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ISSUE	EDO NO.	APP'D	DATE
1	9-02-245	WS	10-8-02
2	3-03-250		

**Customer Bid Specification for
Line-Powered RF-Admittance Point Level Control
AMETEK Drexelbrook ThePoint™**

The point level switch shall consist of the following:

Electronics

The electronics shall be a radio frequency admittance type, with circuitry designed to ignore errors caused by coating "build-up" on the sensing element, ambient temperature fluctuations, or changes in conductivity and/or dielectric.

The point level switch shall not require calibration. The electronics shall be microprocessor controlled, and the software must be capable of assigning a trip point that does not require manual calibration or setpoint adjustments.

The electronic unit shall be suitable for mounting integrally to the sensing element or up to 75 feet from the sensing element.

The ambient temperature limits of the electronics shall be -40°C to 70°C.

The output shall be one DPDT relay contacts rated at 5A @ 120Vdc / 3A @ 30Vdc. The electronics shall be furnished fail-safe and be field selectable for low or high level. The enclosure shall be of rugged design. The electronic unit shall have 100Amp static protection built in.

Operating response time shall be less than 1 second. The electronics shall be furnished with a time delay adjustment with up to 60 seconds response time. The time delay shall be field selectable for forward or reverse action to provide a delay into alarm, or on recovery form an alarm condition.

The electronics shall utilize an auto-detecting power supply circuit capable of operating from an AC power source between 19 – 55 volts and a DC power source between 19 – 253 volts, regardless of polarity, and with a frequency range between 0 and 400Hz.

Sensing Element

The sensing element shall be of a rigid or flexible design and shall be rugged and suitable for the temperature and pressure required by the application. If required, the sensing element shall be abrasion resistant and/or shall be made of a material that resists chemical attack. The sensing element shall be a three-terminal type, and shall contain no active electronics. The sensing element, when remotely mounted, shall be furnished with a conduit the meets NEMA 1-5 and 12 area classifications.

Interconnecting Cable

The coaxial interconnecting cable shall be a three-conductor, driven-shield type, up to 75 feet long, and shall be used to connect the sensing element to the electronic unit.

System Approvals

FM -

Explosionproof for Class I, Division 1, Groups A, B, C and D;

Dust-Ignitionproof for Class II, III, Division 1, Groups E, F and G;

Nonincendive for Class I, Division 2, Groups A, B, C & D;

Suitable for Class II, III, Groups F & G hazardous outdoor Type 4X, IP66 (classified) locations with

Intrinsically Safe connections to Class I, II, III, Division 1,

Groups A, B, C, D, E, F and G hazardous (classified) locations.

The point level control switch shall be the AMETEK Drexelbrook ThePoint™ Series (PNL1-XXXX-XXXX).