



Sense
Measure
Control

Model GSS Gear Shift Load Cell

- *Miniature Size*
- *±500 or ±1000N Range*
- *Ruggedized Construction*
- *5V or 8-16V Supply*
- *IP67 Sealed*
- *±1% Accuracy*



The GSS Series of miniature load cells are designed for the detection and measurement of tension/compression forces in gear shift application.

Construction is stainless steel with a built-in amplifier which allows for a very simple installation, only 3 wires are needed for connection.

Mechanical mounting is via M6 or M8 male threads, but custom designs are also possible.

The output signal is proportional to the amount of force and is a linear 0.5 to 4.5V and can be connected to most common ECU's.

The typical application is for use as: Flat Shift / Quickshifter / Torque Cut / Ignition Cut / Clutchfree Gearshift on race vehicles.

The load cells are generally installed into the actuator rod or cable and will detect the level of force applied by the driver to change gear.

Other applications include: Gearshift – Suspension – Steering – Pedal Force - General Testing

KA Sensors is a dynamic company with over 30 years of sensor and instrumentation experience in the motorsport industry. We offer a strong engineering led service to all of our customers, with speed of response and confidentiality being paramount.

Please contact us for further expert assistance with your application.

Process Measurement & Controls, Inc.- 11 Old Sugar Hollow Road – Danbury – CT 06810 - USA

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GSS.0812U

Specifications

- **Range: Newtons**
±500N to ±1000N
- **Safe Over Range**
150% of range
- **Accuracy**
±1% FS combined linearity & hysteresis
- **Thermal Effects**
Zero: ±0.005% FS/°F
Sensitivity: 0.005% of reading / °F
- **Output**
0.5V to 4.5V (±50mV) (others available)
Zero offset: 2.5V
- **Supply**
5V (±0.5V) ratiometric or 8-16Vdc
- **Operating Temperature Range**
-4°F to +257°F
- **Compensated Temperature Range**
32°F to +257°F
- **Construction**
Stainless steel, Aluminum
- **Electrical Connection**
20" 55spec, 26AWG +DR25sleeve
- **Thread size**
M6x1, M8x1.25 (Left Hand/Right Hand)
- **Environmental Protection**
IP67
- **EMC Protection**
EN 50082-1
- **Vibration**
Mil-Std-810C, Curve L, 20G
- **Weight**
1.1oz to 1.4oz Depending on Thread size
(excluding cable)
- **Options**
Connectors fitted
Female Threads
M7x1 Thread

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

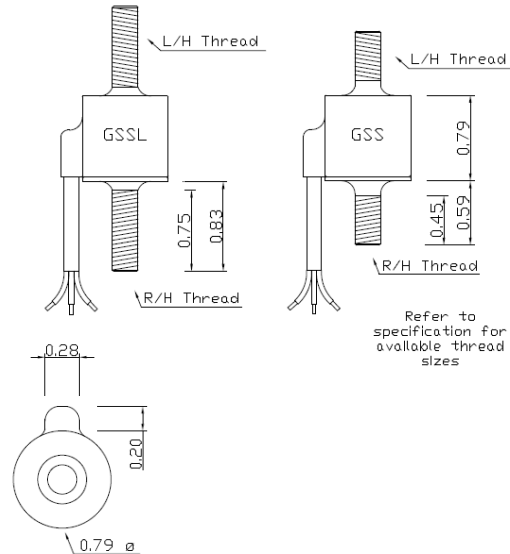
How to Order

- Please provide information as below:

		0 0 0 0 / 0 0 0 0 / 0 0 0 / 0 0 0
Thread Length	Long Short	G S S L G S S
Range Newtons	500N 1000N	0 5 0 0 1 0 0 0
Thread Size	M6 M8	6 8
Supply	5V 8-16V	1 2
Output	0.5 to 4.5V 1mV/V	A B
Cable Length	20 inches	U 2 0

Standard Configuration

Dimensions in inches



Other Products

- **KA Sensors offer a wide range of products and services to the Motor Sport Industry.**
- **Sensors:** Pressure, Force, Torque, Temperature, Acceleration, Displacement, Angle, Speed
- **Other capabilities:** Telemetry, Data logging, Electronics design, Controls, Wiring.....please contact us for additional information.

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