



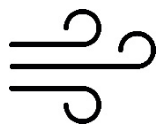
**NIEUWKOOP**

# LEAFLET



**ZZ5000**

SMALL RAIN GAUGE



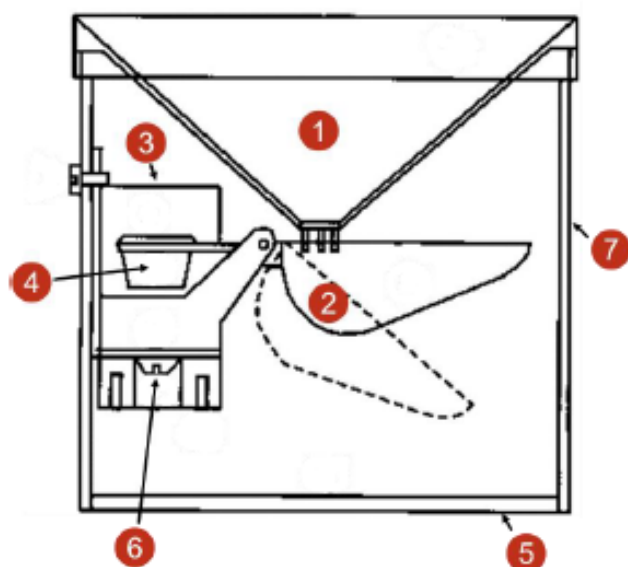
TO MEASURE  TO KNOW



## Technical specifications

### Rain collector/Tipping bucket

The Small rain gauge measures the precipitation by means of a funnel (orifice 50 cm<sup>2</sup>), which leads the water down into the self-emptying tipping POM bucket, held in place by a hard ferrite magnet. The magnet always exerts just enough tension to allow the measuring bucket to empty in one quick movement (less than 300 ms) and then return to its normal position, ready to collect precipitation once again. This means the counterweight always remains the same opposite to other conventional two spoons tipping bucket rain gauges.



1. Funnel with grille
2. Self-emptying tipping bucket
3. PCB with reed switches
4. Magnet
5. Base
6. Adjustment screw
7. Housing

### ASA (Acrylonitrile Styrene Acrylate)

The rain gauge made in molded thermoplastic, also known as ASA, which has high outdoor weather ability. ASA is extremely resistant against the sun's UV radiation, it is frost- and heat resistant, standing all climatically conditions.

The product is widely used in the automotive industry as well as several other outdoor applications.

### PCB

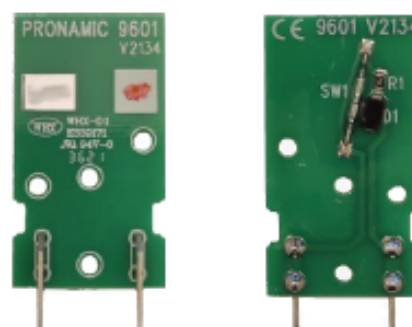
The electronic printed circuit board with individually tested and high-quality reed switches protected against extreme weather conditions such as extreme frost or heat. This include corrosion from salt water due to the PCB is coated with weather-resistant varnish.

**The PCB comes in two versions:**

**Small Rain Gauge: Item no. 100.053.**

**Comes with: PCB No. 9601**

NC: normally closed. Two male spade connectors and 1 reed switch connected in series with a 1K ohm 1/4W resistor and a TVS-diode in parallel.



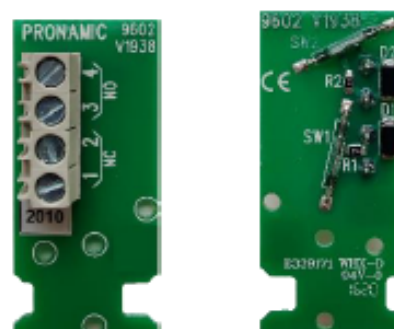
**Small Rain Gauge: Item no. 100.054.**

**comes with PCB No. 9602**

One Screw Terminal with 4 connections:

1-2 NC: Normally closed 3-4 NO: Normally open.

Two separated circuits. Each with one reed switch connected in series with a 1K Ohm 1/4W resistor and a TVS-diodes in parallel.





**Typical switching times for PCB 9602**

**Accuracy:**

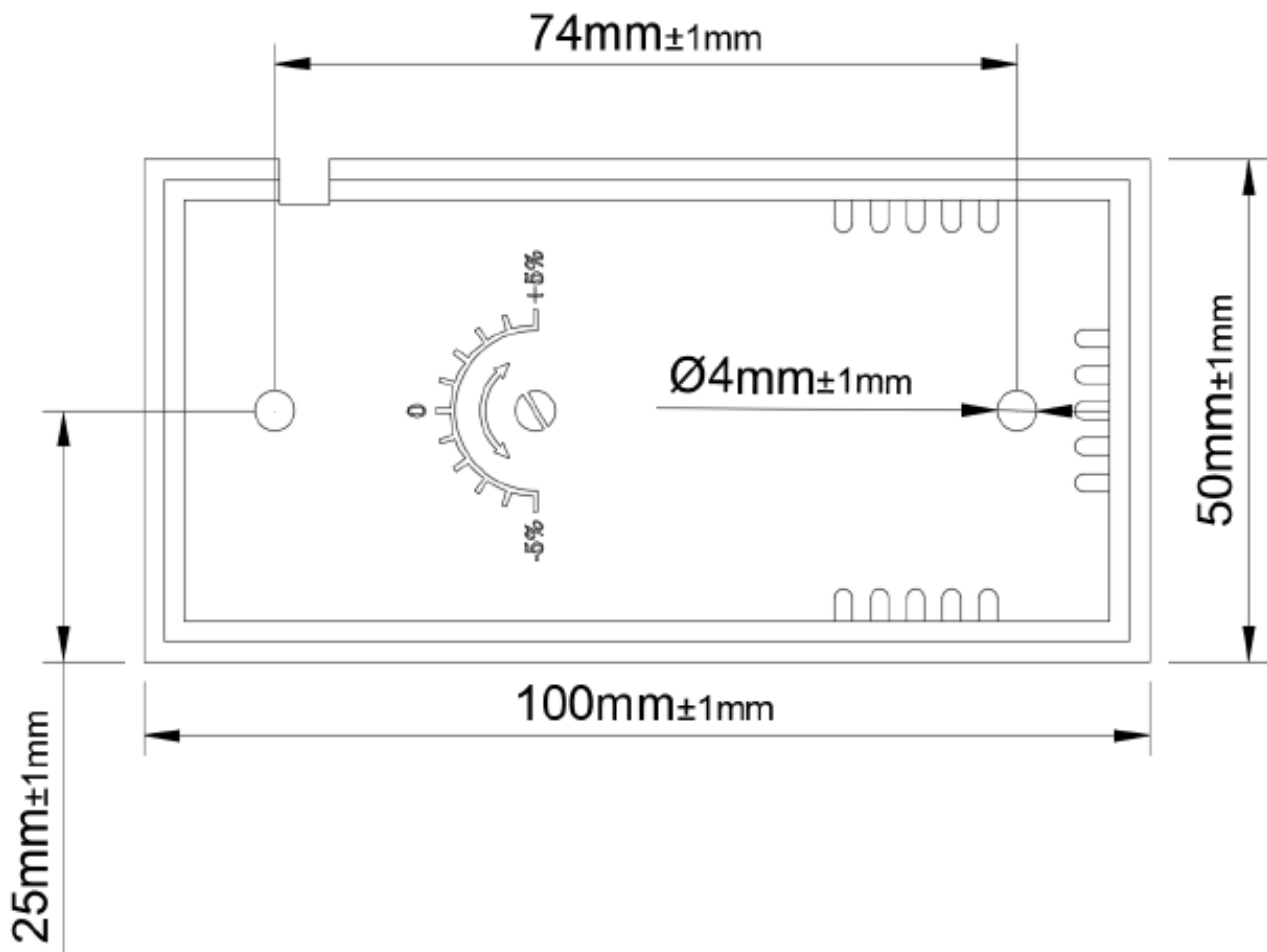
+/- 5%

Spoon	Terminal 1-2 NC	Terminal 3-4 NO
5ml	326ms $\sigma = 11\text{mS}$	301ms, $\sigma = 12\text{mS}$

$\sigma$  = Standard deviation

Filter design: Max 200msec recommended.

**Dimensions on the bottom for mounting.**



	<b>Metric</b>	<b>American</b>
<b>Resolution</b>	1.00 mm rain per tip	0.04 rain per tip
<b>Orifice</b>	50 cm <sup>2</sup>	7.75 sq. inch
<b>Dimensions (L/W/H)</b>	100/50/100 mm [+/- 2mm]	3.93/1.96/3.93 inches [+/- 0.1 inch]
<b>Weight</b>	118 g	4.1 oz



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**Nieuwkoop BV**

Aalsmeerderweg 249 -S

1432 CM AALSMEER

0297 325836

[info@nieuwkoopbv.nl](mailto:info@nieuwkoopbv.nl)

[www.meten.nl](http://www.meten.nl)



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