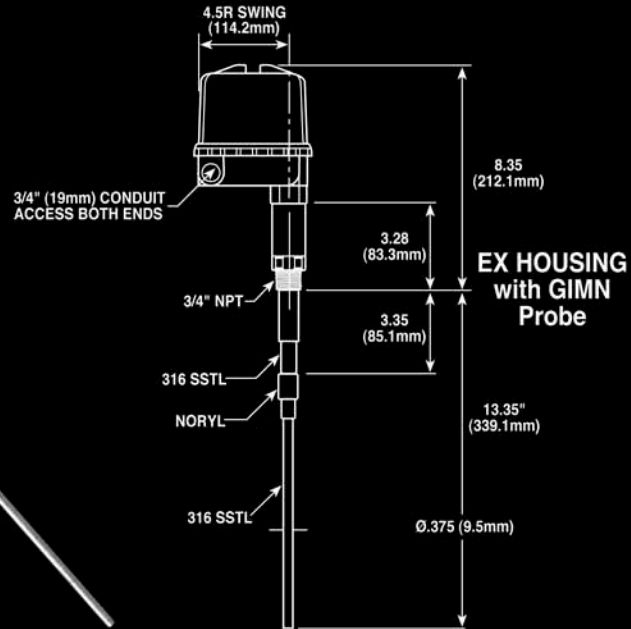


# MicroPoint 800

DATA SHEET  
**R.F. Capacitance  
Point Level Switch**



## ■ PURPOSE

Delavan's **MicroPoint 800** is a truly cost effective Microprocessor Based R.F. Capacitance On/Off Switch used in powder bulk solid and liquid applications.

## ■ OEM FRIENDLY DESIGN

Designed with OEM customers in mind, the **MicroPoint 800** features several user selectable options including: system output, supply voltage, enclosure type, and a wide range of sensing probes.

## ■ PRINCIPLE OF OPERATION

The **MicroPoint 800** Microprocessor Based Point Level Switch consists of solid state electronics mounted in an explosion proof or corrosion resistant enclosure. The rugged sensing element utilizes a driven guard designed to eliminate the effects of material build-up or coatings.

The sensing element's "active" section is energized with a R.F. (radio frequency) signal approximately 2 MHz. When the process level changes, a change in capacitance occurs resulting in a change in frequency. This change is compared to a preset value and after amplification the signal is used to actuate a relay.

## ■ FEATURES

- On-board microprocessor
- Push button calibration
- Built-in driven guard  
Designed to eliminate false signals due to material build-up or coatings
- Sensitivity to .5 pF
- Integral electronics
- Explosion proof or corrosion resistant housing
- Adjustable time delay
- Non-volatile memory
- Field selectable fail-safe
- Sensing probes to 50 ft.
- Status indication LED's



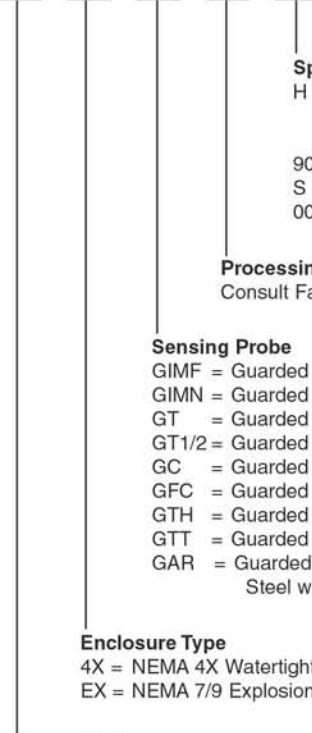
## SPECIFICATIONS

<b>Supply Voltage</b>	24 Volts DC Optional: 110/220 Volts AC
<b>Absolute Limits</b>	±4 Volts DC or 90-240 Volts AC
<b>Power Consumption</b>	≤ 3 volt-amperes
<b>Sensitivity</b>	Factory set @ 5 pF Field adjustable: < 2 pF
<b>Output</b>	24 Volts DC = Solid state FET output 110/220 Volts AC = Form C DPDT Relay 5 amp @ 115 Volts AC Non-inductive 5 amp @ 230 Volts AC Non-inductive
<b>Time Delay</b>	Adjustable 50 milliseconds to 30 seconds
<b>Fail-Safe Selectable</b>	High Level or Low Level using jumper
<b>Temperature Range</b>	Electronics: -40°F to +160°F -40°C to +71°C
<b>Enclosure Rating</b>	Explosion Proof: Meets NEMA 4, 5, 7, 9, 12; NEC Class I, Division II; NEC Class II, Division II  Watertight: Meets NEMA 4X Watertight corrosion resistant

## ORDERING INFORMATION

### MicroPoint

800-



#### Special Features

- H = High Temperature Lagging Extension - only with GT Type Probes
- 90° = 90° Bend on Active Section
- S = Sensitivity Sleeve, 2" or 5"
- 00 = None

#### Processing Mounting

Consult Factory

#### Sensing Probe

- GIMF = Guarded Injection Molded Fortron, 14"
- GIMN = Guarded Injection Molded Noryl, 14"
- GT = Guarded Teflon, 18"
- GT1/2 = Guarded Teflon, 1/2" Center Rod
- GC = Guarded Ceramic, 750°F Max
- GFC = Guarded Flexible Cable, 25 ft. Max
- GTH = Guarded Teflon, Hastelloy Wetted Parts
- GTT = Guarded Teflon, Teflon Sealed Active
- GAR = Guarded Abrasion Resistant Stainless Steel with Durable Plastic Insulator

#### Enclosure Type

- 4X = NEMA 4X Watertight Corrosion Resistant
- EX = NEMA 7/9 Explosion Proof

#### Output Options

- F = Solid State FET Output (24 Volts DC)
- R = Relay Output (110/220 Volts AC)

Micropoint 800 Capacitance Point Level Switch

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