

# Compact, accurate, economical

Inverse frequency shift capacitance level switch



## Pointek CLS100

Answers for industry.

**SIEMENS**



## Pointek® CLS100

Pointek CLS100 is a compact 2-wire inverse frequency shift capacitance switch for level detection in constricted spaces, interfaces, solids, liquids, slurries, and foam. It is precise, economical, reliable, and easy to install. It is ideal for high-low level alarm, and for small vessels and pipes.

Inverse Frequency Technology and the use of an Advanced Sensitive-Tip ensure high accuracy, resolution and repeatable switch point, while tank walls, variations in product quality, vapour and dust have a negligible effect.

The fully synthetic Pointek CLS100 offers reliable level detection at a low cost. The compact design makes it ideal for small process vessels. It is virtually maintenance free.

- Compact design and short insertion-length. Ideal for constricted spaces and for small vessels or pipes up to 100 mm (4")
- Inverse frequency capacitance technology results in higher accuracy and resolution
- Advanced Sensitive-Tip technology for accurate and repeatable switch point
- Tank walls, variations in product quality, vapor and dust have a negligible effect on the readings
- Choice of PPS or PVDF probes, and PPS or stainless steel process connections
- The optional SensGuard cover protects from shearing, impact, and abrasion in tough primary processes

Pointek CLS100	Stainless steel process connection (integral cable and enclosure version)	Synthetic process connection (fully synthetic enclosure version only)
----------------	---	---

### Power

	<ul style="list-style-type: none"> <li>• General purpose and/or dust ignition proof: 12 to 33 V DC</li> <li>• Intrinsically Safe*: 10 to 30 V DC</li> </ul>	<ul style="list-style-type: none"> <li>• General purpose and/or dust ignition proof: 12 to 33 V DC</li> </ul>
--	---	---

### Performance

Measurement range	Up to 100 mm (4")
Measured value	High and low

### Output

Alarm output	4 or 20/20 or 4 mA 2-wire loop	
Transistor output	<ul style="list-style-type: none"> <li>• Solid-state: 30 V DC/30 V AC (peak), max. 82 mA, max. 2 VA</li> <li>• Intrinsically safe model: 30 V DC</li> </ul>	
Relay output		Max. switching voltage: 60 V DC/30 V AC Max. switching current: 1 A

### Mechanical

Enclosure	<ul style="list-style-type: none"> <li>• Cable version: 316 stainless steel (1.4401)</li> <li>• Enclosure version: PBT (or 316 stainless steel), transparent-thermoplastic polyester lid</li> </ul>	PBT, transparent thermoplastic polyester lid
Process connection	316 stainless steel (1.4401)	Process connection and sensor: PPS (Uni-construction)
Process seal	FKM (optional FFKM)	FKM
Sensor	PPS (optional PVDF)	PPS

### Process conditions

Ambient temperature	-30 to 85 °C (-22 to 185 °F)	-10 to 85 °C (14 to 185 °F)
Process temperature	-30 to 100 °C (-22 to 212 °F)	-10 to 100 °C (14 to 212 °F)
Pressure	-1 to 10 bar g (-14.6 to 146 psi g), nominal**	
Dielectric constant $\epsilon_r$	Min. 1.5	

### Approvals

	CE, CSA, FM, ATEX, WHG/VbF overfill protection (Germany), PED 97/23/EC, Lloyd's Register of Shipping, categories ENV1, ENV2, and ENV5, C-TICK (Australia)
--	---

\*Intrinsically Safe barrier required. \*\* Operational pressure is temperature dependent.  
 Pointek is a registered trademark of Siemens Milltronics Process Instruments Inc.  
 Specifications are subject to change without notice.  
 © Siemens Milltronics Process Instruments Inc. 2008.