



PME300 and PME 300+

Slew limiter and enhanced slew controller



Slew



Stability



Basic functionality

PME300 is a controller designed to monitor and prevent slewing machinery moving into a user-defined zone. PME300+ provides the basic functionality of PME300 with the additional ability to work within a user-described complex shape or with a “virtual wall” at one or both sides of the equipment. Both systems are designed to control the machine within the horizontal (slewing) plane and do not control vertical movement.

Suitable for:

- Excavator (multiple articulations possible)
- Telehandler
- Mobile cranes (to EN13000:2010)
- Truck-mounted cranes
- Agricultural machinery
- Special purpose machines

PME300 features:

- Real time display of slew position with dynamic machine position
- ‘Always on’ controller monitors and stores machine state ensuring traceability
- System configured for motion cuts as standard
- Monitors and controls machine position remaining within set limits (motion cut required)
- Warning on approach to limits (audible and visual)
- SIL1 safety version as standard. SIL2 as an option (per EN62061)
- Temporary override allows operators movement to safe conditions during limit states

PME300+

(as for PME300 plus the following features)

- Fully described working envelope (2D horizontal) allowing any shape to be described
- All articulations and extensions movement included in slew calculation allowing a richer envelope control



Configurable features

PME300

- Slew right and slew left limit set and displayed on screen
- Safe zones displayed to the driver distinct from restricted zone, in real time
- Multiple languages
- Multiple views possible showing information in alternate configurations
- Upgradable to other PME configurations through software (some hardware may be required)

PME300+

(as for PME300 plus the following features)

- Telescoping boom – reeling drum or sensors to set different boom lengths
- Function to allow operator definition of any complex shape on slew
- Multiple virtual walls possible – slew restricted zones to both sides of equipment

Set-up and machine data

- CAN sensor input with separate ID on each component (PME300+ only)
- 4GB storage of operating data (approx 12 months usage). Download as required
- Configurator allowing input of machine data off site and upload to machine on install
- Default settings shipped with each system can be reconfigured as needed

Hardware and user interface

- 4.3” super-bright daylight viewable landscape HD screen
- Fully sealed capacitive touch buttons
- Icon driven context specific menus and help functions
- Access control levels: operators, supervisors and installers
- USB, serial and CAN interface
- Mappable and expandable I/O on controller
- Smart override monitors signals from key-switch to controller allowing context specific control
- Multiple sensor types available depending on machine size, shape and configuration (PME300+ only)
- Fully sealed sensors with CAN cabling provide superior reliability and signal clarity
- Simple plug and go M12 connectors for input and output
- Tamper evident connectors show ID on screen on failure/disconnect

Standard terms and specification (generic systems; specific details may vary according to function)

Full testing, traceability and control on design to ensure the operation is as planned and the functionality as safe as possible.

- Complies with H&S requirements on the machinery directive EN2006/42/EC
- Designed to meet EN474; BS7262; EN10567; EN13000:2010; EN13849; EN12077; EN62061; EN60204:2006
- Complies with LOLER requirements for UK lifting
- EMC EN13309:2010; EN50121-3:2006
- Tested for vibration, temperature, impact and environmental protection to standards
- Controller tested to IP67 and IP69k, display rated to IP65
- Display daylight viewable (650cd/m2)
- Input voltage 10-32V
- Power requirements as installed: system off: 2mA; 12v system: 1A; 24v system: c500mA

Configurator

Options	Base Part Number	Motion cut height (only)	SIL2	External alarm	External beacon	External keyswitch	Extending boom	No screen	Basic	4.3” daylight viewable
Simple slew (all machinery)	PME300	E	2	A	B	K	N/A	N	C	Standard
Enhanced slew crane	PME300C+	E	2	A	B	K	Z	N	C	Standard
Enhanced slew monoboam excavator	PME300M+	E	2	A	B	K	Z	N	C	Standard
Enhanced slew triple excavator	PME300T+	E	2	A	B	K	Z	N	C	Standard
Enhanced slew multiple articulations	PME300X+	E	2	A	B	K	Z	N	C	Standard

Note: Systems without motion cut not available.

Example: PME300M+EA: Enhanced slew system with motion cut and external alarm when reaching limit.