

# Wet Gas Insertion flowmeter

# WGAA



GAS



## OVERVIEW

### Operation

WGAA Pitot tube flow meter is Bass Instruments's latest technology base on different pressure technology specially designed for compressed air applications. As it has 1 1/2" insertion connection probe and compact designed sensor, it can be used on pipes from DN25~DN600. In some higher pressure applications, it can be installed / removed without stopping the fluid, as the pipe is thinner, field engineers will be able to insert the meter to pipe very easily. Also, due to its working principle, it is less effected by the water contents in the compressed air.

### Application

- Pharmaceutical industry
- Chemical processes
- Mechanical engineering
- Metal industries
- Petrochemicals

### Features

- Cost effective
- High sensitivity
- Resistant to chemical fluids
- Easy to install
- High accuracy
- Self-diagnose and remote diagnose function to provide with the best support
- Multi-variable flowmeter, measures flow rate, temperature, pressure, FAD measurement available
- Wide measurement range
- Fast response time
- No mechanical wear part
- Selectable gas (Air, nitrogen, O<sub>2</sub> etc.)
- Insertion mounting, available for hot tapping
- Bi-directional flow measurement

## OPERATING DATA

<b>Working Pressure</b>	16 bar max.
<b>Temperature Limit</b>	-40...150°C
<b>Ambient Temperature</b>	-20...60°C
<b>Accuracy</b>	±1.5 % RD, ±0.3 % FS
<b>Repeatability</b>	0.5% RD
<b>Response Time</b>	1 second
<b>Connection</b>	1 1/2" G
<b>Parameter Measured</b>	Flow rate, temperature, pressure
<b>Ambient Humidity</b>	5...100% for sensor

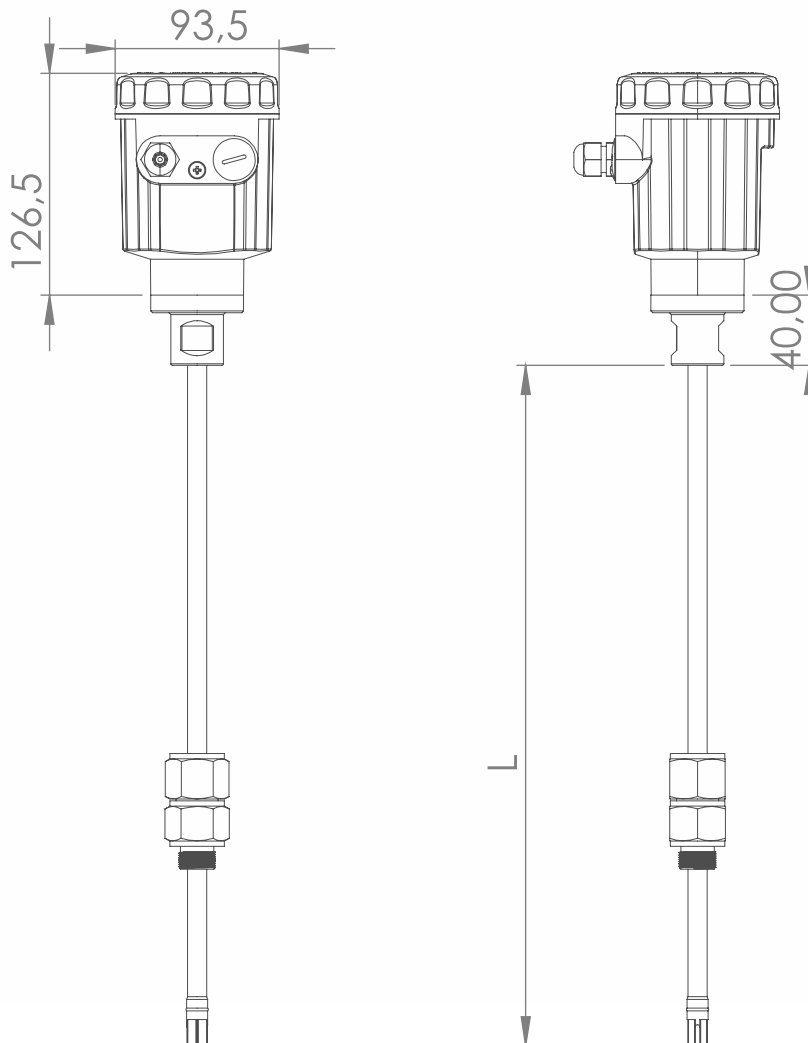
## MEASURING RANGES

<b>Pipe Size Range</b>	DN25...DN600
------------------------	--------------

## MATERIALS

<b>Wet Part</b>	Brass or AISI 316
-----------------	-------------------

## TECHNICAL DRAWINGS AND DIMENSIONS



## FLOW RANGES

Standard flow range for compressed air 50°C and different pressure, unit is normal flow Nm<sup>3</sup>/min ref to 1.01325 Bar, 0 °C

Pipe inside diameter			0 Bar G		4 Bar G		6 Bar G		7 Bar G		8 Bar G	
DN	mm	Inch	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
DN25	27.3	1"	0.19	1.93	0.43	4.29	0.51	5.08	0.54	5.43	0.58	5.76
DN32	36	1 1/4"	0.34	3.36	0.75	7.47	0.88	8.83	0.94	9.44	1.00	10.01
DN40	41.9	1 1/2"	0.45	4.55	1.01	10.11	1.20	11.96	1.28	12.79	1.36	13.56
DN50	53.1	2"	0.73	7.30	1.62	16.24	1.92	19.21	2.05	20.53	2.18	21.78
DN65	68.9	2 1/2"	1.23	12.29	2.73	27.34	3.23	32.34	3.46	34.57	3.67	36.66
DN80	80.9	3"	1.69	16.95	3.77	37.70	4.46	44.59	4.77	47.66	5.05	50.55
DN100	110	4"	3.13	31.33	6.97	69.70	8.24	82.44	8.81	88.12	9.35	93.45
DN125	133.7	5"	4.63	46.29	10.30	102.97	12.18	121.78	13.02	130.18	13.81	138.06
DN150	159.3	6"	6.57	65.71	14.62	146.17	17.29	172.89	18.48	184.80	19.60	195.99
DN200	200	8"	10.36	103.58	23.04	230.40	27.25	272.52	29.13	291.30	30.89	308.94
DN250	250	20"	16.18	161.85	36.00	360.01	42.58	425.80	45.52	455.15	48.27	482.72
DN300	300	12"	23.31	233.06	51.84	518.41	61.32	613.16	65.54	655.42	69.51	695.11

## ELECTRICAL DATA

**Signal Output** 4-20 mA/ 0-10 VDC / pulse

**Power Supply** 16...28 VDC, 150 mA max

**Communication** RS485 Modbus-RTU

# ORDERING

WGGA					Wet Gas Insertion Flowmeter
Probe Length	DKS				DN25...DN100
	DOS				DN25...DN250
	DUS				DN25...DN600
Probe Material		SS			AISI 316
			BR		Brass
Connection			CS		Carbon steel
				SS	Stainless steel
Pressure Rating				10	10 Bar max
					16
Remote Display				C	Compact
					R
Accessories				B	With ball valve
					N