



Sense  
Measure  
Control

## Model GST Gear Lever Load Cell

- *For Sequential or 'H' Pattern Gearbox*
- *±250N, ±500N or ±1000N Range*
- *Built In Amplifier*
- *Ruggedized Construction*
- *5V or 8-16V Supply*
- *±0.5% Accuracy*



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

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

Mechanical mounting is via M10 female 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. Configuration for either Sequential or 'H' Pattern gearboxes.

The load cell can be supplied with or without a cover.

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 on top of the gear change lever and will detect the level of force applied by the driver to change gear.

### **Other applications include: Gearshift – Steering – 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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GST.0812U

## Specifications

- **Range: Newtons**  
±250N, ±500N to ±1000N
- **Safe Over Range**  
±2000N
- **Accuracy**  
±0.5% 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: 0.5V or 2.5V
- **Supply**  
5V (±0.5V) ratiometric or 8-16Vdc
- **Operating Temperature Range**  
-4°F to +185°F
- **Compensated Temperature Range**  
32°F to +185°F
- **Construction**  
Aluminum
- **Electrical Connection**  
40" 55spec, 24AWG +DR25sleeve
- **Thread size**  
M10x1.5
- **EMC Protection**  
EN 50082-1
- **Vibration**  
Mil-Std-810C, Curve L, 20G
- **Weight**  
3.5oz (excluding cable)  
5.6oz with aluminum cover  
9.2oz with plastic cover
- **Options**  
Aluminum or plastic cover  
Thread size  
Connector fitted

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

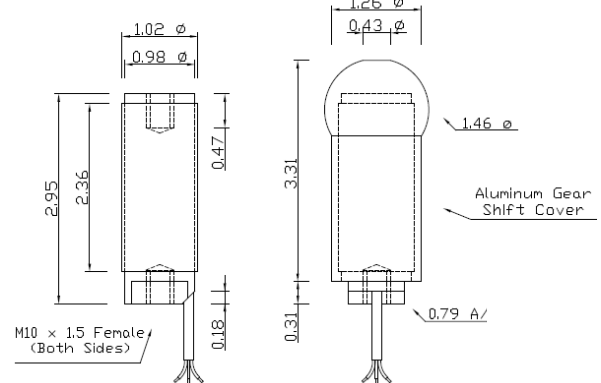
## How to Order

- Please provide information as below:

	GST	0 0 0 0 /	0 0 /	0 0 0 /	0 0
Range Newtons	250N	0 2 5 0			
	500N	0 5 0 0			
	1000N	1 0 0 0			
Supply	5V		A		
	8-16V		B		
Output	1mV/V			1	
Offset 0.5V	0.5-4.5V			2	
Offset 2.5V	0.5-4.5V			3	
Cable Length	40 inches			0 4 0	
Cover	Plastic				P
	Aluminum				A
	Non				N
Thread Size	M10				1
	M12				2

## 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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