

## VORTEX FLOWMETER CMLUGB SERIES



CMLUGB vortex flowmeter series is widely applied in industries such as petro,chemical, power supply, metallurgy and heat supply,etc. Especially for measuring and controlling flow of liquid, gas and steam in enclose pipeline. It can output pulse frequency signal or 4~20mA current signal. Stable and reliable.

### Ordering Code

CMLZ -      -

1=flange connect  
2=flange clamp

Medium	
1	Liquid and gast
2	liquid
3	gas

DN	
15,25 ,50 ,80 ,100,125,200, 250,300,400,450,500,600	

Explosion-proof	
Blank	Normal type
B	Explosion-proof

Output	
Blank	Voltage pulse (12/24VDC)
C	4~20mA,LCD display,24V
D	No output,LCD display,3.6V lithium battery

Pressure	
Blank	1.6MPa
2	2.5MPa
4	4.0MPa

Body Material	
Blank	1.6MPa
2	2.5MPa
4	4.0MPa

Flange Material	
Blank	Carbon steel
S	304

**Main Parameter**

DN (mm)	15,25 ,50 ,80 ,100,125,200,250,300,400,450,500,600
Pressure (MPa)	1.6 ; 2.5 ; 4.0
Accuracy	Liquid1.0 ; gas1.5
Medium temperature (°C )	-40~+140 ; -40~+250 ; -40~+350 ; -40~+425
Flow speed	Liquid 1~10m/s ; gas5~50m/s
Range ratio	10:1~20:1
Output	3-wire voltage pulse signal / 4~20mA
Power supply	Pulse output: 220VAC/12VDC ; 4~20mA: 24VDC ; Battery:3.6V/5Ah
Intrinsic explosion-proof	ExiaCT1~T4
Environment	-40~+55°C ; relative humidity:5%~8% ; air pressure: 86~106KPa

**Flow Range****1. Liquid and Gas**

DN (mm)	Water ( m <sup>3</sup> /h)	Air (m <sup>3</sup> /h)
15	1~6	5~30
20	1.2~8	6~50
25	2~16	8~60
32	2.2~20	14~100
40	2.5~25	18~180
50	3.5~35	30~300
65	6~60	50~500
80	13~130	70~700
100	20~200	100~1000
125	30~300	150~1500
150	50~500	250~2500
200	100~1000	400~4000
250	150~1500	600~6000
300	200~2000	1000~10000
350	300~3000	1500~15000
400	350~3500	1800~18000
450	420~4200	2100~21000
500	500~5000	2500~25000
600	700~7000	3200~32000

**2. Steam's mass flow**

DN (mm)	Measurable Max. Flow	Max. Flow	Min. Flow
15	$38.2 \times \rho$	$49.5 \times \sqrt{\rho}$	$8.24 \times \sqrt{\rho}$
20	$67.8 \times \rho$	$79 \times \sqrt{\rho}$	$9.88 \times \sqrt{\rho}$
25	$106 \times \rho$	$104 \times \sqrt{\rho}$	$13.12 \times \sqrt{\rho}$
32	$174 \times \rho$	$184 \times \sqrt{\rho}$	$23 \times \sqrt{\rho}$
40	$271 \times \rho$	$265 \times \sqrt{\rho}$	$26.65 \times \sqrt{\rho}$
50	$424 \times \rho$	$494 \times \sqrt{\rho}$	$49.41 \times \sqrt{\rho}$
65	$716 \times \rho$	$823 \times \sqrt{\rho}$	$82.35 \times \sqrt{\rho}$
80	$1085 \times \rho$	$1153 \times \sqrt{\rho}$	$115.3 \times \sqrt{\rho}$
100	$1696 \times \rho$	$1647 \times \sqrt{\rho}$	$164.7 \times \sqrt{\rho}$
125	$2649 \times \rho$	$2471 \times \sqrt{\rho}$	$247.1 \times \sqrt{\rho}$
150	$3815 \times \rho$	$3294 \times \sqrt{\rho}$	$329.4 \times \sqrt{\rho}$
200	$6782 \times \rho$	$6588 \times \sqrt{\rho}$	$658.8 \times \sqrt{\rho}$
250	$10596 \times \rho$	$9882 \times \sqrt{\rho}$	$988.2 \times \sqrt{\rho}$
300	$15260 \times \rho$	$16470 \times \sqrt{\rho}$	$1647 \times \sqrt{\rho}$
350	$20771 \times \rho$	$24710 \times \sqrt{\rho}$	$2471 \times \sqrt{\rho}$
400	$27130 \times \rho$	$29650 \times \sqrt{\rho}$	$2965 \times \sqrt{\rho}$
450	$34336 \times \rho$	$34590 \times \sqrt{\rho}$	$3459 \times \sqrt{\rho}$
500	$42390 \times \rho$	$41180 \times \sqrt{\rho}$	$4118 \times \sqrt{\rho}$
600	$61042 \times \rho$	$52700 \times \sqrt{\rho}$	$5270 \times \sqrt{\rho}$

Remark:  $\rho$ =operation density of steam