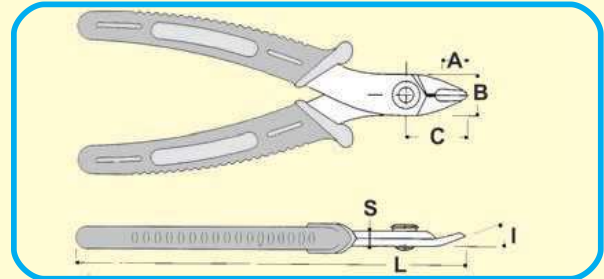


CUTTING NIPPERS

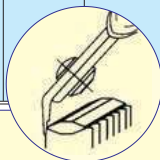
Specially developed for the electronic, these tools are made out a special carbon steel, with elastic, ergonomic PVC handles, in two versions:

ESD black (10⁶ - 10⁹ Ω)
INSULATING orange

A patented safety clip to prevent the cut lead to spring out dangerously is available.

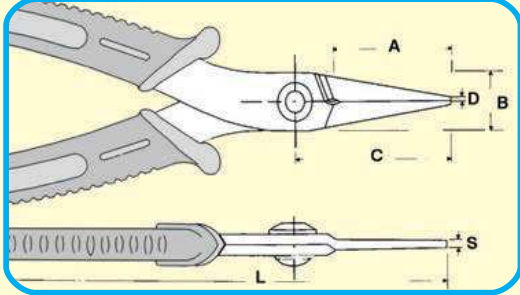


| USE | TYPE OF CUT | WT | dia.max Copper wire | | DIMENSIONS | | | | | | CODE | HANDLES | | SAFETY CLIP |
|---|--------------------|-----|---------------------|----|------------|------|----|---|-----|-----|--|------------------|-----------|-------------|
| | | | gr. | mm | AWG | A | B | C | S | L | | I | ESD black | |
| normal For lead diameter to 1mm | Clean cut | 60 | 1,02 | 18 | 8 | 13,5 | 20 | 5 | 138 | 21° | TRE 03 NB TRE 03 AB TRE 03 NBD TRE 03 ABD | • • • • | • | • |
| normal For lead diameter to 1,3mm | Clean cut | 65 | 1,30 | 16 | 8 | 13,5 | 20 | 5 | 128 | 21° | TR 30 TR 30 A TR 30 D TR 30 AD | • • • • | • | • |
| normal with 45° bending nose for lead diameter to 1,3mm | Clean cut | 65 | 1,30 | 16 | 8 | 13,5 | 20 | 5 | 128 | 45° | TR 2550 TR 2550 D | • | • | |
| normal for lead diameter to 2mm | Clean cut | 75 | 2,05 | 12 | 8 | 13,5 | 20 | 6 | 128 | 21° | TR 58 R TR 58 RA TR 58 RD TR 58 AD | • • • • | • | • |
| heavy for lead diameter to 2,5mm | Blunt cut | 100 | 2,59 | 10 | 12 | 16,5 | 25 | 6 | 148 | 21° | TRR 58 TRR 58 A TRR 58 D TRR 58 AD | • • • • | • | • |
| micro for lead diameter to 0,8mm | Clean cut | 45 | 0,81 | 20 | 8 | 9,5 | 18 | 4 | 118 | 21° | TR 20 M TR 20 MA TR 20 MD TR 20 MAD | • • • • | • | • |
| micro for lead diameter to 1mm | Clean cut | 60 | 1,02 | 18 | 8 | 10 | 18 | 5 | 128 | 21° | TR 25 P TR 25 PA TR 25 PD TR 25 PAD | • • • • | • | • |
| micro with 48° bending nose for lead diameter to 0,6mm | Clean cut | 45 | 0,64 | 22 | 8 | 9,5 | 18 | 4 | 118 | 48° | TR 2050 M TR 2050 MD | • | • | |
| micro reversed cut with 48° bending nose specially developed for IC leads | Clean back cut | 45 | 0,64 | 22 | 8 | 9,5 | 18 | 4 | 118 | 48° | TR 20 TM TR 20 TMD | • | • | |

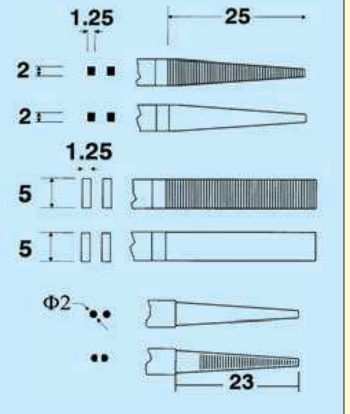


PLIERS

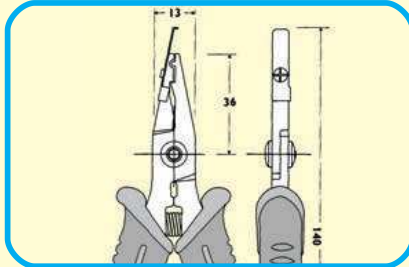
Professional pliers developed for the electronics industry.
Short, long, rounded pliers, with smooth or serrated nose.
Extension D is for the Black Dissipative PVC handles ($10^6-10^9\Omega$).



| | A | B | C | D | S | L | Peso gr. |
|-------------------------|----|----|----|-----|---|-----|----------|
| PN 5005 PN 5005 D | 25 | 13 | 36 | 1,3 | 2 | 140 | 97 |
| PN 5006 PN 5006 D | 25 | 13 | 36 | 1,3 | 2 | 140 | 97 |
| PN 5007 PN 5007 D | 25 | 13 | 39 | 1,3 | 5 | 140 | 97 |
| PN 5008 PN 5008 D | 25 | 13 | 39 | 1,3 | 5 | 140 | 97 |
| PN 5025 PN 5025 D | 23 | 13 | 32 | 2 | 2 | 138 | 95 |
| PN 5025 Z PN 5025 ZD | 23 | 13 | 32 | 2 | 2 | 138 | 95 |



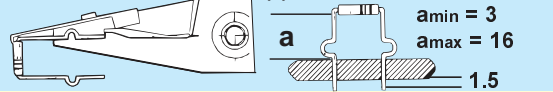
PREFORMING WITH CURL



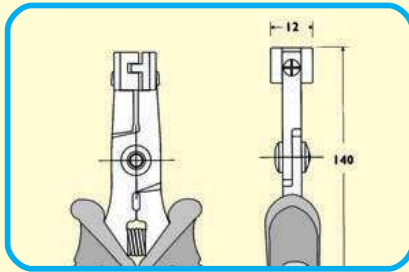
Professional tool specially designed to cut and preform components in a single operation.
Variable length by means of an adjustable stop.

PNR5000D black dissipative ESD handles ($10^6-10^9\Omega$)

Max. diam.: copper lead 1mm/18AWG

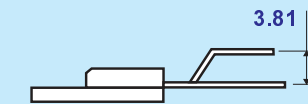


PREFORMING TO220

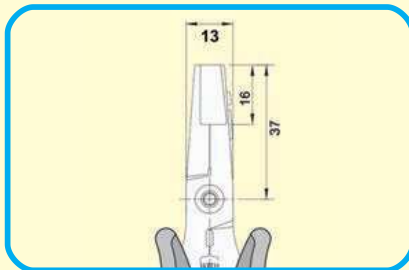


Professional tool specially designed to preform with central lead out of 3.81mm.

PN5050/17D black dissipative ESD handles ($10^6-10^9\Omega$)

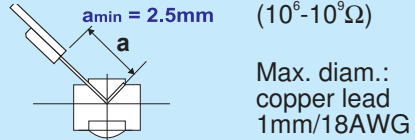


PREFORMING AT 90°



Professional tool specially designed to preform components at 90°.

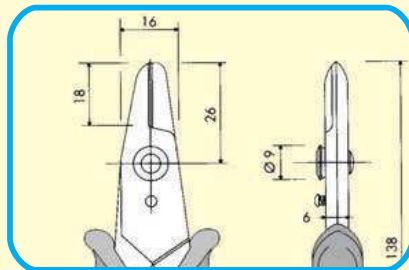
PN5040/7D black dissipative ESD handles ($10^6-10^9\Omega$)



Max. diam.: copper lead 1mm/18AWG



SHEARS



An easy-handly shear, designed for the electronic.

Copper wire: max.diameter 1.63mm(14AWG)

CS 30 PVC handles
CS 30 D black dissipative ESD handles ($10^6-10^9\Omega$)

PRECISION SCREWDRIVERS

Free cap rotation



Chrome-Molybdenum-Vanadium alloy, with a black tip

| PVC | Dissipative | Dimensions |
|-----------|-------------|--------------|
| PG1-0 | PG1-0-D | 1,2x60 |
| PG1-1 | PG1-1-D | 1,5x60 |
| PG1-2 | PG1-2-D | 1,8x60 |
| PG1-3 | PG1-3-D | 2,5x75 |
| PG1-4 | PG1-4-D | 3,0x100 |
| PG1-5 | PG1-5-D | 3,0x150 |
| PG2-0 | PG2-0-D | PH000 2,5x60 |
| PG2-1 | PG2-1-D | PH00 2,5x60 |
| PG2-1/75 | PG2-1/75-D | PH00 2,5x75 |
| PG2-2 | PG2-2-D | PH0 3,0x60 |
| PG2-2/75 | PG2-2/75-D | PH0 3,0x75 |
| PG2-2/100 | PG2-2/100-D | PH0 3,0x100 |
| PG2-2/150 | PG2-2/150-D | PH0 3,0x150 |

TORX



TAMPER RESISTANT



| | | |
|--------|----------|----------|
| PG4-0X | PG4-0X-D | Tx5x50 |
| PG4-0 | PG4-0-D | Tx6x50 |
| PG4-1 | PG4-1-D | Tx7x50 |
| PG4-2 | PG4-2-D | Tx8x60 |
| PG4-3 | PG4-3-D | Tx9x60 |
| PG4-4 | PG4-4-D | Tx10x60 |
| PG4-5 | PG4-5-D | Tx15x60 |
| PG5-0X | PG5-0X-D | TRx5x50 |
| PG5-0 | PG5-0-D | TRx6x50 |
| PG5-1 | PG5-1-D | TRx7x50 |
| PG5-2 | PG5-2-D | TRx8x60 |
| PG5-3 | PG5-3-D | TRx9x60 |
| PG5-4 | PG5-4-D | TRx10x60 |
| PG5-5 | PG5-5-D | TRx15x60 |

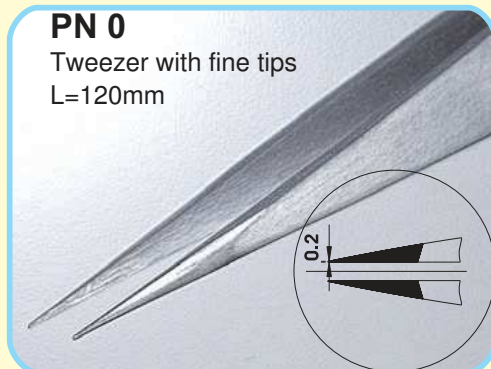
TWEEZER

Precision tweezers made out of high quality steels, meet with the standards of the electronic industry.

Further models upon request.

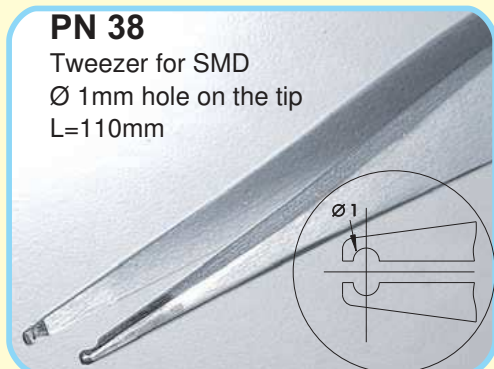
PN 0

Tweezer with fine tips
L=120mm



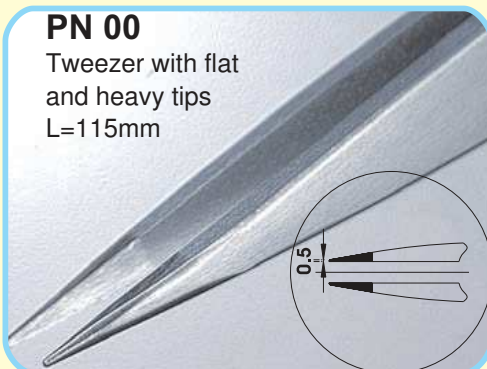
PN 38

Tweezer for SMD
Ø 1mm hole on the tip
L=110mm



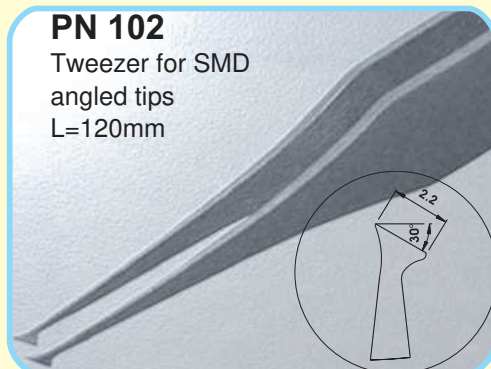
PN 00

Tweezer with flat and heavy tips
L=115mm



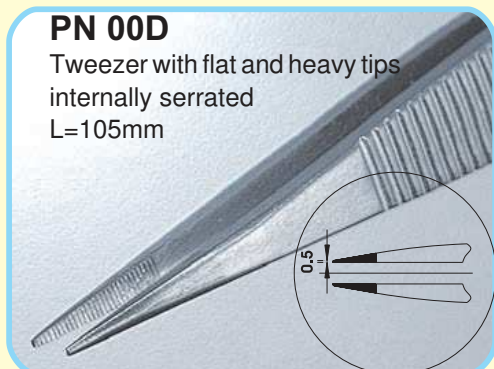
PN 102

Tweezer for SMD
angled tips
L=120mm



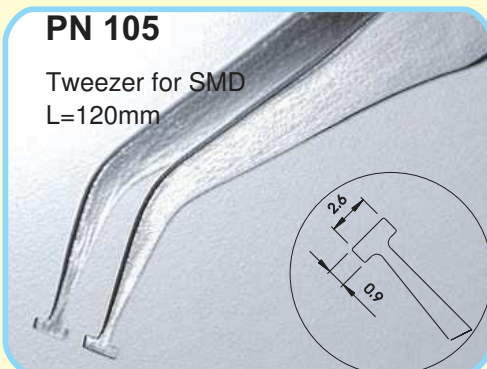
PN 00D

Tweezer with flat and heavy tips
internally serrated
L=105mm



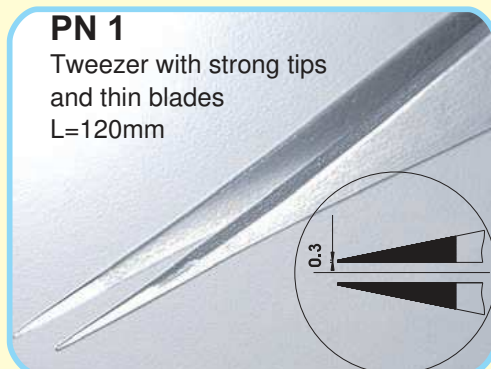
PN 105

Tweezer for SMD
L=120mm



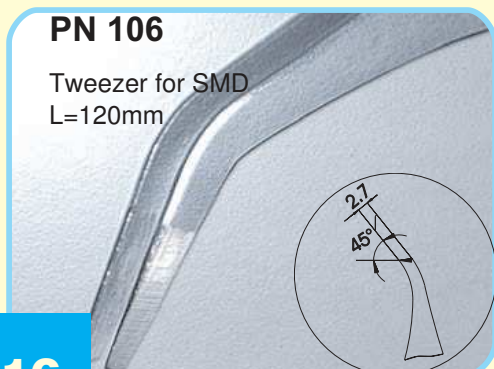
PN 1

Tweezer with strong tips
and thin blades
L=120mm



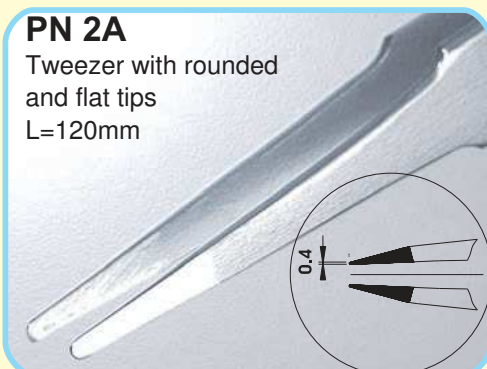
PN 106

Tweezer for SMD
L=120mm



PN 2A

Tweezer with rounded
and flat tips
L=120mm



PN 109

Tweezer for SMD
L=120mm

