

Linear Mass Sensors

LMS2400-XX-UC



PERFECT SPEED MATCHING SYSTEMS — By providing an analog signal that is proportional to can back-up on the conveyor, the LMS can be used to modulate machine or conveyor speed accordingly. When used on the infeed to machines, the LMS controls machine speed to perfectly match the rate of cans being supplied to the machine. It will do this smoothly without overshoot across a wide speed range, eliminating the constant speed variations that are a design feature of traditional, slow-medium-high speed control systems.

STABLE CONVEYOR CONDITIONS — are vital for today's lightweight cans and high speed machinery. The LMS enables complete speed control with minimum changes in conveyor back up, creating optimum conveyor conditions, empty-out space, accumulation space, and minimum can pressure.

CLOSE COUPLED SYNCHRONIZATION — The output of the LMS responds instantly to each and every can, which means that a machine does not have to wait for a sensor to cover it before it begins to respond. Close coupled installation of waxers, neckers and testers is possible, with each machine maintaining perfect inter-machine back-ups / feed rates.

UNIQUE AND VERSATILE SENSORS WHICH HAVE REVOLUTIONIZED SPEED CONTROL ON CANMAKING LINES

Smooth, precise, self-correcting speed control right down the line

BENEFITS

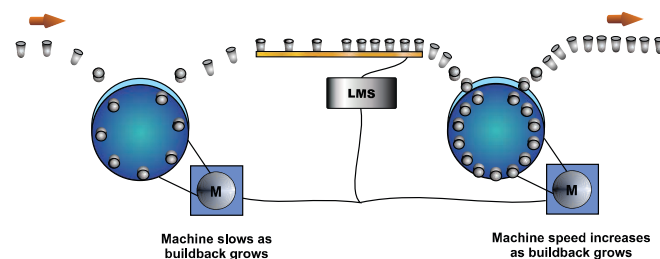
Can density can be monitored at any point on the line

Machine speeds can be smoothly modulated and coordinated

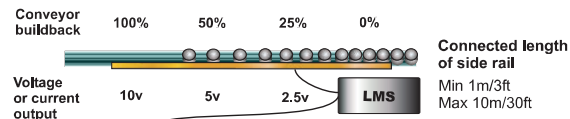
Optimum line efficiency

MANY APPLICATIONS — Can be used on mass conveyors, single file conveyors, gravity drops, variable speed conveyors, metering units. Applications are limited only by the imagination of the control engineer.

CONVEYOR PRESSURE CONTROL — The LMS enables conveyor speed to be varied relative to back up. When full, the conveyor should run at machine rate, creating no excess can pressure, but as it empties the speed should increase. So when recovering from an empty-out situation, conveyor speed is maximum, thus reducing transit and refill times, adding precious seconds to the line efficiency.



EASY INSTALLATION, EVEN ON COMPLEX CONVEYORS — Another possibility is to isolate and use the side rail on one or both sides of the track to monitor can density instead of using the sensor wire. This makes installation practical on complex conveyor shapes such as swan necks or curved 'tunnel' track.



ORDERING INFORMATION

Linear Mass Sensor for guide rail use	ET400WR-UC
Linear Mass Sensor Kit — 25' (7.6 m) range	LMS2400-25-UC
Linear Mass Sensor Kit — 40' (12.2 m) range	LMS2400-40-UC

The LMS Sensor Kit is supplied complete with:

- Amplifier output module,
- High quality, special coated stainless steel sensor wire
- Mounting kit
- User Manual

FEATURES

Two capacitance ranges with auto-switching capability

Adjustable low and high alarms

'On the fly' adjustment of set points

Adjustable low and high output signal limits

2 digit display to indicate signal level with a third digit for mode of operation

T400WR-UC TRANSMITTER SPECIFICATIONS

Operating Voltage	11 to 24 VDC
Power Consumption	3.0 Watts
Method of Detection	Capacitance deviation. Detector wire is electrical isolated from input and output power
Operating Temperature	0 to 50°C (32 to 122°F), 0 to 90% relative humidity, non-condensing
Dimensions (L x W x D)	(L) 4.92" (125 mm) x (W) 2.95" (75 mm) x (D) 2.95" (75 mm)
Analog Output	0 to 10 VDC (default) or 4 to 20 mA (selectable)

ALARM SIGNAL OUTPUT CHARACTERISTICS

Maximum Load	75 mA. Typical ON resistance at 25 mA is 25Ω. 500 mW maximum power through the switch
Voltage Range	0 to 240 VAC RMS or 0 to 380 VDC
Leakage Current	<1 microamp
Output Type	Bi-directional, isolated solid state switches
Output Configuration	Suitable for DC source, DC sink, or AC

