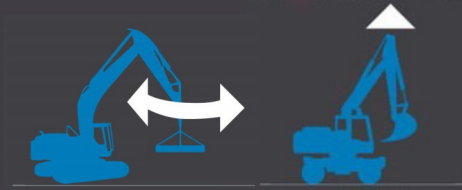


# SensorSafe

## Height & Slew Limiter

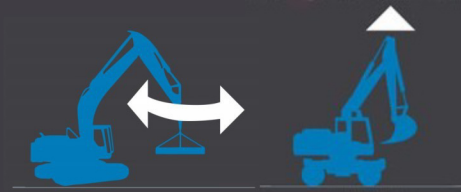


GKD Technologies new, advanced Height and Slew limiter system combines our proven height limiting algorithms and precise slew position measurement to create 1 complete product.

The system can provide Height only, Slew only or Combined Height and Slew limiting through different configurations and licence options.

The screen shows the operator the current machine position, including the following:

- ◆ **Start up time from ignition on, 5 seconds**
- ◆ **Current highest point of the machine (in metres)**
- ◆ **Current set height limit**
- ◆ **Approach to height limit**
- ◆ **Current slew position of the machine (in degrees)**
- ◆ **Current slew limits set**
- ◆ **Approach to slew limit**
- ◆ **Key switch to provide access to setting limits and service area**
- ◆ **Service area is passcode protected**
- ◆ Available in the following, licenced, configurations:
  - ◇ **Slew limiting only**
  - ◇ **Height limiting only (using 2 or more angle sensors)**
  - ◇ **Combined Slew and Height limiting (height using 2 or more angle sensors)**
- ◆ **Machines with up to 4 articulations can be monitored**
- ◆ **Optional Travel Inhibit output to prevent movement of machine with set limits**



### System Information

The Controller complies to the following standards:

- **EN61000-6-2:2005 - Electromagnetic Compatibility: Noise immunity**
- **EN61000-6-4:2007 - Electromagnetic Compatibility: Emission Standard**
- **EN61010-1:2001 - Safety requirements for electrical equipment**
- **UN/ECE-R10 Emission standard - Immunity with 100 V/m**
- **ISO 7637-2:2004 - Electrical disturbances - Transient conduction via supply lines only**
- **EN 60068-2-30:2006 - Damp heat, cyclic - Upper temperature 55°C**
- **EN 60068-2-78:2002 - Damp heat, steady state - Test temperature 40°C**
- **EN 60068-2-52:1996 - Salt spray test**
- **ISO 16750-3:2007 - Test VII; vibration**
- **EN 60068-2-6:2008 - Vibration, sinusoidal**
- **ISO 16750-3:2007 - Bumps. 30 g/6ms; 24,000 shocks**

The Display complies to the all the standards above, as well as the following:

- **EN 50155 clause 12-2: 2008 - Electronic equipment used on rolling stock**
- **EN 50121: 2006 - Electromagnetic compatibility (EMC)**
- **Water ingress protected to IP 65**

The Angle Sensors comply to the following standards:

- **DIN EN 61000-6-2 - Electromagnetic compatibility (EMC)**
- **DIN EN 61000-6-4 - Electromagnetic compatibility (EMC)**
- **ISO 7637-2 - Electrical Disturbances**
- **ISO 11452-2 - Electrical Disturbances**
- **ISO 11452-5 - Electrical Disturbances**
- **EN 55025 - Radio disturbance characteristics**
- **ECE Reg. No. 10R04**
- **IEC 60068-2-52 - Salt mist**
- **Complies to ISO 12944-5:1998 - Protective paint systems (C5-M)**
- **DIN EN 60068-2-6 - Vibration  $\pm 1.5$  mm - 10-58 Hz - 20 g - 58-2000 Hz**
- **DIN EN 60068-2-27 - Shock 200 g, 6ms**
- **DIN EN 60529 - IP 66, IP 67, IP 68, IP 69K**