

# Rosemount Solids Level Switches

For bulk solids point level measurement



Rosemount™ Solids Level Switches are the latest addition to Emerson's innovative bulk solids measurement portfolio, providing safe, reliable point level detection and control in all silo types.

## Robust, reliable and flexible technology



- Rosemount solids level switches feature time-proven and trusted technologies
- Suitable for operation in the most challenging of environments, including high temperatures, pressure, and dust
- Rotatable housings and wide range of process connections for top down, side or oblique mounting
- Technology is largely maintenance free, leaving your time free for other tasks

## Prevent downtime, increase safety, and reduce waste

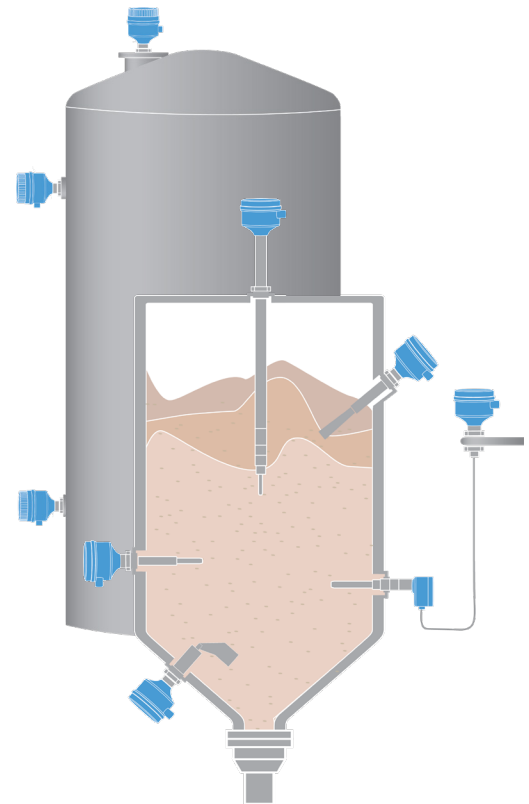


- Suitable for standalone point level measurement or for installation with continuous level instrumentation
- Add redundancy and keep your process running without problems
- Cost-effective overflow and spillage prevention solutions
- Prevent costly, time-consuming clean-ups

## Optimize filling and emptying cycles



- A simple, easy to install, effective way to make your operations more efficient
- Automate processes such as filling, stop/start, and demand
- Keep your process running and add alarms to alert personnel to emerging situations



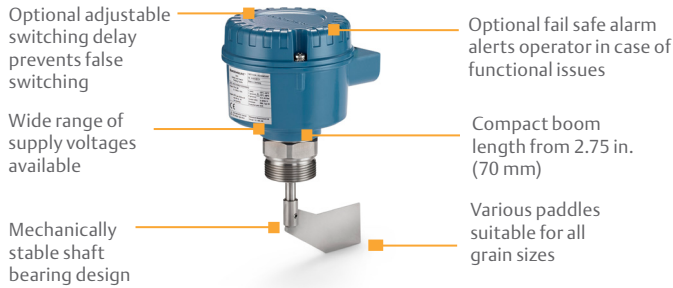
“  
Research indicates that nearly  
**80 percent** of production  
downtime is preventable.”

**Ian Nimmo, Founder of the Abnormal  
Situation Management Consortium**

# Rosemount Solids Level Switch Portfolio

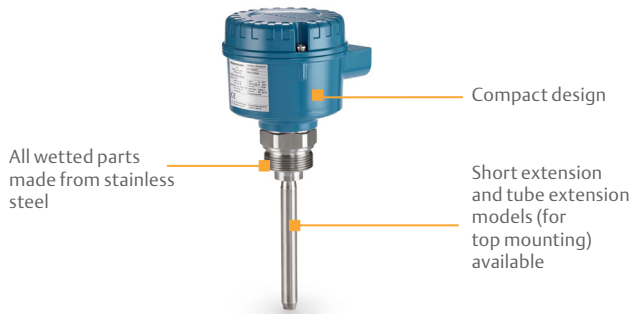
Rosemount solids level switches provide flexible measurement of powders, grains, and pellets. Their compact size makes them suitable for installation in all sizes of vessels and silos. Four different technologies are available, so you can find the right solution for your process.

## Rosemount 2501 Solids Level Switch - Rotating Paddle



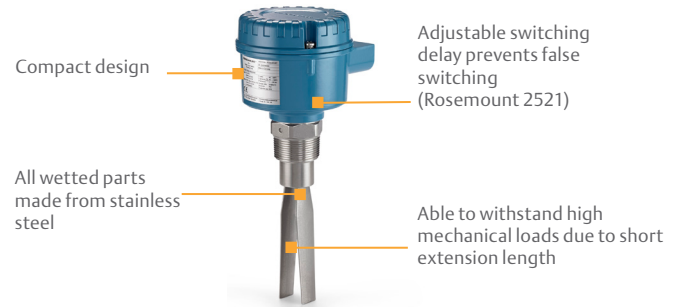
- Flexible technology suitable for measurement of most bulk materials
- Robust paddle withstands heavy loads and extreme temperatures
- Unaffected by dust, electrostatic charging and caking

## Rosemount 2535 Solids Level Switch - Vibrating Rod



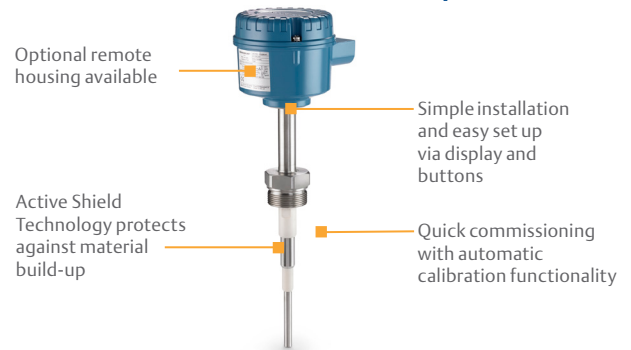
- Plug and play technology
- Full, demand and empty detection of fine-grained and powdered materials
- Unaffected by particle size; reliable and maintenance free

## Rosemount 2511/2521 Solids Level Switches - Vibrating Fork



- Plug and play devices suitable for many bulk material types
- Adjustable sensitivity: select Rosemount 2521 for the lightest materials
- Select Rosemount 2521 where there is mechanical vibration in the process

## Rosemount 2555 Solids Level Switch - Capacitance



- Suitable for most bulk materials in all applications
- Measurement of low dielectric values (from 1.5)
- Suitable for use in high temperature and pressure applications
- Model suitable for hygienic applications is available

Specification		Paddle 2501	Fork 2511	Fork 2521	Rod 2535	Capacitance 2555
Material properties	Granulate/powder	•	•	•	•	•
	Prone to caking	•				•
	Abrasive material	•	•	•	•	•
Process conditions	Sensitivity (bulk density/dielectric constant)	≥ 15 g/l	30 g/l or 150 g/l	>5 g/l, 20 g/l, 50 g/l <5 g/l (optional)	≥ 20 g/l	DK value ≥1.5
	Process temperature	-40 to 1100 °C -40 to 2012 °F	-40 to 150 °C -40 to 302 °F	-40 to 150 °C -40 to 302 °F	-40 to 150 °C -40 to 302 °F	-40 to 500 °C -40 to 932 °F
	Process pressure	10 bar	16 bar	16 bar	16 bar	25 bar
	High mechanical load	•	•	•	•	•
	High humidity	•	•	•	•	•
	High vibration in process	•	•	•	•	•
			•	•	•	•
Specification	Housing (powder coated)	Aluminum IP66	Aluminum IP67	Aluminum IP66	Aluminum IP67	Aluminum IP67
	Material of construction	Aluminum or stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel, PPS or ceramic
	Output	Relay	Relay, 3-wire PNP	Relay, 3-wire PNP, Direct Load, NAMUR	Relay, 3-wire PNP	Relay
	Certs and approvals	CE, ATEX/IECex, FM/CSA	CE, ATEX/IECex, FM/CSA	CE, ATEX/IECex, FM/CSA	CE, ATEX/IECex, FM, FMc	CE, ATEX/IECex, FM, FMc, EHEDG

KEY: • Very good • Application dependent