crossweb/Filler	0.26	0.32	-	0.42	-	0.04	0.31	0.34
Filling Compound	-	-	-	-	-	-	-	-
Tape	-	-	-	-	-	-	0.36	-
Total	2.60	3.10	2.30	3.30	2.00	2.30	4.10	4.20

Table 3: Material Inputs for Non-Plenum Copper Data Networking Cables (lbs/100 ft) Continued



ENVIRONMENTAL PRODUCT DECLARATION



Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

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Material (lb/100ft)	XCGB4	1583ANH/ M58510	M58762/ 2137A/	10GX24/ M58958	10GX44	2424	3624	7851NH
Jacket	-	0.65	1.78	1.45	1.42	0.80	1.30	1.53
PVC Colorant	-	0.19	0.28	0.41	0.41	0.28	0.30	0.37
Insulation	0.56	0.03	0.04	0.03	0.02	0.01	0.01	0.04
HDPE Colorant	<0.01	0.01	-	0.01	0.01	0.01	0.01	0.02
FEP Colorant	-	1.03	1.10	1.60	1.55	1.21	1.28	1.55
Binder/Ripcord/Yarns	-	-	0.30	-	-	-	-	-
Conductor	1.23	1.90	3.50	3.50	3.40	2.30	2.90	3.50
Crossweb/Filler	-	-	-	-	-	-	-	-
Filling Compound	-	0.65	1.78	1.45	1.42	0.80	1.30	1.53
Tape	1.80	0.19	0.28	0.41	0.41	0.28	0.30	0.37
Total		0.03	0.04	0.03	0.02	0.01	0.01	0.04
Material (lb/100ft)	7997A/ M58790	M57561/ M56871	M57622	M58772/ 2143A	OSP6U	1232A1	M57562	
Jacket	0.71	0.71	0.77	1.84	0.27	2.00	3.33	
PVC Colorant	0.01	0.01	0.02	0.35	0.02	0.03	0.02	
Insulation	0.25	0.25	0.47	0.04	0.37	1.21	0.35	
HDPE Colorant	<0.01	<0.01	<0.01	-	<0.01	0.01	<0.01	
FEP Colorant	-	-	-	1.35	-	-	-	
Binder/Ripcord/Yarns	-	-	-	0.32	-	0.01	0.11	
Conductor	1.03	1.03	1.06	3.90	1.45	6.44	1.37	
Crossweb/Filler	-	-	-	-	-	-	-	
Filling Compound	0.29	0.29	0.28	1.84	0.39	-	0.37	
Tape	-	-	-	0.35	-	-	1.65	
Total	2.30	2.30	2.60	0.04	2.50	9.70	7.20	

Table 3: Material Inputs for Non-Plenum Copper Data Networking Cables (lbs/100 ft) Continued



ENVIRONMENTAL PRODUCT DECLARATION



Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

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Material (lb/100ft)	1227A1	1229A1	1229A2	1242A	1212/ M56167/	1212F/ 1533R/ M57370	1583A/ 5663U5/ M57553	1583B
Wood Pallets	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Wood Reels	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Plastic Reels	<0.01	0.07	0.10	<0.01	0.07	0.10	0.06	0.06
Stretch Wrap	<0.01	<0.01	0.06	<0.01	<0.01	0.07	<0.01	<0.01
Labels	<0.01	0.08	0.11	0.06	0.07	0.11	0.07	0.07
Cardboard	<0.01	<0.01	0.05	<0.01	<0.01	0.06	<0.01	<0.01
Material (lb/100ft)	1592A/ M57076	1594A/ M58926	1624R	1668A	1700A	1700S6	1702A	1752A
Wood Pallets	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Wood Reels	<0.01	<0.01	<0.01	<0.01	<0.01	0.07	<0.01	<0.01
Plastic Reels	0.07	0.08	0.10	0.17	0.07	0.48	0.13	0.07
Stretch Wrap	<0.01	0.05	0.07	0.11	<0.01	0.32	0.09	<0.01
Labels	0.08	0.09	0.11	0.19	0.07	0.55	0.15	0.08
Cardboard	<0.01	<0.01	0.06	0.10	<0.01	0.27	0.08	<0.01
Material (lb/100ft)	1867A	M58196	M58209	1588A	10GX12/ M58650	10GX32	10GX52F	10GX62F
Wood Pallets	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Wood Reels	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Plastic Reels	<0.01	0.10	0.07	<0.01	0.12	0.13	0.13	0.13
Stretch Wrap	<0.01	0.07	<0.01	<0.01	0.08	0.09	0.09	0.09
Labels	0.05	0.11	0.07	<0.01	0.13	0.15	0.15	0.15
Cardboard	<0.01	0.06	<0.01	<0.01	0.07	0.07	0.08	0.07
Material (lb/100ft)	10GXS12/ M59156/ M59180	10GXS32	1872A	1875GB/ 1875GA	2146A/ M59200	2412/ M58804	2412F/ M58156/ 1351A	3612/ M57202
Wood Pallets	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Wood Reels	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Plastic Reels	0.11	0.11	0.11	0.09	0.10	0.13	0.13	0.08
Stretch Wrap	0.07	0.07	0.07	0.06	0.06	0.09	0.09	0.06
Labels	0.12	0.12	0.12	0.10	0.11	0.15	0.15	0.09
Cardboard	0.06	0.06	0.06	0.05	0.05	0.08	0.08	<0.01

Table 4: Average Packaging Material Inputs



ENVIRONMENTAL PRODUCT DECLARATION



Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Material (lb/100ft)	3632	4812/ M57419	5663U6/ M58292/ LAN6R/ 7881A	7851A	7883A	M57508	M58816	M58876
Wood Pallets	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Wood Reels	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Plastic Reels	0.09	0.10	0.08	0.11	0.07	0.08	0.13	0.14
Stretch Wrap	0.06	0.07	0.05	0.07	<0.01	0.05	0.09	0.09
Labels	0.10	0.12	0.09	0.12	0.07	0.09	0.15	0.16
Cardboard	<0.01	0.06	<0.01	0.06	<0.01	<0.01	0.08	0.08
Material (lb/100ft)	XCGB4	1583ANH/ M58510	M58762/ 2137A	10GX24/ M58958	10GX44	2424	3624	7851NH
Wood Pallets	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Wood Reels	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Plastic Reels	0.06	0.06	0.12	0.12	0.11	0.08	0.10	0.12
Stretch Wrap	<0.01	<0.01	0.08	0.08	0.08	0.05	0.06	0.08
Labels	0.07	0.07	0.13	0.13	0.13	0.09	0.11	0.13
Cardboard	<0.01	<0.01	0.07	0.07	0.06	<0.01	0.05	0.07
Material (lb/100ft)	7997A/ M58790	M57561/ M56871	M57622	M58772/ 2143A	OSP6U	1232A1	M57562	
Wood Pallets	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Wood Reels	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Plastic Reels	0.08	0.08	0.09	0.13	0.08	0.32	0.24	
Stretch Wrap	0.05	0.05	0.06	0.09	0.06	0.21	0.16	
Labels	0.09	0.09	0.10	0.15	0.09	0.36	0.27	
Cardboard	<0.01	<0.01	<0.01	0.07	<0.01	0.18	0.13	

Table 4: Average Packaging Material Inputs Continued

Manufacturing Process

Copper wire goes through a wire mill process to draw the wire to a specified gauge. The copper is then drawn a second time to a specified diameter. The wire continues down the line to an extruder where insulation is applied to the wire. Cooling and drying of the insulated wire then occurs. For paired cables, two of these insulated wires are then twinned. For bonded pairs, the twinned cables are bonded together. Four twinned wire pairs, along with other cable components such as crosswebs, ripcords and/or shielding material, are then stranded together. Subsequently, the stranded wire has a jacket extruded around the stranded cable. After the jacket is applied, the cable is cooled and packaged. Various packaging options exist, but most product is shipped in 1000-foot length spools and/or boxes.



ENVIRONMENTAL PRODUCT DECLARATION



Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Life Cycle Assessment Description

Functional Unit

Environmental impacts are reported per functional unit of a product and the functional unit is the basis for comparison in an LCA. For copper data cable, the functional unit is 100 feet of cable.

Life Cycle Stages Assessed

Life Cycle Boundary	EPD Life Cycle Stage
Belden Non-Plenum Cable Business-to-Business	Raw Material Acquisition
	Manufacturing
	Packaging/Storage
Belden Non-Plenum Cable Business-to-Consumer	Marketing and Distribution
	Installation and Use
	Waste Disposal

Table 5: Life Cycle Stages Assessed

System Boundary

This project considers the life cycle activities from resource extraction through installation and end-of-life effects. The boundary covers raw material acquisition, manufacturing, marketing, use and waste disposal as seen in Figure 1.

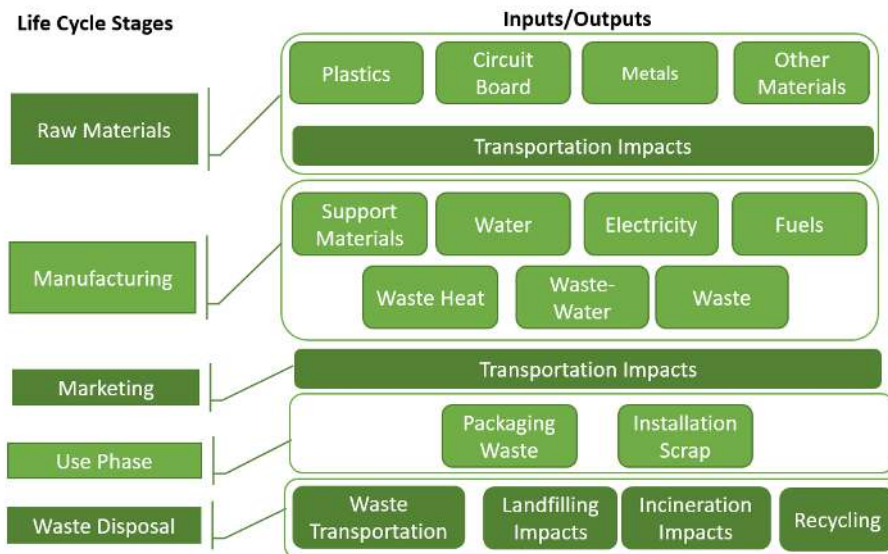


Figure 1: System Boundary



ENVIRONMENTAL PRODUCT DECLARATION



Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10®, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Allocation

Allocation for manufacturing energy, water, and waste items was conducted per length of production based on allocation of resources per product groups produced at each facility.

Cut-off Criteria

For any impact category, should the sum of various impacts from a specific process/activity be less than 1% of the impact equivalent in that category, the process/activity may be neglected during the inventory analysis. Nonetheless, the accumulated impact of neglected process/activity may not exceed 5%. Components and materials omitted from the LCA shall be documented.

This EPD is in compliance with the cut-off criteria. Components and materials omitted from the LCA shall be documented and include installation energy from signal testing devices in the installation of data networking cable. Capital items for the production processes (machines, buildings, etc.) were not taken into consideration.

Period under Consideration

Primary data used refer to the production processes of the manufacturing facility and were derived from calendar year 2015.

Software and Background Data

SimaPro v8.02 Software System for Life Cycle Engineering, an internationally recognized LCA modeling software program, was used for life cycle impact assessment modeling. Background and secondary datasets were modeled using the US LCI database, developed by the National Renewable Energy Laboratory, as well as the ecoinvent v3 database, which is developed by the Swiss Centre for Life Cycle Inventories. FEP material impact data was obtained from an LCA on data cable conducted for the Environmental Protection Agency.

Marketing and Distribution

The non-plenum cable products are distributed globally, but primarily throughout the United States and Canada. The final products were modeled as being shipped 500 miles (800 kilometers) by truck, based on the location of Belden manufacturing locations and distribution centers.

Transportation

Belden provided resource transportation mode and location data to support the calculation of raw material transportation flows. The transportation LCI data from the US LCI database (kg-km basis) were used to develop the resource transportation LCI profile.



ENVIRONMENTAL PRODUCT DECLARATION



Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Installation and Use Stage

Based on industry expertise from Belden, a scrap rate of 5% was assumed in the installation of the product in the use stage for this study. This rate was based on the expertise of Belden. In some installations, cables may be hung on J-hooks or attached to a surface with Velcro. However, in many cases the cable is simply laid with no attachment. Thus no J-hooks, Velcro, or other attachment materials were included in the boundary. Grounding is often required in data systems, but the grounding function is required for the server racks and cable trays, not for the cables themselves, so grounding materials were not considered as an input to the cable product. The cables often connect to outlets installed in a wall or floor. These outlets were considered a separate product system and not included in the boundary of this study. No other materials are required for installation.

Copper data networking cable are considered passive product after installation and during the use stage, meaning no energy is consumed during the products' use. Therefore, no use stage impacts were measured, and thus none are presented in these results. No maintenance is required. The lifetimes of these products are vary and data cable is replaced more commonly due to increased bandwidth and data speed requirements, and not because of product performance or degradation.

End-of-Life

A distance of 20 miles to the recycling facility was assumed for products at the end-of-life. A 95% recycling rate was assumed with the remaining 5% being disposed as the average US municipal solid waste disposition, as cited in a study conducted by DuPont (Krieger, 2007). The US disposition rates of 82% landfill and 18% incineration were assumed for the remaining 5% of product material. The cut-off methodology (also known as the recycled content method) was used for any materials that were sent to recycling such as scrap and the end-of-life disposition. This methodology assumes the processing of the recycled material at the recycler will be applied to the next product life cycle. Data not available in life cycle databases used models found in the Waste Reduction Model (WARM), developed by the US EPA.



ENVIRONMENTAL PRODUCT DECLARATION



Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Life Cycle Inventory

Energy Use

The following table and figure details the cumulative energy demand of the Belden non-plenum copper cables through each life cycle stage of the product.

Life Cycle Stage	1227A1	1229A1	1229A2	1242A	1212/ M56167	1212F/ 1533R/ M57370	1583A/ 5663U5/ M57553
Materials	3.9E+01	7.2E+01	1.1E+02	5.2E+01	6.9E+01	1.0E+02	6.2E+01
Manufacturing	9.5E+00	1.7E+01	1.7E+01	1.2E+01	2.9E+01	2.4E+01	2.6E+01
Marketing	2.7E+00	4.7E+00	4.7E+00	3.3E+00	3.8E+00	6.7E+00	3.4E+00
Use	2.6E+00	4.8E+00	5.4E+00	3.4E+00	5.1E+00	6.7E+00	4.6E+00
Waste Disposal	9.7E-03	1.7E-02	1.7E-02	1.2E-02	1.6E-02	2.4E-02	1.5E-02
Cradle to Grave	5.5E+01	1.0E+02	1.1E+02	7.2E+01	1.1E+02	1.4E+02	9.7E+01
Life Cycle Stage	1583B	1592A/ M57076	1594A/ M58926	1624R	1668A	1700A	1700S6
Materials	6.6E+01	7.7E+01	7.4E+01	1.0E+02	1.5E+02	6.9E+01	4.8E+02
Manufacturing	2.7E+01	1.7E+01	5.7E+00	2.4E+01	4.1E+01	2.9E+01	2.1E+02
Marketing	3.6E+00	4.7E+00	2.6E+00	6.7E+00	1.2E+01	3.8E+00	2.8E+01
Use	4.9E+00	5.0E+00	4.2E+00	6.7E+00	1.0E+01	5.1E+00	3.6E+01
Waste Disposal	1.5E-02	1.7E-02	1.9E-02	2.4E-02	4.2E-02	1.6E-02	1.2E-01
Cradle to Grave	1.0E+02	1.1E+02	8.8E+01	1.4E+02	2.1E+02	1.1E+02	7.7E+02
Life Cycle Stage	1702A	1752A	1867A	M58196	M58209	1588A	10GX12/ M58650
Materials	1.4E+02	8.7E+01	4.9E+01	1.1E+02	7.2E+01	3.9E+01	1.2E+02
Manufacturing	4.4E+01	1.7E+01	1.1E+01	2.4E+01	2.1E+01	1.0E+01	2.9E+01
Marketing	8.5E+00	4.7E+00	3.1E+00	6.7E+00	5.8E+00	2.9E+00	8.0E+00
Use	8.6E+00	5.5E+00	3.2E+00	7.1E+00	3.6E+00	2.7E+00	8.0E+00
Waste Disposal	3.3E-02	1.7E-02	1.1E-02	2.4E-02	2.1E-02	1.1E-02	2.9E-02
Cradle to Grave	1.8E+02	1.2E+02	6.7E+01	1.5E+02	7.6E+01	5.6E+01	1.7E+02

Table 6: Cradle to Grave Cumulative Energy Demand (MJ) per 100 feet of Cable



ENVIRONMENTAL PRODUCT DECLARATION



Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Life Cycle Stage	10GX32	10GX52F	10GX62F	10GXS12/ M59156/ M59180	10GXS32	1872A	1875GB/ 1875GA
Materials	1.3E+02	1.3E+02	1.2E+02	1.2E+02	1.1E+02	9.7E+01	8.5E+01
Manufacturing	3.2E+01	3.3E+01	3.1E+01	2.9E+01	3.2E+01	4.6E+01	2.2E+01
Marketing	8.9E+00	9.1E+00	8.7E+00	8.0E+00	8.9E+00	6.1E+00	6.2E+00
Use	8.9E+00	8.6E+00	8.1E+00	7.8E+00	7.5E+00	7.6E+00	5.8E+00
Waste Disposal	3.2E-02	3.3E-02	3.2E-02	2.9E-02	3.2E-02	2.6E-02	2.3E-02
Cradle to Grave	1.9E+02	1.8E+02	1.7E+02	1.6E+02	1.6E+02	1.6E+02	1.2E+02
Life Cycle Stage	2146A/ M59200	2412/ M58804	2412F/ M58156/ 1351A	3612/ M57202	3632	4812/ M57419	5663U6/ M58292/ LAN6R/ 7881A
Materials	9.9E+01	1.4E+02	1.4E+02	8.7E+01	9.1E+01	1.1E+02	8.1E+01
Manufacturing	2.3E+01	3.2E+01	3.3E+01	3.6E+01	2.1E+01	2.5E+01	3.2E+01
Marketing	6.4E+00	4.2E+00	9.1E+00	4.8E+00	5.8E+00	6.9E+00	4.2E+00
Use	6.5E+00	9.0E+00	9.3E+00	6.5E+00	6.0E+00	7.2E+00	5.9E+00
Waste Disposal	2.4E-02	1.8E-02	3.3E-02	2.0E-02	2.1E-02	2.5E-02	1.8E-02
Cradle to Grave	1.4E+02	1.9E+02	2.0E+02	1.4E+02	1.3E+02	1.5E+02	1.2E+02
Life Cycle Stage	7851A	7883A	M57508	M58816	M58876	XCGB4	1583ANH/ M58510
Materials	1.1E+02	6.9E+01	7.4E+01	1.6E+02	1.2E+02	9.8E+01	7.9E+01
Manufacturing	2.6E+01	1.6E+01	1.8E+01	3.3E+01	6.1E+01	2.6E+01	1.5E+01
Marketing	7.3E+00	4.4E+00	5.1E+00	9.1E+00	8.0E+00	3.4E+00	4.2E+00
Use	7.1E+00	4.5E+00	5.0E+00	1.0E+01	9.7E+00	6.4E+00	5.0E+00
Waste Disposal	2.7E-02	1.6E-02	1.9E-02	3.3E-02	3.4E-02	1.5E-02	1.5E-02
Cradle to Grave	1.5E+02	9.5E+01	1.0E+02	2.2E+02	2.0E+02	1.3E+02	1.0E+02
Life Cycle Stage	M58762/ 2137A	10GX24/ M58958	10GX44	2424	3624	7851NH	7997A/ M58790
Materials	1.4E+02	1.4E+02	1.4E+02	9.4E+01	1.4E+02	1.4E+02	9.0E+01
Manufacturing	2.8E+01	5.0E+01	2.7E+01	3.5E+01	4.2E+01	2.8E+01	1.8E+01
Marketing	7.8E+00	6.7E+00	7.6E+00	4.6E+00	5.5E+00	7.8E+00	5.1E+00
Use	8.7E+00	1.0E+01	8.7E+00	6.7E+00	9.6E+00	9.0E+00	5.8E+00
Waste Disposal	2.8E-02	2.8E-02	2.8E-02	1.9E-02	2.4E-02	2.8E-02	1.9E-02
Cradle to Grave	1.8E+02	2.1E+02	1.8E+02	1.4E+02	2.0E+02	1.9E+02	1.2E+02

Table 6: Cradle to Grave Cumulative Energy Demand (MJ) per 100 feet of Cable Continued



ENVIRONMENTAL PRODUCT DECLARATION



Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Life Cycle Stage	M57561	M57622	M58772/ 2143A	OSP6U
Materials	9.0E+01	1.0E+02	1.5E+02	1.1E+02
Manufacturing	1.8E+01	2.1E+01	3.1E+01	2.0E+01
Marketing	5.1E+00	5.8E+00	8.7E+00	5.6E+00
Use	5.8E+00	6.5E+00	9.7E+00	6.9E+00
Waste Disposal	1.9E-02	2.1E-02	3.2E-02	2.0E-02
Cradle to Grave	1.2E+02	1.4E+02	2.0E+02	1.4E+02

Table 6: Cradle to Grave Cumulative Energy Demand (MJ) per 100 feet of Cable Continued



ENVIRONMENTAL PRODUCT DECLARATION



Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10®, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

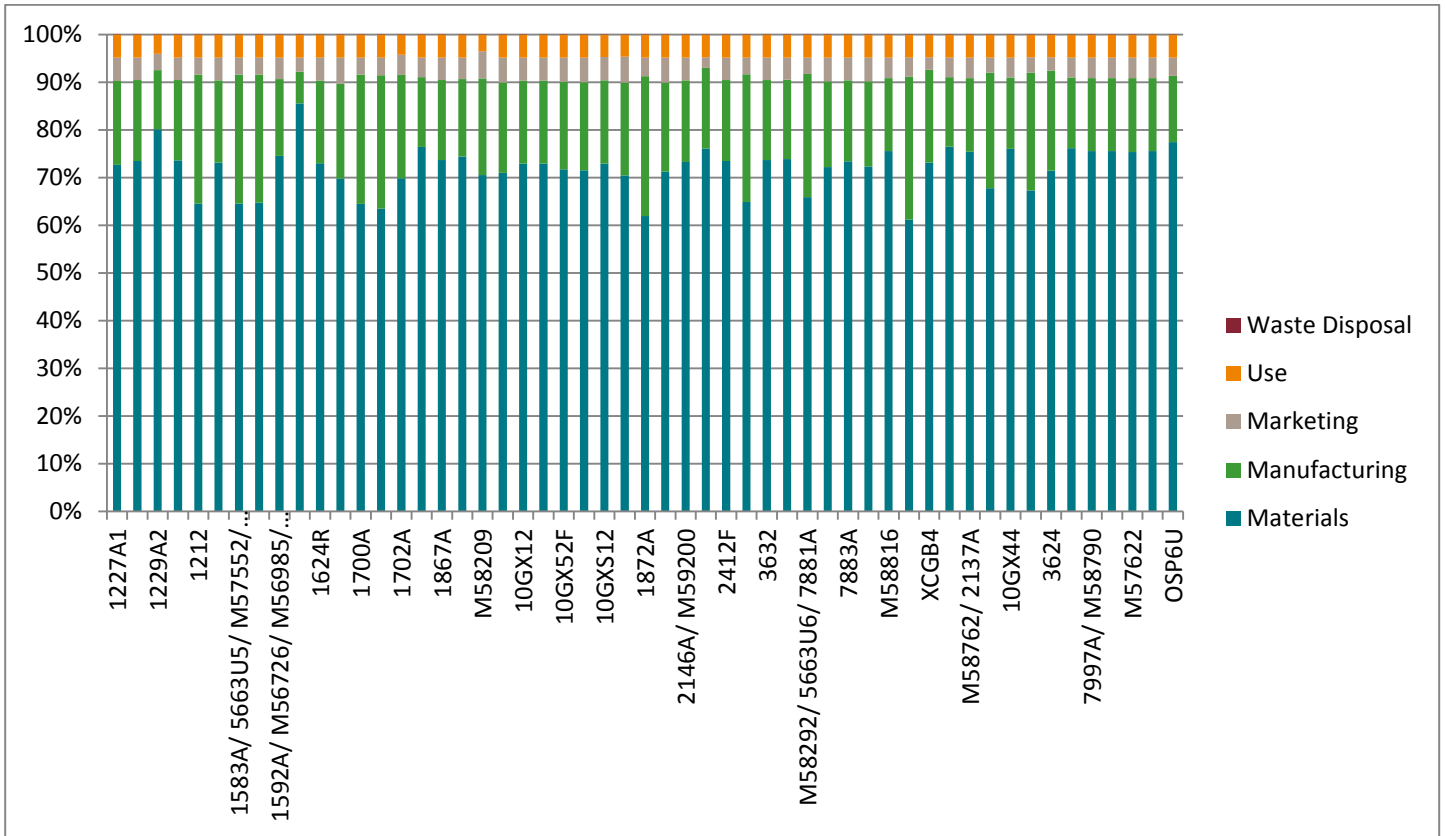


Figure 2: Cradle to Grave Cumulative Energy Demand

Waste Management

Methods of waste handling are detailed for the Belden non-plenum copper cables for the entire life cycle of the products per 100 feet of cable.



ENVIRONMENTAL PRODUCT DECLARATION



Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Waste Category	1227A1	1229A1	1229A2	1242A	1212/ M56167	1212F/ 1533R/ M57370	1583A/ 5663U5/ M57553	1583B	1592A/ M57076
Incineration (with and without energy recovery)	0.01	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02
Landfill (nonhazardous waste)	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hazardous Waste	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Landfill Avoidance (recycling)	1.75	3.06	3.06	2.18	2.13	4.37	1.92	2.02	3.06
Waste Category	1594A/ M58926	1624R	1668A	1700A	1700S6	1702A	1752A	1867A	M58196
Incineration (with and without energy recovery)	0.02	0.03	0.05	0.02	0.15	0.04	0.02	0.01	0.03
Landfill (nonhazardous waste)	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hazardous Waste	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Landfill Avoidance (recycling)	2.40	4.37	7.57	2.13	15.66	4.37	3.06	2.04	4.37
Waste Category	M58209	1588A	10GX12/ M58650	10GX32	10GX52F	10GX62F	10GXS12/ M59156/ M59180	10GXS32	1872A
Incineration (with and without energy recovery)	0.03	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.03
Landfill (nonhazardous waste)	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hazardous Waste	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Landfill Avoidance (recycling)	3.79	1.89	5.24	5.83	5.97	5.68	5.24	5.83	3.41

Table 7: Cradle to Grave Waste (kg) per 100ft of Cable



ENVIRONMENTAL PRODUCT DECLARATION



Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Waste Category	1875GB/ 1875GA	2146A/ M59200	2412/ M58804	2412F/ M58156/ 1351A	3612/ M57202	3632	4812/ M57419	5663U6/ M58292/ LAN6R/ 7881A	7851A
Incineration (with and without energy recovery)	0.03	0.03	0.02	0.04	0.03	0.03	0.03	0.02	0.03
Landfill (nonhazardous waste)	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hazardous Waste	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Landfill Avoidance (recycling)	4.08	4.22	2.34	5.97	2.66	3.79	4.52	2.34	4.81
Waste Category	7883A	M57508	M58816	M58876	XCGB4	1583AN H/ M58510	M58762 / 2137A	10GX24/ M58958	10GX44
Incineration (with and without energy recovery)	0.02	0.02	0.04	0.04	0.02	0.02	0.04	0.04	0.03
Landfill (nonhazardous waste)	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Hazardous Waste	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Landfill Avoidance (recycling)	2.91	3.35	5.97	4.47	1.92	2.77	5.10	3.73	4.95
Waste Category	2424	3624	7851NH	7997A/ M58790	M57561	M57622	M58772 / 2143A	OSP6U	
Incineration (with and without energy recovery)	0.02	0.03	0.04	0.02	0.02	0.03	0.04	0.03	
Landfill (nonhazardous waste)	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	
Hazardous Waste	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	
Landfill Avoidance (recycling)	2.56	3.09	5.10	3.35	3.35	3.79	5.68	3.64	

Table 7: Cradle to Grave Waste (kg) per 100ft of Cable Continued



ENVIRONMENTAL PRODUCT DECLARATION



SENDING ALL THE RIGHT SIGNALS DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

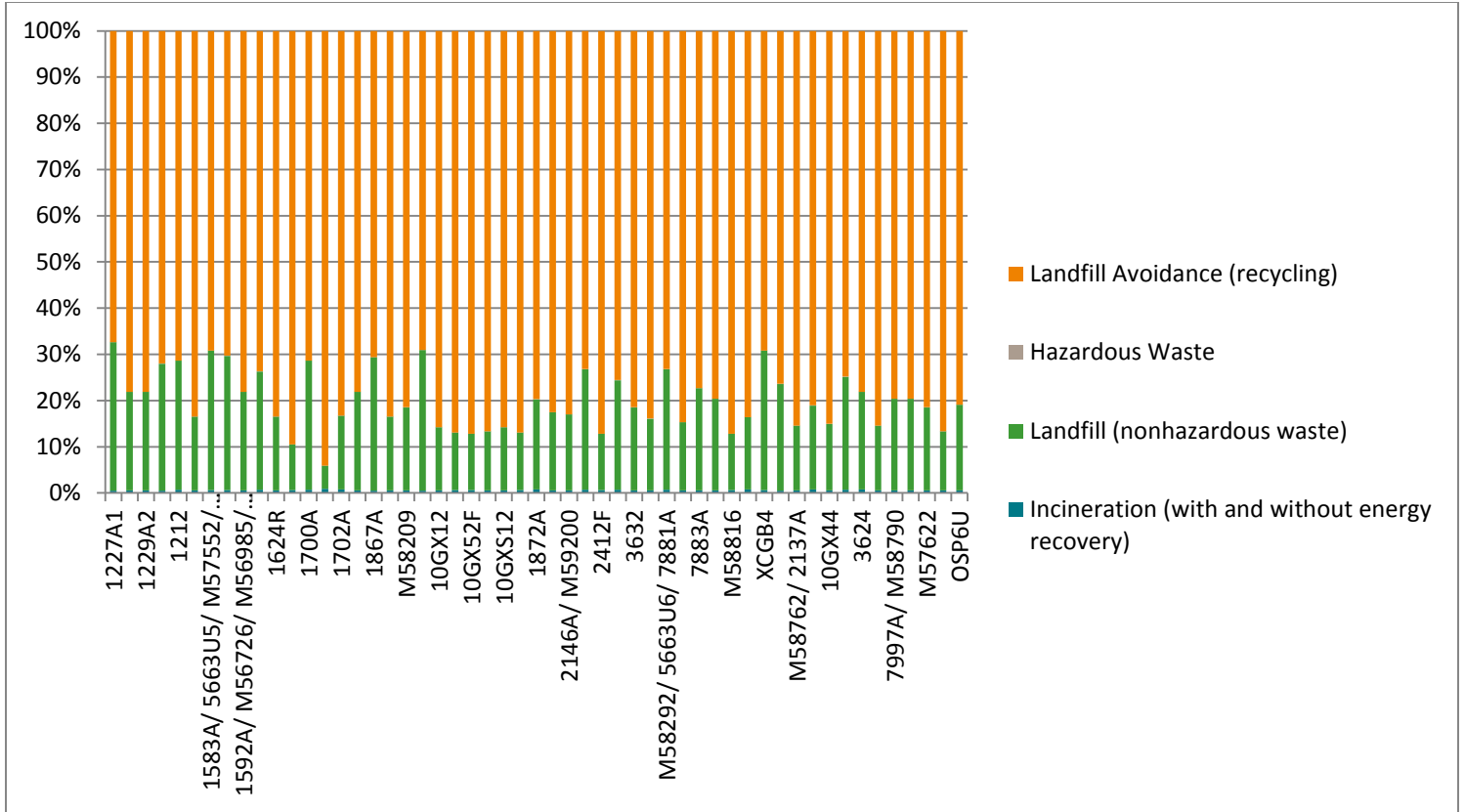


Figure 3: Cradle to Grave Waste



ENVIRONMENTAL PRODUCT DECLARATION



SENDING ALL THE RIGHT SIGNALS

Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Life Cycle Impact Assessment

The environmental impacts listed below were assessed throughout the life cycle of the non-plenum data cable products as defined above, per 100 feet of cable. The environmental impacts were analyzed using TRACI 2.1 methodology.

Impact Category	1242A						1212/ M56167						1212F/ 1533R/ M57370					
	Raw Material	Manu-facturing	Mark-eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu-facturing	Mark-eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu-facturing	Mark-eting	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	2.2E+00	5.6E-01	1.9E-01	1.5E-01	3.1E-03	3.1E+00	4.0E+00	9.8E-01	3.3E-01	2.7E-01	5.4E-03	5.7E+00	5.9E+00	9.8E-01	3.3E-01	2.9E-01	5.4E-03	6.2E+00
Fossil Fuel Depletion (MJ surplus)	3.2E+00	5.5E-01	2.7E-01	2.0E-01	1.1E-03	4.3E+00	5.5E+00	9.6E-01	4.8E-01	3.5E-01	1.9E-03	7.4E+00	8.2E+00	9.6E-01	4.8E-01	4.1E-01	1.9E-03	8.6E+00
Eutrophication (kg N eq)	5.0E-01	9.9E-03	5.1E-05	2.6E-02	9.3E-06	5.4E-01	1.0E+00	1.7E-02	9.0E-05	5.3E-02	1.6E-05	1.1E+00	1.6E+00	1.7E-02	9.0E-05	7.8E-02	1.6E-05	1.6E+00
Smog (kg O ₃ eq)	5.7E-01	4.3E-02	2.3E-02	3.2E-02	1.2E-04	6.8E-01	1.2E+00	7.5E-02	4.0E-02	6.5E-02	2.2E-04	1.4E+00	1.7E+00	7.5E-02	4.0E-02	8.6E-02	2.2E-04	1.8E+00
Acidification (kg SO ₂ eq)	1.1E-01	6.7E-03	1.2E-03	6.2E-03	4.7E-06	1.3E-01	2.3E-01	1.2E-02	2.1E-03	1.2E-02	8.2E-06	2.6E-01	3.5E-01	1.2E-02	2.1E-03	1.7E-02	8.2E-06	3.7E-01
Ozone Depletion (kg CFC ₋₁₁ eq)	7.6E-07	5.6E-09	6.8E-10	3.9E-08	1.1E-10	8.1E-07	6.3E-07	9.8E-09	1.2E-09	3.2E-08	1.9E-10	6.8E-07	1.4E-06	9.8E-09	1.2E-09	7.0E-08	1.9E-10	1.5E-06

Table 8: Cradle to Grave Life Cycle Impact Assessment Results per 100 ft of Cable

ENVIRONMENTAL PRODUCT DECLARATION



SENDING ALL THE RIGHT SIGNALS

Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Impact Category	1242A						1212/ M56167						1212F/ 1533R/ M57370					
	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	2.8E+00	7.0E-01	2.3E-01	1.9E-01	3.8E-03	4.0E+00	3.8E+00	1.6E+00	2.7E-01	2.9E-01	5.1E-03	6.0E+00	5.6E+00	1.4E+00	4.7E-01	3.8E-01	7.7E-03	8.0E+00
Fossil Fuel Depletion (MJ surplus)	4.1E+00	6.8E-01	3.4E-01	2.6E-01	1.3E-03	5.5E+00	5.3E+00	3.4E+00	3.7E-01	4.6E-01	1.8E-03	9.7E+00	8.4E+00	1.4E+00	6.8E-01	5.3E-01	2.7E-03	1.1E+01
Eutrophication (kg N eq)	7.0E-01	1.2E-02	6.4E-05	3.6E-02	1.2E-05	7.5E-01	9.8E-01	7.6E-04	7.5E-05	4.9E-02	1.6E-05	1.0E+00	1.2E+00	2.5E-02	1.3E-04	5.9E-02	2.3E-05	1.2E+00
Smog (kg O ₃ eq)	7.8E-01	5.4E-02	2.9E-02	4.4E-02	1.5E-04	9.2E-01	1.1E+00	7.0E-02	3.4E-02	6.0E-02	2.1E-04	1.3E+00	1.3E+00	1.1E-01	5.8E-02	7.6E-02	3.1E-04	1.6E+00
Acidification (kg SO ₂ eq)	1.6E-01	8.4E-03	1.5E-03	8.4E-03	5.9E-06	1.8E-01	2.2E-01	8.9E-03	1.8E-03	1.2E-02	7.8E-06	2.4E-01	2.7E-01	1.7E-02	3.0E-03	1.4E-02	1.2E-05	3.0E-01
Ozone Depletion (kg CFC ₋₁₁ eq)	9.1E-07	7.0E-09	8.5E-10	4.6E-08	1.4E-10	9.7E-07	6.0E-07	8.7E-08	1.1E-09	3.4E-08	1.8E-10	7.2E-07	1.7E-06	1.4E-08	1.7E-09	8.5E-08	2.8E-10	1.8E-06
Impact Category	1583A/ 5663U5/ M57553						1583B						1592A/ M57076					
	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	3.4E+00	1.4E+00	2.4E-01	2.6E-01	4.6E-03	5.4E+00	3.7E+00	1.5E+00	2.6E-01	2.8E-01	4.9E-03	5.8E+00	4.2E+00	9.8E-01	3.3E-01	2.8E-01	5.4E-03	5.9E+00
Fossil Fuel Depletion (MJ surplus)	4.7E+00	3.1E+00	3.4E-01	4.1E-01	1.6E-03	8.7E+00	4.9E+00	3.3E+00	3.5E-01	4.3E-01	1.7E-03	9.1E+00	5.9E+00	9.6E-01	4.8E-01	3.8E-01	1.9E-03	7.9E+00
Eutrophication (kg N eq)	8.8E-01	6.8E-04	6.7E-05	4.4E-02	1.4E-05	9.3E-01	9.8E-01	7.2E-04	7.1E-05	4.9E-02	1.5E-05	1.0E+00	1.1E+00	1.7E-02	9.0E-05	5.6E-02	1.6E-05	1.2E+00
Smog (kg O ₃ eq)	9.8E-01	6.3E-02	3.0E-02	5.4E-02	1.8E-04	1.1E+00	1.1E+00	6.7E-02	3.2E-02	6.0E-02	2.0E-04	1.3E+00	1.2E+00	7.5E-02	4.0E-02	6.7E-02	2.2E-04	1.4E+00
Acidification (kg SO ₂ eq)	2.0E-01	8.0E-03	1.6E-03	1.0E-02	7.0E-06	2.2E-01	2.2E-01	8.5E-03	1.7E-03	1.2E-02	7.4E-06	2.4E-01	2.5E-01	1.2E-02	2.1E-03	1.3E-02	8.2E-06	2.7E-01
Ozone Depletion (kg CFC ₋₁₁ eq)	5.4E-07	7.9E-08	1.0E-09	3.1E-08	1.7E-10	6.5E-07	5.8E-07	8.3E-08	1.1E-09	3.3E-08	1.7E-10	7.0E-07	1.0E-06	9.8E-09	1.2E-09	5.3E-08	1.9E-10	1.1E-06

Table 8: Cradle to Grave Life Cycle Impact Assessment Results per 100 ft of Cable Continued

ENVIRONMENTAL PRODUCT DECLARATION



SENDING ALL THE RIGHT SIGNALS

Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10®, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Impact Category	1594A/ M58926						1624R						1668A					
	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	4.1E+00	4.3E-01	1.9E-01	2.4E-01	5.9E-03	5.0E+00	5.5E+00	1.4E+00	4.7E-01	3.8E-01	7.7E-03	7.9E+00	7.5E+00	2.4E+00	8.1E-01	5.5E-01	1.3E-02	1.2E+01
Fossil Fuel Depletion (MJ surplus)	6.1E+00	2.1E-01	1.9E-01	3.3E-01	2.1E-03	7.0E+00	8.4E+00	1.4E+00	6.8E-01	5.4E-01	2.7E-03	1.1E+01	1.1E+01	2.4E+00	1.2E+00	7.5E-01	4.6E-03	1.6E+01
Eutrophication (kg N eq)	9.2E-01	4.3E-03	4.6E-05	4.6E-02	1.8E-05	9.8E-01	1.1E+00	2.5E-02	1.3E-04	5.7E-02	2.3E-05	1.2E+00	2.1E+00	4.3E-02	2.2E-04	1.1E-01	4.0E-05	2.2E+00
Smog (kg O ₃ eq)	1.0E+00	3.3E-02	2.0E-02	5.6E-02	2.4E-04	1.2E+00	1.3E+00	1.1E-01	5.8E-02	7.4E-02	3.1E-04	1.6E+00	2.3E+00	1.9E-01	1.0E-01	1.3E-01	5.3E-04	2.7E+00
Acidification (kg SO ₂ eq)	2.1E-01	3.6E-03	1.4E-03	1.1E-02	9.0E-06	2.3E-01	2.6E-01	1.7E-02	3.0E-03	1.4E-02	1.2E-05	2.9E-01	4.6E-01	2.9E-02	5.3E-03	2.5E-02	2.0E-05	5.2E-01
Ozone Depletion (kg CFC ₋₁₁ eq)	1.5E-06	1.1E-08	1.3E-09	7.6E-08	2.1E-10	1.6E-06	1.7E-06	1.4E-08	1.7E-09	8.6E-08	2.8E-10	1.8E-06	5.3E-07	2.4E-08	2.9E-09	2.8E-08	4.8E-10	5.9E-07
Impact Category	1700A						1700S6						1702A					
	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	3.7E+00	1.6E+00	2.7E-01	2.9E-01	5.1E-03	6.0E+00	2.6E+01	1.2E+01	2.0E+00	2.0E+00	3.8E-02	4.3E+01	7.7E+00	2.5E+00	6.0E-01	4.8E-01	1.1E-02	1.0E+01
Fossil Fuel Depletion (MJ surplus)	5.3E+00	3.4E+00	3.7E-01	4.6E-01	1.8E-03	9.7E+00	3.8E+01	2.5E+01	2.7E+00	3.4E+00	1.3E-02	7.1E+01	1.1E+01	4.1E+00	8.6E-01	6.6E-01	3.7E-03	1.4E+01
Eutrophication (kg N eq)	9.6E-01	7.6E-04	7.5E-05	4.8E-02	1.6E-05	1.0E+00	6.2E+00	5.6E-03	5.5E-04	3.1E-01	1.1E-04	6.5E+00	2.0E+00	2.0E-02	1.7E-04	1.0E-01	3.2E-05	2.1E+00
Smog (kg O ₃ eq)	1.1E+00	7.0E-02	3.4E-02	5.9E-02	2.1E-04	1.2E+00	7.0E+00	5.2E-01	2.5E-01	3.9E-01	1.5E-03	8.3E+00	2.2E+00	1.5E-01	7.5E-02	1.2E-01	4.2E-04	2.5E+00
Acidification (kg SO ₂ eq)	2.1E-01	8.9E-03	1.8E-03	1.1E-02	7.8E-06	2.4E-01	1.4E+00	6.5E-02	1.3E-02	7.4E-02	5.8E-05	1.6E+00	4.5E-01	2.1E-02	4.0E-03	2.3E-02	1.6E-05	4.9E-01
Ozone Depletion (kg CFC ₋₁₁ eq)	5.9E-07	8.7E-08	1.1E-09	3.4E-08	1.8E-10	7.1E-07	5.8E-06	6.4E-07	8.3E-09	3.2E-07	1.4E-09	6.8E-06	1.2E-06	8.8E-08	2.3E-09	6.1E-08	3.8E-10	1.3E-06

Table 8: Cradle to Grave Life Cycle Impact Assessment Results per 100 ft of Cable Continued

ENVIRONMENTAL PRODUCT DECLARATION



SENDING ALL THE RIGHT SIGNALS

Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10®, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Impact Category	1752A						1867A						M58196					
	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	4.9E+00	9.8E-01	3.3E-01	3.2E-01	5.4E-03	6.6E+00	2.6E+00	6.5E-01	2.2E-01	1.8E-01	3.6E-03	3.8E+00	6.0E+00	1.4E+00	4.7E-01	4.0E-01	7.7E-03	8.4E+00
Fossil Fuel Depletion (MJ surplus)	6.3E+00	9.6E-01	4.8E-01	3.9E-01	1.9E-03	8.3E+00	4.0E+00	6.4E-01	3.2E-01	2.5E-01	1.3E-03	5.3E+00	8.9E+00	1.4E+00	6.8E-01	5.6E-01	2.7E-03	1.2E+01
Eutrophication (kg N eq)	1.0E+00	1.7E-02	9.0E-05	5.3E-02	1.6E-05	1.1E+00	6.2E-01	1.2E-02	6.0E-05	3.2E-02	1.1E-05	6.7E-01	1.3E+00	2.5E-02	1.3E-04	6.7E-02	2.3E-05	1.4E+00
Smog (kg O ₃ eq)	1.2E+00	7.5E-02	4.0E-02	6.8E-02	2.2E-04	1.4E+00	7.0E-01	5.0E-02	2.7E-02	3.9E-02	1.4E-04	8.3E-01	1.5E+00	1.1E-01	5.8E-02	8.5E-02	3.1E-04	1.8E+00
Acidification (kg SO ₂ eq)	2.4E-01	1.2E-02	2.1E-03	1.3E-02	8.2E-06	2.7E-01	1.4E-01	7.8E-03	1.4E-03	7.5E-03	5.5E-06	1.6E-01	3.0E-01	1.7E-02	3.0E-03	1.6E-02	1.2E-05	3.4E-01
Ozone Depletion (kg CFC ₁₁ eq)	1.1E-06	9.8E-09	1.2E-09	5.5E-08	1.9E-10	1.1E-06	7.8E-07	6.5E-09	7.9E-10	4.0E-08	1.3E-10	8.4E-07	1.7E-06	1.4E-08	1.7E-09	8.7E-08	2.8E-10	1.8E-06
Impact Category	M58209						1588A						10GX12/ M58650					
	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	4.1E+00	1.2E+00	4.1E-01	2.0E-01	6.7E-03	4.3E+00	2.2E+00	6.1E-01	2.0E-01	1.5E-01	3.3E-03	3.2E+00	6.1E+00	1.7E+00	5.6E-01	4.3E-01	9.2E-03	8.9E+00
Fossil Fuel Depletion (MJ surplus)	5.4E+00	1.2E+00	5.9E-01	2.7E-01	2.3E-03	5.7E+00	3.1E+00	5.9E-01	3.0E-01	2.1E-01	1.2E-03	4.3E+00	1.0E+01	1.6E+00	8.2E-01	6.6E-01	3.2E-03	1.4E+01
Eutrophication (kg N eq)	7.9E-01	2.2E-02	1.1E-04	4.0E-02	2.0E-05	8.3E-01	4.8E-01	1.1E-02	5.6E-05	2.4E-02	1.0E-05	5.1E-01	1.3E+00	3.0E-02	1.5E-04	6.6E-02	2.8E-05	1.4E+00
Smog (kg O ₃ eq)	9.4E-01	9.3E-02	5.0E-02	4.7E-02	2.7E-04	9.9E-01	5.5E-01	4.6E-02	2.5E-02	3.2E-02	1.3E-04	6.6E-01	1.5E+00	1.3E-01	6.9E-02	8.6E-02	3.7E-04	1.8E+00
Acidification (kg SO ₂ eq)	1.9E-01	1.4E-02	2.6E-03	9.3E-03	1.0E-05	1.9E-01	1.1E-01	7.2E-03	1.3E-03	5.9E-03	5.1E-06	1.2E-01	3.1E-01	2.0E-02	3.7E-03	1.7E-02	1.4E-05	3.5E-01
Ozone Depletion (kg CFC ₁₁ eq)	1.1E-06	1.2E-08	1.5E-09	5.5E-08	2.4E-10	1.1E-06	4.7E-07	6.0E-09	7.3E-10	2.4E-08	1.2E-10	5.0E-07	1.1E-06	1.7E-08	2.0E-09	5.5E-08	3.3E-10	1.2E-06

Table 8: Cradle to Grave Life Cycle Impact Assessment Results per 100 ft of Cable Continued

ENVIRONMENTAL PRODUCT DECLARATION



SENDING ALL THE RIGHT SIGNALS

Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10®, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Impact Category	10GX32						10GX52F						10GX62F					
	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	6.7E+00	1.9E+00	6.2E-01	4.7E-01	1.0E-02	9.9E+00	6.8E+00	1.9E+00	6.4E-01	4.8E-01	1.1E-02	1.0E+01	6.5E+00	1.8E+00	6.1E-01	4.5E-01	1.0E-02	9.5E+00
Fossil Fuel Depletion (MJ surplus)	1.2E+01	1.8E+00	9.1E-01	7.4E-01	3.6E-03	1.6E+01	1.1E+01	1.9E+00	9.3E-01	7.1E-01	3.7E-03	1.5E+01	1.1E+01	1.8E+00	8.9E-01	6.8E-01	3.5E-03	1.4E+01
Eutrophication (kg N eq)	1.4E+00	3.3E-02	1.7E-04	7.1E-02	3.1E-05	1.5E+00	1.3E+00	3.4E-02	1.8E-04	6.7E-02	3.2E-05	1.4E+00	1.2E+00	3.2E-02	1.7E-04	6.1E-02	3.0E-05	1.3E+00
Smog (kg O ₃ eq)	1.6E+00	1.4E-01	7.7E-02	9.4E-02	4.1E-04	2.0E+00	1.5E+00	1.5E-01	7.9E-02	8.9E-02	4.2E-04	1.9E+00	1.4E+00	1.4E-01	7.5E-02	8.3E-02	4.0E-04	1.7E+00
Acidification (kg SO ₂ eq)	3.4E-01	2.2E-02	4.1E-03	1.8E-02	1.6E-05	3.8E-01	3.1E-01	2.3E-02	4.2E-03	1.7E-02	1.6E-05	3.5E-01	2.8E-01	2.2E-02	4.0E-03	1.6E-02	1.5E-05	3.3E-01
Ozone Depletion (kg CFC ₁₁ eq)	1.2E-06	1.9E-08	2.3E-09	6.1E-08	3.7E-10	1.3E-06	9.1E-07	1.9E-08	2.3E-09	4.7E-08	3.8E-10	9.8E-07	8.6E-07	1.8E-08	2.2E-09	4.4E-08	3.6E-10	9.3E-07
Impact Category	10GXS12/ M59156/ M59180						10GXS32						1872A					
	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	6.1E+00	1.7E+00	5.6E-01	4.2E-01	9.2E-03	8.7E+00	5.8E+00	1.9E+00	6.2E-01	4.0E-01	1.0E-02	8.5E+00	5.4E+00	2.6E+00	4.3E-01	4.3E-01	8.2E-03	9.0E+00
Fossil Fuel Depletion (MJ surplus)	1.0E+01	1.6E+00	8.2E-01	6.4E-01	3.2E-03	1.4E+01	9.7E+00	1.8E+00	9.1E-01	6.1E-01	3.6E-03	1.3E+01	7.9E+00	5.5E+00	6.0E-01	7.1E-01	2.9E-03	1.5E+01
Eutrophication (kg N eq)	1.2E+00	3.0E-02	1.5E-04	6.1E-02	2.8E-05	1.3E+00	1.3E+00	3.3E-02	1.7E-04	6.5E-02	3.1E-05	1.4E+00	1.2E+00	1.2E-03	1.2E-04	5.9E-02	2.5E-05	1.2E+00
Smog (kg O ₃ eq)	1.4E+00	1.3E-01	6.9E-02	8.1E-02	3.7E-04	1.7E+00	1.5E+00	1.4E-01	7.7E-02	8.3E-02	4.1E-04	1.7E+00	1.4E+00	1.1E-01	5.4E-02	7.7E-02	3.3E-04	1.6E+00
Acidification (kg SO ₂ eq)	2.9E-01	2.0E-02	3.7E-03	1.6E-02	1.4E-05	3.3E-01	3.0E-01	2.2E-02	4.1E-03	1.6E-02	1.6E-05	3.4E-01	2.7E-01	1.4E-02	2.9E-03	1.4E-02	1.3E-05	3.0E-01
Ozone Depletion (kg CFC ₁₁ eq)	9.0E-07	1.7E-08	2.0E-09	4.6E-08	3.3E-10	9.7E-07	8.6E-07	1.9E-08	2.3E-09	4.4E-08	3.7E-10	9.3E-07	1.1E-06	1.4E-07	1.8E-09	6.2E-08	2.9E-10	1.3E-06

Table 8: Cradle to Grave Life Cycle Impact Assessment Results per 100 ft of Cable Continued

ENVIRONMENTAL PRODUCT DECLARATION



SENDING ALL THE RIGHT SIGNALS

Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Impact Category	1875GB/ 1875GA						2146A/ M59200						2412/ M58804					
	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	4.7E+00	1.3E+00	4.4E-01	3.3E-01	7.2E-03	6.9E+00	5.4E+00	1.4E+00	4.5E-01	3.7E-01	7.4E-03	7.8E+00	7.7E+00	1.8E+00	3.0E-01	4.9E-01	5.6E-03	1.0E+01
Fossil Fuel Depletion (MJ surplus)	6.9E+00	1.3E+00	6.4E-01	4.5E-01	2.5E-03	9.5E+00	8.0E+00	1.3E+00	6.6E-01	5.1E-01	2.6E-03	1.1E+01	1.1E+01	3.8E+00	4.1E-01	7.7E-01	2.0E-03	1.6E+01
Eutrophication (kg N eq)	1.0E+00	2.3E-02	1.2E-04	5.3E-02	2.2E-05	1.1E+00	1.2E+00	2.4E-02	1.2E-04	6.3E-02	2.3E-05	1.3E+00	2.0E+00	8.3E-04	8.2E-05	1.0E-01	1.7E-05	2.1E+00
Smog (kg O ₃ eq)	1.2E+00	1.0E-01	5.4E-02	6.8E-02	2.9E-04	1.4E+00	1.4E+00	1.0E-01	5.6E-02	7.9E-02	3.0E-04	1.7E+00	2.2E+00	7.7E-02	3.7E-02	1.2E-01	2.3E-04	2.5E+00
Acidification (kg SO ₂ eq)	2.4E-01	1.6E-02	2.8E-03	1.3E-02	1.1E-05	2.7E-01	2.8E-01	1.6E-02	2.9E-03	1.5E-02	1.1E-05	3.1E-01	4.5E-01	9.8E-03	2.0E-03	2.3E-02	8.6E-06	4.8E-01
Ozone Depletion (kg CFC ₋₁₁ eq)	9.6E-07	1.3E-08	1.6E-09	4.9E-08	2.6E-10	1.0E-06	1.8E-06	1.3E-08	1.6E-09	9.0E-08	2.7E-10	1.9E-06	1.2E-06	9.6E-08	1.2E-09	6.4E-08	2.0E-10	1.3E-06
Impact Category	2412F/ M58156/ 1351A						3612/ M57202						3632					
	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	7.9E+00	1.9E+00	6.4E-01	5.3E-01	1.1E-02	1.1E+01	4.5E+00	2.0E+00	3.4E-01	3.5E-01	6.4E-03	7.4E+00	4.7E+00	1.2E+00	4.1E-01	3.2E-01	6.7E-03	6.8E+00
Fossil Fuel Depletion (MJ surplus)	9.9E+00	1.9E+00	9.3E-01	6.5E-01	3.7E-03	1.4E+01	7.1E+00	4.3E+00	4.7E-01	6.0E-01	2.2E-03	1.3E+01	7.4E+00	1.2E+00	5.9E-01	4.7E-01	2.3E-03	9.8E+00
Eutrophication (kg N eq)	1.4E+00	3.4E-02	1.8E-04	6.9E-02	3.2E-05	1.5E+00	1.1E+00	9.5E-04	9.3E-05	5.5E-02	1.9E-05	1.2E+00	1.2E+00	2.2E-02	1.1E-04	5.9E-02	2.0E-05	1.2E+00
Smog (kg O ₃ eq)	1.6E+00	1.5E-01	7.9E-02	9.3E-02	4.2E-04	1.9E+00	1.2E+00	8.8E-02	4.2E-02	6.9E-02	2.6E-04	1.5E+00	1.3E+00	9.3E-02	5.0E-02	7.3E-02	2.7E-04	1.5E+00
Acidification (kg SO ₂ eq)	3.2E-01	2.3E-02	4.2E-03	1.7E-02	1.6E-05	3.6E-01	2.5E-01	1.1E-02	2.3E-03	1.3E-02	9.8E-06	2.8E-01	2.7E-01	1.4E-02	2.6E-03	1.4E-02	1.0E-05	3.0E-01
Ozone Depletion (kg CFC ₋₁₁ eq)	2.0E-05	1.9E-08	2.3E-09	1.0E-06	3.8E-10	2.1E-05	7.1E-07	1.1E-07	1.4E-09	4.1E-08	2.3E-10	8.6E-07	7.4E-07	1.2E-08	1.5E-09	3.8E-08	2.4E-10	7.9E-07

Table 8: Cradle to Grave Life Cycle Impact Assessment Results per 100 ft of Cable Continued

ENVIRONMENTAL PRODUCT DECLARATION



SENDING ALL THE RIGHT SIGNALS

Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Impact Category	4812/ M57419						5663U6/ M58292/ LAN6R/ 7881A						7851A					
	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	5.7E+00	1.4E+00	4.8E-01	3.9E-01	7.9E-03	8.2E+00	4.4E+00	1.8E+00	3.0E-01	3.3E-01	5.6E-03	6.9E+00	5.5E+00	1.5E+00	5.1E-01	3.8E-01	8.5E-03	8.1E+00
Fossil Fuel Depletion (MJ surplus)	8.8E+00	1.4E+00	7.1E-01	5.6E-01	2.8E-03	1.2E+01	6.1E+00	3.8E+00	4.1E-01	5.2E-01	2.0E-03	1.1E+01	8.8E+00	1.5E+00	7.5E-01	5.7E-01	3.0E-03	1.2E+01
Eutrophication (kg N eq)	1.4E+00	2.6E-02	1.3E-04	7.2E-02	2.4E-05	1.5E+00	1.2E+00	8.3E-04	8.2E-05	5.9E-02	1.7E-05	1.2E+00	1.3E+00	2.7E-02	1.4E-04	6.4E-02	2.6E-05	1.4E+00
Smog (kg O ₃ eq)	1.6E+00	1.1E-01	6.0E-02	8.9E-02	3.2E-04	1.9E+00	1.3E+00	7.7E-02	3.7E-02	7.1E-02	2.3E-04	1.5E+00	1.4E+00	1.2E-01	6.4E-02	8.2E-02	3.4E-04	1.7E+00
Acidification (kg SO ₂ eq)	3.3E-01	1.7E-02	3.1E-03	1.7E-02	1.2E-05	3.6E-01	2.6E-01	9.8E-03	2.0E-03	1.4E-02	8.6E-06	2.9E-01	2.9E-01	1.8E-02	3.3E-03	1.6E-02	1.3E-05	3.3E-01
Ozone Depletion (kg CFC-11 eq)	8.7E-07	1.4E-08	1.7E-09	4.5E-08	2.8E-10	9.4E-07	6.6E-07	9.6E-08	1.2E-09	3.8E-08	2.0E-10	8.0E-07	9.1E-07	1.5E-08	1.9E-09	4.6E-08	3.0E-10	9.8E-07
Impact Category	7883A						M57508						M58816					
	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	3.8E+00	9.3E-01	3.1E-01	2.6E-01	5.1E-03	5.4E+00	4.1E+00	1.1E+00	3.6E-01	2.8E-01	5.9E-03	5.9E+00	8.9E+00	1.9E+00	6.4E-01	5.9E-01	1.1E-02	1.2E+01
Fossil Fuel Depletion (MJ surplus)	5.2E+00	9.1E-01	4.6E-01	3.4E-01	1.8E-03	7.1E+00	5.9E+00	1.0E+00	5.2E-01	3.8E-01	2.1E-03	8.0E+00	1.0E+01	1.9E+00	9.3E-01	6.6E-01	3.7E-03	1.4E+01
Eutrophication (kg N eq)	9.8E-01	1.7E-02	8.5E-05	5.0E-02	1.6E-05	1.0E+00	9.8E-01	1.9E-02	9.8E-05	5.0E-02	1.8E-05	1.0E+00	1.4E+00	3.4E-02	1.8E-04	6.9E-02	3.2E-05	1.5E+00
Smog (kg O ₃ eq)	1.1E+00	7.1E-02	3.9E-02	6.1E-02	2.1E-04	1.3E+00	1.1E+00	8.2E-02	4.4E-02	6.2E-02	2.4E-04	1.3E+00	1.6E+00	1.5E-01	7.9E-02	9.2E-02	4.2E-04	1.9E+00
Acidification (kg SO ₂ eq)	2.2E-01	1.1E-02	2.0E-03	1.2E-02	7.8E-06	2.4E-01	2.2E-01	1.3E-02	2.3E-03	1.2E-02	9.0E-06	2.5E-01	3.2E-01	2.3E-02	4.2E-03	1.7E-02	1.6E-05	3.6E-01
Ozone Depletion (kg CFC-11 eq)	6.0E-07	9.3E-09	1.1E-09	3.1E-08	1.8E-10	6.4E-07	7.5E-07	1.1E-08	1.3E-09	3.8E-08	2.1E-10	8.1E-07	3.9E-05	1.9E-08	2.3E-09	2.0E-06	3.8E-10	4.1E-05

Table 8: Cradle to Grave Life Cycle Impact Assessment Results per 100 ft of Cable Continued

ENVIRONMENTAL PRODUCT DECLARATION



SENDING ALL THE RIGHT SIGNALS

Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Impact Category	M58876						XCGB4						1583ANH/ M58510					
	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	6.7E+00	3.4E+00	5.7E-01	5.4E-01	1.1E-02	1.1E+01	5.4E+00	1.4E+00	2.4E-01	3.6E-01	4.6E-03	7.6E+00	3.6E+00	8.9E-01	3.0E-01	2.5E-01	4.9E-03	5.2E+00
Fossil Fuel Depletion (MJ surplus)	1.1E+01	7.2E+00	7.8E-01	9.6E-01	3.8E-03	2.0E+01	4.0E+00	3.1E+00	3.4E-01	3.8E-01	1.6E-03	7.9E+00	6.6E+00	8.7E-01	4.3E-01	4.0E-01	1.7E-03	8.4E+00
Eutrophication (kg N eq)	1.2E+00	1.6E-03	1.6E-04	6.2E-02	3.3E-05	1.3E+00	1.1E+00	6.8E-04	6.7E-05	5.6E-02	1.4E-05	1.2E+00	9.4E-01	1.6E-02	8.1E-05	4.8E-02	1.5E-05	1.0E+00
Smog (kg O ₃ eq)	1.5E+00	1.5E-01	7.1E-02	8.7E-02	4.3E-04	1.8E+00	1.2E+00	6.3E-02	3.0E-02	6.5E-02	1.8E-04	1.4E+00	1.0E+00	6.8E-02	3.7E-02	5.8E-02	2.0E-04	1.2E+00
Acidification (kg SO ₂ eq)	3.0E-01	1.9E-02	3.8E-03	1.6E-02	1.6E-05	3.4E-01	2.4E-01	8.0E-03	1.6E-03	1.3E-02	7.0E-06	2.7E-01	2.1E-01	1.1E-02	1.9E-03	1.1E-02	7.4E-06	2.3E-01
Ozone Depletion (kg CFC-11 eq)	1.5E-06	1.8E-07	2.4E-09	8.4E-08	3.9E-10	1.8E-06	3.5E-05	7.9E-08	1.0E-09	1.8E-06	1.7E-10	3.7E-05	2.8E-07	8.8E-09	1.1E-09	1.4E-08	1.7E-10	3.0E-07
Impact Category	M58762/ 2137A						10GX24/ M58958						10GX44					
	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	5.2E+00	1.6E+00	5.5E-01	3.8E-01	9.0E-03	8.0E+00	6.0E+00	2.8E+00	4.7E-01	4.8E-01	9.0E-03	1.0E+01	5.9E+00	1.6E+00	5.3E-01	4.1E-01	8.7E-03	8.6E+00
Fossil Fuel Depletion (MJ surplus)	1.3E+01	1.6E+00	8.0E-01	8.0E-01	3.1E-03	1.7E+01	1.3E+01	6.0E+00	6.5E-01	9.8E-01	3.1E-03	2.1E+01	1.2E+01	1.5E+00	7.7E-01	7.4E-01	3.0E-03	1.6E+01
Eutrophication (kg N eq)	1.0E+00	2.9E-02	1.5E-04	5.2E-02	2.7E-05	1.1E+00	1.5E+00	1.3E-03	1.3E-04	7.3E-02	2.7E-05	1.5E+00	1.4E+00	2.8E-02	1.5E-04	7.2E-02	2.6E-05	1.5E+00
Smog (kg O ₃ eq)	1.2E+00	1.2E-01	6.7E-02	6.9E-02	3.6E-04	1.5E+00	1.6E+00	1.2E-01	5.9E-02	9.1E-02	3.6E-04	1.9E+00	1.6E+00	1.2E-01	6.6E-02	8.9E-02	3.5E-04	1.9E+00
Acidification (kg SO ₂ eq)	2.3E-01	1.9E-02	3.6E-03	1.3E-02	1.4E-05	2.6E-01	3.2E-01	1.6E-02	3.2E-03	1.7E-02	1.4E-05	3.6E-01	3.1E-01	1.9E-02	3.5E-03	1.7E-02	1.3E-05	3.5E-01
Ozone Depletion (kg CFC-11 eq)	3.5E-07	1.6E-08	2.0E-09	1.9E-08	3.2E-10	3.9E-07	4.3E-07	1.5E-07	2.0E-09	2.9E-08	3.2E-10	6.1E-07	4.1E-07	1.6E-08	1.9E-09	2.2E-08	3.1E-10	4.5E-07

Table 8: Cradle to Grave Life Cycle Impact Assessment Results per 100 ft of Cable Continued

ENVIRONMENTAL PRODUCT DECLARATION



SENDING ALL THE RIGHT SIGNALS

Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Impact Category	2424						3624						7851NH					
	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	4.2E+00	1.9E+00	3.2E-01	3.2E-01	6.1E-03	6.8E+00	6.2E+00	2.3E+00	3.9E-01	4.5E-01	7.4E-03	9.5E+00	6.2E+00	1.6E+00	5.5E-01	4.3E-01	9.0E-03	9.0E+00
Fossil Fuel Depletion (MJ surplus)	8.1E+00	4.1E+00	4.5E-01	6.3E-01	2.1E-03	1.3E+01	1.3E+01	5.0E+00	5.4E-01	9.2E-01	2.6E-03	1.9E+01	1.3E+01	1.6E+00	8.0E-01	7.6E-01	3.1E-03	1.6E+01
Eutrophication (kg N eq)	1.1E+00	9.1E-04	9.0E-05	5.5E-02	1.9E-05	1.2E+00	1.4E+00	1.1E-03	1.1E-04	7.1E-02	2.3E-05	1.5E+00	1.4E+00	2.9E-02	1.5E-04	7.2E-02	2.7E-05	1.5E+00
Smog (kg O ₃ eq)	1.2E+00	8.4E-02	4.0E-02	6.7E-02	2.5E-04	1.4E+00	1.6E+00	1.0E-01	4.9E-02	8.8E-02	3.0E-04	1.8E+00	1.6E+00	1.2E-01	6.7E-02	9.1E-02	3.6E-04	1.9E+00
Acidification (kg SO ₂ eq)	2.4E-01	1.1E-02	2.2E-03	1.3E-02	9.4E-06	2.7E-01	3.1E-01	1.3E-02	2.7E-03	1.7E-02	1.1E-05	3.5E-01	3.2E-01	1.9E-02	3.6E-03	1.7E-02	1.4E-05	3.6E-01
Ozone Depletion (kg CFC ₁₁ eq)	3.0E-07	1.0E-07	1.4E-09	2.0E-08	2.2E-10	4.3E-07	4.6E-07	1.3E-07	1.6E-09	2.9E-08	2.7E-10	6.2E-07	4.6E-07	1.6E-08	2.0E-09	2.4E-08	3.2E-10	5.1E-07
Impact Category	7997A/ M58790						M57561						M57622					
	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave	Raw Material	Manu- facturing	Mark- eting	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	3.8E+00	1.1E+00	3.6E-01	2.7E-01	5.9E-03	5.6E+00	3.8E+00	1.1E+00	3.6E-01	2.7E-01	5.9E-03	5.6E+00	4.1E+00	1.2E+00	4.1E-01	2.9E-01	6.7E-03	6.2E+00
Fossil Fuel Depletion (MJ surplus)	8.1E+00	1.0E+00	5.2E-01	4.9E-01	2.1E-03	1.0E+01	8.1E+00	1.0E+00	5.2E-01	4.9E-01	2.1E-03	1.0E+01	9.3E+00	1.2E+00	5.9E-01	5.7E-01	2.3E-03	1.2E+01
Eutrophication (kg N eq)	9.4E-01	1.9E-02	9.8E-05	4.8E-02	1.8E-05	1.0E+00	9.4E-01	1.9E-02	9.8E-05	4.8E-02	1.8E-05	1.0E+00	9.6E-01	2.2E-02	1.1E-04	4.9E-02	2.0E-05	1.0E+00
Smog (kg O ₃ eq)	1.0E+00	8.2E-02	4.4E-02	5.9E-02	2.4E-04	1.2E+00	1.0E+00	8.2E-02	4.4E-02	5.9E-02	2.4E-04	1.2E+00	1.1E+00	9.3E-02	5.0E-02	6.2E-02	2.7E-04	1.3E+00
Acidification (kg SO ₂ eq)	2.1E-01	1.3E-02	2.3E-03	1.1E-02	9.0E-06	2.4E-01	2.1E-01	1.3E-02	2.3E-03	1.1E-02	9.0E-06	2.4E-01	2.1E-01	1.4E-02	2.6E-03	1.2E-02	1.0E-05	2.4E-01
Ozone Depletion (kg CFC ₁₁ eq)	2.7E-07	1.1E-08	1.3E-09	1.4E-08	2.1E-10	2.9E-07	2.7E-07	1.1E-08	1.3E-09	1.4E-08	2.1E-10	2.9E-07	2.7E-07	1.2E-08	1.5E-09	1.4E-08	2.4E-10	3.0E-07

Table 8: Cradle to Grave Life Cycle Impact Assessment Results per 100 ft of Cable Continued

ENVIRONMENTAL PRODUCT DECLARATION



SENDING ALL THE RIGHT SIGNALS

Belden: 10GXS™, 10GX™, DataTwist® 1200, DataTwist® 2400, DataTwist® 3600, DataTwist® 4800, DataTwist® 600e, DataTwist® 350, DataTwist® 6, DataTwist® 5e, DataTwist® 3

Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

Impact Category	M58772/ 2143A						OSP6U					
	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave	Raw Material	Manufacturing	Marketing	Use	Waste Disposal	Cradle to Grave
Global Warming (kg CO ₂ eq)	6.0E+00	1.8E+00	6.1E-01	4.3E-01	1.0E-02	9.1E+00	5.3E+00	1.2E+00	3.9E-01	3.5E-01	6.4E-03	7.4E+00
Fossil Fuel Depletion (MJ surplus)	1.5E+01	1.8E+00	8.9E-01	8.8E-01	3.5E-03	1.9E+01	8.7E+00	1.1E+00	5.7E-01	5.3E-01	2.2E-03	1.1E+01
Eutrophication (kg N eq)	1.2E+00	3.2E-02	1.7E-04	6.3E-02	3.0E-05	1.3E+00	1.6E+00	2.1E-02	1.1E-04	8.0E-02	1.9E-05	1.7E+00
Smog (kg O ₃ eq)	1.4E+00	1.4E-01	7.5E-02	8.3E-02	4.0E-04	1.7E+00	1.7E+00	8.9E-02	4.8E-02	9.4E-02	2.6E-04	2.0E+00
Acidification (kg SO ₂ eq)	2.8E-01	2.2E-02	4.0E-03	1.5E-02	1.5E-05	3.2E-01	3.5E-01	1.4E-02	2.5E-03	1.8E-02	9.8E-06	3.8E-01
Ozone Depletion (kg CFC ₋₁₁ eq)	4.1E-07	1.8E-08	2.2E-09	2.2E-08	3.6E-10	4.6E-07	4.1E-07	1.2E-08	1.4E-09	2.1E-08	2.3E-10	4.5E-07

Table 8: Cradle to Grave Life Cycle Impact Assessment Results per 100 ft of Cable

ENVIRONMENTAL PRODUCT DECLARATION

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SENDING ALL THE RIGHT SIGNALS

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Mohawk: GigaLAN 10@ Small Diameter, GigaLAN 10@, GigaLAN®, AdvanceNet™, 6 LAN Plus™, 6 LAN™, MegaLAN®, 5e LAN®, XGO™, MegaLink™, AdvanceLink™, VersaLAN®

According to ISO 14025

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- ISO 14040:2006 *Environmental management - Life cycle assessment – Principles and framework*
- ISO 14044:2006 *Environmental management - Life cycle assessment – Requirements and guidelines*
- NFPA 262: Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces
- NFPA 70®: National Electrical Code
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- UL 1666 Test for Flame Propagation Height of Electrical and Optical-Fiber Cables Installed Vertically in Shafts
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LCA Development

This EPD and corresponding LCA were prepared by Sustainable Solutions Corporation of Royersford, Pennsylvania.



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