Cordset Technical Information

Prysmian takes pride in offering high-quality cordsets to our customers that provide reliable service year after year in the most rugged uses and application conditions. From our innovative **Plug-it®** line of cordset products and extension cord accessories to the ultimate extension cord in the industry – **FrogHide®** – we sell the products that power you forward.

Handy information and technical data in this section will help in the correct selection and matching of our cordset products to your application. For difficult applications or more detailed technical questions, please contact your local Prysmian distributor, your retailer, or your Inside Sales Representative.

Extension Cord Facts

What does AWG mean?

AWG means American Wire Gauge. It designates the size of the copper wire. The standard sizes for extension cords are 16 AWG, 14 AWG, 12 AWG and 10 AWG. The smaller the AWG number, the larger the size of the copper wire and wattage rating.

What do the amp and watt ratings mean?

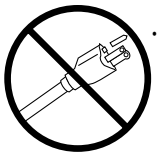
Never plug more than the specific number of watts into a cord. For example, could you plug a 150-watt lamp, a 60-watt lamp and a 10-amp appliance into an extension cord rated 13 amps/1625 watts? Use the Amp to Watt Conversion Table to determine the total number of watts to be used (150 watts + 60 watts + 1250 watts = 1460 watts). Therefore, it is safe to use the 13-amp/1625-watt extension cord.

Always look for the Underwriters Laboratory label which is permanently attached or molded into the cord. Read the label for instructions and electrical ratings.

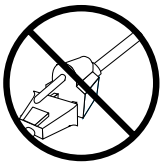
Amps To Watts (@ 125 V) Conversion Table		
0	=	0
1	=	125
2	=	250
3	=	375
4	=	500
5	=	625
6	=	750
7	=	875
8	=	1000
9	=	1125
10	=	1250
11	=	1375
12	=	1500
13	=	1625
14	=	1750
15	=	1875

How to use an extension cord properly.

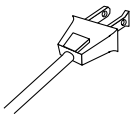
- Be sure the cord you have selected meets the intended use. Never use a cord outdoors that is not marked for outdoors.
- Inspect cord thoroughly before each use. Do not use if damaged.



- Do not remove, bend or modify any metal prongs or pins of plug.
- Look for the number of watts on appliances to be plugged into cord.
- Refer to UL Label on cord for specific wattage.
- Do not connect a three-prong plug into a two-hole cord.



- Do not plug more than the specified number of watts into a cord.
- Make sure appliance is off before connecting cord to outlet.



- A polarized plug has one blade wider than the other.
- Fully insert plug into outlet.
- Do not use excessive force to make connections.
- Do not run cords through doorways, holes in ceilings, walls or floors.
- Do not use an extension cord when wet.

- Keep extension cords away from water.
- Keep children and pets away from extension cords.

- Avoid overheating. Uncoil cord and do not cover it with any other material.
- Do not plug one extension cord into another.
- Do not drive, drag or place objects over extension cord.
- Always grasp plug when removing it from cord or outlet.
- Do not unplug by pulling on cord.

- Always store extension cords indoors.

- Do not walk on cord.
- Always unplug cord when not in use.
- Always look for the Underwriters Laboratory (UL) label which is permanently attached or molded into the cord. Read the label for instructions and electrical ratings.

CAROL®

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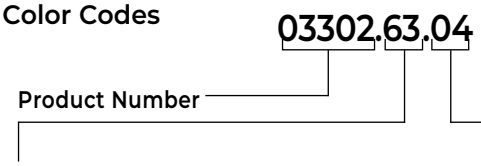
Cordset Product Coding System

Cordset Packaging and Color Codes

Example:



Packaging Code Identification Numbers

CODE	PACKAGING	CODE	PACKAGING
13	Clamshell	70	Bulk (with tie)
60	Cuff	73	Bulk (without tie)
61	Box	96	Card
63	Sleeve		

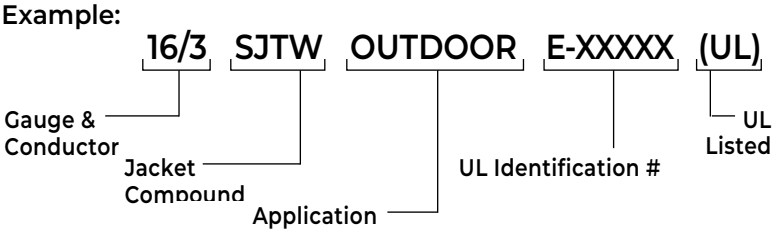
Jacket Color Code Identification Numbers

CODE	COLOR	CODE	COLOR
00	No color	06	Green
01	Black	07	Blue
02	White	08	Brown
03	Red	10	Gray
04	Orange	17	Beige
05	Yellow		

Surface Printed Legend

Our extension cords have surface-printed jackets to provide a means of identifying and distinguishing between different types of extension cords.

Example:



Inner Wire Color Code Chart

NO. OF CONDUCTORS	COLOR
2	Black, White
3	Black, White, Green
4	Black, White, Green, Red

Understanding Wire Gauge

- Gauge refers to the size of the wire
- The thinner the wire, the higher the gauge number
- The thicker the wire, the lower the gauge number

- The lower the gauge, the more electrical current (amps) the wire can carry
- The lower the gauge, the longer distance the wire can be run from an electrical source

How to Select the Right Extension Cord

1. Look up the amp rating on the power tool or appliance.

Extension Cord Selector

EQUIPMENT	AMP RATING
Circular Saw	12-15
Power Drill	3-7
Hedge Trimmer	2-3
Weed Trimmer	2-4
Chain Saw	7-12
Leaf Blower	6-12
Bug Killer	1-2
Lawn Mower	6-12

2. Determine the maximum distance the tool or appliance will be from the electrical outlet.
3. Use the Extension Cord Selector chart below to identify the proper gauge.

Extension Cord Selector

MAXIMUM DISTANCES	UP TO 10 AMPS	UP TO 15 AMPS
0' to 25'	16 Gauge	14 Gauge
25' to 50'	16 Gauge	14 Gauge
50' to 75'	16 Gauge	12 Gauge
75' to 100'	16 Gauge	12 Gauge

Extension Cord Performance Guide

	FROGHIDE® ULTRA FLEX® RUBBER	LIFETIME PLUS® SUPER FLEX®	ALL WEATHER BLUE	SAFETY ORANGE®
Low-Temp Flex	Excellent	Good	Good	Fair
Room-Temp Flex	Excellent	Very Good	Very Good	Good
Oil Resistance	Excellent	Very Good	Very Good	Fair
Cap/Cord Bonding	Excellent	Very Good	Very Good	Good
Abrasion Resistance	Excellent	Very Good	Very Good	Very Good
Chemical Resistance	Excellent	Very Good	Very Good	Very Good
Heat Softening	Excellent	Fair	Fair	Fair
Water Resistance	Excellent	Excellent	Excellent	Excellent
Flame Resistance	Excellent	Very Good	Very Good	Very Good

Ground Fault Circuit Interrupters (GFCI)

What is the GFCI?

The GFCI is a fast-acting circuit interrupter that senses small current imbalances.

These small imbalances in the circuit are caused by current leakage to ground and, in a fraction of a second, the GFCI shuts off the electricity. The GFCI continually matches the amount of current going to an electrical device against the amount of current returning from the device along the normal path. Whenever the amount "going" differs from the amount "returning" by approximately 5 milliamps, the GFCI interrupts the electrical power within as little as 1/40 of a second.

What are OSHA's Electrical Standards for Construction?

GFCIs can be used successfully to reduce electrical hazards on construction sites...

Tripping of GFCIs - interruption of current flow - is sometimes caused by wet connectors and tools. It is a good practice to limit exposure of connectors and tools to excessive moisture by using watertight or sealable connectors. Providing more GFCIs or shorter circuits can prevent tripping caused by the cumulative leakage from several tools or by leakages from extremely long circuits.

To help cope with the electrical hazards at construction sites...

The Occupational Safety and Health Administration (OSHA) issued a revision of OSHA safety and health regulation, 29 Code of Federal Regulations Part 1926, Subpart K (Electrical Standards of Construction). This revision was published in the federal Register and contains the requirements for the GFCI and the assured equipment grounding conductor program.

What are the Employer's Responsibilities on a Construction Site?

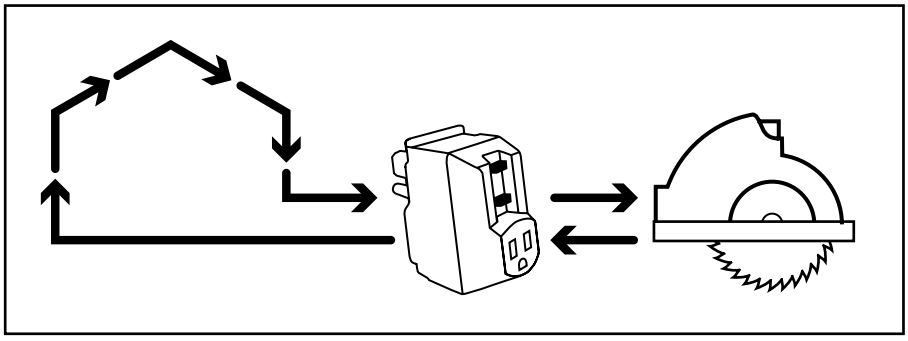
OSHA ground-fault protection rules and regulations have been determined necessary and appropriate for employee safety and health.

Therefore, it is the employer's responsibility to provide either...

- Ground-fault circuit interrupters on construction sites for receptacle outlets in use and not a part of the permanent wiring of the building or structure.
- A scheduled and recorded assured equipment grounding conductor program on construction sites, covering all cordsets, receptacles that are not part of the permanent wiring of the building or structure, and equipment connected by cord and plug that are for use or used by employees.

It is also the employer's responsibility to provide approved ground fault circuit interrupters for a 120-volt, single-phase, 15- and 20-ampere receptacle outlets on construction sites that are not part of the permanent wiring of the building or structure, and that are in use by employees. Receptacles on the ends of extension cords are not part of the permanent wiring and, therefore must be protected by GFCIs whether or not the extension cord is plugged into permanent wiring.

Effective management of worker safety and health protection is a decisive factor in reducing the extent and severity of work-related injuries and illnesses and their related costs. An effective program includes provisions for the systematic identification, evaluation and prevention or control of general workplace hazards, specific job hazards and potential hazards that may arise from foreseeable conditions. An effective program will include management commitment and employee involvement, work site analysis, hazard prevention and control, training and the proper equipment.



NEMA Receptacle and Plug Chart

	VOLTAGE	LINE NO.	15 AMPERE RECEPTACLE	15 AMPERE PLUG	20 AMPERE RECEPTACLE	20 AMPERE PLUG
2 Pole 2 Wire	125 V	1	1-15R 	1-15P 		
	250 V	2	2-15R 	2-15P 	2-20R 	2-20P 
2 Pole 3 Wire Grounding	125 V	5	5-15R 	5-15P 	5-20R 	5-20P 
	250 V	6	6-15R 	6-15P 	6-20R 	6-20P 
	277 V	7	7-15R 	7-15P 	7-20R 	7-20P 
3 Pole 3 Wire	125/250 V	10			10-20R 	10-20P 
	3 ϕ Δ 250 V	11	11-15R 	11-15P 	11-20R 	11-20P 
3 Pole 4 Wire Grounding	125/250 V	14	14-15R 	14-15P 	14-20R 	14-20P 
	3 ϕ Δ 250 V	15	15-15R 	15-15P 	15-20P 	15-20P 
4 Pole 4 Wire	3 ϕ Y 120/208 V	18	18-15R 	18-15P 	18-20R 	18-20P 

NEMA Receptacle and Plug Chart

	VOLTAGE	LINE NO.	30 AMPERE RECEPTACLE	30 AMPERE PLUG	50 AMPERE RECEPTACLE	50 AMPERE PLUG	60 AMPERE RECEPTACLE	60 AMPERE PLUG
2 Pole 2 Wire	125 V	1						
	250 V	2	2-30R 	2-30P 				
2 Pole 3 Wire Grounding	125 V	5	5-20R 	5-30P 	5-50R 	5-50P 		
	250 V	6	6-30R 	6-30P 	6-50R 	6-50P 		
	277 V	7	7-30R 	7-30P 	7-50R 	7-50P 		
3 Pole 3 Wire	125/250 V	10	10-30R 	10-30P 	10-50R 	10-50P 		
	3 ϕ Δ 250 V	11	11-30R 	11-30P 	11-50R 	11-50P 		
3 Pole 4 Wire Grounding	125/250 V	14	14-30R 	14-30P 	14-50R 	14-50P 	14-60R 	14-60P 
	3 ϕ Δ 250 V	15	15-30R 	15-30P 	15-50R 	15-50P 	15-60R 	15-60P 
4 Pole 4 Wire	3 ϕ Y 120/208 V	18	18-30R 	18-30P 	18-50R 	18-50P 	18-60R 	18-60P 

LOCKING-TYPE PLUGS AND RECEPTACLES

VOLTAGE	LINE NO.	15 AMPERE RECEPTACLE	15 AMPERE PLUG	20 AMPERE RECEPTACLE	20 AMPERE PLUG	30 AMPERE RECEPTACLE	30 AMPERE PLUG
125 V	L-1	L1-15R 	L1-15P 				
250 V	L-2			L2-20R 	L2-20P 		
125 V	L-5	L5-15R 	L5-15P 	L5-20R 	L5-20P 	L5-30R 	L5-30P 
250 V	L-6	L6-15R 	L6-15P 	L6-20R 	L6-20P 	L6-30R 	L6-30P 
277 V, A.C.	L-7	L7-15R 	L7-15P 	L7-20R 	L7-20P 	L7-30R 	L7-30P 
480 V	L-8			L8-20R 	L8-20P 	L8-30R 	L8-30P 
600 V	L-9			L9-20P 	L9-20P 	L9-30R 	L9-30P