

## Fiscal turbin gas flow meter

Fiscal turbin gas flow meter with measuring cartridge

National approvals DM. N. 341308

According to the following regulations :

EN 12261, OIML R6(1989), R32 ( 1989) Annex A.

All meters are manufactured in accordance with ISO 9001 and satisfy ISO 9951, DIN 33800.

The turbin gas meter has an integrated flow conditioner on the upstream side length = 2DN.

Possible sizes of the turbin gas flow meters from G65 DN50 to G2500 DN300 as standard;

Upon request, supply of larger nominal sizes is possible.

Flow rate: 5- 4.000 m<sup>3</sup>/h (standard)

Qmin to Qmax Ratio 1:20

Pressure rate from PN10 to PN64

and from ANSI 150 to ANSI 600

Low pressure loss

High measuring accuracy and long term stability.

Length = 3 DN

Steel body or GGG40

Solid and strong construction

Suitable for natural gas, refinery gas, city gas, butane/propane(LPG), ethilene, air ,nitrogen

Other gases upon request

Suitable for outdoor installation

Pulse generator

Reed contact pulse generator (LF) with following characteristics:

Vmax=24 V; Imax= 100 mA; R=0.15 Ω; Fmax=500 Hz;

High frequency pulse generator HF (NAMUR) as an optional.



### ▼ Functioning

The measurement principle of the turbine gas flow meter is based on the proportionality between gas velocity in an annular space and turbin wheel angular velocity.

Magnetic coupling system ensures the gas tight separation from the outside. Meccanical trasmission moves the counter drums that displays quantity of a gas.

### Recommendations for the installation and the use:

The turbin gas flow meter must be transported in the original packaging to the installation site.

Storage in a dry place. Handle with extreme care. The meter should be installed in an as dry as possible place.

The best installing position is an horizontal one. However, a vertical postion is possible for the meters of a size up to DN80. In that case, the gas flow must be downward.

The counter head is rotatable around 350°.

If possible, a filter has to be installed in front of the gas meter (0.5μ)

In the starting phase a start sieve is recommendable.

To avoid damages to the counter head, open and close the valves very slowly.

The installation must be done by authorised personal only.

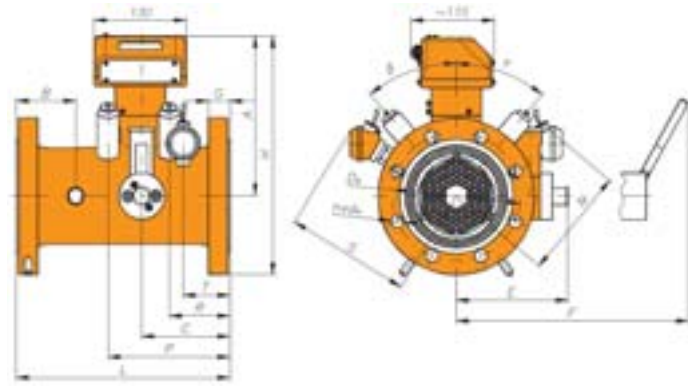
### ▼ Headquarters and Sales offices:

Via Ascanio Sforza, 85  
20141 Milano - (Italy)  
Tel. +39 02 8435441 - 8435442  
Fax +39 02 89511482

### ▼ Plant:

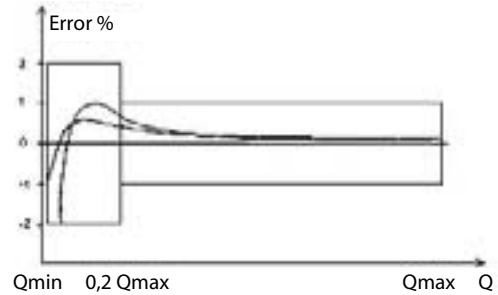
Località Garavelle - Fraz. S. Lucia  
06012 Città di Castello  
Perugia (Italy)  
Tel. +39 075 8526070 - 8526066  
Fax. +39 075 8526079

## Fiscal turbin gas flow meter

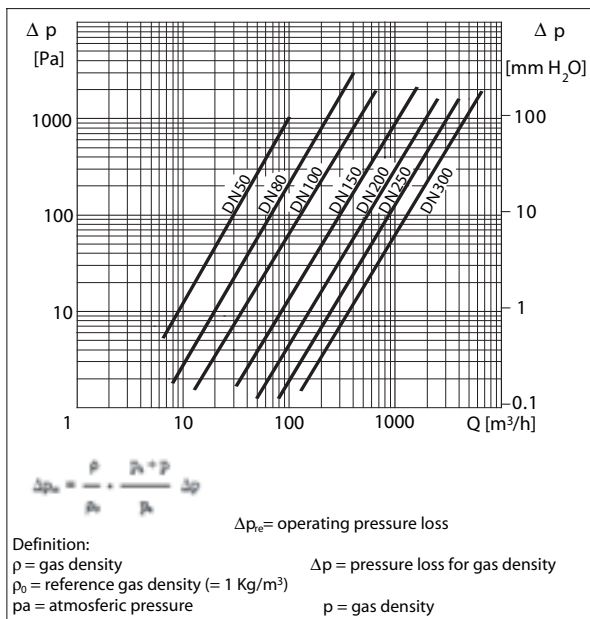


## technical data

DN		G Type	Measurement Range	P		E1
mm	inch			Qmax	imp/m <sup>3</sup>	
50	2	65	5-100	9,0	0,1	
80	3	100	8-160	4,0	1	
		160	13-250	9,7	1	
		250	20-400	14,0	1	
100	4	160	13-250	2,8	1	
		250	20-400	6,2	1	
		400	32-650	13,8	1	
150	6	400	32-650	3,5	1	
		650	50-1000	6,9	1	
		1000	80-1600	14,9	10	
200	8	650	50-1000	1,2	1	
		1000	80-1600	6,2	10	
		1600	130-2500	13,8	10	
250	10	1000	80-1600	2,3	10	
		1600	130-2500	6,2	10	
		2500	200-4000	13,8	10	
300	12	1600	130-2500	2,5	10	
		2500	200-4000	6,2	10	



Error curve:  
 < ± 2% between Qmin to 0,2 Qmax  
 < ± 1% between 0,2 Qmax to Qmax



### Characteristic parameters

DN		L	A	B	C	E	Flangie PN	Casing	Weight Kg	Flangie ANSI	Casing	Weight Kg
mm	inch											
50	2	150	198	42	58	148	10/16	GGG40	8	150	GGG40	8
							10/16	steel	8	150	steel	8
							25/40	steel	10	300	steel	13
							63	steel	12	600	steel	17
80	3	240	210	60	95	148	10/16	GGG40	18	150	GGG40	19
							10/16	steel	19	150	steel	20
							25/40	steel	23	300	steel	28
							63	steel	26	600	steel	43
100	4	300	224	85	124	158	10/16	GGG40	23	150	GGG40	24
							10/16	steel	24	150	steel	25
							25/40	steel	30	300	steel	42
							63	steel	40	600	steel	60
150	6	450	251	125	180	186	10/16	GGG40	47	150	GGG40	48
							10/16	steel	50	150	steel	50
							25/40	steel	67	300	steel	85
							63	steel	80	600	steel	115
200	8	600	265	175	240	203	10	steel	75	150	steel	80
							16	steel	75	300	steel	135
							25	steel	90	600	steel	175
							40	steel	105	---	---	---
250	10	750	293	275	330	230	63	steel	130	---	---	---
							10	steel	130	150	steel	140
							16	steel	130	300	steel	200
							25	steel	150	600	steel	255
300	12	900	318	300	350	350	40	steel	170	---	---	---
							63	steel	195	---	---	---
							10	steel	190	150	steel	200
							16	steel	190	300	steel	280
300	12	900	318	300	350	350	25	steel	210	600	steel	360
							40	steel	230	---	---	---
							63	steel	275	---	---	---
							63	steel	275	---	---	---