AIRGUARD®

Low and Medium Voltage Cable Products and Accessories

prysmian

The planet's pathways

INTRODUCTION





Today's customers are looking for solutions to the ever-growing demands before them including reduced construction and installation costs, and improved reliability and safety levels for man and machine. Prysmian's AIRGUARD® cable is making that happen today.

Yesterday's metallic armored cable technology is a hindrance to meeting the installation efficiencies and safety levels that customers require today. Medium Voltage AIRGUARD® eliminates or reduces splices, increasing reliability while reducing the total installation cost.

Low Voltage AIRGUARD® construction allows the cable to be stripped in minutes. AIRGUARD® cables exceeds crush and impact resistance requirements of MC-HL with smaller ODs. Low Voltage AIRGUARD® is rated TC-ER-HL suitable for Class I Division I location for the entire size range. All of this allows for AIRGUARD® connections to be performed in minutes, not hours. AIRGUARD's® polymeric armor makes the need for power tools and knives a thing of the past while insuring a faster, more reliable and safer cable installation.

The Prysmian AIRGUARD® polymeric armored cable solution completely eliminates the need for outdated interlocked and continuously corrugated and welded cables as it is now available in High Voltage, Medium Voltage, Low Voltage, Instrumentation and Fiber Optic cable constructions. The combination of AIRGUARD® cable and Prysmian's extensive offering of terminations, splices, cable glands and tools provides a turnkey system and makes Prysmian the right choice for the demands of today.

APPLICATIONS

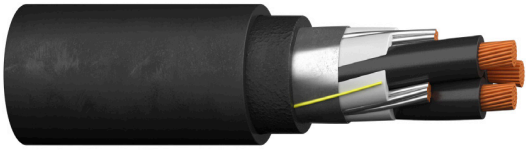
- ARTIFICIAL LIFT
- CHEMICALS
- CHEMICAL WASHDOWN
- DRILLING
- FOOD INDUSTRY
- FRACKING
- MINING
- OFFSHORE PRODUCTION PLATFORM PETROCHEMICALS
- PIPELINE
- PULP & PAPER
- PUMPING STATION
- REFINING
- STEEL
- TANK BATTERY

INDUSTRIAL CABLES

SPECIFICATION NUMBER	PRODUCT DESCRIPTION	REVISION DATE	PAGE NUMBER
10000 AIRGUARD® EX VFD (AGX)	XLPE / Polymeric Armor / PVC, Low-Voltage Power UL Type TC-ER-HL 600V or UL Type TC-ER 1000V	July 2025	4
10050 AIRGUARD® EX (AGX)	XLPE / Polymeric Armor / PVC, Control UL Type TC-ER-HL 600V or UL Type TC-ER 1000V	July 2025	5
10200 AIRGUARD® Instrumentation	PVC / Nylon / Polymeric Armor / PVC, Instrumentation UL Type TC-ER-HL 600V	July 2025	6
10300 AIRGUARD® Control	XLPE / Polymeric Armor / PVC, Control UL Type TC-ER-HL 600V or 1000V	July 2025	7
10350 AIRGUARD® Power	XLPE / Polymeric Armor / PVC, Low-Voltage Power UL Type TC-ER-HL 600V or 1000V	July 2025	8
10400 AIRGUARD® VFD	XLPE / Polymeric Armor / PVC, Low-Voltage Power UL Type TC-ER-HL 600V or 1000V	July 2025	9
10500 AIRGUARD® Medium Voltage	EPR / Copper Tape Shield / Polymeric Armor / PVC, MV Power, Shielded UL Type MV-105, 5kV and 8kV, 133% / 100% Ins. Level	July 2025	10
10550 AIRGUARD® Medium Voltage	EPR / Copper Tape Shield / Polymeric Armor / PVC, MV Power, Shielded UL Type MV-105, 15kV, 133% Ins. Level	July 2025	11
10600 AIRGUARD® Medium Voltage	EPR / Copper Tape Shield / Polymeric Armor / PVC, MV Power, Shielded UL Type MV-105, 25kV, 133% Ins. Level	July 2025	12
10650 AIRGUARD® Medium Voltage	EPR / Copper Tape Shield / Polymeric Armor / PVC, MV Power, Shielded UL Type MV-105, 35kV, 133% Ins. Level	July 2025	13
LV AIRGUARD® Putty Sealing Gland 424BT Series	TC-ER-HL Cables, Class I Div 1	July 2025	14
A2EX Silicone Cable Gland 494NE Series	TC-ER-(HL) Unarmored Cables, AEX e, Class 1 Div 2	July 2025	15
AIRGUARD® XP Fiber Optic Cable	Oil & Gas / Chemical / Low Temp / High Crush / Harsh Environment / Tray	June 2025	16

AIRGUARD® EX VFD

XLPE/Polymeric Armor/PVC, Low-Voltage Power
UL Type TC-ER-HL 600V or UL Type TC-ER 1000V



Product Construction:

Conductor:
- 4 AWG thru 750 kcmil annealed bare copper per ASTM B3, Class B stranding per ASTM B8
- 14 AWG thru 6 AWG annealed bare copper per ASTM B3, Class C stranding per ASTM B8

Insulation:
- Flame-retardant Cross-linked Polyethylene (XLPE)
- Color-coded per ICEA Method 4

Ground Conductor(s):
- Annealed stranded tinned copper per ASTM B33
- Three split ground wires are sized in accordance with NEC Table 250.122

Shield:
- Overall shielded is Flexfoil® aluminum/polymer in contact with stranded tinned copper ground wire

Polymeric Armor:
- High strength and high crush resistant Air Bag™ layer extruded over the core assembly

Jacket:
- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

Applications:
- Variable Frequency Drives: 3-conductor AIRGUARD® EX cables with three (3) symmetrical ground wires are the preferred wiring method for use with AC motors controlled by pulse-width modulated inverters in VFD applications

Applications (cont'd):
- For use in Class I, II and III, Divisions 1 and 2; and Class I, Zones 1 and 2 hazardous locations per NEC Articles 501, 502, 503 and 505
- For use as services, feeders and branch circuits for power, lighting, control, and signal circuits in accordance with NEC Articles 330 and 725
- Installed indoors or outdoors, wet or dry locations, directly buried, embedded in concrete, in a raceway, as aerial cable on a messenger, in cable trays, or as exposed runs secured to supports in accordance with NEC Article 330

Features:
- Rated at 90°C wet or dry
- Ripcord applied to all cables with jacket of 60 mils or less
- Meets cold bend test at -25°C
- Type TC-ER-HL versions exceeds crush and impact requirements of Type MC-HL cables.
- Sunlight- and weather-resistant
- Excellent flame resistance
- Excellent physical, thermal and electrical properties
- Excellent moisture resistance
- Good resistance to abrasion and heat deformation

Compliances:

Industry Compliances:
- NEC Type XHHW-2 conductors
- UL 1277 Type TC-ER-HL, UL File # E57179
- ICEA S-95-658/NEMA WC70

Flame Test Compliances:
- UL 1685 Vertical Flame Test
- IEEE 1202/FT4
- XHHW-2 inners VW-1

Other Compliances:
- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

Packaging:
- Material cut to length and shipped on nonreturnable wood reels

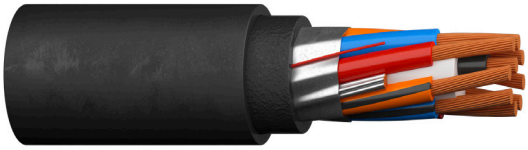
Product Number	Number & Circuit Conductor Size (AWG)	Insulation Thickness (Mils)	Number & Ground Conductor Size (AWG)	Jacket Thickness (Mils)	Nominal Overall Cable O.D. (In)	Nominal Cable Weight (Lbs/Kft)	‡ Ampacity (Amps)
AIRGUARD® EX Low-Voltage Power, 3/C VFD | 600 Volt or 1000 Volt							
10000.01403318	3/C #14	30	3 - #18	60	0.54	167	25
10000.01203316	3/C #12	30	3 - #16	60	0.58	208	30
10000.01003314	3/C #10	30	3 - #14	60	0.63	269	40
10000.00803314	3/C #8	45	3 - #14	60	0.77	386	55
10000.00603312	3/C #6	45	3 - #12	80	0.89	560	75
10000.00403312	3/C #4	45	3 - #12	80	0.97	729	95
10000.00203310	3/C #2	45	3 - #10	80	1.10	1027	130
10000.00103310	3/C #1	55	3 - #10	80	1.21	1235	145
10000.11003310	3/C #1/0	55	3 - #10	80	1.29	1473	170
10000.21003310	3/C #2/0	55	3 - #10	80	1.40	1771	195
10000.31003308	3/C #3/0	55	3 - #8	80	1.48	2178	225
10000.41003308	3/C #4/0	55	3 - #8	80	1.61	2651	260
10000.25003308	3/C #250	65	3 - #8	110	1.83	3179	290
10000.35003306	3/C #350	65	3 - #6	110	2.05	4283	350
10000.50003306	3/C #500	65	3 - #6	110	2.32	5754	430
10000.75003304	3/C #750	80	3 - #4	140	2.82	8669	535

The above dimensions are approximate and subject to normal manufacturing tolerances.

‡ Per 2023 NEC Table 310.16 "Allowable Ampacities of Insulated Conductors Rated up to and including 2000 Volts, 60°C through 90°C (140°F through 194°F), Not More Than Three Current-Carrying Conductors"

AIRGUARD® EX

XLPE/Polymeric Armor/PVC, Control
UL Type TC-ER-HL 600V or UL Type TC-ER 1000V



Product Construction:

Conductor:
- 14 AWG thru 10 AWG annealed bare copper per ASTM B3, Class C stranding per ASTM B8

Insulation:
- Flame-retardant Cross-linked Polyethylene (XLPE)
- Color-coded per ICEA Method 1, Table E-2 (does not include white or green)

Ground Conductor(s):
- Annealed stranded tinned copper per ASTM B33
- Single ground wire is sized in accordance with NEC Table 250.122

Shield:
- Overall shielded is Flexfoil® aluminum/polymer in contact with stranded tinned copper ground wire

Polymeric Armor:
- High strength and high crush resistant Air Bag™ layer extruded over the core assembly

Jacket:
- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

Applications:
- For use in Class I, II and III, Divisions 1 and 2; and Class I, Zones 1 and 2 hazardous locations per NEC Articles 501, 502, 503 and 505
- For use as services, feeders and branch circuits for power, lighting, control, and signal circuits in accordance with NEC Articles 330 and 725
- Installed indoors or outdoors, wet or dry locations, directly buried, embedded in concrete, in a raceway, as aerial cable on a messenger, in cable trays, or as exposed runs secured to supports in accordance with NEC Article 330

Features:
- Rated at 90°C wet or dry
- Ripcord applied to all cables with jacket of 60 mils or less
- Meets cold bend test at -40 ˚C
- Type TC-ER-HL versions exceeds crush and impact requirements of Type MC-HL cables.
- Sunlight- and weather-resistant
- Excellent flame resistance
- Excellent physical, thermal and electrical properties
- Excellent moisture resistance
- Good resistance to abrasion and heat deformation
- Provides excellent oil and chemical resistance

Compliances:

Industry Compliances:
- NEC Type XHHW-2 conductors
- UL 1277 Type TC-ER-HL, UL File # E60544/ E83287
- ICEA S-73-532/NEMA WC57

Flame Test Compliances:
- UL 1685 Vertical Flame Test
- IEEE 1202/FT4
- XHHW-2 inners VW-1

Other Compliances:
- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

Packaging:
- Material cut to length and shipped on nonreturnable wood reels

Product Number	Number & Circuit Conductor Size (AWG)	Insulation Thickness (Mils)	Ground Conductor Size (AWG)	Jacket Thickness (Mils)	Nominal Overall Cable O.D. (In)	Nominal Cable Weight (Lbs/Kft)
AIRGUARD® EX Control with Ground Conductor | 600 Volt or 1000 Volt						
10050.01404114	4/C #14	30	#14	60	0.57	201
10050.01405114	5/C #14	30	#14	60	0.61	230
10050.01407114	7/C #14	30	#14	60	0.65	277
10050.01409114	9/C #14	30	#14	60	0.73	335
10050.01412114	12/C #14	30	#14	60	0.80	408
10050.01419114	19/C #14	30	#14	80	0.81	474
10050.01437114	37/C #14	30	#14	80	0.96	734
10050.01204112	4/C #12	30	#12	60	0.62	256
10050.01205112	5/C #12	30	#12	60	0.66	295
10050.01207112	7/C #12	30	#12	60	0.71	361
10050.01209112	9/C #12	30	#12	60	0.80	440
10050.01212112	12/C #12	30	#12	80	0.80	479
10050.01004110	4/C #10	30	#10	60	0.67	335

The above dimensions are approximate and subject to normal manufacturing tolerances.

AIRGUARD® Instrumentation

PVC/Nylon/Polymeric Armor/PVC, Instrumentation
UL Type TC-ER-HL 600V

Product Construction:

Conductor:
- 18 AWG and 16 AWG annealed bare copper per ASTM B3
- Class B stranding per ASTM B8

Insulation:
- Flame-retardant Polyvinyl Chloride (PVC) with Polyamide (nylon)
- Color-coded per ICEA Method 1: Pairs - black and white; Triads - black, white and red. One conductor in each pair or triad is printed alphanumerically for easy identification

Individual and Overall Shield:
- Individual pairs are 100% shielded with Flexfoil® aluminum/polyester in contact with 20 AWG stranded tinned copper drain wire
- Overall shield is Flexfoil® aluminum/polymer in contact with stranded tinned copper drain wire as the same size of insulated conductor

Polymeric Armor:
- High strength and high crush resistant Air Bag™ layer extruded over the core assembly

Jacket:
- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

Applications:
- For use in Class I, II and III, Divisions 1 and 2; and Class I, Zones 1 and 2 hazardous locations per NEC Articles 501, 502, 503 and 505
- For use as services, feeders and branch circuits for power, lighting, control, and signal circuits in accordance with NEC Articles 330 and 725
- Installed indoors or outdoors, wet or dry locations, directly buried, embedded in concrete, in a raceway, as aerial cable on a messenger, in cable trays, or as exposed runs secured to supports in accordance with NEC Article 330

Features:
- Rated at 90°C wet or dry
- Ripcord applied to all cables with jacket of 60 mils or less
- Meets cold bend test at -40 °C
- Type TC-ER-HL versions exceeds crush and impact requirements of Type MC-HL cables.
- Sunlight- and weather-resistant
- Excellent flame resistance
- Excellent physical, thermal and electrical properties
- Excellent moisture resistance
- Good resistance to abrasion and heat deformation
- Provides excellent oil and chemical resistance

Compliances:

Industry Compliances:
- NEC Type TFN conductors
- UL 1277 Type TC-ER-HL, UL File # E60544/ E83287
- ICEA S-73-532/NEMA WC57
- UL 1309 Marine rated

Flame Test Compliances:
- UL 1685 Vertical Flame Test
- IEEE 1202
- CSA FT4

Other Compliances:
- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

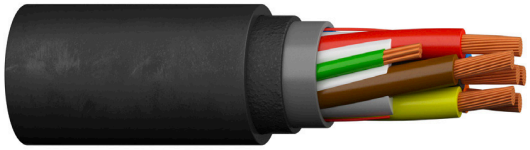
Packaging:
- Material cut to length and shipped on nonreturnable wood reels

Product Number	Number & Circuit Conductor Size (AWG)	Insulation Thickness (Mils)		Jacket Thickness (Mils)	Nominal Overall Cable O.D. (In)	Nominal Cable Weight (Lbs/Kft)
		Avg PVC	Min Nylon			
Instrumentation – Low Voltage 600 V – IS/OS Cables						
10200.01801001	1/PR #18	15	4	45	0.51	132
10200.01801002	1/TR #18	15	4	45	0.52	147
10200.01802001	2/PR #18	15	4	60	0.66	229
10200.01804001	4/PR #18	15	4	60	0.73	294
10200.01808001	8/PR #18	15	4	80	0.91	468
10200.01601001	1/PR #16	15	4	45	0.53	144
10200.01601002	1/TR #16	15	4	60	0.57	178
10200.01602001	2/PR #16	15	4	60	0.72	270
10200.01604001	4/PR #16	15	4	60	0.79	343
10200.01604002	4/TR #16	15	4	80	0.93	456
10200.01608001	8/PR #16	15	4	80	0.99	557
10200.01612001	12/PR #16	15	4	80	1.15	725
10200.01612002	12/TR #16	15	4	80	1.27	907
10200.01624001	24/PR #16	15	4	80	1.45	1266
10200.01636001	36/PR #16	15	4	110	1.79	1670

The above dimensions are approximate and subject to normal manufacturing tolerances.

AIRGUARD® Control

XLPE/Polymeric Armor/PVC, Control
UL Type TC-ER-HL 600V or
UL Type TC-ER 1000V



Product Construction:

Conductor:
- 14 AWG thru 10 AWG annealed bare copper per ASTM B3
- Class B stranding per ASTM B8

Insulation:
- Flame-retardant Cross-linked Polyethylene (XLPE)
- Color-coded per ICEA Method 1, Table E-2 (does not include white or green)

Polymeric Armor:
- High strength and high crush resistant Air Bag™ layer extruded over the core assembly

Jacket:
- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

Applications:
- For use in Class I, II and III, Divisions 1 and 2; and Class I, Zones 1 and 2 hazardous locations per NEC Articles 501, 502, 503 and 505
- For use as services, feeders and branch circuits for power, lighting, control, and signal circuits in accordance with NEC Articles 330 and 725
- Installed indoors or outdoors, wet or dry locations, directly buried, embedded in concrete, in a raceway, as aerial cable on a messenger, in cable trays, or as exposed runs secured to supports in accordance with NEC Article 330

Features:
- Rated at 90˚C wet or dry
- Ripcord applied to all cables with jacket of 60 mils or less
- Meets cold bend test at -40˚C
- Type TC-ER-HL versions exceeds crush and impact requirements of Type MC-HL cables.
- Sunlight- and weather-resistant
- Excellent flame resistance
- Excellent physical, thermal and electrical properties
- Excellent moisture resistance
- Good resistance to abrasion and heat deformation
- Provides excellent oil and chemical resistance

Compliances:

Industry Compliances:
- NEC Type XHHW-2 conductors
- UL 1277 Type TC-ER-HL, UL File # E60544/ E83287
- ICEA S-73-532/NEMA WC57
- UL 1309 Marine rated

Flame Test Compliances:
- UL 1685 Vertical Flame Test
- IEEE 1202
- CSA FT4
- XHHW-2 inners VW-1

Other Compliances:
- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

Packaging:
- Material cut to length and shipped on nonreturnable wood reels

Product Number	Number & Circuit Conductor Size (AWG)	Green Ground Conductor Size (AWG)	Insulation Thickness (Mils)	Jacket Thickness (Mils)	Nominal Overall Cable O.D. (In)	Nominal Cable Weight O.D. (Lbs/Kft)
Control – Low Voltage 600 V/1000 V						
10300.01402114	2/C #14 + Grd	#14	30	60	0.63	213
10300.01404114	4/C #14 + Grd	#14	30	60	0.73	283
10300.01204112	4/C #12 + Grd	#12	30	60	0.77	344
10300.01004110	4/C #10 + Grd	#10	30	60	0.78	429
10300.01406114	6/C #14 + Grd	#14	30	60	0.77	331
10300.01206112	6/C #12 + Grd	#12	30	60	0.82	410
10300.01006110	6/C #10 + Grd	#10	30	80	0.93	559
10300.01407114	7/C #14 + Grd	#14	30	60	0.81	368
10300.01007110	7/C #10 + Grd	#10	30	80	0.99	627
10300.01408114	8/C #14 + Grd	#14	30	80	0.89	432
10300.01208112	8/C #12 + Grd	#12	30	80	0.96	536
10300.01009110*	9/C #10 + Grd	#10	30	80	1.05	753
10300.01411114	11/C #14 + Grd	#14	30	80	0.96	511
10300.01212112*	12/C #12 + Grd	#12	30	80	1.04	694
10300.01419114*	19/C #14 + Grd	#14	30	80	1.07	715
10300.01219112*	19/C #12 + Grd	#12	30	80	1.16	928

The above dimensions are approximate and subject to normal manufacturing tolerances.

* Cable indicated with "*" have copper tape shield applied above cabling

AIRGUARD® Power

XLPE/Polymeric Armor/PVC, Low-Voltage Power
UL Type TC-ER-HL 600V or UL Type TC-ER 1000V

Product Construction:

Conductor:
- 14 AWG thru 1/0 AWG annealed bare copper per ASTM B3
- Class B stranding per ASTM B8

Insulation:
- Flame-retardant Cross-linked Polyethylene (XLPE)
- Color-coded per ICEA Method 1, Table E-2 (does not include white or green)

Polymeric Armor:
- High strength and high crush resistant Air Bag™ layer extruded over the core assembly

Jacket:
- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

Applications:
- For use in Class I, II and III, Divisions 1 and 2; and Class I, Zones 1 and 2 hazardous locations per NEC Articles 501, 502, 503 and 505
- For use as services, feeders and branch circuits for power, lighting, control, and signal circuits in accordance with NEC Articles 330 and 725
- Installed indoors or outdoors, wet or dry locations, directly buried, embedded in concrete, in a raceway, as aerial cable on a messenger, in cable trays, or as exposed runs secured to supports in accordance with NEC Article 330

Features:
- Rated at 90˚C wet or dry
- Ripcord applied to all cables with jacket of 60 mils or less
- Meets cold bend test at -40˚C
- Type TC-ER-HL versions exceeds crush and impact requirements of Type MC-HL cables.
- Sunlight- and weather-resistant
- Excellent flame resistance
- Excellent physical, thermal and electrical properties
- Excellent moisture resistance
- Good resistance to abrasion and heat deformation
- Provides excellent oil and chemicalresistance

Compliances:

Industry Compliances:
- NEC Type XHHW-2 conductors
- UL 1277 Type TC-ER-HL, UL File #E60544/ E83287
- ICEA S-95-658/NEMA WC70

Flame Test Compliances:
- UL 1685 Vertical Flame Test
- IEEE 1202
- CSA FT4
- XHHW-2 inners VW-1

Other Compliances:
- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

Packaging:
- Material cut to length and shipped on nonreturnable wood reels

Product Number	Number & Circuit Conductor Size (AWG)	Insulation Thickness (Mils)	Number & Ground Conductor Size (AWG)	Jacket Thickness (Mils)	Nominal Overall Cable O.D. (In)	Nominal Cable Weight O.D. (Lbs/Kft)	‡ Ampacity (Amps)
Power – Low Voltage – 3/C & 4/C – 600 V/1000 V							
10350.01403318	3/C #14	30	3 - #18	60	0.63	230	25
10350.01404114	4/C #14	30	1 - #14	60	0.69	263	20
10350.01203316	3/C #12	30	3 - #16	60	0.67	281	30
10350.01204112	4/C #12	30	1 - #12	60	0.73	320	24
10350.01003314	3/C #10	30	3 - #14	60	0.72	355	40
10350.01004110	4/C #10	30	1 - #10	60	0.79	408	32
10350.00803314	3/C #8	30	3 - #14	80	0.89	521	55
10350.00804110	4/C #8	45	1 - #10	60	0.97	603	44
10350.00603312	3/C #6	45	3 - #12	80	0.96	675	75
10350.00604108*	4/C #6	45	1 - #8	80	1.06	782	60
10350.00403312*	3/C #4	45	3 - #12	80	1.09	923	95
10350.00203310*	3/C #2	45	3 - #10	80	1.22	1264	130
10350.00204106*	4/C #2	45	1 - #6	80	1.31	1442	104
10350.11003310*	3/C #1/0	55	3 - #10	80	1.42	1836	170

The above dimensions are approximate and subject to normal manufacturing tolerances.

* Cables indicated with "*" are not marked "-HL" (per UL 2225, cables with an overall OD of 1 inch or greater need to be shielded to be marked "-HL")

‡ Per 2023 NEC Table 310.16 "Allowable Ampacities of Insulated Conductors Rated up to and including 2000 Volts, 60°C through 90°C (140°F through 194°F), Not More Than Three Current-Carrying Conductors

AIRGUARD® VFD

XLPE/Polymeric Armor/PVC, Low-Voltage Power
UL Type TC-ER-HL 600V or UL Type TC-ER 1000V

Product Construction:

Conductor:
- 14 AWG thru 500 AWG annealed bare copper per ASTM B3
- Class B stranding per ASTM B8

Insulation:
- Flame-retardant Cross-linked Polyethylene (XLPE)
- Color-coded per ICEA Method 1, Table E-2 (does not include white or green)

Ground Conductor(s):
- Annealed stranded bare copper per ASTM B33
- Three (3) split annealed bare copper ground conductors

Shield:
- Overall annealed copper tape with a nom. overlap of 25%

Polymeric Armor:
- High strength and high crush resistant Air Bag™ layer extruded over the core assembly

Jacket:
- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

Applications:
- For use in Class I, II and III, Divisions 1 and 2; and Class I, Zones 1 and 2 hazardous locations per NEC Articles 501, 502, 503 and 505
- For use as services, feeders and branch circuits for power, lighting, control, and signal circuits in accordance with NEC Articles 330 and 725
- Installed indoors or outdoors, wet or dry locations, directly buried, embedded in concrete, in a raceway, as aerial cable on a messenger, in cable trays, or as exposed runs secured to supports in accordance with NEC Article 330

Features:
- Rated at 90˚C wet or dry
- Ripcord applied to all cables with jacket of 60 mils or less
- Meets cold bend test at -40˚C
- Type TC-ER-HL versions exceeds crush and impact requirements of Type MC-HL cables.
- Sunlight- and weather-resistant
- Excellent flame resistance
- Excellent physical, thermal and electrical properties
- Excellent moisture resistance
- Good resistance to abrasion and heat deformation
- Provides excellent oil and chemical resistance

Compliances:

Industry Compliances:
- NEC Type XHHW-2 conductors
- UL 1277 Type TC-ER-HL, UL File # E60544/ E83287
- ICEA S-95-658/NEMA WC70

Flame Test Compliances:
- UL 1685 Vertical Flame Test
- IEEE 1202
- CSA FT4
- XHHW-2 inners VW-1

Other Compliances:
- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

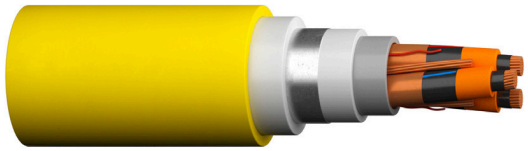
Packaging:
- Material cut to length and shipped on nonreturnable wood reels

Product Number	Number & Circuit Conductor Size (AWG)	Insulation Thickness (Mils)	Number & Ground Conductor Size (AWG)	Jacket Thickness (Mils)	Nominal Overall Cable O.D. (In)	Nominal Cable Weight O.D. (Lbs/Kft)	‡ Ampacity (Amps)
VFD – Low Voltage – 3/C – 600 V/1000 V							
10400.01403318	3/C #14	30	3 - #18	60	0.63	247	25
10400.01203316	3/C #12	30	3 - #16	60	0.67	297	30
10400.01003314	3/C #10	30	3 - #14	60	0.73	374	40
10400.00803314	3/C #8	45	3 - #14	80	0.89	542	55
10400.00603312	3/C #6	45	3 - #12	80	0.97	701	75
10400.00403312	3/C #4	45	3 - #12	80	1.09	960	95
10400.00203310	3/C #2	45	3 - #10	80	1.23	1309	130
10400.11003310	3/C #1/0	55	3 - #10	80	1.41	1872	170
10400.21003310	3/C #2/0	55	3 - #10	80	1.51	2273	195
10400.31003308	3/C #3/0	55	3 - #8	80	1.62	2766	225
10400.41003308	3/C #4/0	55	3 - #8	80	1.80	3398	260
10400.25003308	3/C 250	65	3 - #8	110	2.02	3903	290
10400.35003307	3/C 350	65	3 - #7	110	2.24	5220	350
10400.50003306	3/C 500	65	3 - #6	110	2.51	6940	430

‡ Per 2023 NEC Table 310.16 "Allowable Ampacities of Insulated Conductors Rated up to and including 2000 Volts, 60°C through 90°C (140°F through 194°F), Not More Than Three Current-Carrying Conductors"
The above dimensions are approximate and subject to normal manufacturing tolerances.

AIRGUARD® Medium Voltage

EPR/Copper Tape Shield/Polymeric Armor/PVC Shielded
UL Type MV-105, 5kV and 8kV, 133%/100% Ins. Level



Product Construction:

Conductor:
- 2 AWG thru 750 kcmil annealed bare copper per ASTM B3
- Compact Class B stranding per ASTM B496

Extruded Strand Shield (ESS):
- Extruded thermoset semi-conducting stress control layer over conductor

Insulation:
- Ethylene Propylene Rubber (EPR) insulation, contrasting in color to the black semiconducting shield layers

Extruded Insulation Shield (EIS):
- Thermoset semi-conducting polymeric layer free stripping from insulation

Metallic Shield:
- Annealed copper tape with a nom. overlap of 25%

Ground Conductor(s):
- Three (3) split annealed bare copper ground conductors

Polymeric Armor:
- High strength and high crush resistant Air Bag™ layer extruded over the core assembly

Overall Jacket:
- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

Applications:
- Suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical
- In wet or dry locations when installed in accordance with NEC
- In aerial, direct burial, conduit, open tray and underground duct installations

Features:
- Rated at 105˚C
- Excellent heat, moisture and sunlight resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant
- Meets cold bend and cold impact test at -40˚C
- 105°C rating for continuous operation
- 140°C rating for emergency overload conditions
- 250°C rating for short circuit conditions

Compliances:

Industry Compliances:
- UL 1072 Type MV105, UL File # E518856
- ICEA S-93-639 / NEMA WC74
- ICEA S-97-682
- AEIC CS8-13 (AEIC CS8-20, Optional)
- CSA Standard C68.10 MV68.10 (Optional)
- Mine Power Type MP-GC (Optional)

Flame Test Compliances:
- UL 1685 Vertical Flame Test
- IEEE 1202
- CSA FT4

Other Compliances:
- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable

Packaging:
- Material cut to length and shipped on nonreturnable wood reels

Product Number	Circuit Cond. Size (AWG)	Insulation Thickness (Mils)	Ground Wires		Nom. Cond. O.D. (In)	Nom. Insulation O.D. (In)	Nom. EIS O.D. (In)	Nom. Overall Cable O.D. (In)	Nom. Cable Weight (Lbs/ Kft))	†Ampacity (Amps)					
										Conduit In Air (1)		Underground Duct (2)		Uncovered Tray (3)	
			#	Size						90˚C	105˚C	90˚C	105˚C	90˚C	105˚C
5kV 133%/8kV 100% Copper Three Conductor															
10500.00203310	2 AWG CU	115	3	#10	0.27	0.56	0.60	1.85	2182	145	165	150	160	165	185
10500.11003308	1/0 AWG CU	115	3	#8	0.34	0.63	0.68	2.05	2914	195	215	195	210	215	240
10500.21003308	2/0 AWG CU	115	3	#8	0.38	0.67	0.71	2.13	3281	220	245	220	235	245	275
10500.41003307	4/0 AWG CU	115	3	#7	0.47	0.76	0.76	2.32	4344	290	320	285	305	325	360
10500.25003306	250 AWG CU	115	3	#6	0.53	0.82	0.86	2.46	4974	315	350	310	335	360	400
10500.35003306	350 AWG CU	115	3	#6	0.62	0.91	0.96	2.67	6247	385	430	375	400	435	490
10500.50003305	500 AWG CU	115	3	#5	0.74	1.03	1.08	3.00	8349	470	525	450	485	535	600
10500.75003304	750 AWG CU	115	3	#4	0.92	1.22	1.27	3.44	11635	570	635	545	585	670	745

The above dimensions are approximate and subject to normal manufacturing tolerances.

† Ampacities are based on the following:

1) Ampacities are in accordance with Table 315.60(C)(9) of the 2023 NEC for three conductor copper cables in isolated conduit in air based on a conductor temperature of 90°C (194°F) or 105°C (221°F), temperature denoted in column header, and an ambient air temperature of 40°C (104°F).

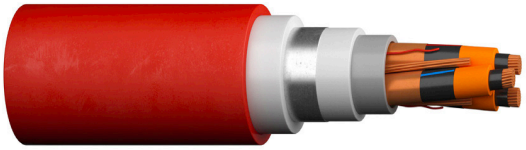
(2) Ampacities are in accordance with Table 315.60(C)(13) of the 2023 NEC for three conductor copper cables in underground ducts (three conductors per duct), based on a conductor temperature of 90°C (194°F) or 105°C (221°F), temperature denoted in column header, and an ambient earth temperature of 20°C (68°F), electrical duct arrangement per Figure 315.60(D)(3) Detail 1, 100% load factor, and earth thermal resistance (rho) of 90.

(3) Ampacities are based on three conductor cables installed with at least one OD between cables in an uncovered tray in accordance with Section 392.80(B)(1)(2) of the 2023 NEC at an ambient air temperature of 40°C (104°F); the ampacities are based on 100% of the values per Table 315.60(C)(5), operating temperature denoted in column header.

EPROTENAX™ EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.

AIRGUARD® Medium Voltage

EPR/Copper Tape Shield/Polymeric Armor/PVC, Shielded
UL Type MV-105, 15kV, 133% Ins. Level



Product Construction:

Conductor:
- 2 AWG thru 1000 kcmil annealed bare copper per ASTM B3
- Compact Class B stranding per ASTM B496

Extruded Strand Shield (ESS):
- Extruded thermoset semi-conducting stress control layer over conductor

Insulation:
- Ethylene Propylene Rubber (EPR) insulation, contrasting in color to the black semiconducting shield layers

Extruded Insulation Shield (EIS):
- Thermoset semi-conducting polymeric layer free stripping from insulation

Metallic Shield:
- Annealed copper tape with a nom. overlap of 25%

Ground Conductor(s):
- Three (3) split annealed bare copper ground conductors

Polymeric Armor:
- High strength and high crush resistant Air Bag™ layer extruded over the core assembly

Overall Jacket:
- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

Applications:
- Suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical
- In wet or dry locations when installed in accordance with NEC
- In aerial, direct burial, conduit, open tray and underground duct installations

Features:
- Rated at 105˚C
- Excellent heat, moisture and sunlight resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant
- Meets cold bend and cold impact test at -40˚C
- 105°C rating for continuous operation
- 140°C rating for emergency overload conditions
- 250°C rating for short circuit conditions

Compliances:

Industry Compliances:
- UL 1072 Type MV105, UL File # E518856
- ICEA S-93-639 / NEMA WC74
- ICEA S-97-682
- AEIC CS8-13 (AEIC CS8-20, Optional)
- CSA Standard C68.10 MV68.10 (Optional)
- Mine Power Type MP-GC (Optional)

Flame Test Compliances:
- UL 1685 Vertical Flame Test
- IEEE 1202
- CSA FT4

Other Compliances:
- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable

Packaging:
- Material cut to length and shipped on nonreturnable wood reels

Product Number	Circuit Cond. Size (AWG)	Insulation Thickness (Mils)	Ground Wires		Nom. Cond. O.D. (In)	Nom. Insulation O.D. (In)	Nom. EIS O.D. (In)	Nom. Overall Cable O.D. (In)	Nom. Cable Weight (Lbs/ Kft))	†Ampacity (Amps)					
										Conduit In Air (1)		Underground Duct (2)		Uncovered Tray (3)	
			#	Size						90˚C	105˚C	90˚C	105˚C	90˚C	105˚C
15kV 133%/8kV 100% Copper Three Conductor															
10550.00203310	2 AWG CU	220	3	#10	0.27	0.76	0.80	2.34	3147	145	165	150	160	165	185
10550.11003308	1/0 AWG CU	220	3	#8	0.34	0.83	0.88	2.48	3830	195	215	195	210	215	240
10550.21003308	2/0 AWG CU	220	3	#8	0.38	0.86	0.91	2.56	4228	220	245	220	235	245	275
10550.41003307	4/0 AWG CU	220	3	#7	0.47	0.96	1.02	2.75	5370	290	320	285	305	325	360
10550.25003306	250 AWG CU	220	3	#6	0.53	1.01	1.06	2.89	6054	315	350	310	335	360	400
10550.35003306	350 AWG CU	220	3	#6	0.62	1.11	1.16	3.20	7652	385	430	375	400	435	490
10550.50003305	500 AWG CU	220	3	#5	0.74	1.23	1.28	3.48	9745	470	525	450	485	535	600
10550.75003304	750 AWG CU	220	3	#4	0.92	1.42	1.47	3.87	13102	570	635	545	585	670	745
10550.75003304	1000 MCM CU	220	3	#3	1.07	1.57	1.62	4.22	16432	650	725	615	660	770	860

The above dimensions are approximate and subject to normal manufacturing tolerances.

† Ampacities are based on the following:

1) Ampacities are in accordance with Table 315.60(C)(9) of the 2023 NEC for three conductor copper cables in isolated conduit in air based on a conductor temperature of 90°C (194°F) or 105°C (221°F), temperature denoted in column header, and an ambient air temperature of 40°C (104°F).

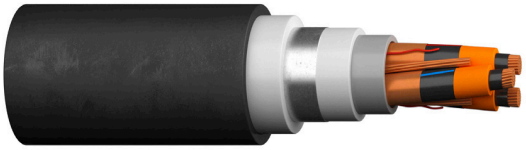
(2) Ampacities are in accordance with Table 315.60(C)(13) of the 2023 NEC for three conductor copper cables in underground ducts (three conductors per duct), based on a conductor temperature of 90°C (194°F) or 105°C (221°F), temperature denoted in column header, and an ambient earth temperature of 20°C (68°F), electrical duct arrangement per Figure 315.60(D)(3) Detail 1, 100% load factor, and earth thermal resistance (rho) of 90.

(3) Ampacities are based on three conductor cables installed with at least one OD between cables in an uncovered tray in accordance with Section 392.80(B)(1)(2) of the 2023 NEC at an ambient air temperature of 40°C (104°F); the ampacities are based on 100% of the values per Table 315.60(C)(5), operating temperature denoted in column header.

EPROTENAX™ EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.

AIRGUARD® Medium Voltage

EPR/Copper Tape Shield/Polymeric Armor/PVC, Shielded
UL Type MV-105, 25kV, 133% Ins. Level



Product Construction:

Conductor:
- 1/0 AWG thru 1000 kcmil annealed bare copper per ASTM B3
- Compact Class B stranding per ASTM B496

Extruded Strand Shield (ESS):
- Extruded thermoset semi-conducting stress control layer over conductor

Insulation:
- Ethylene Propylene Rubber (EPR) insulation, contrasting in color to the black semiconducting shield layers

Extruded Insulation Shield (EIS):
- Thermoset semi-conducting polymeric layer free stripping from insulation

Metallic Shield:
- Annealed copper tape with a nom. overlap of 25%

Ground Conductor(s):
- Three (3) split annealed bare copper ground conductors

Polymeric Armor:
- High strength and high crush resistant Air Bag™ layer extruded over the core assembly

Overall Jacket:
- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

Applications:
- Suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical
- In wet or dry locations when installed in accordance with NEC
- In aerial, direct burial, conduit, open tray and underground duct installations

Features:
- Rated at 105˚C
- Excellent heat, moisture and sunlight resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant
- Meets cold bend and cold impact test at -40˚C
- 105°C rating for continuous operation
- 140°C rating for emergency overload conditions
- 250°C rating for short circuit conditions

Compliances:

Industry Compliances:
- UL 1072 Type MV105, UL File # E518856
- ICEA S-93-639 / NEMA WC74
- ICEA S-97-682
- AEIC CS8-13 (AEIC CS8-20, Optional)
- CSA Standard C68.10 MV68.10 (Optional)
- Mine Power Type MP-GC (Optional)

Flame Test Compliances:
- UL 1685 Vertical Flame Test
- IEEE 1202
- CSA FT4

Other Compliances:
- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable

Packaging:
- Material cut to length and shipped on nonreturnable wood reels

Product Number	Circuit Cond. Size (AWG)	Insulation Thickness (Mils)	Ground Wires		Nom. Cond. O.D. (In)	Nom. Insulation O.D. (In)	Nom. EIS O.D. (In)	Nom. Overall Cable O.D. (In)	Nom. Cable Weight (Lbs/ Kft))	†Ampacity (Amps)					
										Conduit In Air (1)		Underground Duct (2)		Uncovered Tray (3)	
			#	Size						90˚C	105˚C	90˚C	105˚C	90˚C	105˚C
25kV 133%/8kV 100% Copper Three Conductor															
10600.11003308	1/0 AWG CU	320	3	#8	0.34	1.03	1.08	2.88	4855	195	215	195	210	215	240
10600.21003308	2/0 AWG CU	320	3	#8	0.38	1.06	1.12	3.01	5410	220	245	220	235	245	275
10600.41003307	4/0 AWG CU	320	3	#7	0.47	1.16	1.22	3.28	6811	290	320	285	305	325	360
10600.25003306	250 AWG CU	320	3	#6	0.53	1.24	1.30	3.45	7667	315	350	310	335	360	400
10600.35003306	350 AWG CU	320	3	#6	0.62	1.31	1.37	3.60	8962	385	430	375	400	435	490
10600.50003305	500 AWG CU	320	3	#5	0.74	1.43	1.49	3.86	11097	470	525	450	485	535	600
10600.75003304	750 AWG CU	320	3	#4	0.92	1.62	1.67	4.28	14730	570	635	545	585	670	745
10600.10003304	1000 MCM CU	320	3	#3	1.07	1.77	1.83	4.65	18141	650	725	615	660	770	860

The above dimensions are approximate and subject to normal manufacturing tolerances.

† Ampacities are based on the following:

1) Ampacities are in accordance with Table 315.60(C)(9) of the 2023 NEC for three conductor copper cables in isolated conduit in air based on a conductor temperature of 90°C (194°F) or 105°C (221°F), temperature denoted in column header, and an ambient air temperature of 40°C (104°F).

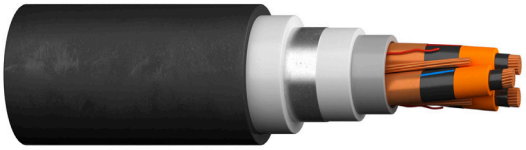
(2) Ampacities are in accordance with Table 315.60(C)(13) of the 2023 NEC for three conductor copper cables in underground ducts (three conductors per duct), based on a conductor temperature of 90°C (194°F) or 105°C (221°F), temperature denoted in column header, and an ambient earth temperature of 20°C (68°F), electrical duct arrangement per Figure 315.60(D)(3) Detail 1, 100% load factor, and earth thermal resistance (rho) of 90.

(3) Ampacities are based on three conductor cables installed with at least one OD between cables in an uncovered tray in accordance with Section 392.80(B)(1)(2) of the 2023 NEC at an ambient air temperature of 40°C (104°F); the ampacities are based on 100% of the values per Table 315.60(C)(5), operating temperature denoted in column header.

EPROTENAX™ EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.

AIRGUARD® Medium Voltage

EPR/Copper Tape Shield/Polymeric Armor/PVC, Shielded
UL Type MV-105, 35kV, 133% Ins. Level



Product Construction:

Conductor:
- 1/0 AWG thru 1000 kcmil annealed bare copper per ASTM B3
- Compact Class B stranding per ASTM B496

Extruded Strand Shield (ESS):
- Extruded thermoset semi-conducting stress control layer over conductor

Insulation:
- Ethylene Propylene Rubber (EPR) insulation, contrasting in color to the black semiconducting shield layers

Extruded Insulation Shield (EIS):
- Thermoset semi-conducting polymeric layer free stripping from insulation

Metallic Shield:
- Annealed copper tape with a nom. overlap of 25%

Ground Conducto(s):
- Three (3) split annealed bare copper ground conductors

Polymeric Armor:
- High strength and high crush resistant Air Bag™ layer extruded over the core assembly

Overall Jacket:
- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

Applications:
- Suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical
- In wet or dry locations when installed in accordance with NEC
- In aerial, direct burial, conduit, open tray and underground duct installations

Features:
- Rated at 105˚C
- Excellent heat, moisture and sunlight resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant
- Meets cold bend and cold impact test at -40˚C
- 105°C rating for continuous operation
- 140°C rating for emergency overload conditions
- 250°C rating for short circuit conditions

Compliances:

Industry Compliances:
- UL 1072 Type MV105, UL File # E518856
- ICEA S-93-639 / NEMA WC74
- ICEA S-97-682
- AEIC CS8-13 (AEIC CS8-20, Optional)
- CSA Standard C68.10 MV68.10 (Optional)
- Mine Power Type MP-GC (Optional)

Flame Test Compliances:
- UL 1685 Vertical Flame Test
- IEEE 1202
- CSA FT4

Other Compliances:
- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable

Packaging:
- Material cut to length and shipped on nonreturnable wood reels

Product Number	Circuit Cond. Size (AWG)	Insulation Thickness (Mils)	Ground Wires		Nom. Cond. O.D. (In)	Nom. Insulation O.D. (In)	Nom. EIS O.D. (In)	Nom. Overall Cable O.D. (In)	Nom. Cable Weight (Lbs/ Kft))	†Ampacity (Amps)					
										Conduit In Air (1)		Underground Duct (2)		Uncovered Tray (3)	
			#	Size						90˚C	105˚C	90˚C	105˚C	90˚C	105˚C
35kV 133%/8kV 100% Copper Three Conductor															
10650.11003308	1/0 AWG CU	420	3	#8	0.34	1.22	1.27	3.39	6291	195	215	195	210	215	240
10650.21003308	2/0 AWG CU	420	3	#8	0.38	1.24	1.31	3.50	7326	220	245	220	235	245	275
10650.41003307	4/0 AWG CU	420	3	#7	0.47	1.35	1.41	3.69	8130	290	320	285	305	325	360
10650.25003306	250 AWG CU	420	3	#6	0.53	1.40	1.46	3.78	9472	315	350	310	335	360	400
10650.35003306	350 AWG CU	420	3	#6	0.62	1.50	1.56	4.02	1116	385	430	375	400	435	490
10650.50003305	500 AWG CU	420	3	#5	0.74	1.62	1.68	4.30	12697	470	525	450	485	535	600
10650.75003304	750 AWG CU	420	3	#4	0.92	1.81	1.86	4.73	16566	570	635	545	585	670	745
10650.10003304	1000 MCM CU	420	3	#3	1.07	1.96	2.05	5.00	20786	650	725	615	660	770	860

The above dimensions are approximate and subject to normal manufacturing tolerances.

† Ampacities are based on the following:

1) Ampacities are in accordance with Table 315.60(C)(9) of the 2023 NEC for three conductor copper cables in isolated conduit in air based on a conductor temperature of 90°C (194°F) or 105°C (221°F), temperature denoted in column header, and an ambient air temperature of 40°C (104°F).

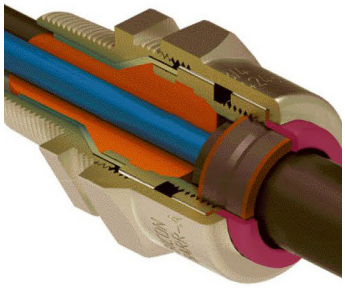
(2) Ampacities are in accordance with Table 315.60(C)(13) of the 2023 NEC for three conductor copper cables in underground ducts (three conductors per duct), based on a conductor temperature of 90°C (194°F) or 105°C (221°F), temperature denoted in column header, and an ambient earth temperature of 20°C (68°F), electrical duct arrangement per Figure 315.60(D)(3) Detail 1, 100% load factor, and earth thermal resistance (rho) of 90.

(3) Ampacities are based on three conductor cables installed with at least one OD between cables in an uncovered tray in accordance with Section 392.80(B)(1)(2) of the 2023 NEC at an ambient air temperature of 40°C (104°F); the ampacities are based on 100% of the values per Table 315.60(C)(5), operating temperature denoted in column header.

EPROTENAX™ EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.

LV AIRGUARD® Putty Sealing Gland 424BT Series

TC-ER-HL Cables, Class I Div 1



Features & Benefits

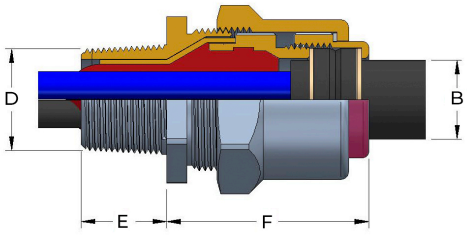
- Fast, easy installation
- Large sealing range
- Space and weight savings
- Tested to UL and CSA standards
- Suitable for unarmored tray cables - TC-ER-HL and TC-ER
- 8hr cure time at 68°F

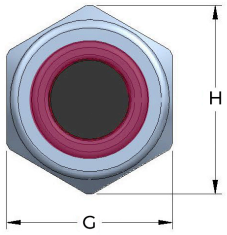
Technical Information:

- Suitable for unarmored tray cables - category TC-ER-HL & TC-ER
- Brass construction with bright autocatalytic nickel coated hub
- Optional bright autocatalytic nickel coating of all brass parts. Add suffix “V” to reference

Connector listed as follows:

- ½" to 3 ½" CSA Class I groups ABCD, Class II Groups EFG, Class III
- ½ to 1 ½, UL Class I groups ABCD (Div 1) with TC-ER-HL cable (up to 1 inch); Class II Groups FG (Div 2), Class III
- 1 ¼" to 3 ½" UL Class I groups CD (Div 2); Class II Groups FG (Div 2), Class III
- Compound forms barrier around individual cores, so preventing migration of gases through the centre of cable
- For use in most climatic conditions, rated to IP66 for wet locations
- For use with explosion proof equipment in Zone 1 and 2 hazardous areas and for Class 1, Div 1 & 2 applications
- Equivalent European designs available: Approved to European & IECEx standards
- Full Installation instructions supplied





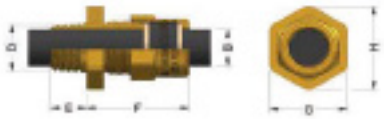
Gland Reference			Cable Dimensions Overall ⌀ (B)			Gland Dimensions			Weight
Standard	Nickel-Plated	Hub Size NPT (D)	Min	Max	Hub Length (E)	Protrusion Length (F)	Hexagon		Lbs
							A/F (G)	A/C (H)	
424BT-02	424BT-02V	½"	0.35"	0.62"	0.85"	1.85"	1.42"	1.57"	0.50
424BT-03	424BT-03V	¾"	0.51"	0.76"	0.86"	1.96"	1.67"	1.89"	0.50
424BT-04	424BT-04V	1"	0.67"	1.06"	1.07"	2.08"	1.86"	2.11"	0.75
424BT-05	424BT-05V	1¼"	0.95"	1.26"	1.10"	2.16"	2.22"	2.42"	1.25
424BT-15	424BT-15V	1½"	0.95"	1.26"	1.11"	2.16"	2.22"	2.42"	1.25
424BT-06	424BT-06V	2"	1.14"	1.65"	1.15"	2.32"	2.76"	3.04"	1.75
424BT-07	424BT-07V	2½"	1.61"	2.08"	1.70"	2.24"	3.15"	3.44"	2.25
424BT-08	424BT-08V	3"	1.96"	2.42"	1.76"	2.83"	3.89"	4.30"	4.25
424BT-09	424BT-09V	3½"	2.15"	2.91"	1.81"	2.91"	4.18"	4.50"	5.50

A2EX
494NE Series

TC-ER-(HL) Unarmored Cables, AEX e, Class 1 Div 2

Key Features:

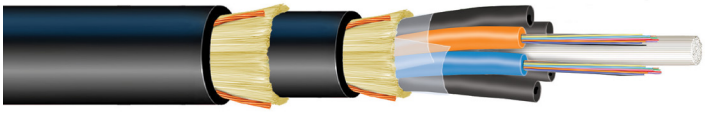
- Brass indoor and outdoor cable gland for use in hazardous areas
- Suitable for circular unarmored cables with extruded oversheath
- Fitted with silicone rubber low smoke, zero halogen seal
- Achieves IP66, IP68 (1 bar) and deluge proof (DTS01:1991) seal onto cable and to enclosure with suitable sealing washer or thread sealant
- Suitable for most climatic conditions – weatherproof, waterproof and deluge proof
- Standard and Nickel plated versions available
- Certified II 2GD, Ex e II & Ex d IIC under ATEX directive 2014/34/EU Certificate number Sira99ATEX1086X. IECEx 10.0069X
- CSA (C/US) certified – Class 1 Zone 1 AEx de IIC AEx tD CSA 1100772X
- Suitable for use in Class 1 Div. 2 areas (as per NEC 501.5)
- Service temperature range -50°C to +200°C
- Full installation instructions supplied



Gland Reference			Cable Dimensions Overall ⌀ (B)				Gland Dimensions			Weight
Design Reference		Hub Size NPT (D)	Basic Metric	Min	Max	Hub Length (E)	Protrusion Length (F)	Hexagon		Lbs
Fully Plated	Un-Plated							A/F (G)	A/C (H)	
494NE-03V	494NE-03	½"	16	0.138"	0.335"	0.60"	1.42"	0.85"	0.97"	0.209
494NE-04V	494NE-04	½"	20s	0.315"	0.453"	0.60"	1.34"	0.85"	0.97"	0.176
494NE-05V	494NE-05	½"	20	0.315"	0.530"	0.64"	1.73"	1.00"	1.13"	0.198
494NE-08V	494NE-08	¾"	20	0.315"	0.630"	0.64"	1.73"	1.00"	1.13"	0.198
494NE-10V	494NE-10	¾"	25	0.453"	0.827"	0.76"	1.81"	1.29"	1.45"	0.320
494NE-14V	494NE-14	1"	25	0.453"	0.827"	0.76"	1.81"	1.29"	1.45"	0.320
494NE-15V	494NE-15	1"	32	0.728"	1.083"	0.80"	1.50"	1.47"	1.65"	0.310
494NE-20V	494NE-20	1¼"	32	0.728"	1.083"	0.80"	1.50"	1.47"	1.65"	0.309
494NE-21V	494NE-21	1¼"	40	0.945"	1.339"	0.82"	1.81"	1.85"	2.11"	0.595
494NE-27V	494NE-27	1½"	40	0.945"	1.339"	0.82"	1.81"	2.21"	2.47"	0.595
494NE-31V	494NE-31	1½"	50	1.220"	1.614"	0.86"	1.73"	2.21"	2.40"	0.849
494NE-32V	494NE-32	2"	50	1.220"	1.614"	0.86"	1.73"	2.21"	2.40"	0.849
494NE-38V	494NE-38	2 ½"	63	1.575"	2.067"	1.27"	2.40"	2.75"	3.02"	1.620
494NE-44V	494NE-44	3"	75s	2.067"	2.283"	1.31"	1.81"	3.13"	3.42"	1.962
494NE-45V	494NE-45	3"	75	2.146"	2.579"	1.31"	2.60"	3.13"	3.42"	1.709

AIRGUARD® XP Fiber Optic Cable

Oil & Gas | Chemical | Low Temp | High Crush | Harsh Environment | Tray



OVERVIEW

AIRGUARD® XP combines world-class mechanical protection, chemical protection, and user friendliness into a family of robust industrial optical fiber cables. AIRGUARD® XP joins Prysmian's existing brands of AIRGUARD® low voltage and medium voltage cables.

In the industrial and harsh environment, the presence of aggressive chemicals such as hydrocarbons, solvents, acids, and bases can destroy a traditional fiber cable.AIRGUARD®XP resists those harsh elements. In fact, the AIRGUARD® XP family surpasses the rigorous UL 2556 requirements for Oil & Gasoline Resistance.

AIRGUARD® XP goes head to head with interlocking armor cables in the areas of impact and crush resistance. Because interlock armor contains metallic armoring, they are stiff, heavy, and require grounding. A severe impact or crush may cause permanent deformation to the metallic armor. The AIRGUARD® XP, all-dielectric versions, overcome these un-desirable factors and can be installed in trays/ladders along with copper communications or power conducting cables, thus providing greater flexibility & user friendliness.

AIRGUARD® XP cables meet or exceed key industry standards such as ANSI/ICEA 696, CSA 22.2, UL 1277, and Telcordia GR20.

The robust all-dielectric double jacket carries listings for sunlight resistance (SUN RES) and direct burial (DIR BUR). This cable is extremely versatile and may be utilized in low temperature applications down to -50°C (-58°F) and in properly engineered self-supporting aerial applications. The dual jacket, single corrugated steel tape option is also SUN RES and DIR BUR listed and provides optimal rodent protection in direct buried applications. The single jacket all-dielectric option is best suited for duct installations.

Chemical Resistance Performance

Compound	Test Criteria
ASTM No. 2 Oil	96 hours at 100°C
Kerosene	168 hours at 50°C
MIL-T-5624N JP-4 (jet fuel)	168 hours at 50°C
MIL-H-5606 Hydraulic Fluid	168 hours at 50°C
Vegetation Killer	168 hours at 50°C
De-Icing Fluid	24 hours at 50°C
Hydrogen Sulfide (H2S)	24 hours at 50°C

SPECIFICATIONS / RATINGS

Applications	AIRGUARD® XP cables are extremely rugged, indoor/outdoor loose tube cables providing unsurpassed performance in the most challenging applications where extreme exposures to chemicals, oils, temperature, or compressive and tensile loads are present
Flame Ratings	**XPRLTM** = OFNG- LS/FT4 ST1 flame and low smoke rating **XPRLTMB** = OFN flame rating **XPRLTMD** = OFCG-LS FT4 ST1 flame and low smoke rating
Fiber Count	2 to 288
Fiber Types	Single-mode (SMF, bend-insensitive) Multimode (62.5/125-OM1, 50/125-OM2, OM3 & OM4)
Standards	ANSI/ICEA S-104-696, CSA C22.2 No 230/232, UL-1277, UL-2556 4.2.8.3 "Oil Resistance" PR11, UL-2556 4.2.8.4 "Gasoline Resistance" GR11, UL 1277 & CSA 22.2 230 Direct Buried Rated: DIR BUR, UL 1651 & CSA 22.2 230 UV Resistance Rated: SUN RES, Telcordia GR-20, CE RoHS Compliant
Registered Supplier	TL 9000, ISO 9001, ISO 14001, and OHSAS 18001

CE
RoHS Compliant

FEATURES AND BENEFITS

- Suitable for tray installations
- Hydrocarbon (kerosene, gasoline, lubricating oil) resistant
- Resists chemical degradation in industrial environments
- Resistant to jet fuel & de-icing chemicals for airport applications
- Flame-retardant, black UV-resistant outer jacket
- Smaller & lighter than comparable metallic armored designs
- Available with bend-insensitive single-mode & multimode fibers
- Proven stranded loose tube cable design for long term reliability

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4 Tesseneer Drive, Highland Heights, KY 41076
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AIRGUARD® XP Fiber Optic Cable

Oil & Gas | Chemical | Low Temp | High Crush | Harsh Environment | Tray

AirGuard® XP Dielectric Double Jacket (2J) XPRLTM Series | OFNG-LS / FT4 ST1

Fiber Count Range	Recommended Fiber Count	Recommended Part Number	# of Buffer Tubes	Diameter		Approx. Cable Weight		Bend Radius | Load		Bend Radius | No Load		Max. Reel Length	
		Prysmian*		Inches	mm	lb/kft	kg/km	Inches	cm	inches	cm	feet	meters
6 - 72	6	XPRLTM-12-AA-006-BB	6	0.60	15.3	159	237	12	31	6	15	41,010	12,500
	12	XPRLTM-12-AA-012-BB											
	24	XPRLTM-12-AA-024-BB											
	36	XPRLTM-12-AA-036-BB											
	48	XPRLTM-12-AA-048-BB											
	72	XPRLTM-12-AA-072-BB											
96	96	XPRLTM-12-AA-096-BB	8	0.67	17.1	198	294	13	34	7	17	41,010	12,500
120	120	XPRLTM-12-AA-120-BB	10	0.74	18.8	238	354	15	38	7	19	35,673	10,873
144	144	XPRLTM-12-AA-144-BB	12	0.83	21.0	294	438	17	42	8	21	29,534	9,002
216	216	XTRLTM-12-AA-216-BB	18	0.81	20.5	267	398	16	41	8	21	21,978	6,699
288	288	XPRLTM-12-AA-288-BB	24	0.94	24.0	366	545	19	48	9	24	21,978	6,699

* Where AA equals glass type and BB equals attenuation

Note:

Single layer, 12 position = OD 21 mm

Dual layer, 12/6 position = OD 20.5 mm

Temperature Range

Shipping and Storage:	-58° F to +158° F	(-50° C to +70° C)
Installation:	-22° F to +140° F	(-30° C to +60° C)
Operation:	-58° F to +158° F	(-50° C to +70° C)

Mechanical Performance

Maximum installation load:	1000 lbf (4500 N)
Maximum operation loads:	300 lbf (1335 N)
Crush resistance:	4500 N
Impact force resistance:	11.8 N*M
Cold impact load:	5.88 N*M at -22° F (-30° C)

Note:

Cable damage may occur if installation temperature limits are exceeded; therefore, Prysmian Group recommends storing I/O cables in appropriate temperature conditions ≥ 24 hours prior to placement.

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AIRGUARD® XP Fiber Optic Cable

Oil & Gas | Chemical | Low Temp | High Crush | Harsh Environment | Tray

AirGuard® XP Dielectric Single Jacket (1J) XPRLTMB Series | OFN

Fiber Count Range	Recommended Fiber Count	Recommended Part Number	# of Buffer Tubes	Diameter		Approx. Cable Weight		Bend Radius | Load		Bend Radius | No Load		Max. Reel Length	
		Prysmian*		Inches	mm	lb/kft	kg/km	Inches	cm	inches	cm	feet	meters
6 - 48	6	XPRLTMB-12-AA-006-BB	5	0.41	10.3	62	93	8	21	4	10	41,010	12,500
	12	XPRLTMB-12-AA-012-BB											
	24	XPRLTMB-12-AA-024-BB											
	36	XPRLTMB-12-AA-036-BB											
	48	XPRLTMB-12-AA-048-BB											
72	72	XPRLTMB-12-AA-072-BB	6	0.44	11.2	73	109	9	22	4	11	41,010	12,500
96	96	XPRLTMB-12-AA-096-BB	8	0.51	12.9	95	142	10	26	5	13	41,010	12,500
120	120	XPRLTMB-12-AA-120-BB	10	0.58	14.8	125	186	12	30	6	15	41,010	12,500
144	144	XPRLTMB-12-AA-144-BB	18	0.65	16.5	154	229	13	33	6	17	41,010	12,500
216	216	XPRLTMB-12-AA-216-BB	18	0.65	16.5	154	229	13	33	6	17	33,465	10,200

* Where AA equals glass type and BB equals attenuation

Temperature Range

Shipping and Storage:	-40° F to +158° F	(-40° C to +70° C)
Installation:	+14° F to +140° F	(-10° C to +60° C)
Operation:	-40° F to +158° F	(-40° C to +70° C)

Mechanical Performance

Maximum installation load:	600 lbf (2670 N)
Maximum operation loads:	180 lbf (801 N)
Cold impact load:	5.88 N*M at -22° F (-30° C)

AirGuard® XP Corrugated Steel Tape Armor with Double Jacket (1A 2J) XPRLTMD Series | OFCG-LS / FT4 ST1

Fiber Count Range	Recommended Fiber Count	Recommended Part Number	# of Buffer Tubes	Diameter		Approx. Cable Weight		Bend Radius | Load		Bend Radius | No Load		Max. Reel Length	
		Prysmian*		Inches	mm	lb/kft	kg/km	Inches	cm	inches	cm	feet	meters
6 - 72	6	XPRLTMD-12-AA-006-BB	6	0.67	17.1	215	320	13	34	7	17	41,010	12,500
	12	XPRLTMD-12-AA-012-BB											
	24	XPRLTMD-12-AA-024-BB											
	36	XPRLTMD-12-AA-036-BB											
	48	XPRLTMD-12-AA-048-BB											
	72	XPRLTMD-12-AA-072-BB											
96	96	XPRLTMD-12-AA-096-BB	8	0.74	18.9	259	386	15	38	7	19	32,808	10,000
120	120	XPRLTMD-12-AA-120-BB	10	0.81	20.7	308	458	16	41	8	21	21,755	6,631
144	144	XPRLTMD-12-AA-144-BB	12	0.91	23.0	374	556	18	46	9	23	21,755	6,631
216	216	XTRLTMD-12-AA-216-BB	18	0.89	22.5	153	513	18	45	9	23	18,202	5,548
288	288	XPRLTMD-12-AA-288-BB	24	0.99	25.2	205	645	20	50	10	25	18,202	5,548

* Where AA equals glass type and BB equals attenuation

Temperature Range

Shipping and Storage:	-50° F to +158° F	(-40° C to +70° C)
Installation:	-22° F to +140° F	(-30° C to +60° C)
Operation 12-72F:	-58° F to +158° F	(-50° C to +70° C)
Operation>72F:	-40° F to +158° F	(-40° C to +70° C)

Mechanical Performance

Maximum installation load:	600 lbf (2670 N)
Maximum operation loads:	180 lbf (801 N)
Cold impact load:	5.88 N*M at -22° F (-30° C)

Note:

Cable damage may occur if installation temperature limits are exceeded; therefore, Prysmian Group recommends storing I/O cables in appropriate temperature conditions ≥ 24 hours prior to placement.

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AIRGUARD® XP Fiber Optic Cable

Oil & Gas | Chemical | Low Temp | High Crush | Harsh Environment | Tray

Ordering Guide

The Prysmian part number incorporates several significant attributes involving cable design and optical performance.
The appropriate part number can be configured using the process described below

Example: Indoor/Outdoor Loose Tube | AIRGUARD® Series, Dielectric (double Jacket) | General Purpose rated | 12 fibers per buffer tube 48 62.5/125 multimode fibers total (printed in feet)

1 LENGTH MARKINGS		2 PRODUCT FAMILY	3 CONSTRUCTION		4 FIBER GROUPING		5 FIBER TYPE		6 FIBER COUNT		7 FIBER GRADE
F	–	XPRLTM	BLANK	–	12	–	G6	–	048	–	M2

PART NUMBER CONSTRUCTION

1 LENGTH MARKINGS

F = Feet or M = Meters

2 PRODUCT FAMILY

XPRLTM = 2-288f AIRGUARD® XP (double jacket)

XPRLTMB = 2-216f AIRGUARD® XP (single jacket)

XPRLTMD= 2-288f AIRGUARD® XP (double jacket & steel tape armored)

3 CONSTRUCTION

(Blank) = Not available with interlock armor

4 FIBER GROUPING

12 = 12f per unit or tube

FIBER INFORMATION

5 FIBER TYPE

SINGLE-MODE

HB = Single-Mode (ITU G.652 C & D) Low Water Peak

ES = Enhanced Single-Mode (ITU G.652 C & D)

B1 = Bend-Insensitive Single-Mode (ITU G.657.A1 & G.652.D)

B2 = Bend-Insensitive Single-Mode (ITU G.657.A2 & .B2, & G.652.D)

MULTIMODE*	Wavelength (nm)	Bandwidth (MHz)	1 GbE Dist (m)	10 GbE Dist (m)
G6 = OM1 (62.5µm)	850/1300	200/500	300/550	33/___
G5 = OM2+ BIF (50µm)	850/1300	700/500	800	150/___
G3 = OM3 BIF (50µm)	850/1300	1500/500	1000	300/___
G4 = OM4 BIF (50µm)	850/1300	3500/500	1100	550/___

* For XPRLTMD with multimode, the maximum fiber count is 72.

6 FIBER COUNT

002 to 288 fibers

7 FIBER GRADE

SINGLE-MODE Attenuation (dB/km)	Wavelength (nm)	Fiber Type
E1 = 0.40/0.40/0.30	1310/1383/1550	HB or ES
E3 = 0.35/0.35/0.25	1310/1383/1550	HB, ES, B1, or B2

MULTIMODE Attenuation (dB/km)	Wavelength (nm)	Fiber Type
M2 = 3.5/1.0	850/1300	OM1 (62.5µm)
M3 = 3.0/1.0	850/1300	OM2+, OM3, OM4 (50µm)

Other cable constructions and fiber performance grades available on request.

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