Cantilever Data	Value	Range*
Resonance Frequency	14 kHz	10 - 19 kHz
Force Constant	0.2 N/m	0.06 - 0.38 N/m
Length	450 µm	445 - 455 µm
Mean Width	45 µm	40 - 50 µm
Thickness	2 µm	1.5 - 2.5 µm

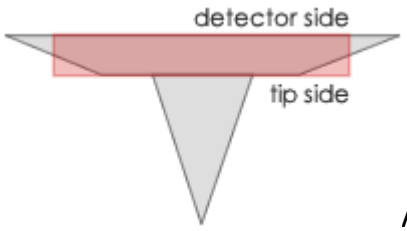
Optimized positioning through maximized AFM tip visibility

NanoWorld® Arrow™ CONT AFM probes are designed for Contact Mode imaging. Furthermore this type can be used for Force Distance Spectroscopy Mode or Pulsed Force Mode (PFM). The CONT type is optimized for high sensitivity due to a low Force Constant.

All SPM and AFM probes of the Arrow™ series are made from monolithic silicon which is highly doped to dissipate static charge. They are chemically inert and offer a high mechanical Q-factor for high sensitivity. These AFM probes feature a rectangular AFM cantilever with a triangular free end and a tetrahedral AFM tip with a typical height of 10 - 15 µm.

Additionally, this AFM probe offers an AFM tip radius of curvature of less than 10 nm.

The unique Arrow™ shape with the AFM tip position at the very end of the AFM cantilever allows easy positioning of the AFM tip on the area of interest.



A trapezoidal cross section of the AFM cantilever and therefore 30% wider (e.g. NCH) AFM cantilever detector side result in easier and faster laser adjustment. Additionally, because there is simply more space to place and reflect the laser beam, a higher SUM signal is reached.

Tip shape: Arrow

Coating: Reflective Aluminum

Aluminum Reflex Coating

The aluminum reflex coating consists of a 30 nm thick aluminum layer deposited on the detector side of the AFM cantilever which enhances the reflectance of the laser beam by a factor of 2.5. Furthermore it prevents light from interfering within the AFM cantilever.

As the coating is almost stress-free the bending of the AFM cantilever due to stress is less than 2 degrees.

Order Code	Quantity	Data Sheet
ARROW-CONTR-10	10	Nominal values
ARROW-CONTR-20	20	Nominal values
ARROW-CONTR-50	50	Nominal values
ARROW-CONTR-W	380	Nominal values