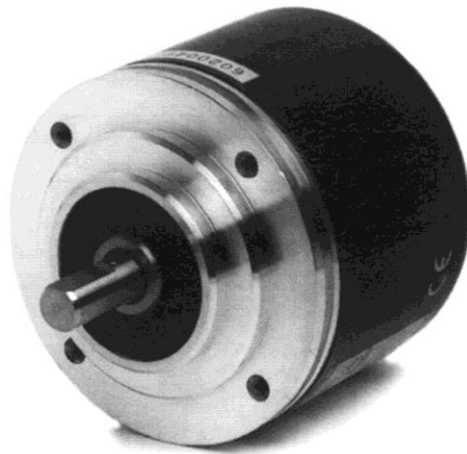


ROTARY SPEED (R.P.M.) (Rotary table / Top drive)



Barrier
Amplifier



Encoder
Interface



Incremental encoder to monitor the rotary speed

- Actual RPM rotary table / top drive
- Total RPM
- Accumulated bit revolutions

Parameter Specifications

- Measuring range 10 pulses per revolution
- System accuracy – / –
- System resolution 1/25 of a total sensor revolution

Principle of Operation

The rotary encoder is linked to the drive unit of the rotary table or the top-drive. The pulse disc generates, in correspondence to the rotary speed, a sequence of pulses. Inductive proximity switches convert the pulses into proportional electrical signals.

Maintenance

Once the system is set up and calibrated, generally no maintenance will be required.

Visual routine checks (daily); check the sensor positioning weekly or after each tripping operation, readjust if necessary.

Data Processing

The powerful DMS software records, visualizes and displays data on different locations on the well site.

The DMS supports the setting of individual alarms for “High” and “Low” limits.

Technical Specifications

SENSOR

- **Type or model:** Incremental encoder
- **Certified for hazardous area:** Intrinsically safe to EEx ia IIC T6
- **Certificate of conformity:** PTB No. Ex-83/2022X
- **Operating temperature range:** -10 °C ... +60 °C
- **Supply voltage:** 8 V DC
- **Installation point :** Linked to the drive unit of the rotary table or the top drive

Evaluation Unit

- | | Transmitter / Repeater Unit | Ex-Barrier Amplifier with BUS System |
|-------------------------------------|---|---|
| ▪ Type or model | Isolating amplifier - inputs EEx ia IIC | Barrier Amplifier - EEx ia IIC |
| ▪ Certificate of conformity: | PTB No. Ex-81/2065X | TÜV 99 ATEX 1499 X |
| ▪ Signal output : | 4 – 20 mA | 4 – 20 mA |
| ▪ Supply voltage: | 24 V DC | 24 V DC |
| ▪ Bus System: | Not applicable | Field bus independent connectors |
| ▪ Installation: | Logging unit; connected to 19-inch frame (DMS rack) | |