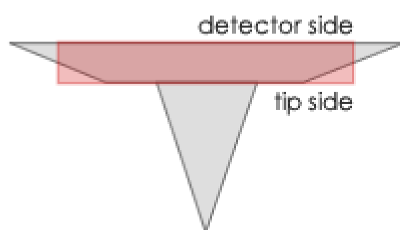
Cantilever Data	Value	Range*
Resonance Frequency	**27 kHz**	23 - 31 kHz
Force Constant	**1.6 N/m**	1 - 2.6 N/m
Length	**450 µm**	445 - 455 µm
Mean Width	**55 µm**	50 - 60 µm
Thickness	**4 µm**	3.5 - 4.5 µm

NanoWorld® Pointprobe® ZEILR probes are designed for owners of the Zeiss Veritekt or a Seiko Instruments microscope using the contact mode. Compared to the Pointprobe® contact mode AFM probes of the CONT type the force constant is slightly increased.

The 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 height of 10 - 15 µm.

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



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.

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
ZEILR-10	**10**	yes
ZEILR-20	**20**	yes
ZEILR-50	**50**	no
ZEILR-W	**380**	yes