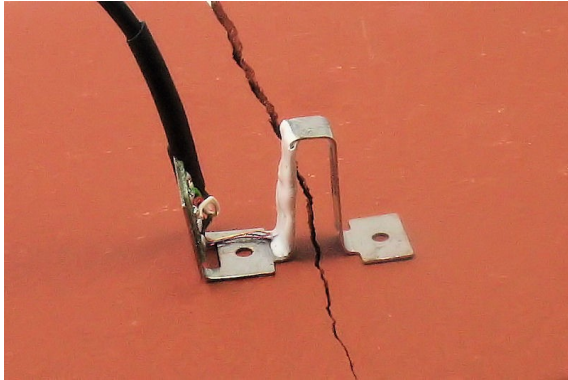


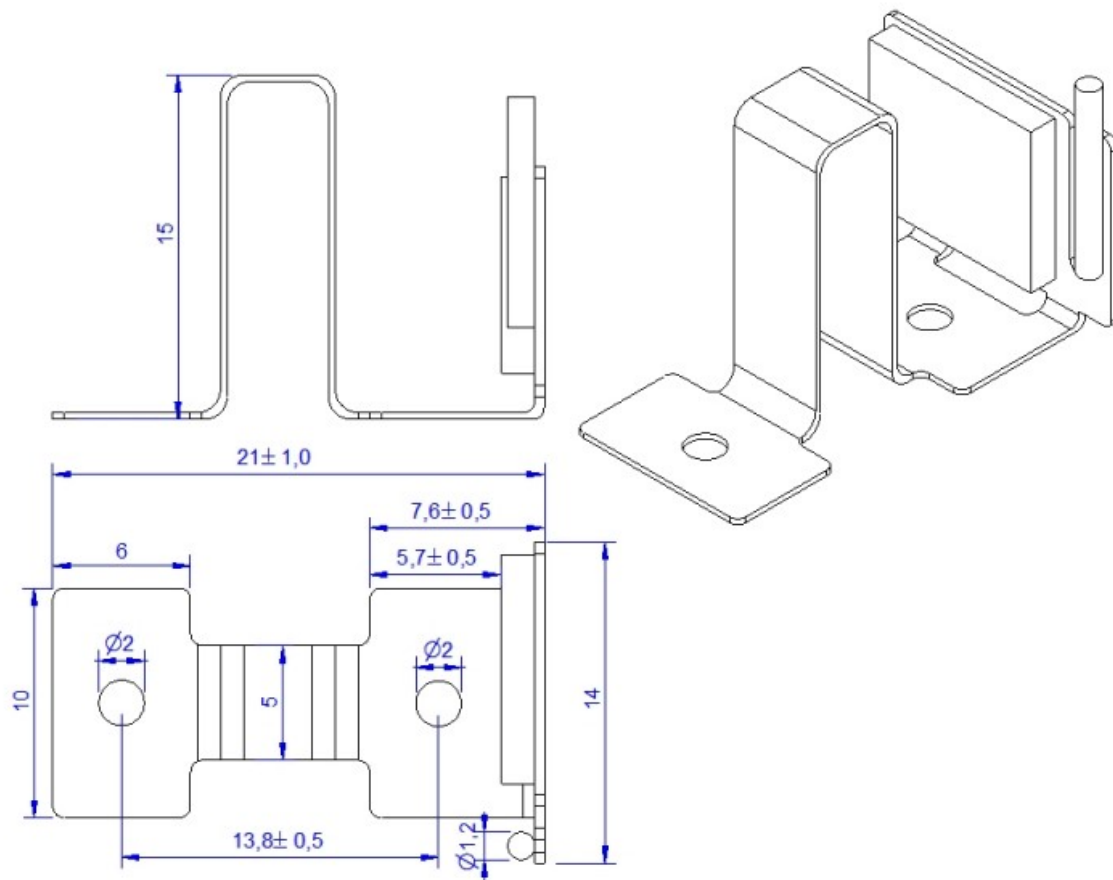
## Displacement Sensor CS05 31V

Item number: 4136



Crack propagation sensor in ultraminiature design. Applications: crack monitoring in listed buildings, monitoring of welding seams of machines, measurement of displacement and deformation on containers, tanks and components. Due to the small weight the crack propagation sensor CS05 is suitable for deformation measurements with crash tests.

## Technical Drawing



## Technical Data

| Basic Data   |                    | Unit |
|--------------|--------------------|------|
| Typ          | Wegsensor          |      |
| Nennweg      | 0.5                |      |
| Gebrauchsweg | 1                  |      |
| Maximalweg   | 1.5                |      |
| Material     | Stainless steel    |      |
| Abmessung    | 21mm x 14mm x 15mm |      |

| Electrical Data                            |                   | Unit      |
|--------------------------------------------|-------------------|-----------|
| Input resistance                           | 350               | Ohm       |
| Tolerance input resistance                 | 10                | ±         |
| Output resistance                          | 350               | Ohm       |
| Tolerance output resistance                | 10                | ±         |
| Insulation resistance                      | 5x10 <sup>9</sup> | Ohm       |
| Rated range of excitation voltage from     | 2.5               | V         |
| Rated range of excitation voltage to       | 5                 | V         |
| Operating range of excitation voltage from | 1                 | V         |
| Operating range of excitation voltage to   | 5                 | V         |
| Zero signal                                | 0.5               | mV/V      |
| Rated output                               | 1                 | mV/V / FS |

| Accuracy Data                              |      | Unit  |
|--------------------------------------------|------|-------|
| Relative linearity error                   | 1    | %Fn   |
| Relative zero signal hysteresis            | 1    | %Fn   |
| Temperature effect on zero signal          | 0.5  | %Fn/K |
| Temperature effect on characteristic value | 0.05 | %Sn/K |
| Relative creep                             | 0.05 | %Fn   |
| Environmental Data                         |      | Unit  |
| Rated temperature range from               | 10   | °C    |
| Rated temperature range to                 | 30   | °C    |
| Operating temperature range from           | 0    | °C    |
| Operating temperature range to             | 50   | °C    |
| Storage temperature range from             | 0    | °C    |
| Storage temperature range to               | 50   | °C    |

## Pin assignment

| Channel | Symbol | Description            | Wire color | PIN |
|---------|--------|------------------------|------------|-----|
|         | +Us    | positive bridge supply | red        |     |
|         | -Us    | negative bridge supply | black      |     |
|         | +Ud    | positive bridge output | green      |     |
|         | -Ud    | negative bridge output | white      |     |

Screen - transparent. Pressure load : positive output signal