

## Piezoelectric Sensor SYS-FLX-900-010

### GENERAL specification

PZ structure is based on Votek3 proprietary Piezoelectric bending elements which are electromechanical transducers with high motion and voltage sensitivity. The element has sandwich -like structure, in which two thin piezoelectric ceramic sheets are bonded between them

| 1 | Sensor Dimensions                                   | Parameter                       | Tolerance |
|---|-----------------------------------------------------|---------------------------------|-----------|
|   | Length                                              | 20 mm                           | ± 20%     |
|   | Width                                               | 5 mm                            | ± 20%     |
|   | Thickness                                           | 0.35 mm                         | ± 15%     |
| 2 | Weight                                              | 0.2 gr                          | +/-15%    |
| 3 | Electrical Properties                               |                                 |           |
|   | Capacitance before poling                           | 5-9 nF                          |           |
|   | Capacitance after poling                            | 6-10 nF                         |           |
|   | Piezoelectric Charge (Displacement Coefficient) d31 | -320 Coul/N x 10 <sup>-12</sup> |           |
| 4 | Environmental Specifications                        |                                 |           |
|   | Operation Temperature                               | a. -40° C to 85° C              |           |
|   | Storage Temperature                                 | a. -54° C to 95° C              |           |
|   | Curie Point                                         | a. 225° C                       |           |
|   | Vibration/Bonding                                   | not tested                      |           |
|   | Humidity                                            | not tested                      |           |
|   | Lifetime/MTBF/Redandancy                            | not tested                      |           |
|   | Pressure                                            | not tested                      |           |