

swiss made 

ergo-tek



Red Dot Design Award Winner 2014



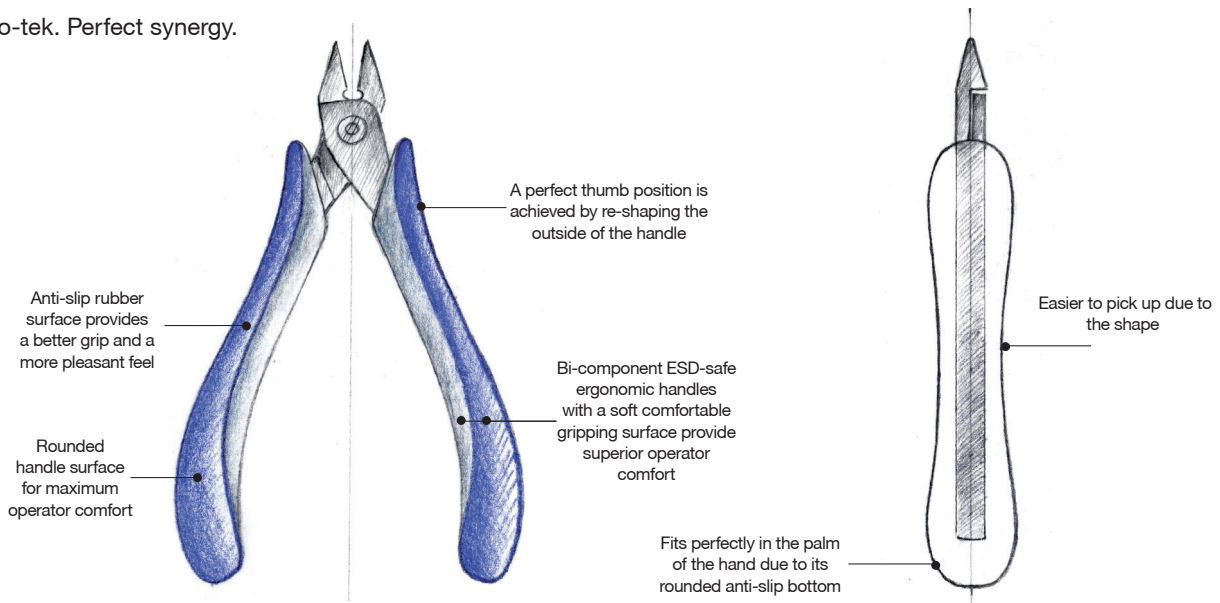
reddot design award

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 safety standards 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-safe 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

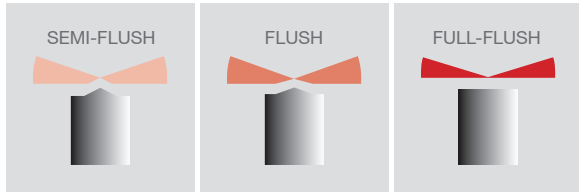
Superior no-scratch/antiglare satin finish

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



Cutting Blades & Wire Definition

Cutting blades definition



Wire definition

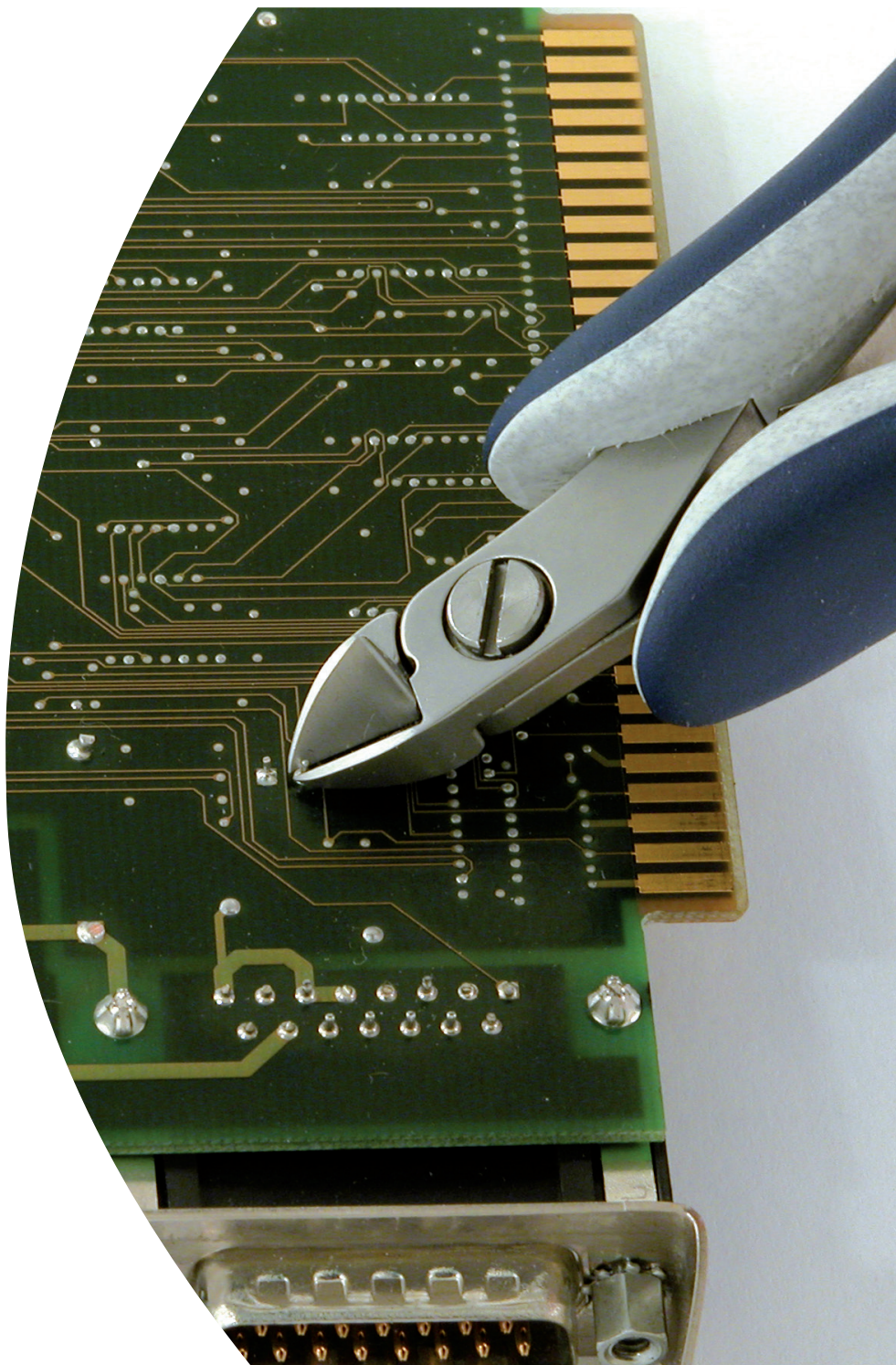
- SOFT wire, copper, aluminium, tensile strength 250 MPa
- MEDIUM-HARD wire, stainless steel wire, material 1.4301, tensile strength 800 MPa
- HARD wire, stainless steel wire, material 1.4301, tensile strength 1800 MPa

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

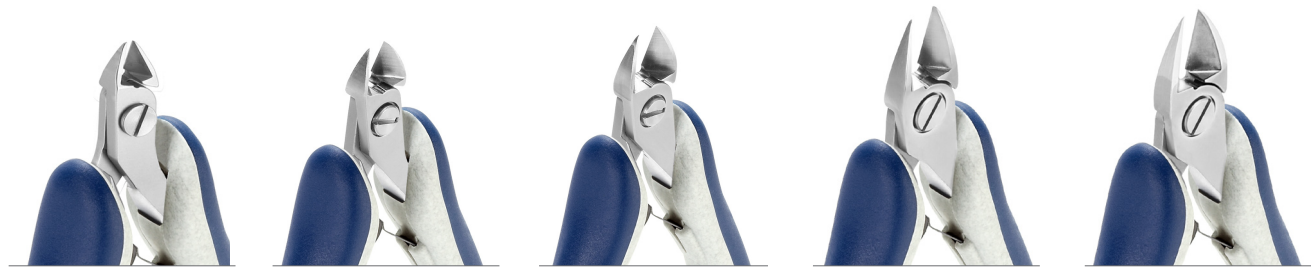
Micro robust, very slim, oval to maximize accessibility

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.



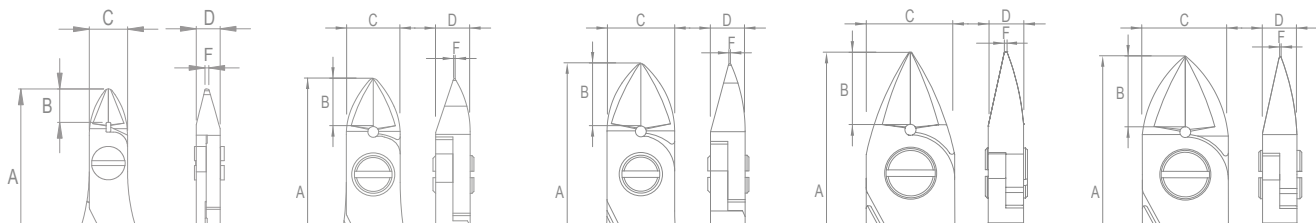
5130-31-32

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



reddot 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



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

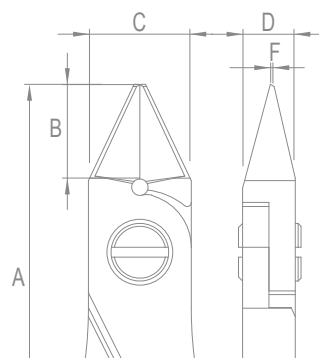
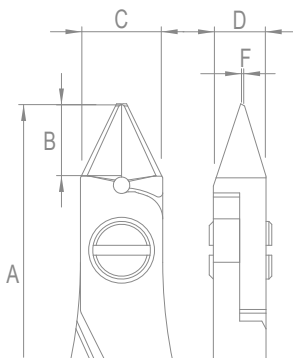
Large robust and versatile, pointed head shape to increase accessibility when limited space.



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.



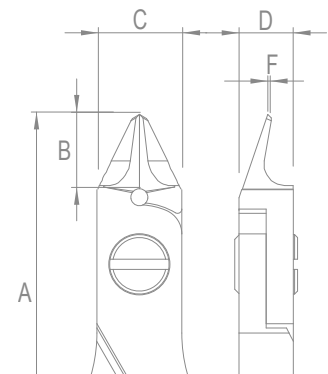
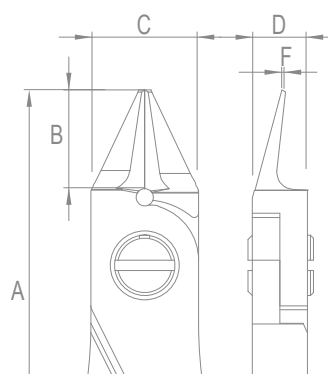
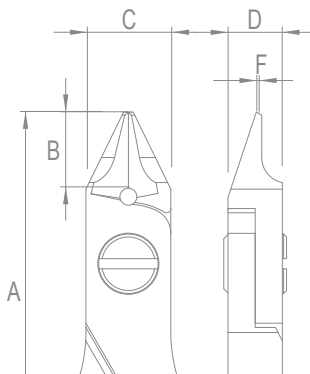
5540-41-42



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	-	-

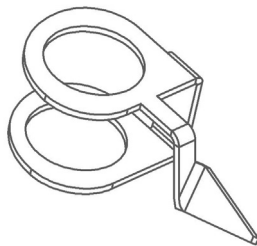
TECHNICAL DATA SHEET

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 \(VIDEO\)](#)

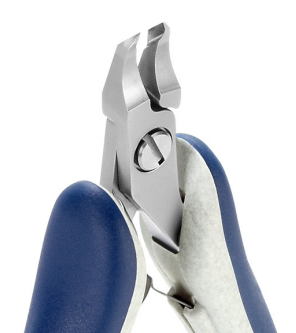
TECHNICAL DATA SHEET

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



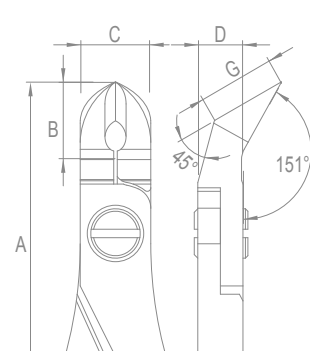
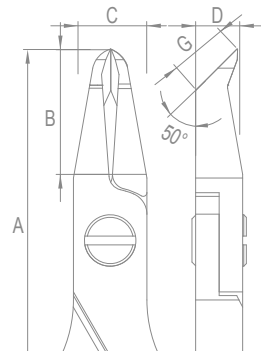
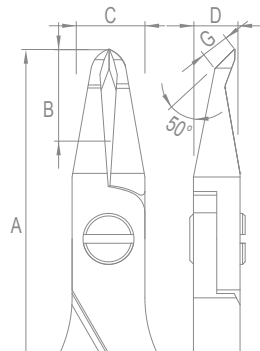
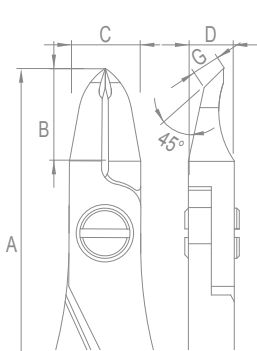
B - Oblique Head Small 5246



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**



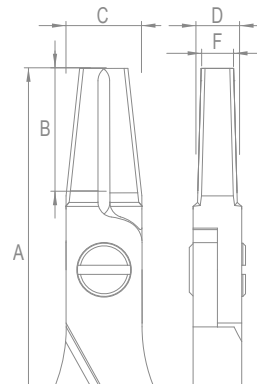
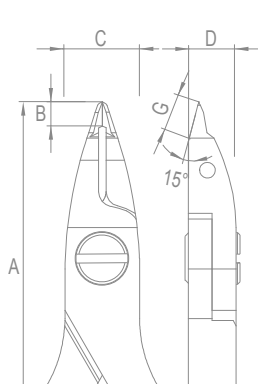
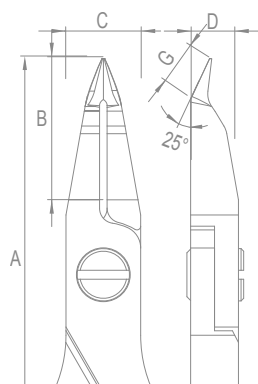
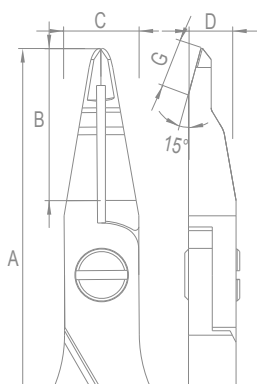
**F - Oblique Micro Tip 25°
5234**



**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	-	-

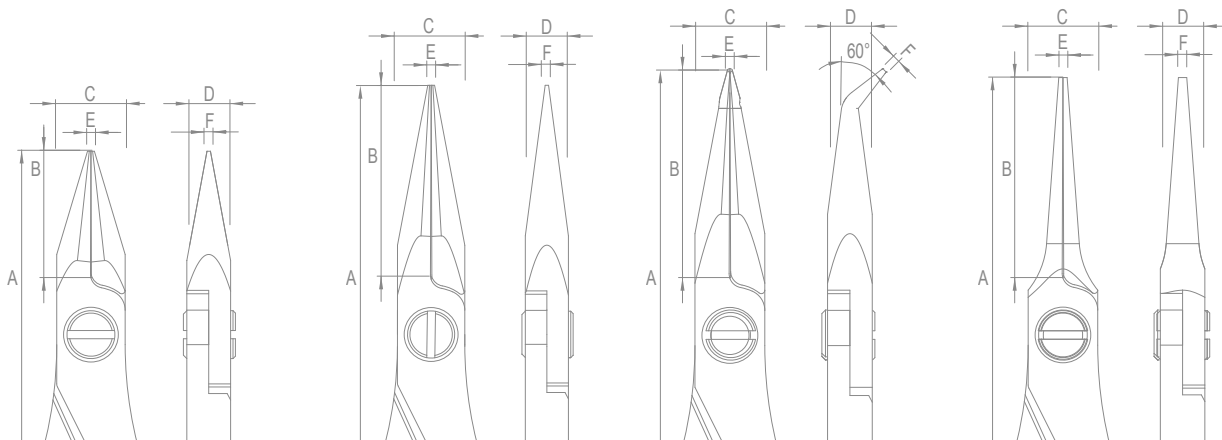
TECHNICAL DATA SHEET

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



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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.



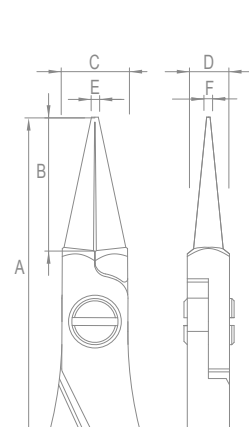
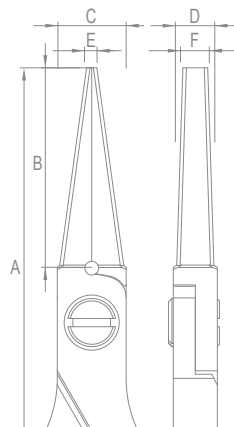
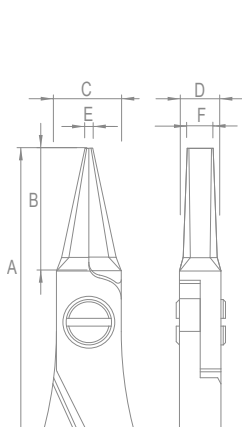
**A - Flat Nose
6011-12**



**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

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