

# 49 21 A31

## 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



### High precision 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!

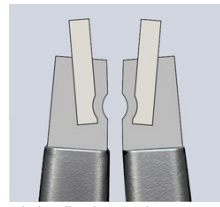
### KNIPEX circlip pliers with overexpansion guard

For the standardized fitting of circlips in the industrial serial production. Particularly manufacturers of sensitive, safety-relevant components (e.g. brakes or gears) highly appreciate the compliance of DIN 471 and 472. The mounting of circlip rings in this case requires pliers with overexpansion guard or a cone. KNIPEX Circlip Pliers with overexpansion guard meet the requirements and furthermore offer a superior durability.

Article No.	49 21 A31
EAN	4003773050315
Pliers	grey atramentized
Handles	with non-slip plastic coating
Style	2
Size of shaft Ø mm	40 - 100
Tips (diameter) Ø mm	2,3
Length mm	210
Net weight g	272



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



Tight fit through compression



technical change and errors excepted

