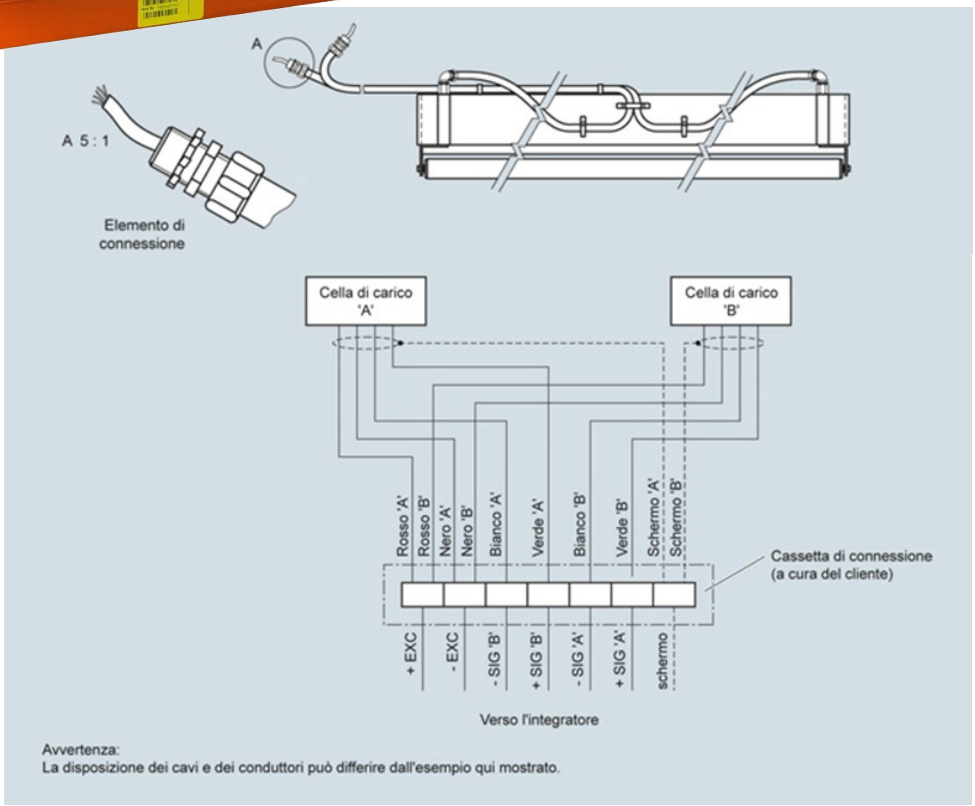
MLC

Low-capacity belt scale for measuring small loads



Benefits

- Unique parallelogram design of the load cell
- Designed for low loads
- Compact and easy to install
- Includes weighing roller
- Stainless steel (optional)
- Low operating costs

Application

The MLC scale is suitable for weighing various products such as fertilisers, tobacco, animal feed or sugar.
The special parallelogram-shaped load cells of the MLC scale guarantee maximum reaction to vertical forces and immediate response to material loads.
This allows high weighing accuracy with maximum reproducibility even with very small loads. The MLC scale is easily installed in flat belt conveyors or belt feeders.
The MLC belt scale is used with a Milltronics BW500, SIWAREX WT241, WP241 or FTC microprocessor electronics (integrator) and provides measurements of instantaneous flow rate, total weight, load and speed of solid materials on the belt.
A sensor provides the integrator with a signal proportional to belt speed.
Used with a Milltronics BW500 integrator with PID controller, the MLC scale can also be used in the food industry as part of a feed control system for extruders, cooking and dehydration plants.

TERRY FERRARIS S.R.L.
Viale Ortles, 10 - 20139 Milano | Tel. 02 5391005 | Fax 02 5692864 | info@terryferraris.it | www.netaqua.it | www.terryferraris.it

TECHNICAL SPECIFICATIONS

Mode of operation Measuring principle	Strain gauge load cell measures load on flat belt conveyor
Typical applications	Monitoring fertilisers, tobacco, animal feed (pellets), sugar and cereals
Measurement Accuracy Accuracy	± 0.5 ... 1.0 % of the total weight over 25 ... 100 % of the working range
Repeatability	± 0,1%
Material Conditions Max. material temperature	85 °C (185 °F)
Belt execution Belt width	• 450 ... 1 200 mm • 18 ... 48 inch
Belt speed	2,0 m/s (400 fpm) max.[2])
Capacity	Up to 50 t/h (55 STPH)[2])
Conveyor inclination	• ± 20° from horizontal line, constant inclination • Up to ± 30° with reduced accuracy
Roller bridge Conveyor roller	Horizontal
Roller diameter	• 50 o 60 mm (1.90 o 2.30 inch)
Free space between roller bridges	0,5 ... 1,5 m (1.6 ... 5.0 ft)
Load cell Construction	Stainless steel 1.4568 (17-4 PH), stainless steel cover 1.4301 (304) Load cell based protection: Polybutadiene
Degree of protection	IP67
Cable length	3 m (10 ft)
Excitation	DC 10 V nominal, max. DC 15 V
Output	2 mV/V supply at nominal load cell capacity
Linearity error	0.03% of nominal output value
Hysteresis	0.05 % of nominal output value
Repeatability error	0.03 % of nominal output value
Capacity	10 o 20 lb
Overload	150 % of nominal capacity, max. 300 % of nominal capacity
Temperature	• 40 ... +85 °C (-40 ... +185 °F) operating range • Compensated: -10 ... +60 °C (14 ... 140 °F)
Mounting dimensions	Identical for all capacities
Hazardous Locations	Data on request
Approvals	CE, UKCA, RCM, EAC, KC

TERRY FERRARIS S.R.L.
Viale Ortles, 10 - 20139 Milano | Tel. 02 5391005 | Fax 02 5692864 | info@terryferraris.it | www.netaqua.it | www.terryferraris.it