# Introduction – Pliers

## **Klein Quality**

KLEIN TOOL

Klein pliers are made of the finest U.S. steel alloy. Forged, precision machined, hardened, and carefully tempered for maximum strength, Klein pliers provide exceptional performance and durability.

All pliers mating surfaces and dimensions are precision machined and hot riveted for uniformly smooth opening and closing action. Cutting knives are manufactured for long-lasting edges and are designed to perfectly align and meet according to the way each is used.

## **Using Pliers**

A professional knows all the rules about using pliers, but a review of the following points may help you recall any you may have forgotten.

**1. Never use pliers to do another tool's job.** Pliers should not be used as a hammer or pry tool or a wrench. Using pliers instead of the proper tools risks damaging the work, damaging yourself, and losing time.

2. Never push pliers beyond their capacity. Bending stiff wire with light pliers or the tip of needle-nose pliers can spring or break them. Use a stronger, blunt-nose pliers. When you need greater leverage, use pliers with greater leverage. Don't extend the length of the pliers handles. Bolts should be cut with a bolt cutter, and large cable with a cable cutter.

**3. Never expose pliers to excessive heat.** Direct flame on metal can ruin the tool. Cutting pliers are especially vulnerable to high, direct heat.

**4. Never cut hardened wire with ordinary pliers.** Pliers should not be used for cutting hardened wire unless they are specifically recommended for this use.

5. Never rock pliers from side to side when cutting wire...and never bend the wire back and forth against the cutting knives. Either practice can dull or nick the cutting

Side-cutting and long-nose pliers with side cutters have knives that meet at the hinge first and then meet at least one-half of the knife length. Diagonal-cutting pliers meet at the tip first and then meet at least one-half of the knife length.

These precise knife-closing designs increase knife life and facilitate resharpening.

Klein pliers are individually adjusted to meet performance standards far exceeding application requirements – ensuring that nothing less than outstanding quality ever carries the Klein name.

edges. Cut wire at a right angle only. If it won't cut readily, the knives may need sharpening, or you may need pliers with greater leverage.

6. Never cut any wire or metal unless your eyes are protected. Goggles or other protective devices are an absolute must. Don't take shortcuts. Operate safely...the professional way.

7. Never cut any wire or metal unless your fellow workers' eyes are also protected. The wire that doesn't get you may get someone else. Think about the "other guy" as well as yourself.

8. Never depend on plastic-dipped handles to insulate you from electricity.

Plastic-dipped and Journeyman<sup>™</sup> handles are intended for comfort and a firmer grip only. They are not intended for protection against electric shock. Never use any pliers or cutting tools on live electrical circuits. Only use insulated tools that are marked with the official international 1000-volt rating symbol if there is any chance that the tool will make contact with an energized source.

## **Pliers Catalog Number Prefixes/Suffixes**

"D" (Prefix) – Indicates the pliers have plastic-dipped handles for comfort, NOT for protection against electrical shock.

"HD" (Prefix) – Indicates the pliers have heavy-duty plastic-dipped handles to provide an extra level of user comfort, NOT for protection against electrical shock. "J" (Prefix) – Indicates the pliers have State-of-the-art dual material molded Journeyman<sup>™</sup> handles for a softer, more comfortable grip on the outer surface and a harder, more durable grip on the inner surface and handle ends, NOT for protection against electrical shock.

 $^{\rm v}{\rm C}^{\rm v}$  (Suffix) – Indicates the pliers have a coil spring in the handles for self-opening action.

## **Pliers Cutting Edges**

Knife-edge descriptions refer to the angle of the outside cutting edges of the knives when fully closed.

#### **Standard Cutting Edges**

Cuts hard wire. Found on all Klein side-cutters, long-nose, and on most diagonal-cutting pliers.

#### **Full-Flush Cutting Edges**

Close, flat cutting of soft wire only. Found on select diagonal-cutting pliers.



## **Semi-Flush Cutting Edges**

Closely cuts medium wire. Found on select diagonal-cutting pliers.







## Introduction – Pliers

## **Pliers Dimensions**

All Klein pliers are listed with necessary dimensions in both inches and millimeters. The following drawings of six basic types of pliers are keyed by letter to the dimensions given for each pliers listed. All dimensions are subject to commercial tolerances.

#### **1. Side-Cutting Pliers**

2. Diagonal-Cutting Pliers



# 3. End Cutting Pliers



H



A - Overall Length

B – Jaw Length

C – Jaw Width



5. Flat-Nose and Duck-Bill Pliers

D – Jaw Thickness

E – Knife Length

F – Point Thickness

#### 6. Curved-Nose Pliers



Pliers dimensions shown are accurate within accepted commercial tolerances, which allow slight variations that normally result from forging and grinding operations.

# JOURNEYMAN

# State-of-the-art dual material molding process

4

Innovative dual material grips are more comfortable and last longer than other handles.



Hard, black material for toughness and durability

**Contoured thumb area** for additional comfort and positive feel

Soft material on outer surface for comfort and a firm grip

US Patent: D468988

AVAILABLE ON KLEIN SIDE-CUTTING PLIERS | DIAGONAL-CUTTING PLIERS | LONG-NOSE PLIERS | SNIPS

See page 295 for additional information on warnings.



www.kleintools.com



# **Plastic-Handle Screwdrivers**

### **Pocket-Clip Screwdrivers**

#### Includes core Plastic-Handle Screwdriver features plus:

<ul> <li>Specially designed for</li> </ul>	delicate instrument work
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Cat. No.	Тір Туре	Shank Type	Shank Length	Overall Length	Weight
A130-2	1/8" (3.2 mm) Keystone	Round	2" (50.8 mm)	3-7/8" (98.4 mm)	0.80 oz (22.7 g)
A130-3	1/8" (3.2 mm) Keystone	Round	3" (76.2 mm)	4-7/8" (123.8 mm)	0.64 oz (18.1 g)
A116-2	3/32" (2.4 mm) Keystone	Round	2" (50.8 mm)	4-7/16" (112.7 mm)	0.80 oz (22.7 g)
A116-3	3/32" (2.4 mm) Keystone	Round	3" (76.2 mm)	5-7/16" (138.1 mm)	0.48 oz (13.6 g)
A131-2	1/8" (3.2 mm) Keystone	Round	2" (50.8 mm)	4-7/16" (112.7 mm)	0.80 oz (22.7 g)
P12	#0 Phillips	Round	2-1/2" (63.5 mm)	5" (127.0 mm)	0.80 oz (22.7 g)

### **Magnetic Plastic-Handle Screwdriver**

- Powerful magnet built into its shank to holds interchangeable bits and screws in place
- Comfortable handle for easier driving
- Interchangeable bits store inside handle for quick access
- Wide selection of bits for different screw types





A116-3

70035

Cat. No.	Phillips Bits	Slotted Bits	Shank Length	Handle Color	Overall Length	Weight
70035	#1, #2	3/16" (4.8 mm), 9/32" (7.1 mm)	3-3/4" (95.3 mm)	Black and Clear	3-7/16"	0.25 lb (0.11 kg)

### Slotted Plastic-Handle Screw-Holding Screwdrivers

- Positive gripping action holds, starts, and drives slotted screws in awkward, hard-to-reach places
- Split-blade screw-holding driver wedges into screw slot
- Not designed for torquing or tightening



Cat. No.	Overall Length	Shank Type	Тір Туре	Weight
K23	5-1/4" (133.4 mm)	Round	3/16" (4.8 mm) Slotted	0.80 oz (22.7 g)
K28	10-1/4" (260.4 mm)	Round	3/16" (4.8 mm) Slotted	0.10 lb (0.05 kg)
K34	7-3/4" (196.9 mm)	Round	1/4" (6.4 mm) Slotted	0.10 lb (0.05 kg)
K36	9-3/4" (247.7 mm)	Round	1/4" (6.4 mm) Slotted	0.15 lb (0.07 kg)
K38	11-3/4" (298.5 mm)	Round	1/4" (6.4 mm) Slotted	0.20 lb (0.09 kg)
K44	8-1/4" (209.6 mm)	Round	5/16" (7.9 mm) Slotted	0.25 lb (0.11 kg)
K46	10-1/4" (260.4 mm)	Round	5/16" (7.9 mm) Slotted	0.25 lb (0.11 kg)
K48	12-1/4" (311.2 mm)	Round	5/16" (7.9 mm) Slotted	0.30 lb (0.14 kg)

Precision blade for use with small precision screws. Blade thickness of 0.028" expanding to 0.045". ‡ Blade thickness of 0.043" expanding to 0.085". K21 and K23 have pocket clips.

Cat. No.	Set Contains		Weight
SK234	Slotted Hold	d Holding Screwdriver Set 3 Pc	
	Cat. No.	Description	
	K23	3/16" Screw Holding Screwdriver 3"	
	K34	Slotted Screw Holding Screwdriver 4"	
	K46	Slotted Holding Screwdriver 10-1/4" L	

See page 295 for additional information on warnings.

