

Strokes-Per-Minute Sensor

Measures strokes per minute and total strokes of duplex and triplex mud pumps

Applications

- Provides measurements on all rig types

Features and Benefits

- Multiple detection faces allow for greater installation flexibility.
- The rugged design provides extremely high reliability.
- The system is certified globally for use global hazardous areas.
- The extended temperature range enables reliable use in the hot, humid conditions present around mud pumps.

Certifications

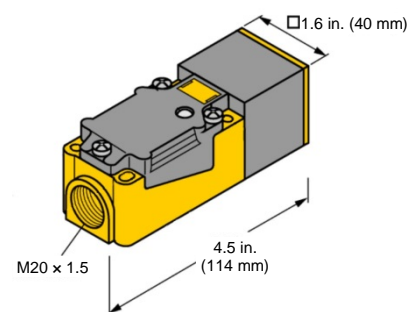
- FM/CSA Class 1, Division 1
- ATEX Zone 0

Tool Description

The strokes-per-minute (SPM) sensor measures strokes per minute and total strokes by detecting the movement of the reciprocating piston on a mud pump—or any other moving metal object—without making contact or causing wear. The SPM sensor uses a high-frequency, electromagnetic, alternating-current field to sense metal objects that are a minimum 0.04-in. (1-mm) thickness.

Specifications

Model	Ni20-CP40-Y1X
Brand	Turck
Length	1.6 in. (40 mm)
Range	0.8 in. (20 mm)
LED	Yellow
Supply voltage	Nominal 8, 2 Vdc
Current, off-state	≥2, 1 mA
Current, on-state	≤1, 2 mA
Maximum switch frequency	≤0, 15 mA
Accuracy	1 rpm
Resolution	1 rpm
Output function	2-wire NAMUR
Temperature	−13°F to 158°F (−25°C to 70°C)
Vibration	55 Hz (1 ms)
Shock	30 g (11 m/s ²)



Without making contact or causing wear, the strokes-per-minute sensor detects the movement of metal objects.

