FN MASS FLOWMETER

MASS FLOWMETER CALCULATION SHEET

1	DATE	2020년 4월 20일		
2	COMPANY	Golden Rules Co.,Ltd.		
3	MODEL	KC-7730OP		
4	OPERATING ELEMENT DATA			
5	FLUID	Diesel Oil	MOLE FRACTION	
6	FLUID STATE	Liquid State	Diesel Oil	1.000000
7	MOLECULAR WEIGHT [g/mol]	4.002602		
8	THROAT DIAMETER at 20˚C [mm]	9.560		
9	PIPE INNER DIAMETER [mm]	23.900		
10	CONNECTION	KS 10K S0 STS304		
11	PIPE MATERIAL	STS 304		
12	DEVICE MATERIAL	STS304		
13	STANDARD	D-5.0D Orifice		
14	PRESSURE LOSS COEFFICIENT	9.136187		
15	PRESSURE LOSS [kPa]	16.408106		
16	UPSTREAM CONDITION			
17	PRESSURE [kPa]	924.00		
18	TEMPERATURE [˚C]	20.00		
19	VELOCITY [m/s]	16.056756		
20	PROCESS DATA			
21	MASS FLOW RATE [kg/h]	39.177523		
22	VOLUME FLOW RATE [m3/h]	25.932596		
23	NORMAL VOLUME FLOW RATE [Nm3/h]	219.502231		
24	ENERGY FLOW RATE [MJ/h]	59.961120		
25	DIFFERENTIAL PRESSURE [Pa]	20000.00		
26	DENSITY [kg/m3]	1.510744		
27	VISCOSITY [μPa-s]	19.648179		
28	SONIC VELOCITY [m/s]	1011.575861		
29	REYNOLDS NUMBER(Re) [-]	29443		
30	ISENTROPIC EXPONENT [-]	1.673077		
31	COMPRESSIBILITY FACTOR [-]	1.004382		
32	SPECIFIC HEAT (Op) [Kj/KGk]	5.193542		
33	ENTHALPY [Kj/KG]	1530.497979		
34	UNCERTAINTY			

FLOW RATE	MASS FLOW ACCURACY[%]	PRESSURE DROP [Pa]	VELOCITY [m/s]	Re
m X 1.00		0.000000	0.000000	0
m X 0.75		0.000000	0.000000	0
m X 0.56		0.000000	0.000000	0
m X 0.24		0.000000	0.000000	0

NOTE :