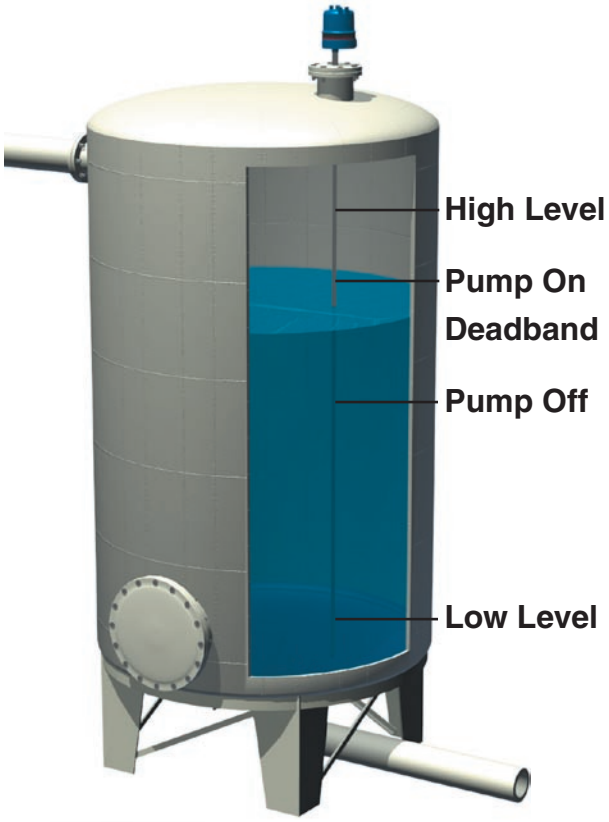
DREXELBROOK®

A Leader In Level Measurement Solutions

AMETEK®

MultiPoint II™ 506-3100 Series

Multiple Operating Point Level Control



Multiple operating points through a single entry

System offers up to four control points on a single sensing element. One relay has an adjustable differential, providing two control points.

No need to empty the vessel for installation

Sensing element is mounted in the top of the vessel. This eliminates the need for openings below the material level.

Safe for hazardous locations

Sensing element and cable are intrinsically safe for hazardous areas.

No Maintenance

All electronic design and no moving parts eliminate the need for maintenance.

Control up to four operating points on a single sensor with the MultiPoint II Level Control from Drexelbrook.

The MultiPoint II level control is economical for processes requiring multiple operating points, such as batch processing and sump applications. The system provides four operating points with only one electronic unit to install and maintain. It requires only one opening in the vessel for the sensor.

Top mounting eliminates any openings below the material level.

Single entry in the top of the vessel eliminates any possibility of leaks in the vessel due to the placement of the control at the material level. The sensing element mounts in a single NPT or flange mounting at the top of the vessel.

Coating on the sensor has no effect on the measurement.

For process materials that produce coatings, the MultiPoint II Level Control features Drexelbrook's unequaled Cote-Shield™ circuitry. Cote-Shield ignores the effects of build-up on the sensing element and continues to accurately detect the presence or absence of material.

Choose the most convenient location for the transmitter.

The MultiPoint II Level Control is available in integral or remote mounted versions with standard explosionproof or optional NEMA 4X housings. Choose the configuration that best suits your needs.

Point Level Measurement



MultiPoint II™ 506-3100 Series

Specifications

Power Requirements
95-145 Vac 50/60 Hz 1 watt or 205-255 Vac 50/60 Hz 1 watt.

Level Output
(3) DPDT relays:one with 0-90 second adjustable time delay, one on/off, one with adjustable differential*.

*Adjustable differential can be selected as a locked band.The differential remains the same, even if the setpoints are moved.

Contact Ratings
120 Vac; 5A non-inductive, 3A inductive. Min. Rating 100 mA/ 12VDC.

Operating Temperature (Electronics)
-40°F to 140°F (-40°C to 60°C).

Operating Point Range
0-200 ft (depending on sensing elements) Range selection: Four-position adjustable switch.

RFI Protection
(Built-in) Less than 1/2 inch shift in operating point for unit in explosion-proof housing, 5W field @ 27, 150, or 450 MHz at a distance of 5 feet (1.5m) from exposed cable, or power line.

Fail-Safe
Switchable to either Low-Level Fail-Safe (LLFS) or High-Level Fail-Safe (HLFS).

Connecting Cable
(Remote units only) Three-terminal coaxial up to 150 feet (45.7m).

Housing
5-inch integral explosion-proof standard. 5-inch remote explosion-proof or Nema 4X remote housings optional.

Sensing Element and Cable
Designed to be intrinsically safe for Class I Groups A,B,C,D and Class II Groups E,F,G (Div. 1 and 2). Unit is mounted in FM approved explosion proof housing.

Approvals
Consult factory.

Other Options
Drexelcote™ corrosion-resistant condulet/housing.

Model Number (Sensing Element)	Process Pressure/ Temperature	Applications	Sensing Element Dimensions	Standard Mounting[1]	Materials of Construction	Capacitance (pF) per Foot
506-3100-X01 (700-1-22)	1000psi @100°F (70 BAR @ 38°C) 500 psi @300°F (34 BAR @149°C)	Light or non-coating conductive liquids	.375 in (9.5mm) O.D. 20 ft (6m) maximum length	¾ inch NPT	TFE insulated metal rod	78 pF
506-3100-X04 (700-2-57)	1000psi @100°F (70 BAR @ 38°C) 500 psi @250°F (34 BAR @120°C)	For strength and modest conductive coatings	.84 in (21.3mm) O.D. 20 ft (6m) maximum length	1 inch NPT	"X" insulated metal rod	350 pF ±10%
506-3100-X05 (700-5-54)	500 psi @300°F (34 BAR @149°C)	Longer lengths in water-like liquids without agitation	.093 in (2.4mm) O.D. 200 ft (61m) maximum length	¾ inch NPT	PFA insulated cable	48 pF
506-3100-X06 (700-2-37)	1000psi @100°F (70 BAR @ 38°C) 500 psi @250°F (34 BAR @149°C)	Best conductive coating rejection	.54 in (13.7mm) O.D. 12 ft (3.65m) maximum length	¾ inch NPT	"X" insulated metal rod	2400 pF
506-3100-X07 (700-2-27)	1000psi @100°F (70 BAR @38°C) 500 psi @300°F (34 BAR @120°C)	Modest conductive coatings	.56 in (13.7mm) O.D. 15 ft (4.7m) maximum length	¾ inch NPT	FEP insulated metal rod	300 pF

[1]Flange mountings available. Consult local Drexelbrook representative.
X = 0 (Integral Electronic); X = 7 (Remote Electronics)

U.S.A. Sales: 800-553-9092 • 24-Hour Service: 800-527-6297 • International Support: 215-674-1234 • Fax: 215-674-2731

AMETEK®
DREXELBROOK
205 Keith Valley Road
Horsham PA 19044 U.S.A.
E-mail - drexelbrook.info@ametek.com
Web - www.drexelbrook.com

AMETEK Nihon Drexelbrook
2 Chome • 12-7 Minami Gyotoku
Ichikawa City • Chiba 27201 Japan
Phone: 81-473-56-6513
Fax: 81-473-56-6535
E-mail: nd@nihon-drexelbrook.co.jp

AMETEK Singapore Pte. Ltd.
10 Ang Mo Kio Street 65
#05-12 Techpoint • 569059 Singapore
Phone: 65-6484-2388
Fax: 65-6481-6588
E-mail: aspl@ametek.com.sg

AMETEK Precision Instruments Europe
Rudolf-Diesel-Strasse 16
D-40670 Meerbusch Germany
Phone: 49-2159-9136-0
Fax: 49-2159-9136-39
Web: www.ametek.de

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