

Flow Rate	25 gal/min	0.0557 ft ³ /s
pipe diameter	10 in	0.833333 ft
pipe area		0.545415 ft ²
sg	0.83	
Yammonia	51.792 lb/ft ³	Ymercury 62.4
dy-vis η	2.50E-06 lb-s/ft ²	
density	1.94E+00 lb/ft ³	

	diameter	Area	β	v @D	Nr	Flow Nozzle	Height
Orifice plate 1	0.083333	0.005454		0.1 0.102124	0.0031878	35.57631	0.0062
Orifice plate 2	0.583333	0.267253		0.7 0.102124	0.0031878	95.76770	0.0000

Pipe		linseed oil	
D (ft)	0.4004	sg	0.93
Area (ft^2)	0.125915	γ_{lin}	58
Q (ft^3/s)	1.55961	=====	2.228 ρ
h	0	=====	8 η
			$\gamma_{mercury}$
			844.9

max

d?	assume C	A of d	d	β	velocity	Nr	Cactual	%error
	0.895	0.006687	0.092273	4.339302	17.69447	1.85E+04	0.89737	-0.26421

d suggested = 0.0922729 ft 1.107275 in