



## Specifications

Fluids Sampled	Crude oil, refined hydrocarbons (including non-lubricating products), and non-corrosive chemicals				
Viscosity Range	0.5 to 4000 cSt				
Ambient Temperature Range	-4° F to 149° F (-20° C to 65° C)				
Maximum Operating Pressure (standard materials of construction)	Class	38° C	50° C	100° C	Model
	150#	19.6	19.2	17.7	210P
	600#	102	100	93	210P or 210P-HP
	900#	153	150	139	210P-HP
	1500#	255	250	233	210P-HP
Operating Temperature	Standard and design temperature: -4° F to 194° F (-20° C to 90° C)				
Configuration	In-line withdrawable (non-standard flanges available on request)				
Pipeline Size Range	Sizes A, B, and C – see diagram for suitability				
Mounting Arrangements	3" nominal bore – flanged – ANSI class 150 - 1000 – RF or RTJ (other standard flanges available on request) (56 mm minimum diameter)				
Maximum Pipeline Velocity	Size A: 9.4 m/s, Size B: 6.9 m/s, Size C: 4.8 m/s (dependent on viscosity)				
Sample Grab Size (nominal)	1.04 cc or 2.04 cc (conversion kits available)				
Grab Size Repeatability	Better than ±2%				
Grab Size Adjustment	1 cc version ±20% – 2 cc version +0/-10%				
Maximum Grab Rate**	210P: 120 grabs per minute		210P-HP: 60 grabs per minute (1/2" hose)		
Capture Time	< 250 ms				
Sample Outlet Connection	1/8" NPT female				
Standard Materials	Seal housing: ASTM A350 LF2 carbon steel (316 available*) as class construction above Wetted parts: 316/304 stainless steel (NACE certification available*) Standard seals: Graphite-filled P.T.F.E., standard O-rings: Viton® (Kalrez® available*)				
Operating Standards and CE Compliance	ISO 3171, API 8.2, IP 6.2, PED – 97/23/EC, Machinery directive – 2006/42/EC, ATEX 94/90EEC				
Approximate Weight	210P: 84 lb (38 kg)		210P-HP: 86 lb (39 kg)		

## Actuation Data

Actuation Method	Pneumatic	
Supply Range	4 to 10 bar/60 to 145 psi** (filtered air recommended)	
Consumption (30 grabs/min)	210P: 0.47 ft <sup>3</sup> /min [ACFM] – (0.8m <sup>3</sup> /hr)	210P-HP: 1 ft <sup>3</sup> /min [ACFM] – (1.9m <sup>3</sup> /hr)
Actuator Connections	2 x 1/4" NPT female	210P-HP: 39 kg (86 lb)

\* Charges made for these items

\*\* ACFM reflects the actual swept volume for 30 sample cycles without allowance for interconnection piping

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

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