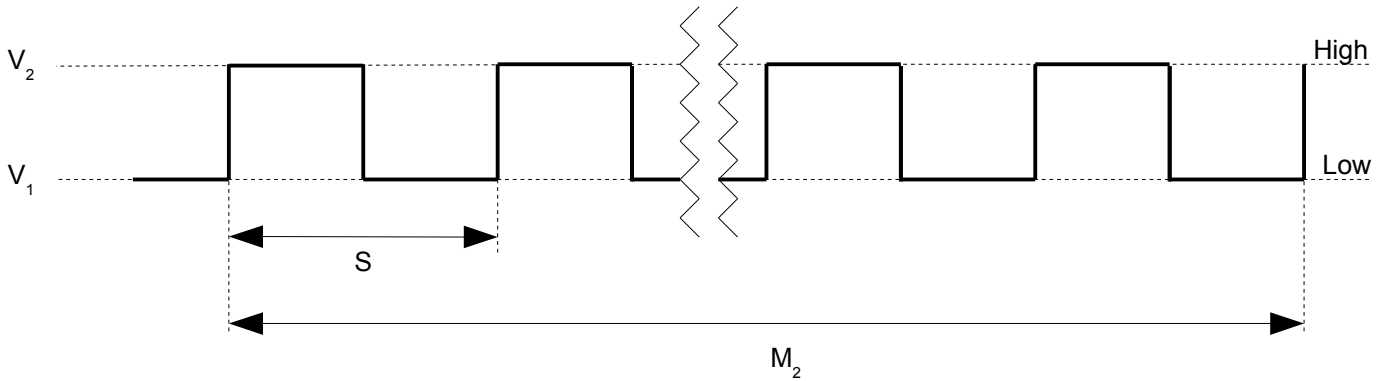


RPM measurement

Digital signal diagram



Interval measurement

By using the Gel 2474 we can measure the rounds per minute on a gear wheel by timing the frequency interval with the following formula:

$$\text{RPM} = (M_1 / S) / T$$

Time measurement

We can also measure the rounds per minute on a gear wheel by counting the amount of intervals with the following formula:

$$\text{RPM} = ((M_1 / M_2) * C) / T$$

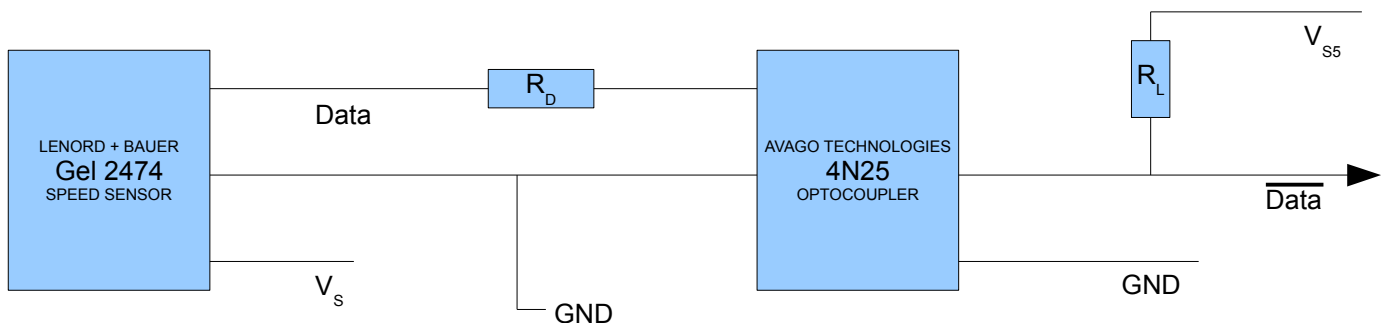
C = amount of interval's during M_2

V_s	Power supply 10-30 Volt
V_{S5}	Power supply 5 Volt
V_1	1 Volt
V_2	$(V_s - 1)$ Volt
S	Microseconds of one complete interval
C	Interval counter
M_1	One minute in microseconds (60 000 000)
M_2	Predefined time in microseconds
T	Amount of tooth's on the gearwheel



The 'Lenord + Bauer Speed Sensor Gel 2474'

Simple circuit overview



For more specific information on the 'Speed Sensor Gel 2474' please visit,
<http://www.sensorprod.com/lenord/speed-sensor-gel-2474.php>