

swiss made 

ergo-tek



Red Dot Design Award Winner 2014

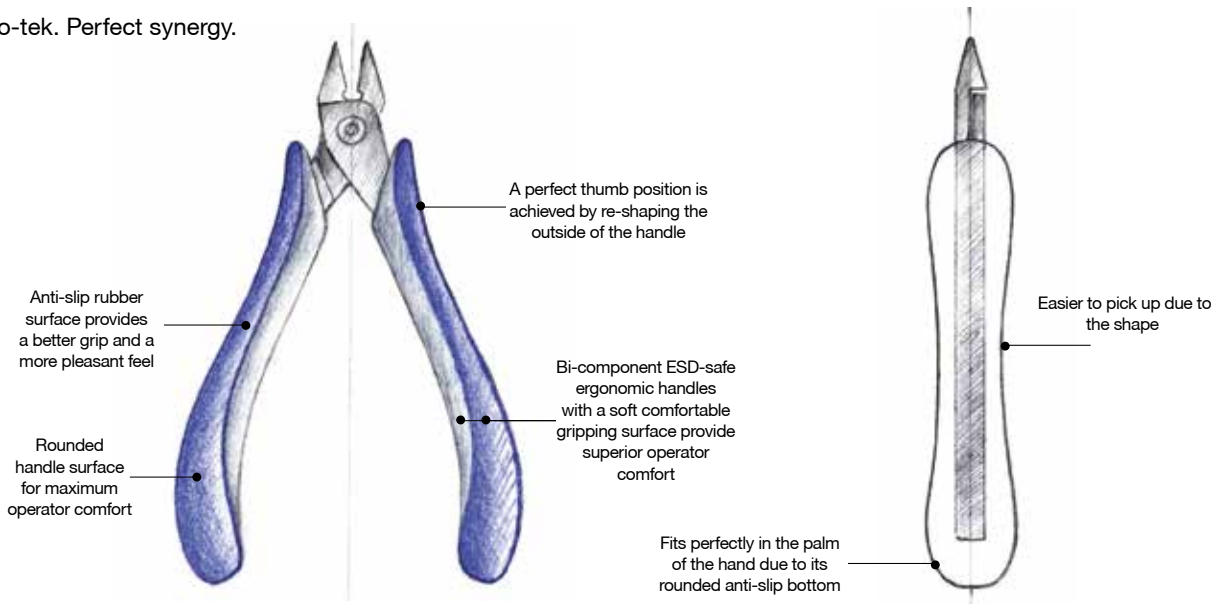


Perfect synergy of Swiss precision and Italian design

Introducing Ergo-tek from Ideal-tek. New cutters and pliers handles' set a new benchmark in ergonomics. Following the User-Centered Design approach of one of the world's most respected research universities (University of Milan), over a two year period, Ideal-tek gained a full understanding of the needs, wants and frustrations of end users.

Subsequent painstaking attention to detail at every stage of the design process resulted in the creation of the ideal handles. Precision Swiss manufacture provides quality, accuracy and longevity. The addition of Italian design brings beauty and elegance.

Ergo-tek. Perfect synergy.



[click here to download the Paper Abstract \(ERGO-TEK\)](#)

Ergo-tek SLIM



THE NEW GENERATION ERGONOMIC HANDLES.

When Ideal-tek introduced the Ergo-tek range in 2013, we set a new benchmark for the ergonomics, quality, ESD and beauty of high precision cutters and pliers.

The new lighter weight **ERGO-TEK SLIM** range is designed especially for smaller hands while providing the same ergonomic, ESD, and technical advantages you expect from Ideal-tek.

Upgraded features:

- Revised ergonomic handle to provide enhanced operator comfort and reduce repetitive motion injuries
- Lighter weight
- Better accessibility and visibility in confined areas

With Ergo-tek AND Ergo-tek slim, users are now able to custom fit high precision tools to their personal preference and application.

No more, one line fits all!

[click here to download the Paper Abstract \(ERGO-TEK SLIM\)](#)



Handles

2-Component ESD-safe user-friendly Ergonomic handles with a soft comfortable gripping surface.

2 sizes: Ergo-tek (E) and Ergo-tek slim (ES)

For every handles production lot Ideal-Tek performs the following tests:

- point to point resistance
- surface resistance
- decay time analysis



Material & Hardness

High quality ball bearing steel

- 45 Rockwell Hardness (HRC) for pliers
- 63 Rockwell Hardness for cutters

Pyrometer controlled inductive hardening

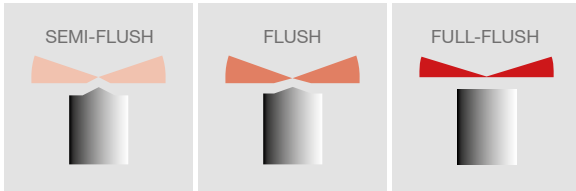
Superior no-scratch/antiglare satin finish

For every single production lot Ideal-Tek performs metallographic and hardness profile analysis.



Cutting Blades & Wire Definition

Cutting blades definition



Wire definition

- SOFT wire, copper, aluminium, tensile strength 250 MPa
- MEDIUM-HARD wire, stainless steel wire, material 1.4301, tensile strength 800 MPa
- HARD wire, stainless steel wire, material 1.4301, tensile strength 1800 MPa

100% visual inspection



More Features

- Dual leaf springs made of stainless steel
- Lap joint with screw, to achieve a high level of strength and precision
- Nuts made of hardened alloy steel to resist high cutting load
- Fine-pitched screw for perfect joint adjustment
- Perfect symmetry



Free Test & Maintenance

The application engineering of the Ideal-Tek factory will conduct test cutting and cutting evaluations at no charge upon the receipt of test wire samples.

We also provide free cutter model recommendations.

In order to preserve your cutters perfectly efficient keep a thin oil film on the tips head.



[click here to see the maintenance \(VIDEO\)](#)

Head Shape & Available models

CUTTERS

- Oval
- Tapered
- Tapered & Relieved
- Wire Lead Catchers
- Special

PLIERS

- Snipe Nose
- Flat & Round Nose



TECHNICAL DATA SHEET

Oval Cutters



reddot design award

Micro robust, very slim, oval to maximize accessibility

Small robust, slim shape, and optimum balance between durability and accessibility.

Large strong and durable, for intensive cutting operations.

Extra-Large very strong and durable, for intensive cutting operations.

Extra-Large Rounded extremely strong and durable with rounded head, for intensive cutting operations.



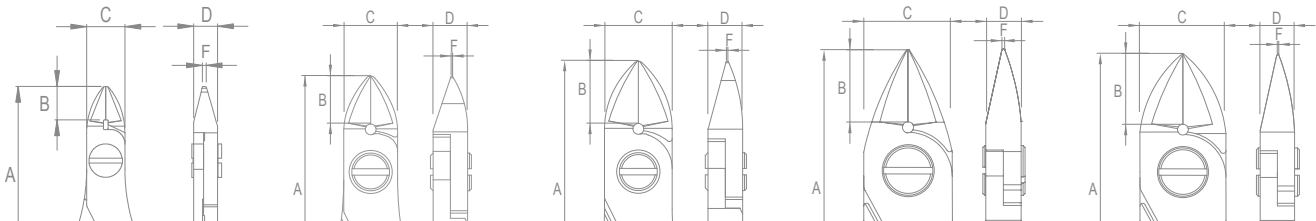
5130-31-32

5140-41-42

5150-51-52

5160-61-62

5160L-61L-62L



E = ERGO-TEK HANDLE

ES = ERGO-TEK SLIM HANDLE

CUTTING CAPACITY

| Art. No. | Type | A (mm) | B (mm) | C (mm) | D (mm) | F (mm) | Cutting Edges | CUTTING CAPACITY | | | | | |
|-----------------|-------------|------------|--------|--------|--------|--------|---------------|------------------|------------|-------------|--------------|-----------|------------|
| | | | | | | | | Soft (mm) | Soft (AWG) | Medium (mm) | Medium (AWG) | Hard (mm) | Hard (AWG) |
| E5130 ES5130 | Micro | 125 120 | 7 | 8 | 5 | 0.7 | Semi-Flush | 0.2-1.0 | 32-18 | 0.1-0.8 | 38-20 | - | - |
| E5131 ES5131 | Micro | 125 120 | 7 | 8 | 5 | 0.7 | Flush | 0.2-1.0 | 32-18 | 0.1-0.8 | 38-20 | - | - |
| E5132 ES5132 | Micro | 125 120 | 7 | 8 | 5 | 0.7 | Full-Flush | 0.1-0.8 | 38-20 | 0.1-0.5 | 38-24 | - | - |
| E5140 ES5140 | Small | 125 120 | 10 | 10 | 6.4 | 0.5 | Semi-Flush | 0.2-1.2 | 32-17 | 0.1-1.0 | 38-18 | 0.03-0.6 | 48-23 |
| E5141 ES5141 | Small | 125 120 | 10 | 10 | 6.4 | 0.5 | Flush | 0.1-1.2 | 38-17 | 0.1-1.0 | 38-18 | - | - |
| E5142 ES5142 | Small | 125 120 | 10 | 10 | 6.4 | 0.5 | Full-Flush | 0.1-1.0 | 38-18 | 0.1-0.8 | 38-20 | - | - |
| E5150 ES5150 | Large | 125 120 | 12.5 | 12.5 | 6.4 | 0.5 | Semi-Flush | 0.3-1.6 | 29-14 | 0.1-1.3 | 38-16 | 0.03-0.7 | 48-21 |
| E5151 ES5151 | Large | 125 120 | 12.5 | 12.5 | 6.4 | 0.5 | Flush | 0.2-1.6 | 32-14 | 0.1-1.2 | 38-17 | - | - |
| E5152 ES5152 | Large | 125 120 | 12.5 | 12.5 | 6.4 | 0.5 | Full-Flush | 0.2-1.2 | 32-17 | 0.1-1.0 | 38-18 | - | - |
| E5160 ES5160 | Extra Large | 130 125 | 14 | 16 | 6.4 | 0.5 | Semi-Flush | 0.4-2.0 | 26-12 | 0.3-1.6 | 29-14 | 0.05-0.9 | 44-19 |
| E5161 ES5161 | Extra Large | 130 125 | 14 | 16 | 6.4 | 0.5 | Flush | 0.3-1.6 | 29-14 | 0.3-1.5 | 29-15 | - | - |
| E5162 ES5162 | Extra Large | 130 125 | 14 | 16 | 6.4 | 0.5 | Full-Flush | 0.3-1.6 | 29-14 | 0.3-1.1 | 29-17 | - | - |

TECHNICAL DATA SHEET

Oval Cutters



red dot design award

E = ERGO-TEK HANDLE

ES = ERGO-TEK SLIM HANDLE

CUTTING CAPACITY

| Art. No. | Type | A (mm) | B (mm) | C (mm) | D (mm) | F (mm) | Cutting Edges | CUTTING CAPACITY | | | | | |
|---------------------------------|------------------------|------------|-----------|-----------|-----------|-----------|------------------|------------------|---------------|----------------|-----------------|--------------|---------------|
| | | | | | | | | Soft (mm) | Soft (AWG) | Medium (mm) | Medium (AWG) | Hard (mm) | Hard (AWG) |
| E5160L ES5160L | Extra Large Rounded | 130 125 | 14 | 16 | 6.4 | 0.5 | Semi-Flush | 0.5-3.0 | 24-09 | 0.4-2.5 | 26-10 | 0.06-1.1 | 42-17 |
| E5161L ES5161L | Extra Large Rounded | 130 125 | 14 | 16 | 6.4 | 0.5 | Flush | 0.4-2.5 | 26-10 | 0.4-2.3 | 26-11 | - | - |
| E5162L ES5162L | Extra Large Rounded | 130 125 | 14 | 16 | 6.4 | 0.5 | Full-Flush | 0.4-2.5 | 26-10 | 0.4-2.0 | 26-12 | - | - |

TECHNICAL DATA SHEET

Tapered Cutters



reddot design award

Small pointed head shape, slim and optimum balance between durability and accessibility.

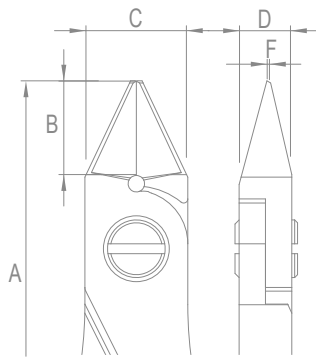
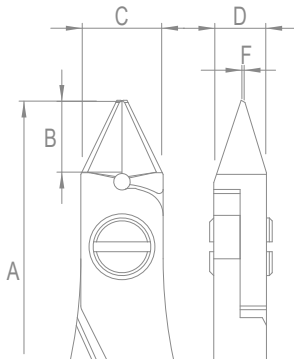
Large robust and versatile, pointed head shape to increase accessibility when limited space.



5340-41-42



5350-51-52



E = ERGO-TEK HANDLE
ES = ERGO-TEK SLIM HANDLE

CUTTING CAPACITY

| Art. No. | Type | A (mm) | B (mm) | C (mm) | D (mm) | F (mm) | Cutting Edges | CUTTING CAPACITY | | | | | |
|-----------------|-------|------------|--------|--------|--------|--------|---------------|------------------|------------|-------------|--------------|-----------|------------|
| | | | | | | | | Soft (mm) | Soft (AWG) | Medium (mm) | Medium (AWG) | Hard (mm) | Hard (AWG) |
| E5340 ES5340 | Small | 125 120 | 10 | 10 | 6.4 | 0.5 | Semi-Flush | 0.2-1.2 | 32-17 | 0.1-1.0 | 38-18 | 0.03-0.6 | 48-23 |
| E5341 ES5341 | Small | 125 120 | 10 | 10 | 6.4 | 0.5 | Flush | 0.1-1.2 | 38-17 | 0.1-1.0 | 38-18 | - | - |
| E5342 ES5342 | Small | 125 120 | 10 | 10 | 6.4 | 0.5 | Full-Flush | 0.1-1.0 | 38-18 | 0.1-0.8 | 38-20 | - | - |
| E5350 ES5350 | Large | 125 120 | 12.5 | 12.5 | 6.4 | 0.5 | Semi-Flush | 0.3-1.6 | 29-14 | 0.1-1.2 | 38-17 | 0.03-0.7 | 48-21 |
| E5351 ES5351 | Large | 125 120 | 12.5 | 12.5 | 6.4 | 0.5 | Flush | 0.2-1.6 | 32-14 | 0.1-1.1 | 38-18 | - | - |
| E5352 ES5352 | Large | 125 120 | 12.5 | 12.5 | 6.4 | 0.5 | Full-Flush | 0.2-1.2 | 32-17 | 0.1-1.0 | 38-18 | - | - |

TECHNICAL DATA SHEET

Tapered & Relieved Cutters



reddot design award

Small pointed head shape and deep relief for a very low profile to maximize accessibility when limited space.

Robust and versatile. **Large** pointed head shape to increase accessibility when limited space.

Tapered and Super Relieved Small pointed head shape and deep relief for a very low profile to maximize accessibility when limited space.



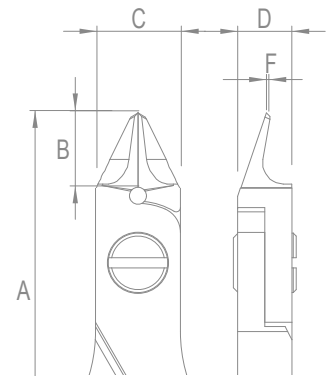
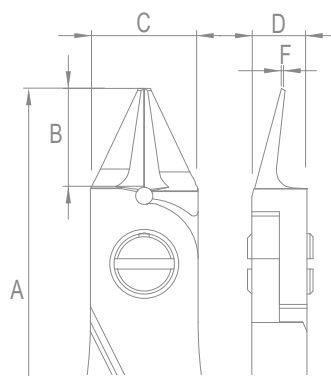
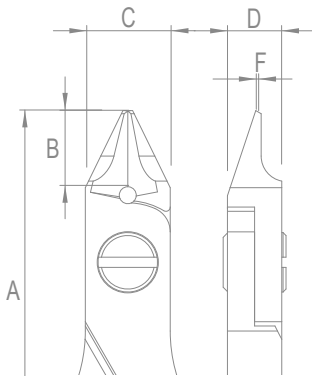
5540-41-42



5550-51-52



5548



E = ERGO-TEK HANDLE

ES = ERGO-TEK SLIM HANDLE

CUTTING CAPACITY

| Art. No. | Type | A (mm) | B (mm) | C (mm) | D (mm) | F (mm) | Cutting Edges | CUTTING CAPACITY | | | | | |
|-----------------|-------|------------|--------|--------|--------|--------|---------------|------------------|------------|-------------|--------------|-----------|------------|
| | | | | | | | | Soft (mm) | Soft (AWG) | Medium (mm) | Medium (AWG) | Hard (mm) | Hard (AWG) |
| E5540 ES5540 | Small | 125 120 | 10 | 10 | 6.4 | 0.5 | Semi-Flush | 0.2-1.2 | 32-17 | 0.1-1.0 | 38-18 | - | - |
| E5541 ES5541 | Small | 125 120 | 10 | 10 | 6.4 | 0.5 | Flush | 0.1-1.2 | 38-17 | 0.1-0.4 | 38-26 | - | - |
| E5542 ES5542 | Small | 125 120 | 10 | 10 | 6.4 | 0.5 | Full-Flush | 0.1-0.8 | 38-20 | 0.1-0.4 | 38-26 | - | - |
| E5550 ES5550 | Large | 125 120 | 12.5 | 12.5 | 6.4 | 0.5 | Semi-Flush | 0.3-1.6 | 29-14 | 0.1-1.2 | 38-17 | 0.05-0.7 | 44-21 |
| E5551 ES5551 | Large | 125 120 | 12.5 | 12.5 | 6.4 | 0.5 | Flush | 0.2-1.6 | 32-14 | 0.1-1.1 | 38-18 | - | - |
| E5552 ES5552 | Large | 125 120 | 12.5 | 12.5 | 6.4 | 0.5 | Full-Flush | 0.2-1.2 | 32-17 | 0.1-1.0 | 38-18 | - | - |
| E5548 ES5548 | Small | 125 120 | 10 | 10 | 6.4 | 0.5 | Full-Flush | 0.1-0.8 | 38-20 | 0.1-0.4 | 38-26 | - | - |

TECHNICAL DATA SHEET

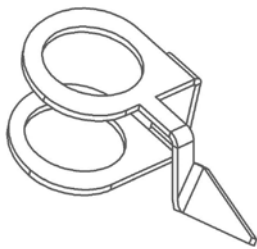
Wire Lead Catcher



reddot design award

Wire Lead Catcher, made of stainless steel AISI 304, for our high precision cutters with 10mm box or 12,5mm box.

Wire Lead Catcher fits Oval, Tapered and Tapered & Relieved cutters only.



| Art. No. | Type | Description |
|----------|-------|---|
| WLC100 | Small | 100 pcs • for cutters with box joint of 10 mm |
| WLC125 | Large | 100 pcs • for cutters with box joint of 12.5 mm |

[click here to see the plug&play system \(VIDEO\)](#)

TECHNICAL DATA SHEET

Oblique Head Cutters



reddot design award

A. - B. - C. Angulated cutters to maximize accessibility and visibility when limited space.
D. Angulated and robust.

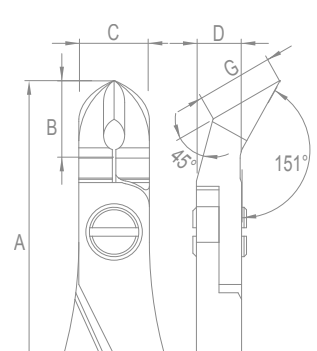
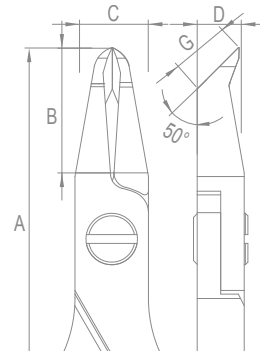
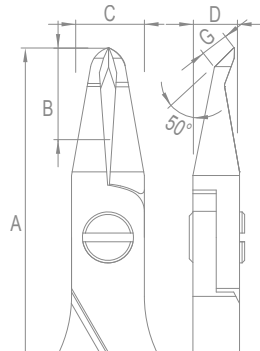
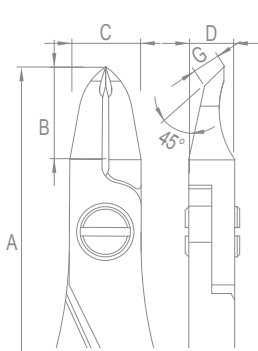


A - Oblique Head Narrow 5245

B - Oblique Head Small 5246

C - Oblique Head 5247

D - Oblique Head Large 5250



E = ERGO-TEK HANDLE

ES = ERGO-TEK SLIM HANDLE

CUTTING CAPACITY

| Art. No. | Type | A (mm) | B (mm) | C (mm) | D (mm) | F (mm) | G (mm) | Cutting Edges | CUTTING CAPACITY | | | | | |
|-------------------------------|---------------------|------------|--------|--------|--------|--------|--------|---------------|------------------|------------|-------------|--------------|-----------|------------|
| | | | | | | | | | Soft (mm) | Soft (AWG) | Medium (mm) | Medium (AWG) | Hard (mm) | Hard (AWG) |
| E5245 ES5245 | Oblique Head Narrow | 130 125 | 13 | 10 | 6.4 | - | 4 | Full-Flush | 0.1-1.2 | 38-17 | 0.1-1.0 | 38-18 | - | - |
| E5246 ES5246 | Oblique Head Small | 130 125 | 17 | 10 | 6.4 | - | 4 | Flush | 0.1-1.2 | 38-17 | 0.1-0.4 | 38-26 | - | - |
| E5247 ES5247 | Oblique Head | 130 125 | 17 | 10 | 6.4 | - | 8 | Flush | 0.1-1.2 | 38-17 | 0.1-0.6 | 38-23 | - | - |
| E5250 ES5250 | Oblique Head Large | 130 125 | 14.5 | 10 | 6.4 | - | 11 | Flush | 0.2-1.2 | 32-17 | 0.1-1.0 | 38-18 | - | - |

TECHNICAL DATA SHEET

Special Cutters



reddot design award

E. - F. Long, narrow jaws. **G.** Short, narrow jaws. Sharp edges for cutting at the very tip. Deep relief for an exceptionally low profile.

H. Tip cutters for vertical tip cutting.

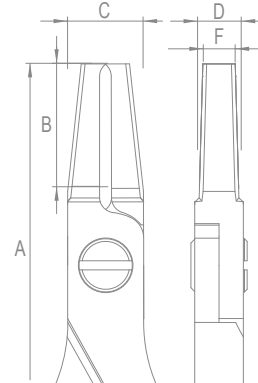
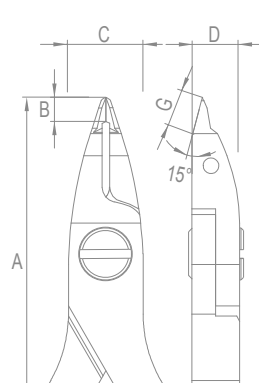
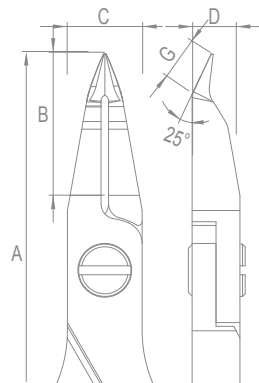
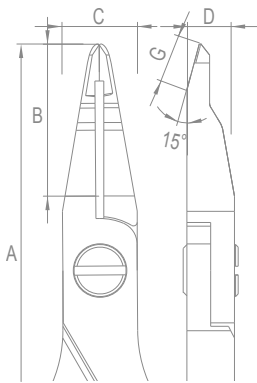


E - Micro Tip 15°
5233

F - Oblique Micro Tip 25°
5234

G - Oblique Micro Tip 15°
5235

H - Front Cutter
5291



E = ERGO-TEK HANDLE

ES = ERGO-TEK SLIM HANDLE

CUTTING CAPACITY

| Art. No. | Type | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | G (mm) | Cutting Edges | CUTTING CAPACITY | | | |
|-------------------------------|-----------------------|------------|--------|--------|--------|--------|--------|--------|---------------|------------------|-------------------|-----------------|-----------------|
| | | | | | | | | | | Soft (mm) (AWG) | Medium (mm) (AWG) | Hard (mm) (AWG) | Hard (mm) (AWG) |
| E5233 ES5233 | Micro Tip 15° | 135 130 | 20 | 10 | 6.4 | - | - | 5.2 | Full-Flush | 0.1-0.8 38-20 | 0.1-0.6 38-23 | - | - |
| E5234 ES5234 | Oblique Micro Tip 25° | 135 130 | 20 | 10 | 6.4 | 0.5 | - | 6 | Full-Flush | 0.1-0.8 38-20 | 0.1-0.6 38-23 | - | - |
| E5235 ES5235 | Oblique Micro Tip 15° | 135 130 | 2.8 | 10 | 6.4 | - | 0.5 | 5.2 | Full-Flush | 0.35 27 | 0.15 34 | - | - |
| E5291 ES5291 | Front Cutter | 135 130 | 18 | 10 | 6.4 | 4.2 | 4 | - | Flush | 0.1-1.2 38-17 | 0.1-0.8 38-20 | - | - |

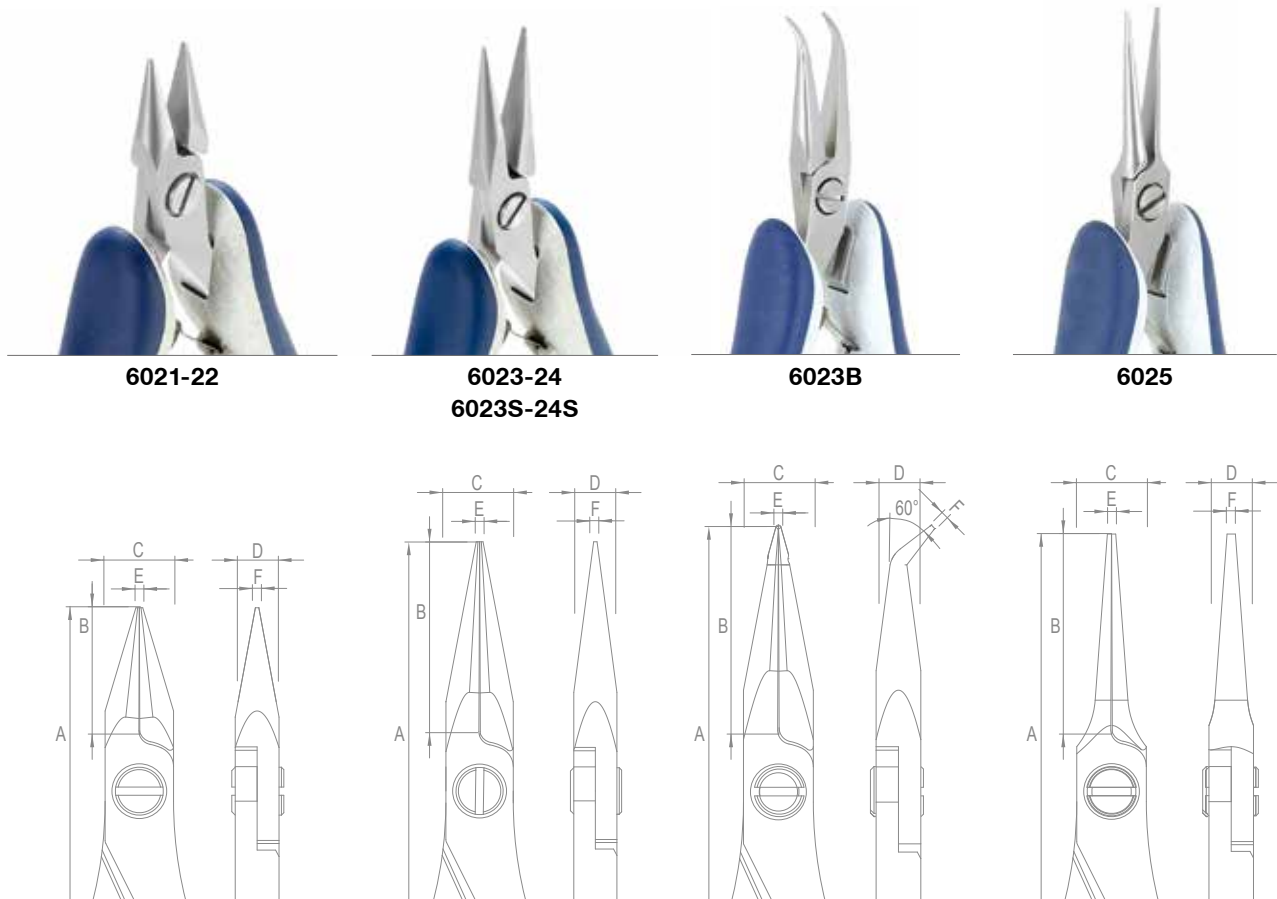
TECHNICAL DATA SHEET

Snipe Nose Pliers



reddot design award

Commonly used in electronic assembly and rework, as well as in fine jewellery



E = ERGO-TEK HANDLE
ES = ERGO-TEK SLIM HANDLE

| Art. No. | Type | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | Jaw Shape |
|-------------------|-------------------|------------|--------|--------|--------|--------|--------|-----------|
| E6021 ES6021 | Snipe Nose | 135 130 | 20 | 10 | 6.4 | 1 | 0.5 | Smooth |
| E6022 ES6022 | Snipe Nose | 135 130 | 20 | 10 | 6.4 | 1 | 0.5 | Serrated |
| E6023 ES6023 | Snipe Nose Long | 145 140 | 30 | 10 | 6.4 | 1 | 0.5 | Smooth |
| E6023S ES6023S | Snipe Nose Strong | 140 135 | 28 | 10 | 6.4 | 1.8 | 1.6 | Smooth |
| E6023B ES6023B | Bent Nose | 145 140 | 30 | 10 | 6.4 | 1 | 0.5 | Smooth |
| E6024 ES6024 | Snipe Nose Long | 145 140 | 30 | 10 | 6.4 | 1 | 0.5 | Serrated |
| E6024S ES6024S | Snipe Nose Strong | 140 135 | 28 | 10 | 6.4 | 1.8 | 1.6 | Serrated |
| E6025 ES6025 | Needle Nose | 145 140 | 30 | 10 | 6.4 | 1.3 | 1.3 | Smooth |

TECHNICAL DATA SHEET

Flat & Round Nose Pliers



reddot design award

A. - B. Flat nose pliers feature a very fine tip, smooth or serrated jaws and inner edges.

C. Round nose pliers have jaws formed by two cones. A round nose pliers is generally used both to clamp and to form loops on leads or wire.



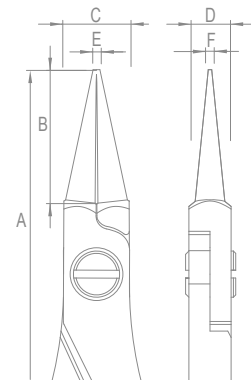
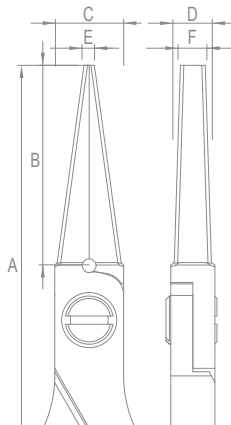
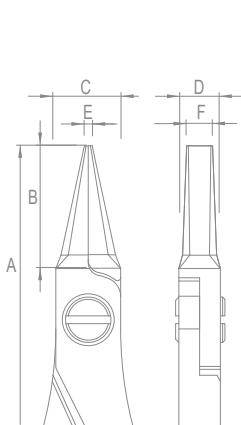
**A - Flat Nose
6011-12**



**B - Flat Nose long
6013-14**



**C - Round Nose
6041**



E = ERGO-TEK HANDLE

ES = ERGO-TEK SLIM HANDLE

| Art. No. | Type | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | Jaw Shape |
|-------------------------------|----------------|------------|--------|--------|--------|--------|--------|-----------|
| E6011 ES6011 | Flat Nose | 135 130 | 20 | 10 | 6.4 | 1.2 | 4.0 | Smooth |
| E6012 ES6012 | Flat Nose | 135 130 | 20 | 10 | 6.4 | 1.2 | 4.0 | Serrated |
| E6013 ES6013 | Flat Nose Long | 145 140 | 30 | 10 | 6.4 | 1.5 | 3.6 | Smooth |
| E6014 ES6014 | Flat Nose Long | 145 140 | 30 | 10 | 6.4 | 1.5 | 3.6 | Serrated |
| E6041 ES6041 | Round Nose | 140 135 | 24 | 10 | 6.4 | 1.0 | 0.5 | Smooth |

Contacts

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Technology at your fingertips