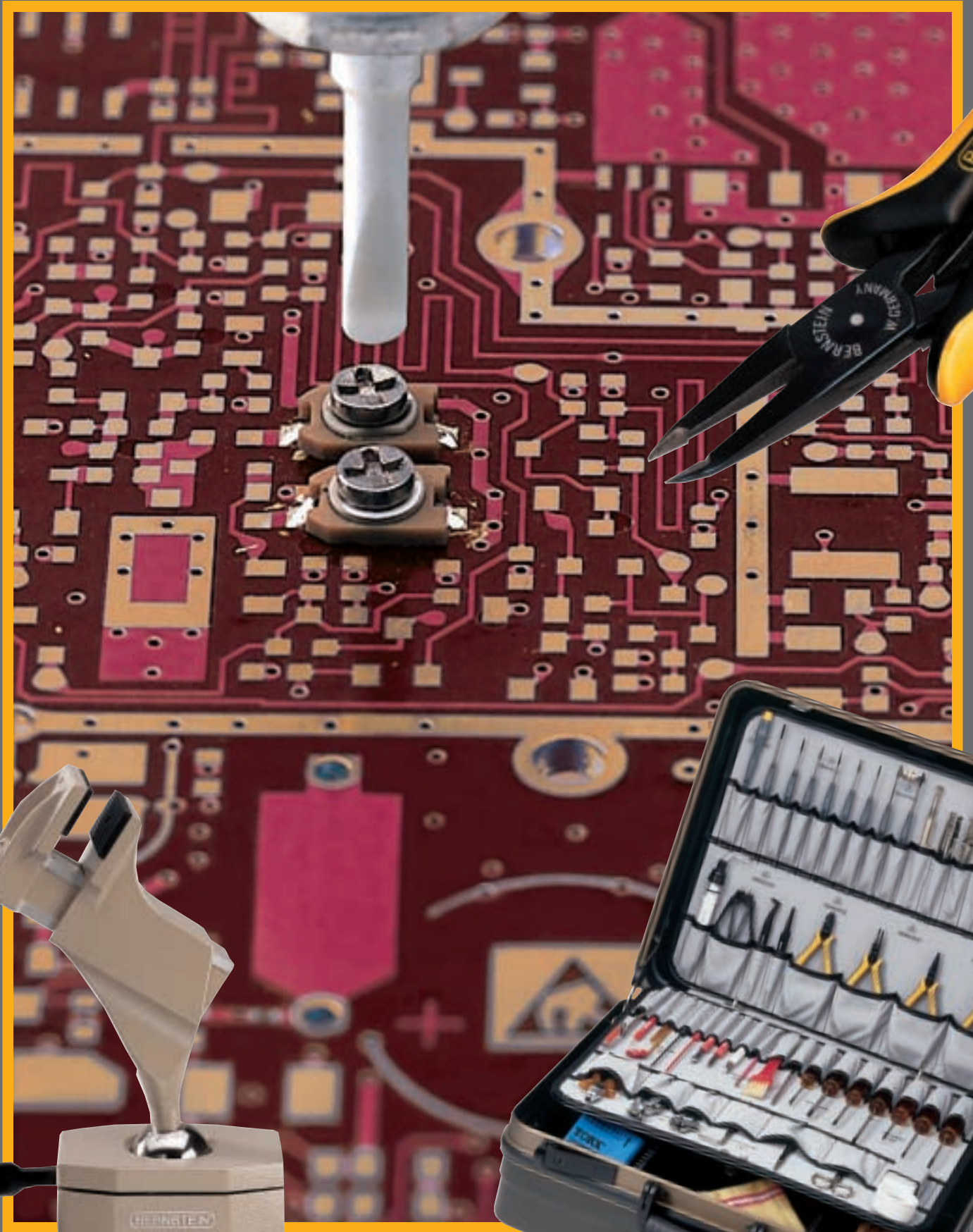


# BERNSTEIN



## Electronic-Tools



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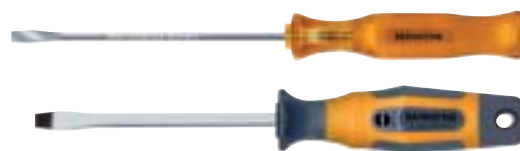
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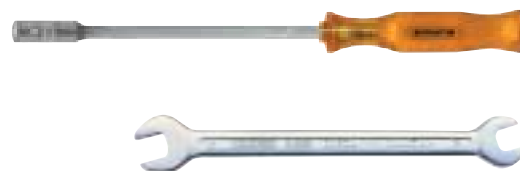
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## TOP 1000 ELECTRONIC SERVICE CASE

The small attractive service case with special design



1000 **BERNSTEIN** TOP with tool set

1015 **BERNSTEIN** TOP without tool set

### Description:

The BERNSTEIN TOP is an elegant, handsomely styled black case made from deep-drawn, impact-resistant plastic shells with inside pad and steel stiffened frame, closed by a nylon zipper with bidirectional sliders. It has loops at the sides for attaching a shoulder strap.

26 precision tools are clearly arranged on a swivel-tool-tray. The bottom contains a deep-drawn tray which provides five different partitions, 30 mm deep, for spare parts, also for a plastic box for components. When removing this tray, it is possible to place a notebook in the bottom.

The inside cover is provided with pockets for documents, 3.5" disks, pencils etc.

**Outside dimensions: 400 x 320 x 90 mm**

**Weight without tools: approx. 2.000 kg**

**Weight with tools: approx. 2.700 kg**

### Tool set:

#### No. Description of individual tools

1-552	<b>Adjusting screwdriver</b> , 120 x 2 mm
2-126	<b>Desoldering lever</b> , with plastic handle, slotted at one end
2-127	<b>Tin knife</b> , with plastic handle, 115 mm
2-155	<b>Claw-type gripper</b> , nickel-plated brass, with 4 wire claws, small version with clip
2-166	<b>Glass fibre contact cleaner</b>
2-265	<b>2 Test prods</b> , red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire
2-275	<b>Repair mirror</b> , 21 mm Ø
2-601	<b>IC tweezers</b> , nickel-plated, 125 mm, for gripping, inserting and removing IC's
2-620	<b>PLCC extractor</b> , for easy removal of plug-in PLCC's
3-109-2	<b>Side cutters</b> , 120 mm, with wide, pointed head, special flat cutting edge, compression spring, for flush cutting, for soft wire up to 1.5 mm, chrome-plated, with transparent insulation
3-127-2	<b>"Slimline" side cutters</b> , 115 mm, for soft wire up to 1.0 mm, extremely slim head, box joint, compression spring, chrome-plated, with transparent insulation
3-445-2	<b>Micro flat nose pliers</b> , 120 mm, extremely slim, box joint, chrome-plated, with transparent insulation
3-481-2	<b>Snipe nose pliers</b> , 120 mm, angular, box joint, compression spring, chrome-plated, with transparent insulation
3-565	<b>Water pump pliers</b> , 120 mm, chrome-plated

#### No. Description of individual tools

4-103 S	<b>Engineer's screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4 mm
4-162	<b>Electronics screwdriver</b> with special handle and swivel top, blade chrome vanadium, chrome-plated, with black tip, 40 x 1.5 mm
4-163	<b>Electronics screwdriver</b> as above, blade 40 x 2.0 mm
4-165	<b>Electronics screwdriver</b> as above, blade 50 x 3.0 mm
4-282	<b>Electronics cross-recess screwdriver</b> with special handle and swivel top, blade chrome vanadium, chrome-plated, with black tip, 40 x 2.0 mm, size 00
4-283	<b>Electronics cross-recess screwdriver</b> as above, size 0
4-406	<b>Retaining screwdriver</b> , 80 x 4 mm
5-006	<b>Component tweezers</b> , nickel-plated, with insulated jaws, for easy insertion and removal of plug-in transistors of various sizes
5-107	<b>Engineer's tweezers</b> made from steel, with bent tips, 150 mm, nickel-plated
5-131	<b>Watchmaker's tweezers</b> , 110 mm, stainless, sharply-pointed
5-301	<b>Special scissors</b> , for cutting sheet-metal and wires, with serration, extremely slim, 110 mm, nickel-plated

#### To complete the set we recommend:

9-325	<b>Plastic box</b> , with hinged lid and adjustable compartments, 200 x 130 x 30 mm
	<b>Shoulder strap</b>

## HANDY 1500 ELECTRONIC SERVICE CASE

The small and very handy service case with big space inside



1500 **BERNSTEIN** **HANDY** with tool set

1515 **BERNSTEIN** **HANDY** without tool set

### Description:

Case-body made from deep-drawn, impact-resistant, grained black plastic shells, pressed on a stable alu-frame, dustproof and rainproof, acid- and scratch-resistant. It has loops at the sides for attaching a shoulder strap.

Fixed by stretch-ribbons, 41 special tools are clearly arranged on two swivel-tool-trays. A special pocket in the case-lid offers a lot of space for documents, pencils etc.. The bottom contains a stable plastic insert of 75 mm depth for spare parts, measuring instruments and soldering irons. 4 adjustable partitions allow a flexible division. For security purposes the case is equipped with 2 key-locks.

Outside dimensions: 340 x 360 x 180 mm

Weight without tools: approx. 3.300 kg

Weight with tools: approx. 4.300 kg

### Tool set:

No.	Description of individual tools
1-152	<b>Adjusting screwdriver</b> , blade 40 x 4 mm
2-126	<b>Desoldering lever</b> , slotted at one end, with plastic handle
2-127	<b>Tin knife</b> , with plastic handle, 115 mm
2-132	<b>Spring hook</b> , nickel-plated and insulated, 175 mm
2-166	<b>Contact cleaner</b> , made from glass fibre
2-265	<b>2 Test prods</b> , red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire
2-275	<b>Repair mirror</b> , 21 mm Ø
2-601	<b>IC tweezers</b> , nickel-plated, 125 mm, for gripping, inserting and removing IC's
2-620	<b>PLCC extractor</b> , for easy removal of plug-in PLCC's
3-127-2	<b>„Slimline“ side cutters</b> , 115 mm, for soft wire up to 1.0 mm, extremely slim head, box joint, compression spring, chrome-plated, with transparent insulation
3-131-1	<b>Side cutters</b> , 120 mm, chrome-plated, for hard wire up to 0.8 mm, for soft wire up to 1.5 mm, with BERNSTEINIT insulation
3-445-2	<b>Micro flat nose pliers</b> , 120 mm, extremely slim, box joint, chrome-plated, with transparent insulation
3-481-2	<b>Snipe nose pliers</b> , 120 mm, angular, box joint, compression spring, chrome-plated, with transparent insulation
4-103 S	<b>Engineer's screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4 mm
4-271	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv, size 0, with special square pattern BERNSTEIN handle, blade made from chrome vanadium, nickel-plated, with black tip
4-272	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv, size 1, with special square pattern BERNSTEIN handle, blade made from chrome vanadium, nickel-plated, with black tip

No.	Description of individual tools
4-301	<b>Miniature screwdriver</b> , with plastic handle, blade nickel-plated 40 x 1.8 mm
4-311	<b>Screwdriver for headless screws</b> , with plastic handle, blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm
4-343 VDE	<b>Voltage tester</b> , blade 60 x 3 mm
4-366	<b>Cross-recess watchmaker's screwdriver</b> , size 00
4-391	<b>Watchmaker's screwdriver</b> , nickel-plated, with 4 interchangeable blades, 1.5, 2.0, 2.5 and 3.0 mm
4-407	<b>Retaining screwdriver</b> , 110 x 4 mm
4-775	<b>Plastic handle</b> , 6 mm, for socket wrenches
5-006	<b>Component tweezers</b> , nickel-plated, with insulated jaws, for easy insertion and removal of plug-in transistors of various sizes
5-107	<b>Engineer's tweezers</b> made from steel, with bent tips, 150 mm, nickel-plated
5-181	<b>Wire scraper</b> , for wires 0.6 mm Ø, interchangeable cutter
5-301	<b>Special scissors</b> , for cutting sheet-metal and wires, with serrations, extremely slim, 110 mm, nickel-plated
5-515	<b>Universal blade knife</b> , with adjustable blade
6-202	<b>Socket wrench</b> , C.V. nickel-plated, 5.5 mm A/F, without handle
6-204	<b>Socket wrench</b> , C.V. nickel-plated, 7.0 mm A/F, without handle
6-771	<b>Adjustable wrench</b> , jaws opening 0 - 12 mm, total length 100 mm
6-820	<b>Set of wrench keys</b> , 8 pieces, in plastic wallet, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 5.5 and 6.0 mm
7-425	<b>Dust brush</b>



## TELE 1100 SERVICE CASE

The ideal case for the ambitious engineer



1100 **BERNSTEIN** TELE with tool set

1115 **BERNSTEIN** TELE without tool set

### Description:

Attractive case made from deep-drawn, impact-resistant, dark brown grained plastic sections with a continuous bronze anodised aluminium frame, dustproof and rainproof, acid-resistant, scratch-resistant and non-slip.

Twenty tools are arranged handily on a hinged panel.

The back of the panel has elastic loops to take documents, measuring instruments, pcb's, etc. The lid of the case is padded with foam rubber.

The split plastic tray in the bottom of the case, which is intended to take spares, measuring and soldering equipment up to approx. 60 mm height, is covered by a foam padded perforated plate. 50 clips and 1 metre of elastic are provided to allow individual tool arrangements on this plate.

The case has a lock strip with 2 locks and is centrally lockable. It has loops at the sides for attaching a carrying strap.

Outside dimensions: 460 x 350 x 170 mm

Weight without tools: approx. 3.600 kg

Weight with tools: approx. 4.200 kg

### Tool set:

#### No. Description of individual tools

1-335	<b>Adjusting key</b> , with bronze insert at both ends 1.7 x 0.7 mm
1-355	<b>Adjusting key</b> , with bronze insert at both ends 2.0 x 1.0 mm
1-909	<b>Engineer's mirror</b> with handle, made entirely from BERNSTEINIT
2-127	<b>Tin knife</b> , with plastic handle, 115 mm
2-265-1	<b>Test prod</b> , red, especially thin, pointed and flexible, blade made from 1 mm steel wire
2-265-2	<b>Test prod</b> , black, as above
3-126-2	<b>Side cutters</b> , 120 mm, for soft wire up to 1.0 mm, chrome-plated, with transparent insulation
3-235-1	<b>Telephone pliers</b> with wire cutters, 145 mm, chrome-plated, with BERNSTEINIT insulation
3-731-1	<b>Combination pliers</b> , 135 mm, chrome-plated, with BERNSTEINIT insulation
4-103 S	<b>Engineer's screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4 mm

#### No. Description of individual tools

4-271	<b>Cross-recess screwdriver</b> , as above, Supadriv/Pozidriv, size 0, black tip
4-272	<b>Cross-recess screwdriver</b> , as above, Supadriv/Pozidriv, size 1, black tip
4-301	<b>Miniature screwdriver</b> , blade nickel-plated, 40 x 1.8 mm
4-775	<b>Plastic handle</b> , 6 mm, for socket wrenches
5-107	<b>Engineer's tweezers</b> , made from steel, with bent tips, 150 mm, nickel-plated
5-121	<b>Steel tweezers</b> , straight, round, pointed, 120 mm, nickel-plated
5-261	<b>Contact file</b> , 150 mm
6-202	<b>Socket wrench</b> , nickel-plated, 5.5 mm A/F, without handle
6-204	<b>Socket wrench</b> , nickel-plated, 7.0 mm A/F, without handle
7-425	<b>Dust brush</b>

## TELE 1150 SERVICE CASE

with the special tool set



### 1150 **BERNSTEIN** TELE with tool set

#### Description:

The case is equivalent to No. 1100, only the perforated plate has additional 18 tools, all together 38 tools.

Outside dimensions: 460 x 350 x 170 mm

Weight without tools: approx. 3.600 kg

Weight with tools: approx. 5.000 kg

#### Tool set:

No.	Description of individual tools	No.	Description of individual tools
1-335	<b>Adjusting key</b> , with bronze insert at both ends 1.7 x 0.7 mm	4-272	<b>Cross-recess screwdriver</b> , as above, Supadriv/Pozidriv, size 1, black tip
1-355	<b>Adjusting key</b> , with bronze insert at both ends 2.0 x 1.0 mm	4-301	<b>Miniature screwdriver</b> , blade nickel-plated, 40 x 1.8 mm
1-909	<b>Engineer's mirror</b> with handle, made entirely from BERNSTEINIT	4-343 VDE	<b>Voltage tester</b> , blade 60 x 3 mm
2-127	<b>Tin knife</b> , with plastic handle, 115 mm	4-366	<b>Cross-recess watchmaker's screwdriver</b> , size 00
2-132	<b>Spring hook</b> , nickel-plated and insulated, 175 mm	4-367	<b>Cross-recess watchmaker's screwdriver</b> , size 0
2-166	<b>Contact-cleaner</b> , made from glass fibre	4-368	<b>Cross-recess watchmaker's screwdriver</b> , size 1
2-265-1	<b>Test prod</b> , red, especially thin, pointed and flexible, blade made from 1 mm steel wire	4-404	<b>Retaining screwdriver</b> , 295 x 4 mm
2-265-2	<b>Test prod</b> , black, as above	4-775	<b>Plastic handle</b> , 6 mm, for socket wrenches
2-601	<b>IC tweezers</b> for gripping, inserting and removing, especially suitable for narrow components, nickel-plated	5-006	<b>Component tweezers</b> , nickel-plated, with insulated jaws
3-126-2	<b>Side cutters</b> , 120 mm, for soft wire up to 1.0 mm, chrome-plated, with transparent insulation	5-107	<b>Engineer's tweezers</b> , made from steel, with bent tips, 150 mm, nickel-plated
3-235-1	<b>Telephone pliers</b> with wire cutters, 145 mm, chrome-plated, with BERNSTEINIT insulation	5-115	<b>Heat dissipating tweezers</b> , 165 mm, nickel-plated
3-731-1	<b>Combination pliers</b> , 135 mm, chrome-plated, with BERNSTEINIT insulation	5-121	<b>Steel tweezers</b> , straight, round, pointed, 120 mm, nickel-plated
4-103 S	<b>Engineer's screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4 mm	5-261	<b>Contact file</b> , 150 mm
4-222	<b>Screwdriver</b> , as above, 260 x 3.0 mm, black tip	5-301	<b>Special sheet-metal scissors</b> , serrated, extremely slim, 110 mm, nickel-plated
4-223	<b>Screwdriver</b> , as above, 260 x 4.5 mm, black tip	6-202	<b>Socket wrench</b> , nickel-plated, 5.5 mm A/F, without handle
4-227	<b>Cross-recess screwdriver</b> , as above, size 1, blade 300 mm, black tip	6-204	<b>Socket wrench</b> , nickel-plated, 7.0 mm A/F, without handle
4-271	<b>Cross-recess screwdriver</b> , as above, Supadriv/Pozidriv, size 0, black tip	6-962	<b>TORX-screwdriver</b> , with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, black tip, size T 7
		6-963	<b>TORX-screwdriver</b> , as above, size T 8
		6-965 L	<b>TORX-screwdriver</b> , as above, size T 10
		6-966 L	<b>TORX-screwdriver</b> , as above, size T 15
		7-425	<b>Dust brush</b>



## PRESTIGE 1200 SERVICE BOX

Multi-purpose aluminium box for the discerning service engineer



1200 **BERNSTEIN** PRESTIGE with tool set

1215 **BERNSTEIN** PRESTIGE without tool set

### Description:

Box made from distortion-free aluminium, dustproof and rainproof. Box lining made from black, grained Aero-Fiber.

Tools, technical documents, soldering iron (naturally also when hot) etc. can be housed in a clear arrangement in the lid and on the hinged tools cover plate.

A thick foamed plastic pad on the back of the cover plate protects delicate equipment in the bottom of the box from being damaged.

The bottom of the box can be divided up to suit individual requirements. Grid spacings of 10 mm permit adjustment to any size.

Two longitudinal dividers and 7 partitions supplied as standard.

The box has 2 locks.

Outside dimensions: 435 x 375 x 155 mm

Weight without tools: approx. 4.500 kg

Weight with tools: approx. 6.200 kg

### Tool set:

No.	Description of individual tools	No.	Description of individual tools
1-180	<b>7-piece adjusting screwdriver set</b> in plastic case. Contents: 1-151 Adjusting screwdriver, blade 40 x 3.0 mm 1-152 Adjusting screwdriver, blade 40 x 4.0 mm 1-153 Adjusting screwdriver, blade 130 x 2.0 mm 1-155 Adjusting screwdriver, blade 130 x 3.5 mm 1-181 Adjusting key, hexagonal jaw at one end, 1.85 mm A/F opposite end rectangular, 1.5 mm A/F 1-182 Adjusting key, hexagonal jaw at one end, 2.6 mm A/F, opposite end rectangular, 3.0 mm A/F 1-306 Adjusting screwdriver, blade 80 mm long, with bronze insert 1.7 x 0.7 mm	4-102 S	<b>Engineer's screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 75 x 3.5 mm
1-909	<b>Engineer's mirror</b> with handle, made entirely from BERNSTEINIT	4-103 S	<b>Engineer's screwdriver</b> as above, blade 100 x 4 mm
2-265	<b>2 test prods</b> , red and black, especially thin, pointed and flexible, blade made from 1 mm steel wire	4-104 S	<b>Engineer's screwdriver</b> as above, blade 150 x 5 mm
3-127-2	<b>Slimline side cutters</b> , 115 mm, for soft wire up to 1.0 mm, extremely narrow head, box joint, compression spring, chrome-plated, with transparent insulation	4-115 S	<b>Engineer's screwdriver</b> as above, blade 200 x 3 mm
3-133-1	<b>Side-cutters</b> , 145 mm, for hard wire, chrome-plated, with BERNSTEINIT insulation	4-251	<b>Cross-recess screwdriver</b> with plastic handle, blade made from chrome vanadium, nickel-plated, size 0
3-215-1	<b>Engineer's pliers</b> , 185 mm, bent snipe nose, box joint, chrome-plated, with BERNSTEINIT insulation	4-252	<b>Cross-recess screwdriver</b> as above, size 1
3-235-1	<b>Telephone pliers</b> , 145 mm, with wire cutter, chrome-plated with BERNSTEINIT insulation	4-301	<b>Miniature screwdriver</b> with plastic handle, blade nickel-plated, 40 x 1.8 mm
3-455-2	<b>Mikro pointed pliers</b> , 120 mm, extremely light and slim, box joint, chrome-plated, with transparent insulation	4-311	<b>Screwdriver for grub screws</b> with plastic handle, blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm
3-565	<b>Water pump pliers</b> , 120 mm, chrome-plated	4-343 VDE	<b>Voltage tester</b> , blade 60 x 3 mm
3-732-1	<b>Combination pliers</b> , 160 mm, chrome-plated, with BERNSTEINIT insulation	4-391	<b>Watchmaker's screwdriver</b> , nickel-plated, with 4 interchangeable blades, 1.5, 2.0, 2.5 and 3.0 mm
		4-407	<b>Screw holder</b> , 110 x 4 mm
		5-006	<b>Transistor tweezers</b> , nickel-plated, with insulation jaws, for easy removal and insertion of plug-in transistors of various sizes
		5-107	<b>Steel tweezers</b> with bent tips, 150 mm, nickel-plated
		5-117	<b>Steel tweezers</b> , straight - flat - wide, 145 mm, nickel-plated
		5-261	<b>Contact file</b>
		5-301	<b>Special sheet-metal scissors</b> , serrated, extremely slim, 110 mm, nickel-plated
		6-155	<b>Socket wrench</b> with plastic handle, blade made from chrome vanadium, nickel-plated, 100 x 5.5 mm A/F
		6-157	<b>Socket wrench</b> as above, blade 100 x 7 mm A/F
		7-425	<b>Dust brush</b>
		8-401	<b>Carded solder</b> , approx. 1 m
		8-145	<b>ERSA Soldering iron</b> 30 W, 220 V, with plastic handle
<b>To complete the set we recommend:</b>			
9-325	<b>Plastic box</b> with hinged lid and adjustable compartments, 200 x 130 x 30 mm		

## PRAXIS 1750 ELECTRONIC SERVICE CASE

Flat tool case with special styling

1750 **BERNSTEIN** PRAXIS with tool set

1755 **BERNSTEIN** PRAXIS without tool set

### Description:

Elegant briefcase in impact-resistant, double-walled grained black plastic.

The tools are clearly arranged in 2 pivoting tool trays.

A document compartment is provided on the back of one tool tray.

The bottom of the case has a deep-drawn tray, 30 mm high,

with dividers of differing sizes and a special holder for a hot soldering iron.

The case has 2 locks.



Outside dimensions: 435 x 325 x 85 mm

Weight without tools: approx. 3.000 kg

Weight with tools: approx. 4.200 kg

### Tool set:

No.	Description of individual tools	No.	Description of individual tools
1-151	<b>Adjusting screwdriver</b> , blade 40x3 mm	4-343 VDE	<b>Voltage tester</b> , blade 60x3 mm
2-126	<b>Desoldering lever</b> , slotted at one end, with plastic handle	4-351	<b>Offset screwdriver</b> , chrome vanadium, nickel-plated, 100x5 mm
2-132	<b>Spring hook</b> , nickel-plated and insulated, 175 mm	4-366	<b>Cross-recess watchmaker's screwdriver</b> , size 00
2-265	<b>2 Test prods</b> , red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire	4-391	<b>Watchmaker's screwdriver</b> , nickel-plated, with 4 interchangeable blades, 1.5, 2.0, 2.5, 3.0 mm
3-127-2	<b>Slimline side cutters</b> , 115 mm, for soft wire up to 1 mm, extremely slim head, box joint, compression spring, chrome-plated, with transparent insulation	4-407	<b>Screw holder</b> , 110x4 mm
3-131-1	<b>Side cutters</b> , 120 mm, for hard wire up to 0.8 mm, for soft wire up to 1.5 mm, chrome-plated, with BERNSTEINIT insulation	4-775	<b>Plastic handle</b> , 6 mm, for socket-spanner
3-445-2	<b>Micro flat-nose pliers</b> , 120 mm, box joint, chrome-plated, with transparent insulation	5-006	<b>Component tweezers</b> , nickel-plated, with insulated jaws, for easy insertion and removal of plug-in transistors of various sizes
3-455-2	<b>Micro snipe-nose pliers</b> , 120 mm, oval-pointed design, box joint, chrome-plated, with transparent insulation	5-107	<b>Engineer's tweezers</b> , made from steel, with bent tips, 150 mm, nickel-plated
3-565	<b>Miniature water-pump pliers</b> , 120 mm, chrome-plated	5-115	<b>Heat dissipating tweezers</b> , 165 mm, nickel-plated, for use when soldering transistors, gold-bonded diodes etc.
4-102 S	<b>Engineer's screwdriver</b> with special square pattern BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 75 x 3.5 mm	5-117	<b>Engineer's tweezers</b> , made from steel, straight-flat-wide, 145 mm, nickel-plated
4-103 S	<b>Engineer's screwdriver</b> as above, blade 100 x 4 mm	5-201/6	<b>Needle files</b> , set of 6 pieces
4-104 S	<b>Engineer's screwdriver</b> as above, blade 150 x 5 mm	5-301	<b>Special scissors</b> for cutting sheet-metal and wires, with serration, extremely slim, 110 mm, nickel-plated
4-271	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv, size 0, with special square pattern BERNSTEIN handle, blade made from chrome vanadium, nickel-plated, with black tip	5-501	<b>Cable knife</b>
4-272	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv, as above, size 1	6-202	<b>Socket spanner</b> , without handle, 5.5 mm, made from chrome vanadium, nickel-plated
4-301	<b>Miniature screwdriver</b> , with plastic handle, blade nickel-plated, 40 x 1.8 mm	6-204	<b>Socket spanner</b> as above, 7.0 mm
4-311	<b>Screwdriver for headless screws</b> , with plastic handle, blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm	6-820	<b>Set of allen hex sockets</b> , 8 pieces, in plastic wallet, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 5.5, 6.0 mm
		7-425	<b>Dust brush</b>
		7-505	<b>Roller tape measure</b> , 1 m

### To complete the set we recommend:

9-325 **Plastic box** with hinged lid and adjustable compartments, 200 x 130 x 30 mm



## ELECTRONICA 2000 SERVICE SET

The practical service case for the electronics engineer



2000 **BERNSTEIN ELECTRONICA** with tool set

2024 **BERNSTEIN ELECTRONICA** with tool set and ERSA Multitip soldering iron 15 W, 220 V (No. 8-135)

2001 Case with zip fastener, without tools

### Description:

Elegant case with zip fastener made from black imitation leather with pockets for tools and notes. The case, which contains 18 clearly arranged special tools, can also carry a soldering iron. In addition to writing materials, the writing case side has room in its 3 compartments for a writing block, leaflets and technical documents. There is also a transparent window for visiting cards or calendars and a pocket for small parts.

Outside dimensions: 330 x 235 x 50 mm (when closed)

Weight with tools: approx. 1.050 kg

### Tool set:

No.	Description of individual tools	No.	Description of individual tools
1-303	<b>Adjusting screwdriver</b> , blade 155 x 2.8 mm, with bronze insert 2.5 x 0.5 mm	3-445-2	<b>Micro flat nose pliers</b> , 120 mm, box joint, extremely light and slim, chrome-plated, with transparent insulation
1-304	<b>Adjusting screwdriver</b> , blade 155 x 2.8 mm, with bronze insert 1.7 x 0.7 mm	3-455-2	<b>Micro pointed pliers</b> , 120 mm, snipe nose, box joint, extremely light and slim, chrome-plated, with transparent insulation
1-305	<b>Adjusting screwdriver</b> , blade 80 x 2.5 mm, with bronze insert 1.1 x 0.5 mm	4-102 S	<b>Engineer's screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 75 x 3.5 mm
1-971	<b>Adjusting screwdriver</b> , blade 80 x 2.0 mm, blade made from hard special plastic	4-301	<b>Miniature screwdriver</b> with plastic handle, blade nickel-plated, 40 x 1.8 mm
2-126	<b>Desoldering bar</b> , slotted at one end, nickel-plated, insulated, with plastic handle	4-311	<b>Screwdriver for grub screws</b> , with plastic handle, blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm
2-127	<b>Tin knife</b> with pointed, sharp blade, high quality steel, for cutting circuit paths and for burring	5-006	<b>Transistor tweezers</b> , nickel-plated, with insulated jaws; for easy removal and insertion of plug-in transistors of various sizes, 140 mm
2-165	<b>Contact cleaner</b> , brush-shaped, with wire bristles	5-107	<b>Steel tweezers</b> with bent tips, 150 mm, nickel-plated
3-125-2	<b>Micro side cutters</b> , 110 mm, for soft wire up to 0.8 mm, slim, pointed head, box joint, compression spring, chrome-plated, with transparent insulation	5-115	<b>Heat dissipating tweezers</b> , made from steel, the flat, wide points of the tweezers are narrow and provided with copper jaws, for use when soldering transistors, gold-bonded diodes etc., 165 mm, nickel-plated
3-165-2	<b>End cutters for electronics</b> , 160 mm, with angular tip and cutting edge for soft wire up to 1.0 mm, box joint, chrome-plated, with transparent insulation		
3-435-2	<b>Micro round nose pliers</b> , 120 mm, box joint, extremely light and slim, chrome-plated, with transparent insulation		

## 2100 TELEVISION SERVICE CASE

The service tool case for the quick service



### 2100 **BERNSTEIN** TELEVISION SERVICE CASE with tool set

2101 Case with zip fastener, without tools

#### Description:

Black imitation leather case with all-round zip fastener and black and red lining. A good assortment of 22 tools for the television engineer is clearly arranged in pockets. There are also 2 flap pockets for tin solder, fuses, spares etc.

Outside dimensions: 335 x 260 x 55 mm (when closed)

Weight with tools: approx. 1.500 kg

#### Tool set:

No.	Description of individual tools	No.	Description of individual tools
1-151	<b>Adjusting screwdriver</b> , blade 40 x 3.0 mm	4-104 S	<b>Engineer's screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 150 x 5.0 mm
1-153	<b>Adjusting screwdriver</b> , blade 130 x 2.0 mm	4-255	<b>Cross recess screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, with black tip, size 0
1-157	<b>Adjusting screwdriver</b> , blade 190 x 3.0 mm	4-301	<b>Miniature screwdriver</b> with plastic handle, blade nickel-plated, 40 x 1.8 mm
1-181	<b>Double-ended adjusting key</b> with hexagon = 1.85 mm A/F and square = 1.5 mm A/F blade	4-311	<b>Screwdriver for grub screws</b> , with plastic handle, blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm
1-909	<b>Engineer's mirror</b> with extending handle, made entirely from BERNSTEINIT	4-343VDE	<b>Voltage tester</b> according to VDE, nickel-plated, fully insulated, blade 60 x 3.0 mm
2-127	<b>Tin knife</b> with pointed, sharp blade, high quality steel, for cutting circuit paths and for burring	4-407	<b>Retaining screwdriver</b> , nickel-plated, blade 110 x 4.0 mm
2-236	<b>Tapping hammer</b> from BERNSTEINIT, 170 mm long	5-117	<b>Steel tweezers</b> , straight, flat, wide, 145 mm, nickel-plated
3-132-1	<b>Side cutters</b> , 130 mm, for hard wire up to 1.0 mm, chrome-plated, polished, with BERNSTEINIT insulation	5-261	<b>Contact file</b>
3-235-1	<b>Telephone pliers</b> with wire cutter, 145 mm, chrome-plated, polished, with BERNSTEINIT insulation	7-425	<b>Dust brush</b>
3-565	<b>Water pump pliers</b> , 120 mm, chrome-plated, polished	8-401	<b>Carded solder</b> , approx. 1 m
4-103 S	<b>Engineer's screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4.0 mm	8-145	<b>ERSA Soldering iron</b> 30 W, 220 V



## ANTISTATIC 2200 SERVICE-SET

The tool set for mobile use at electrostatically endangered components



### 2200 **BERNSTEIN** SERVICE-SET ANTISTATIC with tool set

2201 Case with zip fastener, without tools

### 2220 **BERNSTEIN** SERVICE-SET ANTISTATIC with tool set in **conductive** case

2221 Conductive case with zip fastener, without tools

#### Description:

Elegant, black zipper case, with wine red lining and transparent pockets for 12 tools and a foldable antistatic workbench pad with accessories. Art. 2220 complete made from conductive black imitation leather

Outside dimensions: 320 x 250 x 50 mm (when closed)

Weight with tools: approx. 0.950 kg

#### Tool set:

No.	Description of individual tools
2-620	<b>PLCC extractor</b>
3-601-13	<b>Side cutters</b> , 120 mm, for hard wire up to 0.4 mm Ø, for soft wire up to 1.0 mm Ø, bright steel-polished, box joint, double leaf spring, with conductive black hand-guard
3-632-13	<b>Flat nose pliers</b> , 120 mm, bright steel-polished, box joint, double leaf spring, with conductive black hand-guard
3-633-13	<b>Snipe nose pliers</b> , 120 mm, steel-polished, box joint, double leaf spring, with conductive black hand-guard
4-601	<b>Screwdriver 50 x 0.8 mm</b> , with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-605	<b>Screwdriver 60 x 2.0 mm</b> , with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-606	<b>Screwdriver 60 x 2.5 mm</b> , with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-621	<b>Cross-recess screwdriver size 000</b> , with conductive handle, blade from chrome vanadium, chrome-plated, with black tip

No.	Description of individual tools
4-622	<b>Cross-recess screwdriver size 00</b> , with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-623	<b>Cross-recess screwdriver size 0</b> , with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
5-191	<b>Tweezers</b> , 120 mm, made from conductive plastic material, reinforced with glassfibre, with straight, rounded tips
5-192	<b>Tweezers</b> , 120 mm, made from conductive plastic material, reinforced with glassfibre, with straight, 3 mm flat-hand tips
9-354	<b>ESD handling set</b> , consisting of: foldable, green workbench pad (surface resistance according to DIN 53482: approx. 10 <sup>8</sup> ohm), 500 x 400 x 0.35 mm, contact bracelet 9-342, earth wire 2500 mm long with 1 Mohm safety resistor

## ESD/EGB 2300 SERVICE SET

Special tool set for repair and maintenance of electrostatically endangered components



### 2300 **BERNSTEIN** ESD/EGB Service set with tools

#### Description:

The foldable green portfolio at the same time serves as an electrically conductive workbench pad of 680 x 680 x 0.35 mm. The surface resistance according to DIN 53482 is approx.  $10^8$  ohm.

The workbench pad has 3 press-stud receptacles for connecting the contact bracelet and the earth wire. With 2 additional press-buttons the pad may be closed as tool bag.

The 2 patch pockets carry the contact bracelet and the earth wire. Furthermore 16 conductive tools are placed in pockets, ready to hand.

Outside dimensions: 330 x 240 x 20 mm (when closed)

Weight with tools: approx. 0.850 kg

#### Tool set:

##### No. Description of individual tools

2-166	<b>Glass fibre contact cleaner</b> , with rotary mechanism, plastic casing
2-620	<b>PLCC-extractor</b>
3-601-13	<b>Side cutters</b> , 120 mm, for hard wire up to 0.4 mm Ø, for soft wire up to 1.0 mm Ø, bright steel-polished, box joint, double leaf spring, with conductive black hand-guard
3-633-13	<b>Snipe nose pliers</b> , 120 mm, bright steel-polished, box joint, double leaf spring, with conductive black hand-guard
4-601	<b>Screwdriver 50 x 0.8 mm</b> , with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
4-605	<b>Screwdriver 60 x 2.0 mm</b> , with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
4-606	<b>Screwdriver 60 x 2.5 mm</b> , with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
4-621	<b>Cross-recess screwdriver size 000</b> , with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
4-622	<b>Cross-recess screwdriver size 00</b> , with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
4-623	<b>Cross-recess screwdriver size 0</b> , with conductive handle, blade made from chrome vanadium,

chrome-plated, with black tip

##### No. Description of individual tools

5-191	<b>Tweezers</b> , 120 mm, made from conductive, black plastic material, reinforced with glass fibre, with rounded tips
5-194	<b>Tweezers</b> , 120 mm, made from conductive, black plastic material, reinforced with glass fibre, with bent, pointed tips
6-616	<b>Socket wrench</b> with conductive handle, blade made from chrome vanadium, nickel-plated, A/F 3.5 mm
6-661	<b>TORX screwdriver T 5</b> , with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
6-664	<b>TORX screwdriver T 8</b> , with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
6-666 L	<b>TORX screwdriver T 10</b> , with bore-hole in the tip, with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
9-342	<b>Contact bracelet</b> cloth armband, allergy-free, edges and surface insulating, spiral cord, 1 Mohm safety resistor, combined press-stud and terminal connection, to DIN EN 100 015/1
9-346	<b>Earth wire</b> with 1 Mohm safety resistor, 2500 mm long, with terminal connection resp. press-stud, for connecting workbench pad and floor cover and connection to an earth potential

## ELECTRONIC-SERVICE TOOL SETS

Special service sets for the maintenance and repairing of mobile phones and other high sensitive IT- instruments

The tools are clearly arranged in handy black imitation leather cases with zip fastener.  
2251 Case with zip fastener, without tools

**Outside dimensions: 190 x 135 x 35 mm (when closed)**

### 2250 **BERNSTEIN** CARAT with tool set

9-piece set **conductive tools** from the series EUROline-Conductive, to meet the most exacting standards, with bright-burnished, fine-polished pliers and bi-coloured conductive hand-guard in **conductive case**.

**Weight with tools: approx. 0.360 g**



### Tool set:

No.	Description of individual tools
3-672-15	<b>End cutters EUROline-Conductive</b> , 130 mm, for copper wire up to 0.6 mm Ø, cutting edge 20° angular, box joint, double leaf spring, fine polished and bright burnished, conductive bicoloured hand-guard
3-683-15	<b>Snipe nose pliers EUROline-Conductive</b> , 130 mm, plain jaws, as above
4-601	<b>Screwdriver 50 x 0.8 mm</b> , with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
4-603	<b>Screwdriver 50 x 1.5 mm</b> , as above
4-621	<b>Cross-recess screwdriver size 000</b> , as above
4-623	<b>Cross-recess screwdriver size 0</b> , as above
5-191	<b>Tweezers</b> , made from conductive and acid-resistant black plastic, glassfibre reinforced
6-661	<b>TORX-Screwdriver T 5</b> , with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
6-663	<b>TORX-Screwdriver T 7</b> , as above

### 2260 **BERNSTEIN** SELECT with tool set

9-piece set of tools from the series EUROline, with high quality tools

**Weight with tools: approx. 0.360 kg**

### Tool set:

No.	Description of individual tools
3-651-14	<b>EUROline-mini side cutters</b> , 120 mm, for copper wire up to 1.2 mm for soft wire up to 0.6 mm Ø, fine polished - bright burnished, with bi-coloured hand-guard
3-683-14	<b>EUROline-snipe nose pliers</b> , 130 mm, plain jaws, as above
4-161	<b>Screwdriver 40 x 1.0 mm</b> , blade made from chrome vanadium, chrome plated, with black tip, special handle and swivel top
4-163	<b>Screwdriver 40 x 2.0 mm</b> , as above
4-281	<b>Cross-recess screwdriver size 000</b> , as above
4-283	<b>Cross-recess screwdriver size 0</b> , as above
5-121	<b>Engineer's tweezers</b> , straight, round-pointed, 120 mm, nickel-plated
6-681	<b>TORX-Screwdriver T 5</b> , blade made from chrome vanadium, chrome-plated, with black tip, special handle and swivel top
6-682	<b>TORX-Screwdriver T 6</b> , as above



### 2270 **BERNSTEIN** ACCENT with tool set

9-piece set **conductive tools** with bright steel polished pliers and black, conductive hand guard in **conductive case**

**Weight with tools: approx. 0.360 kg**



### Tool set:

No.	Description of individual tools
3-601-13	<b>Side cutters</b> , 120 mm, for hard wire up to 0.4 mm Ø for soft wire up to 1.0 mm Ø, bright steel-polished, boc joint, double leaf spring, with conductive black hand-guard
3-633-13	<b>Snipe nose pliers</b> , 120 mm, plain jaws, as above
4-601	<b>Screwdriver 40 x 0.8 mm</b> , blade made from chrome vanadium, chrome plated, with black tip, special handle and swivel top
4-603	<b>Screwdriver 50 x 1.5 mm</b> , as above
4-621	<b>Cross-recess screwdriver size 000</b> , as above
4-623	<b>Cross-recess screwdriver size 0</b> , as above
5-191	<b>Tweezers</b> , made from conductive and acid-resistant black plastic material, reinforced with glassfibre, 120 mm, with straight, rounded tips
6-661	<b>TORX-Screwdriver T 5</b> , with conductive handle, chrome vanadium, chrome-plated, with black tip
6-663	<b>TORX-Screwdriver T 7</b> , as above



## RADIO-TV-SERVICE TOOL ROLLS

The tool rolls are made from a durable cotton canvas, outside black, inside grey

### 2400 **BERNSTEIN** TV Service tool roll with 24 piece tool set

2401 Tool roll without tools

Weight with tools: approx. 1.700 kg

#### Tool set:

No.	Description of individual tools
1-459	<b>Adjusting screwdriver</b> , 200 mm long, blade widths 3.5 and 5.0 mm
2-234	<b>High voltage mains tester</b> , 190 mm long
2-236	<b>Tapping hammer</b>
3-132-1	<b>Side cutter</b> , 130 mm, for hard wire, chrome-plated, insulated
3-205-1	<b>Engineer's flat pliers</b> , 185 mm, box joint, chrome-plated, insulated
3-215-1	<b>Engineer's pliers</b> , 180 mm, bent snipe nose, chrome-plated, insulated
3-225-1	<b>Engineer's precision pliers</b> , 135 mm, snipe nose, chrome-plated, insulated
3-335-1	<b>Adjusting pliers</b> , 135 mm, straight, flat, wide, chrome-plated, insulated
3-565	<b>Water pump pliers</b> , 120 mm, chrome-plated
4-103 S	<b>Engineer's screwdriver</b> , with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4 mm
4-104 S	<b>Engineer's screwdriver</b> as above, blade 150 x 5 mm
4-105 S	<b>Engineer's screwdriver</b> as above, blade 200 x 6 mm
4-115-1 S	<b>Engineer's screwdriver</b> as above, blade 200 x 3 mm, insulated
4-311	<b>Screwdriver for grub screws</b> , blade C.V., 80 x 2.8 mm
4-408	<b>Screw holder</b> , nickel-plated, blade 200 x 4 mm
5-107-1	<b>Steel tweezers</b> with bent tips, 150 mm, nickel-plated
5-231	<b>Flat file</b> with handle
5-261	<b>Contact file</b>
5-301	<b>Special sheet-metal scissors</b> , serrated, extremely slim, 110 mm
6-105	<b>Socket wrench</b> , blade C.V., chrome-plated, 140 x 5.5 mm A/F
6-107	<b>Socket wrench</b> as above, blade 140 x 7 mm A/F
7-425	<b>Dust brush</b>
8-145	<b>Soldering iron</b> , 30 W, 220 V
8-401	<b>Carded solder</b> , approx. 1 m



### 2800 **BERNSTEIN** tool roll with 18-piece tool set

2801 Tool roll without tools

Weight with tools: approx. 1.450 kg

#### Tool set:

No.	Description of individual tools
2-236	<b>Tapping hammer</b>
3-133-1	<b>Side cutter</b> , 145 mm, for hard wire, chrome-plated, insulated
3-205-1	<b>Engineer's flat pliers</b> , 185 mm, box joint, chrome-plated, insulated
3-245-1	<b>Telephone pliers</b> with wire cutters, 200 mm, snipe nose, long, straight
3-255-1	<b>Telephone pliers</b> with wire cutters, 200 mm, long, bent snipe nose
3-732-1	<b>Combination pliers</b> , 160 mm, chrome-plated, insulated
4-102 S	<b>Engineer's screwdriver</b> , blade chrome-plated, 75 x 3.5 mm
4-103 S	<b>Engineer's screwdriver</b> as above, blade 100 x 4 mm
4-104 S	<b>Engineer's screwdriver</b> as above, blade 150 x 5 mm
4-105 S	<b>Engineer's screwdriver</b> as above, blade 200 x 6 mm
4-311	<b>Screwdriver for grub screws</b> , blade C.V., 80 x 2.8 mm
4-316	<b>Radio screwdriver</b> , nickel-plated blade 60 x 3 mm
5-107	<b>Steel tweezers</b> with bent tips, 150 mm, nickel-plated
5-121	<b>Steel tweezers</b> straight, round and pointed, 120 mm, nickel-plated
5-125	<b>Sheet-metal tweezers</b> straight, flat and pointed, 110 mm, nickel-plated
5-261	<b>2 contact files</b>
5-301	<b>Special sheet-metal scissors</b> , serrated, extremely slim, 110 mm



### 2850 **BERNSTEIN** tool roll with 10-piece tool set

2851 Tool roll without tools

Weight with tools: approx. 0.900 kg

#### Tool set:

No.	Description of individual tools
2-236	<b>Tapping hammer</b>
3-132-1	<b>Side cutter</b> , 130 mm, for hard wire, chrome-plated, insulated
3-205-1	<b>Engineer's flat pliers</b> , 185 mm, box joint, chrome-plated, insulated
3-235-1	<b>Telephone pliers</b> with wire cutters, 145 mm, chrome-plated, insulated
3-255-1	<b>Telephone pliers</b> with wire cutters, 200 mm, long, bent snipe nose
4-102 S	<b>Engineer's screwdriver</b> , blade chrome-plated, 75 x 3.5 mm
4-103 S	<b>Engineer's screwdriver</b> as above, blade 100 x 4 mm
4-104 S	<b>Engineer's screwdriver</b> as above, blade 150 x 5 mm
4-311	<b>Screwdriver for grub screws</b> , blade C.V., 80 x 2.8 mm
5-107	<b>Steel tweezers</b> with bent tips, 150 mm, nickel-plated



## EUROline 2600 SERVICE SET

The high quality service equipment for the electronics engineer



### 2600 **BERNSTEIN** EUROline with tool set

2601 Case with zip fastener, without tools

#### Description:

Black imitation leather case with zip fastener and velvet grey lining.

22 tools are clearly arranged in pockets made from black imitation leather. For taking CD-ROM, discs or other documents an elastic loop is fixed.

The selected electronics pliers and screwdrivers are from the BERNSTEIN „EUROline“-range.

The CD in the above picture is not included.

Outside dimensions: 320 x 250 x 50 mm (when closed)

Weight with tools: approx. 0.900 kg

#### Tool set:

No.	Description of individual tools	No.	Description of individual tools
1-735	<b>Adjusting screwdriver handle</b> , double-ended, for blades with 3 mm Ø	4-162	<b>Electronics screwdriver</b> with special handle and swivel top, blade made from chrome vanadium, chrome-plated, with black tip, 40 x 1.5 mm
1-738	<b>Special hard plastic bit</b> , blade Ø 3 mm, tip 1.5 x 0.5 mm	4-165	<b>Electronics screwdriver</b> as above, 50 x 3.0 mm
1-739	<b>Special hard plastic bit</b> , blade Ø 3 mm, tip 3.0 x 0.5 mm	4-281	<b>Electronics cross-recess screwdriver</b> as above, size 000
2-127	<b>Tin knife</b> with plastic handle, 115 mm	4-282	<b>Electronics cross-recess screwdriver</b> as above, size 00
2-166	<b>Glass fibre contact cleaner</b>	4-283	<b>Electronics cross-recess screwdriver</b> as above, size 0
2-265	<b>2 test prods</b> , red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire	5-006-7	<b>Component tweezers</b> , stainless, non-reflective, with insulated jaws, 140 mm
2-620	<b>PLCC extractor</b>	5-051	<b>SMD tweezers</b> , anti-magnetic, non-reflective, straight, pointed, 115 mm
3-655-14	<b>EUROline side cutters</b> , 120 mm, with slim, rounded head, without side face, box joint, double leaf spring, fine-polished and bright-burnished, bicolour insulation	5-052	<b>SMD tweezers</b> , anti-magnetic, non-reflective, bent, very sharply pointed, 110 mm
3-672-14	<b>EUROline end cutters</b> , 130 mm, 20° angular without side face, box joint, double leaf spring, fine-polished and bright-burnished, bicolour insulation	5-062	<b>SMD tweezers</b> , anti-magnetic, non-reflective, bent, flat tips, with gripping cavity, 115 mm
3-683-14	<b>EUROline snipe nose pliers</b> , 130 mm, plain jaws, box joint, double leaf spring, fine-polished and bright-burnished, bicolour insulation	6-681	<b>TORX screwdriver</b> with special handle and swivel top, blade made from chrome vanadium, chrome-plated, with black tip, size T 5
		6-683	<b>TORX screwdriver</b> with special handle and swivel top, blade made from chrome vanadium, chrome-plated, with black tip, size T 7

## NETWORK 2700 SERVICE SET

The set with all essential tools for the assembly and maintenance of networks



### 2700 **BERNSTEIN** NETWORK with tool set

2701 Case with zip fastener, without tools

#### Description:

In an elegant black nylon case with zip fastener and velvet grey lining 23 special tools are clearly arranged in pockets.

Outside dimensions: 320 x 250 x 100 mm (when closed)

Weight with tools: 2.750 kg

#### Tool set:

No.	Description of individual tools	No.	Description of individual tools
2-601	<b>IC-tweezers, nickel-plated</b> , 125 mm, for gripping, inserting and removing IC's	5-161	<b>Clamping scissors</b> , 130 mm, stainless, with serrated gripping jaws
3-125-1	<b>Micro side cutters</b> , 110 mm, for soft wire up to 0.8 mm and hard wire up to 0.3 mm, chrome-plated, with BERNSTEINIT-insulation	5-0601	<b>Rotary coaxial cable stripper</b> for cable types RG 58, RG 59 and RG 62
3-235-1	<b>Telephone pliers</b> , 145 mm, chrome-plated, with BERNSTEINIT-insulation	4-775	<b>Plastic sprung handle for socket wrenches</b>
3-815-1	<b>Wire strippers</b> , 155 mm, with adjusting screw for all wire thicknesses, chrome-plated, with BERNSTEINIT-insulation	6-203	<b>Socket wrench</b> , 6.0 mm, chrome vanadium, nickel plated, without handle
3-0605	<b>Combination-crimping pliers</b> for connector types, 6P/6C, 6P/4C, 6P/2C, 8P/8C	6-205	<b>Socket wrench</b> , 8.0 mm, chrome vanadium, nickel plated, without handle
3-0611	<b>Crimping pliers</b> for BNC- and TNC-coaxial connectors	6-207	<b>Socket wrench</b> , 10.0 mm, chrome vanadium, nickel plated, without handle
4-141	<b>Screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, 75 x 3.5 mm, chrome-plated, with black tip	6-772	<b>Adjustable wrench</b> , chrome vanadium, 150 mm, jaw opening 0 - 18 mm
4-143	<b>Screwdriver</b> as above, 125 x 5.5 mm, chrome-plated, with black tip	6-965 L	<b>TORX-Screwdriver</b> , size T 10, with bore-hole in the tip, with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, black tip
4-255	<b>Cross-recess screwdriver</b> size 0, with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, with black tip, blade length 60 mm	6-966 L	<b>TORX-Screwdriver</b> , size T 15, as above, with bore-hole in the tip
4-256	<b>Cross-recess screwdriver</b> size 1, as above, blade length 80 mm	6-967 L	<b>TORX-Screwdriver</b> , size T 20, as above, with bore-hole in the tip
4-257	<b>Cross-recess screwdriver</b> size 2, as above, blade length 100 mm	8-390	<b>Desoldering pump</b> , 195 mm long, 20 mm Ø
		8-396	<b>Gas soldering iron</b> , 10 - 60 W



## MASTER 3000 SERVICE CASE

The indispensable pouch-style service case for the discerning engineer



3000 **BERNSTEIN** MASTER with tool set

3015 **BERNSTEIN** MASTER without tool set

### Description:

Elegant black grained leather case with all-round zip fastener and red plastic lining. The set comprises 19 of the most important BERNSTEIN tools for service work. The BERNSTEIN Master can be kept at hand in the glove compartment of your car.

Outside dimensions: 245 x 130 x 60 mm (when closed)

Weight with tools: approx. 1.250 kg

### Tool set:

#### No. Description of individual tools

1-153	<b>Adjusting screwdriver</b> , blade 130 x 2 mm
1-154	<b>Adjusting screwdriver</b> , blade 130 x 3 mm
3-131-1	<b>Side cutters</b> , 120 mm, for hard wire up to 0.8 mm, for soft wire up to 1.5 mm, chrome-plated, with BERNSTEINIT insulation
3-235-1	<b>Telephone pliers</b> with wire cutters, 145 mm, chrome-plated, with BERNSTEINIT insulation
3-511-1	<b>Flat pliers</b> , 120 mm, chrome-plated, with BERNSTEINIT insulation
3-565	<b>Water pump pliers</b> , 120 mm, chrome-plated
4-103 S	<b>Engineer's screwdriver</b> , with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4 mm
4-311	<b>Screwdriver for grub screws</b> with plastic handle, blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm

#### No. Description of individual tools

4-331	<b>Assembly screwdriver</b> with plastic handle, nickel-plated blade, 45 x 6 mm
4-391	<b>Watchmaker's screwdriver</b> , nickel-plated, with 4 interchangeable blades 1.5, 2.0, 2.5 and 3.0 mm
4-407	<b>Screw holder</b> , nickel-plated, blade 110 x 4 mm
5-107	<b>Steel tweezers</b> , with bent tips, 150 mm, nickel-plated
5-117	<b>Steel tweezers</b> , straight, flat and wide, 145 mm, nickel-plated
5-261	<b>Contact file</b>
5-301	<b>Special sheet-metal scissors</b> , serrated, extremely slim, 110 mm, nickel-plated
5-511	<b>Pocket knife</b>
7-505	<b>Tape measure</b> , 1 m
8-135	<b>ERSA-soldering iron "Multitip"</b> , 15 W, 220 V <b>Wire solder</b>

## SPRINTER 3100 SERVICE CASE

The handy tool case for service-inspection of the electronics engineer



- 3100 **BERNSTEIN** SPRINTER with tool set
- 3110 **BERNSTEIN** SPRINTER with tool set but without gas solder
- 3115 **BERNSTEIN** SPRINTER without tool set

### Description:

Elegant black grained leather case with all-round zip fastener and red plastic lining. The set comprises 19 BERNSTEIN tools for service work. The BERNSTEIN Sprinter has a handy size for the pocket of the smock.

Outside dimensions: 205 x 120 x 50 mm (when closed)

Weight with tools: approx. 0.750 kg

### Tool set:

No.	Description of individual tools
1-151	<b>Adjusting screwdriver</b> , blade 40 x 3 mm
1-305	<b>Adjusting screwdriver</b> , blade 80 x 2.4 mm with bronze insert 1.1 x 0.5 mm
1-307	<b>Adjusting screwdriver</b> , blade 80 x 2.4 mm, with bronze tip 2.0 x 0.5 mm
2-127	<b>Tin knife</b> with plastic handle, 115 mm
2-166	<b>Contact-cleaner</b> , made from glass fibre
2-265-1	<b>Test prod</b> , red, especially thin, pointed and flexible, blade made from 1 mm steel wire
2-265-2	<b>Test prod</b> , black, especially thin, pointed and flexible, blade made from 1 mm steel wire
2-275	<b>Repair mirror</b> , 21 mm Ø
3-127-2	<b>"Slimline" side cutters</b> , 115 mm, for soft wire up to 1.0 mm, extremely slim head, box joint, compression spring, chrome-plated, with transparent insulation
3-445-2	<b>Micro snipe-nose pliers</b> , 120 mm, oval pointed design, box joint, chrome-plated, with transparent insulation

No.	Description of individual tools
4-102 S	<b>Engineer's screwdriver</b> , with special square pattern BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 75 x 3.5 mm
4-271	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv, size 0 with special square pattern BERNSTEIN handle, blade made from chrome vanadium, nickel-plated, with black tip
4-311	<b>Screwdriver for headless screws</b> , with plastic handle, blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm
4-393	<b>Watchmaker's screwdriver</b> , with 5 interchangeable blades 1.5, 2.0, 2.5, cross-recess blades size 00 and 000
4-406	<b>Screw holder</b> , nickel-plated, blade 80 x 4 mm
5-107	<b>Steel tweezers</b> , with bent tips, 150 mm, nickel-plated
5-131	<b>Watchmaker's tweezers</b> , 110 mm, stainless, sharply-pointed
6-771	<b>Adjustable wrench</b> , jaw opening 0-12 mm, total length 100 mm
8-396	<b>Gas-soldering-iron</b> , 10 - 60 W

## PROFI 5500 ELECTRICIAN'S CASE

The electrician's case thought out to the very last detail



5500 **BERNSTEIN** PROFi electrician's case with tool set

5515 **BERNSTEIN** PROFi electrician's case without tool set

### Description:

Body of case made from textured ABS material, cover flaps made from best, black, grained cowhide. The locks are on the top of the case. The handle is slotted through the flap, thereby distributing the load over the entire area of the cover. Inside on the right and on the left, there are each 5 adjustable loops. A special plastic holder mounted on the back is particularly suitable for holding screwdrivers, chisels etc. The 7 compartments sewn into the cover of the case are used for holding pliers. The set comprises 33 tools. The bottom of the case acts as a tray. There is plenty of room for a drill and sundry accessories.

Outside dimensions: 430 x 340 x 190 mm

Weight without tools: 2.000 kg

Weight with tools: 6.100 kg

### Tool set:

#### No. Description of individual tools

3-133-1	<b>Side cutters</b> , 145 mm, for hard wire, chrome-plated, with BERNSTEINIT insulation
3-235-1	<b>Telephone pliers</b> , 145 mm, chrome-plated, with BERNSTEINIT insulation
3-522-1	<b>Round pliers</b> , 145 mm, chrome-plated with BERNSTEINIT insulation
3-575-6	<b>Water pump pliers</b> , 240 mm, nickel-plated, with insulation
3-733-1	<b>Combination pliers</b> , 180 mm, chrome-plated, with BERNSTEINIT insulation
3-815-1	<b>Wire strippers</b> , 155 mm, chrome-plated, with BERNSTEINIT insulation
4-103 S	<b>Engineer's screwdriver</b> with special square BERNSTEIN handle blade made from chrome vanadium, chrome-plated, 100 x 4 mm
4-104 S	<b>Engineer's screwdriver</b> as above, blade 150 x 5 mm
4-105 S	<b>Engineer's screwdriver</b> as above, blade 200 x 6 mm
4-135 S	<b>Engineer's screwdriver</b> as above, blade 150 x 8 mm
4-252	<b>Cross-recess screwdriver</b> with plastic handle, blade made from chrome vanadium, nickel-plated, size 1
4-253	<b>Cross-recess screwdriver</b> as above, size 2
4-311	<b>Screwdriver for grub screws</b> with plastic handle, blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm
4-344 VDE	<b>Voltage tester</b> , blade 100 x 3.5 mm
4-351	<b>Offset screwdriver</b> , C.V., nickel-plated, 100 x 5 mm

#### No. Description of individual tools

5-271	<b>Workshop file</b> , 200 mm, flat and blunt, with wooden handle
5-274	<b>Workshop file</b> , 200 mm, half-round, with wooden handle
5-309	<b>Cable-stripping scissors</b> , 190 mm, stainless, with plastic handles
5-501	<b>Cable knife</b>
7-116	<b>Engineer's hammer</b> , 300 g
7-202	<b>Firmer chisel</b> , blade width 16 mm
7-235	<b>Flat chisel</b> , chrome vanadium, 200 x 16 x 20 mm
7-255	<b>Electrician's chisel</b> , chrome vanadium, 200 x 8 x 10 mm
7-303	<b>Twist gimlet</b> , 3 mm Ø
7-315	<b>Drill rasp</b> , with plastic handle, blade 175 x 4 mm Ø
7-316	<b>Punch</b> , with plastic handle, 6 mm Ø
7-405	<b>Trowel</b> , with wooden handle, blade width 50 mm
7-410	<b>Slicker trowel</b> , with round shank, blade width 16 mm
7-415	<b>Rubber beaker for plaster</b> , round
7-425	<b>Dust brush</b>
7-502	<b>Folding rule</b> , 2 m
7-535	<b>Spirit level</b> , 220 mm, with 3 levels: horizontal, vertical and 45° angle
7-615	<b>Pocket hack saw "Puk"</b> with fixed wooden handle and saw blade



## MULTI 5600 ELECTRICIAN'S CASE

The handy, spacious electrician's tool case



5600 **BERNSTEIN** MULTI with tool set

5615 **BERNSTEIN** MULTI without tool set

### Description:

Stable case, body made from textured ABS material, side and cover flaps made from best, black, grained cowhide. The handle is slotted through the flap, thereby distributing the load over the entire area of the cover. When opening, the side flaps are held by bands. This enables the user to survey all the tools easily.

37 tools are held by compartments, adjustable loops and a special holder. The bottom of the case is a plastic tray which may carry additional tools. The case has 2 locks.

Outside dimensions: 430 x 340 x 195 mm

Weight without tools: approx. 2.900 kg

Weight with tools: approx. 6.900 kg

### Tool set:

No.	Description of individual tools	No.	Description of individual tools
3-133-1	<b>Side cutters</b> , 145 mm, for hard wire, chrome-plated with BERNSTEINIT insulation	5-271	<b>Workshop file</b> , 200 mm, flat and blunt, with wooden handle
3-235-1	<b>Telephone pliers</b> , 145 mm, chrome-plated, with BERNSTEINIT insulation	5-274	<b>Workshop file</b> , 200 mm, half-round, with wooden handle
3-575-6	<b>Water pump pliers</b> , 240 mm, nickel-plated, with insulation	5-309	<b>Cable-stripping scissors</b> , 190 mm, stainless, with plastic handles
3-732-1	<b>Combination pliers</b> , 160 mm, chrome-plated, with BERNSTEINIT insulation	5-501	<b>Cable knife</b>
3-815-1	<b>Wire strippers</b> , 155 mm, chrome-plated, with BERNSTEINIT insulation	5-505	<b>Wire-stripping knife</b> for cable 8-28 mm Ø
4-125 S	<b>Engineer's screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 6 mm	6-820	<b>8-pieces set offset hexagon key wrenches</b> , 1.5 to 6 mm A/F, in plastic case
4-135 S	<b>Engineer's screwdriver</b> as above, blade 150 x 8 mm	7-116	<b>Engineer's hammer</b> , 300 g
4-311	<b>Screwdriver for grub screws</b> with plastic handle, blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm	7-202	<b>Firmer chisel</b> , blade width 16 mm
4-344 VDE	<b>Voltage tester</b> , blade 100 x 3.5 mm	7-235	<b>Flat chisel</b> , chrome vanadium, 200 x 16 x 20 mm
14-603 VDE	<b>Insulated screwdriver</b> , blade 100 x 4.0 mm	7-255	<b>Electrician's chisel</b> , chrome vanadium, 200 x 8 x 10 mm
14-604 VDE	<b>Insulated screwdriver</b> as above, blade 125 x 5.5 mm	7-303	<b>Twist gimlet</b> , 3 mm Ø
14-606 VDE	<b>Insulated screwdriver</b> as above, blade 150 x 6.5 mm	7-306	<b>Twist gimlet</b> , 6 mm Ø
14-632 VDE	<b>Insulated cross-recess screwdriver</b> , size 1	7-316	<b>Punch</b> , with plastic handle, 6 mm Ø
14-633 VDE	<b>Insulated cross-recess screwdriver</b> as above, size 2	7-405	<b>Trowel</b> , with wooden handle, blade width 50 mm
5-107-6	<b>Steel tweezers</b> with fine, bent tips, 150 mm, nickel-plated, strong PVC-insulated	7-410	<b>Slicker trowel</b> , with round shank, blade width 16 mm
5-117-6	<b>Steel tweezers</b> , straight, flat and wide, 145 mm, nickel-plated, strong PVC-insulated	7-415	<b>Rubber beaker for plaster</b> , round
		7-502	<b>Folding rule</b> , 2 m
		7-535	<b>Spirit level</b> , 220 mm, with 3 levels: horizontal, vertical and 45° angle
		7-616	<b>Pocket hack saw "Puk"</b> with adjustable wooden handle, saw blade and plastic wallet

### To complete the set we recommend:

8-145	<b>ERSA soldering iron</b> , 30 W, 220 V
8-403	<b>Soldering wire</b> , 250 g spool, 1.5 mm Ø

## JUMBO HOUSEHOLD ELECTRONICS SERVICE CASE

The universal case with tools for the installation of domestic appliances and fittings, with VDE-tools for the electrical installation inside the house, with special tools for the repair of domestic appliances as well as bearings in washing machines and dryers. A complete case for the electrician in household electronics.

5700 **BERNSTEIN JUMBO** with tool set

5715 **BERNSTEIN JUMBO** without tool set

### Description

The case is made from deep-drawn plastic shells with a sturdy aluminium frame and replaceable protective rubber edges. In the lid of the case is a pocket for documents with different divisions. 43 tools are clearly arranged in pockets on 2 tool trays and in the plastic tray with adjustable partitions in the bottom of the case.

The tool trays are fixed to the case with a special clip system.

The case is locked by a central safety code.

**Outside dimensions: 480 x 350 x 210 mm**

**Weight without tools: approx. 6.340 kg**

**Weight with tools: approx. 12.000 kg**

### Tool set:

No.	Description of individual tools	No.	Description of individual tools
3-575-6	<b>Water pump pliers,</b> 240 mm, nickel-plated, with red insulation	14-602 VDE	<b>Safety insulated screwdriver,</b> VDE-insulation, blade 100 x 3.5 mm
3-578-6	<b>Siphon water pump pliers,</b> 240 mm, with 4 adjustments, nickel-plated, with red insulation, opening up to 70 mm	14-604 VDE	<b>Safety insulated screwdriver,</b> VDE-insulation, blade 125 x 5.5 mm
4-950	<b>Interchangeable screwdriver set,</b> TORX / TRI WING, 11-piece set, in a wallet, chrome vanadium, TW 1, TW 2, TW 3, TW 4, T 10, T 15, T 20, T 25, T 27, T 30 and interchangeable handle	14-606 VDE	<b>Safety insulated screwdriver,</b> VDE-insulation, blade 150 x 6.5 mm
5-309	<b>Cable stripping shears</b> 190 mm, stainless, with plastic handles	14-632 VDE	<b>Cross-recess screwdriver,</b> size 1, with VDE safety insulation, blade length 80 mm
5-505	<b>Insulation stripping tool</b> for cable diameter of 8 up to 28 mm	14-633 VDE	<b>Cross-recess screwdriver,</b> size 2, with VDE safety insulation, blade length 100 mm
6-781	<b>Fitting wrench,</b> with protection jaws, 270 mm, jaw opening 55 mm, jaw length 47 mm, for chrome plated fittings	15-522 VDE	<b>Cable stripping knife,</b> with protection for the blade, blade length 35 mm
7-116	<b>Engineer's hammer,</b> 300 g	16-505 VDE	<b>Single-ended open-jaw wrench</b> with two-colour multilayered safety insulation, 10 mm A/F
7-235	<b>Flat chisel,</b> chrome vanadium, 200 x 16 x 20 mm	16-506 VDE	<b>Single-ended open-jaw wrench</b> with two-colour multilayered safety insulation, 11 mm A/F
7-255	<b>Electrician's chisel,</b> chrome vanadium, 200 x 8 x 10 mm	16-507 VDE	<b>Single-ended open-jaw wrench,</b> with two-colour multilayered safety insulation, 12 mm A/F
7-316	<b>Punch</b> with impact-resistant plastic handle, blade 6 mm Ø	16-508 VDE	<b>Single-ended open-jaw wrench,</b> with two-colour multilayered safety insulation, 13 mm A/F
7-410	<b>Slicker trowel</b> with round shank, blade width 16 mm	16-509 VDE	<b>Single-ended open-jaw wrench,</b> with two-colour multilayered safety insulation, 14 mm A/F
7-502	<b>Folding rule,</b> 2 m	16-512 VDE	<b>Single-ended open-jaw wrench,</b> with two-colour multilayered safety insulation, 17 mm A/F
7-616	<b>Pocket saw,</b> with adjustable wooden handle, in a wallet	16-513 VDE	<b>Single-ended open-jaw wrench,</b> with two-colour multilayered safety insulation, 19 mm A/F
13-106 VDE	<b>Side cutters,</b> 160 mm, for steel wire up to 1.6 mm Ø, chrome-plated, with two- colour multilayered safety insulation	03-0055	<b>Pipe Cutter,</b> 210 mm, for cutting of composite pipes with a diameter of 12 - 20 mm and protective pipes with a diameter of 18 - 35 mm
13-207 VDE	<b>Telephone pliers,</b> 205 mm, snipe nose, long, straight jaws, chrome-plated, with two- colour multilayered safety insulation	03-0051	<b>Pliers wrench,</b> 180 mm, jaw opening up to 35 mm, for gripping, holding, pressing and bending of workpieces
13-707 VDE	<b>Combination pliers,</b> 190 mm, chrome-plated, with two-colour multilayered safety insulation	03-0052	<b>Pliers wrench,</b> 250 mm, jaw opening up to 35 mm, for gripping, holding, pressing and bending of workpieces
13-806 VDE	<b>Wire strippers,</b> 165 mm, chrome-plated, with two-colour multilayered safety insulation		

### To complete the set we recommend:

7-032	<b>Mechanical 2-arm puller,</b> clamping capacity 15 - 85 mm, length of jaws 85 mm
7-033	<b>Mechanical 2-arm puller,</b> clamping capacity 20 - 150 mm, length of jaws 80 mm
7-036	<b>Mechanical 3-arm puller,</b> clamping capacity 15 - 85 mm, length of jaws 85 mm
7-037	<b>Mechanical 3-arm puller,</b> clamping capacity 20 - 150 mm, length of jaws 80 mm
16-440 VDE	<b>Sockets,</b> 9-piece set, in a wallet, sockets and T-bar with two-colour multilayered insulation, 10.0, 11.0, 12.0, 13.0, 14.0, 15.0, 17.0, 19.0 mm A/F
17-531 VDE	<b>Voltage tester „Steinel Volt Check 3“</b>

# JUMBO 5700 HOUSEHOLD ELECTRONICS SERVICE CASE

The universal case for outdoor-service in household electronics





## PC-CONTACT ELECTRONIC SERVICE CASE

The clearly arranged tool case for the prompt and efficient servicing of computers

6100 **BERNSTEIN** PC-CONTACT with tool set

6115 **BERNSTEIN** PC-CONTACT without tool set

### Description:

Elegant, hard-wearing case made from deep-drawn, impact-resistant, grained dark brown plastic with a continuous bronze anodised aluminium frame, dustproof and rainproof, acid-resistant, scratch-resistant and non-slip.

65 tools are clearly arranged in pockets on one swiveling and one removable tray.

The back of the panel has elastic loops to take documents, discs, pcb's, measuring instruments etc.

The lid of the case is padded with foam rubber. The split plastic tray in the bottom of the case, which is intended to take spare parts, measuring instruments and soldering equipment, is 60 mm high.

The case has a lock strip with 2 locks and is centrally lockable. It has loops at the sides for attaching a carrying strap.

Outside dimensions: 460 x 350 x 170 mm

Weight without tools: approx. 3.700 kg

Weight with tools: approx. 5.400 kg

### Tool set:

No.	Description of individual tools	No.	Description of individual tools
2-127	<b>Tin knife</b> , with plastic handle, 115 mm	4-272	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv as above, size 1
2-132	<b>Spring hook</b> , nickel-plated and insulated, 175 mm	4-281	<b>Electronics cross-recess screwdriver</b> with special black handle and swivel top, size 000, blade chrome vanadium, chrome-plated, with black tip
2-161	<b>Magnetic bar</b> with double ball- and socket joint, slewable, 215 mm	4-282	<b>Electronics cross-recess screwdriver</b> as above, size 00
2-166	<b>Contact cleaner</b> , made from glass fibre, 115 mm	4-283	<b>Electronics cross-recess screwdriver</b> as above, size 0
2-265	<b>2 Test prods</b> , red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire, 155 mm	4-284	<b>Electronics cross-recess screwdriver</b> as above, size 1
2-601	<b>IC tweezers</b> , nickel-plated, 125 mm, for gripping, inserting and removing IC's	4-335	<b>Screwdriver</b> for special screws on cabinets
2-620	<b>PLCC extractor</b> for easy removal of plug-in PLCC's	4-343 VDE	<b>Voltage tester</b> , blade 60 x 3 mm
2-275	<b>Repair mirror</b> , 21 mm Ø, with handle, 180 mm long	4-407	<b>Retaining screwdriver</b> , 110 x 4 mm
3-901-12	<b>Side cutters</b> , 120 mm, for hard wire up to 0.4 mm, for soft wire up to 1.0 mm, burnished, with orange insulation	5-107	<b>Engineer's tweezers</b> , made from steel, with bent tips, 150 mm
3-906-12	<b>End cutters</b> , 120 mm, for soft wire up to 0.8 mm, burnished, with orange insulation	5-117	<b>Engineer's tweezers</b> , straight-flat-wide, 145 mm, nickel-plated
3-932-12	<b>Flat nose pliers</b> , 120 mm, burnished, with orange insulation	5-210	<b>Needle files</b> , 6-piece set
3-933-12	<b>Snipe nose pliers</b> , 120 mm, burnished, with orange insulation	5-305	<b>Combination scissors</b> , stainless, serrated, compression spring, plastic handles, 140 mm
3-945-12	<b>Snipe nose pliers</b> , 145 mm, angular long jaws, burnished with orange insulation	6-190	<b>Socket spanner set</b> , 8 pieces, in plastic case, 1 plastic handle, 7 socket spanners 1/8", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"
4-102 S	<b>Engineer's screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 75 x 3.5 mm	6-750	<b>Special open-end wrenches</b> , 6-piece set, nickel-plated, 3 x 3.5, 4 x 4.5, 5 x 5.5, 6 x 6.5, 7 x 8, 9 x 10 mm, material thickness 1.5 resp. 2.0 mm
4-103 S	<b>Engineer's screwdriver</b> as above, blade 100 x 4 mm	6-771	<b>Adjustable wrench</b> , jaw opening 0 - 12 mm, total length 100 mm
4-161	<b>Electronics screwdriver</b> with special handle and swivel top, blade chrome vanadium, chrome-plated, with black tip, blade 40 x 1.0 mm	6-880	<b>Set of wrench keys</b> , 8 pieces in plastic case, 1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"
4-162	<b>Electronics screwdriver</b> as above, blade 40 x 1.5 mm	6-964 L	<b>TORX screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, black tip, size T 9 with hole
4-163	<b>Electronics screwdriver</b> as above, blade 40 x 2.0 mm	6-965 L	<b>TORX screwdriver</b> as above, size T 10 with hole
4-165	<b>Electronics screwdriver</b> as above, blade 50 x 3.0 mm	6-966 L	<b>TORX screwdriver</b> as above, size T 15 with hole
4-271	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv, Size 0, with special square pattern BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, with black tip	7-425	<b>Dust brush</b>

### To complete the set we recommend:

8-135	<b>ERSA "Multitip" soldering iron</b> , 15 W, 220 V
8-390	<b>Desoldering pump</b> , length 195 mm, 20 mm Ø
8-407	<b>Soldering wire coil</b> , 250 g, 0.8 mm Ø
8-413	<b>SPIRIG desoldering wire</b> 1.5 mm x 1.5 m
9-325	<b>Plastic box</b> , with hinged lid and adjustable compartments, 200 x 130 x 30 mm

# PC-CONTACT 6100 ELECTRONIC SERVICE CASE

Elegant, modern tool case for the most exacting standards



The service case

for the computer technology  
with the current tool assortment

## ELECTRONIC SERVICE CASE DATA

The handy tool case for quick service in data systems engineering

6300 **BERNSTEIN DATA** with tool set

6315 **BERNSTEIN DATA** without tool set

### Description:

Case made from deep-drawn, grained plastic, with a black aluminium frame, rainproof, impact-, acid- and scratch-resistant. The 34 tools are placed at hand on a pivoting tool tray. The lid of the case has a pocket for documents. In the bottom is a plastic-tray with adjustable partitions for measuring instruments, soldering tools and components to the height of 60 mm. The case has 2 locks.

**Outside dimensions: 460 x 310 x 120 mm**

**Weight without tools: approx. 3.800 kg**

**Weight with tools: approx. 4.700 kg**

### Tool set:

No.	Description of individual tools	No.	Description of individual tools
1-909	<b>Engineer's mirror</b> , with handle, made entirely from BERNSTEINIT	4-271	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv, size 0 with special square pattern BERNSTEIN handle, blade made from chrome vanadium, nickel-plated, with black tip
2-127	<b>Tin knife</b> , with plastic handle, 115 mm	4-272	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv, size 1, with special square pattern BERNSTEIN handle, blade made from chrome vanadium, nickel-plated, with black tip
2-132	<b>Spring hook</b> , nickel-plated and insulated, 175 mm	4-311	<b>Screwdriver for headless screws</b> , with plastic handle, blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm
2-166	<b>Contact cleaner</b> , made from glass fibre, 115 mm	4-343 VDE	<b>Voltage tester</b> , blade 60 x 3 mm
2-265-1	<b>Test prod</b> , black, especially thin, pointed and flexible, blade made from 1 mm steel wire, 155 mm	4-366	<b>Cross-recess watchmaker's screwdriver</b> , size 00
2-265-2	<b>Test prod</b> , black, especially thin, pointed and flexible, blade made from 1 mm steel wire, 155 mm	4-391	<b>Watchmaker's screwdriver</b> , nickel-plated, with 4 interchangeable blades, 1.5, 2.0, 2.5, 3.0 mm
2-291	<b>Plastic magnifying glass</b>	5-107	<b>Engineer's tweezers</b> , made from steel, with bent tips, 150 mm, nickel-plated
2-601	<b>IC tweezers</b> , nickel-plated, 125 mm, for gripping, inserting and removing IC's	5-117	<b>Engineer's tweezers</b> , made from steel, straight-flat-wide, 145 mm, nickel-plated
3-127-2	<b>"Slimline" side cutters</b> , 115 mm, for soft wire up to 1,0 mm, extremely slim head, box joint, compression spring, chrome-plated, with transparent insulation	5-121	<b>Engineer's tweezers</b> , made from steel, straight, with narrow pointed tips, 120 mm, nickel-plated
3-131-1	<b>Side cutters</b> , 120 mm, chrome-plated, for hard wire up to 0.8 mm, for soft wire up to 1.5 mm, with BERNSTEINIT insulation	5-301	<b>Special scissors</b> for cutting sheet-metal and wires, with serration, extremely slim, 110 mm, nickel-plated
3-455-2	<b>Micro pointed pliers</b> , 120 mm, extremely light and slim, box joint, chrome-plated, with transparent insulation	6-820	<b>Set of allen hex sockets</b> , 8 pieces, in plastic wallet, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 5.5, 6.0, mm
4-102 S	<b>Engineer's screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 75 x 3.5 mm	6-771	<b>Adjustable wrench</b> , jaw opening 0-12 mm, total length 100 mm
4-103-1 S	<b>Engineer's screwdriver</b> , with special square pattern BERNSTEIN handle, insulated blade, made from chrom vanadium, chrome-plated 100 x 4 mm	7-505	<b>Roller tape measure</b> , 1 m
		7-512	<b>Miniature caliper square</b> , stainless, measuring range 100 mm

### To complete the set we recommend:

9-325	<b>Plastic box</b> with hinged lid and adjustable compartments, 200 x 130 x 30 mm
8-390	<b>Desoldering pump</b> , length 195 mm, 20 mm Ø
8-135	<b>ERSA "Multitip" soldering iron</b> , 15 W, 220 V



# DATA 6300 ELECTRONIC SERVICE CASE

The practical assistant for the successful data systems engineer



## TECHNIK ELECTRONIC SERVICE CASE

Service case with a comprehensive tool kit for data systems engineering

- 6400 **BERNSTEIN** **TECHNIK** with tool set
- 6415 **BERNSTEIN** **TECHNIK** without tool set
- 6400 Z **BERNSTEIN** **TECHNIK** with central safety code and tool set
- 6415 Z **BERNSTEIN** **TECHNIK** with central safety code without tool set

### Description:

Case made from deep-drawn, impact-resistant, grained plastic, with a sturdy aluminium frame, dustproof and rainproof, acid- and scratch-resistant. Three removable trays with pockets hold 82 tools, one tray has a double pocket on the back for documents. In the bottom of the case is a plastic tray, 60 mm high, with adjustable partitions for measuring instruments, soldering iron and various accessories. The case has 2 locks.

Outside dimensions: 470 x 360 x 180 mm

Weight without tools: approx. 4.700 kg

Weight with tools: approx. 7.600 kg

### Tool set:

No.	Description of individual tools	No.	Description of individual tools
1-909	<b>Engineer's mirror</b> , with handle, made entirely from BERNSTEINIT	4-311	<b>Screwdriver for headless screws</b> , with plastic handle, blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm
2-126	<b>Desoldering lever</b> , slotted at one end, with plastic handle	4-321	<b>Chubby screwdriver</b> , 25 x 4.5 mm
2-127	<b>Tin knife</b> , with plastic handle, 115 mm	4-343 VDE	<b>Voltage tester</b> , blade 60 x 3 mm
2-128	<b>Tin scraper</b> , with plastic handle, 115 mm	4-351	<b>Offset screwdriver</b> , chrome vanadium, nickel-plated, 100 x 5 mm
2-132	<b>Spring hook</b> , nickel-plated and insulated, 175 mm	4-366	<b>Cross-recess watchmaker's screwdriver</b> , size 00
2-145	<b>Screwdriver</b> with guide sleeve for slotted axles up to 3.2 mm Ø	4-391	<b>Watchmaker's screwdriver</b> , nickel-plated, with 4 interchangeable blades, 1.5, 2.0, 2.5, 3.0 mm
2-161	<b>Magnetic bar</b> with double ball- and socket joint, slewable, 215 mm	4-407	<b>Retaining screwdriver</b> , 110 x 4 mm
2-265	<b>2 Test prods</b> , red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire	5-006	<b>Component tweezers</b> , nickel-plated, with insulated jaws, for easy insertion and removal of plug-in transistors of various sizes
2-601	<b>IC tweezers</b> , nickel-plated, 125 mm, for gripping, inserting and removing IC's	5-107	<b>Engineer's tweezers</b> , made from steel, with bent tips, 150 mm, nickel-plated
3-127-2	<b>"Slimline" side cutters</b> , 115 mm, for soft wire only up to 1.0 mm, extremely slim head, box joint, compression spring, chrome-plated, with transparent insulation	5-115	<b>Heat dissipating tweezers</b> , 165 mm, nickel-plated, for use when soldering transistors, gold-bonded diodes etc.
3-131-1	<b>Side cutters</b> , 120 mm, chrome-plated, for hard wire up to 0.8 mm, for soft wire up to 1.5 mm, with BERNSTEINIT insulation	5-117	<b>Engineer's tweezers</b> , straight-flat-wide, 145 mm, nickel-plated
3-461-2	<b>Round nose pliers</b> , 130 mm, slim, box joint, compression spring, chrome-plated, with transparent insulation	5-131	<b>Watchmaker's tweezers</b> , 110 mm, stainless, sharply-pointed
3-462-2	<b>Flat nose pliers</b> , 130 mm, slim, box joint, compression spring, chrome-plated, with transparent insulation	5-161	<b>Clamping scissors</b> , 130 mm, stainless
3-481-2	<b>Snipe nose pliers</b> , 120 mm, angular, box joint, compression spring, chrome-plated, with transparent insulation	5-181	<b>Wire scraper</b> , for wires 0.6 mm Ø, interchangeable cutters
3-565	<b>Miniature water pump pliers</b> , 120 mm, chrome-plated	5-210	<b>Needle files</b> , 6-piece set
3-732-1	<b>Combination pliers</b> , 160 mm, chrome-plated, with BERNSTEINIT insulation	5-301	<b>Special scissors</b> for cutting sheet-metal and wires, with serration, extremely slim, 110 mm, nickel-plated
3-761-10	<b>Special assembly pliers</b> for clamping rings, 1.5 mm – 2.8 mm, 140 mm, burnished, with adjusting screw	5-501	<b>Cable knife</b>
3-835-2	<b>Wire strippers</b> , 165 mm, narrow and slim, with adjusting screw and compression spring, chrome-plated, with transparent insulation	6-200	<b>Socket spanner set</b> , chrome vanadium, nickel-plated, 1 plastic handle, 7 socket spanners, 4.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.0 mm
4-102-1 S	<b>Engineer's screwdriver</b> , with special square pattern BERNSTEIN handle, insulated blade, made from chrome vanadium, chrome-plated, 75 x 3.5 mm	6-750	<b>Special open-end wrenches</b> , 6-piece set, nickel-plated, material thickness 1.5 or 2 mm, 3 x 3.5, 4 x 4.5, 5 x 5.5, 6 x 6.5, 7 x 8, 9 x 10 mm
4-103-1 S	<b>Engineer's screwdriver</b> , as above, blade 100 x 4 mm	6-820	<b>Set of allen hex sockets</b> , 8 pieces, in plastic wallet, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 5.5, 6.0, mm
4-104-1 S	<b>Engineer's screwdriver</b> , as above, blade 150 x 5 mm	6-860	<b>Electronic socket spanner set</b> , in transparent box, 6 pieces, 3.0, 3.5, 4.0, 4.5, 5.0 mm
4-261	<b>Cross-recess screwdriver</b> , size 01, with plastic handle, blade made from chrome vanadium, 25 mm long, nickel-plated	7-425	<b>Dust brush</b>
4-271	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv, size 0, with special square pattern BERNSTEIN handle, blade made from chrome vanadium, 60 mm long, nickel-plated, with black tip	7-428	<b>Duster</b>
4-272	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv, as above, size 1, 80 mm long	7-435	<b>Plastic-oiler</b> , with standpipe made from brass
4-301	<b>Miniature screwdriver</b> , with plastic handle, blade nickel-plated, 40 x 1.8 mm	7-508	<b>Steel tape measure</b> , 30 cm, stainless
		7-511	<b>Precision caliper square</b> , stainless, in wallet, measuring range 160 mm, 1/20 nonius, separation mm/inches
		7-616	<b>Pocket saw</b> , in wallet

### To complete the set we recommend:

- 9-325 **Plastic box** with hinged lid and adjustable compartments, 200 x 130 x 30 mm
- 8-390 **Desoldering pump**, length 195 mm, 20 mm Ø
- 8-135 **ERSA "Multitip" soldering iron**, 15 W, 220 V

# TECHNIK 6400 ELECTRONIC SERVICE CASE

A toolcase as a bordcase for the travelling engineer



## The service case

- for the computer technology
- with special tool assortment
- for the professional

Service case **Technik 6400 Z**  
with central safety code





## BOSS ELECTRONIC SERVICE CASE

The actual multi-purpose tool case with the vast assortment

6500 **BERNSTEIN BOSS** with tool set

6515 **BERNSTEIN BOSS** without tool set

### Description:

Body of case made from deep-drawn, impact-resistant, grained black plastic, with a sturdy aluminium frame, dustproof and rainproof, acid- and scratch-resistant.

The 105-piece tool set comprises all required conventional and special tools for the servicing of electronic equipment, also for difficult repairs. The tools are clearly arranged in partitions on tool trays which are removable and folding and the swiveling parts are securable:  
A variable tool chest in case-size!

A stable plastic tray, 90 mm high, with 6 partition walls for a variable arrangement of the divisions offers a lot of space to carry spare parts, measuring instruments and soldering irons. The lid of the case has a pocket for documents. The case has 2 locks.

**Outside dimensions: 490 x 410 x 190 mm**

**Weight without tools: approx. 6.500 kg**

**Weight with tools: approx. 10.600 kg**

### Tool set:

No.	Description of individual tools	No.	Description of individual tools
1-151	<b>Adjusting screwdriver</b> , blade 40 x 3 mm	4-281	<b>Electronics cross-recess screwdriver</b> with special grey handle and swivel top, blade chrome vanadium, chrome-plated, with black tip, 40 x 2.0 mm, size 000
1-153	<b>Adjusting screwdriver</b> , blade 130 x 2 mm	4-282	<b>Electronics cross-recess screwdriver</b> as above size 00
1-155	<b>Adjusting screwdriver</b> , blade 130 x 3.5 mm	4-283	<b>Electronics cross-recess screwdriver</b> as above, blade 50 x 3.0 mm, size 0
1-909	<b>Engineer's mirror</b> , with handle, made entirely from BERNSTEIN IT	4-343 VDE	<b>Voltage tester</b> , blade 60 x 3 mm
2-126	<b>Desoldering lever</b> , slotted at one end, with plastic handle	4-351	<b>Offset screwdriver</b> , chrome vanadium, nickel-plated, 100 x 5 mm
2-127	<b>Tin knife</b> with plastic handle, 115 mm	4-391	<b>Watchmaker's screwdriver</b> , nickel-plated, with 4 interchangeable blades, 1.5, 2.0, 2.5, 3.0 mm
2-128	<b>Tin scraper</b> with plastic handle, 115 mm	4-407	<b>Retaining screwdriver</b> , 110 x 4 mm
2-132	<b>Spring hook</b> , nickel-plated and insulated, 175 mm	5-006	<b>Component tweezers</b> , nickel-plated, with insulated jaws, for easy insertion and removal of plug-in transistors of various sizes
2-152	<b>Tool holder</b> , nickel-plated brass, with collets at both ends for holding tools from 0 to 3 mm Ø	5-107	<b>Engineer's tweezers</b> made from steel, with bent tips, 150 mm, nickel-plated
2-155	<b>Claw-type gripper</b> , nickel-plated brass, with 4 wire claws, small version with clip	5-107-6	<b>Engineer's tweezers</b> , as above, strong PVC-insulated
2-161	<b>Magnetic bar</b> with double ball- and socket joint, slewable, 215 mm	5-115	<b>Heat dissipating tweezers</b> , 165 mm, nickel-plated, for use when soldering transistors, gold-bonded diodes etc.
2-166	<b>Contact cleaner</b> , made from glass fibre	5-117	<b>Engineer's tweezers</b> , straight-flat-wide, 145 mm, nickel-plated
2-265	<b>2 Test prods</b> , red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire	5-131	<b>Watchmaker's tweezers</b> , 110 mm, stainless, sharply-pointed
2-295	<b>Hand magnifier</b> with light	5-161	<b>Clamping scissors</b> , 130 mm, stainless
2-601	<b>IC tweezers</b> , nickel-plated, 125 mm, for gripping, inserting and removing IC's	5-181	<b>Wire scraper</b> , for wires 0.6 mm Ø, interchangeable cutter
2-620	<b>PLCC extractor</b> , for easy removal of plug-in PLCC'S	5-191	<b>ESD/EGB tweezers</b> , 120 mm, conductive, with straight, rounded tips
3-127-2	<b>"Slimline" side cutters</b> , 115 mm, for soft wire up to 1.0 mm, extremely slim head, box joint, compression spring, chrome-plated, with transparent insulation	5-194	<b>ESD/EGB tweezers</b> , 120 mm, conductive, with bent, pointed tips
3-132-1	<b>Side cutters</b> , 130 mm, for hard wire, chrome-plated, with BERNSTEIN IT-insulation	5-210	<b>Needle files</b> , 6-piece set
3-235-1	<b>Telephone pliers</b> with wire cutters, 145 mm, chrome-plated with BERNSTEIN IT-insulation	5-301	<b>Special scissors</b> , for cutting sheet-metal and wires, with serration, extremely slim, 110 mm, nickel-plated
3-462-2	<b>Flat nose pliers</b> , 130 mm, slim, box joint, compression spring, chrome-plated, with transparent insulation	5-305	<b>Combination scissors</b> , stainless, serrated, compression spring, plastic handles, 140 mm
3-463-2	<b>Snipe nose pliers</b> , 130 mm, slim, box joint, compression spring, chrome-plated, with transparent insulation	5-501	<b>Electrician knife</b>
3-482-2	<b>Snipe nose pliers</b> , 140 mm, angular, slim, box joint, compression spring, chrome-plated, with transparent insulation	6-200	<b>Socket spanner set</b> , chrome vanadium, nickel-plated, 8-piece set, 1 plastic handle, 7 socket spanners, 4.0, 5.5, 6.0, 7.0, 8.0, 9.0, 10.0 mm
3-565	<b>Water pump pliers</b> , 120 mm, chrome-plated	6-750	<b>Special open-end wrench</b> , 6-piece set, nickel-plated, 3 x 3.5, 4 x 4.5, 5 x 5.5, 6 x 6.5, 7 x 8, 9 x 10 mm, material thickness 1.5 or 2.0 mm,
3-742-1	<b>Electrician's combination pliers</b> , 160 mm, chrome-plated, with BERNSTEIN IT-insulation	6-771	<b>Adjustable wrench</b> , jaw opening 0 - 12 mm, total length 100 mm
3-761-10	<b>Special assembly pliers</b> for clamping rings, 1.5 mm - 2.8 mm, 140 mm, burnished, with adjusting screw	6-830	<b>Set of wrench keys</b> , 11 pieces in plastic case, 1 handle, 10 wrench keys 1.0, 1.2, 1.5, 2.0, 2.5, 3.0, 4.0, 4.5, 5.0 and 6.0 mm
3-815-1	<b>Wire strippers</b> , 155 mm, chrome-plated, with BERNSTEIN IT-insulation	6-880	<b>Set of wrench keys</b> , 8 pieces in plastic wallet, 1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"
3-0856	<b>Crimp tool</b> for insulated and uninsulated terminals, 230 mm	6-964 L	<b>TORX screwdriver</b> , with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, black tip, size T 9 with hole
3-871-6	<b>Pressing pliers</b> for multicore cable and for sleeves from 0.25 - 2.5 mm <sup>2</sup>	6-965 L	<b>TORX screwdriver</b> as above, size T 10 with hole
4-103 S	<b>Engineer's screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4 mm	6-966 L	<b>TORX screwdriver</b> as above, size T 15 with hole
4-104 S	<b>Engineer's screwdriver</b> as above, blade 150 x 5 mm	7-425	<b>Dust brush</b>
4-161	<b>Electronics screwdriver</b> with special handle and swivel top, blade chrome vanadium, chrome-plated, with black tip, blade 40 x 1.0 mm	7-428	<b>Duster</b>
4-162	<b>Electronics screwdriver</b> as above, blade 40 x 1.5 mm	7-438	<b>Drip oiler</b> for dropet oiling
4-164	<b>Electronics screwdriver</b> as above, blade 50 x 2.5 mm	7-506	<b>Roller tape measure</b> 2 m
4-165	<b>Electronics screwdriver</b> as above, blade 50 x 3.0 mm	7-508	<b>Steel measure</b> , 30 mm, stainless
4-272	<b>Crosspoint-screwdriver</b> , Supadriv/Pozidriv, size 1, with special square pattern BERNSTEIN handle, blade made from chrome vanadium, nickel-plated, with black tip	7-511	<b>Precision caliper square</b> , stainless, in wallet, measuring range 160 mm, 1/20 nonius, separation mm/inches
		7-616	<b>Pocket hack saw "Puk"</b> with adjustable wooden handle, in wallet

### To complete the set we recommend:

8-135	<b>ERSA "Multitip" soldering iron</b> , 15 W/220 V
8-390	<b>Desoldering pump</b> , length 195 mm, 20 mm Ø
8-402	<b>Soldering wire coil</b> , 100 g, 1.5 mm Ø
9-325	<b>Plastic box</b> , with hinged lid and adjustable compartments, 200 x 130 x 30 mm

# **BOSS** 6500 ELECTRONIC SERVICE CASE

A variable tool chest in case size



## TELECOM ELECTRONIC SERVICE CASE

The actual case with special tools and testing instruments for the installation and maintenance of complex telecommunication systems

6600 **BERNSTEIN TELECOM** with tool set

6615 **BERNSTEIN TELECOM** without tool set

### Description:

Case made from deep-drawn, impact-resistant, grained black plastic, with a sturdy aluminium frame, dustproof and rainproof, acid- and scratch-resistant. With 118 tools the case contains a complete equipment of tools especially for the electrical and electronical connecting and maintenance operations at distribution boards in the telecommunication technique.

The tools are clearly arranged in the case on 3 removable tool trays and in a stable plastic tray in the bottom of the case that grants by adjustable partitions additional place for further instruments.

The case has 2 locks.

Outside dimensions: 490 x 410 x 190 mm

Weight without tools: approx. 5.800 kg

Weight with tools: approx. 12.900 kg

### Tool set

No.	Description of individual tools	No.	Description of individual tools
2-265	<b>2 test prods,</b> red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire	4-407	<b>Retaining screwdriver,</b> for inserting slotted screws, nickel-plated, blade 110 x 4.0 mm
2-275	<b>Repair mirror,</b> stainless, magnifying, concave mirror 21 mm Ø, with BERNSTEINIT handle	4-437	<b>Retaining screwdriver</b> for inserting and tightening cross-recess screws size 1, nickel-plated, insulated, blade length 150 mm
2-601	<b>IC-tweezers,</b> nickel-plated, 125 mm, for gripping, inserting and removing IC's	5-107	<b>Engineer's tweezers,</b> made from steel, with bent tips, 150 mm, nickel-plated
2-620	<b>PLCC-extractor</b>	5-117	<b>Engineer's tweezers,</b> made from steel, straight-flat-wide, 145 mm, nickel-plated
2-655	<b>Pocket inspection lamp</b> watertight, with pre-focused reflector	5-122	<b>Engineer's tweezers,</b> made from steel, straight, with narrow pointed tips, 155 mm, nickel-plated
2-701	<b>Insertion tool with sensor</b> for connecting the wires and simultaneously cutting off the residual wire	5-240	<b>Warding files,</b> 6-piece set, with wooden handles, in plastic wallet
2-702	<b>Insertion tool for system MDF 71</b> for connecting the cable conductors and jumper wires	5-505	<b>Insulation stripping tool</b> for cable diameter of 8 up to 28 mm
2-751	<b>Test headphones,</b> 1 x 600 ohm, switchable from 600 to 10.000 ohm, with fine control	6-103	<b>Socket wrench</b> 4.5 mm, chrome vanadium, chrome-plated, with square handle
3-112-2	<b>Side cutters,</b> 120 mm, for soft wire up to 1.0 mm, with rounded head, double leaf spring, chrome-plated, with red insulation	6-104	<b>Socket wrench</b> 5.0 mm, chrome vanadium, chrome-plated, with square handle
3-134 VDE	<b>Side cutters,</b> 160 mm, for steel wire up to 1.6 mm Ø, chrome-plated, with VDE safety insulation	6-105	<b>Socket wrench</b> 5.5 mm, chrome vanadium, chrome-plated, with square handle
3-235-1	<b>Telephon pliers,</b> 145 mm, chrome-plated, with BERNSTEINIT-insulation	6-320	<b>Socket wrench-set</b> 16-piece set in a metal case, first rate quality
3-532-1	<b>Flat nose pliers,</b> 160 mm, with long jaws, chrome-plated, with BERNSTEINIT-insulation	6-500-12	<b>Double open-ended wrench,</b> 12 x 13 mm, chrome vanadium, chrome-plated
3-585-1	<b>Quick-action water pump pliers,</b> 175 mm, made from chrome vanadium, chrome-plated, with BERNSTEINIT-insulation	6-500-18	<b>Double open-ended wrench,</b> 18 x 19 mm, chrome-vanadium, chrome-plated
3-732-1	<b>Combination pliers,</b> 160 mm, chrome-plated, with BERNSTEINIT-insulation	6-600	<b>Combination ring-and open-ended wrench,</b> 7-piece set, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 13.0 mm, chrome vanadium, chrome-plated
3-0605	<b>Combination crimping pliers,</b> 200 mm, for connector types 6P/6C, 6P/4C, 6P/2C, 8P/8C	6-600-12	<b>Combination ring-and open-ended wrench,</b> 12 mm, chrome vanadium, chrome-plated
4-141	<b>Screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 75 x 3.5 mm, with black tip	6-600-17	<b>Combination ring-and open-ended wrench,</b> 17 mm, chrome vanadium, chrome plated
4-142	<b>Screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4.0 mm, with black tip	6-600-19	<b>Combination ring-and open-ended wrench,</b> 19 mm, chrome vanadium, chrome-plated
4-143	<b>Screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 125 x 5.5 mm, with black tip	6-880	<b>Hexagon wrench keys</b> 8-piece set, in a wallet, 1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"
4-222	<b>Screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 260 x 3.0 mm, with black tip	6-950	<b>Ballpoint wrench keys, hexagon,</b> 8-piece set, in a wallet, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 8.0 mm
4-227	<b>Cross-recess screwdriver, size 1,</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, blade length 300 mm, with black tip	6-995	<b>TORX-screwdrivers with bore hole in the tip</b> 8-piece set, in a box, T 9, T 10, T 15, T 20, T 25, T 27, T 30, T 40
4-228	<b>Cross-recess screwdriver, size 2,</b> as above, blade length 300 mm, with black tip	7-114	<b>Engineer's hammer, 200 g</b>
4-255	<b>Cross-recess screwdriver, size 0,</b> as above, blade length 60 mm, with black tip	7-425	<b>Duster</b>
4-256	<b>Cross-recess screwdriver, size 1,</b> as above, blade length 80 mm, with black tip	7-429	<b>Insulating tape</b>
4-257	<b>Cross-recess screwdriver, size 2,</b> as above, blade length 100 mm, with black tip	7-506	<b>Roller tape, 2 m</b>
4-258	<b>Cross-recess screwdriver, size 3,</b> as above, blade length 150 mm, with black tip	7-616	<b>Pocket saw,</b> with adjustable wooden handle, in a wallet
4-370	<b>Watchmaker's screwdrivers from metal,</b> 6-piece set, in metal box, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5 mm	8-110	<b>ERSA-fine soldering iron</b> Tip 260 BN/230 V/16 W
		8-139	<b>Spare soldering tip 162 LN</b>
		8-385	<b>ERSA VAC3 desoldering pump</b>
		8-407	<b>Solder wire spool,</b> 250 g, 0.8 mm Ø
		9-316/5	<b>5 Chip-Container,</b> conductive box with lid, black, internal dimensions: 118 x 32 x 14 mm
		14-601 VDE	<b>Screwdriver</b> with VDE-insulation, blade 75 x 2.5 mm
		14-602 VDE	<b>Screwdriver</b> with VDE-insulation, blade 100 x 3.5 mm
		14-632 VDE	<b>Cross-recess screwdriver,</b> size 1, with VDE-insulation, blade length 80 mm
		14-633 VDE	<b>Cross-recess screwdriver,</b> size 2, with VDE-insulation, blade length 100 mm



# TELECOM 6600 ELECTRONIC SERVICE CASE

The professional toolcase for the telecommunication



## TELEDATA ELECTRONIC SERVICE CASE

The case with a basic equipment of special tools for the installation and maintenance of complex telecommunication systems and data networks.

6700 **BERNSTEIN** TELEDATA with tool set

6715 **BERNSTEIN** TELEDATA without tool set

### Description:

Case made from deep-drawn, impact-resistant, grained black plastic, with sturdy aluminium frame, dustproof and rainproof, acid- and scratch-resistant. 80 tools are clearly arranged on two removable tool trays, one of it on both sides, and in the plastic tray with adjustable partitions in the bottom of the case. The basic equipment for special operations at telecommunication systems and data networks may efficiently be completed by special tools additionally recommended.

The case has 2 locks.

Outside dimensions: 470 x 340 x 170 mm

Weight without tools: approx. 4.600 kg

Weight with tools: approx. 8.700 kg

### Tool set

No.	Description of individual tools	No.	Description of individual tools
2-265	<b>2 test prods</b> , red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire	6-103	<b>Socket wrench</b> 4.5 mm, chrome vanadium, chrome-plated, with square handle
2-601	<b>IC-tweezers</b> , nickel-plated, 125 mm, for gripping, inserting and removing IC's	6-104	<b>Socket wrench</b> 5.0 mm, chrome vanadium, chrome-plated, with square handle
2-620	<b>PLCC-extractor</b>	6-105	<b>Socket wrench</b> 5.5 mm, chrome-vanadium, chrome-plated, with square handle
2-701	<b>Insertion tool with sensor</b> for connecting the wires and simultaneously cutting off the residual wire	6-500-12	<b>Double open-ended wrench</b> , 12 x 13 mm, chrome vanadium, chrome-plated
3-112-2	<b>Side cutters</b> , 120 mm, for soft wire up to 1.0 mm, with rounded head, double leaf spring, chrome-plated, with red insulation	6-500-18	<b>Double open-ended wrench</b> , 18 x 19 mm, chrome vanadium, chrome-plated
3-134 VDE	<b>Side cutters</b> , 160 mm, for steel wire up to 1.6 mm Ø, chrome-plated, with VDE safety insulation	6-600	<b>Combination ring- and open-ended wrench</b> , 7-piece set, chrome vanadium, chrome-plated, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 13.0 mm
3-235-1	<b>Telephon pliers</b> , 145 mm, chrome-plated, with BERNSTEINIT-insulation	6-600-12	<b>Combination ring- and open-ended wrench</b> , 12 mm, chrome vanadium, chrome-plated
3-532-1	<b>Flat nose pliers</b> , 160 mm, with long jaws, chrome-plated, with BERNSTEINIT-insulation	6-600-17	<b>Combination ring- and open-ended wrench</b> , 17 mm, chrome vanadium, chrome-plated
3-585-1	<b>Quick-action water pump pliers</b> , 175 mm, made from chrome vanadium, chrome-plated, with BERNSTEINIT-insulation	6-600-19	<b>Combination ring- and open-ended wrench</b> , 19 mm, chrome vanadium, chrome-plated
3-732-1	<b>Combination pliers</b> , 160 mm, chrome-plated, with BERNSTEINIT-insulation	6-880	<b>Hexagon wrench keys</b> , 8-piece set, in a wallet, 1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"
3-0605	<b>Combination crimping pliers</b> , 200 mm, for connector types 6P/6C, 6P/4C, 6P/2C, 8P/8C	6-950	<b>Ballpoint wrench keys</b> , hexagon, 8-piece set, in a wallet, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 8.0 mm
4-222	<b>Screwdriver</b> with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 260 x 3.0 mm, with black tip	6-995	<b>Torx screwdrivers with bore-hole in the tip</b> , 8-piece set, in a box, T 9, T 10, T 15, T 20, T 25, T 27, T 30, T 40
4-227	<b>Crosspoint-screwdriver</b> , size 1, with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 300 mm, with black tip	7-425	<b>Duster</b>
4-228	<b>Crosspoint-screwdriver</b> , size 2, with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 300 mm, with black tip	7-506	<b>Roller tape measure</b> , 2 m
4-431	<b>Retaining screwdrivers</b> for inserting and tightening slotted screws, blade made from chrome vanadium, nickel-plated, insulated, 100 x 3.0 mm	7-616	<b>Pocket saw</b> , with adjustable wooden handle, in a wallet
4-437	<b>Retaining screwdriver</b> for inserting and tightening cross-recess screws size 1 blade made from chrome vanadium, nickel-plated, insulated	9-316/5	<b>5 Chip-Container</b> , conductive box with lid, black, internal dimensions: 118 x 32 x 14 mm
5-107	<b>Engineer's tweezers</b> , made from steel, with bent tips, 150 mm, nickel-plated	14-601 VDE	<b>Screwdriver</b> with VDE-insulation, blade 75 x 2.5 mm
5-117	<b>Engineer's tweezers</b> , made from steel, straight-flat-wide, 145 mm, nickel-plated	14-602 VDE	<b>Screwdriver</b> with VDE-insulation, blade 100 x 3.5 mm
5-240	<b>Warding files</b> , 6-piece set, with wooden handles, in plastic wallet	14-603 VDE	<b>Screwdriver</b> with VDE-insulation, blade 100 x 4.0 mm
5-505	<b>Insulation stripping tool</b> for cable diameter of 8 up to 28 mm	14-631 VDE	<b>Cross-recess screwdriver</b> , size 0, with VDE-insulation, blade length 60 mm
		14-632 VDE	<b>Cross-recess screwdriver</b> , size 1, with VDE-insulation, blade length 80 mm
		14-633 VDE	<b>Cross-recess screwdriver</b> , size 2, with VDE-insulation, blade length 100 mm
		14-634 VDE	<b>Cross-recess screwdriver</b> , size 3, with VDE-insulation, blade length 150 mm

### To complete the set we recommend:

2-751	<b>Test headphones</b> 1 x 600 ohm, switchable from 600 to 10.000 ohm	8-139	<b>Spare soldering tip 162 LN</b>
2-702	<b>Insertion tool for systems MDF 71</b> for connecting the cable conductors and jumper wires	8-385	<b>ERSA VAC3 desoldering pump</b>
8-110	<b>ERSA fine soldering iron</b> Tip 260 BN/230 V/16 W	8-407	<b>Solder wire spool</b> , 250 g, 0.8 mm Ø

# TELEDATA 6700 ELECTRONIC SERVICE CASE

The service case for the ambitious Telecommunication engineer





## EPA ELECTRONIC SERVICE CASE

The service case made from **conductive material** for maintenance and installation tasks in **ESD protected areas** with a full assortment of special ESD-tools. For use at electrostatically endangered components and plants.

6900 **BERNSTEIN** EPA with tool set

6915 **BERNSTEIN** EPA without tool set



### Description:

The body of the case, the tool trays as well as the bottom tray with adjustable partitions are made from conductive material which is **tested by German TÜV** according to **DIN EN IEC Norm 10 00 15 part 5**. The tools of this set have been tested with good results by a well-known electronic group adequate to **IEC 61340**. The sturdy shells are pressed with the stable double aluminium frame.

32 tools are clearly arranged on two tool trays, one of it on both sides. The lid of the case has a pocket for documentations etc. The bottom tray allows with its partitions a clear arrangement of additional tools and instruments.

The case has two locks.

**Outside dimensions: 460 x 165 x 310 mm**

**Weight without tools: approx. 5.400 kg**

**Weight with tools: approx. 6.280 kg**

### Tool set:

No.	Description of individual tools	No.	Description of individual tools
2-101	<b>Tin knife</b> with ceramic blade, 115 mm	4-632	<b>Screwdriver</b> with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, 100 x 4.0 mm
2-265	<b>2 Test prods</b> , red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire	4-633	<b>Screwdriver</b> with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, 125 x 5.5 mm
2-620	<b>PLCC extractor</b>	4-662	<b>Cross-recess screwdriver</b> Pozidriv size 1, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 80 mm
3-654-15	<b>Side cutters EUROline-Conductive</b> , 125 mm, for hard wire up to 0.4 mm Ø, for copper wire up to 1.5 mm Ø, slim rounded head, box joint, double leaf spring, fine polished and bright burnished, conductive bicoloured hand-guard	4-663	<b>Cross-recess screwdriver</b> Pozidriv size 2, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 100 mm
3-671-15	<b>End cutters EUROline-Conductive</b> , 130 mm, for copper wire up to 0.6 mm Ø, extremely slim, straight, box joint, double leaf spring, fine polished and bright burnished, conductive bicoloured hand-guard	5-191	<b>Tweezers</b> , made from conductive and acid-resistant black plastic material, reinforced with glass fibre, 120 mm, with straight, rounded tips
3-682-15	<b>Flat nose pliers EUROline-Conductive</b> , 130 mm, extremely slim, box joint, double leaf spring, fine polished and bright burnished, conductive bicoloured hand-guard	5-192	<b>Tweezers</b> , made from conductive and acid-resistant black plastic material, reinforced with glass fibre, 120 mm, with straight, 3 mm flat-hand tips
3-133-13	<b>Side cutters</b> , 145 mm, for hard wire up to 1.25 mm Ø, for soft wire up to 2.5 mm Ø, chrome-plated, conductive black hand-guard	5-194	<b>Tweezers</b> , made from conductive and acid-resistant black plastic material, reinforced with glass fibre, 120 mm, with bent, pointed tips
3-245-13	<b>Telephone pliers</b> , 200 mm, snipe nose, with cutting edge for hard wire, chrome-plated, conductive black hand-guard	6-612	<b>Socket wrench</b> with conductive handle, blade from chrome vanadium, nickel-plated, A/F 2.0 mm
3-732-13	<b>Combination pliers</b> , 165 mm, chrome-plated, conductive black hand-guard	6-617	<b>Socket wrench</b> with conductive handle, blade from chrome vanadium, nickel-plated, A/F 4.0 mm
4-603	<b>Screwdriver</b> with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, 50 x 1.5 mm	6-621	<b>Socket wrench</b> with conductive handle, blade from chrome vanadium, nickel-plated, A/F 5.5 mm
4-605	<b>Screwdriver</b> with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, 60 x 2.0 mm	6-659	<b>TORX-screwdriver</b> T 4, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-606	<b>Screwdriver</b> with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, 60 x 2.5 mm	6-661	<b>TORX-screwdriver</b> T 5, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-621	<b>Cross-recess screwdriver</b> size 000, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip,	6-662	<b>TORX-screwdriver</b> T 6, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-622	<b>Cross-recess screwdriver</b> size 00, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip,	6-663	<b>TORX-screwdriver</b> T 7, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-623	<b>Cross-recess screwdriver</b> size 0, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip,	6-665 L	<b>TORX-screwdriver</b> T 9 with hole, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
		7-422	<b>ESD/EGB-brush</b> , bristles width 20 mm

### To complete the set we recommend:

9-316/5	<b>5 Chip-Container</b> , conductive box with lid, black, internal dimensions: 118 x 32 x 14 mm	4-675	<b>Extra long TORX-screwdriver</b> T 10, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 300 mm
9-356	<b>ESD-Handling-Set</b> , foldable, with contact bracelet and earth wire	4-676 L	<b>Extra long TORX-screwdriver</b> T 15 with hole, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 300 mm
4-643	<b>Extra long screwdriver</b> with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, 300 x 5.5 mm	4-677 L	<b>Extra long TORX-screwdriver</b> T 20 with hole, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 300 mm
4-656	<b>Extra long cross-recess screwdriver</b> PH size 1, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 300 mm		
4-657	<b>Extra long cross-recess screwdriver</b> PH size 2, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 300 mm		

# EPA 6900 ELECTRONIC SERVICE CASE



The service case made from **conductive material** for maintenance and installation tasks in **ESD protected areas** with a full assortment of special **ESD-tools**. For use at electrostatically endangered components and plants.

## COMPACT-MOBIL ELECTRONIC SERVICE CASE

The trolley case with special tools for the assembly and maintenance of electronic devices

7000 **BERNSTEIN COMPACT-MOBIL** with tool assortment 7010, 7020 and 7030

7015 **BERNSTEIN COMPACT-MOBIL** without tools

7100 **BERNSTEIN COMPACT-MOBIL** with tool assortment 7010, 7020 and 7060

### Description:

Elegant case made from deep-drawn, impact-resistant, grained dark brown plastic with a continuous bronze anodised aluminium frame, dustproof and rainproof, acid-resistant, scratch-resistant and non-slip. For energy saving transport stable rolls are installed and a telescopic handle is mounted.

The arrangement of the rolls results in a vibration absorbing locomotion. The tools are held in their partitions.

The case has 3 removable tool trays: No. 7010, 7020 and 7030. The trays contain 63 tools. On request the tray No. 7030 may be exchanged for No. 7060 (VDE-tools). The lid of the case has a pocket for documents etc.

The plastic tray with adjustable partitions in the bottom allows a clear arrangement of a soldering iron, measuring instruments and accessories of various sizes.

The case has two locks.

Outside dimensions: 500 x 400 x 200 mm  
(bordcase-size)

Weight without tools: approx. 8.000 kg

Weight with tools 7000: approx. 10.600 kg  
Weight with tools 7100: approx. 10.700 kg

### Tool set:

#### No. Description of individual tools

No.	Description of individual tools
<b>Tool tray No. 7010</b>	
2-155	<b>Claw-type gripper</b> with 4 wire claws and clip
2-601	<b>IC-tweezers</b> , nickel-plated, 125 mm, for gripping, inserting and removing IC's
2-620	<b>PLCC-extractor</b>
2-655	<b>Pocket inspection lite</b> with fibre optic adaptor for close inspection of small, tight, hard-to-see areas
3-654-14	<b>EUROline-side-cutters</b> , 120 mm, for hard wire up to 0.4 mm Ø, for copper wire up to 1.5 mm Ø, with slim rounded head, box joint, double leaf spring, bright burnished, with bicoloured hand-guard
3-672-14	<b>EUROline-end-cutters</b> , 130 mm, for copper wire up to 0.6 mm Ø, cutting edge 20° angular, box joint, double leaf spring, bright burnished, with bicoloured hand-guard
3-682-14	<b>EUROline-flat nose pliers</b> , 130 mm, extremely slim, box joint, double leaf spring, bright burnished, with bicoloured hand-guard
3-683-14	<b>EUROline-snip nose pliers</b> , 130 mm, extremely slim, box joint, double leaf spring, bright burnished, with bicoloured hand-guard
4-161	<b>Electronics screwdriver</b> with special handle and swivel top, blade chrome vanadium, chrome-plated, with black tip, 40 x 1.0 mm
4-162	<b>Electronics screwdriver</b> as above, 40 x 1.5 mm
4-163	<b>Electronics screwdriver</b> as above, 40 x 2.0 mm
4-164	<b>Electronics screwdriver</b> as above, 50 x 2.5 mm
4-165	<b>Electronics screwdriver</b> as above, 50 x 3.0 mm
4-281	<b>Electronics cross-recess screwdriver</b> as above, size 000
4-282	<b>Electronics cross-recess screwdriver</b> as above, size 00
4-283	<b>Electronics cross-recess screwdriver</b> as above, size 0
4-284	<b>Electronics cross-recess screwdriver</b> as above, size 1
5-006	<b>Component tweezers</b> , 140 mm, with insulated jaws, for easy insertion and removal of plug-in transistors of various sizes, nickel-plated
5-107	<b>Engineer's tweezers</b> , made from steel, with bent tips, 150 mm, nickel-plated
5-115	<b>Heat dissipating tweezers</b> , for use when soldering transistors, gold-bonded diodes etc., 165 mm, nickel-plated
5-117	<b>Engineer's tweezers</b> , straight-flat-wide, 145 mm, nickel-plated
5-131	<b>Watchmaker's tweezers</b> , sharply-pointed, 110 mm, stainless
5-191	<b>ESD/EGB tweezers</b> , 120 mm, conductive, rounded tips
5-194	<b>ESD/EGB tweezers</b> , 120 mm, conductive, bent pointed tips

#### Tool tray No. 7020

1-735	<b>Adjusting screwdriver handle</b> , double-ended
1-738	<b>Special hard plastic bit</b> , 1.5 x 0.5 mm
1-739	<b>Special hard plastic bit</b> , 3.0 x 0.5 mm
1-909	<b>Engineer's mirror</b> with handle, made entirely from BERNSTEINIT
2-126	<b>Desoldering bar</b> , slotted at one end, with plastic handle
2-127	<b>Tin knife</b> with plastic handle, 115 mm

#### To complete the set we recommend for the bottom of the case:

5-240	<b>Warding file set</b> , 6 pieces, with wooden handles, in a wallet
6-820	<b>Set of allen hex sockets</b> , 8 pieces, 1.5 - 6.0 mm
7-512	<b>Miniature caliper square</b> , measuring range 100 mm, stainless
8-135	<b>ERSA Multitip soldering iron</b> , 15 W/230 V

#### No. Description of individual tools

2-132	<b>Spring hook</b> , nickel-plated and insulated, 175 mm
2-161	<b>Magnetic bar</b> with double ball- and socket joint, 215 mm
2-166	<b>Glass fibre contact cleaner</b>
2-265	<b>2 test prods</b> , red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire
2-295	<b>Hand magnifier</b> with light
3-565	<b>Water pump pliers</b> , 120 mm, chrome-plated
3-715-1	<b>Combination pliers</b> , 115 mm, chrome-plated, BERNSTEINIT-insulation
4-141	<b>Screwdriver</b> , with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 75 x 3.5 mm, with black tips
4-142	<b>Screwdriver</b> , as above, 100 x 4.0 mm
4-271	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv, size 0, with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, with black tips
4-272	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv, size 1, as above
4-351	<b>Offset screwdriver</b> , 100 x 5 mm, nickel-plated
4-407	<b>Retaining screwdriver</b> , 110 x 4 mm
5-161	<b>Clamping scissors</b> , 130 mm, stainless
5-301	<b>Special scissors</b> , with serration, 110 mm, nickel-plated
6-771	<b>Adjustable wrench</b> , jaws opening 0 - 12 mm, total length 100 mm
6-964 L	<b>TORX-Screwdriver</b> , size T 9, with hole, with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, with black tip
6-965 L	<b>TORX-Screwdriver</b> , size T 10, with hole, as above
6-966 L	<b>TORX-Screwdriver</b> , size T 15, with hole, as above
7-425	<b>Dust brush</b>

#### Tool tray No. 7030

3-133-1	<b>Side cutters</b> , 145 mm, for hard wire up to 1.25 mm Ø, for soft wire up to 2.5 mm Ø, chrome-plated, with BERNSTEINIT-insulation
3-235-1	<b>Telephone pliers</b> , 145 mm, chrome-plated, with BERNSTEINIT-insulation
3-732-1	<b>Combination pliers</b> , 160 mm, chrome-plated, with BERNSTEINIT-insulation
4-103 S	<b>Engineer's screwdriver</b> , with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4.0 mm
4-104 S	<b>Engineer's screwdriver</b> , as above, blade 150 x 5.0 mm
4-135 S	<b>Engineer's screwdriver</b> , as above, blade 150 x 8.0 mm
4-256	<b>Cross-recess screwdriver</b> , as above, size 1, with black tip
4-257	<b>Cross-recess screwdriver</b> , as above, size 2, with black tip
4-344 VDE	<b>Voltage tester</b> , for 220 - 250 V, blade 100 x 3.5 mm
5-0605	<b>Universal stripping tool</b>
6-105	<b>Socket wrench</b> , with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 5.5 mm A/F
6-107	<b>Socket wrench</b> , as above, 7.0 mm A/F

8-390	<b>Desoldering pump</b> , length 195 mm, 20 mm Ø
8-402	<b>Solder wire (spool)</b> , 100 g, 1.5 mm Ø
9-325	<b>Plastic box</b> , with hinged lid and adjustable compartments, 200 x 130 x 30 mm



# COMPACT-MOBIL 7000 ELECTRONIC SERVICE CASE

The trolley case as bordcase for world-wide service



## The service-case

- with high quality tools for electronics
- with telescopic handle, length up to 950 mm
- mobile on installed stable rolls



## COMPACT-MOBIL ELECTRICIAN'S SERVICE CASE

The multi-purpose trolley case for the assembly and maintenance of electric devices

7200 **BERNSTEIN COMPACT-MOBIL** with tool assortment 7030, 7040 and 7050

7215 **BERNSTEIN COMPACT-MOBIL** without tools

7300 **BERNSTEIN COMPACT-MOBIL** with tool assortment 7040, 7050 and 7060

### Description:

as service case 7000

This tool case is also equipped with 3 removable tool trays: No. 7030, 7040 and 7050.

The trays contain all together 32 tools.

On request the tray No. 7030 may be exchanged for No. 7060 (VDE-tools).

Outside dimensions: 500 x 400 x 200 mm  
(bordcase-size)

Weight without tools: approx. 7.900 kg

Weight with tools 7200: approx. 11.500 kg  
Weight with tools 7300: approx. 11.600 kg

### Tool set:

#### No. Description of individual tools

No.	Description of individual tools
<b>Tool tray No. 7030</b>	
3-133-1	<b>Side cutters</b> , 145 mm, for hard wire up to 1.25 mm Ø, for soft wire up to 2.5 mm Ø, chrome-plated, BERNSTEINIT-insulation
3-235-1	<b>Telephone pliers</b> , 145 mm, chrome-plated, with BERNSTEINIT-insulation
3-732-1	<b>Combination pliers</b> , 160 mm, chrome-plated, with BERNSTEINIT-insulation
4-103 S	<b>Engineer's screwdriver</b> , with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4.0 mm
4-104 S	<b>Engineer's screwdriver</b> , as above, blade 150 x 5.0 mm
4-135 S	<b>Engineer's screwdriver</b> , as above, blade 150 x 8.0 mm
4-256	<b>Cross-recess screwdriver</b> , as above, size 1, with black tip
4-257	<b>Cross-recess screwdriver</b> , as above, size 2, with black tip
4-344 VDE	<b>Voltage tester</b> , for 220 - 250 V, blade 100 x 3.5 mm
5-0605	<b>Universal stripping tool</b>
6-105	<b>Socket wrench</b> , with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 5.5 mm A/F
6-107	<b>Socket wrench</b> , as above, 7.0 mm A/F
<b>Tool tray No. 7040</b>	
3-575-6	<b>Water pump pliers</b> , 240 mm, chrome-plated, with insulation
3-815-1	<b>Wire strippers</b> , 155 mm, chrome-plated, with BERNSTEINIT insulation
4-272	<b>Cross-recess screwdriver</b> Supadriv/Pozidriv, size 1, blade made from chrome vanadium, chrome-plated, with special square BERNSTEIN handle
4-273	<b>Cross-recess screwdriver</b> , Supadriv/Pozidriv, as above, size 2
5-304	<b>Combination cutters</b> , 190 mm, stainless
5-309	<b>Cable stripping shears</b> , 190 mm, stainless, with plastic handles
5-501	<b>Cable knife</b>
7-410	<b>Slicker trowel</b> with round shank, blade width 16 mm
7-535	<b>Spirit level</b> , length 225 mm, with 3 levels: horizontal, vertical and 45° angle

#### No. Description of individual tools

No.	Description of individual tools
<b>Tool tray No. 7050</b>	
5-107-6	<b>Steel tweezers</b> , bent, nickel-plated, safety-insulated, 150 mm
5-117-6	<b>Steel tweezers</b> , straight-flat-wide, safety-insulated, 145 mm
5-505	<b>Insulation stripping tool</b> for cable 8 - 28 mm Ø
7-114	<b>Engineer's hammer</b> , 200 g
7-202	<b>Firmer chisel</b> , blade width 16 mm
7-235	<b>Flat chisel</b> , 200 x 16 x 22 mm, chrome vanadium
7-255	<b>Electrician's chisel</b> , 200 x 8 x 10 mm, chrome vanadium
7-315	<b>Drill rasp</b> , bore-Ø 4 mm, length of blade 175 mm, with plastic handle
7-316	<b>Punch</b> , 6 mm Ø, with plastic handle
7-502	<b>Folding rule</b> , 2 m
7-616	<b>Pocket saw „PUK“</b> in a wallet
<b>alternatively to 7030</b>	
<b>Tool tray No. 7060 (VDE)</b>	
3-134 VDE	<b>Side cutters</b> , 160 mm, for steel wire up to 1.6 mm Ø, chrome-plated, with VDE safety insulation
3-244 VDE	<b>Telephone pliers</b> , 165 mm, snipe nose, long straight jaws, with cutting edge for hard wire, chrome-plated, with VDE safety insulation
3-732 VDE	<b>Combination pliers</b> , 160 mm, with wire cutter, for hard wire up to 1.6 mm Ø, chrome-plated, with VDE safety insulation
4-344 VDE	<b>Voltage tester</b> , 220 - 250 V, blade 100 x 3.5 mm
14-602 VDE	<b>Screwdriver</b> , with VDE safety insulation, blade 100 x 3.5 mm
14-604 VDE	<b>Screwdriver</b> , with VDE safety insulation, blade 125 x 5.5 mm
14-606 VDE	<b>Screwdriver</b> , with VDE safety insulation, blade 150 x 6.5 mm
14-632 VDE	<b>Cross-recess screwdriver</b> , size 1, with VDE insulation, blade length 80 mm
14-633 VDE	<b>Cross-recess screwdriver</b> , size 2, with VDE insulation, blade length 100 mm
15-522 VDE	<b>Cable stripping knife</b> , with blade protection, blade length 35 mm
16-402 VDE	<b>Socket wrench</b> , with VDE insulation, 5.5 mm A/F
16-404 VDE	<b>Socket wrench</b> , with VDE insulation, 7.0 mm A/F

### To complete the set we recommend for the bottom of the case:

5-240	<b>Warding file set</b> , 6 pieces, wooden handles in a wallet
6-810	<b>Set of allen hex sockets</b> on a ring, 8 pieces
7-405	<b>Trowel</b> , 50 mm
7-415	<b>Rubber beaker</b> for plaster
8-145	<b>ERSA soldering iron</b> 30 S/330 KN/30 W/230 V
8-402	<b>Solder wire (spool)</b> , 100 g, 1.5 mm Ø

# COMPACT-MOBIL 7200 ELECTRICIAN'S SERVICE CASE

The trolley case as bordcase for world-wide service



alternative with  
VDE-tools  
7060





## SAFETY 8100 VDE TOOL CASE

A case full of safety for working under voltage up to 1000 V



8100 **BERNSTEIN SAFETY** with tool set

8115 **BERNSTEIN SAFETY** without tool set

### Description:

Extremely stable case made from cowhide, red safety-colour. The hinged front plate allows to grip easily the 35 tools placed in partitions and in the tray in the bottom. Behind the tool set there is a partition for protective gloves, security grip etc.. Furthermore there is a separate pocket for connection diagrams and other documents. The case has two locks. At the side it has loops for attaching a carrying strap.

Outside dimensions: 440 x 175 x 310 mm

Weight without tools: approx. 3.000 kg

Weight with tools: approx. 7.500 kg

### Tool set:

BERNSTEIN safety tools are produced in accordance with specification EN 60.900 of the Association of German Electrical Engineers (VDE) - the guarantee of optimal safety. The two-colour multilayered insulation (outside red - inside yellow) allows a simple safety-control, practicable at any time: damages of the external red insulation immediately become visible by the yellow layer below.

No.	Description of individual tools
4-344 VDE	<b>Voltage tester</b> , blade 100 x 3.5 mm
13-106 VDE	<b>Side cutter</b> , for piano wire, 165 mm, chrome-plated, with two-colour multilayered insulation
13-207 VDE	<b>Telephone pliers</b> , straight, 210 mm, chrome-plated, with two-colour multilayered insulation
13-208 VDE	<b>Telephone pliers</b> , bent, 205 mm, chrome-plated, with two-colour multilayered insulation
13-707 VDE	<b>Combination pliers</b> , 185 mm, chrome-plated, with two-colour multilayered insulation
13-806 VDE	<b>Wire strippers</b> , 165 mm, chrome-plated, with two-colour multilayered insulation
14-602 VDE	<b>Screwdriver</b> , insulated, blade 100 x 3.5 mm
14-603 VDE	<b>Screwdriver</b> , insulated, blade 100 x 4.0 mm
14-604 VDE	<b>Screwdriver</b> , insulated, blade 125 x 5.5 mm
14-606 VDE	<b>Screwdriver</b> , insulated, blade 150 x 6.5 mm
14-608 VDE	<b>Screwdriver</b> , insulated, blade 175 x 8.0 mm
14-632 VDE	<b>Cross-recess screwdriver</b> , insulated, size 1
14-633 VDE	<b>Cross-recess screwdriver</b> , insulated, size 2
15-522 VDE	<b>Cable stripping knife</b> with blade-protection, blade 35 mm
16-441 VDE	<b>Socket</b> , 10 mm A/F, with two-colour multilayered insulation
16-442 VDE	<b>Socket</b> , as above, 11 mm A/F
16-443 VDE	<b>Socket</b> , as above, 12 mm A/F

No.	Description of individual tools
16-444 VDE	<b>Socket</b> , as above, 13 mm A/F
16-445 VDE	<b>Socket</b> , as above, 14 mm A/F
16-447 VDE	<b>Socket</b> , as above, 17 mm A/F
16-448 VDE	<b>Socket</b> , as above, 19 mm A/F
16-449 VDE	<b>Socket</b> , as above, 22 mm A/F
16-451 VDE	<b>Socket</b> , as above, 24 mm A/F
16-471 VDE	<b>Reversible ratchet</b> , 260 mm long, with two-colour multilayered insulation
16-476 VDE	<b>Rigid extension</b> with locking device, length 125 mm, with two-colour multilayered insulation
16-503 VDE	<b>Single-ended open-jaw wrench</b> , 8 mm A/F, with two-colour multilayered insulation
16-504 VDE	<b>Single-ended open-jaw wrench</b> , as above, 9 mm A/F
16-505 VDE	<b>Single-ended open-jaw wrench</b> , as above, 10 mm A/F
16-506 VDE	<b>Single-ended open-jaw wrench</b> , as above, 11 mm A/F
16-507 VDE	<b>Single-ended open-jaw wrench</b> , as above, 12 mm A/F
16-508 VDE	<b>Single-ended open-jaw wrench</b> , as above, 13 mm A/F
16-509 VDE	<b>Single-ended open-jaw wrench</b> , as above, 14 mm A/F
17-501 VDE	<b>Electrician's protective gloves</b> , size 10
17-521 VDE	<b>Plug-in grip</b> with leather gauntlet for NH-fuses
17-523 VDE	<b>Plastic clip</b> , 170 mm long, with internal spiral spring

## VDE TOOL SETS 8150 AND 8160

Safety tools at hand in a plastic case

### Description:

Black plastic case made from fracture-proof ABS material. The tools are clearly arranged in foamed plastic recesses. The case has two locks and a handle which may be turned down.

**Outside dimensions: 395 x 290 x 90 mm**

BERNSTEIN safety tools are produced in accordance with specification EN 60.900 of the Association of German Electrical Engineers (VDE) - the guarantee of optimal safety. The two-colour multilayered insulation (outside red - inside yellow) allows a simple safety control, practicable at any time: damages of the external red insulation immediately become visible by the yellow layer below.

### 8150 **BERNSTEIN** 24-piece VDE tool set

**Weight with tools: 4.100 kg**

No.	Description of individual tools
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13-106 VDE	<b>Side cutters for piano wire</b> , 165 mm, chrome-plated, with two-colour multilayered insulation
13-708 VDE	<b>Combination pliers</b> , 205 mm, chrome-plated, with two-colour multilayered insulation
14-601 VDE	<b>Screwdriver</b> , insulated, blade 75 x 2.5 mm
14-606 VDE	<b>Screwdriver</b> , insulated, blade 150 x 6.5 mm
14-632 VDE	<b>Cross-recess screwdriver</b> , insulated, size 1
14-633 VDE	<b>Cross-recess screwdriver</b> , insulated, size 2
15-521 VDE	<b>Cable knife</b> with blade protection, blade length 50 mm
15-522 VDE	<b>Cable stripping knife</b> with blade protection, blade length 35 mm
16-441 VDE	<b>Socket</b> , 10 mm A/F, with two-colour multilayered insulation
16-442 VDE	<b>Socket</b> , as above, 11 mm A/F
16-443 VDE	<b>Socket</b> , as above, 12 mm A/F
16-444 VDE	<b>Socket</b> , as above, 13 mm A/F
16-445 VDE	<b>Socket</b> , as above, 14 mm A/F
16-447 VDE	<b>Socket</b> , as above, 17 mm A/F
16-448 VDE	<b>Socket</b> , as above, 19 mm A/F
16-475 VDE	<b>T-bar</b> , 1/2" square drive, 200 mm, with two-colour multilayered insulation
16-505 VDE	<b>Single-ended open-jaw wrench</b> , 10 mm A/F, with two-colour multilayered insulation
16-506 VDE	<b>Single-ended open-jaw wrench</b> , as above, 11 mm A/F
16-507 VDE	<b>Single-ended open-jaw wrench</b> , as above, 12 mm A/F
16-508 VDE	<b>Single-ended open-jaw wrench</b> , as above, 13 mm A/F
16-509 VDE	<b>Single-ended open-jaw wrench</b> , as above, 14 mm A/F
16-512 VDE	<b>Single-ended open-jaw wrench</b> , as above, 17 mm A/F
16-513 VDE	<b>Single-ended open-jaw wrench</b> , as above, 19 mm A/F
17-531 VDE	<b>Voltage tester</b> 'Steinel Volt Check 3'



### 8160 **BERNSTEIN** 12-piece VDE tool set

**Weight with tools: 2.800 kg**

No.	Description of individual tools
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13-106 VDE	<b>Side cutters for piano wire</b> , 165 mm, chrome-plated, with two-colour multilayered insulation
13-207 VDE	<b>Telephone pliers</b> , straight, 210 mm, chrome-plated, with two-colour multilayered insulation
13-707 VDE	<b>Combination pliers</b> , 185 mm, chrome-plated, with two-colour multilayered insulation
13-806 VDE	<b>Wire strippers</b> , 165 mm, chrome-plated, with two-colour multilayered insulation
14-601 VDE	<b>Screwdriver</b> , insulated, blade 75 x 2.5 mm
14-602 VDE	<b>Screwdriver</b> , insulated, blade 100 x 3.5 mm
14-604 VDE	<b>Screwdriver</b> , insulated, blade 125 x 5.5 mm
14-606 VDE	<b>Screwdriver</b> , insulated, blade 150 x 6.5 mm
14-632 VDE	<b>Cross-recess screwdriver</b> , insulated, size 1
14-633 VDE	<b>Cross-recess screwdriver</b> , insulated, size 2
15-521 VDE	<b>Cable knife</b> with blade protection, blade length 50 mm
15-522 VDE	<b>Cable stripping knife</b> with blade protection, blade length 35 mm



## ADJUSTING AND SETTING IN ELECTRONICS

A large number of electrical and electronic appliances or assemblies must be adjusted and set after the production process. Even when servicing, when fitting new components or when electrical values have altered owing to age, adjustment is usually necessary in order to restore the optimum functioning of the appliance. Although this should be reduced to a minimum by design measures and technological processes, in order to save costs and to attain a high degree of reliability, adjustment cannot be eliminated completely.

The number of examples which can be quoted is vast: pulse generators in digital systems have a quartz crystal whose nominal frequency is set by a trimming capacitor (this is the case in each digital clock). The offset adjustment in operational amplifiers is carried out using helis. The band-pass filter curve of selective amplifiers must be set in accordance with specific regulations by adjusting the inductances. The list of these problems is endless.

Trimming potentiometers, ten-turn trimmers, adjusting capacitors, inductor cores, adjusting hands of shell-type cores etc. can be set.

Not just any screwdriver should be used. There are special tools which ensure that the setting mechanism is not damaged and that sensitive setting can be carried out. The use of special materials prevents the electrical functioning of the appliance from being affected.

BERNSTEIN use a high-quality, fully insulated plastic material with the trademark "BERNSTEINIT", which is hard and flexible, for adjusting screwdrivers and keys. A material made from hard special plastic is available to satisfy the stringent requirements with regard to torsional strength. BERNSTEIN supply adjusting screwdrivers and keys with inserts made from resilient hard bronze for cores which are especially difficult to remove. This material is true to size even with the smallest dimensions. Since it is only used as small cutting tips in conjunction with BERNSTEINIT material, detuning by the resilient hard bronze is virtually eliminated.

For the industrial adjustment and the work with electrostatically endangered components, BERNSTEIN manufacture a variety of high-grade ceramic bits as well as tweezers with ceramic tips. These ceramic bits made from zirconium oxide ( $ZrO_2$ ) meet highest standards due to their excellent mechanical, thermic and electrical features. The hardness and breaking strength of the material allows the fabrication and use even in smallest dimensions with greatest possible resistance to wear. BERNSTEIN ceramic bits are extremely resistant and merely show a low thermal conductivity. The blades are non-magnetic, anti-static and electrically insulating, the electric resistance is approx.  $10^{10} \Omega/cm$ .

In addition to the types indicated in the catalogue, on request BERNSTEIN also manufacture special wanted dimensions or forms also in smaller quantities.



Examples of special tools for adjustment



Sample 97, cross 3 x 0.8 mm



Sample 38, elongated hole 4 x 3 mm



Sample 69, internal bronze blades, 4 and 3 mm



Sample 60, 1 mm slot and edge with inside radius of 2°



Sample 35, hexagon 1.85 mm A/F



Sample 36, triangular adjusting key



Sample 77, bronze insert 1.4 x 0.5 mm



Handle for interchangeable blades 1-725 with cross-recess ceramic bit 3 x 0.6 mm



Sample 372, handle for interchangeable blades with ceramic bit 1-776



Sample 411, double-ended handle for interchangeable blades with ceramic bits



Sample 377, 3 x 1 mm ceramic blade



Sample 386, cross 1.55 x 0.4



Sample 401, bit 0.95 x 0.55 mm



Sample 378, bit 2.2 x 1.2 mm

## TRIMMING WITH CERAMIC

Antistatic – antimagnetic – electrically insulating

### Ceramic Bits for handles 1-725 or 1-735

#### Material:

BERNSTEIN ceramic blades belong to the group of oxide ceramic materials (zirconium oxide) which, thanks to their very fine grained structure, provide the highest breaking strength and toughness values obtainable with ceramic materials, namely: great hardness and wear resistance with constantly smooth, sharp edges, high torque, non-magnetic, antistatic and electrically insulating.

### 1-750 **BERNSTEIN** Ceramic adjusting screwdrivers set 13-pieces in a box with hinged lid

**Contents:** double-ended handle 1-735 and 12 ceramic bits

**Weight:** 90 g

#### Measurements of the ceramic bits in box 1-750

No.	Blade length mm	Blade tip mm	Weight g
1-751	32	0.90 x 0.30	1
1-752	32	1.30 x 0.30	1
1-753	32	1.50 x 0.30	1
1-754	32	1.80 x 0.30	1
1-755	32	1.95 x 0.35	1
1-756	32	2.50 x 0.70	1
1-757	32	3.00 x 0.30	1
1-761	32	1.95 AF	1
1-762	32	2.45 AF	1
1-765	32	size 00	1
1-766	32	size 0	1
1-767	32	2.40 x 0.80	1

#### Measurements of further ceramic bits

No.	Blade length mm	Blade tip mm	Weight g
1-758	32	3.00 x 0.70	1
1-763	32	2.60 AF	1
1-764	32	size 000	1
1-773	32	0.70 x 1.40	1
1-774	32	3.00 x 1.00	1
1-775	32	1.20 x 1.20	1
1-776	32	1.30 x 0.40	1

## ADJUSTING SCREWDRIVERS

with blades from ceramic and conductive handle, non insulating, with centre top

No.	Overall length mm	Blade tip mm	Weight g
1-851	110	0.90 x 0.30	10
1-852	110	1.30 x 0.30	10
1-853	110	1.50 x 0.30	10
1-854	110	1.80 x 0.30	10
1-855	110	1.95 x 0.35	10
1-856	110	2.50 x 0.70	10
1-857	110	3.00 x 0.30	10
1-858	110	3.00 x 0.70	10
1-861	110	1.95 AF	10
1-862	110	2.45 AF	10
1-863	110	2.60 AF	10
1-864	110	size 000	10
1-865	110	size 00	10
1-866	110	size 0	10
1-867	110	2.40 x 0.80	10
1-873	110	0.70 x 1.40	10
1-874	110	3.00 x 1.00	10
1-875	110	1.20 x 1.20	10
1-876	110	1.30 x 0.40	10



## ADJUSTING KEYS

For special trimming

### Adjusting screwdrivers with metal inserts

For extremely firm cores or extremely small dimensions

**Material:**

handle and blade made from flexible BERNSTEINIT with tip from resilient hard bronze

No.	Overall length mm	Blade length mm	Blade Ø mm	Bronze insert mm	Weight g
1-571	120	75	2.5	1.1 x 0.5	4
1-572	120	75	2.5	1.4 x 0.5	4
1-573	120	75	2.5	1.7 x 0.5	4
1-574	120	75	3.0	2.0 x 0.5	4
1-575	120	75	3.0	2.5 x 0.5	4
1-576	120	75	5.0	3.5 x 0.5	5
1-577	120	75	2.5	1.7 x 0.7	4
1-578	120	75	5.0	4.0 x 0.4	5
1-579	120	75	5.0	4.0 x 0.7	5
1-581	120	75	3.0	2.0 x 1.0	4
1-582	120	75	5.0	4.0 x 1.0	5



### Double-ended adjusting keys

made from BERNSTEINIT, overall length 135 mm, one end with outside bronze tip, other end with inside bronze insert

No.	Handle length x Ø mm	Blade length x Ø mm	Bronze insert outside/mm	Blade length x Ø mm	Bronze insert inside/mm	Weight g
1-601	85 x 6	20 x 3	1.4 x 0.5	30 x 3	1.4 x 0.5	5
1-602	85 x 6	20 x 3	2.0 x 0.5	30 x 3	2.0 x 0.5	5
1-603	85 x 6	20 x 4	2.5 x 0.5	30 x 4	2.5 x 0.5	5
1-604	85 x 6	20 x 4	3.0 x 0.3	30 x 4	3.0 x 0.3	5
1-605	85 x 6	20 x 5	3.5 x 0.5	30 x 5	3.5 x 0.5	6



### Double-ended adjusting keys

made from BERNSTEINIT, overall length 135 mm, both ends with inside bronze insert

No.	Handle length x Ø mm	Blade length x Ø mm	Bronze insert inside/mm	Blade length x Ø mm	Bronze insert inside/mm	Weight g
1-616	85 x 6	20 x 3	2.0 x 0.5	30 x 4	3.0 x 0.3	5
1-617	85 x 6	20 x 4	2.5 x 0.5	30 x 5	3.5 x 0.5	5
1-618	85 x 6	20 x 4	3.0 x 0.3	30 x 5	4.0 x 1.0	6



### For industrial trimming

1-725 **Adjusting screwdriver handle for interchangeable blades,** made from BERNSTEINIT with swivel top for 3 mm Ø blades

5

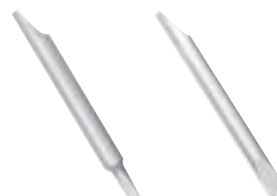
1-735 **Adjusting screwdriver handle for interchangeable blades,** double-ended, for 3 mm Ø blades

6



### Interchangeable blades for handles

No.	Blade material	Overall length mm	Blade Ø mm	Blade tip mm	Weight g
1-738	special hard plastic	32	3	1.5 x 0.5	1
1-739	special hard plastic	32	3	3.0 x 0.5	1



Further finish and measurements available on request



## ADJUSTING KEYS

For adjusting and setting work of all kinds, e. g. inductor cores and trimming capacitors

### Double-ended adjusting keys

Centre section made from flexible BERNSTEINIT with inserts made from special hard plastic

No.	overall length mm	blade Ø mm	blade tips mm	weight g
1-181	180	3.0	Hexagon =1.85 A/F	4
1-182	180	3.0	Square =1.5 A/F	4
1-183	180	4.0	Hexagon =2.6 A/F	4
1-184	180	2.7	Square =3.0 A/F	4
1-185	180	2.4	Slot 1.3	4
			Slot 0.8	
			3.0 x 0.5	4
			2.4 x 0.3	
			Bronze 1.1 x 0.5	4
			Bronze 1.7 x 0.7	

1-280 **5-piece set of adjusting keys**, as above, in a plastic case

### Double-ended adjusting keys

made from BERNSTEINIT with screwdriver inserts made from resilient hard bronze

No.	overall length mm	blade Ø mm	bronze inserts mm	weight g
1-335	150	2.5	1.7 x 0.7	1
1-345	150	3.0	1.7 x 0.7	1
1-355	150	4.0	2.0 x 1.0	3
1-365	150	5.0	4.0 x 1.0	4

### "Special" adjusting screwdrivers

with blades made entirely from hard special plastic

No.	overall length mm	blade length mm	Ø and blade width mm	weight g
1-415	185	140	2.4	4
1-425	240	195	3.0	5
1-435	240	195	4.0	5

### Tuning keys

made from flexible BERNSTEINIT, insert at one end made from hard special plastic

No.	overall length mm	blade Ø mm	blade widths mm	weight g
1-445	350	3.0	3.0 and 2.0	3
1-446	350	4.0	4.0 and 3.0	5

### Adjusting screwdrivers

made entirely from BERNSTEINIT, ground at both ends

No.	overall length mm	blade Ø mm	blade widths mm	weight g
1-458	130	5.0	5.0 and 3.5	3
1-459	200	5.0	5.0 and 3.5	5

### Adjusting screwdrivers

made entirely from hard special plastic, ground at both ends

No.	overall length mm	blade Ø mm	blade widths mm	weight g
1-465	130	2.0	2.0	1
1-475	200	2.4	2.4	1
1-485	200	3.0	3.0	2
1-495	200	4.0	4.0	3

### Adjusting key (slotted key)

made entirely from hard special plastic, slotted at both ends

No.	overall length mm	blade Ø mm	slot width mm	weight g
1-505	120	3.0	1.0	1



## ADJUSTING KEYS

For special trimming

### Adjusting keys for elongated hole

made entirely from flexible BERNSTEINIT

No.	overall length mm	blade Ø mm	blade tip mm	weight g
1-511	120	3.5	3.5 x 2	4
1-512	120	4.0	4.0 x 3	4

### Adjusting key for elongated hole

handle and blade made from flexible BERNSTEINIT  
with insert made from special plastic

No.	overall length mm	blade Ø mm	insert Ø mm	blade tip mm	weight g
1-515	120	3.0	2.0	2.0 x 1.4	4

### Hexagonal adjusting keys

handle and blade made from flexible BERNSTEINIT  
with insert made from special plastic

No.	overall length mm	blade Ø mm	insert Ø mm	hex. mm	weight g
1-521	120	3.0	2.0	1.5 A/F	4
1-522	120	4.0	2.7	1.85 A/F	4
1-523	120	4.0	2.7	1.95 A/F	4
1-524	120	4.0	2.7	2.0 A/F	5
1-525	120	4.0	3.0	2.6 A/F	5

### Crosspoint adjusting keys

handle and blade made from flexible BERNSTEINIT  
with insert made from special plastic

No.	overall length mm	blade Ø mm	insert Ø mm	cross mm	weight g
1-531	120	3.0	2.4	2.4 x 0.4	4
1-532	120	3.5	2.7	2.7 x 0.8	4
1-533	120	4.0	3.0	3.0 x 0.8	4
1-534	120	5.0	4.0	4.0 x 1.5	5

### Square adjusting keys

handle and blade made from flexible BERNSTEINIT  
with insert made from special plastic

No.	overall length mm	blade Ø mm	insert Ø mm	square mm	weight g
1-541	120	3.0	2.0	1.5	4
1-542	120	3.5	2.7	2.0	4
1-543	120	5.0	4.0	3.0	5

### Screwdriver adjusting keys

handle and blade made from flexible BERNSTEINIT  
with insert made from special plastic

No.	overall length mm	blade Ø mm	insert Ø mm	blade tip mm	weight g
1-551	120	3.0	1.4	1.4 x 0.4	4
1-552	120	3.0	2.0	2.0 x 0.4	4
1-553	120	3.5	2.4	2.4 x 0.5	4
1-554	120	3.5	2.7	2.7 x 0.5	4
1-555	120	4.0	3.0	3.0 x 0.6	4

### Cross adjusting socket spanner

made entirely from BERNSTEINIT, head black

No.	overall length mm	head Ø mm	inside cross mm	weight g
1-561	120	8.0	4.8 x 1.5	5



## RADIO-TV-ADJUSTING SETS

Tools made from high quality BERNSTEINIT material, combined with inserts of hard special plastic

(German Federal Registered Pattern)

### 1-170 **BERNSTEIN** Television adjusting screwdrivers 7-piece set in a plastic case

Weight: 50 g

No.	Description of individual tools	weight
1-151	Short, single-ended screwdriver, 85 mm, blade made from special plastic, 40 x 3 mm	3 g
1-172	Double-ended screwdriver made from BERNSTEINIT, 65 mm long, one end with bronze insert 3.5 x 0.5 mm, in BERNSTEINIT guide, other end 5 mm wide screwdriver	2 g
1-173	Double-ended adjusting key made from BERNSTEINIT, 165 mm long, one end hexagon key 2.6 mm, other end blunt screwdriver for 2 mm wide slot	4 g
1-174	Feeler gauge made from BERNSTEINIT, 150 mm long, one end with H. F. iron core, other end with brass core, 3 mm Ø	3 g
1-175	Double-ended screwdriver made from BERNSTEINIT, 185 mm long, one end with bronze insert 3.5 x 0.5 mm, other end 4 mm wide screwdriver made from special plastic	5 g
1-176	Double-ended screwdriver made from BERNSTEINIT, 180 mm long, one end with bronze insert 3.5 x 0.5 mm, in BERNSTEINIT guide, other end 3 mm wide screwdriver made from special plastic	3 g
1-177	Double-ended screwdriver made from BERNSTEINIT, 230 mm long, one end with insert for slotted head screws 3 mm, other end screwdriver made from special plastic 3 mm	4 g

### 1-160 **BERNSTEIN** Television adjusting screwdrivers 7-piece set, made entirely from BERNSTEINIT, in a plastic case

Weight: 45 g

Measurements as per set 1-170

### 1-900 **BERNSTEIN** Radio adjusting tools 21-piece set in a tool roll

Weight: 200 g

No.	Description of individual tools	weight
1-901	Socket wrench, 6 mm, single-ended, overall length 60 mm	3 g
1-902	Screwdriver, 3.5 mm, with 2 mm wide slot in handle, overall length 150 mm	5 g
1-903	Wrench with pivot, overall length 60 mm	5 g
1-904	Special screwdriver with pivot blade, other end 2.8 mm screwdriver blade, overall length 130 mm	11 g
1-905	Combined socket wrench 4.5 mm A/F, with inserted bronze screwdriver blade 3.5 mm	4 g
1-906	Screwdriver double-ended, widths 5 mm and 3 mm	2 g
1-909	Engineer's mirror with extension handle, made entirely from BERNSTEINIT, overall length 260 mm	9 g
	Double-ended hexagonal adjusting socket wrenches, one end BERNSTEINIT, other end brass, overall length 140 mm. The metal and plastic socket wrenches are extremely thin in order to penetrate deep into each coil core.	
1-911	2.5 mm,	2 g
1-912	3.0 mm,	3 g
1-913	3.5 mm,	3 g
1-914	4.0 mm,	5 g
1-915	4.5 mm,	6 g
1-916	5.0 mm,	7 g
1-917	5.5 mm,	7 g
1-918	6.0 mm,	9 g
1-174	Feeler gauge for radio, one end H. F. iron core, other end brass core, 150 x 4 mm Ø	5 g
2-265-1	Black test prod with banana plug connection	9 g
2-265-2	Red test prod with banana plug connection	9 g
5-107	Engineer's steel tweezers with bent tips, length 150 mm	22 g
4-311	Screwdriver for grub screws, 2.8 mm, blade chrome vanadium	10 g





## ADJUSTING SCREWDRIVERS

For all adjusting work which requires a ground blade

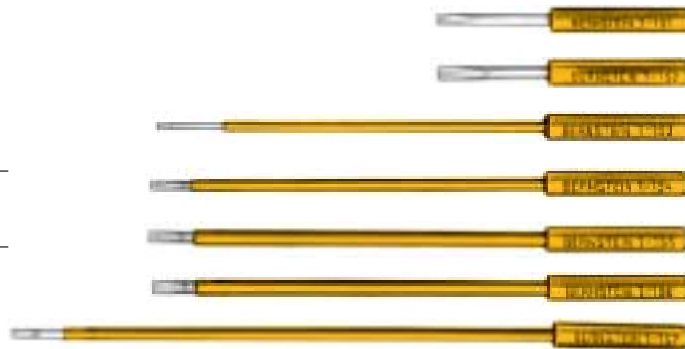
### Adjusting screwdrivers with blade-tip made from special hard plastic

**Material:**

BERNSTEINIT with insert made from special plastic (German Federal Registered Pattern)

The BERNSTEINIT blade makes the screwdriver flexible, and the hard special plastic insert at the tip gives the blade exceptional torsional strength.

No.	overall length mm	blade length mm	blade Ø mm	blade width mm	weight g
1-151	85	40	3.0	3.0	3
1-152	85	40	4.0	4.0	3
1-153	175	130	3.0	2.0	4
1-154	175	130	4.0	3.0	5
1-155	175	130	5.0	3.5	6
1-156	175	130	5.0	4.0	6
1-157	225	180	4.0	3.0	6



1-150 **BERNSTEIN** Adjusting screwdrivers  
7-piece set, as described above, clearly arranged in a plastic case  
Weight: 55 g



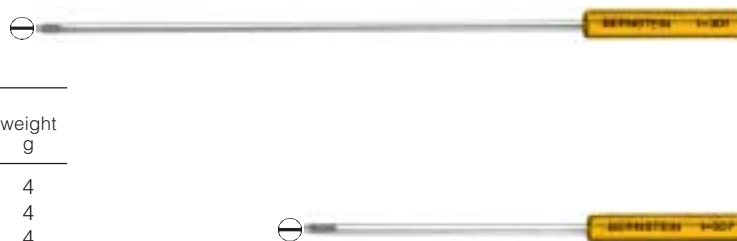
### Adjusting screwdrivers with metal inserts made from resilient hard bronze

For extremely firm cores or extremely small dimensions

**Material:**

Handle made from BERNSTEINIT, blades made from special plastic with bronze tips

No.	overall length mm	blade length mm	blade Ø mm	bronze insert mm	weight g
1-301	200	155	2.7	1.4 x 0.5	4
1-302	200	155	2.7	2.0 x 0.5	4
1-303	200	155	2.7	2.5 x 0.5	4
1-304	200	155	2.7	1.7 x 0.7	4
1-305	125	80	2.4	1.1 x 0.5	3
1-306	125	80	2.4	1.7 x 0.7	3
1-307	125	80	2.4	2.0 x 0.5	3



1-300 **BERNSTEIN** Adjusting screwdrivers,  
7-piece set, as described above, clearly arranged in a plastic case  
Weight: 50 g



### Interchangeable adjusting screwdrivers

made from BERNSTEINIT, insert at one end made from hard special plastic, blade supplied loose (no. 1-456) or with screw-headed handle for inserting the blade (No. 1-455) either way

No.	handle length mm	blade length mm	Ø and blade widths mm	weight g
1-455	60	110	3.0 and 2.0	9
1-456	-	110	3.0 and 2.0	1
4-776	Screw-headed handle, 3 mm			8



## ADJUSTING TOOL SETS

1-180 **BERNSTEIN** **Adjusting tools**  
7-piece set in a plastic case  
Weight: 50 g



No.	Description of individual tools
	Adjusting screwdrivers made from BERNSTEINIT with hard special plastic insert
1-151	Overall length 85 mm, blade 40 x 3.0 mm
1-152	Overall length 85 mm, blade 40 x 4.0 mm
1-153	Overall length 175 mm, blade 130 x 2.0 mm
1-155	Overall length 175 mm, blade 130 x 3.5 mm
1-181	Double-ended adjusting key made from BERNSTEINIT with hard special plastic inserts, overall length 180 mm, one end hexagonal 1.85 mm A/F, other end square 1.5 mm A/F
1-182	Double-ended adjusting key made from BERNSTEINIT with hard special plastic inserts, overall length 180 mm, one end hexagonal 2.6 mm A/F, other end square 3.0 mm A/F
1-306	Adjusting screwdriver made from special plastic, overall length 125 mm, blade 80 x 2.5 mm, with bronze insert 1.7 x 0.7 mm

1-190 **BERNSTEIN** **Adjusting tools**  
7-piece set  
in an imitation leather case  
Weight: 60 g



No.	Description of individual tools
	Adjusting screwdrivers made from BERNSTEINIT with hard special plastic insert
1-153	Overall length 175 mm, blade 130 x 2.0 mm
1-154	Overall length 175 mm, blade 130 x 3.0 mm
1-155	Overall length 175 mm, blade 130 x 3.5 mm
1-181	Double-ended adjusting key made from BERNSTEINIT with hard special plastic inserts, overall length 180 mm, one end hexagonal 1.85 mm A/F, other end square 1.5 mm A/F
1-182	Double-ended adjusting key made from BERNSTEINIT with hard special plastic inserts, overall length 180 mm, one end hexagonal 2.6 mm A/F, other end square 3.0 mm A/F
1-306	Adjusting screwdriver made from special plastic, overall length 125 mm, blade 80 x 2.5 mm, with bronze insert 1.7 x 0.7 mm
1-505	Slotted key made from special plastic, 120 x 3 mm Ø, slot at both ends 1 mm

1-970 **BERNSTEIN** **Adjusting tools**  
21-piece set in a tool roll  
Weight: 240 g



No.	Description of individual tools
	Adjusting screwdrivers, made entirely from hard special plastic, No. 1-971 and 1-972 made from BERNSTEINIT, tip made from hard special plastic
1-151	Overall length 85 mm, blade 40 x 3.0 mm
1-152	Overall length 85 mm, blade 40 x 4.0 mm
1-971	Overall length 125 mm, blade 80 x 2.0 mm
1-972	Overall length 175 mm, blade 130 x 2.0 mm
1-973	Overall length 180 mm, blade 135 x 3.0 mm
1-974	Overall length 180 mm, blade 135 x 3.5 mm
1-975	Overall length 180 mm, blade 135 x 4.0 mm
1-174	Feeler gauge for radio and television, 150 x 4 mm Ø
1-978	Engineer's mirror with extension handle, made entirely from BERNSTEINIT, with 6 mm screwdriver ground in handle
	Double-ended hexagonal adjusting socket wrenches, one end BERNSTEINIT, other end brass, overall length 140 mm. The metal and plastic socket wrenches are extremely slim so that they can engage deeply in every coil core
1-911	Adjusting socket wrench 2.5 mm
1-912	Adjusting socket wrench 3.0 mm
1-913	Adjusting socket wrench 3.5 mm
1-914	Adjusting socket wrench 4.0 mm
1-915	Adjusting socket wrench 4.5 mm
1-916	Adjusting socket wrench 5.0 mm
1-917	Adjusting socket wrench 5.5 mm
1-918	Adjusting socket wrench 6.0 mm
2-236	Valve tapping hammer
4-315	Radio screwdriver 40 x 3 mm
4-311	Screwdriver for grub screws 80 x 2.8 mm

## ADJUSTING TOOL SETS

### 1-250 **BERNSTEIN** Special tools and adjusting tools 15-piece set in a leather case Weight: 180 g

No.	Description of individual tools
1-151	Adjusting screwdriver made from BERNSTEINIT, with blade made from hard special plastic, overall length 85 mm, blade 40 x 3.0 mm
1-153	Adjusting screwdriver made from BERNSTEINIT, with hard special plastic insert, overall length 175 mm, blade 130 x 2.0 mm
1-154	Adjusting screwdriver made from BERNSTEINIT, with hard special plastic insert, overall length 175 mm, blade 130 x 3.0 mm
1-181	Double-ended adjusting key made from BERNSTEINIT, with hard special plastic inserts, overall length 180 mm, one end hexagonal 1.85 mm A/F, other end square 1.5 mm A/F
1-182	Double-ended adjusting key made from BERNSTEINIT, with hard special plastic inserts, overall length 180 mm, one end hexagonal 2.6 mm A/F, other end square 3.0 mm A/F
1-305	Adjusting screwdriver made from special plastic, overall length 125 mm, blade 80 x 2.5 mm, with bronze insert 1.1 x 0.5 mm
1-307	Adjusting screwdriver as above, with bronze insert 2.0 x 0.5 mm
1-978	Engineer's mirror with extension handle, made entirely from BERNSTEINIT, handle ground as 6 mm screwdriver
2-126	Desoldering lever, slotted at one end, nickel-plated and insulated, with plastic handle
2-135	Core remover, for easy removal of damaged cores
2-265	Pair of test prods, red and black, extremely slim, pointed and flexible, 155 mm, blade made from 1 mm steel wire, with banana plug connection, fully insulated
4-301	Miniature screwdriver, overall length 85 mm, blade 40 x 1.8 mm
4-311	Screwdriver for grub screws, overall length 140 mm



### 1-200 **BERNSTEIN** Special tools and adjusting tools 12-piece set in an imitation leather case Weight: 150 g

No.	Description of individual tools
1-153	Adjusting screwdriver made from BERNSTEINIT, with hard special plastic insert, overall length 175 mm, blade 130 x 2.0 mm
1-181	Double-ended adjusting key made from BERNSTEINIT, with hard special plastic inserts, overall length 180 mm, one end hexagonal 1.85 mm A/F, other end square 1.5 mm A/F
1-182	Double-ended adjusting key made from BERNSTEINIT, with hard special plastic inserts, overall length 180 mm, one end hexagonal 2.6 mm A/F, other end square 3.0 mm A/F
1-301	Adjusting screwdriver made from special plastic, overall length 200 mm, blade 155 x 2.7 mm, with bronze insert 1.4 x 0.5 mm
1-304	Adjusting screwdriver as above, bronze insert 1.7 x 0.7 mm
1-505	Slotted key made from special plastic, 120 x 3 mm Ø, 1 mm slot at both ends
1-978	Engineer's mirror with extension handle, made entirely from BERNSTEINIT, handle ground as screwdriver
2-265	Pair of test prods, red and black, extremely slim, pointed and flexible, 155 mm, blade made from 1 mm steel wire, with banana plug connection, fully insulated
4-301	Miniature screwdriver, overall length 85 mm, blade 40 x 1.8 mm
5-107	Steel tweezers with bent tips, 150 mm long
5-301	Special sheet-metal scissors, serrated, 110 mm long





## SPECIAL TOOLS



No.	Description	Length	Weight
2-265	<b>Test prods</b> , extremely slim, pointed and flexible, blade made from 1 mm steel wire, with banana plug connection, fully insulated, available in red (2-265-1) and black (2-265-2)	155 mm	9 g
2-125	<b>Desoldering lever</b> for lifting fixed components when desoldering, ends at different angles (40°/70°), slotted at both ends, nickel-plated, insulated	125 mm	7 g
2-126	<b>Desoldering lever</b> , slotted at one end, nickel-plated, round, insulated shank and hexagonal plastic handle	115 mm	10 g
2-127	<b>Tin knife</b> with pointed, sharp blade, for cutting circuit paths and working printed circuit boards, round, insulated shank and hexagonal plastic handle	115 mm	14 g
2-128	<b>Tin scraper</b> with blade of sharp parting tool shape for scraping off excess solder and solder bridges, round, insulated shank and hexagonal plastic handle	115 mm	14 g
2-101	<b>Tin knife</b> with ceramic blade for working printed circuit boards, handle from <b>conductive</b> black plastic	105 mm	9 g
2-135	<b>Core remover</b> for easy removal of damaged cores in coils etc., flexible metal tip 1.5 x 0.5 x 30 mm, nickel-plated blade, BERNSTEINIT handle	175 mm	8 g
2-145	<b>Screwdriver with guide sleeve</b> for easy and accurate setting of spindle resistors and potentiometers with slotted axles up to 3.2 mm Ø, nickel-plated blade, plastic-handle	140 mm	12 g
2-151	<b>Triangular scraper</b> in brass tool holder, nickel-plated, triangular blade made from hollow ground special steel (80 mm long), insertable at both ends and adjustable in holder	90 mm	26 g
2-152	<b>Tool holder</b> , nickel-plated brass, with collets at both ends for holding tools from 0 to 3 mm Ø	110 mm	32 g
2-155	<b>Claw-type gripper</b> , nickel-plated brass, with 4 wire claws, small version with clip	120 mm	21 g
2-157	<b>Flexible claw-type grip</b> with 4 sprung claws, to reach inaccessible areas with free play, nickel-plated, long version	600 mm	75 g
2-161	<b>Magnetic bar</b> with double ball-and-socket joint, slewable into any position, diameter of bar 8 mm	215 mm	34 g
2-165	<b>Contact cleaner</b> , brush-type, with wire bristles, nickel-plated	35 mm	2 g
2-166	<b>Glass fibre contact cleaner brush</b> with rotary mechanism, plastic casing	115 mm	10 g
2-167	<b>Replacement glass fibre</b> for 2-166	40 mm	1 g
2-234	<b>High voltage tester</b> made from BERNSTEINIT with steel tip	190 mm	15 g
2-236	<b>Valve tapping hammer</b> made from BERNSTEINIT	170 mm	15 g
2-245	<b>Resilient adjusting key</b> for bending and adjusting fine contacts, nickel-plated blade, BERNSTEINIT handle	135 mm	11 g

## SPECIAL TOOLS

No.	Description	Length	Weight
1-909	<b>Engineer's mirror</b> , magnifying, concave mirror 23 mm Ø, with extension handle, made entirely from BERNSTEINIT, fully insulated version	145/260 mm	9 g
1-978	<b>Engineer's mirror</b> as above, but extension handle with ground 6 mm screwdriver blade, made from BERNSTEINIT	145/260 mm	9 g
2-275	<b>Repair mirror</b> , stainless, magnifying, concave mirror 21 mm Ø, with BERNSTEINIT handle	180 mm	7 g
2-281	<b>Double-jointed mirror</b> , slewable into any position, nickel-plated, with insulated handle and clip, mirror 30 mm Ø	195 mm	33 g
2-282	<b>Telescopic mirror</b> with double joint, slewable into any position, nickel-plated, pocket clip, mirror 23 mm Ø	150-460 mm	26 g
2-285	<b>Inspection mirror</b> with illuminated mirror area and double joint, slewable into any position, nickel-plated, pocket clip, for 2 batteries type Mignon 1.5 V	200 mm	45 g
2-291	<b>Plastic magnifying glass</b> with biconvex lens, 5 x magnification, 30 mm Ø, short, practical shape	70 mm	6 g
2-293	<b>Hand magnifier</b> , light metal surround, biconvex lens, 65 mm Ø, 3.0 x magnification	115 mm	52 g
2-295	<b>Hand magnifier, illuminated</b> with bi-aspherical PMX-light-weight lens, 35 mm Ø, 4x magnification, 16.0 Dpt., with 2 batteries type Mignon 1.5 V	125 mm	80 g
2-655	<b>Pocket inspection lamp MITILITE LASER SPOT</b> with bent fibre optic adaptor for close inspection of small, tight, hard-to-see areas. The most powerful pocket lite with pre-focused reflector, clip and magnet, handy, watertight and unbreakable incl. 2 Alkaline-batteries ea. 1.5 V	125 mm	50 g
2-655-80	<b>Pocket inspection lamp</b> as discribed above, with additional straight fibre optic adaptor, 80 mm long		



## SPECIAL TOOLS

No.	Description	Length	Weight
2-130	<b>Set of spring hooks</b> , 6-piece, nickel-plated, for gripping and straightening, inserting and removing tension and compression springs of various kinds, hook screwing onto handle, in a plastic case	hook with handle 205 mm	39 g
2-131	<b>Spring hook</b> , nickel-plated and insulated, for inserting and removing tension and compression springs	205 mm	10 g
2-132	<b>Spring hook</b> , nickel-plated and insulated, for inserting and removing tension springs	175 mm	10 g
2-133	<b>Spring hook with ring</b> , nickel-plated, for inserting and removing strong tension springs	195 mm	13 g
2-306	<b>Extractor with self-centring extractor hook</b> to remove small bearings and similar parts. Span 60 mm, grip depth 50 mm	105 mm	200 g
2-307	<b>Double lamp extractor</b> , nickel-plated, for plug-in lamps in long-distance data transmission systems etc., suitable for cap-type lamps T5.5 / T5.5K / T6.8 / B7s, in accordance with DIN 49838	100 mm	11 g
2-601	<b>IC tweezers</b> for gripping, inserting and removing, especially suitable for narrow components, nickel-plated	125 mm	20 g
2-605	<b>PLCC-puller</b> for lifting out plug-in PLCC's	135 mm	6 g
2-620	<b>PLCC extractor</b> for easy removal of plug-in PLCC's	100 mm	22 g
2-701	<b>Insertion tool with sensor</b> , wire connection, without soldering, screwing and stripping, cutting the remaining length, all in one operation	185 mm	60 g
2-702	<b>Insertion tool</b> for system MDF 71 to connect cable and switch wire	165 mm	60 g





## DEMAGNETIZING THROTTLES

Indispensable for the service

### 2-305 Demagnetizing throttle

complete with 2 m connecting cable and Euro-flat plug

The device removes unwanted magnetism from sound heads, which can cause disturbing extraneous noise and losses of high-frequency sound.

Also suitable for erasing magnetic tapes.

Technical data: Dimensions: 105 mm x 40 mm Ø  
Voltage: 220 V = 50 Hz  
Low voltage on request

Weight: 300 g



### 2-505 Demagnetizing throttle

for **colour televisions** and **colour monitors**

complete with 4 m connecting cable and Euro-flat plug

When servicing colour televisions, the most important requirement for setting the purity of colour and convergence accurately is the demagnetisation of the colour television tube.

There are colour televisions and colour monitors which are so strongly magnetized that the intern demagnetisation is not successful enough. For these cases the demagnetizing throttle 2-505 is used, which neutralizes even the strongest magnetic fields. An installed thermo-element interrupts as protection of overheating after approx. 1.5 min.

Technical data: Diameter: 350 mm  
Voltage: 220 V  
Current consumption: approx. 2 A  
Thermo-element

Weight: approx. 1.000 g



## TESTING TOOLS

### 2-705 Contact-free voltage detector VOLTtester

Quick and accurate detection of cable breaks, blown fuses and damaged switches by optical and acoustic indication

Power supply: 2 batt. typ AAA, 1.5 V  
Weigth: 40 g



### 2-751 Test headphone

Usable for

- the check of switching circuitry
- the connection to the line without drawing loop current (monitor)
- verification the presence of DC current and permission to follow a tone on different pairs

Technical data:  
1 x 600 ohm, changeable from 600 up to 10.000 ohm,  
with fine adjuster, cable length including test prods 1450 mm,  
maximum load 2 W

Weigth: 240 g



BERNSTEIN-Pliers are made from specially selected top-quality special steels. The blanks are drop-forged and are then further processed in accordance with the latest production techniques.

BERNSTEIN pliers are oil-hardened and all cutting pliers additionally undergo subsequent induction hardening. All pliers are carefully produced for the cutting capacities indicated, either with a side face for cutting hard and soft wire or without a side face for flush cutting soft wire only.

BERNSTEIN pliers without side faces are marked with a dot on the head of the pliers. In the case of pliers for electronic engineers, the cutting capacities are indicated on the handle.

All BERNSTEIN pliers are guaranteed tools. Defective pliers will be replaced if they contain material or production defects.

## Special design features

Most BERNSTEIN pliers for electronic engineers are produced with a **box joint**.



As a result of this expensive design, optimum parallel guiding edges is obtained and the service lives are long.

The decision to produce a **lap joint**



or a **lay-on joint**



is made according to the type of pliers and the use.

## Finishes

BERNSTEIN-pliers are supplied as standard in the following finishes:

**Bright-polished chrome-plated**  
**Fine-polished and bright-burnished**  
**Bright steel-polished**  
**Nickel-plated**  
**Burnished**

Additional insulation or other types of finish are indicated by a suffix after the article number

Finish	No.suffix
<b>chrome-plated, polished</b>	without
with transparent hand-guard (=BERNSTEINIT-insulation)	-1
with transparent or coloured insulation	-2
with conductive black hand-guard	-13
with yellow-grey hand-guard	-20
<b>nickel-plated</b>	-3
with transparent hand-guard (=BERNSTEINIT-insulation)	-4
with coloured hand-guard insulation	-5
with coloured insulation	-6
<b>steel-polished</b>	
with coloured hand-guard insulation	-8
with coloured insulation	-9
with conductive black hand-guard	-13
<b>burnished</b>	-10
with coloured insulation	-12
<b>bright-burnished, fine-polished</b>	
with yellow-grey hand-guard	-14
with conductive black-yellow hand-guard	-15
<b>Safety insulation</b>	
VDE-safety insulation	-VDE
two-colour multilayered insulation	-VDE
<b>ESD/EGB-insulations</b>	
conductive black hand-guard	-13
conductive black-yellow hand-guard	-15

Only the finishes indicated in the descriptions of the pliers are available from stock, all other finishes are available on request.

## Packing

All pliers are supplied in skin packs as standard. Packing in plastic bags can also be selected if required. Both are for recycling. Quantities of 10 pairs of pliers per type are packed in a 3-coloured covered box and are clearly labelled.





## SPECIAL ELECTRONIC PLIERS EUROline

Box joint

Double leaf spring

High quality steel

Fine polished and bright burnished

For dazzle-free working, high corrosion protection

Ergonomically formed bicoloured hand-guard from anti-slide material

## CUTTING PLIERS

No.	Length		Finish	Cutting capacity mm Ø			Weight g
	mm	inches		Copper-wire	Soft wire	Hard wire	

### EUROline mini side cutters

with very slim, rounded head for finest operations

3-651-14	120	4 3/4	without side face	1.2	0.6	-	55
3-651-14 DR	120	4 3/4	without side face with wire retaining spring	1.2	0.6	-	55

### EUROline mini side cutters

with very slim, pointed head for finest operations

3-652-14	120	4 3/4	without side face	1.0	0.6	-	55
3-653-14	120	4 3/4	without side face, with special flat cutting edge	1.0	0.6	-	55

### EUROline side cutters

with slim rounded head, available with or without side face

3-654-14	125	5	<b>with side face</b>	1.5	1.0	0.4	60
3-655-14	125	5	<b>without side face</b>	1.5	1.0	-	60

### EUROline side cutters

with slim, pointed head, available with or without side face

3-656-14	125	5	<b>with side face</b>	1.2	1.0	0.4	60
3-657-14	125	5	<b>without side face</b>	1.2	1.0	-	60

### EUROline end cutters

extremely slim, without side face, for precision work at points difficult to reach

3-671-14	130	5 1/8	straight	0.6	-	-	60
3-672-14	130	5 1/8	cutting edge 20° angular	0.6	-	-	60

### EUROline top cutters

extremely slim, without side face, head 45° angular, for flush cutting directly in front of and behind the components

3-673-14	130	5 1/8	cutting edge inside	0.6	-	-	60
3-674-14	130	5 1/8	cutting edge outside	0.6	-	-	60



## SPECIAL ELECTRONIC PLIERS

### EUROline

Box joint



Double leaf spring

High quality steel

Fine polished and bright burnished

For dazzle free working, high corrosion protection

Ergonomically formed bicoloured hand-guard from anti-slide material



3-681-14

## ROUND, FLAT AND SNIPE NOSE PLIERS

No.	mm	length inches	finish	weight g
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### EUROline round nose pliers

extremely slim

3-681-14	130	5 1/8	plain jaws	60
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### EUROline flat nose pliers

extremely slim

3-682-14	130	5 1/8	plain jaws	60
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### EUROline snipe nose pliers

extremely slim

3-683-14	130	5 1/8	plain jaws	55
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3-682-14



3-683-14

### 3-670 EUROline Set of pliers, 4 pieces

in black imitation leather case  
with zip fastener and velvet grey lining

Weight: 390 g


#### Tool set:

No.	Description of individual tools
3-651-14	<b>Mini side cutters</b> , 120 mm, without side face, for soft wire up to 0.6 mm, copper wire up to 1.2 mm
3-672-14	<b>End cutters</b> , 130 mm, cutting edge 20° angular, for copper wire up to 0.6 mm
3-682-14	<b>Flat nose pliers</b> , 130 mm, plain jaws
3-683-14	<b>Snipe nose pliers</b> , 130 mm, plain jaws



## SPECIAL ELECTRONIC PLIERS EUROline-Conductive



Box joint   
Double leaf spring  
High quality steel

Fine polished and bright burnished, for dazzle free working  
Ergonomically formed bicoloured hand-guard from **conductive** anti-slide material

The pliers of this program have been tested with good results by a well-known electronic group adequate to IEC 61340



## CUTTING PLIERS

No.	Length		Finish	cutting capacity mm Ø			Weight g
	mm	inches		Copper wire	Soft wire	Hard wire	

### Mini side cutters EUROline-Conductive

with very slim, rounded head for finest operations

3-651-15	120	4 3/4	without side facee	1.2	0.6	-	55
3-651-15 DR	120	4 3/4	without side face, with retaining spring	1.2	0.6	-	55

### Mini side cutters EUROline-Conductive

with very slim, pointed head for finest operations

3-652-15	120	4 3/4	without side face	1.0	0.6	-	55
3-653-15	120	4 3/4	without side face, with special flat cutting edge	1.0	0.6	-	55

### Side cutters EUROline-Conductive

with slim, rounded head,  
available with or without side face

3-654-15	125	5	<b>with side face</b>	1.5	1.0	0.4	60
3-655-15	125	5	<b>without side face</b>	1.5	1.0	-	60

### Side cutters EUROline-Conductive

with slim, pointed head,  
available with or without side face

3-656-15	125	5	<b>with side face</b>	1.2	1.0	0.4	60
3-657-15	125	5	<b>without side face</b>	1.2	1.0	-	60

### End cutters EUROline-Conductive

extremely slim, without side face, for precision  
work at points difficult to reach

3-671-15	130	5 1/8	straight	0.6	-	-	60
3-672-15	130	5 1/8	cutting edge 20° angular	0.6	-	-	60


### Top cutters EUROline-Conductive

extremely slim, without side face, head 45° angular,  
for flush cutting directly in front of and  
behind the components.

3-673-15	130	5 1/8	cutting edge inside	0.6	-	-	60
3-674-15	130	5 1/8	cutting edge outside	0.6	-	-	60



## SPECIAL ELECTRONIC PLIERS EUROline-Conductive

Box joint   
Double leaf spring



High quality steel, extremely slim  
Fine polished and bright burnished, for dazzle free working  
Ergonomically formed bicoloured hand-guard from **conductive** anti-slide material

## ROUND, FLAT AND SNIPE NOSE PLIERS

No.	Length mm	Length inches	Finish	Weight g
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### Round nose pliers EUROline-Conductive

3-681-15	130	5 1/8	plain jaws	60
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### Flat nose pliers EUROline-Conductive

3-682-15	130	5 1/8	plain jaws	60
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### Snipe nose pliers EUROline-Conductive

3-683-15	130	5 1/8	plain jaws	55
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3-681-15



3-682-15



3-683-15

### 3-680 EUROline-Conductive Set of pliers, 4 pieces

in black **conductive** imitation leather case, with zip fastener



### Tool set:

No.	Description of individual tools	Weight: 390 g
3-651-15	<b>Mini side cutters</b> , 120 mm, without side face, for soft wire up to 0.6 mm Ø, copper wire up to 1.2 mm Ø	
3-672-15	<b>End cutters</b> , 130 mm, cutting edge 20° angular, for copper wire up to 0.6 mm Ø	
3-682-15	<b>Flat nose pliers</b> , 130 mm, plain jaws	
3-683-15	<b>Snipe nose pliers</b> , 130 mm, plain jaws	



## CUTTING PLIERS WITH CARBID CUTTING EDGES

No.	Length mm	Length inches	Finish	cutting capacity mm Ø			Weight g
				Nickel- wire	Hard wire	Piano- wire	

### Mini side cutters EUROline-Conductive

with very slim, rounded head for finest operations, for continuous heavy work, inserted carbon cutting edges, only for tough nickel and electrode wires

3-661-15	120	4 3/4		1.2	1.0	0.6	65
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### Mini side cutters EUROline-Conductive

with very slim, pointed head, finish as above

3-663-15	120	4 3/4	with spezial flat cutting edges	0.6	0.5	0.3	65
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3-661-15



3-663-15



## SPECIAL ESD/EGB ELECTRONIC PLIERS

Box joint   
 Double leaf spring  
 Bright steel-polished  
 With **conductive** black hand-guard



## CUTTING PLIERS

No.	Length		Finish	Cutting capacity mm Ø		Weight g
	mm	inches		Soft wire	Hard wire	

### Side cutters

with slim, rounded head, available with or without side face

3-601-13	120	4 3/4	<b>with side face</b>	1.0	0.4	70
3-602-13	120	4 3/4	<b>without side face</b>	1.0	-	70

### Side cutters

with slim, pointed head, available with or without side face

3-603-13	120	4 3/4	<b>with side face</b>	0.8	-	65
3-604-13	120	4 3/4	<b>without side face</b>	0.8	-	65

### End cutters

with angular tips and oblique cutting edge,  
 for flush cutting, for soft wire only

3-606-13	120	4 3/4	without side face	0.4	-	55
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## ROUND, FLAT AND SNIPE NOSE PLIERS

No.	article	Length		Finish	Weight g
		mm	inches		
3-631-13	Round nose pliers	120	4 3/4	plain jaws	55
3-632-13	Flat nose pliers	120	4 3/4	plain jaws	55
3-633-13	Snipe nose pliers	120	4 3/4	plain jaws	55
3-634-13	Snipe nose pliers, angular	120	4 3/4	plain jaws	55

## SETS OF ELECTRONIC PLIERS

### 3-650 Set of conductive pliers, 5 pieces

in a practical table support from antistatic material

**Tool set:**

Weight: 320 g

No.	Description of individual tools
3-601-13	<b>Side cutters</b> , 120 mm, for hard wire up to 0.4 mm, for soft wire up to 1.0 mm
3-631-13	<b>Round nose pliers</b> , 120 mm, plain jaws
3-632-13	<b>Flat nose pliers</b> , 120 mm, plain jaws
3-633-13	<b>Snipe nose pliers</b> , 120 mm, plain jaws
3-634-13	<b>Snipe nose pliers</b> , angular, 120 mm, plain jaws

### 3-630 Set of conductive pliers, 3 pieces

in a wallet of recycable nylon

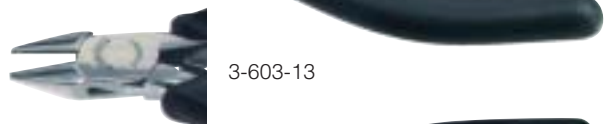
**Tool set:**

Weight: 240 g

No.	Description of individual tools
3-601-13	<b>Side cutters</b> , 120 mm, for hard wire up to 0.4 mm, for soft wire up to 1.0 mm
3-632-13	<b>Flat nose pliers</b> , 120 mm, plain jaws
3-633-13	<b>Snipe nose pliers</b> , 120 mm, plain jaws



3-601-13



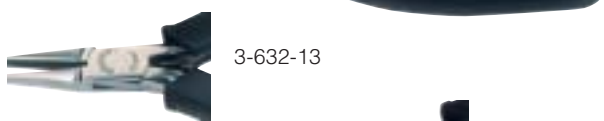
3-603-13



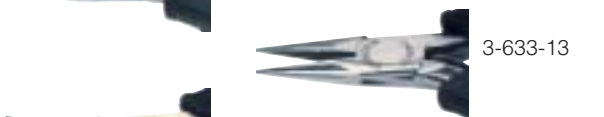
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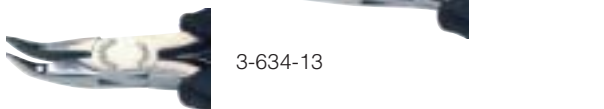
3-631-13



3-632-13



3-633-13



3-634-13



## SPECIAL ESD/EGB ELECTRONIC PLIERS

Lap joint



Double leaf spring

Bright polished - chrome-plated

With **conductive** black handguard

## CUTTING PLIERS



No.	Length		Finish	Cutting capacity mm Ø		Weight g
	mm	inches		Soft wire	Hard wire	

### Side cutters

with slim, rounded head

3-901-13	125	5	chrome-plated	1.0	0.4	75
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### Side cutters

with slim, pointed head and special flat cutting edge, for soft wire only

3-902-13	125	5	chrome-plated	0.8	-	75
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### Top cutters

with 3 mm wide cutting edge, jaw length 20 mm, without side face, for flush cutting, for soft wire only

3-905-13	135	5	chrome-plated	0.8	-	80
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### End cutters

with angular tips and oblique cutting edge, without side face, for flush cutting, for soft wire only

3-906-13	135	5	chrome-plated	0.8	-	80
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## ROUND, FLAT AND SNIPE NOSE PLIERS

### Round nose pliers with plain jaws

3-931-13	130	5	chrome-plated	-	-	80
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### Flat nose pliers with plain jaws

3-932-13	130	5	chrome-plated	-	-	80
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### Snipe nose pliers with plain jaws

3-933-13	130	5	chrome-plated	-	-	80
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## SIDE CUTTERS, ENGINEER'S PLIERS COMBINATION PLIERS

### Side cutters

swedish design

3-133-13	145	5 <sup>3</sup> / <sub>4</sub>	chrome-plated, polished	2.5	1.25	160
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**Telephone pliers** snipe nose, long straight jaws, with cutting edges for hard wire

3-245-13	200	8	chrome-plated, polished	-	-	190
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### Combination pliers

with wire cutter, for hard wire

3-732-13	165	6 <sup>1</sup> / <sub>2</sub>	chrome-plated, polished	-	-	220
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3-901-13



3-902-13



3-905-13



3-906-13



3-931-13



3-932-13



3-933-13



3-133-13



3-245-13



3-732-13

## SPECIAL ELECTRONIC PLIERS

Box joint 

Compression spring, Special steel

Especially light and slim, designed for the Electronic engineers working on small printed circuits



3-051-2

No.	Length		Finish	Cutting capacity mm Ø		Weight g
	mm	inches		Soft wire	Hard wire	

### Side cutters

with recess in the cutting edge, for gripping components not to be worked on, cutting area 3.3 mm wide, without side face, for flush cutting, for soft wire only



3-052-2

3-051-2	120	4 3/4	chrome-plated bright polished, with transparent insulation	0.8	-	70
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### Oblique cutters

with recess in the cutting edge, for gripping components not to be worked on, cutting area 4.0 mm wide, without side face, for flush cutting, for soft wire only



3-053-2

3-052-2	120	4 3/4	chrome-plated bright polished, with transparent insulation	1.0	-	70
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### Oblique cutters

with 4.0 mm wide recessed cutting edge, ends of wire are shortened uniformly to 1.5 mm, for soft wire only



3-058-2

3-053-2	120	4 3/4	chrome-plated bright polished, with transparent insulation	0.8	-	70
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### Mini top cutters

with cutting edge only 2.0 mm wide, jaw length 20 mm, without side face, for flush cutting, for precision work, for soft wire only



3-055-2

3-058-2	120	4 3/4	chromed-plated bright polished, with transparent insulation	0.4	-	40
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### Side cutters

with angular handles (25°), straight cutting edge, without side face, for flush cutting, for soft wire only



3-057-2

3-055-2	120	4 3/4	chrome-plated bright polished, with transparent insulation	0.8	-	70
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### Mini end cutters

with angular tips and oblique cutting edge, without side face, for flush cutting, for precision work at points difficult to reach, for soft wire only

3-057-2	120	4 3/4	chrome-plated bright polished, with transparent insulation	0.6	-	45
3-164-2	140	5 1/2	chrome-plated bright polished, with transparent insulation	0.8	-	80



## SPECIAL ELECTRONIC PLIERS

Box joint 

Compression spring, Special steel

Especially light and slim, designed for the Electronic engineers working on small printed circuits

No.	Length		Finish	Cutting capacity mm Ø		Weight g
	mm	inches		Soft wire	Hard wire	

### Side cutters

with slim, pointed head, available with or without side face

			chrome-plated bright polished, with transparent insulation			
3-061-2	125	4 3/4	<b>with side face</b>	1.2	0.4	75
3-062-2	125	4 3/4	<b>without side face</b>	1.2	-	75

### Side cutters

with slim, pointed head and **straight** cutting edge available with or without side face

			chrome-plated bright polished, with transparent insulation			
3-063-2	125	4 3/4	<b>with side face</b>	1.2	0.4	70
3-064-2	125	4 3/4	<b>without side face</b>	1.2	-	70

### Side cutters

with slim, rounded head, available with or without side face

			chrome-plated bright polished, with transparent insulation			
3-065-2	125	4 3/4	<b>with side face</b>	1.2	0.4	75
3-066-2	125	4 3/4	<b>without side face</b>	1.2	-	75

### Electronics side cutters

for continuous heavy work, with inserted carbid cutting edges, **only** for tough nickel and electrode wires

3-124-1	115	4 3/8	chrome-plated bright polished, with BERNSTEINIT-insulation	-	0.8	70
3-124-2	115	4 3/8	with transparent insulation -		0.8	60
3-067-2	125	4 3/4	with transparent insulation -		1.0	70

### Mini side cutters

with extremely narrow, pointed head, without side face, for flush cutting, for precision work, for soft wire only

3-068-2	110	4 1/2	chrome-plated bright polished, with transparent insulation	0.6	-	45
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### Mini side cutters

with extremely narrow, rounded head, without side face, for flush cutting, for precision work, for soft wire only

3-069-2	110	4 1/2	chrome-plated bright polished, with transparent insulation	0.8	-	45
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3-061-2



3-063-2



3-065-2



3-067-2



3-068-2



3-069-2

## SPECIAL ELECTRONIC PLIERS

Lap joint  
Special steel



(excluding 3-105)



3-105-1

No.	Length		Finish	Cutting capacity mm Ø		Weight g
	mm	Inches		Soft wire	Hard wire	

### All-purpose side cutters

small, handy model with excellent cutting capacity for steel wire up to 1.0 mm Ø, lay-on joint



3-108-2

3-105	140	5 1/2	chrome-plated bright polished	2.0	1.0	150
3-105-1	140	5 1/2	with BERNSTEINIT insulation	2.0	1.0	175

### Side cutters

with wide, pointed head, special flat cutting edge, compression spring, without side face, for flush cutting, for soft wire only



3-109-2

3-108-2	120	4 3/4	chrome-plated bright polished, with transparent insulation	1.5	-	85
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### Side cutters

with wide, rounded head, special flat cutting edge, compression spring, without side face, for flush cutting, for soft wire only



3-111-2

3-109-2	120	4 3/4	chrome-plated bright polished, with transparent insulation	1.5	-	90
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### Side cutters

with slim, pointed head, special flat cutting edge, double leaf spring, without side face, for flush cutting, for soft wire only



3-112-2

3-111-2	120	4 3/4	chrome-plated bright polished, with red insulation	0.8	-	65
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### Side cutters

with slim, rounded head, double leaf spring, without side face, for flush cutting, for soft wire only



3-115-2

3-112-2	120	4 3/4	chrome-plated bright polished, with red insulation	1.0	-	70
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### Special side cutters

for plastic, with rounded head, special flat cutting edge, double leaf spring, without side face, for flush cutting of plastic sprues, circuit boards etc.

3-115-2	145	5 3/4	chrome-plated bright polished, with transparent insulation	-	-	120
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### Side cutters

with especially slim, rounded head, without side face, for flush cutting, for soft wire only



3-126

3-126	120	4 3/4	chrome-plated bright polished	1.0	-	60
3-126-1	120	4 3/4	with BERNSTEINIT- insulation	1.0	-	80
3-126-2	120	4 3/4	with transparent insulation	1.0	-	70

## SPECIAL ELECTRONIC PLIERS

Box joint

Compression spring, Special steel

Especially light and slim

No.	Length		Finish	Cutting capacity mm Ø		Weight g
	mm	inches		Soft wire	Hard wire	

### Micro side cutters

with slim, pointed head and fine side face

3-125	115	4 1/2	chrome-plated bright polished	0.8	0.3	55
3-125-1	115	4 1/2	with BERNSTEINIT- insulation	0.8	0.3	70
3-125-2	115	4 1/2	with transparent insulation	0.8	0.3	60

### Slimline side cutters

with slim, rounded head and fine side face

3-127-2	115	4 1/2	chrome-plated bright polished, with transparent insulation	1.0	0.4	60
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### Slimline side cutters

with slim, rounded head and fine side face,  
with wire retaining spring (to hold the wire clippings)

3-127-2 DR	115	4 1/2	chrome-plated bright polished, with transparent insulation	1.0	0.4	60
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### Slimline oblique top cutters

with slim head, without side face, for flush cutting,  
for soft wire only

3-128-2	120	4 3/4	chrome-plated bright polished, with transparent insulation	0.8	0.3	65
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### Slimline top cutters

with slim head, without side face, for flush cutting,  
for soft wire only

3-129-2	115	4 1/2	chrome-plated bright polished, with transparent insulation	1.0	0.4	80
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### IC top cutters

for cutting IC connections, without side face

3-130-2	120	4 3/4	chrome-plated bright polished, with transparent insulation	-	-	65
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### Slimline end cutters

with angular tip and oblique cutting edge,  
without side face, for flush cutting, for precision work  
at points difficult to reach, for soft wire only

3-164-2	140	5 1/2	chrome-plated bright polished, with transparent insulation	0.8	-	80
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### End cutters

with angular tip and cutting edge, without compression  
spring, for soft wire only

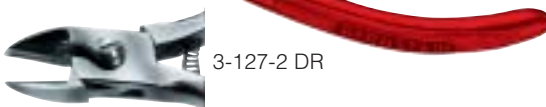
3-165	165	6 1/2	chrome-plated	1.0	-	95
3-165-1	165	6 1/2	with BERNSTEINIT- insulation	1.0	-	115
3-165-2	165	6 1/2	with transparent insulation	1.0	-	105



3-125-2



3-127-2



3-127-2 DR



3-128-2



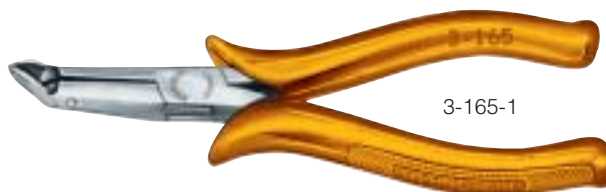
3-129-2



3-130-2



3-164-2



3-165-1

## SPECIAL ELECTRONIC PLIERS

Box joint   
 Compression spring, Special steel



No.	mm	Length inches	Finish	Weight g
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### Snipe nose pliers

with wire cutter for soft wire up to 0.6 mm Ø, particularly slim, pointed model with fine serrated jaws

3-161-2	145	5 3/4	chrome-plated, polished, with transparent insulation	75
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### Telephone pliers

with wire cutter for soft wire up to 0.8 mm Ø, especially slim, pointed model with fine serrated jaws

3-162-2	150	6	chrome-plated, polished, with transparent insulation	75
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## COMPONENT PLIERS

For bending, cutting and squeezing connecting wires on components

### Crimping and bending pliers

crimp the wire in one operation without changing the parallelism of the ends of the wire, especially slim model

3-172-2	130	5 1/8	chrome-plated, polished, with transparent insulation	75
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### Cutting and squeezing pliers

cut and squeeze soft wire up to 1.2 mm Ø in one operation, wire ends are shortened up to 1.5 mm and squeezed flat, cutting edge width 4.0 mm


3-175-2	125	5	chrome-plated, polished, with transparent insulation	70
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### Cutting and bending pliers

cut and bend soft wire up to 0.8 mm Ø in one operation, wire ends are shortened to 1.5 mm and bent through 45°, cutting edge width 2.0 mm, especially slim model

3-056-2	125	5	chrome-plated, polished, with transparent insulation	75
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## ADJUSTING PLIERS

Lap joint   
 Special steel  
 Produced accurately, extremely resilient

### Adjusting pliers bent at right angles

3-315	135	5 1/2	chrome-plated, polished,	70
3-315-1	135	5 1/2	with BERNSTEINIT-insulation	85

### Adjusting pliers bent at an obtuse angle

3-325	135	5 1/2	chrome-plated, polished,	70
3-325-1	135	5 1/2	with BERNSTEINIT-insulation	85

### Adjusting pliers straight, flat and wide

3-335	135	5 1/2	chrome-plated, polished,	70
3-335-1	135	5 1/2	with BERNSTEINIT-insulation	85

### Adjusting pliers straight, pointed nose

3-345	135	5 1/2	chrome-plated, polished,	70
3-345-1	135	5 1/2	with BERNSTEINIT-insulation	85



## SPECIAL ELECTRONIC PLIERS

Box joint



Special steel

Especially light and slim

Plain jaws

No.	Length		Finish	Weight g
	mm	inches		

### Micro round nose pliers

extremely light and slim

3-435	120	4 3/4	chrome-plated, bright polished	40
3-435-2	120	4 3/4	with transparent insulation	45

### Micro flat nose pliers

extremely light and slim

3-445	120	4 3/4	chrome-plated, bright polished	45
3-445-2	120	4 3/4	with transparent insulation	50

### Micro snipe nose pliers

extremely light and slim

3-455	120	4 3/4	chrome-plated, bright polished	45
3-455-2	120	4 3/4	with transparent insulation	50

### Round nose pliers

slim model, with compression spring

			chrome-plated, bright polished, with transparent insulation	
3-461-2	130	5 1/8	<b>short jaws</b>	70
3-471-2	145	5 3/4	<b>long jaws</b>	70

### Flat nose pliers

slim model, with compression spring

			chrome-plated, bright polished, with transparent insulation	
3-462-2	130	5 1/8	<b>short jaws</b>	80
3-472-2	145	5 3/4	<b>long jaws</b>	80

### Snipe nose pliers

slim model, with compression spring

			chrome-plated, bright polished, with transparent insulation	
3-463-2	130	5 1/8	<b>short jaws</b>	75
3-473-2	145	5 3/4	<b>long jaws</b>	85

### Snipe nose pliers

angular, slim model, with compression spring

			chrome-plated, bright polished, with transparent insulation	
3-481-2	130	5 1/8	<b>short jaws</b>	50
3-482-2	140	5 1/2	<b>long jaws</b>	80



3-435-2



3-445-2



3-455-2



3-461-2



3-472-2



3-473-2



3-482-2

## SIDE CUTTERS

Lap joint, lay-on joint or box joint

Special steel



3-132-1



3-270-2



3-138-2



3-141-1



3-151-2



3-152-1

No.	Length		Finish	Cutting capacity mm Ø		Weight g
	mm	Inches		Soft wire	Hard wire	

### Side cutters

swedish design, lap joint, special steel

3-131	120	4 3/4	chrome-plated, polished	1.5	0.8	90
3-131-1	120	4 3/4	with BERNSTEINIT-ins.	1.5	0.8	110
3-132	130	5 1/8	chrome-plated, polished	2.0	1.0	110
3-132-1	130	5 1/8	with BERNSTEINIT-ins.	2.0	1.0	130
3-133	145	5 3/4	chrome-plated, polished	2.5	1.25	120
3-133-1	145	5 3/4	with BERNSTEINIT-ins.	2.5	1.25	160

### Electronic side cutters

slim model, with long handles, lay-on joint, special steel, with expanding spring

3-270-2	130	5 1/8	chrome-plated bright polished, with transparent insulation	1.0	0.5	70
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### Special side cutters

slim, pointed head, box joint, compression spring, special steel, without side face, for flush cutting, for soft wire only

3-138	130	5 1/8	chrome-plated, polished	1.25	-	85
3-138-2	130	5 1/8	with transparent insulation	1.25	-	90

### Power side cutters

powerful, handy model, with excellent cutting capacity for steel wire, lay-on joint, special steel

3-141	145	5 3/4	chrome-plated, polished	2.5	1.25	150
3-141-1	145	5 3/4	with BERNSTEINIT-ins.	2.5	1.25	180
3-142	160	6 1/4	chrome-plated, polished	3.0	1.5	210
3-142-1	160	6 1/4	with BERNSTEINIT-ins.	3.0	1.5	245

## TOP CUTTERS

### Top cutters

small, handy model, lap joint, special steel

3-151	120	4 3/4	chrome-plated, polished	2.0	1.0	85
3-151-1	120	4 3/4	with BERNSTEINIT-ins.	2.0	1.0	110
3-151-2	120	4 3/4	with transparent ins.	2.0	1.0	90

### Top cutters

powerful, handy model, lay-on joint, special steel

3-152	130	5 1/8	chrome-plated, polished	2.5	1.25	125
3-152-1	130	5 1/8	with BERNSTEINIT-ins.	2.5	1.25	150
3-153	160	6 1/4	chrome-plated, polished	3.0	1.6	200
3-153-1	160	6 1/4	with BERNSTEINIT-ins.	3.0	1.6	230

## ENGINEER'S PLIERS

Box joint  Special steel  
Fine, slim design, with fine serrated jaws

No.	Length mm	inches	Finish	Weight g
<b>Long nose pliers</b> flat, slim				
3-205	185	7 1/2	chrome-plated, polished	120
3-205-1	185	7 1/2	with BERNSTEINIT-insulation	140

**Snipe long nose pliers** oval-pointed, bent

3-215	185	7 1/2	chrome-plated, polished	125
3-215-1	185	7 1/2	with BERNSTEINIT-insulation	145

**Snipe nose pliers** oval-pointed

3-225	130	5 1/8	chrome-plated, polished	65
3-225-1	130	5 1/8	with BERNSTEINIT-insulation	80

## TELEPHONE PLIERS

Lap joint  Special steel  
Serrated jaws Wire cutters

**Telephone pliers** snipe nose,  
short jaws, with cutting edge for hard wire

3-235	145	5 3/4	chrome-plated, polished	95
3-235-1	145	5 3/4	with BERNSTEINIT-insulation	115

**Telephone pliers** snipe nose, long  
straight jaws, with cutting edge for hard wire

3-245	200	8	chrome-plated, polished	160
3-245-1	200	8	with BERNSTEINIT-insulation	190

**Telephone pliers** snipe nose,  
long bent jaws, with cutting edge for hard wire

3-255	200	8	chrome-plated, polished	160
3-255-1	200	8	with BERNSTEINIT-insulation	190

## FLAT AND ROUND NOSE PLIERS

Lap joint  Special steel  
Serrated jaws

**Flat nose pliers** with short jaws

3-511	120	4 3/4	chrome-plated, polished	70
3-511-1	120	4 3/4	with BERNSTEINIT-insulation	85
3-512	140	5 1/2	chrome-plated, polished	105
3-512-1	140	5 1/2	with BERNSTEINIT-insulation	125

**Round nose pliers** with short jaws

3-521	120	4 3/4	chrome-plated, polished	65
3-521-1	120	4 3/4	with BERNSTEINIT-insulation	80
3-522	140	5 1/2	chrome-plated, polished	110
3-522-1	140	5 1/2	with BERNSTEINIT-insulation	130

**Flat nose pliers** with long jaws

3-531	140	5 1/2	chrome-plated	90
3-531-1	140	5 1/2	with BERNSTEINIT-insulation	110
3-532	160	6 1/4	chrome-plated	140
3-532-1	160	6 1/4	with BERNSTEINIT-insulation	160



3-205-1



3-215-1



3-225-1



3-235-1



3-245-1



3-255-1



3-512



3-522-1



3-531

## COMBINATION PLIERS



3-732-1



3-742-1



3-565-1



3-575-6



3-578-6



3-385



3-761-10



3-771-10

No.	Length mm	Length inches	Finish	Weight g
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### Combination pliers with wire cutter, for hard wire

3-715	115	4 1/2	chrome-plated, polished	70
3-715-1	115	4 1/2	with BERNSTEINIT-insulation	90
3-731	140	5 1/2	chrome-plated, polished	135
3-731-1	140	5 1/2	with BERNSTEINIT-insulation	155
3-732	165	6 1/2	chrome-plated, polished	190
3-732-1	165	6 1/2	with BERNSTEINIT-insulation	220
3-733	180	7	chrome-plated, polished	225
3-733-1	180	7	with BERNSTEINIT-insulation	260

### Electrician's combination pliers, extra quality

chrome-vanadium steel, with wire cutter for piano wire

cutting capacity: No. 3-742 up to 1.6 mm Ø

No. 3-743 up to 2.0 mm Ø

3-742	160	6 1/4	chrome-plated, polished	185
3-742-1	160	6 1/4	with BERNSTEINIT-insulation	215
3-743	180	7	chrome-plated, polished	250
3-743-1	180	7	with BERNSTEINIT-insulation	285

## WATER PUMP PLIERS

### Miniature water pump pliers with 3 adjustments

3-565	130	5 1/8	chrome-plated, polished	85
3-565-1	130	5 1/8	with BERNSTEINIT-insulation	105

### Water pump pliers

3-575-6	240	9 1/2	nickel-plated with red insulation	360
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### Siphon pliers chrome-vanadium steel, opening up to 70 mm

3-578-6	240	9 1/2	nickel-plated with red insulation	360
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### Quick-action water pump pliers

chrome-vanadium steel, toothed box joint,  
excellent design with extremely high stability

3-585	175	7	chrome-plated, polished	165
3-585-1	175	7	with BERNSTEINIT-insulation	185
3-586	250	10	chrome-plated, polished	470
3-586-1	250	10	with BERNSTEINIT-insulation	505

## SPECIAL ASSEMBLY PLIERS

No.	Length mm	Length inches	for clamping rings	Finish	Weight g
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### Model with adjusting screw and sprung handles

for clamping rings on shafts without grooves

3-761-10	140	5 1/2	1.5-2.8 mm	fine burnished	90
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### Model with cylindrical tips (for bores)

for fitting internal circlips to DIN 472, 984 etc.

for circlips Bore-Ø					
3-771-10	140	5 1/2	8-25 mm	burnished, straight	90
3-772-10	130	5 1/8	8-25 mm	burnished, offset	90

### Model with cylindrical tips, sprung handles (for shafts)

for fitting external circlips to DIN 471, 983 etc..

for circlips Shaft-Ø					
3-781-10	140	5 1/2	3-10 mm	burnished, straight	90
3-782-10	140	5 1/2	10-25 mm	burnished, straight	90
3-783-10	135	5 1/4	3-10 mm	burnished, offset	90
3-784-10	135	5 1/4	10-25 mm	burnished, offset	90



## WIRE STRIPPERS

Lap joint  
Special steel



No.	Length mm	inches	Finish	Weight g
<b>"Record" wire strippers</b>				
Spring system enables safe working with automatic adjustment to the wire size. Easy to use: insert wire - close pliers - remove insulation				
3-805-4	160	6 1/4	for wire thicknesses from 0.5 to 5 mm Ø nickel-plated with BERNSTEINIT-insulation	175
3-806-4	160	6 1/4	for wire thicknesses from 0.3 to 1.2 mm Ø nickel-plated with BERNSTEINIT-insulation	175

### Wire strippers with adjusting screw

for all wire thicknesses, with compression spring

3-815	155	6 1/8	chrome-plated, polished	130
3-815-1	155	6 1/8	with BERNSTEINIT-insulation	165

### Wire strippers for use in electronics

especially narrow and slim, with internal adjusting screw and compression spring

3-834-2	135	5 1/2	chrome-plated, polished with transparent insulation	85
3-835-2	160	6 1/4	chrome-plated, polished with transparent insulation	120

## PRESSING PLIERS

Lay-on joint  
Carbon steel



### Pressing pliers for multicore cable end

combined with cable cutter and stripping-prism for different cable dimensions for sleeves of 0.25 - 2.5 mm².

3-871-6	155	6	nickel-plated, with red insulation	160
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### Pressing pliers for multicore cable end

combined with cable cutter and stripping-prism for different cable dimensions for sleeves of 0.50 - 16.0 mm².

3-875-6	225	9	nickel-plated, with red insulation	285
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## SETS OF ELECTRONICS PLIERS

in wallets of recycable nylon

Contents: Black burnished pliers, with orange insulation

### 3-940 Set consisting of 4 pliers

**No.** **Description of individual tools** Weight: 350 g

3-901-12	<b>Side cutters</b> , 120 mm, for soft wire up to 1.0 mm, for hard wire up to 0.4 mm Ø
3-906-12	<b>End cutters</b> , 125 mm, with angular tips and oblique cutting edge, without side face, for flush cutting, for soft wire only up to 0.8 mm Ø
3-932-12	<b>Flat nose pliers</b> , 120 mm
3-933-12	<b>Snipe nose pliers</b> , 125 mm

### 3-930 Set consisting of 3 pliers

**No.** **Description of individual tools** Weight: 275 g

3-901-12	<b>Side cutters</b> , 120 mm, for soft wire up to 1.0 mm, for hard wire up to 0.4 mm Ø
3-932-12	<b>Flat nose pliers</b> , 120 mm
3-933-12	<b>Snipe nose pliers</b> , 125 mm



## SPECIAL ELECTRONIC PLIERS

Black burnished  
Lap joint  
Double leaf spring



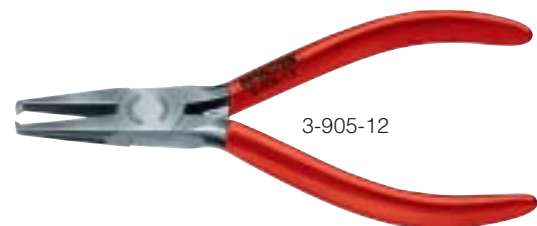
## CUTTING PLIERS



3-901-12



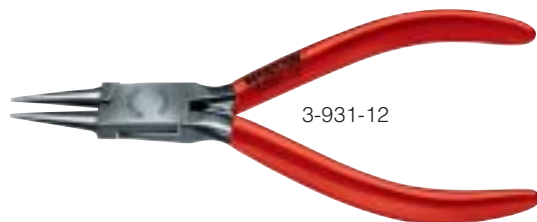
3-902-12



3-905-12



3-906-12



3-931-12



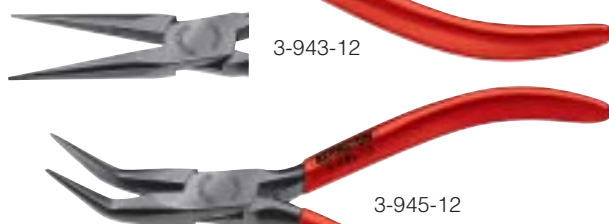
3-932-12



3-942-12



3-933-12



3-943-12



3-945-12

No.	Length		Finish	Cutting capacity mm Ø		Weight g
	mm	inches		Soft wire	Hard wire	
<b>Side cutters</b> with slim, rounded head						
3-901-12	120	4 3/4	burnished orange insulation	1.0	0.4	70

<b>Side cutters</b> with slim, pointed head, special flat cutting edge, for soft wire only						
3-902-12	120	4 3/4	burnished orange insulation	0.8	-	70

<b>Top cutters</b> with 3 mm wide cutting edge, jaw length 20 mm, without side face, for flush cutting, for soft wire only						
3-905-12	125	5	burnished orange insulation	0.8	-	70

<b>End cutters</b> with angular tips and oblique cutting edge, without side face, for flush cutting, for soft wire only						
3-906-12	125	5	burnished orange insulation	0.8	-	75

## ROUND-FLAT-SNIPE NOSE PLIERS

No.	Length mm	Length inches	Finish	Weight g
<b>Round nose pliers</b> with short, plain jaws				
3-931-12	120	4 3/4	burnished orange insulation	70

<b>Flat nose pliers</b> with short, plain jaws				
3-932-12	120	4 3/4	burnished orange insulation	75

<b>Flat nose pliers</b> slim model, with long, serrated jaws				
3-942-12	145	5 3/4	burnished orange insulation	90

<b>Snipe nose pliers</b> with short, plain jaws				
3-933-12	125	5	burnished orange insulation	70

<b>Snipe nose pliers</b> slim model, with long, serrated jaws				
3-943-12	145	5 3/4	burnished orange insulation	85

<b>Snipe nose pliers</b> angular, slim model, with long, serrated jaws				
3-945-12	145	5 3/4	burnished orange insulation	85

## SPECIAL ELECTRONIC PLIERS

Bright steel polished  
Box joint  
Double leaf spring



## CUTTING PLIERS

No.	Length		Finish	Cutting capacity mm Ø		Weight g
	mm	inches		Soft wire	Hard wire	

### Side cutters

with slim, rounded head, available with or without side face

			bright steel-polished with red hand-guard			
3-601-8	120	4 3/4	<b>with side face</b>	1.0	0.4	70
3-602-8	120	4 3/4	<b>without side face</b>	1.0	-	70

### Side cutters

with slim, pointed head, available with or without side face

			bright steel-polished with red hand-guard			
3-603-8	120	4 3/4	<b>with side face</b>	0.8	0.3	70
3-604-8	120	4 3/4	<b>without side face</b>	0.8	-	70

### End cutters

with angular tips and oblique cutting edge, without side face, for flush cutting, for soft wire only

			bright steel-polished with red hand-guard			
3-606-8	120	4 3/4	<b>without side face</b>	0.4	-	60

## ROUND-FLAT-SNIPE NOSE PLIERS

No.	Length		Finish	Weight g
	mm	inches		

### Round nose pliers with plain jaws

3-631-8	120	4 3/4	bright steel-polished with red hand-guard	60
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### Flat nose pliers with plain jaws

3-632-8	120	4 3/4	bright steel-polished with red hand-guard	60
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### Snipe nose pliers with plain jaws

3-633-8	120	4 3/4	bright steel-polished with red hand-guard	60
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### Snipe nose pliers angular, with plain jaws

3-634-8	120	4 3/4	bright steel-polished with red hand-guard	60
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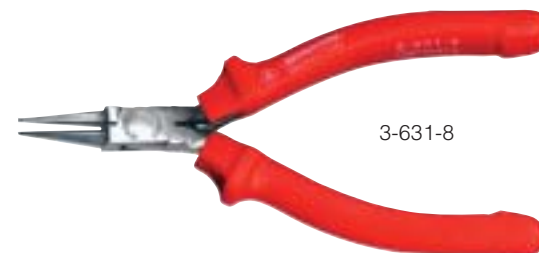
3-601-8



3-603-8



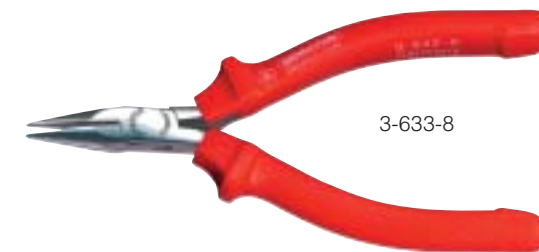
3-606-8



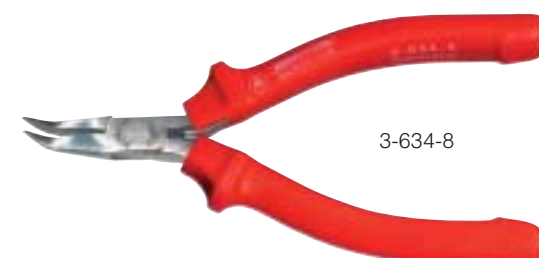
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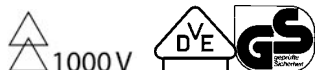
3-632-8



3-633-8



3-634-8



## SAFETY INSULATED PLIERS

Produced in accordance with specification EN 60.900 of the Association of German Electrical Engineers (VDE).

Permissible voltage at which the VDE pliers can be used: 1000 V a.c. or 1500 V d.c.

### Bicoloured VDE multicomponent safety insulation

No.	mm	Length inches	Finish	Weight g
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#### Side cutters

for steel wire up to 1.6 mm Ø, swedish design, special steel

3-134 VDE	160	6 1/4	chrome-plated, polished, with VDE safety insulation	190
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#### Power side cutters for steel wire up to 1.6 mm Ø, special steel

3-142 VDE	165	6 1/2	chrome-plated, polished, with VDE safety insulation	230
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#### Telephone pliers

snipe nose, long, straight jaws, with cutting edge for hard wire, serrated jaws, special steel

3-244 VDE	165	6 1/2	chrome-plated, polished, with VDE safety insulation	150
3-245 VDE	205	8	chrome-plated, polished, with VDE safety insulation	200

#### Telephone pliers

snipe nose, long, bent jaws, with cutting edge for hard wire, serrated jaws, special steel

3-254 VDE	165	6 1/2	chrome-plated, polished, with VDE safety insulation	150
3-255 VDE	205	8	chrome-plated, polished, with VDE safety insulation	200

#### Round nose pliers

with long, round, serrated jaws

3-541 VDE	165	6 1/2	chrome-plated, polished, with VDE safety insulation	170
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#### Flat nose pliers with long, flat, serrated jaws

3-545 VDE	165	6 1/2	chrome-plated, polished, with VDE safety insulation	180
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#### Combination pliers

with wire cutter, for hard wire up to 1.6 mm Ø

3-732 VDE	165	6 1/2	chrome-plated, polished, with VDE safety insulation	200
3-733 VDE	185	7 1/4	chrome-plated, polished, with VDE safety insulation	260

#### „Record“ wire strippers

with automatic adjusting to the wire size, for wire thicknesses from 0.5 to 5 mm Ø

3-805 VDE	165	6 1/2	chrome-plated, polished, with VDE safety insulation	185
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#### Wire strippers with adjusting screw

3-815 VDE	160	6 1/4	chrome-plated, polished, with VDE safety insulation	150
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## SAFETY INSULATED PLIERS

Insulated and piece-checked in accordance with specification EN 60.900 of the Association of German Electrical Engineers (VDE) Permissible voltage at which the VDE pliers can be used: 1000 V a.c. or 1500 V d.c.

 1000 V **EN 60.900**

No.	Length mm	Zoll	Finish	Weight g
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### Side cutters

Special steel, cutting capacity: 13-906 VDE for steel wire up to 1.6 mm Ø  
13-908 VDE for steel wire up to 2.0 mm Ø

13-906 VDE	160	6 1/4	chrome-plated, polished, with safety insulation	210
13-908 VDE	180	7	chrome-plated, polished, with safety insulation	290

### Telephon pliers

snipe nose, long, straight jaws, with cutting edge for hard wire up to 1.6 mm Ø, serrated jaws, special steel

13-915 VDE	160	6 1/4	chrome-plated, polished, with safety insulation	155
13-917 VDE	200	8	chrome-plated, polished, with safety insulation	220

### Telephon pliers

snipe nose, long, bent jaws, with cutting edge for hard wire up to 1.6 mm Ø, serrated jaws, special steel

13-916 VDE	160	6 1/4	chrome-plated, polished, with safety insulation	150
13-918 VDE	200	8	chrome-plated, polished, with safety insulation	220

### Round nose pliers

with long, round, serrated jaws

13-926 VDE	160	6 1/4	chrome-plated, polished, with safety insulation	165
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### Flat nose pliers

with long, flat, serrated jaws

13-927 VDE	160	6 1/4	chrome-plated, polished, with safety insulation	180
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### Combination pliers

with wire cutter for hard wire up to 1.6 mm Ø

13-936 VDE	160	6 1/4	chrome-plated, polished, with safety insulation	220
13-937 VDE	185	7 1/4	chrome-plated, polished, with safety insulation	280
13-938 VDE	205	8	chrome-plated, polished, with safety insulation	350

### Wire strippers

with adjusting screw

13-946 VDE	160	6 1/4	chrome-plated, polished, with safety insulation	190
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## SAFETY INSULATED PLIERS

Insulated and piece-checked in accordance with specification EN 60.900 of the Association of German Electrical Engineers (VDE). Permissible voltage at which the safety pliers can be used: 1000 V a.c. or 1500 V d.c. Two-colour multilayered insulation, outside red - inside yellow. Damages of the external red insulation immediately become visible by the yellow layer below.

The advantage: simple safety control, practical at any time



13-106 VDE



13-207 VDE



13-506 VDE



13-208 VDE



13-516 VDE



13-516 VDE



13-707 VDE



13-806 VDE

No.	mm	Length inches	Finish	Weight g
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### Side cutters

special steel, cutting capacity: 13-106 VDE for steel wire up to 1.6 mm Ø  
13-108 VDE for steel wire up to 2.0 mm Ø

13-106 VDE	160	6 1/4	chrome-plated, polished, with VDE safety insulation	210
13-108 VDE	195	7 3/4	chrome-plated, polished, with VDE safety insulation	300

### Telephone pliers

snipe nose, long, straight jaws, with cutting edge for hard wire up to 1.6 mm Ø, serrated jaws, special steel

13-207 VDE	205	8	chrome-plated, polished, with VDE safety insulation	235
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### Telephone pliers

snipe nose, long, bent jaws, with cutting edge for hard wire up to 1.6 mm Ø, serrated jaws, special steel

13-208 VDE	205	8	chrome-plated, polished, with VDE safety insulation	235
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### Round nose pliers

with long, round, serrated jaws

13-506 VDE	165	6 1/2	chrome-plated, polished, with safety insulation	225
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### Flat nose pliers

with long, flat, serrated jaws

13-516 VDE	165	6 1/2	chrome-plated, polished, with safety insulation	185
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### Combination pliers

with wire cutter, for hard wire up to 1.6 mm Ø

13-707 VDE	190	7 1/2	chrome-plated, polished, with VDE safety insulation	300
13-708 VDE	210	8 1/4	chrome-plated, polished, with VDE safety insulation	365

### Wire strippers

with adjusting screw

13-806 VDE	165	6 1/2	chrome-plated, polished, with VDE safety insulation	210
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## CRIMPING PLIERS FOR MODULAR CONNECTORS

No.	Length mm	Length inches	for connector types	Weight g
<b>Crimping pliers</b>				
solid metal type, with interchangeable blades, spring and closed lock, for cutting, cable stripping and crimping of the most current connector types				
3-0601	190	7 1/2	4P4C, 4P2C	215
3-0602	190	7 1/2	6P6C / RJ-12, 6P4C / RJ-11, 6P/2C	215
3-0603	200	8	8P8C / RJ-45	270

### Combination crimping pliers

solid metal pliers, with interchangeable blades, spring and closed lock, for cutting, cable stripping and crimping

3-0605	200	8	6P6C, 6P4C, 6P2C, 8P8C	320
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### Universal crimping pliers

light execution, ergonomically formed plastic casing, for cutting, cable stripping and crimping

3-0609	200	8	4P4C, 4P2C, 7.65 mm 6P6C / RJ-12, 6P4C / RJ-11, 9.65 mm, 8P8C / RJ-45, 11.68 mm, DEC 6P6C	520
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### Replacement blades

4 blades for stripper and 2 blades for cutter

3-0609-00	1 Set blades
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### Crimping pliers

for BNC- and TNC-coaxial connectors, with forced locking device and automatic release, for inner contacts and outside sleeves

Pressing range	Crimping length	Inner-Ø
Hexagon for all inner contacts	2.3 mm	.068" 1.72 mm
Small hexagon for RG 58	10.0 mm	.213" 5.41 mm
Medium-sized hexagon for RG 59/62	10.0 mm	.256" 6.50 mm
Large hexagon RG 6	10.0 mm	.319" 8.10 mm

No.	Length mm	Length inches	Finish	Weight g
3-0611	220	8 3/4	burnished-insulated	480

### Crimp tool

for insulated and uninsulated terminals

3-0856	230	9 1/4	black-insulated	295
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## CUTTING TOOLS

No.	Length mm	Length inches	Finish	Weight g
<b>Cabel cutters</b>				
especially for coaxial cable, robust execution with closed lock, for cable up to 10.5 mm Ø				
3-0648	160	6 1/4	burnished-insulated	150

### Electronics side cutters

with spring, without side face, for CU-wires up to 1.0 mm Ø

3-0641	130	5 1/8	burnished-insulated	70
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### Stripping side cutters

standard-execution, with spring, without side face, for CU-wires up to 0.8 mm Ø

3-0645	125	5	burnished-insulated	60
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3-0602



3-0605



3-0609



3-0611



3-0856



3-0648



3-0641



3-0645

BERNSTEIN screwdrivers and wrenches with special square pattern Bernstein handle

**Special features:**

long square pattern handle, very shape, with tapered hexagon at the end

**Material:**

impact resistant transparent plastic

**Colour:**

amber



BERNSTEIN screwdrivers with EUROline-Power-handle

**Special features:**

ergonomically formed hexagon handle with slip off protection for sturdy and safety screwing

**Material:**

combined hard- and soft plastic

**Colour:**

grey-yellow



## SCREWDRIVERS

with special square pattern Bernstein handle  
from impact-resistant, transparent yellow plastic

### Engineer's screwdrivers

**Blade:** chrome vanadium, hardened over its full length, chrome-plated

No.	Blade length mm	Blade width mm	Blade thickness mm	Handle size mm	Weight
4-102 S	75	3.5	0.6	86 x 19	37 g
4-103 S	100	4.0	0.6	92 x 21	46 g
4-104 S	150	5.0	0.8	100 x 23	75 g
4-105 S	200	6.0	1.0	110 x 25	112 g
4-115 S	200	3.0	0.5	86 x 19	40 g
4-125 S	100	6.0	1.0	110 x 25	90 g
4-135 S	150	8.0	1.2	110 x 25	133 g

### Screwdrivers to DIN 5265

**Blade:** chrome vanadium, hardened over its full length, chrome-plated, black tip

No.	Blade length mm	Blade width mm	Blade thickness mm	Handle size mm	Weight
4-141	75	3.5	0.6	86 x 19	35 g
4-142	100	4.0	0.8	92 x 21	46 g
4-143	125	5.5	1.0	100 x 23	75 g
4-144	150	6.5	1.2	110 x 25	110 g
4-145	150	8.0	1.2	110 x 25	144 g

### Swiss standard screwdrivers

**Blade:** chrome vanadium, hardened over its full length, chrome-plated, black tip

No.	Size	Blade length mm	Blade width mm	Blade thickness mm	Handle size mm	Weight
4-151	0	80	2.5	0.4	86 x 19	30 g
4-152	1	90	3.5	0.5	86 x 19	35 g
4-153	2	100	4.0	0.6	92 x 21	46 g
4-154	3	120	5.5	0.8	100 x 23	70 g
4-155	4	140	6.5	1.0	110 x 25	100 g
4-156	5	160	8.0	1.2	110 x 25	120 g
4-157	6	180	10.0	1.6	110 x 25	150 g

### Cross-recess screwdrivers

**Blade:** chrome vanadium, hardened over its full length, chrome-plated, black tip

No.	Size	Blade length mm	Blade-Ø mm	Handle size mm	Weight
4-255	0	60	3.0	86 x 19	25 g
4-256	1	80	4.5	92 x 21	49 g
4-257	2	100	6.0	100 x 23	78 g
4-258	3	150	8.0	110 x 25	137 g

### Cross-recess screwdrivers Pozidriv

**Blade:** chrome vanadium, hardened over its full length, chrome-plated, black tip

No.	Size	Blade length mm	Blade-Ø mm	Handle size mm	Weight
4-271	0	60	3.0	86 x 19	25 g
4-272	1	80	4.5	92 x 21	49 g
4-273	2	100	6.0	100 x 23	78 g
4-274	3	150	8.0	110 x 25	140 g

### Very long screwdrivers

**Blade:** chrome vanadium, hardened over its full length, chrome-plated, black tip

No.	Blade length mm	Blade width mm	Blade thickness mm	Handle size mm	Weight
4-222	260	3.0	0.5	92 x 21	50 g
4-223	260	4.5	1.0	92 x 21	70 g
4-224	300	5.5	1.2	100 x 23	108 g

### Cross-recess screwdrivers

4-227	300	size 1	blade Ø 4.5	100 x 23	87 g
4-228	300	size 2	blade Ø 6.0	100 x 23	120 g
4-229	300	size 3	blade Ø 8.0	110 x 25	190 g

All screwdrivers can be supplied with insulated blades.  
In this case the article number gets the suffix "-1".



## SCREWDRIVERS

### Cross-recess screwdrivers

**Blade:** chrome vanadium, hardened over its full length, nickel-plated  
**Handle:** impact-resistant, transparent plastic

No.	Size	Blade length mm	Blade-Ø mm	Handle size mm	Weight
4-251	0	60	3.0	80 x 16	20 g
4-252	1	80	4.5	90 x 18	36 g
4-253	2	100	6.0	98 x 21	60 g
4-254	3	150	8.0	103 x 24	125 g
4-261	01	25	4.5	50 x 29	43 g
4-262	02	25	6.0	55 x 30	46 g

### Electrician's screwdrivers

**Blade:** chrome vanadium, plane-parallel, hardened over its full length, nickel-plated  
**Handle:** impact-resistant, transparent yellow plastic

No.	Blade length mm	Blade width mm	Blade thickness mm	Handle size mm	Weight
4-201	75	3.0	0.4	80 x 16	21 g
4-202	100	3.0	0.4	80 x 16	23 g
4-203	150	3.0	0.4	90 x 18	31 g
4-204	100	4.0	0.5	90 x 18	34 g
4-205	150	4.0	0.6	98 x 21	49 g
4-206	150	5.0	0.8	98 x 21	58 g
4-207	200	5.0	0.8	98 x 21	66 g

### Chubby screwdrivers

**Blade:** chrome vanadium, nickel-plated  
**Handle:** impact-resistant, transparent plastic

4-321	25	4.0	0.8	55 x 30	41 g
4-322	25	6.5	1.2	55 x 30	46 g

### Miniature screwdriver

**Blade:** special steel, nickel-plated  
**Handle:** transparent yellow plastic

4-301	40	1.8	0.5	45 x 9	3 g
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### Screwdriver for grub screws

**Blade:** chrome vanadium, plane-parallel, nickel-plated  
**Handle:** impact-resistant, transparent yellow plastic

4-311	80	2.8	0.6	60 x 11	10 g
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### Radio screwdrivers

**Blade:** chrome vanadium, nickel-plated  
**Handle:** transparent yellow plastic

4-315	40	3.0	0.8	60 x 11	8 g
4-316	60	3.0	0.8	60 x 11	9 g
4-317	80	3.0	0.8	60 x 11	10 g

### Mechanic's screwdriver

**Blade:** special steel, nickel-plated  
**Handle:** impact-resistant, transparent plastic

4-331	45	6.0	1.0	80 x 16	26 g
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### Special screwdriver for cabinet screws

**Blade:** special steel, chrome-plated  
**Handle:** impact-resistant, transparent yellow plastic

4-335	70	9.0	1.0	92 x 21	43 g
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### Screwdrivers with voltage tester (Export models)

No. 4-341 for 110 - 380 V, No. 4-342 for 100 - 500 V

**Blade:** chrome vanadium, nickel-plated, fully insulated  
**Handle:** transparent yellow plastic

4-341	40	3.0	0.6	72 x 14	14 g
4-342	95	4.0	0.8	85 x 18	33 g

### VDE-voltage testers, 220 - 250 V, to VDE regulations 0426

**Blade:** chrome vanadium, nickel-plated, fully insulated  
**Handle:** transparent plastic

4-343 VDE	60	3.0	0.7	76 x 15	15 g
4-344 VDE	100	3.5	0.7	92 x 18	31 g

### Offset screwdrivers

**Material:** chrome vanadium, nickel-plated

No.	Total length mm	Blade width mm	Blade thickness mm	Blade-Ø mm	Weight
4-351	100	5.0	0.65	4.5	15 g
4-352	125	6.0	0.80	6.0	32 g



## SCREWDRIVERS EUROLINE-POWER

ergonomical formed 2 components handles (yellow-black)

**Blade:** chrom vanadium, hardened over its full length, matt chrome-plated, with black tip

**Handle:** impact-resistant, two-coloured plastic, with slip off protection and practical hanging up hole

### Workshop-Screwdrivers

No.	Blade length mm	Blade width mm	Blade thickness mm	Handle size mm	Weight
4-504	100	5.5	1.0	107 x 27	62 g
4-506	125	6.5	1.2	114 x 32	93 g
4-508	150	8.0	1.2	121 x 35	141 g
4-509	200	10.0	1.6	121 x 35	203 g



### Electrician's Screwdrivers

No.	Blade length mm	Blade width mm	Blade thickness mm	Handle size mm	Weight
4-521	75	2.5	0.4	100 x 21	26 g
4-522	100	3.0	0.5	100 x 21	27 g
4-523	100	4.0	0.8	100 x 21	36 g
4-524	150	5.5	1.0	107 x 27	74 g
4-525	200	5.5	1.0	107 x 27	85 g



### Cross-recess screwdrivers

PH ⊕

No.	Size	Blade length mm	Blade-Ø mm	Handle size mm	Weight
4-532	0	60	3.0	100 x 21	28 g
4-533	1	80	4.5	107 x 27	55 g
4-534	2	100	6.0	114 x 32	90 g
4-535	3	150	8.0	121 x 35	160 g



### Cross-recess screwdrivers Pozidriv

PZ ⊕

No.	Size	Blade length mm	Blade-Ø mm	Handle size mm	Weight
4-542	0	60	3.0	100 x 21	42 g
4-543	1	80	4.5	107 x 27	55 g
4-544	2	100	6.0	114 x 32	90 g
4-545	3	150	8.0	121 x 35	162 g



### TORX-Screwdrivers

from size T 7 with bore-hole in the tip



No.	Size	Blade-length mm	for metric thread	Handle size mm	Weight
6-979	T 5	55	M 1.6 - 2	100 x 21	25 g
6-981	T 6	65	M 2	100 x 21	29 g
6-982 L	T 7	65	M 2.5	100 x 21	29 g
6-983 L	T 8	75	M 2.5	100 x 21	29 g
6-984 L	T 9	75	M 3	100 x 21	29 g
6-985 L	T 10	85	M 3-3.5	100 x 21	34 g



## ESD/EGB ELECTRONICS SCREWDRIVERS



with slim, ergonomically formed handles from black **conductive** plastic. The centring head guarantees a precise working without exhaustion.

**Blade:** chrome vanadium, hardened over its full length, chrome-plated, with black tip

**Handle:** impact-resistant **conductive**, black plastic, electrostatic discharge according to DIN EN 100015/1

### Screwdrivers

No.	Blade length mm	Blade width mm	Blade thickness mm	Blade Ø mm	Handle length mm	Weight
4-601	50	0.8	0.20	2.5	90	12 g
4-602	50	1.2	0.25	2.5	90	12 g
4-603	50	1.5	0.30	2.5	90	12 g
4-604	50	1.8	0.30	2.5	90	12 g
4-605	60	2.0	0.40	2.5	90	12 g
4-606	60	2.5	0.40	2.5	90	12 g
4-607	60	3.0	0.50	3,0	90	14 g

### Cross-recess Screwdrivers

PH

No.	Size	Blade length mm	Blade Ø mm	Handle length mm	Weight
4-621	000	50	2.5	90	12 g
4-622	00	50	2.5	90	12 g
4-623	0	50	3.0	90	14 g

### 4-610 6-piece screwdriver set

in a practical table support from **conductive** material

Contents: 6 screwdrivers No. 4-601, 4-603, 4-604, 4-605, 4-606, 4-607

Weight: 141 g

### 4-620 6-piece screwdriver and cross-recess screwdriver set

in a practical table support from **conductive** material

Contents: 3 screwdrivers No. 4-602, 4-605, 4-607

3 cross-recess screwdrivers No. 4-621, 4-622, 4-623

Weight: 145 g

## ESD/EGB SCREWDRIVERS

with special-square pattern handle from impact-resistant, **conductive** black plastic

**Blade:** chrome vanadium, hardened over its full length, chrome-plated, with black tip

**Handle:** impact-resistant, **conductive**, black plastic, electrostatic discharge according to DIN EN 100015/1

### Screwdrivers

No.	Blade length mm	Blade width mm	Blade thickness mm	Handle size mm	Weight
4-632	100	4.0	0.8	92 x 21	46 g
4-633	125	5.5	1.0	100 x 23	75 g
4-643	<b>300</b>	5.5	1,2	100 x 23	108 g

### Cross-recess screwdrivers

PH

No.	Size	Blade length mm	Blade Ø mm	Handle size mm	Weight
4-652	1	80	4.5	92 x 21	49 g
4-653	2	100	6.0	100 x 23	78 g
4-656	1	<b>300</b>	4.5	100 x 23	87 g
4-657	2	<b>300</b>	6.0	100 x 23	120 g

### Cross-recess screwdrivers Pozidriv

PZ

4-662	1	80	4.5	92 x 21	49 g
4-663	2	100	6.0	100 x 23	78 g





## ELECTRONICS SCREWDRIVERS

with slim, ergonomically formed handles and swivel top

**Blade:** chrome vanadium, hardened over its full length, chrome-plated, with black tip

**Handle:** impact-resistant, grey plastic material, swivel top, amber-coloured

### Screwdrivers

No.	Blade length mm	Blade width mm	Blade thickness mm	Blade Ø mm	Handle length mm	Weight
4-161	40	1.0	0.20	2.5	100	11 g
4-162	40	1.5	0.30	2.5	100	11 g
4-163	40	2.0	0.40	2.5	100	11 g
4-164	50	2.5	0.40	2.5	100	11 g
4-165	50	3.0	0.50	3.0	100	13 g
4-166	100	2.0	0.40	2.0	100	11 g
4-167	100	2.5	0.40	2.5	100	13 g
4-169	150	3.0	0.50	3.0	100	18 g

### Cross-recess screwdrivers

PH

No.	Size	Blade length mm	Blade Ø mm	Handle length mm	Weight
4-281	000	40	2.5	100	11 g
4-282	00	40	2.5	100	11 g
4-283	0	50	3.0	100	13 g
4-284	1	60	4.0	100	23 g
4-285	1	150	4.0	100	27 g

### TORX-Screwdrivers

No.	Size mm	Blade length mm	for metric thread	Handle length mm	Weight
6-679	T 4	40	M 1.4-1.6	100	10 g
6-681	T 5	40	M 1.6-2	100	10 g
6-682	T 6	40	M 2	100	11 g
6-683	T 7	40	M 2.5	100	11 g
6-684	T 8	40	M 2.5	100	12 g
6-685 L	T 9	50	M 3	100	12 g
6-686 L	T 10	50	M 3-3.5	100	13 g

from Size T 9 with bore-hole in the tip

#### 4-170 6-piece screwdriver and cross-recess screwdriver set

in a practical table support

Contents: 4 Screwdrivers No. 4-162, 4-163, 4-164 + 4-165  
2 Cross-recess screwdrivers No. 4-282 + 4-283  
Weight: 125 g

#### 4-180 6-piece screwdriver and cross-recess screwdriver set

in a practical table support

Contents: 3 Screwdrivers No. 4-161, 4-162 + 4-163  
3 Cross-recess screwdrivers No. 4-281, 4-282 + 4-283  
Weight: 115 g

#### 4-190 6-piece screwdriver and cross-recess screwdriver set

in a practical table support

Contents: 5 Screwdrivers No. 4-161, 4-162, 4-163, 4-164 + 4-165,  
1 Cross-recess screwdriver No. 4-284  
Weight: 135 g

#### 6-680 6-piece TORX-Screwdriver set

in a practical table support

Contents: 6 TORX-Screwdrivers No. 6-681, 6-682, 6-683, 6-684, 6-685 + 6-686  
Weight: 155 g



## SCREWDRIVER SETS



### 4-910 **9-piece interchangeable screwdriver set**

double-ended screwdrivers in a useful folding plastic box for setting up or hanging up at the workshop place

**Blades:** chrome vanadium, hardened over their full lengths, matt-chrome plated, double ended, overall length 120 mm

**Handle:** for interchangeable blades with large absorption capacity, gripping collet and swivel top

**Contents:** handle as described above  
screwdriver blade widths: 1.5 / 3.0 mm, 2.0 / 3.5 mm,  
2.5 / 4.0 mm

cross-recess blades: size 000 / 00, size 0 / 1  
TORX-screwdriver blades: T 6 / T 8, T 7 / T 9, T 10 / T 15

**Weight:** 150 g



### 4-950 **11-piece interchangeable screwdriver set TRI WING / TORX**

10 interchangeable blades and 1 handle packed in a sturdy canvas wallet with stick fastener

**Blades:** chrome vanadium, hardened over their full length, matt-polished, overall length 140 mm

**Handle:** for interchangeable blades with large absorption capacity, gripping collet and swivel top

**Contents:** handle as described above  
TRI WING- blades: TW 1, TW 2, TW 3, TW 4  
TORX-blades: T 10, T 15, T 20, T 25, T 27, T 30

**Weight:** 375 g



### 4-800 **60-piece radio-screwdriver stand**

**Contents:** 20 screwdrivers each No. 4-311, 4-315, 4-316, with chrome vanadium blades and transparent yellow plastic handles

**Weight:** 600 g

### 4-810 **60-piece screwdriver stand**

**Contents:** 20 screwdrivers each with tool steel blades, 40 x 3.0 mm, 60 x 3.0 mm and 80 x 3.0 mm and coloured plastic handles

**Weight:** 580 g

### 4-820 **60-piece miniature screwdriver stand**

**Contents:** 60 screwdrivers with tool steel blades, 40 x 1.8 mm and transparent yellow plastic handles

**Weight:** 235 g

### 4-850 **7-piece screwdriver set**

with special square pattern Bernstein handles visible packed in a carton box

**Contents:** 1 screwdriver each No. 4-102 S, 4-103 S, 4-104 S, 4-125 S, 4-271, 4-272 and 1 voltage tester No. 4-343 VDE

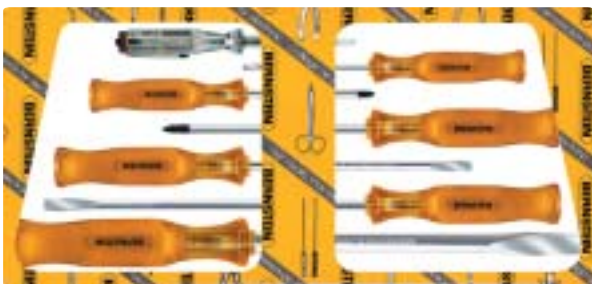
**Weight:** 470 g

### 4-530 **6-piece screwdriver set**

from series EUROline-Power, visible packed in a carton box

**Contents:** 1 workshop screwdriver each No. 4-504, 4-506  
1 electrician's screwdriver each No. 4-523, 4-524  
1 cross-recess screwdriver PH No. 4-533, 4-534

**Weight:** 540 g



## WATCHMAKER'S SCREWDRIVERS

### Cross-recess watchmaker's screwdrivers

**Blade:** chrome vanadium, burnished

**Handle:** metal, nickel-plated, with swivel top

No.	Size	Blade length mm	Total length mm	Weight
4-364	000	21	92	9 g
4-366	00	21	92	9 g
4-367	0	21	105	18 g
4-368	1	21	117	34 g

### Watchmaker's screwdrivers

**Blade:** chrome vanadium, burnished

**Handle:** metal, nickel-plated, with swivel top

No.	Blade length mm	Blade width mm	Total length mm	Weight
4-371	14	1.0	85	7 g
4-372	18	1.5	90	7 g
4-373	21	2.0	105	18 g
4-374	24	2.5	108	18 g
4-375	24	3.0	120	37 g
4-376	27	3.5	123	38 g

### 4-360 3-piece watchmaker's screwdriver set

in a plastic wallet

Contents: 2 watchmaker's screwdrivers No. 4-372 + 4-374

1 cross-recess watchmaker's screwdriver No. 4-367

Weight: 68 g

### 4-365 3-piece watchmaker's screwdriver set

in a plastic wallet

Contents: 3 cross-recess screwdrivers No. 4-366, 4-367 + 4-368

Weight: 66 g

### 4-370 6-piece watchmaker's screwdriver set

in a metal case

Contents: 6 watchmaker's screwdrivers No. 4-371 - 4-376

Weight: 480 g

### Watchmaker's screwdrivers

**Blade:** chrome vanadium, burnished

**Handle:** black plastic, with swivel top and colour coding

No.	Blade length mm	Blade width mm	Total length mm	Weight
4-381	18	1.0	104	5 g
4-382	18	1.5	104	6 g
4-383	18	2.0	104	6 g
4-384	18	2.5	104	6 g
4-385	18	3.0	104	6 g

### 4-380 5-piece watchmaker's screwdriver set

in a plastic box

Contents: 5 watchmaker's screwdrivers No. 4-381 - 4-385

Weight: 64 g

### Watchmaker's storage screwdrivers with interchangeable blades

**Blades:** chrome vanadium, burnished

**Handle:** metal magazine, nickel-plated, with swivel top

### 4-391 Watchmaker's screwdriver magazine with 4 bits

1.5 – 2.0 – 2.5 – 3.0 mm blade width

Weight: 31 g

### 4-392 Watchmaker's screwdriver magazine with 4 bits

1.5 – 2.0 – 2.5 – 3.0 mm blade width

and 1 cross-recess blade size 0

Weight: 32 g

### 4-393 Watchmaker's screwdriver magazine with 3 bits

1.5 – 2.0 – 2.5 mm blade width and 2 cross-recess blades

Size 00 and 000

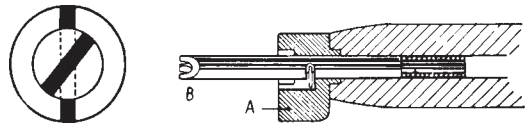
Weight: 32 g



## RETAINING SCREWDRIVERS

### TRIC screw holders

for inserting slotted screws into places difficult to reach



“TRIC” is especially easy to use. Push lever A as far as the stop with your thumb; insert blade B into the screw slot and release lever A. The screw is tight and can now be inserted into the hole. Release the holder by pressing lever A lightly in the same direction.

#### Special advantage:

Projecting controls do not hamper vision

**Blade:** special steel, plane-parallel, nickel-plated

**Handle:** impact-resistant, transparent yellow plastic

**Do not use for tightening or undoing screws!**

No.	Blade length mm	Blade width mm	Blade-Ø mm	Handle size mm	Weight
4-401	40	6.0	6.0	98 x 19	44 g
4-402	140	6.0	6.0	98 x 19	65 g
4-403	180	6.0	6.0	98 x 19	76 g
4-404	295	4.0	4.0	70 x 15	42 g
4-405	40	4.0	4.0	70 x 15	18 g
4-406	80	4.0	4.0	70 x 15	22 g
4-407	110	4.0	4.0	70 x 15	25 g
4-408	200	4.0	4.0	70 x 15	35 g
4-409	295	6.0	6.0	98 x 19	98 g

On request, all screw holders can be supplied with insulated blades.

### Retaining screwdrivers

for inserting and tightening **slotted screws**

**Blade:** chrome vanadium, burnished, insulated

**Handle:** impact-resistant, transparent yellow plastic or black plastic for VDE-types

No.	Blade length mm	Blade width mm	Blade thickness mm	Handle size mm	Weight
4-431	100	3.0	0.5	90 x 18	35 g
4-432	125	4.0	0.6	100 x 22	65 g
4-433	150	5.0	0.8	105 x 24	93 g
4-441 VDE	100	3.0	0.5	90 x 18	34 g
4-442 VDE	125	4.0	0.6	100 x 22	58 g
4-443 VDE	150	5.0	0.8	105 x 24	88 g

### Retaining screwdrivers

for inserting and tightening **cross-recess screws**

**Blade:** chrome vanadium, burnished, insulated

**Handle:** impact-resistant, transparent yellow plastic or black plastic for VDE-types

No.	Size	Blade length mm	Blade-Ø mm	Handle size mm	Weight
4-436	0	125	4.0	100 x 22	63 g
4-437	1	150	5.0	105 x 24	93 g
4-438	2	175	6.0	105 x 24	117 g
4-446 VDE	0	125	4.0	100 x 22	58 g
4-447 VDE	1	150	5.0	105 x 24	88 g
4-448 VDE	2	175	6.0	105 x 24	110 g

### Screwdriver with guide sleeve

for easy, reliable adjustment of screw-type resistors and potentiometers with slotted shanks of 3.2 mm Ø

**Blade:** chrome vanadium, nickel-plated

**Handle:** impact-resistant, transparent yellow plastic

No.	Blade length mm	Blade width mm	Handle size mm	Weight
2-145	80	2.8	60 x 11	12 g





## SAFETY TOOLS

BERNSTEIN VDE screwdrivers and VDE cross-recess screwdrivers are monitored by the VDE Test Centre.

Random samples are taken and type tests are performed in accordance with the regulations.

Permissible voltage at which the VDE screwdrivers can be used:  
1000 V a.c. or 1500 V d.c.

**The handle and blade insulation is moulded in one piece and is therefore permanently connected.**



### Safety insulated screwdrivers

to DIN 5265 VDE regulations EN 60.900

**Blade:** chrome vanadium, hardened over its full length, burnished

**Handle:** impact-resistant, red coated plastic

No.	Blade length mm	Blade width mm	Blade thickness mm	Handle size mm	Weight
14-601 VDE	75	2.5	0.4	80 x 18	18 g
14-602 VDE	100	3.5	0.6	80 x 18	24 g
14-603 VDE	100	4.0	0.8	80 x 18	27 g
14-604 VDE	125	5.5	1.0	100 x 24	64 g
14-606 VDE	150	6.5	1.2	100 x 24	83 g
14-608 VDE	175	8.0	1.2	110 x 26	133 g



### Safety insulated cross-recess Phillips screwdrivers

to DIN 5262 VDE regulations EN 60.900

**Blade:** chrome vanadium, hardened over its full length, burnished

**Handle:** impact-resistant, red coated plastic

No.	Size	Blade length mm	Blade Ø mm	Handle size mm	Weight
14-631 VDE	0	60	3.0	80 x 18	20 g
14-632 VDE	1	80	4.5	90 x 21	35 g
14-633 VDE	2	100	6.0	100 x 24	62 g
14-634 VDE	3	150	8.0	110 x 26	125 g



### Safety insulated Pozidriv cross-recess screwdrivers

to VDE regulations EN 60.900

**Blade:** chrome vanadium, hardened over its full length, burnished

**Handle:** impact-resistant, red coated plastic

No.	Size	Blade length mm	Blade Ø mm	Handle size mm	Weight
14-641 VDE	0	60	3.0	80 x 18	20 g
14-642 VDE	1	80	4.5	90 x 21	34 g
14-643 VDE	2	100	6.0	100 x 24	62 g
14-644 VDE	3	150	8.0	110 x 26	115 g

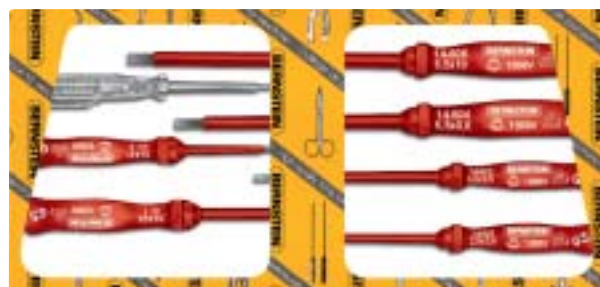


### 14-600 VDE 7-piece VDE screwdriver set

visibly packed in a carton box

- Contents:
- 14-601 VDE 2.5 x 0.4 mm screwdriver
  - 14-602 VDE 3.5 x 0.5 mm screwdriver
  - 14-604 VDE 5.5 x 0.8 mm screwdriver
  - 14-606 VDE 6.5 x 1.0 mm screwdriver
  - 14-631 VDE cross-recess screwdriver, size 0
  - 14-632 VDE cross-recess screwdriver, size 1
  - 4-343 VDE voltage tester, 150 V - 250 V

Weight: 350 g



## ELECTRONIC-TWEEZERS

No.	Length		Finish	Weight
	mm	inches		

### Component tweezers

made from steel, with insulated jaws, a special tool for easy insertion and removal of plug-in transistors of various sizes

5-006	140	5 1/2"	nickel-plated	25 g
5-006-7	140	5 1/2"	stainless-non-reflective	25 g

### Component tweezers

made from steel, with semi-circular jaws, 5 mm wide, to facilitate the insertion and removal of horizontally positioned components of various sizes

5-007	140	5 1/2"	nickel-plated	25 g
5-007-7	140	5 1/2"	stainless-non-reflective	25 g

### Component tweezers

made from steel, with jaws bent inwards at right angles, 5 mm wide, to facilitate the removal of round or cube-shaped components

5-008	140	5 1/2"	nickel-plated	25 g
5-008-7	140	5 1/2"	stainless-non-reflective	25 g

### Component tweezers

made from steel, with insulated jaws, 5.5 mm wide, for gripping flat components

5-009	140	5 1/2"	nickel-plated	25 g
5-009-7	140	5 1/2"	stainless-non-reflective	25 g

No.	Length		Gripping cavity width		Finish	Weight
	mm	inches	width	Ø mm		

### Miniature component tweezers

made from anti-magnetic steel, stainless and acid-resistant to facilitate the insertion and removal of components

#### Gripping cavity straight

5-011	120	4 3/4"	3.0	0.75	polished	13 g
5-012	120	4 3/4"	3.5	1.50	polished	13 g
5-013	120	4 3/4"	3.5	3.50	polished	14 g
5-014	120	4 3/4"	5.0	6.50	polished	14 g

#### Gripping cavity diagonal

5-015	120	4 3/4"	4.0	3.50	polished	14 g
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No.	Length		Finish	Weight
	mm	inches		

### Contact tweezers

made from anti-magnetic steel, stainless and acid-resistant, with bent, flat jaws

5-018	110	4 3/8"	polished	11 g
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### IC-tweezers

for gripping, insertion and removal of IC's

2-601	125	5"	nickel-plated	20 g
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## SPECIAL-TWEEZERS

No.	Length		Finish	Weight
	mm	inches		

### Engineer's tweezers

made from steel, with fine, bent tips, finely serrated

5-107	150	6"	nickel-plated	22 g
5-107-1	150	6"	polished, with antiallergical coating	23 g
5-107-6	150	6"	nickel-plated, strong PVC-insulated	27 g
5-107-7	150	6"	stainless, matt-non-reflective	25 g

### Heat dissipating tweezers

made from steel, for use when soldering transistors, gold-bonded diodes etc., the flat, wide points of the tweezers are narrow and provided with copper jaws

5-115	165	6 1/2"	nickel-plated	35 g
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### Engineer's tweezers

made from steel, heavy type, straight, flat and wide, tips with serration

5-116	120	4 3/4"	nickel-plated	17 g
5-117	145	5 3/4"	nickel-plated	25 g
5-117-1	145	5 3/4"	polished, with antiallergical coating	26 g
5-117-6	145	5 3/4"	nickel-plated, strong PVC insulated	31 g
5-117-7	145	5 3/4"	stainless, matt-non-reflective	26 g

### Jewellerie's tweezers

made from steel, fine-rounded tips, with X-serration

5-119	140	5 1/2"	nickel-plated	21 g
5-120	160	6 1/4"	nickel-plated	25 g

### Engineer's tweezers

made from steel, straight, with narrow pointed tips, finely serrated

5-121	120	4 3/4"	nickel-plated	14 g
5-121-1	120	4 3/4"	polished, with antiallergical coating	14 g
5-121-6	120	4 3/4"	nickel-plated, strong PVC-insulated	17 g
5-121-7	120	4 3/4"	stainless, matt-non-reflective	13 g
5-122	155	6 1/8"	nickel-plated	20 g

### Sheet-metal tweezers

straight, flat and pointed

5-125	110	4 3/8"	nickel-plated	12 g
5-125-1	110	4 3/8"	polished, with antiallergical coating	13 g

### Sheet-metal tweezers

with sliding fastener for a firm grip, straight, with narrow pointed tips

5-126	160	6 1/4"	nickel-plated	22 g
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## SPECIAL ELECTRONIC-TWEEZERS

No.	Length mm	Length inches	Gripping cavity width	Ø mm	Finish	Weight
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### Miniature component tweezers

teflon-coated (green), made from steel, to facilitate insertion and removal of components, with straight gripping cavity

5-021-9	120	4 3/4"	3.0	0.75	teflon-coated	11 g
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No.	mm	Length inches	Finish	Weight
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### Watchmaker's tweezers

teflon-coated (green), made from steel, very sharply pointed, straight

5-027-9	110	4 3/8"	teflon-coated	13 g
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### Engineer's tweezers

teflon-coated (green), made from steel, with fine bent tips, finely serrated

5-107-9	150	6"	teflon-coated	22 g
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### Engineer's tweezers

teflon-coated (green), made from steel, heavy type, straight, flat and wide, with serration

5-117-9	145	5 3/4"	teflon-coated	25 g
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### Jewellerie's tweezers

teflon-coated (green), made from steel, fine-rounded tips, finely serrated

5-119-9	140	5 1/2"	teflon-coated	19 g
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### Engineer's tweezers

teflon-coated (green), made from steel, straight, with narrow pointed tips, finely serrated

5-121-9	120	4 3/4"	teflon-coated	13 g
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## SPECIAL-TWEEZERS FROM CERAMIC

Ceramic tweezers meet highest standards due to their excellent mechanical, thermic and electrical features. Ceramic tweezers are harder than conventional tweezers, therefore the tips have a longer durability. They are non magnetic, antistatic, acid-resistant and alkaliproof, solder-repellent and heat-resistant.

No.	mm	Length inches	Finish	Weight
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### Ceramic tweezers (each in plastic box)

5-081	130	5 1/8"	straight, pointed	15 g
5-082	130	5 1/8"	straight, microscopic-pointed	16 g

### Ceramic-tipped tweezers (each in plastic box)

5-095	130	5 1/8"	especially slim and pointed	6 g
5-096	130	5 1/8"	slim - 2 mm flat tips	6 g





## SPECIAL TWEEZERS

No.	Length		Finish	Weight
	mm	inches		

### Watchmaker's tweezers

made from stainless **or** anti-magnetic steel, straight, very sharply pointed

5-131	110	4 3/8"	polished-stainless, sharply pointed	11 g
5-132	110	4 3/8"	polished-anti-magnetic, stainless and acid-resistant, sharply pointed	13 g

### Watchmaker's tweezers

made from stainless **or** anti-magnetic steel, bent, very sharply pointed

5-134	115	4 1/2"	polished-stainless	12 g
5-135	115	4 1/2"	polished-anti-magnetic, stainless and acid-resistant	12 g

### Engineer's tweezers

made from steel, straight, with flat, 2 mm wide tips

5-136	120	4 3/4"	polished-nickel-plated	17 g
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### Anti-magnetic tweezers

straight, with flat, pointed tips

5-145	130	5 1/8"	polished-anti-magnetic stainless and acid-resistant	18 g
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### Crossed tweezers (self-locking tweezers)

made from steel, jaws 5 mm wide, finely serrated

5-155	160	6 1/4"	polished-nickel-plated	35 g
5-155-1	160	6 1/4"	polished, with antiallergical coating	36 g

### Crossed soldering tweezers (self-locking tweezers)

made from steel, with bent tips and gripping well hand guard

5-156	160	6 1/4"	polished-nickel-plated	29 g
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## TITAN TWEEZERS

Tweezers made from Titan are for highest demands, have a light weight, immunity to corrosion, even to aggressive acids, they are antimagnetic, antibacterial, especially conductive, solder-repellent and non-reflective. The melting point is 1677°C.

No.	Length		Finish	Weight
	mm	inches		

5-031	110	4 3/8"	matt-stainless, sharply pointed	9 g
5-035	120	4 3/4"	matt-stainless, sharply pointed	9 g
5-036	145	5 3/4"	matt-stainless, straight – round – wide, tips with fine serration	15 g
5-037	150	6"	matt-stainless, fine bent tips, tips with fine serration	15 g



## SPECIAL-TWEEZERS FOR THE SMD-TECHNIQUE

stainless – matt finish – non-reflective – anti-magnetic – acid-resisting

No.	Length		Finish	Weight
	mm	inches		
5-051	115	4 1/2"	straight, pointed	15 g
5-052	110	4 3/8"	bent, very sharply pointed	13 g
5-053	110	4 3/8"	obliquely angled, very sharply pointed	13 g
5-054	120	4 3/4"	sickle-shaped curved, very sharply pointed	16 g
5-057	120	4 3/4"	self-locking, straight, pointed	13 g
5-058	120	4 3/4"	self-locking, bent, pointed	13 g
5-061	115	4 1/2"	bent, 2 mm wide, flat tips	16 g
5-062	115	4 1/2"	bent, flat tips, with gripping cavity	16 g
5-071	85	3 3/8"	straight, pointed	8 g
5-075	135	5 3/8"	straight, very sharply pointed, grip surface offset	13 g

## ESD/EGB TWEEZERS

made from **conductive**, black plastic material, reinforced with glassfibre conductive and acid-resistant

No.	Length		Finish	Weight
	mm	inches		
5-191	120	4 3/4"	straight, rounded tips	5 g
5-192	120	4 3/4"	straight, 3 mm flat-hand tips, grip surface offset	4 g
5-193	120	4 3/4"	straight, 6 mm flat, and wide tips	5 g
5-194	120	4 3/4"	bent, pointed tips	5 g
5-195	120	4 3/4"	straight, pointed tips, grip surface offset	4 g

### 5-190 6-piece set of ESD/EGB tweezers

in a practical table support from **conductive** material

Contents: 5 tweezers made from conductive black plastic material, reinforced with glass fibre No. 5-191, 5-192, 5-193, 5-194, 5-195

1 tweezers with ceramic tips No. 5-095

Weight: 120 g

### 5-090 5-piece set of ESD/EGB tweezers

in a practical table support from **conductive** material

Contents: 5 tweezers made from conductive black plastic material, reinforced with glass fibre No. 5-191, 5-192, 5-193, 5-194, 5-195

Weight: 94 g



## SETS OF SPECIAL TWEEZERS

in wallets of recycable nylon

### 5-030 3-piece set of electronic tweezers from titan

matt-stainless - super-light - immunity to corrosion - acid-resistant - solder-repellent - antibacterial - especially conductive - non-reflective

Weight: 60 g

No.	Description of individual tools
-----	---------------------------------

- |       |   |
|-------|---|
| 5-031 | <b>Titan-tweezers</b> , sharply pointed, 110 mm                       |
| 5-036 | <b>Titan-tweezers</b> , straight, round, wide, 145 mm, with serration |
| 5-037 | <b>Titan-tweezers</b> , fine bent tips, 150 mm                        |



### 5-050 6-piece set of special tweezers for the SMD-technique

stainless - matt finish - non-reflective - anti-magnetic - acid-resisting

Weight: 120 g

No.	Description of individual tools
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- |       |  |
|-------|--|
| 5-051 | <b>SMD-tweezers</b> , straight pointed, 115 mm                           |
| 5-052 | <b>SMD-tweezers</b> , bent, very sharply pointed, 110 mm                 |
| 5-054 | <b>SMD-tweezers</b> , sickle-shaped curved, very sharply pointed, 120 mm |
| 5-058 | <b>SMD-tweezers</b> , crossed, bent, pointed, 120 mm                     |
| 5-061 | <b>SMD-tweezers</b> , bent, flat tips 2 mm wide, 115 mm                  |
| 5-062 | <b>SMD-tweezers</b> , bent, flat tips, with gripping cavity, 115 mm      |



### 5-100 12-piece set special tweezers and tools

Weight: 360 g

No.	Description of individual tools
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- |         |   |
|---------|---|
| 2-126   | <b>Desoldering lever</b> , slotted at one end, with plastic handle, 115 mm  |
| 2-127   | <b>Tin knife</b> with plastic handle, 115 mm  |
| 2-601   | <b>IC-tweezers</b> , nickel-plated, 125 mm, for gripping, inserting and removing IC,s   |
| 5-006   | <b>Component tweezers</b> , nickel-plated, with insulated jaws, a special tool for easy insertion and removal of plug-in transistors of various sizes |
| 5-107   | <b>Engineer's tweezers</b> , made from steel, with bent tips, 150 mm, nickel-plated   |
| 5-107-6 | <b>Engineer's tweezers</b> , as above, strong PVC-insulation  |
| 5-115   | <b>Heat dissipating tweezers</b> , 165 mm, nickel-plated, for soldering transistors, gold-bonded diodes etc.  |
| 5-117   | <b>Engineer's tweezers</b> , straight, flat, wide, 145 mm, nickel-plated  |
| 5-117-6 | <b>Engineer's tweezers</b> , as above, strong PVC-insulation  |
| 5-121   | <b>Engineer's tweezers</b> , straight, with narrow pointed tips, 120 mm, nickel-plated  |
| 5-145   | <b>Anti-magnetic tweezers</b> , straight, with flat, pointed tips, 130 mm, polished, stainless and acid-resistant                                     |
| 5-156   | <b>Crossed soldering tweezers</b> , (self-locking tweezers), made from steel, with bent tips and gripping well hand-guard, nickel-plated, 160 mm      |



## FILES - SCISSORS



No.	Length mm	inches	Finish	Weight
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### Needle files without handle

5-201	140	5 1/2"	flat-hand	7 g
5-202	140	5 1/2"	flat-entering	6 g
5-203	140	5 1/2"	round	6 g
5-204	140	5 1/2"	half round	6 g
5-205	140	5 1/2"	three square	6 g
5-206	140	5 1/2"	square	6 g

### 5-210 6-piece set of needle files

No. 5-201 – 5-206 in plastic wallet 47 g

### Warding files with wooden handle

overall length 175 mm – 6 3/4"

5-231	100	4"	flat-hand	17 g
5-232	100	4"	flat-entering	14 g
5-233	100	4"	round	13 g
5-234	100	4"	half round	27 g
5-235	100	4"	three square	18 g
5-236	100	4"	square	15 g

### 5-240 6-piece set of warding files

No. 5-231 – 5-236 with wooden handle, in plastic wallet 113 g

### Contact file

with fine cut

5-261	150	6"	flat-hand	9 g
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### Engineer's files with wooden handle

heavy type, fine cut, overall length 320 mm – 13 1/4"

5-271	200	8"	flat-hand	148 g
5-274	200	8"	half round	153 g

### Clamping scissors

made from stainless steel, with serrated gripping jaws

5-161	130	5 1/8"	polished	20 g
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**Special-scissors** for cutting sheet-metal and wires, jaws extremely slim, serrated, for precision work

5-301	110	4 3/8"	nickel-plated	27 g
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### Universal cutting shears

for wires and thin sheet materials

5-306	180	7"	black-lacquered polished head	85 g
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### Telephone and cable shears

with one serrated blade

5-308	125	5"	nickel-plated	63 g
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### Domestic scissors

5-311	180	7"	nickel-plated, polished	85 g
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### Ceramic blade scissors

for cutting aramid yarns and fiber optic cables

5-353	140	5 1/2"	Blade length 50 mm conductive plastic handle	22 g
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## SHEARS - SCISSORS - STRIPPING TOOLS

No.	Length		Finish	Weight
	mm	inches		

### Ribbon cable cutter

made from steel, with handy plastic handles, for special cutting of ribbon cable, also suitable for cutting of ledges and profiles from plastic, with interchangeable one-way blade and plastic support with straight stop

5-307	220	8 3/4"	chrome-plated	300 g
5-307-1			cutting length 55 mm spare blade	3 g

### Cable stripping shears

made from stainless steel, with handy plastic handles, compression spring, self-locking. The sheathing of round, flat and shield cables may be removed easily

5-309	190	7 1/2"	polished	125 g
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### Combination cutters (general purpose cutters)

made from stainless steel, with serrated cutting edge, handy plastic handles and compression spring

5-304	190	7 1/2"	polished	110 g
5-305	140	5 1/2"	polished	52 g

### Wire scraper tweezers

for stripping varnish or any other material on wires 0.6 mm Ø made from steel, with interchangeable cutters

5-181	130	5 1/8"	burnished	28 g
5-182		cutters (2 pieces)		2 g

### Electrician's knife

with steel blade, wire scraper and wooden handle

5-501	200	8"	knife opened	81 g
	110	4 3/8"	knife closed	

### Pocket knife

with one blade

5-511	180	7"	knife opened	44 g
	100	4"	knife closed	

### Universal blade knife

made from plastic material with adjustable blade

5-515	140	5 1/2"		10 g
5-516		set of blades for 5-515 (10 pieces)		25 g
5-517	150	6"	heavy type	32 g
5-518		set of blades for 5-517 (10 pieces)		59 g

### Rotary coaxial cable stripper

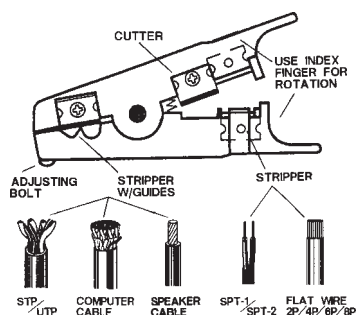
Handy plastic tool with adjustable cutters, for cable types RG 58, RG 59 and RG 62

5-0601	100	4"	black	51 g
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### Universal stripping tool

Handy plastic tool with adjustable cutters, very easy to use  
Weight: 47 g

5-0605	100	4"		
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5-515



5-0601



5-0605

## STRIPPING TOOLS

No.	Length mm	inches	Finish	Weight
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### Stripping and crimping tool

for easy stripping, crimping and cutting only with one tool, the special scanning system adjusts automatically to the wire diameter

5-532	160	6 1/4"	<b>Working range:</b> easy stripping from 0.5 to 6.0 mm <sup>2</sup> stripping length 5 mm crimping ranges for terminals: 0.5 to 2.5 and 4.0 to 6.0 mm <sup>2</sup> cutting capacity of the side cutters max. 6.0 mm <sup>2</sup> , solid conductors max. 4.0 mm <sup>2</sup>	120 g
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### Coax cable stripper

for two-or-three-level stripping of all common coaxial cables (e.g. antenna- and transmission cables) and flexible cables

5-535	110	4 3/8"	<b>Working range:</b> coax cable from 4.8 to 7.5 mm outside-Ø for flexible cable 3 x 0.75 mm <sup>2</sup> , 10 mm <sup>2</sup> and 16 mm <sup>2</sup>	30 g
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### Round cable stripper

with ergonomical handles

5-536	125	5"	<b>Working range:</b> round and continental type cable from 8 to 13 mm Ø e.g. NYM 3 x 1.5 mm <sup>2</sup> up to 5 x 2.5 mm <sup>2</sup>	45 g
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### Swivel-blade cable strippers

for accurate, fast and safe stripping of all common round cables of 4 - 28 mm Ø, cutting depth and adjustment via adjusting screw at end of handle, moving inner blade automatically adjusts itself from circular to longitudinal cuts

5-503	130	5 1/8"	<b>Working range:</b> without blade: 8 - 28 mm Ø	70 g
5-504	130	5 1/8"	without blade: 4 - 16 mm Ø	70 g
5-505	170	6 3/4"	hook blade: 4 - 28 mm Ø	80 g
5-506	180	7"	straight blade: 4 - 28 mm Ø	80 g



### Automatic wire stripper Super

fully insulated automatic wire stripper for all common stranded and solid conductors of 0.2 - 6.0 mm<sup>2</sup>, adjustable length stop of 5 - 12 mm, removable if required, built-in side cutters for max. 2 mm Ø

5-531	200	8"	plastic	130 g
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## ESD/EGB SPECIAL-TOOLS



with slim, ergonomically formed handles from black, **conductive** plastic. The centring head guarantees a precise working without exhaustion.

**Blade:** chrome vanadium, hardened over its full length, chrome-plated, black tip, L = with bore-hole in the tip

**Handle:** impact-resistant, **conductive** black plastic, electrostatic discharge according to DIN EN 1000 15/1

## TORX-screwdrivers



No.	Size	Blade length mm	for metric thread	Handle size mm	Weight
6-659	T 4	50	M 1.4-1.6	90	12 g
6-661	T 5	50	M 1.6-2	90	12 g
6-662	T 6	50	M 2	90	16 g
6-663	T 7	50	M 2.5	90	13 g
6-664	T 8	60	M 2.5	90	14 g
6-665 L	T 9	60	M 3	90	19 g
6-666 L	T 10	60	M 3-3.5	90	20 g
<b>very long TORX-screwdrivers with special-square pattern handle</b>					
6-675 L	T 10	300	M 3-3.5	92 x 21	60 g
6-676 L	T 15	300	M 3.5-4	92 x 21	65 g
6-677 L	T 20	300	M 4-5	100 x 23	80 g

### 6-660 6-piece TORX-screwdriver-set,

in a practical support from **conductive** material

Contents: 6 TORX-screwdrivers No. 6-661, 6-662, 6-663, 6-664, 6-665, 6-666

Weight: 163 g

## Wrench keys



No.	A/F mm	Blade length mm	Handle length mm	Weight
6-631	0.7	50	90	11 g
6-632	0.9	50	90	12 g
6-633	1.3	50	90	12 g
6-634	1.5	50	90	12 g
6-635	2.0	60	90	12 g
6-636	2.5	60	90	14 g

### 6-630 6-piece wrench key set

in a practical support from **conductive** material

Contents: 6 wrench keys No. 6-631, 6-632, 6-633, 6-634, 6-635, 6-636

Weight: 142 g

## Socket wrenches



No.	A/F mm	Blade length mm	Handle length mm	Weight
6-611	1.5	70	90	14 g
6-612	2.0	70	90	14 g
6-613	2.5	70	90	14 g
6-614	3.0	70	90	14 g
6-615	3.2	70	90	14 g
6-616	3.5	70	90	15 g
6-617	4.0	70	90	15 g
6-618	4.5	70	90	16 g
6-619	5.0	70	90	16 g
6-621	5.5	70	90	20 g

### 6-610 6-piece socket wrenches

in a practical support from **conductive** material

Contents: 6 Socket wrenches No. 6-612, 6-614, 6-617, 6-618, 6-619, 6-621

Weight: 156 g



6-660



6-630



6-610

## SOCKET WRENCHES

### Socket wrenches, long, with handle

**Blade:** chrome vanadium, hardened over its full length, chrome-plated

**Handle:** special square pattern Bernstein handle, impact-resistant, transparent yellow plastic

No.	A/F mm	Blade length mm	Handle size mm	Weight
6-101	3.5	140	92 x 21	70 g
6-102	4.0	140	92 x 21	72 g
6-103	4.5	140	92 x 21	72 g
6-104	5.0	140	92 x 21	75 g
6-105	5.5	140	92 x 21	77 g
6-106	6.0	140	92 x 21	77 g
6-107	7.0	140	92 x 21	92 g
6-108	8.0	140	92 x 21	94 g

### 6-100 8-piece socket wrench set in a plastic wallet

Contents: 8 socket wrenches No. 6-101 – 6-108

Weight: 650 g

### Socket wrenches, short, with handle

**Blade:** chrome vanadium, hardened over its full length, nickel-plated

**Handle:** impact-resistant, transparent yellow plastic

No.	A/F mm	Blade length mm	Handle size mm	Weight
6-151	3.5	100	98 x 21	57 g
6-152	4.0	100	98 x 21	60 g
6-153	4.5	100	98 x 21	60 g
6-154	5.0	100	98 x 21	65 g
6-155	5.5	100	98 x 21	65 g
6-156	6.0	100	98 x 21	65 g
6-157	7.0	100	98 x 21	70 g
6-158	8.0	100	98 x 21	70 g
6-159	9.0	140	103 x 24	106 g
6-161	10.0	140	103 x 24	110 g
6-162	11.0	140	103 x 24	130 g
6-163	12.0	140	103 x 24	135 g
6-164	13.0	140	103 x 24	135 g
6-165	14.0	140	103 x 24	144 g

### 6-150 8-piece socket wrench set in a plastic wallet

Contents: 8 socket wrenches No. 6-151 – 6-158

Weight: 530 g

### Socket wrenches without handles with tangs for interchangeability

**Material:** chrome vanadium, nickel-plated

No.	A/F mm	Wrench length mm	Inches for No. 6-190	Weight
6-201	4.0	140	1/8"	30 g
6-202	5.5	140	5/32"	35 g
6-203	6.0	140	3/16"	35 g
6-204	7.0	140	7/32"	40 g
6-205	8.0	140	1/4"	40 g
6-206	9.0	140	5/16"	43 g
6-207	10.0	140	3/8"	45 g

### 6-200 8-piece socket wrench in a plastic wallet

Contents: 7 socket wrenches No. 6-201 – 6-207

1 plastic spring handle. 4-775

Weight: 310 g

### 6-190 8-piece socket wrench set same as 6-200, but in imperial dimensions

### 6-210 6-piece socket wrench set in a plastic wallet

Contents: 5 socket wrenches No. 6-201 – 6-205

1 plastic spring handle No. 4-775

Weight: 225 g

### 6-360 17-piece combination socket wrench set in clear pack

Contents: 1 flexible holder No. 6-461 with

special square pattern Bernstein handle

1 adapter for bits No. 6-406

7 sockets No. 6-301 - 6-307

8 bits No. 6-411 - 6-412 - 6-413 - 6-421 -

6-422 - 6-431 - 6-432 - 6-433

Weight: 340 g



6-108



6-205



6-360



## SOCKET WRENCH DRIVES AND CONNECTORS

### Sets of socket wrenches in metal cases

**Typ:** 1/4" square drive, chrome vanadium, chrome-plated

- 6-300 **12-piece socket wrench set in metal case**  
Contents: 11 sockets No. 6-301 – 6-312, 1 holder No. 6-331  
Weight: 630 g
- 6-310 **15-piece socket wrench set in metal case**  
Contents: 11 sockets No. 6-301 – 6-312, 1 holder No. 6-331  
1 sliding tee bar No. 6-332, 1 universal joint No. 6-333,  
1 rigid extension No. 6-337  
Weight: 744 g
- 6-320 **16-piece socket wrench set in metal case**  
Contents: 11 sockets No. 6-301 – 6-312, 1 holder No. 6-331  
1 sliding tee bar No. 6-332, 1 universal joint No. 6-333,  
1 reversible ratchet No. 6-334, 1 rigid extension No. 6-337  
Weight: 815 g
- 6-330 **16-piece socket wrench set in metal case**  
Contents: 11 sockets No. 6-301 – 6-312, 1 holder No. 6-331  
1 sliding tee bar No. 6-332, 1 universal joint No. 6-333,  
1 reversible ratchet No. 6-335, 1 rigid extension No. 6-337  
Weight: 830 g

### Accessories

**Typ:** 1/4" square drive, chrome vanadium, chrome-plated

- 6-331 **Socket wrench holder**  
with special square pattern Bernstein handle Weight 65 g
- 6-332 **Sliding tee bar** 45 g
- 6-333 **Universal joint** 25 g
- 6-334 **Reversible ratchet, 150 mm long** 80 g
- 6-335 **Reversible ratchet, 150 mm long** 100 g
- 6-337 **Rigid extension, 100 mm long** 45 g

### Sockets

**Typ:** 1/4" square drive, chrome vanadium, chrome-plated

No.	A/F mm	Total length mm	Weight	No.	A/F mm	Total length mm	Weight
6-301	4.0	25	10 g	6-307	8.0	25	13 g
6-302	4.5	25	10 g	6-308	9.0	25	16 g
6-303	5.0	25	10 g	6-309	10.0	25	19 g
6-304	5.5	25	10 g	6-311	11.0	25	27 g
6-305	6.0	25	10 g	6-312	13.0	25	31 g
6-306	7.0	25	11 g				

- on special request also in imperial dimensions available -

### Bit holder with square drive and hexagonal location for bits

**Material:** chrome vanadium, chrome-plated

No.	Drive	Location	Total length mm	Weight
6-406	1/4"	1/4"	25	15 g

### Screwdriver bits, 1/4" hexagon drive

**Material:** special steel, steel grey

No.	Blade width mm	Blade thickness mm	Total length mm	Weight
6-411	4.0	0.5	25	5 g
6-412	4.5	0.6	25	5 g
6-413	5.5	0.8	25	5 g
6-414	6.5	1.2	25	5 g
6-415	8.0	1.6	25	6 g

### Cross-recess screwdriver bits

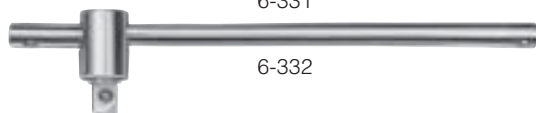
1/4" hexagon drive

**Material:** special steel, steel grey

No.	Size	Typ	Total length mm	Weight
6-421	1	PH	25	5 g
6-422	2	PH	25	5 g
6-423	3	PH	25	5 g
6-425	1	PZ	25	5 g
6-426	2	PZ	25	5 g
6-427	3	PZ	25	5 g
6-431	3.0 mm	hexagon for M4	25	5 g
6-432	4.0 mm	hexagon for M5	25	5 g
6-433	5.0 mm	hexagon for M6	25	5 g



6-331



6-332



6-333



6-337



6-312



6-406



6-411



6-421



6-425



6-431

## SCREWDRIVER BITS

### Screwdriver bits

1/4" hexagon drive

**Material:** chrome vanadium, steel grey, DIN

#### 6-410 7-piece Bit-Box

Handy plastic box with hexagon hole in the bottom for makeshift screwing

Contents: 1 bit each

- No. 6-413  $\ominus$  5.5 x 0.8 mm
- No. 6-415  $\ominus$  8.0 x 1.6 mm
- No. 6-421  $\oplus$  Phillips size 1
- No. 6-422  $\oplus$  Phillips size 2
- No. 6-425  $\oplus$  Pozidriv size 1
- No. 6-426  $\oplus$  Pozidriv size 2

1 universal bit holder

Weight: 70 g

#### 6-440 7-piece Torx-Bit-Box

Handy plastic box with hexagon hole in the bottom for makeshift screwing

Contents: 6 Torx bits of the following sizes:

- T 10, T 15, T 20, T 25, T 30, T 40,

1 universal bit holder

Weight: 70 g



## WRENCHES

### Sets of wrenches

**Material:** chrome vanadium, chrome-plated

#### 6-500 5-piece double open-ended wrench set

Contents: 5 double open-ended wrenches 6 x 7 – 8 x 9 – 10 x 11 – 12 x 13 and 14 x 17 mm

Weight: 270 g

#### 6-550 5-piece ring wrench set double-offset

Contents: 5 ring wrenches 6 x 7 – 8 x 9 – 10 x 11 – 12 x 13 and 14 x 17 mm

Weight: 620 g

#### 6-600 7-piece combination wrench set

Contents: 7 combination wrenches 6 – 7 – 8 – 9 – 10 – 11 and 13 mm

Weight: 230 g

#### 6-650 5-piece ring wrench set

Contents: 5 ring wrenches 6 x 7 – 8 x 9 – 10 x 11 – 12 x 13 and 14 x 15 mm

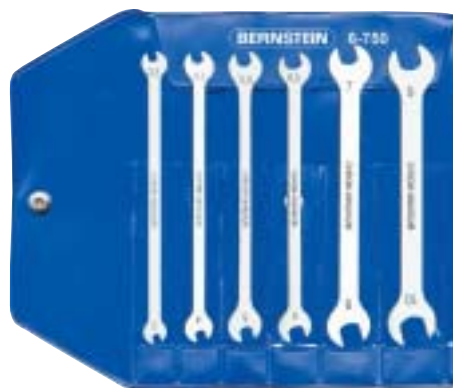
Weight: 160 g

#### 6-750 6-piece special double open-ended wrench set in plastic case

**Material:** chrome vanadium, bright nickel-plated, extra slim

Contents: 4 double open-ended wrenches 3.0 x 3.5 – 4.0 x 4.5 – 5.0 x 5.5 and 6.0 x 6.5 mm material thickness 1.5 mm, 120 mm long  
2 double open-ended wrenches 7 x 8 and 9 x 10 mm material thickness 2 mm, 125 mm long

Weight: 90 g



### Adjustable wrenches

**Material:** chrome vanadium, chrome-plated

No.	Jaw opening mm	Total length mm	Jaw length mm	Weight
6-771	0 – 12	100	12	55 g
6-772	0 – 18	150	22	145 g
6-773	0 – 23	200	25	230 g

### Fitting wrench with protection jaws, for chrome-plated fittings

**Material:** chrome vanadium, burnished

No.	Jaw opening mm	Total length mm	Jaw length mm	Weight
6-781	55	270	47	720 g



## SPECIAL WRENCHES

### Wrench keys

angle-shaped screwdrivers for hex socket-head screws

Material: special steel, nickel-plated

No.	A/F mm	No.	Inches	A/F ≈ mm	Leg length mm		Weight
					A	B	
6-811	0.89	-	-	-	30 x 10	1 g	
6-812	1.0	6-851	3/64	1.19	46 x 10	1 g	
6-813	1.5	6-852	1/16	1.59	50 x 12	1 g	
6-814	2.0	6-853	5/64	1.98	55 x 15	2 g	
6-815	2.5	6-854	3/32	2.38	60 x 18	3 g	
6-816	3.0	6-855	1/8	3.18	65 x 20	5 g	
6-817	3.5	6-856	9/64	3.56	68 x 22	8 g	
6-818	4.0	6-857	5/32	3.97	72 x 25	11 g	
6-819	4.5	6-858	3/16	4.76	75 x 27	13 g	
6-821	5.0	-	-	-	80 x 28	19 g	
6-822	5.5	6-859	7/32	5.56	85 x 30	22 g	
6-823	6.0	6-861	1/4	6.35	90 x 32	28 g	
6-825	7.0	6-862	9/32	7.14	95 x 34	41 g	
6-826	8.0	6-863	5/16	7.94	100 x 36	60 g	
6-827	9.0	6-864	11/32	8.73	105 x 38	81 g	
6-828	10.0	6-865	3/8	9.53	112 x 40	105 g	

### 6-810 8-piece wrench key set

offset model, on ring

Contents: 8 wrench keys 2.0–2.5–3.0–4.0–5.0–6.0–8.0–10.0 mm

Weight: 255 g

### 6-820 8-piece wrench key set

offset model, in a plastic wallet

Contents: 8 wrench keys 1.5–2.0–2.5–3.0–4.0–5.0–5.5–6.0 mm

Weight: 100 g

### Wrench keys without handles

with fitting tangs (figure 6-830)

Material: chrome vanadium, burnished, tangs nickel-plated

No.	A/F mm	No.	Inches	A/F ≈ mm	Blade length mm	Weight
6-832	1.2	6-872	1/16	1.59	140	16 g
6-833	1.5	6-873	5/64	1.98	140	16 g
6-834	2.0	6-874	3/32	2.38	140	17 g
6-835	2.5	6-875	1/8	3.18	140	18 g
6-836	3.0	6-876	9/64	3.56	140	19 g
6-837	4.0	6-877	5/32	3.97	140	28 g
6-838	4.5	6-878	3/16	4.76	140	30 g
6-839	5.0	6-879	7/32	5.56	140	32 g
6-841	6.0	6-881	1/4	6.35	140	42 g

### 6-830 11-piece wrench key set in a plastic wallet

Contents: 10 wrench keys 1.0–1.2–1.5–2.0–2.5–3.0–4.0–4.5–5.0–6.0 mm

1 spring handle in impact-resistant, transparent yellow plastic No. 4-775

Weight: 290 g

### Sets of wrench keys (imperial dimensions)

#### 6-840 10-piece wrench key set on ring

Contents: 10 wrench keys 1/16–5/64–3/32–1/8–5/32–3/16–7/32–1/4–5/16–3/8"

Weight: 220 g

#### 6-880 8-piece wrench key set in a plastic wallet

Contents: 8 wrench keys 1/16–5/64–3/32–1/8–5/32–3/16–7/32–1/4"

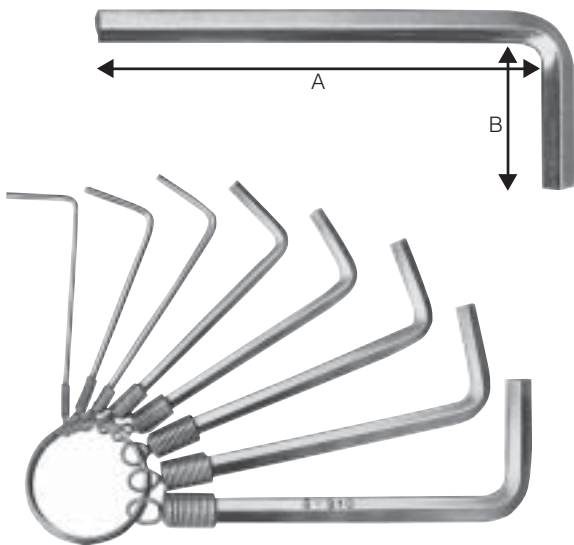
Weight: 100 g

#### 6-890 11-piece wrench key set in a plastic wallet

Contents: 10 wrench keys 3/64–1/16–5/64–3/32–1/8–9/64–5/32–3/16–7/32–1/4"

1 spring handle in impact-resistant, transparent yellow plastic No. 4-775

Weight: 315 g



## SPECIAL WRENCHES

### Wrench keys

straight model and offset model to DIN 911

**Blade:** chrome vanadium, nickel-plated

**Handle:** impact-resistant, transparent plastic

Straight finish No.	A/F mm	Blade length mm	Weight	Offset finish No.	Leg length mm		Weight	Handle size mm
					A	B		
6-901	2.0	75	15 g	6-921	75 x 16	15 g	70 x 15	
6-902	2.5	75	17 g	6-922	75 x 18	17 g	70 x 15	
6-903	3.0	75	20 g	6-923	75 x 20	20 g	70 x 15	
6-904	4.0	75	30 g	6-924	75 x 25	35 g	80 x 17	
6-905	5.0	80	55 g	6-925	80 x 28	55 g	80 x 17	
6-906	6.0	80	60 g	6-926	80 x 32	70 g	90 x 20	
6-907	7.0	80	70 g	6-927	80 x 34	100 g	90 x 20	
6-908	8.0	120	115 g	6-928	120 x 36	130 g	100 x 23	
6-909	9.0	120	135 g	6-929	120 x 38	170 g	100 x 23	
6-911	10.0	120	180 g	6-931	120 x 40	210 g	110 x 26	
6-912	12.0	120	240 g	6-932	150 x 45	345 g	120 x 28	



### Ballpoint wrench keys

with special square pattern Bernstein handle

**Blade:** chrome vanadium, hardened over its full length, chrome-plated

**Handle:** impact-resistant, transparent plastic

No.	Blade length mm	A/F mm	Handle size mm	Weight
6-941	100	3.0	86 x 19	34 g
6-942	100	4.0	86 x 19	41 g
6-943	100	5.0	92 x 21	56 g
6-944	125	6.0	110 x 25	100 g
6-945	150	8.0	110 x 25	146 g
6-946	150	10.0	110 x 25	194 g



### 6-950 8-piece ballpoint wrench key set, in a plastic wallet

**Material:** chrome vanadium, burnished, offset model

Contents: 8 wrench keys 1.5 – 2.0 – 2.5 – 3.0 – 4.0 – 5.0 – 6.0 – 8.0 mm

Weight: 210 g



### TORX-screwdrivers

with special square pattern Bernstein handle

**Blade:** chrome vanadium, hardened over its full length, chrome-plated, black tip, "L" with bore-hole in the tip

**Handle:** impact-resistant, transparent plastic, amber coloured

No.	Size	Blade length mm	for metric thread	Handle size mm	Weight
6-961	T 6	50	M 2	86 x 19	32 g
6-962	T 7	50	M 2.5	86 x 19	32 g
6-963	T 8	60	M 2.5	86 x 19	32 g
6-964 L	T 9	60	M 3	92 x 21	44 g
6-965 L	T 10	80	M 3-3.5	92 x 21	46 g
6-966 L	T 15	80	M 3.5-4	92 x 21	46 g
6-967 L	T 20	100	M 4-5	100 x 23	61 g
6-968 L	T 25	100	M 4.5-5	100 x 23	63 g
6-969 L	T 27	115	M 4.5-5-6	110 x 25	85 g
6-971 L	T 30	115	M 6-7	110 x 25	95 g



### very long TORX-screwdrivers

6-974	T 8	100	M 2.5	86 x 19	34 g
6-975 L	T 10	300	M 3-3.5	92 x 21	60 g
6-976 L	T 15	300	M 3.5-4	92 x 21	65 g
6-977 L	T 20	300	M 4-5	100 x 23	80 g

### 6-995 8-piece TORX-wrench keys with bore-hole in a plastic box

**Material:** chrome vanadium, burnished, offset model

Contents: 8 TORX-wrench keys T 9, T 10, T 15, T 20, T 25, T 27, T 30, T 40

Weight: 200 g





## SAFETY TOOLS

BERNSTEIN-VDE-socket wrenches and VDE-wrench keys are monitored by the VDE Test Centre.

Random samples are taken and type tests are performed in accordance with the regulations.

Permissible voltage at which the VDE socket wrenches and wrench keys can be used:

1000 V a.c. or 1500 V d.c.

**The handle and blade insulation is moulded in one piece and is therefore permanently connected.**



### Safety insulated socket wrenches

to VDE regulations EN 60.900

**Blade:** chrome vanadium, hardened over its full length, to DIN 7445

**Handle:** impact-resistant, red coated plastic

No.	A/F mm	Blade length mm	Handle size mm	Weight
16-402 VDE	5.5	125	100 x 24	75 g
16-403 VDE	6.0	125	100 x 24	75 g
16-404 VDE	7.0	125	110 x 26	105 g
16-405 VDE	8.0	125	110 x 26	105 g
16-406 VDE	9.0	125	110 x 26	110 g
16-407 VDE	10.0	125	110 x 26	110 g
16-408 VDE	11.0	125	125 x 30	150 g
16-409 VDE	12.0	125	125 x 30	150 g
16-411 VDE	13.0	125	125 x 30	155 g



### Safety insulated wrench keys

to VDE regulations EN 60.900

**Blade:** chrome vanadium, hardened over its full length, burnished, to DIN 7439

**Handle:** impact-resistant, red coated plastic

No.	A/F mm	Blade length mm	Handle size mm	Weight
16-701 VDE	2.5	75	100 x 24	35 g
16-702 VDE	3.0	75	100 x 24	40 g
16-703 VDE	4.0	75	100 x 24	45 g
16-704 VDE	5.0	75	110 x 26	65 g
16-705 VDE	6.0	100	110 x 26	80 g
16-706 VDE	8.0	100	125 x 30	130 g



### Single-ended open-jaw wrenches

to DIN 7446, with two-colour multilayered insulation, 1000 V

No.	A/F mm	Weight	No.	A/F mm	Weight
16-501 VDE	6.0	25 g	16-507 VDE	12.0	65 g
16-502 VDE	7.0	25 g	16-508 VDE	13.0	75 g
16-503 VDE	8.0	35 g	16-509 VDE	14.0	95 g
16-504 VDE	9.0	40 g	16-511 VDE	15.0	100 g
16-505 VDE	10.0	50 g	16-512 VDE	17.0	110 g
16-506 VDE	11.0	55 g	16-513 VDE	19.0	185 g



### Single-ended ring wrenches

to DIN 7447, with two-colour multilayered insulation, 1000 V

No.	A/F mm	Weight	No.	A/F mm	Weight
16-531 VDE	6.0	45 g	16-536 VDE	11.0	90 g
16-532 VDE	7.0	50 g	16-537 VDE	12.0	130 g
16-533 VDE	8.0	55 g	16-538 VDE	13.0	135 g
16-534 VDE	9.0	60 g	16-539 VDE	14.0	160 g
16-535 VDE	10.0	85 g	16-541 VDE	15.0	165 g

– other dimensions available on request –

### 16-440 VDE 9-piece set of sockets

**in red imitation leather case**

Contents: 8 sockets with two-colour multilayered insulation

A/F: 10.0 – 11.0 – 12.0 – 13.0 – 14.0 – 15.0 – 17.0 – 19.0 mm

1 T-socket wrench, 1/2" square drive, 200 mm with two-colour multilayered insulation

Weight: 1.120 kg



## TOOLS

### Engineer's hammers

with lacquered wooden handle

No.	Length mm	Head weight	Total weight
7-102	265	100	170 g
7-104	285	200	280 g
7-106	300	300	400 g
7-109	320	500	590 g

### Engineer's hammers to DIN 1041



swaged, accurately slided, stem and path finish grinded, lacquered and rust-proof, with lacquered ash-handle

7-112	260	100	155 g
7-114	280	200	260 g
7-116	300	300	435 g
7-119	320	500	615 g

### Plastic hammers

with impact-resistant, cellidor plastic tops, lacquered wooden handle

No.	Head-Ø mm	Length mm	Weight
7-121	22	255	130 g
7-122	27	265	225 g
7-123	32	285	330 g

### Firmer chisels to DIN 5139, with impact-resistant wooden handle

No.	Blade width mm	Blade length mm	Total length mm	Weight
7-201	10	120	235	90 g
7-202	16	130	240	130 g
7-203	20	140	250	155 g

### Flat chisels

similar to DIN 6453, chrome vanadium, safety impact head

No.	Head width mm	Length mm	Ø mm	Weight
7-215	10	100	8	45 g
7-225	16	150	12	125 g
7-235	20	200	16	310 g

### Electrician's chisels

chrome vanadium, safety impact head

7-245	8	200	6	55 g
7-255	10	200	8	95 g

### Centre-punch to DIN 7250, chrome vanadium, safety impact head

No.	Head-Ø mm	Length mm	Ø mm	Weight
7-281	5.0	120	12	90 g

### Twist gimlets

black lacquered, with knurled ring handle

No.	Bore-Ø mm	Length mm	Weight
7-303	3.0	125	10 g
7-304	4.0	140	20 g
7-306	6.0	170	30 g

### Drill saw

with plastic handle

No.	Bore-Ø mm	Blade length mm	Total length mm	Weight
7-311	5.0	170	270	55 g
7-312	6.5	230	360	110 g

### Drill rasp

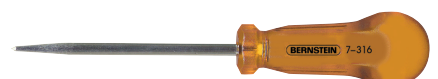
with plastic handle

7-315	4.0	175	260	35 g
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### Punch

with impact-resistant plastic handle

No.	Blade-Ø mm	Blade length mm	Total length mm	Weight
7-316	6.0	100	185	75 g



## TOOLS – OILER

**Trowel** with conical forged blade and wooden handle

No.	Blade width mm	Total length mm	Weight
7-405	50	200	65 g

**Slicker trowel** polished with round shank

7-410	16	220	25 g
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**Rubber beaker for plaster** (without picture) round, conical form

No.	Ø	Height mm	Weight mm
7-415	130	95	125 g

**Dust brush**

with white bristles and plastic handle

No.	Bristles length mm	Bristles width mm	Total length mm	Weight
7-425	40	25	195	10 g

**ESD/EGB-brush**

with conductive handle, natural bristles with conductive fibres

No.	Typ	Bristles	Total length mm	Weight
7-421	round	6 mm Ø	150	7 g
7-422	flat	20 mm wide	150	26 g

**Oiler**

made from transparent plastic with brass rotating seal

No.	Contents	Total length ccm	Weight mm
7-435	20	110	15 g

**Oiler**

made from transparent plastic, with plastic seal

7-445	20	110	6 g
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**Drip oiler**

for droplet oiling

7-438	5	140	20 g
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## MEASURING TOOLS

**Folding rule** from wood, with steel spring

No.	Length m	Width mm	Weight
7-502	2	15.0	112 g

**Tape measure**

with impact-resistant plastic housing, steel tape for pulling out and in

7-505	1	6.5	18 g
7-506	2	13.0	71 g

**Steel tape measure**

stainless, lines and numbers etched and blank coloured

No.	Length mm	Cross section mm	Weight
7-508	300	13 x 0.5	16 g

**Precision caliper square**

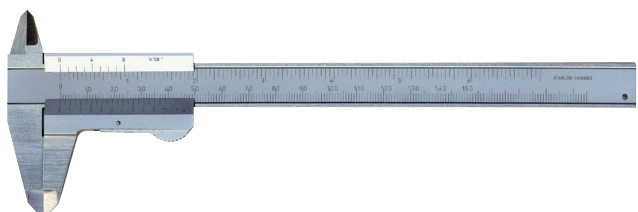
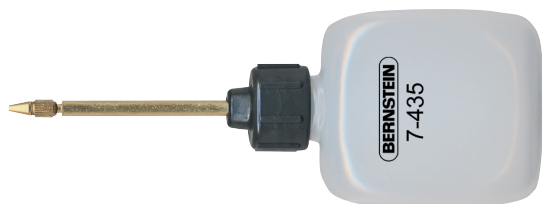
hardened, stainless, with open slide and quick clamping, in a wallet

No.	Measuring range mm	Nose mm	Nonius mm	Weight
7-511	160	40	1/20	186 g

**Miniature caliper square**

hardened, stainless, with open slide and adjusting screw, in wallet

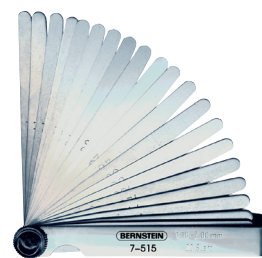
7-512	100	20	1/20	84 g
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## MEASURING TOOLS

### Feeler gauge with conical leaves

No.	Measuring range mm	Blade length mm	Blade quantity	Weight
7-515	0.10 - 2.0	100	20	171 g



### Scriber

with roughened nickeled handle, needles hardened and burnished, interchangeable

No.	Handle-Ø mm	Needles-Ø mm	Total length mm	Weight
7-521	6	2.5	200	26 g



### Square for mechanics with bevel, plate, fine polished

No.	Sides of angle mm	Weight
7-523	150 x 100	250 g



### Spirit level, made from plastic

with 3 levels: horizontal, vertical and 45° angle

No.	Length mm	Weight
7-535	220	58 g



## SAWS

No.	Blade length mm	Length mm	Weight
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### Hack saw frame from flat steel for sawblades

of 300 mm length, with saw blade

7-605	300	530	515 g
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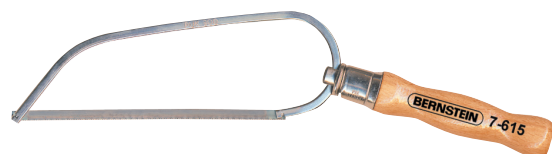
### Hack saw blade both ends toothed, from Wolfram-steel

7-606	300	44 g
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### Pocket hack saw „Puk“ with fixed wooden handle

and saw blade for wood and metal

7-615	150	300	94 g
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### Pocket hack saw „Puk“ with adjustable wooden handle,

with saw blade for wood and metal, in a plastic wallet

7-616	150	300	130 g
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### Hack saw blade special for „Puk“ hack saws

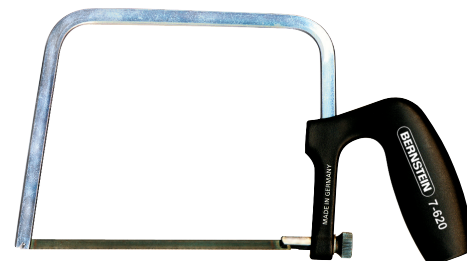
and pocket hack saw 7-620

7-617	150	3 g
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### Pocket hack saw with plastic handle and saw blade

for wood and metal

7-620	150	260	215 g
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## PROTECTION SPECTACLE

### Protection spectacle with colourless glasses

from plastic, acc. to DIN-regulations

7-651	68 g
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## CLAMPING VICES SPANNFIX

BERNSTEIN clamping equipment is constructed on ball-and-socket joints, thus enabling it to be rotated and set firmly, in order to create maximum possibilities for work.

### Small vice on ball-and-socket joint rotatable in any direction and capable of being set securely.

The "Spannfix" vice simplifies many jobs in precision engineering, in laboratories, in test rooms and all engineering and electronics workshops.



9-205



9-215



9-261



9-220



9-220



9-210



9-211

### 9-205 **BERNSTEIN SPANNFIX** screw-on vice

for work benches with a max. table thickness of 80 mm.

The small vice with ball-and-socket joint can be mounted quickly and easily onto a work bench or table. Slight pressure on the lever is sufficient, and the clamped workpiece can be moved into any suitable position.

Technical data:	Clamping pressure	150 kp
	Clamping capacity	70 mm
	Clamping depth	38 mm
	Jaw width	50 mm
	Jaws (interchangeable)	plastic

Weight: 1.450 kg

### 9-215 **BERNSTEIN SPANNFIX** for permanent mounting using bolts

Technical data: as 9-205

Size of base: 150 x 105 mm

Weight: 1.350 kg

### 9-261 **SPANNFIX** bench mounted base with universal ball joint and threaded stud M 12 x 1.5 for permanent mounting using bolts

Size of base: 150 x 105 mm

Weight: 0.800 kg

### 9-220 **BERNSTEIN SPANNFIX VICE** WITH VACUUM BASE for portable applications

Technical data: as 9-205

Size of base: 150 x 105 mm

Weight: 2.000 kg

### 9-210 **SPANNFIX VACUUM BASE** with ball joint and threaded stud M 12 x 1.5

(consisting of 9-211 and 9-261)

Weight: 1.500 kg

### 9-211 **SPANNFIX VACUUM BASE** only

to be used in conjunction with 9-215 or 9-261

Weight: 0.650 kg

## CLAMPING EQUIPMENT SPANNFIX COMBINATIONS

### 9-250 **BERNSTEIN SPANNFIX-VARIO** assembly vice

5 piece set  
with interchangeable screw-on work mounts

Weight: 2.000 kg

Description of individual components:

#### 9-251 **Universal clamp mounting ball joint base**

for screwing onto work benches with a max. table thickness of 80 mm

Weight: 0.950 kg

#### 9-252 **Screw-on mounting vice**

Technical data:

Clamping pressure	150 kp
Clamping capacity	70 mm
Clamping depth	38 mm
Jaw width	50 mm
Jaws (interchangeable)	plastic

Weight: 0.560 kg

#### 9-253 **Circuit board holder**

adjustable from 25 mm to 270 mm clamping capacity, can be extended as required at any time, correct setting by adjusting the centre position, protected against contact voltages, firm clamping of the printed circuit by built-in resilience in the locating arms, height of locating arms 70 mm.

Weight: 0.280 kg

If the circuit board holder is to be used with universal ball joint base 9-251, we recommend that the combination is used with angular adapter 9-255 or with rapid turning device 9-257 in order to obtain a larger turning circle.

#### 9-254 **Universal screw-on plate**

Slots made for commonly used standard bolts, for holding of e. g. tuner, line output transformer, small loudspeaker etc. or prototypes

Weight: 0.120 kg

#### 9-255 **Angular adapter**

to be used as an additional attachment with every work mount, permits an even larger turning circle.

Weight: 0.095 kg

### 9-260 **BERNSTEIN SPANNFIX-VARIO** assembly vice

5-piece set  
comparable with 9-250  
only 9-251 Universal clamp ball joint base is changed into 9-261

Weight: 2.000 kg

#### 9-261 **SPANNFIX bench mounted base with universal ball joint and threaded stud M 12 x 1.5 for permanent mounting using bolts**

Size of base: 150 x 105 mm

Weight: 0.800 kg

All parts can also be obtained individually.



Example of application  
9-251  
9-253  
9-255

Example of application  
9-251  
9-252



## CLAMPING EQUIPMENT SPANNFIX COMBINATIONS

### 9-270 **BERNSTEIN** SPANNFIX-VARIO-PLUS clamping combination

Tailor-made combination of the following individual components:

- 9-251 Clamp mounting ball joint base
  - 9-257 Rapid turning device with permanently connected angular adapter
  - 9-253 Circuit board holder
  - 9-256 Clamping lid for circuit boards with components
- Weight: 1.800 kg



9-270

### Accessories for the SPANNFIX-VARIO assembly vice

- 9-256 **Clamping lid for circuit boards with components**  
covered with 20 mm thick foamed plastic. Components of different sizes are pressed in such a way that soldering can be carried out correctly after the circuit board holder has been turned.

Size of cover: 240 x 130 mm

Use: in conjunction with circuit board holder 9-253

Weight: 0.260 kg

- 9-257 **Rapid turning device**  
with permanently connected angular adapter, permits swift rotation of the circuit board holder with the PCB and clamping lid through 180°.

Weight: 0.270 kg

- 9-263 **Large circuit board holder**  
for industrial purposes  
clamping width adjustable from 25 mm to 310 mm, clamping height up to 350 mm, correct setting by adjusting the centre position, protected against contact voltages, firm clamping of the circuit board through built-in resilience of the locating arms.

Weight: 0.400 kg

- 9-266 **Clamping lid for large circuit board holder**  
robust version for industrial purposes  
construction as 9-256

Size of cover: 315 x 330 mm

Use: in conjunction with circuit board holder 9-263

Weight: 0.900 kg

### Accessories for SPANNFIX VICE

#### 9-230 **ALLSPANN clamping device**

(patent applied for)

with rapidly interchangeable loose tools

Technical data:	Clamping capacity	approx. 370 mm
	Jaw width	160 mm
	Distance between uprights	65 and 130 mm
	Height of uprights	150 mm

Weight: 2.100 kg

"ALLSPANN" is an accessory for the Spannfix vice to enable the clamping capacity, clamping depth and jaw width to be extended and which, in addition, also permits the clamping of irregularly shaped bodies or workpieces.



9-256



9-257



9-263



9-230

## CLAMPING VICES MAXI

### Heavy-duty vice on ball-and-socket joint rotatable in any direction and capable of being set securely.

The same functioning as the Spannfix small vice also distinguishes the large models. To be used when working on larger and heavier workpieces.

#### 9-225 **BERNSTEIN SPANNFIX VICE MAXI screw-on**

for work benches with a max. table thickness of 85 mm.

Technical data:	Clamping pressure	300 kp
	Clamping capacity	100 mm
	Clamping depth	50 mm
	Jaw width	100 mm
	Jaws (rotatable) steel, smooth and fluted (other clamping jaws on request)	

Weight: 4.000 kg



9-225

#### 9-226 **BERNSTEIN SPANNFIX VICE MAXI** for permanent mounting using bolts

Technical data: as 9-225  
Size of base: 190 x 155 mm  
Weight: 3.600 kg



9-226

## SPANNFIX FOR SPECIAL USE

#### 9-227 **SPANNFIX MAXI universal clamp** mounting ball joint base, with threaded stud M 12 x 1.5 for screwing onto work benches

with a max. table thickness of 85 mm.

Weight: 2.220 kg



9-227

#### 9-228 **SPANNFIX MAXI bench mounted base** with universal ball joint and threaded stud M 12 x 1.5 for permanent mounting using bolts

Size of base: 190 x 155 mm

Weight: 1.850 kg



9-228



## ESD-COVERINGS AND ACCESSORIES



9-342

9-343



9-356



9-357

9-359



9-361

### 9-342 Contact bracelet with spiral cord

adjustable elastical bracelet with woven silvered synthetic fibres, allergy-free, with 3 mm press-stud; high elastical spiral cord, 2400 mm long, 2 x 1 Mohm safety resistor, press-studs 3 mm for bracelet and 10 mm for earth wire; additionally insulated crocodile clip for terminal connection No. 9-353. (Weight: 60 g)

### 9-343 Earth wire

with 1 Mohm safety resistor, 1500 mm long, with 2 press-studs 10/10 mm, for connecting workbench pad and floor cover and connection to an earth potential; additionally insulated crocodile clip No. 9-535. (Weight: 40 g)

### 9-345 Floor cover

2000 x 1200 x 2.2 mm, **pebble grey**, with homogeneous, electrostatic conductive rear, wheelchair-proof, with 2 press-studs 10/10 mm; earth wire 4500 mm long, 1 Mohm safety resistance, with 2 press-studs 10/10 mm, (leakage resistance according to DIN IEC 61340-4-1  $R_A$ :  $10^6 - 10^7$  ohm); additionally insulated crocodile clip No. 9-353. (Weight: 7850 g)

### 9-346 Earth wire

with 1 Mohm safety resistance, 2500 mm long, mit 2 press-studs 10/10 mm, for connecting workbench pad and floor cover and connection to an earth potential; additionally crocodile clip for terminal connection No. 9-353. (Weight: 50 g)

### 9-351 ESD-handling set

consisting of:  
workbench pad, 900 x 600 x 2.2 mm, **pebble grey**, with homogeneous, electrically conductive rear, (leakage resistance to DIN IEC 61340-4-1  $R_A$ :  $10^6 - 10^7$  ohm), with 2 press-studs 10/10 mm; contact bracelet No.9-342, earth wire No. 9-343 including crocodile clip No. 9-353. (Weight: 1850 g)

### 9-353 Crocodile clip

insulated clip with banana plug connection socket and 10 mm press-stud. (Weight: 20 g)

### 9-354 ESD-handling set foldable - especially for mobile use

consisting of:  
workbench pad, 500 x 400 x 0.35 mm, **green**, electrically conductive, grained surface, (leakage resistance to DIN IEC 61340-4-1  $R_A$ : ca.  $10^8$  ohm), with 2 press-studs 10/10 mm; contact bracelet No. 9-342, earth wire No. 9-346 including crocodile clip No. 9-353. (Weight: 160 g)

### 9-355 ESD-handling set foldable - especially for mobile use

consisting of:  
workbench pad, 800 x 600 x 0.2 mm, **black**, electrically conductive, (leakage resistance to DIN IEC 61340-4-1  $R_A$  below  $10^6$  ohm); contact bracelet No. 9-342, earth wire No. 9-346 including three crocodile clips No. 9-353. (Weight: 240 g)

### 9-356 ESD-handling set foldable - especially for mobile use

consisting of:  
workbench pad with 2 patch pockets, 680 x 680 x 0.35 mm, **green**, electrically conductive, grained surface, (leakage resistance to DIN IEC 61340-4-1  $R_A$ : ca.  $10^8$  ohm), with three press-studs 10/10/10 mm; contact bracelet No. 9-342, earth wire No. 9-346 including crocodile clip No. 9-353. (Weight: 480 g)

### 9-357 Earthing module

earthing box with 2 x 10 mm press-stud inputs and 1 x 4 mm safety socket input, per input 1 Mohm safety resistance, earth wire 2000 mm, with dummy Schuko-plug. (Weight: 90 g)

### 9-359 Earth wire with dummy Schuko-plug

spiral cord 2400 mm long, 1 Mohm safety resistance, one side press-stud 10 mm, other side dummy Schuko-plug. (Weight: 90 g)

### 9-360 ESD-handling set

consisting of:  
workbench pad, **resistant to soldering tin**, 800 x 600 x 1.5 mm, **black**, from homogeneous, electrically conductive synthetic caoutchouc, slightly grained surface, (leakage resistance to DIN IEC 61340-4-1  $R_A$ :  $10^5 - 10^6$  ohm), with 2 press-studs 10/10 mm; contact bracelet No. 9-342, earth wire No. 9-343 including crocodile clip No. 9-353. (Weight: 1100 g)

### 9-361 ESD-handling set

consisting of:  
workbench pad, **resistant to soldering tin**, 800 x 600 x 2.0 mm **platinum grey**, from conductive synthetic caoutchouc, slightly grained, with homogeneous, electrically conductive black rear, (leakage resistance to DIN IEC 61340-4-1  $R_A$ :  $10^5 - 10^7$  ohm), with 2 press-studs 10/10 mm; contact bracelet No. 9-342, earth wire No. 9-343 including crocodile clip No. 9-353. (Weight: 1300 g)

## ESD COVERINGS AND ACCESSORIES

especially for EDP and cash-register

The workbench pads consist of antistatic synthetic caoutchouc, with homogeneous, conductive, black rear. The surface is slightly grained. The synthetic caoutchouc material is very wear- and heat-resistant, nonskid and lies very flat.

Technical data: material thickness 2 mm  
leakage resistance (DIN IEC 61340-4-1)  $R_{\Sigma}$ :  $10^5 - 10^7$  ohm  
time of discharge from 5000 to 50 Volt: < 2 Sec.

Colour: **platinum grey**

- 9-348 **ESD set** / pad 800 x 600 mm  
especially for cash-register, EDP-terminals  
consisting of:  
workbench pad with 1 press-stud 10 mm for the earthing connection;  
earth wire No. 9-346 including crocodile clip No. 9-353. (Weight: 1350 g)
- 9-365 **ESD set** / pad 600 x 300 mm  
especially for keyboards  
consisting of:  
workbench pad with 2 press-studs 10/10 mm for connecting the earth wire and  
the junction to the mousepad; earth wire with dummy Schuko-plug No. 9-359.  
(Weight: 550 g)
- 9-367 **ESD set** / pad 600 x 450 mm  
especially for CPU (central processing units), printer, scanner  
consisting of:  
workbench pad with 1 press-stud 10 mm for the earthing connection;  
earth wire with dummy Schuko-plug No. 9-359. (Weight: 750 g)
- 9-368 **ESD set** / pad 600 x 600 mm  
especially for CPU (central processing unit), printer, scanner  
consisting of:  
workbench pad with 1 press-stud 10 mm for the earthing connection;  
earth wire No. 9-346 including crocodile clip No. 9-353. (Weight: 930 g)



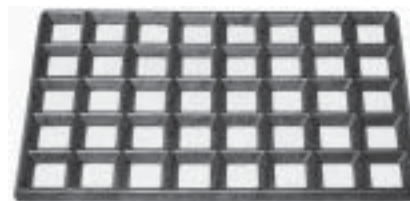
9-365

## ESD ACCESSORIES

### Grid mats made from solid rubber

repair support, in conductive execution, according to DIN 482

- 9-335 Grid mat size I, measure: 625 x 375 x 20 mm Weight: 2500 g
- 9-336 Grid mat size II, measure: 700 x 450 x 20 mm Weight: 3350 g

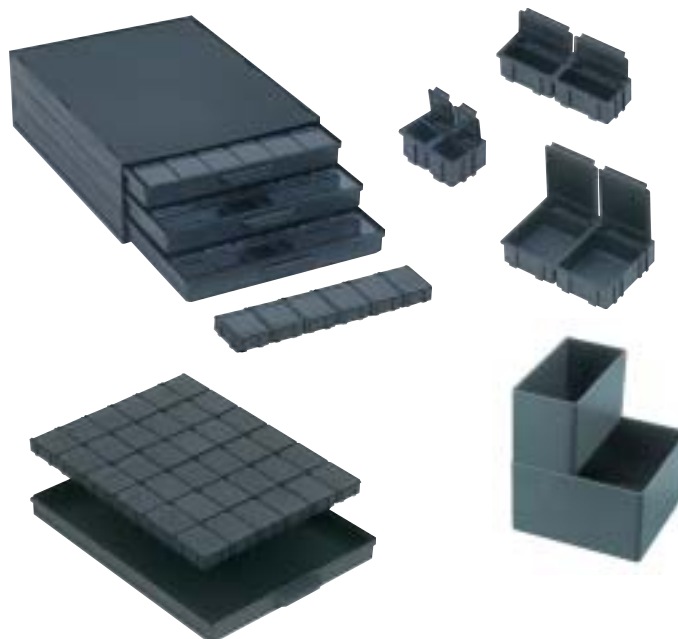


9-335

### Boxes for SMD components

from black, conductive plastic, to be fit into one another at random, hinged cover, closed tightly by spring pull, in 3 different sizes

- 9-321 SMD box 16 x 12 x 15 mm (internal dimensions) Weight: 5 g
- 9-322 SMD box 37 x 12 x 15 mm (internal dimensions) Weight: 10 g
- 9-323 SMD box 41 x 37 x 15 mm (internal dimensions) Weight: 15 g



### Cabinet for SMD boxes

9-320 from black, conductive plastic, with 3 removable drawers, each 340 x 250 x 22 mm suitable for:

Weight: 1900 g

- 432 boxes No. 9-321 ( 144 per drawer )
- 216 boxes No. 9-322 ( 72 per drawer )
- 108 boxes No. 9-323 ( 36 per drawer )

### Storage boxes

electrically conductive interchangeable containers, black

- 9-311 box 108 x 54 x 63 mm (external dimension) Weight: 40 g
- 9-312 box 108 x 108 x 63 mm (external dimension) Weight: 70 g

### Chip-container

electrically conductive, black, with lid an pin-cushion lining 5 mm thick, for pins of electrostatically endangered components

- 9-316 chip-container 118 x 32 x 14 mm (internal dimensions) Weight: 30 g
- 9-319 chip-container 54 x 25 x 14 mm (internal dimensions) Weight: 10 g

**ESD/EGB tools** please see the special sides in the article groups screwdriver, pliers, tweezers und socket wrenches resp. complete sets of conductive tools under service cases/service boxes.



## MAGNIFYING LAMPS

### Magnifying lamp with lens-cover and glare-protection

for 22 W fluorescent light source  
with ideal viewing conditions  
without excessive heat

Robust arm construction. Two spring-balanced arms with parallel movement. Springs and all moving mechanical parts built into the tubes and covered. The springs are of high-grade tempered steel calibrated to ensure perfect arm balance; with insulated parts in the joints for safety reasons. Qualified for vibrant working-places.

Technical data: Arm length: from bracket to center of lens 120 cm fully extended, reflector-Ø: 23 cm, lens-Ø: 125 mm, lens: fixed 3 diopter bi-convex, magnification: 1 : 1 3/4 or 175 % at a working-distance of 25 cm, Schuko-contact-cable 1.5 m, protection class I. Through additional lens approx. magnification of 1 : 3 3/4 or 375 % possible. Colour: pearlgrey

- 9-100 **Magnifying lamp with stand trolley and sliding bracket**
- 9-101 **Magnifying lamp with bracket (table) standard**
- 9-102 **Magnifying lamp with bracket (wall)**
- 9-103 **Magnifying lamp with bracket (screw-down mount)**
- 9-105 **Magnifying lamp with bracket (drawing-board or any slanting surface)**

All lamps will be delivered without circular fluorescent tube.

Accessories:

- 9-106 **5-feet-stand with trolley and sliding bracket**
- 9-107 **Additional lens 4 diopter, magnification 1 : 2 3/4**
- 9-108 **Additional lens 8 diopter, magnification 1 : 3 3/4**
- 9-109 **Fluorescent ring lamp 22 W, white**

### Magnifying lamp with plastic reflector

for 22 W fluorescent ring light

Good equilibrated arm construction enables maximal setting. It's easy to bring this lamp in the wanted position by the open spring-balanced arms.

Technical data: Total arm length: 105 cm, reflector-Ø 22 cm, lens-Ø 125 mm, lens: fixed 3.0 diopter bi-convex, magnification: 1 : 1 3/4 or 175 %, at a working-distance of 25 cm, Schuko-contact-cable 2.5 m, protection class I, fluorescent tube protected by prism cover. Colour: light grey

- 9-191 **Magnifying lamp with bracket (table) standard**
- 9-192 **Magnifying lamp with bracket (wall)**
- 9-193 **Magnifying lamp with bracket (screw-down mount)**
- 9-195 **Magnifying lamp with bracket (drawing-board or any slanting surface)**

All lamps will be delivered without circular fluorescent tube.

- 9-109 **Fluorescent ring lamp 22 W, white**



# MAGNIFYING LAMPS OFFICE LAMPS

## Magnifying lamp with plastic reflector

for compact fluorescent tube 9 W

Four-tube spring balanced arm from lacquered steel pipe, open chrome-plated springs, twist protection, 1.5 m cable, protection class II.

Technical data: Total arm length 96 cm, table version 60 cm, lens 150 x 60 mm, 3 diopter, magnification 1 : 1 3/4 at a working-distance of 20 cm, reflector 220 x 160 mm.

Colour: white

9-171 **Magnifying lamp with table stand**

9-172 **Magnifying lamp with bracket**

All lamps will be delivered without tubes.

Accessories:

9-179 **Fluorescent tube 9 W**



## Magnifying lamp with plastic reflector

for 40 W incandescent bulb

Four-tube spring balanced arm from lacquered steel pipe, open chrome-plated springs, twist protection, 1.5 m cable, protection class II.

Technical data: Total arm length 95 cm, lens-Ø 100 mm, 3 diopter, magnification 1 : 1 3/4 at a working-distance of 20 cm.

Colour: white

9-181 **Magnifying lamp with bracket (table) standard**

9-182 **Magnifying lamp with bracket (wall)**

9-183 **Magnifying lamp with bracket (screw-down mount)**

All lamps will be delivered without incandescent bulb.



## Office and industry lamp

for 15 W fluorescent tubes (2 pieces)

The reflector is designed to distribute a shadow-free light over a large area with a minimum of heat and glare. The two 15 W fluorescent tubes give a light output equivalent to that of a 150 W incandescent bulb. The lamp head is mounted on a heavy-duty arm with built-in springs and parts, with insulated parts in the joints, turnable into any position. Qualified for vibrant working-places, Schuko-contact-cable 1.5 m, protection class I.

Technical data: Total arm length 120 cm, reflector 48 x 10 cm.

Colour: white

9-131 **Fluorescent lamp with bracket (table) standard**

9-132 **Fluorescent lamp with bracket (wall)**

9-133 **Fluorescent lamp with bracket (screw-down mount)**

9-135 **Fluorescent lamp with bracket (drawing-board or any slanting surface)**

All lamps will be delivered without fluorescent tubes.

Accessories:

9-139 **Fluorescent tubes 15 W (2 pieces), white**



## Office lamp

for halogen lamp 15 W / 12 V base GY 6.35

Four-tube spring balanced arm from thermo lacquered steel pipe, chrome-plated steel springs, reflector with twist protection. Halogen lamp protected by security glass. Intensity of light variable in 2 steps.

Technical data: Total arm length 105 cm, reflector-Ø 90 mm, 1.8 m cable, protection class II

Colour: black

9-116 **Office lamp with bracket**

**inclusive halogen lamp 50 W**





## MAGNIFIER AND MICROSCOPE



**Professional illuminated magnifier**  
for compact fluorescent tubes 7 W (2 pieces)

This magnifier with rectangular lens permits viewing with both eyes. It is the ideal combination of light and magnifier because of two individual light sources and separate switches for individual operation. With single tube operation, three-dimensional viewing is possible. Shadow-free illumination is provided when both fluorescent tubes are operating.

A spring-balanced arm with parallel motion permits exact positioning of the magnifier making it flexible for every working situation.

Technical data: Arm length: from bracket to center of lens 60 cm Ø, reflector 15 x 29 cm, asymmetrical light distribution, lens 17 x 11 cm, 3 diopter, magnification 1 : 1 ¾ or 175 % at a working distance of 25 cm, Schuko-contact-cable 1.5 m, protection class I.  
Colour: light grey

9-121 **Professional illuminated magnifier with table bracket inclusive 2 tubes 7 W**

Accessories:

9-127 **Additional lens 4 diopter, magnification 1 : 2 ¾**

9-128 **Additional lens 8 diopter, magnification 1 : 3 ¾**

9-129 **Fluorescent tubes 7 W (2 pieces)**

### Binoskop

Stereomicroscope, tele-magnifier and binoculars in one.

The BINOSKOP is a unique optical device for stereoscopic observation of a wide field of vision. It is thus especially well suited for monitoring details of materials and assembly in SMD technology.

Additional benefits:

- upright picture, vertical and horizontal
- pupillary distance adjustable from 58 to 72 mm
- eye piece individually adjustable for left and right eye with diopter markings
- fully coated lenses, low weight: 540 g



Technical Data	Magnification from/to	Field of vision from/to	Working distance in mm
For use as stereomicroscope with attachment lens	12 x	20 - 35 mm	135 - 185
as telemagnifier	9 x	90 - 135 mm	420 - 750
as binoculars	7 x 25	166 m to 1000 m corresponds to wide angle lens	400 -

9-150 **Binoskop**

# CONTROL MIRROR

Television service mirror

A control mirror for the most exacting requirements in production and servicing of monitors and TV

Pivoting into any position

Locking in position not necessary

Free from vibration

The control mirror is designed to ensure extreme stability and reliability. Special joints (patented) enable the mirror arm to be moved easily in any desired direction.

Finish: chrome-plated guide bar, arm and joints grey lacquered. The distortion-free mirror has a plastic back and is held in a rubber profiled frame. A broken mirror can be replaced in just a few minutes.

Available on request: Front-surface mirror, evaporated with aluminium, for best image reproduction, nearly free from distortion.

9-401 **BERNSTEIN** **Control mirror with screw clamp**

9-402 **BERNSTEIN** **Control mirror with flange**

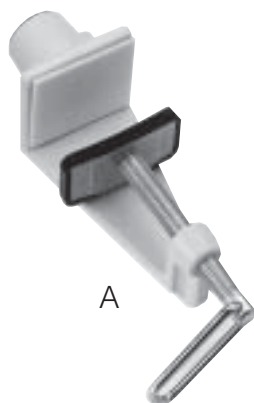
9-404 **BERNSTEIN** **Control mirror with 5-feet-stand**

Technical data:    maximum height of guide bar    500 mm  
                         maximum extension of arm        450 mm  
                         mirror                                        395 x 290 mm

Weights:            9-401 - 3.000 kg  
                         9-402 - 2.900 kg  
                         9-404 - 10.300 kg

## Types of fastenings:

- A Screw clamp
- B Flange for table or wall mounting
- C 5-feet-stand





# BERNSTEIN



## Electronic-Tools

## ESD



BERNSTEIN 6-644 ESD Germany  
non insulating  
TW 3

BERNSTEIN Germany  
1-851 Ceramic antistatic  
0.9 x 0.3

BERNSTEIN Germany  
4-021 ESD non insulating  
PH 000

anti-acid ESD  
stainless Antistatic  
BERNSTEIN  
5-052-113





# EPA 6900 ELECTRONIC SERVICE CASE



The service case made from **conductive material** for maintenance and installation tasks in **ESD protected areas** with a full assortment of special **ESD-tools**. For use at electrostatically endangered components and plants.



## EPA ELECTRONIC SERVICE CASE

The service case made from **conductive material** for maintenance and installation tasks in **ESD protected areas** with a full assortment of special ESD-tools. For use at electrostatically endangered components and plants.

6900  EPA with tool set

6915  EPA without tool set



### Description:

The body of the case, the tool trays as well as the bottom tray with adjustable partitions are made from conductive material which is **tested by German TÜV** according to **DIN EN IEC Norm 10 00 15 part 5**. The tools of this set have been tested with good results by several testing laboratories adequate to **DIN EN 61340-5-1, 61340-2-1, 61340-2-3** for work in ESD protected areas. The sturdy shells are pressed with the stable double aluminium frame.

32 tools are clearly arranged on two tool trays, one of it on both sides. The lid of the case has a pocket for documentations etc. The bottom tray allows with its partitions a clear arrangement of additional tools and instruments.

The case has two locks.

**Outside dimensions: 460 x 165 x 310 mm**

**Weight without tools: approx. 5.400 kg**

**Weight with tools: approx. 6.280 kg**

### Tool set:

No.	Description of individual tools	No.	Description of individual tools
2-101	<b>Tin knife</b> with ceramic blade, 115 mm	4-632	<b>Screwdriver</b> with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, 100 x 4.0 mm
2-265	<b>2 Test prods</b> , red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire	4-633	<b>Screwdriver</b> with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, 125 x 5.5 mm
2-620	<b>PLCC extractor</b>	4-662	<b>Cross-recess screwdriver</b> Pozidriv size 1, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 80 mm
3-654-15	<b>Side cutters EUROline-Conductive</b> , 125 mm, for hard wire up to 0.4 mm Ø, for copper wire up to 1.5 mm Ø, slim rounded head, box joint, double leaf spring, fine polished and bright burnished, conductive bicoloured hand-guard	4-663	<b>Cross-recess screwdriver</b> Pozidriv size 2, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 100 mm
3-671-15	<b>End cutters EUROline-Conductive</b> , 130 mm, for copper wire up to 0.6 mm Ø, extremely slim, straight, box joint, double leaf spring, fine polished and bright burnished, conductive bicoloured hand-guard	5-191	<b>Tweezers</b> , made from conductive and acid-resistant black plastic material, reinforced with glass fibre, 120 mm, with straight, rounded tips
3-682-15	<b>Flat nose pliers EUROline-Conductive</b> , 130 mm, extremely slim, box joint, double leaf spring, fine polished and bright burnished, conductive bicoloured hand-guard	5-192	<b>Tweezers</b> , made from conductive and acid-resistant black plastic material, reinforced with glass fibre, 120 mm, with straight, 3 mm flat-hand tips
3-133-13	<b>Side cutters</b> , 145 mm, for hard wire up to 1.25 mm Ø, for soft wire up to 2.5 mm Ø, chrome-plated, conductive black hand-guard	5-194	<b>Tweezers</b> , made from conductive and acid-resistant black plastic material, reinforced with glass fibre, 120 mm, with bent, pointed tips
3-245-13	<b>Telephone pliers</b> , 200 mm, snipe nose, with cutting edge for hard wire, chrome-plated, conductive black hand-guard	6-612	<b>Socket wrench</b> with conductive handle, blade from chrome vanadium, nickel-plated, A/F 2.0 mm
3-732-13	<b>Combination pliers</b> , 165 mm, chrome-plated, conductive black hand-guard	6-617	<b>Socket wrench</b> with conductive handle, blade from chrome vanadium, nickel-plated, A/F 4.0 mm
4-603	<b>Screwdriver</b> with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, 50 x 1.5 mm	6-621	<b>Socket wrench</b> with conductive handle, blade from chrome vanadium, nickel-plated, A/F 5.5 mm
4-605	<b>Screwdriver</b> with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, 60 x 2.0 mm	6-659	<b>TORX-screwdriver</b> T 4, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-606	<b>Screwdriver</b> with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, 60 x 2.5 mm	6-661	<b>TORX-screwdriver</b> T 5, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-621	<b>Cross-recess screwdriver</b> size 000, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip	6-662	<b>TORX-screwdriver</b> T 6, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-622	<b>Cross-recess screwdriver</b> size 00, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip	6-663	<b>TORX-screwdriver</b> T 7, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-623	<b>Cross-recess screwdriver</b> size 0, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip	6-665 L	<b>TORX-screwdriver</b> T 9 with hole, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
		7-422	<b>ESD brush</b> , bristles width 20 mm

### To complete the set we recommend:

9-316/5	<b>5 Chip-Container</b> , conductive box with lid, black, internal dimensions: 118 x 32 x 14 mm	6-675	<b>Extra long TORX-screwdriver</b> T 10 with hole, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 300 mm
9-356	<b>ESD-Handling-Set</b> , foldable, with contact bracelet and earth wire	6-676 L	<b>Extra long TORX-screwdriver</b> T 15 with hole, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 300 mm
4-643	<b>Extra long screwdriver</b> with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, 300 x 5.5 mm	6-677 L	<b>Extra long TORX-screwdriver</b> T 20 with hole, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 300 mm
4-656	<b>Extra long cross-recess screwdriver</b> PH size 1, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 300 mm		
4-657	<b>Extra long cross-recess screwdriver</b> PH size 2, with conductive special-square pattern handle, blade from chrome vanadium, chrome-plated, with black tip, blade length 300 mm		

## ELECTRONIC-SERVICE TOOL SETS

The tool sets for mobile use at electrostatically endangered components



### 2220 **BERNSTEIN** SERVICE-SET ANTISTATIC with tool set

2221 Case with zip fastener, without tools

#### Description:

Elegant zipper case, made from **conductive** black imitation leather and **conductive** pockets for 12 ESD-tools and foldable ESD-workbench pad with accessories.

**Outside dimensions: 320 x 250 x 50 mm (when closed)**

**Weight with tools: approx. 0.950 kg**

#### Tool set:

No.	Description of individual tools
2-620	<b>PLCC-extractor</b>
3-601-13	<b>Side cutters</b> , 120 mm, for hard wire up to 0.4 mm Ø, for soft wire up to 1.0 mm Ø, bright steel-polished, box joint, double leaf spring, with conductive black hand-guard
3-632-13	<b>Flat nose pliers</b> , 120 mm, plain jaws, bright steel-polished, box joint, double leaf spring, with conductive black hand-guard
3-633-13	<b>Snipe nose pliers</b> , 120 mm, plain jaws, bright steel-polished, box joint, double leaf spring, with conductive black hand-guard
4-601	<b>Screwdriver</b> with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, 50 x 0.8 mm
4-605	<b>Screwdriver</b> with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, 60 x 2.0 mm
4-606	<b>Screwdriver</b> with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, 60 x 2.5 mm
4-621	<b>Cross-recess screwdriver</b> size 000, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip



No.	Description of individual tools
4-622	<b>Cross-recess screwdriver</b> size 00, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-623	<b>Cross-recess screwdriver</b> size 0, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
5-191	<b>Tweezers</b> , made from conductive plastic material, reinforced with glass fibre, 120 mm, with straight, rounded tips
5-192	<b>Tweezers</b> , made from conductive plastic material, reinforced with glass fibre, 120 mm, with straight, 3 mm flat-hand tips
9-354	<b>ESD-handling-set</b> , consisting of: foldable green workbench pad (surface resistance according to DIN 53482: approx. 10 <sup>8</sup> ohm), 500 x 400 x 0.35 mm, contact bracelet 9-342, earth wire 2500 mm long with 1 Mohm safety resistor

### 2300 **BERNSTEIN** ESD/EGB Service-Set with tools



#### Description:

The foldable green portfolio at the same time serves as an electrically **conductive** workbench pad of 680 x 680 x 0.35 mm. The surface resistance according to DIN 53482 is approx. 10<sup>8</sup> ohm.

The workbench pad has 3 press-stud receptacles for connecting the contact bracelet and the earth wire.

With 2 additional press-buttons the pad may be closed as tool bag.

The 2 patch pockets carry the contact bracelet and the earth wire.

Furthermore 16 conductive tools are placed in pockets, ready to hand.

**Outside dimensions: 330 x 240 x 20 mm (when closed)**

**Weight with tools: approx. 0.850 kg**

#### Tool set:

No.	Description of individual tools
2-166	<b>Glass fibre contact cleaner</b> , with rotary mechanism, plastic casing
2-620	<b>PLCC-extractor</b>
3-601-13	<b>Side cutters</b> , 120 mm, for hard wire up to 0.4 mm Ø, for soft wire up to 1.0 mm Ø, bright steel-polished, box joint, double leaf spring, with conductive black hand-guard
3-633-13	<b>Snipe nose pliers</b> , 120 mm, plain jaws, bright steel-polished, box joint, double leaf spring, with conductive black hand-guard
4-601	<b>Screwdriver</b> with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip, 50 x 0.8 mm
4-605	<b>Screwdriver</b> with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip, 60 x 2.0 mm
4-606	<b>Screwdriver</b> with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip, 60 x 2.5 mm
4-621	<b>Cross-recess screwdriver</b> size 000, with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
4-622	<b>Cross-recess screwdriver</b> size 00, with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
4-623	<b>Cross-recess screwdriver</b> size 0, with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip

No.	Description of individual tools
5-191	<b>Tweezers</b> made from conductive, black plastic material, reinforced with glass fibre, 120 mm, with rounded tips
5-194	<b>Tweezers</b> made from conductive, black plastic material, reinforced with glass fibre, 120 mm with bent, pointed tips
6-616	<b>Socket wrench</b> with conductive handle, blade made from chrome vanadium, nickel-plated, A/F 3.5 mm
6-661	<b>TORX screwdriver</b> T 5, with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
6-664	<b>TORX screwdriver</b> T 8, with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
6-666 L	<b>TORX screwdriver</b> T10 with bore-hole in the tip, with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip
9-342	<b>Contact bracelet</b> cloth armband, allergy-free, edges and surface insulating, spiral cord, 1 Mohm safety resistor, combined press-stud and terminal connection, to DIN EN 100 015/1
9-346	<b>Earth wire</b> with 1 Mohm safety resistor, 2500 mm long, with terminal connection resp. press-stud, for connecting workbench pad and floor cover and connection to an earth potential





## ELECTRONIC-SERVICE TOOL SETS

Special service sets for the maintenance and repairing of mobile phones and other high sensitive IT-Instruments

The tools are clearly arranged in cases made from **conductive** black imitation leather, with zip fastener.

2251 Case with zip fastener, without tools

**Outside dimensions: 190 x 135 x 35 mm (when closed)**

### 2250 **BERNSTEIN** CARAT with tool set

9-piece set **conductive** tools from the series EUROline-Conductive to meet the most exacting standards.

**Weight with tools: approx. 0.360 kg**



### 2270 **BERNSTEIN** ACCENT with tool set

9-piece set **conductive** tools with bright steel polished pliers

**Weight with tools: approx. 0.360 kg**

#### Tool set:

No.	Description of individual tools
3-601-13	<b>Side cutters</b> , 120 mm, for hard wire up to 0.4 mm Ø, for soft wire up to 1.0 mm Ø, bright steel-polished, box joint, double leaf spring, with conductive black hand-guard
3-633-13	<b>Snipe nose pliers</b> , 120 mm, plain jaws, bright steel-polished, box joint, double leaf spring, with conductive black hand-guard
4-601	<b>Screwdriver</b> with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, 50 x 0.8 mm
4-603	<b>Screwdriver</b> with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, 50 x 1.5 mm
4-621	<b>Cross-recess screwdriver</b> size 000, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-623	<b>Cross-recess screwdriver</b> size 0, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
5-191	<b>Tweezers</b> , made from conductive and acid-resistant black plastic material, reinforced with glassfibre, 120 mm, with straight, rounded tips
6-661	<b>TORX-screwdriver</b> T 5, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
6-663	<b>TORX-screwdriver</b> T 7, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip



#### Tool set:

No.	Description of individual tools
3-672-15	<b>End cutters EUROline-Conductive</b> , 130 mm, for copper wire up to 0.6 mm Ø, cutting edge 20° angular, box joint, double leaf spring, fine polished and bright burnished, conductive bicoloured hand-guard
3-683-15	<b>Snipe nose pliers EUROline-Conductive</b> , 130 mm, plain jaws, box joint, double leaf spring, fine polished and bright burnished, conductive bicoloured hand-guard
4-601	<b>Screwdriver</b> with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, 50 x 0.8 mm
4-603	<b>Screwdriver</b> with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, 50 x 1.5 mm
4-621	<b>Cross-recess screwdriver</b> size 000, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
4-623	<b>Cross-recess screwdriver</b> size 0, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
5-191	<b>Tweezers</b> , made from conductive and acid-resistant black plastic material, reinforced with glassfibre, 120 mm, with straight, rounded tips
6-661	<b>TORX-screwdriver</b> T 5, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip
6-663	<b>TORX-screwdriver</b> T 7, with conductive handle, blade from chrome vanadium, chrome-plated, with black tip



### 3-680 **BERNSTEIN** EUROline-Conductive set of pliers

4-piece set **conductive** pliers from the series EUROline-Conductive to meet highest quality standards


**Weight with tools: approx. 0.390 kg**

#### Tool set:

No.	Description of individual tools
3-651-15	<b>Mini side cutters EUROline-Conductive</b> , 120 mm, without sideface, for soft wire up to 0.6 mm Ø, copper wire up to 1.2 mm Ø, box joint, double leaf spring, fine polished and bright burnished, conductive bicoloured hand-guard
3-672-15	<b>End cutters EUROline-Conductive</b> , 130 mm, for copper wire up to 0.6 mm Ø, cutting edge 20° angular, box joint, double leaf spring, fine polished and bright burnished, conductive bicoloured hand-guard
3-682-15	<b>Flat nose pliers EUROline-Conductive</b> , 130 mm, plain jaws, finish as before
3-683-15	<b>Snipe nose pliers EUROline-Conductive</b> , 130 mm, plain jaws, finish as before



## SPECIAL ELECTRONIC PLIERS EUROline-Conductive

Box joint 

Double leaf spring

High quality steel

Fine polished and bright burnished, for dazzle free working

Ergonomically formed bicoloured hand-guard from

**conductive** anti-slide material

The pliers of this program have been tested with good results by several testing laboratories adequate to **DIN EN 61340-5-1, 61340-2-1, 61340-2-3** for work in ESD protected areas

## CUTTING PLIERS

No.	Length		Finish	cutting capacity mm Ø			Weight g
	mm	inches		Copper-wire	Soft wire	Hard wire	

### Mini side cutters EUROline-Conductive

with very slim, rounded head for finest operations

3-651-15	120	4 3/4	without side face	1.2	0.6	-	55
3-651-15 DR	120	4 3/4	without side face, with retaining spring	1.2	0.6	-	55

### Mini side cutters EUROline-Conductive

with very slim, pointed head for finest operations

3-652-15	120	4 3/4	without side face	1.0	0.6	-	55
3-653-15	120	4 3/4	without side face, with special flat cutting edge	1.0	0.6	-	55

### Side cutters EUROline-Conductive

with slim, rounded head, available with or without side face

3-654-15	125	5	<b>with side face</b>	1.5	1.0	0.4	60
3-655-15	125	5	<b>without side face</b>	1.5	1.0	-	60

### Side cutters EUROline-Conductive

with slim, pointed head, available with or without side face

3-656-15	125	5	<b>with side face</b>	1.2	1.0	0.4	60
3-657-15	125	5	<b>without side face</b>	1.2	1.0	-	60

### End cutters EUROline-Conductive

extremely slim, without side face, for precision work at points difficult to reach

3-671-15	130	5 1/8	straight	0.6	-	-	60
3-672-15	130	5 1/8	cutting edge 20° angular	0.6	-	-	60

### Top cutters EUROline-Conductive

extremely slim, without side face, head 45° angular, for flush cutting directly in front of and behind the components.

3-673-15	130	5 1/8	cutting edge inside	0.6	-	-	60
3-674-15	130	5 1/8	cutting edge outside	0.6	-	-	60

### Oblique top cutters EUROline-Conductive

cutting plane 29° angular, flush cutting for horizontal and vertical use

3-675-15	115	4 1/2	<b>without side face</b>	1.2	1.0	0.4	65
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## SPECIAL ELECTRONIC PLIERS EUROline-Conductive

### CUTTING PLIERS

No.	Length		Finish	cutting capacity mm Ø			Weight g
	mm	inches		Medium hard wire	Hard wire	Piano-wire	

#### Carbide mini side cutters EUROline-Conductive

for continuous heavy work, **with inserted carbide cutting edges**,  
**only** for tough nickel and electrode wires

3-661-15	120	4 3/4	with side face very slim rounded head	1.2	1.0	0.6	60
3-663-15	120	4 3/4	with side face very slim pointed head with special flat cutting edge	0.6	0.5	-	60

#### Carbide oblique top cutters EUROline-Conductive

for continuous heavy work, **with inserted carbide cutting edges**,  
cutting plane 29° angular, for horizontal and vertical use,  
**only** for tough nickel and electrode wires

3-667-15	115	4 1/2	without side face	0.6	0.5	0.3	65
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#### Glas fibre mini side cutters EUROline-Conductive

for continuous heavy work, **with inserted carbide cutting edges**,  
with special side face, **for cutting glass fibre only**, max. Ø 2.0 mm

3-665-15	120	4 3/4	very slim rounded head				60
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### ROUND, FLAT, SNIPE NOSE PLIERS

No.	Length		Finish	Weight g
	mm	inches		

#### Round nose pliers EUROline-Conductive

extremely slim

3-681-15	130	5 1/8	short plain jaws	60
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#### Flat nose pliers EUROline-Conductive

extremely slim

3-682-15	130	5 1/8	short plain jaws	60
3-688-15	130	5 1/8	short, <b>ultra slim</b> plain jaws	60

#### Snipe nose pliers EUROline-Conductive

extremely slim

3-683-15	130	5 1/8	short plain jaws	55
3-685-15	140	5 1/2	long plain jaws	65
3-686-15	140	5 1/2	long serrated jaws	65
3-687-15	130	5 1/8	short plain jaws, <b>ultra slim pointed</b> for precise handling of tiny components	60



3-661-15



3-663-15



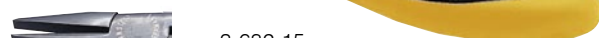
3-667-15



3-665-15



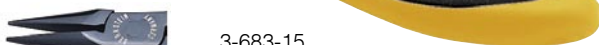
3-681-15



3-682-15



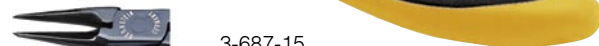
3-688-15



3-683-15



3-685-15



3-687-15

## SPECIAL ESD ELECTRONIC PLIERS

Box joint   
 Double leaf spring  
 Bright steel-polished  
 With **conductive** black handguard



## CUTTING PLIERS

No.	Length		Finish	Cutting capacity mm Ø		Weight g
	mm	inches		Soft wire	Hard wire	

### Side cutters

with slim, rounded head, available with or without side face

3-601-13	120	4 3/4	<b>with side face</b>	1.0	0.4	70
3-602-13	120	4 3/4	<b>without side face</b>	1.0	-	70

### Side cutters

with slim, pointed head, available with or without side face

3-603-13	120	4 3/4	<b>with side face</b>	0.8	-	65
3-604-13	120	4 3/4	<b>without side face</b>	0.8	-	65

### End cutters

with angular tips and oblique cutting edge,  
 for flush cutting, for soft wire only

3-606-13	120	4 3/4	<b>without side face</b>	0.4	-	55
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## ROUND, FLAT AND SNIPE NOSE PLIERS

No.	article	Length		Finish	Weight g
		mm	inches		
3-631-13	Round nose pliers	120	4 3/4	plain jaws	55
3-632-13	Flat nose pliers	120	4 3/4	plain jaws	55
3-633-13	Snipe nose pliers	120	4 3/4	plain jaws	55
3-634-13	Snipe nose pliers, angular	120	4 3/4	plain jaws	55

## SETS OF ELECTRONIC PLIERS

### 3-650 Set of conductive pliers, 5 pieces

in a practical table support from antistatic material

#### Tool set:

Weight: 320 g

No.	Description of individual tools
3-601-13	<b>Side cutters</b> , 120 mm, for hard wire up to 0.4 mm Ø, for soft wire up to 1.0 mm Ø
3-631-13	<b>Round nose pliers</b> , 120 mm, plain jaws
3-632-13	<b>Flat nose pliers</b> , 120 mm, plain jaws
3-633-13	<b>Snipe nose pliers</b> , 120 mm, plain jaws
3-634-13	<b>Snipe nose pliers</b> , angular, 120 mm, plain jaws

### 3-630 Set of conductive pliers, 3 pieces

in a wallet of recycable nylon

#### Tool set:

Weight: 240 g

No.	Description of individual tools
3-601-13	<b>Side cutters</b> , 120 mm, for hard wire up to 0.4 mm Ø, for soft wire up to 1.0 mm Ø
3-632-13	<b>Flat nose pliers</b> , 120 mm, plain jaws
3-633-13	<b>Snipe nose pliers</b> , 120 mm, plain jaws



3-601-13



3-603-13



3-606-13



3-631-13



3-632-13



3-633-13



3-634-13



## SPECIAL ESD ELECTRONIC PLIERS

Lap joint 

Double leaf spring

Bright polished – chrome-plated

With **conductive** black handguard



## CUTTING PLIERS

No.	Length		Finish	Cutting capacity mm Ø		Weight g
	mm	inches		Soft wire	Hard wire	

### Side cutters

with slim, rounded head

3-901-13	125	5	<b>with side face</b>	1.0	0.4	75
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### Side cutters

with slim, pointed head and special flat cutting edge, for soft wire only

3-902-13	125	5	<b>without side face</b>	0.8	-	75
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### Top cutters

with 3 mm wide cutting edge, jaw length 20 mm, for flush cutting, for soft wire only

3-905-13	135	5 1/2	<b>without side face</b>	0.8	-	80
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### End cutters

with angular tips and oblique cutting edge, for flush cutting, for soft wire only

3-906-13	135	5 1/2	<b>without side face</b>	0.8		80
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## ROUND, FLAT AND SNIPE NOSE PLIERS

### Round nose pliers

3-931-13	130	5 1/8	plain jaws			80
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### Flat nose pliers

3-932-13	130	5 1/8	plain jaws			80
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### Snipe nose pliers

3-933-13	130	5 1/8	plain jaws			80
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## SIDE CUTTERS, TELEPHONE AND COMBINATION PLIERS

Lap joint, bright polished – chrome-plated

With **conductive** black handguard

### Side cutters

swedish design

3-133-13	145	5 3/4	chrome-plated	2.5	1.25	160
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**Telephone pliers** snipe nose, long straight serrated jaws, with cutting edges for hard wire

3-245-13	200	8	chrome-plated			190
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### Combination pliers

with wire cutter, for hard wire

3-732-13	165	6 1/2	chrome-plated			220
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3-901-13



3-902-13



3-905-13



3-906-13



3-931-13



3-932-13



3-933-13



3-133-13



3-245-13



3-732-13



3-901-7



3-902-7



3-905-7



3-906-7



3-932-7



3-933-7



3-191-17



3-192-17

## ESD SPECIAL ELECTRONIC PLIERS

Lap joint  
Black burnished, double leaf spring  
With **conductive** black dip insulation



## CUTTING PLIERS

No.	Length		Finish	Cutting capacity mm Ø		Weight g
	mm	inches		Soft wire	Hard wire	
<b>Side cutters</b> with slim, rounded head						
3-901-7	120	4 3/4	with side face	1.0	0.4	70

<b>Side cutters</b> with slim, pointed head, special flat cutting edge, for soft wire only						
3-902-7	120	4 3/4	without side face	0.8	-	70

<b>Top cutters</b> with 3 mm wide cutting edge, jaw length 20 mm, for flush cutting, for soft wire only						
3-905-7	125	5	without side face	0.8	-	70

<b>End cutters</b> with angular tips and oblique cutting edge, for flush cutting, for soft wire only						
3-906-7	125	5	without side face	0.8	-	75

## FLAT-SNIPE NOSE PLIERS

No.	Length		Finish	Weight g
	mm	inches		
<b>Flat nose pliers</b>				
3-932-7	120	4 3/4	short, plain jaws	75

<b>Snipe nose pliers</b>				
3-933-7	125	5	short, plain jaws	70

## ESD PRINTPLIERS

With openingspring and **conductive** black, soft handguard

No.	Length		Finish	Cutting capacity mm Ø		Weight g
	mm	inches		Soft wire	Hard wire	
<b>Electronic side cutters</b> with pointed head, for flush cutting						
3-191-17	130	5 1/8	without side face	1.0	-	70

<b>Stripping side cutters</b> with pointed head, for flush cutting						
3-192-17	125	5	without side face	0.8	-	60



## ESD INTERCHANGEABLE SCREWDRIVER-SET

for special service

Practical tool rolls made from conductive material are equipped with double-ended screwdriver-blades and ESD handle with brass clamping sleeve, suitable for hexagon blades of A / F 4 mm

**blade:** chrome vanadium, hexagon material, A / F 4 x 120 mm, hardened over its full length, matt chrome-plated, black tip

### 4-920 9-piece interchangeable screwdriver set with ESD-handle

Contents: ESD-interchangeable handle  
 3 blades widths 1.5 / 3.0 mm, 2.0 / 3.5 mm, 2.5 / 4.0 mm  
 2 cross-recess blades PH 000 / PH 00, PH 0 / PH 1  
 3 TORX blades T 5 / T 6, T 7 L / T 8 L, T 9 L / T 10 L ("L" with bore hole)

Weight: 170 g

### 4-960 11-piece interchangeable screwdriver set with ESD-handle

Contents: ESD-interchangeable handle  
 2 blades widths 1.5 / 3.0 mm, 2.0 / 4.0 mm,  
 2 cross-recess blades PH 000 / PH 00, PH 0 / PH 1  
 4 TORX blades T 3 / T 4, T 5 / T 6, T 7 L / T 8 L, T 9 L / T 10 L ("L" with bore hole)  
 2 Tri Wing / Four Wing blades TW 1 / FW 1, TW 2 / FW 2

Weight: 170 g



4-960

## ESD SCREWDRIVERS

with special-square pattern handle from impact-resistant, **conductive** black plastic

**Blade:** chrome vanadium, hardened over its full length, matt chrome-plated, with black tip

**Handle:** impact-resistant, **conductive**, black plastic, electrostatic discharge according to DIN EN 100015/1



### Screwdrivers

No.	Blade length mm	Blade width mm	Blade thickness mm	Handle size mm	Weight
4-632	100	4.0	0.8	92 x 21	46 g
4-633	125	5.5	1.0	100 x 23	75 g
4-643	<b>300</b>	5.5	1.2	100 x 23	108 g

### Cross-recess screwdrivers

No.	Size	Blade length mm	Blade Ø mm	Handle size mm	Weight
4-652	1	80	4.5	92 x 21	49 g
4-653	2	100	6.0	100 x 23	78 g

### extra long screwdrivers

4-656	1	<b>300</b>	4.5	100 x 23	87 g
4-657	2	<b>300</b>	6.0	100 x 23	120 g

### Cross-recess screwdrivers Pozidriv

4-662	1	80	4.5	92 x 21	49 g
4-663	2	100	6.0	100 x 23	78 g

### Tri Wing screwdrivers

4-641	TW 0	70	4.5	92 x 21	42 g
4-642	TW 1	70	4.5	92 x 21	42 g
4-643	TW 2	70	4.5	92 x 21	42 g
4-644	TW 3	70	4.5	92 x 21	42 g
4-645	TW 4	70	6.0	92 x 21	53 g
4-646	TW 5	70	6.0	92 x 21	54 g



## ESD ELECTRONICS SCREWDRIVERS



with slim, ergonomically formed handles from black **conductive** plastic. The swivel top guarantees a precise working without exhaustion.

**Blade:** chrome vanadium, hardened over its full length, chrome-plated, with black tip

**Handle:** impact-resistant **conductive**, black plastic, electrostatic discharge according to DIN EN 100015/1

### Screwdrivers

No.	Blade length mm	Blade width mm	Blade thickness mm	Blade Ø mm	Handle length mm	Weight
4-601	50	0.8	0.20	2.5	90	12 g
4-602	50	1.2	0.25	2.5	90	12 g
4-603	50	1.5	0.30	2.5	90	12 g
4-604	50	1.8	0.30	2.5	90	12 g
4-605	60	2.0	0.40	2.5	90	12 g
4-606	60	2.5	0.40	2.5	90	12 g
4-607	60	3.0	0.50	3.0	90	14 g

### Cross-recess Screwdrivers

No.	Size	Blade length mm	Blade Ø mm	Handle length mm	Weight
4-621	000	50	2.5	90	12 g
4-622	00	50	2.5	90	12 g
4-623	0	50	3.0	90	14 g

### 4-610 6-piece screwdriver set

in a practical table support from **conductive** material

Contents: 6 screwdrivers No. 4-601, 4-603, 4-604, 4-605, 4-606, 4-607

Weight: 141 g

### 4-620 6-piece screwdriver and cross-recess screwdriver set

in a practical table support from **conductive** material

Contents: 3 screwdrivers No. 4-602, 4-605, 4-607  
3 cross-recess screwdrivers No. 4-621, 4-622, 4-623

Weight: 145 g

### Wrench keys

No.	A/F mm	Blade length mm	Handle length mm	Weight
6-631	0.7	50	90	11 g
6-632	0.9	50	90	12 g
6-633	1.3	50	90	12 g
6-634	1.5	50	90	12 g
6-635	2.0	60	90	12 g
6-636	2.5	60	90	14 g

### 6-630 6-piece wrench key set

in a practical support from **conductive** material

Contents: 6 wrench keys No. 6-631, 6-632, 6-633, 6-634, 6-635, 6-636

Weight: 142 g



4-610



6-630

## ESD SPECIAL-TOOLS



with slim, ergonomically formed handles from black, **conductive** plastic. The swivel top guarantees a precise working without exhaustion.

**Blade:** chrome vanadium, hardened over its full length, chrome-plated, black tip, "L" with bore-hole in the tip

**Handle:** impact-resistant, **conductive** black plastic, electrostatic discharge according to DIN EN 100015/1



### TORX-screwdrivers



No.	Size	Blade length mm	for metric thread	Handle length mm	Weight
6-656	T 1	50	M 0.9	90	10 g
6-657	T 2	50	M 1.0-1.2	90	10 g
6-658	T 3	50	M 1.2-1.4	90	10 g
6-659	T 4	50	M 1.4-1.6	90	12 g
6-661	T 5	50	M 1.6-2	90	12 g
6-662	T 6	50	M 2	90	16 g
6-663	T 7	50	M 2.5	90	13 g
6-664	T 8	60	M 2.5	90	14 g
6-665 L	T 9	60	M 3	90	19 g
6-666 L	T 10	60	M 3-3.5	90	20 g

### extra long TORX screwdrivers with conductive special-square pattern handle

No.	Size	Blade length mm	for metric thread	Handle length mm	Weight
6-675 L	T 10	<b>300</b>	M 3-3.5	92 x 21	60 g
6-676 L	T 15	<b>300</b>	M 3.5-4	92 x 21	65 g
6-677 L	T 20	<b>300</b>	M 4-5	100 x 21	80 g



6-660



### 6-660 6-piece TORX-screwdriver-set,

in a practical support from **conductive** material

Contents: 6 TORX-screwdrivers No. 6-661, 6-662, 6-663, 6-664, 6-665, 6-666

Weight: 163 g

### Socket wrenches



No.	A/F mm	Blade length mm	Handle length mm	Weight
6-611	1.5	70	90	14 g
6-612	2.0	70	90	14 g
6-613	2.5	70	90	14 g
6-614	3.0	70	90	14 g
6-615	3.2	70	90	14 g
6-616	3.5	70	90	15 g
6-617	4.0	70	90	15 g
6-618	4.5	70	90	16 g
6-619	5.0	70	90	16 g
6-621	5.5	70	90	20 g



### 6-610 6-piece socket wrenches

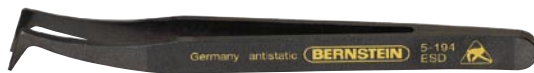
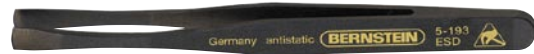
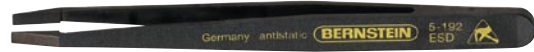
in a practical support from **conductive** material

Contents: 6 Socket wrenches No. 6-612, 6-614, 6-617, 6-618, 6-619, 6-621

Weight: 156 g



6-610



5-190



## ESD TWEEZERS

made from **antistatic**, black plastic material, reinforced with glass fibre, conductive and acid-resistant

No.	Length		Finish	Weight
	mm	inches		
5-191	120	4 3/4"	straight, rounded tips	5 g
5-192	120	4 3/4"	straight, 3 mm flat-hand tips, grip surface offset	4 g
5-193	120	4 3/4"	straight, 6 mm flat, and wide tips	5 g
5-194	120	4 3/4"	bent, pointed tips	5 g
5-195	120	4 3/4"	straight, pointed tips, grip surface offset	4 g

### 5-190 6-piece set of ESD tweezers

in a practical table support from **conductive** material

Contents: 5 tweezers made from conductive black plastic material, No. 5-191, 5-192, 5-193, 5-194, 5-195  
1 tweezers with ceramic tips No. 5-095

Weight: 120 g

### 5-090 5-piece set of ESD tweezers

in a practical table support from **conductive** material

Contents: 5 tweezers made from conductive black plastic material, No. 5-191, 5-192, 5-193, 5-194, 5-195

Weight: 94 g

## TWEEZERS FROM CERAMIC

Ceramic tweezers meet highest standards due to their excellent mechanical, thermic and electrical features, non magnetic, antistatic, acid-resistant and alkaliproof, solder-repellent and heat-resistant.

### Ceramic tweezers (each seperately in a plastic case)

5-081	130	5 1/8"	straight, pointed	15 g
5-082	130	5 1/8"	straight, microscopic-pointed	16 g

### Ceramic-tipped tweezers (each seperately in a plastic case)

5-095	130	5 1/8"	especially slim and pointed	6 g
5-096	130	5 1/8"	slim, 2mm flat tips	6 g

## TITAN TWEEZERS

Tweezers made from Titan are for highest demands, have a light weight, immunity to corrosion, even to aggressive acids, they are antimagnetic, antibacterial, solder-repellent, and non-reflective.

The melting point is 1677°C.

5-031	110	4 3/8"	matt-stainless, sharply pointed	9 g
5-035	120	4 3/8"	matt-stainless, sharply pointed	9 g
5-036	145	5 3/4"	matt-stainless, straight - round - wide tips with fine serration	15 g
5-037	150	6 "	matt-stainless, fine bent tips	15 g

### 5-030 3-piece set of electronic tweezers from titan

in a wallet of recycable nylon

Contents: Nr. 5-031, 5-036, 5-037

Weight: 60 g





## SPECIAL-TWEEZERS FOR THE SMD-TECHNIQUE

high precision tweezers from special steel  
 stainless – matt finish – anti-magnetic – acid-resisting  
**– on request with ESD coating (-13)**

No.	Length		Finish	Weight
	mm	inches		
5-049	110	4 3/8"	straight, very sharply pointed	12 g
5-051	115	4 1/2"	straight pointed	15 g
5-051-13	115	4 1/2"	as above with ESD coating	15 g
5-052	110	4 3/8"	bent, very sharply pointed	13 g
5-052-13	110	4 3/8"	as above with ESD coating	13 g
5-053	110	4 3/8"	obliquely angled, very sharply pointed	13 g
5-053-13	110	4 3/8"	as above with ESD coating	13 g
5-054	120	4 3/4"	sickle-shape-curved, very sharply pointed	16 g
5-055	120	4 3/4"	sickle-shaped, very sharply pointed	15 g
5-056	120	4 3/4"	slightly bent, very sharply pointed	15 g
5-057	120	4 3/4"	self-locking, straight-pointed	13 g
5-058	120	4 3/4"	self-locking, bent, pointed	13 g
5-059	120	4 3/4"	flat, rounded tips, 2.0 mm width	15 g
5-061	115	4 1/2"	bent, flat rounded tips,	16 g
5-062	115	4 1/2"	35° angled, 2.0 mm width, with gripping cavity Ø 0.8 mm	16 g
5-063	115	4 1/2"	35° angled, 3.5 mm width, with gripping cavity Ø 0.8 mm	16 g
5-065	120	4 3/4"	straight, 3.0 mm width with gripping cavity Ø 0.8 mm	16 g
5-066	120	4 3/4"	30° angled, 2.5 mm width	15 g
5-067	120	4 3/4"	tip 45° angled, 2.0 mm width	15 g
5-068	120	4 3/4"	tip angled, 1.6 mm width	13 g
5-071	85	3 3/8"	thin, straight-pointed	8 g
5-073	140	5 1/2"	long-thin, straight, very sharply pointed	13 g
5-075	140	5 1/2"	straight, very sharply pointed, grip surface offset	13 g
5-076	120	4 3/4"	rigid, straight, pointed	19 g
5-077	130	5 1/8"	round, tapering, pointed	16 g
5-078	130	5 1/8"	tapering, chisel, 1.0 mm width	16 g

### 5-050 6-piece set of special tweezers for the SMD-technique in a wallet of recycable nylon

Contents: 6 high quality ESD tweezers made from special steel

No. 5-051, 5-052, 5-054  
 5-058, 5-061, 5-062

Weight: 120 g





## TOOLS FROM CERAMIC

Antistatic – antimagnetic – electrically insulating

Material: zirconium oxide

### Adjusting screwdrivers

with blades from ceramic and conductive handle No.: 1-851 – 1-876

Bits to use with screwdriver handle No.: 1-751 – 1-776

No.	Length mm	No.	Length mm	Blade tip mm	Weight g
1-851	110	1-751	32	0.90 x 0.30	10 / 1
1-852	110	1-752	32	1.30 x 0.30	10 / 1
1-853	110	1-753	32	1.50 x 0.30	10 / 1
1-854	110	1-754	32	1.80 x 0.30	10 / 1
1-855	110	1-755	32	1.95 x 0.35	10 / 1
1-856	110	1-756	32	2.50 x 0.70	10 / 1
1-857	110	1-757	32	3.00 x 0.30	10 / 1
1-858	110	1-758	32	3.00 x 0.70	10 / 1
1-861	110	1-761	32	1.95 SW	10 / 1
1-862	110	1-762	32	2.45 SW	10 / 1
1-863	110	1-763	32	2.60 SW	10 / 1
1-864	110	1-764	32	KS Gr. 000	10 / 1
1-865	110	1-765	32	KS Gr. 00	10 / 1
1-866	110	1-766	32	KS Gr. 0	10 / 1
1-867	110	1-767	32	2.40 x 0.80	10 / 1
1-873	110	1-773	32	0.70 x 1.40	10 / 1
1-874	110	1-774	32	3.00 x 1.00	10 / 1
1-875	110	1-775	32	1.20 x 1.20	10 / 1
1-876	110	1-776	32	1.30 x 0.40	10 / 1

### 1-750 Ceramic adjusting screwdrivers set

13-piece set in a box with hinged lid

Weight: 90 g

Contents: double-ended handle No. 1-735,  
12 ceramic bits, length 32 mm  
No. 1-751, 1-752, 1-753, 1-744, 1-755, 1-756,  
1-757, 1-761, 1-762, 1-765, 1-766, 1-767

### Tin knife with ceramic blade

for working at printed circuit boards, 105 mm long,  
handle from **conductive** black plastic

No. 2-101 Tin knife with ceramic blade

Weight: 9 g

### Ceramic blade scissors

for cutting e.g. aramid yarns and fiber optic cables, antistatic and  
electrically insulating, black plastic handles reinforced with glass-fibre

No.	mm	Length inches	Finish	Weight
5-353	125	5 "	blade length 45 mm	30 g

## SPECIAL TOOLS

### ESD Brushes

with **conductive** handle, natural bristles with **conductive** fibres

No.	Finish	Bristles	Total length mm	Weight
7-421	round	6 mm Ø	150	7 g
7-422	flat	20 mm wide	150	26 g

### Lightning Tweezers

Nickel-plated steel-tweezers with **LED light**

The lightning tweezers is focussing the light to the working area at the  
tweezers tips enabling optimal visibility e.g. for positioning of smallest  
components without additional light source.

Power Supply: 2 x 3 Voltage Lithium Batteries

Function: when pressing the tweezers jaws the light will be switched on

No.	Length mm	Length inches	Finish	Weight
5-171	120	4 3/4 "	straight, pointed, finely serrated	39 g
5-172	120	4 3/4 "	with fine bent tips	39 g

