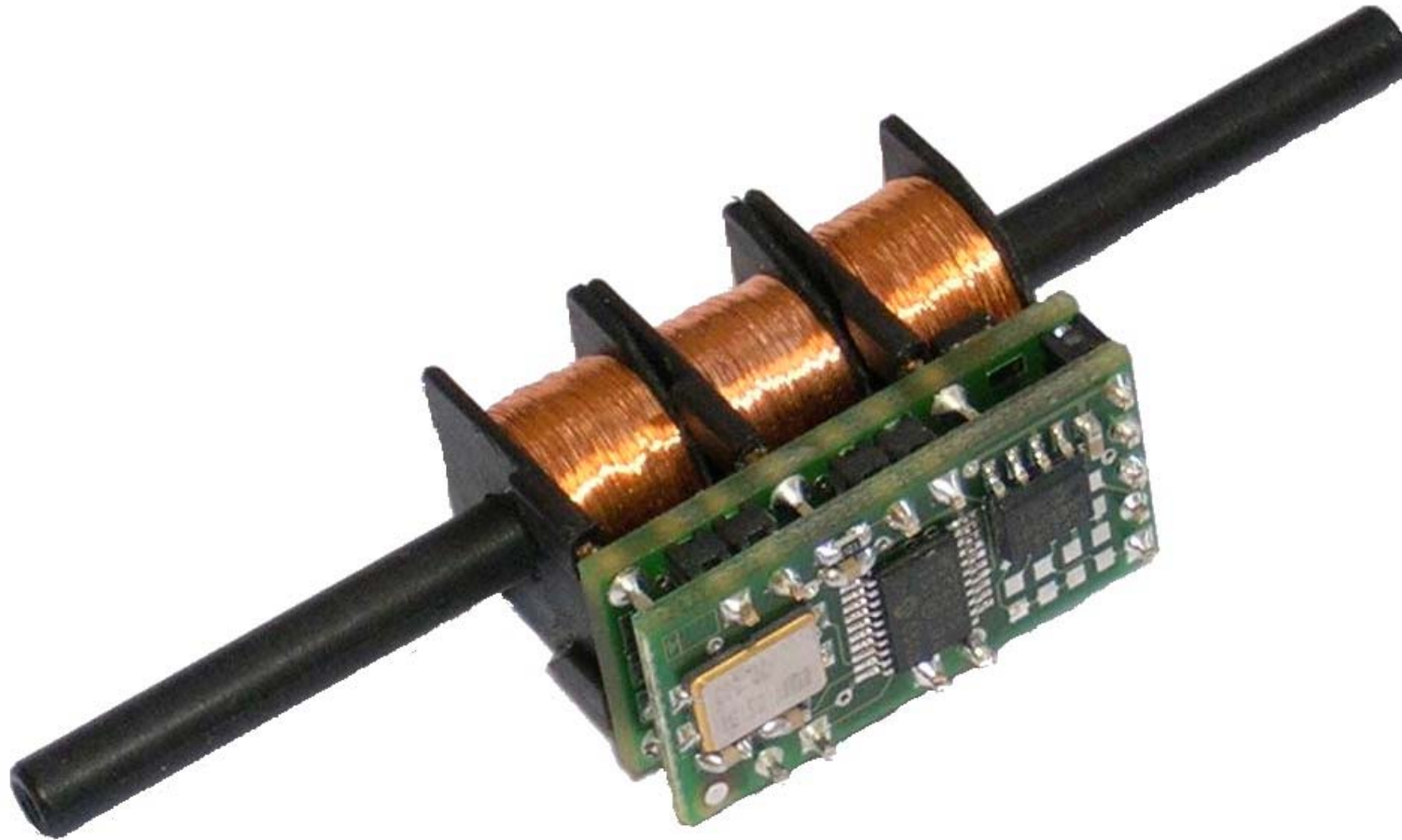
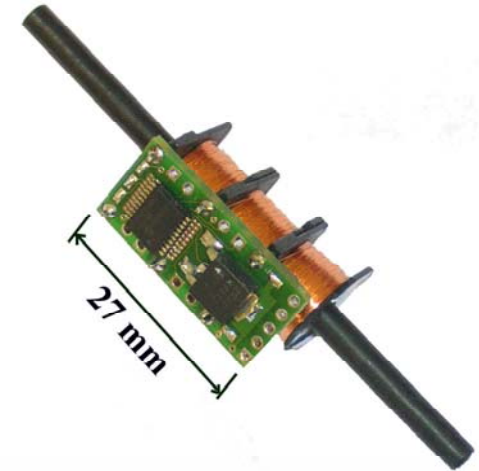


# CONTACTLESS POSITION SENSORS



# Analog output sensor

| Parameter              | Min. | Typ.  | Max. | Units           | Notes  |
|------------------------|------|-------|------|-----------------|--------|
| Mechanical Swing Range |      | 7     |      | mm              |        |
| Supply voltage         | 7    |       | 18   | V               | (1)    |
| Output voltage         | 0.85 |       | 4.2  | V               |        |
| Ripple voltage         |      |       | 20   | mV              |        |
| Offset voltage         |      | 2.5   |      | V               | @ 25°C |
| Sensitivity            |      | 0.458 |      | V/mm            |        |
| TC Offset              |      | 66    |      | mV/100°C        |        |
| TC Sensitivity         |      | 6     |      | mV/mm/100<br>°C |        |
| Linearity              |      |       | 0.8  | %FS             |        |
| Operating Temperature  | -40  |       | 125  | °C              |        |
| Storage Temperature    | -40  |       | 125  | °C              |        |
| Time response          |      | 22    |      | ms              |        |
|                        |      |       |      |                 |        |



## Notes :

1. 60 V Load Dump Protection / -50 V Reverse Transient Protection / Internal Current Limiting with Thermal Shutdown

# CAN output sensor

| Parameter              | Min. | Typ.  | Max. | Units            | Notes  |
|------------------------|------|-------|------|------------------|--------|
| Mechanical Swing Range |      | 7     |      | mm               |        |
| Supply voltage         | 7    |       | 18   | V                | (1)    |
| Binary output          | 43   |       | 214  | LSB              |        |
| Resolution             |      | 1     |      | LSB              |        |
| Offset                 |      | 127   |      | LSB              | @ 25°C |
| Sensitivity            |      | 23.45 |      | LSB/mm           |        |
| TC Offset              |      | 3     |      | LSB/100°C        |        |
| TC Sensitivity         |      | 0.3   |      | LSB/mm/100°<br>C |        |
| Linearity              |      |       | 0.8  | %FS              |        |
| Operating Temperature  | -40  |       | 120  | °C               |        |
| Storage Temperature    | -40  |       | 125  | °C               |        |
| Time response          |      | 16    |      | ms               |        |
| CAN clock              |      | 125   |      | Kb/s             |        |



Notes :

1. 60 V Load Dump Protection / -50 V Reverse Transient Protection / Internal Current Limiting with Thermal Shutdown

## Cost/100k/year

|                              | Analog Output | CAN Output    |
|------------------------------|---------------|---------------|
| PCB                          | 0,04 €        | 0,08 €        |
| Passive components           | 0,04 €        | 0,66 €        |
| Active components            | 0,72 €        | 2,19 €        |
| Coil                         | 0,30 €        | 0,30 €        |
| Embedded software            | 0,28 €        | 0,40 €        |
| Nucleus                      | 0,02 €        | 0,08 €        |
| <b>Total purchase</b>        | <b>1,40 €</b> | <b>3,71 €</b> |
|                              |               |               |
| <b>Total price including</b> | <b>2,81 €</b> | <b>7,43 €</b> |
| assembly                     |               |               |
| packaging                    |               |               |
| connector                    |               |               |
| margin                       |               |               |