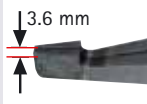




45 Special Retaining Ring Pliers (shafts)



45 10 170



45 21 200



Model 45 10 170:

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

Model 45 21 200:

- ▶ angled jaws with centering 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

- ▶ 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: Tips with center holes for secure fit of the retaining ring

Article-No.	EAN-Code	Style	Head	Handles	g
45 10 170	017370	WWW	burnished	burnished	155
45 21 200	031208	WWW	burnished	plastic coated	190

46 External Circlip Pliers for fitting Grip Rings (shafts)



46 11 G0



- ▶ for fitting grip rings on shafts from 1.5 - 30 mm dia.
- ▶ with opening spring
- ▶ solid style, forged
- ▶ non-slip, solid tips
- ▶ Chrome Vanadium electric steel, oil-hardened and tempered

Model 46 11 G0:

- ▶ for rings of 1.5 - 4.0 mm dia., with adjustable stop screw to prevent overstretching

46 11 G2



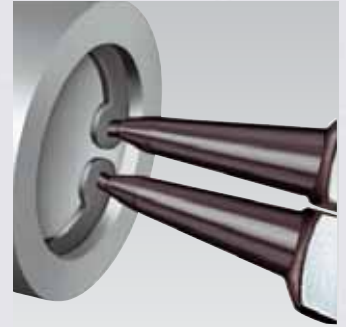
Article-No.	EAN-Code	Style	Head	Handles	Size of shaft	Length	g
46 11 G0	047896	WWW	polished	plastic coated	1.5 - 4	140	80
G1	031062				4 - 7	140	80
G2	031079				5 - 13	140	80
G3	031086				14 - 18	140	80
G4	031093				20 - 30	180	140

44 Internal Circlip Pliers (bore holes)



DIN 5256 C (straight)
DIN 5256 D (bent)

- ▶ for fitting internal circlips in bore holes from 8 - 400 mm dia.
- ▶ solid style, forged
- ▶ non-slip, solid tips
- ▶ Chrome Vanadium electric steel, oil-hardened and tempered



Easy fitting of internal circlips

44 11 J2
Style 1: straight tips



44 21 J21
Style 2: bent tips



44 10 J6



Models 44 10 and 44 20:

- ▶ for rings from 122 - 400 mm dia.
- ▶ with locking device, can be released
- ▶ with replaceable tips made of tempered steel
- ▶ black powder coated

Article-No.	EAN-Code	Style	Head	Handles	Size of bore	Length	Weight
	4003773-				mm	mm	g
44 11 J0	017240	1	polished	plastic coated	8 - 13	140	90
J1	013570				12 - 25	140	90
J2	013587				19 - 60	180	140
J3	013594				40 - 100	225	200
J4	013600				85 - 140	320	465
44 10 J5	024910	2	black powder coated		122 - 300	570	1710
J6	024927				252 - 400	580	1730
44 19 J5	024934				spare tips		
J6	024941	spare tips					
44 13 J0	017264	straight	chrome plated	plastic-coated	8 - 13	140	90
J1	017271				12 - 25	140	90
J2	017288				19 - 60	180	140
J3	017295				40 - 100	225	200
J4	017301				85 - 140	320	465
44 21 J01	017318	2	polished	plastic coated	8 - 13	130	90
J11	013617				12 - 25	130	90
J21	013624				19 - 60	170	140
J31	013631				40 - 100	215	205
J41	013648				85 - 140	300	480
44 20 J51	024958	2	black powder coated		122 - 300	590	1980
J61	024965				252 - 400	600	1990
44 29 J51	024972	2	spare tips	spare tips			
J61	024989						
44 23 J01	017325	straight	chrome plated	plastic coated	8 - 13	130	90
J11	017332				12 - 25	130	90
J21	017349				19 - 60	170	140
J31	017356				40 - 100	215	205
J41	017363				85 - 140	300	480



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.

46

46 External Circlip Pliers (shafts)



DIN 5254 A (straight)
DIN 5254 B (bent)

- ▶ for fitting external circlips on shafts from 3 - 400 mm dia.
- ▶ solid style, forged
- ▶ non-slip, solid tips
- ▶ Chrome Vanadium electricsteel, oil-hardened and tempered

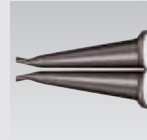


Easy fitting of external circlips

46 11 A2
Style 1: straight tips








46 21 A21
Style 2: bent tips



46 10 A5

- 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
 - ▶ black powder coated

Article-No.	EAN-Code	Style	Head	Handles	Size of shaft		
					ø mm	Length mm	g
	4003773-						
46 11 A0	013655	1 WWWW	polished	plastic coated	3 - 10	140	85
A1	013662				10 - 25	140	85
A2	013679				19 - 60	180	140
A3	013686				40 - 100	210	215
A4	013693				85 - 140	320	530
46 10 A5	024996	straight 	black powder coated		122 - 300	560	2020
A6	025009				252 - 400	570	2030
46 19 A5	024316				spare tips		
A6	025016	spare tips					
46 13 A0	017417	straight 	chrome plated	plastic coated	3 - 10	140	85
A1	017424				10 - 25	140	85
A2	017431				19 - 60	180	140
A3	017455				40 - 100	210	215
A4	017462				85 - 140	320	530
46 21 A01	013709	2 WWWW	polished	plastic coated	3 - 10	125	85
A11	013716				10 - 25	125	85
A21	013723				19 - 60	170	135
A31	013730				40 - 100	200	215
A41	013747				85 - 140	300	515
46 20 A51	025023	bent 	black powder coated		122 - 300	570	1810
A61	025030				252 - 400	580	1820
46 29 A51	025047	bent 		spare tips			
A61	025054				spare tips		
46 23 A01	017509	straight 	chrome plated	plastic coated	3 - 10	125	85
A11	017516				10 - 25	125	85
A21	017523				19 - 60	170	135
A31	017530				40 - 100	200	215
A41	017479				85 - 140	300	515



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.

48

48 Precision Internal Circlip Pliers (bore holes)



DIN 5256 C (straight)
DIN 5256 D (bent)

- ▶ 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



48 11 J2
Style 1: straight tips



48 21 J21
Style 2: bent tips

KNIPEX special

The new KNIPEX Precision Circlip Pliers meet 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.



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

Article-No.	EAN-Code	Style	Head	Handles	Size of bore	Length	Weight
Size	Code				ø mm	mm	g
48 11 J0	048510	1  straight	grey atramentized	with non-slip plastic coating	8 - 13	140	100
J1	048527				12 - 25	140	100
J2	048534				19 - 60	180	180
J3	048541				40 - 100	225	260
J4	048558				85 - 140	320	580
48 21 J01	048619				2 	grey atramentized	with non-slip plastic coating
J11	048633	12 - 25	130	100			
J21	048640	19 - 60	165	180			
J31	048657	40 - 100	210	260			
J41	048664	85 - 140	305	580			



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.

49 Precision External Circlip Pliers (shafts)



DIN 5254 A (straight)
DIN 5254 B (bent)



49 11 A2
Style 1: straight tips



49 21 A21
Style 2: 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

special

The new KNIPLEX Precision Circlip Pliers meet 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



KNIPLEX 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

Article-No.	EAN-Code	Style	Head	Handles	Size of shaft		
					Length	mm	g
49 11 A0	048718	1	grey atramentized	with non-slip plastic coating	3 - 10	140	100
A1	048725				10 - 25	140	100
A2	048732				19 - 60	180	180
A3	048749				40 - 100	225	260
A4	048756	straight			85 - 140	320	595
49 21 A01	048817	2	grey atramentized	with non-slip plastic coating	3 - 10	130	100
A11	048824				10 - 25	130	100
A21	048831				19 - 60	165	180
A31	048848				40 - 100	210	260
A41	048855				85 - 140	305	595



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.