

# Diaphragm Gas Meter



**DAEMYOUNG I&T**  
DAEMYOUNG INSTRUMENT TECHNOLOGY INC.

# Domestic Diaphragm Gas Meters



KG2



G1.6



G2.5



G4.0



G6.0A



G6.0B

## Applicable Gas

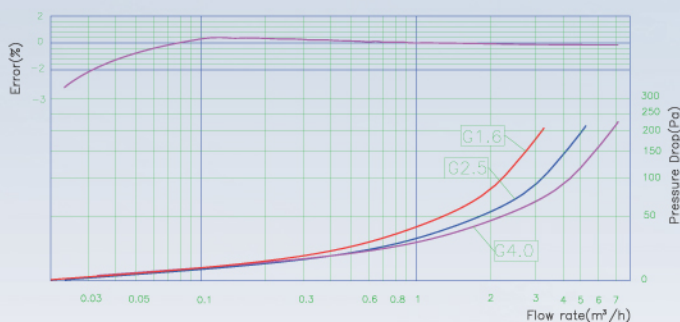
- City gas, LPG, Natural Gas

## Features

- DMT gas meter is high accurate meter meeting international standard (OIML) and Korea standard.
- High quality nitrile coated rubber polyester base fabric is used for smooth rotation of movement, so it can measure very small volume(Qmin) accurately.
- Noise is minimized by using precious rotary valve and valve seat.
- Drain pan of gas meter inlet collects dirty or sludge and prevents frozen by moisture in winter.
- Under the differential pressure, the performance is excellent. The material of diaphragm is durable against low and high temperature and water proofing with no deformation.

## Performance Curve

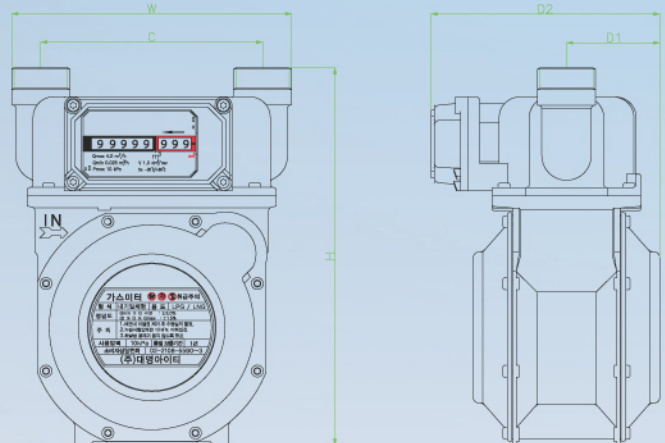
Performance Curve



## Material

- Housing is made of die casted aluminum, which is durable from external shocks and corrosion.
- Rotating axis is strong against cold and hot by using good lubricant grease, so it maintains smooth rotation for long time operation

## Specification / Dimension



Specification	KG2	KG3S	G1.6	G2.5	G4.0	G6.0A	G6.0B
Max Capacity (m³/h)	2.5	2.5	4	6	10		
Min Capacity (m³/h)	0.016	0.016	0.025	0.04	0.06		
Cyclic volume (L/rev)	0.4	0.78	1	1.2	2		
Max Counter (m³/h)	9999,999			99999,999			
Max operating Pressure (kPa)	10						
Min Counter (L)	0.2						
Accuracy	Qmin ≤ Q < 0.1Qmax			±3.0			
	0.1Qmax ≤ Q ≤ Qmax			±1.5			
Temperature (°C)	-20~+60						
Weight (Kg)	1.5	1.6	1.8	2	2.8	3.0	
Connecting pipe (UNION)	15mm	15mm	20mm	20mm	20mm	25mm	
	PT1/2'	PT1/2'	PT3/4'	PT3/4'	PT3/4'	PT1'	

## Mechanism

- When gas flows into gas meter, it flows to measuring chamber through distribution chamber. Then the diaphragm generates alternating movement, which is converted to rotation movement by a gear, and such rotation movement indicates the gas usage on meter index.

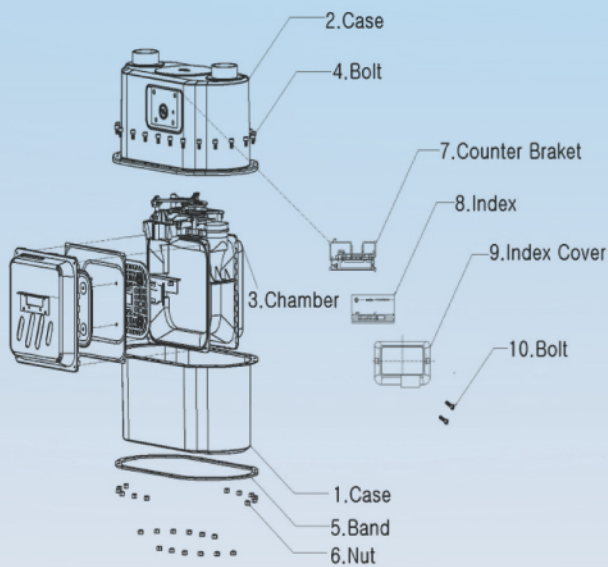
Dimension	KG2	KG3S	G1.6	G2.5	G4.0	G6.0A	G6.0B
(mm)	Height (H)	197	214	214	221	230.5	279.5
	Width (W)	128	164	164	164	165	171.91
	Center (C)	100	100	130	130	130	250
	Depth (D1)	44	52	52	55	54	61
	Depth (D2)	110	130	130	134	134.5	148

# Commercial & Industrial Diaphragm Gas meters



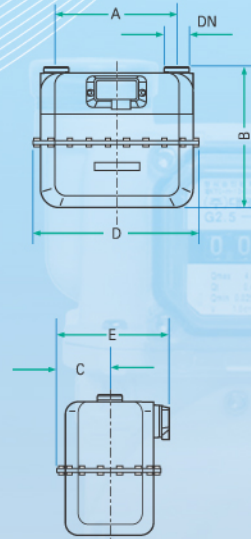
## Mechanism

- Measuring chambers are separated by synthetic diaphragms. The chambers are filled, and emptied periodically as the chambers slide left and right, and the movement of the diaphragms is transferred via a gear to the crankshaft. This shaft moves the valves, which control the gas flow. The rotations of the gear are transferred via a magnetic coupling to the index.

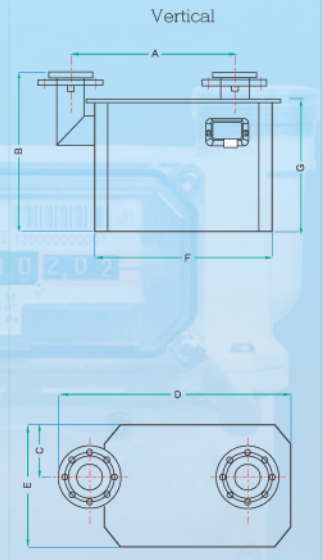


## Specification / Dimension

G10-G25

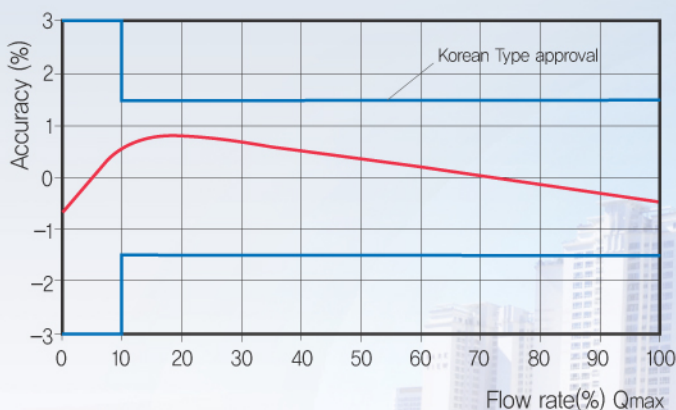


G40



Indication	unit	G10	G16	G25	G40
A	mm	280	280	335	510
B	mm	333	333	398	495
C	mm	119	119	143	172
D	mm	415	415	475	753
E	mm	239	239	294	400
F	mm	-	-	-	551
G	mm	-	-	-	415
Weight	Kg	6,7 (7,7)	6,7 (7,7)	11 (12,5)	50

## Accuracy curve



	G10	G16	G25	G40
Nominal Diameter (DN)	40mm(Union)	50mm(Union)	80mm(Flange)	
Operating Pressure (Kpa)	50 (100Kpa option)			
Cyclic Volume (dm <sup>3</sup> )	6	12	18	
Minimum Capacity (m <sup>3</sup> /h)	0,1	0,16	0,25	0,4
Maximum Capacity (m <sup>3</sup> /h)	16	25	40	65
T,D,R	1 : 160			
Error P Qmax - Ql	Within ±1,5%			
Error P Qt - Qmin	Within ±3,0%			
Max counter	999999,99			
Using Gas	LPG, LPG, Inert Gas			
Body Material	Aluminium Steel			
Pulser	Magnet for the pulse was installed inside.			
Approval	Korean Type Approval			



*Best Quality*  
**Dae Myoung**



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