

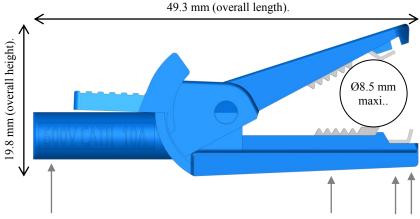
# 5002-IEC-d4

Designation: Alligator Clip w/ 4 mm Banana (female) Jack (socket).



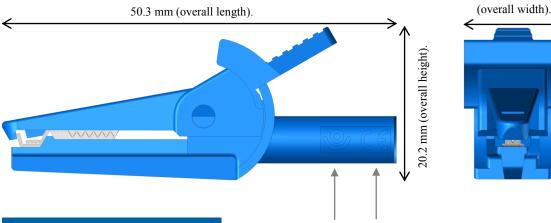
Optimum jaw design including "snake tongue" to clench well and hold a lot of various items as bar, wire, screw, PCB pin, etc.





The 4 mm banana female connection complies with the 4 mm banana plugs of most of the worldwide most famous manufacturers.

The "snake tongue" at the end of the bottom jaw can hold Ø1.0 mm pins in the hollow of the "V". So the clip can hold pins in line and it can clench transversal target items too. The jaws are very optimized to hold them at several positions: front flat area, rear teeth (and front "snake tongue").



### Small size.

The low size of the clip complies with dense environments. And despite its low size the clip connects to usual 4 mm banana plugs, opens wide, and holds well the target items.

Electro-PJP's marking. (French design and manufacturing.)

European Union marking. The clip complies with the European LVD by meeting the harmonized standard EN / IEC 61010 -031:2008.

12.9 mm



## 5002-IFC-d4

Designation: Alligator Clip w/ 4 mm Banana (female) Jack (socket).

300 V CAT III

150 V CAT IV

#### Electrical protection According to EN / IEC 61010-031:2008. 600 V CAT II / 300 V CAT III / 150 V CAT IV, reinforced insulation, 10 A (at +40 °C). 600 V CAT II

These specifications come from the creepage distances, clearances, accessible parts, and solid insulation of the clip. 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



Barrier. Keep behind this barrier to operate safely the

clip while connecting to hazardous live voltages (more than 33 V AC and 70 V DC).

Operating temperature range	-20 °C mini., +80 °C maxi. (piease see above too).
Protection against fire	According to EN / IEC 61010-031:2008. The clip is compatible with the require

INFORCED INSULATION. Insulation which provides protection against ctric shock not less than that provided by DOUBLE INSULATION.

HS". European Directive 2002/95/EC on the restriction of the use of tain hazardous substances in electrical and electronic equipment.

LID INSULATION. Insulating materials.

PPLEMENTARY INSULATION. Independent insulation applied in lition to BASIC INSULATION in order to provide protection inst electric shock in the event of a failure of BASIC INSULATION.

**GLOSSARY:** 

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

BASIC INSULATION. Insulation of hazardous live parts which provides

CAT II. Measurement or overvoltage category II. For measurement per-

CAT III. Measurement or overvoltage category III. For measurement

CAT IV. Measurement or overvoltage category IV. For measurement

CLEARANCE. Shortest distance in air between two conductive parts.

CREEPAGE DISTANCE. Shortest distance along the surface of a solid

EN / IEC 60529:2001. The 2001 version of the European / international

EN / IEC 61010-031:2008. The latest version (in February 2012) of the European / international standard regarding the safety requirements for Safety requirements for hand-held probe assemblies for electrical measure-

IP2X. Solid protection to prevent finger touch according to the European / international standard EN / IEC 60529. VD". European Directive 2006/95/EC on the harmonisation of the laws of ember States relating to electrical equipment designed for use within tain voltage limits. (Usually called the Low Voltage Directive.) C 93-440:1986. French standard regarding one pole plugs, sockets and ety assemblies diameter 4 mm and specially the interchangeability

ERVOLTAGE CATEGORY, Numeral defining a TRANSIENT OVER-

LLUTION. Addition of foreign matter, solid, liquid or gaseous (ionized ses), that may produce a reduction of dielectric strength or surface LLUTION DEGREE. Numeral indicating the level of POLLUTION that

LLUTION DEGREE 1. No POLLUTION or only dry, non-conductive

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

LLUTION DEGREE 3. Conductive POLLUTION occurs, or dry, noniductive pollution occurs which becomes conductive due to condensation

standard regarding the degrees of protection provided by enclosures.

DOUBLE INSULATION. Insulation comprising both BASIC INSULATION

performed on / equipment connected to part of a building wiring installation

performed on / equipment connected to the origin of the electrical supply to a

formed on / equipment connected to the building wiring.

insulating material between two conductive parts.

and SUPPLEMENTARY INSULATION

ment and test. Version year 2008.

nensions of plugs and sockets.

y be present in the environment.

LLUTION occurs which has no influence

LTAGE condition.

ich is expected

basic protection.

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

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**ELECTRO-PJP** ZI "LES CHARMES D'AMONT" 13 RUE DE MADRID 39500 TAVAUX **FRANCE** 

Operating temperature range	-20 °C mini., +80 °C maxi. (please see above too).
Protection against fire	According to EN / IEC $61010-031:2008$ . The clip 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" 2006/95/EC.     International / European standard EN / IEC 61010-031:2008.     European Directive "RoHS" 2002/95/EC.     European REACH regulation n°1907 / 2006.
Environment	<ul> <li>"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 %.</li> <li>REACH compliant, no substances from the candidate list of SVHC for authorisation at mass concentrations greater than 0.1 %.</li> </ul>
Materials	Conductors: nickel-coated steel, tin-coated steel, and nickel-coated brass. Insulators: please contact us.
Colors	Black Red Yellow Green Blue White G/Y
Weight	0.004 kg.
Origin	Designed and manufactured in France.
Reliability benchmark	Year of 1st placing on the market 2006.
Packaging	Bag of 10 leads (default packaging).