

Weight Transmitters

FEATURES

- Microprocessor-based weight transmitter
- Integral multi-cell summing circuit
- Standard digital RS-485 output
- Optional analog 0–10 V and 4–20 mA outputs
- Optional Modbus RTU or Allen-Bradley remote I/O protocol
- Fault protected transducer excitation

APPLICATIONS

- Inventory weighing
- Process weighing
- Silo, bin, and hopper weighing systems

DESCRIPTION

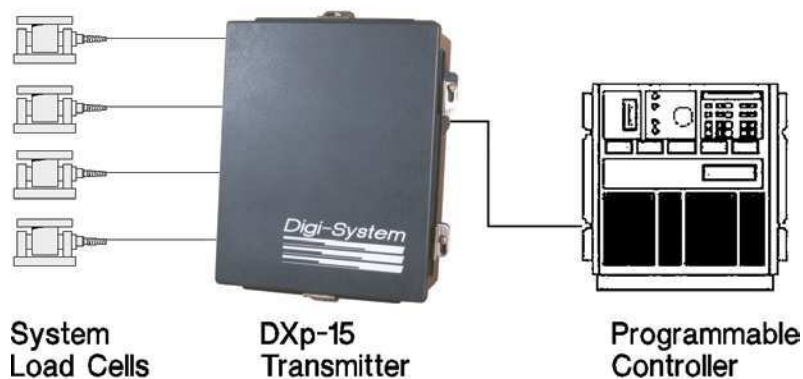
Self-contained microprocessor based weight transmitters. Both units contain an internal multi-cell summing circuit, 10 or 15 V excitation, and a digital RS-485 output. Analog 0–10 V and 4–20 mA outputs are available as an option. DXp transmitters are designed to be field mounted within the standard cable length of the load cells and are available with NEMA 4, 4X, or explosion proof enclosures. The DXp-10 offers 20,000 counts of digital resolution with a response time of 400 ms. For high speed batch and packaging applications, the DXp-15 offers 50,000 counts of digital resolution with a response time of 50 ms.

DXp-15 units are available with Allen-Bradley Remote I/O or Modbus RTU protocol for convenient interface with host PLC/ DCS systems.



The DXp-10 and DXp-15 transmitters are designed for inventory and process weighing systems requiring transmission of high accuracy weight data to a computer or other control device. Availability of a wide variety of digital interface options simplifies communication of weight data to a host computer or PLC. The result is improved product quality and material control.

CONFIGURATION



Weight Transmitters

| SPECIFICATIONS | | PARAMETER | VALUE |
|-----------------------------------|--|--|---|
| PERFORMANCE | | PARAMETER | VALUE |
| Resolution DXp-10 | 20,000 counts | ENCLOSURE | |
| Resolution DXp-15 | 50,000 counts | Dimensions (NEMA 4/4X) | 11.5×8.0×4.3 in H×W×D |
| Sensitivity DXp-10 | 1.0 µV/count | Explosion Proof | 12.875×10.875×8.188 in H×W×D |
| Sensitivity DXp-15 | 0.5 µV/count | OPTIONS – ISOLATED ANALOG OUTPUT(S) | |
| Full Scale Range | 25 or 35 mV (selectable) | Type | 12 bit D/A conversion |
| Dead Load Range | 100% | Voltage | 0 to 10 V (25 kΩ min. load) |
| Input Impedance | 10 MΩ, min. | Current | 4 to 20 mA (1,000 Ω max. load) |
| Load Cell Excitation (Selectable) | 10 V for up to eight 350 Ω load cells (250 mA) 15 V for up to six 350 Ω load cells (260 mA) | SERIAL COMMUNICATION SIMPLEX DATA OUTPUT (STANDARD) | |
| Linearity | ±0.01% of full scale | Interface Type | RS-485 (simplex) |
| Humidity | 5 to 90% rh, non-condensing | Data Format | Simplex ASCII data 7 Data Bit Even Parity 1 Stop Bit |
| Common Mode Rej. | 100 db or better at or below 35 Hz | SERIAL COMMUNICATION TERMINAL/COMPUTER INTERFACE (OPTIONAL) | |
| Normal Mode Rej. | 100 db or better at or below 35 Hz | Interface Type | RS-485 Half Duplex (Standard) |
| Conversion Speed DXp-10 | 400 ms | Baud | 1,200 or 9,600 |
| Conversion Speed DXp-15 | 50 ms | Protocol | ASCII duplex command/ response format |
| TEMPERATURE EFFECTS | | APPROVALS | |
| Span | ±2 ppm/°C typical, 7 ppm/°C max. | FM (Factory Mutual) | 3611 (Class I, II, III; Div.1, 2; Groups A-G) |
| Zero | ±2 ppm/°C | CSA | C22.2 (Class I, II, III; Div.1, 2; Groups A-G) |
| Operating Temperature | -10 to 55°C (12 to 131°F) | MODBUS RTU PROTOCOL (DXP-15 OPTION ONLY) | |
| Storage Temperature | -20 to 85°C (-4 to 185°F) | ALLEN-BRADLEY REMOTE L/O (DXP-15 OPTION ONLY) | |
| ELECTRICAL | | | |
| Voltage | 115/230 VAC ±15% 50/60 Hz | | |
| Power | 10 W max. | | |
| Parameter Storage | EEPROM | | |
| EMI/RFI | Shielded from typical industrial interference | | |

NOTE: Allen-Bradley is a trademark of Allen-Bradley Co., Inc. Modbus is a trademark of Schneider.

BLH Nobel is continually seeking to improve product quality and performance. Specifications may change without notice.

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