

SMARTLEVEL Sensors

SMARTLEVEL



Capacitive Level Detection Sensors

Capacitive sensors are used for level indication of a wide variety of materials ranging from dry bulk materials, such as powders and granulate, to liquid compositions. Liquids impose a special difficulty for level sensors in general, since some of them tend to foam, whereas others are adhesive or tend to create extensive amounts of material build-up on the sensors or the container walls.

SmartLevel™ Technology

Balluff SmartLevel™ capacitive sensors provide accurate level detection in demanding applications where extensive foaming, filming, and

material build-up are present. Their groundbreaking sensing technology allows SmartLevel™ sensors to reliably distinguish between true liquid level and foam, film, or build-up which would cause conventional capacitive sensors to false trigger.

SmartLevel™ sensors are only suitable for water-based liquids or other highly conductive liquids. They automatically tune out plastic or other non-conductive wall materials without teach-in procedures or other user interaction, dramatically reducing assembly time and simplifying setup routines.

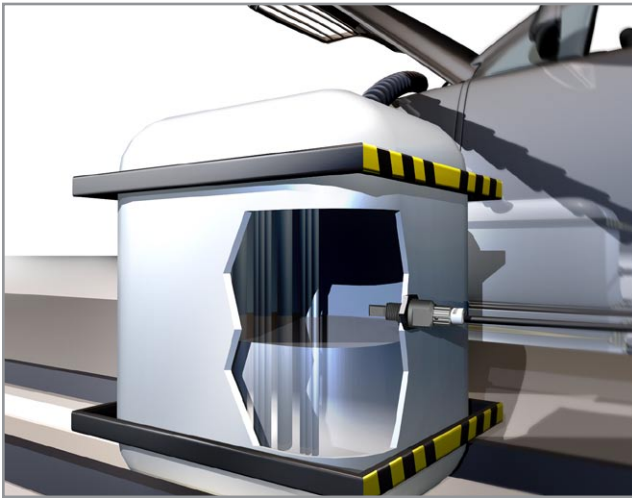
SmartLevel™ sensors are available in a wide range of housing shapes and materials – including M18 and M30 in PVC or PBT housings. The cPTFE line offers complete PTFE housing and cable in M18, M30 and Ø50, which are suitable for the harshest chemical environments.

Solves more level detection applications

- Compensates for film, foam, and material build-up
- Senses liquids through glass or plastic walls up to 12mm thick
- Detects aqueous and highly conductive liquids

Reduces costs

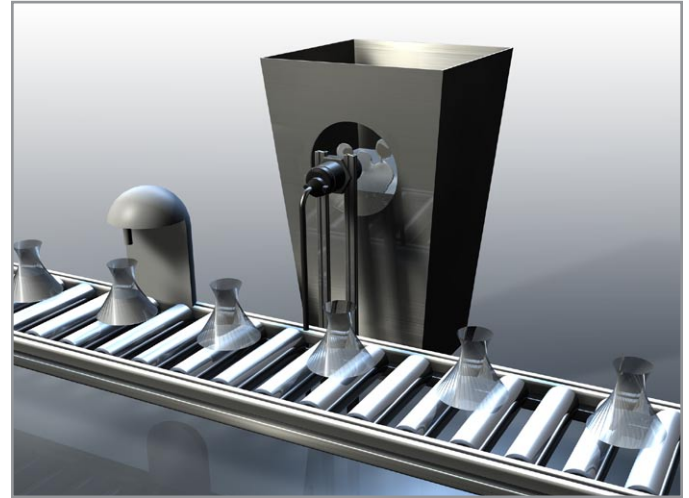
- Eliminates routine cleaning maintenance
- Self-adjusts to most applications
- Simplifies installation routines



An all-round liquid level sensor for demanding conditions

Cooling fluids and other liquids used in the automotive and assembly industry require point level detection devices to indicate a full or empty container. Balluff MicroLevel™ sensors offer an excellent alternative to conventional electro-mechanical sensing devices in these applications, because SmartLevel technology allows them to operate accurately without false triggering in the face of foam, film, or extensive material build-up.

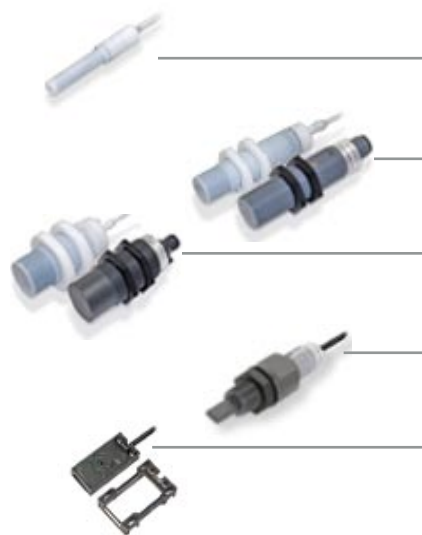
MicroLevel™ sensors' small size and 145 psi pressure-rated PSU housings equipped with M12 or 1/4" NPT threads allows them to operate almost anywhere. These low maintenance SmartLevel sensors provide all four output types on three wires with our new XDC output to keep inventory low.



SmartLevel™ technology performs in filling stations

Filling stations and other automated fluid handling equipment have to frequently deal with differing customer materials that foam or leave heavy films that clog equipment and tubing. Electro-mechanical and other conventional sensors will quickly fail from unforeseen material build-up leading to more maintenance for the end-user. Some applications require frequent material circulation or mixing to prevent liquids from drying. A point-level capacitive sensor can mount remotely from material and mechanical mixing devices to provide accurate, reliable, and low maintenance level detection.

SmartLevel capacitive sensor technology assures there won't be any false triggering in the face of film, foam, or extraneous material build-up. They readjust to new material compositions automatically for faster changeover to a new production run.



Part Number	Size
BCS S20TT01-PSLFAG-ET02	Ø7 complete PTFE probe
BCS M18WV11-PSCFAG-DV02 BCS M18TT12-PSCFAG-AT02	M18 PVC with cable out M18 complete PTFE
BCS M30BBM2-PPCFAG-S04G BCS M30TTH2-PSCFAG-AT02	M30, M12 QD, NO/NC switchable M30 complete PTFE
BCS S40SS01-GPCFAG-EP02	MicroLevel - M12 / 1/4" NPT
BCS R08RR01-PSMFAC-EP02	MicroBox - 34x16x8mm