



# 710EL Cell

Electrically driven flow-through sample extractor



The 710EL Cell is a low-pressure flow-through sample extraction device suitable for use as part of an externally pumped bypass pipeline or a small diameter pipeline. Powered by an integrated motor, it is ideal as part of a Jiskoot fast-loop sampling system or a fiscal quality loop where an air supply is unavailable.

The sampler's 'high grab rate' (ability to collect an extremely high number of grabs per minute) ensures that a fully representative sample can still be extracted from very small product batches.

The 710EL Cell incorporates a positive displacement sample action to ensure sample repeatability and there are no water retention voids in the body, further improving accuracy.

The sampler caters for a wide range of applications, able to sample products that range from Natural Gas Liquid at -20°C to refined and crude oils up to 100°C.

The 710EL Cell is certified for use in EExd IIB T4 hazardous area.

Data Sheet S107-0507-3 • 710EL Cell



## Specification

### 710EL Cell Electrically actuated sample extractor

|                                       |  |
|---------------------------------------|--|
| Fluids sampled                        | Crude oil, refined hydrocarbons (including non-lubricating products) & non-corrosive chemicals   |
| Viscosity range                       | 0.5 to 500 cSt. (Under optimal conditions)   |
| Line temperature range                | -20 to 100°C / -4 to 212°F   |
| Ambient temperature range             | -20 to 60°C / 4 to 104°F   |
| Max. operating pressure               | 50 Barg at 40°C (std materials of construction)  |
| Configuration                         | Full bore - flow through cell  |
| Size range                            | 1" to 2" Nominal bore  |
| Mounting arrangements                 | 1" Nominal bore - ANSI class 150 - wafer type (standard)<br>(1", 1-1/2" & 2" flanged versions available on request)  |
| Sample grab size (nominal)            | 1cc  |
| Grab size repeatability               | Better than $\pm 5\%$  |
| Grab size adjustment                  | +50% / -0%   |
| Max. grab rate                        | 50+ grabs per minute **  |
| Sample outlet connection              | 1/4" Swagelok®   |
| Standard materials                    | Pressure retaining: 316/304 Stainless steel<br>Standard seals: Graphite filled P.T.F.E.<br>Standard O' rings: Viton (Kalrez available*)<br>(NACE certification available*) |
| Operating standards and CE compliance | ISO 3171, API 8.2, IP 6.2, PED – 97/23/EC<br>Machinery directive – 98/37/EC  |
| Approximate weight                    | 16kg (35 lb)   |

### Actuation data

|                               |  |
|-------------------------------|--|
| Actuation method              | Motor driven   |
| Motor supply                  | 440V AC 50 / 60Hz three phase - Requires motor starter / emergency stop<br>(can operate using single phase supply with suitable converter) |
| Consumption                   | 60W nominal  |
| Hazardous area classification | EExd IIB T4, Optional CSA Class I Division 1 Group C & D   |
| Actuating solenoid            | 24V DC (22 Watts)<br>110 / 120V AC 50 / 60Hz single phase (8 Watts)<br>220 / 240V AC 50 / 60Hz single phase (8 Watts)                      |
| Actuation signal              | 250ms pulse, maximum   |
| Electrical entries            | M20  |

\* Charges made for these items.

\*\* Maximum grab rate and seal life are dependant on process conditions, i.e. line pressure and fluid viscosity.

These are standard design specifications. We operate a policy of continuous development and the information on this sheet may be updated without notice.



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