WINFLOW 2.75 (I) Diff. Pressure Calculation
ITABAR - Flow - Sensor

Company:	AIRLITEC Sarl
Name(capital letters):	Regis Houllier
Street:	88, rue Jean Jaurès
Zip Code/City:	80470 Dreuil Les Amiens
Offer-/Com. No:	11/29949
P. Order Number:	
Tag No.:	
Serial No.:	
Pipe Data:	ID=43,10/2,600 mm - horizontal
Date:	14.10.2011
Person in charge	Br

Calculation:	Volume Rate of Flow Gas(Operating Cond.)	**Base Temperature**	**273,15 Kelvin**
Fluid:	Nitrogen	**Base Pressure**	**101,33 kPa**

Pipe Internal Dimensions to 20°C	43,10	mm
Pipe Internal Dimensions 20,00 °C	43,10	mm
Flowing Temperature:	20,000	°C
Flowing Pressure:	7,000	bar G
Density:	1,251	kg/Nm3
Viscosity:	0,0174	cPs
K-Factor:	0,4649	without unit

Op. Density: 9,215

Comp. factor at operating cond. :	1,0000
Comp. factor at norm cond. :	1,0000
Ratio of Specific Heat:	1,40

	QMax	QNorm	QMin	
Flow Rate	200,00	160,00	40,00	m3/h
Reynolds No.	868.966	695.173	173.793	without unit
Permanent press. loss	90,860	58,110	3,630	mbar
Expansionsfactor	0,999	0,999	1,000	without unit
Velocity:	38,08	30,46	7,62	m/sec.
Differential Pressure	**302,168**	**193,252**	**12,064**	**mbar**

Itabar-Type: IBR-20-ID43,1-S-07-Y-KI-HL-A03-A56
Material Sensor 1.4571
Note:

Max. DeltaP	2.809,50 mbar	Max. Flow Rate	610,44 m3/h
Natural Freq.:	6.433,35 hz	Operat. Freq.:	75,27 hz