



## **SPECIFICATIONS**

**ITEM : OIL-Less Rocking Piston Type Vacuum Pump**

**MODEL : 120RAD-LL for Dental Air Compressor**

**( LL : Long Life Version )**

**APPLICATION : Dental Air Compressor**

**CUSTOMER :**

**MANUFACTURER & SUPPLIER : G&M TECH INC. KOREA**

**Mar. 10, 2014**

 **G&M Tech Inc.**



**Rm # 404, DFV 1 Cha, #1030, Jung-Dong, Giheung -Gu, Yongin-City, Korea**

**Tel : +82-31-459-8221 , Fax.: +82-31-459-8611**

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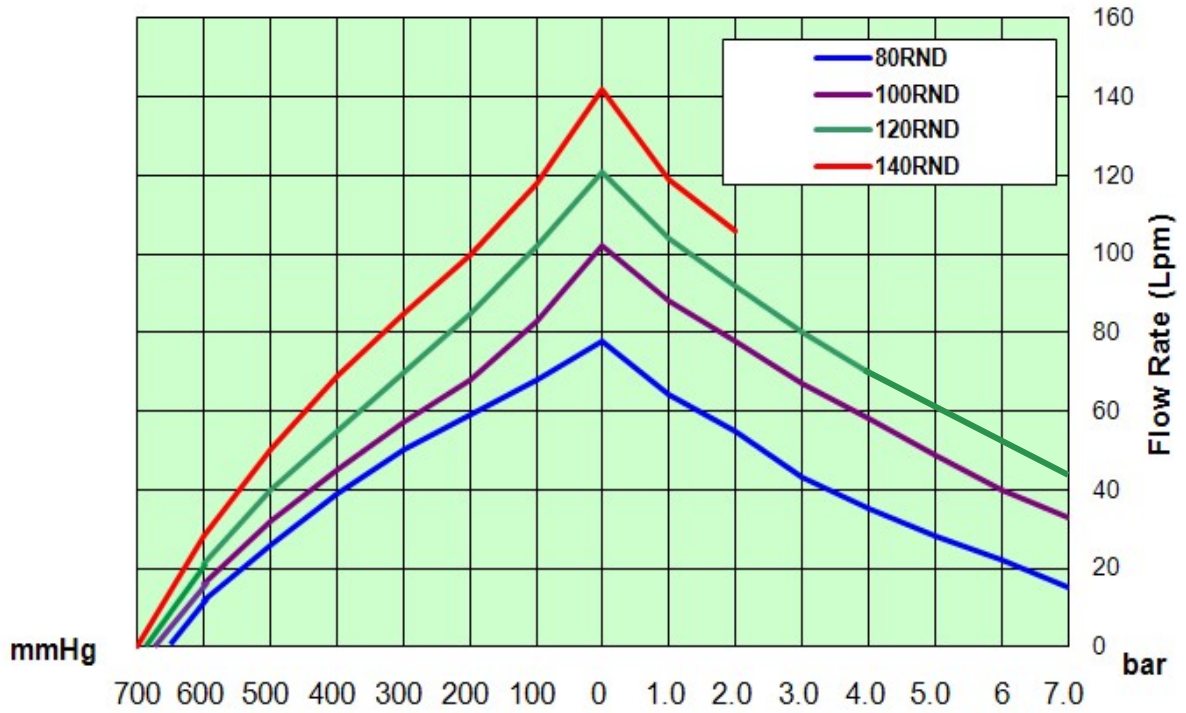
**7. CERTIFICATE**

**1. BASIC SPECIFICATIONS : 120RAD-LL**

DESCRIPTION	Feature & Specification	Remarks
Model	<b>120RAD-LL ( Long Life Version )</b>	
Voltage	<b>230VAC, 50Hz / 60Hz</b>	
Motor Type	4 pole, Class B. Capacitor start	
Rated RPM	1420rpm (50 Hz) , 1650rpm (60Hz)	
Rated Output	250 Watt	
Rated Current	2.1 A (50Hz) , 1.4A (60Hz)	at free flow
	3.1 A (50Hz) , 2.8A (60Hz)	at 5 bar
Rated Input	280W	at free flow
	530 W (50Hz) , 580 W (60Hz)	at 5 bar
Max. flow rate	102 Lpm ( 50Hz), 120 Lpm (60Hz)	
Max. operating pressure	Upto 7.0 bar	
Insulation resistance	More than 100 MΩ (According to EN60204-1)	According to IEC601-1
Voltage Test	No problem under DC1500V / 5mA for 1 minute (According to EN60204-1)	
Thermal Protector	130°C ± 6.5°C	"B" Class
Ambient Temperature	0°C ~ 40°C	Recommended
Capacitor	14μF / 450VAC	
Life Time	22,000 Hours in Vacuum	
	16,000 Hours in pressure at 0~40°C	upto 3 bar
Dimensions	250(L) X 178(H) X 118(W) mm	
Weight	8.0 Kg	
Certificate	ISO14001, CE Mark, EMI Test approved	

● EN60204-1 is European standard of Electrical Safety.

## 2. Performance Curve



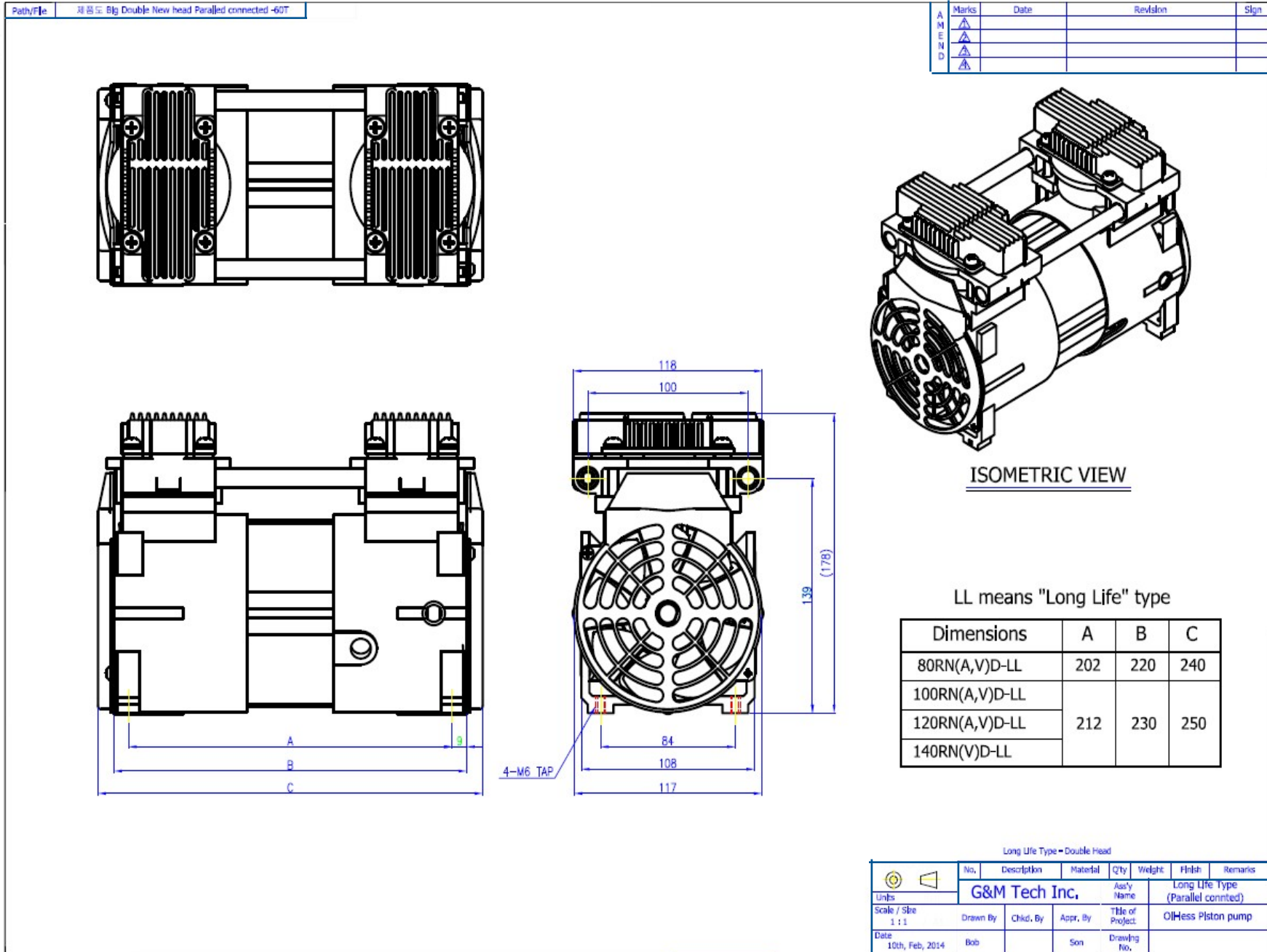
## 3. Appearance



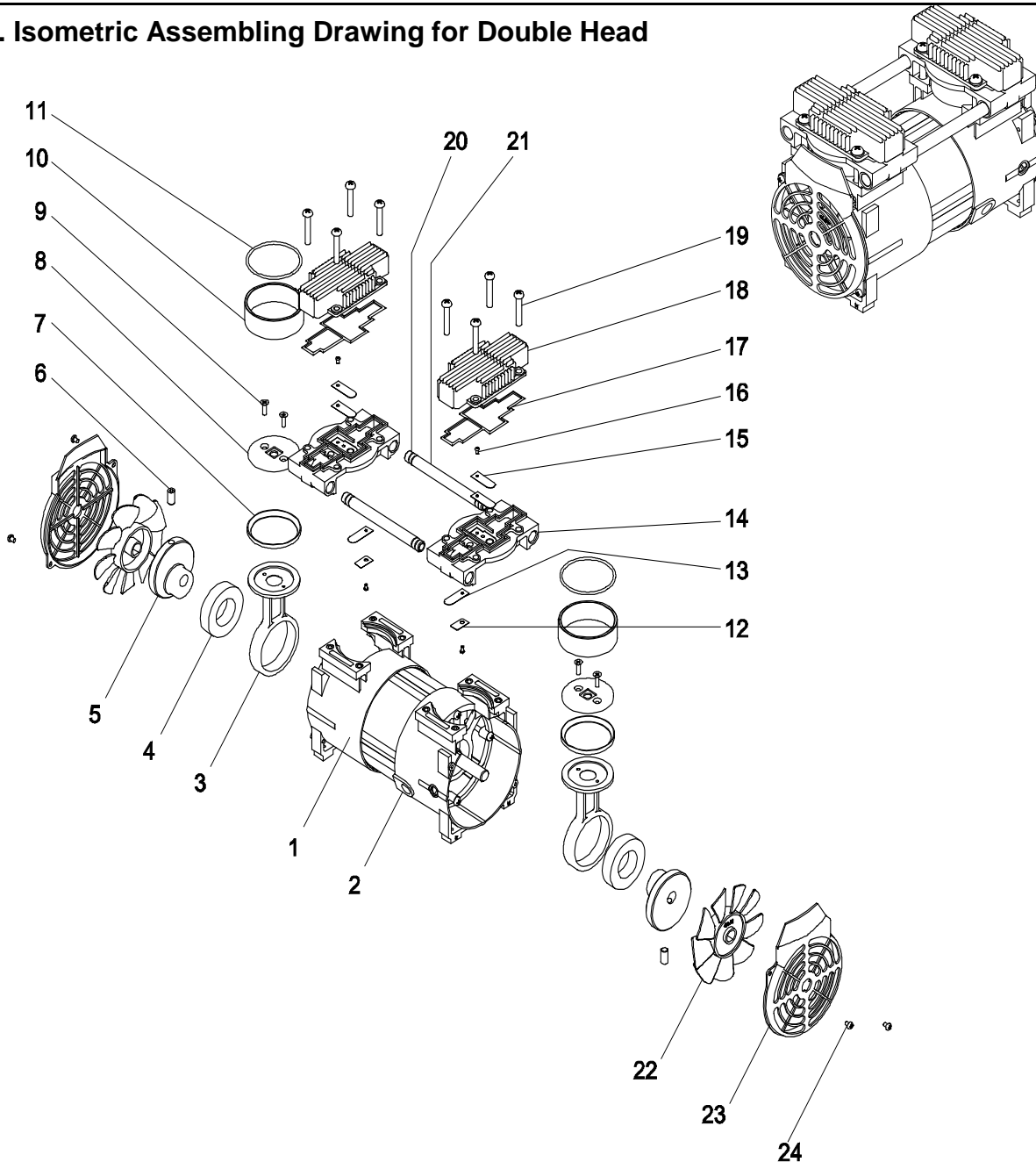
PTFE Coating Type



Normal Type



## 5. Isometric Assembling Drawing for Double Head



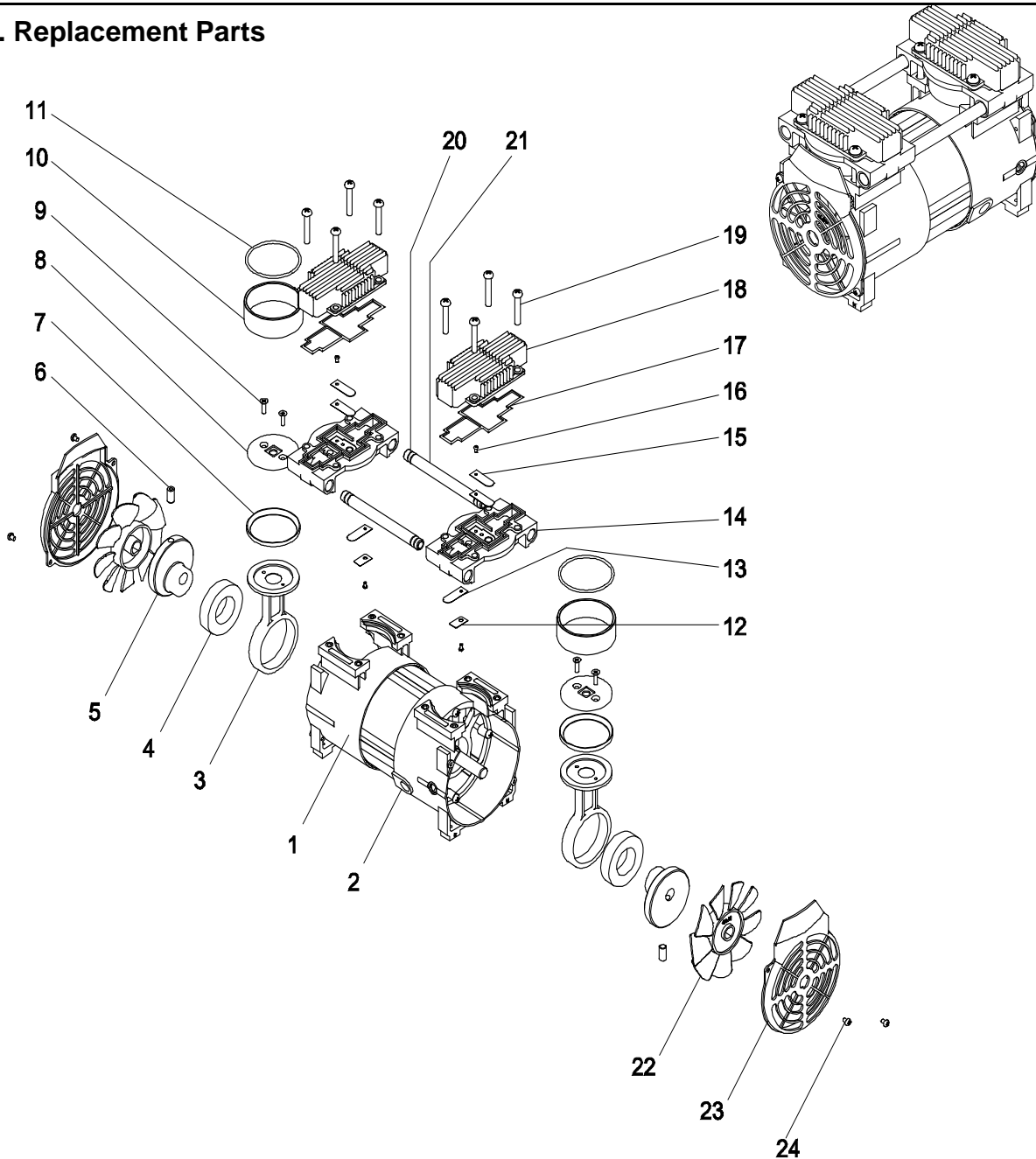
No.	Description	Material	Q'ty	Remarks
1	Motor (AC Ver.)		1	110 Core
2	Wire Holder	NBR	1	
3	Rod	ADC12	2	
4	Bearing		2	6006ZZ
5	Eccentric		2	
6	Set Screw		2	M8
7	Teflon Cup	PTFE	2	
8	Rod Cap	ADC12	2	
9	Rod Screw	STS	4	M4
10	Cylinder	AL6061	2	Anodizing
11	O-Ring	Silicone	2	
12	Valve washer	STS	2	Small
13	Valve	STS	2	
14	Valve Plate	ADC12	2	
15	Valve washer	STS	2	Large
16	Valve Screw		4	M4
17	Rec-Ring	Silicone	2	Red
18	Head Cap	ADC12	2	
19	Head Screw		8	M6
20	O-Ring	Silicone	8	Red
21	Conn. Pipe	AL6063	2	
22	Fan	P.P	2	Black
23	Fan Cover	P.C	2	Black
24	F/C screw		4	M4

Applied Model : 80, 100, 120, 140RND(RVD)

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(주) 지엔엠텍



## 6. Replacement Parts



No.	Description	Material	Q'ty	Remarks
7	Teflon Cup		2	Yellow
9	Rod Screw	STS	4	M4x12
10	Cylinder	AL6061	2	
13	Valve	STS	4	
	Rod Ass'y		2	No.3~8

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7. Certificates - CE Mark ( Machinery by TUV Nord )



**Certificate  
of conformity with the following  
European Directives**

Registered No.:  
**K3555/M10**

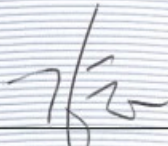
**Machinery Directive 2006/42/EC**

Reference of applicant	Date of application	File reference	Test report No.	Date of issue
-	04.11.2010	KP-10-333	K4880/M10	09.11.2010

This is to certify that the following products comply to the essential requirements (Annex 1) of the above mentioned European Directive and the following standards, taking into account the German national deviations:

- Product:** Oil-less Rocking Piston Pump
- Type designation:** aRND, bRNS, cRVD, dRAD, eRVS, fRAS  
(a = 140, 120, 100, 80, 70, 60, 50, 40, 30, 25, 20, 15, 12, 10; b = 70, 60, 50, 40, 30, 20, 15, 12, 10; c = 140, 120, 100, 80, 70, 60, 50, 40, 30, 25, 20, 15, 12, 10; d = 120, 100, 80; e = 70, 60, 50, 40, 30, 25, 20, 15, 12, 10; f = 70, 60, 50, 40, 30, 25, 20, 15, 12, 10)
- Applicant:** G&M Tech Inc.  
# 327-7, Dangjeong-dong, Gunpo-city, Kyunggi-do 435-832, Korea
- Standard(s):** EN ISO 12100-2:2003 + A1:2009  
EN 60204-1:2006 + A1:2009  
EN 60034-1:2004  
EN 1012-2:1996 + A1:2009

This Certificate of conformity is based on the evaluation of samples of the product. It does not imply an assessment of the production and it does not permit the use of a mark of conformity or of a safety mark of the TÜV NORD CERT. The holder of this certificate may use this Certificate together with his EC-Declaration of Conformity.

  
\_\_\_\_\_  
Certification Body for Product Safety

TUV NORD Korea Ltd.  
Tel.: +82-2-6000-4222  
Fax: +82-2-6000-4223  
E-mail: product@tuvnord.or.kr

CERT A4 VU-H 02.05 9000\_04a



## Certificates - CE Mark ( EMC by TUV Nord )



**Certificate  
of conformity with the following  
European Directives**

Registered No.: <b>K1781/E07</b>
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**Electromagnetic Compatibility Directive 2004/108/EC**

Reference of applicant	Date of application	File reference	Test report No.	Date of issue	Revision:
-	28.05.2007	KP-07-272	K2798/E07 (Ref.No.DAC07-0255)	20.09.2007	0

This is to certify that the following products comply to the essential requirements (Annex 1) of the above mentioned European Directive and the following standards, taking into account the German national deviations:

**Product:** Oil-Less Rocking Piston Pumps

**Type designation:** xRND, yRNS  
(x=10, 12, 15, 18, 20, 40, 50, 60, 70, 80, 100, 120, 140;  
y=10, 12, 15, 18, 20, 40, 50, 60, 70)

**Applicant:** G&M Tech Inc.  
2F., 327-7, Dangjeoung-dong, Gunpo-city,  
Kyunggi-do 435-832, Koea

**Standard(s):** EN 61000-6-2:2005  
EN 61000-6-4:2001

This Certificate of conformity is based on the evaluation of samples of the product. It does not imply an assessment of the production and it does not permit the use of a mark of conformity or of a safety mark of the TÜV NORD CERT. The holder of this certificate may use this Certificate together with his EC-Declaration of Conformity.

Certification Body for Product Safety



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E-mail: info@tuvnord.or.kr

Certificates - ISO 14001



**CERTIFICATE OF ENVIRONMENTAL  
MANAGEMENT SYSTEMS**

***G&M Tech Inc.***

Room No.404, Daewoo FV 1Cha, #1030, Jung-Dong, Giheung-Gu, Yongin-City,  
Gyeonggi-Do, Korea

This is to certify that the Environmental Management Systems of  
this organization has been found to conform to the below  
Certification Standard by KTLMS

Certificate No.

**KRE - 0032**

Certification Standard

**KS I ISO 14001:2009 / ISO 14001:2004**

Certification Scope

Design & development, production, service of Oil-less Rocking Piston Pump

Period of Validity

from 09 September 2014 until 08 September 2017

Initial Registration Date : 09 September 2005

Date of Issue : 01 September 2014

*Hyun Doo Kim*

**President**

**KTLMS Co., Ltd.**

1-610, 98, Gasan digital 2-ro, Geumcheon-gu, Seoul, Korea



The use of the Accreditation Mark indicates accreditation by KAB in  
respect of those activities covered by the Accreditation Certificate Number  
KAB-EC-40

Accredited by Member(KAB) of the International Accreditation Forum  
Multilateral Recognition Arrangement for Environmental Management Systems

KTLMSKTLMSKTLMS



## Certificates - RoHS

 **G&M Tech Inc.**

Address : 2F, #327-7, Dangeong-Dong, Gunpo-City, Kyunggi-Do, Korea

Tel : +82-31-459-8221, Fax : +82-31-459-8611, <http://gntechinc.en.ec21.com>

**RoHS**

 TUV NORD

 KCE

ISO14001, CE Mark

## DECLARATION OF CONFORMITY

We, G&M Tech Inc. locates at #327-7, Dangeong-Dong, Gunpo-City, Kyuggi-Do, Korea, declare under our responsibility that products manufactured by Pneumax :

to which this declaration relates, are in conformity with the following standards or other normative document(s) :

- Directive 2002/95/CE (RoHS) prohibiting and limitating the use of lead, mercury, cadmium, chrome and some retarding flame products in electric and electronics equipments.
- Directive 2002/96/CE (RAEE) preventing and limiting the flow of equipments refusals destined to dumps through recovery and recycling politics of instruments and their components.

All products are realized with material respecting limits indicated by a.m. Directives, including all surfaces treatments adopted by Pneumax as well as plastic material free from PBB and PBDE

Mar. 12, 2007

124-81-93615

(주)지엔엘티 손필호

경기도 구포시 당정동 327-7 2층

제조, 도메 서비스 기계기구부



G & M TECH INC.



B. H. SON / PRESIDENT