CONTROL BELTSCALE IDEA



DATA SHEET

Control Beltscale Thermo Ramsey IDEA 10-101.

Low-priced, rugged beltscale for in-company belt weighing.

Accuracy: ±1%.



Rugged, low-priced Beltscale

Specifically designed for operations where economy and ease of installation are important considerations, the Thermo Ramsey IDEA beltscale provides basic rate and totalization functions. The IDEA belt scale is ruggedly designed and outstandingly easy to install.

The IDEA belt scale lets you monitor production output and inventory, or regulate product loadout, while providing vital information for the effective management and efficient operation of your business.



The weighing assembly consists of the modular IDEA weighing frame and the speed sensor ZA-11. It also utilizes the modern Ramsey[™] Flex series electronic integrator.

The IDEA beltscale is suited for basic registration and monitoring of continuously conveyed bulk materials. Accuracy is normally ±1%.

CONTROL BELTSCALE IDEA





System Components

The Ramsey IDEA beltscale consists of three major components: control unit (integrator), weighing frame, and belt speed sensor.

Control Unit (Integrator)

As control units, the modern Ramsey™ Flex series integrators are used. These devices are characterized by their high accuracy, their ruggedness and their easy handling. Interfaces make it easy connecting the beltscale with process control systems.

Weighing Frame

The IDEA weighing frame is designed for one idler station. The weighing frame consists of either one or two weighing modules, depending on conveyor width. Compact and designed to attach to the conveyor's stringers, the modules support the weigh idler and measure the weight of material on the conveyor belt.

IDEA Weighing Frame Advantages:

- Factory installed and calibrated overload protection.
- Pivotless design.
- No moving or wearing parts to cause potential maintenance problems.
- Compact design for easy installation and alignment.
- No place for material to build up and cause measurement errors.
- Identical weighing modules fit on any belt width and are interchangeable.





Belt Speed Sensor

For belt speed measurement, the ZA-11 digital lower belt measuring wheel is being used which stands out due to very simple installation. The PTFE measuring wheel reduces soilings and adhesions.

As an alternative, the 60-12 digital belt speed sensor without measuring wheel can be used.

ZA-11 Lower Belt Measuring Wheel Advantages:

Simplest installation.

60-12 Belt Speed Sensor Advantages:

- Rugged housing, suitable for outdoor installations.
- A/C pulse generator means no brushes to adjust or replace.





Performance Guarantee

On installations approved by EmWeA, we warrant that the Thermo Ramsey IDEA beltscale will weigh and totalize to a value within ±1% of the test load when calibrated to our specifications.



IDEA-1 Weighing Frame:

IDEA-2 Weighing Frame:



Idlers from -2 to +2 must be shimmed 5 mm ±0.5 mm above belt line.



CONTROL BELTSCALE IDEA



Technical Specifications:

IDEA Weighing Frame:



No. of weighing idlers: No. of weighing modules: Clearance requirements: Belt width: Construction: Mounting:

Quantity:

Enclosure:

Mounting:

Excitation:

Accuracy:

Safe load:

Type:

Output:

1 1 (IDEA-1) or 2 (IDEA-2) fits any standard conveyor; no space required above belt line up to 800 mm (IDEA-1) / up to 1600 mm (IDEA-2) compact module, steel / aluminium (option: stainless steel) 4 bolts to conveyor stringers

Load Cell:



1 per weighing module environmentally-protected load cell, stainless steel, IP 67 welded bending beam type load cell 10 V DC 2 mV/V ±0.02 % / 3000 d -40°C ... +80°C Operating temperature: Nominal temperature: -10°C ... +40°C 150 % full span Certificates (standard): CE

ZA-11 Lower Belt Measuring Wheel:

· · · · ·

digital, brushless Mounting: lower belt measuring wheel weatherproof, IP 65 Housing: Mounting hardware: supplied with coupling, restraint arm and restraint spring Certificates (standard): CE Certificates (optional): ATEX

60-12 Belt Speed Sensor:



Control and Display Unit (Integrator) Ramsey[™] Flex:



Different variants are available for different requirements. Choose from weatherproof stainless steel housing (with or without display and control options) or panel mount. Various interfaces such as binary and analogue inputs and outputs, RS 232 / RS 485, PROFIBUS, PROFINET, EtherNet/IP, Modbus TCP/IP and Modbus RTU enable connection to process control systems and controllers. A web interface for remote control and maintenance is also integrated. We would be happy to make you an individual offer!



EmWeA Prozessmesstechnik e.K. Günzerode Am Hagen 3 99735 Werther Germany

question

Phone: +49 36335 3800-0 Telefax: +49 36335 3800-10 info@emwea.de www.emwea.de

© EmWeA Prozessmesstechnik e.K. • Subject to change without prior notice!