

# Magnetic proximity sensors

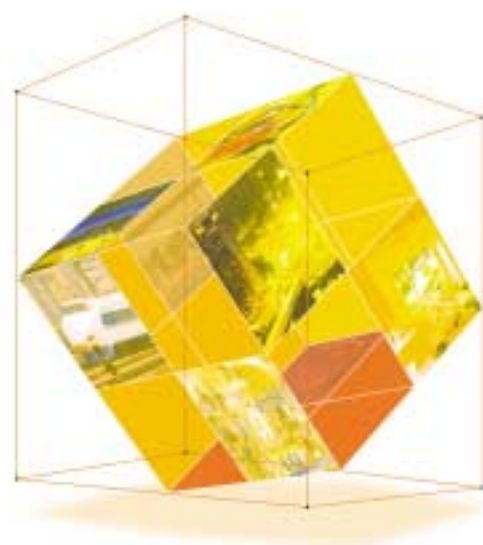
We are the experts ! !!!

If you look for a sensor for position, passage, presence, level or speed, we must have it in our range of magnetic sensors.

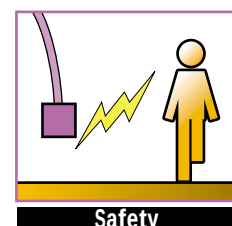
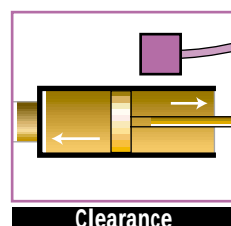
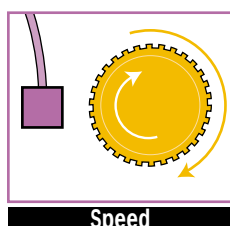
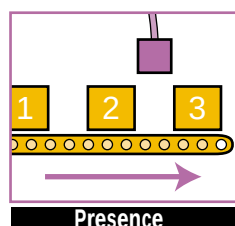
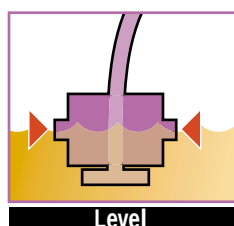
We can even design the ideal product for your applications !

At celduc® relais, we are eager to offer the best products for your application, thanks to our 30-year experience in the key technologies that we use in our products :

- Reed switch, a dry contact in a sealed glass bulb providing insulation at the same time. A simple, reliable and low cost solution.
- Electronic cell, based on either magneto-resistance or Hall effect, necessary for higher performance, particularly in frequency .



## Scope



### Industry

Counting  
Cylinder positions  
Machine safety  
Advertising panel

### Home

Burglar alarm  
Camera shutter control window position (blinds)  
Lifts  
Alarms  
Big and small household goods

### Aircraft, space and army

Fuel/oil level.  
camera shutter control

### Specific applications

ATEX (explosive atmospheres )

## Contents

|                                            | PAGES |
|--------------------------------------------|-------|
| Electronical sensors .....                 | 20    |
| Level sensors - PTF range .....            | 21    |
| Screw sensors .....                        | 21    |
| Sensors for layout on PCB .....            | 21    |
| PMG range .....                            | 22    |
| Sensors with high level of switching ..... | 22    |
| Tubular sensors .....                      | 22    |
| Control magnets .....                      | 22    |
| Safety sensors .....                       | 23    |
| Door sensors for lifts .....               | 24    |
| Special customer products .....            | 24    |

### Contact type :

NO -> Normaly Open

NC -> Normaly Closed

Other lengths of cable or wire possible for significant quantities



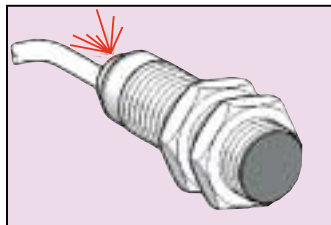
All our technical data-sheets are available in our website :  
**[www.celduc.com](http://www.celduc.com)**

# ELECTRONICAL SENSORS

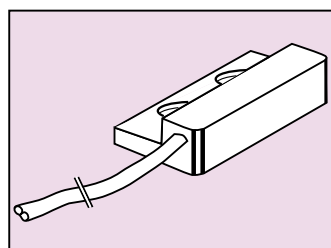


celduc<sup>®</sup> relais offers two ranges of electronical sensors :

- > HALL effect sensors.
- > Gear Tooth Sensor.



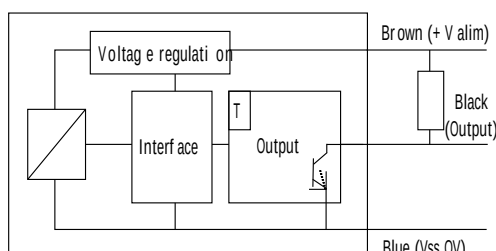
PTE  
(for front detection)



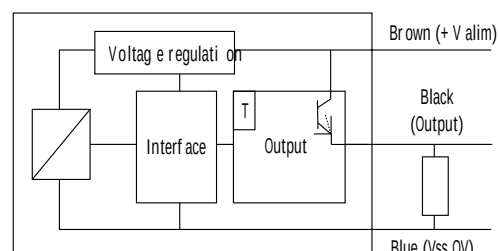
PLE  
(for side detection)

## Technical characteristics :

- 5-24VDC or 6-48VDC power supply with internal voltage clamping and reverse voltage protection.
- Low side or High side output.
- 25mA or 0.4A output current with overload short-circuit protection and thermal shutdown.
- Adjustable Internal delay (option on request).
- High Speed Operation > 10kHz.
- Insensible to shocks and vibrations.
- Designed in conformity with IEC/EN60947-5-2



NPN

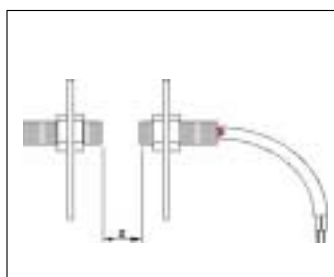


PNP

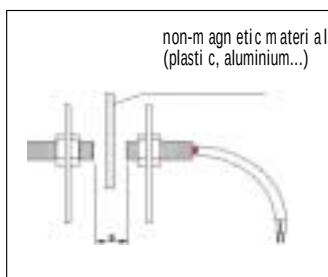
| PRODUCT REFERENCE | Contact type    | Connection type | Cable length | Closing distance | Max switching voltage | Max switching current | Dimensions L x l x h | Associated coded magnet |
|-------------------|-----------------|-----------------|--------------|------------------|-----------------------|-----------------------|----------------------|-------------------------|
| PLE13320*         | Hall effect NPN | Cable           | 2 m          | 8 mm             | 5-24VDC               | 25mA                  | 32x15x6,8            | P6250000                |
| PLE14320**        | Hall effect NPN | Cable           | 2 m          | 8 mm             | 5-24VDC               | 25mA                  | 32x15x6,8            |                         |
| PTE11320          | Hall effect PNP | Cable           | 2 m          | 19 mm            | 6-48VDC               | 0,4A                  | M12x33               | PT810000                |
| PTE11321          | Hall effect PNP | Cable           | 2 m          | 19 mm            | 6-48VDC               | 0,4A                  | M12x33               |                         |
| PTE21320          | Gear tooth PNP  | Cable           | 2 m          | 1,5 mm           | 6-48VDC               | 0,4A                  | M12x33               |                         |
| PTE21321          | Gear tooth NPN  | Cable           | 2 m          | 1,5 mm           | 6-48VDC               | 0,4A                  | M12x33               |                         |

\* Front detection

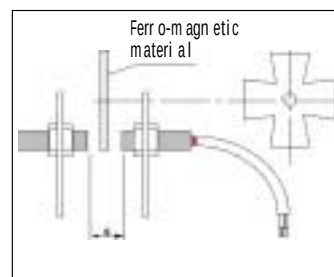
\*\* Side detection



Direct detection



Detection through  
non-magnetic material

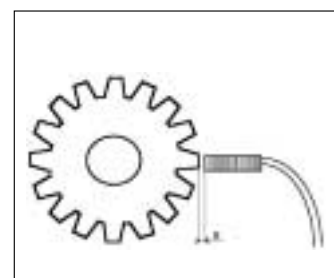


Detection of  
ferro-magnetic  
(counting,...)

## Applications :

- Industry
- Lift
- Speed sensors
- Household electronical appliances
- Tractors

...



Gear tooth sensor