



## **RSN-P** (Road Sensor NOVACOS - Piezo)

The RSN-P is designed to be installed in the surface of the road for collecting traffic reports. The sensor is possible to be built under the configuration of the road and also designed to reduce the bending of the road, decrease the noise of the side lane and approaching vehicles signal. The specialized technology of NOVACOS makes it possible to install with least cutting so lesson the damage of the road and also reduce the use of the material for road suture.



# **PIEZO**

# RSN-P Performance **RSN-P** Specification

| Section               | Description                        | S      |
|-----------------------|------------------------------------|--------|
| Temperature range     | $-40^\circ$ C $\sim$ 70 $^\circ$ C | Intern |
| Default power range   | more than 250mV                    | Sense  |
| Signal cable          | RG-58C/U                           | Exteri |
| Insulation resistance | $\rangle$ 500M $_{Q}$              | Senso  |

| Section           | Description   |  |
|-------------------|---|--|
| Internal sensor   | A plane surface, Tailoring, Silver gilt copper wire           |  |
| Sensor type       | PVDF Piezoelectric film                                       |  |
| Exterior material | 0.2cm Thickness Brass   |  |
| Sensor size       | Length 2500mm, Thickness 1.9mm $\pm$ 3%, Width 6.7mm $\pm$ 2% |  |
| Signal cable      | RG-58C/U, Cable order production possible                     |  |

# **RSN-P** Properties

- · RSN-P generates stated of high amplitude of piezoelectric and it used for classification of vehicles and counting the number of the vehicles
- It also can eliminate all of, signal noises of the side lanes and all kind of road signal noises by approaching vehicles
- · We are provided distinguished technology and material for load sensing It is designed for easily set up and reduction of road cutting and minimized the use of the resin material
- The sensor signal leveling is possible by maintaining the depth of the surface of road equally
- · Best products provided that pass the pre-test, before take out, with 100 percent reliability
- · We are fully provided for confidence and Optimization to Korea expressway condition and the durability of the client demand



# ■ RSN-P Detail specification

| Manufacture | Test items                                     | Test method      | Test conditions  | Acceptance criteria            |  |
|-------------|--|------------------|--|--------------------------------|--|
|             |  |                  | function   |                                |  |
| NOVACOS     | Output Level                                   | KS C 5529        | <ol> <li>Insistence: (12 ± 1) g</li> <li>Height: (70 ± 5) mm</li> </ol>  | 1 ~2.5V                        |  |
|             | Output Uniformity                              |                  | Measurement of the output voltage equivalent to five point   | $\pm 20\%$ in less than        |  |
|             | Insulation Resistance                          |                  | <ol> <li>DC 500 V, 1 min</li> <li>Between Core and Shield</li> </ol>   | more than 2,000M $\Omega$      |  |
|             | Capacitance                                    |                  | <ol> <li>1 V, 1 kHz</li> <li>Between Core and Shield</li> </ol>  | 6~12nF                         |  |
|             | Output Delay Time                              |                  | Sensor cable at both ends  | $0.1_{\text{MS}}$ in less than |  |
|             | Tensile Strength                               |                  | Cable connections  | more than 0.35kN               |  |
|             | Conditions                                     |                  |  |                                |  |
|             | High Temperature Test                          | KSC0221          | <ol> <li>Temperature : (70 ± 2) °C</li> <li>Test time : 96 hours</li> </ol>  |                                |  |
|             | Low Temperature Test                           | KSC0220          | ① Temperature : (-40 $\pm$ 3) <sup>°</sup> C<br>② Test time : 96 hours   |                                |  |
|             | Rapid Temperature<br>- Change Test             | KSC0225          | <ol> <li>(70 ± 2) °C, 2 hours</li> <li>(-40 ± 3) °C, 2 hours</li> <li>Test cycle : 50 cycle</li> </ol>   |                                |  |
|             | Immersion Test                                 | MIL-STD<br>-883E | <ol> <li>Sodium chloride Saturated solution</li> <li>(65 ± 2) °C, 1 hours</li> <li>(0 ± 3) °C, 1 hours</li> <li>Test cycle : 5 cycle</li> </ol>                                    | n                              |  |
|             | Temperature-Change Test<br>with Specified rate | KSC0025          | <ol> <li>(20~ -40 ~60~20) °C, 20 °C interval</li> <li>Test time: The temperature by 1 I</li> <li>Temperature change : 1 °C/min</li> <li>Temperature Capacitance measure</li> </ol> | nour                           |  |