

To whom it may concern

Waldkirch, September 2024

Cooperation between Dr. Langer Medical GmbH and Spes Medica S.p.A.

This document is to confirm that Dr. Langer Medical GmbH (DLM) and Spes Medica S.p.A. (SPES) are closely cooperating in the field of intraoperative neuromonitoring (IONM).

SPES acts as a licensed manufacturer for various supplies and accessories for IONM, some of them even exclusively for DLM. Most of them are coming in a customized packaging clearly resembling the DLM corporate design.

The individual item numbers are shown in the accessories catalogue of DLM and listed in the user manual of the devices manufactured by DLM (TWISTER® MM, AVALANCHE® SI and AVALANCHE® PLUS).

For more information please contact us directly at info@medical-langer.de

Best regards

Dr. Langer Medical GmbH



Managing Director

DR. LANGER
MEDICAL GMBH
Am Bruckwald 26
79183 WALDKIRCH
GERMANY
Fon: +49 (0) 7681 / 47 45 4-0
Fax: +49 (0) 7681 / 47 45 4-29

Vienkartinės priemonės saugiai skydliaukės chirurgijai neuromonitoriaus įrangai AVALANCHE® SI 2.

NEURO TOOLS

SURGICAL STIMULATION PROBES

Spes Medica offers a **complete range** of disposable IOM stimulation probes:

- Flexible disposable 250 cm leadwire with touch proof connectors
- Overmoulded handgrip to give the best stability and performance
- The electrode is made with top quality medical grade stainless steel
- Double sterile pouches for optimum safety
- 5 year expiration date
- Universal Compatibility with all nerve monitoring systems
- Class III certified

Take a look of our standard range of probes. Spes Medica is also able to manufacture **specific designs** based on the customer requirements.



MONO POLAR

STANDARD TIP

Monopolar stimulation probes are used to **identify the nerve by direct nerve stimulation**. They may be used to stimulate when **a large signal spread is required**. A Disposable Subdermal Needle Electrode or a Disposable Adhesive Surface Electrode is needed as a reference. With a **mapping function**, they may be used during **skull base surgery, acoustic neuroma surgery, parotidectomy and parathyroidectomy**.

MONOPOLAR

- ✓ PERFECTLY ISOLATED SHAFT TO ENSURE A **PRECISE** STIMULATION POINT
- ✓ **ATRAUMATIC SMOOTH TIP** TO AVOID ANY INJURY



monopolinis stimuliacijos zondas, 45mm ilgio

SI1100**45**S2526D

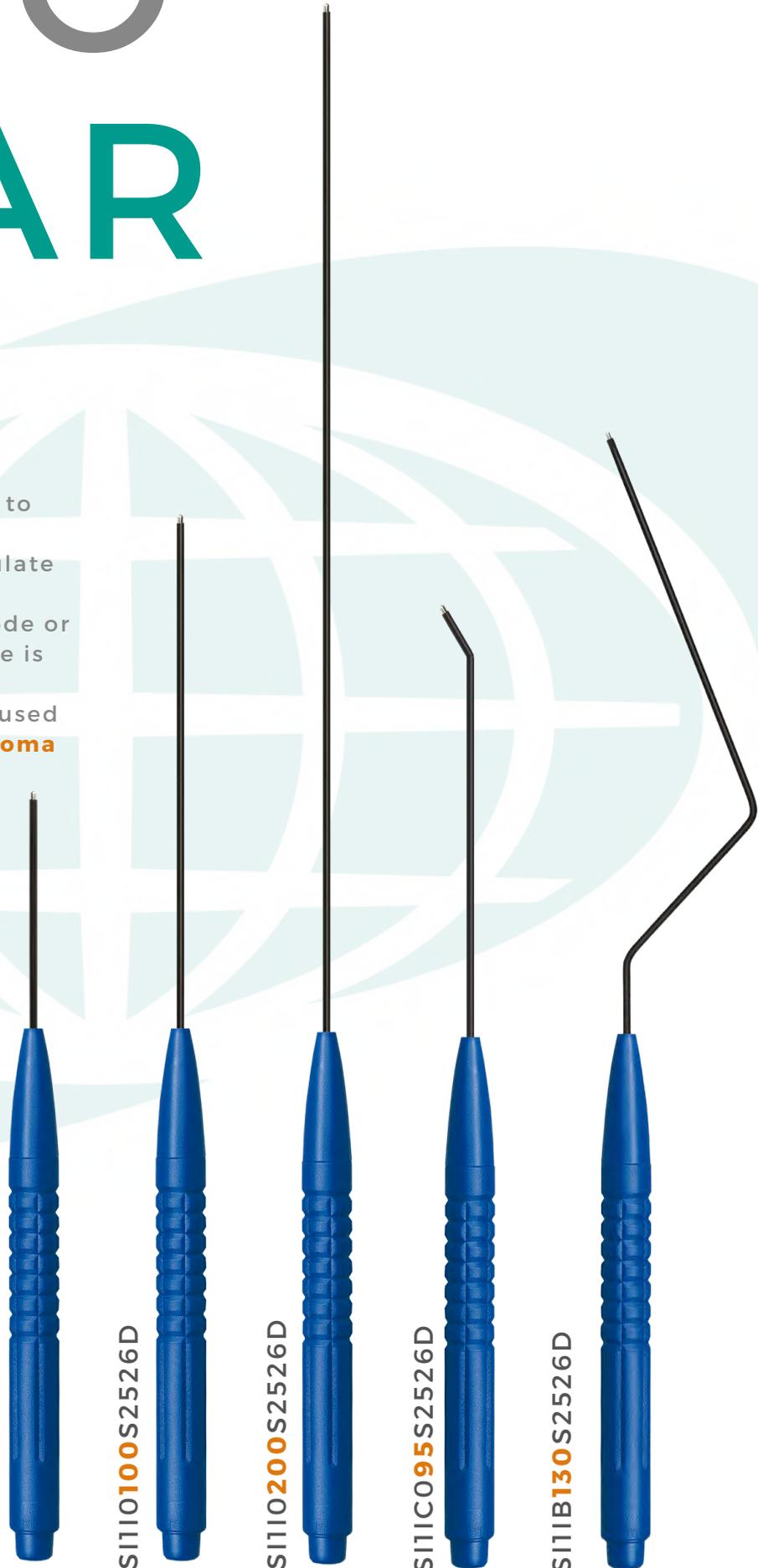
✓

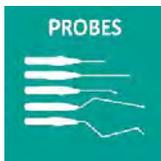
SI110**100**S2526D

SI110**200**S2526D

SI11C**095**S2526D

SI11B**130**S2526D





MONOPOLAR STIMULATION PROBES



vienkartinis, sterilus, monopolinis stimuliacijos zondas, 45mm ilgio , 1,2mm diametro su 2,5m ilgio laidu su 1,5mm jungtimi DIN 42802 tipo



Description

Monopolar stimulation probes have an active electrode to ensure a precise stimulation. The probes need a reference electrode. This reference electrode is placed outside the stimulation area.

The tip is perfectly blunted to avoid any tissue injury and the shaft is fully isolated for a precise stimulation point.

In the ball version, the ball and the shaft are a single piece of stainless steel perfectly tooled to give the best stability and safety.

The ball is available in 2mm and 3 mm diameter.

- Light and ergonomic handgrip;
- Safety connector 1,5 mm DIN 42802.

UMDNS 11453

Materiali

Electrode	Stainless Steel
Electrode insulation	PVDF
Handgrip	PS
Lead wire	Cu/Sn with PVC jacket
Connector	CuZn with PVC jacket
Packaging	Medical paper/PET-PE

Salute

Biocompatibility (UNI EN ISO 10993)	Yes
Sterilization method	Ethylene oxide (EtO) ✓
Latex	No
Phthalates	No

Specifiche prodotto

Generic code	✓ SI11XXXXXXXXXD SI1BXXXXXXXXXD
Probe diameter	✓ 1.2 mm - 1.4 mm 2 mm - 3 mm
Probe length	From 45 to 200 mm
Model	Straight, bayonet, curved, ball straight, ball bayonet
Cable length	✓ 250 cm
Connector	✓ 1,5 mm T.P. connector DIN 42802

Environment

RoHS II	✓
REACH	✓



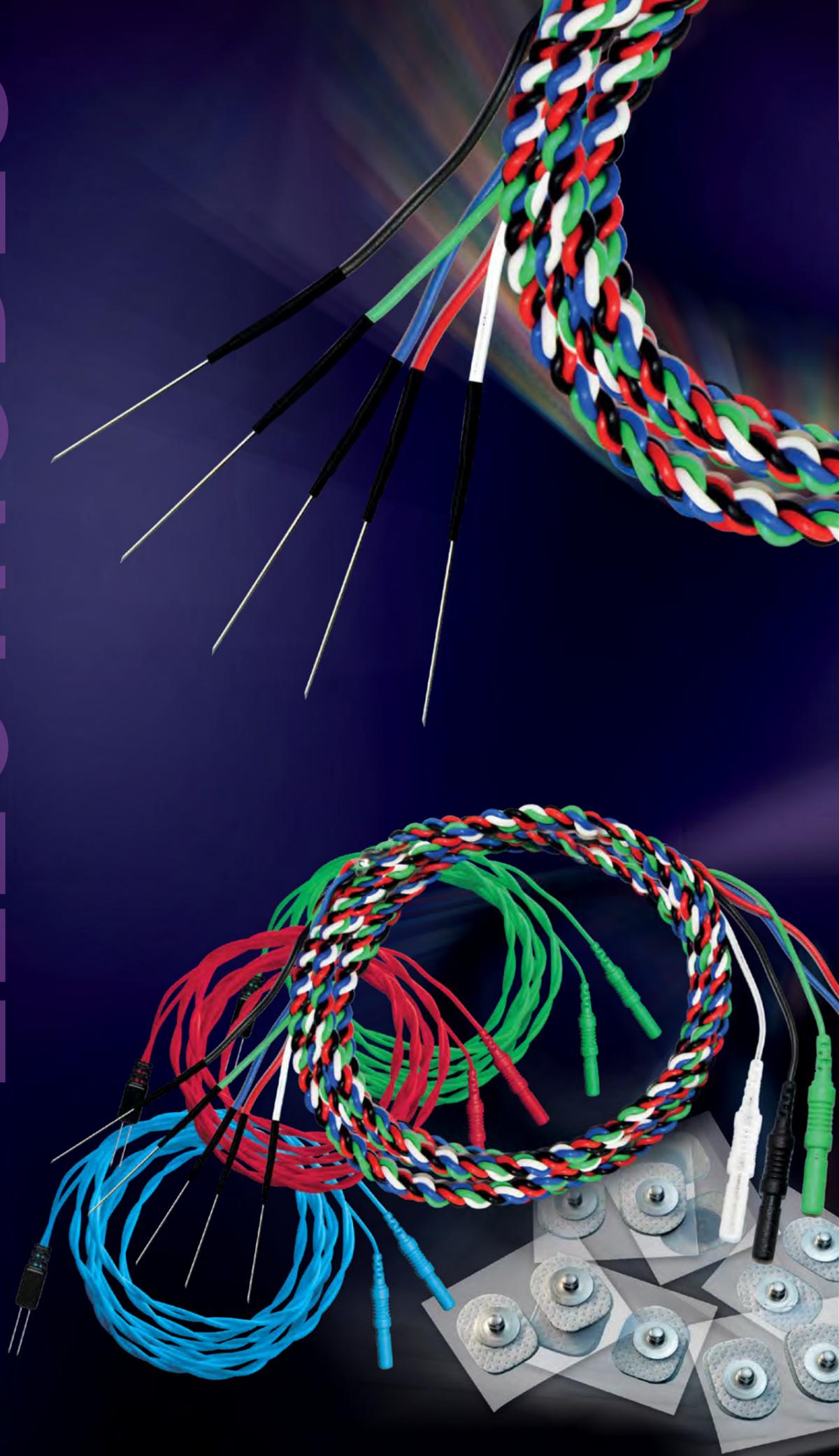
ACCESSORIES

Vienkartinės priemonės saugiai skydliaukės chirurgijai neuromonitoriaus įrangai
AVALANCHE® SI 2.

The art
of neuromonitoring



ELECTRODES



Vienkartinės priemonės saugiai skydliaukės chirurgijai neuromonitoriaus įrangai AVALANCHE® Disposable electrodes

Vagus electrode



42-0068 Saxophone electrode

after Prof. Lamadé, single use, for continuous stimulation of the vagus nerve, cable length 175 cm, with DIN 42802-1 connectors, individual sterile packaging, 5/pk

Tube electrode

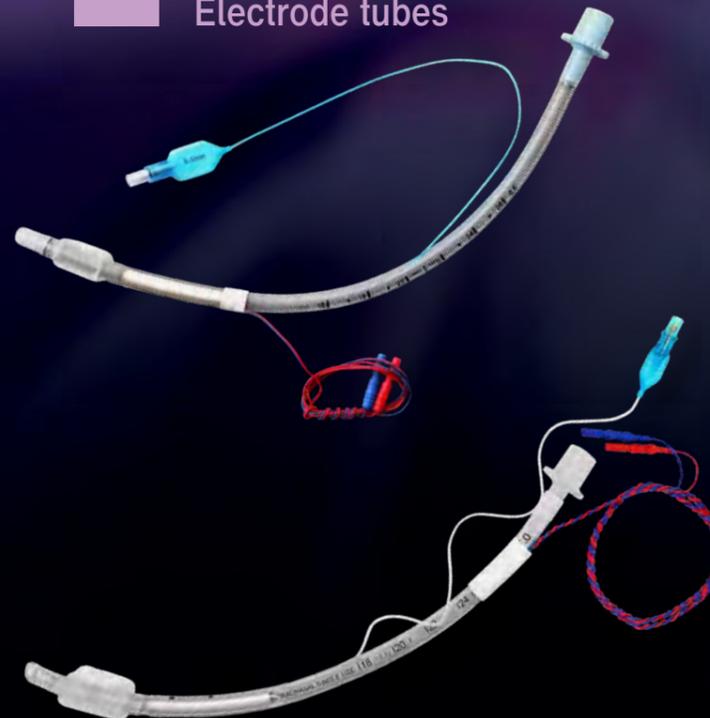


vienkartinis, sterilus elektrodas klijuojamas ant intubacinio vamzdelio su 75cm ilgio laidu, jungiamas prie Avalanche monitoriaus

✓ 42-9800 Adhesive tube electrode

✓ suitable for use with spiral and standard tubes with diameters ≥ 7.5 mm, cable length 75 cm, with DIN 42802-1 connectors, single use, individual sterile packaging, 5/pk

Electrode tubes



42-9912 Electrode tube, I.D. 6.0 mm

Woodbridge tube with guide wire for intraoperative neuromonitoring, 1 channel, cable length 75 cm, with DIN 42802-1 connectors, single use, individual sterile packaging, 5/pk

42-9913 like item 42-9912, I.D. 6.5 mm

42-9914 like item 42-9912, I.D. 7.0 mm

42-9915 like item 42-9912, I.D. 7.5 mm

42-9916 like item 42-9912, I.D. 8.0 mm

42-9902 Electrode tube, I.D. 6.0 mm

standard tube for intraoperative neuro-monitoring, 1 channel, cable length 75 cm, with DIN 42802-1 connectors, single use, individual sterile packaging, 5/pk

42-9903 like item 42-9902, I.D. 6.5 mm

42-9904 like item 42-9902, I.D. 7.0 mm

42-9905 like item 42-9902, I.D. 7.5 mm

42-9906 like item 42-9902, I.D. 8.0 mm

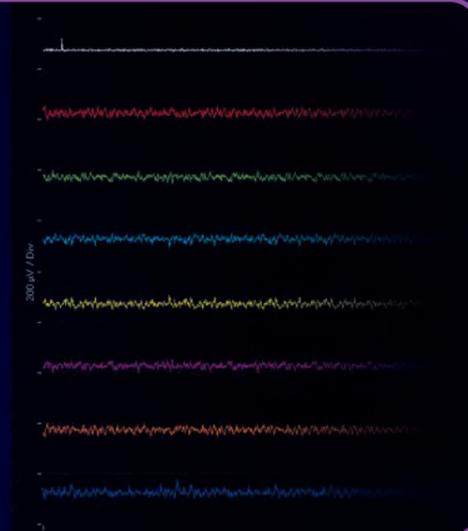
Disposable electrodes

User-friendly application

The 8 colours of our disposable subdermal needle electrodes match the EMG channel colours of the AVALANCHE® SI 2 system.



channel 1		white
channel 2		red
channel 3		green
channel 4		light blue
channel 5		yellow
channel 6		purple
channel 7		orange
channel 8		dark blue



Subdermal needle electrodes



42-9710 Subdermal, monopolar disposable needle electrode

black, needle length 18 mm, needle diameter 0.4 mm, cable length 1.5 m, with DIN 42802-1 connectors, individual sterile packaging, 24/pk

42-9711 Subdermal, monopolar disposable needle electrode

green, needle length 18 mm, needle diameter 0.4 mm, cable length 1.5 m, with DIN 42802-connectors, individual sterile packaging, 24/pk

42-9714 like item 42-9711, cable length 2.5 m

42-9712 Subdermal, monopolar disposable needle electrode

white, needle length 18 mm, needle diameter 0.4 mm, cable length 1.5 m, with DIN 42802-1 connectors, individual sterile packaging, 10/pk

vienkartinis, sterilūs, poodinis adatinis elektrodas, 18mm ilgio, 0,4mm diametro, su 1,5m laidu

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The subdermal reference needle electrode 42-9712 is required for application of the monopolar stimulation probes (e.g. 40-1303 or 40-1306).



Subdermal needle electrodes



42-9700 Disposable subdermal needle electrode set

12 x white, 12 x red, consisting of 2 electrodes (twisted wire), needle length 18 mm, needle diameter 0.4 mm, cable length 1.5 m, with DIN 42802-1 connectors, individual sterile packaging, 24/pk

42-9701 Disposable subdermal needle electrode set

12 x green, 12 x light blue, consisting of 2 electrodes (twisted wire), needle length 18 mm, needle diameter 0.4 mm, cable length 1.5 m, with DIN 42802-1 connectors, individual sterile packaging, 24/pk

42-9702 Disposable subdermal needle electrode set

12 x yellow, 12 x purple, consisting of 2 electrodes (twisted wire), needle length 18 mm, needle diameter 0.4 mm, cable length 1.5 m, with DIN 42802-1 connectors, individual sterile packaging, 24/pk

42-9703 Disposable subdermal needle electrode set

12 x orange, 12 x dark blue, consisting of 2 electrodes (twisted wire), needle length 18 mm, needle diameter 0.4 mm, cable length 1.5 m, with DIN 42802-1 connectors, individual sterile packaging, 24/pk

42-9704 Disposable subdermal needle electrode set

2 x (white + 6 colours), 2 x (black + 6 colours), consisting of 2 electrodes (twisted wire), needle length 18 mm, needle diameter 0.4 mm, cable length 1.5 m, with DIN 42802-1 connectors, individual sterile packaging, 24/pk

42-9708 like item 42-9704, cable length 2.5 m

Disposable electrodes

Adhesive electrodes



42-0015 Disposable adhesive electrode, snap button
15 x 20 mm, 20/pk



✓ 42-0016 Disposable adhesive electrode, snap button with solid gel
42 x 24 mm, 50/pk

vienkartiniai klijuojami elektrodai 42 x 24mm



CONNECTION CABLES