

# PROCAP Capacitance Level Sensors



## Capacitance Level Sensors for Inventory Control

BinMaster's PROCAP capacitance probes are a versatile point level sensor used for level detection and alerts in bins, tanks, silos, and hoppers. They are used to sense high-, mid-, or low- levels in powders and solids as well as liquids. Thousands of custom configurations allow capacitance probes to be used across many industries such as plastics, chemicals, food and dairy, feed, grain, mining, aggregates, cement, and concrete.

# PROCAP Capacitance Probes



## USA-Made Quality

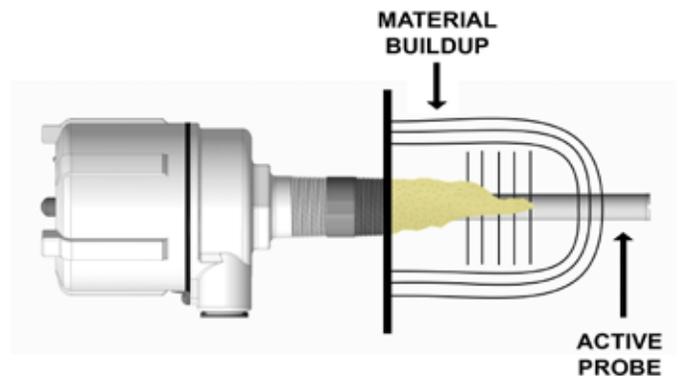
*BinMaster capacitance probes are designed with features that make them accurate and reliable, even under rigorous or harsh conditions.*

## Fail-Safe Operation

An LED light on top of the unit indicates the sensor status is covered, uncovered, or in a failed condition preventing process mishaps caused by a power failure.

## Pro-Shield

Pro-Shield protects against false readings due to buildup on the probe or bridging between the sidewall and the probe. This allows the probe to be used in dusty, sticky, or clingy materials.



## Quick-Set Calibration

Calibration of PROCAP sensors is simple and precise. Using two single-turn potentiometers allows for sensitivity setting even when no material is present.



## Time Delay

The time delay feature minimizes false signals from sudden material shifts or splashing liquids. Users simply set a time delay of up to 30 seconds before alerting to a signal change.

## Interference-Free

PROCAP probes are immune to RF signals, ensuring interference-free operation from electronic plant equipment or two-way radios.



# How PROCAP Works

*PROCAP capacitance probes measure the difference in the dielectric constant of the material versus the surrounding air allowing the sensor to detect the presence or absence of material. The probes are very responsive, sensing changes in capacitance as small as just one picofarad.*



## Built-to-Order

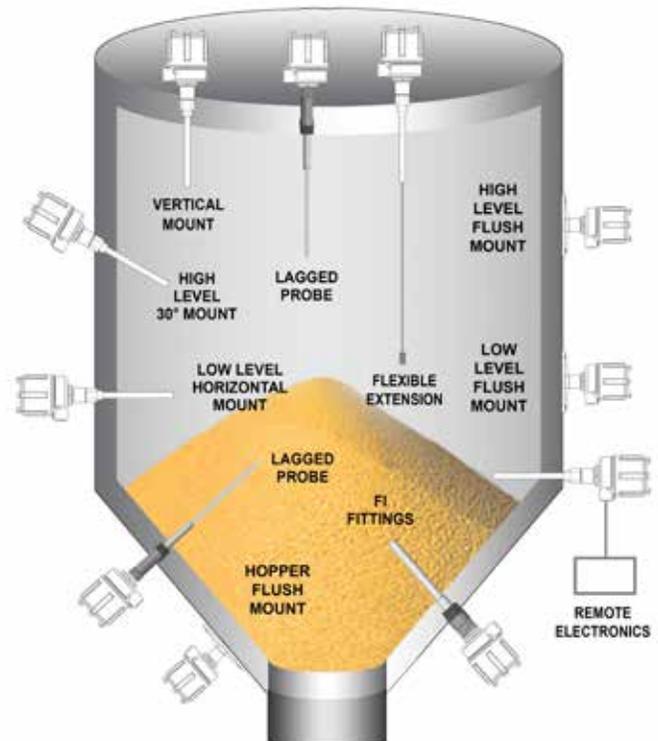
BinMaster builds each PROCAP probe to a customer's specification. Each sensor is specified a power pac, fitting, lag, probe, length, and mounting plate best for its material, vessel, and operating environment. Each sensor is made in just days in BinMaster's factory in Lincoln, Nebraska.

## Probe Selection

- Delrin Shielded, Extended Shielded, Unshielded
- 3A Delrin® Extended Shielded
- Teflon™ Shielded, Extended Shielded, Unshielded
- Bare Shielded or Unshielded
- Heavy Duty Stainless Steel
- Hanging Stainless Steel Cable
- Bendable
- Flush Mounted

## Many Mounting Options

BinMaster's PROCAP capacitance probes are mounted on the top, side, or cone of the vessel for high, mid, or low-level detection.



# Probes for Every Process

## STANDARD PROBES

The standard PROCAP I & II probes are offered with an expansive choice of Delrin, Teflon, stainless steel and bare probes ... all custom assembled to a customer's specification.



PROCAP I

## BENDABLE PROBES

A bendable probe can be used to avoid obstructions in a vessel and is a clever solution for use in smaller mixers or containers.



Bendable probe

## HAZARDOUS LOCATIONS

PROCAP IX & IIX Probes are designed for use in hazardous locations for Class I, Groups C & D and Class II, Groups E, F & G using either a standard or flush mounted sensing probe.



PROCAP IX

## HEAVY DUTY

Heavy duty HD probes feature a 1" solid stainless-steel probe for use in high temperatures up to 500°F and can be used in heavy or challenging materials such as coal, fly ash, or clinker.



PROCAP HD

## SANITARY APPLICATIONS

Food and pharmaceutical plants find PROCAP 3A sanitary probes with a thread-free mounting flange and clean-in-place, tri-clamp connection ideal for 3-A, USDA, or food grade use.



PROCAP 3A

## REMOTE ELECTRONICS

For hostile areas with high temperatures or vibration, remote electronics can be used to distance the electronics up to 75 feet from the sensing probe.



PRO REMOTE

# Probes for Every Process

## AUTOMATIC CALIBRATION

For fast installation, the PRO AUTO-CAL probes with automatic calibration set up in seconds using a magnet without opening the unit cover.



**PRO AUTO-CAL**

## FLUSH MOUNTED

Flush mounted PROCAP FL probes are non-intrusive and ideal for use on a vessel wall, conveyor housing, chute or tight spaces where material may damage a standard probe.



**PROCAP FL**

## FLEXIBLE EXTENSION

A flexible cable extension up to 35 feet long can be added to top-mounted probes for instances where material such as coal or aggregates may damage a rigid probe.



**Flexible Probe**

## COMPACT PROBES

COMPACT PRO probes are ideal for smaller vessels and tight spaces such as chutes, conveyors, pipes, or small hoppers.



**COMPACT PRO**



*All models of PROCAP capacitance probes are made in the USA and are simple to use, offer long-lasting durability, and are maintenance free.*

## PROCAP I & II

**PROCAP I Power:** 24 to 240 VAC or VDC  
Universal Power Supply  
**Ambient Temperature:** -20°F to +145°F  
(-28°C to +62°C)  
**PROCAP II Power:** 115/230 VAC,  
50/60 Hz, 2.2VA  
**Ambient Temperature:** -40°F to +158°F  
(-40°C to +70°C)  
**Output Relay:** DPDT 10 Amp at 250 VAC  
**Probe:** 250°F Delrin/Bare (121°C),  
500°F Teflon (260°C)  
**Pressure:** 500 psi, 3/4" mount  
**Sensitivity Setting:** Adjustable sensitivity  
to < 1 picofarad  
**Calibration:** "Quick Set", Coarse/fine  
single turn potentiometers  
**Fail-Safe:** Switch selectable high/low  
**Time Delay:** Dual delay covered/uncovered  
up to 30 seconds  
**Enclosure:** Die cast aluminum, threaded  
cover, FDA recognized powder coat finish  
**Conduit Entry:** 3/4" NPT  
**Mounting:** 1-1/4" NPT or 3/4" NPT 316 SS  
**PRO-Shield:** Compensates for material  
buildup on sensing probe  
**Approval Rating:**  listed for Class II,  
Groups E, F & G Hazardous Locations.  
Enclosure Type NEMA 4X, 5, 9 & 12.  
CE Mark.  
**Status Indicator:** Visual LED indicates  
sensor status: uncovered, covered, and  
power failure  
**Probe Options:** Delrin, Teflon, food grade,  
flush mount, flexible extension, stubby  
shielded, extended shielded, bare  
shielded, lagged



## PROCAP IX & IIX

**PROCAP IX Power:** 24 to 240 VAC or VDC  
Universal Power Supply  
**Ambient Temperature:** -20°F to +145°F  
(-28°C to +62°C)  
**PROCAP IIX Power:** 115/230 VAC  
50/60 Hz, 2.2VA  
**Ambient Temperature:** -40°F to +158°F  
(-40°C to +70°C)  
**Output Relay:** DPDT 10 Amp at 250 VAC  
**Probe:** 250°F Delrin/Bare (121°C), 500°F  
Teflon (260°C)  
**Pressure:** 500 psi, 3/4" mount  
**Sensitivity Setting:** Adjustable sensitivity  
to < 1 picofarad  
**Calibration:** "Quick Set" Coarse/fine single  
turn potentiometers  
**Fail-Safe:** Switch selectable high/low  
**Time Delay:** Dual delay covered/uncovered  
up to 30 seconds  
**Enclosure:** Die cast aluminum, threaded  
cover, FDA recognized powder coat  
finish  
**Conduit Entry:** 3/4" NPT  
**Mounting:** 1-1/4" NPT or 3/4" NPT 316 SS  
**PRO-Shield:** Compensates for material  
buildup on sensing probe  
**Approval Rating:**  listed for Class I,  
Groups C & D and Class II, Groups E, F  
& G, Hazardous Locations. Enclosure  
Type NEMA 4X, 5, 9 & 12. CE Mark.  
**Status Indicator:** Internal LED indicates  
material in contact with probe  
**Probe Options:** Delrin, Teflon, food grade,  
flush mount, stubby shielded, extended  
shielded, lagged



## PROCAP I 3-A & II 3-A

**PROCAP I Power:** 24 to 240 VAC or VDC  
Universal Power Supply  
**Ambient Temperature:** -20°F to +145°F  
(-28°C to +62°C)  
**PROCAP II Power:** 115/230 VAC  
50/60 Hz, 2.2VA  
**Ambient Temperature:** -40°F to +158°F  
(-40°C to +70°C)  
**Output Relay:** DPDT 10 Amp at 250 VAC  
**Probe:** 250°F Delrin (121°C)  
**Pressure:** 200 psi  
**Sensitivity Setting:** Adjustable sensitivity  
to < 1 picofarad  
**Calibration:** "Quick Set" Coarse/fine  
single turn potentiometers  
**Fail-Safe:** Switch selectable high/low  
**Time Delay:** Dual delay covered/uncovered  
up to 30 seconds  
**Enclosure:** Die cast aluminum, threaded  
cover, FDA recognized powder coat  
finish  
**Conduit Entry:** 3/4" NPT  
**Mounting:** 1" or 2" Sanitary 316 SS  
Fitting  
**PRO-Shield:** Compensates for material  
buildup on sensing probe  
**Approval Rating:**  listed for Class II,  
Groups E, F & G Hazardous Locations.  
Enclosure Type NEMA 4X, 5, 9  
& 12. CE Mark.  
**Status Indicator:** Visual LED indicates  
sensor status: uncovered, covered,  
and power failure  
**Probe Options:** All Delrin sleeved style  
probes



## PROCAP I-FL & II-FL

**PROCAP I Power:** 24 to 240 VAC or VDC  
Universal Power Supply  
**Ambient Temperature:** 20°F to +145°F  
(-28°C to +62°C)  
**PROCAP II Power:** 115/230 VAC,  
50/60 Hz, 2.2VA  
**Ambient Temperature:** -40°F to +158°F,  
(-40°C to +70°C)  
**Output Relay:** DPDT 10 Amp at 250 VAC  
**Probe:** 150°F Standard (65°C), 450°F  
High Temp (232°C)  
**Pressure:** 250 psi, flush mount  
**Sensitivity Setting:** Adjustable sensitivity  
to < 1 picofarad  
**Calibration:** "Quick Set" Coarse/fine  
single turn potentiometers  
**Fail-Safe:** Switch selectable high/low  
**Time Delay:** Dual delay covered/uncovered  
up to 30 seconds  
**Enclosure:** Die cast aluminum, threaded  
cover, FDA recognized powder coat  
finish  
**Conduit Entry:** 3/4" NPT  
**Mounting:** Flush Mount Non-Invasive  
**PRO-Shield:** Compensates for material  
buildup on sensing probe  
**Approval Rating:**  listed for Class II,  
Groups E, F & G Hazardous Locations.  
Enclosure Type NEMA 4X, 5, 9  
& 12. Units also available in Class I,  
Groups C & D.  Mark.  
**Status Indicator:** Visual LED indicates  
sensor status: uncovered, covered, and  
power failure  
**Probe Options:** Flush mounted probe;  
standard or high temp



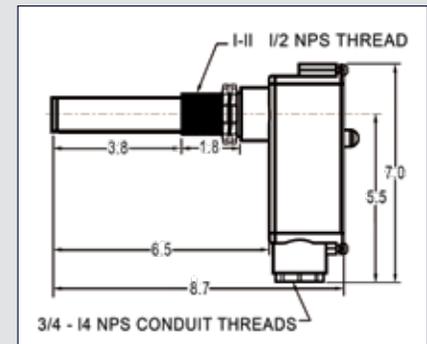
## PRO REMOTE

**Power Requirements:** 120/240 VAC,  
50/60 Hz  $\pm 15\%$ , 5VA  
**Ambient Temperature:** -40°F to + 185°F  
(-40°C to +85°C)  
**Output Relay:** DPDT 10 Amp at 250  
VAC status contacts: 3 Amps 240  
VAC  
**Probe:** 250°F Delrin/Bare (121°C), 500°F  
Teflon (260°C)  
**Pressure:** 500 psi, 3/4" mount  
**Sensitivity Setting:** Adjustable sensitiv-  
ity to < 1 picofarad  
**Calibration:** "Quick Set", Coarse/fine  
single turn potentiometers  
**Fail-Safe:** Switch selectable high/low  
**Time Delay:** Dual delay covered/  
uncovered up to 30 seconds  
**Enclosure:** Cast aluminum, bolt-on cover  
FDA recognized finish  
**Enclosure Electronics:** Plastic  
**Mounting:** 1-1/4" NPT or 3/4", NPT 316  
SS  
**PRO-Shield:** Compensates for material  
buildup on sensing probe  
**Approval Ratings Probe:**  Listed  
NEMA 4X, 5 & 12 Intrinsically Safe  
**Electronics:**  Listed Class II, Group  
E, F, & G, NEMA 4X, 5 and 12  
**Status Indicator:** Internal LED indicates  
material in contact with probe  
**Probe Options:** Delrin, Teflon,  
food grade, flush mount, flexible  
extension, stubby shielded, extended  
shielded, bare shielded, lagged



## COMPACT PRO

**Power Requirements:** 120 VAC, 230 VAC,  
or 24VDC  
**Ambient Temperature:** -40°F to 185°F  
(-40°C to 85°C)  
**Output Relay:** SPDT 5 amp at 250 VAC  
**Probe:** -40 to 240°F (-40 to 116°C)  
**Enclosure:** NEMA 4X, dust tight, water  
resistant  
**Sensitivity Setting:** Adjustable sensitivity  
to < 1 picofarad  
**Calibration:** Multi-turn potentiometer  
**Fail-Safe:** Switch selectable, high/low  
**Time Delay:** Adjustable 1 to 30 seconds  
**Enclosure:** PVC  
**Probe:** CPVC  
**Mounting:** 1" NPS (1-1/4" NPS adapter  
available)  
**LED:** Indicates material presence or  
absence



## Standard Shielded Delrin/ Teflon Sleeved Probe

The standard Delrin/Teflon sleeved probe is the most versatile all-purpose probe. It works reliably in bulk solids, powders, slurries, and liquids. It has a rugged 5/8" diameter 316 SS probe featuring "PRO-Shield" protection against false readings because of coating or buildup.

**Maximum Temp:** Delrin sleeved 250°F (121°C), Teflon sleeved 500°F (260°C)

**Maximum Pressure:** 50 psi (3.5 kg/cm<sup>2</sup>)  
1-1/4" NPT, 500 psi (35 kg/cm<sup>2</sup>), 3/4" NPT

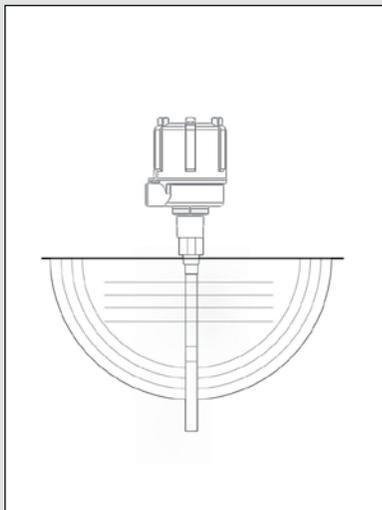
**Probe Material:** 5/8" diameter 316 SS  
Delrin/Teflon sleeved

**Lengths Available:** 10.63", 18", 24", 30", 36", 48", and custom order lengths

**Fitting Options:** 3/4" NPT, 1-1/4" NPT, 1" food grade, 1 1/2"/3 1/4" 150# Raised face flanges

**Power Pac Options:** PROCAP I & II, PROCAP IX & IIX, PRO Remote, PRO Auto-Cal

**Applications:** Point level detection and process control for solid, liquid and slurry materials. Used in bins, tanks, chutes, and spouts.



## Extended Shield Delrin/ Teflon Sleeved Probe

Designed with a 10" extended PRO-Shield, used when mounting the probe through a nozzle or standpipe. This probe has all the same features as the standard probe.

**Maximum Temp:** Delrin sleeved, 250°F (121°C), Teflon sleeved 500°F (260°C)

**Maximum Pressure:** 50 psi (3.5 kg/cm<sup>2</sup>), 1-1/4" NPT, 500 psi (35 kg/cm<sup>2</sup>), 3/4" NPT

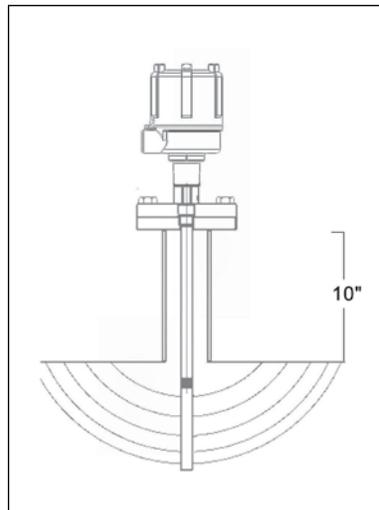
**Probe Material:** 5/8" diameter 316 SS,  
Delrin/Teflon sleeved

**Lengths Available:** 15", 18", 24", 30", 36", 48", and custom order lengths

**Fitting Options:** 3/4" NPT, 1-1/4" NPT, 1" food grade, 1 1/2"/3 1/4" 150# Raised face flanges

**Power Pac Options:** PROCAP I & II, PROCAP IX & IIX, PRO Remote, PRO Auto-Cal

**Applications:** Point level detection and process control for solid, liquid and slurry materials. Used when mounting probe in a nozzle or standpipe. Also can be used when excessive sidewall buildup may occur.



## Stubby Shielded Delrin/ Teflon Sleeved Probe

Designed with a 6.5" overall length while still providing the PRO-Shield protection. This probe is specially designed for low level applications where minimal projection is preferred due to restricted area or excessive weight that could damage a longer probe. This probe has all the same features as the standard probe.

**Maximum Temp:** Delrin sleeved, 250°F (121°C), Teflon sleeved 500°F (260°C)

**Maximum Pressure:** 50 psi (3.5 kg/cm<sup>2</sup>), 1-1/4" NPT, 500 psi (35 kg/cm<sup>2</sup>), 3/4" NPT

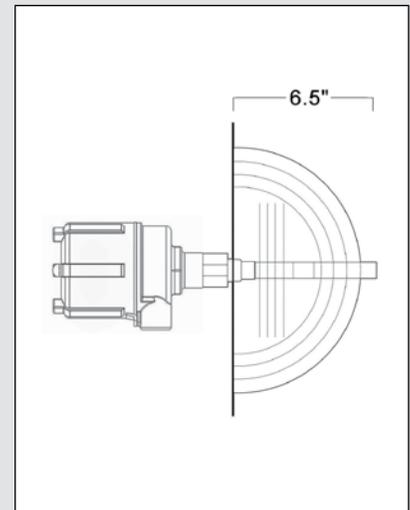
**Probe Material:** 5/8" diameter 316 SS,  
Delrin/Teflon sleeved

**Lengths Available:** 6.5"

**Fitting Options:** 3/4" NPT, 1-1/4" NPT, 1" food grade, 1 1/2"/3 1/4" 150#, Raised face flanges

**Power Pac Options:** PROCAP I & II, PROCAP IX & IIX, PRO Remotes, PRO Auto-Cal

**Applications:** Low level where material load on probe may cause damage or when working in a restricted area or small vessel.



## Shielded Delrin Sleeved Sanitary/3-A Probe

Sanitary probe meets 3-A and USDA standards, conforming to the food industry's most demanding requirements for material, surfaces, and clean-in-place construction. This probe is designed for quick disconnect from the tank to facilitate ease of inspection and cleaning.

**Maximum Temp:** 250°F (121°C)

**Maximum Pressure:** 200 psi (14 kg/cm<sup>2</sup>)

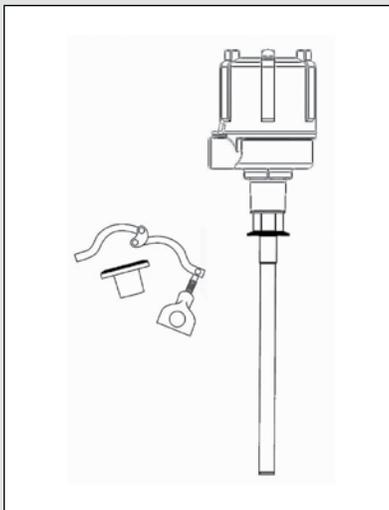
**Probe Material:** 5/8" diameter 316 SS, Delrin sleeved

**Lengths Available:** 4", 6.5", 10.63", 18", 24", 30", 36", 48", and custom order lengths

**Fitting Options:** 1" or 2" sanitary, 316 SS fitting for use with tri-clamp

**Power Pac Options:** PROCAP I 3-A & II 3-A

**Applications:** Point level detection and process control for solid, liquid and slurry materials. Built specifically for dairy, pharmaceutical, and food grade applications where 3-A/USDA sanitary standards apply. Used in bins, tanks, chutes, and spouts.



## Flush Mounted Shielded Probe

No probe intrusion, designed for space constrained areas or applications where material flow or bridging may damage standard probes. The probe mounts flush on a vessel wall, conveyor housing or chute. A special bin wall adapter is available when working with thick walls or angled hoppers to move the face of the probe flush or slightly protruding the inside of the vessel wall, eliminating false signals due to excessive buildup on the probe surface.

**Maximum Temp:** 150°F (65°C), standard probe, 450°F (232°C), High temp probe

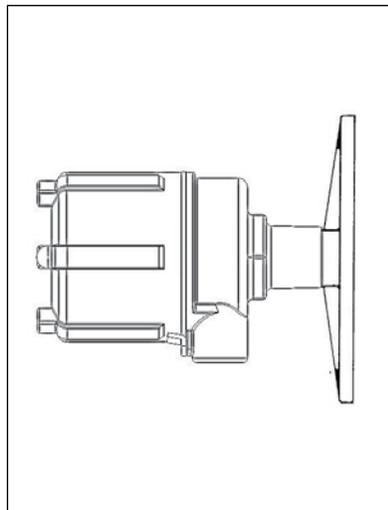
**Maximum Pressure:** 250 psi (17 kg/cm<sup>2</sup>)

**Standard Probe Material:** Polyethylene, High Temp, Teflon

**Fitting Options:** 5.75" hole mounted on 7.00" bolt circle 8.50" hole mounted on 9.50" bolt circle when using bin wall adapter

**Power Pac Options:** PROCAP I & II, PROCAP IX & IIX, PRO Remote, PRO Auto-Cal

**Applications:** Detects presence of material or level of materials that may bend or break probes when material shifts. Works well in coal, aggregates, gravel, or other heavy and/or chunky materials.



## Bare Shielded OEM Probe

This is a bare shielded probe whose length can be modified in the field. It can be cut back to 7 inches or extended up to 8 feet. It has a rugged solid 5/8" diameter 316 SS probe featuring "PRO-Shield" protection against false readings because of coating or buildup.

**Maximum Temp:** 250°F (121°C)

**Maximum Pressure:** 50 psi (3.5 kg/cm<sup>2</sup>), 1-1/4" NPT, 500 psi (35 kg/cm<sup>2</sup>), 3/4" NPT

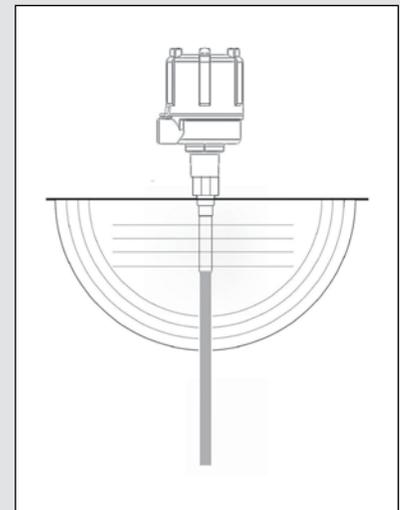
**Probe Material:** Standard probe 5/8", diameter 316 SS/Bare with Delrin insulator

**Lengths Available:** 7 inches to 8 feet

**Fitting Options:** 3/4" NPT, 1-1/4" NPT, 1" food grade, 1 1/2"/3/4" 150#, Raised face flanges

**Power Pac Options:** PROCAP I & II, PRO Remote, PRO Auto-Cal

**Applications:** Point level detection and process control for powders and dry bulk solid material that may have a tendency to build up and coat the probe. Used in bins, tanks, chutes, and spouts.



## Shielded Teflon Sleeved 316 SS Hanging Flexible Cable Extension

The Teflon sleeved flexible cable extension was designed for high, mid, or low level when it is necessary to top mount. The flexible extension is also used in aggregates, coal or other lump materials that might damage a rigid probe or in materials that are not compatible with stainless steel. Maximum length of the cable and weighted probe end is 25 feet. The cable can be cut to length in the field.

**Maximum Temp:** 500°F (260°C)

**Maximum Pressure:** 50 psi (3.5 kg/cm<sup>2</sup>), 1-1/4" NPT, 500 psi (35 kg/cm<sup>2</sup>), 3/4" NPT

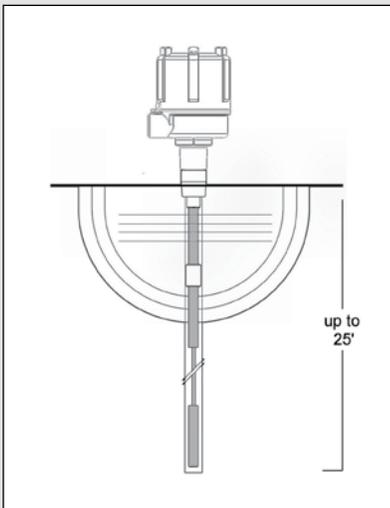
**Probe Material:** 316 stainless steel, 1/4" diameter cable with Teflon sleeve and insulator

**Lengths Available:** 16 inches to 25 feet

**Fitting Options:** 3/4" NPT, 1-1/4" NPT, 1" food grade, 1 1/2"/3/4" 150#, Raised face flanges

**Power Pac Options:** PROCAP I & II, PROCAP IX & IIX, PRO Remote, PRO Auto-Cal

**Applications:** Point level detection and process control for various solid, liquid and slurry applications when top-mounting. This Teflon sleeved probe should be used in applications where conductive material may leave residue on the probe (most liquids for instance). Note: Any conductive residue which builds up from the vessel wall to the active portion of any unsleeved bare probe will short out the two conductors.



## Shielded Bare 316 SS Hanging Flexible Extension

The flexible cable extension was designed for high, mid, or low level when it is necessary to top mount. The flexible extension is also used in aggregates, coal or other lump materials that might damage a rigid probe. This flexible cable extension probe features "PRO-Shield" protection against false readings because of coating or buildup. The shielded probe also allows you to mount the probe in a standoff pipe or nozzle. Maximum length of the cable and weighted probe end is 35 feet. The cable can be cut to length in the field.

**Maximum Temp:** 250°F (121°C), Standard probe

**Maximum Pressure:** 50 psi (3.5 kg/cm<sup>2</sup>), 1-1/4" NPT, 500 psi (35 kg/cm<sup>2</sup>), 3/4" NPT

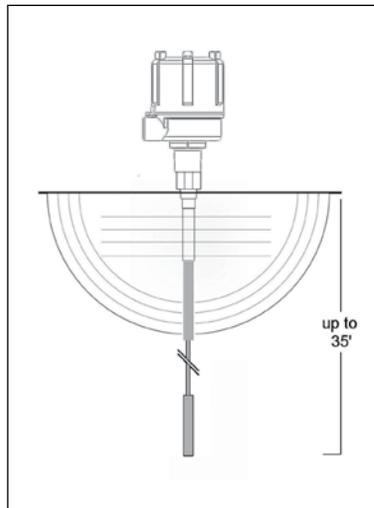
**Probe Material:** 316 stainless steel, 1/4" diameter cable with Delrin insulator

**Lengths Available:** 16 inches to 35 feet

**Fitting Options:** 3/4" NPT, 1-1/4" NPT, 1" food grade, 1 1/2"/3/4" 150#, Raised face flanges

**Power Pac Options:** PROCAP I & II, PRO Remote, PRO Auto-Cal

**Applications:** Point level detection and process control for various solid, liquid and slurry applications when top mounting.



## Unshielded Bare 316 SS Hanging Flexible Cable Extension

The flexible cable extension was designed for high, mid or low level detection when it is necessary to top mount. The flexible extension is also used in aggregates, coal or other lump materials that might damage a rigid probe. Maximum length of the cable and weighted probe end is 35 feet. The cable can be cut to length in the field.

**Maximum Temp:** 250°F (121°C), Standard probe, 500°F (260°C), High temp probe

**Maximum Pressure:** 50 psi (3.5 kg/cm<sup>2</sup>), 1-1/4" NPT, 500 psi (35 kg/cm<sup>2</sup>), 3/4" NPT

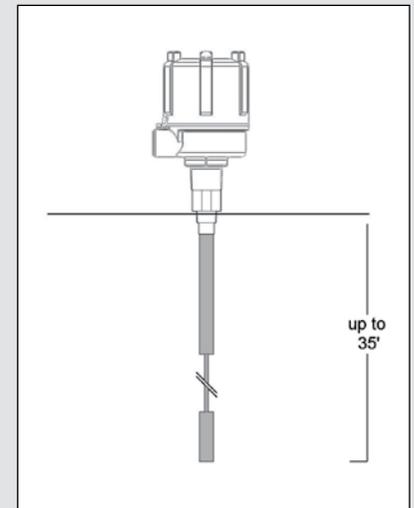
**Probe Material:** Standard probe, 316 stainless steel, 1/4" diameter cable with Delrin insulator, High temp probe, 316 stainless steel 1/4" diameter cable with Teflon insulator

**Lengths Available:** 16 inches to 35 feet

**Fitting Options:** 3/4" NPT, 1-1/4" NPT, 1" food grade, 1 1/2"/3/4" 150#, Raised face flanges

**Power Pac Options:** PROCAP I & II, PRO Remote, PRO Auto-Cal

**Applications:** Point level detection and process control for various solid, liquid and slurry applications when top mounting.



## Unshielded Delrin/Teflon Sleeved Probe

The unshielded fully insulated Delrin/Teflon sleeved probe was designed to be a lower cost, yet versatile probe. This all-purpose probe works reliably in bulk solids, powders, slurries, and liquids. It has a rugged, solid 5/8" diameter 316 SS probe.

**Maximum Temp:** Delrin sleeved, 250°F (121°C), Teflon sleeved 500°F (260°C)

**Maximum Pressure:** 50 psi (3.5 kg/cm<sup>2</sup>), 1-1/4" NPT, 500 psi (35 kg/cm<sup>2</sup>), 3/4" NPT

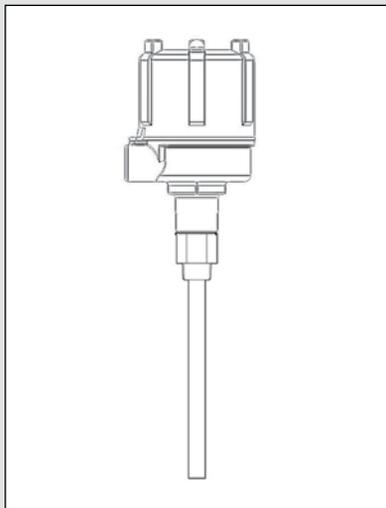
**Probe Material:** 5/8" diameter 316 SS, Delrin or Teflon sleeved

**Lengths Available:** 10.63", 18", 24", 30", 36", 48", and custom

**Fitting Options:** 3/4" NPT, 1-1/4" NPT, 1" food grade, 1 1/2"/3/4" 150#, Raised face flanges

**Power Pac Options:** PROCAP I & II, PROCAP IX & IIX, PRO Remote, PRO Auto-Cal

**Applications:** Point level detection and process control for solid, liquid and slurry materials. When working with powders and bulk solids, this probe works best if top mounted or side mounted in vessels with free-flowing material where excessive sidewall buildup is not present. Used in bins, tanks, chutes, and spouts.



## Stubby Unshielded Delrin/Teflon Sleeved Probe

The stubby unshielded probe is designed for minimal insertion into pipes, small hoppers, and in vessels where excessive buildup is not present. Also designed for low level applications where minimal insertion is preferred due to restricted areas or excessive weight that could damage a longer probe.

**Maximum Temp:** Delrin sleeved, 250°F (121°C), Teflon sleeved 500°F (260°C)

**Maximum Pressure:** 50 psi (3.5 kg/cm<sup>2</sup>), 1-1/4" NPT, 500 psi (35 kg/cm<sup>2</sup>), 3/4" NPT

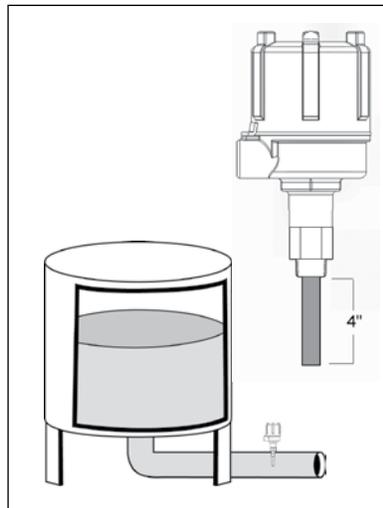
**Probe Material:** 5/8" diameter 316 SS, Delrin or Teflon sleeved

**Lengths Available:** 4"

**Fitting Options:** 3/4" NPT, 1-1/4" NPT, 1" food grade, 1 1/2"/3/4" 150#, Raised face flanges

**Power Pac Options:** PROCAP I & II, PRO Remote, PRO Auto-Cal

**Applications:** Designed for minimal insertion into pipes, small hoppers, vessels, or other restricted areas.



## Unshielded Bare Stainless Steel Probe

An unshielded probe whose length can be modified in the field. It can be cut back to 3 inches or extended to 8 feet. The probe will work reliably in a variety of powders and dry bulk solid materials.

**Maximum Temp:** 250°F (121°C), Standard probe, 500°F (260°C), High temp probe

**Maximum Pressure:** 50 psi (3.5 kg/cm<sup>2</sup>), 1-1/4" NPT, 500 psi (35 kg/cm<sup>2</sup>), 3/4" NPT

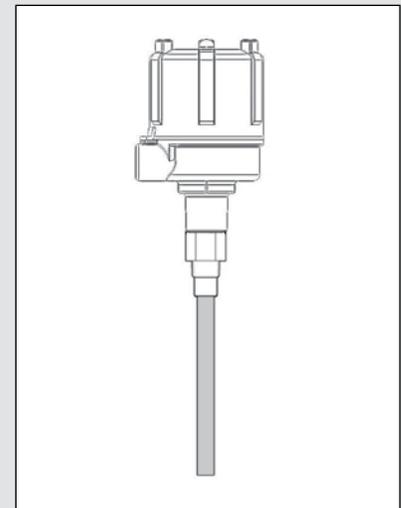
**Probe Material:** Standard probe, 5/8" diameter, 316 SS/bare with Delrin insulator, High temp probe, 5/8" diameter 316 SS/bare with Teflon insulator

**Lengths Available:** 3", 4", 6", 10.19", 18", 24", 30", 36", 48", 72", 96", and custom

**Fitting Options:** 3/4" NPT, 1-1/4" NPT, 1" food grade, 1 1/2"/3/4" 150#, Raised face flanges

**Power Pac Options:** PROCAP I & II, PRO Remote, PRO Auto-Cal

**Applications:** Point level detection and process control for powder and dry bulk solids. This probe works best when top mounted or side mounted in vessels with free-flowing dry material where excessive sidewall buildup is not present. Used in bins, tanks, chutes, and spouts.



## Shielded Bare Stainless Steel/ Ceramic High Temperature Probe

The high temperature PRO Remote capacitance probe is a heavy duty probe designed for applications that exceed 500°F (260°C). A stainless steel probe with ceramic inserts protects the probe from heat; remote electronics can be located up to 20 feet from the probe.

**Maximum Temp:** 1000°F (538°C)

**Maximum Pressure:** 100 psi (3.5 kg/cm<sup>2</sup>)

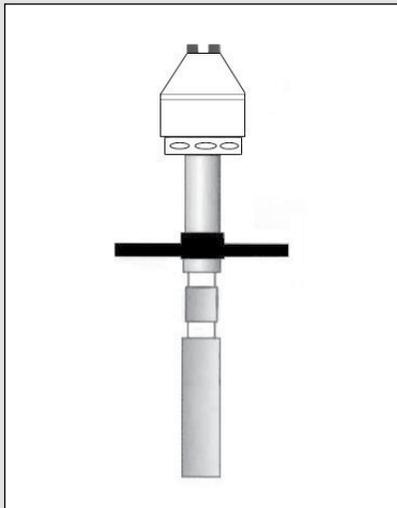
**Probe Material:** 1-1/8" diameter  
316 SS with ceramic inserts

**Lengths Available:** 9" (230 mm)

**Fitting Options:** 1-1/4" NPT

**Power Pac Options:** Remote electronics only

**Applications:** Point level detection and process control for solid, liquid and slurry materials. Used in bins, tanks, chutes, and spouts.



## FI Fitting

The PROCAP FI stainless steel fitting is used to extend the probe 3-5/8" beyond the vessel wall to get past excessive buildup or through a thick wall. It can also be used to lag the electronics away from a heat source or clear external insulation. The extended lag fitting works with bare and Delrin sleeved probes.

**Maximum Temp:** Delrin sleeved/Bare, 250°F (121°C)

**Maximum Pressure:** 50 psi (3.5 kg/cm<sup>2</sup>),  
1-1/4" NPT, 500 psi (35 kg/cm<sup>2</sup>), 3/4" NPT

**Fitting Material:** 316 SS

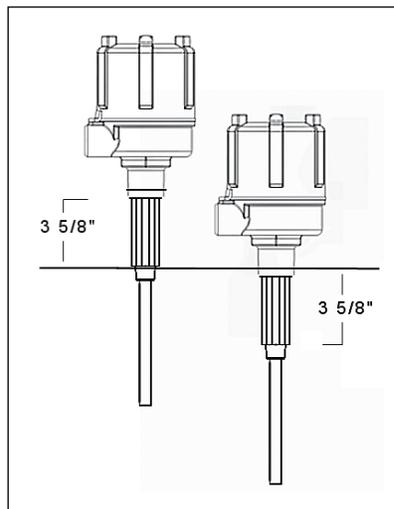
**Lengths Available:** 3-5/8"

**Fitting Options:** 3/4" NPT to lag out,  
1-1/4" NPT to lag in

**Probe Options:** All Delrin sleeved,  
bare, and flexible probes

**Power Pac Options:** PROCAP I & II,  
PRO Remote, PRO Auto-Cal

**Applications:** Point level detection and process control for solid, liquid and slurry materials. Used in bins, tanks, chutes, and spouts.



## Stainless Steel or Galvanized Lag

The lagged probe fitting is used to extend the probe up to 2 feet through thick vessel walls or double-walled hoppers and bins. It can be used to lag the electronics away from a heat source or to clear external insulation. Available in stainless steel or galvanized pipe.

**Maximum Temp:** Delrin sleeved, 250°F (121°C), Teflon sleeved, 500°F (260°C)

**Maximum Pressure:** 50 psi (3.5 kg/cm<sup>2</sup>),  
1-1/4" NPT, 500 psi (35 kg/cm<sup>2</sup>), 3/4" NPT

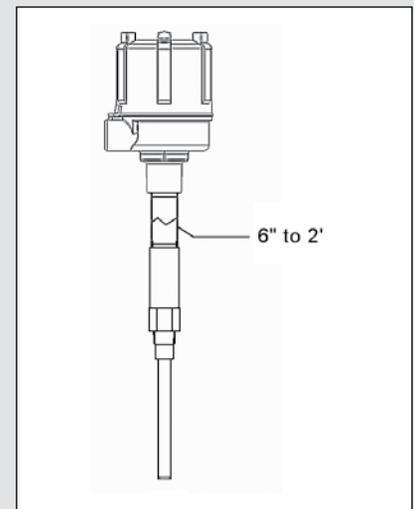
**Lengths Available:** 6" to 24"

**Fitting Options:** 3/4" NPT to lag out,  
1-1/4" NPT to lag in

**Probe Options:** All Delrin sleeved,  
bare, and flexible probes

**Power Pac Options:** PROCAP I & II,  
PRO Remote, PRO Auto-Cal

**Applications:** Point level detection and process control for solid, liquid and slurry materials. Used in bins, tanks, chutes, and spouts.



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