

MEMSCAP

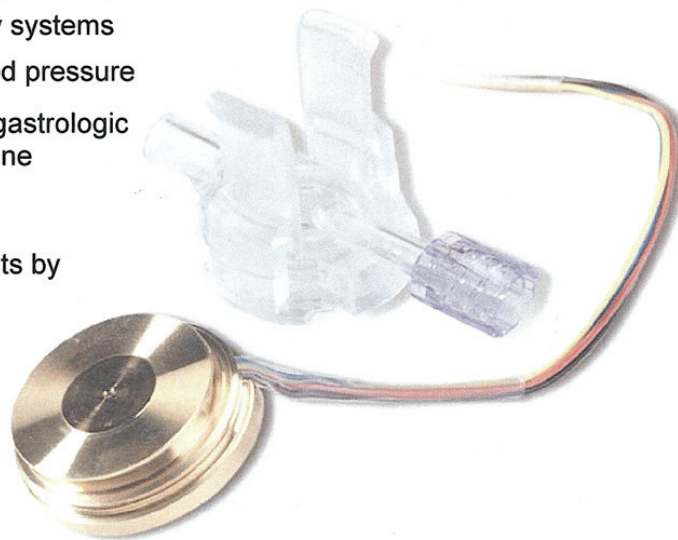
SENSOR SOLUTIONS

SP854 BIOMEDICAL PRESSURE TRANSDUCER

MEMSCAP high-end sensors offer unique performance for your applications. The high proven quality and reliability of our sensors that match all Medical standards provide unmatched results for pressure measurement during surgery, treatment and intensive care. The **reusable transducer** with its **disposable dome** offers flexibility, accuracy and reliability for the most cost effective solution.

APPLICATIONS :

- Filtration systems
- Flow control systems
- Dialysis systems
- Infusion pumps
- Drug delivery systems
- Invasive blood pressure
- Intracranial, gastrologic and intrauterine pressure
- Urodynamic measurements by catheterization



FEATURES :

- Piezoresistive transducer
- Isolation of electrical parts from the housing
- Isolation of housing from the saline solution
- Silicone dome diaphragm

BENEFITS :

- Reusable transducer
- Pressure range -600mmHg to +700mmHg
- Low cost disposable dome and monitoring set
- High frequency response gives unique signal resolution
- Gold plated for easier cleaning
- Dome dry coupled to the transducer
- Easily coupled and easy to fill dome
- High overload protection 10.000 mmHg
- Long life expectancy and reliability

Preliminary Data

European Headquarters
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Bernin
38926 Crolles Cedex
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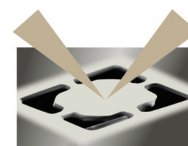
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For requests please contact:

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MEMSCAP®

The Power of a Small World™

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SP854

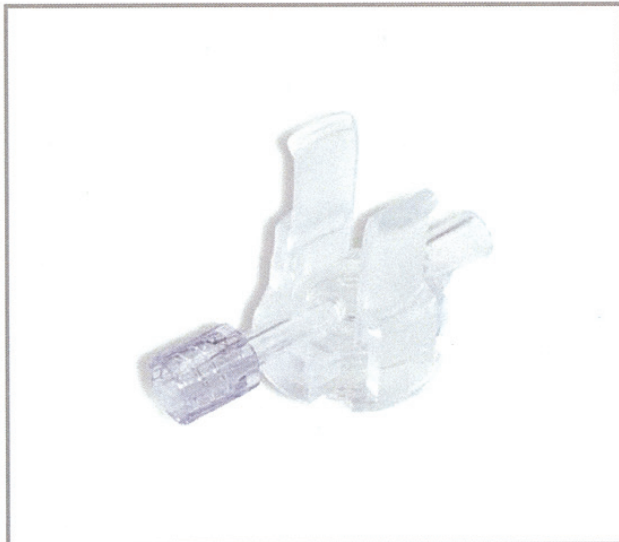
BIOMEDICAL PRESSURE TRANSDUCER



PRELIMINARY SPECIFICATIONS

Pressure Range	-600 to 700mmHg
Max. Overpressure	10 000mmHg
Sensitivity	50 μ V / V / cmHg
Resonant Frequency*	300 Hz typical (transducer and dome)
Max. Electrical Excitation	15V DC or AC
Input resistance	700 Ω (or equipment specified)
Output resistance	1000 Ω (or equipment specified)
Total accuracy at room temperature	max \pm 2.5% FSO
Non-Linearity and Hysteresis	max 1.5% FSO
Zero Balance	max \pm 50mmHg
Thermal Sensitivity Shift	max -0.20% FSO/ $^{\circ}$ C
Thermal Zero Shift (25 $^{\circ}$ C to 35 $^{\circ}$ C)	max \pm 0.20mmHg / $^{\circ}$ C
Operating Temperature Range	+10 $^{\circ}$ C to + 50 $^{\circ}$ C
Storage Temperature Range	-20 $^{\circ}$ C to +60 $^{\circ}$ C
Insulation Resistance	min 1. G Ω
Leakage Current	max 1.5 μ A at 250V, 50Hz
High Voltage Resistance	10 000V between medium in dome and transducer leads
Weight	typ 52 grams (without cable)
Length of cable	upon request
Wiring information	
+ Excitation	Red
- Excitation	Black
+ Signal	Blue
- Signal	Yellow

*The frequency response may be limited by the length of the pressure tube.



844-29 Dome (non-sterile)



SP854 Biomedical Pressure Transducer