20 Flat Nose Pliers UN ISO 574 20 O1 160 20 O1 160 CO 02 160 CO 02 160 CO 02 160 CO 02 160 CO 05 160 CO 06 160

Part N	0.	Head	Handles		imensio	ns		Weight
	Length			L	3	W3	T1	
	mm			r	nm	mm	mm	g
20 01	125	polished	plastic coated	2	7.0	14.5	8.0	80
	140			2	8.0	15.5	9.5	110
	160			3	0.0	17.0	9.5	140
180				3	5.0	19.0	10.0	190
	200			3	8.0	21.0	12.0	275
20 02	140	polished	with two-colour	2	8.0	15.5	9.5	145
	160		dual component handles	3	0.0	17.0	9.5	170
20 06	160	chrome plated	insulated with two-colour dual component handles	3	0.0	17.0	9.5	175





Part N	0.	Head	Handles	Dimens	sions		Weight		
	Length			L3	W3	D1	T1		
	mm			mm	mm	Ømm	mm	g	
22 01	125	polished	plastic coated	27.0	14.5	2.0	8.0	70	
	140			28.0	16.5	2.5	9.5	100	
	160			30.0	18.0	3.0	9.5	140	
	180			35.0	21.0	3.5	10.5	180	
22 02	140	polished	with two-colour	28.0	16.5	2.5	9.5	135	
	160		dual component handles	30.0	18.0	3.0	9.5	165	
22 06	160	chrome plated	insulated with two-colour dual component handles	30.0	18.0	3.0	9.5	170	



23 Flat Nose Pliers, with cutting edges, Precision Mechanics Pliers



- suitable for gripping and cutting work in precision mechanics
- > long, tapering jaws
- > serrated gripping surfaces
- > with cutting edges for soft wire 2.5 mm dia. and medium hard wire 1.6 mm dia.
- cutting edges additionally induction hardened, cutting edge hardness approx. 60 HRC
- high grade special tool steel, oil-hardened and tempered



Part N	0. Length	Head	Handles	Weight
	mm			g
23 01	140	polished	plastic coated	65

25 Snipe Nose Side Cutting Pliers, Radio Pliers



- suitable for gripping and cutting work in precision mechanics
- > pointed, half-round jaws
- > serrated gripping surfaces
- > with cutting edges for medium hard wire and hard wire
- cutting edges additionally induction hardened, cutting edge hardness approx. 61 HRC
- high grade special tool steel, oil-hardened and tempered

Part N	0.	Head	Handles	Dime	nsions				Weight		
	Length			\bigcirc		L3	W3	T1	W4	T2	
	mm			Ømm	Ømm	mm	mm	mm	mm	mm	g
25 01	125	polished	plastic coated	2.2	1.6	27.0	13.0	7.0	2.5	1.8	70
	140			2.5	1.6	42.0	15.0	8.0	2.5	2.0	90
	160			2.5	1.6	50.0	16.5	9.5	3.0	2.5	115
25 02	140	polished	with two-colour	2.5	1.6	42.0	15.0	8.0	2.5	2.0	110
	160		dual component handles	2.5	1.6	50.0	16.5	9.5	3.0	2.5	145
25 06	160	chrome plated	insulated with two-colour dual component handles ★ 1000 V 🕸 VDE-tested	2.5	1.6	50.0	16.5	9.5	3.0	2.5	150



26 Snipe Nose Side Cutting Pliers, Stork Beak Pliers

precision points

and tempered

hard wire max. dia. 3.2 mm and

hard wire max. dia. 2.2 mm

induction hardened, cutting

edge hardness approx. 61 HRC



Style 2: 40° bent jaws

Part N	0.	Style	Head	Handles	Cutting	capacity	Weight
	Length					\bigcirc	
	mm				Ømm	Ømm	g
26 11	200	Λ	polished	plastic coated	3.2	2.2	170
26 12	200		polished	with two-colour dual component handles	3.2	2.2	200
26 15	200	1	chrome plated	with two-colour dual component handles	3.2	2.2	200
26 16	200		chrome plated	insulated with two-colour dual component handles	3.2	2.2	205
26 21	200	<u>_</u>	polished	plastic coated	3.2	2.2	170
26 22	200		polished	with two-colour dual component handles	3.2	2.2	200
26 26	200	2 <u>★4</u> 0°	chrome plated	insulated with two-colour dual component handles ▲ 1000 V 🏝 VDE-tested	3.2	2.2	205



KNIPEX Snipe Nose Side Cutting Pliers (Stork Beak Pliers) are forged from vanadium steel and carefully hardened. The slim precision tips withstand high demands, particularly bending loads.

High loadable elastic precision tips







Part No	0.	Head	Handles	Dime	nsions				Weight
	Length			L3	W3	T1	W4	T2	
	mm			mm	mm	mm	mm	mm	g
28 01	200	polished	plastic coated	33.0	13.5	10.5	4.0	10.5	200

30 Long Nose Pliers without side cutter



- $\boldsymbol{\boldsymbol{\mathsf{Y}}}$ heavy duty and wear resisting
- > different jaw styles
- chrome vanadium electric steel, oil-hardened and tempered

30 36 160 8 <

Style 1: long trapezoidal jaws, gripping surfaces serrated

Style 3: long round jaws, gripping surfaces smooth

Part N	0.	Style	Head	Handles	Dime	nsions	;			Weight
	Length				L3	W3	T1	W4	T2	
	mm				mm	mm	mm	mm	mm	g
30 11	140		polished	plastic coated	42.0	15.0	8.0	2.5	4.0	90
	160	1			46.5	16.5	9.5	3.0	5.0	120
	190				50.0	18.5	8.0	3.0	7.0	140
30 16	160		chrome plated	insulated with two-colour dual component handles ▲ 1000 V ▲ VDE-tested	46.5	16.5	9.5	3.0	5.0	155
30 31	140	3	polished	plastic coated	37.5	15.0	8.0	4.0	2.0	85
30 36	160	8	chrome plated	insulated with two-colour dual component handles ▲ 1000 V ▲ VDE-tested	41.0	16.5	9.5	5.0	2.5	145



18 KNIPE

31 Grab Pliers, Needle Nose Pliers

 precision pliers for very exact assembly, bending and adjusting work

- > with extra long jaws: length of jaws 55.0 mm
- smooth ground gripping surfaces
- > edges carefully deburred
- chrome vanadium electric steel, oil-hardened and tempered

Style 1: straight jaws Style 2: 45° bent jaws

31 21 160 ⊟ _____ Style 2: 45° bent jaws

Part N	0.	Style	Dime	nsions	5			Weight		
	Length				L3	W3	T1	W4	T2	
	mm				mm	mm	mm	mm	mm	g
31 11	160	1 🖽	polished	plastic coated	55.0	15.0	7.5	2.0	2.5	100
31 21	160	2 <u>⊟ ∡4</u> 5°	polished	plastic coated	55.0	15.0	7.5	2.0	2.5	100



32 Relay Adjusting Pliers



Part N	0.	Style	Head	Handles	Dime		Weight			
	Length				L3	W3	T1	W4	T2	
	mm				mm	mm	mm	mm	mm	g
32 11	135	1 🖂	polished	plastic coated	34.0	12.5	7.0	1.4	1.5	75
32 21	135	2 🖂	polished	plastic coated	34.0	12.5	7.0	1.4	3.5	75
32 31	135	3 <u>⊟ ∡4</u> 0°	polished	plastic coated	32.0	12.5	7.0	1.4	3.5	75



33 Duckbill Pliers



- duckbill shaped jaws 9 mm wide at the tip and tapering to 1.5 mm thickness
- > smooth gripping surfaces
 > chrome vanadium electric steel, oil-hardened and tempered

Weight



<u>33 01 160 polished plastic coated</u> 55.0 15.0 7.5 3.0 9.0 110

34 Precision Electronics Gripping Pliers, with ground screw joint







34 32 130 Style 3: round, pointed jaws



34 12 130 location of electronic components in a vertical direction



34 22 130 positioning of components in electronics



34 22 130 half-round tips for bending and forming

Part No).	Style	Dimens	ions					Weight
		all pliers with	В	А	D	E		Length	
		MMMM	mm	mm	mm	mm	mm	mm	g
34 12	130	1 🖂	19.0	11.0	6.5	1.5	3.5	135	60
34 22	130	2 🖯	19.0	11.0	6.5	1.5	1.5	135	60
34 32	130	3 8	21.0	11.0	6.5	2.0	1.0	135	60

- > the assortment for highest standard of performance and results
- > precision pliers for ultra fine assembly work, e.g. in
- electronics and fine mechanicsfor gripping, holding and bending
- joint with screw: precise, zero-backlash operation of pliers
- precisely finished joint surfaces for smooth, low friction movement along the complete opening range
- > low-friction double spring for gentle and even opening
- smooth ground gripping surfaces, edges carefully deburred
- > non-reflective finish
- > low weight
- ergonomically shaped, two-colour dual component handles; blue/grey
- high quality ball bearing steel, forged



In the design of KNIPEX **Electronics Pliers for gripping** and cutting ergonomic criteria have been given particular attention. The ergonomics of the two colour dual component handles were optimised to suit the motion sequence during precision work. The shape and material chosen allow a secure grip and fatigue reduced work. The strain on the hand is distributed over a larger surface and reduces pressure accordingly. The user still retains the sense for the work on the workpiece.





35 Electronics Pliers 🙀



35 22 115 $\ominus \Box$ Style 2: half-round jaws



 $\ominus \square$ Style 4: 45° bent, half-round jaws





35 52 145 Style 5: long, trapezoidal jaws



 $\ominus \square$ Style 8: 45° bent, half-round long jaws

- > precision pliers for ultra fine assembly work, e.g. in electronics and fine mechanics
- > for gripping, holding and bending
- > precision box joint
- > smooth ground gripping surfaces
- > edges carefully deburred
- > low-friction double spring for gentle and even opening
- > the polish or mirror polish (only finish 2) together with a fine film of oil offer the best possible rust protection no circuit faults caused by peeling chrome from plated tools
- > special tool steel, oil-hardened and tempered

Finish 1

(4th digit of the Part No.):

> head polished, plastic coated handles

Finish 2

(4th digit of the Part No.):

> head mirror polished, two colour dual component handles red/blue



In the design of KNIPEX **Electronics Pliers for gripping** and cutting, ergonomic criteria have been given particular attention. The result is a comfortable and user friendly adaption of the plier to the human hand.



00 20 16



F



Part No. Style		Head	Handles	Dime	ensions	5			Weigh		
	Length		pliers with			В	А	D			
	mm	N	www. 🗇			mm	mm	mm	mm	mm	g
35 11	115	1		polished	plastic coated	22.5	9.5	6.5	2.0	4.0	60
35 22	115	2	\ominus	mirror polished	with two colour dual component handles	22.5	9.5	6.5	2.0	1.5	70
35 31	115	3	8	polished	plastic coated	22.5	9.5	6.5	2.0	1.0	50
35 42	115	4	\bigcirc $\underline{\checkmark}45^{\circ}$	mirror polished	with two colour dual component handles	22.5	9.5	6.5	2.0	1.5	75
35 52	145	5	long jaws	mirror polished	with two colour dual component handles	40.0	12.0	7.5	1.5	4.0	105
35 62	145	6	long jaws	mirror polished	with two colour dual component handles	40.0	12.0	7.5	2.5	1.5	95
35 82	145	8	long jaws O <u>X</u> 45°	mirror polished	with two colour dual component handles	35.0	12.0	7.5	2.5	1.0	95







 $\ominus \subseteq$ Style 2: half-round jaws





00 20 17

- > precision pliers for ultra fine assembly work, e.g. in electronics and fine mechanics
- > for gripping, holding and bending
- > electrically discharging version dissipative
- > precision box joint
- > smooth ground gripping surfaces
- > edges carefully deburred
- > low-friction double spring for gentle and even opening
- > the mirror polish together with a fine film of oil offer the best possible rust protection - no circuit faults caused by peeling chrome from plated tools
- > two-colour dual component handles black/grey
- > special tool steel, oil-hardened and tempered





In the design of KNIPEX **Electronics Pliers for gripping** and cutting, ergonomic criteria have been given particular attention. The result is a comfortable and user friendly adaption of the plier to the human hand.



When using pliers on components endangered by electrostatic discharge (ESDS - electro static discharge sensitive devices) relevant regulations and standards (e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472) require a controlled discharge of electric energy through the handles of such pliers. The KNIPEX Electronics Pliers in ESD version discharge the electrostatic energy correspondingly slowly and controlled to protect endangered components.

Part No.		Style	Head Handles [Dimensions						
	Length	all pliers with			В	А	D						
	mm				mm	mm	mm	mm	mm	g			
35 12	115 ESD	1	mirror polished	with two colour dual component handles	22.5	9.5	6.5	2.0	4.0	75			
35 22	115 ESD	² ⊖	mirror polished	with two colour dual component handles	22.5	9.5	6.5	2.0	1.5	70			



36 Electronics Mounting Pliers







Model 36 12 130: to bend wire in shape for the distance to the plate





to cut wire at 1.3mm length below the plate

- > precision pliers for ultra fine assembly work, e.g. in electronics and fine mechanics
- > for bending and cutting wire ends
- > precision box joint
- > smooth ground gripping surfaces
- > edges carefully deburred
- > low-friction double spring for gentle and even opening
- > the mirror polish together with a fine film of oil offer the best possible rust protection - no circuit faults caused by peeling chrome from plated tools
- > with two-colour dual component handles red/blue
- > special tool steel, oil-hardened and tempered





Part No.		Head	Style	Dime	nsions	5				Weight
	Length			L3	W	T1	W1	T2		
	mm			mm	mm	mm	mm	mm	mm	g
36 12	130	mirror polished	to bend wire shape	23.0	12.0	7.5	5.5	6.0	-	80
36 42	125	mirror polished	to cut wire, distance 1.3mm	18.0	11.5	7.5	-	4.0	1.2	100



38 Mechanics Pliers



38 41 190 Style 4: flat, wide jaws



plier jaws / tips

oil-hardened and tempered

Style 7: 70° bent, half-round jaws, suitable for pulling split pins. For gripping tasks in confined areas.



Angled jaws for easy access to confined areas



Specially shaped jaws for easy gripping of spark plugs



38 91 200 ₩¥

Style 9: 45° bent, half-round, long jaws, also suitable for gripping spark plugs and round components (spark plug cover 'grabber')

Part N	0.	Style	Head	Handles	Dime	nsions	5			Weight
	Length				L3	W3	T1	W4	T2	
	mm				mm	mm	mm	mm	mm	g
38 11	200	1	polished	plastic coated	73.0	17.5	9.5	3.0	2.5	180
38 15	200	\ominus	chrome plated	with two colour dual component handles	73.0	17.5	9.5	3.0	2.5	210
38 31	200	3 🕀	polished	plastic coated	73.0	17.5	9.5	3.0	2.5	175
38 41	190	4 🖂	polished	plastic coated	50.0	18.0	8.0	2.0	8.0	140
38 71	200	7 <u>⊀</u>7 ⁰	polished	plastic coated	73.0	17.5	9.5	3.0	2.0	175
38 91	200	9 <u>∡4</u> 5°	polished	plastic coated	73.0	17.5	9.5	-	2.5	180



41 Grip Pliers



41 04 250 Style 0: jaws for round workpieces, with wire cutter

- > holds round, section and flat material securely
- > heavy duty model
- > with adjustment screw and release lever
- > one-hand operation
- high clamping pressure due to toggle lever action
- > plier body: high strength spring steel
- inserted jaws made from chrome vanadium steel, drop forged



Style 1: jaws with double prism for round, section and flat material







Example: 41 14 250



41 34 165

Style 3: Long-Nose Grip Pliers, narrow, long jaws

Part No.		Style	Head	Handles	Clamping width			Weight
	Length				C]		\Box	
	mm				mm	mm	mm	g
41 04	180	0	nickel plated	nickel plated	8-30	20	6-24	360
41 04	250		nickel plated	nickel plated	8-40	20	8-30	530
41 14	250	1	nickel plated	nickel plated	36	36	13-36	560
41 34	165	3	nickel plated	nickel plated	6.5-30	10	6-24	200



42 Welding Grip Pliers



42 14 280





42 24 280



42 34 280



- > for gripping and clamping round, section and flat material
- > heavy duty model
- > with adjustment screw and release lever

Model 42 14 280:

- > heat resistant crucible cast steel jaws
- > section or flat material items lying side by side are held securely during welding
- > also for section material with vertical webs up to 25 wmm high



- high clamping pressure due to toggle lever action
- > plier body: high strength spring steel



Secure fixing of metal section material for welding



Model 42 24 280:

- > heat resistant crucible cast steel jaws
- round or tubular material items lying centrally side by side are held securely during welding



Model 42 34 280:

- > gripping jaws of chrome vanadium steel, drop forged
- clamps cumbersome workpieces and sections with high webs up to 40 mm

Part N	lo.	Head	Handles	Clamping	Weight	
	Length			EO		
	mm			mm	mm	g
42 14	280	nickel plated	nickel plated	30-65	51	915
42 24	280	nickel plated	nickel plated	10-85	-	860
42 34	280	nickel plated	nickel plated	-	90	700

26 KNIPEX

45 Special Retaining Ring Pliers (shafts)



Model 45 10 170:

> for retaining rings with a minimum ring split gap of 3.6 mm

- > for fitting horseshoe-shaped spring retaining rings and circlips without grip holes
- > for shaft retaining devices
- > with opening spring
- Forged
- > chrome vanadium steel, oil-hardened and tempered



45 21 200

2,2 mm

Model 45 21 200:

 > angled jaws with centring hole
 > for retaining rings according to standard from 12.0 mm dia.,
 e.g. for securing drive shaft in the gearbox of a motor vehicle
 > minimum ring split gap of the rings 2.2 mm



45 21 200 *tips with centre holes for secure fit of the retaining ring*

Part No		Style	Head	Handles	Weight
	Length				a
	mm				y
45 10	170		burnished	burnished	155
45 21	200		burnished	plastic coated	190



85-140

310

465

44 Internal Circlip Pliers (bore holes)



> for fitting internal circlips





Only use circlip pliers for

working with these pliers.

J42

46 External Circlip Pliers (shafts)





Easy fitting of external circlips

Models 46 10 and 46 20:

- ➤ for rings from 122 400 mm dia.
- > with locking device, can be released
- > without opening spring
- > with replaceable tips made of tempered steel
- > handles black powder coated

46 31 A22

Style 3: 45° bent tips

Part	No.	Style	Head	Handles	Size of shaft		Weight
	Size					Length	
		M			Ømm	mm	g
46 11	A0		polished	plastic coated	3-10	140	85
	A1	1			10-25	140	85
	A2				19-60	180	140
	A3	11			40-100	210	215
	A4	- A			85-140	320	530
46 10) A5	14	black powder coated	black powder coated	122-300	560	2020
	A6	1.1			252-400	570	2030
46 19) A5	straight	spare tips (46 10 A5)				
	A6	e	spare tips (46 10 A6)				
46 21	A01		polished	plastic coated	3-10	125	85
	A11	2			10-25	125	85
	A21	COTT			19-60	170	135
	A31	15			40-100	200	215
	A41	14			85-140	300	515
46 20) A51	14	black powder coated	black powder coated	122-300	570	1810
	A61	1.0.010			252-400	580	1820
46 29	A51	∖ 90°	spare tips (46 20 A51)				
	A61		spare tips (46 20 A61)				
46 31	A02	3	polished	plastic coated	3-10	130	85
	A12	(γ)			10-25	130	85
	A22				19-60	185	133
	A32	1			40-100	210	213
	A42	<u>∡4</u> 5°			85-140	310	511



00 19 56

Loosen tight circlips before removing these.

Only use circlip pliers for the specified diameter range.

We recommend wearing safety goggles when working with these pliers.

KNIPEX 29

48 Precision Internal Circlip Pliers (bore holes)





Style 2:90° bent tips

- > for fitting circlips on bore holes, range of application from
 8 - 140 mm dia.
- > inserted tips of high density drawn spring wire
- > heavy duty under continuous use; up to 10 times longer service life
- > precise, smoothly-operating screw joint
- > forged
- > large contact faces on the tips: no distortion of circlips, easy fitting
- Slim head style allows use in confined areas
- handles with non-slip plastic coating
- > chrome vanadium electric steel



The new KNIPEX Precision Circlip Pliers meet the highest requirements. Positive locked high density spring wire tips offer 10 times longer service life compared with conventional circlip pliers and high stability when loosening tight circlips. Circlips are held securely thanks to the large contact faces of the tips.



00 19 57



Sturdy, inserted tips: made from high density drawn spring wire



Circlips are held securely: *large contact faces and the position of the tips make it difficult for the circlip to bounce off*



Slim head style: allows use in confined areas



Screw joint: *high precision and optimum drive*



Loosen tight circlips before removing these.

Only use circlip pliers for the specified diameter range.

We recommend wearing safety goggles when working with these pliers.

Part N	o. Size	Style	Head	Handles	Size of bore	Tips	Length	Weight
48 11	JO	1	grey	with non-slip	Ø mm 8-13	Ø mm 0.9	mm 140	g 100
	J1	п	atramentized	plastic coating	12-25	1.25	140	100
	J2	T1			19-60	1.80	180	180
	J3	11			40-100	2.25	225	260
	J4	straight			85-140	2.30	320	580
48 21	J01	2	grey atramentized	with non-slip plastic coating	8-13	0.9	130	100
	J11	10	atramentized	plastic coating	12-25	1.25	130	100
	J21	11			19-60	1.80	165	180
	J31				40-100	2.25	210	260
	J41	<u> </u>			85-140	3.20	305	580

49 Precision External Circlip Pliers (shafts)





Style 2:90° bent tips

- > for fitting circlips on shafts, range of application from 3 - 140 mm dia.
- inserted tips of high density drawn spring wire
- heavy duty under continuous use; up to 10 times longer service life
- > precise, smoothly-operating screw joint
- Forged
- > large contact faces on the tips: no distortion of circlips, easy fitting
- Slim head style allows use in confined areas
- > protected captive spring in the joint
- > handles with non-slip plastic coating
- > chrome vanadium electric steel



The new KNIPEX Precision Circlip Pliers meet the highest requirements. Positive locked high density spring wire tips offer 10 times longer service life compared with conventional circlip pliers and high stability when loosening tight circlips. Circlips are held securely thanks to the large contact faces of the tips. The large contact areas as well as the position of the tips ensure fitting without distortion and make it difficult for the circlip to bounce off. The opening spring is protected inside the screw joint.



Spring inside the joint: *the spring is protected inside the precision screw joint. It does not hinder work and can't get dirty or lost*



KNIPEX Precision Circlip Pliers: fit circlips without distortion; easy and quick assembling



Conventional Circlip Pliers: *distortion of the circlip when being fitted is possible*



Heavy duty tips: optimum stability when loosening tight circlips

Part N		Style	Head	Handles	Size of shaft			Weight
	Size				Ømm	Tips Ø mm	Length mm	g
49 11	A0	1	grey atramentized	with non-slip plastic coating	3-10	0.9	140	100
	A1	MMM			10-25	1.25	140	100
	A2	A			19-60	1.80	180	180
	A3	A			40-100	2.25	225	260
	A4	straight			85-140	3.20	320	595
49 21	A01	2	grey atramentized	with non-slip plastic coating	3-10	0.9	130	100
	A11	MMM			10-25	1.25	130	100
	A21	15			19-60	1.80	165	180
	A31	11			40-100	2.25	210	260
	A41	<u> </u>			85-140	2.80	305	595



00 19 57