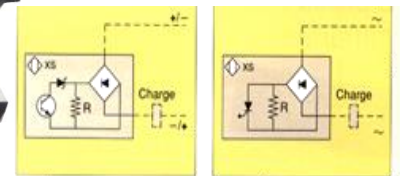
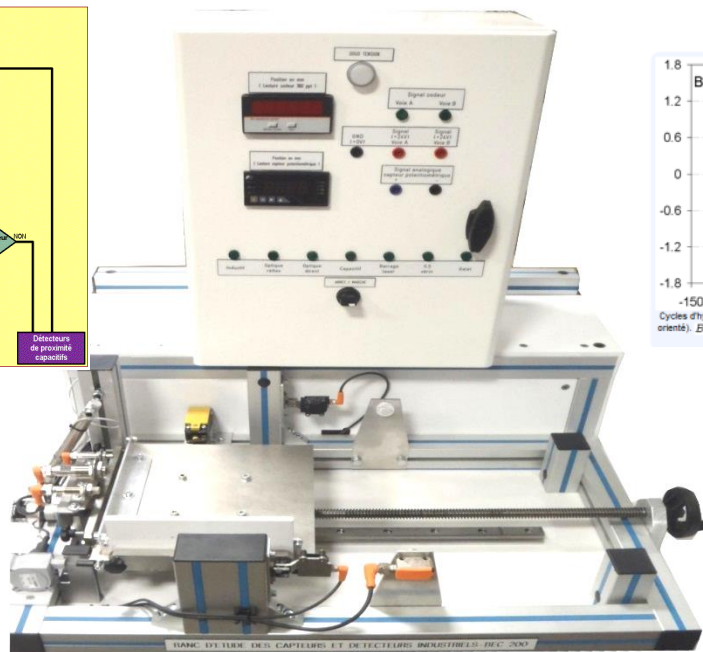
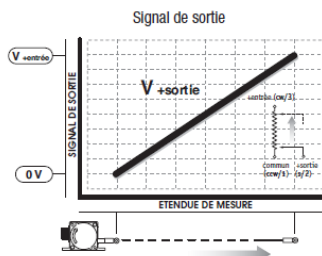
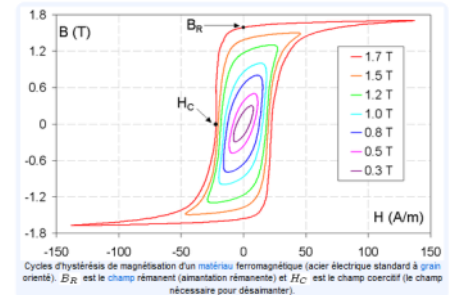
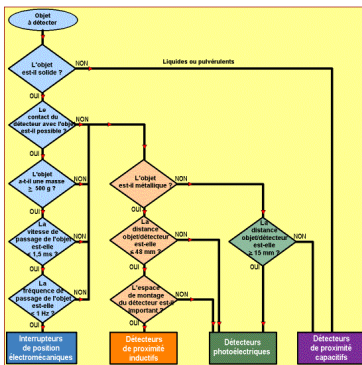


INDUSTRIAL POSITIONNING SENSORS STUDY UNIT



APPLICATIONS PEDAGOGIQUES

- Characterization of the compatibilities detection technology / material to be detected
- Determination and quantification of hysteresis effects of the sensors
- Determination of the action area of a sensor
- Differences between discrete detection (digital) or continuous (analog)
- Direct optical sensors, optical reflex, thrubeam laser, inductive, capacitive, ILS, incremental encoder, potentiometer sensor
- Pressure switch / Vacuum switch: setting of trigger thresholds, digital outputs, etc ...
- Setting of a display based on the characteristics of the signal provided by the sensor (scale setting using a voltmeter and physical measurement, calculating the coefficient director, etc ...)

PRINCIPE DE FONCTIONNEMENT

The BEC 200 is a bench for the study of industrial positioning sensors and detectors, digital displays as well as the pressure switches / vacuum switch.

It allows to study :

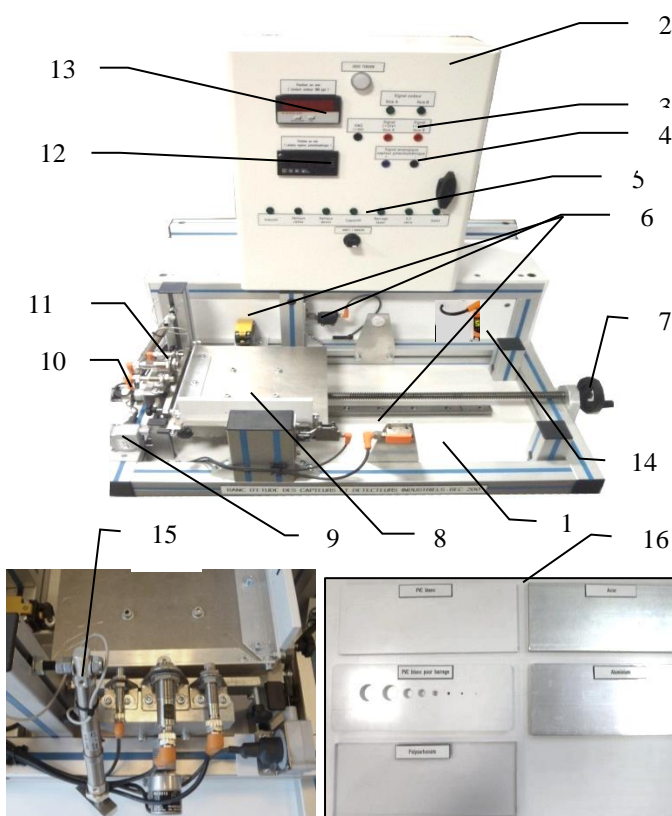
- The compatibility of a multitude of different technologies detectors with different types of materials to be detected (material, density, color, transparency ...) in order to determine the most suitable for a given application.
- The programming of industrial display depending on the type of signal provided by the sensor.
- Pressure switches / vacuum switch (setting of detection thresholds, the state of digital outputs, etc ...)

This bench also allows to quantify with precision (tenth of a millimeter):

- The distances of detections
- The hysteresis effects, and to compare the continuous measurements of position by encoder and potentiometric.

Illustrations

Spécifications techniques



1. Anodized aluminum **chassis** on 4 feet dampers
2. **Electrical box** making machine panel office
3. **Status lights of 2 tracks A and B of the encoder** + double sink sockets of recopying of associated electrical signals for measurement by voltmeter.
4. **Sockets** for measuring the analog output voltage of the potentiometric sensor
5. **Status lights** of different detectors + general switch On-Off
6. **Mechanical sensor with roller, thrubeam laser detectors and optical polarized reflex**
7. **Crank handle** of carriage movement
8. **Carriage mounted on ball slides** with 1 front support and 1 lateral support for integration of the plates # materials. It is driven in translation with precision by a worm screw system / crank handle
9. **Cable potentiometric sensor** - max stroke 635mm-driven by the movement of the trolley
10. **Incremental encoder** resolution 1 point per degree-mounted on axis screw of the carriage drive
11. **Set of capacitive detectors ILS (mounted on jack) optical with direct detection and inductive**
12. **Digital display** of the position given by the potentiometric sensor
13. **Digital display** of the position given by the incremental encoder with reset button
14. **Pressure switch / Vacuum switch / configurable Manometer** connected to the cylinder ports for activate the setting
15. Removable **double-action cylinder** with ILS detector. The rod is fixed to the movable carriage for accurate movement (determination of characteristics of the magnetic sensor) and also produce a positive or negative variable pressure (in the direction of displacement) in the cylinder chambers connected to the reference sensor n°14 to be study.
16. **Set of plates of different materials** and also to determine the accuracy of the beams of some sensors used in barrier.

Spécifications d'installation

Documentation

- Power supply: 230 Vac – 50 Hz - 2A
- Power supply type: 1 phase + Neutral + Earth.
- Dimensions: (LxlxH mm): 900 x 700 x 800
- Weight (Kg): 50

- Notice d'instructions
- Dossier technique avec documentation de chaque composant
- Travaux Pratiques avec corrigés
- Programme (afficheurs)
- Certificat de conformité CE

Nota : Dans le cadre d'une installation de l'équipement par nos services, tous les raccordements aux réseaux doivent se situer à moins de 2m de la machine

DIDATEC– Zone d'activité du parc – 42490 FRAISSES- FRANCE
Tél. +33(0)4.77.10.10.10 – Fax+33(0)4.77.61.56.49 – www.didatec-technologie.com
email : service_commercial@didatec-technologie.com

Reproduction interdite / copy prohibited– Copyright DIDATEC févr.-17- page 2

Dans le cadre de l'amélioration permanente de nos produits, ce descriptif technique est susceptible d'être modifié sans préavis
As part of the continuous improvement of our products, this technical specification may be modified without previous notifying