ELT SCALES

Illtronics MLC belt scale is a low-capacity scale for light belt loading. The MLC is suitable for monitoring such products as fertilizer, tobacco, animal feed pellets, or sugar.

The MLC's patented use of parallelogram style load cells results in fast reaction to vertical forces, ensuring instant response to product loading. This enables it to provide outstanding accuracy and repeatability even with very light loading. The MLC may be easily installed in existing flat belt conveyors or belt feeders.

Operating with one of Milltronics' microprocessor-based integrators, the MLC provides indication of flow rate, total weight, belt load and belt speed of bulk solids materials on a belt conveyor. A Siemens Milltronics speed sensor monitors conveyor belt speed for input to the integrator. When used in conjunction with the Milltronics BW500 integrator with PID controller, the MLC may also be used in the food industry as part of a pre-feed control system for extruders, cookers and de-hydrators.



Product Features

- Unique parallelogram style load cell design
- · Designed for light product loading
- Compact and easy to install
- · System includes weighing idler
- · Stainless steel option
- · Low cost of construction

Technical Specifications

Typical Application

- monitor fertilizer, tobacco, animal feed pellets, sugar, cereal
 Accuracy
- ±1.0% of totalization over 5 to 1 operating range

Maximum Material Temperature

• 85 °C (185 °F)

Belt Width

- 450 to 1200 mm in metric sizes
- 18 to 48" in Imperial sizes

Belt Speed

• 2.0 m/s (400 fpm) maximum

Capacity

• up to 50 t/h

Conveyor Incline

- ±20° from horizontal, fixed incline
- up to ±30° with reduced accuracy

Conveyor Idler

horizontal

Idler Diameter

• 50 or 60 mm or 1.90"

Idler Spacing

• 0.5 to 1.5 m (1.6 to 5 ft)

Load Cell

- excitation: 10 Vdc nominal, 15 Vdc maximum
- output: 2 mV/V excitation at rated load cell capacity
- non-linearity: 0.03% of rated output
- hysteresis: 0.05% of rated output
- non-repeatability: 0.03% of rated output
- · capacity: 10 or 20 lbs
- overload: safe 150% of rated capacity, ultimate 300% of rated capacity
- temperature:
 - -40 to 85 °C (-40 to 185 °F) operating range
 - -10 to 60 °C (14 to 140 °F) compensated
- · stainless steel construction
- · mounting dimensions: identical for all capacities

Hazardous Locations

with the use of approved intrinsically safe barrier strips

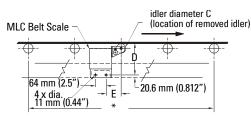
Approvals

• CE*

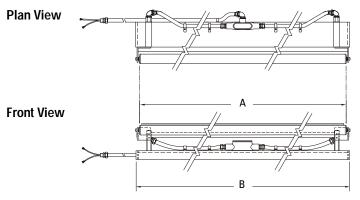
^{*} EMC performance available upon request.

Specifications are subject to change without notice.

Installation



* For pan supported belts, the pan should be cut out to allow the MLC and at least two (preferabley four) other idlers to be installed.



Metric Designs (Europe)

Belt Width	Α	В	C	D	Ξ
450 mm	450 mm	500 mm	50 mm	158 mm	96 mm
(17.72")	(17.72")	(19.69")	(1.97")	(6.22")	(3.78")
500 mm	500 mm	550 mm	50 mm	158 mm	96 mm
(19.69")	(19.69")	(21.65")	(1.97")	(6.22")	(3.78")
650 mm	650 mm	700 mm	50 mm	158 mm	96 mm
(25.59")	(25.59")	(27.56")	(1.97")	(6.22")	(3.78")
800 mm	800 mm	850 mm	50 mm	158 mm	96 mm
(31.50")	(31.50")	(33.46")	(1.97")	(6.22")	(3.78")
1000 mm	1000 mm	1050 mm	60 mm	163 mm	96 mm
(39.37")	(39.37")	(41.34")	(2.36")	(6.42")	(3.78")
1200 mm	1200 mm	1250 mm	60 mm	163 mm	96 mm
(47.24")	(47.24")	(49.21")	(2.36")	(6.42")	(3.78")

Imperial Designs (North America)

Belt Width	Α	В	C	D	E
18" (457 mm)	18" (457 mm)	19" (483 mm)	1.90" (48.3 mm)	6.19" (157 mm)	3.5" (89 mm)
24" (610 mm)	24" (610 mm)	25" (635 mm)	1.90" (48.3 mm)	6.19" (157 mm)	3.5" (89 mm)
30" (762 mm)	30" (762 mm)	31" (787 mm)	1.90" (48.3 mm)	6.19" (157 mm)	3.5" (89 mm)
36" (914 mm)	36" (914 mm)	37" (940 mm)	1.90" (48.3 mm)	6.19" (157 mm)	3.5" (89 mm)
42" (1067 mm)	42" (1067 mm)	43" (1092 mm)	1.90" (48.3 mm)	6.19" (157 mm)	3.5" (89 mm)
48" (1219 mm)	48" (1219 mm)	49" (1245 mm)	1.90" (48.3 mm)	6.19" (157 mm)	3.5" (89 mm)

Wiring

