



**REFEX™**  
**SENSORS**  
(EUROPE) LTD

Long life pH sensors & controls for process & water industries

**Excellent performance in  
Pure & low-ionic waters  
for Water industries**  
**No diffusion potential error**  
**Highly resistant to  
Manganese poisoning**  
**Excellent in ETP**

## Benefits of REFEX™ in pH measurement

Patented REFEX™ pH sensors are available as combination probes and as separate electrodes. Robust construction, accurate and repeatable performance make them the ideal choice for many applications in chemically hostile and abrasive environments.

**REFEX™ reference electrode  
EC-FT-5710-1M**



**EC-FT-5610-1M  
pH measuring electrode**

**Temperature sensor  
EC-FT-PT1000-1M**



**REFEX™ separate electrodes with  
free turning collars for Flow Cell  
applications**

### Non porous REFEX™ in summary:

- ✓ accurate, repeatable & reliable pH measurement
- ✓ long sensor life, typically 3 to 5 times other sensors
- ✓ very low maintenance, saves down-time
- ✓ no porous junction to become blocked
- ✓ does not become poisoned
- ✓ does not leak electrolyte
- ✓ low electrical impedance
- ✓ faster response times
- ✓ has large surface contact area
- ✓ works in vacuum & upto 20bar pressure

REFEX™ sensors are especially resistant to chemical attack and poisoning because they do not have porous junctions, preventing reactions between the process and internal reference solution and failure through clogging by precipitates or oily deposits.

The REFEX™ reference electrode has replaced the need for a liquid-junction. It acts as both an immobilised electrolyte and also as a non-porous protective interface completely separating the medium under test from the internal Ag/AgCl half-cell. The entire outside surface of the REFEX™ electrode is electrochemically active and does not foul – even when completely coated (oily waste waters being a typical example). Being non-porous REFEX™ will continue to perform at pressures of up to 20 bar (290psi) and in full vacuum.

The REFEX™ pH sensor has a long operational life, typically 3 to 5 times greater than any other. Very low maintenance & recalibration requirements greatly reduce the cost of ownership & operation.

REFEX™ reliability helps ensure that you can meet process, statutory and regulatory requirements, which in turn help you maintain the process quality & profitability of your plant.

**Solid State REFEX™ reference  
electrode, large surface area,  
no porous junction**



**No fouling, clogging,  
electrolyte leakage, or  
poisoning of reference**

**Combination pH sensor glass & REFEX™**



**Robust combination pH sensor  
with 3/4" NPT fitting  
Ideal for ETP**



**Free turning 3/4" BSP fitting  
Combination sensor, ideal for Flow Cell application**

### mail address & registered office:

Building 1828, Elms Farm Business Centre  
Frieston Heath Lane, Caythorpe, Grantham  
Lincolnshire, NG32 3HD, England

### numbers:

Phone: +44 (0)8701 999 069  
Fax: +44 (0)7092 239 776  
Patent No: WO9315393

### internet:

www.refexsensors.com  
sales@refexsensors.com  
admin.uk@refexsensors.com