

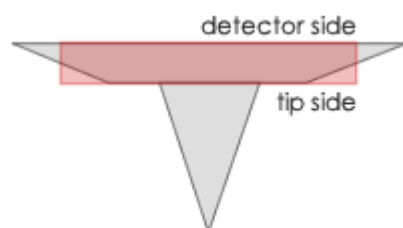
Cantilever Data	Value	Range*
Resonance Frequency	190 kHz	160 - 210 kHz
Force Constant	48 N/m	31 - 71 N/m
Length	225 μm	220 - 230 μm
Mean Width	38 μm	33 - 43 μm
Thickness	7 μm	6.5 - 7.5 μm

NanoWorld® Pointprobe® NCL probes are designed for non-contact or tapping mode imaging and offer an alternative to our high frequency non-contact type NCH. The NCL type is recommended if the feedback loop of the microscope does not accept high frequencies or if the detection system needs a minimum cantilever length ($> 125 \mu\text{m}$). This AFM probe combines high operation stability with outstanding sensitivity. Compared to the high frequency non-contact type NCH the maximum scanning speed is slightly reduced.

All SPM and AFM probes of the Pointprobe® 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. The AFM tip is shaped like a polygon based pyramid with a typical height of 10 - 15 μm .

Additionally, this AFM probe offers typical AFM tip radius of curvature of less than 8 nm.

For applications allowing higher resonance frequencies or a shorter AFM cantilever length we recommend our Pointprobe® type [NCH](#).



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: Standard

Coating: none

Order Code	Quantity	Data Sheet
NCL-10	10	yes
NCL-20	20	yes
NCL-50	50	no
NCL-W	380	yes