Spiral Cuffs

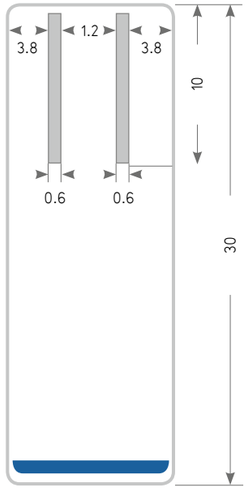
One of the major design innovations by CorTec: Minimally traumatic cuff electrodes for recording and stimulation of peripheral nerves with elastic modules. Spiral Cuffs – the self-adjusting solution for changing diameters.

Self-adjusting diameter cuffs can compensate for nerve swelling to some extent. They also balance the differences in nerve diameters from individual to individual.

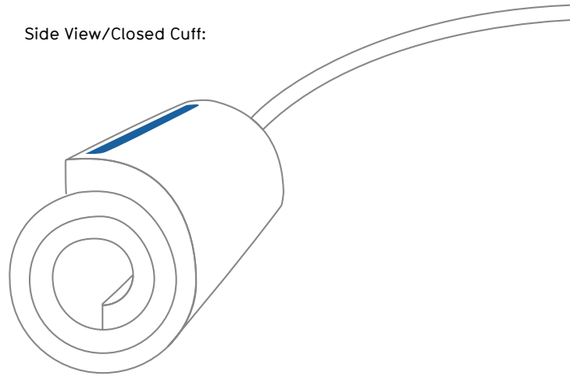
To ensure that the nerve will not escape the electrode we suggest to design spiral cuffs with at least 2.5 turns around the targeted nerve diameter. This will also help to avoid electrical insulation issues for example caused by connective tissue growing into the electrode.

Example of a Bi-polar Spiral Cuff with a target diameter at 1000 µm:

Top View/Open Cuff
(Contact openings are shown face up)



Side View/Closed Cuff:



Typical arrangements of Spiral Cuffs range within the following diameters::

Product Feature	Product Configuration
Number of contacts	Starting from 2
Inner diameter	1.5 - 4.0 mm
Wall thickness	0.2 - 0.8 mm