

CABIN

KIMAX 1 spring



Axle installation call for:

1 x Kimax 1 cabin 1 SG input

Part number 013000-0100

1 x display cabin

1 x mounting bracket

Additional you must purchase:

2 x P/N 10205 SG sensor CM

Gluing kit and cables

Spring installation call for:

Kimax 1 cabin 1 sensor

Part number 014000-0100

1 x display cabin

1 x mounting bracket

Additional you must purchase:

2 x P/N 10203 SG sensor CL

Gluing kit and cables

Cabin version - for driver's cab

Intended for use in driver's cab: The Kimax 1 display is supplied with a mount for simple installation on the dashboard.

The scale you take with you ...

Kimax 1, the axle load measuring unit for economical and convenient supervision of axle loads on trucks equipped with mechanical spring suspension system.

Kimax 1 calculates the current axle load from the current strain in axles/springs.

Axle load is displayed as a three-digit value.

SG sensors installed on the rear axle or the springs are connected to the display through a connector.

... and warns when limits are exceeded

Kimax 1 has two separately adjustable alarm values. Exceeding alarm level 1 is indicated by a flashing display. Exceeding alarm level 2 switches in an internal relay.

The relay signal can be used as ON/OFF input for another unit, for example an on-board computer or an external lamp.

Kimax 1 helps to achieve economical transportation, avoid fines and simultaneously optimize the cargo weight.

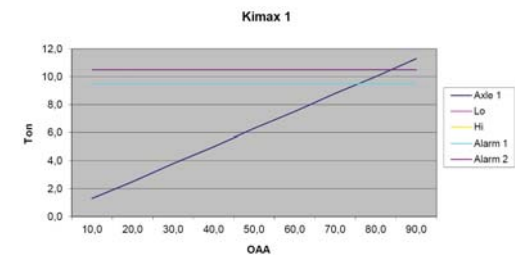
Sensor configuration

2-axle vehicles with SG sensors can be installed directly on the rear axle, for 3-axle vehicles we recommend SG sensors installed on the parabolic springs.

Axle load measurement

Kimax 1 uses the linearity between strain in the axles and load of the single axles.

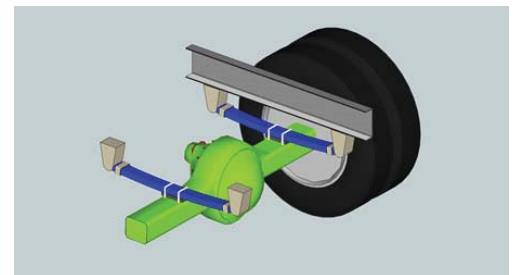
By using two reference points (empty weight and weight at maximum load) and the currently measured air pressure, Kimax 1 calculates the current axle load with an accuracy of 2 % of the maximum load.



Basic operation

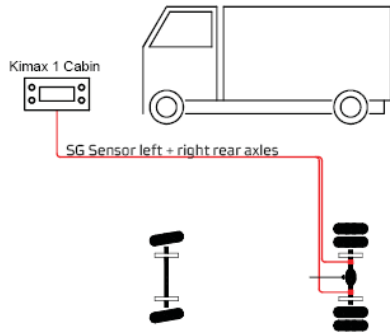
The strain in the axles will increase linearly with the load above the axle.

The SG sensors are installed either on the axle or on the parabolic springs depending on the mechanical dimension of the differential gear box



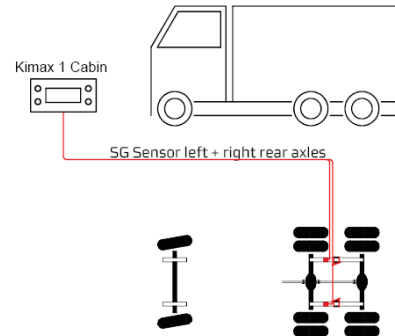
2 sensors on the single rear axle P/N 013000-0100 + additional SG sensor P/N 10205

In this version, the reading is measured only on the rear axle.



2 sensors on the springs for the rear axles P/N 014000-0100 + additional SG sensors P/N 10203

In this version the reading is measured on the rear axle springs



Display of reading

KIMAX has a three-digit 7-segment LED display. The decimal points can be set at the second or third digit or removed completely depending on requirements.

Two modes of display can be selected:

- Automatic switch-off of display after approx. 2 minutes reading (recommended in cabs).
- Continuous display (recommended on trailer/semitrailer) (factory setting).

Optionals:

RS-232 serial output (option 1) Kimax 1 is available with a serial output in RS-232 format, offering you the displayed value in digital format intended for on-board computers.

Analogue output (option 2) Kimax 1 is available with an analog 0–5 V output corresponding to the displayed value you read on the unit. The output is intended for on-board computers or remote display purpose.

Serial printer output (option 4) Kimax 1 is available with output for most common serial printers.

Trailer version - for trailers/semitrailers Intended for use on trailers and semitrailers: The display is designed for mounting in a sturdy, waterproof stainless steel housing direct on the chassis.

Other combination of truck and trailers:

- Visit www.kimax.com for more details and informations.

Technical Specifications

Supply voltage	10 ... 30 Volt direct current
Current consumption	Max. 90 mA (with relay active)
Relay output	Normally open contact max. 1 A/ 30 VDC
Display	Three-digits 7-segment LED, character height 20.3 mm
Accuracy	2 % of maximum load at 0 °C - +50 °C
SG sensor	0 - 20 mA
Operating temperature	-25 °C...+70 °C
Storage temperature	-40 °C...+70 °C
Dimensions	100 x 50 x 40 mm
Weight	approx. 240 g
Approval	CE and E1

☰ KIMAX 1

Kimax 1 and Kimax 2 are a series of high quality well proven on-board scales for use on trucks, buses and loading equipment. For detailed product selection guide please go to Kimax.com. Kimax 1 and Kimax 2 are registered trademarks owned by Sense-Tech Weighing Systems.

Sense -Tech Weighing Systems are used all over the world. From the hectic harbours of Amsterdam to the dusty outback of Australia. And everywhere in between.