

### GSS Series Gear Shift Load Cell

The GSS Series of Miniature Load Cells are designed for the detection and measurement of tension and compression forces in Gear Shift Application.

Construction is stainless steel with a built-in amplifier, allowing for a very simple installation with only a 3 wire connection needed. Mechanical mounting is via M6 or M8 threads.

The output signal is proportional to the amount of force applied and is linear 0.5 to 4.5V which can be connected to most common ECU's. The typical application is for use such as: Flat Shift, Quickshifter, Torque Cut, Ignition Cut and Clutch-free Gearshift on race vehicles.

The Load Cells are generally installed into the actuator rod or cable on sequential gearboxes.

#### ±500N, ±1000N or ±2000N Range Safe Over Range 150% of Range Accuracy ±1% FS Combined Linearity & Hysteresis (CNLH) Thermal Effects Zero ±0.01% FS/°C (Sensitivity ±0.01% of Reading /°C) Output 0.5V to 4.5V (2.5v Offset, ±0.5%) +V in Compression 5V (±0.5V) Ratiometric or 8-16V Supply **Operating Temperature Range** -20°C to +125°C **Compensated Temperature Range** 0°C to +125°C Construction Stainless Steel and Aluminium **Electrical Connection** 100cm, 55Spec, 26AWG Cable + DR25 Sleeve Thread Size M6 x 1 or M8 x 1.25 (Left Hand/Right Hand) **Protection Class** IP67. Dust & water tight. Immersion to 1m for 30mins 30g—40g, Dependant on Thread Size (Excluding Cable) Weight

### **TECHNICAL SPECIFICATIONS**

KA Sensors adopts a continuous development program which sometimes necessitates specification changes without notice.

Sensors For Motorsport

#### Features

- ±500N to ±2000N
- Miniature Size
- 5V or 8-16V Supply
- IP67 Sealed
- ±1% Accuracy
- Rugged Construction

### **Applications**

- Gear Shift
- Suspension
- Steering
- //Pedal Force
- Aero Struts
- General Testing

kasensors.com sales@kasensors.com

GSS 08.22

#### PRESSURE | TEMPERATURE | FORCE | TORQUE | POSITION | SPEED | ACCELERATION | GYRO

# PART NUMBER CONFIGURATOR



# **MECHANICAL DETAILS**





## **CONNECTION DETAILS**

+Ve Supply	0V Supply	Signal
Red	Black	White

F S

### Services for:

Sense

Analyse

- Data Log<mark>ging</mark>
- Telemetry
- Controls
- Wiring

### Contact us

KA Sensors Ltd Unit 13, Priest Court Springfield Business Park Grantham United Kingdom NG31 7FZ

kasensors.com sales@kasensors.com

GSS 08.22

ENGINEERING LED | CONFIDENTIAL | EXPERIENCED | RESPONSIVE | DYNAMIC | FRIENDLY