Abstract

A sensor is a device, module, or subsystem whose purpose is to observe the events or changes in its environment and send the information to other electronics, frequently a computer processor [1]. There are plenty of sensor types that are used in industry for various purposes. One type of the sensors is position sensors which are divided into Linear and Rotational sensors. This report is dedicated to the rotational sensors by specifying several different types of them. These types are Incremental rotary encoders, Absolute encoders and Inductive rotary sensors. Incremental rotary encoders measure or record length, angles, thickness and speed. They are often combined with counting, visualizing and control systems in order to achieve programmed positions, preset step shifts or to display measured values. Absolute rotary encoders are ideal to control motions and to determine position on industrial controls of operating robots and machines. Inductive rotary sensors are contactless sensors used to measure position, rotation, or speed. They work using transformer principles where current carrying coils induce a current in a metal disk.
Rotation Sensors – A Brief Guide of Use of the Most Common Types

References

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Index Terms

Computer Science  Applied Sciences

Keywords

RVDT, RVIT, quadrate, encoder, decode, ‘incoder’, OEM, PCB.