



QUADBEAM TECHNOLOGIES

~ Specialists in process suspended solids & turbidity ~

Immersion Sensors

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

Applications:

- Return and waste sludge measurements
- Thickened and digested sludge to clarifiers
- Centrifugal, gravity or filter separation processes



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 2" or 3" Triclover connections.

Applications:

- Extensively used in the dairy industry for the determination of fat in milk
- Percentage solids in fruit juice



Series 10 Sensors

- 'QuadBeam' optical systems use 2 pairs of infrared 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.

SPECIFICATIONS

Measuring Range:

Immersion Sensor
Normal activated sludge: 0 to 25g/l
Coal dust: 4% maximum

Hygienic Sensor: 0 to 40% milkfat

(The measuring ranges can vary according to media and particle characteristics)

Accuracy:

+/-2% of reading

Repeatability:

+/-1% of reading

Temperature:

0 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:

S10-IMM - Immersion style body

S10-2HY - Hygienic style body with 2" Triclover fitting

S10-3HY - 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: S10-3HY-880-PP-1-CA

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

Immersion Sensor

Hygienic Sensor

