

Model N-65 Modular Belt Scale System



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The Bulk Pro Systems Model N-65 Belt Scale System is suitable for applications where price, delivery and ease of installation are key factors. This economical belt scale system provides crucial information for the successful management and efficient operation of your plant.

The Bulk Pro Systems Model N-65 Belt Scale System is designed for most weighing applications in harsh industrial environments. The Model N-65 allows you to control feed rates to crushers, screens, stockpiles and other processes with a guaranteed accuracy from $\pm 1/2\%$ to $\pm .20\%$. Accuracies get better by adding additional modules and weigh idlers. 1, 2, 3 & 4 idler systems can be utilized. A single idler system will provide $\pm 1/2\%$, dual idler system will provide $\pm 1/2-1/4\%$, three idler systems will provide $\pm 1/4\%$ and a four idler system will provide $\pm .20\%$.

The Bulk Pro Systems model N-65 belt scale system utilizes a weighbridge design comprised of two separate single-load cell modules. The weigh idler spans between these modules and bolts directly to them.

The Bulk Pro Systems Model N-65 Belt Scale System is easy to install. The heavy duty construction allows for installation in extreme industrial environments. The N-65 single idler belt scale system utilizes a full suspension weighbridge design. The strain gauge load cell mounted in compression and the modular weighbridge design allows for near zero material build-up ensuring reliable and precise performance.

The Model N-65 is the best solution for your highly accurate, yet economical belt scale applications. The modules are kept in stock for quick delivery and fit on most conveyor systems. The heavy duty modular design is suitable for most industrial applications.

SPECIFICATIONS

Load Cell

- Single Point Strain Gauge
- Housing: Anodized aluminum
- Excitation: 10VDC \pm 5%
- Load cell output: 1.8 mV/V
- Nonlinearity: <0.03% FS
- Repeatability: <0.01% FS
- Hysteresis: <0.02% FS
- Operation temperature: -22~158°F (-30°C~ +70°C)
- Temperature Sensitivity:
 - Span 0.002% FS/°C
 - Zero 0.002% FS/°C
- Safe Overload: 200% of load cell capacity

6101 Series Integrator

- Enclosure, Field mount:
 - Outline dimensions: 12.28x15x5.91" (312x380x150mm)
 - Mounting hole dimensions: 9.45x17.72" (240x450mm)
- Enclosure, Panel mount:
 - Outline dimensions: 11.34x5.67x7.28" (288x144x185mm)
 - Front Panel dimensions: 11.18x5.51" (284x140mm)
- Temperature Rating:
 - Operating: -14 to 122°F (-10 to 50 °C)
 - Storage: -40 to 158°F (-40 to 70 °C)
- Power Requirements:
 - 120/220 VAC \pm 10% Switch Selectable
- Display Resolution:
 - LCD 320x240 pixels, English/Chinese language with graphs displayed on-screen: histogram, curve graph, etc.
- Keypad:
 - 25 operating keys. All keys provide tactile feedback
- Measurement Unit:
 - Tons, Kg
- Memory:
 - FRAM memory, data retention when power is interrupted or disconnected.
- Accuracy / Non-Linearity:
 - Less than 0.01% of net for load ranging from 0% to 105% of full scale.
- Circuit Construction:
 - 32-bit RAM Microprocessor, with built-in watchdog preventing system halt, 24-bit A/D converter, real-time clock system.
- 8 programmable open collector outputs
- 6 programmable open collector inputs
- Analog 4-20mA Output & Pulse Output
- Expansion Slots, 3 for optional communications
- Shipping weight:
 - Field Mount, 30 lbs (13.6 Kg)
 - Panel Mount, 18 lbs (8 Kg)



Model N60 Speed Sensor

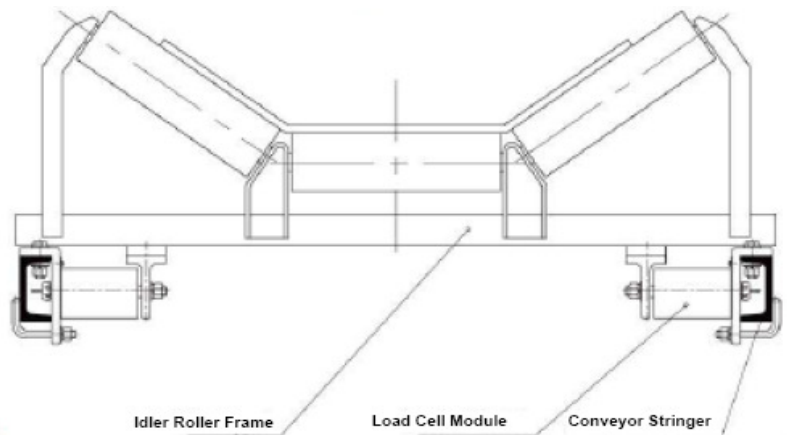
The model N60 speed sensor is used for series N-65, N64, N62 and N61 belt scales. Sensor is directly coupled to the conveyor tail pulley or any other pulley with a minimum of 15-30 degrees of wrap.



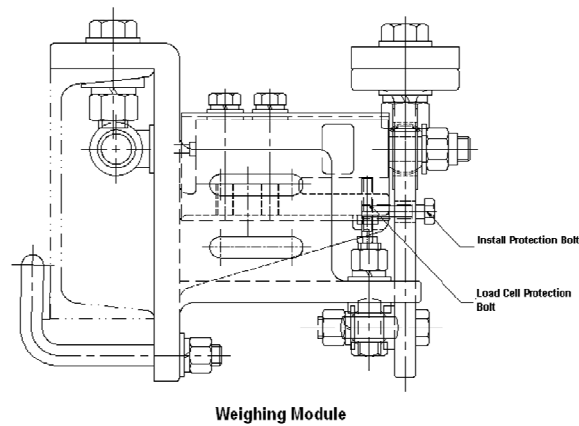
The speed sensor is a brushless pulse generator which gives a series pulse. Each pulse represents one unit of belt travel, the pulse frequency is proportional to belt speed.

- Die cast aluminum housing, weather proof.
- Yellow urethane enamel finish.
- Brushless AC pulse generator requires no adjusting or replacement of brushes.
- NEMA-9, Class II, Div. 1 & 2, Groups E, F & G versions available.

General Arrangement Diagram



Weigh Module Overview



1, 2, 3 & 4 Idler System Accuracies

Model	Weigh Idlers	Load Cell Modules	Accuracy
N65-1	1	2	\pm 0.5%
N65-2	2	4	\pm 0.5-0.25%
N65-3	3	6	\pm 0.25%
N65-4	4	8	\pm 0.20%