

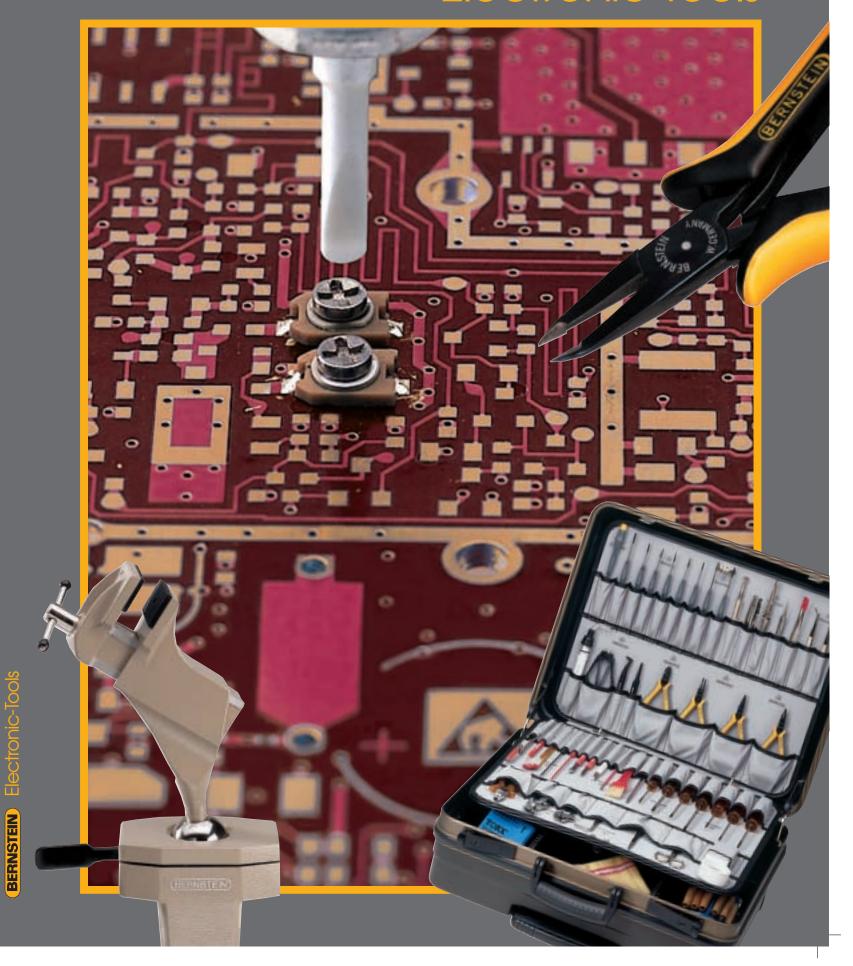
BERNSTEIN

HIGH TECH Tools





Electronic-Tools





NDEX





page 3 - 41

DEMAGNETIZING THROTLES
ADJUSTING AND SPECIAL TOOLS,

page 43 - 57

















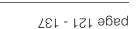








We reserve the right to make technical modifications without prior notice for all articles of this catalogue.



page 109 - 119

70r - 76 əgsq

bage 85 - 95

page 59 - 83

PLIERS

MEASURING TOOLS

LWEEZERS, FILES,

SCEMDIMERS

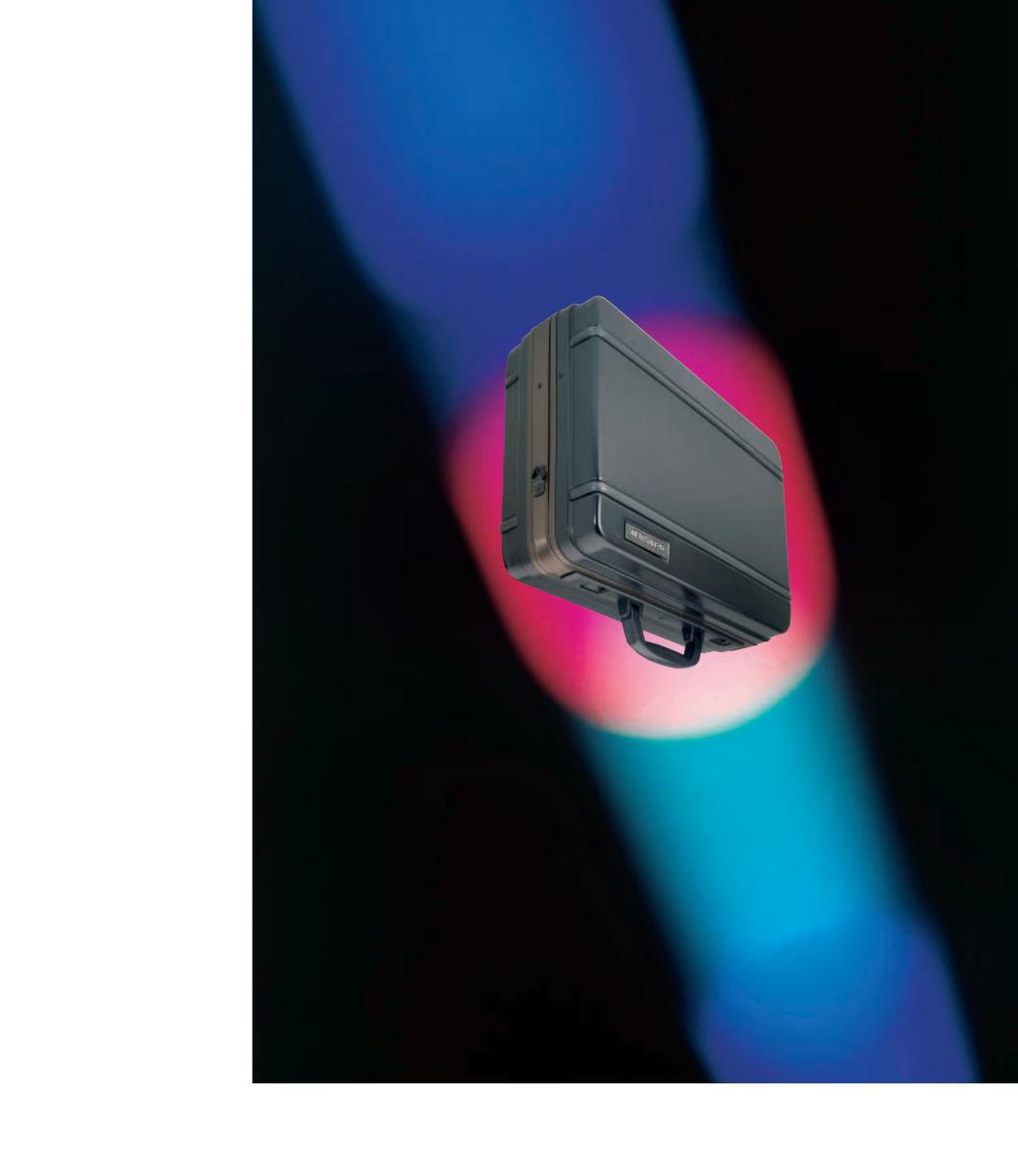
106X-SCBEWDBIVERS, HAND-TOOLS, MJENCH KEAS' SBECIPT MJENCHES'

SCISSORS, KNIVES, STRIPPING TOOLS

MBENCHES' SOCKEL MBENCHES'









Shoulder strap Water pump pliers, 120 mm, chrome-plated 3-262 Plastic box, with hinged lid and adjustable compartments, $200\times130\times30$ mm Snipe nose pliets, 120 mm, angular, box joint, compression spring, chrome-plated, with transparent insulation 9-325 3-481-2 To complete the set we recommend: chrome-plated, with transparent insulation Micro flat nose pliers, 120 mm, extremely slim, box joint, 3-446-2 Special scissors, for cutting sheet-metal and wires, with sertation, extremely slim, 110 mm, nickel-plated plated, with transparent insulation extremely slim head, box joint, compression spring, chrome-Watchmaker's tweezers, 110 mm, stainless, sharply-pointed 181-9 "Slimline" side cutters, 115 mm, for soft wire up to 1.0 mm, 3-127-2 **Side cutters,** 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 Engineer's tweezers made from steel, with bent tips, 150 mm, Z01-9 Component tweezers, nickel-plated, with insulated jaws, for easy insertion and removal of plug-in translators of various sizes 3-109-2 900-9 PLCC extractor, for easy removal of plug-in PLCC's 2-620 Ketaining screwdriver, 80 x 4 mm 904-4 Electronics cross-recess screwdriver as above, size 0 4-283 IC tweezers, nickel-plated, 125 mm, for gripping, inserting and 109-2 and swivel top, blade chrome vanadium, chrome-plated, with black tip, 40 x 2.0 mm, size $00\,$ Repair mirror, 21 mm Ø 2-275 2 Test prods, red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire Electronics cross-recess screwdriver with special handle 4-282 2-265 Electronics screwdriver as above, blade 50 x 3.0 mm 991-7 Glass fibre contact cleaner 2-166 Electronics screwdriver as above, blade $40 \times 2.0 \; \text{mm}$ 691-4 Claw-type gripper, nickel-plated brass, with 4 wire claws, small 2-199 blade chrome vanadium, chrome-plated, with black tip, Tin knife, with plastic handle, 115 mm 721-2 Electronics screwdriver with special handle and swivel top, 4-162 Desoldering lever, with plastic handle, slotted at one end Engineer's screwdriver with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, $100\,\mathrm{x}$ 4 mm 2-126 Adjusting screwdriver, 120 x 2 mm S E01-4 1-995 Description of individual tools Description of individual tools .oN .oN :tes looT

Weight without tools: approx. 2.000 kg Outside dimensions: 400 x 320 x 90 mm

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

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. 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

Weight with tools: approx. 2.700 kg

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

Description:

1015 (BERNSTEIN) TOP without tool set



The small attractive service case with special design

10b 1000 EFECTRONIC SERVICE CASE





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:

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

4 adjustable partitions allow a flexible division. For security purposes the case is equipped with 2 key-locks. documents, pencils etc.. The bottom contains a stable plastic insert of 75 mm depth for spare parts, measuring instruments and soldering irons. 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

Weight with tools: approx. 4.300 kg Weight without tools: approx. 3.300 kg Outside dimensions: 340 x 360 x 180 mm

:tes looT

		Cross-recess screwdriver, Supadriv/Pozidriv, size 1, with special square pattern BERNSTEIN handle, blade made from chrome vanadium, nickel-plated, with black tip	Z7Z-Þ
2.5, 3.0, 4.0, 5.0, 5.5 and 6.0 mm Dust brush	7-425	Cross-recess screwdriver, Supadriv/Pozidriv, size 0, with special square pattern BERNSTEIN handle, blade made from chrome vanadium, nickel-plated, with black tip	172-p
Set of wrench keys, 8 pieces, in plastic wallet, 1.5, 2.0,	6-820	blade made from chrome vanadium, chrome-plated, 100 x 4 mm	170-1
Adjustable wrench, jaws opening 0 - 12 mm, total length 100 m	177-9	Engineer's screwdriver with special square BERNSTEIN handle, blade made from chrome wanding chrome-plated 100 x A mm	S E01-4
Socket wrench, C.V. nickel-plated, 7.0 mm A/F, without handle	402-9	spring, chrome-plated, with transparent insulation	0 007 7
Socket wrench, C.V. nickel-plated, 5.5 mm A/F, without handle	8-202	Snipe nose pliers, 120 mm, angular, box joint, compression	3-181-2
Universal blade knife, with adjustable blade	919-9	chrome-plated, with transparent insulation	70110
serrations, extremely slim, 110 mm, nickel-plated		Micro flat nose pliers, 120 mm, extremely slim, box joint,	3-446-2
Special scissors, for cutting sheet-metal and wires, with	106-3	Side cutters, 120 mm, chrome-plated, for hard wire up to 0.8 mm, for soft wire up to 1.5 mm, with BERNSTEINIT insulation	3-131-1
Wire scraper, for wires 0.6 mm Ø, interchangeable cutter	181-3	with transparent insulation	3-131-1
Engineer's tweezers made from steel, with bent tips, 150 mm, nickel-plated	Z01-9	extremely slim head, box joint, compression spring, chrome-plated,	
insertion and removal of plug-in transistors of various sizes	201 3	"Slimline" side cutters, 115 mm, for soft wire up to 1.0 mm,	3-127-2
Component tweezers, nickel-plated, with insulated jaws, for ear	900-9	PLCC extractor, for easy removal of plug-in PLCC's	2-620
Plastic handle, 6 mm, for socket wrenches	977-4	and removing IC's	
Retaining screwdriver, 110 x 4 mm	Z07-7	IC tweezers, nickel-plated, 125 mm, for gripping, inserting	Z-601
with 4 interchangeable blades, 1.5, 2.0, 2.5 and 3.0 mm		Repair mirror, 21 mm Ø	2-275
Watchmaker's screwdriver, nickel-plated,	1-391	flexible, blade made from 1 mm steel wire	
Cross-recess watchmaker's screwdriver, size 00	998-7	2 Test prods, red and black, extremely slim, pointed and	2-265
Voltage tester, blade 60 x 3 mm	4-343 VDE	Contact cleaner, made from glass fibre	2-166
blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm		Spring hook, nickel-plated and insulated, 175 mm	2-132
Screwdriver for headless screws, with plastic handle,	118-4	Tin knife, with plastic handle, 115 mm	721-2
mm 8.1 x 04 bated-plated 40 x 1.8 mm		Desoldering lever, slotted at one end, with plastic handle	2-126
Miniature screwdriver, with plastic handle,	108-4	Adjusting screwdriver, blade 40 x 4 mm	1-152
Description of individual tools	.oN	Description of individual tools	.oN



TELE 1100 SERVICE CASE



Weight with tools: approx. 4.200 kg



1100 **BERNSTEIN** TELE with tool set

Outside dimensions: 460 x 350 x 170 mm

1115 (BERNSTEIN) TELE without tool set

Description:

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

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

Weight without tools: approx. 3.600 kg

Description of individual tools Description of individual tools :tes looT

S 801-4	Engineer's screwdriver with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4 mm		
1-157-5	Combination pliers, 135 mm, chrome-plated, with BERNSTEINIT insulation	7-425	Dust brush
	with BERNSTEINIT insulation	6-204	Socket wrench, nickel-plated, 7.0 mm A/F, without handle
3-235-1	Telephone pliers with wire cutters, 145 mm, chrome-plated,	8-202	Socket wrench, nickel-plated, 5.5 mm A/F, without handle
	with transparent insulation	192-9	Contact file, 150 mm
3-126-2	Side cutters, 120 mm, for soft wire up to 1.0 mm, chrome-plated,	121-3	Steel tweezers, straight, round, pointed, 120 mm, nickel-plated
2-265-2	Test prod, black, as above		nickel-plated
	blade made from 1 mm steel wire	Z01-9	Engineer's tweezers, made from steel, with bent tips, 150 mm
2-265-1	Test prod, red, especially thin, pointed and flexible,	944-ħ	Plastic handle, 6 mm, for socket wrenches
721-2	Tin knife, with plastic handle, 115 mm	4-301	Miniature screwdriver, blade nickel-plated, 40 x 1.8 mm
	from BERNSTEINIT		plack tip
1-906	Engineer's mirror with handle, made entirely	4-272	Cross-recess screwdriver, as above, Supadriv/Pozidriv, size
1-322	Adjusting key, with bronze insert at both ends 2.0 x 1.0 mm		black tip
1-336	Adjusting key, with bronze insert at both ends 1.7 x 0.7 mm	17S-4	Cross-recess screwdriver, as above, Supadriv/Pozidriv, size (

Dust brush	7-426	black tip	
TORX-screwdriver, as above, size T 15	7 996-9	Cross-recess screwdriver, as above, Supadriv/Pozidriv, size 0,	172-4
TORX-screwdriver, as above, size T 10	7 996-9	blade 300 mm, black tip	
TORX-screwdriver, as above, size T 8	896-9	Cross-recess screwdriver, as above, size 1,	4-227
made from chrome vanadium, chrome-plated, black tip, size T 7		Screwdriver, as above, 260 x 4.5 mm, black tip	4-223
TORX-screwdriver, with special square BERNSTEIN handle, blad	796-9	Screwdriver, as above, 260 x 3.0 mm, black tip	4-222
Socket wrench, nickel-plated, 7.0 mm A/F, without handle	6-204	blade made from chrome vanadium, chrome-plated, 100 x 4 mm	0.001.1
Socket wrench, nickel-plated, 5.5 mm A/F, without handle	8-202	Engineer's screwdriver with special square BERNSTEIN handle,	S 801-4
110 mm, nickel-plated		Combination pliers, 135 mm, chrome-plated, with BERNSTEINIT insulation	1-187-8
Special sheet-metal scissors, serrated, extremely slim,	108-9	with BERNSTEINIT insulation	, , , , ,
Contact file, 150 mm	192-9	Telephone pliers with wire cutters, 145 mm, chrome-plated,	3-236-1
Steel tweezers, straight, round, pointed, 120 mm, nickel-plated	121-3	with transparent insulation	
Heat dissipating tweezers, 165 mm, nickel-plated	911-9	Side cutters, 120 mm, for soft wire up to 1.0 mm, chrome-plated,	3-126-2
Engineer's tweezers, made from steel, with bent tips, 150 mm, nickel-plated	201-9	IC tweezers for gripping, inserting and removing, especially suitable for narrow components, nickel-plated	5-601
Component tweezers, nickel-plated, with insulated jaws	900-9	Test prod, black, as above	2-265-2
Plastic handle, 6 mm, for socket wrenches	977-4	blade made from 1 mm steel wire	
Retaining screwdriver, 295 x 4 mm	t-40t	Test prod, red, especially thin, pointed and flexible,	2-265-1
Cross-recess watchmaker's screwdriver, size 1	4-368	Contact-cleaner, made from glass fibre	2-166
Cross-recess watchmaker's screwdriver, size 0	798-4	Spring hook, nickel-plated and insulated, 175 mm	2-132
Cross-recess watchmaker's screwdriver, size 00	998-7	Tin knife, with plastic handle, 115 mm	721-2
Voltage tester, blade 60 x 3 mm	4-343 ADE	from BERNSTEINIT	
Miniature screwdriver, blade nickel-plated, 40 x 1.8 mm	4-301	Engineer's mirror with handle, made entirely	1-909
black tip		Adjusting key, with bronze insert at both ends 2.0 x 1.0 mm	1-322
Cross-recess screwdriver, as above, Supadriv/Pozidriv, size 1,	4-272	Mm Γ.0 x Γ.1 sbnə doth endert at born ende γ.7 x σ.7 mm	1-336

Description of individual tools

Tool set:

Mm 071 x 025 x 034 :snoisnamib abisiuO

Weight without tools: approx. 3.600 kg **Description:** The case is equivalent to No. 1100, only the perforated plate has additional 18 tools, all together 38 tools.

1150 **BERNSTEIN** TELE with tool set



Description of individual tools

Weight with tools: approx. 5.000 kg

with the special tool set

LEFE 1190 SEBNICE CYSE



Carded soldering iron 30 W, 220 V, with plastic handle	971-8 107-8	lete the set we recommend: Plastic box with hinged lid and adjustable compartments, $20\times30~\text{mm}$	_ 6-352
Socket wrench as above, blade 100×7 mm A/F	977-4 97-4	Water pump pliers, 120 mm, chrome-plated, Combination pliers, 160 mm, chrome-plated, with BERNSTEINIT insulation	3-285-1
110 mm, nickel-plated. Socket wrench with plastic handle, blade made from chrome vanadium, nickel-plated, 100 x 5.5 mm A/F	991-9	Mikro pointed pliers, 120 mm, extremely light and slim, box joint, chrome-plated, with transparent insulation Mater pliers, 130 mm, ebrome plated	3-426-2
Contact file Special sheet-metal scissors, serrated, extremely slim,	2-304 2-304	Telephone pliers, 145 mm, with wire cutter, chrome-plated with BERNSTEINIT insulation	3-236-1
Steel tweezers with bent tips, 150 mm, nickel-plated Steel tweezers, straight - flat - wide, 145 mm, nickel-plated	701-3 711-3	with BERNSTEINIT insulation Engineer's pliers, 185 mm, bent snipe nose, box joint, chrome-plated, with BERNSTEINIT insulation	3-215-1
Transistor tweezers, nickel-plated, with insulation jaws, for easy removal and insertion of plug-in transistors of various sizes	900-9	chrome-plated, with transparent insulation Side-cutters, 145 mm, for hard wire, chrome-plated,	3-133-1
interchangeable blades, 1.5, 2.0, 2.5 and 3.0 mm Screw holder, 110 x 4 mm	Z07-7	Slimline side cutters, 115 mm, for soft wire up to 1.0 mm, extremely narrow head, box joint, compression spring,	3-127-2
Voltage tester, blade 60x3 mm Watchmaker's screwdriver, nickel-plated, with 4	4-343 ADE	Engineer's mirror with handle, made entirely from BERNSTEINIT 2 test prods, red and black, especially thin, pointed and flexible, blade made from 1 mm steel wire	1-909
nickel-plated, 40 x 1.8 mm Screwdriver for grub screws with plastic handle, blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm	4-311	1-306 Adjusting screwdriver, blade 80 mm long, with bronze insert 1.7 x 0.7 mm	
Cross-recess screwdriver as above, size 1 Miniature screwdriver with plastic handle, blade	4-262	1-182 Adjusting key, hexagonal jaw at one end, 2.6 mm A/F, opposite end rectangular, 3.0 mm A/F	
Engineer's screwdriver as above, blade 200x3 mm Cross-recess screwdriver with plastic handle, blade made from chrome vanadium, nickel-plated, size 0	4-261	1-181 Adjusting key, hexagonal jaw at one end, 1.85 mm A/F opposite end rectangular, 1.5 mm A/F	
Engineer's screwdriver as above, blade 150x5 mm Engineer's screwdriver as above, blade 150x5 mm Engineer's screwdriver as above, blade 200x3 mm	S 501-4 S 401-4	1-152 Adjusting screwdriver, blade 40x4.0 mm 1-153 Adjusting screwdriver, blade 130x2.0 mm 1-155 Adjusting screwdriver, blade 130x3.5 mm	
Engineer's screwdriver with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 75×3.5 mm	S 201-4	7-piece adjusting screwdriver set in plastic case. Contents: 1-151 Adjusting screwdriver, blade ADX3.0 mm	1-180

:jes looT

.oN

Weight with tools: approx. 6.200 kg Weight without tools: approx. 4.500 kg Outside dimensions: 435 x 375 x 155 mm

The box has 2 locks.

Two longitudinal dividers and 7 partitions supplied as standard.

Description of individual tools

The bottom of the box can be divided up to suit individual requirements. Grid spacings of 10 mm permit adjustment to any size. A thick foamed plastic pad on the back of the cover plate protects delicate equipment in the bottom of the box from being damaged.

Tools, technical documents, soldering iron (naturally also when hot) etc. can be housed in a clear arrangement in the lid and on the hinged Box made from distortion-free aluminium, dustproof and rainproof. Box lining made from black, grained Aero-Fiber.

Description:

1215 (BERNSTEIN) PRESTIGE without tool set

1200 **BERNSTEIN** PRESTIGE with tool set





Description of individual tools

Multi-purpose aluminium box for the discerning service enaineer

bbeslige 1500 Sebaice Box





BBAXIS 1750 ELECTRONIC SERVICE CASE

Flat tool case with special styling

1755 **BERNSTEIN** PRAXIS without tool set 1750 **BERNSTEIN** PRAXIS with tool set

The case has 2 locks. hot soldering iron. with dividers of differing sizes and a special holder for a The bottom of the case has a deep-drawn tray, 30 mm high, A document compartment is provided on the back of one tool tray. The tools are clearly arranged in 2 pivoting tool trays.

Plastic box with hinged lid and adjustable compartments, $200\times130\times30$ mm

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

Weight with tools: approx. 4.200 kg

Weight without tools: approx. 3.000 kg

Outside dimensions: 435 x 325 x 3b mm

:tes looT

9-326

To complete the set we recommend:

Description of individual tools	.oN	Description of individual tools	.oN
Voltage tester, blade 60x3 mm	4-343 ADE	Adjusting screwdriver, blade 40 x 3 mm	1-151
Offset screwdriver, chrome vanadium, nickel-plated,	198-4	Desoldering lever, slotted at one end, with plastic handle Spring hook, nickel-plated and insulated, 175 mm	5-135 5-135
mm 8 x 00 f	330 V	2 Test prods, red and black, extremely slim, pointed and	5-265
Cross-recess watchmaker's screwdriver, size 00	998-7	flexible, blade made from 1 mm steel wire	007
Watchmaker's screwdriver, nickel-plated, with 4 interchangeable blades, 1.5, 2.0, 2.5, 3.0 mm	1-361	Slimline side cutters, 115 mm, for soft wire up to 1 mm,	2-127-2
Screw holder, 110x4 mm	Z07-7	extremely slim head, box joint, compression spring,	
Plastic handle, 6 mm, for socket-spanner	977-4	chrome-plated, with transparent insulation	1 101 0
Component tweezers, nickel-plated, with insulated Jaws, for easy	900-9	Side cutters, 120 mm, for hard wire up to 0.8 mm, for soft wire up to 1.5 mm, chrome-plated, with BERNSTEINIT	1-181-8
insertion and removal of plug-in transistors of various sizes		noitslueni	
Engineer's tweezers, made from steel, with bent tips, 150 mm, nickel-plated	Z01-9	Micro flat-nose pliers, 120 mm, box joint, chrome-plated, with transparent insulation	2-446-2
Heat dissipating tweezers, 165 mm, nickel-plated, for use when soldering transistors, gold-bonded diodes etc.	911-9	Micro snipe-nose pliers, 120 mm, oval-pointed design,	3-499-5
Engineer's tweezers, made from steel, straight-flat-wide,	Z11-9	box joint, chrome-plated, with transparent insulation Miniature water-pump pliers, 120 mm, chrome-plated	3-565
145 mm, nickel-plated		Engineer's screwdriver with special square pattern	d-102 S
Needle files , set of 6 pieces Special scissors for cutting sheet-metal and wires, with serration	2-301 9-301	BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 75 x 3.5 mm	
extremely slim, 110 mm, nickel-plated		Engineer's screwdriver as above, blade 100 x 4 mm	S 801-t
Cable knife	109-9	Engineer's screwdriver as above, blade 150x5 mm	S 701-t
Socket spanner, without handle, 5.5 mm, made from chrome vanadium, nickel-plated	9-505	Cross-recess screwdriver, Supadriv/Pozidriv, size 0, with special square pattern BERNSTEIN handle, blade	1-271
Socket spanner as above, 7.0 mm	402-9	made from chrome vanadium, nickel-plated, with black tip	
Set of allen hex sockets, 8 pieces, in plastic wallet, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 5.5, 6.0 mm	028-9	Cross-recess screwdriver, Supadriv/Pozidriv, as above, size 1	772-1
Dust brush	7-426	Miniature screwdriver, with plastic handle, blade nickel-plated, 40 x 1.8 mm	t-301
Roller tape measure, 1 ${\sf m}$	909-7	nactor places, 103 Meets acrews, with plastic handle, blade carewing from chrome vanadium, nickel-plated, 80 x 2.8 mm	118-4



The practical service case for the electronics engineer ELECTRONICA 2000 SERVICE SET





2000 (BERNSTEIN) ELECTRONICA with tool set

and slim, chrome-plated, with transparent insulation Micro round nose pliers, 120 mm, box joint, extremely light

cutting edge for soft wire up to 1.0 mm, box joint,

Contact cleaner, brush-shaped, with wire bristles

Desoldering bar, slotted at one end, nickel-plated,

Tin knife with pointed, sharp blade, high quality steel,

End cutters for electronics, 160 mm, with angular tip and

pointed head, box joint, compression spring, chrome-plated,

Micro side cutters, \$110\$ mm, for soft wire up to 0.8 mm, \$slim,

chrome-plated, with transparent insulation

for cutting circuit paths and for burring

blade made from hard special plastic

Adjusting screwdriver, blade $80 \times 2.0 \text{ mm}$,

Adjusting screwdriver, blade 80 x 2.5 mm,

Adjusting screwdriver, blade 155 x 2.8 mm,

Adjusting screwdriver, blade 155 x 2.8 mm, with bronze insert 2.5 x 0.5 mm

with transparent insulation

insulated, with plastic handle

mm 6.0 x 1.1 traeni asnord diw

mm Y.U x Y.f frasni əznord ifiw

Description of individual tools

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

3-165-2

3-125-2

2-165

721-2

2-156

1-671

1-305

1-304

1-303

:fee looT

Description:

.oN

2024 (BERNSTEIN) ELECTRONICA with tool set and ERSA Multitip



165 mm, nickel-plated

mm 041, essis

mm 8.f x 04

911-9

201-9

900-9

4-311

4-301

4-102 S

3-499-5

3-445-2

soldering iron 15 W, 220 V (No. 8-135)

.oN

block, leaflets and technical documents. There is also a transparent window for visiting cards or calendars and a pocket for small parts. 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 Elegant case with zip fastener made from black imitation leather with pockets for tools and notes. The case, which contains 18 clearly arranged

for use when soldering transistors, gold-bonded diodes etc.,

Heat dissipating tweezers, made from steel, the flat, wide

easy removal and insertion of plug-in transistors of various $\textbf{Transistor tweezers,} \ \ \text{nickel-plated,} \ \ \text{with insulated jaws;} \ \ \text{for}$

Screwdriver for grub screws, with plastic handle, blade made

Miniature screwdriver with plastic handle, blade nickel-plated,

extremely light and slim, chrome-plated, with transparent

Micro flat nose pliets, 120 mm, box joint, extremely light and slim, chrome-plated, with transparent insulation

Micro pointed pliers, 120 mm, snipe nose, box joint,

Description of individual tools

blade made from chrome vanadium, chrome-plated, 75 x 3.5 mm Engineer's screwdriver with special square BERNSTEIN handle,

Weight with tools: approx. 1.050 kg

Steel tweezers with bent tips, 150 mm, nickel-plated

from chrome vanadium, nickel-plated, 80 x 2.8 mm

points of the tweezers are narrow and provided with copper Jaws,

2001 Case with zip fastener, without tools



SJOO LEFENISION SELVICE CASE

The service tool case for the quick service



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

2101 Case with zip fastener, without tools

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. Description:

Weight with tools: approx. 1.500 kg

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

:tes looT

Steel tweezers, straight, flat, wide, 145 mm, nickel-plated Contact file Dust brush Carded solder, approx. 1 m ERSA Soldering iron 30 W, 220 V	971-8 107-8 977-2 197-9 111-9	polished, with BERUSTEINIT insulation Water pump pliers, 120 mm, chrome-plated, polished Engineer's screwdriver with special square BERUSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4.0 mm	S 201-7 3-265
insulated, blade 60 x 3.0 mm Retaining screwdriver, nickel-plated, blade 110 x 4.0 mm	207-7	Side cutters, 130 mm, for hard wire up to 1.0 mm, chrome-plated, polished, with BERNSTEINIT insulation Telephone pliers with wire cutter, 145 mm, chrome-plated,	3-132-1
Screwdriver for grub screws, with plastic handle, blade made from chrome vanadium, nickel-plated, 80×2.8 mm Voltage tester according to VDE, nickel-plated, fully	⊄-343ΛDE ⊄-311	Tin knife with pointed, sharp blade, high quality steel, for cuttling circuit paths and for burning Tapping hammer from BERNSTEINIT, 170 mm long	2-127
with black tip, size 0 Ministure screwdriver with plastic handle, blade nickel-plated, $40\times1.8~\text{mm}$	4-301	square = 1.5 mm A/F blade Engineer's mirror with extending handle, made entirely from BERNSTEINIT	606-1
150 x 5.0 mm Cross recess screwdriver with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated,	4-255	Adjusting screwdriver, blade 190 x 3.0 mm A/F and Double-ended adjusting key with hexagon = 1.85 mm A/F and	181-1 181-1
Engineer's screwdriver with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated,	S 701-7	Adjusting screwdriver, blade 130 x 2.0 mm Adjusting screwdriver, blade 130 x 2.0 mm	1-151
Description of individual tools	.oN	Description of individual tools	.oN

oss-recess screwdriver with conductive handle, blade from come vanadium, chrome-plated, with black tip, size 00 oss-recess screwdriver with conductive handle, blade from conservecess screwdriver with conductive handle, blade from rome vanadium, chrome-plated, with black tip, size 0 in glassfibre, 120 mm, with straight, rounded tips in glassfibre, 120 mm, with straight, rounded tips in glassfibre, 120 mm, with straight, nunded tips in glassfibre, 120 mm, with straight, 3 mm flat-hand tips in gable, on workbench pad (surface resistance according DIM 53482; approx. 10° ohm), 500 x 400 x 0.35 mm, contact scelet 9-342, earth wire 2500 mm long with 1 Mohm safety sistor
foldable antistatic workbench pad with accessories. Weight with tools: approx. 0.950 kg
Squents

BEBUSTEIN

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

Elegant, black zipper case, with wine red lining and transparent pockets for 12 tools and a foldable antistatic workbench pad with accessories.

.oN

Description of individual tools

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

Description of individual tools

:tes looT

		chrome vanadium, chrome-plated, with black tip, size 000	
		Cross-recess screwdriver with conductive handle, blade from	4-621
resistor		Screwdriver with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, $60 \times 2.5 \text{mm}$	909-†
to DIM 53482: approx. 106 ohm), 500 x 400 x 0.35 mm, contact bracelet 9-342, earth wire 2500 mm long with 1 Mohm safety		Screwdriver with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, $60 \times 2.0 \text{mm}$	909-†
ESD handling set, consisting of: foldable, green workbench pad (surface resistance according	1 98-6	Screwdriver with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, $50 \times 0.8 \mathrm{mm}$	L09-₩
Tweezers, made from conductive plastic material, reinforced with glassfibre, 120 mm, with straight, 3 mm flat-hand tips	261-9	Snipe nose pliers, 125 mm, steel-polished, box joint, double leat spring, with conductive black hand-guard	81-889-8
Tweezers, made from conductive plastic material, reinforced with glassfibre, 120 mm, with straight, rounded tips	161-9	Flat nose pliers, 125 mm, steel-polished, box joint, double leat spring, with conductive black hand-guard	3-632-13
Cross-recess screwdriver with conductive handle, blade from chrome vanadium, chrome-plated, with black tip, size 0	t-623	wire up to 1.0 mm, steel-polished, box joint, double leat spring, with conductive black hand-guard	
chrome vanadium, chrome-plated, with black tip, size 00		Side cutters, 125 mm, for hard wire up to 0.4 mm, for soft	81-109-8
Cross-recess screwdriver with conductive handle, blade from	4-622	PLCC extractor	2-620

Description of individual tools	.oN	Description of individual tools	.oN
Tweezers made from conductive, black plastic material,	161-9	Glass fibre contact cleaner, with rotary mechanism,	2-166
reinforced with glass fibre, 120 mm, with rounded tips		plastic casing	300 0
Tweezers made from conductive, black plastic material, reinforced with glass fibre, 120 mm, with bent, pointed tips	7 61-9	PLCC-extractor	3-601-13
Socket wrench with conductive handle, blade made from chrome vanadium, nickel-plated, A/F 3.5 mm	919-9	Side cutters, 125 mm, for hard wire up to 0.4 mm, for soft wire up to 1.0 mm, steel-polished, box joint, double leat spring, with conductive black hand-guard	3-601-13
TORX screwdriver with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip, T 5	199-9	Snipe nose pliers, 125 mm, steel-polished, box joint, double leaf spring, with conductive black hand-guard	81-889-8
TORX screwdriver with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip, T8	1 99-9	Screwdriver with conductive handle, blade made from chrome vanadium, with black tip,	109-1
TORX screwdriver with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip, T 10	7 999-9	50 x 0.8 mm Screwdriver with conductive handle, blade made	909-1
	0.00	from chrome vanadium, with black tip, 60 x 2.0 mm	
Contact bracelet cloth similar throughly-free, edges and surface insulating, spiral coot, 1 Mohm safety resistor, combined press-stud and terminal connection, to DIV EV 100 015/1	8-345	Screwdriver with conductive handle, blade made from chrome vanadium, with black tip, 60 x 2.5 mm	909-7
Earth wire	978-6	Cross-recess screwdriver with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip, size 000	129-4
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	0.00	Cross-recess screwdriver with conductive handle, blade made from chrome vanadium, chrome-plated, with black tip, size 00	7-622
		Cross-recess screwdriver with conductive handle, blade made from chrome vanadium, chrome-plated,	4-623

Tool set:

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

with black tip, size 0

Weight with tools: approx. 0.850 kg

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.

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 DIM 53482 is approx. 108 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 bad.

2300 **BEHNZIEIN ESD/EGB** Service set with tools



Special tool set for repair and maintenance of electrostatically endangered components

E2D/ECB 5300 SELVICE SEL







2251 Case with zip fastener, without tools

2250 (BERNSTEIN) CARAT with tool set

9-piece set conductive tools from the series EUROline-Conductive,

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

The tools are clearly arranged in handy black imitation leather cases with zip fastener and velvet grey lining.

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



with bright-burnished, fine-polished pliers and bi-coloured conductive hand-guard, to meet the most exacting standards.



 $\textbf{TORX-Screwdriver} \ \ \textbf{T.7,} \\ \text{with conductive handle, chrome vanadium, chrome-plated, with black tip} \\$

made from conductive and acid-resistant black plastic, glassfibre

with conductive handle, chrome vanadium, chrome-plated with conductive handle, chrome vanadium, chrome-plated Cross-recess screwdriver, size 0,

with conductive handle, chrome vanadium, chrome-plated,

120 mm, for hard wire up to 0.4 mm and soft wire up to 1.0 mm Snipe nose pliers, 120 mm, plain jaws Screwdriver for slotted screws,

ctive handle, chrome vanadium, chrome-plated,

TORX-Screwdriver T 5,

blade 50 x 1.5 mm

mm 8.0 x 0d absid

Cross-recess screwdriver, size 000,

Screwdriver for slotted screws,

Description of individual tools

Tweezers

hrome vanadium, chrome-plated, with black tip

with conductive handle, chrome vanadium, chrome-plated, with black tip TORX-Screwdriver T 7, £99-9 ductive handle, chrome vanadium, chrome-plated, with black tip 199-9 made from conductive and acid-resistant black plastic, glassfibre reinforced Tweezers 161-9 with conductive handle, chrome vanadium, chrome-plated with conductive handle, chrome vanadium, chrome-plated Cross-recess acrewdriver, size 0, Cross-recess screwdriver, size 000, 4-621 mm 3.1 x 03 with conductive handle, chrome vanadium, chrome-plated, blade Screwdriver for slotted screws 609-4 ith conductive handle, chrome vanadium, chrome-plated, blade Screwdriver for slotted screws 109-1 130 mm, plain jaws, fine polished - bright burnished End cutters EUROline-Conductive, 130 mm, for copper wire up to 0.6 mm, fine polished - bright burnished Snipe nose pliers EUROline-Conductive, 3-683-15 9L-Z/9-E

Description of individual tools

Tool set:

299-9

199-9

4-623

4-621

£09-t

Tool set:

Weight with tools: approx. 0.360 g

2260 (BERNSTEIN) SELECT with tool set

Screwdriver for slotted screws, chrome vanadium, blade 40 x 1.0 mm, chrome plated, with special handle and swivel top 120 mm, for copper wire up to 1.2 mm and soft wire up to 0.6 mm, fine polished - bright burnished, with bi-coloured hand-guard fine polished - bright burnished bright burnished bright burnished with the properties of the propert EUROline-mini side cutters

191-7 71-E89-E

Weight with tools: approx. 0.360 kg

289-9

6-121 6-681

4-283

4-281

4-163

and black, conductive hand-guard

with special nandle and swivel top

NILU SPECIAI NANGIE AND SWIVEI TOP

2270 (BERNSTEIN) ACCENT with tool set

9-piece set conductive tools with bright steel polished pliers

TORX-Screwdriver T 6, chrome vanadium, chrome-plated,

Engineer's tweezers, straight, round-pointed, 120 mm, nickel-plated TORX-Screwdriver T 5, chrome vanadium, chrome-plated, mith special bands and survivel tos.

Cross-recess screwdriver, size 0, chrome vanadium, chrome-plated, with special handle and swivel top

Cross-recess screwdriver, size 000, chrome vanadium, chrome-plated, with special handle and swivel top

Screwdriver for slotted screws, chrome vanadium, blade 40 x 2.0 mm, chrome-plated, with special handle and swivel top

3-651-14 Description of individual tools .oN

Weight with tools: approx. 0.360 kg

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

Tool set:



The tool rolls are made from a durable cotton canvas, outside black, inside grey RADIO-TV-SERVICE TOOL ROLLS

2400 (BERNSTEIN) TV Service tool roll with 24 piece tool set

2401 Tool roll without tools

Weight with tools: approx. 1.700 kg

:jəs looT

 $\mathbf{Adjusting}$ screwdriver, 200 mm long, blade widths 3.5 and 5.0 mm 69t-l Description of individual tools .oN

Side cutter, 130 mm, for hard wire, chrome-plated, insulated 3-132-1 ı appıng nammer 2-236 High voltage mains tester, 190 mm long 2-234

Adjusting pliers, 135 mm, straight, flat, wide, chrome-plated, insulated Engineer's pliers, 180 mm, bent snipe nose, chrome-plated, insulated Engineer's precision pliers, 135 mm, snipe nose, chrome-plated, insulated 3-215-1 Engineer's flat pliers, 185 mm, box joint, chrome-plated, insulated

3-225-1

Water pump pliers, 120 mm, chrome-plated Engineer's screwdriver, with special square BERNSTEIN handle, S 801-4 3-965 1-966-6

Engineer's screwdriver as above, blade 150 x 5 mm plade made from chrome vanadium, chrome-plated, 100 x 4 mm

S 1-911-7 Engineer's screwdriver as above, blade 200 x 6 mm S 901-7 S 701-7

Engineer's screwdriver as above, blade 200 x 3 mm, insulated

Screwdriver for grub screws, blade C.V., 80×2.8 mm Screw holder, nickel-plated, blade 200×4 mm

1-701-8 4-311

6-231 5-231 5-231 Contact file Flat file with handle Steel tweezers with bent tips, 150 mm, nickel-plated

Socket wrench, blade C.V., chrome-plated, 140 x 5.5 mm A/F Socket wrench as above, blade 140 x 7 mm A/F 901-9 Special sheet-metal scissors, serrated, extremly slim, 110 mm

Carded solder, approx. 1 m Soldering iron, 30 W, 220 V 971-8 6-107 524-7 Dust brush

Weight with tools: approx. 1.450 kg

2800 (BERNSTEIN) tool roll with 18-piece tool set

Steel tweezers with bent tips, 150 mm, nickel-plated

Screwdriver for grub screws, blade C.V., 80 x 2.8 mm Engineer's screwdriver as above, blade 100 x 4 mm Engineer's screwdriver as above, blade 150 x 5 mm

Engineer's screwdriver, blade chrome-plated, 75 x 3.5 mm

Side cutter, 130 mm, for hard wire, chrome-plated, insulated

2850 (BERNSTEIN) tool roll with 10-piece tool set

Steel tweezers with bent tips, 150 mm, nickel-plated

Engineer's screwdriver, blade chrome-plated, 75 x 3.5 mm

Telephone pilers with wire cutters, 200 mm, long, bent snipe nose Combination pilers, 160 mm, chrome-plated, insulated

Telephone pliers with wire cutters, 200 mm, snipe nose, long, straight

Radio screwdriver, nickel-plated blade 60 x 3 mm Screwdriver for grub screws, blade C.V., 80 x 2.8 mm Engineer's screwdriver as above, blade 200 x 6 mm Engineer's screwdriver as above, blade 100 x 4 mm Engineer's screwdriver as above, blade 150 x 5 mm

Special sheet-metal scissors, serrated, extremly slim, 110 mm

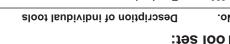
Steel tweezers straight, round and pointed, 120 mm, nickel-plated Sheet-metal tweezers straight, flat and pointed, 110 mm, nickel-plated

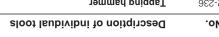
Telephone pliers with wire cutters, 200 mm, long, bent snipe nose

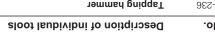
Telephone pliers with wire cutters, 145 mm, chrome-plated, insulated

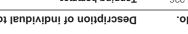
Engineer's flat pliers, 185 mm, box joint, chrome-plated, insulated

Tool set:







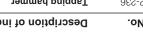


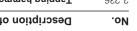
gbbing hammer

Weight with tools: approx. 0.900 kg 2851 Tool roll without tools

2 contact files

Description of individual tools





10L-9

S 701-4 S E01-4

4-102 S

3-255-1

L-927-2

3-205-1

3-132-1

2-236 .oN

192-9

971-9 2-151

701-8 4-311

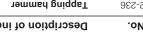
S 701-7 S 20L-4

Z-102 S

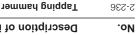
3-255-1

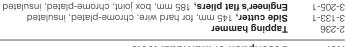
3-245-1

:tes looT











The high quality service equipment for the electronics engineer

EUROline 2600 SERVICE SET



2600 (BERNSTEIN) EUROline with tool set

2601 Case with zip fastener, without tools

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

6-683

290-9

290-9

190-9

Z-900-9

4-283

4-285

991-7

4-162

.oN

top, blade made from chrome vanadium, chromeplated, with black tip, size T $\ensuremath{\mathsf{7}}$

TORX screwdriver with special handle and swivel

top, blade made from chrome vanadium, chrome-

TORX screwdriver with special handle and swivel

bent, flat tips, with gripping cavity, 115 mm

bent, very sharply pointed, 110 mm

Description of individual tools

mm 041 , swsį belaluani diw

SMD tweezers, anti-magnetic, non-reflective,

SMD tweezers, anti-magnetic, non-reflective,

SMD tweezers, anti-magnetic, non-reflective, straight, pointed, 115 mm

Component tweezers, stainless, non-reflective,

top, blade made from chrome vanadium, chromeplated, with black tip, 40 x 1.5 mm

Electronics cross-recess screwdriver as above, size 0

Electronics screwdriver with special handle and swivel

Weight with tools: approx. 0.900 kg

Electronics cross-recess screwdriver as above, size 00

Electronics cross-recess screwdriver as above, size 000 Electronics screwdriver as above, 50 x 3.0 mm

plated, with black tip, size 1 5

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

The CD in the above picture is not included.

bright-burnished, bicolour insulation

bicolour insulation

picolour insulation

PLCC extractor

With 3 mm &

Glass fibre contact cleaner

Tin knife with plastic handle, 115 mm

Description of individual tools

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

7-E89-E

3-672-14

71-999-8

2-620

2-265

2-166

721-2

1-739

1-738

1-735 .oN

Tool set:

Description:

box joint, double leaf spring, fine-polished and

sbring, fine-polished and bright-burnished,

EUROline end cutters, 130 mm, 20° angular

spring, fine-polished and bright-burnished,

head, without side face, box joint, double leaf

EUROline side cutters, 120 mm, with slim, rounded

2 test prods, red and black, extremely slim, pointed and flexible, blade made from 1 mm steel wire

Special hard plastic bit, blade \otimes 3 mm, tip 3.0 x 0.5 mm

Special hard plastic bit, blade \boxtimes 3 mm, fip 1.5 \times 0.5 mm

Adjusting screwdriver handle, double-ended, for blades

without side face, box joint, double leaf

EUROline snipe nose pliers, 130 mm, plain jaws,



NETWORK 2700 SERVICE SET

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



2700 **BERNSTEIN NETWORK** with tool set

removing IC's

4-257

4-256

4-255

4-143

171-7

1190-8

3-0605

3-815-1

3-235-1

3-156-1

109-2

.oN

2701 Case with zip fastener, without tools

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

Weight with tools: 2.750 kg

968-8

8-390

7 496-9

7 996-9

7 996-9

S77-8

6-207

902-9

6-203

944-Þ

1090-9

191-9

.oN

Gas soldering iron, 10 - 60 W

chrome-plated, black tip

jaw opening 0 - 18 mm

 Δ mm 02 , gool mm 391 , q
muq pringbesol Δ

Adjustable wrench, chrome vanadium, 150 mm,

Plastic sprung handle for socket wrenches

Description of individuel tools

TORX-Screwdriver, size T 20, as above, with bore-hole in the tip

TORX-Screwdriver, size T 15, as above, with bore-hole in the tip

square BERNSTEIN handle, blade made from chrome vanadium,

TORX-Screwdriver, size T 10, with bore-hole in the tip, with special

Socket wrench, 10.0 mm, chrome vanadium, nickel plated, without

Socket wrench, 8.0 mm, chrome vanadium, nickel plated, without

Socket wrench, 6.0 mm, chrome vanadium, nickel plated, without

Rotary coaxial cable stripper for cable types RG 58, RG 59 and

Clamping scissors, 130 mm, stainless, with serrated gripping Jaws

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

Description of individual tools

Cross-recess screwdriver size 2, as above, blade length 100 mm

Cross-recess screwdriver size 1, as above, blade length 80 mm

Cross-recess screwdriver size 0, with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, with

Screwdriver as above, 125 x 5.5 mm, chrome-plated, with black tip

from chrome vanadium, 75 x 3.5 mm, chrome-plated, with black tip

Screwdriver with special square BERNSTEIN handle, blade made

Combination-crimping pliers for connector types, 6P/6C, 6P/4C,

Telephon pliers, 145 mm, chrome-plated, with BERNSTEINIT-

wire up to 0.3 mm, chrome-plated, with BERNSTEINIT-insulation Micro side cutters, 110 mm, for soft wire $\,$ up to 0.8 mm and hard

IC-tweezers, nickel-plated, 125 mm, for gripping, inserting and

Crimping pliers for BNC- and TNC-coaxial connectors

thicknesses, chrome-plated, with BERNSTEINIT-insulation

Wire strippers, 155 mm, with adjusting screw for all wire

black tip, blade length 60 mm



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:

Eleant black greined leather case with all-round zip testener and red plastic liping. The set comprises 19 of the most important.

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

Weight with tools: approx. 1.250 kg

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

Tool set:

ERSA-soldering iron "Multitip", 15 W, 220 V Wire solder	981-8	blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm	
Tape measure, 1 m	909-7	Screwdriver for grub screws with plastic handle,	4-311
110 mm, nickel-plated Pocket knife	6-511	Engineer's screwdriver, with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 100 x 4 mm	S E01-4
Special sheet-metal scissors, serrated, extremely slim,	108-3	Water pump pliers, 120 mm, chrome-plated	3-29
Contact file	192-9	Flat pliers, 120 mm, chrome-plated, with BERNSTEINIT insulation	1-119-8
Steel tweezers, straight, flat and wide, 145 mm, nickel-plated	711-8	with BERNSTEINIT insulation	
Steel tweezers, with bent tips, 150 mm, nickel-plated	201-9	Telephone pliers with wire cutters, 145 mm, chrome-plated,	3-236-1
blades 1.5, 2.0, 2.5 and 3.0 mm Screw holder, nickel-plated, blade 110 x 4 mm	Z07-7	for soft wire up to 1.5 mm, chrome-plated, with BERNSTEINIT insulation	
Watchmaker's screwdriver, nickel-plated, with 4 interchangeab	4-394	Side cutters, 120 mm, for hard wire up to 0.8 mm,	1-151-5
ww 9 x 97	7007	Adjusting screwdriver, blade 130 x 3 mm	1-124
Assembly screwdriver with plastic handle, nickel-plated blade,	4-331	Adjusting screwdriver, blade 130 x 2 mm	1-153
Description of individual tools	.oN	Description of individual tools	.oN



SPRINTER 3100 SERVICE CASE

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



968-8

177-8

121-3

Z01-3

907-7

£66-4

4-311

172-4

4-102 S

.oN

Elegant black grained leather case with all-round zip fastener and red plastic lining. The set comprises 19 BERNSTEIN tools for service work.

3115 (BERNSTEIN) SPRINTER without tool set

3100 (BERNSTEIN) SPRINTER With tool set

The BERNSTEIN Sprinter has a handy size for the pocket of the smock.

Adjustable wrench, jaw opening 0-12 mm, total length 100 mm Gas-soldering-iron, 10 - 60 W

Watchmaker's tweezers, 110 mm, stainless, sharply-pointed

Watchmaker's screwdriver, with 5 interchangeable blades 1.5, 2.0, 2.5, cross-recess blades size 00 and 000

Screwdriver for headless screws, with plastic handle, blade

made from chrome vanadium, nickel-plated, 80 x 2.8 mm

made from chrome vanadium, nickel-plated, with black tip

Engineer's screwdriver, with special square pattern BERNSTEIN handle, blade made from chrome vanadium,

Cross-recess screwdriver, Supadriv/Pozidriv, size 0 with special square pattern BERNSTEIN handle, blade

Steel tweezers, with bent tips, 150 mm, nickel-plated

Screw holder, nickel-plated, blade 80 x 4 mm

chrome-plated, 75 x 3.5 mm

Description of individual tools

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

3110 (BERNSTEIN) SPRINTER with tool set but without gas solder

Micro snipe-nose pliers, 120 mm, oval pointed design, box joint, chrome-plated, with transparent insulation

"Slimline" side cutters, 115 mm, for soft wire up to 1.0 mm, extremely slim head, box joint, compression spring,

Test prod, black, especially thin, pointed and flexible,

Test prod, red, especially thin, pointed and flexible,

chrome-plated, with transparent insulation

Repair mirror, 21 mm Ø

blade made from 1 mm steel wire

blade made from 1 mm steel wire

mm 3.0 x 1.1 these and at the miles with bronze insert 1.1 x 1.5 mm

Contact-cleaner, made from glass fibre

Adjusting screwdriver, blade 80 x 2.4 mm, with bronze tip 2.0 x 0.5 mm

Adjusting screwdriver, blade 80 x 2.4 mm

Adjusting screwdriver, blade 40 x 3 mm

Description of individual tools

Tin knife with plastic handle, 115 mm

3-442-5

3-127-2

2-265-2

2-265-1

2-166

721-2

70E-1

1-305

1-151

:tes looT

.oN

2-275

Weight with tools: approx. 0.750 kg



bbofi 5500 electrician's case

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





Weight with tools: 6.100 kg

5515 (BERNSTEIN) PROFI electrician's case without tool set 5500 (BERNSTEIN) PROFI electrician's case with tool set

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 The handle is slotted through the flap, thereby distributing the load over the entire area of the cover. 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. Description:

holding screwdrivers, chisels etc. The 7 compartments sewn into the cover of the case are used for holding pliers. The set comprises 33 tools.

Outside dimensions: 430 x 340 x 1990 mm Weight without tools: 2.000 kg The bottom of the case acts as a tray. There is plenty of room for a drill and sundry accessories.

:tes looT

		Offset screwdriver, C.V., nickel-plated, 100 x 5 mm	4-361
		Voltage tester, blade 100 x 3.5 mm	4-344 VDE
Pocket hack saw "Puk" with fixed wooden handle and saw blade	7-616	blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm	
horizontal, vertical and 45° angle		Screwdriver for grub screws with plastic handle,	118-4
Spirit level, 220 mm, with 3 levels:	7-932	Cross-recess screwdriver as above, size 2	4-253
m Հ , elding rule, Հ m	7-905	from chrome vanadium, nickel-plated, size 1	
Dust brush	7-456	Cross-recess screwdriver with plastic handle, blade made	4-252
Rubber beaker for plaster, round	914-7	Engineer's screwdriver as above, blade 150 x 8 mm	S 981-4
Slicker trowel, with round shank, blade width 16 mm	014-7	Engineer's screwdriver as above, blade 200 x 6 mm	S 901-7
Trowel, with wooden handle, blade width 50 mm	907-7	Engineer's screwdriver as above, blade 150 x 5 mm	S 701-7
Punch, with plastic handle, 6 mm Ø	916-7	blade made from chrome vanadium, chrome-plated, 100 x 4 mm	
Drill rasp, with plastic handle, blade 175 x 4 mm Ø	7-316	Engineer's screwdriver with special square BERNSTEIN handle	S 501-4
▼wist gimlet, 3 mm &	7-303	with BERNSTEINIT insulation	
Electrician's chisel, chrome vanadium, 200 x 8 x 10 mm	7-256	Wire strippers, 155 mm, chrome-plated,	3-815-1
Flat chisel, chrome vanadium, 200 x 16 x 20 mm	7-235	Combination pliers, 180 mm, chrome-plated, with BERNSTEINIT insulation	1-887-8
Firmer chisel, blade width 16 mm	7-202	Water pump pliers, 240 mm, nickel-plated, with insulation	9-949-8
Engineer's hammer, 300 g	911-7	Round pliers, 145 mm, chrome-plated with BERNSTEINIT insulation Weter purps pliess, 340 mm piekel pleted with insulation	
Cable knife	109-9		3-522-1
Cable-stripping scissors, 190 mm, stainless, with plastic handles	608-9	Telephone pliers, 145 mm, chrome-plated, with BERNSTEINIT insulation	3-236-1
Workshop file, 200 mm, half-round, with wooden handle	P-274	with BERNSTEINIT insulation	, 200 0
Workshop file, 200 mm, flat and blunt, with wooden handle	5-271	Side cutters, 145 mm, for hard wire, chrome-plated,	3-133-1
Description of individual tools	.oN	Description of individual tools	.oN



NOLTI 5600 ELECTRICIAN'S CASE

The handy, spacious electrician's tool case



5600 (BERNSTEIN) MULTI With tool set

5615 (BERNSTEIN) MULTI without tool set

Stable case, body made from textured ABS material, side and cover flaps made from best, plack, 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

Weight without tools: approx. 2.900 kg

to survey all the tools easily.

919-7

7-635

914-7

The case has 2 locks. 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.

mm 261 x 045 x 054 :anoianamib abiatuO

Workshop file, 200 mm, half-round, with wooden handle Side cutters, 145 mm, for hard wire, chrome-plated with BERNSTEINIT insulation 47S-8 Workshop file, 200 mm, flat and blunt, with wooden handle 172-8 .oN Description of individual tools Description of individual tools .oN :tes looT

BERNSTEINT insulation Telephone pliers, 145 mm, chrome-plated, with 3-235-1 3-133-1

Combination pliers, 160 mm, chrome-plated, with BERNSTEINIT insulation Water pump pliers, 240 mm, nickel-plated, with insulation

Screwdriver for grub screws with plastic handle, blade made from chrome vanadium, nickel-plated, $80\times 2.8~\text{mm}$

piade made from chrome vanadium, chrome-piated, full x 6 mm

1-218-5 3-732-1 9-949-8

Engineer's screwdriver as above, blade 150 x 8 mm

Engineer's screwdriver with special square BERNSTEIN handle, Engineer's hammer, 300 g 911-7 Wire strippers, 155 mm, chrome-plated, with BERNSTEINIT insulation 028-9 Wire-stripping knife for cable 8-28 mm Ø 909-9 109-9 608-9

Slicker trowel, with round shank, blade width 16 mm 014-7 Trowel, with wooden handle, blade width 50 mm 907-7 Punch, with plastic handle, 6 mm Ø 918-7 Naist gimlet, 6 mm Ø 908-7 Twist gimlet, 3 mm Ø 7-303 Electrician's chisel, chrome vanadium, $200 \times 8 \times 10 \text{ mm}$ 7-266 Flat chisel, chrome vanadium, 200 x 16 x 20 mm 7-236 Firmer chisel, blade width 16 mm 7-202 8-pieces set offset hexagon key wrenches, 1.5 to 6 mm A/F, in plastic case

Pocket hack saw "Puk" with adjustable wooden handle,

Weight with tools: approx. 6.900 kg

Cable-stripping scissors, 190 mm, stainless,

saw blade and plastic wallet

Folding rule, 2 m

horizontal, vertical and 45° angle

Spirit level, 220 mm, with 3 levels:

Rubber beaker for plaster, round

Soldering wire, 250 g spool, 1.5 mm Ø ERSA soldering iron, 30 W, 220 V

5-117-6 **Steel tweezers**, straight, flat and wide, 145 mm, nickel-plated, strong PVC-insulated

14-632 VDE Insulated cross-recess screwdriver, size 1

14-603 VDE Insulated screwdriver, blade 100 x 4.0 mm

4-344 VDE Voltage tester, blade 100 x 3.5 mm

Steel tweezers with fine, bent tips, 150 mm, nickel-plated, strong PVC-insulated

14-633 VDE Insulated cross-recess screwdriver as above, size 2

14-606 VDE Insulated screwdriver as above, blade 150 x 6.5 mm

14-604 VDE Insulated screwdriver as above, blade 125 x 5.5 mm

To complete the set we recommend:

9-701-8

4-311

S 981-4



10MBO HONZEHOLD ELECTRONICS SERVICE CASE

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

5700 **BERNSTEIN** JUMBO with tool set

5715 (BERNSTEIN) JUMBO without tool set

pocket for documents with different divisions. 43 tools are clearly arranged in pockets on 2 tool trays and in the plastic tray with adjustable 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

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

The case is locked by a central safety code. partitions in the bottom of the case.

Weight with tools: approx. 12.000 kg Weight without tools: approx. 6.340 kg

250 mm, jaw opening up to 35 mm, for gripping, holding, pressing and bending of workpieces

Outside dimensions: 480 x 350 x 210 mm

Old	Peceription od individual toole	OM
	:jəs	looT

Insulation stripping tool for cable diameter of 8 up to 28 mm 909-9 14-633 VDE Cross-recess screwdriver, size 2, with VDE safety insulation, blade length 100 mm 190 mm, stainless, with plastic handles Cable stripping shears 608-9 mm 08 hgde length som blade length 80 mm in a wallet, chrome vanadium, TW 1, TW 2, TW 3, TW 4, T 10, T 15, T 20, T25, T 27, T 30 and interchangeable handle 14-632 VDE Cross-recess screwdriver, size 1, 14-606 VDE Safety insulated screwdriver, VDE-insulation, blade 150 x 6.5 mm Interchangeable screwdriver set, TORX / TRI WING, 11-piece set, 096-7 14-604 VDE **Safety insulated screwdriver,**VDE-insulation, blade 125 x 5.5 mm 240 mm, with 4 adjustments, nickel-plated, with red insulation, Siphon water pump pliers, 9-878-6 14-602 VDE **Safety insulated screwdriver**, VDE-insulation, blade 100 x 3.5 mm Water pump pliers, 9-949-8 Description of individual tools

Pliers wrench, 03-0025 13-707 VDE Combination pliers, 180 mm, jaw opening up to 35 mm, for gripping, holding, pressing and bending of workpieces 205 mm, snipe nose, long, straight jaws, chrome-plated, with two-colour multilayered safety insulation 13-207 VDE Telephone pliers, 210 mm, for cutting of composite pipes with a diameter of 12 - 20 mm and protective pipes with a diameter of 18 - 35 mm 13-106 VDE Side cutters, 160 mm, for steel wire up to 1.6 mm Ø, chrome-plated, with two-colour multilayered safety insulation 16-513 VDE **Single-ended open-jaw wrench,** with two-colour multilayered safety insulation, 19 mm A/F Pocket saw, with adjustable wooden handle, in a wallet 919-7 16-512 VDE Single-ended open-jaw wrench, with two-colour multilayered safety insulation, 17 mm A/F $\,$ Folding rule, 2 m 7-502 Slicker trowel with round shank, blade width 16 mm 16-509 VDE **Single-ended open-jaw wrench**, with two-colour multilayered safety insulation, 14 mm A/F 014-7 with impact-resistant plastic handle, blade 6 mm Ø 16-508 VDE Single-ended open-jaw wrench, with two-colour multilayered safety insulation, 13 mm A/F Punch 916-7 Electrician's chisel, chrome vanadium, 200 x 8 x 10 mm 16-507 VDE **Single-ended open-jaw wrench,** with two-colour multilayered safety insulation, 12 mm A/F 7-255 chrome vanadium, 200 x 16 x 20 mm 16-506 VDE **Single-ended open-jaw wrench** with two-colour multilayered safety insulation, 11 mm A/F 7-236 Engineer's hammer, 300 g 16-505 VDE Single-ended open-jaw wrench with two-colour multilayered safety insulation, 10 mm A/F $_{\rm V}$ aw opening 55 mm, Jaw length 47 mm, for chrome plated fittings Fitting wrench, with protection Jaws, 270 mm, 187-8 15-522 VDE **Cable stripping knife,** with protection for the blade, blade length 35 mm

clamping capacity 15 - 85 mm, length of jaws 85 mm Mechanical 2-arm puller, To complete the set we recommend:

17-531 VDE Voltage tester "Steinel Volt Check 3"

7\A mm 0.9t ,0.7t ,0.3t ,0.4t ,0.5t ,0.1t ,0.1f ,0.0t -piece set, in a wallet, sockets and T-bar with two-colour

Mechanical 3-arm puller, clamping capacity 20 - 150 mm, length of jaws 80 mm Mechanical 3-arm puller, clamping capacity 15 - 85 mm, length of jaws 85 mm

Mechanical 2-arm puller, clamping capacity 20 - 150 mm, length of jaws 80 mm

165 mm, chrome-plated, with two-colour multilayered safety

190 mm, chrome-plated, with two-colour multilayered safety

16-440 VDE Sockets,

980-7

7-033

13-806 VDE Wire strippers,



TOWBO 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:

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

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

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

The case has a lock strip with 2 locks and is centrally lockable. It has loops at the sides for attaching a carrying strap. instruments and soldering equipment, is 60 mm high.

Weight with tools: approx. 5.400 kg Weight without tools: approx. 3.700 kg Outside dimensions: 460 x 350 x 170 mm

Tool set:

Description of individual tools	.oN	Description of individual tools	.oN
Cross-recess screwdriver, Supadriv/Pozidriv as above, size 1	4-272	Tin knife, with plastic handle, 115 mm	721-2
Electronics cross-recess screwdriver with special black handle shall and support the special place change and switch the special place change and switch the special place changes and special control of the special place.	4-281	Spring hook, nickel-plated and insulated, 175 mm	2-132
and swivel top, size 000, blade chrome vanadium, chrome-plated, with black tip		Magnetic bar with double ball- and socket joint, slewable, 215 mm	2-161
Electronics cross-recess screwdriver as above, size 00	4-282	Contact cleaner, made from glass fibre, 115 mm	2-166
Electronics cross-recess screwdriver as above, size 0	4-283	2 Test prods, red and black, extremely slim, pointed and flexible,	2-265
Electronics cross-recess screwdriver as above, size 1	4-284	blade made from 1 mm steel wire, 155 mm	
Screwdriver for special screws on cabinets	4-335	IC tweezers, nickel-plated, 125 mm, for gripping, inserting and removing IC's	7-601
Voltage tester, blade 60 x 3 mm	4-343 ADE	PLCC extractor for easy removal of plug-in PLCC's	2-620
Retaining screwdriver, 110 x 4 mm	20t 3 20t-t	Repair mirror, 21 mm Ø, with handle, 180 mm long	2-275
Engineer's tweezers, made from steel, with bent tips, 150 mm Engineer's tweezers, made from steel, with bent tips, 150 mm	201-9	Side cutters, 120 mm, for hard wire up to 0.4 mm, for soft wire up to	3-901-12
Engineer's tweezers, straight-flat-wide, 145 mm, nickel-plated	Z11-9	1.0 mm, burnished, with orange insulation	1, 000 0
Meedle files, 6-piece set Combination scissors, stainless, serrated, compression spring,	2-309 2-540	End cutters, 120 mm, for soft wire up to 0.8 mm, burnished, with orange insulation	3-906-15
plastic handles, 140 mm	000-0	Flat nose pliers, 120 mm, burnished, with orange insulation	3-932-12
Socket spanner set, 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"	061-9	Snipe nose pliers, 120 mm, burnished, with orange insulation	3-933-15
Special open-end wrenches, 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	092-9	Snipe nose pliers, 145 mm, angular long jaws, burnished with orange insualation	31-976-15
1.5 resp. 2.0 mm Adjustable wrench, jaw opening 0 - 12 mm, total length 100 mm	122-9	Engineet's screwativer with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 75 x 3.5 mm	S 201-4
		Engineer's screwdriver as above, blade 100 x 4 mm	S 801-4
Set of wrench keys, 8 pieces in plastic case, 1/16", 5/64", 3/32",	088-9	Electronics acrewdriver with special handle and swivel top, blade chrome vanadium, chrome-plated, with black tip,	191-4
TORX screwdriver with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated,	7 1⁄96-9	mm 0.1 x 04 abald	

Dust brush

TORX screwdriver as above, size T 15 with hole

TORX screwdriver as above, size T 10 with hole

TORX screwdriver with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, black tip, size T 9 with hole

7-459

7 996-9

7 996-9

To complete the set we recommend:

172-4

991-4

4-163

4-162

Plastic box, with hinged lid and adjustable	9-325
m 3.1 x mm 3.1 əriw gnirəblozəb ƏIRI92	8-413
Soldering wire coil, 250 g, 0.8 mm Ø	704-8
Desoldering pump, length 195 mm, 20 mm &	8-390
V OSS , W &I troni gningles "gitibluM"ASAH	8-13E

vanadium, chrome-plated, with black tip

Cross-recess screwdriver, Supadriv/Pozidriv, Size 0, with special square pattern BERNSTEIN handle, blade made from chrome

Electronics screwdriver as above, blade 50 x 3.0 mm

Electronics screwdriver as above, blade 40 x 2.0 mm

Electronics screwdriver as above, blade 40 x 1.5 mm

compartments, 200 x 130 x 30 mm



PC-CONTACT 67 OO ELECTRONIC SERVICE CASE

Elegant, modern tool case for the most exacting standards



The service case

for the computer technology with the current tool assortment





The handy tool case for quick service in data systems engineering ELECTRONIC SERVICE CASE DATA

6300 (BERNSTEIN) DATA with tool set

6315 **BERNSTEIN** DATA without tool set

adjustable partitions for measuring instruments, soldering tools and components to the height of 60 mm. 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 Case made from deep-drawn, grained plastic, with a black aluminium frame, rainproof, impact-, acid- and scratch-resistant. Description:

The case has 2 locks.

Weight with tools: approx. 4.700 kg Weight without tools: approx. 3.800 kg Outside dimensions: 460 x 310 x 120 mm

:tes looT

Miniature caliper square, stainless, measuring range 100 mm	7-512	BERNSTEIN handle, insulated blade, made from chrom vanadium, chrome-plated 100 x 4 mm	
Roller tape measure, 1 m $$	909-7	Engineer's screwdriver, with special square pattern	S 1-801-4
Adjustable wrench, jaw opening 0-12 mm, total length 100 mm	177-8	handle, blade made from chrome vanadium, chrome-plated, 75 x 3.5 mm	
Set of allen hex sockets, 8 pieces, in plastic wallet, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 5.5, 6.0, mm	078-9	Engineer's screwdriver with special square BERUSTEIN	201-4
extremely slim, 110 mm, nickel-plated	000 9	Micro pointed pliers, 120 mm, extremely light and slim, box joint, chrome-plated, with transparent insulation	3-422-5
Special scissors for cutting sheet-metal and wires, with serration,	2-301	noitaluani	
Engineer's tweezers, made from steel, straight, with narrow pointed tips, 120 mm, nickel-plated	121-9	Side cutters , 120 mm, chrome-plated, for hard wire up to 0.8 mm, for soft wire up to 1.5 mm, with BERNSTEINIT	1-151-5
	2117	"Slimline" side cutters, 115 mm, for soft wire up to 1,0 mm, extremely slim head, box joint, compression spring, chrome-plated, with transparent insulation	3-721-8
Engineer's tweezers, made from steel, with bent tips, 150 mm, nickel-plated	201-9	IC tweezers, nickel-plated, 125 mm, for gripping, inserting and removing IC's	Z-e01
Watchmaker's screwdriver, nickel-plated, with 4 interchangeable blades, 1.5, 2.0, 2.5, 3.0 mm	1-391	Plastic magnifying glass	2-291
Cross-recess watchmaker's screwdriver, $\operatorname{size}00$	998-4	Test prod, black, especially thin, pointed and flexible, blade made from 1 mm steel wire, 155 mm	7-565-2
Voltage tester, blade 60 x 3 mm	4-343 VDE	Test prod, black, especially thin, pointed and flexible, blade made from 1 mm steel wire, 155 mm	7-265-1
Screwdriver for headless screws, with plastic handle, blade made from chrome vanadium, nickel-plated, 80 x 2.8 mm	4-311	Contact cleaner, made from glass fibre, 115 mm	5 366 1 S-166
Cross-recess screwdriver, Supadriv/Pozidriv, size 1, with special square pattern BERNSTEIN handle, blade made from chrome vanadium, nickel-plated, with black tip	712-4	Spring hook, nickel-plated and insulated, 175 mm	25-132
made from chrome vanadium, nickel-plated, with black tip	020 /	Tin knife, with plastic handle, 115 mm	721-2
Cross-recess screwdriver, Supadriv/Pozidriv, size 0 with special square pattern BERNSTEIN handle, blade made from chrome versafilm pickel-plated with black the	172-4	Engineer's mirror, with handle, made entirely from BERNSTEINIT	606-1
Description of individual tools	.oN	Description of individual tools	.oN

To complete the set we recommend:

Plastic box with hinged lid and adjustable compartments, $200\times130\times30~\text{mm}$

Desoldering pump, length 195 mm, 20 mm Ø 9-390

V SSS ,W 3f ,noni ginable soldering iron, 15 W, SSO V 8-132



DATA 6300 ELECTRONIC SERVICE CASE

The practical assistant for the successful data systems engineer





LECHNIK ELECTRONIC SERVICE CASE

6400 (BERNSTEIN) TECHNIK With tool set

V S20 ,W 31 ,noni gining "soldering iron, 15 W, 220 V

Desoldering pump, length 195 mm, 20 mm Ø

To complete the set we recommend:

Plastic box with hinged lid and adjustable compartments,

Miniature screwdriver, with plastic handle, blade nickel-plated,

Cross-recess screwdriver, Supadriv/Pozidriv, as above, size 1,

Cross-recess screwdriver, Supadriv/Pozidriv, size 0, with special

Cross-recess screwdriver, size 01, with plastic handle, blade made from chrome vanadium, 25 mm long, nickel-plated

Engineer's screwdriver, with special square pattern BERNSTEIN handle, insulated blade, made from chrome vanadium, chrome-plated, $75 \times 3.5 \, \text{mm}$

compression spring, chrome-plated, with transparent insulation

Special assembly pliers for clamping rings, 1.5 mm – 2.8 mm, 140 mm, burnished, with adjusting screw

Combination pliers, 160 mm, chrome-plated, with BERNSTEINIT

Snipe nose pliers, 120 mm, angular, box joint, compression spring,

Round nose pliers, 130 mm, slim, box joint, compression spring,

Side cutters, 120 mm, chrome-plated, for hard wire up to 0.8 mm, for soft wire up to 1.5 mm, with BERUSTEINIT insulation $\,$

extremely slim head, box joint, compression spring, chrome-plated,

"Slimline" side cutters, 115 mm, for soft wire only up to 1,0 mm,

IC tweezers, nickel-plated, 125 mm, for gripping, inserting and

2 Test prods, red and black, extremely slim, pointed and flexible,

Screwdriver with guide sleeve for slotted axles up to 3.2 mm S.2

Desoldering lever, slotted at one end, with plastic handle

Spring hook, nickel-plated and insulated, 175 mm

Tin scraper, with plastic handle, 115 mm

Tin knife, with plastic handle, 115 mm

Description of individual tools

Outside dimensions: 470 x 360 x 180 mm

Magnetic bar with double ball- and socket joint, slewable, 215 mm

Engineer's mirror, with handle, made entirely from BERNSTEINIT

Flat nose pliers, 130 mm, slim, box joint, compression spring, chrome-plated, with transparent insulation

Miniature water pump pliers, 120 mm, chrome-plated

cyrome-plated, with transparent insulation

chrome-plated, with transparent insulation

with transparent insulation

blade made from 1 mm steel wire

Wire strippers, 165 mm, narrow and slim, with adjusting screw and

vanadium, 60 mm long, nickei-piated, with black tip

Engineer's screwdriver, as above, blade 150 x 5 mm

Engineer's screwdriver, as above, blade 100 x 4 mm

Pocket saw, in wallet

Duster

Dust brush

1/20 nonus, separation mm/inches

Plastic-oiler, with standpipe made from brass

Steel tape measure, 30 cm, stainless

extremely slim, 110 mm, nickel-plated

Clamping scissors, 130 mm, stainless

Retaining screwdriver, 110 x 4 mm

Chubby screwdriver, 25 x 4.5 mm

Description of individual tools

4-343 VDE Voltage tester, blade 60 x 3 mm

soldering transistors, gold-bonded diodes etc.

Cross-recess watchmaker's screwdriver, size 00

Offset screwdriver, chrome vanadium, nickel-plated,

Needle files, 6-piece set

Precision caliper square, stainless, in wallet, measuring range

Electronic socket spanner set, in transparent box, 6 pieces, 3.0, 3.5, 4.0, 4.5, 5.0 mm

handle, 7 socket spanners, 4.0, 5.5, 6.0, 7.0, 8.0, 9.0,

Set of allen hex sockets, 8 pieces, in plastic wallet, 1.5, 2.0, 2.5,

Socket spanner set, chrome vanadium, nickel-plated, 1 plastic

Special scissors for cutting sheet-metal and wires, with serration,

Wire scraper, for wires 0.6 mm Ø, interchangeable cutters

Watchmaker's tweezers, 110 mm, stainless, sharply-pointed

Engineer's tweezers, straight-flat-wide, 145 mm, nickel-plated

Engineer's tweezers, made from steel, with bent tips, 150 mm,

Component tweezers, nickel-plated, with insulated jaws, for easy insertion and removal of plug-in translators of various sizes

Watchmaker's screwdriver, nickel-plated, with 4 interchangeable

Screwdriver for headless screws, with plastic handle, blade

Weight with tools: approx. 7.600 kg

Heat dissipating tweezers, $165\,\mathrm{mm}$, nickel-plated, for use when

Special open-end wrenches, 6-piece set, nickel-plated, material thickness 1.5 or 2 mm, 3×3.5 , 4×4.5 , 5×5.5 , 6×6.5 , 7×8 , 9×10 mm

919-7

119-7

809-7

98t-7

7-458

7-459

6-820

094-9

9-200 109-9

106-3

9-510

181-8

191-9

LEL-9

Z11-9

911-9

Z01-9

900-9

Z07-7

998-4

1-361

118-4

.oN

Weight without tools: approx. 4.700 kg

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

951-8

066-8

9-325

4-272

172-4

4-261

S 1-401-4

S 1-801-4

4-102-1 S

3-836-2

9-761-10

3-732-1

3-99

3-481-2

3-462-2

1-151-5

3-127-2

109-2

2-265

191-2

2-149

2-132

2-128

721-2

2-126

606-F

Tool set:

6415 Z (BERNSTEIN) TECHNIK with central safety code without tool set

plastic tray, 60 mm high, with adjustable partitions for measuring instruments, soldering iron and various accessories.

6400 Z (BERNSTEIN) TECHNIK with central safety code and tool set

6415 **BERNSTEIN TECHNIK** without tool set

Service case with a comprehensive tool kit for data systems engineering





LECHNIK 9700 EFECTRONIC SERVICE CASE

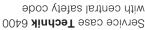
 $\ensuremath{\mathsf{A}}$ toolcase as a bordcase for the travelling engineer



The service case











BO22 EFECTRONIC 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:

The 105-piece tool set comprises all required conventional and special tools for the servicing of electronic equipment, also for difflicult repairs. The scratch-resistant. Body of case made from deep-drawn, impact-resistant, grained black plastic, with a sturdy aluminium frame, dustproof and rainproof, acid- and

A variable tool chest in case-size! tools are clearly arranged in partitions on tool trays which are removable and folding and the swiveling parts are securable:

measuring instruments and soldering irons. The lid of the case has a pocket for documents. The case has 2 locks. 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,

Weight with tools: approx. 10.600 kg Weight without tools: approx. 6.500 kg mm 0el x 0l4 x 0e4 :enoienamib abistuO

 6	

Dust brush	7-459	blade chrome vanadium, chrome-plated,	
TORX screwdriver as above, size T 15 with hole	7 996-9	Electronics screwdriver with special handle and swivel top,	191-4
TORX screwdriver as above, size T 10 with hole	7 996-9	Engineer's screwdriver as above, blade 150 x 5 mm	S 701-7
SIZE I 9 WILL hole		blade made from chrome vanadium, chrome-plated, 100 x 4 mm	
made from chrome vanadium, chrome-plated, black tip,		Engineer's screwdriver with special square BERNSTEIN handle,	S 501-4
TORX screwdriver, with special square BERNSTEIN handle, blade	7 796-9	from 2.5 - 2.0 mort	0 00 0
1/8", 5/32", 3/16", 7/32", 1/4"	17303	Pressing pliers for multicore cable and for sleeves	9-178-8
Set of wrench keys, 8 pieces in plastic wallet, 1/16", 5/64", 3/32",	088-9	Crimp tool for insulated and uninsulated terminals, 230 mm	9980-8
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	088-9		3-818-5
	000.0	Wire strippers, 155 mm, chrome-plated, with BERNSTEINIT-insulation	3-815-1
Set of wrench keys, 11 pieces in plastic case, 1 handle,	08-9	140 mm, burnished, with adjusting screw	
Adjustable wrench, jaw opening 0 - 12 mm, total length 100 mm	177-8	Special assembly pliers for clamping rings, 1.5 mm - 2.8 mm,	9-761-10
material thickness 1.5 or 2.0 mm,		with BERNSTEINIT-insulation	
, mm 01 x 9 ,8 x 7 ,		Electrician's combination pliers, 160 mm, chrome-plated,	3-742-1
Special open-end wrench, 6-piece set, nickel-plated,	094-9	Water pump pliers, 120 mm, chrome-plated	3-262
mm 0.01		spring, chrome-plated, with transparent insulation	
1 plastic handle, 7 socket spanners, 4.0, 5.5, 6.0, 7.0, 8.0, 9.0,		Snipe nose pliers, 140 mm, angular, slim, box joint, compression	3-482-5
Socket spanner set, chrome vanadium, nickel-plated, 8-piece set,	9-500	chrome-plated, with transparent insulation	
Electrician knife	109-9	Suipe nose pliers, 130 mm, slim, box joint, compression spring,	3-463-2
plastic handles, 140 mm	F C D 3	chrome-plated, with transparent insulation	0 007 0
Combination scissors, stainless, serrated, compression spring,	908-9	Flat nose pliers, 130 mm, slim, box joint, compression spring,	3-462-2
extremely slim, 110 mm, nickel-plated	2002	with BERNSTEINIT-insulation	0 000 0
Special scissors, for cutting sheet-metal and wires, with serration, extremely elim 110 mm, pickel plated	108-9	Telephone pliers with wire cutters, 145 mm, chrome-plated	3-236-1
			3-036-1
Needle files, 6-piece set	9-210	with BERNSTEINIT-insulation	0. 0
ESD/EGB tweezers, 120 mm, conductive, with bent, pointed tips	76L-9	Side cutters, 130 mm, for hard wire, chrome-plated,	3-132-1
ESD/EGB tweezers, 120 mm, conductive, with straight, rounded tips	161-9	plated, with transparent insulation	
Wire scraper, for wires 0.6 mm Ø, interchangeable cutter	181-3	extremely slim head, box joint, compression spring, chrome-	
Clamping scissors, 130 mm, stainless	191-9	"Slimline" side cutters, 115 mm, for soft wire up to 1.0 mm,	3-127-2
Watchmaker's tweezers, 110 mm, stainless, sharply-pointed	121-9	PLCC extractor, for easy removal of plug-in PLCC'S	2-620
Engineer's tweezers, straight-flat-wide, 145 mm, nickel-plated	Z117-9	inserting and removing IC's	
soldering transistors, gold-bonded diodes etc.		IC tweezers, nickel-plated, 125 mm, for gripping,	7-601
Heat dissipating tweezers, 165 mm, nickel-plated, for use when	911-9	Hand magnifier with light	2-296
Engineer's tweezers, as above, strong PVC-insulated	9-701-8	blade made from 1 mm steel wire	
uickel-plated	0 20, 2	2 Test prods, red and black, extremely slim, pointed and flexible,	2-265
Engineer's tweezers made from steel, with bent tips, 150 mm,	401-9	Contact cleaner, made from glass fibre	2-166
insertion and removal of plug-in transistors of various sizes	201 3	Magnetic bar with double ball- and socket joint, slewable, 215 mm	2-161
Component tweezers, nickel-plated, with insulated jaws, for easy insulated jaws, for easy	900-9	small version with delible bell, and applied tight, elemeble, 315 mm	1310
Retaining screwdriver, 110 x 4 mm	20t-t	Claw-type gripper, nickel-plated brass, with 4 wire claws,	2-199
	ZUV-V		321-0
mm 0.5, 2.0, 2.5, 3.0 mm		S mm & of 0 mort stood griden blood	70. 7
Watchmaker's screwdriver, nickel-plated, with 4 interchangeable	1-391	Tool holder, nickel-plated brass, with collets at both ends for	2-152
Offset screwdriver, chrome vanadium, nickel-plated, 100 x 5 mm	4-361	Spring hook, nickel-plated and insulated, 175 mm	2-132
Voltage tester, blade 60 x 3 mm	4-343 VDE	Tin scraper with plastic handle, 115 mm	2-128
0 əziz ,mm 0.8 x 03 əblad		Tin knife with plastic handle, 115 mm	721-2
Electronics cross-recess screwdriver as above,	4-283	Desoldering lever, slotted at one end, with plastic handle	2-126
Electronics cross-recess screwdriver as above size 00	4-282	Engineer's mirror, with handle, made entirely from BERNSTEINIT	4-906
with black tip, 40 x 2.0 mm, size 000		Adjusting screwdriver, blade 130 x 3.5 mm	1-122
and swivel top, blade chrome vanadium, chrome-plated,		Adjusting screwdriver, blade 130 x 2 mm	1-153
Electronics cross-recess screwdriver with special grey handle	4-281	Adjusting screwdriver, blade 40 x 3 mm	1-151
Description of individual tools	.oN	Description of individual tools	.oN
		:}€	S looT

919-7

119-7

809-7 808-7

7-428 7-438

97-4 9-96-5

Pocket hack saw "Puk" with adjustable wooden handle, in wallet

Precision caliper square, stainless, in wallet, measuring range 160 mm, 1/20 nonius, separation mm/inches

Steel measure, 30 mm, stainless

Drip oiler for dropet oiling

Dust brush

To complete the set we recommend:

4-165 4-165 4-272

4-162

	00
compartments, 200 x 130 x 30 mm	
Plastic box, with hinged lid and adjustable	9-325
Soldering wire coil, 100 g, 1.5 mm Ø	8-405
Desoldering pump, length 195 mm, 20 mm Ø	8-360
ERSA "Multitip" soldering iron, 15 W/220 V	8-132

Electronics screwdriver as above, blade 40 x 2.5 mm
Electronics screwdriver as above, blade 50 x 3.0 mm
Electronics screwdriver as above, blade 50 x 3.0 mm
Crosspoint-screwdriver, Supadriv/Pozidriv, size 1, with special
square pattern BERNSTEIN handle, blade made from chrome
vanadium, nickel-plated, with black tip

blade chrome vanadium, chrome-plated, with black tip, blade 40 x 1.0 mm Electronics screwdriver as above, blade 40×1.5 mm



BO22 9200 EFECTRONIC SERVICE CASE

A variable tool chest in case zise



as above, blade length 150 mm, with black tip Watchmaker's screwdrivers from metal, 6-piece set, in metal box, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5 mm MINI-VICE 14-633 VDE Cross-recess screwdriver, size 2, with VDE-insulation, blade length 100 mm 4-370 14-632 VDE Cross-recess screwdriver, size 1, with VDE-insulation, blade length 80 mm as above, blade length 100 mm, with black tip Cross-recess screwdriver, size 3, 4-258 as above, blade length 80 mm, with black tip Cross-recess screwdriver, size 2, mm 3.5 x 001 əbald insulation, blade 100 x 3.5 mm 4-257 14-602 VDE Screwdriver as above, blade length 60 mm, with black tip Cross-recess screwdriver, size 1, mm 2.5 x 27 əbald inoilaluari yə x 2.5 mm 4-256 14-601 VDE Screwdriver as above, blade length 300 mm, with black tip Cross-recess screwdriver, size 0, conductive box with lid, black, internal dimensions: 118 x 32 x 14 mm 4-255 Solder wire spool, 250 g, 0.8 mm Ø 5 Chip-Container, 704-8 704-8 4-228 Cross-recess screwdriver, size 2, ERSA VAC3 desoldering pump vanadium, chrome-plated, blade length 300 mm, with black tip vanadium, chrome-plated, 260 x 3.0 mm, with black tip Cross-recess screwdriver, size 1, with special square BERNSTEIN handle, blade made from chrome Spare soldering tip 162 LM 8-136 ERSA-fine soldering iron Tip 260 BN/230 V/16 W 4-227 011-8 Roller tape, 2 m Pocket saw, with adjustable wooden handle, in a wallet 919-7 with special square BERNSTEIN handle, blade made from chrome 4-222 Screwdriver with special square BERNSTEIN handle, blade made from chrome varadium, chrome-plated, 125 x 5.5 mm, with black tip 7-425 insulating tape Ballpoint wrench keys, hexagon, 8-piece set, in a wallet, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 8.0 mm P-piece set, in a box, T 9, T 10, T 15, T 20, T 25, T 27, T 30, T 40 8-piece set, in a box, T 9, T 10, T 15, T 20, T 25, T 27, T 30, T 40 Brgineer's hammer, 200 g 7-114 Screwdriver 64143 with special square BERNSTEIN handle, blade made from chrome varadium, chrome-plated, 100 x 4.0 mm, with black tip 966-9 4-145 vanadium, chrome-plated, 75 x 3.5 mm, with black tip 096-9 Hexagon wrench keys 8-piece set, in a wallet, 1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4" with special square BERNSTEIN handle, blade made from chrome 088-9 Screwdriver 141-4 19 mm, chrome vanadium, chrome-plated Combination crimping pliers, 200 mm, for connector types 6P/6C, 6P/4C, 6P/2C, 8P/8C Combination ring-and open-ended wrench, 61-009-9 3-090 Combination pliers, 160 mm, chrome-plated, with BERNSTEINIT-insulation Combination ring-and open-ended wrench, ZI-009-9 3-732-1 Oulck-action water pump pliers,
175 mm, made from chrome vanadium, chrome-plated, with
175 mm, made from chrome vanadium, chrome-plated, with Combination ring-and open-ended wrench, 6-600-12 vanadium, chrome-plated 1-989-5 Combination ring-and open-ended wrench, 7-piece set, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 13.0 mm, chrome 160 mm, with long jaws, chrome-plated, with BERNSTEINIT-009-9 Flat nose pliers, Double open-ended wrench, 12 x 13 mm, chrome vanadium, chrome-plated Double open-ended wrench, 145 mm, chrome-plated, with BERNSTEINIT-insulation 81-009-9 Telephon pliers, 3-236-1 6-500-12 Socket wrench-set 16-piece set in a metal case, first rate quality Side cutters, 160 mm, for steel wire up to 1.6 mm Ø, chrome-plated, with VDE 6-320 3-134 VDE Side cutters, 120 mm, with rounded head, double leaf spring, chrome-plated, with red insulation 5.5 mm, chrome vanadium, chrome-plated, with square handle Socket wrench 901-9 0.0 mm, chrome vanadium, chrome-plated, with square handle 3-112-2 1 x 600 ohm, switchable from 600 to 10.000 ohm, with fine control **⊅01-9** for connecting the cable conductors and jumper wires

Test headphones, 197-2 1.5 mm, chrome vanadium, chrome-plated, with square handle Socket wrench 6-103 for cable diameter of 8 up to 28 mm Insertion tool for system MDF 71 207-2 loot gniqqirts noitsluenl for connecting the wires and simultaneously cutting off the residual 6-piece set, with wooden handles, in plastic wallet watertight, with pre-focused reflector Insertion tool with sensor Warding files, 107-2 9-240 made from steel, straight, with narrow pointed tips, 155 mm, nickel-plated S-626 Engineer's tweezers, 9-125 Pocket inspection lamp made from steel, straight-flat-wide, 145 mm, nickel-plated PLCC-extractor made from steel, with bent tips, 150 mm, nickel-plated Engineer's tweezers, IC-tweezers, nickel-plated, 125 mm, for gripping, inserting and removing IC's Z11-9 2-601 Engineer s tweezers, Z01-8 stainless, magnifying, concave mirror 21 mm Ø, with BERNSTEINIT insulated, blade length 150 mm for inserting and tightening cross-recess screws size 1, nickel-plated, Kepair mirror, 2-275 Retaining screwdriver 754-4 2 test prods, red and black, extremely slim, pointed and flexible, blade made red and black, extremely slim, pointed and flexible, blade made tor inserting slotted screws, nickel-plated, blade 110 x 4.0 mm Z07-7 2-265 Retaining screwdriver,

.oN

Tool set

.oN

Weight with tools: approx. 12.900 kg Weight without tools: approx. 5.800 kg

Description of individual tools

The case has 2 locks.

partitions additional place for further instruments.

mm 061 x 014 x 064 :enoisnamib abistuO

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 oberations at distribution boards in the telecommunication technique.

Description of individual tools

With 118 tools the case contains a complete equipment of tools especially for the electrical and electronical connecting and maintenance

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

Description:

6615 (BERNSTEIN) TELECOM without tool set

6600 (BERNSTEIN) TELECOM with tool set

complex telecommunication systems

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

LEFECON ELECTRONIC SERVICE CASE









The professional toolcase for the telecommunication

LELECOM 6600 ELECTRONIC SERVICE CASE

BEBUSTEIN



TELEDATA ELECTRONIC SERVICE CASE

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

6700 **BERNSTEIN** TELEDATA with tool set

6715 (BERNSTEIN) TELEDATA without tool set

for connecting the cable conductors and jumper wires

ERSA fine soldering iron

Tip 260 BN/230 V/16 W

Test headphones 3 x 600 ohm, switchable from 600 to 10.000 ohm Insertion tool for systems MDF 71 for connecting the cable conductors and impact w

To complete the set we recommend:

011-8

2-702

197-2

Description:

The case has 2 locks.

tools additionally recommended. the case. The basic equipment for special operations at telecommunication systems and data networks may efficiently be completed by special 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 Case made from deep-drawn, impact-resistant, grained black plastic, with sturdy aluminium frame, dustproof and rainproof, acid- and scratch-resistant.

Outside dimensions: 470 x 340 x 170 mm

Weight with tools: approx. 8.700 kg Weight without tools: approx. 4.600 kg

Spare soldering tip 162 LN ERSA VAC3 desoldering pump Solder wire spool, 250 g, 0.8 mm Ø

Description of individual tools Description of individual tools fool set

		for cable diameter of 8 up to 28 mm	
		Insulation stripping tool	909-9
		6-piece set, with wooden handles, in plastic wallet	
with VDE-insulation, blade length 150 mm		Warding files,	9-240
Cross-recess screwdriver, size 3,		made from steel, straight-flat-wide, 145 mm, nickel-plated	
with VDE-insulation, blade length 100 mm		Engineer's tweezers,	Z11-9
Cross-recess screwdriver, size 2,	14-633 VDE	made from steel, with bent tips, 150 mm, nickel-plated	
with VDE-insulation, blade length 80 mm		Engineer's tweezers,	Z01-9
Cross-recess screwdriver, size 1,	14-632 VDE	blade made from chrome vanadium, nickel-plated, insulated	
with VDE-insulation, blade length 60 mm		for inserting and tightening cross-recess screws size 1	
Cross-recess screwdriver, size 0,	14-631 VDE	Retaining screwdriver	ZE7-7
with VDE-insulation, blade 100 x 4.0 mm		blade made from chrome vanadium, nickel-plated, insulated, 100 x 3.0 mm	
Screwdriver	14-603 VDE	for inserting and tightening slotted screws,	
with VDE-insulation, blade 100 x 3.5 mm	10,1000 77	Retaining screwdrivers	154-4
Screwdriver	14-905 VDE	vanadium, chrome-plated, 300 mm, with black tip	, , ,
with VDE-insulation, blade 75 x 2.5 mm	14,1000 77	with special square BERNSTEIN handle, blade made from chrome	
Screwdriver	3UV 1U0-41	Crosspoint-screwdriver, size 2,	4-228
conductive box with lid, black, internal dimensions: 118 x 32 x 14 mr	10077	vanadium, chrome-plated, 300 mm, with black tip	000 7
5 Chip-Container,	9/918-6	with special square BERNSTEIN handle, blade made from chrome	
with adjustable wooden handle, in a wallet	2,0,00	Crosspoint-screwdriver, size 1,	4-227
Pocket saw,	919-7	vanadium, chrome-plated, 260 x 3.0 mm, with black tip	200 /
Roller tape measure, 2 m	909-2	with special square BERNSTEIN handle, blade made from chrome	
Duster	7-426	Screwdriver	4-222
8-piece set, in a box, T9, T10, T15, T20, T25, T27, T30, T40	307 2	200 mm, for connector types 6P/6C, 6P/4C, 6P/2C, 8P/8C	000 /
Torx screwdrivers with bore-hole in the tip,	966-9	Combination crimping pliers,	3-090
8-piece set, in a wallet, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 8.0 mm	200 0	160 mm, chrome-plated, with BERNSTEINIT-insulation	2000 0
Ballpoint wrench keys, hexagon,	096-9	Combination pliers,	3-732-1
8-piece set, in a wallet, 1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1	020 0	BERNSTEINIT-insulation	, 002 0
Hexagon wrench keys,	088-9	175 mm, made from chrome vanadium, chrome-plated, with	
19 mm, chrome vanadium, chrome-plated	000 0	Quick-action water pump pliers,	3-289-1
Combination ring- and open-ended wrench,	61-009-9	160 mm, with long Jaws, chrome-plated, with BERNSTEINIT-insulation	, 202 0
17 mm, chrome vanadium, chrome-plated	0, 000 0	Flat nose pliers,	3-532-1
Combination ring- and open-ended wrench,	ZI-009-9	145 mm, chrome-plated, with BERNSTEINIT-insulation	, 002 0
12 mm, chrome vanadium, chrome-plated	2, 000 0	Telephon pliers,	3-236-1
Combination ring- and open-ended wrench,	21-009-9	safety insulation	, 200 0
mm 0.61 ,0.11 ,0.01		160 mm, for steel wire up to 1.6 mm Ø, chrome-plated, with VDE	
7-piece set, chrome vanadium, chrome-plated, 6.0, 7.0, 8.0, 9.0,		Side cutters,	3-134 VDE
Combination ring- and open-ended wrench,	009-9	spring, chrome-plated, with red insulation	
18 x 19 mm, chrome vanadium, chrome-plated		120 mm, for soft wire up to 1.0 mm, with rounded head, double leaf	
Double open-ended wrench,	81-009-9	Side cutters,	3-112-2
12 x 13 mm, chrome vanadium, chrome-plated		for connecting the wires and simultaneously cutting off the residual wire	
Donble open-ended wrench,	6-500-12	Insertion tool with sensor	107-2
5.5 mm, chrome-vanadium, chrome-plated, with square handle		PLCC-extractor	2-620
Socket wrench	901-9	removing IC's	0
5.0 mm, chrome vanadium, chrome-plated, with square handle		IC-tweezers, nickel-plated, 125 mm, for gripping, inserting and	2-601
Socket wrench	t01-9	from 1 mm steel wire	0
4.5 mm, chrome vanadium, chrome-plated, with square handle		red and black, extremely slim, pointed and flexible, blade made	
Socket wrench	6-103	2 test prods,	2-265
			0

2985-8 286-8 704-8



TELEDATA 6700 ELECTRONIC SERVICE CASE

The service case for the ambitious Telecommunication engineer







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:

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

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

7060 (VDE-tools). The lid of the case has a pocket for documents etc. 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.

compartments, 200 x 130 x 30 mm Plastic box, with hinged lid and adjustable

Solder wire (spool), 100 g, 1.5 mm Ø

Socket wrench, as above, 7.0 mm A/F

Universal stripping tool

with BERNSTEINIT-insulation

cyrome-plated, with black tip

Tool tray No. 7030

Desoldering pump, length 195 mm, 20 mm &

A/F mm 6.5 blade made from chrome vanadium, chrome-plated, 5.5 mm A/F

olade made from chrome vanadium, chrome-plated, 100 x 4.0 mm

Engineer's screwdriver, with special square BERNSTEIN handle,

up to 2.5 mm Ø, chrome-plated, with BERNSTEINIT-insulation **Telephone pliers**, 145 mm, chrome-plated,

Side cutters, 145 mm, for hard wire up to 1.25 mm Ø, for soft wire

Socket wrench, with special square BERNSTEIN handle,

Cross-recess screwdriver, as above, size 2, with black tip Voltage tester, for 220 - 250 V, blade 100 x 3.5 mm

Cross-recess screwdriver, as above, size 1, with black tip

Engineer's screwdriver, as above, blade 150 x 8.0 mm

Engineer's screwdriver, as above, blade 150 x 5.0 mm

Combination pliers, 160 mm, chrome-plated,

TORX-Screwdriver, size T 15, with hole, as above

TORX-Screwdriver, size T 10, with hole, as above

Retaining screwdriver, 110 x 4 mm Clamping scissors, 130 mm, stainless

Screwdriver, as above, 100 x 4.0 mm

Glass fibre contact cleaner

Offset screwdriver, 100 x 5 mm, nickel-plated

Hand magnifier with light Water pump pliers, 120 mm, chrome-plated

exible, blade made from 1 mm steel wire

2 test prods, red and black, extremely slim, pointed and

Magnetic bar with double ball- and socket joint, 215 mm Spring hook, nickel-plated and insulated, 175 mm

BERNSTEIN handle, blade made from chrome vanadium,

TORX-Screwdriver, size T 9, with hole, with special square

Special scissors, with serration, 110 mm, nickel-plated

Adjustable wrench, Jaws opening 0 - 12 mm, total length 100 mm

chrome-plated, with black tips Cross-recess screwdriver, Supadriv/Pozidriv, size 1, as above

square BERNSTEIN handle, blade made from chrome vanadium,

Cross-recess screwdriver, Supadriv/Pozidriv, size 0, with special

Screwdriver, with special square BERNSTEIN handle, blade made from chrome vanadium, chrome-plated, 75×3.5 mm, with black tips

Combination pliers, 115 mm, chrome-plated, BERNSTEINIT-insulation

Weight with tools 7100: approx. 10.700 kg

8-405 9-352

066-8

Z01-9

90L-9

9090-9

4-257

4-256

S 981-4

S 701-7

S E01-4

1-287-8

3-236-1

3-133-1

7-452

7 996-9

7 996-9

177-9

191-9

ノハヤ-セ

198-4

4-272

172-p

4-145

171-7

5-596

997-7

2-166

2-132

1-917-8

4-344 VDE

Weight with tools 7000: approx. 10.600 kg The case has two locks.

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

Outside dimensions: 500 x 400 x 200 mm

(bordcase-size)

Ministure caliper square, measuring range 100 mm, stainless ERSA Multitip soldering iron, 15 W/230 V

Set of allen hex sockets, 8 pieces, 1.5 - 6.0 mm Warding file set, 6 pieces, with wooden handles, in a wallet

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

Desoldering bar, slotted at one end, with plastic handle

ESD/EGB tweezers, 120 mm, conductive, rounded tips ESD/EGB tweezers, 120 mm, conductive, bent pointed tips

gold-bonded diodes etc., 165 mm, nickel-plated Engineer's tweezers, straight-flat-wide, 145 mm, nickel-plated Watchmaker's tweezers, sharply-pointed, 110 mm, stainless

Heat dissipating tweezers, for use when soldering transistors,

Engineer's tweezers, made from steel, with bent tips, 150 mm,

and removal of plug-in transistors of various sizes, nickel-plated

Electronics cross-recess screwdriver as above, size 1 Electronics cross-recess screwdriver as above, size U

Electronics cross-recess screwdriver as above, size 00

Electronics screwdriver as above, 50 x 2.5 mm

Electronics screwdriver as above, 40 x 2.0 mm

Electronics screwdriver as above, 40 x 1.5 mm

ontrished, with bicoloured hand-guard

Electronics screwdriver as above, 50 x 3.0 mm Electronics cross-recess screwdriver as above, size 000

chrome vanadium, chrome-plated, with black tip, 40 x 1.0 mm

Electronics screwdriver with special handle and swivel top, blade

double leaf spring, bright burnished, with bicoloured hand-guard

double leaf spring, bright burnished, with bicoloured hand-guard EUROline-snip nose pliers, 130 mm, extremely slim, box joint,

EUROline-end-cutters, 130 mm, for copper wire up to 0.6 mm Ø,

double leaf spring, bright burnished, with bicoloured hand-guard

for copper wire up to 1.5 mm Ø, with slim rounded head, box joint,

Pocket inspection lite with fibre optic adaptor for close inspection

of small, tight, hard-to-see areas EUROline-side-cutters, 120 mm, for hard wire up to 0.4 mm Ø,

IC-tweezers, nickel-plated, 125 mm, for gripping, inserting and

EUROline-flat nose pliers, 130 mm, extremely slim, box joint,

cutting edge 20° angular, box joint, double leaf spring, bright

Component tweezers, 140 mm, with insulated jaws, for easy insertion

Engineer's mirror with handle, made entirely from BERNSTEINIT

Tin knife with plastic handle, 115 mm

Special hard plastic bit, 3.0 x 0.5 mm

Adjusting screwdriver handle, double-ended

Special hard plastic bit, 1.5 x 0.5 mm

Tool tray No. 7020

Weight without tools: approx. 8.000 kg

:tes looT

Claw-type gripper with 4 wire claws and clip

ON. Description of individual tools Description of individual tools

.oN

8-132

7-512

042-9

2-126 2-127

1-909

1-738

987-1

761-9 161-9

711-B

911-9

Z01-9

900-9

4-283 4-284 4-284

4-165

791-7

4-163

191-4

71-889-E

71-439-8

2-620

2-199

PLCC-extractor

Tool tray No. 7010



COMPACT-MOBIL 7000 ELECTRONIC SERVICE CASE





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

as service case 7000 Description:

The trays contain all together 32 tools. On request the tray No. 7030 may be exchanged for No. 7060 (VDE-tools). This tool case is also equipped with 3 removable tool trays: No. 7030, 7040 and 7050.

(bordcase-size) Weight without tools: approx. 7.900 kg Outside dimensions: 500 x 400 x 200 mm

:tes looT

Description of individual tools	.oN	Description of individual tools	.oN
Tool tray No. 7050		Tool tray No. 7030	
Steel tweezers, bent, nickel-plated, safety-insulated, 150 mm	9-101-9	Side cutters, 145 mm, for hard wire up to 1.25 mm Ø, for soft wire	3-133-1
Steel tweezers, straight-flat-wide, safety-insulated, 145 mm	9-111-9	up to 2.5 mm Ø, chrome-plated, BERNSTEINIT-insulation	
Insulation stripping tool for cable 8 - 8 mm Ø	909-9	Telephone pliers, 145 mm, chrome-plated,	1-352-5
Engineer's hammer, 200 g	411-7	with BERNSTEINIT-insulation	
Firmer chisel, blade width 16 mm	7-202	Combination pliers, 160 mm, chrome-plated,	3-732-1
Flat chisel, 200 x 16 x 22 mm, chrome vanadium	7-236	with BERNSTEINIT-insulation	
Electrician's chisel, 200 x 8 x 10 mm, chrome vanadium	7-255	Engineer's screwdriver, with special square BERNSTEIN handle,	S E01-4
Drill rasp, bore- \otimes 4 mm, length of blade 175 mm, with plastic hand	7-316	blade made from chrome vanadium, chrome-plated, 100 x 4.0 mm	
Punch, 6 mm Ø, with plastic handle	916-7	Engineer's screwdriver, as above, blade 150 x 5.0 mm	S 701-7
m ≤ ,elui griblo∃	7-502	Engineer's screwdriver, as above, blade 150 x 8.0 mm	S 981-4
Pocket saw "PUK" in a wallet	919-7	Cross-recess screwdriver, as above, size 1, with black tip	4-256
		Cross-recess screwdriver, as above, size 2, with black tip	4-257
alternatively to 7030		Voltage tester, for 220 - 250 V, blade 100 x 3.5 mm	4-344 VDE
Tool tray No. 7060 (VDE)		Universal stripping tool	9090-9
Side cutters, 160 mm, for steel wire up to 1.6 mm Ø,	3-134 VDE	Socket wrench, with special square BERNSTEIN handle,	901-9
chrome-plated, with VDE safety insulation		A/F mm 6.5 blate made from chrome vanadium, chrome-plated, 5.5 mm A/F	
Telephone pliers, 165 mm, snipe nose, long straight jaws,	3-244 VDE	Socket wrench, as above, 7.0 mm A/F	Z01-9
with cutting edge for hard wire, chrome-plated,			
with VDE safety insulation		Tool tray No. 7040	
Combination pliers, 160 mm, with wire cutter, for hard wire up to	3-732 VDE	Water pump pliers, 240 mm, chrome-plated, with insualtion	9-949-8
1.6 mm Ø, chrome-plated, with VDE safety insulation		Wire strippers, 155 mm, chrome-plated,	3-816-1
Voltage tester, 220 - 250 V, blade 100 x 3.5 mm	4-344 VDE	with BERNSTEINIT insulation	
Screwdriver, with VDE safety insulation, blade 100 x 3.5 mm		Cross-recess screwdriver Supadriv/Pozidriv, size 1, blade made	4-272
Screwdriver, with VDE safety insulation, blade 125 x 5.5 mm		from chrome vanadium, chrome-plated,	
Screwdriver, with VDE safety insulation, blade 150 x 6.5 mm		with special square BERNSTEIN handle	
Cross-recess screwdriver, size 1, with VDE insulation,	14-632 VDE	Cross-recess screwdriver, Supadriv/Pozidriv, as above, size 2	4-273
plade length 80 mm		Combination cutters, 190 mm, stainless	₹0E-9
Cross-recess screwdriver, size 2, with VDE insulation,	14-633 VDE	Cable stripping shears, 190 mm, stainless, with plastic handles	608-9
plade length 100 mm	30//003 37	Cable knife	109-9
Cable stripping knife, with blade protection, blade length 35 mm		Slicker trowel with round shank, blade width 16 mm	014-7
Socket wrench, with VDE insulation, 5.5 mm A/F		Spirit level, length 225 mm, with 3 levels:	989-7
Socket wrench, with VDE insulation, 7.0 mm A/F	⊒(1 +0+-01	horizontal, vertical and 45° angle	

Weight with tools 7300: approx. 11.600 kg

Weight with tools 7200: approx. 11.500 kg

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

Warding file set, 6 pieces, wooden handles in a wallet

8-405 V 082/W 08/N/30 K/N/30 W/230 V 914-7 907-7 Set of allen hex sockets on a ring, 8 pieces 018-9

 \otimes mm 3.1 ,0 001 ,(looqs) sire wire

9-240



COMPACT-MOBIL 7200 ELECTRICIAN'S SERVICE CASE

The trolley case as bordcase for world-wide service







68



SAFETY 8100 VDE TOOL CASE

V 0001 of as full of safety for working under voltage up to 1000 V



8115 (BERNSTEIN) SAFETY without tool set 8100 (BERNSTEIN) SAFETY with tool set

Description:

.oN

connection diagrams and other documents. The case has two locks. At the side it has loops for attaching a carrying strap. 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 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

Weight with tools: approx. 7.500 kg

Weight without tools: approx. 3.000 kg

with two-colour multilayered insulation

with two-colour multilayered insulation

16-444 VDE **Socket**, as above, 13 mm A/F

Outside dimensions: 440 x 175 x 310 mm

4-344 VDE **Voltage tester**, blade 100 x 3.5 mm

Tool set:

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

time: damages of the external red insulation immediately become visible by the yellow layer below.

Description of individual tools Description of individual tools .oN

17-523 VDE Plastic clip, 170 mm long, with internal spiral spring 17-521 VDE Plug-in grip with leather gauntlet for NH-fuses 16-441 VDE Socket, 10 mm A/F, with two-colour multilayered insulation 17-501 VDE Electrican's protective gloves, size 10 15-522 VDE Cable stripping knife with blade-protection, blade 35 mm 16-509 VDE Single-ended open-jaw wrench, as above, 14 mm A/F 14-633 VDE Cross-recess screwdriver, insulated, size 2 16-508 VDE Single-ended open-jaw wrench, as above, 13 mm A/F 14-632 VDE Cross-recess screwdriver, insulated, size 1 16-507 VDE Single-ended open-jaw wrench, as above, 12 mm A/F 14-608 VDE **Screwdriver**, insulated, blade 175 x 8.0 mm 16-506 VDE Single-ended open-jaw wrench, as above, 11 mm A/F 14-606 VDE Screwdriver, insulated, blade 150 x 6.5 mm 16-505 VDE Single-ended open-jaw wrench, as above, 10 mm A/F 14-604 VDE Screwdriver, insulated, blade 125 x 5.5 mm 7/A mm 9, sa above, as above, 10-504 VDE Single-ended open-jaw wrench, as above, 9 mm A/F 14-603 VDE **Screwdriver**, insulated, blade 100 x 4.0 mm 14-602 VDE **Screwdriver**, insulated, blade 100 x 3.5 mm 16-503 VDE **Single-ended open-jaw wrench**, 8 mm A/F, with two-colour multilayered insulation 13-806 VDE Wire strippers, 165 mm, chrome-plated, 16-476 VDE Rigid extension with locking device, length 125 mm, 13-707 VDE **Combination pliers**, 185 mm, chrome-plated, with two-colour multilayered insulation 16-471 VDE **Reversible ratchet**, 260 mm long, with two-colour multilayered insulation vitn two-colour multilayered insulation 16-451 VDE Socket, as above, 24 mm A/F 13-208 VDE Telephone pliers, bent, 205 mm, chrome-plated, 16-449 VDE Socket, as above, 22 mm A/F 13-207 VDE **Telephone pliers**, straight, 210 mm, chrome-plated, with two-colour multilayered insulation 16-448 VDE Socket, as above, 19 mm A/F 16-447 VDE Socket, as above, 17 mm A/F 13-106 VDE Side cutter, for piano wire, 165 mm, chrome-plated, with two-colour multilayered insulation 16-445 VDE Socket, as above, 14 mm A/F

16-443 VDE **Socket**, as above, 12 mm A/F 16-442 VDE Socket, as above, 11 mm A/F



NDE 100 SELS 8120 AND 8160

Black plastic case made from fracture-prrof ABS material. The tools are

handle which may be turned down. clearly arranged in foamed plastic recesses. The case has two locks and a

Safety tools at hand in a plastic case

Outside dimensions: 395 x 290 x 90 mm

BERNSTEIN safety tools are produced in accordance with specification EN

guarantee of optimal safety. The two-colour multilayered insulation (outside 60.900 of the Association of German Electrical Engineers (VDE) - the

yellow layer below. damages of the external red insulation immediately become visible by the red - inside yellow) allows a simple safety control, practicable at any time:

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

Weight with tools: 4.100 kg

Description of individual tools

13-106 VDE Side cutters for piano wire, 165 mm, chrome-plated,

14-633 VDE Cross-recess screwdriver, insulated, size 2 14-632 VDE Cross-recess screwdriver, insulated, size 1 14-606 VDE Screwdriver, insulated, blade 150 x 6.5 mm

15-522 VDE Cable stripping knife with blade protection, blade length 35 mm 12-221 VDE Cable knife with blade protection, blade length 50 mm 14-633 VDE Cross-recess screwdriver, insulated, size 2 14-632 VDE Cross-recess screwdriver, insulated, size 1 14-606 VDE Screwdriver, insulated, blade 150 x 6.5 mm 14-604 VDE **Screwdriver**, insulated, blade 125 x 5.5 mm 14-602 VDE Screwdriver, insulated, blade 100 x 3.5 mm 14-601 VDE Screwdriver, insulated, blade 75 x 2.5 mm 13-806 VDE **Wire strippers**, 165 mm, chrome-plated, with two-colour multilayered insulation

with two-colour multilayered insulation 13-707 VDE Combination pliers, 185 mm, chrome-plated, 13-207 VDE **Telephone pliers**, straight, 210 mm, chrome-plated, with two-colour multilayered insulation vitn two-colour multilayered insulation 13-106 VDE Side cutters for piano wire, 165 mm, chrome-plated, Description of individual tools

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

16-513 VDE Single-ended open-jaw wrench, as above, 19 mm A/F 16-512 VDE Single-ended open-jaw wrench, as above, 17 mm A/F 16-509 VDE Single-ended open-jaw wrench, as above, 14 mm A/F 16-508 VDE Single-ended open-jaw wrench, as above, 13 mm A/F 16-507 VDE Single-ended open-jaw wrench, as above, 12 mm A/F 16-506 VDE Single-ended open-jaw wrench, as above, 11 mm A/F with two-colour multilayered insulation 16-505 VDE Single-ended open-jaw wrench, 10 mm A/F, with two-colour multilayered insulation

15-521 VDE Cable knife with blade protection, blade length 50 mm

with two-colour multilayered insulation 14-601 VDE Screwdriver, insulated, blade 75 x 2.5 mm 13-708 VDE Combination pliers, 205 mm, chrome-plated,

15-522 VDE Cable stripping knife with blade protection, blade length 35 mm

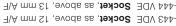
16-441 VDE Socket, 10 mm A/F, with two-colour multilayered insulation

17-531 VDE Voltage tester 'Steinel Volt Check 3'

16-442 VDE Socket, as above, 11 mm A/F

16-443 VDE Socket, as above, 12 mm A/F

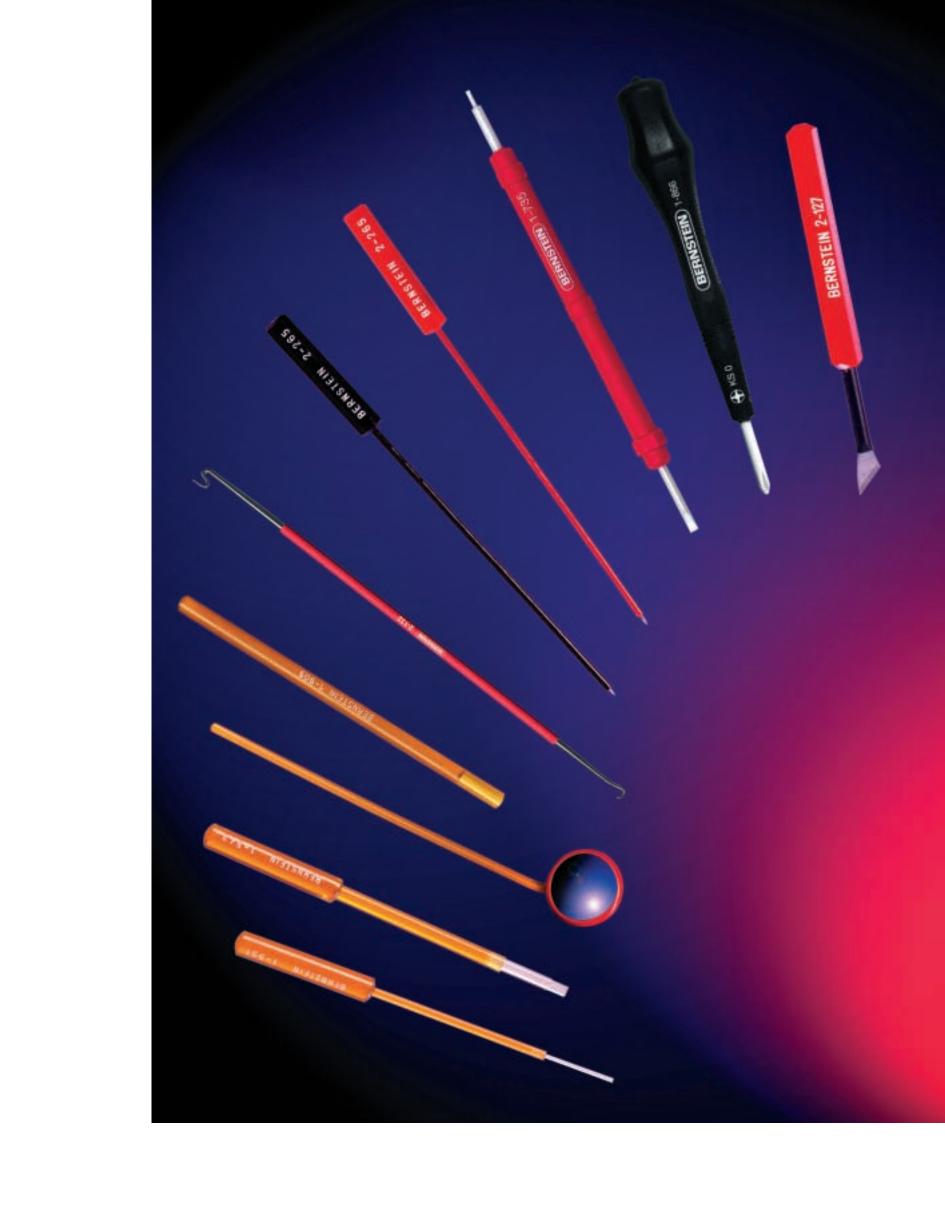
Weight with tools: 2.800 kg

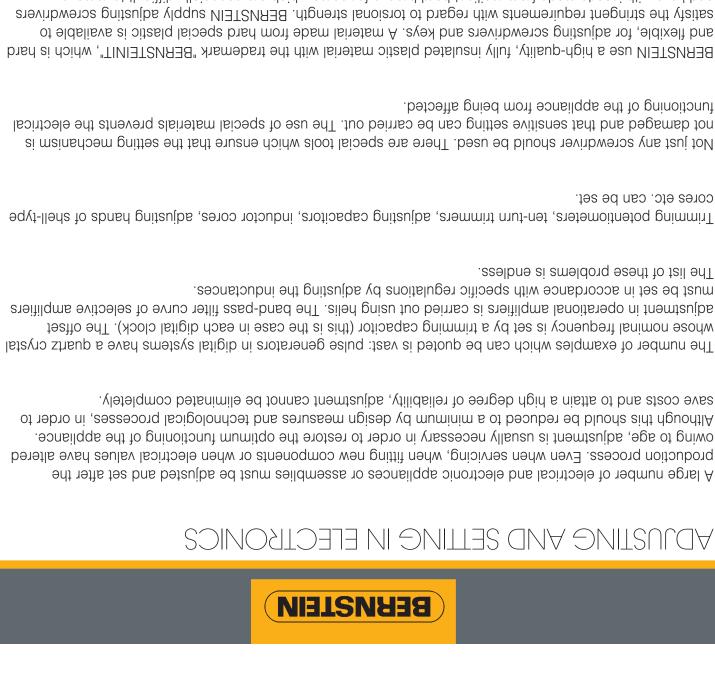




16-475 VDE T-bar, 1/2" square drive, 200 mm, 16-448 VDE Socket, as above, 19 mm A/F $16-447\ VDE\ Socket$, as above, $17\ mm\ A/F$







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

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

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

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

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

BERNSTEIN



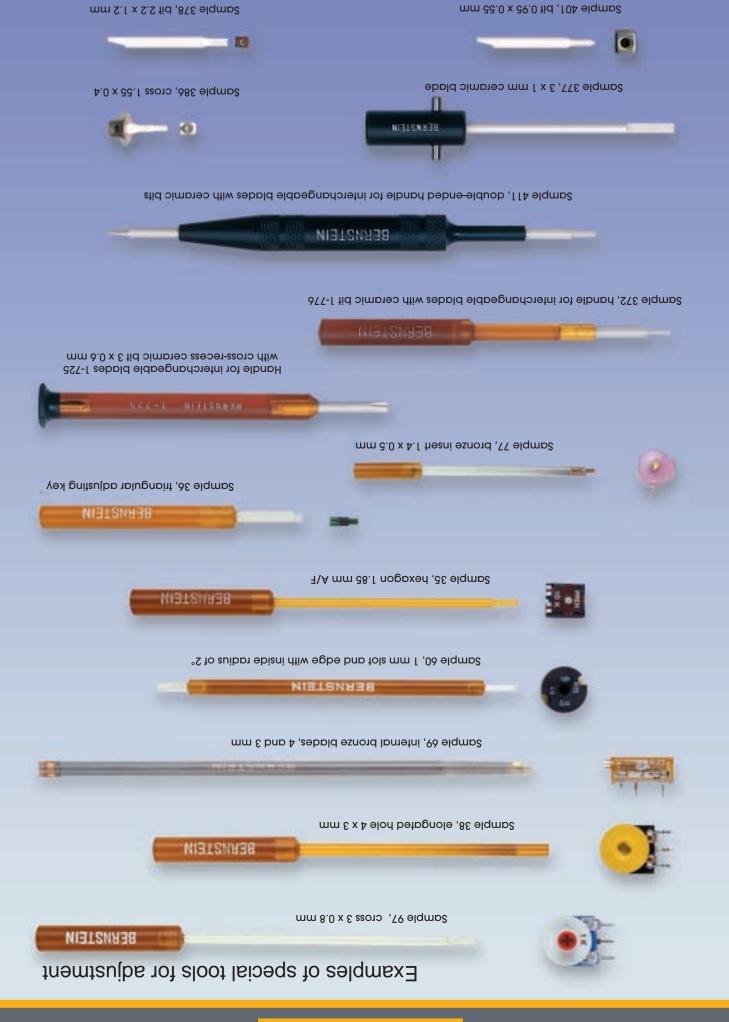
ADJUSTING AND SETTING IN ELECTRONICS

must be set in accordance with specific regulations by adjusting the inductances.

save costs and to attain a high degree of reliability, adjustment cannot be eliminated completely.

The list of these problems is endless.





BERNSTEIN



ISINNING MITH CERANIC

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

constantly smooth, sharp edges, high torque, non-magnetic, antistatic and

1-750 (BERNSTEIN) Ceramic adjusting screwdrivers set

13-pieces in a box with hinged lid

0S.1 × 0S.1 04.0 × 08.1

00.1 x 00.E

04.1 x 07.0

08.0 x 04.2

0 əsis

00 əzis

000 əziz

∃A 09.S

2.45 AF

1.95 AF

07.0 x 00.E

08.0 x 00.8

07.0 x 03.2

35.0 x 36.1

0E.0 x 08.1

08.0 x 03.1

08.0 x 08.1

08.0 x 09.0

0S.1 x 0S.1 04.0 x 08.1

00.1 x 00.E

04.1 x 07.0

07.0 × 00.E

2.40 x 0.80 0 əsis

00 əzis

2.45 AF

1.95 AF

0E.0 x 00.E

07.0 x 03.S

35.0 x 39.1 0E.0 x 08.1

08.0 x 03.1

08.0 x 08.1

08.0 x 06.0

Blade tip

000 əzis

2.60 AF

Blade tip

ADJUSTING SCREWDRIVERS

10 10 10

10

10 10 10

thgiaW

thgiaW

Meight

110

110

011

110

110

110

110

110

110

110

110

110

110

011

011

Overall length

35

35

35

35

35

35

шш

Blade length

35

35

35

35

35

35

шш

Blade length Measurements of the ceramic bits in box 1-750

Measurements of further ceramic bits

insulating, with centre top

978-1

978-r

1-874

£78-1

798-r

998-1

J-865

1-864

1-863

1-862

1-861

1-858

738-r

998-F

J-822

1-824

1-823

1-825

1-851

977-1

922-F

777-r

1-773

79Z-1

£97-1

1-758

.oN

997-1

99Z-1

1-762

192-1

737-r

997-1

79Z-1

1-753

1-752

197-1

.oN

Weight: 90 g

electrically insulating.

ceramic materials, namely: great hardness and wear resistance with the highest breaking strength and toughness values obtainable with (zirconium oxide) which, thanks to their very fine grained structure, provide BERNSTEIN ceramic blades belong to the group of oxide ceramic materials

Ceramic Bits for handles 1-725 or 1-735 Antistatic – antimagnetic – electrically insulating









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

For special trimming

9	0.1 × 0.4	0.8	97	150	1-582
abla	0.1 x 0.S	3.0	97	150	1-581
S	7.0 × 0.4	0.8	97	150	629-L
g	4.0 × 0.4	0.8	97	150	878-1
abla	7.0 x 7.1	2.5	97	150	173-r
g	3.0 x 3.5	0.8	97	150	929-1
abla	2.5 x 0.5	3.0	97	150	949-1
abla	2.0 x 0.5	3.0	97	150	729-L
abla	3.0 x 7.1	2.5	97	150	£73-1
abla	3.0 x 4.1	2.5	97	150	1-672
\forall	3.0 x f.f	2.5	97	120	178-1
6	шш	шш	ww	шш	
thgiəW	trasni	Ø	length	length	.oN
	RLOUZG	RISGE	RISGE	Overall	

Double-ended adjusting keys made from BERNSTEINIT, overall length 135 mm, one end with outside bronze tip, other end with inside bronze insert

thgiaW g	mm/əbisni	mm Ø x	mm/əbistuo	mm Ø x	mm Ø x	.oN
9	3.0 x 4.1	8 x 08	3.0 x 4.1	20 x 3	9 x G8	1-601
9	3.0 x 0.5	8 x 08	3.0 x 0.5	20 x 3	9 x 38	1-605
9	3.0 x 3.S	4 × 08	3.0 x 3.S	20 × 4	9 x 38	1-603
9	£.0 x 0.£	4 × 08	E.0 x 0.E	20 × 4	9 x 38	709-L
9	3.0 x 3.8	30 x 5	3.0 x 3.5	20 x 5	9 x 38	909-L

made from BERNSTEINIT, Double-ended adjusting keys

overall length 135 mm, both ends with inside bronze insert

9	£.0 x 0.£	4 × 08	6.0 x 0.5	20 x 3	9 x	219-1
9	č.0 x č.£	3 × 08	6.0 x 6.5	4 x 02		919-1
JdgiəW g	Bronze insert mm/abisni	absla htgnal mm & x	əznorla trəsni mm\əbisni	Blade length mm & x	əlbnsH htgnəl mm Q x	.oN

9 9 9	6.0 × 0.6 6.0 × 6.6 0.1 × 0.4	9 × 0E 9 × 0E 7 × 0E	5.0 × 0.2 5.0 × 5.2 5.0 × 0.5	20 × 3 20 × 4 20 × 4	9 x 58 9 x 58 9 x 58	919-1 819-1
Meight g	əznorB trəzni mm\əbizni	Blade length mm & x	əsnona İnəsni mm\əbisni	Blade length mm & x	Handle hength x Ø mm	.oN

9	8.0 × 0.8	4 × 08	2.0 × 0.5	20 × 3	9 x 38	919-1
9	8.0 × 8.8	5 × 08	2.0 × 3.5	20 × 4	9 x 38	819-1
9	0.1 × 0.4	5 × 08	3.0 × 0.5	20 × 4	9 x 38	819-1
Meight g	Bronze insert mm/əbisni	Blade length mm & x	Bronze insert mm/ebisni	Blade length mm & x	Handle length mm & x	.oN

9 9 9	E.0 × 0.E B.0 × B.E 0.↑ × 0.4	4 × 08 5 × 08 5 × 08	2.0 × 0.2 2.0 × 3.2 3.0 × 0.3	20 × 3 20 × 4 20 × 4	9 x 28 9 x 38 9 x 38	919-1 819-1
tdgiəW g	Bronze insert mm\əbisni	Blade length mm & x	Bronze Broert mm/abiani	Blade length mm & x	Handle length mm & x	.oN

9 9 9	8.0 × 0.8 8.0 × 8.8 0.1 × 0.4	9 × 08 9 × 08	2.0 × 0.5 2.5 × 0.5 3.0 × 0.3	20 × 3 20 × 4 20 × 4	9 x 58 9 x 58	919-1 919-1
tdgiəW g	Bronae traeri mm\abieni	Blade htgnel mm Ø x	eznona Jasni mm/ebisni	Blade length mm & x	Handle length mm & x	.oN

g B S S S S S S S S S S S S S S S S S S	mm/əbizni E.0 x 0.8	mm & x	mm/əbisni 3.0 x 0.5	iength x Ø mm 20 x 3	mm Ø x	.oN 819-1
9	3.0 x 3.6 0.1 x 0.4	30 × 5	2.0 x 0.5 3.0 x 0.3	20 × 4	9 x 38	719-1 819-1

tdgiəW g	Bronze insert mm/abizni	Blade length x Ø mm	Bronze Insert mm/ebisni	Blade hength mm & x	Handle hypnall mm Q x	.oN
9	£.0 x 0.£	4 x 08	3.0 x 0.5	20 x 3	9 x 38	919-1
9	3.0 x 3.5	30 x 5	2.0 x 2.5	20 × 4	9 x 38	1-9-L
9	0.1 × 0.4	30 x 5	£.0 × 0.£	20 x 4	9 x 38	819-1

9 9 9	5.0 × 0.5 3.0 × 3.6 0.1 × 0.4	9 × 08 9 × 08 7 × 08	2.0 × 0.5 2.5 × 0.5 3.0 × 0.3	20 × 3 20 × 4 20 × 4	9 x g8 9 x g8	219-1 219-1 819-1
thgiəW g	esnoral thesni mm/ebisni	Blade length x Ø mm	estronal insert mm/ebisni	Blade length x mm & x	Handle length x Ø mm	.oN

9	0.1 × 0.4	30 x 5	E.0 x 0.E	20 × 4	9 x G8	819-1	
9	3.0 x 3.5	30 x 5	6.0 x 6.5	20 × 4	9 x 38	1-61Y	
9	£.0 x 0.£	4 x 08	3.0 x 0.5	20 x 3	9 x 38	919-1	
thgiəW g	əznora həsni mm\əbisni	hang x mm Ø x	həsni mm\əbisni	length mm & x	handie handie mm Ø x	.oN	

qof ləviv	ve djiw TINI∃T	.cpsngesp	for inter	1-725
	вu	immit)	dustrial	For in
0.11.00	010 1/ 010		0 1/ 00	0.0.

1-735

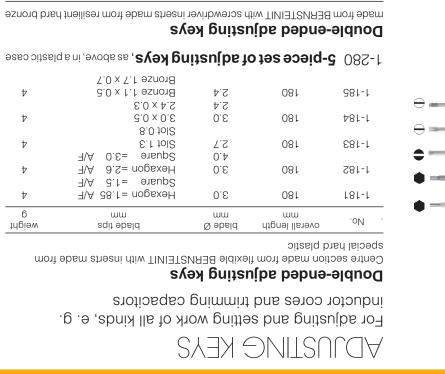
Adjusting screwdriver handle for interchangeable blades, dor interchangeable blades, for 3 mm Ø blades

ŀ	3.0 x 3.1 3.0 x 0.5	S S	32 32	special hard plastic special hard plastic
б	шш	шш	шш	material
Meight	Blade tip	Blade Ø	Overall length	Blade



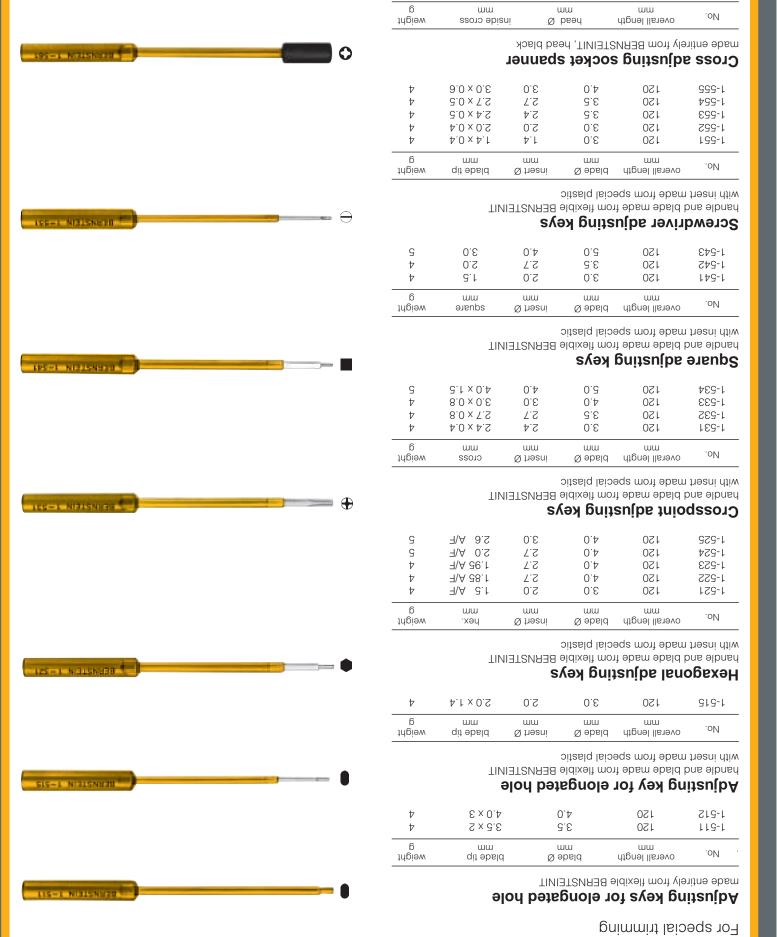
sqit əbsld mm

inductor cores and trimming capacitors



thgiəw g		3.0	150	1-202
	dtbiw tola mm	blade Ø mm	overall length mm	.oN
	ed at both ends		rely from hard spec	_
		ted key)	ing key (slot	isujbA
3	0.4	0.4	200	967-1
2	3.0	3.0	200	98t-1
Ļ	2.4	4.2	200	974-r
ļ	2.0	2.0	130	997-1
tdgiəw g	edtbiw əbald mm	Ø əbald mm	overall length mm	.oN
	nd at both ends	cial plastic, grou	rely from hard spec	made entii
			ing screwdri	_
9	5.6 bns 0.3	0.3	500	697-1
3	3.6 bns 0.3	0.8	130	1-458
6	шш	шш	ww	.oN
thgiaw	shtbiw əbald	Ø əbald	overall length	
	both ends		rely from BERNSTE	
		Vers	ing screwdri	itsuibA
9	0.8 bns 0.4	0.4	320	977-1
3	3.0 and 2.0	3.0	320	944-1
weight g	blade widths mm	Spald mm	overall length	.oN
	end made from hard sp			made Irom
sitoola loico.		, and to the edi. Till		gai'auT
	4.0	961	540	987-L
G			0,0	
G G		4h1	042	
9 9 †	2.4 3.0	961 140	182 5 4 0	1-415
9 † 6	mm 2.4	140 um	182 ww	1-418 -418
9 7	Mand blade width mm	plade length	overall length mm 185	.oN 1-415 1-425
9 † 6	olastic Ø and blade width mm 2.4	nn hard special I blade length mm 140	s made entirely fro overall length mm 185	.oN -415 314-1 314-1
9 † 6	olastic Ø and blade width mm 2.4	nn hard special I blade length mm 140	overall length mm 185	obsld hiw. ON. 1-415 1-425
9 † 6	olastic Ø and blade width mm 2.4	nn hard special I blade length mm 140	s made entirely fro overall length mm 185	obsld hiw. No. 1-415 1-425
thgiew g th	ers Dlastic Ø and blade width mm 2.4	SCREWATIVE The second of the s	al" adjusting s made entirely fro overall length mm 185	"Special with blade No.
p theisw p theisew p theise their	ers ers lastic Ø and blade width mm 2.4	5.0 Screwdrive Screwdrive Mard special programm Marge length mm 140	150 al" adjusting s made entirely fro overall length mm 185	1-365 with blade No. 1-415 1-425
£ the state of the	2.0 x 1.0 4.0 x 1.0 ers blastic Ø and blade width mm 2.4	4.0 5.0 SCrewdriv mm hard special proming the second proming the sec	150 150 al" adjusting s made entirely fro overall length mm 185	1-355 1-365 With blade No.
fr fr fr fr fr fr fr fr fr fr fr fr fr f	7.7 × 0.7 2.0 × 1.0 4.0 × 1.0 4.0 × 1.0 Plastic Ø and blade width mm 2.4	3.0 4.0 5.0 5.0 screwdrive mm 140	150 150 150 al" adjusting s made entirely fro overall length mm	1-345 1-365 1-365 1-365 1-416 1-416 1-416





Z.↑ x 8.4

9

0.8

1-961

150

ADJUSTING KEYS



,mm U.d ,mm 0.5 ,mm 2.5 916-1 thin in order to penetrate deep into each coil core. The metal and plastic socket wrenches are extremely end BERNSTEINIT, other end brass, overall length 140 mm. Double-ended hexagonal adjusting socket wrenches, one from BERNSTEINIT, overall length 260 mm Engineer's mirror with extension handle, made entirely 606-I Screwdriver double-ended, widths 5 mm and 3 mm inserted bronze screwdriver blade 3.5 mm Combined socket wrench 4.5 mm A/F, with 906-L 9 11 2.8 mm screwdriver blade, overall length 130 mm Special screwdriver with pivot blade, other end მ 9 Wrench with pivot, overall length 60 mm 1-903 overall length 150 mm Screwdriver, 3.5 mm, with 2 mm wide slot in handle, 1-905 Socket wrench, 6 mm, single-ended, overall length 60 mm 1-901 34gi9w Description of individual tools .oN Weight: 200 g 21-piece set in a tool roll 1-900 BERNSTEIN Radio adjusting tools Measurements as per set 1-170 g 24 :Jdgi9W BERNSTEINIT, in a plastic case 7-piece set, made entirely from **BERNSTEIN** Television adjusting screwdrivers 091-1 screwdriver made from special plastic 3 mm insert for slotted head screws 3 mm, other end BERNSTEINIT, 230 mm long, one end with Double-ended screwdriver made from 771-1 special plastic other end 3 mm wide screwdriver made from bronze insert 3.5 x 0.5 mm, in BERNSTEINIT guide, BERNSTEINIT, 180 mm long, one end with Double-ended screwdriver made from 971-1 wide screwdriver made from special plastic with bronze insert 3.5 x 0.5 mm, other end 4 mm BERNSTEINIT, 185 mm long, one end Double-ended screwdriver made from other end with brass core, 3 mm Ø 150 mm long, one end with H. F. iron core, Feeler gauge made from BERNSTEINIT, for 2 mm wide slot key 2.6 mm, other end blunt screwdriver BEBNSTEINIT, 165 mm long, one end hexagon Double-ended adjusting key made from other end 5 mm wide screwdriver insert 3.5 x 0.5 mm, in BERNSTEINIT guide, BERNSTEINIT, 65 mm long, one end with bronze Double-ended screwdriver made from 3 g blade made from special plastic, 40 x 3 mm Short, single-ended screwdriver, 85 mm, 1-151 34gi9w Description of individual tools .oN g 02 :JAgiəW 7-piece set in a plastic case 1-170 (BERNSTEIN) Television adjusting screwdrivers (German Federal Registered Pattern) combined with inserts of hard special plastic Tools made from high quality BERNSTEINIT material, STAR DINSTING SETS

piade chrome vanadium

,mm 0.4 419-1

,mm 3.5

4-311

Z01-3

2-265-2

2-265-1

771-L

Screwdriver for grub screws, 2.8 mm,

ofher end brass core, 150 x 4 mm Ø

Red test prod with banana plug connection

Black test prod with banana plug connection

Feeler gauge for radio, one end H. F. iron core,

Engineer's steel tweezers with bent tips, length 150 mm

10 g

ნ 6

მ 9

,mm 0.8

,mm 2.3

816-1



	6 6	0.5 bns 0.5 0.5 bns 0.5	110 110 Mm S ,alahabi	09	927-4 924-1 954-1
	6 weight	mm widths	mm plade length	um psnale length	.oN

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

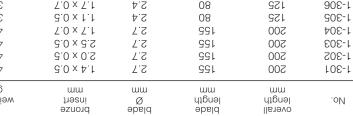
Interchangeable adjusting screwdrivers

Weight: 50 g

1-300 (вепизтем Adjusting screwdrivers,

clearly arranged in a plastic case 7-piece set, as described above,

3.0 x 0.5	2.4	08	152	1-307
7.0 x 7.1	2.4	08	152	1-306
3.0 x f.f	2.4	08	156	1-305
7.0 x 7.1	7.2	122	200	1-304
3.0 x 3.5	7.2	122	200	1-303
3.0 x 0.5	7.2	122	200	1-302
C.O A F.1	1.2	001	007	1.00-1



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

For extremely firm cores or extremely small dimensions made from resilient hard bronze

Adjusting screwdrivers with metal inserts

clearly arranged in a plastic case Weight: 55 g 7-piece set, as described above,

	0.5 0.8 04 0.4 0.4 04 0.2 0.5 061 0.5 0.4 081 0.6 0.3 061 0.4 0.8 081 0.4 0.8 081	98 175 176 176 178 178 178 178 178 178 178 178 178 178	791-1 991-1 991-1 991-1 291-1
--	---	---	---

1-150 **BERNSTEIN** Adjusting screwdrivers

blade length overall length

special plastic insert at the tip gives the blade exceptional torsional strength. (German Federal Registered Pattern)

The BERNSTEINIT blade makes the screwdriver flexible, and the hard

BERNSTEINIT with insert made from special plastic

made from special hard plastic Adjusting screwdrivers with blade-tip

For all adjusting work which requires a ground blade

ADJUSTING SCREWDRIVERS



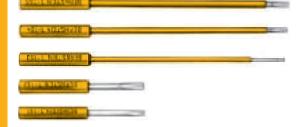














ADJUSTING TOOL SETS

1-180 BERNSTEIN Adjusting tools

7-piece set in a plastic case

in an imitation leather case

g 02 :JdgiəW

sloois	Description of individual	.oN
rom BERNSTEINIT	Adjusting screwdrivers made f	
	with hard special plastic insert	
mm 0.8 x 04	Overall length 85 mm, blade	1-151
mm 0.4 x 04	Overall length 85 mm, blade	1-152
mm 0.2 x 0.5 t	Overall length 175 mm, blade	1-153
mm 3.8 x 08t	Overall length 175 mm, blade	1-122
ade from BERNSTEINIT	Double-ended adjusting key m	1-181
s, overall length 180 mm	with hard special plastic inserta	
/F, other end square 1.5	A mm 38.1 Isnogsxad bna ano	
ade from BERNSTEINIT	1-182	
s, overall length 180 mm	with hard special plastic inserta	
-, other end square 3.0 r	I/A mm 8.5 Isnopsxad bna ano	

Screwdriver for grub screws 80 x 2.8 mm $\,$

Radio screwdriver 40 x 3 mm

Adjusting socket wrench 6.0 mm

Adjusting socket wrench 5.5 mm

Adjusting socket wrench 5.0 mm

Adjusting socket wrench 4.5 mm

Adjusting socket wrench 4.0 mm

Adjusting socket wrench 3.5 mm

Adjusting socket wrench 3.0 mm

Adjusting socket wrench 2.5 mm

that they can engage deeply in every coil core

Overall length 180 mm, blade 135 x 3.0 mm Overall length 180 mm, blade 135 x 3.5 mm Overall length 180 mm, blade 135 x 4.0 mm Overall length 180 mm, blade 135 x 4.0 mm

Overall length 175 mm, blade 130 x 2.0 mm Overall length 125 mm, blade 40 x 4.0 mm Overall length 125 mm, blade 80 x 2.0 mm Overall length 85 mm, blade 40 x 3.0 mm tip made from hard special plastic

Description of individual tools

slot at both ends 1 mm

The metal and plastic socket wrenches are extremely slim so BERNSTEINIT, other end brass, overall length 140 mm. Double-ended hexagonal adjusting socket wrenches, one end Engineer's mirror with extension handle, made entirely from BERNSTEINIT, with 6 mm screwdriver ground in handle Feeler gauge for radio and television, 150 x 4 mm Ø

Adjusting screwdrivers, made entirely from hard special plastic, Mo. 1-971 and 1-972 made from BERNSTEINIT,

21-piece set in a tool roll

Weight: 240 g

Slotted key made from special plastic, 120 x 3 mm Ø,

mm 7.0×7.1 fraeni asnord nith ,mm 7.0×7.1 fraeni asnord ,mm 3.1Adjusting screwdriver made from special plastic, overall length

one end hexagonal 2.6 mm A/F, other end square 3.0 mm A/F with hard special plastic inserts, overall length 180 mm, 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 Double-ended adjusting key made from BERNSTEINIT

Sloot gnitsuibA Marshar

Overall length 175 mm, blade 130 x 3.5 mm Overall length 175 mm, blade 130 x 3.5 mm

Overall length 175 mm, blade 130 x 2.0 mm

BERNSTEIN Adjusting tools

Adjusting screwdrivers made from BERNSTEINIT

Weight: 60 g

7-piece set

125 mm, blade 80 x 2.5 mm, with bronze insert 1.7 x 0.7 mm

with hard special plastic insert

Description of individual tools

Valve tapping hammer

915-4

2-236

816-1

1-6-1

916-1

916-L

716-L

1-913

1-915

1-6-1

1-174

946-1 1-972 1-973 1-974

.oN

046-F

909-L

90E-1

1-185

1-181

991-1 791-L

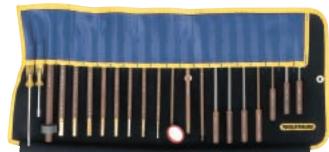
1-153

.oN

Adjusting screwdriver made from special plastic, overall length 1-306 ∃\A mm ∃\A mm ∂

1-190













ADJUSTING TOOL SETS

1-250 (BERNSTEIN) Special tools and adjusting tools

g 081 :14gi9W 15-piece set in a leather case

Weight: 100 g	
Description of individual tools	.oN
Adjusting screwdriver made from BERNSTEINIT, with blade made from hard special plastic, overall length 85 mm, blade 40 x 3.0 made from hard special plastic, overall length 85 mm, blade	1-151
Adjusting screwdriver made from BERNSTEINIT, with hard special plastic insert, overall length 175 mm, blade 130 x 2.0 mm	1-153
Adjusting screwdriver made from BERNSTEINIT, with hard special plastic insert, overall length 175 mm, blade 130 x 3.0 mm	1-124
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	181-1
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	1-182
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	1-305
Adjusting screwdriver as above, with bronze insert 2.0 x 0.5 mm	1-307
Engineer's mirror with extension handle, made entirely from BERNSTEINIT, handle ground as 6 mm screwdriver	8Z6-1
Desoldering lever, slotted at one end, nickel-plated and insulated, with plastic handle	2-126

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

Screwdriver for grub screws, overall length 140 mm

Core remover, for easy removal of damaged cores

Pair of test prods, red and black, extremely slim, pointed and flexible, 155 mm, blade made from 1 mm steel wire,

Miniature screwdriver, overall length 85 mm, blade 40 x 1.8 mm

with banana plug connection, fully insulated

116-4

4-301

2-265

ON.	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
181-1	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

Steel tweezers with bent tips, 150 mm long Z01-3 Miniature screwdriver, overall length 85 mm, blade 40 x 1.8 mm with banana plug connection, fully insulated pointed and flexible, 155 mm, blade made from 1 mm steel wire, Pair of test prods, red and black, extremely slim, 2-265 BERNSTEINIT, handle ground as screwdriver Engineer's mirror with extension handle, made entirely from 876-r 1 mm slot at both ends Slotted key made from special plastic, 120 x 3 mm Ø, 4-505 Adjusting screwdriver as above, bronze insert 1.7 x 0.7 mm 1-304

Special sheet-metal scissors, serrated, 110 mm long

BERNSTEIN

911 135 mm **BERNSTEINIT handle** adjusting fine contacts, nickel-plated blade, Resilient adjusting key for bending and 12 a mm 071 made from BERNSTEINIT 2-236 Valve tapping hammer 12 0 mm 061 qit ləəts dtiw 2-234 High voltage tester made from BERNSTEINIT βĻ 2-167 Replacement glass fibre for 2-166 mm 04 mechanism, plastic casing 0 O F աա ցէէ 2-166 Glass fibre contact cleaner brush with rotary 2 g uickei-bisted 35 mm 2-165 **Contact cleaner,** brush-type, with wire bristles, slewable into any position, diameter of bar 8 mm 215 mm 2-161 Magnetic bar with double ball-and-socket joint, g 27 mm 009 long version nickel-plated, areas with free play, to reach inaccessible 2-157 Flexible claw-type grip with 4 sprung claws, with 4 wire claws, small version with clip 21 g 120 mm 2-155 Claw-type gripper, nickel-plated brass, at both ends for holding tools from 0 to 3 mm & 110 mm 35 g 2-152 **Tool holder,** nickel-plated brass, with collets at both ends and adjustable in holder Se 9 ww 06 ground special steel (80 mm long), insertable nickel-plated, triangular blade made from hollow 2-151 **Triangular scraper** in brass tool holder, nickel-plated blade, plastic-handle 15 0 mm 04t with slotted axles up to 3.2 mm Ø, spindle resistors and potentiometers for easy and accurate setting of 2-145 Screwdriver with guide sleeve g 8 mm 271 **BERNSTEINIT handle** 1.5 x 0.5 x 30 mm, nickel-plated blade, cores in coils etc., flexible metal tip 2-135 **Core remover** for easy removal of damaged ნ 6 mm 201 conductive black plastic printed circuit boards, handle from 2-101 Tin knife with ceramic blade for working 14 8 աա ցլլ hexagonal plastic handle solder bridges, round, insulated shank and shape for scraping off excess solder and 2-128 Tin scraper with blade of sharp parting tool spank and hexagonal plastic handle 14 8 աա ՅԼԼ printed circuit boards, round, insulated for cutting circuit paths and working 2-127 **Tin knife** with pointed, sharp blade, and hexagonal plastic handle g 01 աա ՅԼԼ nickel-plated, round, insulated shank 2-126 **Desoldering lever,** slotted at one end, βZ 125 mm nickel-plated, insulated angles (40°/70°), slotted at both ends, when desoldering, ends at different 2-125 **Desoldering lever** for lifting fixed components available in red (2-265-1) and black (2-265-2) 155 mm with banana plug connection, fully insulated, flexible, blade made from 1 mm steel wire, 2-265 **Test prods,** extremely slim, pointed and Length Weight Description .oN SPECIAL TOOLS

BEBUSTEIN

			10 Pocket inspection lamp as discriped above, with additional straight fibre optic adapter, 80 mm long	0-CC0-7
BEHNBIEM Electronic Tools 2-665	20 đ	mm 221	Pocket inspection lamp MITILITE LASER SPOT 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	Z-655
	g 08	աա Չշլ	Hand magnifier, illuminated with bi-aspherical PMX-light-weight lens, 35 mm Ø, 4x magnification, 16.0 Dpt., with 2 batteries type Mignon 1.5 V	S-295
(HEMMELINN) 5-563	6 SS	ատ ՅԼԼ	Hand magnifier, light metal surround, biconvex lens, 65 mm ⊗, 3.0 x magnification	2-293
M-7 NAMES	6 9	mm 07	Plastic magnifying glass with biconvex lens, 5 x magnification, 30 mm Ø, short, practical shape	7-291
E SEE NISLENUISE	ნ ვ⊭	mm 00S	Inspection mirror with illuminated mirror area and double joint, slewable into any position, nickel-plated, pocket clip, for 2 batteries type Mignon 1.5 V	S-285
TOTAL MINICHUSE	56 92	mm 094-031	Telescopic mirror with double joint, slewable into any position, nickel-plated, pocket clip, mirror ≥3 mm Ø	Z-28Z
NAISAUM - CO	93 მ	mm 361	Double-jointed mirror, slewable into any position, nickel-plated, with insulated handle and clip, mirror 30 mm Ø	S-281
	б∠	mm 081	Repair mirror, stainless, magnifying, concave mirror 21 mm Ø, with BERNSTEINIT handle	2-275
SAV-1 MINISHMAN	б 6	145/260 mm	Engineer's mirror as above, but extension handle with ground 6 mm screwdriver blade, made from BERNSTEINIT	826-1
ACCA - MASSINITY	66		Engineer's mirror, magnifying, concave mirror 23 mm Ø, with extension handle, made entirely from BERNSTEINIT, fully insulated version	606-l
	Meight	геидţр	Description	.oN
			STOOLS	3dS







SPECIALTOOLS

thgisW	Гепдіћ	Description	.oN	
6 6S	mm <u>3</u> 0S	Set of spring hooks, 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	5-130	CERNSTENNY SERVICE OF THE PARTY
g 01	mm 2 0S	Spring hook, nickel-plated and insulated, for inserting and removing tension and compression springs	2-131	To Marine
₿ O L	mm 27t	Spring hook, nickel-plated and insulated, for inserting and removing tension springs	251-2	5
6 Et	աա 961	Spring hook with ring, nickel-plated, for inserting and removing strong tension springs	2-133	
S00 đ	mm 20t	Extractor with self-centring extractor hook to remove small bearings and similar parts. Span 60 mm, grip depth 50 mm	5-306	
6 11	mm 00t	Double lamp extractor, 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 DIM 49838	2-307	106-6
6 OZ	աա Չշլ	IC tweezers for gripping, inserting and removing, especially suitable for narrow components, nickel-plated	Z-601	
ß 9	mm 28t	PLCC-puller for lifting out plug-in PLCC's	S-605	this minimals
6 SZ	mm 001	PLCC extractor for easy removal of plug-in PLCC's	S-620	
6 09	տտ 281	Insertion tool with sensor, wire connection, without soldering, screwing and stripping, cutting the remaining length, all in one operation	P07-S	C. MA-MU STANONE STANO
ნ 09	աա գցլ	Insertion tool for system MDF 71 to connect cable and switch wire	2-702	SECONE MANDES













2-705 Memorial

2-751 Test headphone

Weigth: 240 g

W S bsol mumixsm

a tone on different pairs

- the check of switching circuitry

yeigth: 40 g

Power supply: 2 batt. typ AAA, 1.5 V

damaged switches by optical and acoustic indication Quick and accurate detection of cable breaks, blown fuses and $% \left(1\right) =\left(1\right) \left(1\right)$

with fine adjuster, cable length including test prods 1450 mm, 1 x 600 ohm, changeable from 600 up to 10.000 ohm,

- verification the presence of DC current and permission to follow - the connection to the line without drawning loop current (monitor)

2-705 Contact-free voltage detector "Voltstick"

LESTING TOOLS

Weight: approx. 1.000 g

Thermo-element

Current consumption: approx. 2 A

Voltage: 220 V

Technical data: Diameter: 350 mm

overheating after approx. 1.5 min.

fields. An installed thermo-element interrupts as protection of

2-505 is used, which neutralizes even the strongest magnetic successful enough. For these cases the demagnetizing throttle strongly magnetized that the intern demagnetisation is not There are colour televisions and colour monitors which are so

the demagnetisation of the colour television tube. for setting the purity of colour and convergence accurately is

When servicing colour televisions, the most important requirement

cable and Euro-flat plug

complete with 4 m connecting

and colour monitors

for colour televisions

2-505 Demagnetizing throttle

Weight: 300 g

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

Also suitable for erasing magnetic tapes.

which can cause disturbing extraneous noise and losses of

The device removes unwanted magnetism from sound heads,

cable and Euro-flat plug complete with 2 m connecting

2-305 Demagnetizing throttle

Indispensable for the service

DENACNETIZING THROTTLES







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 guaranted 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 lifes are long.

The decision to produce a lap joint





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

BEBNSTEIN

Finishes

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

Bright-polished chrome-plated Fine-polished and bright-burnished Bright steel-polished Mickel-plated Burnished

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

	Only the finishes indicated in the discriptions of the pliers are available from stock, all other finishes are available on request.
61- 81-	ESD/EGB-insulations conductive black-yellow hand-guard conductive black-yellow hand-guard
-VDE	Safety insulation VDE-safety insulation two-colour multilayered insulation
9l- 7l-	bright-burnished, fine-polished with yellow-grey hand-guard with conductive black-yellow hand-guard
21- 21-	burnished with coloured insulation
8- 6- 81-	steel-polished with coloured hand-guard insulation with coloured insulation with conductive black hand-guard
9- g- t/- E-	nickel-plated with transparent hand-guard (=BERNSTEINIT-insulation) with coloured hand-guard insulation with coloured insulation
tuontiw f- S- F1- S1- 02-	Finish chrome-plated, polished with transparent hand-guard (=BERNSTEINIT-insulation) with transparent or coloured insulation with conductive black hand-guard with yellow-grey hand-guard

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.







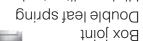






Fine polished and bright burnished

High quality steel









		71-719-8	130	8/ ₁ G	cutting edge outsid	a.u ə	_	_	9
		71-EZ9-E	130	8/L G	cutting edge inside		_	_	9
71-E73-E	ÌO	of and behind	the cor	tnənoqn			ດີເພາກດ	מווברנו) ו	
V F 629 6		EUROline extremely slim	_			y dault 10t	paittue	i vitaerib	uj ui
THE PARTY AND LOCAL									
					_				
	۹.	3-672-14	130	8/ ₁ G	cutting edge 20° angular	9.0	_	_	9
		71-129-E	130	8/ ₁ G	straight '	9.0	-	-	9
	хә	extremely slin	odtiw ,	eì abie tu	ice, for precision wor	k at point	ts diffic	ult to rea	ясµ
	3	EUROline	puə e	cutte	s.				
41-179-8	_								
	3	71-739-8	152	9	without side face	2.1	0.1	_	9
THE MALES	4	71-999-8	156	9	with side face	2.1	0.1	4.0	9
	iw	nioq ,mila diw	ted hea	aliava ,b	ble with or without sid	ace face			
	3	EUROline	əbis e	entte	ike				
	_								
	ર	71-999-8	159	9	without side face	۶. ۲	0.1	_	9
		71-799-8	125	9	with side face	3.1	0.1	4.0	9
71-999-8	łiw	nuor mils diw	ged beb	ad, availa	stuodtiw or dtiw elds	eide face			
	3	EUROline	əbis e	cntte	ik8				
THE PARTY OF	= 1								
					with special flat cut	egge	į		
	ε	71-899-8	150	⊅/ε ⊅	without side face,	0.1	9.0	-	9
		3-652-14	150	⊅/ε ⊅	without side face	0.1	9.0	-	ig
					or finest operations				
	_	EUROline	iuim (ahia i	211110				
71-799-8									
					with wire retaining s				
Transport Street	- 23	3-651-14 DF		⊅/ε ħ	without side face	2.1 2.1	9.0	-	ig
		3-651-14 Willi Very Siirri,	150 Lonuae	⊅/ε t⁄	for finest operations without side face	2.1	9.0	-	ig
		EUROline							
	- 🥌		ww	səyoui		wire	wire	Wire	 ĵ
	1	.oM	υω Γeυί		hsini∃	Copper-	floS		i9W
						aittu O		Ø mm vti	
71-299-1		COLL	-)/	744	$ \Gamma 42$				
)		 	i V					
THE PARTY AND ADDRESS OF									
-		rom anti-							
					d bicoloured hai				
					ng, high corros	ion pro	oitoeti	uc	
		CHOOLDING	ובח טו	บเกท	nalielling ilib				

71-779-8

71-999-8

3-624-14

3-652-14

3-651-14

3-651-14 DR









09

99





EUROline snipe nose pliers

130

EUROline flat nose pliers

from anti-slide material

High quality steel

Box joint Double leaf spring

EUROline

swaj nialq

plain jaws

plain jaws

3-670 EUROline Set of pliers, 4 pieces

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

Tool set: Weight: 390 g

> 3-683-14 extremely slim

> 3-682-14 extremely slim

> 41-189-8 extremely slim

Description of individual tools .oN

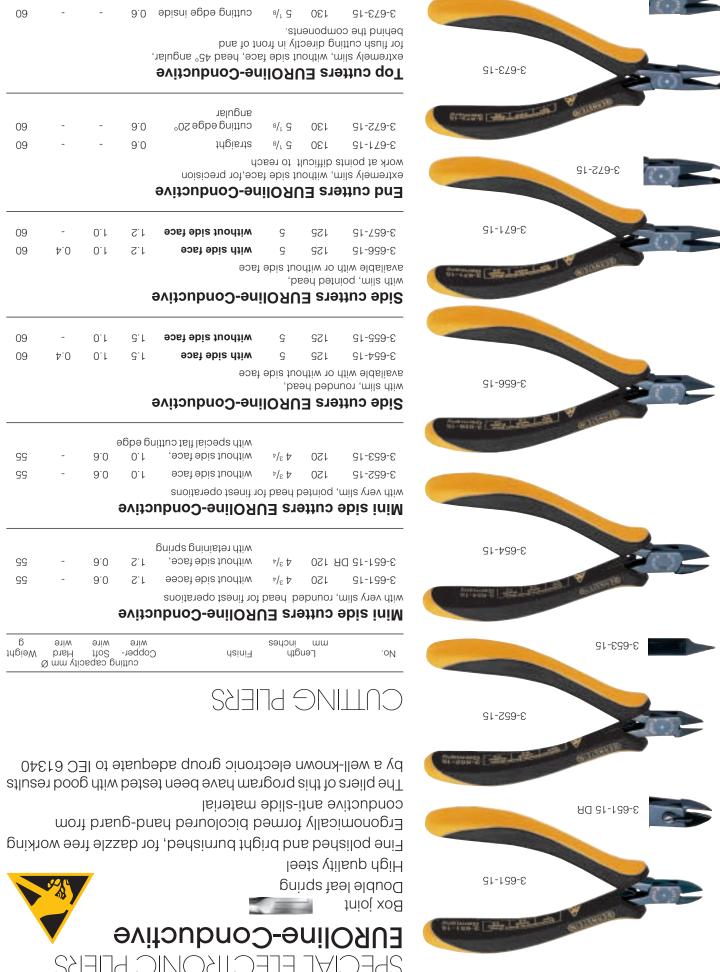
3-651-14 Mini side cutters, 120 mm, without side face,

3-672-14 **End cutters,** 130 mm, cutting edge 20° angular, for soft wire up to 0.6 mm, copper wire up to 1.2 mm

for copper wire up to 0.6 mm

3-682-14 Flat nose pliers, 130 mm, plain jaws

3-683-14 Snipe nose pliers, 130 mm, plain jaws



3-674-15







09	-	-	9.0 əl	cutting edge outsic	8/ ₁ G	130	3-674-15
09	-	-	9.0	cutting edge inside	8/ _L G	130	3-673-15
					ıts.	auodwc	oo ədt bnidəc
							or flush cutti
				sce, head 45° angula			_
			,	evitoubno 2-er	illOgi	IH 216	ittiis aoT
09	_	_	9.0	cutting edge 20° angular	8/ ₁ G	130	3-672-15
09	_	_	9.0	straight	8/ ₁ G	130	91-129-8
09			90				work at point
				ice,for precision			
			€	ne-Conductive	iilOAL	ers El	End cutt
09	-	0.1	2.1	without side face	9	152	91-739-8
09	4.0	0.1	S.1	with side face	9	152	3-656-15
				face	epis inc	or with	available with
							ioq ,mile dfiw
			Э	vitoubnoO-en	IIORU	3 S19	Side cutt
09	-	0.1	ð.f	without side face	9	125	3-655-15
09	4.0	0.1	3.1	with side face	g	125	3-654-15
				face			available with
			•	ADODDUOG OU			with slim, rou
			Ð	vi3ondno2-9n	IIBOII	3 218.	ttuo abi2
		,	26226111	nno mu micodo una			
99	_	9.0	9. f Poba prii	without side face, with special flat cuti	⊅/ε ⊅	150	3-653-15
99	_	9.0	0.1	without side face	<i>†</i> /ε <i>†</i>	120	3-652-15
		0 0	0 4	or finest operations			
		į	avijon	PROline-Condi			
			.,	1 10 1 110 0 1			-1
			f	with retaining spring			
99	-	9.0	2.1	without side face,	⊅/ε ⊅	H 120	3-651-15 DI
99	-	9.0	2.1	without side facee	⊅/ε ⊅	150	3-651-15
				for finest operations		ı, rounde	with very slim
		i	avitou	DROline-Cond			
	21144	21144	21144		69110111	111111	
thgiaW	Hard wire	Soft	Copper- wire	dsini∃	dtb sədəni	ww Feui	.oN
	ω mm γti:	ud cabac	ittuo				



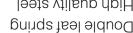


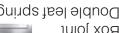
frioj xo8

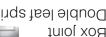
from conductive anti-slide material

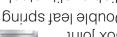
Double leaf spring

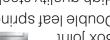
High quality steel

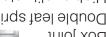


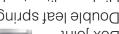


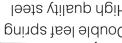


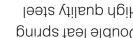


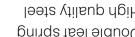


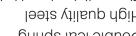


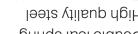


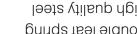


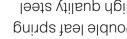


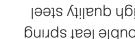


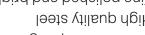


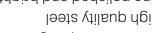






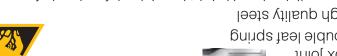




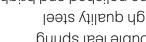


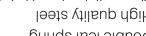


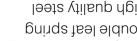
Ergonomically formed bicoloured hand-guard

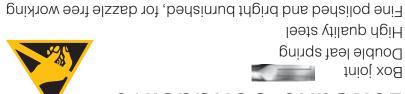


SOUND, FLAT AND SNIPE NOSE





















3-682-15











99

09

3-680 EUROline-Conductive Set of pliers,

Snipe nose pliers EUROline-Conductive

Flat nose pliers EUROline-Conductive

Round nose pliers EUROline-Conductive

Length sahoni

130

for soft wire up to 0.6 mm, copper wire up to 1.2 mm Mini side cutters, 120 mm, without side face,

plain jaws

plain jaws

plain jaws

in black imitation leather case 4 pieces

with zip fastener and velvet grey lining

3-683-15 **Snipe nose pliers,** 130 mm, plain jaws 3-682-15 Flat nose pliers, 130 mm, plain jaws for copper wire up to 0.6 mm 3-672-15 **End cutters,** $130\,\text{mm}$, cutting edge 20° angular,

Description of individual tools

g 0es :JhgieW

3-651-15

Tool set:

3-683-15 extremely slim

3-682-15 extremely slim

31-189-8

extremely slim

SZEL













99 99 99

Weight: 240 g :tes looT in a wallet of recycable nylon 3-630 Set of conductive pliers, 3 pieces Snipe nose pliers, angular, 120 mm, plain jaws Snipe nose pliers, 120 mm, plain jaws 81-663-13 Flat nose pliers, 120 mm, plain jaws 3-632-13 Round nose pliers, 120 mm, plain jaws 81-169-6 mm 0.1 of qu ariw flos 101 Side cutters, 120 mm, for hard wire up to 0.4 mm, 3-601-13 Description of individual tools .oN Weight: 320 g Tool set: in a practical table support from antistatic material 3-650 Set of conductive pliers, 5 pieces 3-634-13 Snipe nose pliers, angular 120 4 3/4 biain Jaws swaj nialq 4/8 \$ 021 3-633-13 Snipe nose pliers plain Jaws 3-632-13 Flat nose pliers 150 43/4 3-631-13 Round nose pliers tdgiəW g sədəni mm Ηsini∃ геидұр PLIERS SOUND, FLAT AND SNIPE NOSE 3-606-13 120 $4^{3/4}$ without side face 4.0 for flush cutting , for soft wire only with angular tips and oblique cutting edge, End cutters each side face without side face 3-604-13 120 3-603-13 120 $4^3/4$ with side face with slim, pointed head, available with or without side face Side cutters 0.1 3-602-13 120 $4^{3}/4$ without side face 4.0 0.f 3-601-13 120 $4^{3}/4$ with side face with slim, rounded head, available with or without side face Side cutters Meight g Length mm inches Sutting capacity mm Soft Hard .oN usiui-

Snipe nose pliers, 120 mm, plain jaws

Side cutters, 120 mm, for hard wire up to $0.4\,\mathrm{mm}$,

Flat nose pliers, 120 mm, plain jaws

mm 0.1 of qu ariw floe rof

Description of individual tools

3-633-13

3-632-13

81-109-8 .oN

SAJAN ONILINO

With conductive black hand-guard Bright steel-polished

Double leaf spring finio[xoB

EFECTRONIC PLIERS





BERNSTEIN

08	chrome-plated bright polished, with conductive black handguard	S	152	3-933-13
	swsį	nislq dtiw	se pliers	on əqin2
08	chrome-plated bright polished, with conductive black handguard	G	159	3-932-13

08	chrome-plated	9	125	Flat nose	
00	bright polished, with conductive black handguard	0	071	01 700 0	

	n jaws	with plai	oze biiet	konua u
08	chrome-plated	9	152	81-189-8
	bright polished, with conductive black hand-quard			

1dgiəW Q	dsini∃	Length mm inches	.oN

SZE SOUND, FLAT AND SNIPE NOSE

conductive black hand-guard bright polished, with chrome-plated 3-906-13 125

with angular tips and oblique cutting edge, End cutters

conductive black hand-guard bright polished, with chrome-plated 08 9 3-906-13 126

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

without side face, for flush cutting, for soft wire only

Top cutters

conductive black hand-guard bright polished, with chrome-plated 3-902-13 125

with slim, pointed head and special flat cutting edge, for soft wire only $% \left\{ 1,2,\ldots ,n\right\}$

Side cutters

conductive black hand-guard bright polished, with chrome-plated 3-901-13 125 with slim, rounded head

Side cutters

θW	Cutting capacity mm Ø Soft Hard wire wire	Length Finish mm inches	.oN

CALLING PLIERS

With conductive black handguard Bright polished - chrome-plated Double leaf spring taioį de J





97

97

























08	-	8.0	3-164-2 140 5 1/2 chrome-plated bright polished, with transparent insulation	8
9t	-	9.0	3-057-S 120 4 3/4 chrome-plated bright polished, with bright polished, with transparent insulation	2-780-8
			with angular tips and oblique cutting, for precision work without side face, for flush cutting, for precision work at points difficult to reach, for soft wire only	1901
			Mini end cutters	
04	-	8.0	3-055-2 120 4 3/4 chrome-plated bright polished, with transparent insulation	
			Side cutters with angular handles (25°), straight cutting edge, without side face, for flush cutting, for soft wire only	3-029-5
			transparent insulation	990-1
07	-	4.0	for soft wire only 3-058-2 120 4 3/4 chromed-plated bright polished, with	
			Mini top cutters with cutting edge only 2.0 mm wide, jaw length 20 mm, without side face, for flush cutting, for precision work,	7.000.0
			transparent insulation	3-058-2
04	-	8.0	are shortened uniformly to 1.5 mm, for soft wire only 3-053-2 120 4 3/4 chrome-plated bright polished, with	
			Oblique cutters with 4.0 mm wide recessed cutting edge, ends of wire	
			bright polished, with transparent insalation	3-023-5
04	-	0.1	cutting area 4.0 mm wide, without side face, for flush cutting, for soft wire only 3-052-2 120 4 $^3/_4$ chrome-plated	3-093
			Oblique cutters with recess in the cutting edge, for gripping components not to be worked on,	
			transparent insulation	
04	-	8.0	for flush cutting, for soft wire only 3-051-2 120 4 3/4 chrome-plated bright polished, with	3-025-2
			with recess in the cutting edge, for gripping components not to be worked on, cutting area 3.3 mm wide, without side face, cutting area 3.3 mm wide, without side face,	290-6
6	eviw	9yive	mm inches Side cutters	
	S mm (Jacob) Hard			
	lectronic		Especially light and slim, designed for the engineers working on small printed circ	3-051-2
	$\bigcirc \setminus 1 \neg 1$	¬ .	Box joint Compression spring, Special steel	150-E
	297		SPECIAL ELECTRONIC	

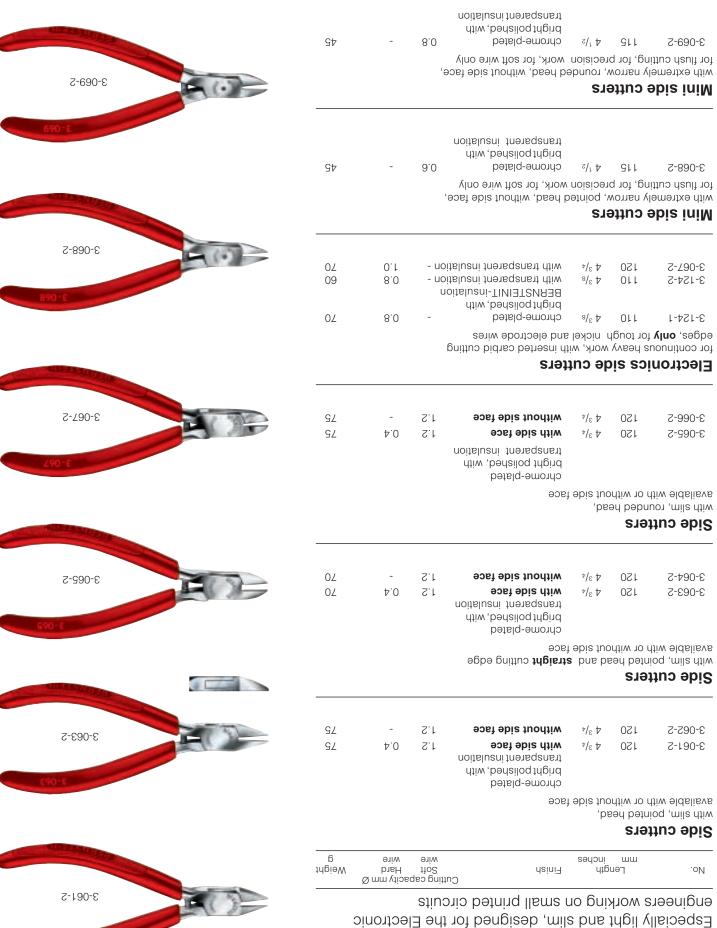


3-069-2	St	-	8.0	d head, without side face, work, for soft wire only chrome-plated bright polished, with transparent insulation	v, rounde	y narrow	Olini side with extremel or flush cutting or flush cutting 3-069-2
E90-E	St	-	9.0	head, without side face, work, for soft wire only chrome-plated bright polished, with transparent insulation	v, pointed	y narrow	
3-890-5	02 09	8.0 0.1	- u	h inserted carbid cutting and electrode wires chrome-plated bright polished, with BERNSTEINIT-insulation with transparent insulation with transparent insulation	work, wit	г реалу	for continuous
3-780-8	97 97	- t [.] 0	2.1 2.1	chrome-plated with bright polished, with transparent insulation with side face without side face	*/ε t	120 120	3-065-2 Electroni
						әц рәри	Side cutt with slim, rour available with
3-065-2	0 <u>/</u> 0/	4.0	2.1 2.1	chrome-plated bright polished, with transparent insulation with side face without side face	*/ε ħ	120	3-063-2
				traight cutting edge ace		nted hes	Side cutt with slim, poin available with
3-063-2	97 37	4.0	2.1 2.1	chrome-plated bright polished, with transparent insulation with side face without side face	*/ε ħ */ε ħ	120	3-061-2 3-062-2
				ace		səd bətn	Side cutt with slim, poil available with
	thgiaW g	Sacity mm Ø Hard wire	ing cap Soft wire	TinO HainiF	gth sedoni	шш µЭ	.oN
3-190-8			stiu	Special steel lim, designed for tl small printed circ	s pue	JABil y	Especially



tnioį xo≅

SPECIAL ELECTRONIC PLIERS





(90 Sa

noitalueni

0.1

0.1

0.1

ð.f

971

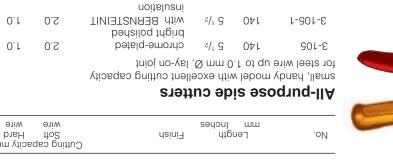
120

- 0. f



Special steel
Lap joint

noiteluzni		
insulation 3-126-2 120 4 % with transparent		
bright polished 3/4 with BERNSTEINIT-	3-126	
3-126 120 4 ³ /4 chrome-plated		
for flush cutting, for soft wire only	A51-E	
Side cutters with especially slim, rounded head, without side face,		
3-115-2 145 5 ³ /4 chrome-plated bright polished, with transparent insulation	300 to 20 mg	
cutting edge, double leaf spring, without side face, for flush cutting of plastique sprues, circuit boards etc.	3-116-2	(-)
for plastic, with rounded head, special flat		
Special side cutters		
red insulation		
3-112-2 120 4 % chrome-plated with bright polished, with	OCH STATE OF	
without side face, for flush cutting, for soft wire only	7-711-0	AND STREET
Side cutters with slim, rounded head, double leaf spring,	3-112-2	8.7
33034112 obi2	-	
red insulation	HILL	
3-111-2 120 4 ³/4 chrome-plated bright polished, with		
for flush cutting, for soft wire only 3-111-2 120 4 3/4 chrome-plated	Different States	
double leaf spring, without side face,		
Side cutters with slim, pointed head, special flat cutting edge,	3-111-2	
ayottiia ahi2		
noitsluani fransparant	1111	
3-109-2 120 4 % chrome-plated bright polished, with		
for flush cutting, for soft wire only		
compression spring, without side face,	WINDS THE	
Side cutters with wide, rounded head, special flat cutting edge,	- 300	- All Hall
	7-601-0	1
transparent insulation	3-109-2	100
3-108-2 120 4 % chrome-plated with		
for flush cutting, for soft wire only		
with wide, pointed head, special flat cutting edge, compression spring, without side face,		11777
Side cutters with wide pointed bead special flat cutting edge	G. PS I	400
noitaluari	3-108-2	Topics .
3-105-1 140 5 1/2 with BERNSTEINIT	3 337 0	(1)
3-105 140 5 1/2 chrome-plated		
small, handy model with excellent cutting capacity for steel wire up to 1.0 mm Ø, lay-on joint	100.0	
All-purpose side cutters		
	COLUMN TO THE PARTY OF THE PART	
No. Length Finish mm Inches		
nithuO	L-90L-E	

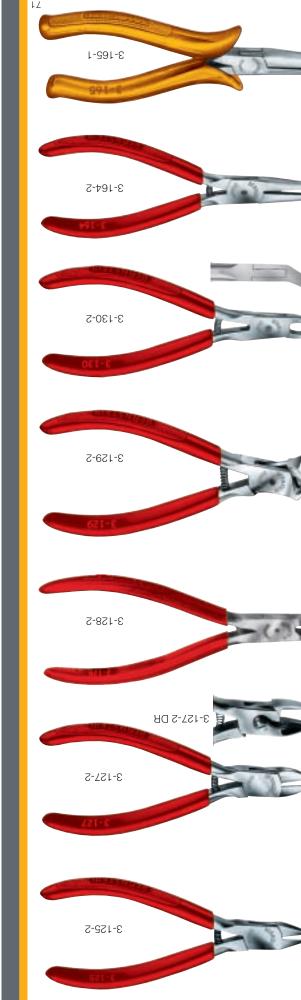


thgiəW g	& mm Vjias Hard wire	qso gnittuO Soft siw	dsini∃	Length Length	.(

SPECIAL ELECTRONIC PLIER	01-8 gnibuləxə)		Lap joint
	TRONIC PLIER	EFEC	SPECIAL

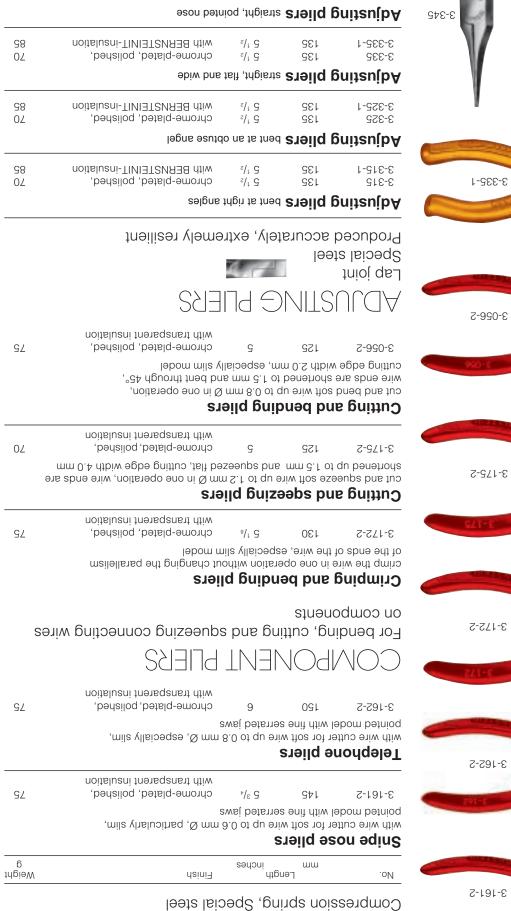
Control of the Contro	405	-	0.1	3-165-S 5-165 6 1/2 sinsulation 5/1 3 2-1651-S
1-391-8	911 96	-	0. f 0. f	3-165 165 6 ½ chrome-plated 3-165-1 165 6 ½ with BERNSTEINIT- insulation
991-8	30		0 4	spring, for soft wire only
				End cutters with angular tip and cutting edge, without compression
Control of the Contro				bright polished, with transparent insulation
	08	-	8.0	3-164-2 140 5 1/2 chrome-plated
3-164-2				with angular tip and oblique cutting edge, with angular tip and oblique cutting, for precision work at points difficult to reach, for soft wire only
H11-E				Slimline end cutters
				bright polished, with transparent insulation
	99	-	-	3-130-2 150 4 ³ / ₄ chrome-plated
3-130-2				IC top cutters for connections, without side face
				transparent insulation
061-8	08	4.0	0.1	3-129-2 115 4 ½ chrome-plated bright polished, with
				with slim head, without side face, for flush cutting, for soft wire only
ALL DAY				Slimline top cutters
3-129-2				bright polished, with transparent insulation
	99	6.0	8.0	3-128-2 120 4 ³ / ₄ chrome-plated
				with slim head, without side face, for flush cutting, for soft wire only
621-1				Slimline oblique top cutters
				bright polished, with transparent insulation
The second secon	09	4.0	0.1	with wire retaining spring (to hold the wire clippings) 3-127-2 DR 115 $4^{1}/2$ chrome-plated
3-128-2				Slimline side cutters with slim, rounded head and fine side face,
(13)				
CHICA	09	4.0	0. r	3-127-2 115 4 ½ chrome-plated bright polished, with transparent insulation
	09	V 0	0 1	with alim, rounded head and fine side face
AO 2-721-E				Slimline side cutters
	09	6.0	8.0	3-125-2 115 4 1/2 with transparent insulation
3-127-2	02	6.0	8.0	3-125-1 115 4 1/2 with BERNSTEINIT-
V51-C	99	6.0	8.0	3-125 115 4 1/2 chrome-plated
				Micro side cutters with slim, pointed head and fine side face
THE PARTY OF THE P	tdgiəW Q	oacity mm Ø Hard wire	ing cap Soft wire	Cutti No. Length Finish mm inches
3-152-5				Especially light and slim
0 301 0				Box joint Compression spring, Special steel
621-E		O \ 1 - 1		
		(2)		SPECIAL ELECTRONIC







Jnioį xo8



132

1-946-5

3-316

3-325

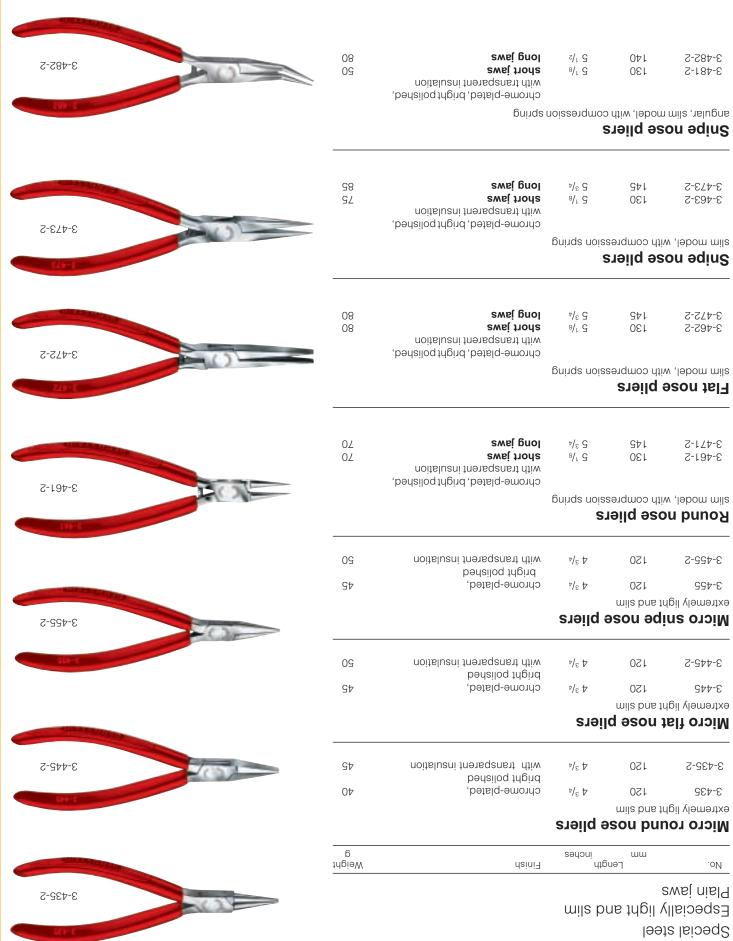
with BERNSTEINIT-insulation

chrome-plated, polished,

CLISONIC PLERS











1-891-8 3-153

3-152-1

3-152

3-151-2

3-121-1

191-8

3-145-1

1-141-8

141-8

3-138-2

1-881-8

3-132-1

1-151-5

151-5

.oN

Side cutters

3-133

for soft wire only

3-145

Top cutters

Top cutters

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

small, handy model, lap joint, special steel

LOP CUTTERS

Power side cutters

Special side cutters

3-270-2 130 5 1/8 chrome-plated

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

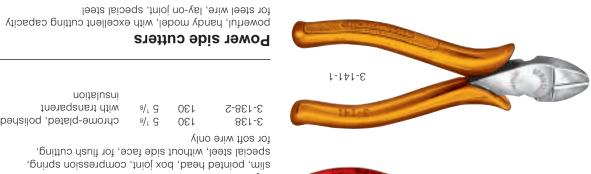
swedish design, lap joint, special steel

SIDE CALLELS

uw Juches Length

















dsini∃













Cutting capacity mm Soft Hard wire wire

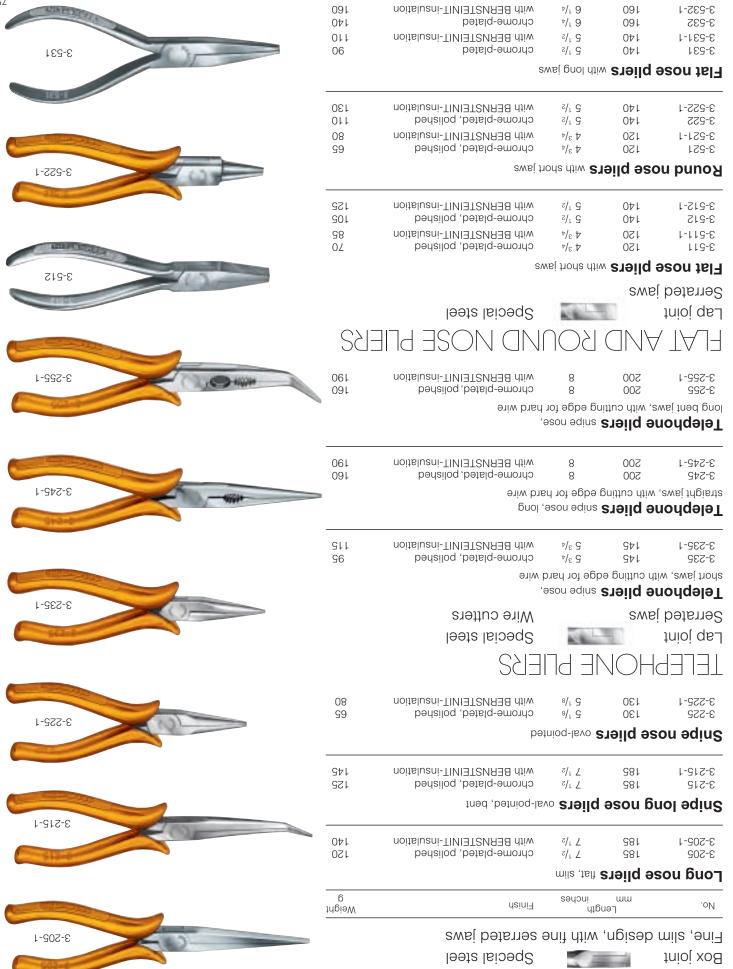


Meight



ı	S30 S00	9. ľ 6. ľ	160 6 1/4 chrome-plated, polished 3.0
	156 156	32.1 32.1	130 5 1/s chrome-plated, polished 2.5
			ndy model, lay-on joint, special steel
			:GRS
ı	06 011 98	0. t 0. t 0. t	120 4.3/4 chrome-plated, polished 2.0 120 4.3/4 with BERNSTEINIT-ins. 2.0 120 4.3/4 with transparent ins. 2.0
ı			ters y model, lap joint, special steel
ı			CALLELS
ı			
	242 542	3.1 3.1	160 6 1/4 chrome-plated, polished 3.0
	180	1.25 1.25	145 5 3/4 chrome-plated, polished 2.5
	150	30 F	e, lay-on joint, special steel
			ide cutters indy model, with excellent cutting capacity
	06	-	130 6 1/8 chrome-plated, polished 1.25 130 6 1/8 with transparent 1.25 insulation
	98	-	only 5 1/8 chrome-plated, polished 1.25
			d head, box joint, compression spring, I, without side face, for flush cutting,
			side cutters
			transparent insulation
	02	9.0	0.f bəlalq-əmordə a/r 3 05.f bright polished , with
			with long handles, lay-on joint, I, with expanding spring
			nic side cutters
	150 160	7.25 7.25	145 5 3/4 chrome-plated, polished 2.5
	130	0.1	130 6 1/8 with BERNSTEINIT-ins. 2.0
	011	8.0 0.1	120 43/4 with BERNSTEINIT-ins. 1.5 130 5 1/8 chrome-plated, polished 2.0
	06	8.0	120 4 3/4 chrome-plated, polished 1.5







ENCINEER'S PLIERS





2071 IQ INOITAINIBINOO

	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	ila amu	y yatev s	Miniature
	SABITA	d dM	Nd 21	
582 580 582	with BERNSTEINIT-insulation chrome-plated, polished with BERNSTEINIT-insulation	L L */, 9	180 180 180	3-742-1 3-743-1 3-743-1
185	chrome-plated, polished	[⊅] /₁ 9	160	3-742
		0.5 of qu 54		andra Guuna
	ter for piano wire			chrome-vana cutting capac
	n pliers, extra quality			
			-	
560	with BERNSTEINIT-insulation	L	180	1-887-8
225	chrome-plated, polished	L	180	557-5
220	with BERNSTEINIT-insulation	2/19	165	1-287-8
061	chrome-plated, polished	²/₁ 9	165	3-732
122 132	chrome-plated, polished with BERNSTEINIT-insulation	²/₊	041 140	187-8 1-187-8
06	with BERNSTEINIT-insulation	ار کا ۱/د	911	1-912-8
06	chrome-plated, polished	ار کا /2 مار	911	3-7-5
	e cutter, for hard wire	oriw dtiw 21 6	eild noit	snidmoO
Meight g	hzini-7	gth	ww uəŋ	.oN

IIETS with 3 adjustments chrome-plated, polished	8/ ₁ G	130	3-265
with BERNSTEINIT-insulation	8/ ₁ G	130	1-999-8

nickel-plated 6 ₁/5 540 9-949-8 Water pump pliers

5 9-873-8	UVG	% 6	hatela-laysia
Siphon plier	iers chron	muibsnsv-91	mm 07 of qu gnineqo ,leets
			with red insulation

mith red insulation

Quick-action water pump pliers

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

	0011071107			
909	with BERNSTEINIT-insulation	10	520	1-989-5
074	chrome-plated, polished	10	520	3-586
182	with BERNSTEINIT-insulation	۷	971	1-989-5
165	chrome-plated, polished	L	971	3-585

0) 1717 1 1771 1700 1	7) ((0) 7) (0)
YZZENBIK PLIERS	A(x) = A(x)

	colbacd parisac	pao mosoo k	aitonibo d	tive lobold
thgiəW g	Haini	for clamping rings	Length sədəni mm	.oN

Model with adjusting screw and sprung handles

fine burnished mm 8.S-3.f s\' \cdot \ 01-137-8 for clamping rings on shafts without grooves

Model with cylindrical tips (for bores)

for fitting internal circlips to DIN 472, 984 etc.

3-771-10 140 6./2 3-771-10 130 5./2 Nor circlips Bore-8 mm 32-8 burnished, straight

Model with cylindrical tips, sprung handles (for shafts)

8-25 mm

burnished, offset

390

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

		or circlips Shart-w	11		
06	burnished, straight	mm 01-6	2/r B	140	01-187-8
06	burnished, straight	mm 2S-01	²/₁ S	140	3-782-10
06	burnished, offset	3-10 mm	♭/L G	132	01-887-8
06	burnished, offset	10-25 mm	♭/L G	132	9-784-10





9-876-6

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

Weight: 275 g Description of individual tools .oN 3-930 Set consisting of 3 pliers

3-932-12 for flush cutting, for soft wire only up to 0.8 mm & with angular tips and oblique cutting edge, without side face,

3-933-12

End cutters, 125 mm, 3-906-12

for soft wire up to 1.0 mm, for hard wire up to 0.4 mm Ø Side cutters, 120 mm, 3-901-12

> 3-940 Set consisting of 4 pliers Contents: Black burnished pliers, with orange insulation

Description of individual tools

Snipe nose pliers, 125 mm

Flat nose pliers, 120 mm

in wallets of recycable nylon

SELS OF ELECTRONICS PLIERS

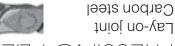
nickel-plated, with red insulation 6 3-875-6 225 cable dimensions for sleeves of $0.50 - 16.0 \,\mathrm{mm}^2$.

combined with cable cutter and stripping-prism for different Pressing pliers for multicore cable end

nickel-plated, with red insulation 9 991 9-128-8

cable dimensions for sleeves of $0.25 - 2.5 \text{ mm}^2$. combined with cable cutter and stripping-prism for different

Pressing pliers for multicore cable end





with transparent insulation 150 chrome-plated, polished þ/₁ 9 160 3-836-2 with transparent insulation 98 chrome-plated, polished 3-834-2 136 6 1/2

especially narrow and slim, with internal adjusting screw and compression spring Wire strippers for use in electronics

ani-TINI3TSNA38 djiw	8/₁ 9	122	1-918-8
chrome-plated, polishe	8/L 9	991	3-815

bression spring	moo diw ,e	іскпеѕѕе	for all wire th
chrome-plated, polished	8/₁ 9	122	3-815
goiteluggi-TIMI3T2M938 dtiw	% 9	155	3-815-1

Wire strippers with adjusting screw

Q mm 2.1 o 1 271	for wire thicknesses from 0.3 nickel-plated with BERNSTEINIT-insulation	♭/ _↓ 9	160	1 -908-8
8 mm č o t	for wire thicknesses from 0.5 nickel-plated with BERNSTEINIT-insulation	♭/ _↓ 9	160	7-908-8

Spring system enables safe working with automatic adjustment to the wire size. Easy to use: insert wire - close pliers - remove insulation

"Record" wire strippers

Weig g	hsini∃	Length mm inches	.oN

Special steel

Lap joint





















Weight: 350 g

585

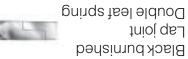
160

165 130



SPECIAL ELECTRONIC PLIERS







			tters	uo abig
Meight g	Omm vicepacity mm O Soft Hard wire wire	haini∃	Length sədəni mm	.oN
		O \ 1 \ \ 1 \ \	1 .	

02

				ers	Side cutt
		orange insulation			
4.0	0.1	bedsinnud	⊅/ε ⊅	150	3-901-12
			nr	all nani	ino i 'iiiile i iiiw

				tters	Side cu
e only	g edge, for soft win	scial flat cutting	esq' sbe	ed betnio	od ,mila Atiw
-	8.0	bedsinrud	[⊅] /ε ⊅	150	3-902-12

orange insulation

Top cutters

3-905-12 125 5 3-906-12 - 8.0 for flush cutting, for soft wire only with 3 mm wide cutting edge, Jaw length 20 mm, without side face,

End cutters

with angular tips and oblique cutting edge, without side face,



for flush cutting, for soft wire only

3-906-12 3125 5 arrished - 8.0

orange insulation

orange insulation

SOUND-FLAT-SNIPE NOSE PLIERS

04	burnished orange insulation	* /ε ⊅	150	3-931-12
	nort, plain jaws	da diw i	ose pliers	Round n
6	Hellill	inches	шш	.OVI

swsį nislq	sport,	Чiw	pliers	əsou	Flat

owei beteatee	paol dtive	lobom milo	pliare	930u tel 1
noitaluani :	orange			
рәц	pnknish	[⊅] /ε ⊅	150	3-932-12

	1 1-1-1	-1	76 7	7,4	0 0	, 0 0
ed jaws	long, serrat	ИJiw	,ləbom mila	pliers	əsou	-lat

with long, serrate	70 =		
barinished	[⊅] /ε G	971	3-942-15

errated jaws	es 'gnol diw	,ləbom mils	buers	Flat nose
,	pornished	[⊅] /ε 9	971	3-942-12

·	(e	V/ε ⊆	9/1	3-040-15
serrated jaws	with long.	.ləbom mila	esila	eson 161

•	serrated jaws	,gnol djiw	ʻləbom m	biiets a	Flat nose
	þac	burnist	_₹ /ε G	946	3-942-15

	hadzinnid	V/ε ⊆	971	3-942-12
swsį bet	ith long, serra	w ,labom mila	pliers	eson fal

	barnished	♭/ε G	971	3-942-15
swsį	with long, serrated	, ləbom mila	pliers	Flat nose

	hadzinnid	V/ε ⊆	971	3-942-12
swsį bet	ith long, serra	w ,labom mila	pliers	eson fal

with long, serrate	70 =		
barinished	[⊅] /ε G	971	3-942-15

el, with long, serrated jaws	pow wiis c	ee buei	בומו ווסג
eı, witn iong, serrated jaws	oow wiis c	ıaııd aq	בומו וומי

per	Asianid	r/ε ⊆	3/1	3-012-12
serrated jaws	with long,	,labom mi	pliers s	Flat nose

poo	10:02.19	18 3	∃V F	01 010 0
serrated jaws	, gnol djiw	,ləbom m	pliers sin	Flat nose

pot	Joinaria	.16 7	311	01 010 6
serrated jaws	, with long,	lebom mila	pliers	Flat nose

pəl	purnish	⁵/ε ⊆	971	12-15	3-6
serrated jaws	with long,	model,	bliers slim	esou p	FIS

with long, serrated jaws	ı, İəbom milə	biieta	Fiat nose
bedsinished	₹/ε G	146	3-942-12
orange insulation			

with long, serrated jaws	,lebom mil	biiers s	Fiat nose
parnished	[⊅] /ε 9	971	3-942-12
aoitelugai apaezo			

	bədsi	pnkn	∜/ε ⊆	971	942-15	-6
jaws	ıg, serrated	nol djiw	,labom	mils 219i l	d əsou je	Ł١

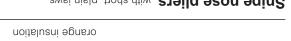
	bədsi	pnkn	∜/ε ⊆	971	942-15	-6
jaws	ıg, serrated	nol djiw	,labom	mils 219i l	d əsou je	Ł١

serrated jaws	with Torrug, burnish	[₹] / ₈ G	142 bucia 2000	15-15	
awei boterroa	paol dtive	Jopour	mile 210ila	0 30u	ᆘ디크

•	purnish	[⊅] /ε	941	3-942-12
serrated jaws	with long,	,lebom mila	pliers	Flat nose

	burnis	†/ε 9	971	12-12	
, serrated jaws	with long	.ləbom	mile RS slim	əsou	Flat

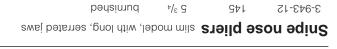






3-946-12 146







5 3/4 burnished

orange insulation



3-933-12

3-932-12

3-931-12

3-906-12

3-906-12

3-902-12

3-901-12

BEBUSTEIN

0Z 0Z

0۷ 0۷



8-459-8

8-653-6

8-532-8

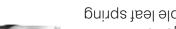
8-159-5

8-909-8

8-603-8

SPECIAL ELECTRONIC PLIERS

Bright steel polished Box joint Double leaf spring



CALLING PLERS

		eside face	able with or witho	ead, avail	y pəpur	with slim, rou
					ters	Side cut
Weigh.	& mm Visso Hard wire	Softing cap Soft wire	dsini∃	ngth səhəni	ww 97	.oN

without side face	⊅ /ε ∀	150	8-509-8
with side face	⊅/ε ⊅	150	8-109-8
with red hand-guard			
bright steel-polished			

-	0.1	without side face	⊅/ε Þ	150	3-602-8
4.0	0.1	with side face	⊅/ε ⊅	150	8-109-8
		with red hand-guard			

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

£.0 8.0 with red hand-guard beright steel-polished

120 4 3/4 120 4 3/4 8.0 without side face 8-409-8 with side face 8-603-8

End cutters

soft wire only

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

8.0

bright steel-polished with red hand-guard without side face 150 43/4 8-909-8

	nose pliers with plain jaws				
6	Finish Finish mm	.OV.			

	แบโตพอ	A MILLI PICE	ioud oco	u nunovi
09	beright steel-polished with red hand-guard	♭/ε ⊅	150	8-159-8

09	bright steel-polished	<i>†</i> /ε <i>†</i>	150	8-631-8
	with red hand-guard			

	ยา โลพร	eid uiiw 🕻 i	oze buei	konun u
09	berled-leafs shed	⊅/ε ⊅	150	8-159-5
	with red hand-auard			

	ewsį nis	slq dtiw 2 °	ıəilq əso	Round n
09	bahsiloq-ləəts trigird	⊅/ε ⊅	150	8-159-5

09	aws bəhziloq-ləətz trigind	†/ ₈ † • ≥ Mith pla	uso Oze buei	Round n
			.0;[0. 000	p o d

	SWS	sį nislq dtiv	nose pliers	Round I
09	beheilog-leets thping	l ⊅/ε Þ	150	8-169-6

Round nose pliers with plain jaws

	03	badailag lagta tdaixd	.18 N	001	0 603 0
		ewsį nir	slq djiw 219i	ıld əsou	Round
_	0				

	Round nose pliers with plain jaws
6	

Round nose pliers with plain jaws
 63110111 111111

	SWS	i nislq dtiw i	sve pliers	Round r
б		səyoui	шш	

	Round nose pliers with plain jaws
6	

	swai	nislq dtiw č	nose pliers	Round I
6	11611111	səyoui	_ աա	.001

	swei u	isla dtiw 219	əila əsou	Bonnd
trlgiəW g	dsini∃	ngth sədəni	աա Әๅ	.oN

	swaj niala niw siek plain jawa	ł
thgiəW g	No. Length Finish mm inches	_

	owei di	ola dtiw 219ila 920	u pullog
thgiəW g	hsini∃	Length mm	.oN

	and place de again again again		
thgiəW g	Length Finish mm	.oN	

1	hgiəW p		dsini∃	dtgr sədəni	шш ГӨІ	.oM
	O \ \ \	7001	. –			

SYALA ASON AYINS-IAA-UNOO	\bigcirc		

NOZE BNEBS	ALS/IPE	SOND-EF

14010\M		dtogo l	
CYITITA	AIRE MOZE	19-14-1-11	$\langle \rangle$

tdpio///	dtpaol

JApiəW	dəini∃	цfbuə¬	01/1
	 . —		
(,7		`_ _/ _(/ 1()()7

		aws[ni	ose pliers with plai	u puno
3	thgiəW Q	Haini	Length mm	.oN

09	bright steel-polished with red hand-guard		150	8-259-8
		awsį nislq	pliers with	Flat nose

09	bright steel-polished with red hand-guard	⁺/ε ⊅	150	8-889-8
	swsi	nislq Atiw 2	se pliers	on aqin2

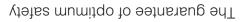
wifh red hand-guard		

09	baright steel-polished birbug-bash red hand-guard	♭/ε ⊅	150	8-459-8
	with plain jaws	angular, '	se pliers	Snipe no

	with red hand-guard			
09	beright steel-polished	[⊅] /ε ∀	150	8-458



Association of German Electrical Engineers (VDE). Permissable voltage at which the VDE pliers can be used: 1000 V a.c. or 1500 V d.c. Produced in accordance with specification EM 60.900 of the



	sh design, special steel	sibəwe ,\@ mm 8.1 ot qu e	for steel wire
		:ters	Side cut
thgiaW g	haini∃	Length mm	.oN

	design, special steel	dsibəws , 🛇	mm 3.1 of a	. steel wire up
265	:hrome-plated, polished,	p/₁ 9	160	3-134 VDE
	noitaluani ytətas 30V dtiv	١		

	wire up to 1.6 mm Ø, special steel	for steel	cutters	Power side
58	chrome-plated, polished, with VDE safety insulation	∜/ε 9	071	3-142 VDE

Telephone pliers

chrome-plated, polished,	5/₁ 9	165	3-244 VDE
	Įθ	special ste	errated jaws,
cutting edge for hard wire,	daws, with	ng, straight	ol ,əson əqir

chrome-plated, polished, with VDE safety insulation	8	502	3-245 VDE
chrome-plated, polished, with VDE safety insulation	²/₁ 9	165	3-244 VDE
(serrated jaws,

535

		e pliers	Telephon
tting edge for hard wire,			snipe nose, lo serrated jaws,
			, ,
chrome-plated, polished	و ۱/₂	991	3-254 VDE

with VDE safety insulation			
chrome-plated, polished	2/₁ 9	165	3-254 VDE
	Jé	special stee	serrated jaws,
tting edge for hard wire,	s, with cu	ng, bent jaw	ol ,əson əqinz

noitaluani ytətaa 30V Atiw			
chrome-plated, polished,	و ۱∖₂	165	3-254 VDE
	[6	special stee	serrated jaws,
tting edge for hard wire,	s, with cu	ng, bent jaw	ol ,əson əqins

noiteli ioni vtoteo 30V dtiw			
chrome-plated, polished,	8	505	3-256 VDE
with VDE safety insulation			
chrome-plated, polished,	5/۱ ع	165	3-254 VDE
			((

chrome-plated polished	8	205	3-255 VDF
noitaluani yteta adV htiw			
chrome-plated, polished,	9 ۱/۶	165	8-254 VDE
		special steel	rrated jaws,

chrome-plated, polished,	8	502	3-255 VDE
chrome-plated, polished, with VDE safety insulation	²/₁ 9	165	3-254 VDE
		sbeciai steei	errated Jaws,

		3	aoila os	ou pullo
S39	chrome-plated, polished, with VDE safety insulation	8	505	3-522 ADE

chrome-plated, polished, with VDE safety insulation	[⊅] /↓ <u>/</u>	182	3-241 VDE
			with long, roun

serrated jaws	long, flat,	diw 21	ıəilq e	Flat nose	

with VDE safety insulation			
chrome-plated, polished,	⊅ /↓ ∠	182	3-645 VDE

Combination pliers

		C I	and non	
	⊗ mm ∂.f	of qu evin	er, for hard v	with wire cutte
230	chrome-plated, polished,	∜/ε 9	140	3-732 VDE
	with VDE satety insulation			
100	bodzilog botola omożdo	'/\ Z	105	3 233 NDE

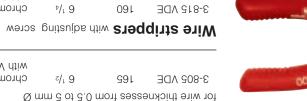
chrome-plated, polished, with VDE safety insulation

3	chrome-plated, polished, with VDE safety insulation	⊅ /↓ <u>/</u>	182	3-733 VDE	
2	chrome-plated, polished, with VDE safety insulation	♭/ε 9	120	3-732 VDE	
	Ø 11111 0:1	or do alla	יו, וטו וומוט י	אונון אאווס סמננס	٨

0.	strippers.		"Record"
chrome-plated, polished, with VDE safety insulation		981	3-733 VDE

[⊅]/₁ 9

hrome-plated, polished, insulation		165	3-802 VDE
	ezis eriw edt ot g	adjusting	





BEBUSTEIN



















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

			• • •	0
thgiəW g	dsini∃	lloZ gth	ww uə7	.oN

			ers	ilq	Telephon
	noitsluzni ytəfisə Afiw				
590	chrome-plated, polished,	Z	08	} 	13-908 VDE
510	chrome-plated, polished, with safety insulation	⊅ /↓	9 09	L	13-906 VDE
	$\&$ mm 8.1 of the wire up to 3.0×3.0 and $3.1 \times 3.0 \times 3.0$ mm 0.5 of the wire up to $3.0 \times 3.0 \times 3.0$		ng capacity:	ittuo	Special steel,
				SJE	Side cutte

			pliers	Telephon
077	with safety insulation	0	007	7.7.4.1.0.01
220	chrome-plated, polished,	8	200	13-917 VDE
	with safety insulation			
991	chrome-plated, polished,	þ/₁ 9	160	13-915 VDE
				⊗ mm ∂.f of qu
	cutting edge for hard wire	Jaws, with	g, straight	nol ,əson əqins
			pliers	Telephon

				Round nos
220	chrome-plated, polished, with safety insulation	8	500	13-918 VDE
120	chrome-plated, polished, with safety insulation	[∌] /₁ 9	160	13-916 VDE
Telephon pliers snipe nose, long, bent jaws, with cutting edge for hard wire up to 1.6 mm Ø, serrated jaws, special steel				

165	chrome-plated, polished, with safety insulation		_	Round nos with long, round 13-926 VDE
220	chrome-plated, polished, with safety insulation	8	500	13-918 VDE
001	with safety insulation	*/ 0	001	764 010 01

		S		Flat nose
180	chrome-plated, polished, with safety insulation	[⊅] /₁ 9	160	13-927 VDE

				Wire stripp	
	noitaluani ytətas htiw				
320	chrome-plated, polished,	8	205	13-938 VDE	
280	chrome-plated, polished, with safety insulation	<i></i> ⊅/∟ <i>L</i>	981	13-937 VDE	
	noitaluani ytəfas Htiw	77 =	20.	24/12000/	
220	chrome-plated, polished,	♭/ _↓ 9	160	13-936 VDE	
	Q mm 3.	rire up to 1	for hard w	with wire cutter	
		SI	əilq noi	Combinat	

♭/_↓9

13-946 VDE 160

chrome-plated, polished, with safety insulation

160







SAFETY INSULATED PLIERS

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

The advantage: simple safety control, practical at any time

						ers	Side cutto
	& mm 8.1 of 6 & mm 0.2 of 6				capacity:	guittuo	special steel,
210	,be	adsiloq ,	hrome-plated	O ⊅/	. 9	160	13-106 VDE

Hsini∃

noitaluani ytəfaz 30V dfiw

chrome-plated, polished, 300 ⊅/ε <u></u>

with VDE safety insulation chrome-plated, polished,

with VDE safety insulation chrome-plated, polished,

with VDE safety insulation

chrome-plated, polished,

mith safety insulation chrome-plated, polished,

with safety insulation chrome-plated, polished,

with VDE safety insulation chrome-plated, polished,

with VDE safety insulation chrome-plated, polished,

with VDE safety insulation

tdgiəW g

þ/₁ 8

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

13-806 VDE 165 with adjusting screw Wire strippers

13-708 VDE 210

13-707 VDE 190

13-216 VDE 165 with long, flat, serrated jaws Flat nose pliers

13-506 VDE 165

13-208 VDE 205

Telephone pliers

13-207 VDE 205

Telephone pliers

with long, round, serrated jaws Round nose pliers

up to 1.6 mm Ø, serrated jaws, special steel

up to 1.6 mm Ø, serrated jaws, special steel

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

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

Combination pliers

13-707 VDE

13-516 VDE

13-506 VDE



.oN













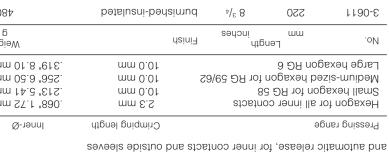






	09	burnished-insulated	G	152	3-0645
	Q mm 8.0 of qu	t side face, for CU-wires u			
			ters	tus abis ı	Stripping
	02	bətslusni-bədsinrud	8/ ₁ S	130	3-0941
	02	Ø mm 0.1 of qu səriv			
		© enem () to at ever conti			Electroni
	120	bətslusni-bədsinınd	♭/ _↓ 9	160	8790-8
		cution with closed lock,	exe isudo;		especially for
					Cabel cu
	thgiəW g	haini∃	n: səhəni	ww reuda	.oN
-			700		
		5			
	595	black-insulated	[⊅] /₁ 6	530	3-0826
			ed terminals	and uninsulate	for insulated a
				lo	Orimp to
	087	bətslusni-bədsinnud	♭/ε 8	220	3-091
	б	Hainish	səqoui	ww	.oN
-	MeighW		', 	Fengt	
	mm 02.8 "882. mm 01.8 "818.	mm 0.0† mm 0.0†	Z9/69 59H J0	ed hexagon fo 3 DB nor	Medium-sizi Large hexag
	mm f4.3 "8f2.	mm 0.01		90n for RG 58	Small hexag
-	mm S7.1 "880.	mm £.S	stast	r all inner con	
	M-nner-Ø	dtgnel gniqminO			Pressing rang
	-	with forced locking device its and outside sleeves			
		- Control of the entire and the same	,	_	Crimping Crimping
-		8P/2C			
		8P/8C, 8P/6C, 8P/4C,			
	160	6P/6C, 6P/4C, 6P/2C, 4P/4C, 4P/2C,	_₹ /, 8	505	8090-8
	001				tor cutting, ca
		gastic casing,	ally formed p	n, ergonomic	light executio
			g pliers	l crimpin	Universa
		8P/8C			
	350	6P/6C, 6P/4C, 6P/2C,	8	200	3-090
					for cutting, ca
	д Іоск.	blades, spring and close			
		ers ————————————————————————————————————	ila paia	tion crim	
	072	8P/8C	8	500	£090-£
	515	6P/6C, 6P/4C, 6P/2C	z/, 7	190	3-0602
	S12	4P/4C, 4P/2C 19 of the most current conr	7 ¹/₂ and crimpin	190 Buiddins əiar	3-0601
		blades, spring and closed		pe, with interd	solid metal ty
				ı pliers	Crimping
_				:14.	





Crimping pliers

Universal crimpin

Combination crin

3	8P/8C	8	200	8090-8
3	6P/6C, 6P/4C, 6P/2C	۷، ا	160	3-0602
3	4P/4C, 4P/2C	2/، ∠	160	1090-8

Crimping pliers

Length mm inches tdgiəW g for connector types

MODULAR CONNECTORS CRIMPING PLIERS FOR





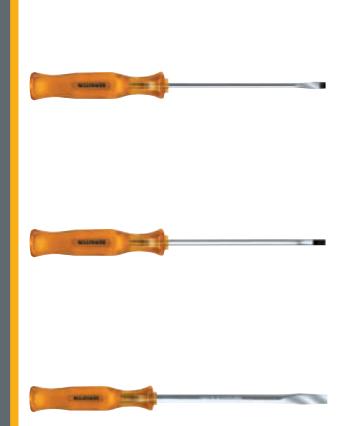


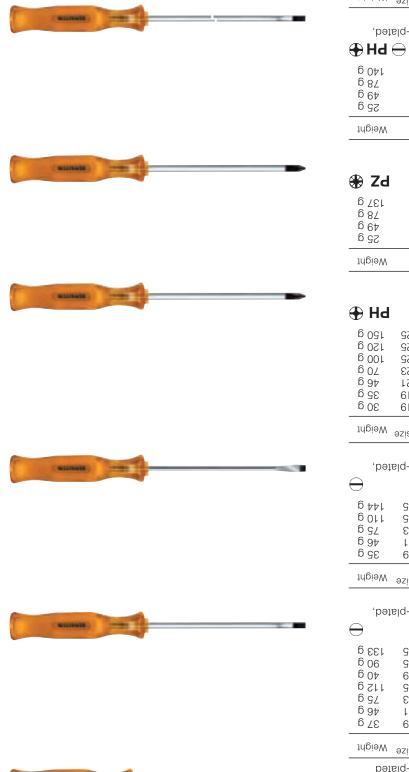














from impact-resistant, transparent yellow plastic

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

300

260

260

шш

Blade length

Very long screwdrivers

chrome-plated, black tip

chrome-plated, black tip

Cross-recess screwdrivers

001 001

Swiss standard screwdrivers

120

125

97

шш

ƏZIS

Cross-recess screwdrivers 4-227

4-228

4-224

4-223

4-222

.oN

4-273

4-272

172-4

.oN

4-257

4-255

.oN

991-7

791-7

4-153

4-152

191-4

ヤナレ-ヤ

641-4

4-145

171-7

.oN

& asis S asis

F 9zis

g.₽

0.8

шш

Blade width

100

08

09

Blade length

Blade: chrome vanadium, hardened over its full length,

100

08

09

Blade length

Blade: chrome vanadium, hardened over its full length,

0.8 0.01

6.8 6.9

0.4

3.5

2.5

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

6.9

G.G

0.4

3.5

шш

Blade width

Cross-recess screwdrivers Pozidriv

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

Blade thickness Handle size Weight

100 x 23

12 x 29

61 x 98

Handle size

100 x 23

12 x 29

61 x 98

Handle size

110 × S2

110 x 25

100 x 23

92 x 21

61 x 98

61 x 98

110 x 25

110 x 25

100 x 23

12 x 29

61 x 88

Blade thickness Handle size Weight

100 x 23

100 x 23

12 x 29

12 x 24

g 78

g 80 f

g 07

g 03

Meight

137 g g 87

6 6t

25 g

Weight

120 g 150 g

100 g

g 07

6 91

30 g

1100

6 97

32 g

6.4 & absid

S.r

0.1

B.0

шш

0.8

ð.4

0.8

шш

g.₽

0.8

шш

Blade-Ø

0.1

8.0

9.0

6.0

4.0

0.1 S.1

8.0

9.0

шш

Size Blade length Blade width Blade thickness Handle size Weight

Engineer's screwdrivers

\circ			2002 1110		
133 მ	110 x 25	2.1	0.8	120	S 981-4
ნ 06	110 x 25	0.1	0.9	100	4-125 S
ნ 0 ₽	61 × 98	9.0	3.0	200	S 911-7
112 g	110 x 25	0.1	0.9	200	S 901-7
6 67	100 x 23	8.0	0.8	120	S 701-7
6 9₽	12 x 29	9.0	0.4	100	S 501-4
g 7£	61 x 88	9.0	3.5	97	4-102 S
31161044	шш	шш	шш	шш	:011
- thgiəW	Aandle size	Blade thickness	Blade width	Blade length	.oN
201	nid allialia i	11161101 1101 01 104	יוווי נומומסווסמ	חווס אמווממוס	uuo :annia

\ominus			OIN 5265	I of ers to [Screwd
133 მ	110 x 25	2.t	0.8	120	S 981-4
ნ 06	110 x 25	0.1	0.9	100	4-125 S
ნ 0†	61 x 98	3.0	0.8	200	S 911-7
115 g	110 x S5	0.1	0.9	200	S 901-7
g 27	100 x 23	8.0	0.8	120	S 701-7
ნ 9†	12 x 29	9.0	0.4	100	S E01-4
g 7£	61 x 88	9.0	3.5	94	4-102 S
6	шш	шш	шш	шш	
thgiəW	Asidle size	Blade thickness	Blade width	Blade length	.oN

($\overline{}$			2925 NIC	T of 219vir	bwa122
	133 მ	110 x 25	2.1	0.8	120	S 981-7
	ნ 06	110 x 25	0.1	0.9	100	4-158 S
	6 0₽	61 x 98	3.0	0.8	200	S 911-7
	112 g	110 x 25	0.1	0.9	200	S 901-7
	6 GZ	100 x 23	8.0	0.8	120	S 701-7
	g 94	12 x 29	9.0	0.4	100	S 501-4
	g 7.E	6f x 88	9.0	3.5	9Z	4-102 S
Ī	6	шш	шш	шш	шш	
	thgiəW	Handle size	Blade thickness	Blade width	Blade length	.oN

			2002 1410	. . ,	
133 მ	110 x 25	2.1	0.8	120	S 981-7
ნ 06	110 x S5	0.1	0.9	100	4-158 S
6 0₽	61 x 98	3.0	0.8	200	S 911-7
112 g	110 x 25	0.1	0.9	200	S 901-7
g 27	100 x 23	8.0	0.3	120	S 701-7
ნ 9†	12 x 29	9.0	0.4	100	S E01-4
g 7£	61 x 88	9.0	3.5	9Z	4-102 S
6	шш	шш	шш	шш	
Meight	Asis əlbasH	Blade thickness	Blade width	Blade length	.oM

$\overline{}$			Aaca Mic	7 ot avoviv	Pwo335
133 მ	110 x 25	2.1	0.8	120	S 981-7
ნ 06	110 x 25	0.1	0.9	100	4-158 S
6 0₽	61 × 98	9.0	3.0	200	S 911-7
112 g	110 x 25	0.1	0.9	200	S 901-7
g 27	100 x 23	8.0	0.8	120	S 701-7
g 94	92 x 21	9.0	0.4	100	S 501-4
g 7£	61 x 88	9.0	3.5	9Z	4-102 S
6	шш	шш	шш	шш	
- tdgi9W	Aandle size	Blade thickness	Blade width	Blade length	.oN

\bigcirc			3363 1416	,	J
37 9 46 9 40 9 90 9 133 9 93 9	12 × 26 12 × 26 22 × 001 86 × 19 32 × 011 52 × 011	8.0 8.0 0.1 8.0 0.1 2.1	3.5 0.4 0.6 0.8 0.8	120 500 500 120 100 120	S 921-7 S 921-7 S 911-7 S 901-7 S 801-7 S 201-7
thgiəW	əzis əlbasH mm	Blade thickness mm	Blade width mm	Blade length	.oN

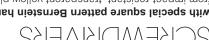
\ominus			975 NIO	rivers to D	Screwd
133 მ	110 x S2	2.1	0.8	120	S 981-7
6 06 6 0 1	96 x 88 32 x 011	3.0 0.1	0.8 0.8	200 100	4-116 S 4-116 S
6 27 9 211	100 x 23	8.0 0.1	0.8 0.8	190 190	S 501-4 S 501-4
6 97	12 x 29	9.0	0.4	100	S 801-7
_β 7ε	et x 88	9.0 	9.E	9Z ww	S 201-4
thgiaW	ezis əiduru	DIAGE (MICKNESS	DISUG WIGILI	Diade lengin	.oM

$\overline{}$			DIN 2565	Vers to	Screwdri
40 g 33 g 133 g	92 × 011 110 × 52 110 × 52	8.0 0.1 S.1	0.8 0.8 0.8	100 100 500	7-132 8 7-132 8 7-112 8
9 94 9 37 9 311	12 × 26 100 × 23 110 × 25	8.0 0.1	0.8 0.4	100 1200 100	S 901-7 S 701-7 S 801-7
g 7.6	et x 88	9.0	9.5 mm	9Z ww	4-102 S

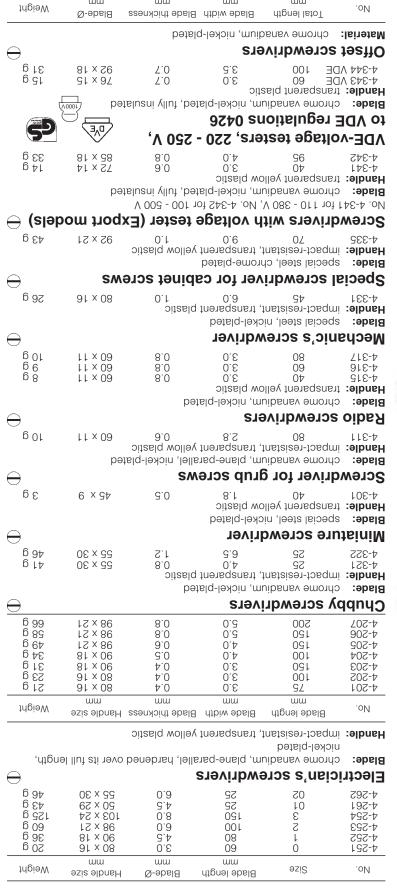
Blade: chrome vanadium, hardened over its full length, chrome-plated,

00	0 0	J 0		0 00 0 0
ıш	шш	шш	шш	
Handl	Blade thickness	Blade width	Blade length	.oN
noma ,	ເມາດິເເລເ ແກເ ຮາເ ເລນດ	n, nanenieu (ii	UILOILIE VAITAUIUI	anpia







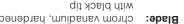


15 g 32 g

Cross-recess screwdrivers



68	*			qit ədt ni əlod-	-9 od djiw 9 T	əzis mor
	6 96 6 89 6 09 6 99 6 79 6 07 6 88 6 98 6 98 6 98	92 x 46 92 x 46 92 x 46 93 x 46 95 x 46 95 x 46 95 x 46 95 x 46 95 x 46 95 x 46 95 x 46 95 x 46	2.2 M 2.2 M 3.2 M 3.5-5 M 3.5-5 M 3.5-5 M 3.5-6 M 5-10 M 5-10 M 5-10 M	911 911 001 001 80 80 80 90 90 90	01 T	7 166-9 7 686-9 7 886-9 7 286-9 7 986-9 7 986-9 7 786-9 886-9 7 786-9 1 186-9
	Meight	əsis əlbasH mm	tot netric Thread	Blade- length mm	əzi2	.oN
(manual 10)	*			Vers	Screwdri	-хяот
	34 g 84 g 84 g 158 g	94 × 26 105 × 301 58 × 31 8 × 821	0.8 0.8 0.8	120 100 80 90	0 1 2 3	979-7 979-7 979-7 979-7
		Handle size mm	Blade-Ø mm	Blade length mm	əzi2	.oN
(Married) (O	₩ Zd		s Pozidriv	crewdriver	kecess s	Cross-
	34 g 84 g 84 g	94 × 26 105 × 30 105 × 33 8 × 35	0.8 0.8 0.8	900 120 80 120	0 1 2 3	763-4 4-534 583-4 583-4
	thgiəW	əsis əlbnsH mm	Q-əbala mm	Blade length mm	əziZ	.oN
(Without) (O	⊕ Нd		•	crewdivers	recess s	-sso10
	Weight 36 g 40 g 72 g 80 g 80 g	mm 94 × 26 96 × 30 105 × 30	8.0 8.0 0.1 0.1	0.6 0.4 0.3 0.3	500 120 100 12	4-522 4-523 4-523
O CHINE O		9zis əlbnsH	Blade thickness	rewdrivers	Blade length	l
	96 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	92 × 46 92 × 56 105 × 301 65 × 711 85 × 711 85 × 321	8.0 8.0 0.1 2.1 2.1 2.1	0.8 0.7 0.8 0.8	75 100 100 125 160 175	609-4 909-4 909-4 909-4 709-4 709-4
		əzis əlbasH	Blade thickness	Blade width	Blade length	l
(Miller): ()	\ominus			swdrivers		
			d plastic, with slip	ant, two-coloure	with black tip	v Y syldi: ii
	-plated,	, matt chrome	ver its full length,	um, hardened c	chrom vanadi	Blade: c
	nrdy	nts a seitn	tection garaı		more the fety screv	



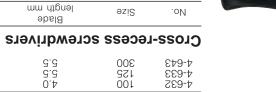
The ergonomical formed hexagon handle consisting of hard and soft two-coloured components enables by a good power transmission a sparingly use of strength in poporation

ENGONNE-POWERS SCREWDRIVERS



Cross-recess screwdrivers Pozidriv







.oN

əzi2

300 152 100

length mm

Screwdrivers

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

Further ESD/EGB tools as TORX-Screwdrivers, wrenches and special wrenches see page 110

Blade length mm

mm dtbiw

ww Ø

Blade

8.0 0.1 S,1

with black tip

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

conductive black plastic

with special-square pattern handle from impact-resistant,

ESD/ECB SCLEMDLINELS

3 cross-recess screwdrivers No. 4-621, 4-622, 4-623 Contents: 3 screwdrivers No. 4-602, 4-605, 4-607

conductive material

in a practical table support from

screwdriver set

4-620 6-piece screwdriver and cross-recess

g f4f :: 14gieW

Z09-7 '909-7 '909-7 Contents: 6 screwdrivers No. 4-601, 4-603, 4-604,

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

4-610 6-piece screwdriver set

12 g 12 g 14 g	06 06 06	2.5 2.5 3.0	20 20 20	0 00 000	4-623 4-623
thgiaW	Handle length	Blade Ø mm	length mm Blade	əzi2	.oN

⊕ Ho	d		rivers	Screwd	s-recess	Cross
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	06 06 06 06 06 06 06	2.5 2.5 2.5 2.5 2.5 2.5 3,0 3,0	02.0 32.0 32.0 35.0 04.0 04.0	8.0 2.1 3.1 2.0 2.5 3.0 8.5	09 09 09 20 20 20 20	209-tv 909-tv 909-tv 209-tv 109-tv
Meight	Handle length mm	Blade Mm Q	Blade thickness mm	Blade mm dtbiw	Blade mm Atgnel	.oN

Screwdrivers

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

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

precise working without exhaustion.

conductive plastic. The centring head guarantees a

with slim, ergonomically formed handles from black **SCLEMDIS/NELS**

ESD/ECB EFECTRONICS



6 87 9 87

⊕ Zd

thgiaW

⊕ Hd

Meight

100 x 23

Handle size

92 x 21 100 x 23 100 x 23

Handle size





Meight	Handle length mm	Slade Ø mm	m Jength E		əziZ	.oN
⊕ Н⊲		•	ndrivers	e acte	-keceaa	Cross
6 6 1 1 1 6 1 1 1 1 6 1	001 001 001 001 001 001	2.5.5.2.2.2.2.2.2.3.3.3.3.3.3.3.3.3.3.3.	02.0 04.0 04.0 04.0 04.0 04.0 04.0	1.0 1.5 2.0 2.0 2.0 2.0 2.0 3.0	091 001 09 09 07 07	191-4 161-4
tdgiəW	Handle Hength mm	absla Q mm	Blade thickness mm	Blade width mm	Blade length mm	.oN

				9	drivers	Screw
M	Handle length mm	Blade Ø mm	Blade thickness mm	Blade Width mm	Blade length mm	.oN
 - -	100 100 100	2.5 2.5 2.5	02.0 32.0 04.0	0.1 3.1 0.S	07 07 07	4-161 4-162 4-163

Weight: 155 g

Weight: 135 g

@ 3115 g Meight: 115 g

in a practical table support

in a practical table support screwdriver set

in a practical table support screwdriver set

in a practical table support screwdriver set

from Size T 9 with bore-hole in the tip

Ol 1 7 989-9

6 L 7 989-9

789-9

6-683

289-9

189-9

649-9

4-285 4-283 4-283 4-283

8 T

9 I

əzi2 mm

TORX-Screwdrivers

989-9 + 989-9 '789-9

6-680 6-piece TORX-Screwdriver set

Contents: 6 TORX-Screwdrivers No. 6-681, 6-682, 6-683,

1 Cross-recess screwdriver No. 4-284

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

Contents: 5 Screwdrivers No. 4-161, 4-162, 4-163,

4-190 6-piece screwdriver and cross-recess

4-180 6-piece screwdriver and cross-recess

4-170 6-piece screwdriver and cross-recess

07

07

шш

Blade length

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

3.6-E M

E M

8.S M

S-9.1 M

9.1-4.1 M

for metric thread

2.5 2.5 3.0 4.0

M S

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

with black tip

Blade: chrome vanadium, hardened over its full length, chrome-plated, with slim, ergonomically formed handles and swivel top

EFECLISOMICS SCISEMDISINELSS



129

15 g

9 11

10 g

9 O F

Meight

100

100

шш

Handle length















Weight: 540 g

Weight: 470 g

Weight: 235 g

Weight: 580 g

Weight: 600 g

Weight: 375 g

4-810 60-piece screwdriver stand

plastic handles

4-800 60-piece radio-screwdriver stand

Contents: handle as described above

TRI WING / TORX

Weight: 150 g

4-530 6-piece srewdriver set

4-850 7-piece screwdriver set

1 cross-recess screwdriver PH No. 4-533, 4-534 1 electrician's screwdriver each No. 4-523, 4-524

4-125 S, 4-271, 4-272 and 1 voltage tester No. 4-343 VDE

Contents: 1 workshop screwdriver each No. 4-504, 4-506 from series EUROline-Power, visible packed in a carton box

Contents: 1 screwdriver each No. 4-102 S, 4-103 S, 4-104 S,

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

mm 0.8 x 08 bns mm 0.8 x 09 ,mm 0.8 x 04

with chrome vanadium blades and transparent yellow

TORX-blades: T 10, T 15, T 20, T 25, T 27, T 30 TRI WING- blades: TW 1, TW 2, TW 3, TW 4

10 interchangeable blades and 1 handle packed in a sturdy canvas wallet with stick fastener $% \left(1\right) =0$

TORX-screwdriver blades: T 6 / T 8, T 7 / T 9, T 10 / T 15

f \ 0 9ziz ,00 \ 000 9ziz

mm 0.4 \ 2.5

capacity, gripping collet and swivel top Handle: for interchangeable blades with large absorption matt-polished, overall length 140 mm Blades: chrome vanadium, hardened over their full length,

4-820 60-piece miniature screwdriver stand

and coloured plastic handles

Contents: 20 screwdrivers each with tool steel blades,

Contents: 20 screwdrivers each No. 4-311, 4-315, 4-316,

with special square pattern Bernstein handles visible packed in a

matt-chrome plated, double ended,

Handle: for interchangeable blades with large absorption overall length 120 mm

4-950 11-piece interchangeable screwdriver set

cross-recess blades:

Contents: handle as described above

capacity, gripping collet and swivel top

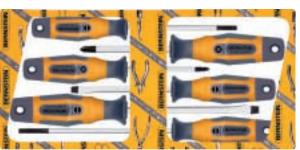
Blades: chrome vanadium, hardened over their full lengths,

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

4-910 9-piece interchangeable screwdriver set







Weight: 32 g Size 00 and 000

1.5-2.0-2.5 mm blade width and 2 cross-recess blades 4-393 Watchmaker's screwdriver magazine with 3 bits

Weight: 32 g

and 1 cross-recess blade size 0 1.5 - 2.5 - 3.5 mm blade width

 $4\text{-}392\,$ Watchmaker's screwdriver magazine with 4 bits Weight: 31 g

1.5 - 2.0 - 2.5 - 3.0 mm blade width 4-391 Watchmaker's screwdriver magazine with 4 bits

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

Blades: chrome vanadium, burnished

with interchangeable blades Watchmaker's storage screwdrivers

Weight: 64 g

Contents: 5 watchmaker's screwdrivers No. 4-381 - 4-385 in a plastic box

4-380 5-piece watchmaker's screwdriver set

ວີ 9	40r	0.1	18	785-4
ວີ <u>ຊ</u>		6.1	18	4-382
0 9 0 9 0 9	401 401 401	2.0 2.5 3.0	81 81 81	585-4 4-383

Handle: black plastic, with swivel top and colour coding

Blade: chrome vanadium, burnished

Watchmaker's screwdrivers

Weight: 480 g Contents: 6 watchmaker's screwdrivers No. 4-371 - 4-376

in a metal case 4-370 6-piece watchmaker's screwdriver set

Weight: 66 g

Contents: 3 cross-recess screwdrivers No. 4-366, 4-367 + 4-368 in a plastic wallet

4-365 3-piece watchmaker's screwdriver set

Weight: 68 g

1 cross-recess watchmaker's screwdriver No. 4-367 Contents: 2 watchmaker's screwdrivers No. 4-372 + 4-374 in a plastic wallet

4-360 3-piece watchmaker's screwdriver set

6 8 L 6 8 L 6 8 L 6 8 L 6 8 E	88 901 801 801 821	0.1 6.5 6.5 8.0 8.5 8.5	12 54 54 72 72 72	978-4 878-4 878-4 878-4 878-4 878-4 878-4
Meight	Total length mm	Blade width mm	Blade length mm	.oN

Handle: metal, nickel-plated, with swivel top Blade: chrome vanadium, burnished

Watchmaker's screwdrivers

6 6 6 6 6 6	92 92 105 117	21 21 21 21 21	L 0 00 000	89E-7 29E-7 99E-7 79E-7
tdgiəW	Total letoT mm	Blade length mm	əzi2	.oN

Handle: metal, nickel-plated, with swivel top

Blade: chrome vanadium, burnished

Cross-recess watchmaker's screwdrivers

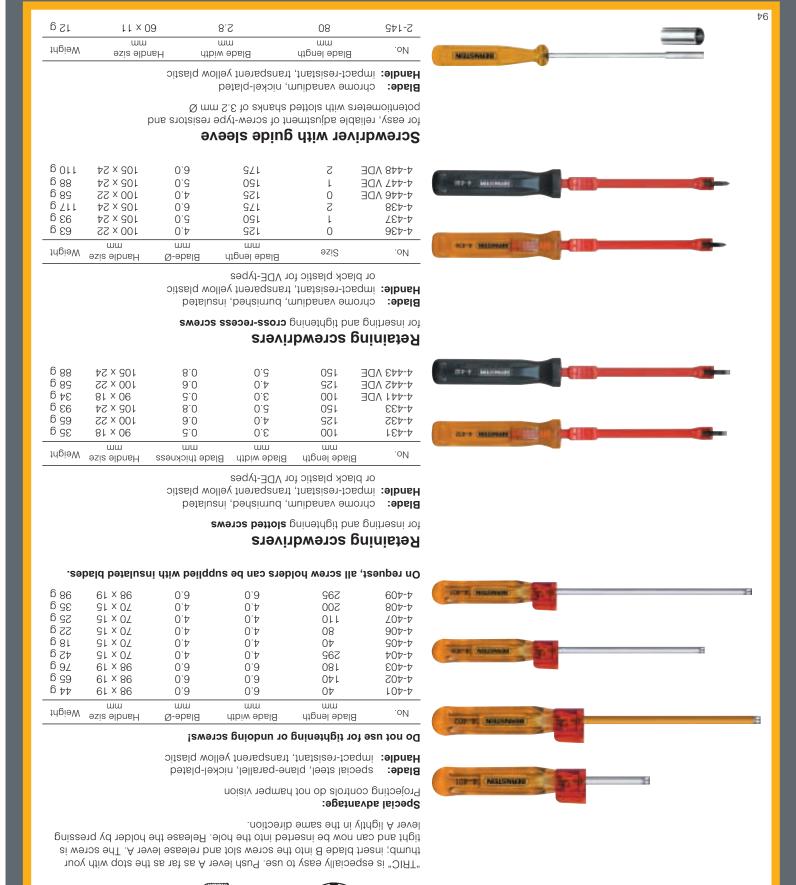














for inserting slotted screws into places difficult to reach

IRIC screw holders

SETAINING SCREWDRIVERS





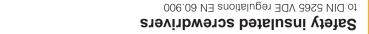


 $\label{eq:definition} \mbox{BERNSTEIN VDE screwdrivers and VDE cross-recess screwdrivers are monitored by the VDE Test Centre.$

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

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

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



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

Handle: impact-resistant, red coated plastic

Blade length Blade width Blade thickness Handle size Weight

18 d 54 d 64 d 83 d 83 d 133 d	81 x 08 81 x 08 81 x 08 42 x 001 42 x 001 42 x 011	4,0 6,0 6,0 8,0 0,1 2,1	5.5 4.0 6.5 6.5 8.0	97 100 100 175 271	14-608 VDE 14-604 VDE 14-603 VDE 14-602 VDE 14-601 VDE
6	шш	шш	шш	шш	

133 მ	110 x 26	2.1	0.8	971	307-608
83 g	100 x 24	0.1	6.9	120	14-606 VDE
6 7 9	100 x 24	8.0	6.8	152	14-604 VDE
27 g	81 x 08	9.0	0.4	100	14-603 VDE
6 tz	01 X 00	C.U	C.C	$\cap \cap I$	3UV 2U0-41

to DIN 5262 VDE regulations EN 60.900 ⊕ на Phillips screwdrivers Safety insulated cross-recess

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

Safety insulated Pozidriv cross-recess

Handle: impact-resistant, red coated plastic

14-644 VDE

14-643 VDE

14-642 VDE

14-641 VDE

.oN

٨	əzis əlbnsH mm	Blade Ø mm	Blade length mm	əzi2	.oN
	81 x 08 12 x 06	0.E 3.4	09	0	14-631 VDE

32 d 62 d 122 d	12 × 00 42 × 001 110 × 26	0.8 0.8	120 100 80	ا 2 3	14-634 VDE 14-632 VDE 14-632 VDE
S0 g	81 x 08	0.6	09	0	14-631 VDE
thgiaW	WW AZIS AIDURL	mm Diade W	mm mm	əziS	.oN

Weight 35 g	81 × 08 12 × 09	3.4 3.4	08 09	0	14-632 VDE 14-631 VDE
62 g	100 x 24	0.8	100	2	14-634 ADE
9 32 L	110 x 26	0.8		3	14-633 ADE

.oN
14-631
14-633 i

-	Weight 20 g	9zis əlbnsH mm 81 x 08	8 lade 8 mm 3.0	909 ww Risde length	əzi2 0	No.
	32 მ	12 × 06	B.4	08	ŀ	14-632 VDE
	6 S9	100 x 24	0.9	100	7	14-633 VDE
	125 g	110 × 26	0.8	120	3	14-634 VDE

-	Weight 20 g	81 x 08	9.6	09 ww	9zi2	14-631 VDE
	95 g 62 g	12 × 24	0.8	001 001	ا 2	14-633 VDE 14-632 VDE
	0 97.L	110 x 26	0.8	091	3	14-634 VDE

14-633 VDE 2 100 6.0 100 x 24 62 9	_	20 g 25 g	81 x 08 12 x 09	3.0 3.4	09 09	0	14-631 VDE
6 GZL 9Z X OLL 0'8 OGL E 3/0/4/59-14-1		35 g 62 g	12 × 09 100 × 24	0.8	08 001	_	14-632 VDE
		6 97 L	92 X 01 L	0.8	091	3	14-634 VDE

	32 d 95 d 152 d	87 × 08 12 × 09 42 × 001 42 × 011	0.8 0.8 0.8	90 100 120	ر ا 2 3	14-634 VDE 14-632 VDE 14-632 VDE
-	D OS	mm 81 v 08	U E WW	09 	9710	14-631 VDE

-632 VDE 1 80 4.5 90 x 21 35 g	14-632 VDE 1 80 4.5 90 x 24 62 9 9 14 62 9 14 62 9 14 62 9 14 62 9 14 62 9 14 62 9 14 62 9 14 62 9
-632 VDE 1 80 4.5 90 x 21 35 9 -633 VDE 2 100 6.0 100 x 24 62 9	14-632 VDE 1 80 4.5 90 x 21 35 9 14-633 VDE 2 100 6.0 100 x 24 62 9
-633 VDE 2 100 6.0 100 x 24 62 g	14-633 VDE 2 100 6.0 100 x 24 62 9
20, 00 0,, 00 02, 0 24,1,00	20, 00 0,, 00 02, 0 24,,,00,,

3.0 8 x 78 20 g 3.0 8 x 08 3.0 g 4.5 9 0 x 24 6.2 g 6.0 100 x 24 6.2 g	08	0 1 2	14-633 VDE 14-631 VDE 14-631 VDE
4.5 90 x21 35 g	08	0 1 S	14-632 VDE
4.5 90 x21 35 g	08	۱ 2	
		2	
8.0 110 x 26 g	120	3	14-634 VDE

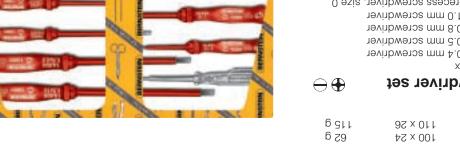
6	шш	шш	шш	0710	
SO 9	81 x 08	0.8	09	0	14-631 VDE
g 35 g	12 × 06	9. 4	08	Ļ	14-632 VDE
g 29	100 x 24	0.8	100	2	14-633 VDE
125 g	110 × 26	0.8	120	3	14-634 VDE

	impact-resistant, red coated plastic	Handle:
	chrome vanadium, hardened over its full length, burnished	Blade:
	egulations M3 snoitsluga	1 3 UV of
🔂 Zd	drivers	screw

Blade length Blade Ø

08

09



34 g

S0 g

Meight

Weight: 350 g 14-632 VDE cross-recess screwdriver, size 1 4-343 VDE voltage tester, 150 V - 250 V 14-631 VDE cross-recess screwdriver, size 0 14-606 VDE 6.5 x 1.0 mm screwdriver 14-604 VDE 5.5 x 0.8 mm screwdriver 14-602 VDE 3.5 x 0.5 mm screwdriver visibly packed in a carton box Contents: 14-601 VDE 2.5 x 0.4 mm screwdriver 14-600 VDE 7-piece VDE screwdriver set

0.8

0.8

3.4

0.8

81 x 08

Handle size























EFECTRONIC-TWEEZERS

Meight

BEBNSTEIN

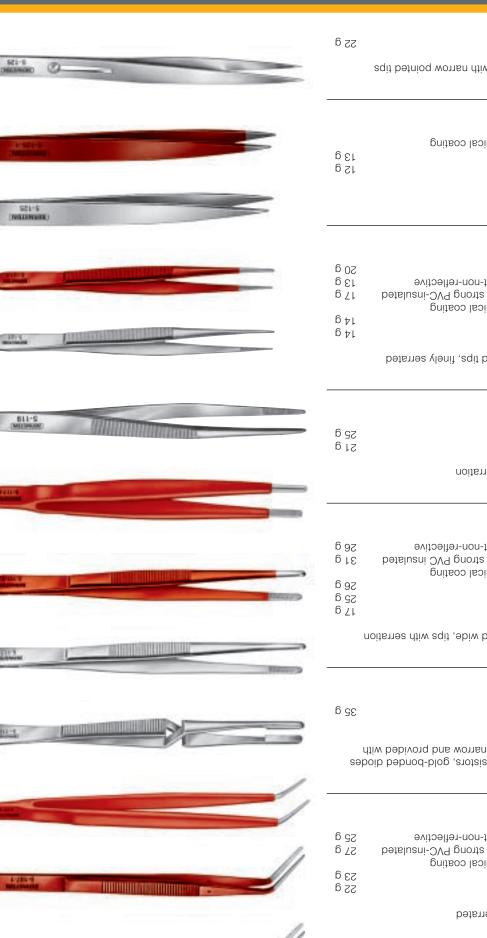
Component tweezers

			of IC's nick	and removal	, insertion 125	or gripping for gripping
						Səəwi-Əİ
g ii		рәц	iloq	,,°/ε Þ	110	810-9
	ימי וני	0,001 0,000 0	וווססס מו	stic steel, stai		with bent, fl
	tnet	aiaer-biae b	ue ssoju			tostno montabem
tdgiəW		Ч	sini]	th səhəni	ww Juəy	.oN
14 0	pəqsilod	3.50	0.4	,,, [†] /ε †⁄	150	910-9
				nai	avity diago	Gripping ca
] †L	pəysilod	09.9	0.8	,, [†] /ε <i>†</i>	150	110-9
981 941	bəhsiloq bəhsiloq	03.f 03.£	3.5 3.5	,,†/ε Þ ,,†/ε Þ	150 150	5-013
13	bedsilog	27.0	3.0	,, ηε ν ,, †/ε ヤ	120	110-9
				14t	avity straig	Gripping ca
SS g	Finish	iless-non-rei	niqqinD dtbiw		шш Геид	.oM
22 g	QVito Ol		11010		()+·I	7-600-0
		el-plated		,,²/, 9 ,,²/, 9	140 140	2-600-9 2-600 2uəuodwo
	talt gniqqing	el-plated	Aoin	wsį betslusni "s\r Z	steel, with s	2-006 comboueur
		el-plated	stair m 3.5 ,s	wsį betslusni "s\r Z	steel, with s	e-009 componenta sambonenta
	flective	aped compi el-plated iless-non-rei m wide, for g	nickanick stain stain st. 5.5 m	inside bent inways bent for found or 5 1/2" 5 1/2" 5 1/2" Insulated jaw 5 1/2"	steel, with 140 140 140 steel, with steel, with steel, with steel	5-008 5-008 5-008 5-008 components
	onents flective	aped compi el-plated iless-non-rei m wide, for g	nickanick stain stain st. 5.5 m	inside bent inways bent for found or 5 1/2" 5 1/2" 5 1/2" Insulated jaw 5 1/2"	steel, with 140 140 140 steel, with steel, with steel, with steel	made from 5 5-008 5-008-7 6-008-7 made from 5 6-009
. S2 G	flective , 5 mm wide, onents flective	el-plated nless-non-rei right angles, aped compi alested nless-non-rei nwide, for g	Noin states at a state	5 1/2" 5 1/2" 5 1/2" 6 1/2" 5 1/2" 5 1/2" 5 1/2" 5 1/2" 5 1/2" 5 1/2"	140 steel, with 140 the remove 140 140 140 steel, with 5	6-007-7 6-007-7 6-008-7 6-0
noinean 25 g 25 g 25 g 25 g	flective , 5 mm wide, onents flective	v fo chents of v forestermon-respected rompressend compressend rompressend rompressend romande, for gel-plated for gel-plated	nicka stain vards at cube-at nick stain stain stain stain stain stain	semi-circular semi-circular stally position 5 1/2" 5 1/2" sws bent inw of round or 5 1/2" 5 1/2" 5 1/2" 5 1/2" 5 1/2"	steel, with and of horizon of hor	6-007 6-007 6-008-7 6-008-7 6-008-7 6-008-7 6-008-7 6-008-7
S2 i	facilitate the i arious sizes flective , 5 mm wide, onents	v fo chents of v forestermon-respected rompressend compressend rompressend rompressend romande, for gel-plated for gel-plated	gaws, gaws, gaws, gaws, bed comonick stain cube-atain nick stain nick stain st	semi-circular semi-circular stally position 5 1/2" 5 1/2" sws bent inw of round or 5 1/2" 5 1/2" 5 1/2" 5 1/2" 5 1/2"	steel, with and of horizon of hor	Gomponents 5-007 5-007 6-008 6-008 6-008 6-008 7-008 7-008 7-008 7-008 7-008 7-008





	22 9	2-126 160 6 1/4" nickel-plated
SEL-G DELEMENTO		Sheet-metal tweezers with sliding fastener for a firm grip, straight, with narrow pointed tips
Delication (Control of the Control o	12 g	Sheet-metal tweezers straight, flat and pointed 5-125 110 4 3/6" nickel-plated 5-125-1 110 4 3/6" polished, with antiallergical coating
121 C	0 4 1 0 4 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Engineer's tweezers made from steel, straight, with narrow pointed tips, finely serrated 5-121 120 4 3/4" nickel-plated, 5-121-1 120 4 3/4" polished, with antiallergical coating with antiallergical coating 5-121-6 120 4 3/4" stainless, matt-non-reflective 5-121-7 120 4 3/4" stainless, matt-non-reflective 5-122 155 6 1/6" nickel-plated
MALUE (MALUE (MA	51 g 22 g	Jewellerie's tweezers made from steel, fine-rounded tips, with X-serration 5-119 140 5 1/2" nickel-plated 5-120 160 6 1/4" nickel-plated
Table 1	26 9 26 9 26 9 26 9 17 9	Engineer's tweezers made from steel, heavy type, straight, flat and wide, tips with serration 5-116 120 4 3/4" nickel-plated 5-117-1 145 5 3/4" polished, 6-117-6 145 5 3/4" nickel-plated, strong PVC insulated 5-117-6 145 5 3/4" stainless, matt-non-reflective 5-117-7 145 5 3/4" stainless, matt-non-reflective
P-1	მ <u>ვ</u> ჹ ა	Heat dissipating tweezers made from steel, for use when soldering transistors, gold-bonded dion etc., the flat, wide points of the tweezers are narrow and provided with copper jaws 5-115 165 6 1/2" nickel-plated
NATIONAL PARTIES AND ADDRESS OF THE PARTIES AND	22 g S2 g S2 g S2 g S2 g S2 g S2 g S2 g	Engineer's tweezers Engineer's tweezers made from steel, with fine, bent tips, finely serrated 5-107 150 6" nickel-plated, with antiallergical coating with antiallergical coating 5-107-6 150 6" nickel-plated, strong PVC-insulated 5-107-7 150 6" stainless, matt-non-reflective
		SBECIAL-TWEEZERS





SHECIAL ELECTRONIC-TWEEZERS

		Miniature component tweezers				
thgiəW	dsini3	Gripping cavity mm \text{\text{\$M\$}} dtbiw	Length sədəni mm	.oN		

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

teflon-coated 37.0 0.8 "_p/ε μ 021 -9-120-3

14gi9W	Length mm inche	.oN

011 6-720-8 teflon-coated (green), made from steel, very sharply pointed, straight

Watchmaker's tweezers

Engineer's tweezers

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

teflon-coated

teflon-coated

22 g

091 6-701-8

teflon-coated (green), made from steel, heavy type, straight, Engineer's tweezers

flat and wide, with serration

teflon-coated "†/ε G 971 6-711-8

Jewellerie's tweezers

6 6 L teflon-coated "≤\r ∂ 071 6-611-9

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

teflon-coated (green), made from steel, straight, with narrow pointed tips, Engineer's tweezers

13 g teflon-coated "₄/E \$ 9-121-9

CEBANIC SPECIAL-TWEEZERS FROM

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

MeighW	hsini∃	Length sədəni	шш	.oN

Ceramic tweezers

91	straight, microscopic-pointed	"8/r B	130	280-9
12	straight, pointed	"8/¹ B	130	180-3

Ceramic-tipped tweezers

9	especially slim and pointed slim - 2 mm flat tips	"8/∟ G "8/∟ G	130	960-9 960-9
9	betriog bas mils yllsipage	"8/1 G	130	960-9







SPECIAL TWEEZERS

The state of the s	36 g		ii , abiw mm &		
		cking tweezers)	e rs (self-lo	ezəəmi b	Grosse
391-9 	981	polished-anti-magnetic stainless and acid-resistant	,, ⁸ / ₁	th flat, point	971-9
			Weezers		
SH-S Decimals	6 71	polished-nickel-plated	,, [‡] /ε Þ	150	921-9
		sqit əbiw mm !		er's twee steel, straig	_
Ci-S Marinani	12 g 12 g	polished-stainless polished-anti-magnetic, stainless and acid-resistant	,,²/₁ Þ ,,²/₁ Þ	115 115	981-9 9-134
	ре	ic steel, bent, very sharply point			
HIS (MANAGED)			Meezers	naker's t	Watchn
(MERCHOL)	13 છ	sharply pointed polished-anti-magnetic, stainless and acid-resistant, sharply pointed	,,8/ε Þ	110	261-3
HELANTS	119	, sealniste-bahailog	,,8/ε ⊅	110	121-3
	pəţu	c steel, straight, very sharply poi	WGGZGKS R anti-magneti		
	Meight	daini T	d1gn:	шш Э7	.oN
		\bigcirc	7 7 7 1 1 1		

59 9

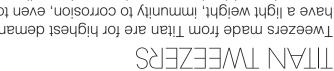










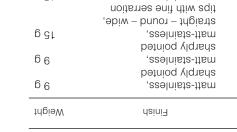


,, †/L 9 made from steel, with bent tips and gripping well hand guard

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

Crossed soldering tweezers (self-locking tweezers)

polished-nickel-plated



Di0///	daigia	цзβи	Э٦	01/1
giəW	d≳ini∃	səyoui	шш	.oN
6	matt-stainless,	,, 8/ε ⊅	011	150-3
6	sharply pointed matt-stainless,	,, [†] /ε 7	120	980-9
91	sharply pointed matt-stainless,	,,, [†] /ε	941	980-9
٩L	straight – round – wide, tips with fine serration matt-stainless, fine bent tips, tips with fine serration	,,9	120	ZE0-9



acid-resisting

SMD-TECHNIQUE SPECIAL-TWEEZERS FOR THE

stainless - matt finish - non-reflective - anti-magnetic -

13 g	straight, very sharply	,, 8/ε ⊆	132	920-9
6 8	straight, pointed	,, 8/ε ε	98	140-9
g 9t	bent, flat tips, with gripping cavity	,,²/, Þ	911	290-9
g 9ľ	bent, 2 mm wide, flat tips	,,²/, Þ	112	190-9
13 g	self-locking, bent, pointed	,, [†] /ε †	150	990-9
13 g	self-locking, straight, pointed	,,,,,,ε. ⊅	150	490-9
g 9t	sickle-shaped curved, very sharply pointed	,,*/ε †	150	t-90-9
13 მ	obliquely angled, very sharply pointed	,,8/ε Þ	110	2-023
13 g	bent, very sharply pointed	,,8/ε Þ	011	290-9
951	straight, pointed	,,²/, Þ	115	190-9
thgiaW	HsiniH	ngth sədəni	шш Р7	.oN

pointed, grip surface offset

ESD/ECB 1MEEZEBS

with glassfibre conductive and acid-resistant made from antistatic, black plastic material, reinforced

tdpiaW	dsini∃	идби	Р	.oN
JdgiəW	1161111 1	səyoui	шш	.001
6 9	straight, rounded tips	,,*/ε Þ	120	161-9
6 4	straight, 3 mm flat-hand tips, grip surface offset	,,, [†] /ε <i>†</i>	150	261-9
6 g	straight, 6 mm flat, and wide tips	,, [†] /ε ħ	120	6-193

tdnig\//	daini∃	นาดิน	Э٦	.oN
Meight		inches	шш	.001
6 9	straight, rounded tips	,,, ,/ε ⊅	120	161-9
6 4	straight, 3 mm flat-hand tips, grip surface offset	,,*/ε τ	150	261-9
6 g	straight, 6 mm flat, and wide tips	,,, [†] /ε †⁄	120	2-193
6 9	bent, pointed tips	,, [†] /ε <i>†</i>	150	161-9
6 4	straight, pointed tips, grip surface offset	,,*/ε τ	150	961-9

5-190 6-piece set of ESD/EGB tweezers

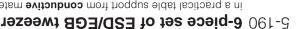
Contents: 5 tweezers made from conductive black plastic in a practical table support from conductive material

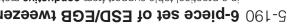
material, reinforced with glass fibre No. 5-191, 5-192, 5-193, 5-194, 5-195

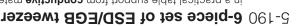
Contents: 5 tweezers made from conductive black plastic

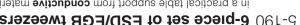
in a practical table support from conductive material

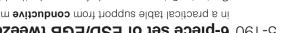


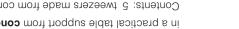




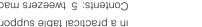


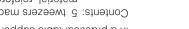






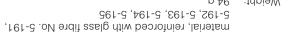






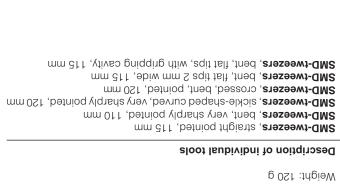






94 g 14gieW





Weight: 120 g

nickel-plated, 160 mm

150 mm, nickel-plated

plug-in transistors of various sizes

Tin knife with plastic handle, 115 mm

Description of individual tools

5-100 12-piece set special tweezers

g 085 :JAgieW and tools

inserting and removing IC,s

971-9

121-5

911-9

701-B

900-9

2-601

721-2

2-126

190-9

890-9

190-9

290-9

190-9

.oN

.oN

polished, stainless and acid-resistant

6-117-6 **Engineer's tweezers**, as above, strong PVC-insulation

5-107-6 **Engineer's tweezers**, as above, strong PVC-insulation

a special tool for easy insertion and removal of

IC-tweezers, nickel-plated, 125 mm, for gripping,

for soldering transistors, gold-bonded diodes etc. Heat dissipating tweezers, 165 mm, nickel-plated,

Engineer's tweezers, made from steel, with bent tips,

Component tweezers, nickel-plated, with insulated jaws,

Desoldering lever, slotted at one end, with plastic handle, 115 mm

made from steel, with bent tips and gripping well hand-guard, Crossed soldering tweezers, (self-locking tweezers),

Anti-magnetic tweezers, straight, with flat, pointed tips, 130 mm,

Engineer's tweezers, straight, with narrow pointed tips, 120 mm,

Engineer's tweezers, straight, flat, wide, 145 mm, nickel-plated

anti-magnetic - acid-resisting stainless - matt finish - non-reflective -

for the SMD-technique 5-050 6-piece set of special tweezers

Titan-tweezers, fine bent tips, 150 mm Titan-tweezers, straight, round, wide, 145 mm, with serration 980-9 Titan-tweezers, sharply pointed, 110 mm

Description of individual tools

g 08 :JdgisW

especially conductive - non-reflective acid-resistant - solder-repellent - antibacterial matt-stainless - super-light - immunity to corrosion -

from titan 5-030 3-piece set of electronic tweezers

in wallets of recycable nylon

SETS OF SPECIAL TWEEZERS

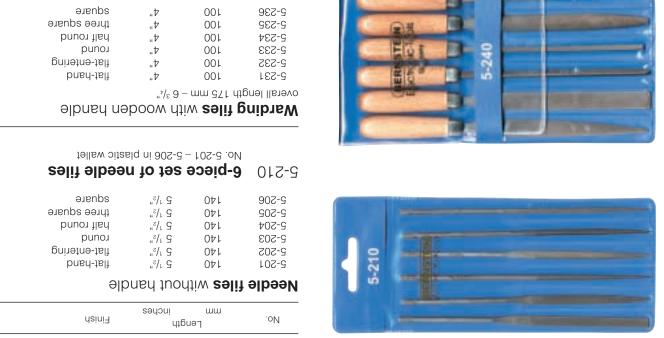








EIFEZ - 2CI22OLS







ნ 98	nickel-plated, polished	٣٤.	180	118-3
		SIO	ssiss si	Domest
6	a sun di sussi			
p 89	nickel-plated	.S e	152 Listed bisde	with one ser
	Iears	csple sh		_
ნ 98	plack-lacquered polished head	"L	180	908-9
		t materials		for wires an
	S	ıd spear	al cuttir	Univers
57 g	ujckel-plated	" ⁸ /ε ⊅	110	106-3
~ 20	recision work	errated, for pi	əs ,mils yləı	jaws extrem
	g sheet-metal and wires,	S for cuttinc	nossiss.	Special
50 0	pəlished	" ⁸ /, 9	130	191-9
~ 00	ated gripping jaws			
		SIO	ssiss gr	Clampir
6		_		
9 841 9 831	bat-hand balf round	"8 "8	200 500	17S-3 47S-3
	320 mm - 13 ¹ /4"			_
	əlbnsh nəbo	Ow dtiw s	oolit a`re	
ნ 6	bnsd-falf	9	120	197-9
				Confact with fine cut
			-1.7	
113 g			w oitsalq ni	
	varding files wooden handle,			
6 GL	sdnare	"Þ	100	927-9
ნ 72 გ 8 ჩ	three square	"セ "セ	100 100	2-53 4
9 4 f	konnd	"₽	100	2-233
9 7 t	flat-hand gninetnering	"セ "セ	100 100	6-231 6-231
	eu pandle		_	overall leng
	elbasd as	boow dti	w aglit r	
6 7 ₽	stic wallet	slq ni	No. 5-201 -	
	səlif əlbəə		_	
6 9	ednare	"²/₁ S	140	907-9
6 9 6 9	half round three square	.²/₊ G .²/₊ G	041 041	2-20 4
6 9 6 9	flat-entering round	²/₊ G ²/₊ G	140 140	2-203 2-203
6 γ 9 9	bnsd-talt	.°/₁ ⊆	041	5-201

thgiəW

100 9090-9

very easy to use Weight: 47 g Handy plastic tool with adjustable cutters,

stripping tool Universal

рјвск 100 1090-9 Rotary coaxial cable stripper Handy plastic tool with adjustable cutters, for cable types RG 58, RG 59 and RG 62

STP CABLE CABLE

ნ 69	(10 pieces)	oj sab	set of blac	819-9
35 g	резлу туре	"9	120	Z19-9
52 g	(seces)	oì səb	set of bla	919-9
g 01		,²/ı G	140	6-615
	adjustable blade	al with	plastic materi	nade from
	,	erinz	ai biade r	Juivers

≀inU

			θþ	with one bla
			on	אונון סווס חומ
6 11	knife opened	"∠	180	119-9
	knife closed	"₽	100	

Pocke

g f8	knife opened knife closed	"8/ε Þ "8	110 110	109-9
	wooden handle	kaper and r	lade, wire sc	vith steel bl
		_		

Electrician's knife

5 8 G	paknished	" ₈ \'	130 cutters	281-9 281-9
	6.0 səriw no listətət	able cutters	ıterchangea	ateel, with in

Wire scraper tweezers

9 01 1	bəhsiloq	"²/₊ ⊆	140	2-30 4	
9 2 3	bəhsiloq	"²/₊ ∠	140		
made from stainless steel, with serrated cutting edge, handy plastic handles and compression spring					

Combination cutters (general purpose cutters)

125 g polished

160 be removed easily

made from stainless steel, with handy plastic handles, compression spring, self-locking. The sheating of round, flat and shield cables may be removed early.

Cable stripping shears

	g E	sbare blade			1-708-3
		mm 23 Atgnəl gnittus			
	300 მ	chrome-plated	"⁺/ε 8	220	Z0E-9
interchangeable one-way blade and plastic support with straight stop					
	cable, also suitable for cutting of ledges and profiles from plastic, with				
	noddir fo g	s handles, for special cutting	andy plastic	d diw ,leets	made from s

Ribbon cable cutter

Meight	dsini∃	ngth səhəni	ww IPT	.oN

BEBUSTEIN

STRIPPING TOOLS SHEARS - SCISSORS -









ნ იგ	straight blade: 8 - 28 mm Ø	/	08 F	909-9
_ 00	Ø 00 0 -	114	001	207 7
ნ 08	pook plade: 8 - 28 mm Ø	" _p /e 0	O/L	909-9
S 00	M mm 90 9 10bold 100d	11/8 9	021	909 9
6 n/	without blade: 4 - 16 mm Ø	8/, G	08 F	t09-9
D 0Z	Margar 1 robold triodtive	171 9	130	P 601
6 n/	without blade: 8 - 28 mm Ø	8/, G	001	209-9
D 0Z	M mm 8C - 8 rabeld triodtiw	1719	130	6-603
	0 0			

(NELLSNEER)



2-532 160 6 1/_"

Working range: easy stripping from 0.5 to 6.0 mm² for easy stripping, crimping and cutting only with one tool, the special scanning system adjusts automatically to the wire diameter

Stripping and crimping tool

SISPPING TOOLS

Length sədəni mm Meight dsini∃

cutting capacity of the side cutters max. 6.0 mm², solid conductors max. 4.0 mm²

1509

^smm 0.8 of 0.4 bns 2.2 of 2.0 stripping length 5 mm crimping ranges for terminals:



130 g	astic	ld "8	500	155-3			
l solid emovable	er Super pper for all common stranded and stable length stop of 5 - 12 mm, r r max. 2 mm Ø	o.6 mm², adju	notus be - S.0 to	fully insulate			
6 08 6 08 6 04 6 04	'orking range: ithout blade: 8 - 28 mm Ø ithout blade: 8 - 28 mm Ø raight blade: 8 - 28 mm Ø	M "8/1 G W "8/1 G	130 130 130	909-9 909-9 909-9 909-9			NELS
	ippers ing of all common round cables d adjustment via adjusting screw a matically adjusts itself from circula	ing depth an	ns tast ar 7 O, cutt 9 nni gniv	for accurate of 4 - 28 mn	. (.	(315NH30)	1
6 5 ₽	forking range: Yorking range: Outstood and continental type cable Outstood and and and and and and and and and an	W O1 "G It' -9.	156	989-9	• (c	ICLI SNEEDE	
		stripper andles		Round (
30 ව	'orking range: sac cable from 8 to 7.5 mm outside-Ø r flexible cable 3 x 0.75 mm², 0 mm² and 16 mm²	"8\E \ .4. O]	110	989-9		HIGH SPACES	
-snnətna	all common coaxial cables (e.g. s xible cables		ıree-leve	Coax ca			NELLS











100F2 E2D\ECB 2bECIVF-

with slim, ergonomically formed handles from black, ${\bf conductive}$ plastic. The centring head guarantees a precise working without exhaustion.

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

Handle: impact-resistant, conductive black plastic, electrostatic discharge according to DIN EN 1000 15/1



TORX-screwdrivers

*			ait adt ai alod-	ith hore	w 6	T asia mont
S0 g	06	3.8-8 M	09	10	Τ	7 999-9
16 d	06	8 M	09	6	Τ	7 999-9
14 0	06	8.5 M	09	8	Τ	1 99-9
13 g	06	9.5 M	09	L	\perp	899-9
g 91	06	МS	90	9	Τ	299-9
159	06	2-9.1 M	20	9	Τ	199-9
15 g	06	9.1-4.1 M	09	\forall	Τ	699-9
Meight	mm Handle length	for metric thread	Blade length	əz	!S	.oN

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



Мгепсь кеуѕ

12 0 12 0 12 0 12 0 14 0	06 06 06 06	09 09 09 09 09	6.0 6.1 6.1 6.1 0.2 6.2	989-9 989-9 989-9 889-9
gll	06	90	7.0	189-9
Meight	Handle length mm	Blade length mm	∃/∀ ww	.oN

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, 6-636, 6-636, 6-636

g S41 : 142 g



Socket wrenches

50 g	06	04	5.3	129-9
g 9t	06	04	0.3	619-9
g 9t	06	04	9.4	819-9
g 2t	06	04	0.4	Z19-9
g 21	06	07	3.5	919-9
6 ≯ ∤	06	07	3.2	919-9
6 ≯ ∤	06	07	0.8	tl9-9
6 ≯ ∤	06	07	2.5	6-613
6 ≯ ∤	06	07	2.0	6-612
9 41	06	02	3.1	119-9
JdgiəW	_ ww	_ ww	шш	.oN
	Handle length	Blade length	∃/∀	

6-610 **6-piece socket wrenches**

129-9, 619-9 in a practical support from **conductive** material Contents: 6 Socket wrenches No. 6-612, 6-614, 6-617, 6-618,

Weight: 156 g











098-9

BEBUSTEIN

0

Socket wrenches, long, with handle

Handle: special square pattern Bernstein handle, impact-resistant, Blade: chrome vanadium, hardened over its full length, chrome-plated

transparent yellow plastic

		,		, 00, 0
6 77 9 29 9 49	92 × 21 65 × 21 65 × 21	071 071 071	5.8 0.7 0.8	801-9 901-9 901-9
9 27 9 37	92 × 21	071 071	0.3 6.0	501-9 401-9
2 <u>7</u> g	12 × 29	071	0.4	6-105
g 07	12 x 26	071	3.5	101-9
Meight	WW	WW	ww.	.oN

Contents: 8 socket wrenches No. 6-101 – 6-108 6-100 8-piece socket wrench set in a plastic wallet

Weight: 650 g

Blade: chrome vanadium, hardened over its full length, nickel-plated Socket wrenches, short, with handle

Handle: impact-resistant, transparent yellow plastic

6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	#2 × 801 #2 × 801 #2 × 801 #2 × 801 #2 × 86 #3 × 86 #4 × 86 #5 × 86 #6 × 86 #6 × 86 #7 × 86 #6 × 86 #7 × 86 #6 × 86 #7 × 86	001 001 001 001 001 001 001 001 001	3.8 6.4 6.3 6.3 6.3 6.0 6.0 6.0 6.0 7.0 6.0 7.0 7.1 6.0 7.1 6.0 7.1 6.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7	991-9 +91-9 591-9 791-9 691-9 991-9 991-9 591-9 591-9 591-9
າມດິເອນ	шш	ww	ww ,	.ONI

6-150 8-piece socket wrench set in a plastic wallet

Contents: 8 socket wrenches No. 6-151 – 6-158 Weight: 530 g

with tangs for interchangeability Socket wrenches without handles

Material: chrome vanadium, nickel-plated

42 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3/16" "1/4" "3/16" "3/16" "28/8"	0† 0† 0† 0† 0† 0†	0.4 6.3 0.5 0.8 0.01 0.01	6-207 6-203 6-203 6-203 6-203 6-203
thgiəW	Inches for No. 6-190	Wrench length mm	∃/∀ ww	.oN

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

but in imperial dimensions 6-190 8-piece socket wrench set same as 6-200,

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

in clear pack Contents: 1 flexible holder No. 6-461 with

6-360 17-piece combination socket wrench set

Sonroncia: 1 Academic Montain Perinatein handle special square patiern Bernatein handle 1 Academic Mo. 6-406
7 Sockets Mo. 6-411 - 6-412 - 6-413 - 6-421 - 6-421 - 6-421 - 6-413 - 6-421 - 6-421 - 6-422 - 6-433
8 bits Mo. 6-411 - 6-412 - 6-413 - 6-421 - 6-421 - 6-421 - 6-422 - 6-433
940 g

BERNSTEIN

917-9 717-9 817-9

114-9

.oN

904-9

908-9 908-9 708-9

£0E-9

6-301

Sockets

Accessories

t28-9

6-335

.oN

6.8 0.8

0.4

Riade width Material: special steel, steel grey

0

0.8 3.8

0.4 8.4

шш

Universal joint

6-331 Socket wrench holder

Weight: 744 g

Screwdriver bits, 1/4" hexagon drive

Material: chrome vanadium, chrome-plated

шш

ıength lotal



Sets of socket wrenches in metal cases

6-320 16-piece socket wrench set in metal case

Typ: 1/4" square drive, chrome vanadium, chrome-plated

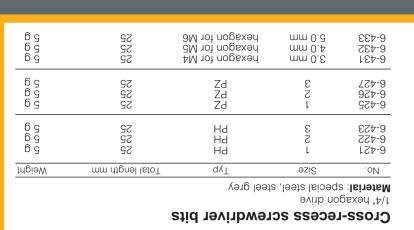
Contents: 11 sockets No. 6-301 – 6-312, 1 holder No. 6-331, 1 sliding tee bar No. 6-332, 1 universal joint No. 6-333, 1 rigid extension No. 6-337, 1 vigid extens 6-310 15-piece socket wrench set in metal case

6-330 **16-piece socket wrench set in metal case**Contents: 11 sockets No. 6-301 – 6-312, 1 holder No. 6-331, 1 solder No. 6-333, 1 rigid extension No. 6-333, 1 reversible ratchet No. 6-335, 1 rigid extension No. 6-333, Neight: 830 g

Contents: 11 sockets No. 6-301 – 6-312, 1 holder No. 6-331, 1 reversible ratchet No. 6-334, 1 rigid extension No. 6-333, 1 reversible ratchet No. 6-334, 1 rigid extension No. 6-337, Weight:

6-300 **12-piece socket wrench set in metal case** Contents: 11 sockets No. 6-301 – 6-312, 1 holder No.. 6-331





8.0 S.!

6.0

Blade thickness mm

0

Bit holder with square drive and hexagonal location for bits

- on special request also in imperial dimensions available -

Meight

with special square pattern Bernstein handle Sliding tee bar

Type: 1/4" square drive, chrome vanadium, chrome-plated

Typ: 1/4" square drive, chrome vanadium, chrome-plated

Reversible ratchet, 150 mm long Reversible ratchet, 150 mm long Rigid extension, 100 mm long

Total length mm

52

Total length mm

0.01 0.11 0.81

0.8

шш

6-311 6-315

Meight

Meight

Meight

Meight

шш

length

117-9	Michigan	-0	
,	Control of the last		

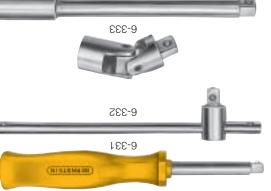


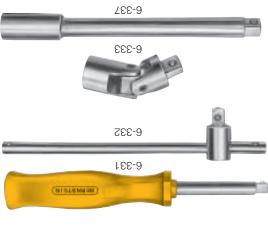












		201101111	ייי פוויס אמווממומווי' מ	
Meight	Jaw length mm	Total length mm	gninəqo wst mm	.oN
720 9	LÞ	270	99	187-8

Material: chrome vanadium, burnished

Fifting wrench with protection jaws, for chrome-plated fittings

530 d	52	120	0 – 12	177-6
142 d	52	120	0 – 18	577-6
22 d	15	100	0 – 23	577-8
tdgi∍W	Jaw length mm	Total length mm	gninəqo wsL mm	.oN

Material: chrome vanadium, chrome-plated

Adjustable wrenches

Weight: 90 g material thickness 2 mm, 125 mm long

Z double open-ended wrenches 7 x 8 and 9 x 10 mm material thickness 1.5 mm, 120 mm long

mm 2.8 x 0.8 bns 2.2 x 0.3

Contents: 4 double open-ended wrenches 3.0 x 3.5 - 4.5 x 4.5 -

Material: chrome vanadium, bright nickel-plated, extra slim 6-piece special double open-ended wrench set in plastic case 094-9

Weight: 160 g

and 14 x 15 mm

Contents: 5 ring wrenches 6 x 7 - 8 x 9 - 10 x 11 - 12 x 13

6-650 5-piece ring wrench set

Weight: 230 g

and 13 mm

Contents: 7 combination wrenches 6 - 7 - 8 - 9 - 11

6-600 **7-piece combination wrench set**

Weight: 620 g

and 14 x 17 mm

Contents: 5 ring wrenches 6 x 7 - 8 x 9 - 10 x 11 - 12 x 13

double-offset

5-piece ring wrench set 099-9

Weight: 270 g

12 x 13 and 14 x 17 mm Contents: 5 double open-ended wrenches 6 x 7 - 8 x 9 - 10 x 11 -

6-500 5-piece double open-ended wrench set

Material: chrome vanadium, chrome-plated

Sets of wrenches

Weight: 70 g

1 universal bit holder

T 10, T 15, T 20, T 25, T 30, T 40, Contents: 6 Torx bits of the following sizes:

for makeshift screwing

Handy plastic box with hexagon hole in the bottom

6-440 7-piece Torx-Bit-Box

Weight: 70 g

1 universal bit holder

S 9zis virbizo¶ ♣ 824-8 .oV

l əzis virbizo9 🏶 Ə24-Ə .oN

S əzis eqillid ⊕ S24-8 .oN

BERNSTEIN

No. 6-421 🕀 Phillips size 1 mm 3.f x 0.8 ⊕ 3f4-3 .oV

Contents: 1 bit each No. 6-413 ← 5.5 x 0.8 mm

for makeshift screwing

Handy plastic box with hexagon hole in the bottom

6-410 7-piece Bit-Box

Material: chrome vanadium, steel grey, DIV

¹/₄" hexagon drive

Screwdriver bits

SCENDUNES BILS













SECIAL WRENCHES

Mrench keys

angle-shaped screwdrivers for hex socket-head screws Material: special steel, nickel-plated

6 90 L	112 x 40	6.63	8/8	998-9	0.01	828-9
g f8	85 x 301	£7.8	11/35	1 98-9	0.6	728-9
6 09	98 x 00 f	₽ 6.7	91/9	£98-9	0.8	978-9
6 14	₹8 × 96	41.7	6/35	298-9	0.7	978-9
58 9	35 × 06	35.9	₽/L	L98-9	0.9	6-823
55 9	05 x 38	99.9	7/32	698-9	6.8	6-822
6 6 L	80 x 28	-	-	-	0.8	128-9
13 g	75 x 27	97.₽	3/16	898-9	9. <i>p</i>	618-9
6 [[72 x 25	3.67	28/9	Z 98-9	0.4	818-9
6 8	89 x 22	3.56	1 9/6	998-9	3.5	Z18-9
6 9	05 x 20	3.18	8/1	998-9	0.8	918-9
მ გ	81 x 03	2.38	3/35	798-9	2.5	918-9
5 9	GL x GG	86. f	t9/9	898-9	2.0	7L8-9
βļ	21 x 03	69. f	91/1	8-825	3.1	6-813
βļ	01 x 94	91.1	79/8	198-9	0.1	6-815
βĻ	01 x 08	-	-	-	68.0	118-9
	A A					
thgiəW	ww were	ww ≈	1	.oN	ww	.oN
	reg length		Α		∃/∀	

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 6-810 8-piece wrench key set

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

6			,			
g S4	140	6.35	セ/ト	F88-9	0.9	148-9
92 g	140	95.5	7/35	648-9	0.3	628-9
30 მ	140	9Z.4	3/16	878-8	9. <i>p</i>	88-9
S8 g	140	3.97	28/9	ZZ8-9	0.4	ZE8-9
g 61	140	3.56	7 9/6	948-9	0.5	988-9
g 8ľ	140	3.18	8/1	948-9	2.5	98-9
βZL	140	2.38	3/35	⊅ ∠8-9	0.2	1 28-9
g 9ľ	140	86.1	79/9	£78-9	3. r	6-833
g 9ľ	140	69.1	91/1	278-9	S.1	6-835
12 g	140	91.1	79/8	178-9	0.1	158-9
thgiaW	шш	ww ≈	ıucµes	.oN	шш	.oN
tdpio///	Blade length	∃/	А		∃/∀	-14

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 – 4.0 mm

1 spring handle in impact-resistant,

transparent yellow plastic No. 4-775

Weight: 290 g

10-piece wrench key set on ring 078-9 Sets of wrench keys (imperial dimensions)

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

Contents: 8 wrench keys 1/16 - 5/64 - 3/32 - 1/8 - 5/32 - 3/16 -8-piece wrench key set in a plastic wallet 088-9

Weight: 100 g

5/32 - 3/16 - 7/32 - 1/4" 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 - 1/16 - 1/

yellow plastic No. 4-775 1 spring handle in impact-resistant, transparent

Weight: 315 g





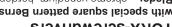


SECIAL WRENCHES

straight model and offset model to DIN 911

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

ьН e n	Meight	P B Jength mm Leg	.faeti. dainii JoM	thgiaW	Blade length mm	∃\A mm	Straight deinith oM
04	g	81 x 87	126-9	g 21	97	2.0	106-9
04	gγt	81 x 37	6-925	βYL	97	2.5	8-905
04	S0 g	75 × 20	6-923	S0 g	97	3.0	£06-9
08	32 d	75 x 25	426-9	30 g	97	0.4	7 06-9
08	ნ ვვ	82 x 08	976-9	22 d	08	0.8	906-9
06	g 07	SE x 08	976-9	ნ 09	08	0.9	906-9
06	p 00 f	₽8 × 34	476-9	p 07	08	0.7	406-9



Weight: 200 g

in a plastic box

very long TORX-screwdrivers

T S T

T 25

01 T

9 I

from size T 9 with bore-hole in the tip

8 T 476-8

05 T 1 179-9

051 1796-9 6-966 L 115

7 696-9

7 896-9

7 996-9

7 796-9

896-9

796-9

196-9

.oN

04 T ,08 T

100

100

09

Blade length

Material: chrome vanadium, burnished, offset model Contents: 8 TORX-wrench keys T9, T10, T15, T20, T25, T27, T30, T40

M 2.5 M 3-3.5

Z-9 W

9-9-9't W

9-9.4 M

9-7 W

εM

D.S M

0.5 M

thread

for metric

M S

4-8.6 M 3.8-8 M

12 × 26

61 x 98

110 x 25

110 x S2

100 x 23

100 x 23

92 x 21

12 x 29

12 x 24

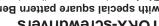
61 x 98

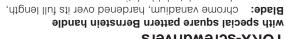
61 x 98

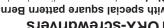
61 x 98

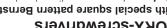
Handle size

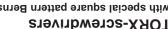
6-995 8-piece TORX-wrench keys with bore-hole

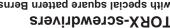


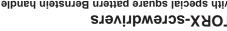


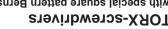


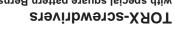






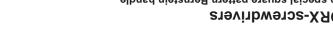






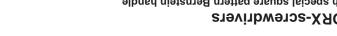


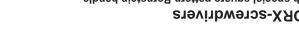




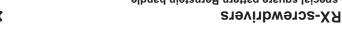


chrome-plated, black tip





Handle: impact-resistant, transparent plastic, amber coloured





ნ 09

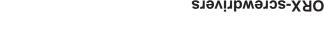
34 9

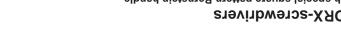
6 97

32 g 44 g

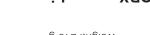
35 g

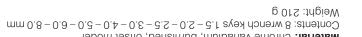
Meight









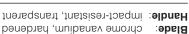


Įθ	bom festlo, offset mod	rome vanadium, bu	Material: ch	
in a plastic wallet	such key set,	ballpoint wre	8-piece l	096-9

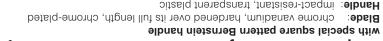
6 †6L	110 × 25	10.0	120	976-9
946	110 x 25	0.8	120	976-9
100 d	110 x 25	0.9	152	<i>7</i> 76-9
ნ 99	12 x 29	0.3	100	£46-9
6 f4	61 x 88	0.4	100	246-9
94 g	61 x 88	3.0	100	176-9
	111111	111111		

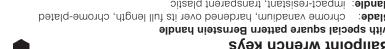
94 g	110 x 25	0.01	120	976-9
g 941	110 × SE	0.8	120	976-9
g 00 f	110 x 25	0.9	152	<i>7</i> 76-9
6 9g	12 x 29	0.3	100	£46-9
6 f4	61 x 88	0.4	100	246-9
g 4£	61 x 98	0.8	100	146-9
Meight	шш	шш	шш	.oN
+9~:0///	Aandle size	∃/∀	Blade length	914

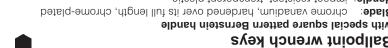
	01 x 38	3.0	100	176-9
V	əzis əlbnsH mm	∃/A mm	Blade length mm	.oN

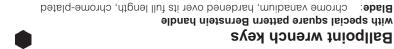


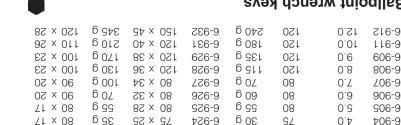












8C × 0Ct	D 245	20 x 021	256-A	D 020	120	100	C10-8
110 × 26	210 g	150 × 40	186-9	g 081	150	0.01	116-9
100 x 23	g 071	150 × 38	6-956	132 მ	150	0.6	606-9
100 x 23	130 g	150 × 36	826-9	g 211	150	0.8	806-9
90 x 20	g 00 f	₽8 × 34	726-9	g 07	08	0.7	Z06-9
90 x 20	g 07	SE x 08	976-9	ნ 09	08	0.9	906-9
71 x 08	g2 d	82 x 08	976-9	ნ ვვ	08	0.8	906-9
71 × 08	32 a	75 x 25	426-9	30 g	97	0.4	7 06-9
31 x 07	S0 g	75 x 20	6-923	20 g	97	3.0	5-903
31 x 07	βYL	81 x 37	6-922	βYL	97	2.5	206-9
31 x 07	g Gt	81 x 87	126-9	g Gt	97	2.0	106-9
шш		A A	.oN		шш	шш	.oN
əzis	thgiaW	length mm	dsinif	Meight	length		dsini ì
ו ומווחוב		െ	.106110		חוממב	1/-/	າເປດເສເາ

00 001	02,	00 00 1	0000	J 0 F	001	0 0	0000
100 x 23	130 g	150 x 36	826-9	g 211	150	0.8	806-9
00 x 20	g 00 f	₽8 × 34	726-9	g 07	08	0.7	Z 06-9
00 x 20	6 0Z	S6 x 08	976-9	ნ 09	08	0.9	906-9
71 x 08	g2 d	80 x 28	976-9	ნ ვვ	08	0.3	906-9
71 x 08	32 g	75 x 25	426-9	30 d	97	0.4	† 06-9
31 x 07	S0 g	75 x 20	6-923	20 g	97	0.5	£06-9
31 x 07	βYL	81 x 37	6-922	βYL	97	2.5	8-905
31 x 07	g	81 x 87	126-9	g	97	2.0	106-9
шш		8 A	.oN		шш	шш	.oN
2715	າເມດເລນ	บบบบบาดิบลเ	HIBIH	บบดีเลงง	เมดิเมลเ		HIBIH

Straig Sinist
.oM

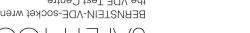
Mrench keys











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

Permissible voltage at which the VDE socket wrenches and wrench keys can

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 EM 60.900

Handle: impact-resistant, red coated plastic Blade: chrome vanadium, hardenend over its full length, to DIN 7445

		onon qo	aoam potol	1104 1140303
122 0	155 x 30	152	13.0	10-411 VDE
g 031	155 x 30	152	15.0	∃QV 904-91
g 031	155 x 30	152	0.11	16-408 VDE
g 0 f f	110 x 26	152	0.01	16-407 VDE
g 0 f f	110 x 26	152	0.6	16-406 VDE
g 201	110 x 26	152	0.8	16-405 VDE
g 201	110 x 26	152	0.7	16-404 VDE
g 37	100 x 24	156	0.9	16-403 VDE
ნ მ∑	100 x 24	152	5.5	16-402 VDE
ThgisW	шш	uuu	шш	.oN
+45i6/M	Azis əlbnsH	Blade length	∃/∀	<u> </u>

Safety insulated wrench keys

to VDE regulations EM 60.900

burnished, to DIN 7439 Blade: chrome vanadium, hardened over its full length,

Handle: impact-resistant, red coated plastic

62 6 62 7 60 7 62 8	mm 100 × 24 100 × 24 24 × 001 42 × 011	97 87 87 87 87	2.5 3.0 4.0 4.0 5.0	16-704 VDE 16-702 VDE 16-701 VDE
Meight	əzis əlbasH mm	Blade length	∃\A mm	.oN

	₩ N 0001 C	w wrenches		
130 g	155 × 30	100	0.8	16-706 VDE
ნ 08	110 × 26	100	0.9	16-705 VDE
ნ ვ9	110 × 26	97	0.3	16-704 VDE
6 S₽	100 x 24	97	0.4	16-703 VDE
ნ 0 †	100 x 24	97	0.8	16-702 VDE
32 მ	100 × 24	9Z	2.5	16-701 VDE
21161644	шш	шш	шш	:011

Weight 9	4/F mm 12.0	16-507 VDE	Weight 25 g	4\A mm 0.0	16-501 VDE No.
6 97	0.81	16-509 VDE	52 g	0.7	16-503 VDE
6 98	0.41	16-508 VDE	32 g	0.8	16-502 VDE
9 00 t	0.31	16-513 VDE	6 99	0.01	16-506 VDE
9 01 t	0.71	16-512 VDE	6 09	0.01	16-505 VDE
9 58 t	0.91	16-511 VDE	6 09	0.11	16-504 VDE

∑ V 000 ľ	:hes /ered insulation, [·]			Single-en State, w
0.61 0.71 0.41	16-513 VDE 16-513 VDE 16-509 VDE	22 d 40 d 32 d	0.8 0.9 0.01 0.11	16-506 VDE 16-505 VDE 16-504 VDE 16-503 VDE
13.0	16-508 VDE	52 g	0.7	16-502 VDE

7447, with two-colour multilayered insulation, 1000 V					W , \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
JdgiəW	∃/∀	.oN	Meight	∃\A mm	.oN
9 06 9 081	0.11 0.21	16-537 VDE 16-536 VDE	6 95 6 03	0.8 0.7	16-532 VDE 16-531 VDE
135 g 160 g 165 g	0.81 0.41 0.31	16-541 VDE 16-539 VDE 16-538 VDE	6 99 6 99	0.8 0.9 0.01	16-535 VDE 16-534 VDE 16-533 VDE



16-440 VDE 9-piece set of sockets

in red imitation leather case

- other dimensions available on request -

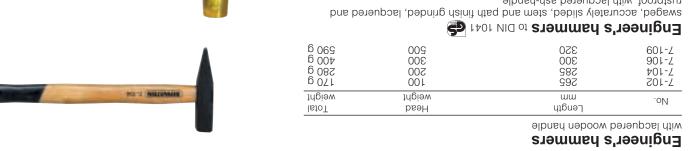
mm0.61 - 0.71-0.2r-0.4r-0.5r-0.2r-0.1r-0.0r:A/A Contents: 8 sockets with two-colour multilayered insulation

with two-colour multilayered insulation 1 T-socket wrench, 1/2" square drive, 200 mm

Weight: 1.120 kg

BEBUSTEIN





pue p		er's hammers to DIN 1041 [ccurately slided, stem and path fin with lacquered ash-handle	swaged, a
170 g 700 g 700 g 280 g	200 300 400	350 300 582 582	7-102 7-106 7-106 7-109
thgiew	thgiaw	шш	.ON

		s hammers to DIN 1041	'rəənign
170 g 400 g 170 g	200 300 100	350 300 582 582 582	7-102 7-104 7-106 7-109
thgiəw	thgiaw	ww .	.oN

	22	Pammers to Division	2'yeening=
170 g 400 g 400 g	200 300 500 100	350 300 382 382 350	7-102 7-104 7-106 7-109
Total tdgiew	Head thgiaw	шш Геид г р	.oN

		35	0.000.000	
170 g 700 g 700 g	200 300 100		350 300 582 582	7-102 7-104 7-106 7-109
lstoT tdgiew	Head thgiaw		шш Геидұр	.oN

	5	F's hammers to DIN 1041	enginee
1 00 g 6 082 6 090 g	300 200 200	350 300 582 582	201-7 401-7 401-7
Total IntoT	bsəH Idgiəw	աա րեսծքի	.oN

		r's hammers to DIN 1041	Enginee
170 g 280 g 400 g 600 g	200 300 100	350 300 582 582	201-7 401-7 601-7
Total Ingiaw	Head Meight	шш Геидұр	.oN

		r's hammers to DIN 1041	enginee
001 000 000 000 000 000 000 000 000 000	200 200 100	350 300 582 582 582	201-7 401-7 601-7
stoT Igiəw	Head weight	шш Геид <u>т</u>	.oN

red and		r's hammers to DIN 10 urately slided, stem and pat	гмадед, асс
069 000 087 001	200 300 200 100	350 300 582 582 582	201-7 401-7 901-7
sto i Agiaw	bsən Jdgiəw	ww reudru	.oN

		r's hammers to DIN 1041 🗲	engine∈
170 g 280 g 400 g 170 g	100 200 200 200	350 300 350	201-7 401-7 601-7
lstoT tdgiəw	bsəH 14giəw	шш Геидұр	.oN

1 1		r's hammers to DIN 1041	
170 82 400 590	200 200 200 200	350 300 582 592	201-7 401-7 601-7
toT giəw	bsəH thgiəw	шш Геидұр	.oN

	lacquered and	grinded,	definish disappears and sinish	curately slided,	swaged, ac
			SYS to DIN 1041	k's hamme	Enginee
6 06 6 00 6 08 6 02	2	200 300 100		350 300 350 350	201-7 401-7 401-7 109
Total Bight		Head weight		ww reudth	.oN

guq	h finish grinded, lacquered	urately slided, stem and pat	swaged, acc
	5 0 l t/0	r's hammers to din 10	enginee
170 g 400 g 400 g	200 300 200 200	350 300 582 582 582	201-7 401-7 601-7
thgiew	thgiew	ww webusa	.oN

sted and	ish grinded, lacque	surately slided, stem and path fin th lacquered ash-handle	
	5	r's hammers to DIN 1041	enginee
1 00 1 0087 6 004 6 069	200 200 200	350 300 582 582	201-7 401-7 601-7
tdgiəw	tdgiəw	шш	.oN

sted and		r's hammers _{to} DIN 1041 Surately slided, stem and path f	
069 780 120	100 200 200 200	350 300 300 350	201-7 401-7 601-7
otoT Totaw	beaH thgiaw	шш Гeuдtµ	.oN

	**	2 1 11	
	tops, lacquered wooden handle		Plastic h
432 d 432 d 560 d 122 d	200 300 500 100	350 300 300 350	211-7 411-7 611-7
pu	path finish grinded, lacquered a	1's hammers to DII urately slided, stem and ih lacquered ash-handle	swaged, acc
280 d 400 d 100 d	200 300 500 100	385 300 350 350	201-7 401-7 601-7

dtpge I	M-heaH	
, lacquered wooden hand	with impact-resistant, cellidor plastic tops	
	Piastic nammers	

		10 11 1 2	11. 1	<u> </u>	j	
	psudle	neboow trastaiser-	with impact	10 DIN 2136	chisels	Firmer
30 g 330 g 330 g	3	582 582 522		22 27 32		7-121 7-122 7-123
14giə\	W	ww wence		ww.		.oN

tdpiaW	əl əbslB dibiw e mm mn	- 01/

	npact head	ıadium, safety ir	 S 6453, chrome var	Flat chise MIC of viller to DIV
6 06 130 d 122 d	540 540 532	130 130 140	10 10 10	7-201 7-202 7-203
тиріəW	шш	uuu	шш	.oN

0	100	O F	310 2
шш	шш	шш	.oN
Ø	Гепдіћ	Head width	-14
npact head	adium, safety ii	6453, chrome van	
		CI	acilla ani i

6 91	8	100	01	7-215
thgiəW	ww Ø	шш Геидұр	Head width mm	.oN

safety impact head	chrome vanadium,
chisels	Electrician's

Drill rasp

Drill saw with plastic handle

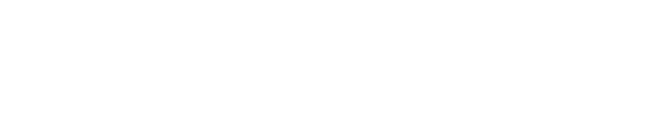
7-311 7-315

ŊΓ.

7-303 7-304 7-306

.oN

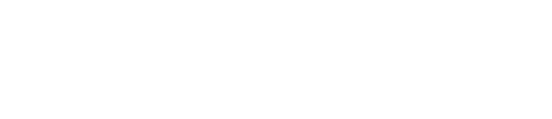
7-281



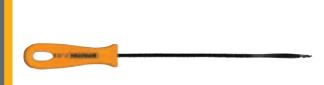














D 37	182	100	0.9	918-7
thgi∋W	Total length mm	Blade length mm	Q-əbala mm	.oN
		ındle	sd oiteslg fast	Punch with impact-resis
32 მ	560	971	0.4	7-316
			ÐΙ	with plastic hand

120 120

Blade length mm

150

шш Геидұр

Centre-punch to DIN 7250, chrome vanadium, safety impact head

0.8 8.9

Bore-Ø mm

0.£ 0.4 0.8

Bore-Ø mm

0.8

Q-baəH mm

Twist gimlets black lacquered, with knurled ring handle

270 360

Total length mm

126 140 170

шш Геидұр

Meight

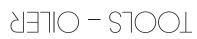
30 d 30 d

thgiaW

ნ 06

thgiaW





		tles and plastic handle	with white brist
		Ч	Dust brus
125 g	96	130	914-7
thgiəW	tdgiəH mm	ww Ø	.oN
mical form	(without picture) round, co	saker for plaster	Rubber be
25 g	550	91	014-7
	д гряик	wel polished with round	Slicker tro
ნ 99	200	90	907-7
thgiəW	Total length mm	dtbiw əbsla mm	.oN
Trowel with conical forged blade and wooden handle			

thgiəW	Total length mm	Bristles width mm	Bristles length mm	.oN
		ale	nsd sites and plastic han	sird ətidw dtiw
			ųs	Dust brus
155 g	96		130	914-7
Meight	thgiəH mm		ww Ø	.oN

04	924-7
Bristles length mm	.oN

	sendif evitail	natural bristles with conc	olbasa o	vitanhaga dtiw
			-prush	E2D/ECB-
g 01	961	S2	04	7-426
11161044	шш	шш	шш	:011

with conductive fibres	Dristies	naturai	nandle,	conductive	UliN

				Jolin
5 g 5 9Z	120 120	8 mm 8 9biw mm 0S	round flat	7-421 SS4-7
Meight	Total length mm	SeltsinB	дγТ	.oN

Oiler

6 9	011	50	944-7
	stic seal	sparent plastic, with pla	made from tran
			Oiler
6 G L	011	50	964-7
thgiəW	dtgnel lstoT mm	stneoO moo	.oN
	ss rotating seal	sparent plastic with bras	made from tran

140	9	7-438
		for droplet oiling
		Drip oiler

	0 1	<u> </u>		vv	•
140		9		864-7	
			6,,,,,	noidoin	

	•	•••	•	
S1001 DNR	JNS\	/]	/	\bigvee

/V\	dtpna I	
	ling rule from wood, with steel spring	Fold

1129	16.0	2	7-502
tdgiəW	dtbiW mm	ш Геидұр	.oN

	ai bae tue saillua set east lecte		Tape meas
115	0.81	2	7-502

7 0			r		J
ni but and in	steel tape for	'6uisuod	ant plastic	oact-resist	lmi Atiw

3.9	Ļ	909-7	
steel tape for pulling out and in	biastic nousing, s	n impact-resistant	IJIM

13.0	7	909-7
9.9	ļ	909-7

13.0	2	909-7
G .8	ļ	909-7

	7 1 7
2	909-7
Ļ	909-7
	7

	Oaliscott	0464 10042
13.0	2	909-7
0:0	i i	000 /

	031100000	0401 10013
13.0	2	909-7
5.9	Ļ	209-7

6 17	0.61	2	909-7
981	6.8	ļ	909-7

0 6 F	U	303 2
5.9	Ļ	909-7
	פנמנוג ליומפונס נוסמפונולף פנסכו נ	uea Laonder III III i

G .8	L	909-7
וון חווף מחר פווח ווון מון פון ווון	מונו אומפוור נוחמפונואי פ	אונוו וווואמרגובפופני

0.07	0	001 2
3.9	Ļ	909-7
	'Autonou anopid ium	elea Laordi III IIIA

13.0	2	909-2
9.9	ļ	909-7

0.81	2	909-7
5.9	ļ	909-7
בון משפי ובון אמווווא במג מוומ ווו	ne (function on early arra	

13.0	6	909-2
<u> 6</u> .9	ļ	909-7
u pur ano fullind lor adri lee	ant piasuc nousing, su	ırı ilibacı-resisi

130	C	909-2
5.9	Ļ	909-7
steel tape for pulling out and in	biastic housing, s	ıtı ımpact-resistant

0 0 F	U	207 2
5.9	Ļ	909-7
בון נשלה וסו לחוווות וסו מנו מנו וום	מווג אומפנור ווטמפוווט, פני	אונון וווואמרו-ובפופנ

909-2
909-7

13.0	2	909-2
G.8	ļ	909-7

	measure	edst tape
13.0	2	909-7
5.9	↓	909-2

	Ballisedu	gret leat2
13.0	2	909-7

cc	plank	guq	etched	unmbers	guq	səuil	stainless,	
				esante	эш	sbe	Steel t	
				2			909-7	

coloured

	3.0 x &f	300	809-7
thgiaW	noitoes eeotO mm	шш Геид <u>г</u> ү	.oN

50

g 48

g 98t Meight

50 g

1/50

Precision caliper square

Miniature caliper square

suinoM	əsoM	Measuring range	.oN
mm	mm	mm	
априну, пта мапес	ın yalındınınız ər	stanness, with open sin	, namen isi

hardened, stainless, with open slide and adjusting screw, in wallet

1585.CV	H BAKS	AGE:	

COMPARTMENT HARAM	BEAUTIME TO SERVICE STREET
	V





215 g

3 g

130 g

6 4 6

6 44

9159

Meight

g 83

thgiaW

S20 d

thgiaW

56 92

Meight

Meight























PROTECTION SPECTACLE

Pocket hack saw with plastic handle and saw blade

Pocket hack saw "Puk" with adjustable wooden handle,

Pocket hack saw "Puk" with fixed wooden handle

Hack saw blade both ends toothed, from Wolfram-steel

220

геидұр шш

120 × 100

Sides of angle mm

Meedles-Ø

with roughened nickeled handle, needles hardened and burnished,

Square for mechanics with bevel, plate, fine polished

Hack saw frame from flat steel for sawblades

Hack saw blade special for "Puk" hack saws

with saw blade for wood and metal, in a plastic wallet 7-616

7-620 for wood and metal

and pocket hack saw 7-620

and saw blade for wood and metal 7-615 150

of 300 mm length, with saw blade 7-605

SMVS

7-636

.oN

7-523

7-521

.oN

Scriber

interchangeable

7-515 0.10 - 2.0

Measuring range No.

Feeler gauge with conical leaves

NEASURING TOOLS

.oN

Blade length mm

with 3 levels: horizontal, vertical and 45° angle

Spirit level, made from plastic

Handle-Ø

Protection spectacle with colourless glasses

from plastic, acc. to DIN-regulations 7-651ნ 89

560

геидұр шш

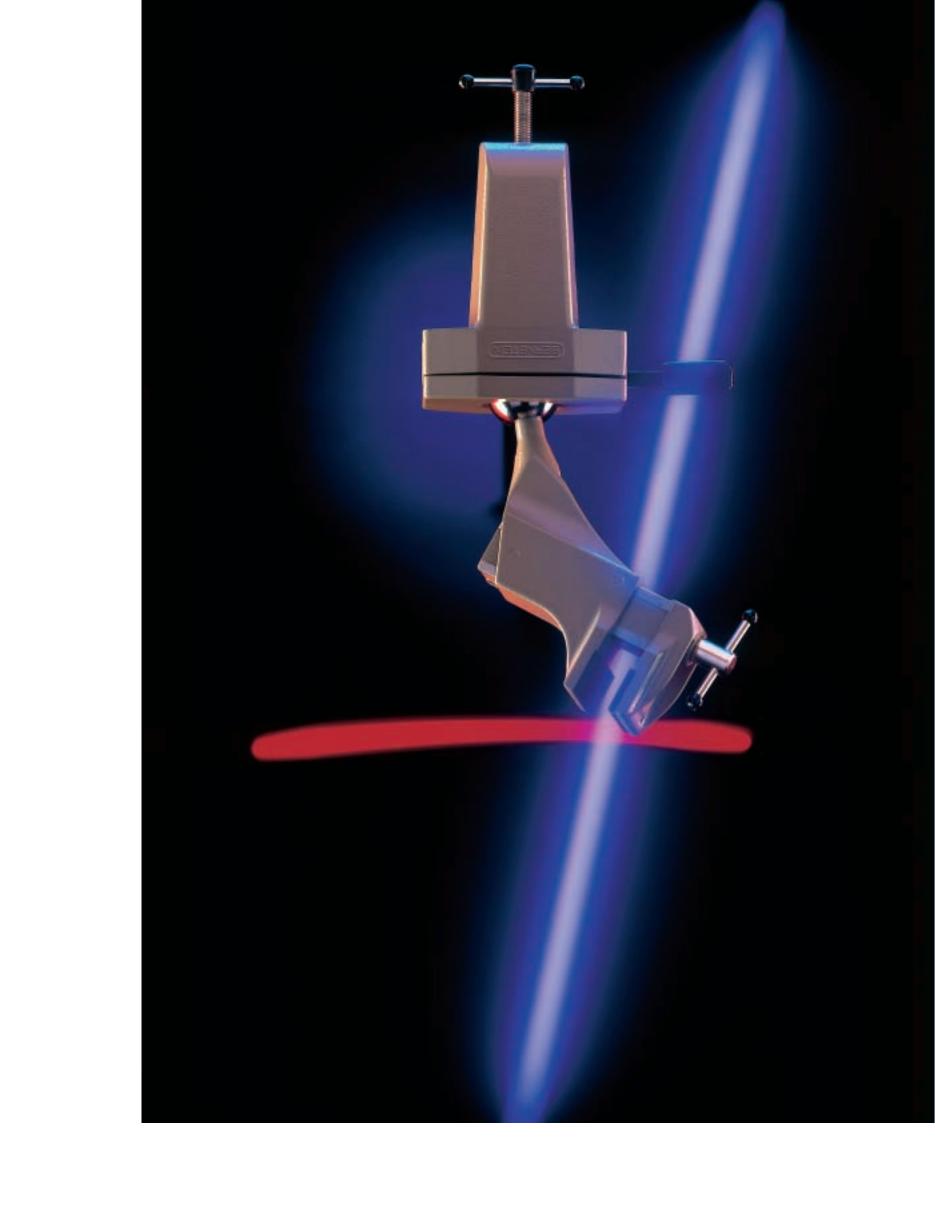
500 шш

Total length

50

Blade quantity







CLANPING VICES SPANNEX

and set firmly, in order to create maximum possibilities ball-and-socket joints, thus enabling it to be rotated BERNSTEIN clamping equipment is constructed on

direction and capable of being set securely. Small vice on ball-and-socket joint rotatable in any

The "Spannfix" vice simplifies many jobs in precision engineering, in laboratories, in test rooms and all engineering and electronics workshops.

9-205 **BERNSTEIN** SPANNFIX screw-on vice

for work benches with a max. table thickness of 80 mm.

on the lever is sufficient, and the clamped workpiece can be quickly and easily onto a work bench or table. Slight pressure The small vice with ball-and-socket joint can be mounted

moved into any suitable position.

mm 8£ Clamping depth mm 07 Clamping capacity Clamping pressure 120 kp Technical data:

mm 03

Jaws (interchangeable) plastic Jaw width

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

3.1 x 21 M buts bebserift with universal ball joint and SPANNFIX bench mounted base 192-6

Size of base: 150 x 105 mm for permanent mounting using bolts

Weight: 0.800 kg

for portable applications **WITH VACUUM BASE** 9-220 **BEBNSTEIN SPANNFIX VICE**

mm 201 x 021 :9ssd to 9si2 Technical data: as 9-205

Weight: 2.000 kg

3.1 x S1 M ball joint and threaded stud SPANNFIX VACUUM BASE with 9-210

(consisting of 9-211 and 9-261)

Weight: 1.500 kg



9-211 SPANNFIX VACUUM BASE only

Weight: 0.650 kg to be used in conjunction with 9-215 or 9-261





Example of application 9-251 9-252

9-251



Jaws (interchangeable) plastic Jaw width Clamping depth

for screwing onto work benches with a max. table thickness

Universal clamp mounting ball joint base

with interchangeable screw-on work mounts

9-250 **BERNSTEIN** SPANNFIX-VARIO assembly vice

SPANNEX COMBINATIONS

CLAMPING EQUIPMENT

Description of individual components:

Weight: 0.560 kg

Technical data: 9-252 Screw-on mounting vice

> Weight: 0.950 kg mm 08 ło

Weight: 2.000 kg

5 piece set

192-6

Circuit board holder 8-253

locating arms, height of locating arms 70 mm. clamping of the printed circuit by built-in resilience in the the centre position, protected against contact voltages, firm extended as required at any time, correct setting by adjusting adjustable from 25 mm to 270 mm clamping capacity, can be

angular adapter 9-255 or with rapid turning device 9-257 in order base 9-251, we recommend that the combination is used with If the circuit board holder is to be used with universal ball joint

All parts can also be obtained individually.

9-260 **BERNSTEIN** SPANNFIX-VARIO assembly vice

threaded stud missing means and for permanent mounting boths between the same of the same 9-261 SPANNFIX bench mounted base with universal ball joint and

only 9-251 Universal clamp ball joint base is changed into 9-261

Weight: 0.280 kg

to obtain a larger turning circle.

Slots made for commonly used standard bolts, for holding of e. g.

Angular adapter

5-piece set

permits an even larger turning circle. to be used as an additional attachment with every work mount,

Weight: 0.095 kg

Weight: 0.800 kg

Weight: 2.000 kg

comparable with 9-250

Size of base: 150 x 105 mm

997-6

Weight: 0.120 kg

tuner, line output transformer, small loudspeaker etc. or prototypes

79Z-6

Universal screw-on plate





Tailor-made combination of the following individual components:

9-257 Rapid turning device with permanently connected

9-256 Clamping lid for circuit boards with components

9-253 Circuit board holder

shaped bodies or workpieces.

Weight: 2.100 kg

(patent applied for)

Weight: 0.900 kg

Weight: 0.400 kg

Weight: 0.270 kg lid through 180°.

Weight: 0.260 kg

Weight: 1.800 kg

Size of cover: 240 x 130 mm

for industrial purposes Large circuit board holder

and which, in addition, also permits the clamping of irregularly clamping capacity, clamping depth and jaw width to be extended "ALLSPANU" is an accessory for the Spannfix vice to enable the

Distance between uprights 65 and 130 mm

mm 02t

mm 091

approx. 370 mm

Height of uprights

Use: in conjunction with circuit board holder 9-263

circuit boardthrough built-in resilience of the locating arms. position, protected against contact voltages, firm clamping of the height up to 350 mm, correct setting by adjusting the centre clamping width adjustable from 25 mm to 310 mm, clamping

rotation of the circuit board holder with the PCB and clamping with permanently connected angular adapter, permits swift

soldering can be carried out correctly after the circuit board holder Components of different sizes are pressed in such a way that

Use: in conjunction with circuit board holder 9-253

covered with 20 mm thick foamed plastic.

Jaw width

Technical data: Clamping capacity with rapidly interchangeable loose tools

9-230 ALLSPANN clamping device

Accessories for SPANNFIX VICE

Size of cover: 315 x 330 mm

robust version for industrial purposes

construction as 9-256

angular adapter

9-251 Clamp mounting ball joint base

clamping combination

9-270 **BERNSTEIN** SPANNFIX-VARIO-PLUS







CLAMPING VICES MAXI

The same functioning as the Spannfix small vice also distinguishes the in any direction and capable of being set securely. Heavy-duty vice on ball-and-socket joint rotatable

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 $85\ \mathrm{mm}.$

Clamping capacity 300 kp Clamping pressure Technical data:

mm 00t Jaw width mm 03 Clamping depth 100 mm

(other clamping jaws on request) Jaws (rotatable) steel, smooth and fluted

Weight: 4.000 kg

for permanent mounting using bolts 9-226 **BERNSTEIN** SPANNFIX VICE MAXI

mm 23f x 09f :əssd fo əsi? Technical data: as 9-225

Weight: 3.600 kg



with a max. table thickness of 85 mm. for screwing onto work benches mounting ball joint base, with threaded stud M 12 x 1.5

Weight: 2.220 kg

9-228 SPANNFIX MAXI bench mounted base

for permanent mounting using bolts and threaded stud M 12 x 1.5 with universal ball joint

mm 22t x 09t :9ssd to 9si2

Weight: 1.850 kg









crocodile clip No. 9-353. (Weight: 1300 g)

conductive black rear, (leakage resistance to DIN IEC 61340-4-1 $\rm R_k$: 10^5 - 10^7 ohm), with 2 press-studs 10/10 mm; contact bracelet $\rm Mo.$ 9-342, earth wire $\rm Mo.$ 9-343 including conductive synthetic caoutchouc, slightly grained, with homogeneous, electrically workbench pad, resistant to soldering tin, $800 \times 2.0 \text{ mm}$ platinum grey, from cougisting of:

9-361 ESD-handling set

(Weight: 1100 g)

mm; contact bracelet No. 9-342, earth wire No. 9-343 including crocodile clip No. 9-353. (leakage resistance to DIN IEC 61340-4-1 $R_{\rm A}$: 10 $^{\circ}$ ohm), with 2 press-studs 10/10 homogeneous, electrically conductive synthetic caoutchouc, slightly grained surface, workbench pad, resistant to soldering tin, 800 x 600 x 1.5 mm, black, from

9-360 ESD-handling set

spiral cord 2400 mm long, 1 Mohm safety resistance, one side press-stud 10 mm, other side dummy Schuko-plug. (Weight: 90 g) 9-359 Earth wire with dummy Schuko-plug

with dummy Schuko-plug. (Weight: 90 g)

per input 1 Mohm safety resistance, earth wire 2000 mm, earthing box with 2 x 10 mm press-stud inputs and 1 x 4 mm safety socket input,

Earthing module

earth wire No. 9-346 including crocodile clip No. 9-353. (Weight: 480 g) with three press-studs 10/10/10 mm; contact bracelet No. 9-342, conductive, grained surface, (leakage resistance to DIM IEC 61340-4-1 $\rm H_{S}$: ca.10 8 ohm), workbench pad with 2 patch pockets, $680 \times 680 \times 0.35 \text{ mm}$, green, electrically

9-356 **ESD-handling set foldable** - especially for mobile use

DIN IEC 61340-4-1 $\rm R_h^2$ below 10 6 ohm); contact bracelet No. 9-342, earth wire No. 9-346 including three crocodile clips No. 9-353. (Weight: 240 g) workbench pad, 800 x 600 x 0.2 mm, black, electrically conductive, (leakage resistance to consisting of:

9-355 **ESD-handling set foldable** - especially for mobile use

earth wire No. 9-346 including crocodile clip No. 9-353. (Weight: 160 g) (leakage resistance to DIN IEC 61340-4-1 $\rm R_{\rm s}^{\rm s}$ ca. $10^{\rm s}$ ohm), with 2 press-studs 10/10 mm; contact bracelet No. 9-342, workbench pad, $500 \times 400 \times 0.35$ mm, green, electrically conductive, grained surface, cougisting of:

9-354 **ESD-handling set foldable** - especially for mobile use

insulated clip with banana plug connection socket and 10 mm press-stud. (Weight: 20 g) 898-6

Crocodile clip

earth wire No. 9-343 including crocodile clip No. 9-353. (Weight: 1850 g) conductive rear, (leakage resistance to DIM IEC 61340-4-1 $\rm R_A$: 10° - 107 ohm), with 2 press-studs 10/10 mm; confact bracelet No.9-342, workbench pad, 900×2.2 mm, **pebble grey**, with homogeneous, electrically :to gnitsisnoo

9-351 ESD-handling set

additionally crocodile clip for terminal connection No. 9-353. (Weight: 50 g) for connecting workbench pad and floor cover and connection to an earth potential; with 1 Mohm safety resistance, 2500 mm long, mit 2 press-studs 10/10 mm,

9-346 Earth wire

(leakage resistance according to DIN IEC 61340-4-1 $R_A^{\rm c}$: 10e - 107 ohm); additionally insulated crocodile clip No. 9-353. (Weight: 7850 g) with 2 press-studs 10/10 mm, earth wire 4500 mm long, 1 Mohm safety resistance, conductive rear, wheelchair-proof, with 2 press-studs 10/10 mm; 2000 x 1200 x 2.2 mm, **pebble grey**, with homogeneous, electrostatic

Floor cover

for connecting workbench pad and floor cover and connection to an earth potential; additionally insulated crococdile clip No. 9-535. (Weight: 40 g) with 1 Mohm safety resistor, 1500 mm long, with 2 press-studs 10/10 mm,

9-343 Earth wire

clip for terminal connection No. 9-353. (Weight: 60 g) and 10 mm for earth wire; additionally insulated crocodile 2400 mm long, 2 x 1 Mohm safety resistor, press-studs 3 mm for bracelet allergy-free, with 3 mm press-stud; high elastical spiral cord, adjustable elastical bracelet with woven silvered synthetic fibres,

9-342 Contact bracelet with spiral cord

ESD-CONEINCZ AND











material is very wear- and heat-resistant, nonskid and lies very flat.

878-6

:to gnitsisnoo

mm 034 x 000 bad \ tee **Q23**

earth wire No. 9-346 including crocodile clip No. 9-353. (Weight: 1350 g) workbench pad with 1 press-stud 10 mm for the earthing connection;

ESD set / pad 600 x 300 mm

consisting of: especially for keyboards

ESD set / pad 800 x 600 mm especially for cash-register, EDP-terminals

Colour: platinum grey

498-6

time of discharge from 5000 to 50 Volt: < 2 Sec.

Technical data: material thickness 2 mm

leakage resistance (DIN IEC 61340-4-1) R_A : 10^5 - 10^7 ohm

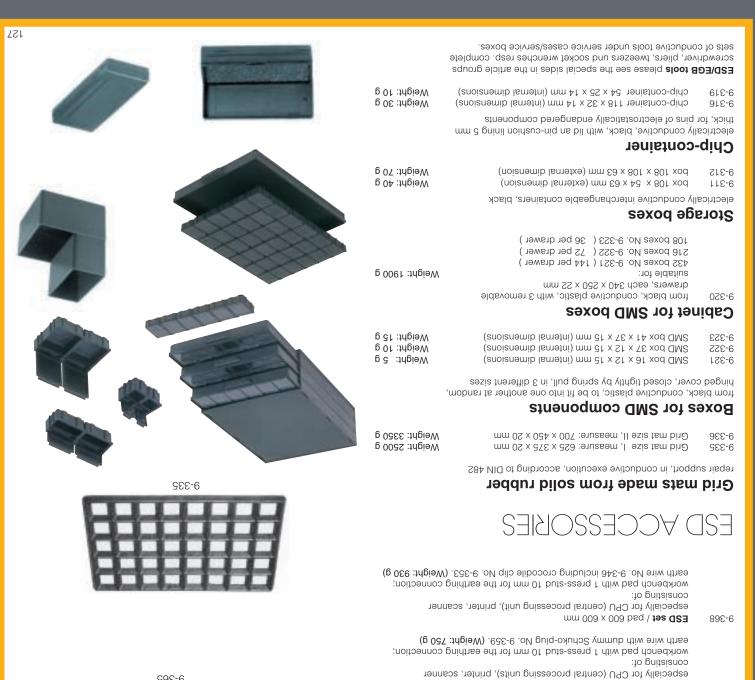
the junction to the mousepad; earth wire with dummy Schuko-plug No. 9-359. workbench pad with 2 press-studs 10/10 mm for connecting the earth wire and

conductive, black rear. The surface is slightly grained. The synthetic caoutchouc The workbench pads consist of antistatic synthetic caoutchouc, with homogeneous,











NACNIFYING LAMPS

and glare-protection Magnifying lamp with lens-cover

without excessive heat with ideal viewing conditions for 22 W fluorescent light source

Robust arm construction. Two spring-balanced arms

prated to ensure perfect arm balance; with insulated The springs are of high-grade tempered steel calimechanical parts built into the tubes and covered. with parallel movement. Springs and all moving

vibrant working-places. parts in the joints for safety reasons. Qualified for

approx. magnification of 1 : 3 $^3/_4$ or 375 % possible. Schuko-contact-cable 1.5 m, protection class I. Through additional lens 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 biconvex, magnification: 1 : 1 3/4 or 175 % at a working-distance of 25 cm, convex, magnification: 1 : 1 3/4 or 175 % at a working-distance of 25 cm,

slanting surface) Magnifying lamp with bracket (drawing-board or any Magnifying lamp with bracket (screw-down mount) Magnifying lamp with bracket (wall) Magnifying lamp with bracket (table) standard Magnifying lamp with stand trolley and sliding bracket

Additional lens 8 diopter, magnification 1:3 3/4

Additional lens 4 diopter, magnification 1 : 2 3/4

5-feet-stand with trolley and sliding bracket

All lamps will be delivered without circular fluorescent tube. 9-103 9-105 101-6 00L-6 Colour: pearlgrey

9-108

401-6

901-6

961-6

9-193

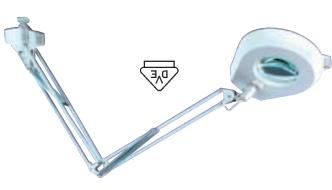
9-192

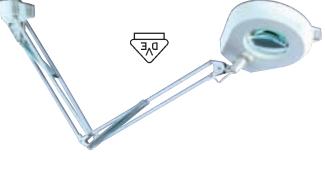
Colour: light grey











fluorescent tube protected by prism cover.

for 22 W fluorescent ring light

Fluorescent ring lamp 22 W, white

Magnifying lamp with bracket (wall)

All lamps will be delivered without circular fluorescent tube.

Magnifying lamp with bracket (drawing-board or any

working-distance of 25 cm, Schuko-contact-cable 2.5 m, protection class I, Technical data: Total arm length: 105 cm, reflector-& 22 cm, lens-& 125 mm, lens: fixed 3.0 diopter bi-convex, magnification: 1 : 1 3 /4 or 175 &4, at a

Magnifying lamp with bracket (screw-down mount)

Magnifying lamp with bracket (table) standard

bosition by the open spring-balanced arms. setting. It's easy to bring this lamp in the wanted Good equilibrated arm construction enables maximal

Magnifying lamp with plastic reflector

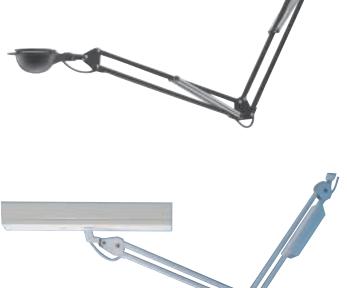
Fluorescent ring lamp 22 W, white



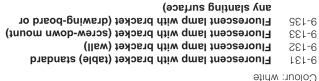












All lamps will be delivered without fluorescent tubes.

Colour: white Technical data: Total arm length 120 cm, reflector 48 x 10 cm.

inclusive halogen lamp 50 W Office lamp with bracket

Intensity of light variable in 2 steps.

Technical data: Total arm length 105 cm, reflector-Ø 90 mm,

for halogen lamp 15 V V base GY 6.35

9-139 Fluorescent tubes 15 W (2 pieces), white

protection. Halogen lamp protected by security glass. steel pipe, chrome-plated steel springs, reflector with twist Four-tube spring balanced arm from thermo lacquered

911-6

Colour: black

Office lamp

1.8 m cable, protection class II

Accessories:

working-places, Schuko-contact-cable 1.5 m, protection class I. the joints, turnable into any position. Qualified for vibrant duty arm with built-in springs and parts, with insulated parts in Wincandescent bulb. The lamp head is mounted on a heavyfluorescent tubes give a light output equivalent to that of a 150 a large area with a minimum of heat and glare. The two 15 W The reflector is designed to distribute a shadow-free light over

tor 15 W fluorescent tubes (2 pieces)

Office and industry lamp

All lamps will be deliverd without incandescent bulb.

Magnifying lamp with bracket (screw-down mount) 88L-6

Magnifying lamp with bracket (wall) 9-185

9-181 Magnifying lamp with bracket (table) standard

magnification 1:13/4 at a working-distance of 20 cm.

Technical data: Total arm length 95 cm, lens-Ø 100 mm, 3 diopter,

protection class II.

open chrome-plated springs, twist protection, 1.5 m cable, Four-tube spring balanced arm from lacquered steel pipe,

for 40 W incandescent bulb

Magnifying lamp with plastic reflector

W 6 edut tube escent tube 9-179

All lamps will be delivered without tubes.

9-172 Magnifying lamp with bracket 9-177 Magnifying lamp with table stand

reflector 220 x 160 mm.

60 mm, 3 diopter, magnification 1:1 $^3\mbox{\ensuremath{\mbox{\tiny A}}}$ at a working-distance of 20 cm, Technical data: Total arm length 96 cm, table version 60 cm, lens 150 x

protection class II.

open chrome-plated springs, twist protection, 1.5 m cable, Four-tube spring balanced arm from lacquered steel pipe,

for compact fluorescent tube 9 W

Magnifying lamp with plastic reflector







YND NICKORCOBE MAGNIFIER

for compact fluorescent tubes 7 W (2 pieces) Professional illuminated magnifier

Shadow-free illumination is provided when both tube operation, three-dimensional viewing is possible. separate switches for individual operation. With single magnifier because of two individual light sources and with both eyes. It is the ideal combination of light and This magnifier with rectangular lens permits viewing

every working situation. exact positioning of the magnifier making it flexible for A spring-balanced arm with parallel motion permits fluorescent tubes are operating.

contact-cable 1.5 m, protection class I. magnification 1:1 $^3/_4$ or 175 % at a working distance of 25 cm, Schuko-15 x 29 cm, asymmetrical light distribution, lens 17 x 11 cm, 3 diopter, Technical data: Arm length: from bracket to center of lens 60 cm Ø, reflector

Professional illuminated magnifier with table bracket

W 7 sedut 2 evizuloni

Additional lens 8 diopter, magnification 1 : 3 3/4 Accessories:
Additional lens 4 diopter, magnification 1:23/4 121-9

9-129 Fluorescent tubes 7 W (2 pieces)

Binoskop

Colour: light grey

Stereomicroscope, tele-magnifier and binoculars in

rials and assembly in SMD technology. especially well suited for monitoring details of matescopic observation of a wide field of vision. It is thus The BINOSKOP is a unique optical device for stereo-

:stifened IsnoitibbA

- upright picture, vertical and horizontal
- eye piece individually adjustable for left and right - pupillary distance adjustable from 58 to 72 mm
- eye with diopter markings
- fully coated lenses, low weight: 540 g

suə)	m 0001 of m 331	7 x 25	as binoculars
- 00t	seponds to wide angle	COITE	
450 - 750	mm 351 - 06	x 6	as telemagnifier
132 - 182	mm 35 - 02	X St	For use as stereo- microscope with attachment lens
Working	noisiv to blei7	noitsation	Technical
mm ni əsnstaib	of/mort	ot/mort	Data



9-150 Binoskop





A Screw clamp
B Flange for table or wall mounting
C 5-feet-stand

Types of fastenings:

9-404 - 10.300 kg 9-401 - 3.000 kg

:sthgi9W

395 x 290 mm

maximum height of guide bar maximum height of guide bar maximum extension of arm Technical data:

with 5-feet-stand

9-404 BERNSTEIN Control mirror

with flange

9-402 **BERNSTEIN** Control mirror

with screw clamp

9-401 **BERNSTEIN** Control mirror

best image reproduction, nearly free from distortion. Available on request: Front-surface mirror, evaporated with aluminium, for

frame. A broken mirror can be replaced in just a few minutes. distortion-free mirror has a plastic back and is held in a rubber profiled Finish: chrome-plated guide bar, arm and joints grey lacquered. The

desired direction.

Special joints (patented) enable the mirror arm to be moved easily in any The control mirror is designed to ensure extreme stability and reliability.

Free from vibration

Locking in position not necessary Pivoting into any position

VT bns and servicing of monitors and TV A control mirror for the most exacting requirements

Television service mirror

CONTROL MIRROR









PORTASOL gas soldering iron

catalytic converter are easily interchangeable. iron. The cap contains the lighter for the catalytic converter. Spare bits with integrated ignition system provides 10 to 60 W of a conventional soldering the gas-heated bit may reach up to 400° C. By the adjustable gas supply the refilled with Butane gas, as used for lighters. The maximum temperature of filling is sufficient for about 1 hour of working time, then the iron has to be catalyst, consequently without open flame. Heating up time 20 sec.. One gas production. It is wireless and therefore without inductive voltage, with The progressive gas soldering iron is suitable for laboratories, service and

mm 4.2 ji8 S-8es 8 mm 0.1 jiB 1-8eE-8 R-396 Gas soldering iron

Weller gas soldering iron Pyropen jr.

flame nozzle integrated in the iron is adjustable up to max. about 1300° C. about 200 - 450° C and with hot air nozzle up to max. about 430° C. The Temperature control by regulating the gas valve: with soldering bit from soldering, brazing and operations with hot air for the SMD-technique.

8-399 Gas soldering set Pyropen jr.

Q mm 3.0 jiB 1-eec-8 shaped, Butane gas refil, holder with sponge consisting of gas soldering iron with longlife bit 0,5 mm, needle-

8-399-2 A mm 3.1 əlszon ris fol 2-998-8

- especially for the SMD-technique

Weller WTCP 50

/ 50 W, with temperature automatism and longlife bit PTB 7, holder KH-20 Magnastat-soldering station 50 W / 24 V,

consisting of safety transformer class II, 230 x 24 V, soldering iron TCP-5 / 24 V

8-350 Soldering station WTCP 50

Weller WS 50 antistatic

stepless temperature adjustment up to 450° C, optical regulation control by a Electronically controlled soldering station with safety transformer 24 V / 50 VA, Temtronic-soldering station with antistatic casing.

green LED, floating, holder KH-20.

8-351 Soldering station WS 50 antistatic

ERSA Multi-Pro / 25 W

8-212-6

8-212-5

8-212-4

addition to conventional applications also suitable for soldering and Extremely flexible and efficient microsoldering tool for the mobile use. In

desoldering of SMT components. Can be equipped with a wide range of

480°C with soldering tip 832 CD; voltage: 230 V; accessories: tool holder Heating time: up to 300° C in about 125 s; soldering tip temperature: appr.

8-120 Multi-Pro with ERSADUR long-life soldering tip 832 CD 930 CD

835 VD

835 ED

835 CD

835 KD

832 SD

835 ND

931 00

8-212-7 Chisel-shaped, 5.0 mm

& mm 0.1, thioq lion99 8-212-8

ERSADUR spare soldering tips

Chisel-shaped, 3.2 mm

Chisel-shaped, 2.2 mm

8-212-2 Pencil point, extended, 0.8 mm Ø

8-212-7 Pencil point, extended, 0.4 mm Ø

Spare heating element

Chisel-shaped, extended, 2.2 mm





1-666-8

2-966-8

1-96E-8

8-399-2

E-96E-8







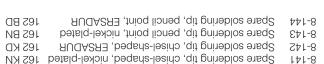
162 LD

162 LN 261 00

260 BN/230 V/16 W



Light and handy soldering iron (16 W) with PTC-heating element and internally heated nickel-plated copper tip. Short heating time (60 s). Tip temperature: 350° C; voltage:



8-140 Spare soldering tip, angled face, ERSADUR

8-139 Spare soldering tip, angled face, nickel-plated

ERSA fine soldering iron Multitip 15 W

Spare heating element

SOLDERING IRONS AND

8-110 Tip 260 with nickel-plated copper tip

tip. Soldering tip temperature: 350° C; voltage: 230 V. connection works. Short heating time (60 s), PTC-heating element, internally heated Optimal soldering tool for printed circuit boards, small relay connections, wire

	Spare soldering tips: see tip 260	
911 00	8-136 Spare heating element	
910 BN/230 V/15 W	Multitip 15 W with nickel-plated copper tip	8-132

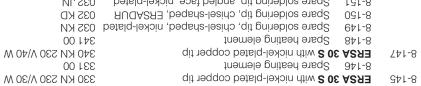
W 25 qijiluM nori gnirəbloz ənif ASAE

heated tip. Tip temperature: 450° C; voltage: 230 V. and printed circuit boards. Short heating time (60 s), PTC-heating element, internally Powerful soldering tool for medium-sized soldering work on plugs, multiterminal strips

8-164 Spare soldering tip, pencil point, ERSADUR 8-163 Spare soldering tip, pencil point, nickel-plated 8-162 Spare soldering tip, chisel-shaped, ERSADUR 8-161 Spare soldering tip, chisel-shaped, nickel-plated 172 KM Spare soldering tip, angled face, ERSADUR 172 LD 8-159 Spare soldering tip, angled face, nickel-plated 172 LN 8-156 Spare heating element 921 00 920 BN/230 V/25 W Multitip 25 W with nickel-plated copper tip 991-8

ERSA universal soldering iron 30 S (30/40 W)

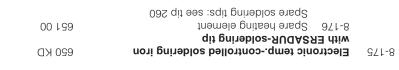
temperature: 380 (420)° C; voltage: 230 V. Universal soldering iron with practical supportable ring and nickel-plated copper tip tested a million times over. Rating: 30 (40) W; heating time: approx. 2 min; tip



8-152 Spare soldering tip, angled face, ERSADUR Spare soldering tip, angled face, nickel-plated 340 KN 530 N/40 M 741-8

ERSA electronic temperature-controlled soldering iron TC 65

compared with soldering irons of 15 W to 100 W. working temperature to the maximum value. The performance spectrum can be internally heated tips). The POWER button enables an immediate heat-up from the spectrum can be compared with a soldering station (ceramic PTC-heating element, stepless temperature setting of the soldering tips 200-440° C and the performance POWER button has in the handle an electronic temperature control integrated for The electronic temperature-controlled soldering iron TG 65 (Voltage: 230 V) with





98L-8

011-8









ERSA high-speed soldering gun Multi-Sprint

ERSADUR long-life soldering tip. Extremely short warm-up and cooling-off time. Optimal soldering equipment for service and maintenance purpose. Cold rating: approx. 75 W, heating time: approx. 20 s, voltage: 230 V

Unusually light and transformer-independent soldering gun with internally heated

	Spare soldering tips: see Multi-Pro	
00196	8-312 Spare heating element	
∃ 096	With ERSADUR long-life soldering tip 832 ED	
	High-speed soldering gun Multi-Sprint	116-8

ERSA holder

For safe and ergonomic placement of soldering irons.

9£ A	For desoldering tool X-Tool 720 ENJ	781-8
0£ A	Antistatic for SMD desoldering pincette 40 430 EDJ	8-569-0
	Micro tool und Tech tool	
6S A	Antistatic, for Tip tool, Power tool, Ergo tool,	981-8
8S A	For Multitip-series, Multi-Pro, Basic tool 60 and 80	8-182
90 ∀	For small and medium soldering irons	081-8

ACCESSORIES SOLDERING STATIONS AND

as a find and tool holds to the SADUR horalise soldering tips are now non-furnable. Technical data: rating: 60 W, primary voltage 230 V, 50/60 Hz, secondary voltage 24 V, temperature range: stepless 150° C to 450° C. ANALOG 60 A complete antistatic according to MIL-SPEC/ESA standards. multifunctional holder with cleaning sponge and swivelling sponge base can be used potential equalization jack ensures the respective safety of the components. The ERSA electronic temp.-controlled soldering station ANALOG 60 (60 W). Temperature control by means of ERSA RESISTRONIC (PTC-heating element). A

832 VD	8-212-7 Chisel-shaped, 5.0 mm	
832 ED	8-212-6 Chisel-shaped, 3.2 mm	
835 CD	8-212-5 Chisel-shaped, 2.2 mm	
835 KD	8-212-4 Chisel-shaped, extended, 2.2 mm	
83S BD	8-212-3 Pencil point, 1.0 mm Ø	
832 SD	8-212-2 Pencil point, extended, 0.8 mm Ø	
au 288	8-212-1 Pencil point, extended, 0.4 mm Ø	
A 08/08 ,03/03 £	Spare soldering tips, ERSADUR for ANALOG	
ion, antistatic ANA 60 A	Electronic tempcontrolled soldering stati	8-211
09 ANA noi	Electronic tempcontrolled soldering stati	8-210

multifunctional holder with cleaning sponge can be used as a tip and tool holder. internally heated ERSADUR long-life tips, which are now non-turnable. The equalization jack ensures the respective safety of the components. Large selection of center of the soldering tip). Heating element with PTC-characteristics. A potential

Technical data: rating: 80 W, primāry voltage 230 V, 50/60 Hz, secundary voltage 24 V, temperature range: stepleas 150° C to 450° C. ANALOG 80 A complete antistatic according to MIL-SPEC/ESA standards.

A 08 ANA

08 ANA



116-8



(W 08) 08 DOJANA ERSA electronic temp.-controlled soldering station

Temperature control by means of ERSA SENSOTRONIC (thermo sensor located in the

Electronic temp.-controlled soldering station

Electronic temp.-controlled soldering station,

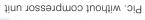
Spare soldering tips: see ANALOG 60

BERNSTEIN





















04 Sta

015 CD

LQA 048

DIG 203 A

722 EN 1548 mm 8.4 &-abistuo ,mm 2.1 &-1968-4 mm 8.3 &-abistuo, mm 2.1 &-nanıl 8-488-8 722 EN 1020 mm 0.5 &-abistuo ,mm 0.1 &-1968-8 722 EN 0823 Spare desoldering tips total length: approx. 70 mm, antistatic start vacuum: up to 800 mbar, temperature control with Ni-CrNi thermo-element, 722 EN 1223, 2 heating elements each 60 W (to 350° C), Desoldering tool X-Tool, 24 V, with tip 8-335

> further desoldering tip pairs: see SMT UNIT 60 A antistatic according to MIL-SPEC/ESA standards

heat up rating 290 W, heating time approx. 40 s (to 280° C),

Soldering iron Power tool, 24 V, with tip 842 CD

antistatic according to MIL-SPEC/ESA standards heating time approx. 12 s (to 280° C), model: 60 W / 350°C, heat up rating 130 W, with tip 612 AD, rating 70 W / 280 $^{\circ}$ C -Soldering iron Tech tool, 24 V, 60 W,

Rating 105 W / 280°C - 80 W / 350°C,

mm 0.1 ,beqs-lshisel-S2S-8 & mm 0.f ,fnioq lion99 F-828-8

The electronic station DIG203 A can optionally be connected

Electronic station, 230/24 V, 80 W, antistatic

consisting of electronic station DIG 203 A

Soldering iron Power tool with tip 842 CD Consisting of electronic station DIG 203 A

a digital PID algorithm, optimized for precise and quick temperature control.

has its own program and when the tools are changed, the soldering station

desoldering iron X-Tool 720 ENJ A 801 uO tinu rosserqmoo

Electronic station DIGITAL 2000 A, 80 W, antistatic $\,$ DIG 20 \mbox{A} \mbox{XT}

Electronic station DIGITAL 2000 A, 80 W, antistatic

automatically switches to the corresponding program. The temperature is controlled by

independently and differently with the above mentioned functions. Each soldering iron The soldering station includes 4 programs. Each program can be configurated 3-digit pass word, "Energy-Function" to adjust the station's heating system. 0-60 min., offset and calibrating function, possibility to block any adjustments by a

Spare soldering tips

Holder, antistatic, A 29

with the following soldering irons:

8-586

8-298

8-356

8-330



SOLDERING STATIONS AND SOLDERING STATIONS AND

ERSA SMD-soldering and desoldering iron

ERSA SMT UNIT 60 A electronic temperature-controlled antistatic SMD soldering and desoldering station

Ideal tool for SMD-soldering, -desoldering and -repair soldering. Temperature control by means of ERSA RESISTROVIC. Heating element with PTC-characteristics. Two independently adjustable tools, the SMD soldering iron Micro tool and the desoldering the starting with 0.4 mm and tweezers Pincette 40. Large selection of SMD soldering tips starting with 0.4 mm and desoldering tips from MELE's and MINI-MELE's, BQFP's and SOIC-housing to PLCC 84. A potential equalization jack ensures for the respective safety of the components. The revolutionary Micro Wave Technology enables soldering of a PQFP 208 in 60 seconds. Technical data: rating 60 W, primary voltage 230 V, 50/60Hz, secondary voltage 24 V, temperature range stepless (soldering iron 150° C to 400° C and desoldering tweezers depends on desoldering inserts). VDE/GS certificate. Complete antistatic according to MIL-SPEC/ESA standards.

452 FD 5	8S OIOS not mm 3.71	8-299-15
422 FD 4	12.5 mm for SOIC 20	11-662-8
422 FD 3	2.5 mm für SOIC 12	8-299-10
422 MD∗	Ellipse for MELF and MINIMELF	8-269-9
422 QD 5	90°angle, length 10 mm for PLCC 20	8-299-8
422 QD 2*	90°angle, length 25 mm for PLCC 68	7-662-8
422 QD 4*	90°angle, length 20 mm for PLCC 52	9-66Z-8
422 QD 3∗	90°angle, length 17.5 mm for PLCC 44	9-667-8
422 QD 1*	90°angle, length 12.5 mm for PLCC 28	7-662-8
422 FD 2*	15 mm for SOIC 24	8-299-3
422 FD 1*	10 mm for SOIC 16	8-586-5
√SS ED*	8 OlOs non for SOIC 8	1-662-8
	ing tips (pair) for pincette 40:	in∍blos∍□
0E A	Holder for pincette 40	8-586-0
√30 ED1	SMD-desoldering pincette 40	8-586
212 MS	Micro Wave	8-298-10
515 KD*	Chisel-shaped, extended, 1.8 mm	4-862-8
212 ED∗	Chisel-shaped, 1.8 mm	8-298-3
515 CD∗	Chisel-shaped, 1.0 mm	2-862-8
515 BD∗	Pencil point, 0.4 mm Ø	1-862-8
	dering tips for Micro tool:	-
270 BDJ	SMD-soldering iron Micro tool	8-298
A 09 TINU 7	IMS nori parid desoldering iron SMI	MS 101 sei102

ERSA tip holder for SMT UNIT 60 A, completely equipped SMD 8012 Tip holder completely equipped with 4 soldering tips (0 4-1 8 mm). 8 descriptions and the completely equipped with 4 soldering tips (0 4-1 8 mm).

Tip holder, completely equipped with 4 soldering tips (0.4-1.8 mm); 8 desoldering tips (pairs) for PLCC 28, 44, 52 and 68; SOIC 8, 16, 24 and MELF's and MINIMELF's (detribed list of tips one 3 to 10 mill 60 A)

SH 03

422 FD 6

A 09 TMS

(detailed list of tips see *at SMT UNIT 60 A).

8-299-13 20 mm for SOIC 32

Tip holder, completely equipped	0-792-8
Tip holder, not equipped	762-8

ERSA SMD-Vacuumpipette SMD-Vampir SVP 100 Vacuumpipette for easy, safety and precise handling c

Vacuumpipette for easy, safety and precise handling of SMD components. Various antistatic vacuum cups (4, Σ and 9 mm) and the bent vacuum nozzle made from high-grade steel enable a large field of application.

8-238 **ODF 9W2 ABMD-Vampir 100**

BERNSTEIN Vacuum pump SMD VAC

This vacuum pump is distinguished by its low-noise and low-vibration running and is maintenance-free with a long service-life. The pump offers optimum conditions for manual application of SMD components. The vacuum pipette has a finger hole lower down which can be closed with the index finger in order to pick up the component. Technical data: output 5.0 |/min, vacuum 160 mbar, operating pressure 0.4 bar, power supply 220 V / 50 Hz, input 0.5 Amp., dimensions 210 x 150 x 100 mm.

9-550 Vakuumpumpe SMD VAC
with suction hose, pipette, 4 different suction needles
Spare suction needles
9-550-14 Suction needle, 1.60 mm Ø

8 mm 76.1, abdoorn oedle, 7.37 Suction needle, 0.81 mm 86.0, abdoorn oedle, 0.81 Suction needle, 0.67 Suction need









136

```
centered correctly. The optional ERSA SR 101 add-on is easily mounted
                                   (250/500/1000 g). A centering nut ensures that the reels of solder wire are
  BEHNSLEIN 8-300
78E-8
                                     electrostatical discharge - two loading and releasing possibilities. Easily
```

DESOLDERING PUMPS

suitable for cartridge No. 8-465 Dosing needles (5 pieces), from plastic

dispenser (3 bar) and manual use.

colophony based, low activated, 15 g in 5 ml cartridge for

Desoldering braid, width approx. 2.2 mm, 1.50 m spool Desoldering braid, width approx. 2.7 mm, 1.50 m spool

Desoldering braid, width approx. 1.5 mm, 1.50 m spool

Desoldering braid, width approx. 0.8 mm, 1.70 m spool

250 g, 0.8 mm

& mm 8.0 , g 03S

& mm 0.f , g 000f

250 g, 1.0 mm Ø

No-Clean soldering flux, F-SW 32, DIN 8511,

for quick and neat desoldering in laboratories and workshops

Solder wire (roll), approx. 1 m, 1.0 mm Ø Solder wire (spool), 100 g, 1.0 mm Ø

Desoldering braid in plastic spool

Solder wire (spool),

Solder wire (spool),

Solder wire (spool),

Solder wire (spool),

(without wire)

Kit for SR 100

with 2.2% soldering flux F-SW 26, to DIN 8511 Solder wire Sn60Pb38Cu2, to DIN 1707

for a second solder wire reel.

8-391 Spare teflon bit 8 mm 02 ,gnol mm 39f Desoldering pump

capacity by dual-sealing of the bulb.

releasing lever.

adjustable shaft.

Desoldering suction pumps PRAKTIK

for various solder wire-Ø and -spools practical, stable solder wire dispenser ERSA solder wire dispenser (without wire)

SOLDERING EQUIPMENT

S-388 Spare desoldering tip VAC 52

SE 386 Spare desoldering tip VAC 32 antistatic, 10 cm 3 suction volume E SAV loof gninebloseb ASAE

7et 2J jid nolfet bezilsteM 188-8

7et 2J jid nolfət bəzilstəM 188-8

antistatic, 14.5 cm³ suction volume **ERSA desoldering tool AZR3**

Handy tools in an all-metal cabinet with interchangeable teflon bit, high suction

and quickly disassembled for cleaning and maintenance, removable

cylinder and the high ohmic conductive teflon bit protect against Antistatic, handy desoldering tool with low static potential. The metal

MOS-LSI semiconductors. Self cleaning static conductive teflon tip, Antistatic desoldering tool for safe desoldering of voltage sensitive

Desoldering tool Soldapullt Successor SS 011

Universal desoldering tool Soldapullt US 340

174-8

997-8

914-8 414-8

8-413

907-8

904-8

8-403

8-405 FU4-8

8-455

124-8

9-390

786-8

985-8

8-385

8-380

Colour: gold



101 AS

001 AS





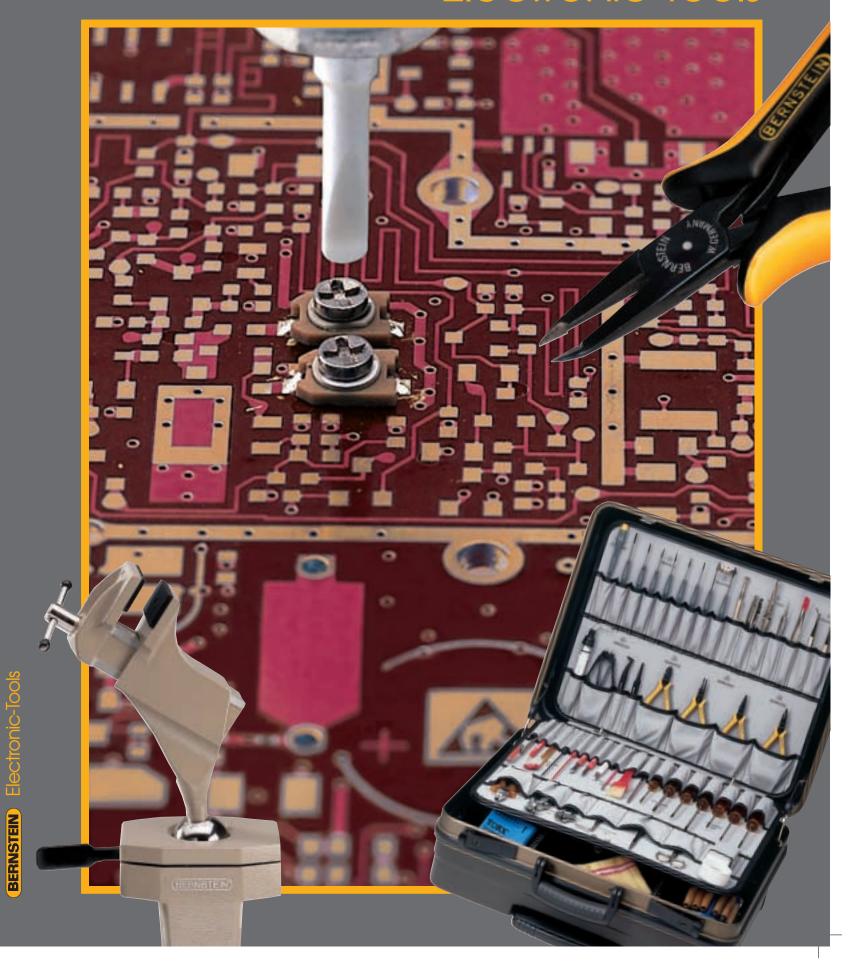
BERNSTEIN

HIGH TECH Tools





Electronic-Tools



(BERNSTEIN) Electronic-Tools

BERNSTEIN-Werkzeugfabrik Steinrücke GmbH

D-42861 REMSCHEID · P.O.BOX 11 01 44 · ③ (0 21 91) 96 50 - 0 · FAX (0 21 91) 96 50 30 or 66 61 59

Internet: http://www.bernstein-werkzeuge.de · email: info@bernstein-werkzeuge.de

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Bernstein manufacturer:

Other Similar products are found below:

1500 2230 3-688-15 3-960 6750 CT-862T 6-610 2280 7015 9-261 CT-762T 608-1167-008 601-6419-059 3-652-15 EUROLINE

CONDUCTIVE 616.1500.725 616.1500.726 616.1500.724 616.1500.723 5-191 1-909 4-920 3-245-13 3-654-15 3-668-15 5-049 5-067-13

5-190 V 1-150 3-682-15 3-681-15 3-653-15 EUROLINE CONDUCTIVE GGT-PLB08 CT-682T I88-U1Z W 608-1190-045 9-367 5-077
13 2-101 9-342 5-079-13 3-650V CT-882T F1-U2ZD UN 2-601-13 SEM2-U1Z GGT-PL05 CA-230 UKF CA-170 UKF CA-270 UKF

CT-661