



# Auto-Set <sup>mk7</sup>

## RF Capacitance Point Level Probe

Detects level or plug condition in bulk granular solids or liquids.

**Now With  
Data Protection + Display**

*Set it and  
forget it!*



- ▶ Digital display shows measured values allowing simple set-up.
- ▶ High and low level control of liquids, powders and free-flowing granular solids stored in tanks, bins, silos or other containers.
- ▶ Completely self-contained for operation direct from 115/240 volts AC 50/60 Hz or 24 volts DC.
- ▶ Membrane push-button calibration with data protection switch.
- ▶ Power shield automatic compensation for material build-up on probe.
- ▶ Remote models available for high temperature or high vibration applications.
- ▶ Conformally coated circuit board for moisture/condensation protection



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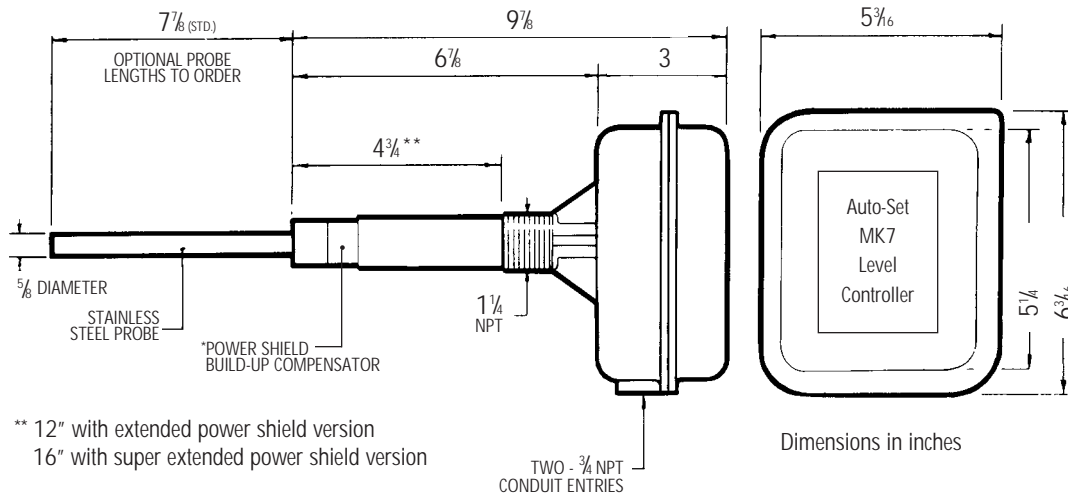
Form #400  
Brochure information subject to change or correction. July 2004  
Refer to instruction manual for correct installation information.

E-Mail: 4b@go4b.com



# Auto-Set<sup>mk7</sup> RF Capacitance Point Level Probe

Detects level or plug condition in bulk granular solids or liquids



\*\* 12" with extended power shield version  
16" with super extended power shield version

## Technical Specifications

|  |  |
|--|--|
| <b>Supply:</b>   | 115/230 volts AC 50/60 Hz or 24 volts DC   |
| <b>Supply tolerance:</b>                                   | -15% +7.5%   |
| <b>Ambient temperature:</b>                                | -25° F to +160° F  |
| <b>Load:</b>   | 2.5 VA   |
| <b>Sensitivity:</b>  | 0.5 picofarad  |
| <b>Output:</b>   | 1 set of voltage-free relay change-over contacts rated at 3 amps 240 volts AC resistive  |
| <b>Fail-to-Safe:</b>                                       | High- or low-level selected by a switch  |
| <b>Calibration:</b>  | Push-button with or without material available   |
| <b>Display:</b>  | LED display shows measured values (covered, uncovered, trip)   |
| <b>Indicator:</b>  | LED probe covered indicator (material detected)  |
| <b>Build-up:</b>   | Power shield automatic compensation for material build-up  |
| <b>Cable entry:</b>  | Two conduit entries 3/4" NPT   |
| <b>Connections:</b>  | Screw terminal block   |
| <b>Probe:</b>  | Stainless steel  |
| <b>Enclosure:</b>  | Flame-retardant, glass-reinforced nylon  |
| <b>Protection:</b>   | IP65-NEMA 4  |
| <b>Time Delay:</b>   | 0-128 Seconds (material arriving & leaving)  |
| <b>Approval:</b>   | Auto-Set is approved for Class II Division 1, Groups E, F and G<br>ATEX approved units available.<br>Polypropylene 248° F (120° C)<br>PEEK 487° F (250° C) |
| <b>Remote Models:</b><br>for high temperature or vibration |  |

## Description

The Auto-Set MK7 Point Level Monitor with digital display is a self-contained unit for high, intermediate, or low-level detection of liquids, powders or free-flowing granular solids. The Auto-Set is suitable for top or side entry in container vessels. Where top entry is required, longer rigid or flexible SS probes are available.

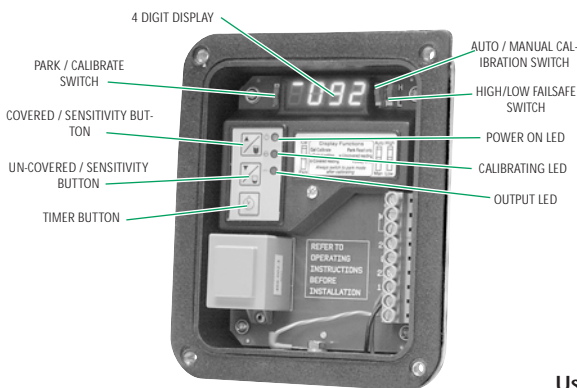
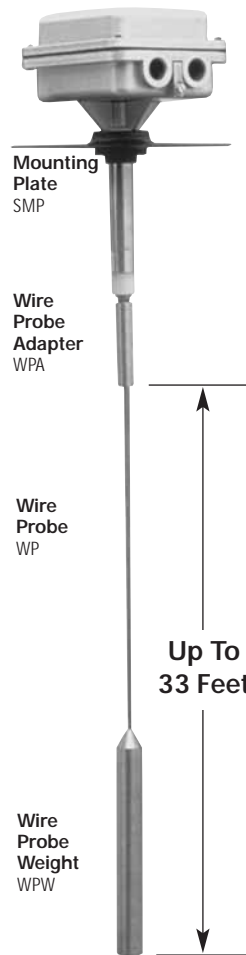
The Auto-Set MK7 incorporates simple push-button calibration with microprocessor enable/disable switch for total protection of stored values. Once the Auto-Set is calibrated for the application it never has to be re-calibrated. Data is stored in a non-volatile memory so that it is not affected.

A 4 digit LED display shows set values for uncovered, covered and trip settings, allowing simple set-up and adjustment.

The unit incorporates a unique Power Shield which automatically compensates for material build-up around the probe and on the sides of the container, preventing false indication.

A set of voltage-free relay, change-over contacts is actuated when the level of the material in the container reaches the probe.

The solid state electronics are housed in a weatherproof, flame retardant shielded, glass-reinforced, nylon enclosure. Identical units are used for both high- and low-level functions with the required fail-to-safe mode being selected by a switch.



\* For reliable operation power shield must protrude into the container. Use the special 12" or 16" extended power shield version for thick walled vessels.



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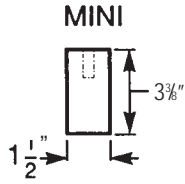
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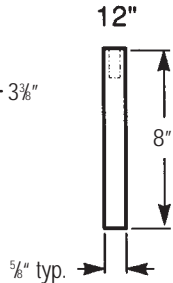


# Auto-Set Probe Chart

## Solid Stainless Steel Probes



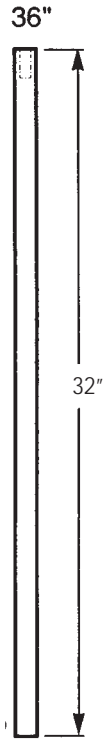
EX03



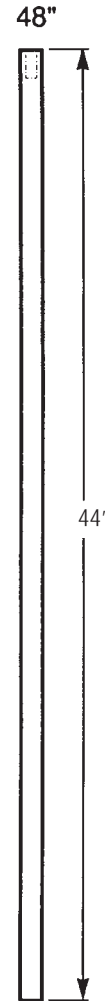
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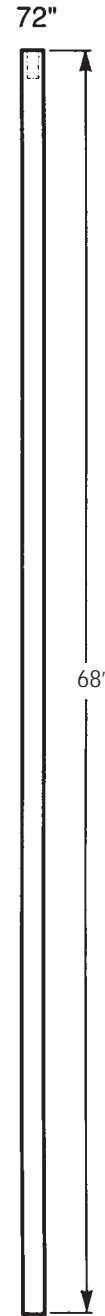
EX24



EX36

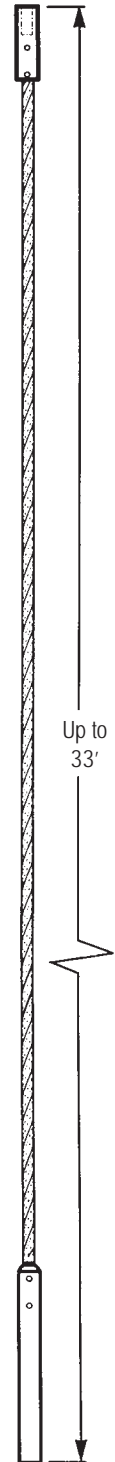


EX48



EX72

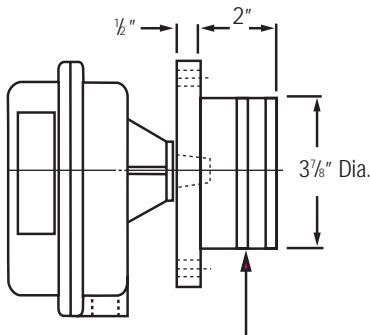
SS Wire  
Probe



- ▶ PTFE Coating Available
- ▶ Special Lengths Available To Order

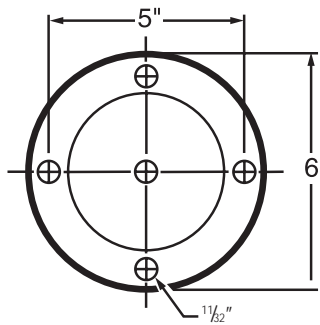


Remote Probe Package (see reverse side)



Flush Probe Assembly

\*Power Shield must project into container.



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# Auto-Set Remote

For high temperature or high vibration applications

For point level indication in applications with high temperature (up to 487°F / 250°C) or vibration considerations the Autoset Remote is a simple and reliable solution. The din rail mounted remote control unit connects to the remote transducer, which is installed in a suitable enclosure mounted close to the remote probe. For applications without any vibration and below 248°F/120°C the remote transducer can be mounted inside the head of the remote probe (see selection guide.) The calibration and set-up is simple with membrane push button controls on the control unit.

## Technical Specifications

### Remote Control Unit

|  |   |
|--|---|
| Supply:                                      | 115/230 volts AC 50/60 Hz or 24 volts DC  |
| Supply Tolerance:                            | -15% + 7.5%   |
| Ambient Temperature:                         | -20°F to + 160°F  |
| Load:  | 2.5VA   |
| Output:                                      | 1 set of voltage-free relay change-over contacts rated at 2.5 amps<br>240 volts AC resistive. |
| Protection:                                  | IP44  |
| Time Delay:                                  | 0-128 Seconds (material arriving and leaving)   |
| Max distance between Control unit and probe: | 650ft in 2 core shielded cable.   |

### Remote Probe

|  |   |
|--|---|
| Max Temperature:   | 487°F/250°C with PEEK Remote Probe<br>248°F/120°C with Polypropylene Remote Probe |
| Protection:  | IP65 - NEMA 4   |
| Material:  | PEEK & Stainless Steel or Polypropylene & Stainless Steel                         |
| Max Distance between Remote probe and remote Transducer: | 20"   |
| Mounting Thread:   | 1-1/4" NPT  |
| Approvals:   | CE  |

### Selection Guide

