

**BID SPEC PACKAGE
FOR THE
MULTI-POINT™ II LEVEL CONTROL
SERIES 506-3000**

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Specifications for Drexelbrook Multi-Point™ Level Control with 2 Points

The Multipoint II Level control shall consist of three components:

1. The electronics
2. Rugged NPT or flange mounted sensing element. Only one sensing element shall be required for all points.
3. An inter-connecting cable

In cases where it is suitable to mount the electronics integrally with the sensing element in one housing, the need for the inter-connecting cable is eliminated.

Electronics

The electronic unit shall be a solid state, radio frequency admittance type, with circuitry designed to ignore errors generated by coating "build-up" on the sensing element. Ambient temperature limits of the electronics shall be -40°F to 140°F. The electronic unit shall have two DPDT relay contacts. Contact ratings shall be 120VAC: 5A non-inductive, 3A inductive. Each relay will be tied to a single non-interacting setpoint with the following features:

Setpoint 1

The setpoint shall be field selectable High Level Fail Safe (HLFS) or Low Level Fail Safe (LLFS) and adjustable over the full range of the sensing element provided. The setpoint shall have a variable field selectable time delay from 0 to 90 seconds response time.

Setpoint 2

The setpoint shall be field selectable High Level Fail Safe (HLFS) or Low Level Fail Safe (LLFS) and adjustable over the full range of the sensing element provided. The setpoint shall have an adjustable dead band/differential (pump/valve) control, where the differential span may be locked for calibration, or where the differential points may be independently calibrated. This option must field selectable.

Power supply to the unit shall be protected from radio frequency interference (RFI) to the extent that less than 1/2" shift in an operating point would occur from a 5 Watt field @ 27 MHz, 150 MHz, or 450 MHz at a distance of 5 feet from an exposed cable or

power lines.

The electronics shall have multiple range settings to provide control resolution. These range settings must be field selectable. The electronic unit shall have LED indicator for each point. The electronic unit shall be mounted in an explosion-proof housing that shall meet Nema 1-5 and 12 classification.

Sensing Element

The sensing element shall be furnished with a conduit that meets Nema 1-5 and 12 area classification, if supplied remotely from the electronics. Sensing element and cable must be intrinsically safe for Class I, Groups A,B,C and D or Class II, Groups E, F, and G, (Div. 1 and 2)

Coaxial Cable

The coaxial cable shall be three conductor driven-shield type, length specified up to 100 feet, and shall be used to connect the sensing element to the electronic unit.

Specifications for Drexelbrook Multi-Point™ Level Control with 3 Points

The Multipoint II Level control shall consist of three components:

1. The electronics
2. Rugged NPT or flange mounted sensing element. Only one sensing element shall be required for all points.
3. An inter-connecting cable

In cases where it is suitable to mount the electronics integrally with the sensing element in one housing, the need for the inter-connecting cable is eliminated.

Electronics

The electronic unit shall be a solid state, radio frequency admittance type, with circuitry designed to ignore errors generated by coating "build-up" on the sensing element. Ambient temperature limits of the electronics shall be -40°F to 140°F. The electronic unit shall have two DPDT relay contacts. Contact ratings shall be 120VAC: 5A non-inductive, 3A inductive. Each relay will be tied to a single non-interacting setpoint with the following features:

Setpoint 1

The setpoint shall be field selectable High Level Fail Safe (HLFS) or Low Level Fail Safe (LLFS) and adjustable over the full range of the sensing element provided. The setpoint shall have a variable field selectable time delay from 0 to 90 seconds response time.

Setpoint 2

The setpoint shall be field selectable High Level Fail Safe (HLFS) or Low Level Fail Safe (LLFS) and adjustable over the full range of the sensing element provided. The setpoint shall have an adjustable dead band/differential (pump/valve) control, where the differential span may be locked for calibration, or where the differential points may be independently calibrated. This option must be field selectable.

Setpoint 3

The setpoint shall be field selectable High Level Fail Safe (HLFS) or Low Level Fail Safe (LLFS) and adjustable over the full range of the sensing element provided.

Power supply to the unit shall be protected from radio frequency interference (RFI) to the extent that less than 1/2" shift in an operating point would occur from a 5 Watt field @ 27 MHz, 150 MHz, or 450 MHz at a distance of 5 feet from an exposed cable or power lines.

The electronics shall have multiple range settings to provide control resolution. These range settings must be field selectable. The electronic unit shall have LED indicator for each point. The electronic unit shall be mounted in an explosion-proof housing that shall meet Nema 1-5 and 12 classification.

Sensing Element

The sensing element shall be furnished with a conduit that meets Nema 1-5 and 12 area classification, if supplied remotely from the electronics. Sensing element and cable must be intrinsically safe for Class I, Groups A,B,C and D or Class II, Groups E, F, and G, (Div. 1 and 2)

Coaxial Cable

The coaxial cable shall be three conductor driven-shield type, length specified up to 100 feet, and shall be used to connect the sensing element to the electronic unit.