

## 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, M8 or 1/4" 28 UNF Male or Female Threads, but custom designs are also possible.

The output signal is proportional to the amount of force and is linear 0.5 to 4.5V and 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 and will detect the level of force applied by the driver to change gear.

## TECHNICAL SPECIFICATIONS

<b>Range</b>	±250N to ±2000N
<b>Safe Over Range</b>	150% of Range
<b>Accuracy</b>	±1% FS Combined Linearity & Hysteresis (CNLH)
<b>Thermal Effects</b>	Zero ±0.01% FS/°C (Sensitivity ±0.01% of Reading /°C)
<b>Output</b>	0.5V to 4.5V and 1mV/V (+V in Compression) (±0.5%)
<b>Supply</b>	5V (±0.5V) Ratiometric or 8-16V
<b>Operating Temperature Range</b>	-20°C to +125°C
<b>Compensated Temperature Range</b>	0°C to +125°C
<b>Construction</b>	Stainless Steel and Aluminium
<b>Electrical Connection</b>	50cm or 100cm, 55Spec, 26AWG Cable + DR25 Sleeve
<b>Thread Size</b>	M6 x 1, M8 x 1.25 & 1/4" 28 UNF (Left Hand/Right Hand)
<b>Protection Class</b>	IP67
<b>EMC Protection</b>	EN 50082-1
<b>Vibration Protection</b>	Mil-Std-810C, Curve L, 20G
<b>Weight</b>	30g—40g, Dependant on Thread Size (Excluding Cable)
<b>Options</b>	Connector Fitted, Labelling and Female Threads

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

## Sensors For Motorsport

### Features

- ±250 & ±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

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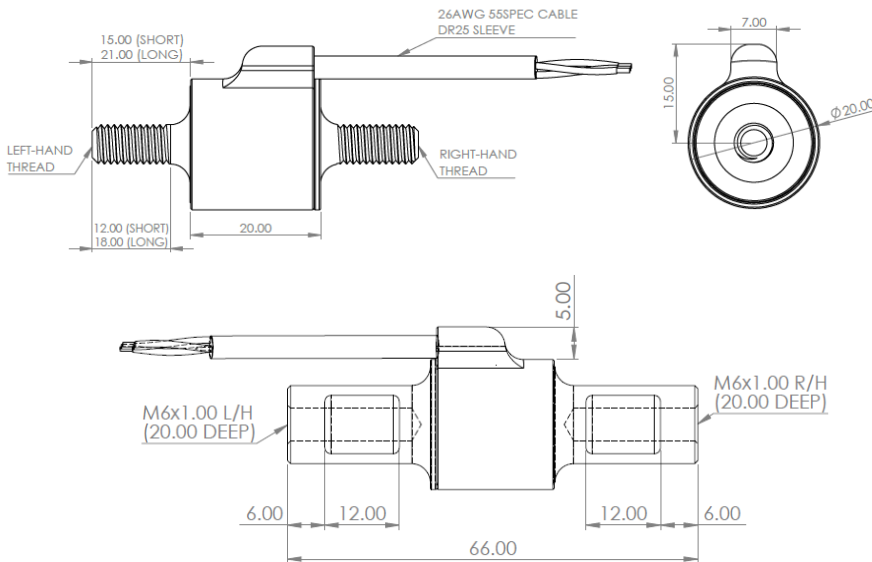
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# PART NUMBER CONFIGURATOR

	<b>GSS</b>							
<b>Range</b>	±250N	0250						
	±500N	0500						
	±1000N	1000						
	±1500N	1500						
	±2000N	2000						
<b>Supply</b>	5V Ratometric		4					
	8-16V		5					
<b>Output</b>	1mV/V			1				
	0.5V to 4.5V (0.5V Offset)			2				
	0.5V to 4.5V (2.5V Offset)			3				
	Dual Output 0.5V to 4.5V (2.5V Offset)			4				
<b>Thread Length / Type</b>	Female/Female (M6 x 1 Thread Only)				F			
	Long Male/Male (LH/RH)				L			
	Short Male/Male (LH/RH)				S			
<b>Thread Size</b>	M6 x 1					6		
	1/4" 28 UNF					4		
	M8 x 1.25					8		
<b>Cable Length</b>	50cm						050	
	100cm						100	
<b>Special Code 1</b>	None							000
<b>Special Code 2</b>	None							000

The KA configuration tool is used to specify a standard KA Sensor, other options are available.

## MECHANICAL DETAILS



## CONNECTION DETAILS

+Ve Supply	0V Supply	Signal
Red	Black	White

*Sense  
Analyse  
Control*

### Services for:

- Data Logging
- Telemetry
- Controls
- Wiring

## Contact us

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