

RO

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Project 2134. BINAK

Thick Restriction Orifice Plate - Gas Flow

Tag number RO-2134

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Input data

Fluid	GAS
Normal gas flow	775.6 kg/h
Meter inlet pressure	22 barg
Discharge pressure	7 barg
Flow temperature	60 degC
Molecular weight	24.52
Cp/Cv specific heat ratio	1.3
Viscosity @ FTP	.012 cp
Pipe inside diameter	2 in
Density @ FTP	22.08 kg/m3
Element material	301 stainless steel
Pipe material	Carbon steel

Output data

Orifice diameter	.332953 in
Beta ratio	.166476
Reynolds number	449942
Max pressure loss	10.45 bar
Max power loss	13.72 hp
Minimum plate thickness	.333 in

Modified Mass English, basic calculation, calculate size

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

InstruCalc Ver.9.0.3.

Notes