

# Introduction – Pliers

## Klein Quality

Klein pliers are made of the finest U.S. steel alloy. They are 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 for faultless performance. Pliers halves are precision machined and hot riveted for uniformly smooth opening and closing action. Cutting knives are manufactured for long-lasting edges and perfect alignment.

The cutting knives on all Klein pliers are designed to meet according to the way each is used. 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.

## 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 them 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 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™ 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. Plastic-dipped handles are for comfort, NOT for protection against electrical shock.

"HD" (Prefix) – Indicates the pliers have heavy-duty plastic-dipped handles. Heavy-duty plastic-dipped handles provide an extra level of user comfort and are NOT for protection against electrical shock.

"J" (Prefix) – Indicates the pliers have Journeyman™ handles. State-of-the-art dual material molding that allows for a softer, more comfortable grip on the outer surface and a harder, more durable grip on the inner surface and handle ends.

"C" (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.

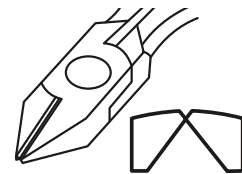
### Standard Cutting Edges

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



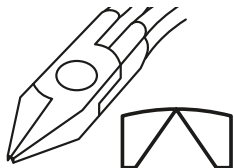
### Semi-Flush Cutting Edges

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



### Full-Flush Cutting Edges

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



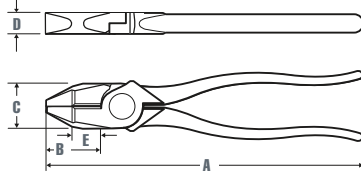
# Introduction – Pliers

## Pliers Dimensions

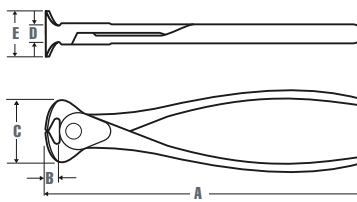
All Klein pliers are listed with necessary dimensions in both inches and millimeters. The following drawings of six basic types of pliers are keyed by letter to the dimensions given for each pliers listed. All dimensions are subject to commercial tolerances.

<b>A</b> – Overall Length	<b>D</b> – Jaw Thickness
<b>B</b> – Jaw Length	<b>E</b> – Knife Length
<b>C</b> – Jaw Width	<b>F</b> – Point Thickness

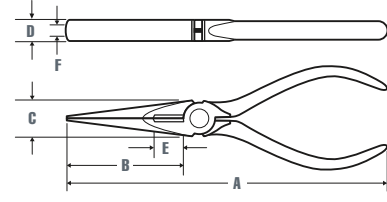
### 1. Side-Cutting Pliers



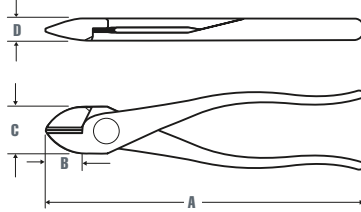
### 3. End Cutting Pliers



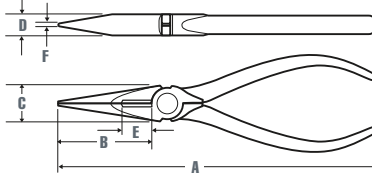
### 5. Flat-Nose and Duck-Bill Pliers



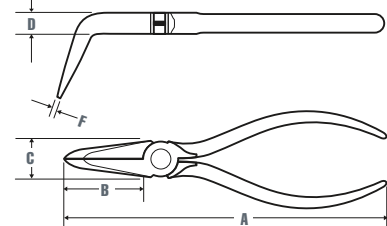
### 2. Diagonal-Cutting Pliers



### 4. Long-Nose Pliers



### 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.

## Side-Cutting Pliers

### Features:

**Custom, US-made tool steel.**

**“Handform” handles** for full gripping and cutting power.

**Precision-hardened plier head** for on-the-job toughness.

**2000 SERIES®** pliers available. Cuts ACSR, screws, nails, and most hardened wire.

†Journeyman™ pliers available. State-of-the-art, dual-material handles provide a better grip without sacrificing tool strength or durability.

**Plastic-dipped handles†** for comfort and ease of identification.

**Unique handle tempering** helps absorb the “snap” when cutting wire.

**Hot-riveted joint** ensures smooth action and no handle wobble.

**Induction hardened cutting knives** for long life.

**Sure-gripping cross-hatched knurled jaws.**



Pliers



All dimensions are in inches and (millimeters).



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See page 296 for additional information on warnings.

# Pump Pliers

## Klaw™ Pump Pliers

- Push button and quick ratchet feature allows for fast and easy adjustment to any position. (Cat. Nos. D504-10B, D504-12B).
- Compact, narrow design for easy work in small or hard to reach spaces.
- Gripping surfaces with specially hardened teeth for reduced wear and positive gripping.
- Extended grips for added comfort.



D504-10



### Quick-Adjust Pump Pliers:

**Push button** feature allows for fast and easy adjustment to any position. (Cat. Nos. D504-10B, D504-12B).

Cat. No.	Overall Length	Max. Jaw Capacity	Handle Finish	Handle Color	Weight
<b>Quick-Adjust Klaw™ Pump Pliers</b>					
D504-10B	10-1/8" (257 mm)	2-1/8" (54 mm)	plastic-dipped	yellow	0.79 lbs. (0.36 kg)
D504-12B	12-1/2" (318 mm)	2-3/4" (70 mm)	plastic-dipped	yellow	1.2 lbs. (0.54 kg)
<b>Classic Klaw™ Pump Pliers</b>					
D504-7	7-3/8" (187 mm)	1-3/8" (35 mm)	plastic-dipped	yellow	0.34 lbs. (0.15 kg)
D504-10	9-7/8" (250 mm)	2-1/8" (54 mm)	plastic-dipped	yellow	0.81 lbs. (0.37 kg)
D504-12	12" (305 mm)	2-3/4" (70 mm)	plastic-dipped	yellow	1.4 lbs. (0.64 kg)

## Pump Pliers

- Secure tongue and groove design for non-slip grip – even with heavy pressure.
- Wide range of versatile jaw positions.



D502-6

Cat. No.	Overall Length	Max. Jaw Capacity	Handle Finish	Handle Color	Weight (lbs.)
D502-6	6-1/2" (165 mm)	7/8" (22 mm)	plastic-dipped	yellow	.41
D502-10	10" (254 mm)	1-3/4" (45 mm)	plastic-dipped	yellow	.97
D502-12	12-1/4" (311 mm)	2-3/8" (60 mm)	plastic-dipped	yellow	1.37
D502-16	16-3/4" (425 mm)	4-1/4" (108 mm)	plastic-dipped	yellow	3.22
<b>Journeyman™ Series – Dual-material handles</b>					
J502-10	10-1/4" (260 mm)	1-3/4" (45 mm)	Journeyman	yellow/black	1.02

Refer to the insulated section for insulated pliers.

## Pipe-Wrench Pliers – Angled Head

- 90° angled jaws provide 20% more leverage than 32° angled jaws.
- Secure tongue and groove design for non-slip grip – even with heavy pressure.
- Seven versatile jaw positions.
- Handle stop design prevents pinched fingers.



D503-10

Cat. No.	Overall Length	Max. Jaw Capacity	Handle Finish	Handle Color	Weight (lbs.)
D503-10	10-1/4" (260 mm)	2-1/8" (54 mm)	plastic-dipped	yellow	1.14
D503-12	13-1/4" (336 mm)	2-5/8" (67 mm)	plastic-dipped	yellow	2.14

All dimensions are in inches and (millimeters).



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