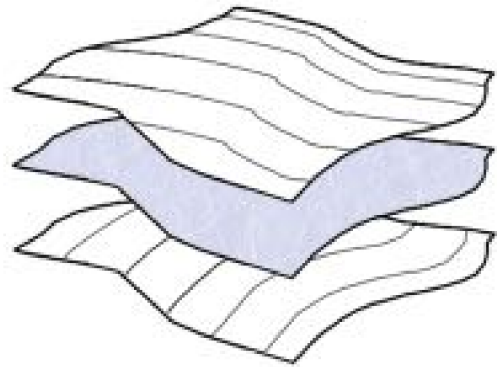


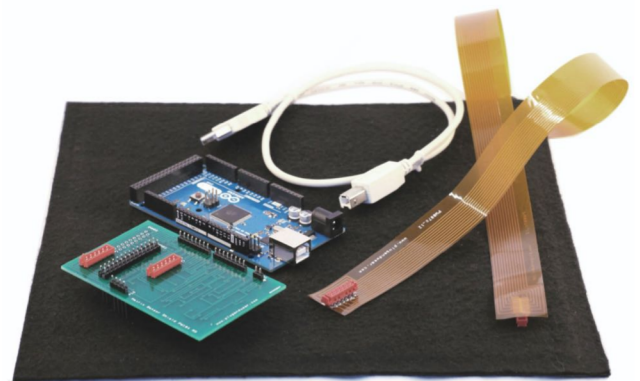
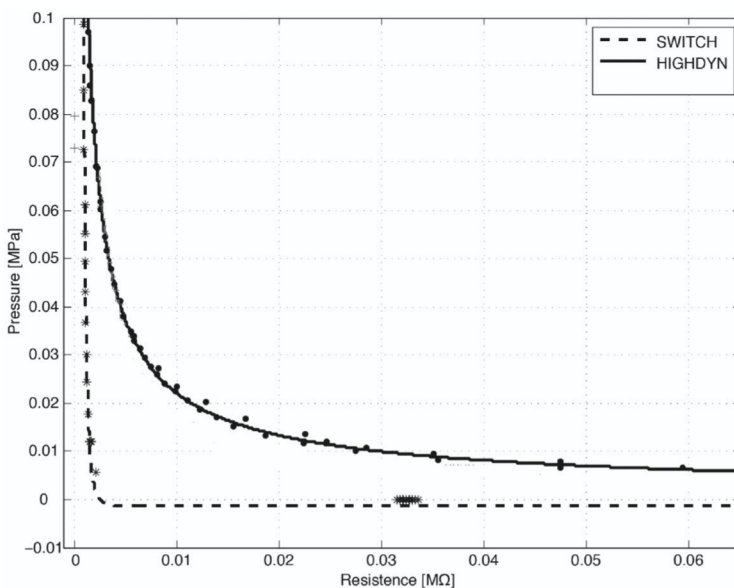
# MATRIX TEXTILE PRESSURE SENSOR

Soft sensor able to generate pressure map data even if placed on uneven surfaces. Its all-fabric layers guarantee flexibility, breathability, conformability and stretchability. Can be placed in direct contact with skin. High density of pressure points with a typical resolution 20 mm. Real time response. The all-fabric layers allow bending the sensor without the crackling noise typical of plastic film sensors. Perfectly suited to monitor pressure points between the human body and a soft surface like a seat, mattress or cushion. EU patent.



## Technical characteristics

|  | unit | value                | equivalents    |
|--|------|----------------------|----------------|
| Working principle                              |      | piezoresistive       |                |
| Spatial resolution*                            | mm   | 20                   | 0.79 in        |
| Spacing between rows/cols*                     | mm   | 10                   | 0.39 in        |
| Maximum detectable pressure                    | kPa  | 130                  | 18.85 psi      |
| Minimum detectable pressure                    | kPa  | 0.1                  | 0.15 psi       |
| Maximum resistance                             | MΩ   | > 0.4                |                |
| Minimum resistance                             | MΩ   | $0.8 \times 10^{-3}$ |                |
| Washable surface                               |      | optional             |                |
| Maximum sensor size W x L                      | cm   | 130 x 250            | 51.2 x 98.4 in |
| Standard sensor size*                          | cm   | 32 x 32              | 12.6 x 12.6 in |
| * other sizes or spacings available on request |      |                      |                |



Our evaluation kits include one 12x12 or 16x16 sensor, one Arduino Mega and one shield for easy connection to the Arduino. A basic pressure map can be visualized using a Processing sketch provided free of charge.



**Knitronix**  
industrial flexible sensors

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