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IS: 5087 - 1969

# Indian Standard SPECIFICATION FOR WIRE STRIPPING PLIERS

First Reprint JANUARY 1983 (Incorporating Amendment No. 1)

UDC 621.881.4



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INDIAN STANDARDS INSTITUTION MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002

# Indian Standard SPECIFICATION FOR WIRE STRIPPING PLIERS

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(Continued on page 2)

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#### IS: 5087 - 1969

(Continued from page 1)

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2

# Indian Standard SPECIFICATION FOR WIRE STRIPPING PLIERS

#### 0. FOREWORD

- 0.1 This Indian Standard was adopted by the Indian Standards Institution on 17 April 1969, after the draft finalized by the Hand Tools Sectional Committee had been approved by the Mechanical Engineering Division Council.
- 0.2 This standard lays down the requirements of wire stripping pliers. The wire stripping pliers are employed to remove a short length of rubber, PVC, polythene, or similar other insulation from a wire without injury to the conductor. Type A pliers are not intended for cutting the conductor whereas Type B pliers are provided with cutting edges and are employed for cutting as well.
- 0.3 While preparing this standard assistance has been derived from Drawing No. IND/GS/517(a) issued by Chief Inspectorate of General Stores, Kanpur, Ministry of Defence and the information supplied by Indian Posts and Telegraphs Department, Ministry of Communications.
- 0.4 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS: 2-1960\*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

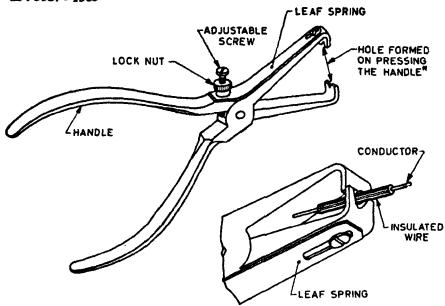
#### 1. SCOPE

1.1 This standard covers the requirements for two types of wire stripping pliers.

#### 2. NOMENCLATURE

2.1 For the purpose of this standard, the nomenclature as given in Fig. 1 shall apply.

<sup>\*</sup>Rules for rounding off numerical values (revised).



View Showing Wire Pressed Between the Jaws \*Hole is adjustable to the size required by adjustable screw

Fig. 1 Nomenclature for Wire Stripping Pliers

#### 3. REQUIREMENTS

- 3.1 The material, manufacture, workmanship and finish, sampling, preservation and packing and tests shall be as given in IS: 2615-1964\*.
- 3.2 The pliers are used for stripping the wires having diameter range of 0.20 to 2.8 mm.

#### 4. DIMENSIONS

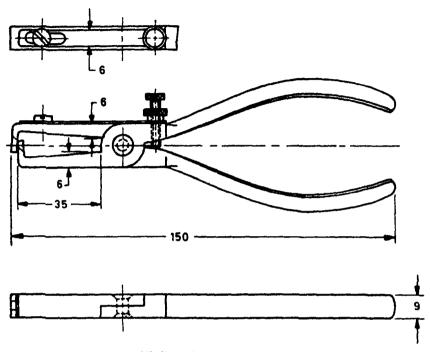
- **4.1** The main dimensions for Type  $\Lambda$  wire stripping pliers shall be as given in Fig. 2.
- 4.1.1 The dimensions for jaws for Type A pliers shall be as given in Fig. 3.
- **4.2** The main dimensions for Type B wire stripping pliers shall be as given in Fig. 4.
- 4.2.1 The main dimensions for component parts of Type B wire stripping pliers shall be as given in Fig. 5.

#### 5. HARDNESS

5.1 The hardness of the jaws in case of Type A pliers shall be within the range of 450 to 750 HV (see IS: 1501-1959†).

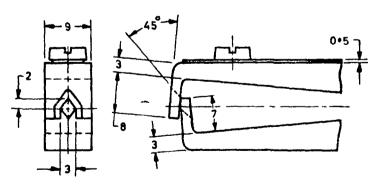
<sup>\*</sup>General requirements for pliers, pincers and nippers.

<sup>†</sup>Method for Vickers hardness test for steel.



All dimensions in millimetres.

Fig. 2 Dimensions for Wire Stripping Pliers, Type A



All dimensions in millimetres.

Fig. 3 Dimensions for Jaws for Wire Stripping Pliers, Type A

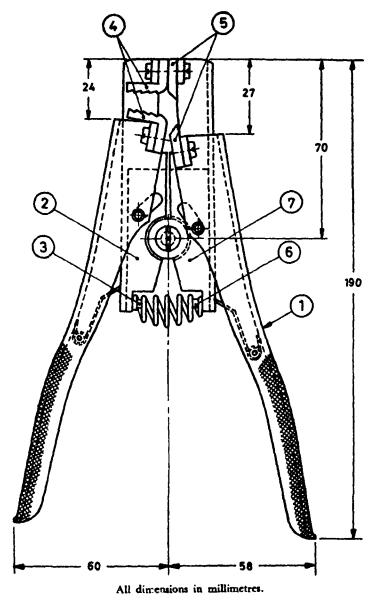
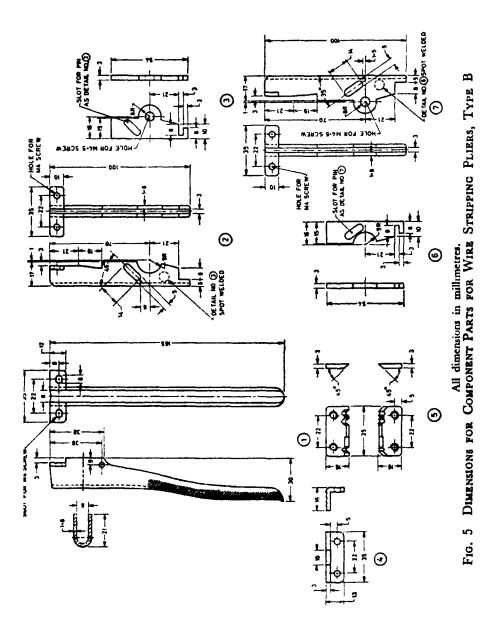


Fig. 4 Dimensions for Wire Stripping Pliers, Type B



#### IS: 5087 - 1969

- **5.2** The hardness of grippers and jaws in case of Type B pliers shall be 500 to 575 HV and 500 to 650 HV (see IS: 1501-1959\*) respectively.
- 5.3 Hardness shall be tested as given in IS: 2615-1964†.

#### 6. MARKING

- 6.1 The pliers shall be stamped with the manufacturer's name, initials/recognized trade-mark. Year of manufacture, if required by the purchaser, shall also be stamped.
  - 6.1.1 The pliers may also be marked with the ISI Certification Mark.

Note — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

#### 7. TESTS

- 7.1 In addition to tests specified in IS: 2615-1964†, the following tests shall be carried out.
- 7.2 Cutting Test The pliers shall cut soft-drawn copper wire of 4 mm diameter or bare aluminium wire without showing any sign of damage to the cutting edge. The cutting ends of the wire shall be smooth.

<sup>\*</sup>Method for Vickers hardness test for steel.

<sup>†</sup>General requirements for pliers, pincers and nippers.

### INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

#### Base Units

QUANTITY	Unit	STMBOL	
Length	metre	m	
Mass	kilogram	kg	
Time	recond	3	
Electric current	ampere	Α	
Thermodynamic temperature	kelvin	K	
Luminous intensity	candela	cd	
Amount of substance	mole	mol	
Supplementary Units			
QUANTITY	UNIT	Symbol	
Plane angle	radian	rad	
Solid angle	steradian	sr	
Derived Units			
QUANTITY	Unit	Symbol	DEFINITION
Force	newton	N	$1 N = 1 \text{ kg m/s}^2$
Energy	joule	J	1 J = 1 N.m
Power	watt	w	1 W - 1 ]/s
Flux	weber	₩b	1 Wb = 1 V.
Flux density	tesla	T	$1 T = 1 Wb/m^3$
Frequency	hertz	Hz	1  Hz = 1  c/s (s-1)
Electric conductance	siem <b>en</b> s	S	1 S = 1 A/V
Electromotive force	volt	v	1 V = 1 W/A
Pressure, stress	pascal	Pa	$1 \text{ Pa} = 1 \text{ N/m}^2$

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