

## LOAD MONITORS

2203  
4203



### FEATURES

The LM range of Load Monitors offer advanced technology in a compact simple to use design.

Low initial investment is paid back quickly as damage due to overloading presses and dies becomes a distant memory.

The front panel layout is clearly defined and gives instant accurate readings for every stroke of the press.



LM monitors can be used to simplify set up procedures. Using previous run tonnage details the press shut height can be set to the monitors tonnage reading thereby greatly eliminating setup errors.

An instant stop signal is sent to the press when a tonnage limit is exceeded.

Automatically calculates setpoints within 5 strokes of the press.



STRAIN LINK

*Technical Specifications on rear side*



Quality Endorsed Company

ISO 9001:2000  
LIC 12055-02  
Standards Australia

ABN 59 004 916 714



Metal Form Group

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## TECHNICAL SPECIFICATIONS

<b>Enclosure:</b>	The monitor is mounted in a steel cabinet and is supplied with 4 shock mounts. Dimensions 270mm x 340mm x 120mm approx. Weight 6.1kg approx
<b>Power Supply:</b>	110/240VAC 50/60 Hz
<b>Inputs:</b>	LM2203 - 2 strain links LM4203 - 4 strain links
<b>Cam Signal Input:</b>	A Zero cam signal is required from the press. It should close from 90° to 240°
<b>Outputs:</b>	LM2203 - 1 stop relay 250VAC 3A max 2 analog outputs +/- 5VDC for strain links LM4203 - 1 stop relay 250VAC 3A max 4 analog outputs +/- 5VDC for strain links
<b>Speed:</b>	LM2203 - 180 spm LM4203 - 190 spm
<b>Capacity:</b>	LM2203 – 2000 ton press LM4203 – 4000 ton press
<b>Strain Links:</b>	Excitation 5VDC max 6VDC Output 500mV/V Capacity 500 micro strain Includes 9.5 m of cable
<b>Display:</b>	Load 3 digits Setpoint 3 digits
<b>Options:</b>	Standard monitor comes with a HI percentage switch only. An optional LO percentage switch is available for minimal cost and offers protection should a decrease in tonnage occur. ie broken punch or material variation.

### Operation Procedure:

- ▶ The LM2203 comes with two setpoint levels to meet both press capacity and actual tooling capacity. The factory default setpoint is usually set to 110% of machine capacity. This will protect the press from any structural damage should an overload situation arise. To set the monitor to protect your dies adjust the HI/LO buttons to give an ideal percentage position then press the reset button once to start the die protection mode. The monitor will calculate the actual tonnage of the dies within 5 strokes. It will then monitor the actual tonnage plus (and minus "optional") the percentage settings that have been entered. If a deviation occurs outside these settings the press will be given a stop signal via the output relay.
- ▶ If a die change occurs press the reset button for over 3 seconds and the system will clear previous setpoint and start calculating a new one.
- ▶ If power is turned off the system will recalculate new settings within 5 strokes after power is restored.
- ▶ To disable die protection setpoint set the HI/LO switches to "00" and press reset once. This will leave only press max limit protection active.
- ▶ The HI/LO switches allows from 1% to 99% selection.