710EL-MC Probe

Electrically driven in-line sample extractor

The 710EL-MC Probe is a low-pressure sample extraction device suitable for use as part of an in-line sampling system. Powered by an integrated motor, it is ideal for remote applications where an air supply is unavailable.

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

Through legendary Jiskoot build quality and minimal use of seals, the 710EL-MC Probe is designed for low maintenance service.
It is extremely light, easy to overhaul and can be fully withdrawn from the line when maintenance is required, eliminating process disruption. The traditional lost-motion three-step sample action is now incorporated in the sampler head, enabling the use of a single tandem shaft sealing arrangement to prevent leakage.

A new capture mechanism has enabled reduced head size with the result that the 710 can be installed through a 2" or 3" pipeline stub. Designed for use with 8" to 52" pipelines, it is robust enough to be inserted into the central 1/3 of the pipeline.

The streamlined head design additionally eliminates vortex problems and provides a streamlined profile for fiscal quality sampling, whilst allowing an extremely wide operating velocity range.

Data Sheet S135-0801-2 • 710EL-MC Probe

Specification

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	In-line withdrawable
Pipeline size range	Sizes A & B - see table 1 for suitability
Mounting arrangements	2" or 3" Nominal bore - flanged ANSI class 150 or 300 RF (50mm minimum diameter)
Max. pipeline velocity (Dependent on viscosity)	Size A 13.75m/s Size B 7.25 m/s
Sample grab size (nominal)	1cc
Grab size repeatability	Better than ±5%
Max. grab rate	50+ grabs per minute **
Sample outlet connection	1/4" NPT female
Standard materials	Pressure retaining: 316/304 Stainless steel Seal housing: ASTM A350 LF2 Carbon steel (316 available*) Standard seals: Graphite filled P.T.F.E. Standard O' rings: Viton (Kalrez available*) (NACE certification available*)
Operating standards and CE compliance	ISO 3171, API 8.2, IP 6.2, PED – 97/23/EC, Machinery directive – 98/37/EC
Approximate weight	25.5kg (56 lb)

Actuation data

Motor supply	600v Max 50/60Hz 3 phase 90w Max, via the 710 MCU (Motor Controller Unit)
Actuation method	The 710EL-MC probe is actuated via the 710 MCU (Motor Controller Unit) (see datasheet for further information)

* Charges made for these items.

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

710 Probe suitability for line sizes

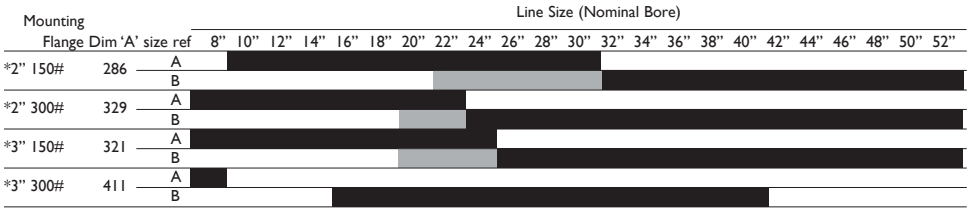
Dim 'A' *Distance from top of pipeline to mounting flange. (incorporating pipe stub and standard length ball valve).*

Minimum bore size 50mm

Best suited to application - recommended

Suitable - not recommended

Not suitable



UK
Jiskoot Quality Systems
Tel: +44 (0)1892 518000
Fax: +44 (0)1892 518100
Email: ms-jiskootuksales@c-a-m.com

USA
Jiskoot Quality Systems
Tel: +1 281 583 0583
Fax: +1 281 583 0587
Email: ms-jiskootusasales@c-a-m.com

Cameron
Measurement Systems
Tel: +1 281 582 9500
Fax: +1 281 582 9599
Email: ms-marketing@c-a-m.com

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www.jiskoot.com
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