

## RO-SIZING

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Project . BINAK

### Thick Restriction Orifice Plate - Gas Flow

Tag number RO-2133

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#### Input data

Fluid	GAS
Normal gas flow	1333.8 kg/h
Meter inlet pressure	62 barg
Discharge pressure	7 barg
Flow temperature	60 degC
Molecular weight	24.52
Cp/Cv specific heat ratio	1.259
Viscosity @ FTP	.011 cp
Pipe inside diameter	2 in
Density @ FTP	8.32 kg/m3
Element material	301 stainless steel
Pipe material	Carbon steel

#### Output data

Orifice diameter	6.74064 mm
Beta ratio	.13269
Reynolds number	844109
Max pressure loss	28.15 bar
Max power loss	168.7 hp
Minimum plate thickness	6.741 mm

English mass units

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

InstruCalc Ver.9.0.3.

Notes