Model 50386SE-109
SDI-12 Shaft Encoder with Display

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Description

The Model 50386SE-109 SDI-12 Shaft Encoder with Display is a low-power shaft encoder designed for battery-powered field operation for the measurement of water level or floodgate position. A 6-digit LED display is provided on the top face for viewing data at the site location. Switches for setting and adjusting the stage (water) level, the SDI-12 address, and shaft rotation increment direction are located beneath a protective cover on top of the encoder. The encoder operates with standard float tape or bead chain pulleys and float hardware.

Specifications

Power
- Voltage: ..... 10 to 16 Vdc, reverse polarity protected
- Current: ..... < 2 mA standby, <=125 mA when display is active

Measurement range
- English format: ..... ± 99999.99 with 100 counts per revolution
- Metric format: ..... ± 9999.999 with 375 counts per revolution

Resolution
- 1 ft pulley: ..... 0.01 ft (standard)
- 375 mm pulley: ..... 1 mm

Starting torque: ..... 0.1 oz-in nominal
Serial interface: ..... SDI-12 (Serial ASCII output) per SDI-12 protocol specifications
Lightning/ESD protection: ..... Internal spark gap and transient suppressor diodes
Operating Temperature: ..... -40 to 60 °C
Connector
- Standard: ..... 3-pin mini MS male
- Optional: ..... 4-pin MS male

Dimensions: ..... 5 in. x 5 in. x 4.75 in.
Weight/Shipping weight: ..... 3 lbs.

Ordering Information

50386SE-109 ..... SDI-12 Shaft Encoder with Display
280-356 ..... Pulley, 12-in circumference
280-364 ..... 4-in Float, with counterweight
280-359 ..... 10-in Float, with counterweight
280-360 ..... 20-ft Float Tape, 2.4-in spacing, for 12-in pulley
280-363 ..... 4-in Float, with counterweight and 20-ft float tape
280-991 ..... Signal Cable, per foot (200 feet max)

Note: Consult factory for additional sizes.

Options

50386SE-109/4 ..... SDI-12 Shaft Encoder with 4-pin MS male connector
50386SE-109-T ..... SDI-12 Shaft Encoder, with optional threaded shaft
SE109BAT-OP ..... 9Vdc Battery Backup Option