## Sensors



Arun Electronics

## Sensors

Reed Proximity Sensors / Switches (sometimes refereed to as magnetic sensors) are inherently reliable due to their simple construction and sealed reed switch contacts. They will give millions of operations at the stated ratings. Applications are numerous and examples of Reed Proximity Switch / Sensor applications can be found in most industries.

These devices are very tolerant to misalignment and are particularly suited to environments that are contaminated by dust, liquid and where non-contact interlocking or hygiene is a consideration.

Reed proximity sensors consist of two parts, the reed switch and the actuator magnet. The reed switch will change state when the actuator magnet comes into close proximity to it, there does not have to be any physical contact between the reed switch and actuator. There are up to three operating faces for both the reed switch and the actuator. The operating distance can be varied by the choice of actuator magnet. Both the reed switches and actuator magnets are housed in rugged cases and are suitable for use in harsh environments, some of the switches are able to switch heavy loads directly. The switch configurations are available with normally open or changeover contacts.

Heavy Duty Magnetic Reed Sensor and Actuator Magnet


Miniature Heavy Duty Reed Sensor and Actuator Magnet


## Key Benefits

## Reliable

Non-Contact Operation
Tolerant to Misalignment
Voltage Free Contacts

## Specifications Table

| Specifications | - | $\mathbf{1 7 0 8 4 2}$ | NO/3/CD | 170841 | 170838 | 170839 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Contact Form | - | $\mathrm{N} / \mathrm{O}$ | $\mathrm{N} / \mathrm{O}$ | $\mathrm{C} / \mathrm{O}$ | $\mathrm{N} / \mathrm{O}$ | $\mathrm{C} / \mathrm{O}$ |
| Max Rating | VA $^{*}$ | 100 | 60 | 50 | 15 | 3 |
| Max Voltage | dc | 250 | 250 | 250 | 220 | 175 |
| Max Switching <br> Current | A | 3 | 1.5 | 1.5 | 0.5 | 0.25 |
| Max Carry Current | A | 6 | 3 | 2 | 1 | 1 |
| Contact Resistance | $\mathrm{m} \Omega$ | 100 | 150 | 500 ** | 100 | 150 |
| Hold Off Voltage | dc | 500 | 500 | 500 | 300 | 200 |
| AM/4 Pull In / Make | mm | - | - | - | 9 | 13 |
| AM/4 Pull In / Make | mm | - | - | - | 9 | 13 |
| AM/5 Pull In / Make | mm | 13 | 13 | 13 | 14 | 19 |

* do not exceed product of V x A
** Initial resistance @ 36Vdc 100 mA


## Product Codes

| Product <br> Codes | Description |
| :--- | :--- |
| 170842 | Heavy Duty Normally Open |
| N/O3/CD | Heavy Duty Normally Open Close Differential |
| 170841 | Heavy Duty Changeover |
| 170843 | Heavy Duty Actuator Magnet |
| 170838 | Miniature Normally Open |
| 170839 | Miniature Changeover |
| 170840 | Miniature Actuator Magnet |

