

RO

12/7/2022

Project 2144. BINAK

Thick Restriction Orifice Plate - Liquid Flow

Tag number RO-2144

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Input data

Fluid	LIQUID
Normal liquid flow	10000 kg/h
Flow temperature	60 degC
Meter inlet pressure	53.9 barg
Vapor pressure	.0001 bara
Specific gravity @ FTP	.982
Viscosity @ FTP	.49 cp
Pipe inside diameter	2 in
Element material	301 stainless steel
Pipe material	Carbon steel

Output data

Orifice diameter	.242213 in
Beta ratio	.121107
Reynolds number	142071
Max pressure loss	53.9 bar
Max power loss	20.54 hp
Minimum plate thickness	1.453 in
Flow Status	Cavitation

Modified mass English, basic calculation, calculate size

Source - The Flow Measurement Engineering Handbook. Third Edition. Table 13.13

InstruCalc Ver.9.0.3.

Notes