

TECHNICAL DATA SHEET

INSULATING GLOVES

EN 60903:2003 + AC2:2005 EN 420:2003 + A1:2009

Certificate:
WE/S/2369/2015

Data of issue:
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APPLICATION

Insulating gloves ELSEC are applicable for electrical purposes exclusively as the basic personal protective tool for live working at voltages up to 1 kV or as additional protective measure for live working at voltages exceeding 1 kV.

CHARACTERISTIC

ELSEC gloves of insulating material have ergonomic shape and are made from high quality natural latex using fully automated production line. Each glove is individually numbered and electrically tested using computer controlled testing arrangement. Report of this test is attached to each individual glove package. The ergonomic shape and elasticity of glove makes comfortable and easy manual work even when anti perspiration inner cotton glove and/or protector leather gloves are worn over. Five classes of ELSEC glove are produced fulfilling different voltage test requirements.

There are:

- 00 (2,5 kV),
- 0 (5 kV),
- 1 (10 kV),
- 2 (20 kV)
- 3 (30 kV)



ELSEC gloves are category RC gloves according to EN 60903:2003 + AC2:2005 standard and have special properties increasing their resistance to:

- R** – acid, oil and ozone.
- C** – resistant to extremely low temperature.

Category R combines the characteristics of categories:

- **A** – resistant to acid;
- **H** – resistant to oil;
- **Z** – resistant to ozone;

Five sizes of ELSEC gloves are produced: 8, 9, 10, 11, 12.

The ELSEC gloves have been tested against thermal influence of electric arc according to the requirements described in the standards:

- 1/ PN-EN 61482-1-1: 2009
- 2/ ASTM F2675/F2575M – 13

Technical characteristic of ELSEC gloves according to EN 60903:2003 + AC2:2005

| Type | | ELSEC 2,5 | ELSEC 5 | ELSEC 10 | ELSEC 20 | ELSEC 30 |
|--|---|-----------------|-----------------|-----------------|-----------------|-------------|
| Catalogue number | | S5911000 | S5912000 | S5913000 | S5914000 | S5915000 |
| Class/Category, acc. to EN 60903:2003 + AC2:2005 | | 00/RC | 0/RC | 1/RC | 2/RC | 3/RC |
| Designation of maximum use voltage | AC [V] rms | 500 | 1 000 | 7 500 | 17 000 | 26 500 |
| | DC [V] | 750 | 1 500 | 11 250 | 25 500 | 39 750 |
| AC tests | Proof test voltage [kV] rms | 2,5 | 5 | 10 | 20 | 30 |
| | Maximum proof test current [mA] rms, (routine test) | 12 | 12 | 14 | 16 | 18 |
| | Withstand test voltage [kV] rms | 5 | 10 | 20 | 30 | 40 |
| DC tests | Proof test voltage Avg [kV] | 4 | 10 | 20 | 30 | 40 |
| | Withstand test voltage Avg [kV] | 8 | 20 | 40 | 60 | 70 |
| Length [mm] | | 360 | 360 | 360 | 360 | 360 |
| Maximum thickness of the gloves, <i>gloves of categories A, H, Z and R may require additional thickness which shall not exceed 0,6 mm.</i> | | 0,5 mm | 1,0 mm | 1,5 mm | 2,3 mm | 2,9 mm |
| Average tensile strength not be less than | | 16 MPa | 16 MPa | 16 MPa | 16 MPa | 16 MPa |
| Average elongation at break not be less than | | 600% | 600% | 600% | 600% | 600% |
| Size | | 8, 9, 10, 11,12 | 8, 9, 10, 11,12 | 8, 9, 10, 11,12 | 8, 9, 10, 11,12 | 9,10, 11,12 |
| Cuff | | Straight | Straight | Straight | Straight | Straight |

COMPOSITION

ELSEC insulating gloves are made in whole from natural latex.

REQUIREMENTS

1. ELSEC gloves have been positively certified in accordance to type test procedure of EN 60903:2003 + AC2:2005, which was required by European Directive 89/686/EU. This has been confirmed by certificate WE/S/2369/2015, which entitled the manufacturer to mark the gloves with CE mark.
2. The manufacturer declares that each individual glove introduced into the market has been positively electrically tested according to EN 60903:2003 + AC2:2005 standard.
3. ELSEC gloves meets the requirements of harmonized standard EN 420:2003 + A1:2009 „Protective gloves. General requirements and test methods.”

INSTRUCTION IN USE AND LIMITATIONS

1. The use voltage of gloves shall not exceed the maximum use voltage appropriate for given class of gloves.
2. No gloves, should be used unless they have been electrically tested within a maximum period of 6 months, whereas in the case of stored new gloves, if the date of the last electrical test is more than 12 months
3. Gloves impaired or leaky shall not be used. In case of any doubts of glove's condition it shall not be used, but shall be controlled according to periodical inspection and electrical retesting requirements. Gloves which become wet in use or by washing shall be dried thoroughly, but not in a manner that will cause the temperature of the gloves to exceed 65 °C and shall be powdered with talcum.
4. Periodic re-testing shall be performed according to requirements of EN 60903:2003 + AC2:2005. For class 00 and class 0 gloves, a check for air leaks and a visual inspection may be considered adequate to detect cracks and damages. Electrical tests can be performed alternatively. However, a routine dielectric test shall be performed for gloves of class 1, 2 and 3. Gloves being used intensively are recommended to be tested within 90 days.

STORAGE

Gloves should be stored in their original container or package at the ambient temperature between +5 °C and +35 °C in dark and dry place, not exposed to direct sunlight, artificial light or other sources of ozone. Care should be taken to ensure that gloves are not compressed or folded.

WARRANTY

The manufacturer provides two years warranty for electro insulating gloves ELSEC.