

ROSEMOUNT INC.
ANNUBAR FLOWMETER SERIES
CALCULATION DATA SHEET

GENERAL DATA

Customer:
Project: 4500-KP-08-0002566
S. O. No:
P. O. No:
Calc. Date:
Model No: 3095MFAS080ZCHFS2AFD0073EA1B
Tag No: E1HAFx0CF001

PRODUCT DESCRIPTION

Product Type:	Flanged with Opposite Side Support	Instrument Valve: Not Applicable
Sensor Size:	2	Valve Material: Not Applicable
Wetted Material:	316 Stainless Steel	Line Size: 8" (200 mm)
Mounting Conn.Type:	Remote-mount	Pipe Sch.: 160
Mounting Conn. Material:	Carbon Steel	Pipe Orientation: Horizontal
Electronics Mounting:	Remote-mount; NPT Connections	Flange Type: 1500# RF ANSI
Max. Allow. Pressure@Temp.:	147,134,114 bar-g 400 C	
Design Pressure/Temperature:	120 bar-g 400 C	Max. Allow. Temp.: 454,44 C

INPUT DATA

Fluid Type:	Steam		
Fluid Description:	Superheated - You have to specify both Temperature and Pressure		
Pipe I.D(Span):	6,813	inch	Wall: 0,906 inch
Pressure:	102	bar-g	
Temperature at Flow:	382,00	C	
Absolute Viscosity:	0,02367	cP	
Isentropic Exponent:	1,28986		
Compressibility at Flow:			
Density at Flow:	41,381	kg/m3	
Flow Rates			
Minimum:	0	kg/sec	
Normal:	27,3	kg/sec	
Maximum:	40	kg/sec	
Full Scale:	40	kg/sec	

CALCULATED DATA

(Calculation Performed at Normal Conditions. DP in inH2O@68F)

DP at Min Flow:	mbar	Flow Coefficient:	0,5403
DP at Normal Flow:	547,265 mbar		
DP at Max Flow:	1176,070 mbar	Rod Reynolds Number (Normal):	1307304
DP at Full Scale Flow:	1176,070 mbar	Pipe Reynolds Number (Full Scale):	12372249
Structural Limit (DP):	2148,530 mbar	Gas Expansion Factor:	0,9991
Structural Limit (Flow):	54,092204 kg/sec	Permanent Pressure Loss:	
Minimum Accurate Flow:	2,6035 kg/sec	at Normal Flow:	108,411 mbar
Resonant Frequency:	441,28 Hz	at Maximum Flow:	232,976 mbar
Wake Frequency:	206,31624 Hz	Velocity at Max Flow:	133,514 ft/sec
Blockage:	0,198		

WARNINGS

NOTES

This report is provided according to the terms and conditions of the Instrument Toolkit(TM) End-Use Customer License Agreement.
Version: 3.0 (Build149A)

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