

# Techtrol RF Capacitance Level Switch - RFC

Consists of a Sensing Probe with Electronic Control unit Integral with the Probe. The sensing probe comprises of 3 elements viz. Sensing rod, SS Coatguard Shield and PTFE Insulation for powders & slurries and Ceramic Insulation for heavy duty applications. The combination of electronics and coat guard technique provides immunity against material built-up on the probe & container wall.

## Salient Features :

- High reliability, as coat guard technique ignores material built-up on the probe.
- Ease to calibrate & install
- Suits highly dusty environment.
- Field selectable operation logic to configure either High or Low level switching.
- Economic solution for critical applications.

## Specifications :

### Sensing Probe:

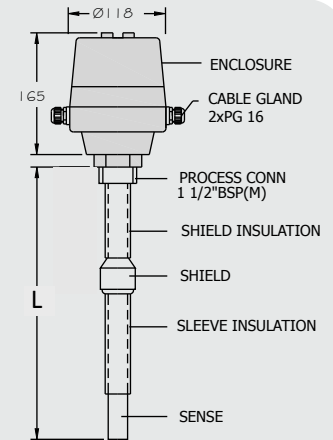
Probe Type	: Standard or Heavy Duty
Std. Probe Length	: 300 mm (Standard), 350 mm (Heavy Duty)
Max Probe Length	: upto 1000 mm (Rigid), upto 3000 mm (Flexible)
Sense Rod	: SS304
Coat Guard Shield	: SS304
Extnd Grounding	: GI or SS304
Insulation	: a) PTFE -150°C (std), 200°C (High temp with standoff) b) Ceramic -150°C (std), ≥200°C (High temp with standoff)
Max. Optg. Temp	: upto 150°C (Std/heavy duty probe) upto 200°C Temp Standoff (Std/heavy duty probe) upto 450°C Temp Standoff (Heavy duty, Two Part) upto 600°C with Radiating Fins (Heavy duty, Two Part)
Mounting	: Top/ Side
Process Connection	: Screwed- 1 1/2" BSP(M), Flanged- 1 1/2" NB ANSI 150#
Enclosure	: Cast Al IP66 x PG16 Cable Gland (Polyamide) or Cast Al Exd Gr. IIB x 1/2" NPT Cable Gland (Brass)

### Control Unit :

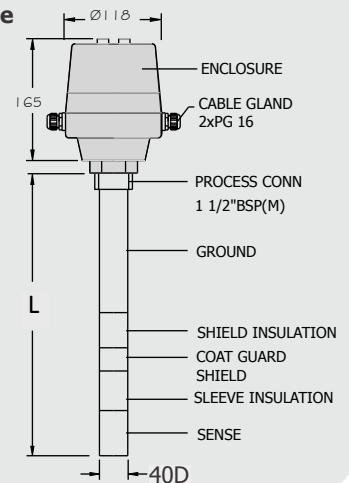
Enclosure x Cable Entry	: 1) Cast Al IP66 (Integral or Two Part Sys) x 2 nos, PG 16 Cable Gland (Polyamide) : 2) Cast Al. Exd IIB (Two Part Sys) x 2 nos, 1/2" NPT Cable Gland (Brass)
Ambient Temp.	: 0°C to 60°C
Supply	: 110 or 230 VAC, 50 Hz (±10%) or 24 VDC
Power	: 2 VA
Output	: Relay (2 x SPDT), 5A, 250VAC (Resistive Load)
Switching Delay (optional)	: Continuously adjustable from 2 to 20 secs probe free and covered
Safety Operation	: Field selectable switch (FSL/FSH) for min or max switching
LED Display	: Green- Normal; Red- Alarm; Yellow- Power On
Signal Cable	: 2 core, PVC insulated, low capacitance, co-axial cable with additional drain wire.



**Standard Probe with Integral Switching Unit**



**Heavy Duty Probe with Integral Switching Unit**



## Applications :

Cement, Sand, Lime, Soda Ash, Fly Ash, Coal Powder, Talcum Powder, Milk/ Chocolate Powder, Coffee, Sugar, Salt, Resin Powder & Pellets, Grain & Grain Slurry, Grain Flour, Paddy Husk, Corn Stalk, Molasses, Fruit Pulp, Tomato Paste, Butter, Fish Food, Sludge, Chemical/ Solvent Slurry, Molten Naptha, Sewage, Cream/Lotion, Alumium Chips, Clinker.

## Model Identification :

	RFC -							x L mm
<b>System</b>								
Integral (Standalone)	I							
Two Part	T							
<b>Probe type</b>								
SS304 Rigid standard		1						
SS304 Rigid heavy duty		2						
GI Flexible standard		3						
GI Flexible heavy duty		4						
SS304 Flexible standard		5						
SS304 Flexible heavy duty		6						
Others		0						
<b>Probe Enclosure x Control Unit Enclosure</b>								
Cast Al IP66 (Syt I)			1					
Cast Al IP66 x Cast Al IP66 (Syt T)			2					
Cast Al Exd Gr IIB x Cast Al IP66 (Syt T)			3					
Others			0					
<b>Process Connection</b>								
SS304 Screwed 1-1/2" BSP (M)				1				
SS304 Flanged 1-1/2" NB, ANSI 150#				2				
Others				0				
				0				
<b>Extended Grounding</b>								
Without						W		
GI						G		
SS304						N		
<b>Max. Operating Temperature</b>								
upto 150°C Standard							R	
upto 200 °C with Temp Standoff							T	
upto 450 °C with Temp Standoff (Two Part & Rigid Heavy Duty Probe)							H	
upto 600 °C with Radiating Fins (Two Part & Rigid Heavy Duty Probe)							V	
<b>Supply</b>								
110 VAC								1
230 VAC								2
24 VDC								3

**Ordering Information :** Model No, Operating Temperature, Service Medium x Bulk Density x Insertion Length

All dimensions in mm except specified

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Custom built specs./options available on demand.

We reserve the right to modify design and specifications without prior notice.



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