

**Best Quality Dae Myoung**

**G10-G16**

**Diaphragm Gas Meter**



Diaphragm Gas meters have a long tradition. They are characterized by a long service life, a large measuring range, long term measurement stability, and maintenance-free operation.

The DMIT diaphragm gas meters offers all the advantages of a metering device without additional energy requirement.

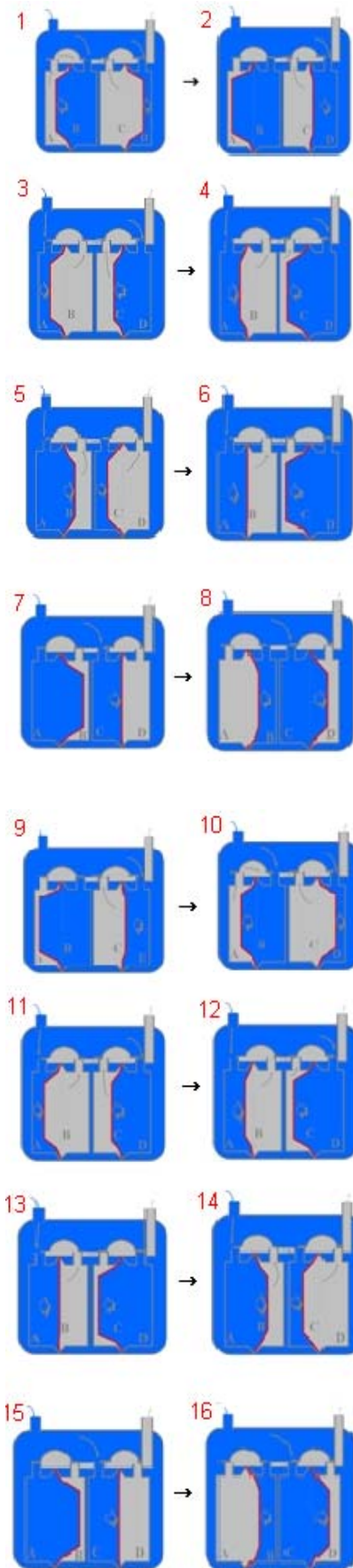
- ✓ Compact
- ✓ Light weight
- ✓ Low-Noise operation level
- ✓ Stable
- ✓ Safe
- ✓ Commercial and industrial



**DAEMYOUNG INSTRUMENT TECHNOLOGY**

[www.dmit.kr](http://www.dmit.kr)

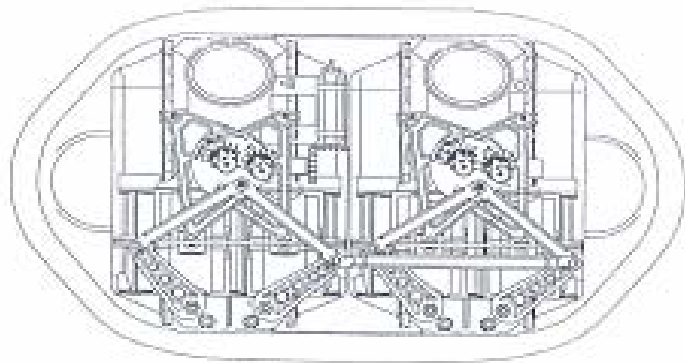
1 → 16



## Operating

✓ Four measuring chambers (Two measuring chambers are 1set) 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.

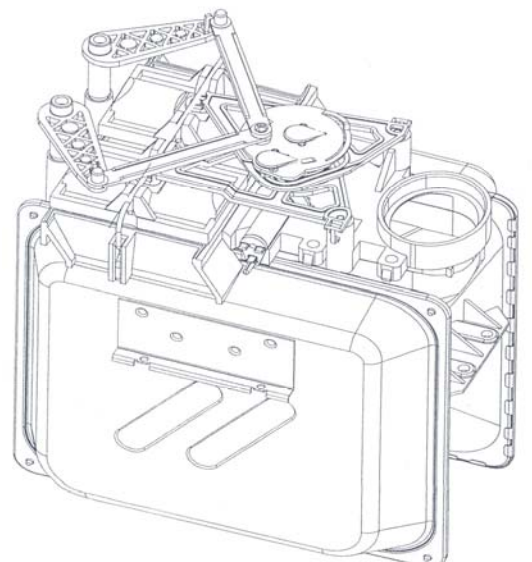


**Reciprocation valve** – Sliding type


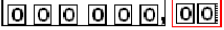
## Measuring Unit


Made mainly of plastic components.

- ✓ Easy handling
- ✓ Recyclable
- ✓ Maintenance free
- ✓ Gas and deformation resistance
- ✓ Wear Resistance



## Index

 G10 → **DAEMYOUNG I&T**  
 V 6 dm MPI NO. 510211322  
 Pmax: 20psig H-07-68  
 1 imp Δ 0.1 m<sup>3</sup> Qmax 530 ACFH  
 Tm -20 ~ +140 °F Qmin 3.5 ACFH  
 DMIT 2010 m<sup>3</sup>  


 : Flow direction

**MPI**  
**H-07-68** : Korean Type Approval -  
 number

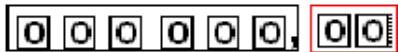
 : Company logo

**m<sup>3</sup>** : Unit for reading

**NO. 510211322**

:Serial Number

Tm : -20 ~ +140 ° F



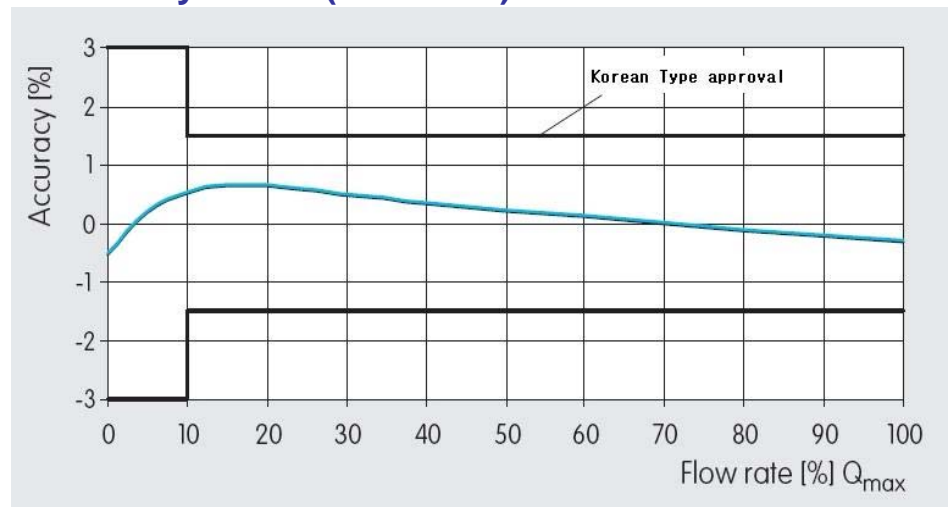
:8 digits- counter

- ✓ Flow rate - G10 / G16
- 12.7mm H2O(0.5") - 12 m<sup>3</sup>/h
- 50.8mm H2O(2") - 16 m<sup>3</sup>/h

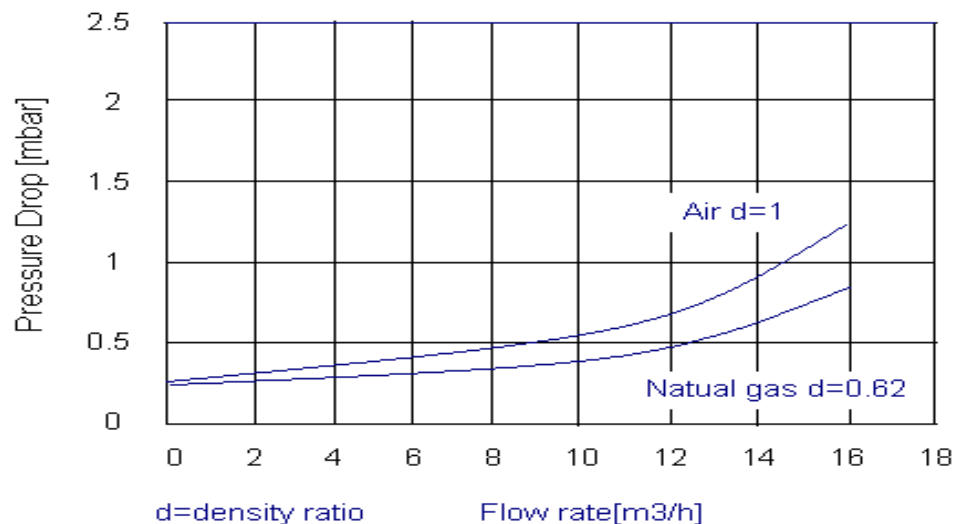
## Characteristics G10-G16

	G10	G16
Nominal diameter (DN)	32mm	40mm
Operating Pressure (psig)	20	
Cyclic volume (dm <sup>3</sup> )	6	
Minimum capacity (ACFH)	3.5	5.3
Maximum capacity (ACFH)	530	885
Usual working capacity (ACFH)	390-450	730-800
T.D.R	1 : 100	
Error Point Qmax-Qt	Within ±1.0	
Error Point Qt-Qmin	Within ±1.0	
Using Gas	LNG, LPG, Inert Gas	
Body Material	Tinning Steel	
PULSER	OPTION	
Approval	Korean Type Approval (Based on the OIML R-31)	

## Accuracy Curve (G10~G16)



## Typical Pressure Drop Curve (G10 - G16)



QUALITY MANAGEMENT SYSTEM CERTIFICATE

QA090267

DAEMYOUNG IT CO., LTD.

Head Office: Bn307, Daeryong Techno Town 5-chu, Gusu-dong, Guro-gu, Seoul, Korea  
 Factory: #237-1, Sachon-vi, Jangjeon-myeon, Hwasung-si, Gyeonggi-do, Korea

Has been found to conform to the Quality Management System Standard  
**KS Q ISO 9001 : 2009 / ISO 9001 : 2008**

This certificate is valid for the following product or service ranges :

Manufacture and Service of Water Meter, Gas Meter,  
 Gas Temperature and Pressure Calibration Device

Valid until : 04<sup>th</sup> November, 2012 Date : 05<sup>th</sup> November, 2009

Issue Date: 02<sup>nd</sup> November, 2009



Approved by: *[Signature]*  
 President CreBIZQM

\* Lack of fulfillment of conditions described in the Scope for Certification Process may render this Certificate invalid.  
 \* The Certification scope above has been approved by Accreditation Body.  
 \* CreBIZ QM has been established in accordance with the International Standards.  
 \* Initial Certification : 2009. 11. 05

CreBIZ QM #01, Yangpyeong-dong 1-gil, Yangpyeong-gu, Seoul, Korea TEL: 02-2696-9022 FAX: 02-2696-9029

✓ Korean Type approval

Type Approval No : MPS-147-49

Certificate of Type Approval

1. Manufacturer : DAE MYOUNG I&T CO., LTD
2. Representative : Kim Jong In 502-85-14496
3. Address : Sachon-vi 332-1, Jang-Myeon, Hwasung-si, Kyunggi-do
4. Type of meter : Diaphragm gas meter (G16)
5. Identification of certified type :
  - Maximum flowrate (Q<sub>max</sub>) : 25 m<sup>3</sup>/h
  - Minimum flowrate (Q<sub>min</sub>) : 0.16 m<sup>3</sup>/h
  - Maximum operation pressure (P<sub>max</sub>) : 50 kPa
  - Cycle volume (V) : 6 dm<sup>3</sup>
  - The range of metering temperatures (t<sub>1</sub>) : -20°C ~ 50°C
  - Screw type : 48 mm (nominal internal diameter of the connecting pieces)
6. Valid until : 31, December, 2017

This is to certify that the type of measuring instrument has been certified in accordance with the provision of Clause 1., Article 12 of the Law in Metrology and Clause 1., Article 13 of the enforcement decree of the said law.

23, March, 2010  
*[Signature]*  
 President

Korea Machinery Meter and Petrochemical  
 Testing & Research Institute  
 Republic of Korea

Type Approval No : MPS-147-48

Certificate of Type Approval

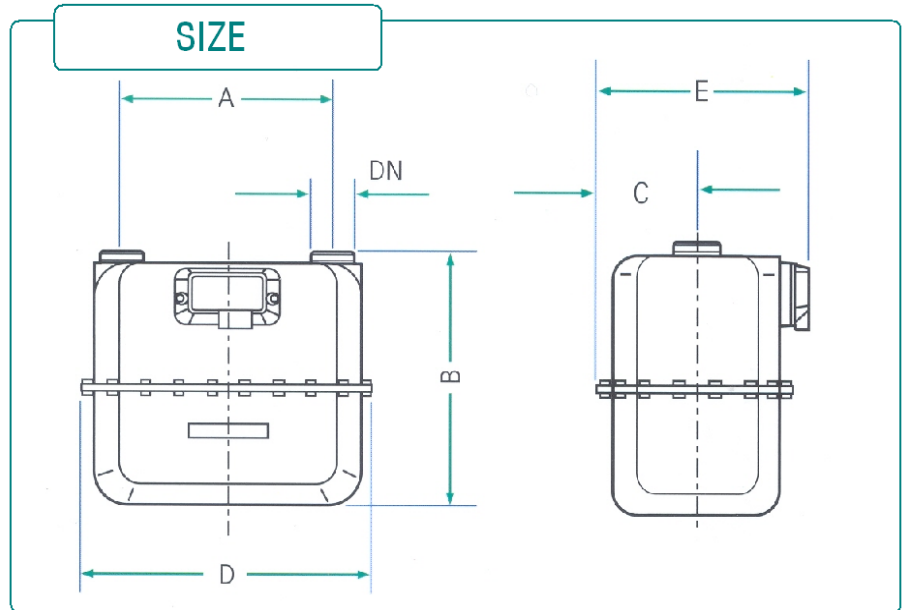
1. Manufacturer : DAE MYOUNG I&T CO., LTD
2. Representative : Kim Jong In 502-85-14496
3. Address : Sachon-vi 332-1, Jang-Myeon, Hwasung-si, Kyunggi-do
4. Type of meter : Diaphragm gas meter (G10)
5. Identification of certified type :
  - Maximum flowrate (Q<sub>max</sub>) : 16 m<sup>3</sup>/h
  - Minimum flowrate (Q<sub>min</sub>) : 0.1 m<sup>3</sup>/h
  - Maximum operation pressure (P<sub>max</sub>) : 50 kPa
  - Cycle volume (V) : 6 dm<sup>3</sup>
  - The range of metering temperatures (t<sub>1</sub>) : -20°C ~ 50°C
  - Screw type : 48 mm (nominal internal diameter of the connecting pieces)
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Dimension (G10-G16)

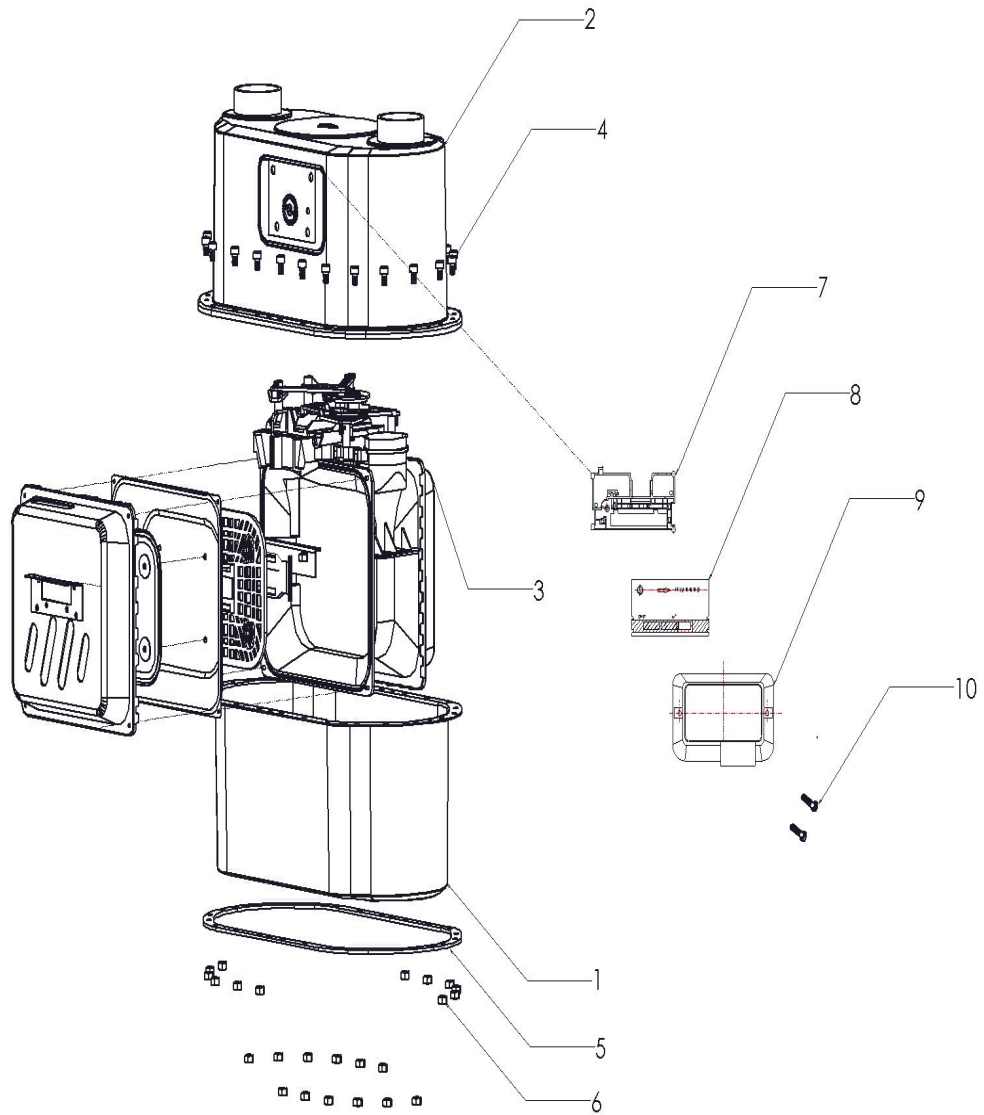


	Unit	G10	G16
A	mm	228	280
B	mm	333	333
C	mm	119	119
D	mm	415	415
E	mm	239	239
F	mm	-	-
G	mm	-	-
Weight		6.7	6.7

Material of parts used inside

- ✓ Diaphragm : NBR coated Material
- ✓ Measuring Unit Body : PBT(G)
- ✓ Valve : PF
- ✓ Case : Hot-DIP coated Aluminium steel  
 KSD-3544 KS standard SA1E

# Part List



G10/16

- 1. Case (1)
- 2. Case (2)
- 3. Chamber
- 4. Bolt
- 5. Band
- 6. Nut
- 7. Counter Bracket
- 8. Index
- 9. Index Cover

10. Bolt



**DAEMYOUNG I&T**

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