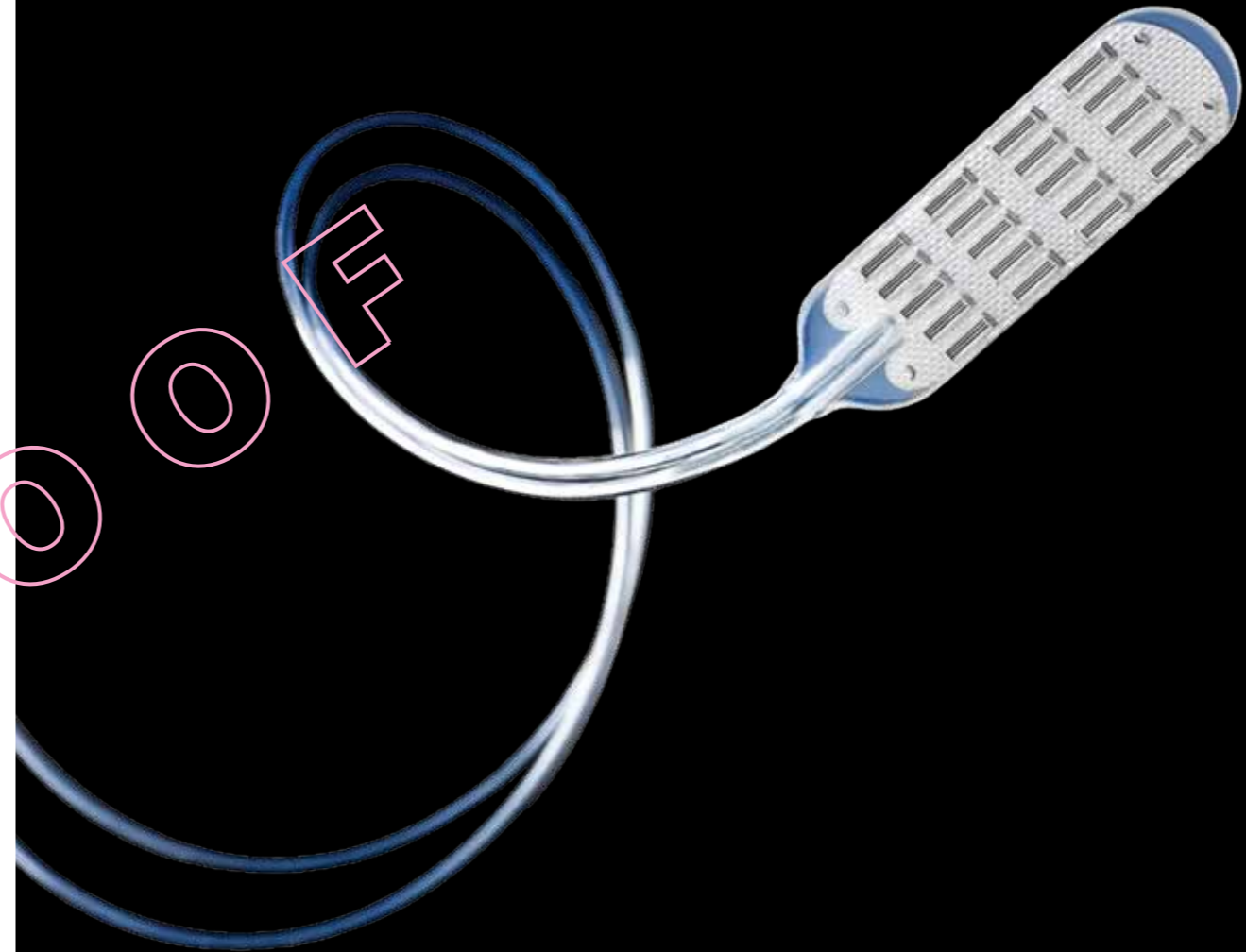


Specifications

Model number	3228
Lead length	60 cm
Number of electrodes	20
Number of active channels	16
Paddle width	11 mm
Electrode array width	9 mm
Electrode array length	25 mm

Penta™ Paddle Lead



1. Data on file.
2. Scaled from: Kameyama T, Hashizume Y, Sobue G, Morphologic features of the normal human cadaveric spinal cord. *Spine*. 1996;21(11):1285-1290.
3. Struijk JJ, Holsheimer J. Transverse tripolar spinal cord stimulation: theoretical performance of a dual channel system. *Med & Biol Eng & Comput*. 1996;34:273-279.

ATRIAL FIBRILLATION CARDIAC RHYTHM MANAGEMENT CARDIOVASCULAR NEUROMODULATION

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Indications for Use: Chronic, intractable pain of the trunk and limbs. **Contraindications:** Demand-type cardiac pacemakers, patients who are unable to operate the system or who fail to receive effective pain relief during trial stimulation. **Warnings/Precautions:** Diathermy therapy, cardioverter defibrillators, magnetic resonance imaging (MRI), explosive or flammable gases, theft detectors and metal screening devices, lead movement, operation of machinery and equipment, postural changes, pediatric use, pregnancy, and case damage. Patients who are poor surgical risks, with multiple illnesses, or with active general infections should not be implanted. **Adverse Events:** Painful stimulation, loss of pain relief, surgical risks (e.g., paralysis). Clinician's manual must be reviewed prior to use for detailed disclosure.

Not all products approved in all countries. Please ask your local representative.

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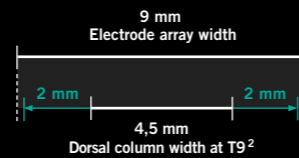


THE FIRST FIVE-COLUMN PADDLE LEAD FOR UNMATCHED LATERAL ELECTRODE COVERAGE AND SPECIFICITY

The Penta lead offers the industry's smallest electrodes in a five-column array for precise field control and broad lateral coverage. Designed to enable selective nerve fiber stimulation and predictable dermatomal activation, the Penta lead provides enhanced control for coverage of complex, multifocal pain.

Innovative Design

- Broad lateral electrode span designed to accommodate anatomical asymmetries as well as placement variability
- Proprietary micro-texturing of electrodes enables greater current delivery¹
- Small electrode size designed to focus current for greater specificity
- Anatomically curved paddle helps facilitate midline placement and stability



In at least 40% of patients, the actual spinal cord position is 1-2 mm to the left or right of the anatomical midline.³

Paddle width (11 mm)

Array length (25 mm)

Array width (9 mm)



Close-up of electrodes with micro-texturing

P R R O

Enhanced Paresthesia Control

- Designed to enable selective stimulation of the nerve fibers associated with the patient's area of pain without affecting other areas
- Five-column array is intended to provide the flexibility necessary to isolate and finely control current to stimulate specific nerve fibers

The diagrams below depict actual patient reported stimulation effects with the Penta lead.¹

