

INTRA-AUTOMATION GmbH

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

Company: Airlitec
 Name(capital letters):
 Street:
 Zip Code/City:
 Offer-/Com. No: 11/29646
 P. Order Number:
 Tag No.:
 Serial No.:
 Pipe Data: ID=150,00/3,000 mm - horizontal
 Date: 24.08.2011
 Person in charge: E.E.

Calculation: Volume Rate of Flow Gas(Standard Cond.)
 Fluid: Gas

Base Temperature	273,15	Kelvin
Base Pressure	101,33	kPa

Pipe Internal Dimensions to 20°C 150,00 mm

Flowing Temperature: 15,000 °C
 Flowing Pressure: 250,000 mbar G
 Density: 1,300 kg/Nm3
 Viscosity: 0,0180 cPs
 K-Factor: 0,5861 without unit
 Op. Density: 1,536

Comp. factor at operating cond. : 1,0000
 Comp. factor at norm cond. : 1,0000
 Ratio of Specific Heat: 1,30

	QMax	QNorm	QMin	
Flow Rate	1.800,00	1.440,00	360,00	Nm3/H
Reynolds No.	306.453	245.163	61.291	without unit
Permanent press. loss	2,240	1,440	0,090	mbar
Expansionsfactor	0,999	1,000	1,000	without unit
Velocity:	23,95	19,16	4,79	m/sec.
Differential Pressure	12,540	8,020	0,500	mbar

Itabar-Type: IBR-25-DN150-S-1-2-KI-HL-T0-A15-A71
 Material Sensor 316SS
 Note:

Max. DeltaP 629,90 mbar
 Natural Freq.: 980,81 hz
 Max. Flow Rate 12.765,30 Nm3/H
 Operat. Freq.: 5,35 hz