# Wiha pliers.

wiha

Wiha

Quality and ergonomics for professionals.

#### **Pliers** range

#### Quality features of good pliers.

Wiha pliers matrix. Discover real pliers quality.

Wiha Inomic<sup>®</sup>. Pliers reinvented.

Wiha Professional. Quality down to the last deta

Wiha Industrial. Comfortable in your hand, ve

Wiha Basic. The complete workshop range

Wiha Electronic. Precision for made-to-measu



Wiha VDE pliers. See VDE tool range, page 244 – 249

Wiha ESD pliers. See ESD tool range, page 282 – 285

Wiha ESD tweezers. See ESD tool range, page 286 – 289



The new Wiha pliers design shown in the catalogue is available from May 2010.

Note:







	174 –	175
	176 -	177
	178 -	179
ail.	180 -	184
ersatile in application.	185 -	188
ge.	189 -	199
ıre work.	200 -	203





# Wiha pliers.



#### Ergonomics: "grippy" in the best sense of the word!

Wiha pliers are consistently designed according to the requirements of users. Proof of this is the innovative and angled form of the Wiha Inomic<sup>®</sup> pliers series. And the multi-component pliers handles have also been designed according to the latest findings from the field of ergonomics. With extra wide handle backs and a well thought-out distribution of soft and hard zones they are both comfortable and easy on the hands.

#### Not only new, but innovative as well

Current examples in the further development of the Wiha pliers series clearly demonstrate what the power of innovation can achieve for users:

- Wiha has perfected the interplay of technology and natural movement with the Inomic<sup>®</sup> pliers generation.
- More "bite", meaning greater cutting performance with less expenditure of effort: that's what Wiha DynamicJoint represents. The optimised joint construction reduces the force needed for cutting by up to 40 % !

- MagicTips, the precision tips made from high performance steel create an added plus in terms of stability and safety with the Basic series circlip pliers. The special latching function that prevents a jumping away of the safety rings is as unique as it is useful!

Because that is and has always been the aim of Wiha innovations making work with pliers safer, more energysaving and with greater comfort. For absolutely professional results.



#### Wiha quality management

The Wiha quality assurance system in accordance with ISO 9001:2008 ensures with pliers as well that only first-class products leave our factory. Continuously monitored production processes and documented organisational procedures form the basis for the excellent quality for which Wiha products are renowned.



the tried-and-trusted Wiha quality.

inductive hardening of highly stressed

A special heat treatment and

parts ensure a long service life.

"Functionality": this somewhat

represents a host of clever ideas.

As such Wiha pays attention to

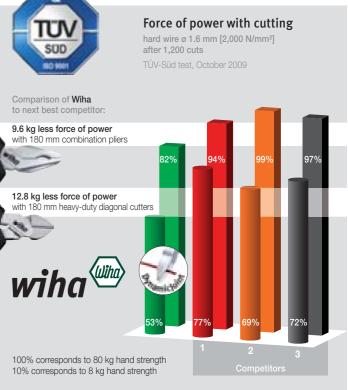
a precise interplay of joints and

an exact processing of cutting edges

sober yet important phrase

and gripping surfaces.

Even more precise? Yes!



 See ESD tools, page 282 – 285



reddot design award winner 2007

For ergonomic and qualitative design, the **Wiha Inomic® pliers** were awarded not only the "iF – product design award" but the "red dot design award" as well. In addition to the red dot award, organised as part of the world's largest show for contemporary design, the iF product design award is one of the oldest and most renowned design accolades.

#### $\mathit{Inomic}^{\circledast}$ distinctions:

The levels of innovation, functionality, ergonomics and service life speak for themselves.

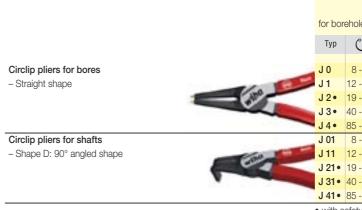


Wiha Professional pliers have won the "Focus in Silver" award for outstanding design. The Stuttgart Design Center awarded the 2006 international design prize in a special energy category. Energy also determines the reference level – the key to success.

"Focus in Silver" award: Convincing ergonomics, surface feel and clean design lines.



Wiha pliers matrix.			c®	Wiha Inomi	c® VDE	Wiha Profes	ssional	Wiha Profes electri	sional	Wiha Indust	rial	Wiha Basic	
Discover real pliers quality.		9	-	4	-						-	Carlor Carlo	7
		Тур		Тур		Тур		Тур		Тур		Тур	
Combination pliers		180	179	180	245	160	181	160	247	160	186	160	190
	(-1)					180 200	181 181	180 200	247 247	180 200	186 186	180 200	190 190
High leverage combination pliers	Remit					200	181	200	247	200	186	200	190
Needle nose pliers		160	179	160	245	225 160	181 182	160	247	225 160	186 187	225 160	190 190
						200	182	200	247	200	187	200	190
Needle nose pliers, angled						160 200	182 182	160 200	247 247	160 200	187 187	160 200	190 190
Long-flat nose pliers						160	181	160	247	160	186	160	190
Long-round nose pliers						160	181	160	248	160	186	160	191
Diagonal cutters		160	179	160	245	140	182	140	248	140	187	140	191
						160 180	182 182	160 180	248 248	160 180	187 187	160 180	191 191
Heavy duty diagonal cutters						160	182	160	240	160	187	160	191
	9. 5					180	182	180	248	180	187	180	191
	Colmic Marine					200	182	200	248	200	187	200	191
Electrician's diagonal cutters								160	248				
Cable cutters								160	248			160	191
								200	248			200	191
Stripping pliers						160	181	160	247	160	188	160	191
Crimping pliers for end sleeves					_							145 180	191 191
Revolving punch and loop pliers						225	183		_			100	191
Revolving punch pliers						225	183						
Water pump pliers						250	183			250	188	180	192
												250	192
												300	192
Water pump pliers						250	183			250	188	180	192
with push button setting					_							250	192
QuickEix water nump plices						250	183					300 250	192 192
QuickFix water pump pliers End cutting nippers						200	103					160	192
												180	193
												200	193
Pincers (carpenter's pincers)												180	193
												200	193
Concretors pincers												200	193
with handle coating												250	193
					_							280	193
Concretors pincers												300 200	193 193
Concretors pincers					-							200	193
												280	193
												300	193
Pipe wrenches swedish style, S-jaw	O, 1"											320	196
	O; 1½"											420	196
	O; 2"											535	196
Pipe wrenches swedish style, 45°	O; 1"											315	196
	O; 1½" O; 2"											420 570	196 196
Pipe wrenches swedish style, 90°	O; 2 O; 1"											320	190
	O; 1½"											415	196
	O, 2 "											555	196
Grip pliers with wire cutter												180	197
												250	197
Molding avia plices												300	197
Welding grip pliers Pipe welding grip pliers												280 280	197 197
Profile welding grip pliers												280	197
												200	101
Cable shears												•	250
Crimp tools												•	250
												٠	251
Automatic stripping pliers												•	251



	Wiha Professional ESD			EM	Wiha Electronic			
	- All	400			1	-0		
		with wire trapping spring	Тур			with wire trapping spring	Тур	
Diagonal cutter	•		115	283	•		118	202
- Narrow, pointed head	•		115 115	283 283	•	•	120	202
Diagonal cutter	•		115	283	•		138	20
- Wide, pointed head	•	•	115	283	•	•	138	20
~	•		115	283			138	201
Diagonal cutter								
– Narrow, semi-circular head	•		115	284				
Disconsi outtor	•		115	284				
Diagonal cutter - Wide, semi-circular head	•		115	284				
Oblique cutting nippers - Wide, pointed head					•		138	202
Oblique end cutting nippers – Narrow head					•		118	202
<ul> <li>Extra narrow head, cutting edges angled at 40°</li> </ul>	•		110	284				
- Wide head, angled at 29°	•		110	284				
End cutting nippers								
– Extra narrow, slim shape – Wide head	•		110 115	284 285				
- Wide Head	•		115	200				-
Needle nose pliers			120	285				
- Straight head			145	285				
Needle nose pliers - Angled			120	285				
Round nose pliers			120	285				
Flat nose pliers			120	285				
Pointed pliers							135	203
Stripping pliers - 20 18 16 14 12 10 AWG, ∅ 0.81 - 2.59 mm							180	200
- 26 24 22 20 18 16 AWG, Ø 0.4 - 1.3 mm							180	20

176 (**Wiha**)

for boreholes for shafts						for bor	reholes		for sha	for shafts		
Тур	C		Тур	Ů		Тур	ಲಿ		Тур	Ů		
10	0 10	105		7 10	105	1.0	0 10	10.4		0 10	10.4	
JO	8 - 13	195	A 0	7 - 10	195	JO	8 - 13	194	A 0	3 - 10	194	
J1	12 - 25	195	A 1	10 - 25	195	J1	12 - 25	194	A 1	10 - 25	194	
J 2•	19 - 60	195	A 2 •	19 - 60	195	J 2	19 - 60	194	A 2	19 - 60	194	
J3•	40 - 100	195	A 3 •	40 - 100	195	J 3	40 - 100	194	A 3	40 -100	194	
J4•	85 -140	195	A 4 •	85 -140	195	J 4	85 -140	194	A 4	85 -140	194	
J 01	8 - 13	195	A 01	7 - 10	195	J 01	8 - 13	194	A 01	3 - 10	194	
J 11	12 - 25	195	A 11	10 - 25	195	J 11	12 - 25	194	A 11	10 - 25	194	
J 21•	19 - 60	195	A 21•	19 - 60	195	J 21	19 - 60	194	A 21	19 - 60	194	
J 31•	40 - 100	195	A 31•	40 -100	195	J 31	40 -100	194	A 31	40 -100	194	
J 41•	85 -140	195	A 41•	85 -140	195	J 41	85 -140	194	A 41	85 -140	194	

with safety latching function

(Uiha) 177

# Wiha Inomic<sup>®</sup>.

#### Pliers – reinvented.



In collaboration with the IAO Stuttgart

(Institute for Industrial Engineering),

a wide variety of shapes and variants

for this new generation of pliers was

investigated during the course of extensive studies and user tests. Gripping system, hand closure forces, jaw shapes and geometries are just a few of the points examined.

Arbeitswirtschaft und Organisation

Fraunhofer Institut



Innovative technology and as ergonomic as nature: descriptions that fit Wiha Inomic<sup>®</sup> pliers perfectly.

Firstly as an extension of the hand: firm and secure when gripping, and with a natural movement that is easy on the joints. And then progressive know-how: with high quality materials that feel soft but are relentless with components being worked upon.

Pliers have been around for ages. But never with so many ideas and intelligent details as the Wiha Inomic<sup>®</sup> pliers.



The relaxed hold when using Inomic<sup>®</sup> ensures fatigue-free work.

Wiha Inomic®.

- Gentle The angled form is easy on muscles, tendons and joints
- **Powerful** All fingers grip at the same time.
- Robust and durable Strong pliers jaws, complete zinc-nickel coating, impact resistant construction
- Sensitive Greater control with grasping via opening spring with fine resistance

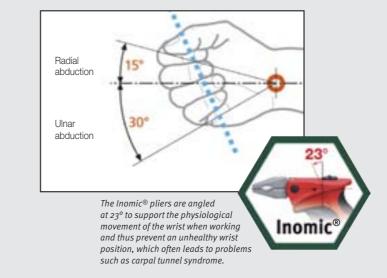
Ergonomic

Like the extension of a hand: grasping is simple, firm and safe

• Attractive An appealing design

Combination pliers.

Z 01 0 15 Head shape: Design:	Serrated Cutting e Arms of t	g cutting gripper dges ad he pliers	g edge f jaws. Iditional s move	for flat and ro	ound cables. hardened to appr 25% force transfe ork.				
Material:	Pliers hea Handles r	With opening spring and locking mechanism. Pliers head of high-quality tool steel. Handles made of tough fibre-glass reinforced plastic, ergonomic soft grip zone in the handle.							
Application:	For gripping, holding and cutting. With improved access to the objects to be processed.								
Order-No.	Тур	0	0	J.					
<b>33260</b> 0	180	3.3	2.2	155		5			



#### Details of cutting results of cutting pliers.

	•	01	
Symbol	Types of wire	Example	Tensile strength ca. N/mm <sup>2</sup>
$\bigcirc$	Soft wire	Copper, aluminium	220 - 250
0	Medium hard wire	Iron nail	750 - 800
0	Hard wire	Spring wire, steel nails	1.600 - 1.800
	Piano wire	Hardened spring steel	2.200 - 2.300
Test wire	s standardised in DIN IS	O 5744	





5

#### Needle nose pliers and diagonal cutters.



Z 05 0 15	Needle nose pliers Inomic <sup>®</sup> .
Head shape:	Straight form with extra-long cutting edge.
Design:	Ridged gripping surfaces.
	Cutting edges additionally induction hardened to approx. 64 HRC.
	Arms of the pliers move in parallel: +25% force transfer.
	Angled shape (23°) for fatigue-free work.
	With opening spring and locking mechanism.
Material:	Pliers head of high-quality tool steel.
	Handles made of tough fibre-glass reinforced plastic,
	ergonomic soft grip zone in the handle.
Application:	For gripping, holding and cutting.
	With improved access to the objects to be processed.
Order-No.	Тур ОО 📬 💳

**2.5** 1.6 150



**33256** 3

Z 12 0 15 Head shape: Design: Material: Application:	Angled si With ope Pliers hea Handles	cular, sw the pliers hape (23 ning spr ad of hig made of ic soft g	edish s move s <sup>o</sup> ) for fa ing and h-qualit tough		sm.			
Order-No.	With improved access to the objects to be processed.							
<b>33254</b> 9	160	2.8	2.0	140		5		
00204 0	100	2.0	2.0	140		0		



# Wiha Professional.

Quality down to the last detail.



Functionality, quality and comfort: only three of the many features that professionals fundamentally demand of their tools. Wiha Professional implements these in a consistent manner.

With a new dimension in terms of functionality: DynamicJoint, the progressive development of the joint construction, ensures precise cuts with simultaneously up to 40% less force of power. Cutting performance is still as high even after thousands of applications!

And in addition Wiha Professional pliers are characterised by manufacture from selected, multi-hardened steel with quality chrome plating. The elastic, shock absorbing plastic handles guarantee comfortable, fatigue-free work.

Wiha Professional carries on where average tools give up the ghost. For thoroughly professional results every time.





Wiha's professional combination pliers offer a secure hold when gripping, bending and cutting both soft and hard wires. The extra wide arms of the new, ergonomic, multi-component handle sleeves offer maximum comfort, even when applying larger amounts of force.



The low expenditure of energy thanks to Dynamic/oint is especially advantageous when cutting a large number of hard objects.

# Wiha Professional.

**Powerful** With DynamicJoint, the high quality joint construction for simple, long-term cutting efficiency

• As hard as steel Pliers head drop forged from high quality steels

- Robust and durable Cutting edges are individually tempered and additionally induction hardened to approx. 64 HRC; joints are extremely wear resistant and withstand high stresses, with high-quality riveting
- Ergonomic Extra wide handle backs, with soft and hard zones perfectly distributed across the handle
- Attractive Award-winning design with high quality chrome-plated head

#### Combination and high leverage combination pliers.



NEW								
Z 01 0 05	Combination pliers Professional.							
Standards:	DIN ISO 5746.							
Head shape:	Extra long cutting edge for flat and round cables.							
Design:	Serrated gripper jaws.							
	Cutting edges additionally induction hardened to approx. 62 HRC.							
	The Wiha DynamicJoint ensures optimal transmission of hand strength							
	to the cutting edges.							
Material:	High-quality tool steel, tempered.							
Application:	General purpose pliers for gripping and holding as well as cutting							
	soft and hard wires and cables.							
Order No	$\leftrightarrow$ $\leftrightarrow$ $\land$ $\land$ $\leftarrow$							

Order-No.	₩mm		0	0	<b>_</b>	-
<b>26704</b> 9	160	6 ½	3.0	2.0	195	5
<b>26707</b> 0	180	7	3.4	2.2	245	5
<b>26710</b> 0	200	8	3.6	2.5	325	5



### N E W

Z 02 0 05	High le	everage o	ombina	tion plie	ers Prot	essiona	l.		
Standards:	DIN ISO 5746.								
Head shape:	Extra lo	Extra long cutting edge for flat and round cables.							
Design:	Serrate	Serrated gripper jaws.							
	Particu	Particularly powerful leverage results in 40% less effort being required							
	for cutt	for cutting tasks compared with standard combination pliers.							
	Cutting	Cutting edges additionally inductively hardened to approx. 64 HRC,							
	therefo	therefore also appropriate for cutting piano wire.							
	The Wi	ha Dynan	nicJoint e	ensures	optimal	transmis	sion of ha	nd streng	gth
	to the o	cutting ed	ges.						
Material:	High-q	uality tool	steel, sp	pecially t	empere	d.			
Application:	Power	assisted g	general p	ourpose	pliers fo	or grippin	g and hold	ding as w	/ell as
	cutting	wires and	d cables	ranging	in hard	ness fron	n soft to ex	ktremely	hard.
Order-No.	₩mm		0	0		<b>.</b>	-	,	
26713 1	200	8	3.8	2.8	2.3	315		5	
<b>26716</b> 2	225	9	4.4	3.0	2.5	370		5	

Details of cutting results of cutting pliers.								
Symbol	Types of wire	Example	Tensile strength ca. N/mm <sup>2</sup>					
$\bigcirc$	Soft wire	Copper, aluminium	220 - 250					
0	Medium hard wire	Iron nail	750 - 800					
0	Hard wire	Spring wire, steel nails	1.600 - 1.800					
	Piano wire	Hardened spring steel	2.200 - 2.300					
Test wires standardised in DIN ISO 5744								





See VDE tools, page 246 – 249

#### Stripping, long-flat and round nose pliers.



Z 55 0 05	Stripping pliers Professional.
Standards:	DIN ISO 5743.
Head shape:	Precision cutting edge prism for even cutting of cable insulation.
Design:	An easy to use adjusting screw allows the stripping diameter to be set.
	Opening spring for effortless and sensitive handling of pliers.
Material:	High-quality tool steel, tempered.
Application:	Simple stripping of cables and strands of up to ø 5 mm = 10 mm <sup>2</sup>
	conductor cross-section.

Order-No.	₩mm	<b>₩</b>	<b>F</b>	<b>—</b>
<b>26846</b> 6	160	6 ½	155	5



Z 07 0 05	Long-flat nose pliers Professional.
Standards:	DIN ISO 5745.
Head shape:	Extra long head.
Design:	Ridged gripping surfaces.
Material:	High-quality tool steel, tempered.
Application:	Gripping and right-angled bending of wires and sheet metal parts.

Order-No.	₩mm	← II		-
<b>26731</b> 5	160	6 ½	160	5



Z 09 0 05	Long-round nose pliers Professional.
Standards:	DIN ISO 5745.
Head shape:	Extra long head.
Design:	Ridged gripping surfaces.
Material:	High-quality tool steel, tempered.
Application:	Gripping and bending of wires and sheet metal parts.

Order-No.	₩mm	<b>↔</b>		<b>—</b>
<b>26734</b> 6	160	6 ½	140	5



# Wiha Professional.

Quality down to the last detail.

#### Needle nose pliers with cutting edge (snipe nose pliers).



Z 05 0 05	Needle	Needle nose pliers Professional with cutting edge.										
Standards:	DIN ISC	DIN ISO 5745.										
Head shape:	Straigh	Straight shape.										
Design:	Extra lo	Extra long cutting edge for flat and round cables.										
	Grippin	Gripping surfaces serrated in parts.										
	Cutting	edges ac	ditional	y induc	tion harde	ned to approx. 62 HRC.						
Material:	High-q	uality tool	steel, te	mpered	l.							
Application:	Grippin	g and hole	ding as	well as	cutting so	ft and hard wires and cables.						
	Preferred choice in the mechanical sector.											
Order-No.	mm	<b>↓</b>	0	0	<b>••</b>							
26719 3	160	6 ½	2.5	1.8	155	5						



**8** 2.8 2.0 200

**26722** 3

200

Z 05 1 05	Needle nose pliers Professional with cutting edge.
Standards:	DIN ISO 5745.
Head shape:	Angled, approx. 40°.
Design:	Extra long cutting edge for flat and round cables.
	Gripping surfaces serrated in parts.
	Cutting edges additionally induction hardened to approx. 62 HRC.
Material:	High-quality tool steel, tempered.
Application:	Gripping and holding as well as cutting soft and hard wires and cables.
	Preferred choice in the mechanical sector.

Order-No.	₩mm	<b>↓</b>	0	0	<b>_</b>	-
26724 7	160	6 ½	2.5	1.8	155	5
26726 1	200	8	2.8	2.0	200	5



Diagonal cutters and heavy duty diagonal cutters.

NEW	
Z 12 0 05	Diagonal cutters Professional.
Standards:	DIN ISO 5749.
Head shape:	Semi-circular, swedish style.
Design:	Low wear lap joint, riveted and able to withstand high loads.
	The Wiha DynamicJoint ensures optimal transmission of hand strength
	to the cutting edges.
	Lightweight action, clean cutting achieved by specially
	milled precision cutting edges. Durable cutting edges due to
	additional induction hardening to approx. 62 HRC.
Material:	High-quality tool steel, tempered.
Application:	For soft and hard wires.

Order-No.	₩mm	<b>₩</b>	$\bigcirc$	0	0	<b>•</b> •	
26736 0	140	5 ½	4.0	2.5	1.8	160	5
<b>26740</b> 7	160	6 ½	4.0	2.8	2.0	200	5
26743 8	180	7	4.0	3.0	2.5	250	5



#### NEW Z 16 0 05 Heavy duty diagonal cutters Professional. DIN ISO 5749.

Standards: Head shape: Semi-circular.

5

TUV

Design: Low wear lap joint, riveted and able to withstand high levels of load. The Wiha DynamicJoint ensures optimal transmission of hand strength to the cutting edges. Lightweight action, clean cutting achieved by specially milled precision cutting edges. Long term cutting is achieved through additional inductive hardening to approx. 64 HRC. Material: High-quality tool steel, specially tempered.

Application: Power assisted, all round diagonal cutter for soft wire as well as the most stringent of demands made by piano wires.

Order-No.	₩mm	← II	0	0		<b>.</b>	
<b>26747</b> 6	160	6 ½	3.5	2.5	2.0	190	5
<b>26750</b> 6	180	7	3.8	2.7	2.3	260	5
26753 7	200	8	4.2	3.0	2.5	315	5

Details of	Details of cutting results of cutting pliers.					
Symbol	Types of wire	Example	Tensile strength ca. N/mm <sup>2</sup>			
$\bigcirc$	Soft wire	Copper, aluminium	220 - 250			
0	Medium hard wire	Iron nail	750 - 800			
0	Hard wire	Spring wire, steel nails	1.600 - 1.800			
	Piano wire	Hardened spring steel	2.200 - 2.300			
Test wire	Test wires standardised in DIN ISO 5744					

# Water pump pliers.



Standards:	DIN ISO 8976.					
Head shape:	Narrow head, therefore also appropriate for work in small spaces.					
Design:	Precisio	n adjusti	ment joir	nt, box t	ype, provi	ding optimum adaptation
	to objec	t to be g	gripped.			
	Long du	urability a	achieved	by add	itional indu	uctive hardening of gripper jaws.
Material:	Chrome	vanadiu	um tool s	steel, ter	npered.	
Application:	For gripping and holding pipes and angular profiles such as hex nuts					
	in the installation area.					
Order-No.	₩mm	<b>₩</b>	0;	0;	<b>•</b> •	
26762 9	250	10	2	50	380	5



Z 22 0 05	Water pump pliers Professional with push button setting.				
Standards:	DIN ISO 8976.				
Head shape:	Extra narrow head, therefore also appropriate for work in difficult				
	to access areas.				
Design:	Precision adjustment joint, box type, providing optimum adaptation				
	to object to be gripped.				
	Rapid and simple push button setting and locking.				
	Long durability achieved by additional inductive hardening of gripper jaws				
Material:	Chrome vanadium tool steel, tempered.				
Application:	For gripping and holding pipes and angular profiles such as hex nuts				
	in the installation area.				
Order No	$\leftrightarrow$ $\leftrightarrow$ $\wedge$ $\wedge$ $\sim$				





Z 23 0 05 Standards:	QuickFix water pump pliers Professional, box type. DIN ISO 8976.					
Head shape:	Narrow	/ head, th	erefore a	ilso app	oropriate f	or work in small spaces.
Design:	Fast ar	nd easy-to	o-adjust v	water p	ump plier	s, with automatic adjustment
	of the l	oox type,	precisior	n-stepp	ed joint.	
	Optimu	um adjust	ment to t	the obje	ect to be	gripped.
Long durability achieved by additional inductive harder				uctive hardening of gripper jaws.		
Material:	Chrome vanadium tool steel, tempered.					
Application:	For rapid and optimum gripping and holding of pipes and angular profiles					
	such as hex nuts in the installation area.					
Order-No.	₩mm		0;	0;		_
<b>26769</b> 8	250	10	1 1⁄2	40	380	5

Wiha Info namicloif NEW Wiha DynamicJoint -Top of their class Less force of power: - 9.6 kg Unique joint construction, patent applied for - 12.6 kg 20 Low loss of force means less force needed for cutting -• Permanent: wiha Optimal performance even after thousands of cuts

Up to 40% less force for cutting



• Innovative:

Effective:

up to 40%



► See VDE tools, page 246 – 249

#### Revolving punch pliers.

in the second	
	4.0 mm 4.5 mm C 5.0 mm 4.5 mm 6 4.5 mm 7 4.5 mm 7 4.5 mm 8 6 4.5 mm 7 4.5 mm 8 6 4.5 mm 7 4 6 4.5 mm 8 6 4.5 mm 7 4 6 4.5 mm 8 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7
<b>Z 65 2 05</b> Head shape: Design:	Professional revolving punch and loop pliers. Alternate equipping of perforating tubes and loop punches. Locking lever and rotatable magazine with hole sizes 4.0 / 4.5 and 5.0 mm and corresponding loop punches. Ergonomic plastic handle.
Material: Application:	Body of pliers made of high-resistance special steel, nickel-plated. For perforating and pressing of loops in three sizes with only one tool.

Order-No.	₩mm	<b>↓</b>	Ø	<b>•••</b>	
<b>29550</b> 9	225	9	4.0-5.0	325	5



**28402** 2

225

9

Z 65 0 05	Professional revolving punch pliers.			
Head shape:	Size designation of perforating tubes in viewing window.			
Design:	Locking mechanism and 6 exchangeable punching tools,			
	diameter: 2.0 / 2.5 / 3.0 / 3.5 / 4.0 / 4.5 mm.			
	With opening spring and locking mechanism			
	for real single-handed operation.			
Material:	Body of pliers made of high-resistance special steel, nickel-plated.			
Application:	Perforation of a wide variety of different materials in trade,			
	industry and DIY.			
Order-No.	$\underset{MM}{\longleftrightarrow}  \underset{II}{\longleftrightarrow}  \varnothing  \underset{II}{\longleftarrow}  \blacksquare$			

325

2.0-4.5

Opening w	vidth of water pump pliers.
<b>O</b> : I	Maximum gripper width across flats [mm]
0; 1	Maximum gripper pipe diameter ["]



# Wiha Professional.

Quality down to the last detail.

#### Pliers set and tool bag.

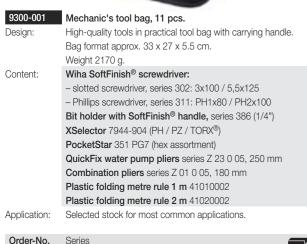




#### Z 99 0 002 05 Pliers set Professional Plus, 3 pcs.

26854 1	Z 99 0 002 05 1
Order-No.	Series -
Application:	Power assisted pliers for providing craftsmen or industrial mechanics with a basic set of pliers.
	High leverage diagonal cutters, series Z 16 0 05, 180 mm – with Wiha DynamicJoint QuickFix water pump pliers series Z 23 0 05, 250 mm
Content:	High leverage combination pliers, series Z 02 0 05, 200 mm – with Wiha DynamicJoint
Ū	Multi-component handles with slip guard for safe and comfortable operation. Cutting pliers are also suited for extremely hard wires. QuickFix water pump pliers with "automatic" rapid adjustment. Weight 1120 g.
Design:	All pliers made of high guality tool steel, hardened, polished and chrome-plated.





 Order-No.
 Series

 28142 7
 9300-001



▶ See VDE tools, page 246 – 249



Z 99 0 003 05	Tool set Professional Mix, 5 pcs.
Design:	Pliers made of high quality tool steel, hardened,
	polished and chrome plated.
	Multi-component handles with slip guard for safe and
	comfortable operation.
	Wiha SoftFinish® screwdriver with round blade and ChromTop® blade tip. Weight 720 g.
Content:	Diagonal cutters, series Z 12 0 05, 160 mm - with Wiha DynamicJoint
	Needle nose pliers series Z 05 0 05, 200 mm
	Wiha SoftFinish® screwdriver:
	- slotted screwdriver, series 302: 3.5x100 / 5.5x125
	- Phillips screwdriver, series 311: PH2x100
Application:	The compact basic set of pliers and screwdrivers for demanding
	craftsmen and industrial mechanics.

Order-No.	Series	
<b>26856</b> 5	Z 99 0 003 05	1

Details of cutting results of cutting pliers.						
Symbol	Types of wire	Example	Tensile strength ca. N/mm <sup>2</sup>			
$\bigcirc$	Soft wire	Copper, aluminium	220 - 250			
0	Medium hard wire	Iron nail	750 - 800			
0	Hard wire	Spring wire, steel nai	il 1.600 - 1.800			
	Piano wire	Hardened spring ste	el 2.200 - 2.300			
Test wires standardised in DIN ISO 5744						

# Dimensions. O: Maximum gripper width across flats O: Maximum gripper pipe diameter I: Opening width, flat Clamping range Clamping range C Retaining ring, external C Retaining ring, internal

Jaw style:	Cutter style:				
Flat jaws	Cutter without bevel				
Half round jaws	Cutter with small bevel				
Round jaws	Cutter with bevel				
•	Center cutter				
	Scissors cutter				
	Anvil cutter				
	Stripper				

Wiha Industrial.

Comfortable in your hand, versatile in application.



Functional gripping surfaces and exact closing, induction hardened cutting edges

For industrial applications in particular, the diversity of tools and the demands made upon them have increased dramatically. Here the Wiha Industrial pliers series has proven to be ideal. It combines the advantages of the Wiha Professional and Basic series: pleasant handling, a concise shape and a flexible range.

With DynamicJoint, Wiha Industrial implements the new generation of precision joints: cuts are powerful and at the same time more energysaving than ever before. Tests have proven: up to 40% less expenditure of effort is a convincing argument.



TUV



4 (Wiha)

The interior is made of harder material for less friction

The exterior of the handle is made of soft, non-slip elastomer

Wiha Industrial pliers offer a secure hold when gripping, bending and cutting soft and hard wire.

Up to **40% less force** for cutting. The low expenditure of energy thanks to DynamicJoint is especially advantageous when cutting a large number of hard objects.



- Powerful With DynamicJoint, the high quality joint construction for simple, long-term cutting efficiency
- As hard as steel Pliers head drop forged from high quality steels
- Robust and durable Cutting edges are individually tempered and additionally induction hardened, joints are extremely wear resistant and can withstand high stresses, and with high-quality riveting
- Ergonomic Extra wide handle backs, with soft and hard zones perfectly distributed across the handle
- Attractive
   Award-winning design
   with high quality
   chrome-plated head



# Wiha Industrial.

Comfortable in your hand, versatile in application.

#### Combination and high leverage combination pliers.



NEW							
Z 01 0 02	Combination pliers Industrial.						
Standards:	DIN ISO 5746.						
Head shape:	Extra long cutting edge for flat and round cables.						
Design:	Serrated gripper jaws.						
	Cutting edges additionally induction hardened to approx. 62 HRC.						
	The Wiha DynamicJoint ensures optimal transmission of hand strength						
	to the cutting edges.						
Material:	High-quality tool steel, tempered.						
Application:	General purpose pliers for gripping and holding as well as cutting						
	soft and hard wires and cables.						
Order-No.							

30979 4         160         6 ½         3.0         2.0         195         5           30826 1         180         7         3.4         2.2         245         5           30978 7         200         8         3.6         2.5         325         5	Order-No.	mm	́П,	0	0	••	
	<b>30979</b> 4	160	6 ½	3.0	2.0	195	5
<b>20079</b> 7 <b>200 9</b> 2.6 0.5 205 5	<b>30826</b> 1	180	7	3.4	2.2	245	5
<b>30976</b> / <b>200 6</b> 3.0 2.3 323 5	<b>30978</b> 7	200	8	3.6	2.5	325	5



NEW									
Z 02 0 02	High-le	High-leverage combination pliers Industrial.							
Standards:	DIN ISO	5746.							
Head shape:	Extra lor	ng cuttin	ig edge fo	or flat ar	nd roun	d cables.			
Design:	Serrated	d gripper	jaws.						
	Particula	arly pow	erful leve	rage res	ults in 4	10% less e	effort being required		
	for cuttir	ng tasks	compare	ed with s	standar	d combina	ation pliers.		
	Cutting	edges a	dditionall	y induct	ively ha	rdened to	approx. 64 HRC,		
	therefore	therefore also appropriate for cutting piano wire.							
	The Wih	ia Dynar	nicJoint e	ensures	optimal	transmiss	sion of hand strength		
	to the ci	to the cutting edges.							
Material:	High-quality tool steel, specially tempered.								
Application:	Power a	Power assisted general purpose pliers for gripping and holding as well as							
	cutting wires and cables ranging in hardness from soft to extremely hard.								
0 1 11	<b>→</b>	<b>→</b>	•						
Order-No.	mm	II.	0	0		<b>L</b>			
<b>32319</b> 6	200	8	3.8	2.8	2.3	315	5		
<b>32320</b> 2	225	9	4.4	3.0	2.5	370	5		

#### Flat and round-nose pliers.



### Z 07 0 02 Long flat-nose pliers Industrial.

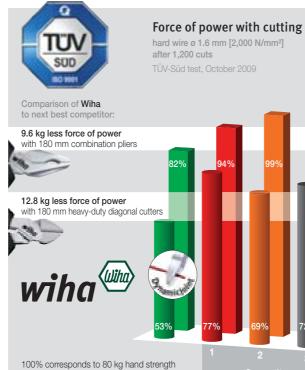
nardened.
and sheet metal parts.

Order-No.	₹mm		<b>L</b>	<b>—</b>
32330 1	160	6 ½	160	5



Z 09 0 02	Long round-nose pliers Industrial.
Standards:	DIN ISO 5745.
Head shape:	Extra long head.
Design:	Gripping surfaces serrated and inductively hardened.
Material:	High-quality tool steel, tempered.
Application:	Gripping and bending of wires and sheet metal parts

Order-No.	₩mm		<b>_</b>	<b>—</b>
<b>32332</b> 5	160	6 ½	140	5



10% corresponds to 8 kg hand strength

#### Needle nose pliers with cutting edge (snipe nose pliers).



Z 05 0 02	Needle	Needle nose pliers Industrial with cutting edge.							
Standards:	DIN ISC	DIN ISO 5745.							
Head shape:	Straight	t shape.							
Design:	Extra lo	ng cutting	g edge fo	or flat a	nd round c	ables.			
	Grippin	g surfaces	s serrate	ed in pa	rts.				
	Cutting	edges ad	ditionall	y induc	tion harder	ned to approx.	62 HRC.		
Material:	High-qu	uality tool	steel, te	mpered	l.				
Application:	Grippin	g and hole	ding as v	well as	cutting sof	t and hard wire	s and cab	les.	
	Preferre	Preferred choice in the mechanical sector.							
Order-No.	₩mm		0	0	<b>•</b> •		_		
<b>32322</b> 6	160	6 ½	2.5	1.8	155		5		
<b>32323</b> 3	200	8	2.8	2.0	200		5		



Z 05 1 02	Needle nose pliers Industrial with cutting edge.							
Standards:	DIN ISO 5745.							
Head shape:	Angled,	approx.	40°.					
Design:	Extra lo	ng cutting	g edge f	or flat a	nd round o	ables.		
	Gripping	g surfaces	s serrate	ed in pa	rts.			
	Cutting edges additionally induction hardened to approx. 62 HRC.							
Material:	High-qu	ality tool	steel, te	mpered	l.			
Application:	Gripping	g and hole	ding as	well as	cutting sof	t and hard wires and cables.		
	Preferred choice in the mechanical sector.							
Order-No.	mm	<b>↓</b>	0	0	ずせ	-		
<b>32324</b> 0	160	6 ½	2.5	1.8	155	5		
<b>32328</b> 8	200	8	2.8	2.0	200	5		

Details o	Details of cutting results of cutting pliers.							
Symbol	Types of wire	Example	Tensile strength ca. N/mm <sup>2</sup>					
$\bigcirc$	Soft wire	Copper, aluminium	220 - 250					
0	Medium hard wire	Iron nail	750 - 800					
0	Hard wire	Spring wire, steel nails	1.600 - 1.800					
•	Piano wire	Hardened spring steel	2.200 - 2.300					
Test wires standardised in DIN ISO 5744								



### NEW Z 12 0 02 Diagonal cutters Industrial. DIN ISO 5749. Standards: Head shape: Semi-circular, swedish style. Low wear lap joint, riveted and able to withstand high loads. The Wiha DynamicJoint ensures optimal transmission of hand strength to the cutting edges. Lightweight action, clean cutting achieved by specially milled precision cutting edges. Durable cutting edges due to additional induction hardening to approx. 62 HRC.

Material: Application:

High-quality tool steel, tempered. For soft and hard wires.

Order-No.	₩mm	<b>↓</b>	$\bigcirc$	0	0	<b>.</b>	-
<b>30975</b> 6	140	5 ½	4.0	2.5	1.8	160	5
<b>30827</b> 8	160	6 ½	4.0	2.8	2.0	200	5
<b>30976</b> 3	180	7	4.0	3.0	2.5	250	5



NEW							
Z 16 0 02		duty diag	gonal ci	utters In	idustria	ıl.	
Standards:	DIN ISC	) 5749.					
Head shape:	Semi-ci	rcular.					
Design:	Low we	ear lap joir	nt, rivete	d and a	ble to w	rithstand h	igh levels of load.
	The Wil	na Dynam	icJoint (	ensures	optimal	transmiss	ion of hand strength
	to the c	utting ed	ges.				-
	Liahtwe	eiaht actio	n. clean	cuttina	achieve	ed by spec	ially
	0	precision o				, - , - , - , - , - , - , - , - , -	
			0	0	ouah a	dditional ir	ductive hardening
		ox. 64 HF		0100 01	ougnu		idaotiro na doning
Material:		uality tool		mnorod			
	0 1	,	,			, fou ooft	ine op well op the most
Application:				0			vire as well as the most
	stringer	nt of dema	ands ma	ade by p	iano wir	es.	
			-	-	-		
Order-No.	₩mm	₩	0	0		••	
<b>32333</b> 2	160	6 ½	3.5	2.5	2.0	190	5
32339 4	180	7	3.8	2.7	2.3	260	5

### Diagonal cutters and heavy duty diagonal cutters.

Design:

4.2 3.0 2.5 315 8

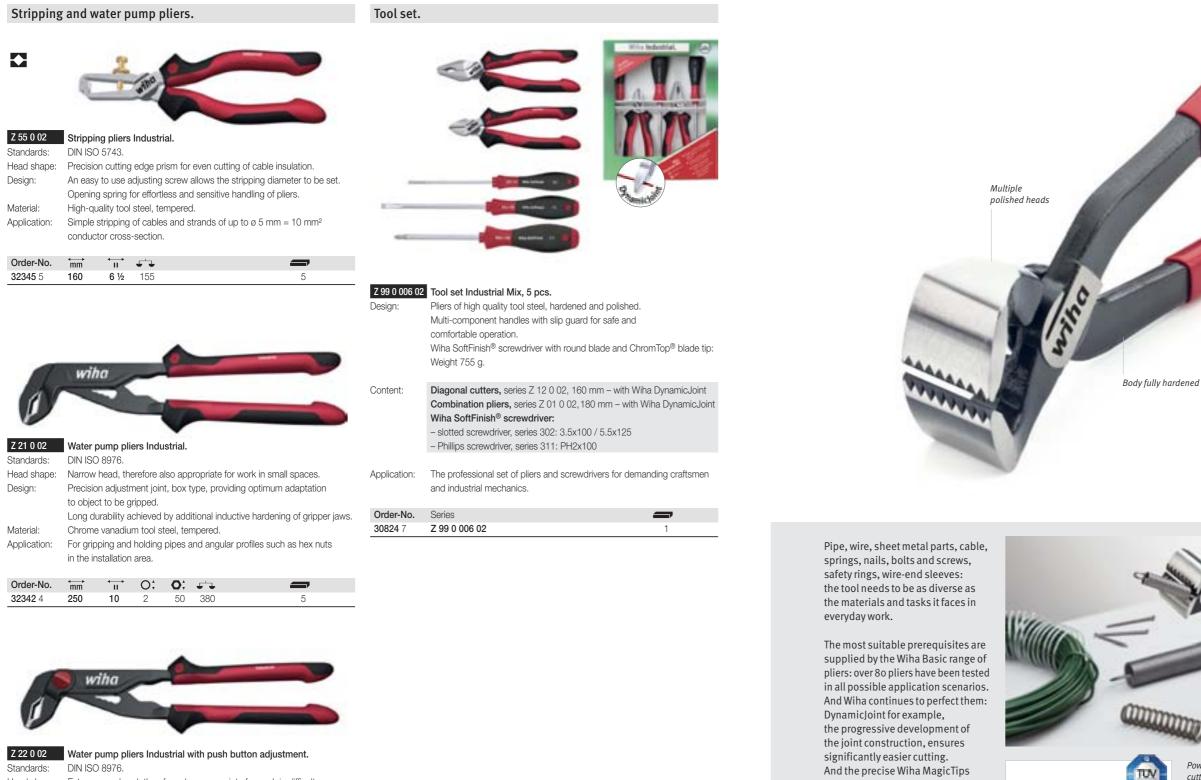
**32341** 7

200



# Wiha Industrial.

Comfortable in your hand, versatile in application.



Head shape: Extra narrow head, therefore also appropriate for work in difficult to access areas Design: Precision adjustment joint, box type, providing optimum adaptation to object to be gripped. Rapid and simple push button setting and locking. Long durability achieved by additional inductive hardening of gripper jaws. Material: Chrome vanadium tool steel, tempered. Application: For gripping and holding pipes and angular profiles such as hex nuts in the installation area.

Order-No.	₩mm	← II	О;	0;	<b>.</b>	<b>—</b>
<b>32352</b> 3	250	10	2	50	400	5

Opening width of water pump pliers.

**O**: Maximum gripper width across flats [mm] Maximum gripper pipe diameter [ " ] 0;

llihn

Anti-slip, oil and thinner resistant handle

Wiha Basic.

stabilise and protect the circlip pliers.

tried-and-true quality at a competitive

price, with an appealing design.

Wiha Basic –

Less force

12 6 k

of power:

The complete workshop range.



Power assisted, all round end cutting nippers for soft wires as well as demanding piano wires.

Up to 40% less force for cutting. The low expenditure of energy thanks to DynamicJoint is especially advantageous when cutting a large number of hard objects.



- Powerful With DynamicJoint, the high quality joint construction for simple, long-term cutting efficiency
- Extra rugged, right up to the tips With Wiha MagicTips, the precision tips that ensure a firm hold with unexcelled stability
- As hard as steel Pliers head drop forged from high quality steels
- Robust and durable Cutting edges are individually tempered and additionally induction hardened to approx. 64 HRC; joints are extremely wear resistant and withstand high stresses, with high-quality riveting
- Ergonomic An ergonomic handle shape for optimal handling
- Attractive An appealing design, with a multi-polished head





The complete workshop range.

#### Combination, high leverage combination and stripping pliers.

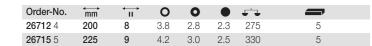


Order-No.	₩mm	<b>↓</b>	0	0	<b>.</b>	<b>—</b>
<b>26703</b> 2	160	6 ½	3.0	2.0	160	5
<b>26706</b> 3	180	7	3.4	2.2	205	5
<b>26709</b> 4	200	8	3.6	2.5	280	5



Z 02 0 01	High leverage combination	pliers	Ba

	- ingit ior of age of the indian prior of Euclide
Standards:	DIN ISO 5746.
Head shape:	Extra long cutting edge for flat and round cables.
Design:	Serrated gripper jaws.
	Particularly powerful leverage results in 40% less effort being required
	for cutting tasks compared with standard combination pliers.
	Cutting edges additionally inductively hardened to approx. 64 HRC,
	therefore also appropriate for cutting piano wire.
	The Wiha DynamicJoint ensures optimal transmission of hand strength
	to the cutting edges.
Material:	High-quality tool steel, specially tempered.
Application:	Power assisted general purpose pliers for gripping and holding as well as
	cutting wires and cables ranging in hardness from soft to extremely hard.





### Z 55 0 01 Stripping pliers Basic.

Standards: DIN ISO 5743. Head shape: Precision cutting edge prism for even cutting of cable insulation. An easy to use adjusting screw allows the stripping diameter to be set. Design: Opening spring for effortless and sensitive handling of pliers. Material: High-quality tool steel, tempered. Application: Simple stripping of cables and strands of up to  $\emptyset$  5 mm = 10 mm<sup>2</sup> conductor cross-section.

Order-No.	₩mm	₩	<b>.</b>	<b>—</b>
<b>26845</b> 9	160	6 ½	125	5

#### Long-flat and needle nose pliers.



#### Z 07 0 01 Long-flat nose pliers Basic. Standards: DIN ISO 5745.

Head shape: Extra long head. Design: Ridged gripping surfaces. Material: High-quality tool steel, tempered. Application: Gripping and right-angled bending of wires and sheet metal parts.

Order-No.	₩mm		<b>F</b>	
<b>26730</b> 8	160	6 ½	130	5



Z 05 0 01	Needle nose pliers Basic with cutting edge.					
Standards:	DIN ISO 5745.					
Head shape:	Straight shape.					
Design:	Extra long cutting edge for flat and round cables.					
	Gripping surfaces serrated in parts.					
	Cutting edges additionally induction hardened to approx. 62 HRC.					
Material:	High-quality tool steel, tempered.					
Application:	Gripping and holding as well as cutting soft and hard wires and cables.					
	Preferred choice in the mechanical sector.					
Ordor-No						

Order-No.	mm	THE STREET	0	0	<b>•</b> •	
<b>26718</b> 6	160	6 ½	2.5	1.8	120	5
<b>26721</b> 6	200	8	2.8	2.0	165	5



Z 05 1 01	Needle nose pliers Basic with cutting edge.
Standards:	DIN ISO 5745.
Head shape:	Angled, approx. 40°.
Design:	Extra long cutting edge for flat and round cables.
	Gripping surfaces serrated in parts.
	Cutting edges additionally induction hardened to approx. 62 HRC.
Material:	High-quality tool steel, tempered.
Application:	Gripping and holding as well as cutting soft and hard wires and cables.
	Preferred choice in the mechanical sector.
Order No	$\leftrightarrow$ $\leftrightarrow$ $\land$ $\land$ $\leftarrow$

Order-No.	₩mm	<b>↓</b>	0	0	<b>_</b>	-
<b>26723</b> 0	160	6 ½	2.5	1.8	120	5
<b>26725</b> 4	200	8	2.8	2.0	165	5

Details o	Details of cutting results of cutting pliers.						
Symbol	Types of wire	Example	Tensile strength ca. N/mm <sup>2</sup>				
$\bigcirc$	Soft wire	Copper, aluminium	220 - 250				
0	Medium hard wire	Iron nail	750 - 800				
0	Hard wire	Spring wire, steel nails	1.600 - 1.800				
	Piano wire	Hardened spring steel	2.200 - 2.300				
Test wire	Test wires standardised in DIN ISO 5744						

#### Round-nose pliers and power/diagonal cutters.



Z 09 0 01	Long-round nose pliers Basic.						
Standards:	DIN ISO 5745.						
Head shape:	Extra long head.						
Design:	Ridged gripping surfaces.						
Material:	High-quality tool steel, tempered.						
Application:	Gripping and bending of wires and sheet metal parts.						
Order-No.							

110

6 ½

**26733** 9

26752 0

200

8

160

<b>I</b> <	witho				72		
NEW			_		Parric V		
Z 12 0 01	Diagon	al cutters	Basic				
Standards:	DIN ISC	5749.					
Head shape:	Semi-ci	rcular, sw	edish st	tyle.			
Design:	Low wear lap joint, riveted and able to withstand high loads. The Wiha DynamicJoint ensures optimal transmission of hand strength to the cutting edges. Lightweight action, clean cutting achieved by specially milled precision cutting edges. Durable cutting edges due to additional induction hardening to approx. 62 HRC.						
Material:	High-quality tool steel, tempered.						
Application:	For cutt	ing of sof	t and ha	ard wire.			
Order-No.	₩mm	<b>₩</b>	$\bigcirc$	0	0	<b>F</b>	
26738 4	140	5 1/2	4.0	2.5	1.8	130	5

26738 4	140	5 1/2	4.0	2.5	1.8	130	5
26739 1	160	6 ½	4.0	2.8	2.0	170	5
26742 1	180	7	4.0	3.0	2.5	220	5



Z 16 0 01 Standards: Head shape: Design:	Heavy duty diagonal cutters Basic. DIN ISO 5749. Semi-circular. Low wear lap joint, riveted and able to withstand high levels of load. The Wiha Dynamic Joint ensures optimal transmission of hand strength to the cutting edges.							
Material: Application:	Lightweight action, clean cutting achieved by specially milled precision cutting edges. Long term cutting is achieved through additional inductive hardening to approx. 64 HRC. High-quality tool steel, specially tempered. Power-assisted all-round diagonal cutter for cutting soft to extremely hard wires and cables.							
Order-No.	₩mm	← II	0	0		<b>.</b>		
<b>26746</b> 9	160	6 ½	3.5	2.5	2.0	160	5	
<b>26749</b> 0	180	7	3.8	2.7	2.3	220	5	

4.2 3.0 2.5 275

5

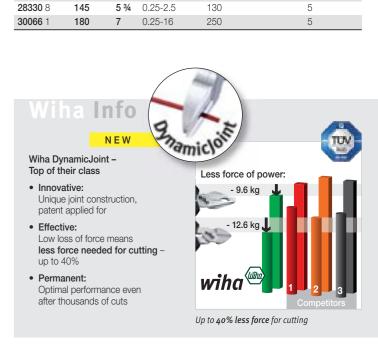


#### Cable cutter and crimping pliers.





Z 60 0 01	Crimping pliers for end sleeves Basic.							
Standards:	DIN ISO 5743.							
Head shape:	Fixed profile grooves for the relevant conductor cross-sections.							
Design:	Trapezoidal or semi-circular profiles for a secure connection between							
	end sleeve and conductor.							
	Sleeve and conductor inserted from the side.							
Material:	High-quality tool steel, tempered.							
Application:	For crimping end sleeves acc. to DIN 46228 parts 1 + 4.							
Order-No.								



### The complete workshop range.

#### Water pump pliers.



Z 21 0 01	Water pump pliers Basic, box type.						
Standards:	DIN ISO 8976.						
Head shape:	Narrow head, therefore also appropriate for work in small spaces.						
Design:	Precision adjustment joint, box type, providing optimum adaptation						
	to object to be gripped.						
	Long durability achieved by additional inductive hardening of gripper jaws.						
Material:	Chrome vanadium tool steel, tempered.						
Application:	For gripping and holding pipes and angular profiles such as hex nuts						
	in the installation area.						
Order-No.	$\overbrace{mm}^{\longleftarrow} \overbrace{II}^{\bigcirc} \bigcirc; \bigcirc; \checkmark {}    \blacksquare $						

Order-No.	mm	<b>↓</b>	0;	0:	<b>•</b>	
<b>26760</b> 5	180	7	1	30	145	5
<b>26761</b> 2	250	10	2	50	345	5
<b>26763</b> 6	300	12	2 1/2	63	555	5

#### Water pump pliers.



Z 23 0 01	QuickFix water pump pliers Basic, box type.
Standards:	DIN ISO 8976.

010011010010101	
Head shape:	Narrow head, therefore also appropriate for work in small spaces.
Design:	Fast and easy-to-adjust water pump pliers, with automatic adjustment
	of the box type, precision-stepped joint.
	Optimum adjustment to the object to be gripped.
	1. See a should the second be seed by a set of the second back set to be used as for a set for the second second set.

Long durability achieved by additional inductive hardening of gripper jaws. Material: Chrome vanadium tool steel, tempered.

Application: For rapid and optimum gripping and holding of pipes and angular profiles such as hex nuts in the installation area.

Order-No.	₩mm	← II	0;	0;	<b>F</b>	<b>—</b>
26768 1	250	10	1 1/2	40	360	5



Z 22 0 01	Water pump pliers Basic with push button setting.							
Standards:	DIN ISO 8976.							
Head shape:	Extra narrow head, therefore also appropriate for work in difficult							
	to access areas.							
Design:	Precision adjustment joint, box type, providing optimum adaptation							
	to object to be gripped.							
	Rapid and simple push button setting and locking.							
	Long durability achieved by additional inductive hardening of gripper jaws.							
Material:	Chrome vanadium tool steel, tempered.							
Application:	For gripping and holding pipes and angular profiles such as hex nuts							
	in the installation area.							
Order-No.	$\overbrace{mm}^{\leftarrow} \overbrace{II}^{\leftarrow} O^{\diamond}_{I} \checkmark \checkmark \qquad \blacksquare$							

1 30 150

2 50 365

63 570

l	Sym	bols.	

Details o	Details of cutting results of cutting pliers.				
Symbol	Types of wire	Example	Tensile strength ca. N/mm <sup>2</sup>		
$\bigcirc$	Soft wire	Copper, aluminium	220 - 250		
0	Medium hard wire	Iron nail	750 - 800		
0	Hard wire	Spring wire, steel nail	1.600 - 1.800		
	Piano wire	Hardened spring stee	el 2.200 - 2.300		
Test wires standardised in DIN ISO 5744					

#### Dimensions.

5

5

5

- O: Maximum gripper width across flats
- O. Maximum gripper pipe diameter
- Opening width, flat
- Clamping range
- ORetaining ring, externalORetaining ring, internal

Jaw style:	Cutter style:
Flat jaws	Cutter without bevel
Half round jaws	Cutter with small bevel
Round jaws	Cutter with bevel
•	Center cutter
	Scissors cutter
	Anvil cutter
	Stripper

#### End cutting nippers and pincers.



Order-No.	₹mm	₩	0	0	<b>_</b>	
<b>26757</b> 5	160	6 ½	3.5	2.5	180	5
<b>26758</b> 2	180	7	3.8	2.8	200	5
<b>26759</b> 9	200	8	4.0	3.0	220	5



Z 30 0 01	Pincers (carpenter's pincers) Basic.
Standards:	DIN ISO 9243.
Head shape:	Classic style.
Design:	Low wear lap joint, riveted and able to
	withstand high levels of load.
	Striking high quality cutting edge with high cutting performance and
	low application of force due to highly precise processing.
	Good durability due to additional induction hardening of cutting edges
	to approx. 62 HRC.
Material:	High-quality tool steel, tempered.
Application:	For withdrawing and cutting nails and wire pins.
Order-No	

Order-No.	₩mm	← II	<b>•</b>	<b>—</b>
26771 1	180	7	265	5
26772 8	200	8	350	5

Opening width of water pump pliers.

O: Maximum gripper width across flats [mm]

O: Maximum gripper pipe diameter ["]

180

250

300

7

10

12

2 1/2



26764 3

**26765** 0

**26767** 4

5

5

#### Monier pliers (rabitz pliers).

26778 0

**26780** 3

280

300

11

12

Z 31 0 01 Standards: Head shape: Design: Material: Application:	DIN ISC Classic Low we withsta High qu low app Good c to appr High-qu For bin	ear lap joir nd high le uality cuttin blication o durability d ox. 62 HF uality tool ding (plaiti	nt, rivete vels of lo ng edge f force c lue to ac RC. steel, te ng) and	d and a bad. with his lue to h dditiona mperec cutting	gh cutting ighly preci I induction I.	performance and se processing. hardening of cutting edges ng in reinforced concrete
	structu	res in a sir	ngle ope	eration.		
Order-No.	₩mm	<b>↓</b>	0	0	<b>•</b>	
<b>26774</b> 2	220	8 3⁄4	3.2	2.0	360	5
<b>26776</b> 6	250	10	3.5	2.2	425	5



3.8 2.4 460

3.8 2.4 485

Z 31 0 00 Standards: Head shape: Design:	Concretors pincers Basic. DIN ISO 9242. Classic style. High quality cutting edge with high cutting performance and low application of force due to highly precise processing. Good durability due to additional induction hardening of cutting edges to approx. 62 HRC.					
Material: Application: Order-No.	High-quality tool steel, tempered. For binding (plaiting) and cutting wire netting in reinforced concrete structures in a single operation.					
<b>26773</b> 5	220	8 3⁄4	3.2	2.0	350	5

Order-No.	mm	11	0	0	÷ ÷	
<b>26773</b> 5	220	8 3⁄4	3.2	2.0	350	5
<b>26775</b> 9	250	10	3.5	2.2	415	5
<b>26777</b> 3	280	11	3.8	2.4	450	5
<b>26779</b> 7	300	12	3.8	2.4	475	5

### Wiha Info

Since pliers have moving parts and sometimes have bright steel parts, they require a certain amount of care:

Therefore keep the joints of the pliers as clean as possible and occasionally give them and the bright surfaces a drop of low viscosity oil which does not contain acid or resin.

You will then be able to enjoy your Wiha quality pliers for a long time to come.



### The complete workshop range.

#### Circlip pliers for bores (internal).



#### Z 33 0 01 Internal circlip pliers Basic (for boreholes). Standards: DIN ISO 5256. Head shape: Straight shape. Drop forged, cylindrical precision tips. Design: Material: Chrome-vanadium tool steel. Application: For inserting / removing circlips from inside bores.

Order-No.	Тур	₩mm	<b>↓</b>	C	<b>••</b>		
26781 0	J 0	139	5	8-13	95	5	
<b>26782</b> 7	J 1	140	5	12-25	95	5	
<b>26783</b> 4	J 2	180	7	19-60	155	5	
<b>26784</b> 1	J 3	225	9	40-100	245	5	
<b>29425</b> 0	J 4	310	12	85-140	410	5	



Z 33 1 01	Internal circlip pliers Basic (for boreholes).					
Standards:	DIN ISO 5256.					
Head shape:	Shape D: 90° angled shape.					
Design:	Drop forged, cylindrical precision tips.					
Material:	Chrome-vanadium tool steel.					
Application:	For inserting / removing circlips from inside bores.					
Order-No	TVD $\longleftrightarrow$ C° $\leftarrow$					

order-no.	1 y p	mm		0	* *	
<b>26785</b> 8	J 01	139	5	8-13	95	5
<b>26786</b> 5	J 11	140	5	12-25	95	5
<b>26787</b> 2	J 21	180	7	19-60	155	5
<b>26788</b> 9	J 31	225	9	40-100	245	5
<b>29427</b> 4	J 41	310	12	85-140	410	5

Circlip pliers for shafts (external).



Z 34 0 01	External circlip pliers Basic (for shafts).
Standards:	DIN ISO 5254.
Head shape:	Straight shape.
Design:	Drop forged, cylindrical precision tips.
Material:	Chrome-vanadium tool steel.
Application:	For fitting / removing circlips externally to / from shafts or axles.

Order-No.	Тур	₩mm	← II	C	₅⁺₽	
<b>26789</b> 6	A 0	139	5	3-10	90	5
<b>26790</b> 2	A 1	140	5	10-25	90	5
<b>26791</b> 9	A 2	180	7	19-60	155	5
<b>26792</b> 6	A 3	225	9	40-100	260	5
29428 1	A 4	310	12	85-140	455	5



Z 34 1 01	External circlip pliers Basic (for shafts).
Standards:	DIN ISO 5254.
Head shape:	Shape D: 90° angled shape.
Design:	Drop forged, cylindrical precision tips.
Material:	Chrome-vanadium tool steel.
Application:	For fitting / removing circlips externally to / from shafts or axles.

Order-No.	Тур	₹mm	<b>₩</b>	Ü	<b>.</b>		
26794 0	A 01	139	5	3-10	90	5	
26795 7	A 11	140	5	10-25	90	5	
<b>26796</b> 4	A 21	180	7	19-60	155	5	
26797 1	A 31	225	9	40-100	260	5	
<b>29429</b> 8	A 41	310	12	85-140	455	5	

### Wiha Info

#### Wiha MagicTips -

Top of their class

Wiha

- Maximum grip: The special latching function preventing jumping away of the safety rings makes the Wiha circlip pliers truly unique
- Hard as steel: Additional hardening of tips means high wear resistance and therefore excellent durability
- Surface refined: Protected against rust
- Precise: Precision tips of special high performance steel for maximum grip and high stability



Special latching function prevents jumping away of the safety rings

Magic,

NEW



Circlip pliers for bores (internal).

Order-No.	Тур	mm	€ II	C	<b>.</b>	
34688 1	J 0	140	5	8-13	95	5
<b>34689</b> 8	J1	140	5	12-25	95	5
<b>34690</b> 4	J 2 •	180	7	19-60	155	5
34691 1	J3•	220	9	40-100	245	5
<b>34692</b> 8	J4•	305	12	85-140	410	5
• with latchin	ng function	l				

C			B			
NEW						
Z 33 5 01	Internal	circlip p	oliers I	Basic (for be	oreholes).	
Standards:	DIN ISO	5256.				
Head shape:	Angled f	orm.				
Design:	Wiha Ma	agicTips	– highl	ly resilient pr	ecision tips manuf	actured
	from spe	ecial high	perfo	rmance stee	l.	
	With spe	ecial surfa	ace fin	ish to proteo	t against rust and	with a unique
	latching	function	that e	ffectively pre	vents jumping awa	ay of the safety rings.
	High we	ar resista	ance w	ith additiona	I hardening of tips	
	Slim plie	r head fo	or optir	nal access a	and a good view of	f the workpiece.
	Spring p	rotected	in the	joint, canno	t be lost.	
Material:	Chrome	vanadiu	m tool	steel, tempe	ered.	
Application:	For inse	rting / rer	noving	g circlips fror	n inside bores.	
		-	-			
Order-No.	Тур	₹mm	<b>↓</b>	C	<b>L</b>	
<b>34693</b> 5	J 01	140	5	8-13	95	5
<b>34694</b> 2	J 11	140	5	12-25	95	5
<b>34695</b> 9	J 21 •	180	7	19-60	155	5

40-100

85-140

245

410

**34696** 6

**34697** 3

220 9

305 12

J 31 •

J 41 •

• with latching function

Circlip pl	iers for	shaft	s (ex	ternal).		
ి 🗲						
N E W Z 34 4 01	-		pliers	Basic (for sha	fts).	
Standards:	DIN ISO					
Head shape:	Straight		le l'ache l			of a structure of
Design:		• •	0	y resilient preci	sion tips man	ufactured
		0		rmance steel.	a alianat w sat a wat	
					0	nd with a unique
	0			ith additional h	, , ,	way of the safety rings.
	0				0 1	of the workpiece.
Material:				steel, tempere	-	or the workpiece.
Application:				rclips externally		afts or axles.
. 1.1		3,				
Order-No.	Тур	₩mm	<b>↓</b>	U	<b>.</b>	
<b>34698</b> 0	A 0	140	5	7-10	90	5
<b>34699</b> 7	A 1	140	5	10-25	90	5
<b>34700</b> 0	A 2 •	185	7	19-60	155	5
<b>34701</b> 7	A 3 •	240	9	40-100	260	5
<b>34702</b> 4	A 4 •	300	12	85-140	455	5

• with latching function

• with latching function



5



lihn

The complete workshop range.

Pipe wrenches swedish style.

**29436** 6

**29437** 3

420

535

#### Pipe wrenches swedish style.



Z 26 0 00 Standards:	DIN 52	34.		sh style Basi	c, S-jaw.	
Head shape:	S-jaw s	shape an	gled 45°			
Design:	Self-cla	imping g	ripping o	of pipes and h	nex nuts at 3 points.	
	Torsion	-free har	ndle prof	ile.		
	Adjusti	ng nut se	ecured to	o prevent loss	8.	
	Long d	urability	achievec	d by additiona	al inductive hardening of gripper ja	aws.
Material:	Chrom	e-vanadi	um steel	, tempered.		
Application:	Safe ar	nd secure	e grip on	pipes and he	ex nuts.	
Order-No.	mm	0;	3	<b>•</b>		
<b>29435</b> 9	320	1	0-40	750	1	

**1 ½** 0-55 1350

0-67 2450

2



Z 26 2 00	Pipe wrenches swedish style Basic, 90°.
Standards:	DIN 5234.
Head shape:	Swedish shape angled 90°.
Design:	Safe and secure grip due to teeth that are offset against the direction
	of rotation. Torsion-free handle profile.
	Adjusting nut secured to prevent loss.
	Long durability achieved by additional inductive hardening of gripper jaws.
Material:	Chrome-vanadium steel, tempered.
Application:	Safe and secure grip on pipes, flat workpieces and nuts.
Order-No	

Order-No.	₩mm	0;	3	<b>•</b>	-
<b>29441</b> 0	320	1	0-40	750	1
<b>29442</b> 7	415	1 ½	0-55	1250	1
<b>29443</b> 4	555	2	0-67	2450	1

### Grip pliers.

**29487** 8

300



Z 66 0 00	Grip p	liers Bas	ic with	wire cut	tter.				
Head shape:	Bent g	Bent gripper jaws with wire cutter.							
Design:	Single-	handed o	operatio	n with q	uick-releas	ie lever,			
	adjusti	ng screw	and inte	egrated	wire cutter				
Material:	Forged	l jaws ma	ide of cl	nrome-va	anadium-s	teel.			
	Body c	of pliers m	nade of	high-resi	istance spe	ecial steel, nickel-plated.			
Application:	Clampi	ing and g	ripping	of round	and flat m	naterial.			
	Wire cu	utter for c	utting v	velded w	vires.				
Order-No.	mm		0;		<b>•</b> •				
<b>29485</b> 4	180	7	8-30	0-20	360	5			
<b>29486</b> 1	250	10	8-40	0-20	530	5			

**12** 8-65 0-30 1000



Z 26 1 00	Pipe wr	enches	swedis	sh style l	Basic, 45°.				
Standards:	DIN 523	4.							
Head shape:	Swedish	Swedish shape angled 45°.							
Design:	Safe and	d secure	grip du	ie to teet	h that are offse	t against the direction			
	of rotatio	on.							
	Torsion-	free han	dle prof	ile.					
	Adjustin	g nut se	cured to	prevent	loss.				
	Long du	rability a	achieved	d by addi	tional inductive	hardening of gripper jaws.			
Material:	Chrome	-vanadiı	um stee	l, temper	ed.				
Application:	Safe and	d secure	grip on	i pipes, fl	at workpieces	and nuts.			
Order-No.	₩mm	О;	1						
<b>29438</b> 0	315	1	0-40	750		1			
<b>29439</b> 7	420	1 ½	0-55	1240		1			
<b>29440</b> 3	570	2	0-67	2500		1			

G				
	vm	10101	11.57	

Symbol	Types of wire	Example	Tensile strength ca. N/mm <sup>2</sup>					
$\bigcirc$	Soft wire	Copper, aluminium	220 - 250					
0	Medium hard wire	Iron nail	750 - 800					
0	Hard wire	Spring wire, steel nail	1.600 - 1.800					
	Piano wire	Hardened spring stee	2.200 - 2.300					
Test wires standardised in DIN ISO 5744								

#### Dimensions.

- **O:** Maximum gripper width across flats
- Maximum gripper vidar derood na
   Maximum gripper pipe diameter
   Opening width, flat
   Clamping range
   Retaining ring, external

- O Retaining ring, internal

Jaw style:	Cutter style:
Flat jaws	Cutter without bevel
Half round jaws	Cutter with small bevel
Round jaws	Cutter with bevel
•	Center cutter
	Scissors cutter
	Anvil cutter
	Stripper



#### Z 67 0 00 Welding grip pliers Basic.

U-shaped, with two supporting surfaces.								
Single-handed operation with quick-release lever and adjusting screw.								
Clamping jaw made of robust and heat-resistant cast iron.								
Body of pliers made of high-resistance special steel, nickel-plated.								
Clamping and gripping of adjacent profiled or flat materials during welding.								
$\leftrightarrow$ $\leftrightarrow$ $\wedge$ $\Box$								

Order-No.	₹mm		О;	□;	<b>•</b>	<b>—</b>
<b>29488</b> 5	280	11	35-65	0-25	900	2

Opening	width of grip pliers.
0;	Maximum gripper width across flats [mm]
	Maximum opening width at jaw flats [mm]

### Grip pliers.



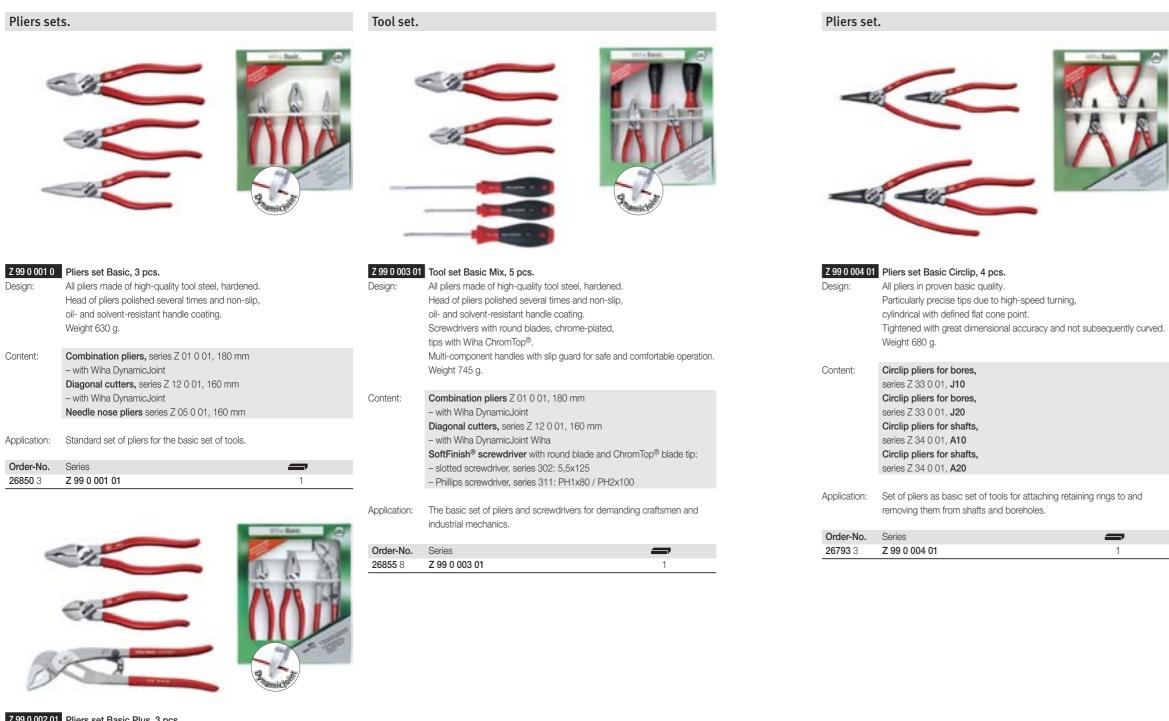
Z 67 1 00	Pipe w	elding	grip plier	rs Basic.					
Head shape:	U-shaped, with two supporting surfaces.								
Design:	Single-I	Single-handed operation with quick-release lever and adjusting screw.							
Material:	Clamping jaw made of robust and heat-resistant cast iron.								
	Body of pliers made of high-resistance special steel, nickel-plated.								
Application:	Clamping and gripping of adjacent round materials during welding.								
Order-No.	₩mm	<b>↓</b>	0;	<b>.</b>					
<b>29489</b> 2	280	11	10-72	912	2				



Z 67 2 00 Head shape: Design: Material: Application:	C-shap Single- Forged Body o Clampi with hig	ed, with handed jaws ma f pliers n ng and g gh ridges	rounded operatior ade of ch nade of h gripping c	I supportir n with quic rome-van nigh-resista of awkward	(clamp grip plie ig surface. k-release lever al adium-steel. ance special stee d-shaped workpi depth up to 50 r	nd adjusting screw. II, nickel-plated. eces or sections
Ourlass No.			J 10 40 11	ini, prome		
Order-No.	mm	П	Ц÷	••		
29490 8	280	11	0-90	660		2



The complete workshop range.



Z 99 0 002 01 Pliers set Basic Plus, 3 pcs. All pliers in proven basic quality. Cutting pliers also suitable for piano wire. QuickFix water pump pliers with "automatic" rapid adjustment.

High leverage combination pliers, series Z 02 0 01, 200 mm Content: - with Wiha DynamicJoint High leverage diagonal cutters, series Z 16 0 01, 180 mm - with Wiha DynamicJoint QuickFix water pump pliers series Z 23 0 01, 250 mm

Application: Power-assisted set of pliers as part of basic set of tools.

Weight 1025 g.

Order-No.	Series	<b>—</b>
<b>26853</b> 4	Z 99 0 002 01	1

Design:

### Wiha Info Wiha MagicTips – Top of their class • Maximum grip: The special latching function preventing jumping away of the safety rings makes the Wiha circlip pliers truly unique

- Hard as steel: Additional hardening of tips means high wear resistance and therefore excellent durability
- Surface refined: Protected against rust
- Precise: Precision tips of special high performance steel for maximum grip and high stability

NEW

Pliers set	
N N	
N E W Z 99 0 007 01 Design:	Pliers set Basic Circlip, 4 pcs. Wiha MagicTips – highly resilient precision tips manufactured from special high performance steel. High wear resistance with additional hardening of tips. Slim plier head for optimal access and a good view of the workpiece. Weight 650 g.
Content:	Circlip pliers for bores, series Z 33 4 01, J10 - with Wiha MagicTips Circlip pliers for bores, series Z 33 4 01, J20 - with Wiha MagicTips Circlip pliers for shafts, series Z 34 4 01, A10 - with Wiha MagicTips Circlip pliers for shafts, series Z 34 4 01, A20 - with Wiha MagicTips
Application:	Set of pliers as basic set of tools for attaching retaining rings to and removing them from shafts and boreholes.
Order-No. 34708 6	Series         Image: Control of the series           Z 99 0 007 01         1





Special latching function prevents jumping away of the safety rings



# Wiha Electronic.

#### Precision for made-to-measure work.



A calm hand is essential for working with electronic components. The Wiha Electronic pliers optimally support the user in this respect.

The sophisticated details are conspicuous: ground, razor-sharp cutting edges for smooth cuts. A handle shape that correctly positions the hand of the user. A glare-free, finely pressed pliers head for precise, safe grasping and holding.

And all with an excellent quality and at a competitive price to which both professionals and demanding handymen will not be able to say no to.



The Electronic long-nose pliers from Wiha hold small components and bend wires.

#### Я Ē Wiha Electronic.

- Specially for fine work Glare-free, phosphate coated head, applied precision joint
- Precise Precisely ground cutting edges

As hard as steel Finely pressed from high grade C70 steel

Robust and durable Cutting edges are additionally hardened up to 63 HRC

Sensitive Greater control with grasping via opening spring with fine resistance

- Ergonomic
- An innovative handle shape for optimal handling

Diagonal cutters, wide shape.



Z 41 1 03	Diagonal cutters Electronic.								
Head shape:	Wide, pointed head.								
Design:	Cutting edge with full flush cutter function.								
	With opening spring.								
Material:	C 70 sp	ecial tool	steel.						
Application:	ation: For an absolutely flush cut of soft wires in the electronics indu								
Order-No.	₩mm	<b>₩</b>	0	<b>•</b> •	-				
26818 3	138	5 ½	1.3	70	5				



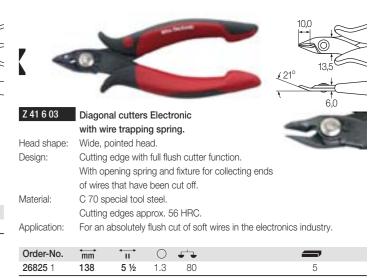
	t 6,0
Z 41 3 03	Diagonal cutters Electronic.
Standards:	DIN ISO 9654.
Head shape:	Wide, pointed head.
Design:	Cutting edge with semi-flush cutter function,
	thus also appropriate for medium hard wires.
	Strong design for soft wires up to ø 2.0 mm.
	With opening spring.
Material:	C 70 special tool steel.
	Cutting edges > 60 HRC.
Application:	Universal small diagonal cutter for cutting soft and medium hard wires in
	the electronics and precision mechanical engineering industries.
<b>O</b> I NI	$\leftrightarrow$ $\leftrightarrow$ $\sim$ $\sim$ $\sim$ $\sim$

Order-No.	₩mm	<b>↓</b>	$\bigcirc$	0	<b>_</b>	-
<b>26815</b> 2	138	5 ½	2.0	0.8	80	5

Details of	of cutting results of c	utting pliers.	
Symbol	Types of wire	Example	Tensile strength ca. N/mm <sup>2</sup>
$\bigcirc$	Soft wire	Copper, aluminium	220 - 250
0	Medium hard wire	Iron nail	750 - 800
0	Hard wire	Spring wire, steel nails	1.600 - 1.800
	Piano wire	Hardened spring steel	2.200 - 2.300
Test wire	s standardised in DIN	ISO 5744	



#### Diagonal cutters, wide shape with wire trapping spring.



### Wiha Info

Electronics pliers with cutting edges are designed especially for cutting soft to medium hard wires.

The diameters of materials which your electronics pliers are able to cut depend not only on the material selected and the hardness of the cutting edges but also depend greatly on the geometry of the cutting edges:

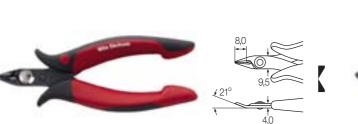
- Pliers with the full flush cutter function may cut off wires smoothly and flushly but are only appropriate for soft copper wires (99.85% pure copper)
- Pliers with the semi-flush and normal bevelled cutting edges function on the other hand may not cut in a totally flush manner but can cut thin iron wires or even medium hard steel wire
- You will find details of precise cutting results in the individual figures of pliers



## Wiha Electronic.

Precision for made-to-measure work.

#### Diagonal cutters, narrow shape.



5

5

Z 40 0 03	Micro diagonal cutter Electronic.
Head shape:	Extra narrow, short head for working in particularly restricted spaces.
Design:	Cutting edge with full flush cutter function.
	With opening spring.
Material:	C 70 special tool steel.
Application:	For absolutely flush cutting of soft wires in places
	which are difficult to access in the electronics industry.
Order-No.	$\overbrace{mm}^{\leftarrow} \underbrace{\overset{\leftarrow}{II}}_{II} \bigcirc \underbrace{\overset{\leftarrow}{II}}_{II} \qquad \blacksquare$

60

**4 ½** 0.8

Z 40 1 03 Diagonal cutters Electronic with wire trapping spring.

Cutting edge with full flush cutter function. With opening spring and fixture for collecting ends

Application: For absolutely flush cutting of soft wires in places which are difficult

1.0 70

of wires that have been cut off. C 70 special tool steel.

to access in the electronics industry.

5

26812 1

Design:

Material:

Order-No.

26813 8

118

Head shape: Narrow, pointed head.

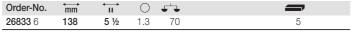
₩mm

128

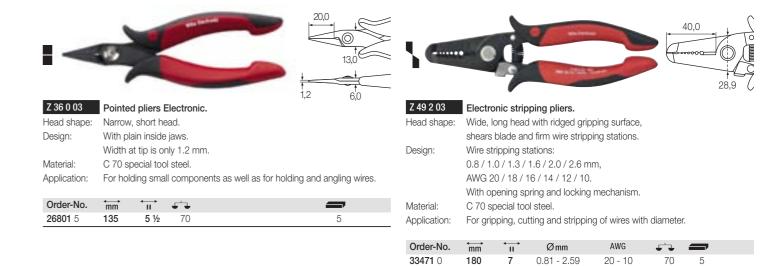


Diagonal cutters.

	0,0
Z 46 0 03	Oblique cutting nippers Electronic.
Head shape:	Wide, pointed head.
Design:	Cutting edge with full flush cutter function.
	With cutting edge at 48° for cutting obliquely from above or from the side.
Material:	C 70 special tool steel.
Application:	For absolutely flush cutting of soft wires in places which are difficult
	to access in the electronics industry.



#### Needle nose pliers



-0	-	10,0 <sup>±</sup>

	4.0
Z 46 0 03	Micro oblique cutting nippers Electronic.
Head shape:	Extremely narrow, short head for working in particullarly restricted spaces.
Design:	Cutting edge with full flush cutter function.
	Edge at 30° to face end of pliers for cutting obliquely from above or
	from the side.
Material:	C 70 special tool steel.
Application:	For absolutely flush cutting of soft wires in places which are difficult
	to access in the electronics industry.
Order-No.	$\overbrace{mm}^{mm} \overbrace{II}^{II} \bigcirc \checkmark \overbrace{II}^{II} \qquad \blacksquare$

Order-No.	mm	ÎIÎ	$\bigcirc$	<b>•</b>	
<b>26830</b> 5	118	4 1⁄2	0.6	60	5

			100	
		10	11	0
				U

A variety of different pliers are required for electronics applications.

Simply contact us if you require different models for other applications.

Details o	of cutting results of cu	itting pliers.	
Symbol	Types of wire	Example	Tensile strength ca. N/mm <sup>2</sup>
$\bigcirc$	Soft wire	Copper, aluminium	220 - 250
0	Medium hard wire	Iron nail	750 - 800
0	Hard wire	Spring wire, steel nails	1.600 - 1.800
	Piano wire	Hardened spring steel	2.200 - 2.300
Test wire	s standardised in DIN I	SO 5744	

#### Stripping pliers.



Z 49 7 03	Electronic stripping pliers.					
Head shape:	Wide, long head with ridged gripping surface,					
	shears blade and firm wire stripping stations.					
Design:	Wire stripping stations:					
	0,4 / 0.5 / 0.6 / 0.8 / 1.0 / 1.3 mm,					
	AWG 26 / 24 / 22 / 20 / 18 / 16.					
	With opening spring and locking mechanism.					
Material:	C 70 special tool steel.					
Application:	For gripping, cutting and stripping of wires with diameter.					
Order-No.	🖮 🖬 Ømm AWG 🖵 🚍					

Order-No.	₹mm	<b>↓</b>	Ømm	AWG	<b>.</b>		
<b>33472</b> 7	180	7	0.4 - 1.3	26 - 16	70	5	

