**Cleaning**
Rinse with distilled water, optional with ethanol 70 %.

**Sterilization:** Do not autoclave or sterilize FlexMEAs by heat. These MEA types are not heat-stable and will be irreversibly damaged! Please do not use ultrasonic bath for cleaning.

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**FlexMEA36-OM**
Flexible Microelectrode Array with 36 Electrodes and Omnetics Connector for Use with the ME2100-HS32 Headstage or the 32-Channel Micro Preamplifier µPA32

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**Technical Specifications**

- **Temperature compatibility:** 10 - 50 °C
- **Dimensions (W x D x H):** 45 mm x 13.8 mm x 1.8 mm
- **Thickness of the electrode field:** 12 µm
- **Base material:** Polyimide 2611 foil
- **Weight:** < 1 g
- **Track material and contact pads:** Gold (Au)
- **Electrode diameter:** 30 µm
- **Interelectrode distance (center to center):** 300 µm
- **Diameter of the holes:** 50 µm
- **Electrode height:** Planar
- **Electrode material:** TiN electrodes (Titanium nitride)
- **Isolation material:** Polyimide 2611 foil
- **Electrode impedance:** < 150 kΩ
- **Electrode layout grid:** 6 x 6
- **Number of recording electrodes:** 32
- **Number of reference electrodes:** 2
- **Number of ground electrodes:** 2
- **Software:** Multi Channel Experimenter linear

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**Advantages**

- The FlexMEA36-OM is made of flexible polyimide 2611 foil, perfect for *in vivo* and specific *in vitro* applications, for example, whole-heart preparations.
- The titanium nitride electrodes have a diameter of 30 µm, and the distance between the electrodes is 300 µm.
- The polyimide foil is perforated with holes of 30 µm diameter, ensuring optimal tissue contact.

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**Warning:** The FlexMEA36-OM may only be used together with the devices from Multi Channel Systems MCS GmbH, and only for the specified purpose. Damage of the device and even injuries can result from improper use.
**Important:** The channel map is constructed by looking on the back side of the electrodes, because the FlexMEA36-OM electrodes are placed on the preparation upside down!

**Electrode Layout (electrodes facing down, seen from behind)**

```
GND 2
  
  3   4   5   10  16  26
  F5  E5  D5  C4  B4  A4
  
  8   14  20  22  27  30
  F4  E4  D4  C3  B3  A3
  
  11  21  30  29  27  27
  F3  E3  D3  C2  B2  A2
  
  9   17  18  16  15  10
  F2  E2  D2  C1  B1  A1
  
  6   13  19  28  21  32
  E6  D6  C6  B6  C6  D6
  
  1   10  14  15  16  17
  F1  E1  D1  C1  B1  A1
  
  GND 1
```

Direction to the connector.

**Numbering**

The letter digit code below the electrode refers to the position of the electrode in the grid. The numbers inside are the linear channel numbers in Multi Channel Experimenter and MC_Rack.

**Multiple Headstages**

**MC_Rack**

If you use more than one µPA32, the signal collector SC2x32 leads the output channels of the second amplifier to channel number 33 - 64. Please see datasheet SC2x32 for details.

**Multi Channel Experimenter**

If you use a ME2100-System with more than one headstage, the second/third/fourth headstage will be displayed as channels B1 - B32 / C1 - C32 / D1 - D32.

**Connector Layout**

```
  REF
  
  A1  A3  A5  A4  B1  B2  C5  C6  D2  D3  D6  D5  E2  E1  F4  F5  F3  GND
  
  A2  B5  B6  B4  B3  C1  C4  C2  D4  D1  E3  E4  E6  E5  F2  F1  REF
```

**Connector Specification**

- Manufacturer: Omnetics
- Manufacturer Part No: A79022-001
- Type: NDP-36-DD-GS
- Connector with 36 pos, dual row, male, provided with 4 holes for guide posts.

**Guide post**