

CIRCLIP PLIERS

44

Circlip Pliers

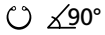
for internal circlips on bore holes



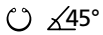
44 11 J2



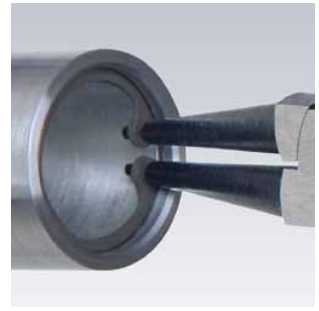
44 21 J21



44 31 J22



- for fitting circlips on bore holes, range of application from 5/16" - 5 33/64" dia.
- solid style, forged
- non-slip, solid tips
- pliers body and tips: Chrome vanadium steel; forged, oil-hardened



Style 1

DIN 5256 C, straight tips

Style 2

DIN 5254 B; 90° angled tips

Style 3

45° angled tips



Pliers Sets
see page 176

Product Number	↔ inch	↔ mm		Style	Pliers	Head	Handles	Size of bore Ø inch	Size of bore Ø mm	⚖ Ounces
44 11 J0	5 3/4	140	⊙	1	black atramentized	polished	plastic coated	5/16 - 33/64	8 - 13	3.1
44 11 J1	5 3/4	140						15/32 - 63/64	12 - 25	3.1
44 11 J2	8	180						3/4 - 2 23/64	19 - 60	4.8
44 11 J3	9	225						1 37/64 - 3 15/16	40 - 100	6.9
44 11 J4	12 3/4	320						3 23/64 - 5 33/64	85 - 140	16.5
44 21 J01	5 1/4	130	⊙ 90°	2	black atramentized	polished	plastic coated	5/16 - 33/64	8 - 13	3.1
44 21 J11	5 1/4	130						15/32 - 63/64	12 - 25	3.1
44 21 J21	6 3/4	170						3/4 - 2 23/64	19 - 60	4.9
44 21 J31	8 1/2	215						1 37/64 - 3 15/16	40 - 100	6.9
44 21 J41	12	300						3 23/64 - 5 33/64	85 - 140	16.3
44 31 J02	5 3/4	140	⊙ 45°	3	black atramentized	polished	plastic coated	5/16 - 33/64	8 - 13	3.2
44 31 J12	5 3/4	140						15/32 - 63/64	12 - 25	3.2
44 31 J22	8	180						3/4 - 2 23/64	19 - 60	4.9
44 31 J32	9	225						1 37/64 - 3 15/16	40 - 100	6.9
44 31 J42	12	310						3 23/64 - 5 33/64	85 - 140	16.4

CIRCLIP PLIERS

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Circlip Pliers

for external circlips on shafts



46 11 A2
 MM



46 21 A21
 $\angle 90^\circ$ MM



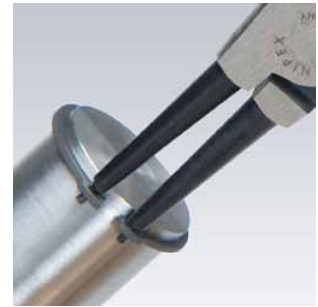
46 31 A22
 $\angle 45^\circ$ MM

- for fitting circlips on shafts, range of application from 1/8" - 5 33/64" dia.
- solid style, forged
- non-slip, solid tips
- pliers body and tips: Chrome vanadium steel; forged, oil-hardened

Style 1
 DIN 5254 A; straight tips

Style 2
 DIN 5254 B; 90° angled tips

Style 3
 45° angled tips



Pliers Sets
 see page 176

Product Number	↔ inch	↔ mm		Style	Pliers	Head	Handles	Size of shaft Ø inch	Size of shaft Ø mm	Ounces
46 11 A0	5 3/4	140	MM	1	black atramentized	polished	plastic coated	1/8 - 25/64	3 - 10	3.0
46 11 A1	5 3/4	140						25/64 - 63/64	10 - 25	3.0
46 11 A2	8	180						3/4 - 2 23/64	19 - 60	4.7
46 11 A3	8 1/4	210						1 37/64 - 3 15/16	40 - 100	7.8
46 11 A4	12 3/4	320						3 23/64 - 5 33/64	85 - 140	17.8
46 21 A01	5	125	$\angle 90^\circ$ MM	2	black atramentized	polished	plastic coated	1/8 - 25/64	3 - 10	3.0
46 21 A11	5	125						25/64 - 63/64	10 - 25	3.0
46 21 A21	6 3/4	170						3/4 - 2 23/64	19 - 60	4.7
46 21 A31	8	200						1 37/64 - 3 15/16	40 - 100	7.7
46 21 A41	12	300						3 23/64 - 5 33/64	85 - 140	18.0
46 31 A02	5 1/4	130	$\angle 45^\circ$ MM	3	black atramentized	polished	plastic coated	1/8 - 25/64	3 - 10	2.9
46 31 A12	5 1/4	130						25/64 - 63/64	10 - 25	3.0
46 31 A22	7 1/4	185						3/4 - 2 23/64	19 - 60	4.7
46 31 A32	8 1/4	210						1 37/64 - 3 15/16	40 - 100	7.5
46 31 A42	12	310						3 23/64 - 5 33/64	85 - 140	18.0

CIRCLIP PLIERS

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Circlip Pliers

for large internal circlips



44 10 J6



- for assembling circlips in bore holes within the range of 4 51/64" - 15 3/4" dia.
- with locking device – can be released without completing cycle
- with replaceable tips made of tempered steel
- black powder-coated
- pliers body: rolled steel, high-strength
- tips: Special tool steel; rolled, oil-hardened

Style 1

DIN 5256 C, straight tips

Style 2

DIN 5256 D; 90° angled tips

Product Number	↔ inch	↔ mm		Style	Pliers	Size of bore Ø inch	Size of bore Ø mm	⚖ Ounces
44 10 J5	22 1/4	570		1	black powder-coated	4 51/64 - 11 13/16	122 - 300	61.0
44 10 J6	22	580	🔒	1	black powder-coated	9 59/64 - 15 3/4	252 - 400	62.0
44 20 J51	23 1/4	590	🔒	2	black powder-coated	4 51/64 - 11 13/16	122 - 300	64.0
44 20 J61	23 1/2	600	🔒 90°	2	black powder-coated	9 59/64 - 15 3/4	252 - 400	61.0

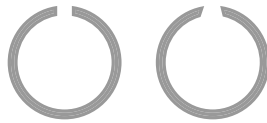
44 19 J6 1 pair of spare tips for 44 10 J6

45

Special Retaining Ring Pliers

for retaining rings on shafts

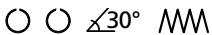
ISO 5743



45 10 170



45 21 200



- for fitting horseshoe-shaped spring retaining rings and circlips without grip holes
- for shaft retaining devices
- with opening spring
- Chrome vanadium electric steel; forged, oil-hardened



45 10 170



45 21 200



45 21 200

45 10 170

for retaining rings with a minimum ring split gap of 9/64"

45 21 200

angled jaws with centering hole; for retaining rings from 15/36" dia., e.g. for securing drive shaft in the gearbox of a motor vehicle; minimum ring split gap of the rings 3/32"

Product Number	↔ inch	↔ mm		Pliers	Handles	⚖ Ounces
45 10 170	6 3/4	170	🔒	burnished		5.5
45 21 200	8	200	🔒 30°	burnished	plastic coated	6.6

46

Circlip Pliers

for large external circlips



46 10 A5

- for assembling circlips on shafts within the range of 4 51/64" - 15 3/4" dia.
- with locking device – can be released without completing cycle
- with replaceable tips made of tempered steel
- black powder-coated
- pliers body: rolled steel, high-strength
- tips: Special tool steel; rolled, oil-hardened

Style 1
 DIN 5254 A; straight tips

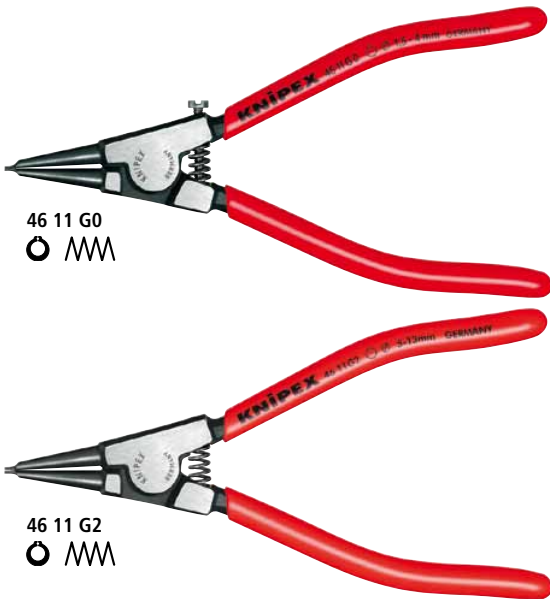
Style 2
 DIN 5254 B; 90° angled tips

Product Number	↔ inch	↔ mm		Style	Pliers	Size of shaft Ø inch	Size of shaft Ø mm	⚖ Ounces
46 10 A5	22 1/2	560	○	1	black powder-coated	4 51/64 - 11 13/16	122 - 300	62.5
46 10 A6	22 3/4	570				9 59/64 - 15 3/4	252 - 400	63.3
46 20 A51	22 3/4	570	○ ∠90°	2	black powder-coated	4 51/64 - 11 13/16	122 - 300	65.0
46 20 A61	22 3/4	580				9 59/64 - 15 3/4	252 - 400	64.4

46

Circlip Pliers for grip rings on shafts

ISO 5743



46 11 G0

46 11 G2

- for fitting grip rings on shafts from 1/16" - 1 3/16" dia.
- with opening spring
- solid style, forged
- non-slip, solid tips
- pliers body and tips: Chrome vanadium stainless steel; forged, oil-hardened

46 11 G0
 for rings of 1/16" - 1 3/16" dia.,
 with adjustable stop screw to prevent overstretching

Product Number	↔ inch	↔ mm		Pliers	Head	Handles	Size of shaft Ø inch	Size of shaft Ø mm	⚖ Ounces
46 11 G0	5 1/2	140	○	black atramentized	polished	plastic coated	1/16 - 5/36	1.5 - 4.0	3.1
46 11 G1	5 1/2	140					5/32 - 9/32	4.0 - 7.0	3.0
46 11 G2	5 1/2	140	○	black atramentized	polished	plastic coated	13/64 - 33/64	5.0 - 13.0	3.0
46 11 G3	5 1/2	140					35/64 - 23/32	14.0 - 18.0	3.0
46 11 G4	7 1/4	180					51/64 - 1 3/16	20.0 - 30.0	4.7

CIRCLIP PLIERS

48

Precision Circlip Pliers

for internal circlips in bore holes



48 11 J2



48 21 J21

Style 1

DIN 5256 C, straight tips

Style 2

DIN 5256 D; 90° angled tips

Pliers Sets
 see page 176



Slim head shape



Product Number	↔ inch	↔ mm		Style	Pliers	Handles	Size of bore Ø inch	Size of bore Ø mm	Tips Ø		⚖ Ounces
									inch	mm	
48 11 J0	5 3/4	140		1	grey atramentized	plastic coated	5/16 - 33/64	8 - 13	3/64	0.90	3.7
48 11 J1	5 3/4	140					15/32 - 63/64	12 - 25	3/64	1.25	3.7
48 11 J2	8	180					3/4 - 2 23/64	19 - 60	5/64	1.80	6.2
48 11 J3	9	225					1 37/64 - 3 15/16	40 - 100	3/32	2.25	9.4
48 11 J4	12 3/4	320					3 23/64 - 5 33/64	85 - 140	1/8	3.20	20.5
48 21 J01	5 1/4	130		2	grey atramentized	plastic coated	5/16 - 33/64	8 - 13	3/64	0.90	3.7
48 21 J11	5 1/4	130					15/32 - 63/64	12 - 25	3/64	1.25	3.7
48 21 J21	6 1/2	165					3/4 - 2 23/64	19 - 60	5/64	1.80	6.2
48 21 J31	8 1/4	210					1 37/64 - 3 15/16	40 - 100	3/32	2.25	9.3
48 21 J41	12	305					3 23/64 - 5 33/64	85 - 140	1/8	3.20	20.3



Tip-top quality

Easy and reliable assembly: form-fitting inserted and pressed-in tips made of high-density spring steel offer a high level of protection against excessive stress and strain, e.g. when removing rings that are stuck. The large supporting surfaces and the position of the tips make it more difficult for the rings to fly off.

With inserted tips for reliable work

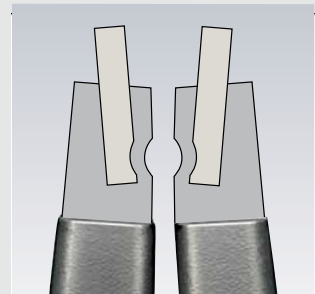
- heavy duty for continuous operation: up to 10 times longer service life than turned tips
- bolted joint: precise, zero backlash operation of pliers
- non-slip plastic coating on the handles
- pliers body: Chrome vanadium electric steel; forged, oil-hardened
- inserted tips: spring steel wire, drawn

Precision and durability

High-density spring steel with a score-free surface is used for the tips. This increases the tips' resistance to dynamic and static strain. The tips are 30% more stable than conventional pliers when subjected to one-off overloading, while still allowing good accessibility during assembly. Subjected to dynamic strain, the tips' resistance capacity is up to 10 times greater! The tips on the Precision Circlip Pliers are non-detachable!



Sturdy, inserted tips: made from high-density spring steel





Tight fit through compression

Precision Circlip Pliers



for external circlips on shafts



49 11 A2
  MM

Style 1
 DIN 5254 A, straight tips



49 21 A21
 90°  MM

Style 2
 DIN 5254 B; 90° angled tips

With inserted tips for reliable work

- heavy duty for continuous operation:
 - up to 10 times longer service life than turned tips
- large contact faces on the tips: no distortion of circlips, easy fitting
- joint with screw: precise, zero-backlash operation of pliers
- internal opening spring, protected
- non-slip plastic coating on the handles
- pliers body: Chrome vanadium electric steel; forged, oil-hardened
- inserted tips: spring steel wire, drawn

49 31 A0 / Style 3
 with additional opening limiter
 (continuously adjustable opening area);
 avoids overstretching of small external
 circlips; DIN 5254 A; straight tips

49 41 A01 / Style 4
 with additional opening limiter
 (continuously adjustable opening area);
 avoids overstretching of small external
 circlips; DIN 5254 B; 90° angled tips



Spring inside the joint: the spring is protected inside the precisely bolted joint. It does not hinder work and cannot get dirty or lost.



Style 3 / Style 4:
 With adjustable restricted opening

Pliers Sets
 see page 176



Bolted joint:
 high precision and smooth action



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



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



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

Product Number	↔			Style	Pliers	Handles	Size of shaft Ø inch	Size of shaft Ø mm	Tips Ø		Ounces
	inch	mm							inch	mm	
49 11 A0	5 3/4	140	  MM	1	grey atramentized	plastic coated	1/8 - 25/64	3 - 10	3/64	0.90	3.6
49 11 A1	5 3/4	140					25/64 - 63/64	10 - 25	3/64	1.25	3.5
49 11 A2	8	180					3/4 - 2 23/64	19 - 60	5/64	1.80	6.0
49 11 A3	9	225					1 37/64 - 3 15/16	40 - 100	3/32	2.25	9.5
49 11 A4	12 3/4	320					3 22/64 - 5 33/64	85 - 140	1/8	3.20	21.0
49 21 A01	5 1/4	130	 90°  MM	2	grey atramentized	plastic coated	1/8 - 25/64	3 - 10	3/64	0.90	3.5
49 21 A11	5 1/4	130					25/64 - 63/64	10 - 25	3/64	1.25	3.6
49 21 A21	6 1/2	165					3/4 - 2 23/64	19 - 60	5/64	1.80	5.6
49 21 A31	8 1/4	210					1 37/64 - 3 15/16	40 - 100	3/32	2.25	9.6
49 21 A41	12	305					3 22/64 - 5 33/64	85 - 140	1/8	3.20	21.2
49 31 A0	5 3/4	140	  MM	3	grey atramentized	plastic coated	1/8 - 25/64	3 - 10	3/64	0.90	3.6
49 41 A01	5 1/4	130	 90°  MM	4	grey atramentized	plastic coated	1/8 - 25/64	3 - 10	3/64	0.90	3.6

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Circlip Tool

for internal and external circlips



- universally usable for large circlips with nominal diameters of 15 3/4" - 39 3/8"
- reliable opening and closing of the circlips and holding by self-locking precision spindle drive
- for fitting and removing circlips in one operation
- circlips are securely held thanks to short, direct attachment
- replaceable tips with 15/64" and 23/64" diameters; for perfect adaptation to the actuation bores in the circlips
- optional operation with hexagonal key, ratchet wrench or cordless drill
- areas of application e.g. wind turbines, tidal power stations, generator construction, hydropower stations, large machine construction (rolling mills, presses), shipbuilding and aerospace – wherever very high forces and torques are transmitted with large shafts and bearings
- tip material: Chrome vanadium electric steel

Product Number	Size of bore Ø inch	Size of bore Ø mm	Size of shaft Ø inch	Size of shaft Ø mm	⚖ Ounces
46 10 100	15 3/4 - 39 3/8	400 - 1,000	15 3/4 - 39 3/8	400 - 1,000	77.6



Replaceable inserts for internal and external circlips



Manually operable



Machine operable

