

RO-DIAMETER

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Project . BINAK

Thick Restriction Orifice Plate - Gas Flow

Tag number RO-2134

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Input data

Fluid	GAS
Normal gas flow	778.4 kg/h
Meter inlet pressure	22 barg
Discharge pressure	7 barg
Flow temperature	60 degC
Molecular weight	24.52
Cp/Cv specific heat ratio	1.24
Viscosity @ FTP	.011 cp
Pipe inside diameter	2 in
Density @ FTP	7.54 kg/m3
Element material	304 Stainless steel
Pipe material	Carbon steel

Output data

Orifice diameter	8.54347 mm
Beta ratio	.168178
Reynolds number	492618
Max pressure loss	10.2 bar
Max power loss	39.35 hp
Minimum plate thickness	8.543 mm

English mass units

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

InstruCalc Ver.9.0.3.

Notes