

LDS-04 Smart Junction Box

Digital weight data from analog load cells



Typical Applications

- Tank, reactor, and silo scales,
- Batching scales,
- Heavy capacity platform scales,
- Scales with impact loading risk.



Load cell failure may not always be detected in a scale with analog load cells. This case may cause faulty production and material loss, especially in tank and reactor scales.



Features

- Up to 4 load cells connection,
- Digital data output,
- Automatic corner adjustment,
- Faulty load cell detection and stopping the weighing,
- Providing unbalanced loading data

Additionally, detecting the faulty load cell, and corner adjustment after the replacement is a troublesome and time-consuming process.

In addition to all these problems, carrying the analog signal at the microvolt level to the control room over long distances increases the risk of weighing errors due to electrical noise caused by magnetic and radio waves.



The product for the harsh industries

- Designed for harsh industrial environments,
- IP67 stainless steel housing,
- Wide Operating temperature range,
- Increasing the system reliability in the long term with the lightning protection feature
- Metal glands as an option

The LDS-04 Digital Junction Box is designed to help you avoid these classic disadvantages and risks of analog load cells by converting your scale to digital without replacing existing analog load cells. The signal from each load cell connected to the LDS-04 Smart Junction Box is converted into a digital signal by a microprocessor-based converter and transmitted to the weighing display as a digital weight signal.

LDS-04 Smart Junction Box Specifications

Number of load cells	up to 4 analog load cells
A/D Converter	24 bit Delta-Sigma A/D converter with integral analog and digital filters
Internal / External resolutions	10 000 000 counts / 200 000 increments
Analog input range	0 mV to 10 mV
Minimum input voltage	< 1 mV
Linearity	< % 0.02 FS
Temperature drift	< 0.01 % FS / °C
Load cell excitation	5 VDC
Instrument cable	Shielded 4 wires, Ø 4 – 8 mm, Max. 500 meters
External grounding screw	Yes
Enclosure / Protection / Glands	Stainless steel with air ventilation, IP67 and PG9-plastic glands, metal gland is optional
Operating temperature / Humidity	Between -10°C and +40°C at 85% RH maximum noncondensing
Dimensions (LxWxH)	25,3 x 17,2 x 4,6 cm
Packing sizes (LxWxH)	27,5 x 19 x 5,5 cm (10,82 x 7,48 x 3,25")
Shipping weight	1,5 kg (3,30 lb)

Recommended Baykon Weighing Indicators

LDS-04 Smart Connection Box is used with the following Baykon digital load cell weighing indicators.



BX23D



BX24D / BX25D



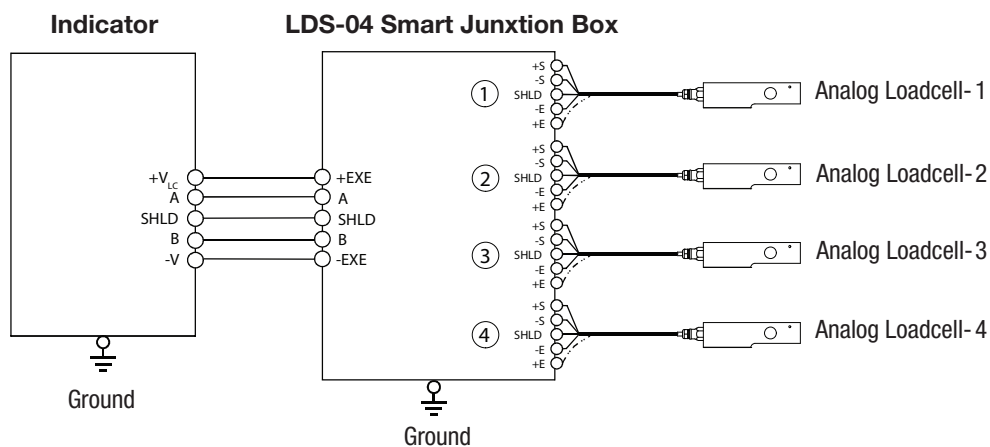
BX30D



BX30D Plus

Connection Diagram

A typical wiring connection of the LDS-04 Smart Junction Box to the Baykon weighing indicator is given below. For connector pinouts, please see the technical manuals of the LDS-04 Smart Junction Box and the weighing indicator.



Specifications are subject to change without notice. 01- 11 / 2022