

Cantilever Data	Value	Range*
Resonance Frequency	285 kHz	240 - 380 kHz
Force Constant	42 N/m	27 - 80 N/m
Length	160 μm	155 - 165 μm
Mean Width	45 μm	40 - 50 μm
Thickness	4.6 μm	4.1 - 5.1 μm

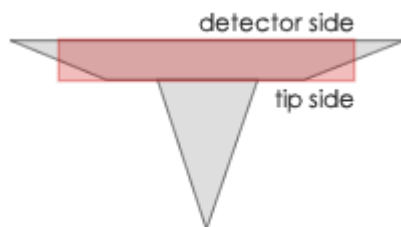
Optimized positioning through maximized AFM tip visibility

NanoWorld® Arrow™ NC probes are designed for non-contact or tapping mode imaging. This AFM probe type combines high operation stability with outstanding sensitivity and fast scanning ability.

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 a typical 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.

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