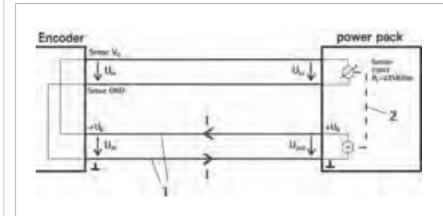


email: sales@impulseautomation.co.uk web: www.impulseautomation.co.uk

Basics of Incremental Encoders

Outputs - Sense at 5 V RS 422 (T)

OUTPUT CIRCUIT



- ¹ Voltage drop due to long cable lengths
- ² Automatic readjustment of the output voltage (only for power packs with sense input)

FUNCTION

The sense wires enable measuring of the actual encoder supply voltage (compensates for voltage drops due to supply current and cable resistance).

Due to the voltage drop in the cables and the voltage supply, the encoder input voltage U_{in} is less than the power pack output voltage U_{out} .

The present input voltage U_{in} is now output to the Sense V_{CC} and Sense GND cables and returns as data to the power pack.

The input resistance R_{i} on the power pack should amount to at least 22 M0hm so that no voltage drop occurs on these cables.

In case of power packs with sense input, it is now possible to readjust the output voltage U_{out} automatically.

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