PME100

– height limiter with envelope monitoring

PRO|safe

Functions

HEIGHT   ENVELOPE MONITORING

+

2D DIGGING

(When combined with PME Machine Control)

Suitable for

▶ Excavator (multiple articulations possible)
▶ Telehandler
▶ Cranes (to EN13000:2010)
▶ Backhoes (forward and rear buckets possible)
▶ Forklifts
▶ Special purpose machines

FUNCTIONALITY

PME100 is a fully featured height limiting system that will also provide cab protection, monitor machine bucket depth and control reach on articulating equipment. The system is configured using Prolec's proprietary "engine" so will model any lifting plant by simple set-up changes and utilises robust, easily viewed, hardware to provide maximum control. The system will also provide full logging of operation and driver behaviour for later retrieval and play back plus stores up to a year's worth of data. When combined with suitable hydraulic controls the system will lock out movement into pre-defined unsafe situations.

Benefits

▶ **Fits any lifting equipment with virtually no hardware change**
▶ **Simple intuitive set up and display of height**
▶ **Maximises range by monitoring all articulations**
▶ **Easily upgraded to include slew, load or guidance functions**
▶ **Configurable using input data or OEM load charts**

PME100

– height limiter with envelope monitoring

Standard Features

- Real time lifting height displayed through the range
- Audible and visual alarm at or near limits
- Full data logging of all actions including alarms, and limit warnings
- Displays boom movement options when near height limits
- Variable or pre-set height limits can be input and locked
- Override for supervisors on screen
- Context specific icons display status on screen
- Hydraulic control on movement at limit (H, E variants)
- Control on depth, maximum and minimum radius (E variant required)
- Full cab protection including complex shapes and movements possible (E variant required)

Optional features

- External keyswitch, alarm and beacon inputs possible (UK law requires external alarm fitted)
- Telescoping boom inputs (hardware required)
- Multiple boom configurations possible (may need software changes)
- Alternative language files selectable
- Upgrades to other safety functions (PME 200, 400 and 500) plus guidance available with limited hardware update
- Alternative angle and load sensor inputs possible (hardware required)
- Fail safe variants available (hardware required)

Standards, Tests and Specification

- Complies with H&S requirements on the machinery directive EN2006/42/EC
- Designed to meet EN474 "Earth-moving machinery – Safety"
- EMC EN13309:2010; EN50121-3:2006
- Tested for Vibration, Temperature, Impact and environmental protection to standards
- Display daylight viewable (650cd/m2)
- Input voltage 10-32V
- Power requirements as installed. System off: 2mA; 10V system: 1A; 32V system: 500mA (power requirements may vary dependant on hardware configuration)
- Software design following MISRA development guidelines
- Operating system independent to ensure SIL2 functionality
- Operating temperature range -20⁰C to 65⁰C
- Controller (IO module) tested to IP69k
- Display tested to IP65
- Touch button (capacitive) input on display
- CAN communications protocol
- M12 connectors
- USB 2 input for data transfer

Configurator

OPTIONS	Base Part Number	Optional Adders (add to part number)								
		Motion Cut (Height only)	Motion Cut Envelope (height, min/max radius, depth)	SIL 2	External Alarm	External Beacon	Fail Safe	External Keyswitch 1 = Supervisor 2 = Override	Extending Section X = R (Reeler) S (Prox Switch)	4.3" Daylight Viewable Screen
Single boom (e.g crane/telehandler)	PME100C	H	E	2	A	B	G	KX	ZX	Standard
Mono boom (excavator)	PME100M	H	E	2	A	B	G	KX	ZX	Standard
Triple boom (excavator/crane)	PME100T	H	E	2	A	B	G	KX	ZX	Standard
Multiple articulations	PME100X	H	E	2	A	B	G	KX	ZX	Standard