Insulated tools





Insulated wrenches



Insulated pliers



Insulated screwdrivers



Insulated ratchets



Insulated sockets



Other insulated tools



Ultimate protection

Unior insulated VDE tools ensure ultimate protection even when used around live circuits with up to a 1000-volt potential. The utility of all tools is thoroughly verified by means of the impact strength, electrical, flame-retardancy, insulation adhesion and stamp tests, with each tool being tested individually.



High-quality steel

Insulated wrenches, pliers, shears, screwdrivers and other tools for working with electrical and other power installations are made of high-quality tool steel with added protection, and designed for simple and safe use.



VDE regulations

VDE insulated and tested according to the VDE regulations, Unior tools for work in electrically live environments meet the requirements of the internationally acknowledged European EN 60900 standard.





Flame retardancy test

The flame is applied to the test piece for 10 seconds. The test piece is acceptable if the height of the flame on the burning handle does not exceed 120 mm in an observation period of 20 seconds after the burner has been removed.



Electrical test (10kV)

Before testing the tools are immersed in a bath of water at 23° C for 24 hours +- 5 hours. The test pieces are acceptable if there is no electrical discharge, spark over or flashover, and if the current leakage is less than 1mA for 20 mm insulation.

VDE BI line

- material: special composition steel suitable for hardening and tempering
- forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished
- surface finish: chrome plated
- heavy duty double component handles
- jet stamp Unior



VDE DP line

- material: special composition steel suitable for hardening and tempering
- forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished
- surface finish: chrome plated
- · double layered insulation VDE tools, double safety
- establish wear of your VDE DP tools, just in time



VDE line

- material: special composition steel suitable for hardening and tempering
- forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished
- surface finish: chrome plated
- · heavy duty plastic handles





Hand tools for live working up to 1000 V A.C.

Sign of the institution certifying the tools (VERBAND DEUTSCHER ELEKTROTECHNIKER).

A sign indicating that the tools are in accordance with the signed standard (DIN), which prescribes the basic demands for tools (dimension, hardness, mechanical testing etc.).

Wrenches

material: chrom vanadium



Screwdrivers

- blade: chrome-vanadium-molybdenum steel
- burnished tip
- hanging hole



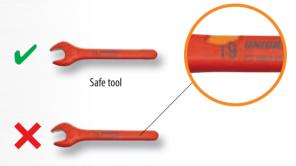
- blade: chrome-vanadium-molybdenum steel
- burnished tip
- handle: polypropylene
- hanging hole





ORANGE AS A WARNING SIGN:

The double plastic protection of the VDE tools ensures double safety, because it enables the recognition of worn out tools in due time. When the tool gets worn out, an orange colour appears (the second protection layer), which is a sign that the tool should be replaced immediately.



Worn out tool – immediate replacement



Insulation test

Before testing the test piece is heated to 70 C -/+ 2° C for 168 hours. The hanger is loaded with weights (500 N). The duration of test is 3 minutes. The test piece is acceptable if the handle remains firmly attached to the conducting part.



Stamp test

The indenter is loaded with a weight of 20 N and is applied to the centre of the handle. The test is successful if the test piece subsequently passes the electrical test.



Impact test

The test is carried out at an ambient temperature of +/- 23°C. The hammer is allowed to fall freely on the test piece 3 times. The test piece is acceptable if the handle is not cracked, broken or does not show signs of flaking.

406/1VDE

Combination pliers

- · material: special tool steel
- · drop forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished
- surface finish: chrome plated to standard EN12540
- heavy duty plastic handles
- made according to standard ISO 5746 and EN 60900



	L	В	C	Α	
605007	140	23	32	8	
605008	160	24	35	9.5	
605009	180	27	38	10	
605010	200	29	41	10.5	
605011	220	32	47	11	

cutting capacity (10N=1kg)

	L	(max 1600 N/mm²)	(max 650 N/mm²)
605007	140	1,6	2,0
605008	160	1,6	2,0
605009	180	1,8	2,5
605010	200	2,0	2,5
605011	220	2,0	3,0

406/1VDEDP

Combination pliers

- · material: special tool steel
- · drop forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished

₹ 1000V

M S

- surface finish: chrome plated to standard EN12540
- handles are insulated with double layered - double coloured insulation, which enables additional safety
- if second layer is visible, replace your VDE tool with the new one.
- made according to standard ISO 5746 and EN 60900





↑ 1000V

	L	В	С	Α	
619177	140	23	32	8	
619178	160	24	35	9.5	
619179	180	27	38	10	
619180	200	29	41	10.5	
619181	220	32	47	11	

cutting capacity (10N=1kg)

	L	(max 1600 N/mm²)	(max 650 N/mm²)
619177	140	1,6	2,0
619178	160	1,6	2,0
619179	180	1,8	2,5
619180	200	2,0	2,5
619181	220	2,0	3,0

406/4E

₹ 1000V

M G

Electronic combination pliers



- drop forged, entirely hardened and tempered
- cutting edges induction hardened
- heavy duty double component handles





cutting co	apacity (1011-111g	/
	L	(max 750-850 N/mm²)
620069	120	1,5



406/1VDEBI



Combination pliers

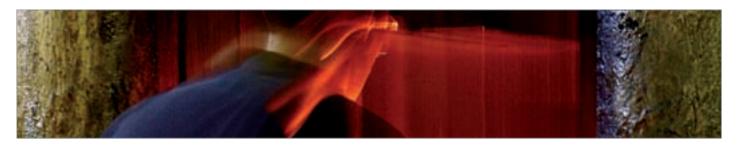
- material: special tool steel
- drop forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished
- surface finish: chrome plated to standard EN12540
- heavy duty double component handles
- made according to standard ISO 5746 and EN 60900



cutting capacity (10N=1kg)

	L	В	C	Α	
610421	160	24	35	9.5	
610422	180	27	38	10	
610423	200	29	41	10.5	
610424	220	32	47	11	

	L	(max 1600 N/mm²)	(max 650 N/mm²)
610421	160	1,6	2,0
610422	180	1,8	2,5
610423	200	2,0	2,5
610424	220	2,0	3,0



Combination slip - join pliers for

- material: special tool steel
- drop forged, entirely hardened and tempered
- with wire cutter

gas tubes

- two possibilities for jaw setting
- surface finish: chrome plated to standard EN12540



9 28

10 30

420/1BI

601262

601263

Linemen's pliers

• material: special tool steel

(1)

160

180

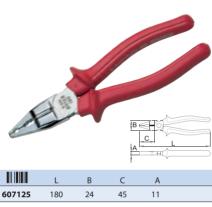
- drop forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished
- surface finish: chrome plated to standard EN12540
- heavy duty double component handles



420/1VDE

Linemen's pliers

- material: special tool steel
- drop forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished
- surface finish: chrome plated to standard EN12540
- heavy duty plastic handles
- made according to standard EN 60900



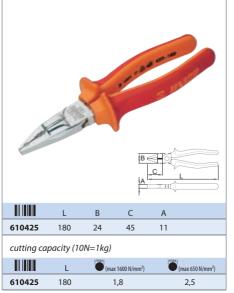
cutting capacity	(10N=1ka)

	L	(max 1600 N/mm²)	(max 650 N/mm²)
607125	180	1,8	2,5

420/1VDEBI

Linemen's pliers

- material: special tool steel
- drop forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished
- surface finish: chrome plated to standard EN12540
- heavy duty double component handles
- made according to standard EN 60900



420/1VDEDP

Linemen's pliers

- material: special tool steel
- drop forged, entirely hardened and tempered

↑1000√

- cutting edges induction hardened
- head polished

619176

♦1000V

180

<u> 1000√</u>

- surface finish: chrome plated to standard EN12540
 handles are insulated with double
- layered double coloured insulation,
 which enables additional safety
- if second layer is visible, replace your VDE tool with the new one.
- made according to standard EN 60900
- made according to standard EN 60900



	L	В	С	Α	
619176	180	24	45	11	
cutting ca	pacity (10	0N=1kg)			
		max	***************************************	max	250 Hz 25

2,5

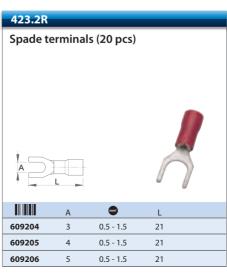


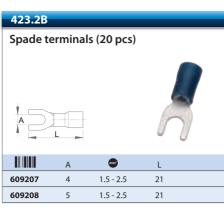


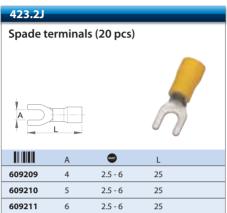


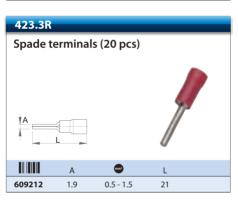


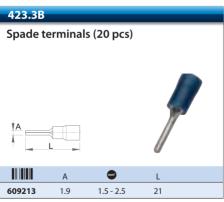


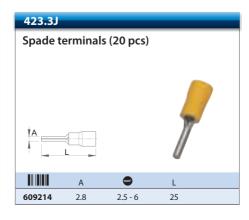


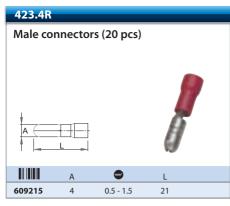


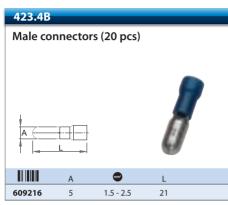


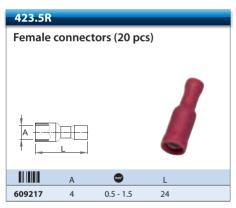


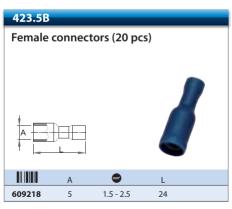


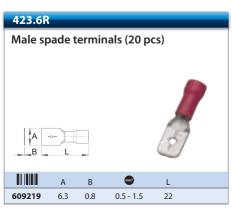


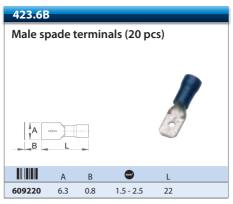




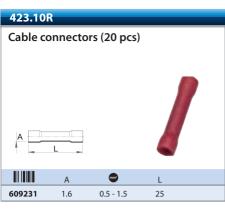


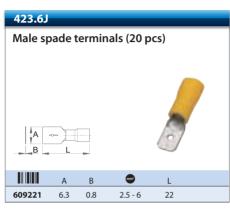


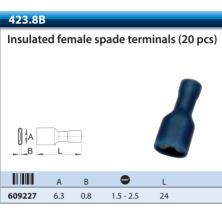


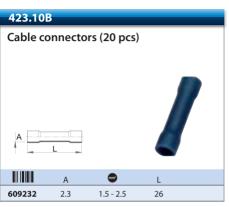


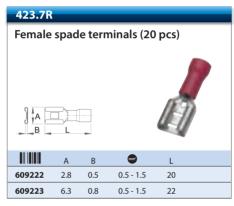


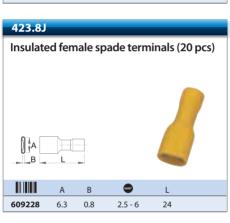


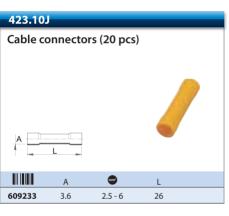


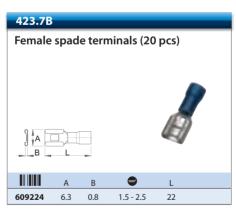


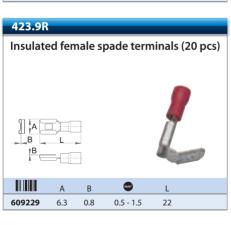


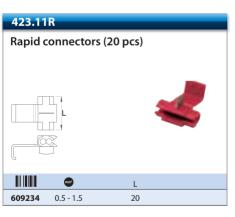


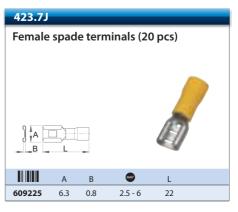


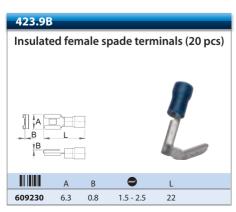


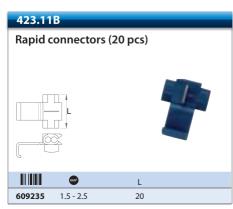








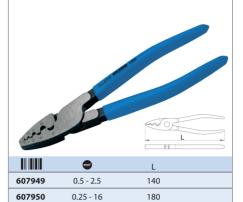




424/4P

Crimping pliers

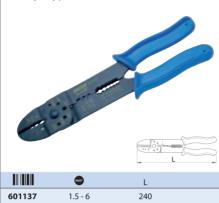
- · material: special tool steel
- · drop forged, entirely hardened and tempered
- head surface finish: fine grinding
- surface finish: phosphated to standard DIN 12476
- for non insulated terminals (dim. 140 from 0,5-2,5mm², dim. 180 0,5-16mm²)
- handles plastic dipped



425/4B

Crimping pliers

- · material: sheet metal
- · entirely hardened and tempered
- for insulated and non insulated open terminals (1,5-6mm²), for cutting cables and stripping insulation
- surface finish: phosphated to standard DIN 12476
- · heavy duty plastic handles



426/3A

Crimp - grip pliers

- for insulated terminals (0,5-6mm²), for cutting cables and wires
- toggle joint ensures high compression pressure with little effort
- tool steel jaws, oil hardened, phosphated
- handles nickel plated
- · material: sheet metal



425/4A

Crimping pliers

- · material: sheet metal
- · entirely hardened and tempered
- for insulated and closed non insulated terminals (1,5-6mm²), for cutting cables and stripping insulation
- surface finish: phosphated to standard DIN 12476

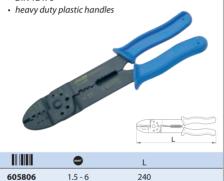


425/4AB

Crimping pliers

- · material: sheet metal
- · entirely hardened and tempered
- for non insulated standard and closed terminals (1,5-6mm²), for cutting cables and stripping insulation
- surface finish: phosphated to standard DIN 12476

1.5 - 6



240

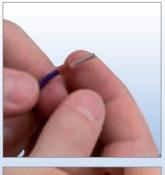
426/3B

Crimp - grip pliers

- for non insulated terminals (0,5-6mm²), for cutting cables and wires
- toggle joint ensures high compression pressure with little effort
- · tool steel jaws, oil hardened, phosphated
- handles nickel plated
- material: sheet metal



424/4P USE









425/4 USE

427/4AG

Crimp grip pliers

- for cord end sleeves 0.08-10mm²/AWG 28-7
- strong metal crimping profile with electrical plating
- square crimping performs a better contact than traditional crimping profile
- reinforced connecting spring for longer usage life



427/4BG

Modular crimping pliers

- professional tool for cutting and stripping unshielded ribbon telephone cables
- for crimping 4-, 6- and 8-pole Western plugs type RJ 10 (7.65 mm width), type RJ 11/12 (9.65 mm width) and type RJ 45 (11.68 mm width)
- exact crimping process due to parallel crimping
- · with additional stripping device for round cables
- with length cutter and dismantling knife for ribbon cables 6 and 12 mm width





Crimp grip pliers

- · special designed clamping jaws hold the wire securely during the stripping process
- swivel knob micro-adjusts for thinner wire to 30AWG (0.05mm²) or thicker wire to 8AWG (8mm²)
- crimp non-insulated terminals 10-22AWG (1.5 to
- crimp insulated terminals 10-22AWG (1.5 to 6.0mm²)
- crimp auto ignition terminals 7 to 8mm



427/4DG

621552

Modular crimping pliers

- tool for cutting and stripping unshielded ribbon
- for crimping 6- and 8-pole Western plugs type RJ 11/12 (9.65 mm width) and type RJ 45 (11.68 mm width)
- exact crimping process due to parallel crimping
- with additional stripping device for round cables
- with length cutter and dismantling knife for ribbon cables 6 and 12 mm width

- hexagon crimping
- lever transmission permits light force transfer
- very easy to handle

Crimp grip pliers

427/4FG

• the respective cross-section is set by rotating profile disks



428/4

621555

Crimp lever pliers

- jaws drop forged from special tool steel, entirely hardened and tempered
- toggle joint ensures high compression pressure with little effort
- heavy duty plastic handles
- re-changeable head-spare part
- surface finish: phosphated to standard DIN 12476





602327 0.5 - 6 240



621553

621551

428/4AGPB

Set of grip crimp pliers with exchangeble jaws in plastic box

- quick changing system for 4 different types of jaws
- ratchet crimp system provides reliable work
- for insulated terminals AWG10-12/14-16/18-22 (4-6/1.5-2.5/0.5-1.0mm²)
- for non-insulated terminals AWG14-6 (0.2-16mm²)
- for cord end terminals AWG22-6 (0.5-16mm²)
- for BNC/TNC coax conectors RG-58, RG-59/62. Hex connectors 0.255 (6.48mm²), 0.213 (5.41mm²), 0-068 (1.73mmV)



621557

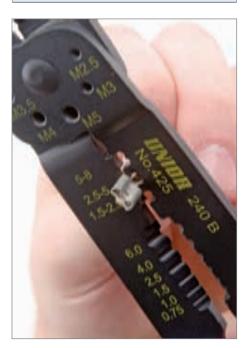
428.1/4

Spare parts for art. 428/4

• spare head



602328





Universal lock - grip pliers

- jaws drop forged from special tool steel, entirely hardened and tempered
- handles made from sheet metal
- surface finish: nickel plated
- screw phosphated
- symmetric jaws



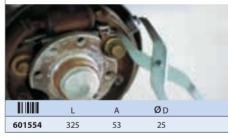
	L	Α	Ö	
613101	175	10	30	
605206	250	12	35	
613102	300	14	40	

431/2

Brake spring pliers

- material: special tool steel
- drop forged, entirely hardened and tempered
- loose oil hardened head, phosphated surface finish: chrome plated





430/3

Grip pliers

- jaws drop forged from special tool steel, entirely hardened and tempered
- handles made from sheet metal
- surface finish: nickel plated
- screw phosphated



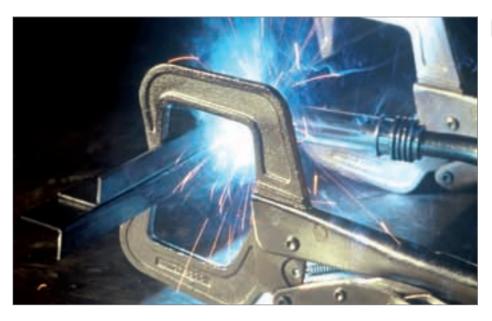
	L	Α	Ö	
601551	175	10	30	
601552	250	12	35	
601553	300	14	40	

432/3A

Welders` lock - grip pliers

- jaws drop forged from special tool steel, entirely hardened and tempered
- handles made from sheet metal
- surface finish: nickel plated
- screw phosphated
- for angle tubes





433/4D

Welders' grip pliers

- material: jaws chrome vanadium, handles from sheet metal
- parallel clamping is achieved by straight line motion of the flexible jaw
- one handed operation
- small sizes and parallel clamping action for easy access into difficult and confined areas
- flat jaws, for spot welding and for assembling flat
 shoot material



	L	D₫	В	Α	
612890	200	19	25	15	

432/3C

Welders` lock - grip pliers

- jaws drop forged from special tool steel, entirely hardened and tempered
- · handles made from sheet metal
- · surface finish: nickel plated
- screw phosphated
- for sheet metal and profiles

AD C

L A B C D T 601144 280 82 10 55 50

433/4B

Welders' grip pliers

- material: jaws chrome vanadium, handles from sheet metal
- parallel clamping is achieved by straight line motion of the flexible jaw
- one handed operation
- small sizes and parallel clamping action for easy access into difficult and confined areas
- wide curved jaws, for spot welding, and assembling angular shapes, curved under 90°



433/4E

Welders' grip pliers

- material: jaws chrome vanadium, handles from sheet metal
- parallel clamping is achieved by straight line motion of the flexible jaw
- one handed operation
- small sizes and parallel clamping action for easy access into difficult and confined areas
- wide curved jaws, for spot welding and assembling angular shapes, curved under 90°



	L	D₹	В	C	Α	
612891	210	14	25	14	15	

433/4A

Welders' grip pliers

- material: jaws chrome vanadium, handles from sheet metal
- parallel clamping is achieved by straight line motion of the flexible jaw
- one handed operation
- small sizes and parallel clamping action for easy access into difficult and confined areas
- wide flat jaws, for spot welding



433/4C

Welders' grip pliers

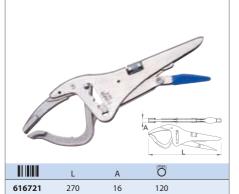
- material: jaws chrome vanadium, handles from sheet metal
- parallel clamping is achieved by straight line motion of the flexible jaw
- one handed operation
- small sizes and parallel clamping action for easy access into difficult and confined areas
- wide curved jaws, for spot welding, and assembling angular shapes, curved under 90°



434/3A

Wheel and rack grip pliers

- jaws drop forged from special tool steel, entirely hardened and tempered
- handles made from sheet metal
- surface finish: nickel plated
- screw chrome plated





434/3B

Wheel and rack grip pliers

- jaws drop forged from special tool steel, entirely hardened and tempered
- handles made from sheet metal
- · surface finish: nickel plated
- screw chrome plated



	L	Α	Ö	
616722	220	16	50	

434/3C

Wheel and rack grip pliers

- jaws drop forged from special tool steel, entirely hardened and tempered
- handles made from sheet metal
- surface finish: nickel plated
- screw chrome plated





	L	А	Ö	
616723	250	16	80	

434/3D

Wheel and rack grip pliers

- jaws drop forged from special tool steel, entirely hardened and tempered
- handles made from sheet metal
- · surface finish: nickel plated
- screw chrome plated



	L	А	Ö	
616724	250	16	100	

436/4P

Universal welding pliers

- The universal welding pliers are intended for the maintenance of welding guns for arc welding with protective gas (MAG / MIG welding).
- material: special tool steel
- drop forged, entirely hardened and tempered
- cutting edges induction hardened
- spring for reopening
- head surface finish: fine grinding
- surface finish: phosphated to standard DIN 12476









dirty nozzle

spatter removal form in and outside







clean nozzle



nozzle removal and installation



tip removal and installation



wire cutting



wire cutting out



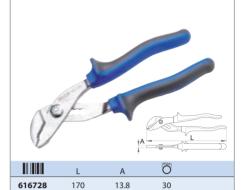
installation bushing removal and installation



	L	В	D	Α	С	
616493	180	25	3	10	59	
616494	210	34	3.5	11	80	

Slip joint waterpump pliers

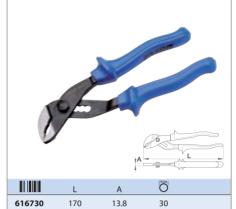
- material: special tool steel
- · drop forged, entirely hardened and tempered
- head polished
- surface finish: chrome plated to standard EN12540
- · heavy duty double component handles
- slip ioint
- jaw aperture adjustable in 5 positions
- made according to standard ISO 8976



441/4G

Slip joint waterpump pliers

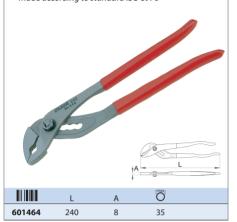
- material: special tool steel
- · drop forged, entirely hardened and tempered
- · head surface finish: fine grinding
- surface finish: phosphated to standard DIN 12476
- heavy duty plastic handles
- slip joint
- jaw aperture adjustable in 5 positions
- made according to standard ISO 8976



441/7PR

Slip joint waterpump pliers

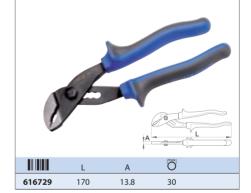
- material: special tool steel
- · drop forged, entirely hardened and tempered
- slip ioint
- jaw aperture adjustable in 6 positions
- head surface finish: fine grinding
- handles ergonomically shaped
- handles plastic dipped
- made according to standard ISO 8976



441/4BI

Slip joint waterpump pliers

- material: special tool steel
- drop forged, entirely hardened and tempered
- · head surface finish: fine grinding
- surface finish: phosphated to standard DIN 12476
- heavy duty double component handles
- slip joint
- jaw aperture adjustable in 5 positions
- made according to standard ISO 8976



441/4P

slip joint waterpump pliers

- material: special tool steel
- material special tool steel
- $\bullet \ \, \textit{drop forged, entirely hardened and tempered}$
- · head surface finish: fine grinding
- handles plastic dipped
- slip jointsurface finish: phosphated to standard DIN 12476
- jaw aperture adjustable in 5 positions
- made according to standard ISO 8976



442/1BIST

Set of variable joint HYPO pliers on carton display



615185 442/1BIST 6 442/1HYPO (240)

442/1HYPO

Variable joint "HYPO" pliers

- material: special tool steel
- · working surfaces induction hardened
- surface finish: chrome plated to standard EN12540



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HYPO pliers

- perfect adaptability to the work piece whatever the shape up to Ø 40 mm
- quicker and simple grip
- work with only one hand
- ergonomic shape
- heavy duty double component handles
- maximum adaptability to hand





180

240

616727

611780

Double groove joint pliers

- material: special tool steel
- · drop forged, entirely hardened and tempered
- · head polished
- surface finish: chrome plated to standard EN12540
- heavy duty double component handles
- grooved joint
- jaw aperture adjustable in 5 positions by dim. 180, by dim. 240 and 300 in 6 positions
- made according to standard ISO 8976





	L	A	O	
607885	180	9.9	25	
620557	240	10.8	35	
607887	300	12.2	40	

445/1BIST

Set of double groove joint pliers on carton display



	Nº	all
615183	445/1BIST	6
	445/1BI (240)	

445/4G

Double groove joint pliers

- material: special tool steel
- drop forged, entirely hardened and tempered
- head surface finish: fine grinding
- surface finish: phosphated to standard DIN 12476
- heavy duty plastic handles
- grooved joint
- jaw aperture adjustable in 5 positions by dim. 180, by dim. 240 and 300 in 6 positions
- made according to standard ISO 8976



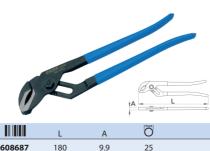
	L	А	Ö	
608690	180	9.9	25	
620558	240	10.8	35	
608692	300	12.2	40	



445/4P

Double groove joint pliers

- material: special tool steel
- drop forged, entirely hardened and tempered
- head surface finish: fine grinding
- surface finish: phosphated to standard DIN 12476
- handles plastic dipped
- grooved joint
- jaw aperture adjustable in 5 positions by dim. 180, by dim. 240 and 300 in 6 positions
- made according to standard ISO 8976

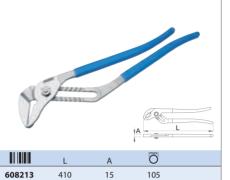


	L	А	Ö	
608687	180	9.9	25	
620559	240	10.8	35	
608689	300	12.2	40	

445/1P

Double groove joint pliers

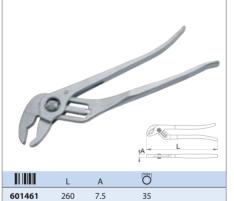
- material: special tool steel
- drop forged, entirely hardened and tempered
- head polished
- surface finish: chrome plated to standard EN12540
- handles plastic dipped
- grooved joint
- jaw aperture adjustable in 11 positions
- made according to standard ISO 8976



446/2

Wheel and rack waterpump pliers

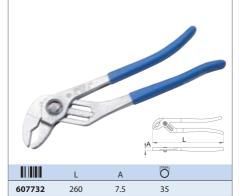
- material: special tool steel
- entirely chrome plated
- infinitely adjustment of jaw aperture
- drop forged, entirely hardened and tempered
- variable adjustment of opening jaws



446/2P

Wheel and rack waterpump pliers

- material: special tool steel
- entirely chrome plated
- infinitely adjustment of jaw aperture
- drop forged, entirely hardened and tempered
- variable adjustment of opening jaws
- handles plastic dipped



447/6

Waterpump box joint pliers

- material: chrome vanadium
- · drop forged, entirely hardened and tempered
- working surfaces induction hardened
- surface finish: red lacquered
- jaw aperture adjustable in 7 positions
- made according to standard ISO 8976

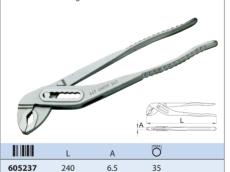


	L	Α	O	
607348	175	6.5	26.5	
603160	240	7.5	35	
605006	300	8.5	42	

447/1

Waterpump box joint pliers

- material: chrome vanadium
- · drop forged, entirely hardened and tempered
- working surfaces induction hardened
- surface finish: chrome plated to standard EN12540
- jaw aperture adjustable in 7 positions
- made according to standard ISO 8976







447/1HPP

Waterpump pliers

- material: chrome vanadium
- drop forged, entirely hardened and tempered
- · working surfaces induction hardened
- surface finish: chrome plated to standard EN12540
- heavy duty double component handles
- toothed jaw is designed to ensure optimum grip of an object
- jaw aperture adjustable in 10 positions
- The HPP pliers have a button for fast regulation of the jaw's gap which enables fast and precise adaptation of the jaw to the wanted grip of the work piece.
- Extreme grip strength: The design and shape of the pliers' jaws enable, despite the slim construction, better grip strength of the work piece, which results in stability, work safety, and greater effectiveness.
- Finish: pliers are drop forged from high quality tool steels and heat treated
- Work: due to the slim construction, the jaws enable one-handed work in difficult-to-reach places
- Made of double-component material which reduces slipping of the hand during work and so enable safe and effective transmission of power from the hand to the pliers' jaws
- Ergonomics: handles are designed to fully adjust to the users hand and so enable greater handling and work safety

















	L	Α	Ö
20172	245	8.5	40

447/4PHPP

Waterpump pliers

- material: chrome vanadium
- drop forged, entirely hardened and tempered
- surface finish: phosphated to standard DIN 12476
- · head surface finish: fine grinding
- · handles plastic dipped
- $\bullet \ \ toothed\ jaw\ is\ designed\ to\ ensure\ optimum\ grip\ of\ an\ object$
- jaw aperture adjustable in 10 positions
- The HPP pliers have a button for fast regulation of the jaw's gap which enables fast and precise adaptation of the jaw to the wanted grip of the work piece.
- Extreme grip strength: The design and shape of the pliers' jaws enable, despite the slim construction, better grip strength of the work piece, which results in stability, work safety, and greater effectiveness.
- $\bullet \ \textit{Finish: pliers are drop forged from high quality tool steels and heat treated} \\$
- Work: due to the slim construction, the jaws enable one-handed work in difficult-toreach places
- Made of double-component material which reduces slipping of the hand during work and so enable safe and effective transmission of power from the hand to the pliers' jaws
- Ergonomics: handles are designed to fully adjust to the users hand and so enable greater handling and work safety



	L	A	max	
620421	245	8.5	40	





Waterpump box joint pliers

- material: chrome vanadium
- drop forged, entirely hardened and tempered
- working surfaces induction hardened
- surface finish: chrome plated to standard EN12540
- jaw aperture adjustable in 7 positions
- · heavy duty double component handles
- made according to standard ISO 8976





447/1VDEDP

Waterpump box joint pliers



- material: chrome vanadium
- drop forged, entirely hardened and tempered
- working surfaces induction hardened
- surface finish: chrome plated to standard EN12540
- jaw aperture adjustable in 7 positions
- handles are insulated with double layered - double coloured insulation, which enables additional safety
- if second layer is visible, replace your VDE tool with the new one.
- made according to standard ISO 8976 and EN 60900

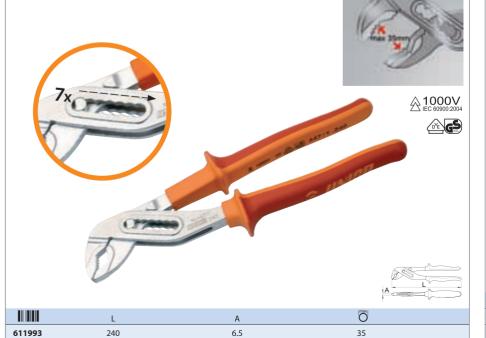


447/1VDEBI

Insulated waterpump box joint pliers

- material: chrome vanadium
- · drop forged, entirely hardened and tempered
- working surfaces induction hardened
- surface finish: chrome plated to standard EN12540
- jaw aperture adjustable in 7 positions
- heavy duty double component handles
- made according to standard ISO 8976 and EN 60900





449/1PYTHON

Waterpump box joint pliers

- material: chrome vanadium
- drop forged, entirely hardened and tempered
- surface finish: chrome plated to standard EN12540
- jaw aperture adjustable in 7 positions
- jaws are always parallel to protect the work piece from being damaged
- 449.1 additional plastic jaws for work on chromed and polished work pieces
- heavy duty double component handles

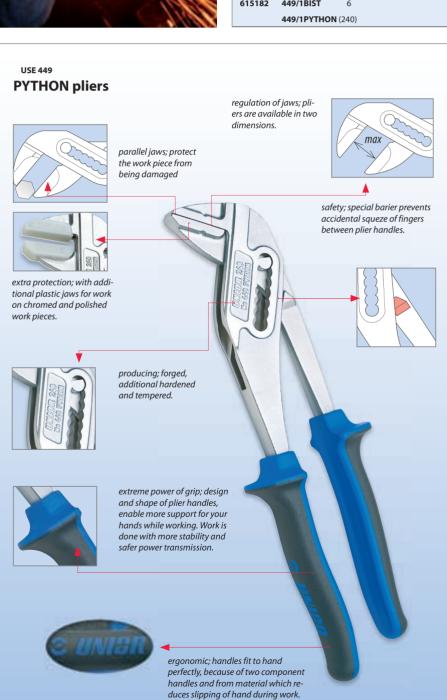


	L	Α	Ö	
615032	240	11	42	
616725	300	15	63	









End cutting nippers

- material: special tool steel
- drop forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished
- surface finish: chrome plated to standard FN12540
- heavy duty double component handles
- made according to standard ISO 5748



	L	В	Α	С			
609192	160	27	22	7			
cutting capacity (10N=1kg)							
	L	(max 1600 N/mm²)		(max 650 N/mm²)			
609192	160	1,	,6	2,5			

455/4E

Electronic pliers - front cutter

X

- material: special tool steel
- drop forged, entirely hardened and tempered
- cutting edges induction hardenedheavy duty double component handles



cutting capacity (10N=1kg)				
	L	(max 750-850 N/mm²)		
620071	110	1,5		





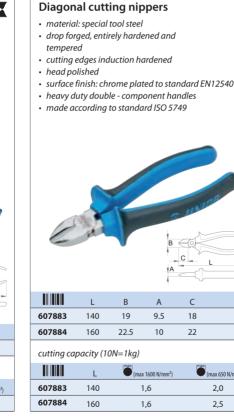




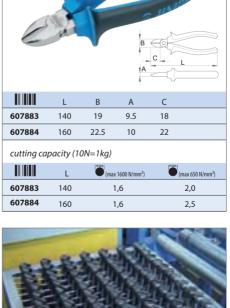
X

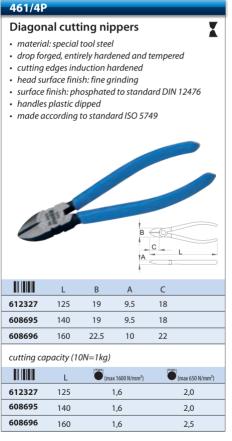






461/1BI









461/1VDE

Diagonal cutting nippers

- · material: special tool steel
- · drop forged, entirely hardened and tempered
- cutting edges induction hardened
- · head polished
- surface finish: chrome plated to standard EN12540
- heavy duty plastic handles
- made according to standard ISO 5749 and EN 60900



	L	В	Α	C	
605012	140	19	9.5	18	
605013	160	22.5	10	22	

cutting capacity (10N=1kg)

	L	(max 1600 N/mm²)	(max 650 N/mm²)
605012	140	1,6	2,0
605013	160	1,6	2,5

461/1VDEBI

Diagonal cutting nippers

- · material: special tool steel
- · drop forged, entirely hardened and tempered
- cutting edges induction hardened
- · head polished
- surface finish: chrome plated to standard EN12540
- heavy duty double component handles
- made according to standard ISO 5749 and EN 60900





	L	В	Α	С	
610426	140	19	9.5	18	
610427	160	22.5	10	22	

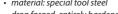
cutting capacity (10N=1kg)

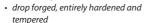
	L	(max 1600 N/mm²)	(max 650 N/mm²)
610426	140	1,6	2,0
610427	160	1.6	2.5

461/1VDEDP

Diagonal cutting nippers







- cutting edges induction hardened
- head polished

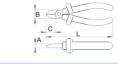
↑1000V

↑ 1000V

DE GS

- surface finish: chrome plated to standard EN12540
- handles are insulated with double layered - double coloured insulation, which enables additional safety
- if second layer is visible, replace your VDE tool with the new one.
- made according to standard ISO 5749 and EN 60900





	L	В	Α	С	
619193	140	19	9.5	18	
619194	160	22.5	10	22	

cutting capacity (10N=1kg)

	L	(max 1600 N/mm²)	(max 650 N/mm²)
619193	140	1,6	2,0
619194	160	1,6	2,5

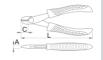
461/4E

♦1000V

Electronic side cutter

- material: special tool steel
- drop forged, entirely hardened and tempered
- heavy duty double component handles





	L	В	Α	С	
620072	115	13	8.2	13.5	

cuttina	capacity	(10N-	1ka)
cutting	cupacity	(1014-	INY)

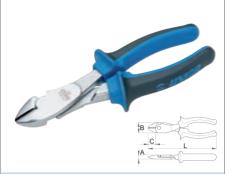
cutting co	ipacity (101	v-rng/
	L	(max 750-850 N/mm²)
620072	115	1,5





Heavy duty diagonal cutting nippers

- material: special tool steel
- · drop forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished
- surface finish: chrome plated to standard EN12540
- · heavy duty double component handles
- made according to standard ISO 5749



	L	В	Α	С	
617686	160	23.5	10	20.5	
608850	180	28	11	20	
608837	200	27	11	21	

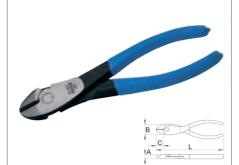
cutting capacity (10N=1kg)

	L	(max 2150 N/mm²)	(max 650 N/mm²)
617686	160	1,6	2,5
608850	180	1,8	3,0
608837	200	2,0	3,5

466/4P

Heavy duty diagonal cutting nippers

- material: special tool steel
- · drop forged, entirely hardened and tempered
- cutting edges induction hardened
- head surface finish: fine grinding
- surface finish: phosphated to standard DIN 12476
- handles plastic dipped
- made according to standard ISO 5749



	L	В	Α	С	
617688	160	23.5	10	20.5	
608699	180	28	11	20	
609191	200	27	11	21	

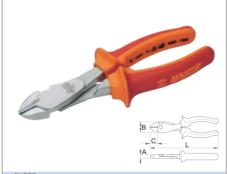
cutting capacity (10N=1kg)

	L	(max 2150 N/mm²)	(max 650 N/mm²)
617688	160	1,6	2,5
608699	180	1,8	3,0
609191	200	2,0	3,5

466/1VDEBI

Heavy duty diagonal cutting nippers

- material: special tool steel
- drop forged, entirely hardened and temnered
- △1000V • cutting edges induction hardened
- head polished
- surface finish: chrome plated to standard EN12540
- heavy duty double component handles
- made according to standard ISO 5749 and EN 60900



	L	В	Α	C	
610428	180	28	11	20	
611756	200	27	11	21	

cutting capacity (10N=1kg)

	L	(max 2150 N/mm²)	(max 650 N/mm²)
610428	180	1,8	3,0
611756	200	2,0	3,5

466/4G

Heavy duty diagonal cutting nippers

- material: special tool steel
- · drop forged, entirely hardened and tempered
- cutting edges induction hardened
- · head surface finish: fine grinding
- surface finish: phosphated to standard DIN 12476
- heavy duty plastic handles
- made according to standard ISO 5749



	L	В	Α	С	
617687	160	23.5	10	20.5	
608700	180	28	11	20	
609190	200	27	11	21	

cutting capacity (10N=1kg)

	F (· ·		
	L	(max 2150 N/mm²)	(max 650 N/mm²)
617687	160	1,6	2,5
608700	180	1,8	3,0
609190	200	2,0	3,5

466/1VDE

Heavy duty diagonal cutting nippers

- material: special tool steel
- drop forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished
- surface finish: chrome plated to standard EN12540
- heavy duty plastic handles
- made according to standard ISO 5749 and EN 60900



	L	В	Α	С	
605212	180	28	11	20	

cutting capacity (10N=1kg)

	L	(max 2150 N/mm²)	(max 650 N/mm²)
605212	180	1,8	3,0

466/1VDEDP

Heavy duty diagonal cutting nippers ▼

- material: special tool steel
- · drop forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished

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- surface finish: chrome plated to standard EN12540
- handles are insulated with double layered - double coloured insulation, which enables additional safety
- if second layer is visible, replace your VDE tool with the new one.
- made according to standard ISO 5749 and EN 60900



	L	В	Α	С	
619195	180	28	11	20	
610106	200	27	11	21	

cutting capacity (10N=1kg)

	L	(max 2150 N/mm²)	(max 650 N/mm²)
619195	180	1,8	3,0
619196	200	2.0	3.5



Long flat nose pliers

- · material: special tool steel
- drop forged, entirely hardened and tempered
- head polished
- surface finish: chrome plated to standard EN12540
- heavy duty double component handles
- gripping surface serrated
- made according to standard ISO 5745



	L	В	C	Α	
607878	140	15	39	8	
607879	160	16	49	9	

472/4P

Long flat nose pliers

- material: special tool steel
- drop forged, entirely hardened and tempered
- head surface finish: fine grinding
- surface finish: phosphated to standard DIN 12476
- handles plastic dipped
- gripping surface serrated
- made according to standard ISO 5745



	L	В	C	Α	
608702	140	15	39	8	
608703	160	16	49	9	

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472/4G

Long flat nose pliers

- material: special tool steel
- drop forged, entirely hardened and tempered
- head surface finish: fine grinding
- surface finish: phosphated to standard DIN 12476
- gripping surface serrated
- heavy duty plastic handles
- made according to standard ISO 5745

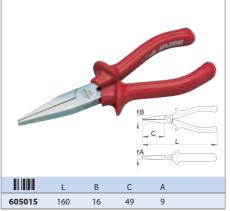


	L	В	С	Α	
608704	140	15	39	8	
608705	160	16	49	9	

472/1VDE

Long flat nose pliers

- material: special tool steel
- drop forged, entirely hardened and tempered
- head polished
- surface finish: chrome plated to standard EN12540
- heavy duty plastic handles
- gripping surface serrated
- made according to standard ISO 5745 and EN 60900



472/1VDEBI

Long flat nose pliers

- material: special tool steel
- drop forged, entirely hardened and tempered

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- head polished
- surface finish: chrome plated to standard EN12540
- heavy duty double component handles
- gripping surface serrated
- made according to standard ISO 5745 and EN 60900



		L	В	C	Α	
6104	130	160	16	49	9	

472/1VDEDP

Long flat nose pliers

- material: special tool steel
- drop forged, entirely hardened and tempered
- head polished
- surface finish: chrome plated to standard EN12540
- gripping surface serrated
- handles are insulated with double layered - double coloured insulation, which enables additional safety
- if second layer is visible, replace your VDE tool with the new one.
- made according to standard ISO 5745 and EN 60900



	L	В	С	Α	
619182	140	15	39	8	
619183	160	16	49	9	









476/4P

Long round nose pliers

· head surface finish: fine grinding

drop forged, entirely hardened and tempered

• surface finish: phosphated to standard DIN 12476

• material: special tool steel

handles plastic dipped

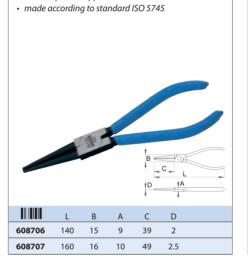




Long round nose pliers
material: special tool steel

drop forged, entirely hardened and tempered

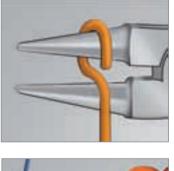
476/1BI

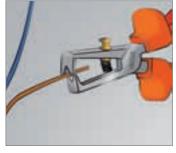








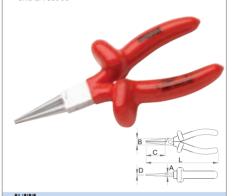




476/1VDEDP

Long round nose pliers

- material: special tool steel
- · drop forged, entirely hardened and tempered
- head polished
- · surface finish: chrome plated to standard FN12540
- handles are insulated with double layered - double coloured insulation, which enables additional safety
- if second layer is visible, replace your VDE tool with the new one.
- made according to standard ISO 5745 and EN 60900



	L	В	Α	C	D	
619184	140	15	9	39	2	
619185	160	16	10	49	2.5	

478/4G

↑1000V

DE GS

Wire stripping pliers

- material: special tool steel
- · drop forged, entirely hardened and tempered
- cutting edges induction hardened
- head surface finish: fine grinding
- surface finish: phosphated to standard DIN 12476
- · heavy duty plastic handles
- stripping capacity: up to max 0.6 10mm²
- · spring for reopening



478/1VDEBI

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Wire stripping pliers

- material: special tool steel
- · drop forged, entirely hardened and tempered

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- cutting edges induction hardened
- head polished
- surface finish: chrome plated to standard EN12540
- heavy duty double component handles
- stripping capacity: up to max 0.6 10mm²
- spring for reopening
- made according to standard EN 60900



610433 160 0.6 - 10 18 9 40

478/1BI

Wire stripping pliers

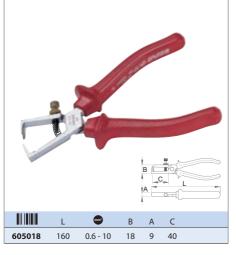
- · material: special tool steel
- drop forged, entirely hardened and tempered
- cutting edges induction hardened
- · head polished
- surface finish: chrome plated to standard EN12540
- · heavy duty double component handles
- stripping capacity: up to max 0.6 10mm²
- spring for reopening



478/1VDE

VDE wire stripping pliers

- · material: special tool steel
- · drop forged, entirely hardened and
- tempered
- · cutting edges induction hardened
- head polished
- surface finish: chrome plated to standard EN12540
- heavy duty plastic handles
- stripping capacity: up to max 0.6 10mm²
- spring for reopening
- made according to standard EN 60900



478/1VDEDP

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♦ 1000V

Wire stripping pliers

- material: special tool steel
- · drop forged, entirely hardened and tempered
- cutting edges induction hardened
- head polished
- stripping capacity: up to max 0.6 -10mm²
- spring for reopening
- · handles are insulated with double layered - double coloured insulation, which enables additional safety
- if second layer is visible, replace your VDE tool with the new one.
- made according to standard EN 60900



619186 0.6 - 10 18 9



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