

Features

- Load Cell Weighing, accurate to 16,000 divisions (65,000 divisions internal resolution)
- Pushbutton Calibration
- Standardised Gain enabling indicator replacement without the need for vessel emptying or re-calibration
- Adjustable filtering, down to 0.5Hz, for elimination of the effects of mechanical vibration, fork lift truck rumble, etc.
- Preset Trip Outputs
- Industry standard 0-10V DC and 4-20mA Analogue Outputs or Serial Communications with computers and PLCs

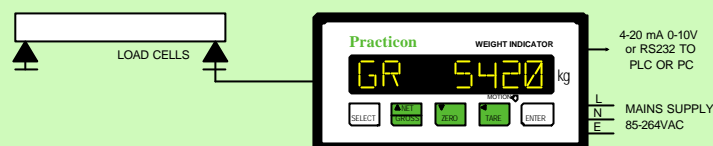
Description

The PR430 connects with a single set of 1 to 4 strain gauge load cells. It supplies 10V DC excitation and amplifies and conditions the resultant return signal. From this signal and from stored control and calibration data it generates Gross Weight and Net Weight signals. On selected models it produces preset trip with analogue or serial link outputs.

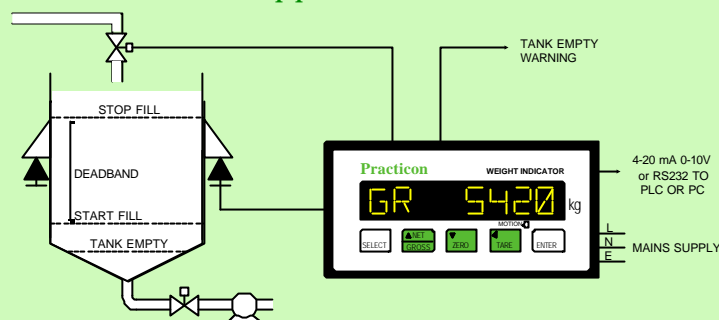
Access to the control and calibration data is pass-number protected.

The TARE and ZERO pushbuttons enable Gross Weight errors of up to 4% and Net Weight readings of any value, to be zeroed out. Together with the

Weigh Scale Application



Process Vessel Application



Technical Data

Model nos:

Model PR430 Basic
PR430A Analogue Output + Trips
PR430S Serial Output + Trips

All AC powered. Add suffix 'D' for DC powered

Power Supply:

Universal fused power supply 85-264V AC or 9-36V DC. Internal Mains Fuse fitted.

Power consumption 10VA

Load Cell Excitation:

10V DC @ 125mA max, 1 to 4 x 350 ohm load cells may be connected in parallel, 4 or 6 wire for volt drop compensation in long cables.

Input Range:

0-20mV min, 0-2.5V max. Filter adjustable 0.2 to 20Hz.

Accuracy:

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

Display:

14mm high character green LED. Selectable update rate and minimum increment.

Trip Relay Outputs:

240V AC 5A rated

Enclosure:

Panel mounting DIN case JP65 sealed 144mm wide x 72mm high x 132mm deep Cut-out 138mm wide x 6 mm high

Environment:

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

NET/GROSS pushbutton they cater for cumulative manual weighing applications. Having completed one weighment, operating TARE zeroes the Net Weight reading ready for the next weighment. When weighing is complete or whenever required, operating NET/GROSS toggles the reading between Net and Gross enabling the cumulative Gross Weight to be checked or, in the case of a vessel, enabling the Gross to be displayed during discharge.

For weighing-out applications the Net Weight readings may be configured to increase as the Gross Weight decreases.

Preset Trip Outputs Two preset trip relay outputs are provided. They have separate level, deadband and high/low settings.

Analogue Outputs Both 0-10V and 4-20mA Gross Weight outputs are available. One or the other may be accurately calibrated.

Calibration The weigher may be calibrated using a single test weight; often of considerably lower weight than the weigher capacity. The data parameters and procedures are:

- ZR ZERO. Operate TARE to zero the weigher.
- CA CALIBRATION. Load known test weight, operate ENTER to obtain data entry mode, use Raise, Lower and Digit Select keys to enter test weight value and ENTER again to complete the calibration.
- CC CALIBRATION COUNTER. Indicates the number of calibrations completed to date.

Calibration may be achieved without the application of test weights. Firstly, on a new installation by entering the precise load cell sensitivity and capacity figures and then zeroing the weigher as above. Secondly, after an instrument replacement by entering previously recorded calibration coefficients.