

# Tweezers

## Precision tweezers: Pointed tips straight




- For applications in microelectronics, jewelry-making, watchmaking, medicine and laboratory technology
- Suitable for delicate standard applications and precision work on small components or wires
- For all models with the suffix SA or SASL in the order number: Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant
- For all models with the suffix S in the order number: Stainless steel, robust tips, non-rusting, non-reflecting surface




 **80 mm/3.150 Inch**



Model		Description
<b>M5S</b>	6 g 0.21 oz.	Micro-tweezers, very pointed tips, e.g. for precision work under a microscope.

 **108 mm/4.252 Inch**




Model		Description
<b>ACSA</b>	16 g 0.56 oz.	Precision tweezers with serrated finger grips for secure handling. For precise bending and holding of components or wires.
<b>20AS</b>	12 g 0.42 oz.	Precision tweezers with serrated finger grips and inside-serrated tips for secure handling. Guide pin to avoid overlapping of tips. For precise bending and holding of components or wires.



## Precision tweezers: Pointed tips straight


 **110 mm/4.331 Inch**



Model		Description
<b>3CS</b>	11 g 0.39 oz.	Precision tweezers with long tips for precision work on printed-circuit boards.
<b>3CSA</b>	11 g 0.39 oz.	Precision tweezers, standard model for delicate work.
<b>3CSASL</b>	11 g 0.39 oz.	Same as 3CSA, but economy model.
<b>3CTA</b>	8 g 0.28 oz.	Model same as 3CSA, but made from titanium: non-magnetic, very heat-resistant and very light.
<b>53CSA</b>	11 g 0.39 oz.	Precision tweezers with anti-crush feature. Prevents damage to sensitive components. Tweezers relieved at front for secure handling.
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 **120 mm/4.724 Inch**




Model		Description
<b>3SA</b>	14 g 0.49 oz.	Precision tweezers with pointed tips for work in microelectronics.
<b>3SASL</b>	14 g 0.49 oz.	Same as 3SA, but economy model.
<b>1SA</b>	14 g 0.49 oz.	Precision tweezers with pointed tips for standard applications..
<b>1SASL</b>	14 g 0.49 oz.	Same as 1SA, but economy model.
<b>OOSA</b>	20 g 0.71 oz.	Precision tweezers with pointed tips. Very robust. Suitable for standard applications, e.g. for assembly in electronics.

# Tweezers

## Precision tweezers: Pointed tips straight


 120 mm/4.724 Inch



Model		Description
<b>OOSASL*</b>	20 g 0.71 oz.	Same as OOSA, but economy model.
<b>OOCSA</b>	18 g 0.64 oz.	Model same as OOSA, but with shorter tips.
<b>OOBSA</b>	20 g 0.71 oz.	Model same as OOSA, but with serrated finger grips for secure handling.
<b>OODSA</b>	20 g 0.71 oz.	Model same as OOSA, but with serrated finger grips and inside-serrated tips for secure handling.
<b>64SA</b>	17 g 0.60 oz.	Precision tweezers with pointed tips and serrated finger grips for secure handling.
<b>11N</b>	17 g 0.60 oz.	Precision tweezers with medium-pointed tips for use on soft components. Nickel-silver, non-magnetic.
<b>AAZ*</b>	16 g 0.56 oz.	Precision tweezers with medium-pointed tips, nickel-plated. Suitable for electronic assembly tasks.

 125 mm/4.921 Inch




Model		Description
<b>AAS</b>	16 g 0.56 oz.	Precision tweezers with fine but robust tips.
<b>AASA</b>	16 g 0.56 oz.	Precision tweezers with fine but robust tips for standard applications.
<b>AASASL*</b>	16 g 0.56 oz.	Same as AASA, but economy model.

\*Not available in North America

## Precision tweezers: Pointed tips straight


 125 mm/4.921 Inch



Model		Description
<b>AM</b>	17 g 0.60 oz.	Precision tweezers made from brass. The soft metal protects sensitive components against damage. No sparks.

 130 mm/5.118 Inch




Model		Description
<b>249SA</b>	20 g 0.71 oz.	Precision tweezers with pointed synthetic tips (PPS) and serrated finger grips for secure handling. Volume resistance 16 Ω/cm. Heat-resistant up to 250°C (480°F). Resistant to acids and molten soldering tin. Water-repellent.



<b>249CER*</b>	24 g 0.84 oz.	Same as 249SA, but with ceramic tips. Heat-resistant up to 900°C (1500°F).
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 140 mm/5.512 Inch




Model		Description
<b>RRS</b>	30 g 1.05 oz.	Precision tweezers with strong tips for heavy-duty applications.



<b>SSSA</b>	11 g 0.39 oz.	Precision tweezers with long, narrow grips and low tension, responds to minimal pressure. The long grips allow precision work close to heat sources.
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 150 mm/5.906 Inch



Model		Description
<b>29SA</b>	26 g 0.92 oz.	Reverse-action tweezers with wide, rounded tips. For holding parts by reverse clamping action. Insulated handles, e.g. for protecting against heat.

 160 mm/6.299 Inch

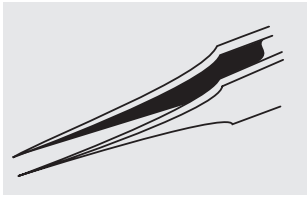


Model		Description
<b>21SA</b>	23 g 0.81 oz.	Precision tweezers with medium-pointed tips and serrated finger grips and inside-serrated tips for secure handling. Very robust. The long grips allow precision work close to heat sources.

\*Not available in North America

# Tweezers

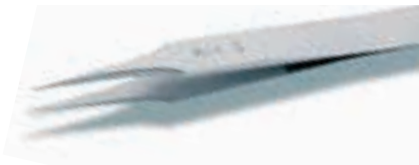
## Precision tweezers: Pointed tips straight relieved




- For precision work e.g. under a microscope
- Relieved shape facilitates excellent access to the most confined spaces
- For all models with the suffix SA or SASL in the order number: Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant
- For all models with the suffix S in the order number: Stainless steel, robust tips, non-rusting, non-reflecting surface




 **90 mm/3.543 Inch**



Model		Description
<b>M4AS*</b>	9 g 0.32 oz.	Micro-tweezers, very pointed tips, e.g. for working under a microscope.

 **110 mm/4.331 Inch**




Model		Description
<b>4SA</b>	13 g 0.46 oz.	Precision tweezers with very pointed tips.
<b>4SASL</b>	13 g 0.46 oz.	Same as 4SA, but economy model.

\*Not available in North America

## Precision tweezers: Pointed tips straight relieved


 115 mm/4.528 Inch



Model		Description
<b>5MBS*</b>	12 g 0.42 oz.	Precision tweezers with extremely pointed tips (~ 0.03 x 0.07 mm/.002 Inch) for use in dissection procedures and working under a microscope. For use on soft materials only.
<b>5FSA*</b>	12 g 0.42 oz.	Precision tweezers with extremely pointed tips (~ 0.05 x 0.1 mm/.003 Inch) for use in dissection procedures and working under a microscope. For use on soft materials only.
<b>5SA</b>	12 g 0.42 oz.	Precision tweezers with very pointed tips, suitable for very fine wires.
<b>5SASL</b>	12 g 0.42 oz.	Same as 5SA, but economy model.
<b>2SA</b>	16 g 0.56 oz.	Precision tweezers with medium-pointed tips.
<b>2SASL</b>	16 g 0.56 oz.	Same as 2SA, but economy model.

 120 mm/4.724 Inch

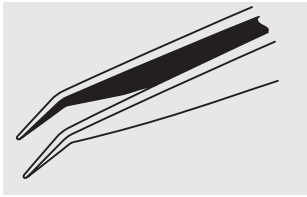


Model		Description
<b>258SA</b>	15 g 0.53 oz.	Precision tweezers with pointed synthetic tips (PPS) and serrated finger grips for secure handling. Volume resistance 16 Ω/cm. Heat-resistant up to 250°C (480°F). Resistant to acids and molten soldering tin. Water-repellent.

\*Not available in North America

# Tweezers

## Precision tweezers: Pointed tips bent




- For applications in biology, medicine, laboratory technology and microelectronics
- Bent shape facilitates access to confined spaces
- For all models with the suffix SA or SASL in the order number: Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant
- For all models with the suffix S in the order number: Stainless steel, robust tips, non-rusting, non-reflecting surface




 **110 mm/4.331 Inch**



Model		Description
<b>3CBS</b>	15 g 0.53 oz.	Precision tweezers, curved 40°, with pointed tips, for precision work such as assembly on printed-circuit boards.

 **115 mm/4.528 Inch**




Model		Description
<b>5CSA</b>	12 g 0.42 oz.	Precision tweezers, curved 30°, relieved. Pointed tips. Relieved shape at front of handle provides excellent visibility of the area to be worked on.
<b>5BSA</b>	12 g 0.42 oz.	Precision tweezers, curved 30°, relieved. Pointed tips. Relieved shape at front of handle provides excellent visibility of the area to be worked on.
<b>51SA</b>	12 g 0.42 oz.	Precision tweezers, curved 30°, relieved. Very pointed tips. Relieved shape at front of handle provides excellent visibility of the area to be worked on.

## Precision tweezers: Pointed tips bent


 115 mm/4.528 Inch



Model		Description
<b>51SASL</b>	12 g 0.42 oz.	Same as 51SA, but economy model.
<b>5ASA</b>	12 g 0.42 oz.	Precision tweezers, lightly curved 15°, relieved. Very pointed tips, e.g. for installing small components.
<b>5ASASL</b>	12 g 0.42 oz.	Same as 5ASA, but economy model.


 120 mm/4.724 Inch



Model		Description
<b>7SA</b>	15 g 0.53 oz.	Precision tweezers, curved, relieved, with pointed tips. Excellent handling in confined spaces.
<b>7SASL</b>	15 g 0.53 oz.	Same as 7SA, but economy model.


 140 mm/5.512 Inch



Model		Description
<b>65ASA</b>	11 g 0.39 oz.	Precision tweezers, curved 50°. Very pointed tips. For working with extra-small chips and other miniature components.

 150 mm/5.906 Inch

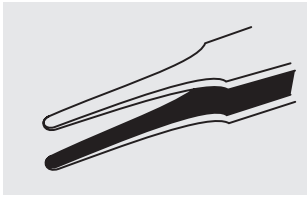


Model		Description
<b>24SA</b>	22 g 0.78 oz.	Precision tweezers, curved 40°, with robust pointed tips. Serrated finger grips and inside-serrated tips for secure handling. Guide pin to avoid overlapping of tips. Ideally suitable for soldering and assembly jobs.
<b>30SA</b>	26 g 0.92 oz.	Reverse-action tweezers, curved 30°, with robust pointed tips. Fibreglass handles for protection against heat. Reverse clamping action for comfortably holding parts. Particularly suitable for soldering and assembly jobs.



# Tweezers

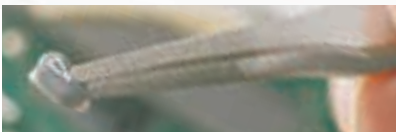
## Precision tweezers: Flat round tips straight



- Suitable for all standard gripping applications and assembly jobs on printed-circuit boards, e.g. in the goldsmith and jewelry industries
- For all models with the suffix SA or SASL in the order number: Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant



 120 mm/4.724 Inch



Model		Description
<b>2ASA</b>	15 g 0.53 oz.	Precision tweezers with flat rounded tips for gripping small components. Tip width 2 mm/.078 Inch.
<b>2ASASL</b>	15 g 0.53 oz.	Same as 2ASA, but economy model.
<b>2ASASLT*</b>	16 g 0.56 oz.	Same as 2ASA, but with Teflon®-coated tips for non-stick holding of self-adhesive parts.
<b>2ASARU</b>	16 g 0.56 oz.	Same as 2ASA, but with coated tips for non-stick holding of self-adhesive parts.
<b>25SA</b>	15 g 0.53 oz.	Precision tweezers with flat, round tips slightly wider than the 2ASARU model. Serrated finger grips for secure handling. For standard gripping jobs.
<b>52ASA</b>	15 g 0.53 oz.	Precision tweezers with pointed, rounded and flexibly movable tips. Prevents damage to sensitive components.

\*Not available in North America


## Precision tweezers with ergonomic handles

- This series offers models with thin shaped tips to suit every application
- Ergonomically shaped handles reduce hand fatigue and facilitates comfortable working
- Thermally insulated, soft foam handles, ESD-safe
- For all models with the suffix SA in the order number: Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant



 120 mm/4.724 Inch



Model		Description
<b>E5SA</b>	25 g 0.88 oz.	Ergonomic precision tweezers with straight, very pointed tips for gripping fine wires.
<b>E3CSA</b>	25 g 0.88 oz.	Ergonomic precision tweezers with long, straight and pointed tips, e.g. for assembly jobs on printed-circuit boards.
<b>EOOSA</b>	30 g 1.05 oz.	Ergonomic precision tweezers with straight, strong tips for standard applications. Very robust.
<b>EOODSA</b>	30 g 1.05 oz.	Model same as EOOSA, but with inside-serrated tips.
<b>E7SA</b>	28 g 0.99 oz.	Ergonomic precision tweezers with curved strong tips, e.g. for working in confined spaces.
<b>E2ASA</b>	28 g 0.99 oz.	Ergonomic precision tweezers with straight, flat and rounded tips for simple gripping jobs. Tip width 2 mm/.078 Inch.
<b>E15AGW</b>	30 g 1.05 oz.	Cutting tweezers, carbon-steel tips.

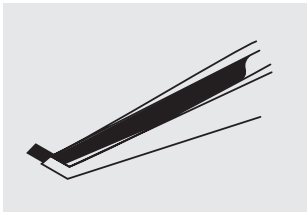
# Tweezers

## SMD tweezers

- High-quality precision tweezers for SMD jobs with different designs (chip, MELFs, mini MELFs)
- Blunted edges prevent damage to printed-circuit boards




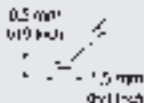
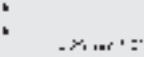
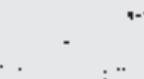
## SMD tweezers – Angled tips



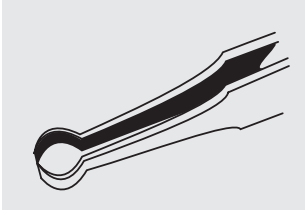
- Suitable for perfect handling of chips and miniature components
- Suitable for assembling SMD printed-circuit boards or ceramic substrates
- Bent shape facilitates optimum access to confined spaces and provides excellent visibility of the area to be worked on
- For all models with the suffix CA in the order number: Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant

 115 mm/4.528 Inch



Model		Description
<b>102ACA</b>	15 g 0.53 oz.	SMD tweezers, angled 45°, with pointed tips for vertical application. 
<b>102ACAX</b>	14 g 0.49 oz.	Model same as 102ACA, but reverse clamping action for easy holding. 
<b>103ACA</b>	15 g 0.53 oz.	SMD tweezers, angled 45°, with slightly wider tips for vertical application. 

## SMD tweezers – Round tips straight



- Suitable for gripping and holding round components and wires
- Blunted edges prevent damage to printed-circuit boards
- For all models with the suffix SA in the order number: Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant


### 110 mm/4.331 Inch



Model		Description
<b>39SA</b>	15 g 0.53 oz.	SMD tweezers with round tips, dia. 0.3 mm/.011 Inch. Serrated finger grips for secure handling. For gripping small wires and cylindrical components.
<b>40SA</b>	15 g 0.53 oz.	SMD tweezers with round tips, dia. 0.4 mm/.015 Inch. Serrated finger grips for secure handling. For gripping small wires and cylindrical components.

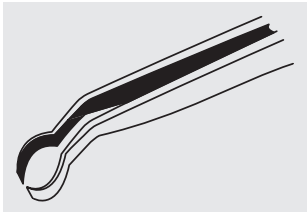
### 120 mm/4.724 Inch



Model		Description
<b>150SAMF</b>	13 g 0.46 oz.	SMD tweezers with round, very narrow tips, dia. 1.2 – 2.5 mm/.047 – .098 Inch. Serrated finger grips for secure handling. For gripping cylindrical components, mini MELFs, etc.
<b>150SAD</b>	13 g 0.46 oz.	SMD tweezers with round tips, dia. 1.5 – 3 mm/.059 – .118 Inch. Serrated finger grips for secure handling. For gripping cylindrical components, mini MELFs, etc.
<b>150SA</b>	13 g 0.46 oz.	SMD tweezers with round tips, dia. 1.5 – 3 mm/.059 – .118 Inch. Serrated finger grips for secure handling. For gripping cylindrical components.
<b>151SA</b>	13 g 0.46 oz.	SMD tweezers with round tips, dia. 3 – 6 mm/.118 – .236 Inch. Serrated finger grips for secure handling. For gripping cylindrical components.

# Tweezers

## SMD tweezers – Round tips bent



- Suitable for gripping fine wires and cylindrical components
- Blunted edges prevent damage to printed-circuit boards
- For all models with the suffix SA in the order number: Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant

 115 mm/4.528 Inch



Model		Description
<b>32BSA</b>	17 g 0.60 oz.	SMD tweezers, angled 45°, with round tips, dia. 5 mm/.197 Inch.
<b>32BSA20*</b>	17 g 0.60 oz.	SMD tweezers, angled 45°, with round tips, dia. 2 mm/.078
<b>32BSA25</b>	17 g 0.60 oz.	MD tweezers, angled 45°, with round tips, dia. 2.5 mm/.098 Inch.
<b>150SAMB</b>	13 g 0.46 oz.	MD tweezers, angled 40°, with round tips, dia. 1.2 – 2.5 mm/ .047 – .098 Inch. Serrated finger grips for secure handling.

\*Not available in North America


## Locking Gripping Tweezers

- Gripping tweezers enable the user to hold and manipulate particularly fine wires with a diameter from 0.3 mm/.011 Inch or insulated optical fibres with a diameter of between 1.5 mm/.059 Inch and 5 mm/.197 Inch
- Suitable as a ligature clamp in dentistry
- Can be disinfected and sterilized



 **120 mm/4.724 Inch**

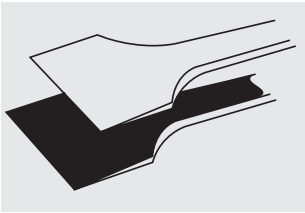


Model		Description
<b>940AS*</b>	17 g 0.60 oz.	Gripping tweezers with locking mechanism. The ring-shaped tip provides for secure handling up to a tensile force of 5 kg.

\*Not available in North America

# Tweezers

## Wafer tweezers




- Suitable for 3" to 6" wafers
- Serrated finger grips for secure handling
- Wafer tweezers are available to order in various sizes and coatings
- For all models with the suffix SA in the order number: Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant



A = Paddle width  
B = Paddle depth


 **125 mm/4.921 Inch**



Dimensions in mm/Inch				
Model		A	B	Description
<b>91SA</b>	15 g 0.53 oz.	12 .472	7 .276	Standard wafer tweezers for 3" and 4" wafers.

 **130 mm/5.118 Inch**




Dimensions in mm/Inch				
Model		A	B	Description
<b>600ASA</b>	23 g 0.81 oz.	19,5 .768	8 .315	Wafer tweezers with flat lower paddle and 6 upper fingers for protecting wafers against damage. For 6" wafers.
<b>608ASA</b>	23 g 0.81 oz.	30 1.181	8,5 .276	Model same as 600ASA, but 30 mm/1.181 Inch wide.
<b>600JSA</b>	24 g 0.84 oz.	20 .787	8 .315	Wafer tweezers with free-floating Teflon® upper paddle for secure, damage-free gripping. For 4" – 6" wafers.

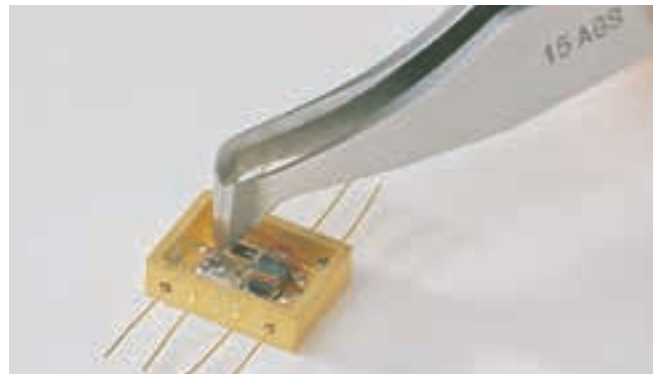
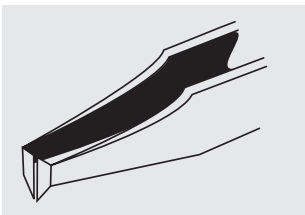
## Wafer tweezers

 150 mm/5.906 Inch



Model		Dimensions in mm/Inch		Description
		A	B	
<b>141SAP</b>	30 g 1.05 oz.	30 1.181	8 .315	Wafer tweezers with polyester tips for protecting Si, GaAs or Ti wafers against damage. For 4" – 6" wafers.


## Cutting tweezers



- Suitable for cutting fine, soft wires and small components
- Delivers high-precision cuts
- Hardened cutting edges for long service life
- For all models with the suffix S in the order number: Stainless steel, robust tips, non-rusting, non-reflecting surface

 115 mm/4.528 Inch



Model		Description
<b>15AGS</b>	21 g 0.74 oz.	Cutting tweezers with narrow oblique head. For soft wires up to dia. 0.25 mm/.010 Inch.
<b>15AGW</b>	26 g 0.92 oz.	SCutting tweezers with narrow oblique head. For soft wires up to dia. 0.25 mm/.010 Inch.



# Tweezers

## Stripping tweezers




- Suitable for stripping fine wires with PVC or Teflon® insulation
- Non-reflecting surface
- Please send a wire sample when ordering




 120 mm/4.724 Inch



Model		Description
<b>29Y30*</b>	22 g 0.78 oz.	Miniature stripping tweezers, dia. 0.25 mm/.010 Inch (AWG 30). Stainless steel. Serrated finger grips for secure handling.
<b>29Y32*</b>	22 g 0.78 oz.	Miniature stripping tweezers, dia. 0.2 mm/.007 Inch (AWG 32). Stainless steel. Serrated finger grips for secure handling.
<b>29Y34*</b>	22 g 0.78 oz.	Miniature stripping tweezers, dia. 0.16 mm/.006 Inch (AWG 34). Stainless steel. Serrated finger grips for secure handling.
<b>29Y36*</b>	22 g 0.78 oz.	Miniature stripping tweezers, dia. 0.13 mm/.005 Inch (AWG 36). Stainless steel. Serrated finger grips for secure handling.
<b>29Y40*</b>	22 g 0.78 oz.	Miniature stripping tweezers, dia. 0.08 mm/.003 Inch (AWG 40). Stainless steel. Serrated finger grips for secure handling.

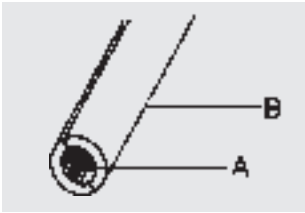
 120 mm/4.724 Inch



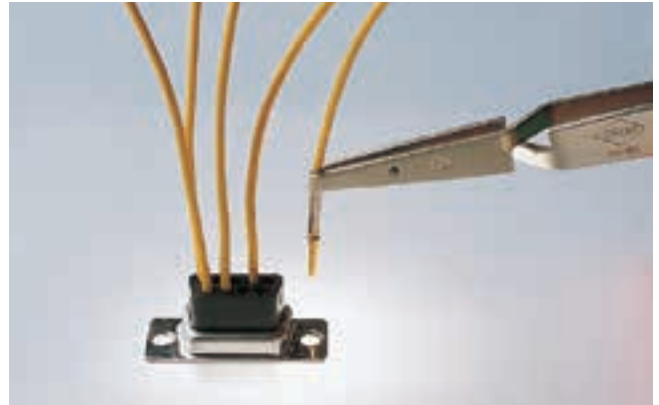
Model		Description
<b>29W30</b>	28 g 0.99 oz.	Stripping tweezers with synthetic fibre handle. For wires of dia. 0.25 – 0.3 mm/.010 – .011 Inch (AWG 30 – 28). For standard and Teflon® insulation.
<b>XB29W301</b>		Spare blade for 29W30

\*Not available in North America

## Extraction tweezers




A = Outside diameter of pin  
B = Inside diameter of pin



- Suitable for extracting contacts from the rear of a plug connector

 **120 mm/4.724 Inch**



Dimensions in mm/Inch				
Model		Ø A	Ø B	Description
<b>024C</b>	15 g 0.53 oz.	12 .472	7 .276	Extraction tweezers for Sub-D connectors. Stainless steel.