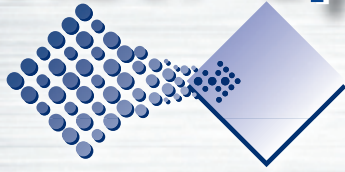


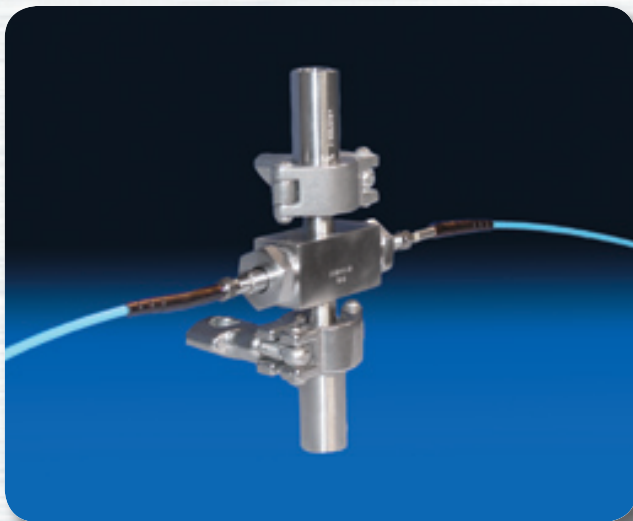
# Fiber Optic Sanitary Flow Cell for Lab or Process



*Fiber Optic Sanitary  
Micro-Flow Cell P/N 5117S*

Custom Sensors & Technology introduces an in-line fiber optic flow cell designed to meet the sanitary requirements of the pharmaceutical industry. The new sanitary flow cell can be used when sample concentrations are too high for traditional cuvettes and dilution is not an attractive option. When used with a fiber optic based light source (Du, Xe, Tungsten, or LED) and fiber optic cables, the sanitary flow cell will transmit energy through dense liquids, highly concentrated solutions, or semisolids. Pathlengths range over 0 to 1.0 mm and the flow cell is very efficient in the .02 to 0.1 mm. In demanding process conditions the flow cell can be supplied with sapphire windows.

## Flow Through Cell Configuration



1/2" sanitary design fiber optic flow cell with Tri-Clamp connections

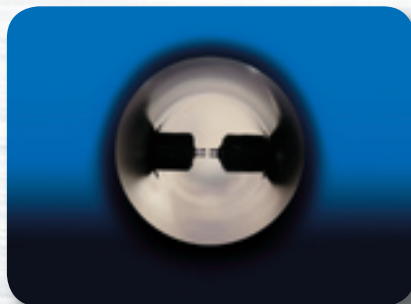
## Custom Designs

Sanitary flow cells are designed to operate in the chemical environment they will be installed in and are available in a range of materials other than 316SS. Sanitary flow cells may also be configured for fluorescence applications by placing an additional fiber input at 90° to the transmission path. The high density fluorescent cloud is easily picked up by the collecting fiber. Sanitary flow cells can be supplied from 1/2" up to 2" diameters.

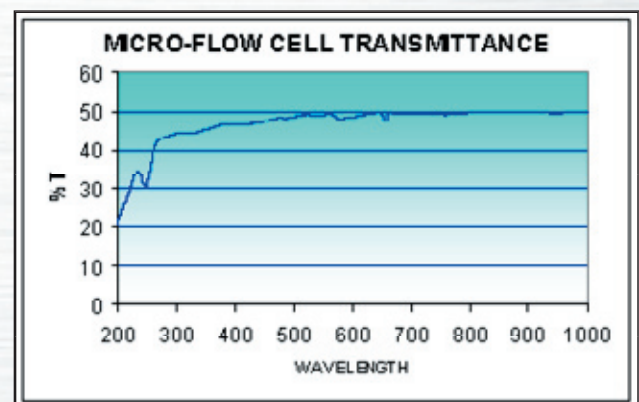


## Flow Cell Applications

Many applications exist for the sanitary flow cell in the Pharmaceutical industry. For example, drug compounds typically have very high extinction coefficients and are measured by a spectrophotometer after several dilution steps. Diluting the sample introduces error to the measurement and can affect the quality of a product in addition to the time and manpower it takes for sample preparation.



0.2mm pathlength with small DP loss



*Custom Sensors & Technology is a manufacturer of process photometric and electrochemical based process transmitters*

# Specifications, P/N 5117S

Size	1/2" (up to 1-1/2") OD
Materials	Wetted body; 316SS, Seal: Ethylene propylene, PTFE/Silicone, Fluorocarbon (Meets 21CFR 177.1550 in the virgin PTFE material only).
Pressure	2000 psig, (137 Bar)
Temperature	300-450F (depending on gasket material)
Seal	Sample end: B-type VCO L-Ring Face Seal Fitting Process end: Tri-Clamp
Inspection sheets	Third party MFG certification, Material certification (upon request)
Fiber optic connection	SMA-905, 600u core UV-VIS fiber (NIR fiber available upon request)
Wavelength range	200-1050nm

Please contact the factory for specific questions or special configurations (fluorescence) this cell can be offered in. The cell can be used with Du, Xenon, or Tungsten Halogen lamps.

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Custom Sensors & Technology is a full service provider. We also supply photometric transmitters, fiber optic probes & flow cells, O<sub>2</sub> transmitters, sample handling systems, and services including: application engineering, commissioning & start-ups, product validation, factory acceptance testing, process stream GAP Analysis, and in-house repair.