

Low Voltage AIRGUARD® 600 Volt Instrumentation Cable (IS/OS)

Part Number	Circuit Conductor		Insulation Thickness		Nominal Jacket Thickness	Nominal Overall Cable OD	Nominal Cable Weight	Minimum Bending Radius	Ampacity** +/-90°C	Gland Explosion Proof C1D1
			Avg PVC	Min Nylon						
	No.	AWG	mils	mils	mils	inches	lbs/Mft	inches	amps	
18-01PRAIRGUARD-OS	1/PR	18	15	4	45	0.51	132	5.7	14	PWC-424BT02
18-01TRAIRGUARD-OS	1/TR	18	15	4	45	0.52	147	5.9	14	PWC-424BT02
18-02PRAIRGUARD-SPOS	2/PR	18	15	4	60	0.66	229	7.7	11.2	PWC-424BT03
18-04PRAIRGUARD-SPOS	4/PR	18	15	4	60	0.73	294	8.5	9.8	PWC-424BT03
18-08PRAIRGUARD-SPOS	8/PR	18	15	4	80	0.91	468	4.6	7	PWC-424BT04
16-01PRAIRGUARD-OS	1/PR	16	15	4	45	0.53	144	6.0	18	PWC-424BT02
16-01TRAIRGUARD-OS	1/TR	16	15	4	60	0.57	178	6.2	18	PWC-424BT02
16-02PRAIRGUARD-SPOS	2/PR	16	15	4	60	0.72	270	8.3	14.4	PWC-424BT04
16-04PRAIRGUARD-SPOS	4/PR	16	15	4	60	0.79	343	9.3	12.6	PWC-424BT04
16-04TRAIRGUARD-STOS	4/TR	16	15	4	80	0.93	456	11.2	9	PWC-424BT04
16-08PRAIRGUARD-SPOS	8/PR	16	15	4	80	0.99	557	11.8	9	PWC-424BT05
*16-12PRAIRGUARD-SPOS	12/PR	16	15	4	80	1.15	725	13.3	8.1	PWC-424BT06
*16-12TRAIRGUARD-STOS	12/TR	16	15	4	80	1.27	907	16.0	7.2	PWC-424BT06
*16-24PRAIRGUARD-SPOS	24/PR	16	15	4	80	1.45	1266	17.7	6.3	PWC-424BT07
*16-36PRAIRGUARD-SPOS	36/PR	16	15	4	110	1.79	1670	19.8	6.3	PWC-424BT07

All values are nominal and subject to correction

*Cables not marked "-HL" (per UL 2225, overall cable diameter must be 1.00 inch or less to be marked "-HL")

**Per 2014 NEC TABLE 310.15(B)(16) (formerly 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 in Raceway, Cable, or Earth (Directly Buried), Based on Ambient Temperature of 30°C (86°F).

Prysmian's Low Voltage AIRGUARD® Power Cables are primarily designed for applications in environments found in heavy industrial and offshore markets. Its rugged polymeric AIR BAG™ armor and chemical barrier protection package makes it the ideal cable choice for tough harsh environmental conditions. AIRGUARD provides the solution to the deficiencies often encountered with MC-HL cables including armor breakage encountered during installation and in applications requiring recurring bending after installation, as well as poor performance in areas of high vibration (e.g. motor connections). AIRGUARD also provides a safer alternative to MC-HL due to its "No Knife/No Saw" preparation.

Low Voltage AIRGUARD is rated for installations in cable tray for exposed runs (Type TC-ER), conduit, and direct burial. It significantly exceeds the stringent crush and impact resistance of UL 2225 for MC-HL cables and is permitted for use in Class I Division 1 and Zone 1 hazardous locations (TC-ER-HL) in accordance with National Electrical Code (2020) Sections 501.10(A)(2)(3) and 505.15(B)(i). Prysmian's patented AIRGUARD design affords far greater protection against water ingress and chemical attack than traditional MC Armored Cables. It also provides users the ease of installation of a tray cable while providing better mechanical and environmental protection than traditional metal clad cables.

CONDUCTORS: Class B stranded, soft drawn, bare copper circuit conductors

INSULATION: Heat and moisture resistant polyvinyl chloride (PVC) and nylon applied directly to the conductor. Acceptable for use in locations at 90 °C dry or 75 °C wet

ARMOR: Impact resistant extruded filler with two ripcords placed under this layer (180° apart) extruded over the core assembly. Crush, impact and chemical resistant polymeric armor layer over filler

ASSEMBLY: Insulated conductors are twisted together into pairs or triads along with a Class B stranded, soft drawn, tinned copper drain wire. Each pair or triad shall be wrapped with an Aluminum/Mylar tape shield. Flame resistant non-hygroscopic fillers (as needed)

JACKET: Heat, moisture and sunlight resistant, thermoplastic polyvinyl chloride (PVC) jacket. Black

COLOR CODE: Pairs: Black, White. Number printed - Pair 1: (1-ONE), Pair 2: (2-TWO), Pair 3: (3-THREE), etc. Triads: Black, White, Red. Number printed - Triad 1: (1-ONE), Triad 2: (2-TWO), Triad 3: (3-THREE), etc.

SPECIFICATIONS

ASTM B3, ASTM B8, & ASTM B33

ICEA S-73-532 (NEMA WC 57)

UL 66 (TFN) 600V

IEEE 1202/FT-4 IEEE 383

UL 1277/NEC Article 336.10(7)

UL 2225

NEC Article 501.10(A)(2)(3)

NEC Article 505.15(B)(1)(i)

CSA 22.2 No. 03

MSHA

Class B Soft Drawn Concentric Lay Stranded Bare Copper Conductors Cable Rating

TFN Multiple Conductors - Direct Buried - Sunlight Resistant - Oil Resistant

Flame Retardant. NFPA 70 TC-ER Exposed Run Rating TC-ER-HL

TC-ER-HL Class I Division 1 TC-ER-HL Class I Zone 1

-40°C/ -35°C Cold Bend/Cold Impact Mine Safety & Health Administration