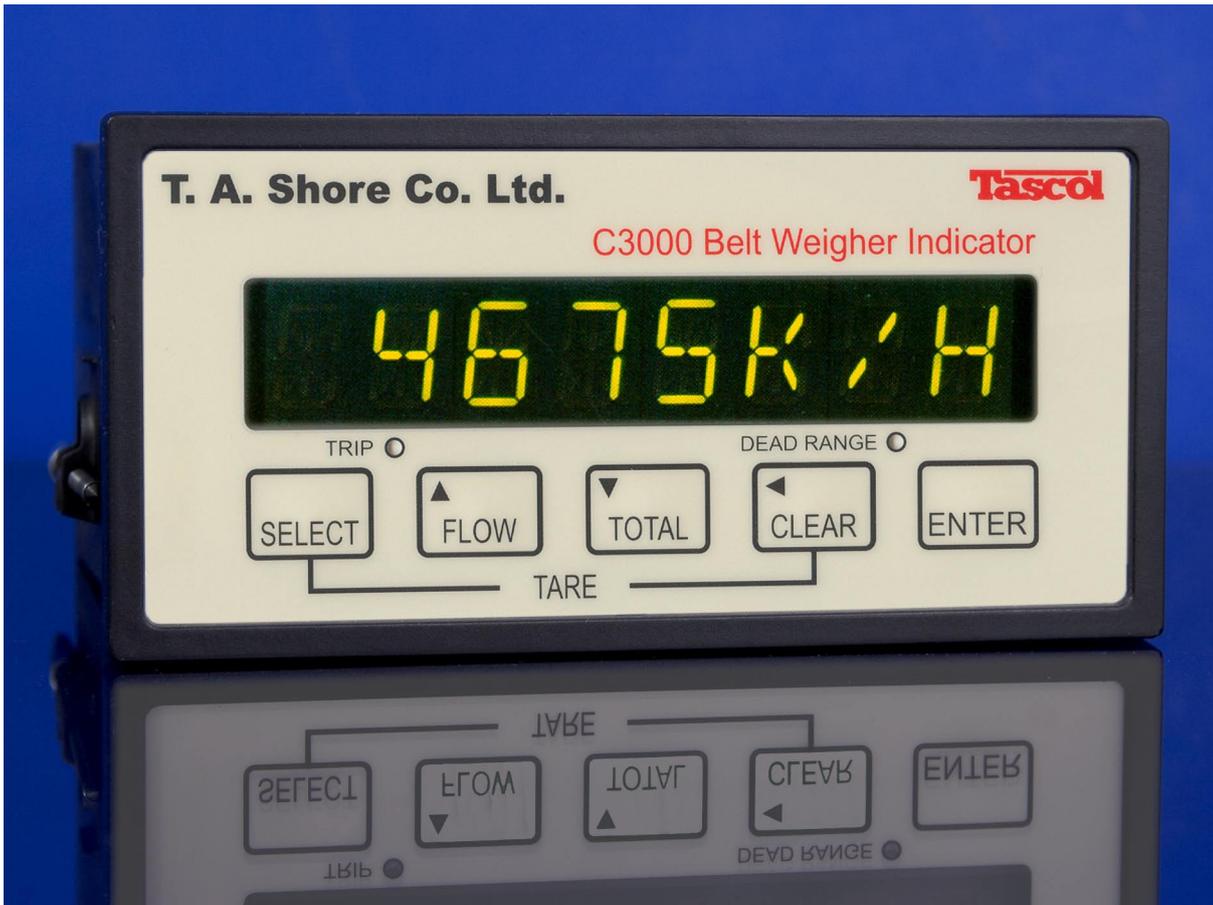


Tascol

C3000 BELT WEIGHER INDICATOR



Features

- ◆ Dynamic Tare, Calibration & Deadband Adjustment by simple pushbutton operation.
- ◆ Automatic Zero Adjustment.
- ◆ Choice of Kgs/Hour or Tonnes/Hour Flow Rate Display.
- ◆ Both Resettable and Non-Resettable Totals.
- ◆ Serial Link, Printer & Analogue Output Options.

Description

The C3000 Belt Weigher Indicator connects with 1-4 strain gauge load cells fitted to a belt weigher mechanism from which it generates a calibrated weight signal. It also connects with a proximity switch, operating as a digital tacho, from which it receives pulses in proportion to belt movement. From these two inputs and from calibration and control data held in its system memory it continually calculates the rate of flow of material over the belt and the total quantity of material transferred.

Optionally, in applications where belt speed variations are insignificant, the indicator may operate from an internal tacho pulse simulator.

The display may be selected to Flow, Resettable or Non-Resettable Total at any time via the front panel keys. Access may be gained to the control and calibration data which is pass-number protected.

Technical Data

Model Nos:

C3000 Basic
C3000A Analogue Output 4-20mA
C3000S Serial Output RS232/RS422
C3000M Multidrop Bus Output RS485

All AC powered. Add suffix 'D' for DC powered option eg C3000-D

Power Supply:

Universal fused power supply 85-264VAC, or 9-36VDC (C3000xD versions only)

Load Cell Excitation:

10V DC @ 125mA max, 1 to 4 x 350 ohm load cells may be connected.

Tacho Input:

Proximity Switch, 3 wire NPN.
Or Shaft Encoder, push-pull output.
Integral 12V DC power supply.
Range 500Hz

Accuracy:

Up to 16,384 +/- 0.5 divisions.
16 bit 1:65,000 internal resolution.

Enclosure:

Panel mounting DIN case, IP65 front seal
144mm wide x 72mm high x 132mm deep
Panel cut-out 138mm x 68mm

Environment:

Operate 0-50°C, 20-80% RH
non-condensing. Storage -40 to 80°C



Dynamic Tare Once started by simple pushbutton operation when the belt is running empty, the system automatically totalises the weight both +ve and -ve over a number of belt movement pulses. When complete it adjusts the weigher zero accordingly.

Dynamic Calibration Check & Recalibration Once similarly started by pushbutton operation, a known weight is passed over the weigher, totalising is stopped and the total is observed to make a calibration check. To make a recalibration the known weight is entered.

Deadband Adjustment A control parameter determines the minimum flow rate below which the indicator ceases to totalise.

Auto Zero Adjustment The internal Dynamic Zero is automatically adjusted by a small amount whenever the unit is running within the Dead Range.

Digital Outputs An Output Pulse that may be wired to one or more totalising counters produces a pulse for every pre-set quantity transferred over the weigher. An Output Trip, typically wired to a spray or other process device, comes on whenever the flow rate is above a pre-set value.

Print Output The C3000S has a serial RS232 interface for connection with a remote printer. Printed records of flow and total values with time and date are sent whenever the print digital input is set on.

Multidrop Bus Version The C3000M model has an RS485 multidrop serial bus interface via which it may communicate with a computer or PLC control system.

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