

DYNASCALE beltweighing system model Loadblock

DYNASCALE BELT SCALE MODEL LOADBLOCK

The Dynascale belt weighing system model Loadblock measures, among other things, feed to crushers, mill, sieves and other processes with accuracies as low as +- 1-2 %, in the most difficult conditions.

This standard and highly accurate solutions is delivered as a single loadblock solution, for belt widths up to 650 mm, or as a double loadblock solution for higher belt widths up to 2000 mm.

The standard design, which is very compact and easy to handle makes a fast installation process possible.

The Dynascale process belt scale model Loadblock allows you to monitor and control your production while providing information on efficient operations.

The Dynascale belt weighing system model Loadblock is designed for process belt weighing in the most complex industrial applications. It allows you to control the supply to your system while providing important information for efficient operations.

The Dynascale Loadblock belt weigher has the proven reliability of the Loadblock weighing frame, (with 1 or 2 Loadblocks), together with the 526 speed sensor and the power of versatility of the advanced WI301 weighing electronics.

Easy installation

The Dynascale belt scale model Loadblock is very easy to handle and installed by simply 2 bolts, delivered if needed with installation brackets, indoors or outdoors, on stationary or mobile belts. Its robust construction makes it suitable for the most difficult applications on a wide variety of applications.

The weighing frame

Its very compact design and robust construction keeps the Loadblock weighing frame fully in line with the conveyor frame.

This one-piece or two-piece weighing frame is fully assembled at the factory and is quick and easy to install and integrate into the conveyor belt. The weighing frame is designed to provide additional support and reinforcement to the belt structure, thus minimising deviations.

The Loadblock weighing frame is due to its specific design insensitive to vibration, moisture and product accumulation, unlike many other systems.

Applications

- Crushing plants
- Chemical plants
- Asphalt plants
- Mining
- Cement plants
- Coal and iron handling
- Paper mills
- Gypsum factories
- Sand and gravel companies
- Ore extraction
- Loading and unloading plants

The belt speed sensor

The WIS526 digital speed transducer is the most reliable and accurate speed transducer ever developed for use with belt weighers. By directly connecting the transducer to the belt reversing roller or a return roller, you are guaranteed an accurate belt run reading. No wheels running over the belt, preventing problems caused by product accumulation or belt slip.

Advantages

Weighing frame:

- No moving or wearing parts
- Precision loadcell loaded on pull guarantees optimal alignment and accuracy
- Total displacement of the weighing trough frame is less than 0.1 mm
- Compact design to minimise product accumulation
- Optional: calibration device

Speed sensor:

- Compact design in stainless steel, suitable for outdoor installation
- High number of pulses for high accuracy



WI301 Weighing indicator, Field - version

The Integrator:

The WI301 integrator is a weight integrator for dynamic weighing systems. By integrating the mV signal from the load cells in the weighing frame and the pulse signal from the speed sensor, the WI301 integrator generates a readout for the product flow in e.g. tonnes/hour. It is also possible to read out the belt load (kg/m), belt speed (m/s) and the daily counter or total counter (kg or Ton). The integrator can also be equipped with various optional boards for e.g. communication purposes. The integrator can be used for both approved and non-approved applications.

Accuracy guarantee:

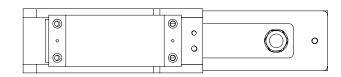
On installations approved by us, we guarantee that the Loadblock belt weighing system weighs and counts within a value of +-1% of the test value. Calibration should be done via a known test weight, or standard static calibration.

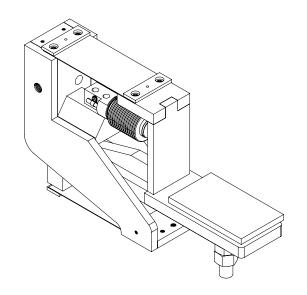


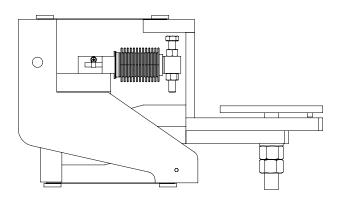


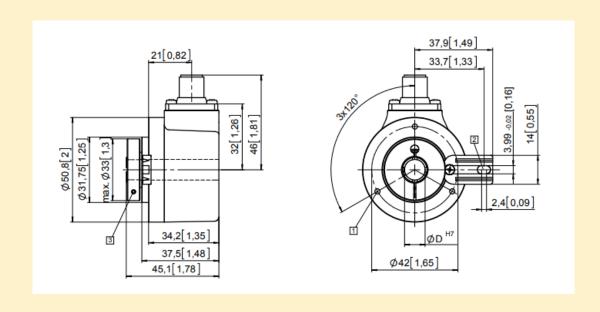
Digital speed sensor WIS526















Temperature

















High rotational

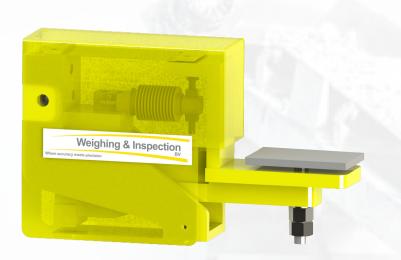
High protection

High shaft load

resistant

Magnetic field

Reverse polarity protection



Specifications

Specifications	
Dynascale Loadblock single or double weighing frame	
Weighing section	Single or double loadblock for single trough
Weighframe design	Composed of a weighing system with spring design to compensate negative influence such as vibration or misalignment of the belt. The rigid construction makes heavy loads possible without damaging frame or loadcell
Weighing frame construction	Powder-coated structural steel, optionally galvanised or stainless
Space requirement	Applicable in any standard conveyor belt
Loadcell	
Number	1 or 2
Туре	Single point, stainless steel, IP68, ATEX optional
Mounting	Load on traction
Power supply	10 VDC +- 5%
Output	2 mV/V +- 0.1%
Combined error	<0.0175 % FS
Non-reproducibility	0.01% FS
Operating temperature	-10°C to +40°C
Temperature sensitivity Range	0.00093% FS/°C; Zero 0.00088% FS/°C
Overload Safe	To 150% of load cell capacity; Max. to 300% FS
Belt speed sensor WIS526	
Type	Digital encoder with hollow shaft
Mounting	Directly with a coupling on the output shaft of the reversing drum or a return roller
Housing	RVS housing, IP67
Mounting accessories	Shaft with mounting arm
Weight	Approx. 500 g
Type WI301	
Display	Alphanumeric, 5" colour display
Calibration	Zero points, zero point tracking, weights, with known quantity of product
Optional communication	mA, profinet, profibus, Ethernet TCP/IP,
Power supply	110 VAC, 240 VAC
Digital inputs	Up to 3
Digital outputs	Up to 4
Housing	Field mount IP69K (228 x 214 x 124 mm) or panel mounting, IP69K (241 x 180 x 47 mm)
Temperature range	-10°C to +40°C