



Electrical Safety Rubber Equipments



Table of Contents

General Instructions

3

PPE (Personal Protective Equipment)

6



Insulating Rubber Gloves

8



Insulating Rubber Sleeves

10

CPE (Collective Protection Equipment)

13



Insulating Rubber Blankets

14



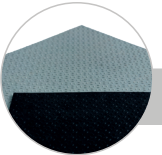
Low Voltage Insulating Blanket

15



Transparent Insulating Rubber Blankets

16



Insulating Rubber Mat

17



Insulating Rubber Platform

18

General Instructions

Orion, a company with more than 100 years of experience in rubber processing and more than 60 years of experience in the manufacture of insulating rubber gloves, always committed to the safety of professionals in the electrical sector, has a Portfolio of Personal (PPE) and Collective (CPE) Protective Equipment for medium and high voltage.

All products are tested at Orion's Safety Testing Laboratory, according to specifications and criteria established by national and international standards. Insulated devices are supplied with their respective report where serial numbers are detailed, in order to increase traceability and historic.

ORION offers a complete line of electrical rubber devices that meets the needs of the market, supported by **technology, quality and safety.**



- Local Technical Assistance;
- More than 60 years of experience in the production of insulating gloves;
- 100% tested products;
- Traceability;
- Individual reports that follow each product.



This Catalog aims to inform the specifications of the entire line of Orion Electrical Safety Rubber Equipments, as well as to clarify common doubts such as in use care, storage, warranty, testing, retest, among others, in addition to contributing to the indication, acquisition and the supply of the most suitable Personal Protective Equipment (PPE) or Collective Protection Equipment (CPE).

PRECAUTIONS FOR USE

- It is forbidden to wear rings, watches, jewels, sharp and / or sharp objects while using rubber insulating products;
- Carry out a meticulous visual inspection inside and on the surface of the product, before and after use, to guarantee that there are no gaps, cuts and contamination that could interfere with the integrity of the product;
- If any sign of physical damage or deterioration of the product is observed, it should be discarded;
- Rubber Insulating Gloves can be used in conjunction with protective gloves made of leather or other similar material free from any contamination and capable of offering mechanical protection;
- Protective skin creams can compromise the equipment efficiency.

General Instructions

TRANSPORT AND STORAGE

- Keep in the original packaging;
- Do not bend, wrinkle, compress or stretch;
- Keep in a place free of ozone, chemicals, oils, solvents, harmful vapors, fumes and electrical discharges;
- Keep away from direct action and radiation from any heat source;
- Keep a place with an ambient temperature below 35°C;

RECOMMENDATIONS

- The durability of the product is conditioned by factors that involve the type of activity, frequency of use, user care, hygiene and storage.
- Orion indicates that is mandatory to carry out an electrical test after the 6-month period of the first glove rewiring for classes 1,2,3,4, even gloves that are in storage should not be used if they have not been verified in a maximum period of 6 months. For classes 00, 0 just an air leak check, and electrical check would only be performed if required by the customer.
- The replacement frequency must be lower than 5 years.

PERIODICITY OF ELECTRICAL TESTS

Orion recommends revalidation testing every 6 months for products in use and every 12 months (at most) for stored products, according to NFPA 70e: below detailed table:

Retest Frequency	Condition
6 months	Products in constant use
12 months	Products in stock
Immediate	On suspicion of any damage to the product

WARRANTY

Orion replaces, without charging the buyer, unused gloves that, on any occasion during a period of 9 months from the date of receipt of the PPE, fail to pass the tests mentioned in this manual. This warranty is valid only if the gloves have been stored properly and have not passed an original receipt test and a new test.



Personal Protective Equipment

ORION

Insulating Rubber Gloves



INSULATING RUBBER GLOVES

Orion insulating rubber gloves are manufactured in accordance with ASTM D120, EN 60903:2014 and 60903:2003, standards and offers protection against electrical shock, serious injury or even death. Manufactured with high quality rubber compounds, assures high electrical resistance, comfort and dexterity, providing the highest safety protection level for live line maintenance.



Image for illustrative purposes only.

The marking contains the following indications:

- Manufacturer's name;
- Type and Category;
- Class;
- Size;
- Standards Details;
- Double Triangle (Suitable for live working);
- Serial Number;
- Maximum voltage of use.

LEATHER GLOVES



Insulating Rubber Gloves

SIZE OF THE INSULATING RUBBER GLOVES

To find the glove size, leave the hand flat and the fingers together to measure the circumference of the hand, leaving the thumb out. (Figure 1). Use the value of the circumference and use Table 1 for the conversion.

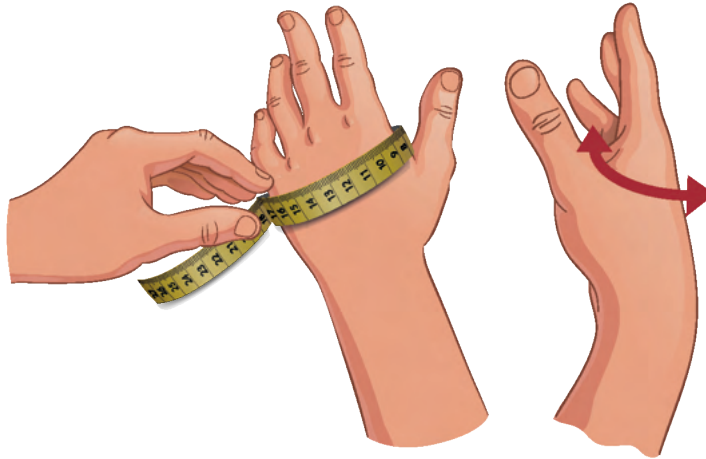


Figura 1

NUMBER (in)	8	8,5	9	9,5	10	10,5	11	11,5	12
(mm)	203	216	229	241	254	267	279	292	303
	SS		S		M		L		XL

Table 1: The allowable tolerance in size must be ± 13 mm.

TECHNICAL SPECIFICATIONS OF RUBBER INSULATING GLOVES

CLASS	ALTERNATE CURRENT		COLOR	SIZES
	TEST VOLTAGE (VOLTS)	MAXIMUM USE VOLTAGE (VOLTS)	TAG	
00	2.500	500	BEIGE	SS, S M, LG XLG
0	5.000	1.000	RED	
1	10.000	7.500	WHITE	
2	20.000	17.000	YELLOW	
3	30.000	26.500	GREEN	
4	40.000	36.000	ORANGE	

Insulating Rubber Sleeves



INSULATING RUBBER SLEEVES

Orion rubber insulating sleeves are specially produced to protect the arms and forearms of workers for live line maintenance. They are made of high quality elastomeric compound and meet Standards ASTM D1051 and EN 60984:1992.



Available colors:



Black



Orange

The marking contains the following indications:

- Manufacturer's name;
- Type and Category;
- Class;
- Size;
- Standards Details;
- Double Triangle (Suitable for live working);
- Serial Number;
- Maximum voltage of use.

Image of illustrative purposes only.

Insulating Rubber Sleeves

STRAPS AND BUTTONS

The insulating rubber sleeves are sold in medium and large sizes and have straps and buttons each pair or sleeves also contains their straps and buttons, so they are supplied fully ready to be worn.



TECHNICAL SPECIFICATIONS OF RUBBER INSULATING SLEEVES

CLASS	ALTERNATING CURRENT		COLOR TAG	AVAILABLE SIZES
	TEST VOLTAGE (VOLTS)	MAXIMUM USE VOLTAGE (VOLTS)		
0	5.000	1.000	RED	M or LG
1	10.000	7.500	WHITE	
2	20.000	17.000	YELLOW	
3	30.000	26.500	GREEN	
4	40.000	36.000	ORANGE	





Collective Protection Equipment

ORION

Insulating Rubber Blanket



INSULATING RUBBER BLANKET FOR MV AND HV

Orion insulating blankets are made from high quality elastomeric compound and meet the standard ASTM - D1048. They are used to protect electrical insulators, cables, switches, fuses, transformers, for live line maintenance.

Available solid or split.



The marking contains the following indications:

- Manufacturer's name;
- Type;
- Style;
- Class;
- Standard Number;
- Serial Number;
- Maximum voltage of use.

Image for illustrative purposes only.

TECHNICAL SPECIFICATIONS OF RUBBER INSULATING BLANKET

CLASS	ALTERNATING CURRENT		COLOR TAG	SIZE (mm)	BLANKET COLOR
	TEST VOLTAGE (VOLTS)	MAXIMUM USE VOLTAGE (VOLTS)			
2	20.000	17.000	YELLOW	910 x 910	ORANGE
4	40.000	36.000	ORANGE		

Insulating Rubber Blanket



INSULATING RUBBER BLANKET FOR LV

Orion Low Voltage Insulating Blankets are manufactured with high quality elastomeric compound and are based on ASTM - D1048 standart. Insulating sheets offers to protection against accidents due to possible approaches or contacts with energized parts, such as electrical panels, boards, cables, switches, transformers, etc.



Image for illustrative purposes only.

ORION

SÉRIE:
MÁXIMA VOLTAGEM DE USO 1.000 Vca
BASEADO NA NORMA ASTM D1048
CLASSE 0 - TIPO II

The marking contains the following indications:

- Manufacturer's name;
- Type;
- Class;
- Standard number;
- Serial number;
- Maximum usage voltage.

TECHNICAL SPECIFICATIONS OF LOW VOLTAGE INSULATING BLANKET

CLASS	ALTERNATING CURRENT		COLOR TAG	SIZES		COLOR SHEET
	TEST VOLTAGE (VOLTS)	MAXIMUM USE VOLTAGE (VOLTS)		THICKNESS (mm)	WIDTH X LENGTH (mm)	
0	5.000	1.000	RED	0,8 a 1,6	800 x 330	ORANGE
					1000 x 400	
1	10.000	7.500	WHITE	1,6 a 2,4	1000 x 500	

Transparent Rubber Insulating Blanket



TRANSPARENT INSULATING RUBBER BLANKET

Orion transparent insulating blanket is manufactured in special rubber, based on the ASTM 1048 standard. It guarantees high transparency and allows users to correctly insulate and easily view all energized contacts. It offers, in addition to flexibility, different classes of insulation and is suitable for panels, fuses, switches, cables, circuit breakers, energized cubicles and other applications.



The marking contains the following indications:

- Manufacturer's name;
- Serial number;
- Maximum usage voltage;
- Type;
- Class.

Image for illustrative purposes only.

TECHNICAL SPECIFICATIONS OF RUBBER INSULATING BLANKET

CLASS	ALTERNATING CURRENT		COLOR TAG	SIZES	
	TEST VOLTAGE (VOLTS)	MAXIMUM USE VOLTAGE (VOLTS)		THICKNESS (mm)	WIDTH X LENGTH (mm)
00	2.500	500	BEIGE	0,6 a 1,0	600 x 800 800 x 1.000
0	5.000	1.000	RED	1,6 a 2,2	900 x 2.100

IMPORTANT

Never store your transparent blankets or your kit together with other rubber products, as these may contain chemical agents that cause stains or yellowing of the blanket.

Rubber Insulating Mat



Rubber Insulating Mat

Rubber Insulating Mat

Rubber Insulating Mat

Rubber Insulating Mat

- ## Rubber Insulating Mat



Rubber Insulating Mat

Rubber Insulating Mat

Rubber Insulating Mat

Rubber Insulating Mat

Rubber Insulating Mat

Rubber Insulating Platform

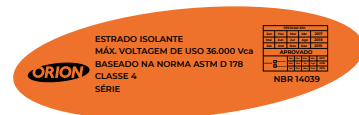


INSULATING PLATAFORM PLATFORM

The insulating rubber platform was developed for using in power cabins. Excellent electrical, thermal and acoustic insulator, with great impact absorption, it is also waterproof, non-slip and easy to apply. The Orion Rubber Insulation Platform is made with the highest technology and strict quality control.



Image for illustrative purposes only.



The marking contains the following indications:

- Manufacturer's name;
- Serial number;
- Standard number;
- Class;
- Maximum usage voltage.

TECHNICAL SPECIFICATIONS OF THE RUBBER INSULATING PLATFORM

SURFACE: Diamond - Features the material as non-slip.

CLASS	ALTERNATING CURRENT		COLOR TAG	THICKNESS (mm)	WIDTH (mm)	LENGTH (mm)	COLOR SURFACE
	TEST VOLTAGE (VOLTS)	MAXIMUM USE VOLTAGE (VOLTS)					
2	20.000	17.000	YELLOW	25,4 mm	1.000 mm	1.000 mm	BLACK
4	40.000	36.000	ORANGE				

The background is a collage of various rubber products. At the top, there are large rolls of red and grey rubber. Below these, there are several grey rubber gloves. In the bottom right corner, there is a fan of various colored rubber sheets (blue, red, orange, yellow, green) and some black rubber components with circular patterns.

ORION

Since 1898
Transforming rubber into solution.



Download technical catalogs on our website.
Access through the QR Code below.



0800.882.2222
+55 (12) 2139.1000
Rodovia Presidente Dutra, Km 135,1
CEP 12247-004 | São José dos Campos - SP - Brasil