

# CELLS

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## MICROPHONE

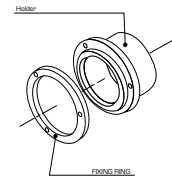
Dynamic cells  
Electret cells

### ACCESSORIES



**Description**  
Holder  
(neoprene or rubber)

### Schematic

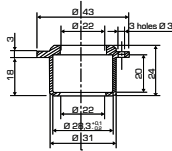


### Cells

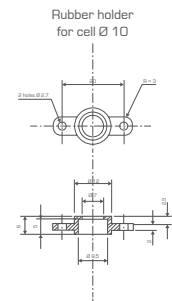
C224 6V - C224 9V - C224 12V -  
C224 24V - P2204 - S896 -  
CELP2321



Fixing ring  
(2 models)



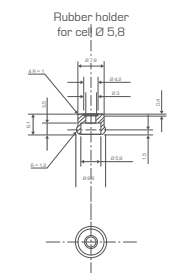
Rubber holder



EM100T - EM135 -  
EMO008 - EME007



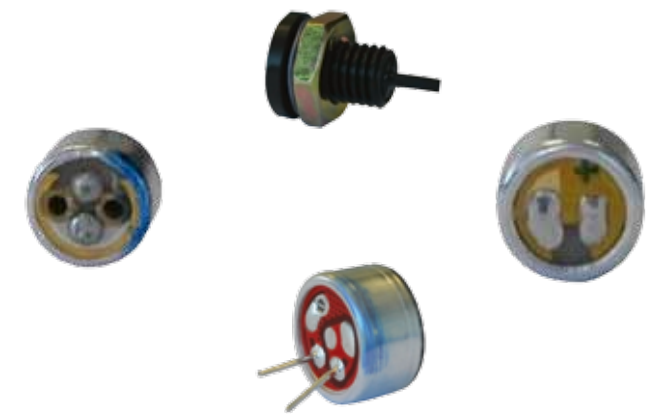
Rubber holder



EM123T - EM118 - EM127 -  
EM124 - EMO006 -

### BENEFITS

- Functioning suited to severe environments
- Protection against rain and wind for some models
- Dynamic cells and electrets
- Omni-directional, unidirectional or differential directivity
- Amplified or not
- Optional housing and fixing ring



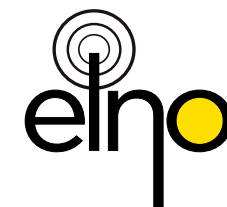
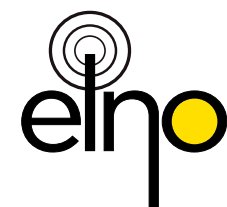
### APPLICATIONS

LEM microphone cells are suitable for intercom, sound system, telecommunication and radio communication applications.

Some models, developed according to specific requirements, meet the constraints of onboard transport and equip buses, trains and trams.

Widely used outdoors, they are integrated in motorway, toll and user service terminals such as for example the hire of electric vehicles. They are also integrated in communication systems for lifts and electronic gate keeper.

In addition to standard products, LEM is able to develop specific equipment in term of design and acoustic.



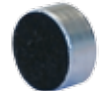
# CELLS



EM100T



EM123T



EM135



EM118



EM127



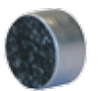
EM124



EMO008



EMO006

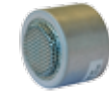


EME007

Type	electret	electret	electret	electret	electret	electret	electret	electret	electret
Directivity	omni-directional	omni-directional	unidirectional	unidirectional	omni-directional	differential	omni-directional	omni-directional	omni-directional
Terminal	pins	pins	solder pads	solder pads	solder pads	solder pads	solder pads	solder pads	pins
Supply voltage	6V [2V to 10V]	3V [1,1V to 10V]	1,5V [2V to 10V]	1,5V [1,1V to 9V]	3V [1,1V to 10V]	3V [1,1V to 10V]	6V [1,2V to 10V]	3V [1,5V to 10V]	1,5V [1V to 10V]
Operating temperature	-10°C to 60°C	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C	-10°C to 60°C	-10°C to 50°C	-10°C to 60°C	-20°C to 60°C	-10°C to 60°C
Storage temperature	-20°C to 70°C	-20°C to 60°C	-30°C to 60°C	-20°C to 60°C	-20°C to 70°C	-20°C to 60°C	-20°C to 70°C	-40°C to 85°C	-20°C to 70°C
S / N ratio	≥ 40dB for 74 dB [weighted A]	≥ 40dB at 1kHz for 74 dB SPL	≥ 48dB at 1kHz for 74 dBA	≥ 38dB at 1kHz for 74 dB SL	≥ 45dBA for 74 dBA	> 38dBA at 1kHz for 74 dB SPL	≥ 58dB at 1kHz/Pa	≥ 75dB at 1kHz/Pa	≥ 60dB at 1kHz/Pa
Efficiency at 1kHz	6,3 μV ± 3dB/Pa	7 μV/Pa	14 μV ± 3dB/Pa	14,5 μV/Pa	15,8 μV/Pa	2,8 μV/Pa	7,5 μV/Pa	25 μV/Pa	7,5 μV/Pa
Impedance	1 kΩ ± 30%	1,6 kΩ ± 30%	1,8 kΩ ± 30%	1,6 kΩ ± 30%	1,6 kΩ ± 30%	1,6 kΩ ± 30%	2 kΩ ± 30%	1,6 kΩ ± 30%	2 kΩ ± 30%
Diameter	10mm	5,8 mm	10 mm	5,8 mm	5,8 mm	5,8 mm	10 mm	5,8 mm	10 mm
							Condensateur RF intégré 33PF + 10PF		waterproof



C224 6V



C224 9V



C224 12V



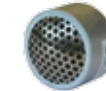
C224 24V



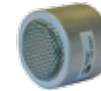
P2204



S896



C416B



CELP2321



70P2664

Type	electret	electret	electret	electret	electret	electrodynamic	electrodynamic	electrodynamic	electret
Directivity	omni-directional	omni-directional	omni-directional	omni-directional	differential	omni-directional	omni-directional	omni-directional	omni-directional
Terminal	screws	screws	screws	screws	screws	solder pads	wires	solder pads	wires
Supply voltage	6V [4V to 7V]	9V [7V to 10V]	12V [10V to 16V]	24V [16V to 25V]	6V	N/A	N/A	N/A	3V [1,1V to 10V]
Operating temperature	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 60°C	-10°C to 50°C	-30°C to 70°C	-10°C to 40°C	-10°C to 40°C	-10°C to 60°C
Storage temperature	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C	-20°C to 70°C	-20°C to 60°C	-40°C to 80°C	-20°C to 50°C	-20°C to 50°C	-20°C to 70°C
S / N ratio									≥ 45dBA for 74dBA
Efficiency at 1kHz	200 μV ± 3dB	850 μV ± 3dB	650 μV ± 3dB	540 μV ± 3dB	450 μV ± 2dB	1,7 μV ± 3dB	1,9 μV ± 3dB/Pa	1,6 μV/Pa	15,8 μV/Pa
Impedance						200 Ω ± 20%	200 Ω ± 20%	200 Ω ± 20%	1,6 kΩ ± 30%
Diameter	28,5 mm	28,5 mm	28,5 mm	28,5 mm	28,5 mm	28,5 mm	31,5 mm	28,5 mm	22 mm [pas de vis M10]
	amplified and waterproof front size	amplified and waterproof front size	amplified and waterproof front size	amplified and waterproof front size				symmetrical output	