

PLIERS

Bahco has a wide range of pliers and cutters for every use - from small, convenient electronic cutters and neat, high-precision gripping pliers to sturdy cutters and heavy duty slip-joint pliers. This extensive range meets all high-quality demands in terms of materials and manufacturing processes as well as ergonomics and safety.



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TYPES OF PLIERS

CUTTING PLIERS



Side cutter



Oblique cutter



End cutter



Cable cutter

HOLDING PLIERS



Flat nose pliers are used mostly for assembly work.



Combination pliers are used both for holding and for cutting.



Slip joint pliers have an adjustable joint which provides a wide range of jaw openings and a firm grip on work pieces of varying shape.



Nut pliers are intended to use for gripping small nuts (counter grip) in confined spaces.



Snipe nose pliers are also used for assembly work. The slender jaws make the work easier in confined spaces.



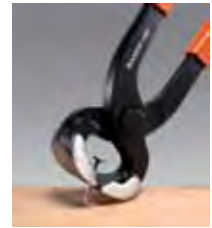
Gripping and welding pliers are used for clamping work pieces during welding and assembly work.



Round nose pliers are used mostly for bending and shaping wire.



Circlips pliers are intended for fitting internal and external circlips.



Pincers are mainly intended for pulling nails, but can also be used for medium hard wire.

Use the right tool for the right job

- Using cutters or pliers in the wrong way will shorten their lifespan by damaging the tool, and may even result in a personal injury
- Don't use cutting pliers that are too small for the job. This not only damages the cutting edges and the work piece, but could also cause personal injury from flying splinters
- Always use the right tool and safety equipment

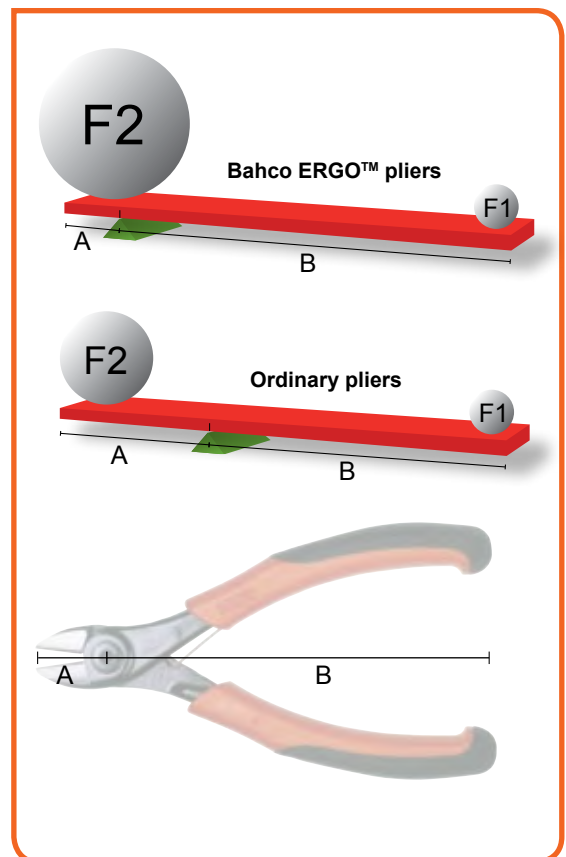
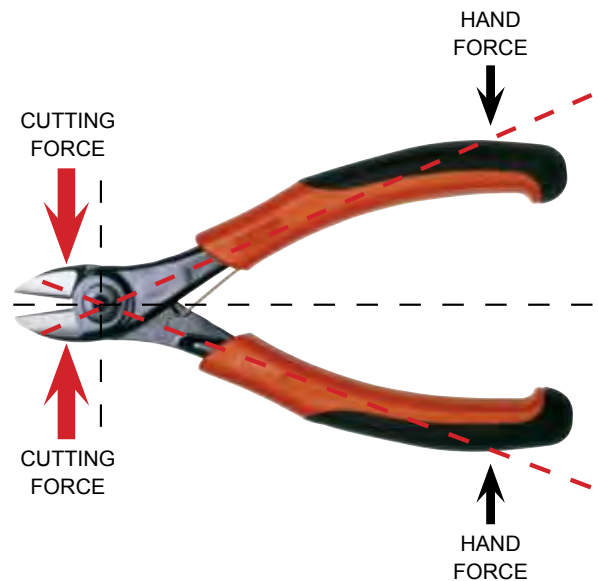
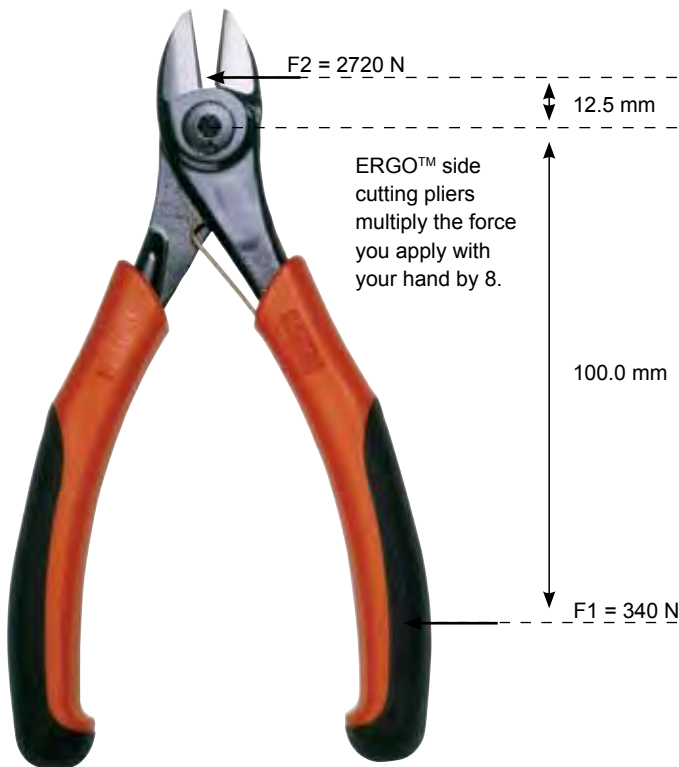


PLIERS - BASIC PRINCIPLES

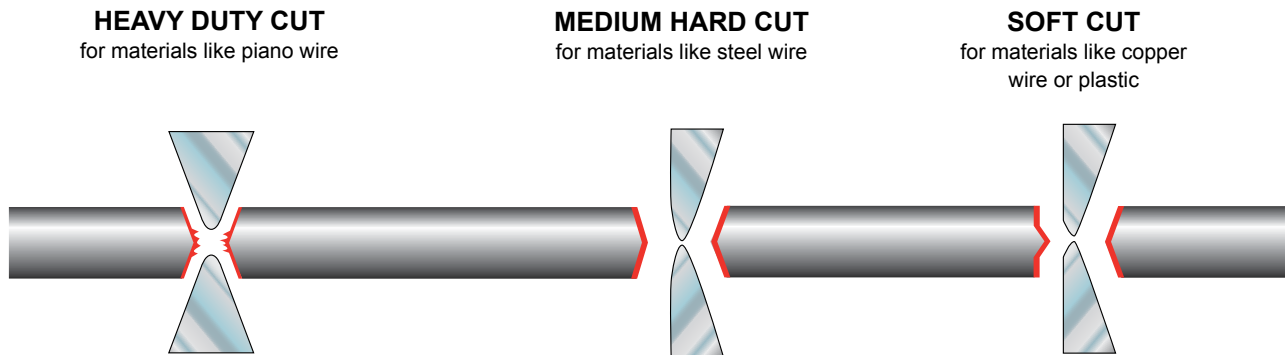
1. CUTTING FORCE - The smaller the distance between the rivet and the bevel, the higher the leverage you can achieve.

F1 = force applied by the user's hand

F2 = force applied by the cutting edges

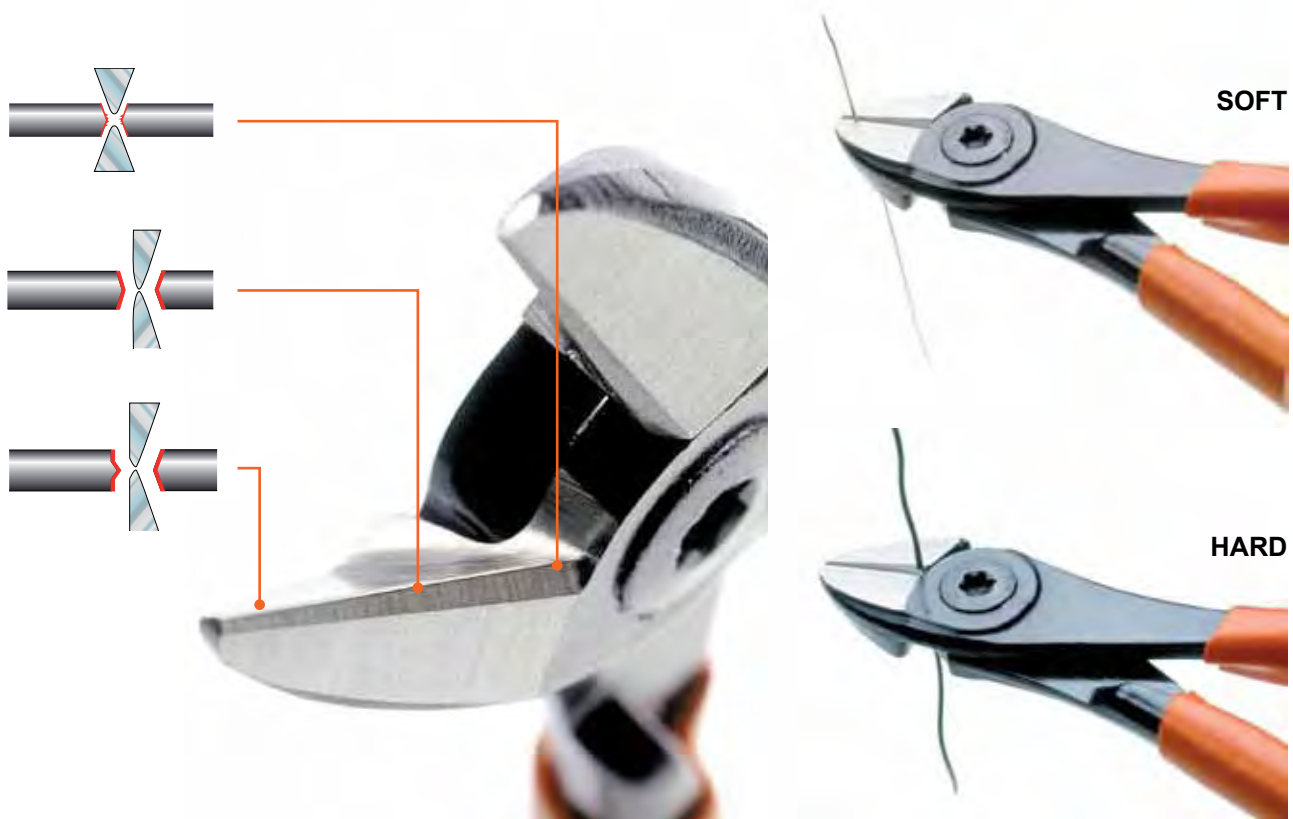


2. CUTTING EDGES - The cutting edges are designed to suit the intended use. The sharper the cutting edge, the softer materials it is intended to cut. Bahco has 2-in-1 pliers with progressive edges that cut both soft cables and thick wires.

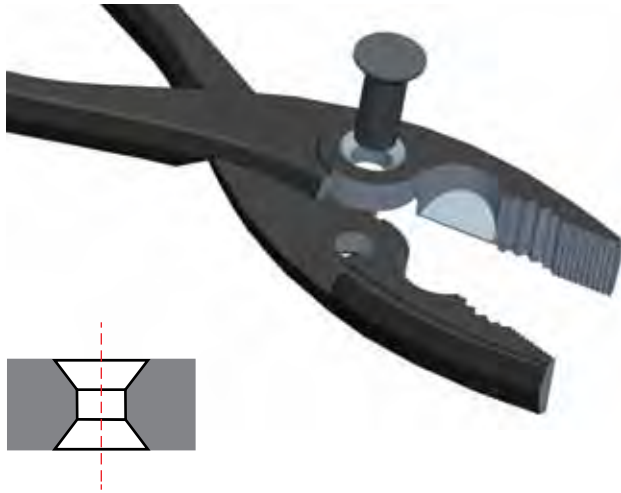


2-PLIERS-IN-1

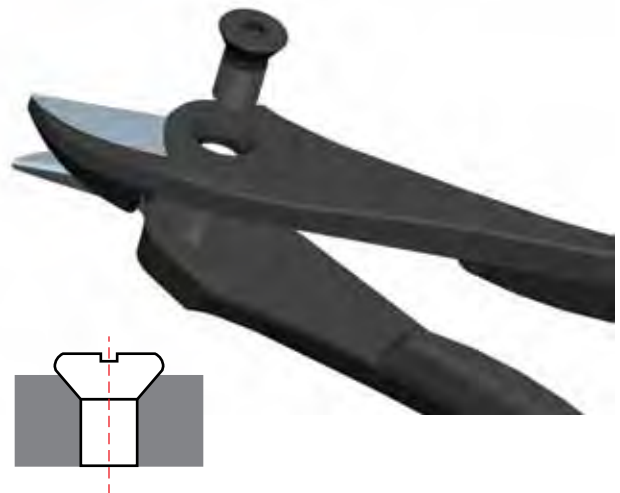
The ERGO™ side cutting pliers have a so called progressive edge. Effectively, this means you can cut soft, thin wire close to the tip, and hard wire close to the screw. At the tip, the cutting edge is sharper so that it can cut softer materials such as copper, instead of simply squeezing them like most of the heavy duty pliers would.



3. EDGE ALIGNMENT - The joint must move easily, yet stay tight without loosening, to achieve optimum cutting accuracy and leverage.

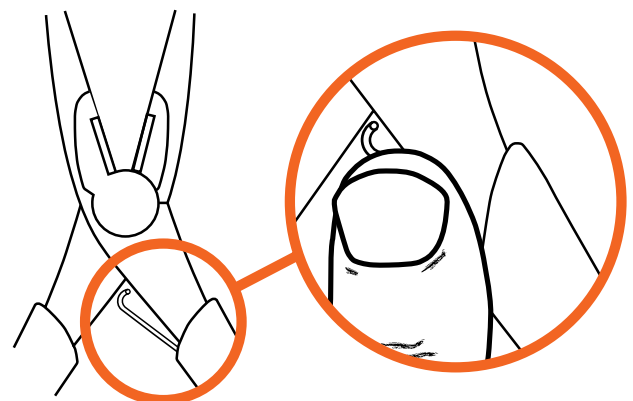


Rivet joints are effective joints for pliers where precision is not a priority.



Screw joints allow excellent precision and adjustment for perfect alignment of the cutting edges and maximum cutting accuracy.

4. RETURN SPRING - The Bahco ERGO™ cutters and pliers have return springs, with on/off function.



The on-off return spring increases ease of cutting with an automatic opening of the jaws and handles when the grip is loosened.

5. COMFORTABLE GRIPS - High cutting forces and an intensive pace of work place stringent demands on the design of handles for pliers. There are grips suited for every need and user.



PVC coated handles



2-component handles



2-component **ergo**® handles



1000V injected handles



1000V 3-layer
insulated handles

6. JAWS - The jaws of Bahco cutters and pliers are designed to suit the intended type of work. Cutters have high-frequency hardened edges, whereas gripping and holding pliers have flat or serrated surfaces to provide a firmer grip.



7. RUSTPROOFING - All Bahco cutters and pliers are subjected to various anti-corrosion treatments, depending on the intended application. The most common methods are black-oxidation with a heat-cured layer of transparent plastic varnish, a drying anti-corrosion oil or chromium plating.



Black-oxidizing is a process that partially protects against rust by covering the metal with a layer of oxide that gives a characteristic deep black colour.

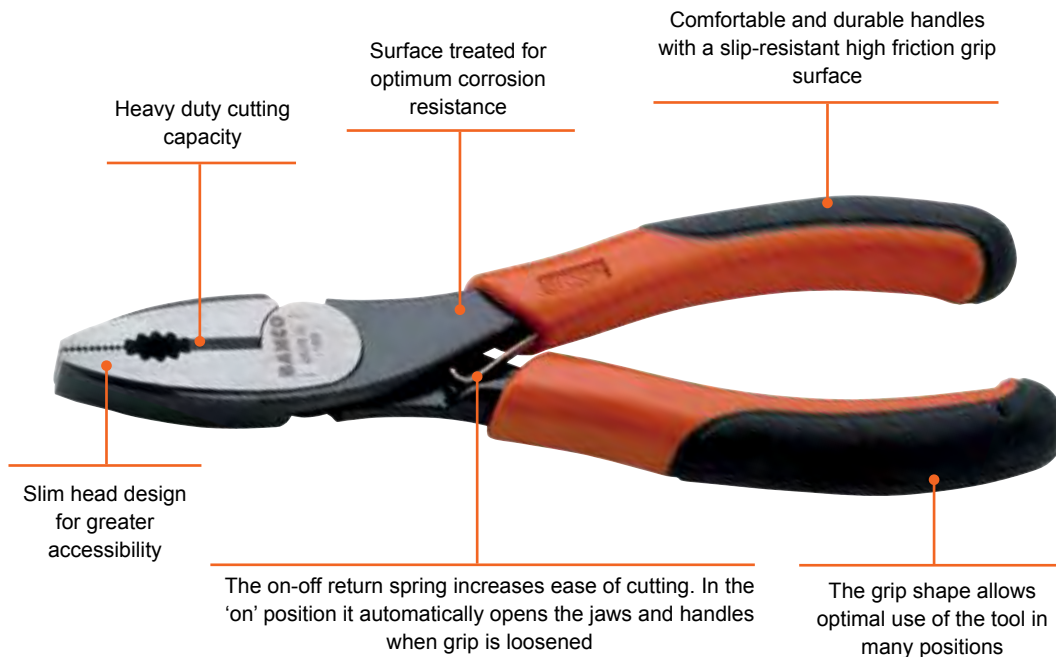


Chrome-plating is a layer of nickel and chrome that protects the pliers from corrosion. If the treatment is not well implemented the layer can peel off. Bahco pliers are tested to ensure that the nickel and chrome layers are perfectly adhered.

PLIERS



Bahco ERGO™ pliers are developed in accordance with the Bahco ERGO™ Process. For more details, please refer to the chapter on ERGO™.



STRENGTH & ACCESSIBILITY

The jaws are strong and durable as well as slim so that even narrow spaces can be reached

RELEASE BUTTON

The release mechanism is unique to Bahco slip joint pliers

SELF ADJUSTING

Press the button and slide the jaws. The slip-joint pliers automatically adjust to chosen grip width



POLISHED EDGES

Designed without sharp edges that could hurt the user's hands while working

SELF LOCKING JAWS

The teeth of the jaws are designed to grab the work piece in three places giving stability and supporting the grip

2-COMPONENT HANDLES

Comfortable and durable handles with a slip-resistant, high-friction grip surface



CHOICE OF PLIERS

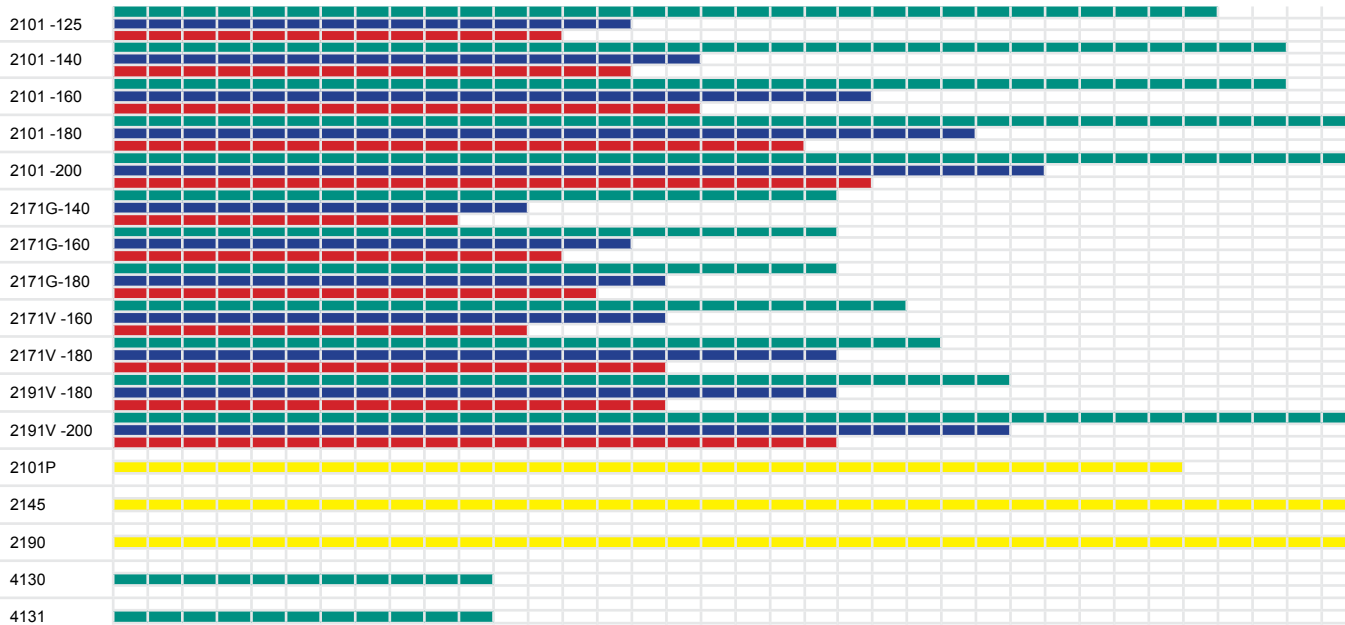
■ Plastic
 ■ Cu
 ■ Fe
 ■ Fe+
 ■ Piano
 ■ Wire stripping capacity

N/mm² 230 - 250 1600 - 1800 1800 - 2100 2100<

Wire ■ ■ ■ ■

Ø 0,5 0,6 0,7 0,8 0,9 1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6 2,7 2,8 2,9 3,0 3,1 3,2 3,3 3,4 3,5 3,6 3,7 3,8 3,9 4,0

SIDE CUTTING PLIERS



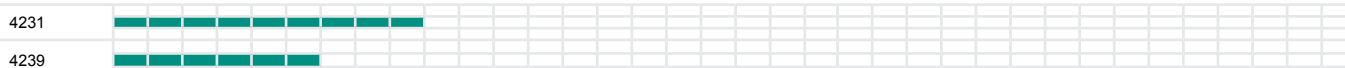
Ø 0,5 0,6 0,7 0,8 0,9 1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6 2,7 2,8 2,9 3,0 3,1 3,2 3,3 3,4 3,5 3,6 3,7 3,8 3,9 4,0

POWER CUTTER



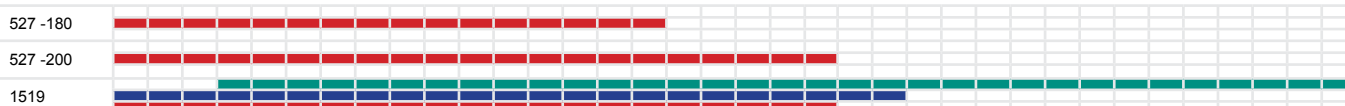
Ø 0,5 0,6 0,7 0,8 0,9 1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6 2,7 2,8 2,9 3,0 3,1 3,2 3,3 3,4 3,5 3,6 3,7 3,8 3,9 4,0

OBLIQUE CUTTERS



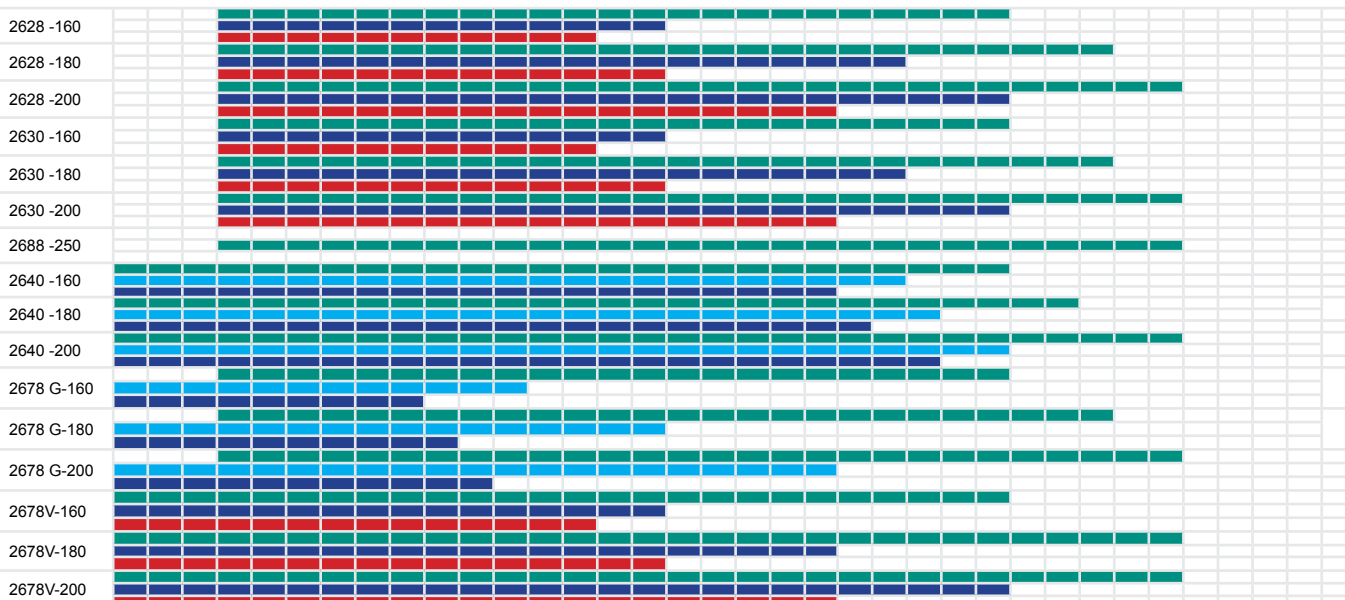
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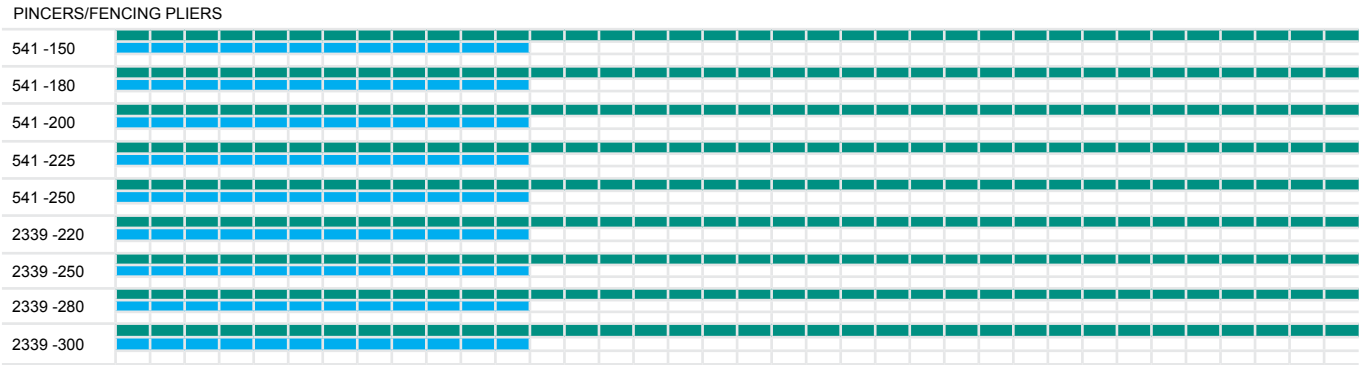
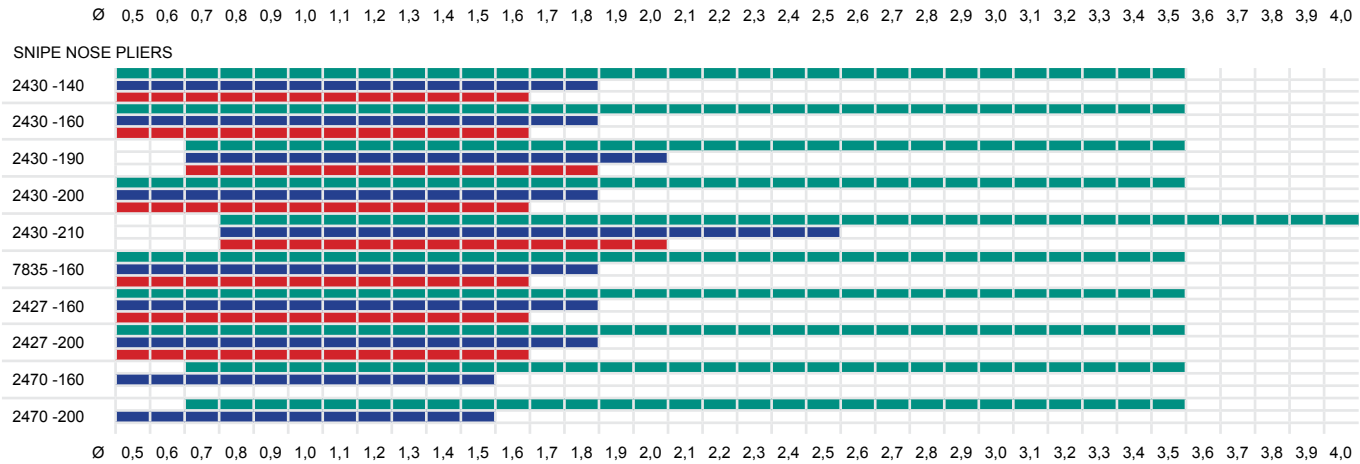
END CUTTERS



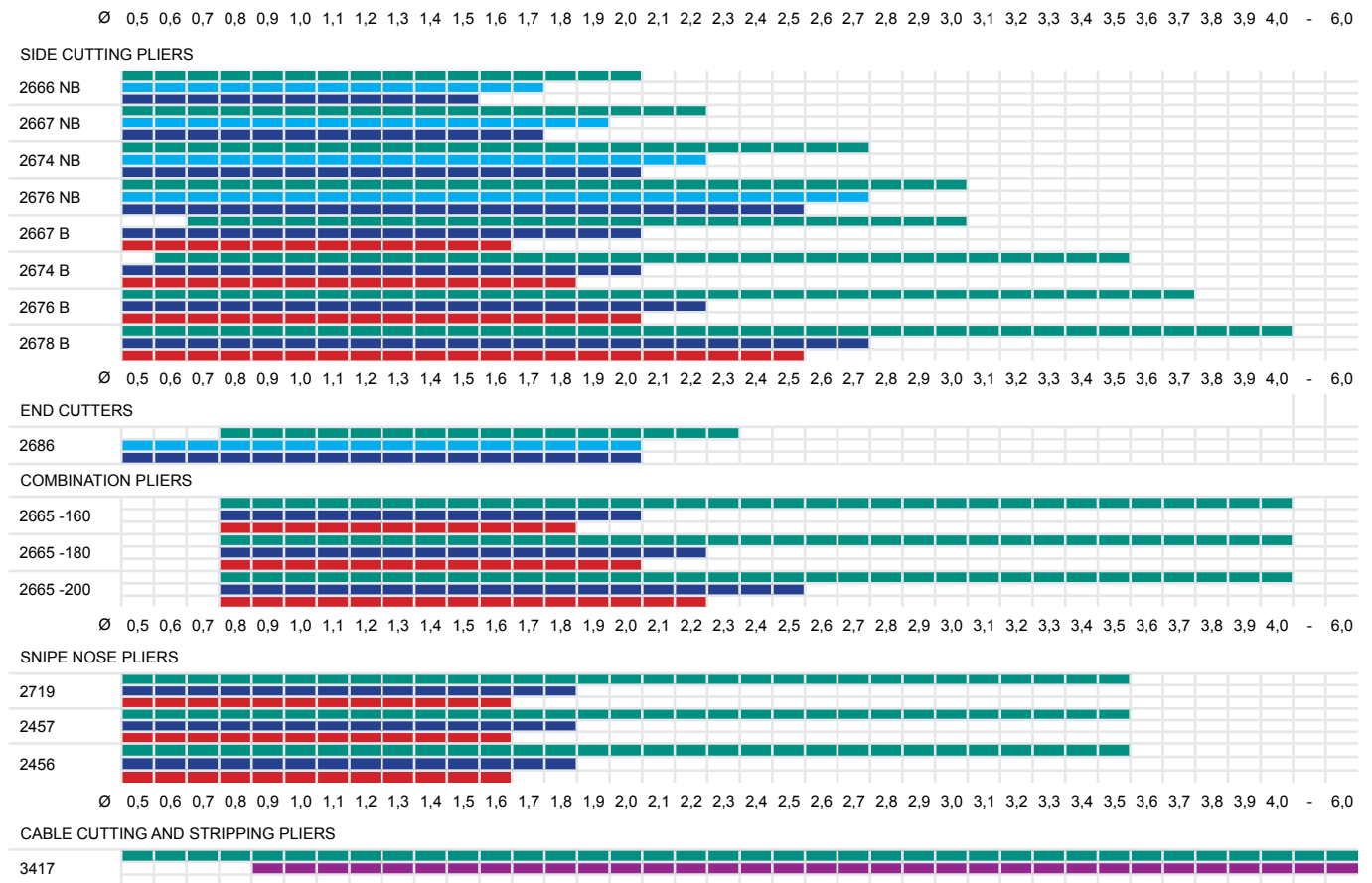
Ø 0,5 0,6 0,7 0,8 0,9 1,0 1,1 1,2 1,3 1,4 1,5 1,6 1,7 1,8 1,9 2,0 2,1 2,2 2,3 2,4 2,5 2,6 2,7 2,8 2,9 3,0 3,1 3,2 3,3 3,4 3,5 3,6 3,7 3,8 3,9 4,0

COMBINATION PLIERS





BELZER

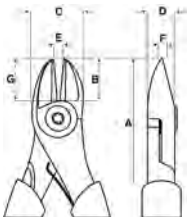




SIDE CUTTERS

2101G

ergo®



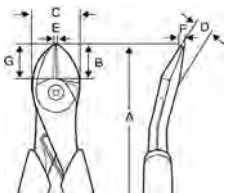
SIDE CUTTING PLIERS

- Side cutting pliers developed according to the scientific ERGO™ process
- ISO 5749
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Induction hardened cutting edges
- Progressive edges: The cutting radius progresses along the edge in order to cut hard material like piano wire close to the joint and soft materials like copper and plastic insulated wire at the tip
- Screw joint that provides excellent running and accurate alignment of the cutting edges
- The distance from the joint to the centre of the cutting edges is reduced: giving greater leverage and increased cutting capacity
- Round shaped jaws give improved accessibility in confined spaces
- Equipped with a return spring featuring an on/off function
- IP: Industrial packed

			A mm	B mm	C mm	D mm	E mm	F mm	G mm				
2101G-125	0106462	5	125	14	17.5	8	1.0	1.2	14	3.5	1.8	1.6	105
2101G-140	0106479	5	140	16	19.5	9	1.5	1.3	16	3.7	2.0	1.8	126
2101G-160	0106486	5	160	18	21.5	10	2.0	1.5	18	3.8	2.5	2.0	162
2101G-180	0106493	5	180	20	23.5	11	2.5	1.5	20	4.0	2.7	2.3	245
2101G-200	0106509	5	200	22	25.5	11	2.5	1.5	22	4.5	3.0	2.5	304
2101G-125IP	0106516	5	125	14	17.5	8	1.0	1.2	14	3.5	1.8	1.6	105
2101G-140IP	0106288	5	140	16	19.5	9	1.5	1.3	16	3.7	2.0	1.8	126
2101G-160IP	0106295	5	160	18	21.5	10	2.0	1.5	18	3.8	2.5	2.0	162
2101G-180IP	0106523	5	180	20	23.5	11	2.5	1.5	20	4.0	2.7	2.3	245
2101G-200IP	0106530	5	200	22	25.5	11	2.5	1.5	22	4.5	3.0	2.5	304

2101G-A

ergo®



SIDE CUTTING PLIERS

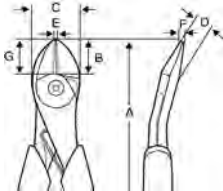
- Side cutting pliers developed according to the scientific ERGO™ process
- ISO 5749
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Induction hardened cutting edges
- Progressive edges: The cutting radius progresses along the edge in order to cut hard material like piano wire close to the joint and soft materials like copper and plastic insulated wire at the tip
- Screw joint that provides excellent running and accurate alignment of the cutting edges
- The distance from the joint to the centre of the cutting edges is reduced: giving greater leverage and increased cutting capacity
- Round shaped jaws give improved accessibility in confined spaces
- Equipped with a return spring featuring an on/off function
- 14° head angle enables better accessibility

			A mm	B mm	C mm	D mm	E mm	F mm	G mm				
2101G-140A	8269500	5	140	16	19.5	9	1.5	1.3	16	3.7	2.0	1.8	126
2101G-160A	8269517	5	160	18	21.5	10	2.0	1.5	18	3.8	2.5	2.0	162
2101G-180A	8269524	5	180	20	23.5	11	2.5	1.5	20	4.0	2.7	2.3	245



2101G-AHL

SIDE CUTTING PLIERS



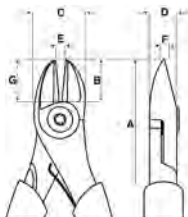
- High leverage side cutting pliers
- ISO 5749
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Induction hardened cutting edges
- Progressive edges: The cutting radius progresses along the edge in order to cut hard material like piano wire close to the joint and soft materials like copper and plastic insulated wire at the tip
- Screw joint that provides excellent running and accurate alignment of the cutting edges
- High leverage: Redesigned for optimum cutting performance and reduced cutting effort
- Equipped with a return spring featuring an on/off function
- 14° head angle enables better accessibility

			A	B	C	D	E	F	G				
2101G-200AHL	8259921	5	200	21	29	11	2.5	1.5	21	4.5	3.0	2.5	304

2101GC

SIDE CUTTING PLIERS

ergo®



- Side cutting pliers developed according to the scientific ERGO™ process
- ISO 5749
- Finish: Nickel-chrome plated, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Induction hardened cutting edges
- Progressive edges: The cutting radius progresses along the edge in order to cut hard material like piano wire close to the joint and soft materials like copper and plastic insulated wire at the tip
- Screw joint that provides excellent running and accurate alignment of the cutting edges
- The distance from the joint to the centre of the cutting edges is reduced: giving greater leverage and increased cutting capacity
- Round shaped jaws give improved accessibility in confined spaces
- Equipped with a return spring featuring an on/off function
- IP: Industrial packed

			A	B	C	D	E	F	G				
2101GC-125IP	0106547	5	125	14	17.5	8	1.0	1.2	14	3.5	1.8	1.6	105
2101GC-140IP	0106554	5	140	16	19.5	9	1.5	1.3	16	3.7	2.0	1.8	126
2101GC-160IP	0106561	5	160	18	21.5	10	2.0	1.5	18	3.8	2.5	2.0	162
2101GC-180IP	0106578	5	180	20	23.5	11	2.5	1.5	20	4.0	2.7	2.3	245
2101GC-200IP	0106585	5	200	22	25.5	11	2.5	1.5	22	4.5	3.0	2.5	304



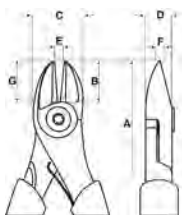
SIDE CUTTERS

2101PG

ergo®



PLASTIC

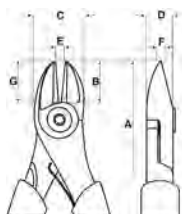


SIDE CUTTING PLIERS

- Side cutting pliers developed according to the scientific ERGO™ process
- Dimensions according to ISO 5749
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel. ERGO handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Induction hardened cutting edges
- Full flush cutting edge without bevelling which is designed to smoothly cut all kinds of plastic parts such as the flash of plastic component
- Screw joint that provides excellent running and accurate alignment of the cutting edges
- Round shaped jaws give improved accessibility in confined spaces
- Equipped with a return spring featuring an on/off function
- Max cutting capacity: Cu 1.5 mm and plastic material PA (Nylon) 3 mm

			A mm	B mm	C mm	D mm	E mm	F mm	G mm	
2101PG-160	0113972	5	160	18	21.5	10	2.0	1.5	18	162

2101D



SIDE CUTTING PLIERS

- ISO 5749
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Induction hardened cutting edges
- Progressive edges: The cutting radius progresses along the edge in order to cut hard material like piano wire close to the joint and soft materials like copper and plastic insulated wire at the tip
- Screw joint that provides excellent running and accurate alignment of the cutting edges
- The distance from the joint to the centre of the cutting edges is reduced, giving greater leverage and increased cutting capacity
- Round shaped jaws give improved accessibility in confined spaces
- IP: Industrial packed

			A mm	B mm	C mm	D mm	E mm	F mm	G mm				
2101D-125	0106387	5	125	14	17.5	8	1.0	1.2	14	3.5	1.8	1.6	104
2101D-140	0106394	5	140	16	19.5	9	1.5	1.3	16	3.7	2.0	1.8	107
2101D-160	0106400	5	160	18	21.5	10	2.0	1.5	18	3.8	2.5	2.0	144
2101D-180	0106417	5	180	20	23.5	11	2.5	1.5	20	4.0	2.7	2.3	235
2101D-200	0106424	5	200	22	25.5	11	2.5	1.5	22	4.5	3.0	2.5	282
2101D-125IP	0106431	5	125	14	17.5	8	1.0	1.2	14	3.5	1.8	1.6	104
2101D-140IP	0106325	5	140	16	19.5	9	1.5	1.3	16	3.7	2.0	1.8	107
2101D-160IP	0106318	5	160	18	21.5	10	2.0	1.5	18	3.8	2.5	2.0	144
2101D-180IP	0106448	5	180	20	23.5	11	2.5	1.5	20	4.0	2.7	2.3	235
2101D-200IP	0106455	5	200	22	25.5	11	2.5	1.5	22	4.5	3.0	2.5	282

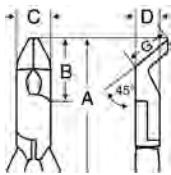


2145PD

SIDE CUTTING PLIERS



PLASTIC



- Side cutting pliers for plastic and other soft materials
- Finish: Black finish, anti-corrosion treated
- Material: Carbon steel and PVC coated handles
- Shape: 45° angled plane cutting edge for improved accessibility
- Full flush cutting edges without bevelling which are designed to smoothly cut all kinds of plastic parts e.g. the flash of plastic components
- With opening spring
- Max cutting capacity: Cu 1.8 mm and plastic material PA (Nylon) 3 mm

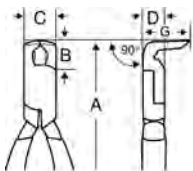
			A mm	B mm	C mm	D mm	G mm	
2145PD-150	0114009	5	154	21	15	11	17	135

2190PD

SIDE CUTTING PLIERS



PLASTIC



- Oblique cutting pliers for plastic and other soft materials
- Finish: Black finish, polished head, anti-corrosion treated
- Material: Carbon steel and PVC coated handles
- Shape: 90° angled plane cutting edge for improved accessibility
- Full flush cutting edges without bevelling which are designed to smoothly cut all kinds of plastic parts e.g. the flash of plastic components
- With opening spring
- Max cutting capacity: Cu 1.8 mm and plastic material PA (Nylon) 3 mm

			A mm	B mm	C mm	D mm	G mm	
2190PD-150	0114016	5	143	11.5	15	11	20	135

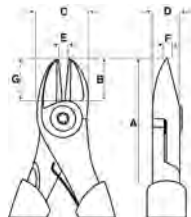


SIDE CUTTERS

2101S











IEC 60900  1000V

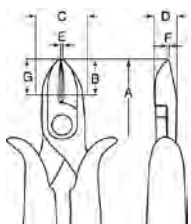


SIDE CUTTING PLIERS

- Insulated side cutting pliers
- ISO 5749, IEC 60900
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, plastic injected handles
- Induction hardened cutting edges
- Progressive edges: The cutting radius progresses along the edge in order to cut hard material like piano wire close to the joint and soft materials like copper and plastic insulated wire at the tip
- Screw joint that provides excellent running and accurate alignment of the cutting edges
- The distance from the joint to the centre of the cutting edges is reduced, giving greater leverage and increased cutting capacity
- Round shaped jaws give improved accessibility in confined spaces



			A mm	B mm	C mm	D mm	E mm	F mm	G mm					
	731415													
2101S-140	0106592	3	140	16	19.5	9	1.5	1.3	16	3.7	2.0	1.8	126	
2101S-160	0106608	3	160	18	21.5	10	2.0	1.5	18	3.8	2.5	2.0	162	
2101S-180	0106615	3	180	20	23.5	11	2.5	1.5	20	4.0	2.7	2.3	245	
2101S-200	0106622	3	200	22	25.5	11	2.5	1.5	22	4.5	3.0	2.5	304	

2666NB-2676NB

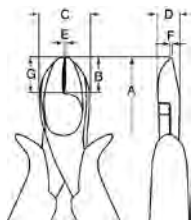


SIDE CUTTING PLIERS

- Side cutting pliers with external edge bevel
- ISO 5749
- Finish: Nickel-chrome plated, fine-polished, anti-corrosion treated
- Material: Vanadium-extra, handles are orange, transparent cellulose acetate
- Induction hardened cutting edges
- Screw joint that provides excellent running and accurate alignment of the cutting edges









			A mm	B mm	C mm	D mm	E mm	F mm	G mm					
	731415													
2666 NB	1066093	1	125	16	16	8.0	1.5	1.2	16	2.0	1.7	1.5	-	100
2667 NB	1066192	1	140	17	18	8.5	1.8	1.2	17	2.2	1.9	1.7	-	145
2674 NB	1066321	1	160	18	20	10.0	2.0	1.2	18	2.7	2.2	2.0	-	200
2676 NB	1066413	1	180	21	22	11.0	2.1	1.2	21	3.0	2.7	2.0	-	250

2667B-2678B



SIDE CUTTING PLIERS

- Heavy duty side cutting pliers with external edge bevel
- ISO 5749
- Finish: Nickel-chrome plated, fine-polished, anti-corrosion treated
- Material: Vanadium-extra, handles are orange, transparent cellulose acetate
- Induction hardened cutting edges
- Screw joint that provides excellent running and accurate alignment of the cutting edges

			A mm	B mm	C mm	D mm	E mm	F mm	G mm					
	731415													
2667 B	1066154	1	125	14	18	8.0	1.5	1.2	14	3.0	2.0	1.6	1.6	120
2674 B	1066307	1	140	17	20	10.0	2.0	1.5	17	3.5	2.0	1.8	1.8	150
2676 B	1066390	1	160	19	23	11.0	2.1	2.0	19	3.7	2.2	2.0	2.0	215
2678 B	1066468	1	200	21	26	11.0	2.1	2.0	21	4.0	2.7	2.5	2.5	325

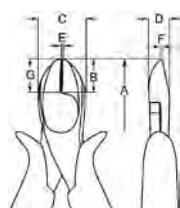


2667NVDE-2676NVDE

SIDE CUTTING PLIERS



IEC 60900 1000V

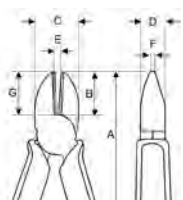


- Insulated side cutting pliers with external edge bevel
- ISO 5749, IEC 60900
- Finish: Nickel-chrome plated, fine-polished, anti-corrosion treated
- Material: Vanadium-extra, handles are red, transparent cellulose acetate
- Induction hardened cutting edges
- Screw joint that provides excellent running and accurate alignment of the cutting edges

			A mm	B mm	C mm	D mm	E mm	F mm	G mm					
2667 NVDE	1497996	1	140	17	18	8.5	1.8	1.2	17	3.5	2.0	1.8	1.8	150
2674 NVDE	1498535	1	160	18	20	10.0	2.0	1.2	18	3.7	2.2	2.0	2.0	205
2676 NVDE	1498962	1	180	21	22	11.0	2.1	1.2	21	4.0	2.7	2.5	2.5	255

2171G

SIDE CUTTING PLIERS

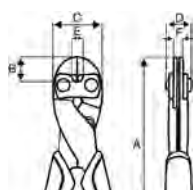


- ISO 5749
- Finish: Polished and oiled
- Material: High performance alloy steel, 2-component handles for added comfort

			A mm	B mm	C mm	D mm	E mm	F mm	G mm				
2171G-140	0116232	5	150	18.5	20	10.5	2	1.5	18.5	2.5	1.6	1.5	170
2171G-160	0116133	5	165	20	22	12	2.5	1.5	20	2.5	1.6	1.5	240
2171G-180	0116140	5	185	22	24	12	3	1.5	22	2.5	1.6	1.5	290

1520G

SIDE CUTTING PLIERS



- Power cutter with centric precision cutting edges
- Finish: Black finish anti-corrosion treated
- Material: High performance alloy steel, handles in 2-component thermoplastic elastomer surface on tough polypropylene which gives a superior grip
- Forged with cutting edges for piano, hard and soft wire
- High leverage giving exceptional cutting performance with minimum effort
- The precision cutting edges are additionally induction hardened 63-64 HRC

			A mm	B mm	C mm	D mm	E mm	F mm		
1520 G	8266516	5	210	16	33.5	17.1	8	6	3.8	310



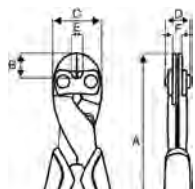
SIDE CUTTERS

1520D

SIDE CUTTING PLIERS



- Power cutter with centric precision cutting edges
- Finish: Black finish anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Forged with cutting edges for piano, hard and soft wire
- High leverage giving exceptional cutting performance with minimum effort
- The precision cutting edges are additionally induction hardened 63-64 HRC



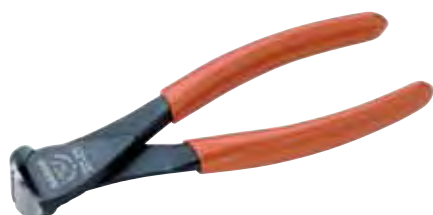
			A mm	B mm	C mm	D mm	E mm	F mm		
1520 D	731151	5	205	16	33.5	17.1	8	6	3.8	300



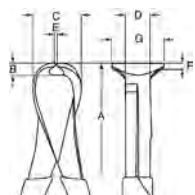
END CUTTERS

527D

END CUTTING PLIERS



- ISO 5748
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- Handles of orange PVC



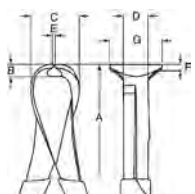
			A mm	B mm	C mm	D mm	E mm	F mm	G mm		
527 D-160	0032723	3	160	7	26.5	11	3.0	3.0	21	2.0	205
527 D-200	0032730	3	200	7	35	13	3.0	3.0	29.5	2.5	320

2686

END CUTTING PLIERS



- ISO 5748
- Finish: Nickel and chrome plated, anti-corrosion treated, fine-polished
- Material: Vanadium-extra, handles of orange PVC



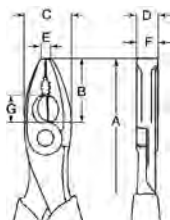
			A mm	B mm	C mm	D mm	E mm	F mm	G mm		
2686	1066598	1	160	13	20	11	2.0	2.0	28	2.0	185



2628G

COMBINATION PLIERS

ergo®



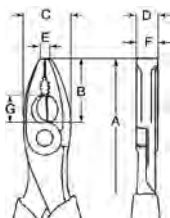
- Combination pliers developed according to the scientific ERGO™ process
- ISO 5746
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Edges specially designed to cut harder material such as piano wire and spring steel wire
- Gripping surfaces particularly suited for gripping round and flat material
- Round shaped jaws give improved accessibility in confined spaces
- The distance from the joint to the centre of the cutting edges is reduced: giving leverage and increased cutting capacity
- Equipped with a return spring featuring an on/off function
- IP: Industrial packed

			A mm	B mm	C mm	D mm	E mm	F mm	G mm			
2628 G-160	0042999	5	160	33	23	10.5	3.5	10.5	12	2.0	1.8	190
2628 G-180	0042678	5	180	36	25	11.0	4.0	11.0	14	2.5	2.0	240
2628 G-200	0103539	5	200	39	27	12.0	4.5	12.0	16	3.0	2.5	300
2628 G-160IP	0055357	5	160	33	23	10.5	3.5	10.5	12	2.0	1.8	190
2628 G-180IP	0044030	5	180	36	25	11.0	4.0	11.0	14	2.5	2.0	240
2628G-200IP	0101085	5	200	39	27	12.0	4.5	12.0	16	3.0	2.5	300

2628GC

COMBINATION PLIERS

ergo®



- Combination pliers developed according to the scientific ERGO™ process
- ISO 5746
- Finish: Chrome plated, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Edges specially designed to cut harder material such as piano wire and spring steel wire
- Gripping surfaces particularly suited for gripping round and flat material
- Round shaped jaws give improved accessibility in confined spaces
- The distance from the joint to the centre of the cutting edges is reduced: giving leverage and increased cutting capacity
- Equipped with a return spring featuring an on/off function
- IP: Industrial packed

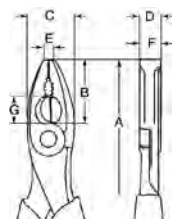
			A mm	B mm	C mm	D mm	E mm	F mm	G mm			
2628 GC-160IP	0101863	5	160	33	23	10.5	3.5	10.5	12	2.0	1.8	190
2628 GC-180IP	0101870	5	180	36	25	11.0	4.0	11.0	14	2.5	2.0	240
2628 GC-200IP	0101887	5	200	39	27	12.0	4.5	12.0	16	3.0	2.5	300



COMBINATION PLIERS

2628D

COMBINATION PLIERS



- ISO 5746
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Edges specially designed to cut harder material such as piano wire and spring steel wire
- Gripping surfaces particularly suited for gripping round and flat material
- Round shaped jaws give improved accessibility in confined spaces
- The distance from the joint to the centre of the cutting edges is reduced, giving greater leverage and increased cutting capacity

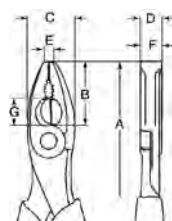
	 731415		A mm	B mm	C mm	D mm	E mm	F mm	G mm	 Fe+ mm	 Piano mm	 g
2628 D-160	0123193	5	160	33	23	11	3.5	10.5	12	2.0	1.8	190
2628 D-180	0042661	5	180	36	25	11	4	11	14	2.5	2.0	240
2628 D-200	0123315	5	200	41	29	12	4.5	12.0	16	3.0	2.5	290

2628S

COMBINATION PLIERS



IEC 60900 1000V



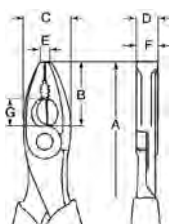
- Insulated combination pliers
- ISO 5746, IEC 60900
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, plastic injected handles
- Edges specially designed to cut harder material such as piano wire and spring steel wire
- Gripping surfaces particularly suited for gripping round and flat material
- Round shaped jaws give improved accessibility in confined spaces
- The distance from the joint to the centre of the cutting edges is reduced: giving greater leverage and increased cutting capacity

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	G mm	 Fe+ mm	 Piano mm	 g
2628 S-180	0044054	3	180	36	25	11	4.0	11	14	2.5	2.0	240
2628 S-200	0043002	3	200	39	27	12	4.5	12	16	3.0	2.5	300



2630GC

ergo®

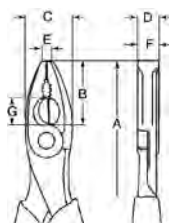


- Combination pliers developed according to the scientific ERGO™ process
- ISO 5746
- Finish: Chrome plated, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Reinforced cutting edges specially designed to cut harder material such as piano wire and spring steel wire
- Gripping surfaces particularly suited for gripping round and flat material
- Round shaped jaws give improved accessibility in confined spaces
- The distance from the joint to the centre of the cutting edges is reduced: greater leverage and increased cutting capacity
- Equipped with a return spring featuring an on/off function
- IP: Industrial packed

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	G mm	 Fe+ mm	 Piano mm	 g
2630GC-160IP	0180165	1	160	33	23	11.5	3.5	10.5	12	2.0	1.8	190
2630GC-180IP	0180172	1	180	36	25	11.0	4.0	12.0	14	2.5	2.0	240
2630GC-200IP	0180189	1	200	39	27	13.0	4.5	12.0	16	3.0	2.5	300

2630D

COMBINATION PLIERS



- ISO 5746
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Reinforced cutting edges specially designed to cut harder material such as piano wire and spring steel wire
- Gripping surfaces particularly suited to gripping round and flat material
- Round shaped jaws give improved accessibility in confined spaces
- The distance from the joint to the centre of the cutting edges is reduced, giving greater leverage and increased cutting capacity

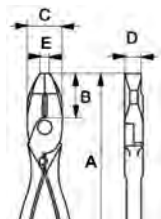
	 731415		A mm	B mm	C mm	D mm	E mm	F mm	G mm	 Fe+ mm	 Piano mm	 g
2630D-160	0123612	5	160	33	23	11.5	3.5	10.5	12	2.0	1.8	190
2630D-180	0123681	5	180	36	25	12.0	4.0	11.0	14	2.5	2.0	240
2630D-200	0123728	5	200	39	27	13.0	4.5	12.0	16	3.0	2.5	300



COMBINATION PLIERS

2688D

COMBINATION PLIERS

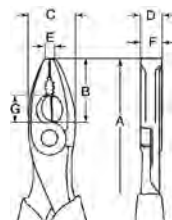


- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Application: Crimping die behind hinge for superior leverage when crimping
- The edges designed to cut medium hard wire
- Gripping surfaces particularly suited to flat material

			A mm	B mm	C mm	D mm	E mm	
2688D-250	0123520	1	250	41	32	16	8	480

2640D

COMBINATION PLIERS

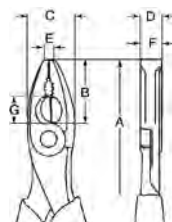


- ISO 5746
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Traditional linesmen pliers, edges designed to cut medium hard wire
- Gripping surfaces particularly suited to flat material

			A mm	B mm	C mm	D mm	E mm	F mm	G mm				
2640D-160	0123766	10	160	26	22	10	6	10	13	3.0	2.7	2.5	160
2640D-180	0123773	5	180	30	25	12	7	12	16	3.0	2.7	2.5	240
2640D-200	0123797	5	200	34	27	14	7	14	18	3.5	3.0	2.5	330

2665B

COMBINATION PLIERS



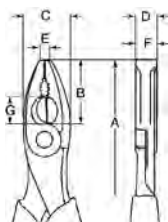
- ISO 5746
- Finish: Nickel and chrome plated, fine-polished
- Material: Vanadium-extra, handles are orange, transparent cellulose acetate
- "Open" joint, in which the distance from the joint centre to the cutting edges is reduced, results in greater leverage and increased cutting capacity
- Round shaped jaws give improved accessibility in confined spaces
- Edges specially designed to cut harder material such as piano wire and spring steel wire
- Gripping surfaces particularly suited for gripping round and flat material

			A mm	B mm	C mm	D mm	E mm	F mm	G mm			
2665 B-160	1066000	1	160	33	23	10.0	3	10.0	12	2.0	1.8	190
2665 B-180	1066017	1	180	36	25	10.5	4	10.5	14	2.5	2.0	240
2665 B-200	1066024	1	200	38	25	11.0	4	11.0	15	3.0	2.5	300



2665VDE

COMBINATION PLIERS

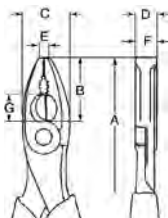


- Insulated combination pliers
- ISO 5746, IEC 60900
- Finish: Nickel-chrome plated, fine-polished, anti-corrosion treated
- Material: Vanadium-extra, handles are red, transparent cellulose acetate
- “Open” joint, in which the distance from the joint centre to the cutting edges is reduced, results in greater leverage and increased cutting capacity
- Round shaped jaws give improved accessibility in confined spaces
- Edges specially designed to cut harder material such as piano wire and spring steel wire
- Gripping surfaces particularly suited for gripping round and flat material

			A mm	B mm	C mm	D mm	E mm	F mm	G mm			
2665 VDE-160	1542023	1	160	33	23	10.0	3	10.0	12	2.0	1.8	190
2665 VDE-180	1498610	1	180	36	25	10.5	4	10.5	14	2.5	2.0	240
2665 VDE-200	1498887	1	200	38	25	11.0	4	11.0	15	3.0	2.5	300

2678G

COMBINATION PLIERS



- ISO 5746
- Finish: Polished and lacquered for extra rust protection
- Material: High performance alloy steel, 2-component handles

			A mm	B mm	C mm	D mm	E mm	F mm	G mm			
2678 G-160	0116157	5	160	35	24	10	6	10	35	1.7	1.3	195
2678 G-180	0116164	5	180	38	27	11	7	11	38	2.0	1.4	2.25
2678 G-200	0116171	5	205	43	30	12	7	12	43	2.5	1.5	300

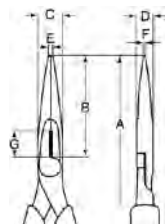


SNIPE NOSE PLIERS

2430G

SNIPE NOSE PLIERS

ergo®



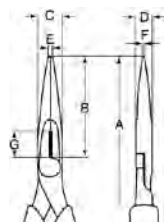
- Snipe nose pliers developed according to the scientific ERGO™ process
- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Slim semicircular shaped and serrated jaws
- Sharp edges for cutting softer material such as copper and plastic insulated wire
- Tips give a good grip and improved accessibility in confined spaces
- Equipped with a return spring featuring an on/off function
- IP: Industrial packed

			A mm	B mm	C mm	D mm	E mm	F mm	G mm				
2430 G-140	0102563	5	140	39	15	8	2.5	2.0	12	2.5	1.8	1.4	120
2430 G-160	0024070	5	160	49	16	8	3.0	2.5	12	3.0	1.8	1.6	160
2430 G-200	0100422	5	200	72	17	9	4.0	2.5	12	3.0	1.8	1.6	170
2430 G-140 IP	0102143	5	140	39	15	8	2.5	2.0	12	2.5	1.8	1.4	120
2430 G-160 IP	0100811	5	160	49	16	8	3.0	2.5	12	3.0	1.8	1.6	160
2430 G-200 IP	0100835	5	200	72	17	9	4.0	2.5	12	3.0	1.8	1.6	170

2430GC

SNIPE NOSE PLIERS

ergo®



- Snipe nose pliers developed according to the scientific ERGO™ process
- ISO 5745
- Finish: Chrome plated, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Slim semicircular shaped and serrated jaws
- Sharp edges for cutting softer material such as copper and plastic insulated wire
- Tips give a good grip and improved accessibility in confined spaces
- Equipped with a return spring featuring an on/off function
- IP: Industrial packed

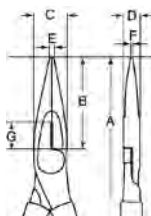
			A mm	B mm	C mm	D mm	E mm	F mm	G mm				
2430 GC-140 IP	0102150	5	140	39	15	8	2.5	2.0	12	2.5	1.8	1.4	120
2430 GC-160 IP	0102167	5	160	49	16	8	3.0	2.5	12	3.0	1.8	1.6	160
2430 GC-200 IP	0102174	5	200	72	17	9	4.0	2.5	12	3.0	1.8	1.6	170



2430G-HD

SNIFE NOSE PLIERS

ergo®

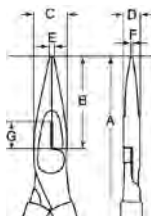


- Heavy-duty snipe nose pliers developed according to the scientific ERGO™ process
- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Withstands 50% higher torque compared to regular snipe nose
- Sharp edges for cutting softer material such as copper and plastic insulated wire
- Tips give a good grip and improved accessibility in confined spaces
- Equipped with a return spring featuring an on/off function

			A mm	B mm	C mm	D mm	E mm	F mm	G mm	Cu mm	Fe+ mm	Piano mm	g
2430 G-190HD	8259945	5	190	62	17	9	3.0	2.5	12	3.0	1.8	1.6	170
2430 G-210HD	8259952	5	210	60	23	12	3.8	3.1	16	4.0	2.5	2.0	270

2430D

SNIFE NOSE PLIERS



- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Slim semicircular shaped and serrated jaws
- Sharp edges for cutting softer material such as copper and plastic insulated wire
- Tips give a good grip and improved accessibility in confined spaces
- IP: Industrial packed

			A mm	B mm	C mm	D mm	E mm	F mm	G mm	Cu mm	Fe+ mm	Piano mm	g
2430 D-140	0032853	5	140	39	15	8	2.5	2.0	12	2.5	1.8	1.4	120
2430 D-160	0032860	5	160	49	16	8	3.0	2.5	12	3.0	1.8	1.6	160
2430 D-200	0032884	5	200	72	17	9	4.0	2.5	12	3.0	1.8	1.6	170
2430 D-140 IP	0100774	5	140	39	15	8	2.5	2.0	12	2.5	1.8	1.4	120
2430 D-160 IP	0100781	5	160	49	16	8	3.0	2.5	12	3.0	1.8	1.6	160
2430 D-200 IP	0100804	5	200	72	17	9	4.0	2.5	12	3.0	1.8	1.6	170



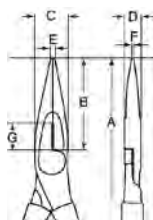
SNIPE NOSE PLIERS

2430S








SNIPE NOSE PLIERS



IEC 60900  1000V

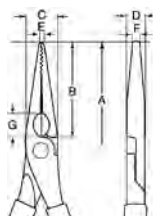


- Insulated snipe nose pliers
- ISO 5745, IEC 60900
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, plastic injected handles
- Slim semicircular shaped and serrated jaws
- Sharp edges for cutting softer material such as copper and plastic insulated wire
- Tips give a good grip and improved accessibility in confined spaces






			A mm	B mm	C mm	D mm	E mm	F mm	G mm	 Cu mm	 Fe mm	 Fe+ mm	 g
2430 S-200	0033010	3	200	72	17	9	4	2.5	12	3.0	1.8	1.6	170

2719SB/2457B/2456AB

SNIPE NOSE PLIERS

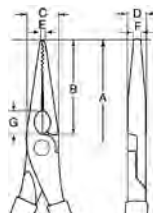


- ISO 5745
- Finish: Nickel-chrome plated, fine-polished, anti-corrosion treated
- Material: Vanadium-extra, handles are orange, transparent cellulose acetate
- Serrated jaws






			A mm	B mm	C mm	D mm	E mm	F mm	G mm	 Fe mm	 g
2719 SB	1381189	1	140	38.5	15.0	8	3	1.5	12	1.25	125
2457 B	1063221	1	160	49.0	16.0	8	3	2.0	12	1.5	125
2456 AB	1063122	1	200	71.5	16.5	9	3	2.5	12	2.0	180

2457/2456A

SNIPE NOSE PLIERS



- ISO 5745
- Finish: Nickel-chrome plated, fine-polished, anti-corrosion treated
- Material: Vanadium-extra, PVC coated handles
- Serrated jaws

			A mm	B mm	C mm	D mm	E mm	F mm	G mm	 Fe mm	 g
2457	1063214	1	160	50.0	16	8	3	1.5	12.5	1.5	105
2456 A	1063115	1	200	74.5	17	9	3	2.5	14.0	2.0	150

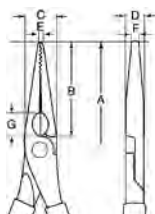


2457VDE/2456AVDE

SNIFE NOSE PLIERS



- Insulated snipe nose pliers
- ISO 5745, IEC 60900
- Finish: Nickel and chrome plated, fine-polished
- Material: Vanadium-extra
- Handles are red cellulose acetate
- Serrated jaws



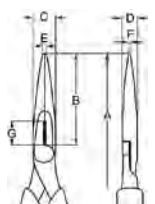
			A mm	B mm	C mm	D mm	E mm	F mm	G mm		
2457 VDE	1498375	1	160	49	15.5	8	4	2.0	12	2.0	130
2456 AVDE	1598082	1	200	76	17.5	9	3	2.5	14	2.0	180

2470G

SNIFE NOSE PLIERS



- ISO 5745
- Finish: Polished and lacquered for extra rust protection
- Material: High performance alloy steel, 2-component handles



			A mm	B mm	C mm	D mm	E mm	F mm	G mm				
2470 G-160	0116188	5	165	48	18	9	3	2	48	3.0	1.5	1.0	160
2470 G-200	0116195	5	210	71	22	11	4	3	71	3.0	1.5	1.0	190

158-N

SNIFE NOSE PLIER, LONG



- Finish: Fine-polished, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Extra long slim shaped serrated jaws
- Accurately machined jaws provide a sure grip on the work piece
- Tips give good grip and improved accessibility in confined spaces

158-N	8277239	12	280	265

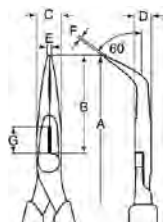


SNIPE NOSE PLIERS, BENT TIP

2427G

SNIPE NOSE PLIERS, 60°

ergo®



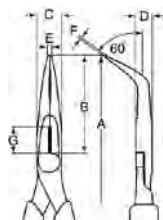
- Snipe nose pliers with bent tips angled at 60° developed according to the scientific ERGO™ process
- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Slim semicircular shaped and serrated jaws
- Sharp edges for cutting softer material such as copper and plastic insulated wire
- Tips give a good grip and improved accessibility in confined spaces
- Equipped with a return spring featuring an on/off function
- IP: Industrial packed

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	G mm	 Cu mm	 Fe mm	 Fe+ mm	 g
2427 G-160	0100408	5	160	46	17	9	2	2	12	3.0	1.8	1.6	160
2427 G-200	0100415	5	200	70	17	9	2	2	12	3.0	1.8	1.6	170
2427 G-160 IP	0100743	5	160	46	17	9	2	2	12	3.0	1.8	1.6	160
2427 G-200 IP	0100750	5	200	70	17	9	2	2	12	3.0	1.8	1.6	170

2427GC

SNIPE NOSE PLIERS, 60°

ergo®



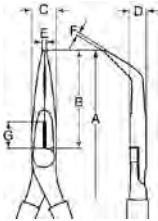
- Snipe nose pliers with bent tips angled at 60° developed according to the scientific ERGO™ process
- ISO 5745
- Finish: Chrome plated, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Slim semicircular shaped and serrated jaws
- Sharp edges for cutting softer material such as copper and plastic insulated wire
- Tips give a good grip and improved accessibility in confined spaces
- Equipped with a return spring featuring an on/off function
- IP: Industrial packed

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	G mm	 Cu mm	 Fe mm	 Fe+ mm	 g
2427 GC-160IP	0102051	5	160	46	17	9	2	2	12	3.0	1.8	1.6	160
2427 GC-200IP	0102075	5	200	70	17	9	2	2	12	3.0	1.8	1.6	170



2427D

SNIPER NOSE PLIERS, 60°



- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Slim semicircular shaped and serrated jaws
- Sharp edges for cutting softer material such as copper and plastic insulated wire
- Tips bent at 60° that give a good grip and improved accessibility in confined spaces

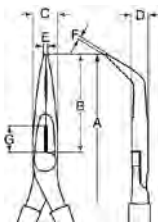
			A mm	B mm	C mm	D mm	E mm	F mm	G mm	Cu mm	Fe mm	Fe+ mm	g
2427 D-160	0032846	5	160	46	17	9	2	2	12	3.0	1.8	1.6	160
2427 D-200	0169030	5	200	10	17	9	2	2	12	3.0	1.8	1.6	170

2427S

SNIPER NOSE PLIERS, 60°



IEC 60900 1000V

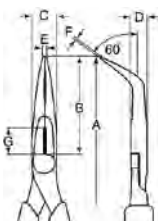


- Insulated snipe nose pliers with a tip angled at 60°
- ISO 5745, IEC 60900
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, plastic injected handles
- Sharp edges for cutting softer material such as copper and plastic insulated wire
- Equipped with a return spring featuring an on/off function

			A mm	B mm	C mm	D mm	E mm	F mm	G mm	Cu mm	Fe mm	Fe+ mm	g
2427 S-200	0033027	3	200	70	17	9	2	2	12	3.0	1.8	1.6	170

2477G-200

SNIPER NOSE PLIERS, 60°



- ISO 5745
- Finish: Lacquered and polished for extra rust protection
- Material: High performance alloy steel, 2-component handles

			A mm	B mm	C mm	D mm	E mm	F mm	G mm	Cu mm	Fe mm	Fe+ mm	g
2477 G-200	0116201	5	210	70	22	11	4	3	70	3.0	1.5	1.0	185



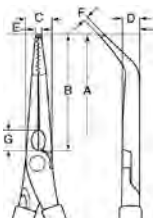
SNIPE NOSE PLIERS, BENT TIP

2456BB

SNIPE NOSE PLIERS, 45°



- ISO 5745
- Finish: Nickel-chrome plated, fine-polished, anti-corrosion treated
- Material: Vanadium-extra, handles are orange, transparent cellulose acetate
- Serrated jaws bent at 45°



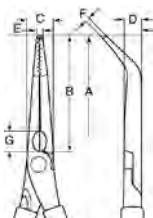
			A	B	C	D	E	F	G		
2456 BB	731415	1	mm	mm	mm	mm	mm	mm	mm	Fe+ mm	g
	1063160		195	69	17.5	9	3	2.5	13	2.0	180

2456B

SNIPE NOSE PLIERS, 45°



- ISO 5745
- Finish: Nickel-chrome plated, fine-polished, anti-corrosion treated
- Material: Vanadium-extra, PVC coated handles
- Serrated jaws bent at 45°



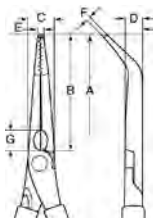
			A	B	C	D	E	F	G		
2456 B	731415	1	mm	mm	mm	mm	mm	mm	mm	Fe+ mm	g
	1063153		200	71	17.5	9	3	2.5	13	2.0	150

2456BVDE

SNIPE NOSE PLIERS, 45°



- Insulated snipe nose pliers with tips bent at 45°
- ISO 5745, IEC 60900
- Finish: Nickel and chrome plated, fine-polished
- Material: Vanadium-extra
- Handles are red cellulose acetate
- Serrated jaws



			A	B	C	D	E	F	G		
2456 BVDE	731415	1	mm	mm	mm	mm	mm	mm	mm	Fe+ mm	g
	1598167		210	69	17.5	9	3	2.5	13	2.0	210



158-NB

SNIPER NOSE PLIERS LONG, BENT TIP, 35°



- Finish: Fine-polished, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Extra long slim shaped tips bent at 35° with serrated jaws
- Accurately machined jaws provide a sure grip on the work piece
- Tips give good grip and improved accessibility in confined spaces

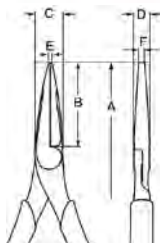
158-NB	731151 8277246	12	270 mm	265 g

MACHINISTS PLIERS



2477AB

MACHINISTS PLIERS

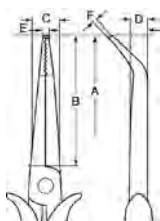


- ISO 5745
- Finish: Nickel and chrome plated, fine-polished
- Material: Vanadium-extra, handles with cellulose acetate coating
- Straight, pointed serrated jaws
- Tips give good grip and improved accessibility in confined spaces
- Particularly suited to precision work

			A mm	B mm	C mm	D mm	E mm	F mm	
2477 AB	731415 1063825	1	200	78	18	9	2.5	2.5	180

2477BB

MACHINISTS PLIERS



- ISO 5745
- Finish: Nickel and chrome plated, fine-polished
- Material: Vanadium-extra, handles with cellulose acetate coating
- Pointed serrated jaws bent at 45°
- Tips give good grip and improved accessibility in confined spaces
- Particularly suited to precision work

			A mm	B mm	C mm	D mm	E mm	F mm	
2477 BB	731415 1063849	1	195	73.5	16.5	9	3	2.5	190

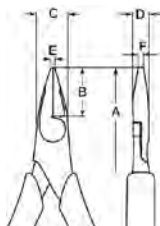


FLAT NOSE PLIERS

2420G

FLAT NOSE PLIERS

ergo®



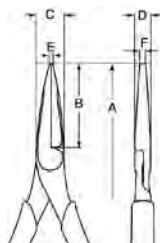
- Short flat nose pliers developed according to the scientific ERGO™ process
- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Tips give a good grip and improved accessibility in confined spaces
- Particularly suited for gripping flat material
- Equipped with a return spring featuring an on/off function

			A mm	B mm	C mm	D mm	E mm	F mm	
2420 G-125	0102525	5	125	23	16	7	2	4	120

2421G

FLAT NOSE PLIERS

ergo®



- Long flat nose pliers developed according to the scientific ERGO™ process
- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Tips give a good grip and improved accessibility in confined spaces
- Particularly suited for gripping flat material
- Equipped with a return spring featuring an on/off function
- IP: Industrial packed

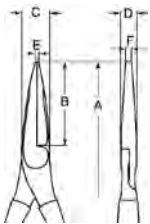
			A mm	B mm	C mm	D mm	E mm	F mm	
2421 G-140	0102532	5	140	39	14.5	8.0	2	4.0	120
2421 G-160	0102549	5	160	49	16.5	8.5	3	5.0	170
2421 G-180	0102556	5	180	64	17.0	8.5	3	6.5	180
2421 G-140IP	0102006	5	140	39	14.5	8.0	2	4.0	120
2421 G-160 IP	0100576	5	160	49	16.5	8.5	3	5.0	170
2421 G-180 IP	0100583	5	180	64	17.0	8.5	3	6.5	180







2421GC

FLAT NOSE PLIERS

ergo®

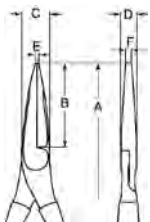


- Long flat nose pliers developed according to the scientific ERGO™ process
- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Tips give a good grip and improved accessibility in confined spaces
- Particularly suited for gripping flat material
- Equipped with a return spring featuring an on/off function





			A mm	B mm	C mm	D mm	E mm	F mm	
2421GC-160	0123902	5	160	49	16.5	8.5	3	5.0	170

2421D

FLAT NOSE PLIERS

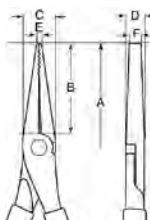


- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Tips give a good grip and improved accessibility in confined spaces
- Particularly suited for gripping flat material
- IP: Industrial packed





			A mm	B mm	C mm	D mm	E mm	F mm	
2421 D-160	0032594	5	160	49	16.5	8.5	3	5.0	150
2421 D-140IP	0101979	5	140	39	14.5	8.0	2	4.0	120
2421 D-160IP	0101986	5	160	49	16.5	8.5	3	5.0	150
2421 D-180IP	0101993	5	180	64	17.0	8.5	3	6.5	160

2718B/2458B

FLAT NOSE PLIERS



- ISO 5745
- Finish: Nickel-chrome plated, fine-polished, anti-corrosion treated
- Material: Vanadium-extra, handles are orange, transparent cellulose acetate
- Serrated jaws

			A mm	B mm	C mm	D mm	E mm	F mm	
2718 B	1067380	1	140	40	13.0	7.5	2.5	4	95
2458 B	1063269	1	180	62	17.5	9.0	3.5	6	170



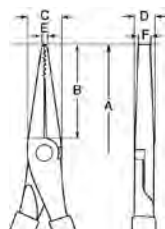
FLAT NOSE PLIERS

2724B/2694B

FLAT NOSE PLIERS



- ISO 5745
- Finish: Nickel-chrome plated, fine-polished, anti-corrosion treated
- Material: Vanadium-extra, handles are orange, transparent cellulose acetate
- Serrated short jaws



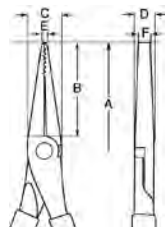
	 731415		A mm	B mm	C mm	D mm	E mm	F mm	 g
2724 B	1067601	1	125	22.0	14	7.5	2	4	120
2694 B	1066826	1	160	41.5	13	9.0	4	7	160

2718

FLAT NOSE PLIERS



- ISO 5745
- Finish: Nickel-chrome plated, fine-polished, anti-corrosion treated
- Material: Vanadium-extra, PVC coated handles
- Serrated jaws



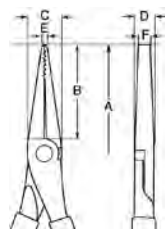
	 731415		A mm	B mm	C mm	D mm	E mm	F mm	 g
2718	1067359	1	140	40	13.5	7.5	3.5	5	80

2694VDE/2458VDE

FLAT NOSE PLIERS



- Insulated flat nose pliers
- ISO 5745, IEC 60900
- Finish: Nickel-chrome plated, fine-polished, anti-corrosion treated
- Material: Vanadium-extra, handles are red, transparent cellulose acetate
- Serrated jaws

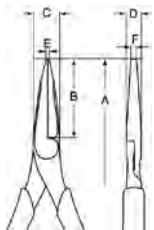


	 731415		A mm	B mm	C mm	D mm	E mm	F mm	 g
2694 VDE	1498023	1	160	49	17	9	3.5	6	165
2458 VDE	1586829	1	180	64	17.5	9	3.5	6	175



2471G

FLAT NOSE PLIERS



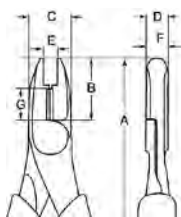
- ISO 5745
- Finish: Lacquered and polished for extra rust protection
- Material: High performance alloy steel 2-component handles

			A mm	B mm	C mm	D mm	E mm	F mm	
2471 G-160	731415	5	165	50	18	9	3	9	160

7835G

CONNECTOR PLIER

ergo®

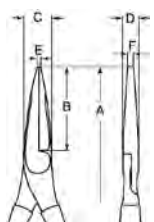


- Connector pliers developed according to the scientific ERGO™ process
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Sharp edges for cutting softer material such as copper and plastic insulated wire
- Equipped with a return spring featuring an on/off function
- To assemble connectors within the telecommunication field

			A mm	B mm	C mm	D mm	E mm	F mm	G mm				
7835 G-160	0050253	10	160	20	16.5	8.5	12	8	6<1/4	3.0	1.8	1.6	160

2713A

ADJUSTING PLIERS



- DIN 5235
- Finish: Nickel-chrome plated, fine-polished, anti-corrosion treated
- Material: Vanadium-extra, PVC coated handles
- Smooth extra thin jaws for bending contact and relay springs

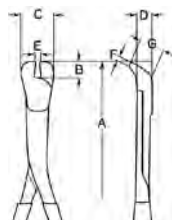
			A mm	B mm	C mm	D mm	E mm	F mm	
2713 A	1067069	1	140	33	14	7.5	1	4	100



FLAT NOSE PLIERS

2979D

NUT PLIER



- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Service pliers for nut and bolt dimensions with 3-13 mm across-flat widths
- Shape: The design of the handles ensures good access in confined spaces
- Serrated and slightly conical gripping surfaces for good grip round the hexagon
- Gripping capacity: 3-13 mm

			A mm	B mm	C mm	D mm	E mm	F mm	G mm	
2979 D-180	731415	5	180	12	23	11.5	5	3	17	200

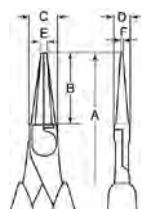


ROUND NOSE PLIERS

2521G

ROUND NOSE PLIERS

ergo®



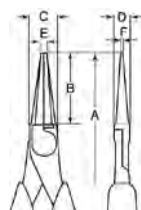
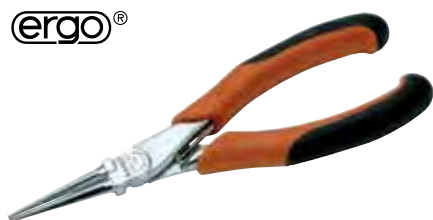
- Round nose pliers developed according to the scientific ERGO™ process
- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Particularly suited to wire bending work
- Equipped with a return spring featuring an on/off function
- IP: Industrial packed

			A mm	B mm	C mm	D mm	E mm	F mm	
2521 G-140	0100293	5	140	37	16	7	3.0	1.5	115
2521 G-160 IP	0100620	5	160	42	16	7	3.0	1.5	120

2521GC

ROUND NOSE PLIERS

ergo®



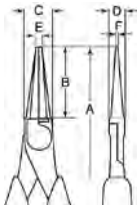
- Round nose pliers developed according to the scientific ERGO™ process
- ISO/DIN 5745
- Finish: Chrome plated, anti-corrosion treated
- Material: Chrome-vanadium. ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Particularly suited to wire bending work
- Equipped with a return spring featuring an on/off function

			A mm	B mm	C mm	D mm	E mm	F mm	
2521GC-160	0127146	5	160	42	16	7	3.0	1.5	410







2521D

ROUND NOSE PLIERS

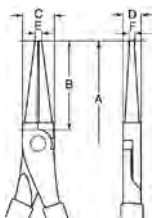


- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Particularly suited to wire bending work





	 731415		A mm	B mm	C mm	D mm	E mm	F mm	 g
2521 D-140	0032907	5	140	37	16	7	3.0	1.5	100
2521D-160	0127139	5	160	42	16	7	3.0	1.5	120

2727B/2698B

ROUND NOSE PLIERS

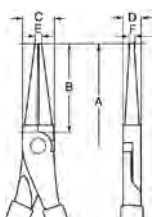


- Finish: Nickel-chrome plated, anti-corrosion treated, fine-polished
- Material: Vanadium-extra, handles are cellulose acetate
- Particularly suited to wire bending work
- 2698B with short tips

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	 g
2727 B	1067731	1	140	38	15	8	4	2	120
2698 B	1066888	1	160	30	15	8	4	2	150

2727

ROUND NOSE PLIERS



- ISO 5745
- Finish: Nickel-chrome plated, anti-corrosion treated, fine-polished
- Material: Vanadium-extra, PVC coated handles
- Particularly suited to wire bending work
- With short tips

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	 g
2727	1067700	1	140	28	15	8	4.5	2	90



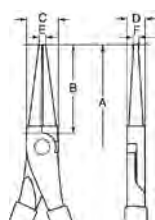
ROUND NOSE PLIERS

2698VDE

ROUND NOSE PLIERS



- Insulated round nose pliers
- ISO 5745, IEC 60900
- Finish: Nickel-chrome plated, anti-corrosion treated, fine-polished
- Material: Vanadium-extra, handles are red cellulose acetate
- Particularly suited to wire bending



			A mm	B mm	C mm	D mm	E mm	F mm	
2698 VDE	731415	1	160	30	15	8	4	2	150



WIRE STRIPPERS

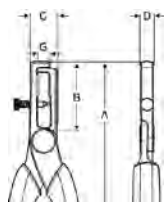
2223G

WIRE STRIPPERS

ergo®



- Wire stripping pliers developed according to the scientific ERGO™ process
- For stripping copper cables up to 5 mm
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Equipped with a return spring featuring an on/off function



			A mm	B mm	C mm	D mm	G mm		AWG	
2223 G-150	0113651	5	167	46	15	8	8	0.5-5	4-23	170

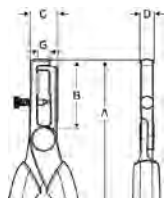
2223GC

WIRE STRIPPERS

ergo®



- Wire stripping pliers developed according to the scientific ERGO™ process
- For stripping copper cables up to 5 mm
- Finish: Chrome plated, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- Equipped with a return spring featuring an on/off function



			A mm	B mm	C mm	D mm	G mm		AWG	
2223GC-150	0123919	5	167	146	15	8	8	0.5-5	4-23	170

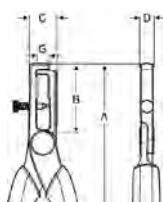


2223D

WIRE STRIPPERS



- For stripping copper cables up to 5 mm
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles



			A mm	B mm	C mm	D mm	G mm		AWG	
2223 D-150	0033591	5	160	46	15	8	8	0.5-5	4-23	140

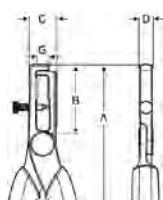
2223S

WIRE STRIPPERS



- Insulated wire stripping pliers, for copper cables up to 5 mm
- IEC 60900
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel, plastic injected handles

IEC 60900



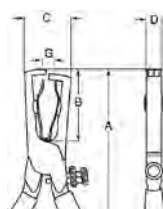
			A mm	B mm	C mm	D mm	G mm		AWG	
2223 S-150	0032983	3	167	46	15	8	8	0.5-5	4-23	170

3417NFB

WIRE STRIPPERS



- Finish: Nickel-chrome plated, anti-corrosion treated, fine-polished
- Material: Vanadium-extra, handles are orange cellulose acetate



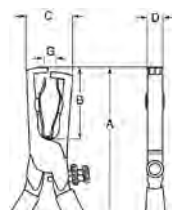
			A mm	B mm	C mm	D mm	G mm		AWG	
3417 NF B	1072216	1	160	38	15	9	6.0	0.5-5	4-23	160



WIRE STRIPPERS

3417NF

WIRE STRIPPERS

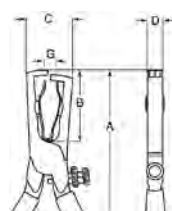


- Finish: Nickel-chrome plated, anti-corrosion treated, fine-polished
- Material: Vanadium-extra, PVC coated handles

			A	B	C	D	G		AWG	
3417 NF	731415	1	160	38	15	9	6.0	0.5-5	4-23	150

3417NFVDE

WIRE STRIPPERS



- Insulated wire stripping pliers
- IEC 60900
- Finish: Nickel-chrome plated, anti-corrosion treated, fine-polished
- Material: Vanadium-extra, handles of red cellulose acetate

			A	B	C	D	G		AWG	
3417 NF VDE	731415	1	160	38	15	9	6.0	0.5-5	4-23	180

3419A

AUTOMATIC WIRE-STRIPPING PLIERS



- For conductors with PVC insulation of all degrees
- Precise stripping without damaging the cables, even in confined spaces where the conductors are difficult to reach
- The blades automatically adjust to the respective conductor cross section - from 0.08 to 1.00 mm² (AWG 28-17)
- Built-in wire cutter for conductors up to 1.00 mm², safe, with hand protection
- Adjustable stripping length from 2.5 to 7.0 mm

3419 A	731415	1	110







3419B

ELECTRICIAN'S WIRE-STRIPPING PLIERS



- For stripping and cutting of wire and cable 0.1 - 6.0 mm, such as:- PVC thick insulation of all hardness- Stranded wires, for thin flat ribbon cables also multiple wires in one operation- Double insulated cable, in two steps without adjustment
- Adjustment of the insulation strip length from 3 - 16 mm (0.12 - 0.65 inches)
- Light, almost unbreakable casing made of fibreglass reinforced polyamide, resistant to chemicals and corrosion
- The wire cutter should be used only for copper and aluminium wire
- No. 3419EB Replacement blade

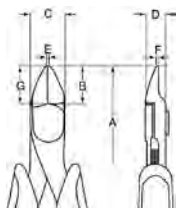
	 731415		
3419 B	1812416	1	145
3419 EB	1812621	1	6

FINE MECHANICAL CUTTERS AND PLIERS









4130, 4131

SIDE CUTTERS

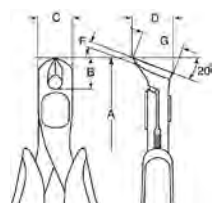


- Compact side cutting pliers developed according to the scientific ERGO™ process
- ISO 5749
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- CNC machine grinding guarantees edge angle accuracy
- Equipped with a return spring
- For fine mechanical, telecommunication and electronics industry

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	G mm			
4130	0100019	3	120	9	11	6.8	0.5	0.9	10	0.3-1.5	Micro	60
4131	0100026	3	120	9	11	6.8	0.5	0.9	10	0.3-1.5	Flush	60



4231

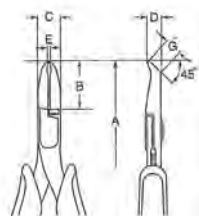


OBLIQUE CUTTERS

- Compact oblique cutting pliers developed according to the scientific ERGO™ process
- ISO 5748
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- CNC machine grinding guarantees edge angle accuracy
- 20° cutting angle
- Equipped with a return spring
- For fine mechanical, telecommunication and electronics industry

			A	B	C	D	F	G			
4231	0100033	3	119	9	13	15	0.5	15	0.3-1.25	Flush	55

4239

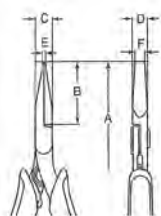


OBLIQUE CUTTERS

- Compact oblique cutting pliers developed according to the scientific ERGO™ process
- ISO 5748
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- CNC machine grinding guarantees edge angle accuracy
- 45° cutting angle
- Equipped with a return spring
- For fine mechanical, telecommunication and electronics industry

			A	B	C	D	E	F	G			
4239	0100088	3	129	19	9	7	3.0	1.5	5.5	0.3-1.0	Flush	60

4430



FLAT NOSE PLIERS

- Compact flat nose pliers developed according to the scientific ERGO™ process
- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- CNC machine grinding guarantees accuracy
- Equipped with a return spring
- For fine mechanical, telecommunication and electronics industry
- Smooth jaws

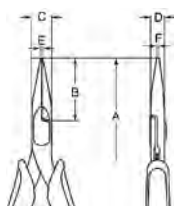
			A	B	C	D	E	F	
4430	0100040	3	135	26	9	7	1.0	4.0	65



4830, 4831

SNIPE NOSE PLIERS

ergo®



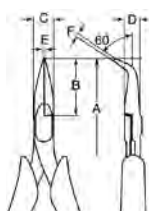
- Compact snipe nose pliers developed according to the scientific ERGO™ process
- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- CNC machine grinding guarantees accuracy
- Equipped with a return spring
- For fine mechanical, telecommunication and electronics industry
- 4830: Smooth jaws
- 4831: Serrated jaws

			A mm	B mm	C mm	D mm	E mm	F mm	
4830	0100057	3	135	25	9	7	1.0	1.0	60
4831	0103393	3	135	25	9	7	1.0	1.0	60

4833

SNIPE NOSE PLIERS, BENT TIP 60°

ergo®



- Compact snipe nose pliers with bent tip developed according to the scientific ERGO™ process
- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- CNC machine grinding guarantees accuracy
- Equipped with a return spring
- Tip bent at 60°
- For fine mechanical, telecommunication and electronics industry
- Smooth jaws

			A mm	B mm	C mm	D mm	E mm	F mm	
4833	0100064	3	130	23	9	7	1.0	1.0	60

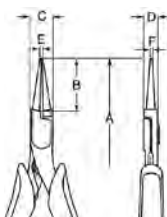


FINE MECHANICAL CUTTERS AND PLIERS

4530

ROUND NOSE PLIERS

ergo®



- Compact round nose pliers developed according to the scientific ERGO™ process
- ISO 5745
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles with 2-component combination, thermoplastic surface on tough polypropylene which gives superior grip
- CNC machine grinding guarantees accuracy
- Equipped with a return spring
- For fine mechanical, telecommunication and electronics industry

			A	B	C	D	E	F	
4530	0100095	3	mm	mm	mm	mm	mm	mm	g
			135	22	9	7	1.6	0.8	60













9733

FINE MECHANICAL CUTTERS AND PLIERS SET

ergo®



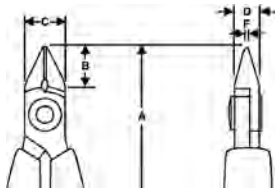
- Set of fine mechanical cutters and pliers packed in a wallet

	 731415			 g
9733	0103256	1	215x215x30	680
4130/4131 120 mm Micro/Flush		4231 119 mm		
4239 129 mm		4430 135 mm		
4830 135 mm		4833 130 mm, 60°		
4530 135 mm				



2646M - 2649

DIAGONAL CUTTERS OVAL HEAD

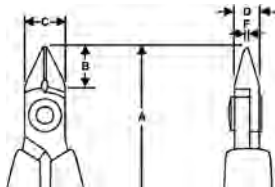


- Material: High performance alloy steel
- Mirror polished
- Numerically controlled machine grinding guarantees edge angle accuracy and contact; increases reliability and consistency
- Precision induction hardened edges 63-65 HRC
- Screw joint that minimizes friction and maximizes alignment of cutting edges
- Handles in synthetic material with return spring
- The cutting capacity that is given is for copper wire
- 2646RK with lead catcher

			A mm	B mm	C mm	D mm	F mm			
731415										
2646 M	1487928	1	108.0	8.0	8.0	5	0.8	0.1-0.8	Ultra	44
2646 R	1304706	1	110.0	10.0	10.0	6	0.8	0.2-1.25	Micro	46
2646 RK	1496678	1	110.0	10.0	10.0	6	0.8	0.2-1.25	Micro	46
2646 RA	1834838	1	110.0	10.0	10.0	6	0.8	0.1-1.0	Ultra	46
2666	0058006	1	112.5	12.5	12.5	6	1.2	0.3-1.6	Micro	50
2649	0058013	1	125.0	16.0	16.0	8	1.6	0.4-2.0	Micro	88

2646 - 2648A

DIAGONAL CUTTERS TAPERED HEAD



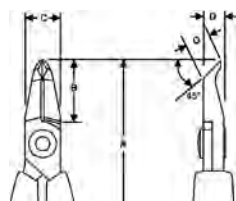
- Material: High performance alloy steel
- Mirror polished
- Numerically controlled machine grinding guarantees edge angle accuracy and contact; increases the tools reliability and consistency
- Precision induction hardened edges 63-65 HRC
- Screw joint that minimizes friction and maximizes alignment of cutting edges
- Handles in synthetic material with return spring
- The cutting capacity that is given is for copper wire
- 2646K, 2646AK, 2666FKK with lead catcher

			A mm	B mm	C mm	D mm	F mm			
731415										
2646	1304638	1	110.0	10.0	10.0	6	0.8	0.2-1.25	Micro	46
2646 K	1495862	1	110.0	10.0	10.0	6	0.8	0.2-1.25	Micro	46
2646 A	1304645	1	110.0	10.0	10.0	6	0.8	0.1-1.0	Ultra	46
2646 AK	1396619	1	110.0	10.0	10.0	6	0.8	0.1-1.0	Ultra	46
2666 FK	1066079	1	112.5	12.5	12.5	6	1.2	0.2-1.25	Ultra	49
2666 FKK	1496593	1	112.5	12.5	12.5	6	1.2	0.2-1.25	Ultra	49
2648	1304713	1	125.0	16.0	16.0	8	1.6	0.4-2.0	Micro	88
2648 A	1304720	1	125.0	16.0	16.0	8	1.6	0.3-1.6	Ultra	88



2787F

OBLIQUE CUTTER 45° LONG HEAD

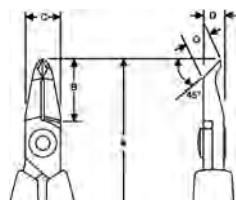


- Material: High performance alloy steel
- Mirror polished
- Numerically controlled machine grinding guarantees edge angle accuracy and contact; increases reliability and consistency
- Precision induction hardened edges 63-65 HRC
- Screw joint that minimizes friction and maximizes alignment of cutting edges
- Handles in synthetic material with return spring
- Ideal for rework and close assembly needs
- The cutting capacity given is for copper wire

			A mm	B mm	C mm	D mm	G mm			
2787 F	1474270	1	117.5	18	10	6	6.7	0.2-1.0	Flush	51

2787G

OBLIQUE CUTTER 45° LONG HEAD RELIEVED

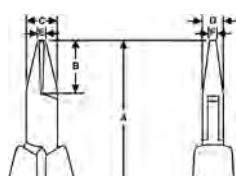


- Material: High performance alloy steel
- Mirror polished
- Numerically controlled machine grinding guarantees edge angle accuracy and contact; increases reliability and consistency
- Precision induction hardened edges 63-65 HRC
- Screw joint that minimizes friction and maximizes alignment of cutting edges
- Handles in synthetic material with return spring
- Ideal for rework and close assembly needs
- The cutting capacity given is for copper wire

			A mm	B mm	C mm	D mm	G mm			
2787 G	0058020	1	117.5	18	10	6	6.7	0.2-0.8	Flush	51

2656/2656A

END CUTTERS



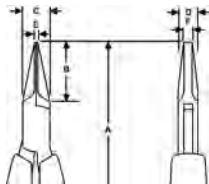
- Material: High performance alloy steel
- Mirror polished
- Numerically controlled machine grinding guarantees edge angle accuracy and contact; increases reliability and consistency
- Precision induction hardened edges 58-60 HRC
- Screw joint that minimizes friction and maximizes alignment of cutting edges
- Handles in synthetic material with return spring
- Miniature end cutter for use in confined spaces
- The cutting capacity given is for copper wire

			A mm	B mm	C mm	D mm	E mm	F mm			
2656	1304737	1	115	15	9	6	3.2	4	0.35 - 0.8	Micro	54
2656 A	1304744	1	115	15	9	6	3.2	4	0.35 - 0.8	Flush	54



2646MF

FLAT NOSE PLIERS

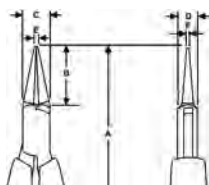


- Material: High performance alloy steel
- Mirror polished
- Numerically controlled machine grinding guarantees edge angle accuracy and contact; increases reliability and consistency
- Screw joint that minimizes friction and maximizes alignment of the jaws
- Handles in synthetic material with return spring
- 20 mm smooth gripping surface with rounded edges

			A mm	B mm	C mm	D mm	E mm	F mm	
2646 MF	1573683	1	120	20	9	6	1.2	3.2	53

2646MT

ROUND NOSE PLIERS

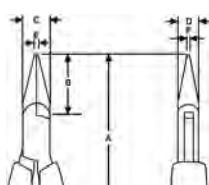


- Material: High performance alloy steel
- Mirror polished
- Numerically controlled machine grinding guarantees edge angle accuracy and contact; increases reliability and consistency
- Screw joint that minimizes friction and maximizes alignment of the jaws
- Handles in synthetic material with return spring
- Round jaws with no sharp edges

			A mm	B mm	C mm	D mm	E mm	F mm	
2646 MT	0058037	1	120	20	9	6	1.8	0.9	54

2646MS

CHAIN NOSE PLIERS



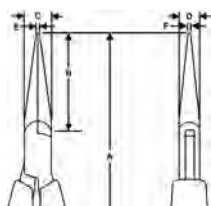
- Material: High performance alloy steel
- Mirror polished
- Numerically controlled machine grinding guarantees edge angle accuracy and contact; increases reliability and consistency
- Screw joint that minimizes friction and maximizes alignment of the jaws
- Handles in synthetic material with return spring
- 20 mm smooth gripping surface with rounded edges

			A mm	B mm	C mm	D mm	E mm	F mm	
2646 MS	1573768	1	120	20	9	6	1.2	0.8	56



2656S

SNIPE NOSE PLIERS

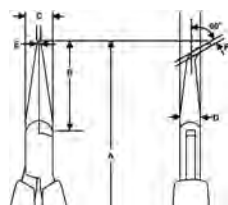


- Material: High performance alloy steel
- Mirror polished
- Numerically controlled machine grinding guarantees edge angle accuracy and contact; increases reliability and consistency
- Screw joint that minimizes friction and maximizes alignment of the jaws
- Handles in synthetic material with return spring
- 32 mm smooth gripping surface with rounded edges

			A mm	B mm	C mm	D mm	E mm	F mm	
2656 S	0058044	1	132	32	9	6	1.2	0.8	60

2656R

SNIPE NOSE PLIERS, BENT TIP



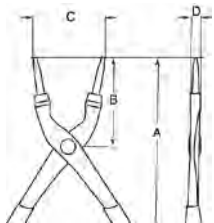
- Material: High performance alloy steel
- Mirror polished
- Numerically controlled machine grinding guarantees edge angle accuracy and contact; increases reliability and consistency
- Screw joint that minimizes friction and maximizes alignment of the jaws
- Handles in synthetic material with return spring
- 29 mm smooth gripping surface angled at 60° with rounded edges

			A mm	B mm	C mm	D mm	E mm	F mm	
2656 R	1473976	1	129	29	9	6	1.2	0.8	59



2800

CIRCLIPS PLIERS INTERNAL

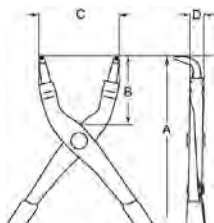


- Pliers without return spring for handling of internal circlips
- DIN 5256
- Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Straight jaws, forged tips

			A mm	B mm	C mm	D mm			
	731415								
2800-140	0121632	3	140	38	18	0.8	8-13	1.2	80
2800-150	0034567	3	150	38	20	10	12-25	1.3	120
2800-180	0034581	3	180	57	23	10	19-60	1.7	185
2800-225	0034604	3	225	69	28	12	40-100	2.2	280
2800-300	0122622	1	310	95	33	14	85-165	3.1	490

2890

CIRCLIPS PLIERS INTERNAL

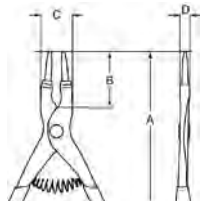


- Pliers without return spring for handling of internal circlips
- DIN 5256
- Black-finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Shape: With 90° offset jaws, forged tips

			A mm	B mm	C mm	D mm			
	731415								
2890-125	0122639	3	127	38	17	9	8-15	0.8	80
2890-140	0034550	3	140	38	19	10	12-25	1.3	120
2890-180	0034574	3	180	57	23	12	19-60	1.8	185
2890-210	0034598	3	210	59	27	14	40-100	2.3	280
2890-300	0122646	1	289	95	33	14	85-165	3.1	490

2900

CIRCLIPS PLIERS EXTERNAL



- Pliers with return spring for handling of external circlips
- DIN 5256
- Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Straight jaws, forged tips

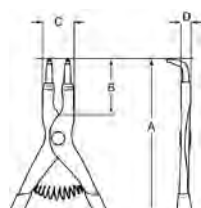
			A mm	B mm	C mm	D mm			
	731415								
2900-140	0121045	3	140	38	18	9	3-10	0.8	80
2900-150	0034499	3	150	38	20	10	10-25	1.3	120
2900-180	0034512	3	180	57	23	11	19-60	1.8	185
2900-215	0034536	3	215	69	31	12	40-100	2.3	280
2900-300	0121076	1	295	95	35	14	85-165	3.1	490









CIRCLIP PLIERS

2990

CIRCLIPS PLIERS EXTERNAL



- Pliers with return spring for handling of external circlips
- DIN 5256
- Black finish, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- Shape: 90° offset jaws, forged tips

	 731415		A mm	B mm	C mm	D mm	 mm	 mm	 g
2990-125	0121250	3	127	38	18	9	3-10	0.8	80
2990-140	0034482	3	140	38	20	10	10-25	1.3	120
2990-180	0034505	3	180	57	22	10	19-60	1.8	185
2990-200	0034529	3	200	69	27	14	40-100	2.3	280
2990-300	0121267	1	289	95	35	11	85-165	3.1	490

28-29/S4

CIRCLIPS PLIERS EXTERNAL



- Circlip pliers set in a cardboard box
 - 2800-180: Internal straight tip, Ø 19-60 mm
 - 2890-180: Internal bent tip, Ø 19-60 mm
 - 2900-180: External straight tip, Ø 19-60 mm
 - 2990-180: External bent tip, Ø 19-60 mm

	 731415		 g
28-29/S4	0179688	1	740

2900-180



2800-180



2990-180



2890-180





2928

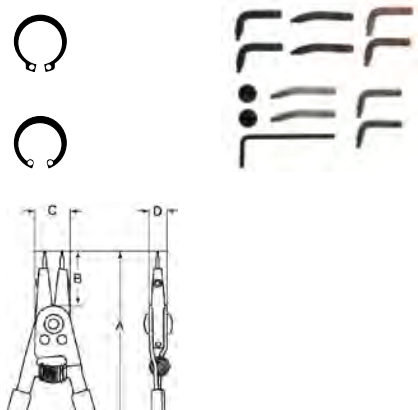
RESETTABLE PLIERS FOR BOTH INTERNAL AND EXTERNAL CIRCLIPS



2928-160



2928-250



- Adjustable pliers that complete the range of existing conventional circlip pliers
- Patented pliers are equipped with interchangeable tips (straight, 15° and 90°) which can easily be adapted for use with internal or external circlips as required
- 5 pairs of tips are supplied with the -160 & -200 and 6 pairs with the -250
- For internal circlips from 8 to 100 mm diameter and for external circlips from 3 to 100 mm
- The 2928-160 covers a range of applications normally requiring up to ten pliers
- Stop mechanism (automatic on the 2928-250 model) for easier use and prevention of damage to circlips from excessive force

			A mm	B mm	C mm	D mm							
731415													
2928-160	0056514	1	160	23.5	21.5	17	7-26	3-26	0.6 0.9 1.2	–	0.9 1.2	120	
2928-200	0056521	1	200	32.0	23.5	20	10-51	7-51	0.9 1.2 1.8	–	0.9 1.2	230	
2928-250	0056538	1	250	36.0	30.0	22	46-102	32-102	–	2.3 2.7 3.0	2.3 2.7 3.0	505	

9938

CIRCLIP PLIERS, SET



- Set of three adjustable pliers for both internal and external circlips from the 2928 series: 160 mm, 200 mm and 250 mm
- Patented pliers that are equipped with interchangeable tips (straight, 15° and 90°) which can easily be adapted for use with internal or external circlips as required
- 5 pairs of tips are supplied with the -160 & -200 and 6 pairs with the -250
- The pliers can be used for internal circlips from 8 to 100 mm diameter and for external circlips from 3 to 100 mm
- This set covers a range of applications previously requiring up to ten conventional pliers
- Stop mechanism (automatic on the 2928-250 model) for easier use and prevention of damage to circlips from excessive force

9938	0056491	1	1640

2928-160
8-25, 3-25



2928-200
10-48, 10-48



2928-250
31-100, 31-100





CIRCLIP PLIERS

2928-1 - 4

SPARE TIPS

- Spare tips for the 2928 series of resettable circlip pliers

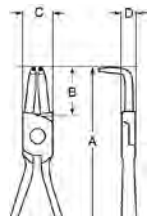
731415				mm 0°	mm 15°	mm 90°	g
2928-1	0056583	1	2928-160	0.6 0.9 1.2		0.9 1.2	10
2928-2	0056590	1	2928-200	0.9 1.2 1.8		0.9 1.2	15
2928-3	0056606	1	2928-250		2.3 2.7 3.0		45
2928-4	0056613	1	2928-250			2.3 2.7 3.0	60

2461

CIRCLIP PLIERS INTERNAL



- Circlip pliers internal
- ISO 5256
- Chrome plated, fine-polished, black finished tips
- Material: High performance alloy steel
- Straight jaws, for internal circlips



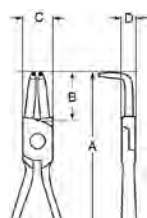
			A	B	C	D			
731415			mm	mm	mm	mm	mm	mm	g
2461 C8	1063481	1	140	31.5	18.5	8.0	8-25	1.0-2.0	85
2461 C19	1063498	1	180	40.0	21.5	9.5	19-60	2.0-2.5	140
2461 C40	1063504	1	255	55.0	22.0	11.0	40-100	2.5-3.5	230

2463

CIRCLIP PLIERS INTERNAL



- Circlip pliers internal
- ISO 5256
- Finish: Chrome plated, fine-polished, black finish tips
- Material: High performance alloy steel
- 90° offset jaws for internal circlips

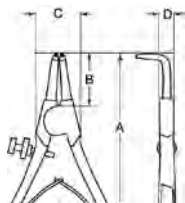


			A	B	C	D			
731415			mm	mm	mm	mm	mm	mm	g
2463 D8	1588878	1	130	20.0	15.0	8.0	8-25	1.0-2.0	85
2463 D19	1063511	1	170	27.5	21.5	9.5	19-60	2.0-2.5	150
2463 D40	1063528	1	210	40.0	22.0	11.0	40-100	2.5-3.5	240



2464

CIRCLIP PLIERS EXTERNAL

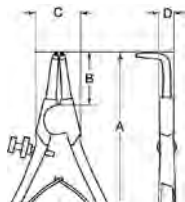


- Circlip pliers for external circlips
- ISO 5254
- Finish: Chrome plated, fine-polished; black finish tips
- Material: High performance alloy steel
- Straight jaws
- Stop screw and opening spring

			A mm	B mm	C mm	D mm			
731415									
2464 A3	1406516	1	120	32	20.0	8.0	3-10	1.0-1.5	95
2464 A10	1063535	1	120	32	20.0	8.0	10-25	1.5-2.0	95
2464 A19	1063542	1	180	40	21.5	9.5	19-60	2.0-2.5	140
2464 A40	1063559	1	210	60	29.5	10.5	40-100	2.5-3.0	260

2466

CIRCLIP PLIERS EXTERNAL

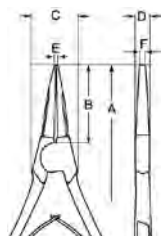


- Circlip pliers external
- ISO: 5254
- Finish: Chrome plated, fine-polished; black finish tips
- Material: High performance alloy steel
- Shape: With 90° offset jaws
- Stop screw and opening spring

			A mm	B mm	C mm	D mm			
731415									
2466 B3	1406868	1	130	20	20	8	3-10	1.0-1.5	100
2466 B10	1063573	1	130	20	20	8	10-25	1.5-2.0	110
2466 B19	1063580	1	165	32	25	9	19-60	2.0-2.5	150
2466 B40	1063597	1	190	44	30	11	40-100	2.5-3.0	250

2460

CIRCLIPS PLIERS SPECIAL



- Pliers for external horseshoe circlips on shafts
- Finish: Chrome plated, fine-polished
- Material: High performance alloy steel
- Opening spring

			A mm	B mm	C mm	D mm	E mm	F mm	
731415									
2460	1063467	1	175	48	22	9.5	3	7	160



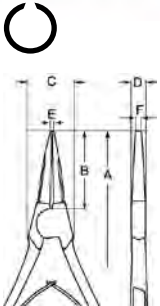
CIRCLIP PLIERS

2465D

CIRCLIPS PLIERS SPECIAL



- Material: High performance alloy steel
- Finish: Nickel and chrome plated surface
- Shape: With jaw for horseshoe circlips on shafts and external snap-rings
- With opening spring



			L mm	A mm	B mm	D mm	
2465D-200	731415	1	200	30	55	2.4	200



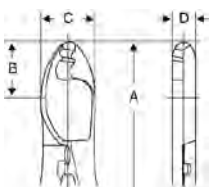
CABLE CUTTERS

2233D

CABLE CUTTERS



- Wire cutting and stripping pliers for copper and aluminium
- Finish: Forged surfaces are black finished and mirror polished
- Material: Carbon steel, PVC coated handles
- IP: Industrial packed



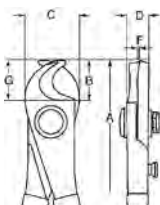
			A mm	B mm	C mm	D mm			
2233 D-160	0114023	5	160	25	25	10	50/35	10	160
2233 D-200	0114030	5	200	28	30	12	70/50	13	280
2233 D-240	0114047	5	240	37	35	14	95/70	16	340
2233D-160IP	0114054	10	160	25	25	10	50/35	10	160
2233D-200IP	0114061	5	200	28	30	12	70/50	13	280
2233D-240IP	0114078	5	240	37	35	14	95/70	16	340

2800N-2801N

CABLE CUTTERS



- Large cutting capacity cable cutter with return spring
- Finish: Nickel and chrome plated, anti-corrosion treated, fine-polished
- Material: Vanadium-extra, PVC coated handles
- Specially designed for cutting multi-wire and other flexible conductors
- Not for use with solid conductors
- Cutting capacity: Plastic insulated copper wire

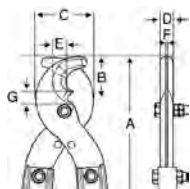


			A mm	B mm	C mm	D mm	F mm	G mm		
2800 N	1318338	1	170	17	28	10	9.0	18	0-10	210
2801 N	1318352	1	230	22	35	13	12.0	27	0-15	425







2520

CABLE CUTTERS

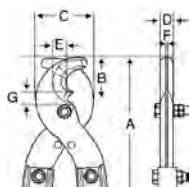


- Cable cutter to cut aluminium or copper cables with or without messenger wire
- Finish: Black finish, handles epoxy painted
- Material: Alloy steel
- For maximum service life only the notched part of blade to be used for ferrous material
- Cutting capacity: 30 mm diameter of Al/Cu with a messenger wire of hard steel of maximum 6 mm diameter
- 2520-SH: Spare blades, screws and nut

			A mm	B mm	C mm	D mm	E mm	F mm	G mm	
2520	0023752	1	550	54	69,5	15	16	8	13	1730
2520-SH	8197506	1	220	54	69.5	15	16	8	13	800

2620-80

CABLE CUTTERS

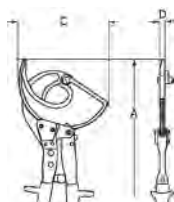


- Cable cutter to cut aluminium or copper cables
- Finish: Black finish, handles epoxy painted
- Material: Alloy steel
- For maximum service life only the notched part of blade to be used for cutting
- Cutting capacity: 42 mm diameter of Al/Cu







			A mm	B mm	C mm	D mm	E mm	F mm	G mm	
2620-80	8200947	1	800	72	80	16	22	8	72	3700

2804-2805

CABLE CUTTERS



- Gradual cutting of cables with an optimum leverage due to a ratcheting mechanism
- Finish: Chrome plated fine-polished, cutting part black finish with red handles
- Material: Special steel, PVC handles
- Excellent handling during cutting, can be unclamped in any cutting position
- Does not cut cables with steel core or steel-armoured cables
- Multiple cables: 2804 up to 240 mm² Cu, 2805 up to 400 mm² Cu
- Cutting capacity:
 - 1 copper wire
 - 2 plastic coated copper or aluminium cables

			A mm	C mm	D mm			
2804	1692698	1	250	50	15	16	32	645
2805-280	1826123	1	280	77	15	-	52	800








CABLE CUTTERS

2804CC

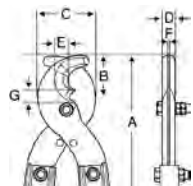


CABLE CUTTERS

- Effortless cutting of single and multi-wire copper/aluminium cable diameters
- Finish: Black finish, black polypropylene handles
- Material: Carbursed alloy steel
- Pliers will be engaged gradually during cutting due to ratcheting mechanism
- Cutting capacity Cu/Al:
 - CC62 up to diameter 62 mm
 - CC80 up to diameter 80 mm





	 731415		 L mm	 g
2804CC62	0122080	1	440	2200
2804CC80	0122097	2	560	3000

2720

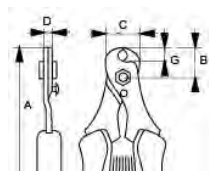


CABLE CUTTERS

- Cutting capacity: 42 mm diameter of aluminium and copper
- Cable cutter to cut steel cables
- Finish: Black finish, handles epoxy painted
- Material: Alloy steel
 - Steel wire 100 kg/mm²: Ø 12 mm
 - Steel wire 150 kg/mm²: Ø 10 mm
 - Solid steel wire 80 kg/mm²: Ø 8 mm
- Spare parts: Blades 2720-SH




	 731415		A mm	B mm	C mm	D mm	E mm	F mm	G mm	 g
2720	0179701	1	600	38	71	17	9	0	8	2800
2720-SH	0179718	1	163	38	71	17	9	0	8	760

2235-160



CABLE CUTTERS

- Lightweight tool designed for cutting solid materials and multi-wire cables
- Finish: Black finish
- Material: Alloy steel, elastomer handles for comfort
- Spring and locking mechanism
- Medium hard wire: Ø 5 mm
- Piano wire: Ø 1.5 mm
- Low carbon steel wire: Ø 4 mm

	 731415		A mm	B mm	C mm	D mm	G mm	 g
2235-160	0179695	1	7	21	12	8	165	165











4559

BOLT CUTTERS



- Material: High performance alloy steel
- Wide range of bolt cutters with cutting capacity up to 15 mm concrete reinforcing rod or 9 mm valve spring steel
- Black finish, anti-corrosion treated
- Forged from precision high-grade steel
- High cutting power even at the start of the cut
- Comfortable handles
- Good accessibility in confined spaces

	 731415		 L mm	 Ø mm	 Ø Fe mm	 Ø Plano mm	 g
4559-12	0113132	1	320	6	5	4	900
4559-18	0024513	8	430	8	7	6	1990
4559-24	0024520	1	600	10	9	8	2860
4559-30	0024537	5	750	13	10	9	3670
4559-36	0024544	1	900	15	12	11	5980
4559-42	0024551	1	1060	15	12	11	8510

4559 JC

BOLT CUTTERS



- Complete spare cutting head for the 4559 range of bolt cutters

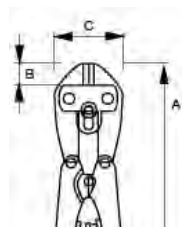
	 731415		 g
4559-12B JC	0113613	1	285
4559-18B JC	0113880	1	600
4559-24B JC	0113897	1	930
4559-30B JC	0113903	1	1260
4559-36B JC	0113910	1	2180
4559-42B JC	0113620	1	3025

4560-210

BOLT CUTTERS



- Material: High performance alloy steel
- Black finish
- Application: Cable cutter to cut steel cables
- Recommended maximum capacity: Steel wire 130 kg/mm²: Ø 1.5 mm
- Cuts rivets, nails, bits, screws, etc



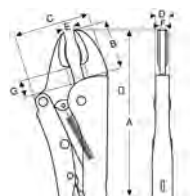
	 731415		A mm	B mm	C mm	 g
4560-210	0178995	1	210	20	75	280



GRIP AND WELDING PLIERS

2951

GRIP

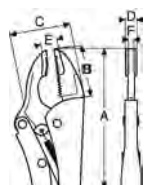


- Finish: Chrome plated for good rust protection
- Shape: Curved jaws for general purpose. Thin, neat jaws for good accessibility
- Application: General purpose. Also good for plumbing and heating work. The cutting edges are good for cutting welding leads etc.
- With cutter

			A mm	B mm	C mm	D mm	E mm	F mm	G mm			
	731415											
2951-140	0124084	1	140	22	47	6,5	4	7.0	4	1.2	30	180
2951-180	0102204	1	180	30	43	10.0	5	10.0	7	2	42	355
2951-250	0102211	1	250	35	54	11.0	6	11.0	11	3	63	540
2951-300	0102228	1	300	46	67	13.5	7	13.5	14	4	75	890

2968

GRIP

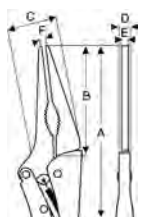


- Finish: Chrome plated for good rust protection
- Benefits: Clamps flat work pieces with maximum contact. Allows more space for work pieces
- Applications: Ideal for holding L, U & T sections in maintenance work
- Features: Broad surface of both jaws. Convex shape of lower jaw

			A mm	B mm	C mm	D mm	E mm	F mm		
	731415									
2968-190	0124091	1	190	50	58	10	13	6	35	370
2968-235	0103850	1	235	53	56	15	6	12	43	590

2952

GRIP



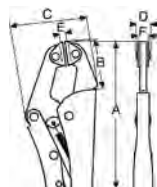
- Finish: Chrome plated for good rust protection
- Features: Long slim jaw design. Curved section
- Benefits: Enables pliers to reach deep into recess areas. Also be used to can hold rounded objects
- Applications: Provides aid when holding, placing or extracting pieces in awkward areas, engines etc.

			A mm	B mm	C mm	D mm	E mm	F mm		
	731415									
2952-165	0103836	1	165	62	27	11	5	4	55	190
2952-235	0103843	1	235	81	41	14	7	5	70	400



2950

PARALLEL GRIP PLIER, SELF ADJUSTING

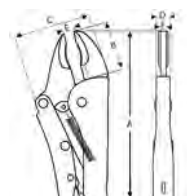


- Finish: Chrome plated for good rust protection
- Shape: Narrow jaw profile, fits in areas where C-Clamps cannot
- Application: Self adjusting parallel grip with swivel pads to grip firmly on any flat or tapered surface

			A mm	B mm	C mm	D mm	E mm	F mm	max mm	
2950-250	731415	1	235	43	73	16	5	6	35	690

2953

SELF GRIP PLIER, CURVED JAWS WITHOUT CUTTER

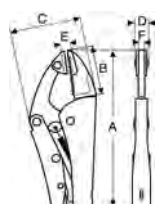


- Finish: Chrome plated for good rust protection
- Shape: Slim design with large opening curved jaws to allow firm hold on all round shapes
- Application: Multipurpose grip for workshops, garages and general maintenance

			A mm	B mm	C mm	D mm	E mm	F mm	
2953-140	0124046	1	140	22	47	6.5	4	7.0	190
2953-200	0124053	1	190	30	43	10.0	5	10.0	390
2953-250	0124060	1	235	35	54	11.0	6	11.0	672
2953-300	0124077	1	300	46	67	13.5	7	13.5	910

2955

PARALLEL PLUS GRIP



- Finish: Chrome plated for good rust protection
- Shape: Parallel jaws with one swivel jaw
- Application: Enables parallel clamping to any size within its capacity
- Fully flat contact makes it perfect for maintenance and repair work. The extra inner jaws also make it possible to grip round work pieces

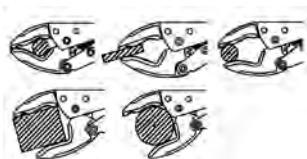
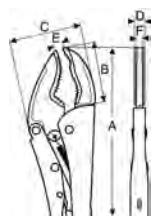
			A mm	B mm	C mm	D mm	E mm	F mm	max mm	
2955-250	0102235	1	250	53	59	12	7	12	45	590



GRIP AND WELDING PLIERS

2957

IDEAL GRIP

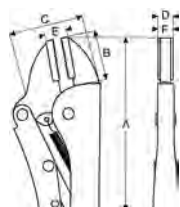


- Finish: Chrome plated for good rust protection
- Shape: Jaws designed for multipurpose
- Application: The configuration of the jaws is ideal for gripping round, flat and square shaped work pieces
- Suitable for plumbers, welders and general mechanics

			A mm	B mm	C mm	D mm	E mm	F mm		
731415										
2957-250	0102259	1	250	46	56	11	10	11	63	550
2957-300	0124251	1	300	73	60	12.5	10	11	63	880

2958

GRIP WITH STRAIGHT JAWS

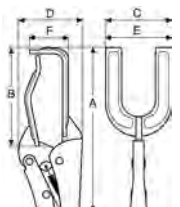


- Finish: Chrome plated for good rust protection
- Shape: Parallel jaws for general purpose. Thin, neat jaws for good accessibility
- Application: General purpose applications

			A mm	B mm	C mm	D mm	E mm	F mm		
731415										
2958-140	0124107	1	135	45	30	9,5	10	6	30	190
2958-200	0124114	1	190	45	58	13	10	6	42	390
2958-250	0102242	1	250	45	73	16	14	12	63	530
2958-300	0124121	1	300	45	79	20	14	12	75	910

2965

WELDING GRIP



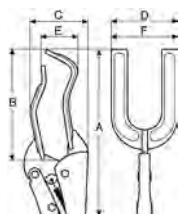
- Finish: Chrome plated for good rust protection
- Shape: U-shaped locking clamp
- Application: Gives powerful grip on two work pieces
- Ideal for assembly and welding work, car repair etc

			A mm	B mm	C mm	D mm	E mm	F mm		
731415										
2965-200	0124152	1	228	67	70	78	70	48	60	960
2965-280	0102266	1	290	87	70	88	70	60	90	950



2966

GRIP FOR TUBE

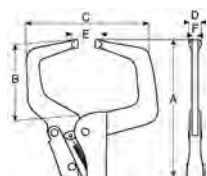


- Finish: Chrome plated body for good rust protection
- Shape: U-shaped locking clamp for pipes and tubes
- Application: Jaws designed to fit on pipes or other round material. Can hold two pipes aligned for obtaining accurate welding
- Ideal for plumbing and general pipe and tube work

			A mm	B mm	C mm	D mm	E mm	F mm	max mm	g
2966-280	0102273	1	280	97	67	50	64	46	100	930

2963

C-CLAMP

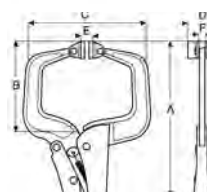


- Finish: Chrome plated body for good rust protection
- Shape: C-shaped locking clamp
- Application: Holds two work pieces together for welding, soldering, gluing, marking off etc

			A mm	B mm	C mm	D mm	E mm	F mm	g
2963-280	0102280	1	280	100	148	12	890	6	700
2963-450	0124138	1	460	265	160	12	165	7	1440
2963-630	0124145	1	580	470	245	13	55	8	3850

2964

PARALLEL C-CLAMP



- Finish: Chrome plated surface for good rust protection
- Shape: C-shaped locking clamp with swivel pads which adjust themselves in parallel to the work piece
- Application: Clamps metal, wood and plastic in a secure way

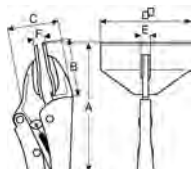
			A mm	B mm	C mm	D mm	E mm	F mm	max mm	g
2964-160	0124183	1	160	57	85	18	4	4	50	270
2964-280	0102297	1	280	113	137	32	6	6	80	770
2964-450	0124190	1	436	249	156	32	6	6	240	970
2964-600	0124206	1	630	430	152	32	6	6	400	1740



GRIP AND WELDING PLIERS

2967

GRIP FOR SHEET METAL

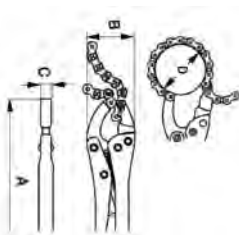


- Finish: Chrome plated body for good rust protection
- Shape: Clamp for sheet metal
- Application: Gives a secure lock onto sheet metal when forming, bending, crimping and manipulating





			A mm	B mm	C mm	D mm	E mm	F mm		
2967-180	0102396	1	180	46	45	80	10	6	45	470

2999

LOCKING PLIER

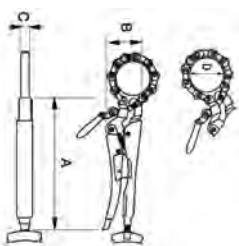


- Finish: Chrome plated for good rust protection
- Shape: Wraps around and holds irregular objects quickly and easily
- Application: Adjusts quickly around any shaped object, even in awkward areas





			A mm	B mm	C mm	D mm	
2999-250	0124169	1	250	75	19	160	900
2999-300	0124176	1	300	80	19	160	1140

2998

CHAIN PIPE CUTTER



- Finish: Chrome plated for good rust protection
- Shape: Perfect for inaccessible areas
- Application: Cuts thin wall pipes (stainless steel, copper, PVC etc.) up to 2.6 mm
- Both cutters have a capacity of cutting pipes between Ø 15-75 mm

			A mm	B mm	C mm	D mm	
2998-250	0124213	1	250	70	28	75	800
2998-300	0124220	1	300	70	28	75	1020

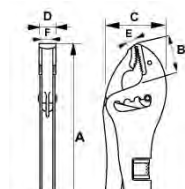


2997

UNIVERSAL GRIP PLIER



Ø 50 mm 46 mm 35 x 35 mm



- Short jaws
- Finish: Chrome plated for good rust protection
- Shape: With flat and convex jaws that can be adjusted in 4 different positions for an increased gripping capacity
- Application: Holds most L, T & U profiles

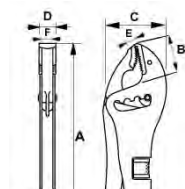
			A mm	B mm	C mm	D mm	E mm	F mm	
2997-250	0124237	1	235	38	58	17	14	15	550

2997

UNIVERSAL GRIP PLIER



Ø 100 mm 85 mm 45 x 45 mm

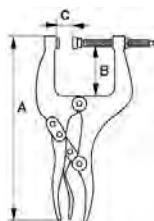


- Extra long jaws with twice as large gripping capacity compared to standard model
- Finish: Chrome plated for good rust protection
- Shape: With flat and convex jaws that can be adjusted in 4 different positions for an increased gripping capacity
- Application: Holds most L, T & U profiles

			A mm	B mm	C mm	D mm	E mm	F mm	
2997-300	0124244	1	255	68	64	17	15	15	700

2949

AUTOMATIC HAND VICES



- Finish: Black finish
- Shape: Locking clamp with movable jaw for increased flexibility
- Application: For production or maintenance applications and general purpose work

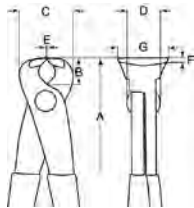
			A mm	B mm	C mm	
2949-190IP	0123926	1	193	30	32	690
2949-200IP	0123940	1	196	30	70	765
2949-240IP	0123957	1	240	62	70	935
2949-250IP	0123971	1	240	62	150	1180



FENCING PLIERS

2339D

END CUTTER/ FENCING PLIERS

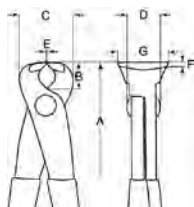


- Finish: Black epoxy powder coated, anti-corrosion treated
- Material: High performance alloy steel, PVC coated handles
- With high leverage design
- For wire twisting and cutting at construction sites (armouring) and to cut medium hard wire used in this application
- IP = Industrial Packed

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	G mm	 Fe mm	 g
2339 D	0032792	3	220	16	28	21	1.0	3.0	21	2.5	320
2339 DIP	0103508	5	220	16	28	22	1.0	3.0	22	2.5	320

2339

END CUTTER/ FENCING PLIERS

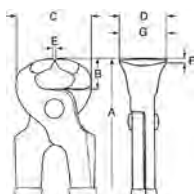


- Finish: Black epoxy powder coated, anti-corrosion treated
- Material: High performance alloy steel
- With high leverage design
- For wire twisting and cutting at construction sites (armouring) and to cut medium hard wire used in this application
- 300 mm size designed for greater leverage
- IP = Industrial Packed

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	G mm	 Fe mm	 g
2339-220IP	0101061	5	220	16	28	22	1.0	3.0	22	2.0	205
2339-250IP	0101078	5	250	16	33	23	1.0	4.0	23	2.5	360
2339-280IP	0101948	5	280	18	33	23	1.5	4.0	23	3.0	420
2339-300IP	0123865	5	300	12	36	21	6	2	6	4.5	465

541D

PINCERS

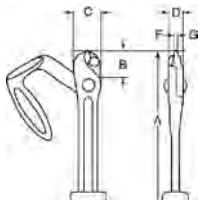


- Finish: Black epoxy powder coated, anti-corrosion treated
- Material: High performance alloy steel, handles plastic coated
- Edges are induction hardened and annealed withstand the high breaking stresses from pulling nails etc

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	G mm	 Fe mm	 g
541 D-150	0032754	5	150	16	45	20.5	1.5	7.0	20.5	2.0	230
541D-180	0127160	5	180	21	52	21.5	2.0	8.0	21.5	2.0	265
541 D-200	0032761	5	200	24	53	23.0	1.5	9.0	23.0	2.5	385
541D-225	0127290	5	225	27	58	26.0	2.0	12.0	26.0	2.5	484
541 D-250	0032778	5	250	20	55	29.0	2.0	12.0	29.0	2.5	630

38

NAIL PULLER

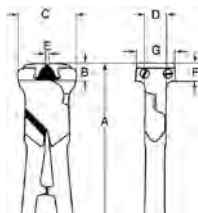


- A robust tool for fast easy removal of nails in crates etc
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- Comfortable handle of malleable cast iron, other parts forged, specially hardened jaws






	 731415		A mm	B mm	C mm	D mm	F mm	G mm	 g
38	0021734	1	450	23	36	18	4.5	4.5	2300

1519D

END CUTTER/ FENCING PLIERS



- Finish: Black finish
- Material: High performance alloy steel
- Extra long handles for high leverage and cutting capacity
- 1519-9 : Spare jaws 2 pcs jaws and screws

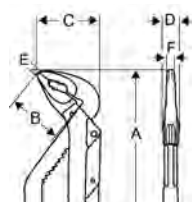
	 731415		A mm	B mm	C mm	D mm	E mm	F mm	G mm	 Piano mm	 g
1519 D	0032747	3	230	10.5	37	13.5	2.5	11.5	25	2.5	450
1519-9	0026074	1									



SLIP JOINT PLIERS

8223 - 8226

ergo®

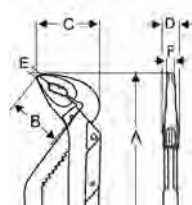


- Slip joint pliers developed according to the scientific ERGO™ process
- ISO 8976
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles in 2-component combination, thermoplastic surface, for comfortable grip, on tough polypropylene core for rigidity
- Hardened jaws
- Teeth designed to ensure grip
- Jaws for flat and pipe shape gripping
- Single thumb button adjustment
- IP: Industrial Packed

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	 max mm	 g
8223	0112685	5	210	35	46	7.0	5	7.0	37	270
8224	0000012	5	250	40	51	8.0	6	8.0	45	350
8225	0000029	5	315	52	63	9.5	7	9.5	55	550
8226	0115853	1	400	60	77	13.0	7	13.0	67	670
8223 IP	0113149	5	210	35	46	7.0	5	7.0	37	270
8224 IP	0101757	5	250	40	51	8.0	6	8.0	45	350
8225 IP	0101764	5	315	52	63	9.5	7	9.5	55	550

8224/8225C

ergo®



SLIP JOINT PLIERS

- Slip joint pliers developed according to the scientific ERGO™ process
- ISO 8976
- Finish: Chrome plated, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles in 2-component combination, thermoplastic surface, for comfortable grip, on tough polypropylene core for rigidity
- Hardened jaws
- Teeth designed to ensure grip
- Jaws for flat and pipe shape gripping
- Single thumb button adjustment
- Industrial packed

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	 max mm	 g
8224CIP	0103607	5	250	40	51	8.0	6	8.0	45	350
8225CIP	0103614	5	315	52	48	9.5	7	9.5	55	550

8231

SLIP JOINT PLIERS



- Slip joint pliers developed according to the scientific ERGO™ process
- ISO 8976
- Finish: Black finish, anti-corrosion treated
- Material: High performance alloy steel
- ERGO™ handles in 2-component combination, thermoplastic surface, for comfortable grip, on tough polypropylene core for rigidity
- Hardened jaws
- Teeth designed to ensure grip
- Jaws for flat and pipe shape gripping
- Extra wide jaw opening combined with a short handle
- Perfect for plumbers and other tradesmen which carry their tools with them
- Single thumb button adjustment
- IP: Industrial Packed

	 731151		A mm	B mm	C mm	D mm	E mm	F mm	 max mm	 g
8231	8266509	5	225	52	63	9.5	7	9.5	51	340
8231 IP	8270285	5	225	52	63	9.5	7	9.5	51	340

7224

SLIP JOINT PLIERS



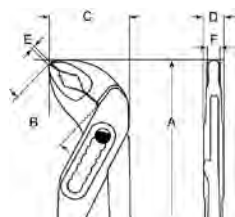
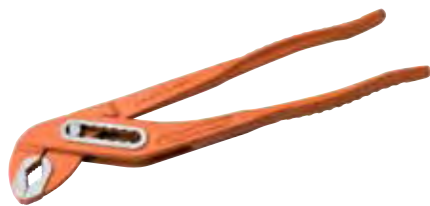
- ISO 8976
- Finish: Black, anti-corrosion treated
- Material: High performance alloy steel, 2-component handles for maximum grip comfort
- Heat treated jaws
- 8 position settings
- Slim jaws provide good accessibility
- Flat and round grip shape with auto-tightening device

	 731151		A mm	B mm	C mm	D mm	E mm	F mm	 max mm	 g
7224	8274733	5	250	43	49	16	4	3.9	69 / 71	285








SLIP JOINT PLIERS

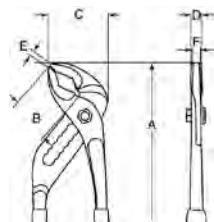
2619LS



- ISO 8976
- Finish: Orange laquered
- Material: High performance alloy steel
- Shape: With ground jaw faces, teeth induction hardened
- Box joint

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	 max mm	 g
2619 LS-175	1809188	5	175	30	27	45	6.5	6	30	154
2619 LS-250	1809195	5	240	32	40	14.5	4.0	7.0	39	330
2619 LS-300	1809201	5	300	40	50	15.0	5.5	9.0	39	480

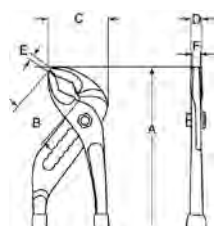
2971G








- ISO 8976
- Black finish, lacquered and polished, anti-corrosion treated
- High performance alloy steel, 2-component handles for comfort
- Box joint

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	 max mm	 g
2971G-250	0117154	5	250	40	40	13	4	8	35	360

6224DC



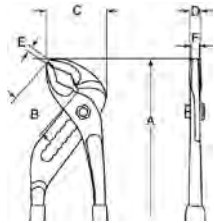
- ISO 8976
- Finish: Chrome plated, anti-corrosion treated
- High performance alloy steel, PVC coated handles
- Slim head for good accessibility
- Machined groove joint for greater stability

	 731415		A mm	B mm	C mm	D mm	E mm	F mm	 max mm	 g
6224 DC	0120307	5	250	35	46	10	7	10	32	385



6224GC

SLIP JOINT PLIERS

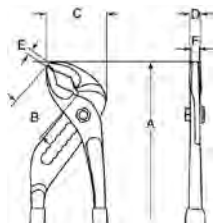


- ISO 8976
- Material: High performance alloy steel, bi-material handles for better gripping comfort
- Finish: Chrome plated
- Slim head for good accessibility and with machined groove joint for high stability

			A mm	B mm	C mm	D mm	E mm	F mm	max mm	g
6224 GC	0120314	5	250	35	46	10	7	10	32	385

5223 - 5226 DC

SLIP JOINT PLIERS

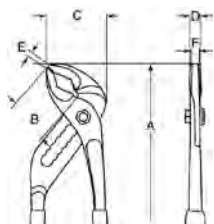


- ISO 8976
- Finish: Chrome plated, anti-corrosion treated
- High performance alloy steel, PVC coated handles
- Machined groove joint for greater stability

			A mm	B mm	C mm	D mm	E mm	F mm	max mm	g
5223 DC	0120321	5	190	25	41	8	3	8	30	195
5224 DC	0120338	5	250	32	51	11	5.5	11	39	345
5225 DC	0120345	2	300	42	61	12	7	12	54	705
5226 DC	0120352	1	400	55	81	13	8	13	105	1130

221 D - 225 D

SLIP JOINT PLIERS



- ISO 8976
- Black finish, anti-rust protected, PVC coated handles for better gripping comfort
- High performance alloy steel
- Jaws grip parallel in all positions up to maximum jaw opening

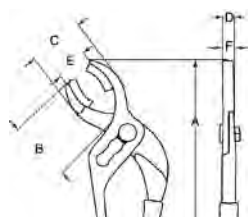
			A mm	B mm	C mm	D mm	E mm	F mm	max mm	g
221 D	0037070	5	117	16	18.0	5.0	3.0	5.0	18	60
222 D	0037087	5	150	22	23.5	6.5	4.0	6.5	23	100
223 D	0037094	5	192	25	28.0	7.5	4.5	7.5	32	185
224 D	0037100	5	240	30	35.0	9.5	5.5	9.5	45	345
225 D	0037117	3	305	38	42.0	11.5	4.5	11.5	58	535



SLIP JOINT PLIERS

2650

CONNECTOR PLIER



- Chrome plated, fine-polished, anti-corrosion treated
- High performance alloy steel, PVC coated handles
- For specific use in the aviation industry
- With interchangeable nylon inserts and slip joint
- 3 positions
- Slim jaws permit work in very confined spaces
- Designed for adjusting connectors on engines, for plumbing and work with light metals and threaded pipe joints where surfaces must not be damaged
- 2650B: Spare pair of nylon inserts

			A mm	B mm	C mm	D mm	E mm		
2650	1065829	1	235	65	38	88	-	65	275
2650B	1065843	1							3



PLIER SETS

9873

PLUMBER'S SET

ergo®



- Adjustable wrench 9072P and slip joint plier 8224
- Packed in environmentally friendly corrugated cardboard
- Attractive packaging design for both wall and shelf display

9873	0058082	1	280x190x25	900

9072P 250 mm		8224 250 mm	
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9853

ALL ROUND SET

ergo®



- Adjustable wrench, slip joint pliers and side cutting pliers
- Packed in environmentally friendly corrugated cardboard
- Attractive packaging design for both wall and shelf display

				
9853	0103287	1	292x252x25	730
9071 200 mm / 8"			8224 250 mm	
2101G 160 mm				









9897

ALL ROUND SET

ergo®



- Slip joint pliers, combination pliers, side cutting pliers and snipe nose pliers
- Packed in environmentally friendly corrugated cardboard
- Attractive packaging design for both wall and shelf display








			
9897	0058068	1	1030
8224 250 mm		2628G 180 mm	
2101G 160 mm		2430G 160 mm	

9860S

ALL ROUND SET



- IEC 60900
- Set of 3 insulated pliers: Side cutting, combination and snipe nose
- Packed in environmentally friendly corrugated cardboard
- Attractive packaging design for both wall and shelf display

			
9860S	0140732	1	840
2101S-160			2628S-180 
2430S-200			

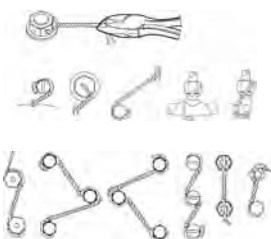
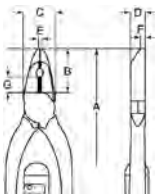
IEC 60900  1000V



WIRE TWISTING PLIERS

2855

WIRE TWISTING PLIERS



- Black finish, anti-corrosion treated
- High performance alloy steel
- Extremely fast and time-saving with, consistent twisting
- Can be used for any wire length and any twist length
- When the pliers grip the wire, any number of twists can be made by pulling out and pushing in the spinner knob
- The reversible models eliminate the need of a second tool just a simple twist of the patented reversing sleeve gives right or left hand capability
- The smaller model might be easier to use in narrow areas
- This is a tool to secure, with wire, all critical places which are exposed to vibration
- Jaws angled at 30° and serrated, with cutter
- Capacity: Wires up to Ø 1.04 mm for the 2855 and Ø 1.6 mm for the 2855 D, also suitable

			A mm	B mm	C mm	D mm	E mm	F mm	G mm	
2855	1825805	1	224	22	14.5	9.5	3	2.5	8	240
2855D	1822569	1	282	29	20	10.5	5	4	10	525



RIVETING TOOLS

2681

HAND RIVETER



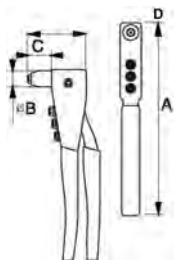
- Swivel head rivet tool
- Head swivels 360° to rivet at any angle
- Suitable for metal, leather, canvas and vinyl, using 2.4, 3.2, 4.0 or 4.8 mm rivets
- Three interchangeable nosepieces can be stored in handle, when not in use

2681	8276706	12	285	740



1467-250

HAND RIVETER

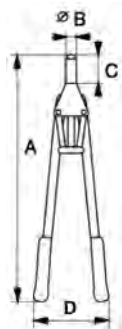


- General duty riveter with four different exchangeable heads for rivet capacities of 2.4 mm; 3.2 mm; 4.0 mm and 4.8 mm
- Includes a wrench for changing heads

			A mm	B mm	C mm	D mm	
1467-250	731415 0124268	1	250	22	34	75	500

1467-520

LONG ARM RIVETER



- Expert quality riveter with long handles for greater leverage
- To be used with aluminium, steel and stainless steel rivets with rivet capacities of 3.2 mm; 4.0 mm; 4.8 mm; 6.0 mm and 6.8 mm
- The transparent tube collects snapped off rivet tails

			A mm	B mm	C mm	D mm	
1467-520	731415 0124275	1	520	22	58	160	1800

1467-320-850

EXTENDIBLE RIVETER



- Extendible riveter with noses of Ø 3.80 - 4.00 mm, Ø 4.80 - 5 mm and Ø 6.00 - 6.50 mm
- Variable length goes from 350 mm to 840 mm
- Riveting capacity (for all noses): Aluminium, copper and stainless steel
- Spares available

			L mm	
1467-320-850	731415 0178636	1	320-850	1750