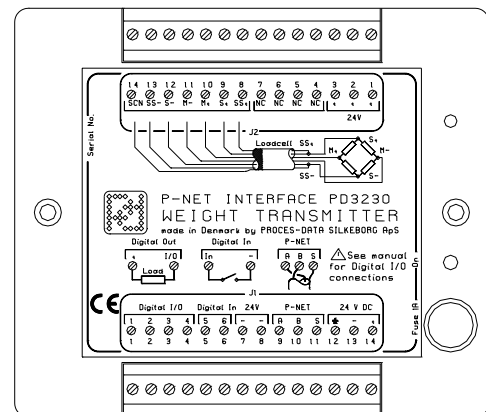


PD 3230/3235 WEIGHT TRANSMITTER

FEATURES

- 1 Weight/Belt Weight Channel
- High Resolution non sampling, fully integrating principle
- High Accuracy factory calibration
- 6 Digital channels: 4 I/O and 2 I
- 1 Programmable Calculator Channel
- Advanced self testing facility
- Overload Protection
- P-NET Fieldbus Communication
- Watchdog Timer
- DIN rail Mounting
- EMC approved (89/336/EEC)



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APPLICATION

The Weight Transmitter is one of a collection of distributed process control units, intended for use within the P-NET fieldbus system. It provides a versatile interface between weighing elements, the associated digital elements such as valves, switches, motors etc. and the P-NET fieldbus.

The unit provides high resolution internal conversion of load measurements into engineering units with single and double taring of the measured value. The weight change per time (Flow) is continuously calculated.

Belt Weight functions with either an active (belt running) signal or a pulse frequency proportional to the belt velocity can be configured. The continuous fully integrating, non sampling principle offers high noise immunity. The influence of vibrations can be damped with the adjustable averaging function.

The module possesses a programmable calculator channel, which can be used to control the digital outputs. With the utilization of user programmes, application specific autonomous functions such as dosing etc. can be added.

Compact design and outstanding environmental specifications makes the Weight transmitter an ideal process component in industrial as well as other environments.

SYSTEM DESCRIPTION

The Weight Transmitters are provided with 1 Service channel, 1 Weight channel, 4 Digital I/O channels, 2 Digital Input channels and an internal user programmable Calculator channel. The Weight Transmitter types PD 3230 and PD 3235 have identical specifications except for their load cell parallelling capacity which is min 60 / 30 Ohms load resistance respectively.

Various configurable automatic functions can be selected, such as automatic calculation of fullscale and zeropoint during calibration, automatic calculation of tare and presettable limit switches. The configurable functions combined with the user programmable calculator reduce the basic operations in the central control system and enable the unit to operate autonomously in a stand-alone system.

The unit offers comprehensive self-testing features, which enables reporting of disconnection, overload and process failure. All outputs are protected against overload. The selectable watchdog timer ensures the safe shut down of a process during a communications or power failure.

As a distributed module, the unit can be mounted close to the process. Data communication with distributed master controllers are made with a single P-NET cable having a ring length of over 1 km. This reduces plant wiring costs to a minimum.

The module may be plugged directly onto a mounting rail (EN 50 022 / DIN 46277) in a panel configuration or in a box designed for the plant environment. The module has 2 snap connectors, which provides the terminals for field connection, power and communication, and may be removed for service without interfering with operational activities on the rest of the network. High accuracy factory calibration eliminates the need for recalibration after replacing a module.

SPECIFICATIONS (all specifications are respected in the approved EMI conditions)

Weight Channel

Load resistance	min. 60 Ohm (PD 3230)
Load resistance	min. 30 Ohm (PD 3235)
Sensitivity	2 mV ± 0.2 %
Linearity error	max. 0.02 %
Readout interval	0.1/0.2/0.5/1/2/5 s
Averaging (Av)	0.1 - 160 s
Resolution	typ. 10 000 d (Av: 0.1 s)
Resolution	typ. 100 000 d (Av: 1.0 s)
Input frequency for belt weight	0 - 100 Hz

Power Supply

Voltage	24 V DC ± 15 %
Consumption	max. 5 W

Ambient Temperature

Operation	-25 to +70 °C
Storage	-40 to +85 °C
Humidity	max. 95 %

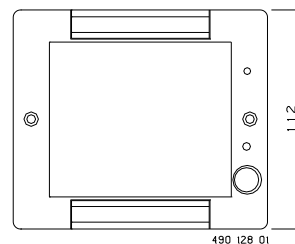
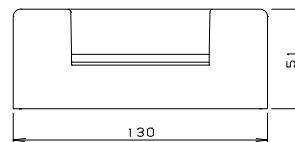
Digital Input Channels

Switch input	nom. 24 V DC
Frequency	max. 50 Hz

Digital Output Channels

Voltage	nom. 24V DC
Current	max. 1A

Scale Drawing (in mm)



APPROVALS

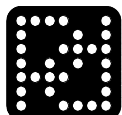
Approved in compliance with the **EMC-directive no 89/336/EEC**. Test limits are determined by the generic standards **EN 50081-1** for emission and **PrEN 50082-2** for immunity.

Approved in compliance with the **IEC 68-2-6 Test Fc** standard for vibration.

The PD 3230 Weight transmitter is a part of the PD 3230/ PD 4000 pattern approved non-automatic weighing system according to **EN 45501** class III and IIII (Refer to PD Manual 502 073).

Produced by:

Distributed by:



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