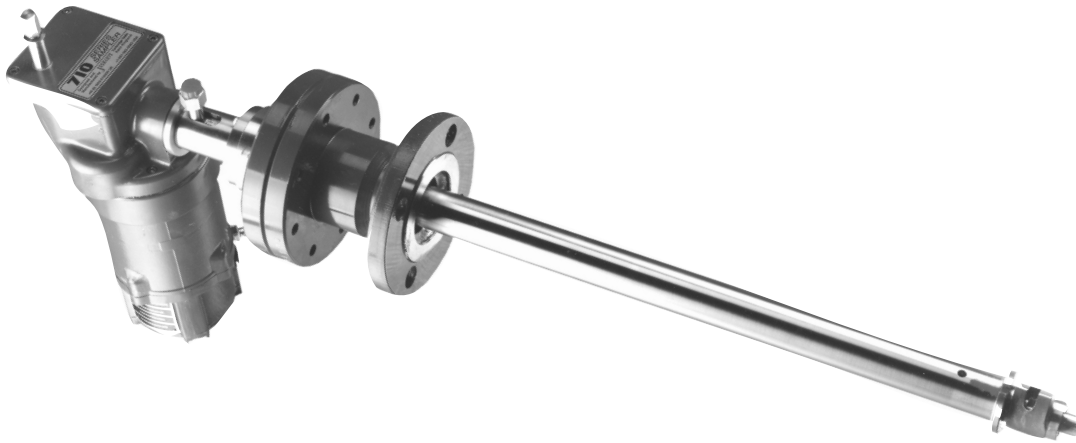




710EL Probe

Electrically driven in-line sample extractor



The 710 EL 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 710 EL 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 It is extremely light, easy to overhaul and can be fully withdrawn from the line when maintenance is required, eliminating process disruption.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 generated 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.

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

Data Sheet S106-0507-3 • 710EL Probe



Specification

710EL Probe

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	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	
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	30+ 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 (316available*)
	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

Actuation method	Motor driven
Motor supply	440V AC 50 / 60Hz three phase - Requires motor starter / emergency stop (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) 110 / 120V AC 50 / 60Hz single phase (8 Watts) 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.

710 Probe suitability for line sizes

Dim 'A'	Distance from top of pipeline to mounting flange. (incorporating pipe stub and standard length ball valve).	Mounting Flange Dim 'A' size ref	Line Size (Nominal Bore)																						
			8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"	38"	40"	42"	44"	46"	48"	50"	52"
*2"	150#	286	A	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
			B	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
*2"	300#	329	A	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
			B	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
*3"	150#	321	A	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
			B	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
*3"	300#	411	A	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
			B	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

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



Jiskoot Limited

Tunbridge Wells, Kent TN1 2DJ, England Tel: +44 (0)1892 518000 Fax: +44 (0)1892 518100 Email: sales@jiskoot.com

Jiskoot Incorporated

14503 Bammel N, Houston #110, Houston, Texas, 77014, USA Tel: +1-281-583-0583 Fax: +1-281-583-0587 E-mail: jinc@jiskoot.com

www.jiskoot.com