

# SG-01

## CABLE SENSOR

### FEATURES

- For overload and load measurement up to 160 kN
- Overload admissible force: 300 kN
- Sensitivity: 1.2 mV/V
- Designed for rope diameter: 16 mm
- High reliability for strict safety requirements
- Developed for use in hostile environments
- Protection class: IP67



Fig. 1: SG-01 Cable sensor

### DESCRIPTION

The SG-01 Cable Sensor is designed for providing load monitoring of permanent and temporary anchors and allows continuous measuring either by a direct or remote control system.

The specific design allows the use of a SG-01 Sensor in harsh, tropical or harbor environments.

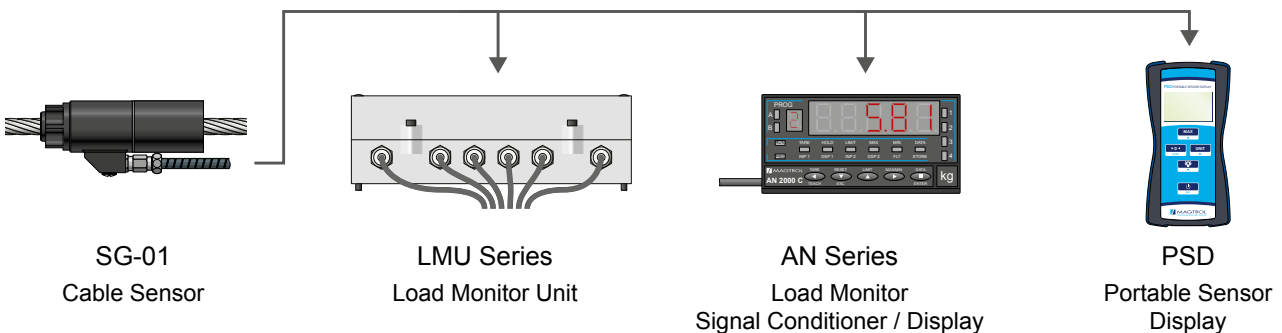
### APPLICATIONS



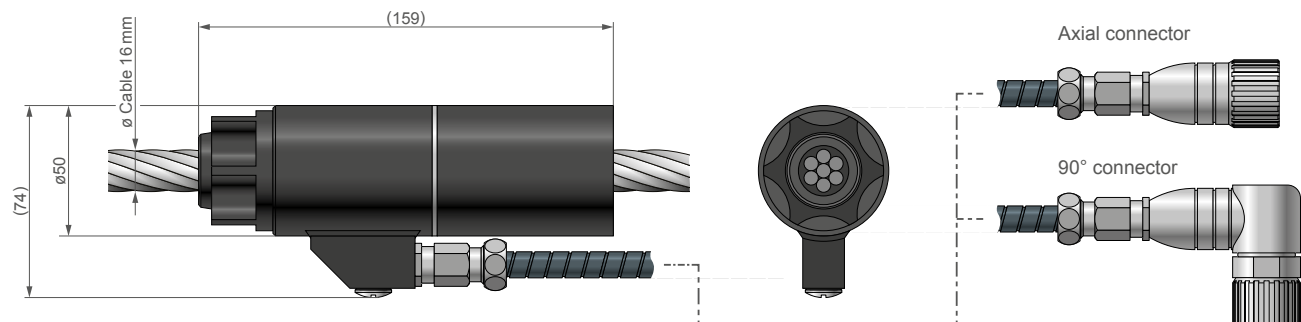
The SG-01 is particularly suitable for bridge strand and stay cable permanent mounting under hostile environmental conditions.

It is the perfect transducer to monitor rope tension in a wide range of applications

### SYSTEM CONFIGURATION



### DIMENSIONS



**SPECIFICATIONS**

**MEASUREMENT**

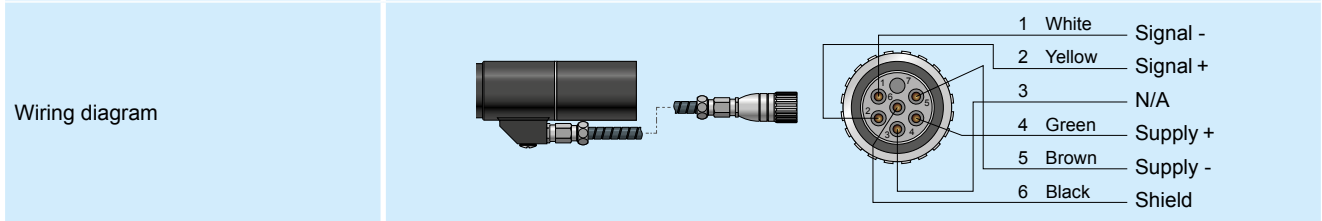
Nominal Load (NL)	160 kN
Admissible Overload (% of NL)	150 %
Overload Limit	300 kN (sensing part alone)

**ENVIRONMENT**

Nominal Temperature	-10 °C ... +70 °C
Operating Temperature Range	-40 °C ... +80 °C
Protection class	IP67
Temperature Influence on Zero	≤ ±0.01 % / K
Temperature Influence on Sensitivity	≤ ±0.01 % / K
Compensation of the Zero	between -5 °C ... +60 °C

**ELECTRICAL CHARACTERISTICS & CONNECTION**

Nominal Sensitivity	1.2 mV/V
Supply Voltage	max. 10VDC
Connection Cable Assembly	Integrated 1.5m cable with connector + extension cable 0.5m + counter-connector



**SYSTEM OPTIONS & ACCESSORIES**

**LMU SERIES - LOAD MONITORING UNIT**



Fig. 2: LMU 217 | Load Monitoring Unit

The Magtrol Load Monitoring Unit is specially designed for strain gauge transducer applications. Specifically developed for use with Magtrol load measuring pins and load-force-weight sensors, the LMU Series provides excitation current and amplifies the output signal of full-bridge strain gauges. Configurable relays and analog outputs are also available.

Its IP65 aluminum housing allows the system to be used in harsh environments.

Further information on accessories are available in their specific data sheets. Please, visit our website: [www.magtrol.com](http://www.magtrol.com)

**AN SERIES - LOAD MONITOR DISPLAY WITH INTEGRATED SIGNAL CONDITIONER**



Fig. 3: AN Series | Load Monitor Display with integrated signal conditioner

The AN Series Load Monitor is designed to process and display signals coming from various types of transducers (weight, load, pressure, torque, etc.) that use standard strain-gauge bridges.

The basic instrument is a soldered assembly composed of a main board, a tri-color programmable display and a power circuit. Standard features include the reading of the input variable as well as remote hold, reading and memorization of max and min values (peak / valley), tare and reset function.

**ORDERING INFORMATION**

To propose you the best suited product for your needs, we advise you to contact our sales network.