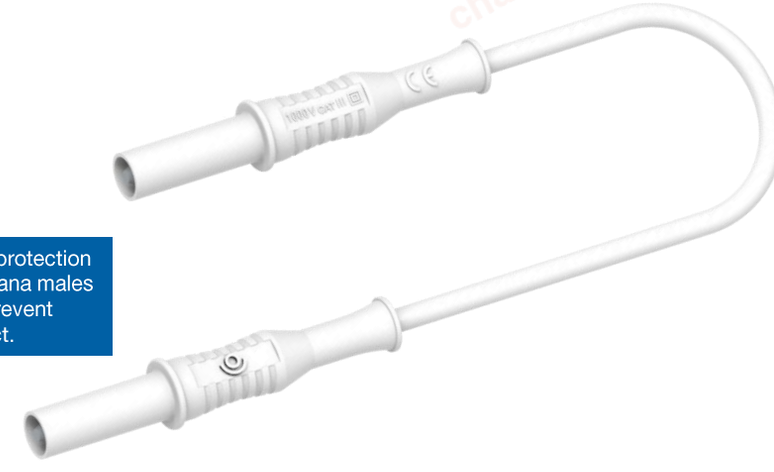
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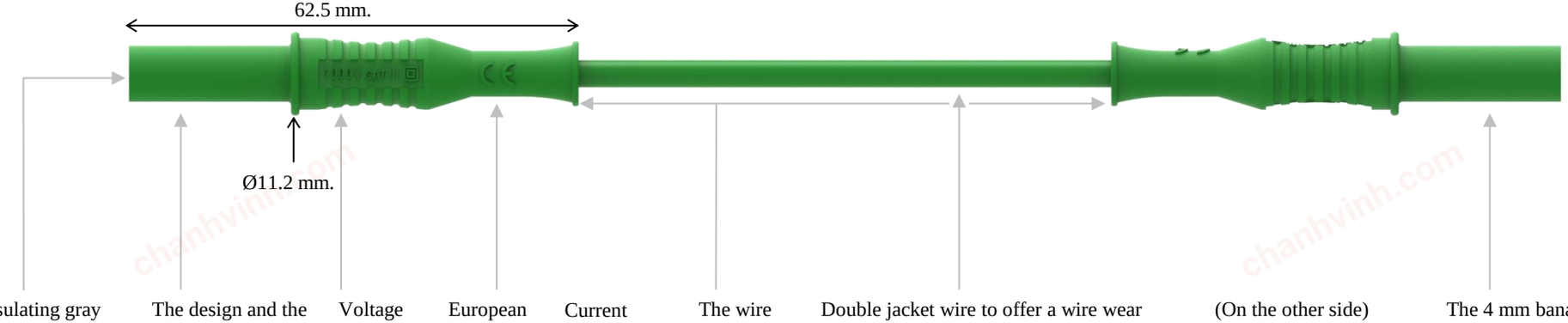
DATA SHEET (page 1 of 2).

Designation : Straight 4 mm Banana (male) Plug to Straight 4 mm Banana (male) Plug Lead.

Applications : to connect to safety 4 mm banana jacks, sockets, and binding posts. General purpose electric testing, controlling, and measuring.



IP2X touchproof protection on the 4 mm banana males connections to prevent accidental contact.



Insulating gray tips on the 4 mm banana male connections to prevent accidental contact.

The design and the material of the lantern contact springs meet the need of low resistance and reliability.

Voltage markings. (Current markings on the wire.)

European Union marking.

Current marking.

The wire attachments comply with heavy duty.

Double jacket wire to offer a wire wear indicator. PVC wire for low cost or silicone wire for more flexibility at low temperatures and better feel. Cross section areas 0.75 mm², 1.00 mm², 1.50 mm², and 2.50 mm² for currents 12 A, 20 A, 25 A, and 36 A respectively. Usual lengths 10 cm, 25 cm, 50 cm, 100 cm, 150 cm, and 200 cm (visible length of the wire, not the overall length of the lead).

(On the other side) Electro-PJP's marking. (French design and manufacturing.)

The 4 mm banana male connections comply with the 4 mm banana sockets of the worldwide most famous manufacturers and meet the requirements of interchangeability dimensions.

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DATA SHEET (page 2 of 2).

Designation : Straight 4 mm Banana (male) Plug to Straight 4 mm Banana (male) Plug Lead.

Electrical safety 1000 V CAT II 1000 V CAT III 600 V CAT IV IP2X (touchproof)	According to EN / IEC 61010-031:2015 : 1000 V CAT II / 1000 V CAT III / 600 V CAT IV, reinforced insulation, up to 36 A (at +40 °C) depending on the wire. These specifications come from the creepage distances, clearances, accessible parts, and solid insulation of the lead. And the considered specifications of the environment are : • pollution degree, 1 or 2 ; • relative humidity, 80 % maximum for temperatures up to 31 °C decreasing linearly to 50 % relative humidity at +40 °C ; • temperature range, +5 °C to +40 °C ; • indoor use ; and • altitude, 2000 m maximum. According to EN / IEC 60529 : IP2X (touchproof).
Operating temperature range	-20 °C mini., +80 °C maxi. (please see above too).
Protection against fire	According to EN / IEC 61010-031:2015. The lead is compatible with the requirements of protection against the spread of fire and resistance to heat by its basic insulation.
Conformity	• European Directive “Low Voltage Directive” 2014/35/UE. • International / European standard EN / IEC 61010-031:2015. • European Directive “RoHS” 2011/65/EU. European Directive 2015/863/EU. • European regulation n°1907 / 2006 “REACH”. • European regulation 2017 / 821 “Conflict minerals”. • International / European standard EN / IEC 60529.
Environment	• "RoHS" compliant, Pb ≤ 4 % in conductor, Pb ≤ 0.1 % in insulator, Hg ≤ 0.1 %, Cr VI ≤ 0.1 %, Cd ≤ 0.01 %, PBB ≤ 0.1 %, and PBDE ≤ 0.1 %. • REACH compliant, no substances from the candidate list of SVHC for authorisation at mass concentrations greater than 0.1 %.
Materials	Conductors : nickel-coated brass and red annealed copper. Wire jackets : PVC or silicone. Insulators and lantern contact spring, please contact us.
Colors	Black Red Yellow Green Blue White
Length	10 cm, 25 cm, 50 cm, 100 cm, 150 cm, 200 cm (usual lengths).
Origin	Designed and manufactured in France.
Reliability benchmark	Year of 1st placing on the market 1992.
Packaging	Bag of 10 units of the same color, wire, and length (default packaging).

Configure your lead and contact us :

- Wire jackets ?
- Wire cross section area and / or current ?
- Color ?
- Length ?

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GLOSSARY :

ACCESSIBLE. Able to be touched with a standard test finger or test pin.

BASIC INSULATION. Insulation of HAZARDOUS LIVE parts which provides basic protection.

CAT II. Measurement or overvoltage category II. For measurement performed on / equipment connected to the building wiring.

CAT III. Measurement or overvoltage category III. For measurement performed on / equipment connected to part of a building wiring installation.

CAT IV. Measurement or overvoltage category IV. For measurement performed on / equipment connected to the origin of the electrical supply to a building.

CLEARANCE. Shortest distance in air between two conductive parts.

CREEPAGE DISTANCE. Shortest distance along the surface of a solid insulating material between two conductive parts.

CTI. Comparative Tracking Index of the insulating material in accordance with IEC 60112.

DOUBLE INSULATION. Insulation comprising both BASIC INSULATION and SUPPLEMENTARY INSULATION.

EN / IEC 60529. European / international standard regarding the degrees of protection provided by enclosures.

EN / IEC 61010-1. European / international standard regarding the safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements.

EN / IEC 61010-031. European / international standard regarding the safety requirements for electrical equipment for measurement, control and laboratory use – Part 031: Safety requirements for hand-held probe assemblies for electrical measurement and test.

"LVD". European Directive 2014/35/EU on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits. (Usually called the Low Voltage Directive.)

MAINS. Low-voltage electricity supply system to which the equipment concerned is designed to be connected for the purpose of powering the equipment.

MAINS CIRCUIT. Circuit which is intended to be directly connected to the MAINS for the purpose of powering the equipment.

OVERVOLTAGE CATEGORY. Numeral defining a TRANSIENT OVERVOLTAGE condition.

POLLUTION. Addition of foreign matter, solid, liquid or gaseous (ionized gases), that may produce a reduction of dielectric strength or surface resistivity.

POLLUTION DEGREE. Numeral indicating the level of POLLUTION that may be present in the environment.

POLLUTION DEGREE 1. No POLLUTION or only dry, non-conductive POLLUTION occurs, which has no influence.

POLLUTION DEGREE 2. Only non-conductive POLLUTION occurs except that occasionally a temporary conductivity caused by condensation is expected.

REINFORCED INSULATION. Insulation which provides protection against electric shock not less than that provided by DOUBLE INSULATION.

"RoHS". European Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

SOLID INSULATION. Insulating materials.

SUPPLEMENTARY INSULATION. Independent insulation applied in addition to BASIC INSULATION in order to provide protection against electric shock in the event of a failure of BASIC INSULATION.

TRANSIENT OVERVOLTAGE. Short duration overvoltage of a few milliseconds or less, oscillatory or non-oscillatory, usually highly damped.

WORKING VOLTAGE. Highest r.m.s. value of the a.c. or d.c. voltage across any particular insulation which can occur when the equipment is supplied at rated voltage.