

# **Immersion Sensors**

Immersion style sensors are designed for continuous on-line monitoring of suspended solids in waste water treatment plants.

# **Applications:**

- Mixed Liquor Suspended Solids (MLSS)
- Return Activated Sludge (RAS)
- Sludge Blanket Detection
- Product loss monitors in milk processing plants





# **Hygienic Sensors**

Hygienic style sensors are designed for installation directly into food product lines where CIP cleaning is used.

One piece polypropylene construction with a surface finish of better than Ra =  $0.9 \mu m$  eliminates bacteria traps.

Industry standard 3" Triclover connections.

# **Applications:**

- Extensively used in the dairy industry for milk fat measurements
- Percentage solids in fruit & vegetable juices

# Series 20 Sensors

- 'QuadBeam' optical systems use 2 pairs of infared light emitting diodes and photodetectors which are pulsed in sequence.
- Ratiometric signal processing compensates for changes in the optical properties of the emitters and detectors due to ageing and surface coating.
- Effects of colour, temperature and changes in background ambient light are virtually eliminated.
- Designed for use with the Quadbeam MSSD53 microprocessor based transmitters providing both relay and/or analogue outputs.
- Physical dimensions and electrical characteristics are compatible with sensors from other suppliers allowing direct replacement.

Product Data Sheet · PDS S20·10·03

# SPECIFICATIONS

### **Measuring Range:**

Immersion Sensor: O to 10g/l in normal activated sludge. Hygienic Sensor: O to 20% milkfat (The measuring ranges will vary according to media and particle characteristics)

#### Accuracy:

+/-2% of reading

### **Repeatability:**

+/-1% of reading

#### **Temperature:**

O to 85°C operating range

#### **Pressure:**

10 BarG

#### Cable:

Polyurethane covered cable rated to 95°C. Extension cables can be supplied to extend the cable length up to a maximum of 100M.

# **MODEL NO. SELECTION GUIDE**

# **Body Style:** S2O-IMM - Immersion style body S2O-3HY - Hygienic style body with 3" Triclover fitting

Wavelength: 880nm - Standard. Other wavelengths available.

### Body Material: PP - Polypropylene

#### Cable:

10 - Immersion sensors are supplied with a 10m cable as standard. Other lengths available.
1 - Hygienic sensors are supplied with a 1m cable as standard. Other lengths available.

#### Connector:

**NC** - No Connector. Cores stripped and tinned for direct connection to MSSD33/53 transmitters.

**CA** - Amphenol Connector. Standard for Hygienic sensors.

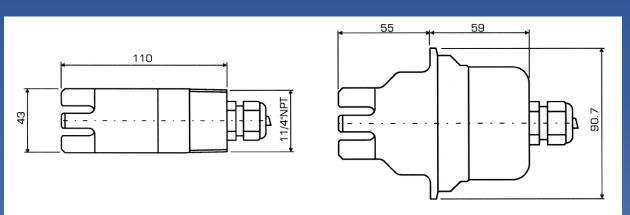
**CS** - Schaltbau Connector. For use with BTG/Zellweger Analytics transmitters.

Sample model no: S20-IMM-880-PP-10-NC

Optional Extras - to mount Immersion sensors into pipes or vessels, 50mm flanges or adapters for Triclamp, RJT and DIN11851 fittings are available.

## **Immersion Sensor**





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