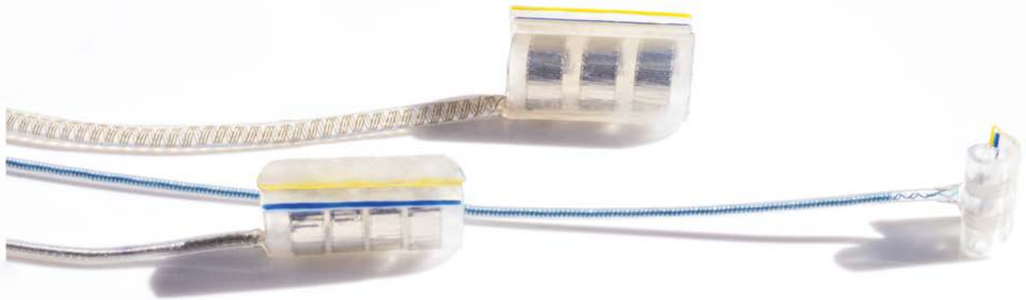
ONE OF THE MAJOR DESIGN INNOVATIONS BY CORTEC: SOFT CUFF ELECTRODES WITH FLEXIBLE CONTACTS FOR RECORDING FROM AND STIMULATION OF PERIPHERAL NERVES. THE TUNNEL CUFF IS THE IDEAL SOLUTION FOR EASY HANDLING. PLEASE CONTACT US WITH YOUR DESIGN REQUEST!

The innovation in **CorTec's** elaborate split cylinder cuffs is their flexible structure: a unique closing mechanism with color-coded flaps enables easy handling.

Once implanted the flaps work as an electrical seal. The electrode can be removed without affecting its functionality. Micro Cuff Tunnel electrodes are available in different diameters, starting from 200 µm, with varying numbers of contacts.



Related Publications:
Selective neural electrical stimulation restores hand and forearm movements in individuals with complete tetraplegia. Tigra, W., et al.; Journal of NeuroEngineering and Rehabilitation (2020)

Stimulation of the pelvic nerve increases bladder capacity in the PGE2 cat model of overactive bladder. Langdale, Christopher L., et al.; Am J Physiol Renal Physiol. 318: F1357–F1368 (2020)

Feasibility of kilohertz frequency alternating current neuromodulation of carotid sinus nerve activity in the pig. Fjordbakk, C., et al.; Sci Rep. 2019 Dec 2;9(1):18136. (2019)

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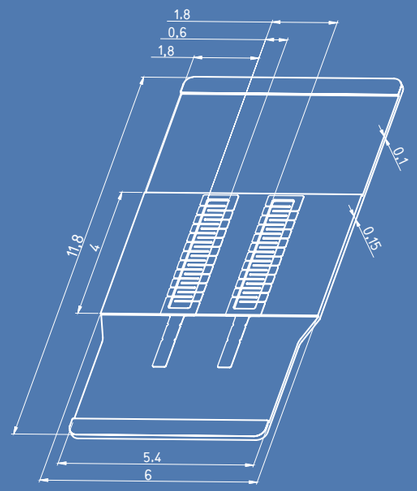
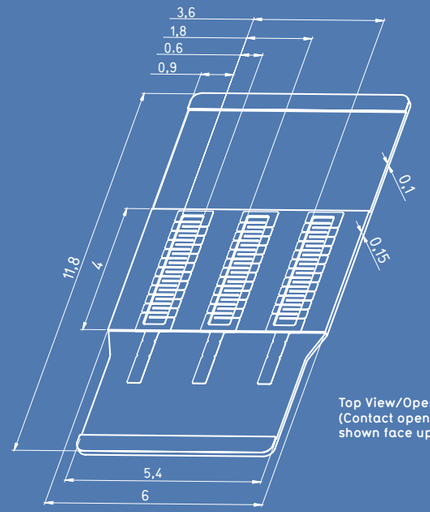
Example of a bi- and tri-polar Micro Cuff Tunnel with a diameter of 1000 µm and a cuff length of 6 mm: The sizes and distances of the electrode contacts scale up or down with the size of the electrode.





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

General Information:
- By default, cuffs are supplied with open cables (insulated wires with exposed ends). Please contact us, if you are interested in any other connectivity.
- Learn more about our technological competences on page 29 and page 34.
- Fore more information about connection options and materials see pages 30ff.

Typical configurations of Tunnel Cuffs range within the following parameters:

	INNER DIAMETER	CABLE ENTRY lateral, tangential LENGTH 2	6	10
Bi-polar	0.15	x	--	
	0.2	x	-	-
	0.3	x	-	-
	0.4	x	-	-
	0.5	x	x	-
	0.6	x	x	-
	0.8	x	x	-
	1.0	x	x	x
	1.2	x	x	x
	1.5	x	x	x
	2.0	-	x	x
	2.5	-	x	x
	3.0	-	x	x
	4.0	-	x	x
	5.0	-	x	x

	INNER DIAMETER	CABLE ENTRY lateral, tangential LENGTH 6	10
Tri-polar	0.5	x	-
	0.6	x	-
	0.8	x	-
	1.0	x	x
	1.2	x	x
	1.5	x	x
	2.0	x	x
	2.5	x	x
	3.0	x	x
	2.5	x	x
	3.0	x	x
	4.0	x	x
	5.0	x	x

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