

# 49 21 A21

## Precision Circlip Pliers for external circlips on shafts



- With inserted tips for reliable work
- heavy duty in continuous operation: up to 10 times longer service life compared to turned tips
- large contact faces on the tips: no distortion of circlips, easy fitting
- bolted joint: precise, zero backlash operation of pliers
- internal opening spring, protected and captive
- non-slip plastic coating on the handles
- pliers body: chrome vanadium electric steel, forged, oil-hardened
- inserted tips: spring steel wire, drawn
  - Style: DIN 5254 B; 90° angled tips

### Tiptop 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 stuck rings. The large supporting surfaces and the position of the tips make it more difficult for the rings to bounce off.

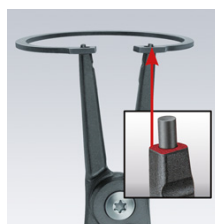
### Precision and durability

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!

<b>Article No.</b>	49 21 A21
<b>EAN</b>	4003773048831
<b>Pliers</b>	grey atramentized
<b>Handles</b>	with non-slip plastic coating
<b>Style</b>	2
<b>Size of shaft Ø mm</b>	19 - 60
<b>Style</b>	bent tips
<b>Ø mm</b>	19 - 60
<b>Tips Ø mm</b>	1,8
<b>Length mm</b>	165
<b>Net weight g</b>	169



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



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



Conventional Circlip Pliers: distortion of the circlip when widening the circlip



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



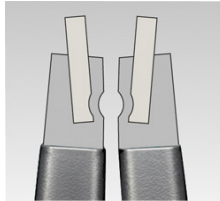
Circlips are held reliably: large contact areas and the position of the tips make it difficult for the circlip to bounce off



Bolted joint: high precision and smooth action

technical change and errors excepted





Tight fit through  
compression