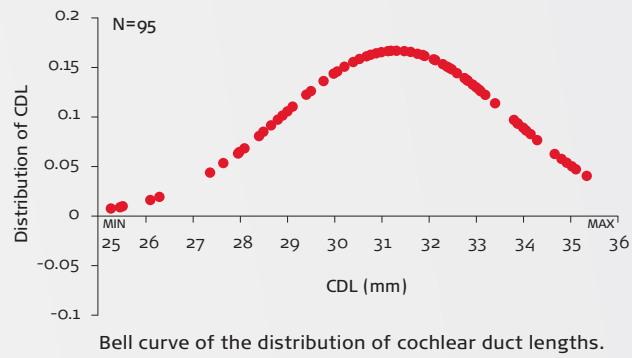


World's Largest Selection of Electrodes for a Variety of Cochlear Duct Lengths (CDLs) ^{1,2}

Cochleae may differ significantly in size and shape from one another as can individual cochlear duct lengths. MED-EL offers the largest selection of electrode arrays. Each implant recipient can be sure to receive the best possible electrode array for their unique hearing loss needs.

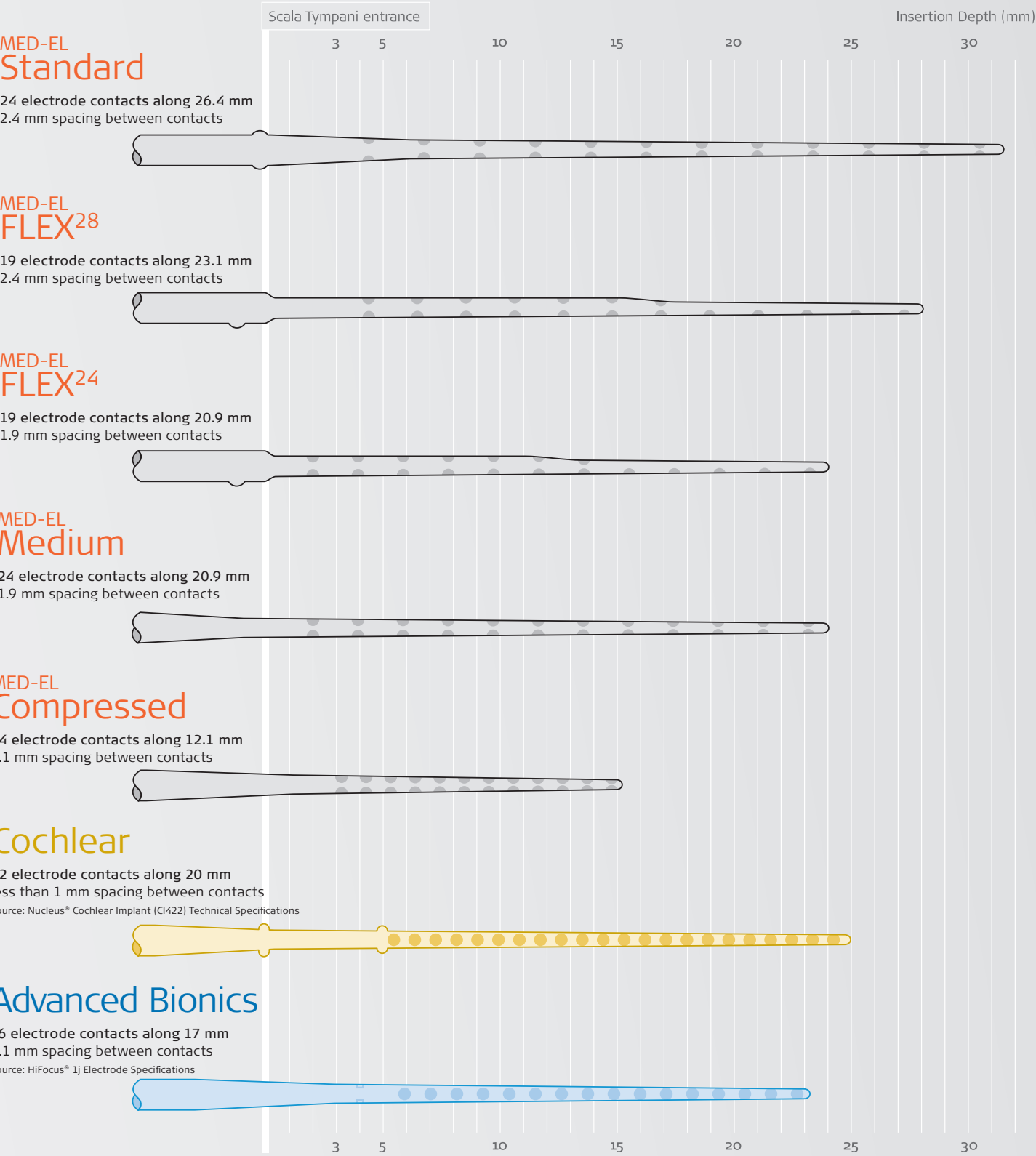
Complete Cochlear Coverage (CCC)
Complete Cochlear Coverage means stimulating the cochlea from the base to the apical region in order to stimulate a maximum number of nerve fibers. Stimulation of the entire frequency range with a deeply inserted, long array provides the implant user with the best possible outcomes in speech performance measures and in sound quality.

“... thin and flexible free-fitting electrodes demonstrated to best fulfill all criteria for atraumatic CI surgery.”⁶



Electrode Array Comparison

MED-EL, COCHLEAR AND ADVANCED BIONICS COCHLEAR IMPLANTS



MED-EL Electrode Arrays

Designed for Atraumatic Implantation
Providing Superior Hearing Performance



MED-EL Electrode Arrays

Designed for Atraumatic Implantation Providing Superior Hearing Performance^{3,4,5}

MED-EL is the leader in providing soft, flexible electrode arrays which ensure maximum protection of the delicate structures in the cochlea. Preserving residual hearing may be important for enabling users to benefit from future technologies and therapies

Wave-Shaped Wires

The electrode arrays feature ultraflexible wave-shaped platinum-iridium wires. This wire design is the key to making a MED-EL electrode array the world's most flexible and atraumatic. Minimizing trauma during electrode insertion maximizes the benefit to the patient. Wave-shaped wires significantly reduce rigidity in comparison to a straight-wire design. Benefits include preserving the integrity of intraneural tissue targeted for electrical stimulation.

Optimal Number of Contacts

MED-EL electrode design philosophy dictates a careful balance between the maximum number of electrode contacts and the reduction of channel interaction, a factor which negatively impacts performance. Each electrode array contains the optimal number of contacts for stimulation of nerve fibers leading to best performance. Optimal number and spacing of electrode contacts also significantly reduces rigidity; allowing for gentle insertion without damaging the delicate cochlear structures.

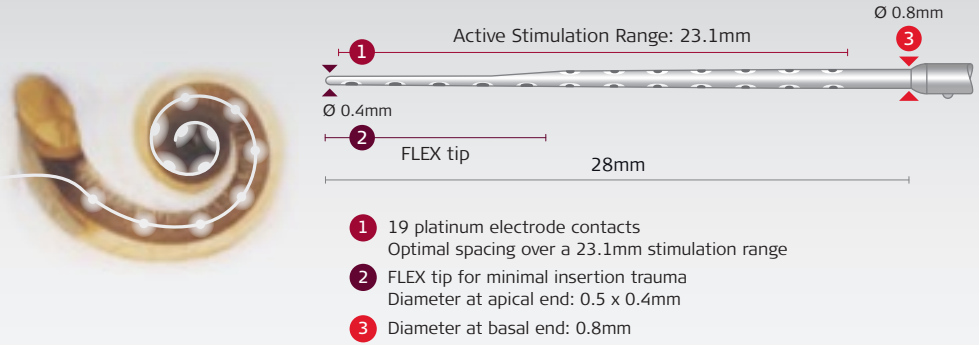
FLEX Tip Technology

The unique FLEX tip features single electrode contacts on the leading end to further increase mechanical flexibility. Softness and flexibility allow insertion into the apical region.

FLEX²⁸

NEW

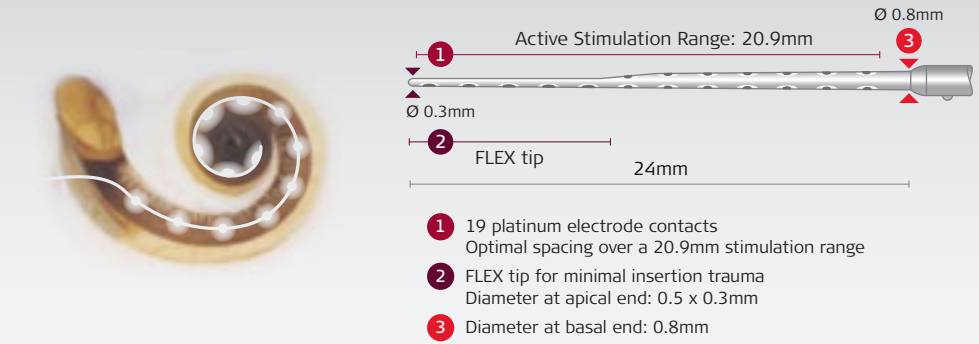
A 28mm electrode array suitable for most normal cochlear anatomies featuring FLEX tip technology. Optimized for insertion into the apical region (CCC).



FLEX²⁴

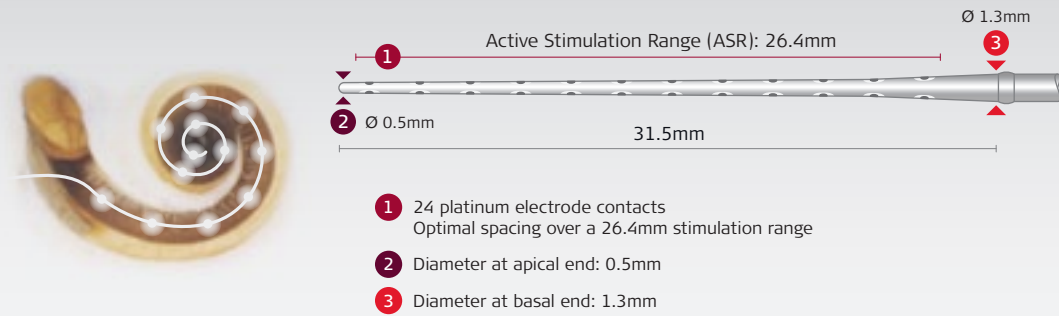
NEW

A 24mm electrode array featuring FLEX tip technology and designed for insertion depths of less than 1.5 turns or where a deeper insertion is not desired.



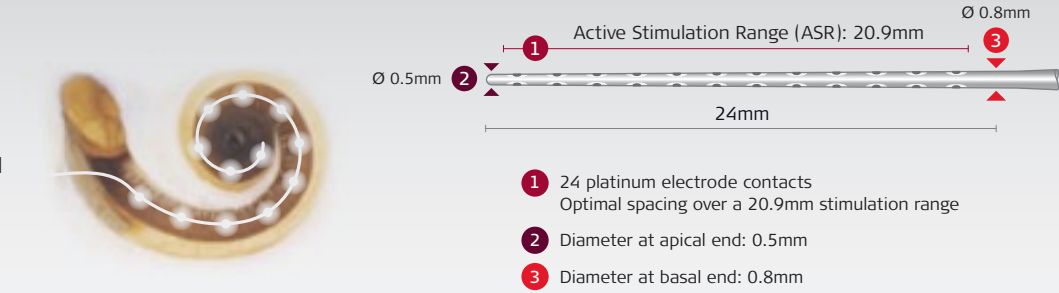
Standard

A 31mm electrode array designed for long cochlear duct lengths.



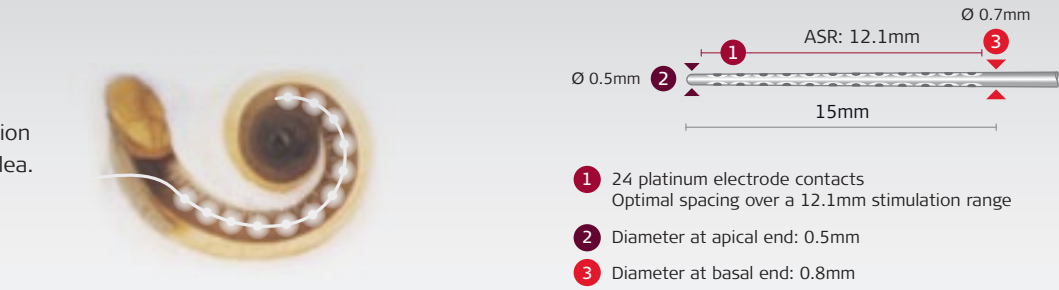
Medium

A 24mm electrode array designed for cases where deep insertion is not desired or is not possible due to anatomic restrictions.



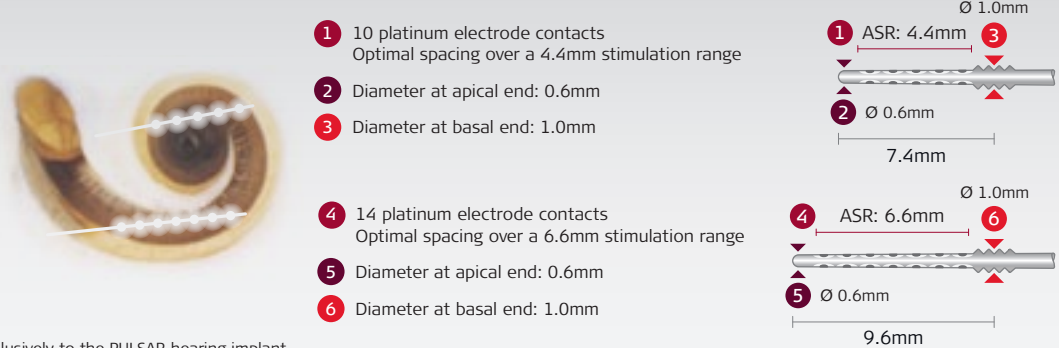
Compressed

A 15mm electrode array designed for partial ossification or malformation of the cochlea.

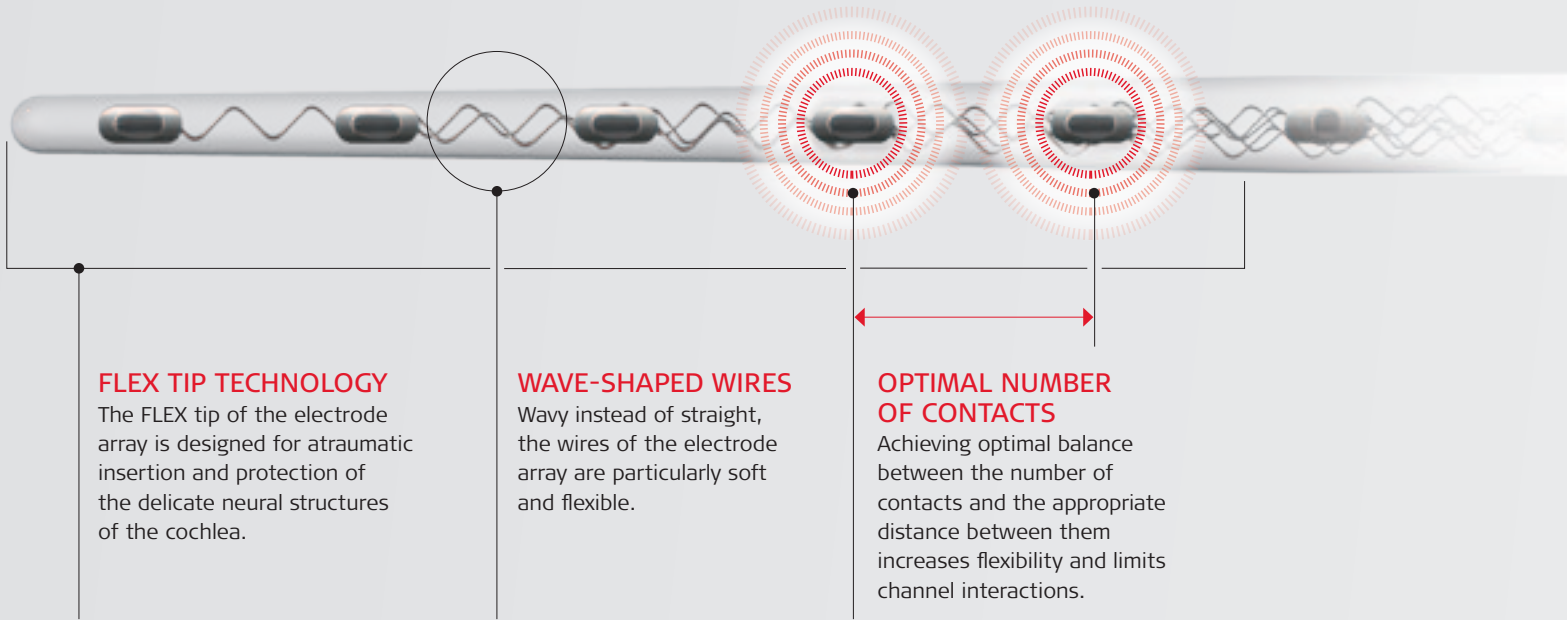


Split

Double branch electrode array designed for severe ossification of the cochlea.



The Split Electrode Array is coupled exclusively to the PULSAR hearing implant.



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