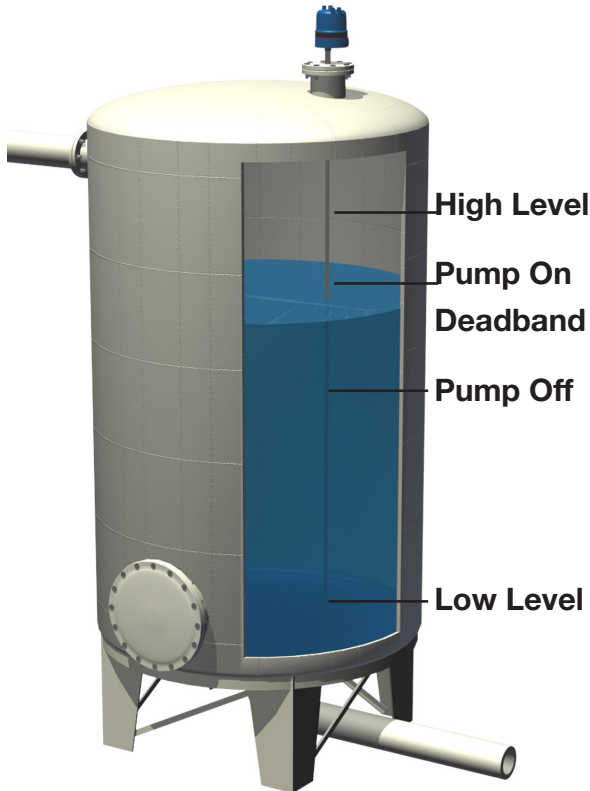


DREXELBROOK[®]

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.

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 unequalled 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.

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	3/4 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	3/4 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	3/4 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	3/4 inch NPT	FEP insulated metal rod	300 pF

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