BLH NOBEL
A **VPG** Brand

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
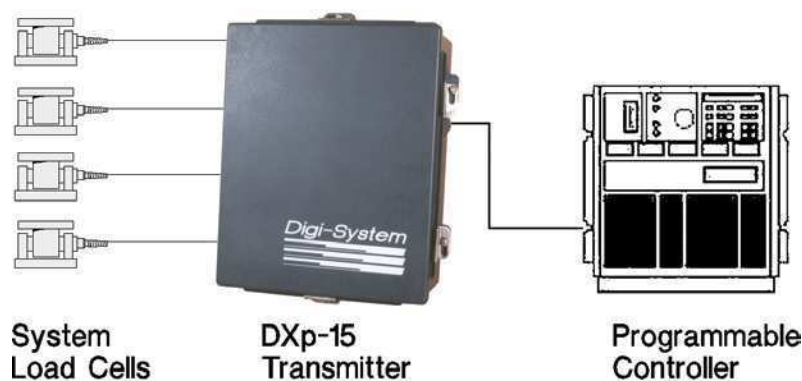- Silo, bin, and hopper weighing systems

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

System Load Cells   DXp-15 Transmitter   Programmable Controller

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DXp-10 and DXp-15

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SPECIFICATIONS

PARAMETER	VALUE
PERFORMANCE	
Resolution DXp-10	20,000 counts
Resolution DXp-15	50,000 counts
Sensitivity DXp-10	1.0 µV/count
Sensitivity DXp-15	0.5 µV/count
Full Scale Range	25 or 35 mV (selectable)
Dead Load Range	100%
Input Impedance	10 MΩ, min.
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)
Linearity	±0.01% of full scale
Humidity	5 to 90% rh, non-condensing
Common Mode Rej.	100 db or better at or below 35 Hz
Normal Mode Rej.	100 db or better at or below 35 Hz
Conversion Speed DXp-10	400 ms
Conversion Speed DXp-15	50 ms
TEMPERATURE EFFECTS	
Span	±2 ppm/°C typical, 7 ppm/°C max.
Zero	±2 ppm/°C
Operating Temperature	−10 to 55°C (12 to 131°F)
Storage Temperature	−20 to 85°C (−4 to 185°F)
ELECTRICAL	
Voltage	115/230 VAC ±15% 50/60 Hz
Power	10 W max.
Parameter Storage	EEPROM
EMI/RFI	Shielded from typical industrial interference

PARAMETER	VALUE
ENCLOSURE	
Dimensions (NEMA 4/4X)	11.5 × 8.0 × 4.3 in H × W × D
Explosion Proof	12.875 × 10.875 × 8.188 in H × W × D
OPTIONS – ISOLATED ANALOG OUTPUT(S)	
Type	12 bit D/A conversion
Voltage	0 to 10 V (25 kΩ min. load)
Current	4 to 20 mA (1,000 Ω max. load)
SERIAL COMMUNICATION SIMPLEX DATA OUTPUT (STANDARD)	
Interface Type	RS-485 (simplex)
Data Format	Simplex ASCII data 7 Data Bit Even Parity 1 Stop Bit
SERIAL COMMUNICATION TERMINAL/COMPUTER INTERFACE (OPTIONAL)	
Interface Type	RS-485 Half Duplex (Standard)
Baud	1,200 or 9,600
Protocol	ASCII duplex command/ response format
APPROVALS	
FM (Factory Mutual)	3611 (Class I, II, III; Div.1, 2; Groups A-G)
CSA	C22.2 (Class I, II,III; Div.1, 2; Groups A-G)
MODBUS RTU PROTOCOL (DXP-15 OPTION ONLY)	
ALLEN-BRADLEY REMOTE L/O (DXP-15 OPTION ONLY)	

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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