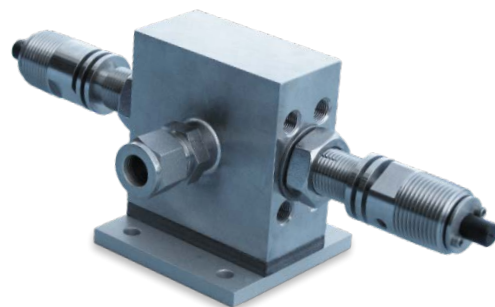




FET Series Spectroscopic Transmission Cells For Extreme Conditions

Fiber-optic coupled flow cells for spectroscopic analysis of polymer melts and other demanding process applications.



Hellma Analytics FET-980 cells with Axiom Technology bring high performance chemical composition monitoring to some of the most demanding process environments. These products are designed for use in high temperature (to 400°C), high pressure (to 400 bar), and/or high viscosity applications. While ideal for a variety of sample types, FET cells are especially suited for the analysis of hot polymer melts. In these applications, the cells are often mounted in series with a die on a small extruder or in a rheometer loop on a larger extruder.

The key to the FET-980's extreme durability is the use of thick sapphire windows, which are permanently sealed into the cell structure by means of the company's patented welded metal seal design (US Patent: 6,587,195 B1). This provides an extremely robust and permanent optical seal, virtually eliminating the possibility of window breakage, chemical attack, or mechanical seal failure. The standard cell includes fittings for cartridge heaters and a temperature sensor.

FEATURES:

- Metal seals for extreme robustness
- Compatible with high temperature, pressure, and viscosity
- Minimum possible flow restriction
- Customized flow fixtures to meet individual needs

REFERENCES:

1. US Patent: 6,587,195 B1

FET-980 SPECIFICATIONS:

| | FET-980R |
|-----------------------------------|--|
| Window Material: | Sapphire (Fused silica for UV range) |
| Wetted Metal: | 316 Stainless Steel |
| Window Seal: | Permanent welded-in gold plated high nickel alloy C-ring |
| Probe to Fixture Seal: | Permanent weld |
| Maximum Pressure: | 400 bar |
| Maximum Temperature: | 400°C |
| Flow Fittings: | Customer specified |
| Fiber-optic Connectors: | SMA-905 female, standard, FC optional |
| Recommended Fiber-optic Cables: | 0.6 mm core diameter |
| Conduit Termination Fittings: | ¾ NPT, male |
| Spectral Range: (Specify R value) | R = N (800 – 4500 nm), R = V (400 – 2000 nm), R = U (230 – 800 nm, Optimized for 230 – 300 nm) |