

Client Name: Jiangsu DINGS' Intelligent Control Technology Co., Ltd

Client Address: No. 2850 Luheng Road, Economic Development Zone, Changzhou, Jiangsu, 213025 China.

Sample Name: PM Stepper Linear Actuator

Tested Basic Model No.: E25PA14B05-40

Tested Extended Model No.: N25PA14B05-87-6, K25PA14B05-13

Client Ref. Information: E/N/K

The above sample(s) and information were provided by the client.

SGS Job No.: SHP25-041307

Sample Receiving Date: Dec 08, 2025

Verification Period: Dec 08, 2025 ~ Dec 11, 2025

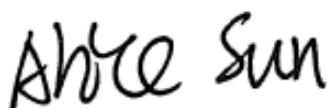
Verification Requested: With reference to RoHS Directive (EU) 2015/863 amending 2011/65/EU.

Verification Method(s): Please refer to next page(s).

Verification Result(s): Please refer to next page(s).

Test Result Summary:

Test Items	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)	Pass

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Qingdao) Co., Ltd.Alice Sun
Approved Signatory

Scan to see the report



9C658219



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services (Qingdao) Co., Ltd.

SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101

中国·山东·青岛市崂山区株洲路143号通标中心

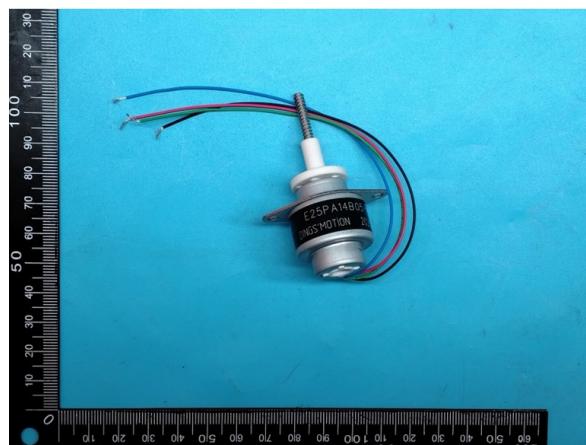
邮编: 266101

t (86-532) 68999888

www.sgsgroup.com.cn

t (86-532) 68999888

sgs.china@sgs.com

Photo of Submitted Sample

E25PA14B05-40



K25PA14B05-13

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

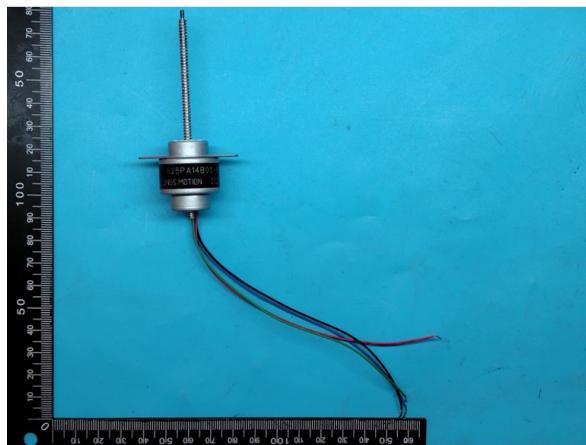
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101
中国·山东·青岛市崂山区株洲路143号通标中心 邮编: 266101

t (86-532) 68999888 www.sgsgroup.com.cn
t (86-532) 68999888 sgs.china@sgs.com

Member of the SGS Group (SGS SA)



N25PA14B05-87-6

Verification Method(s):

1. With reference to IEC 62321-2:2021, disassembly and disjointment were performed for the submitted samples.
2. With reference to IEC 62321-1:2013, tests were performed for the samples indicated by the photos in this report.
 - (1) With reference to IEC 62321-3-1:2013, screening by EDXRF spectroscopy.
 - (2) Wet chemical test method: With reference to IEC 62321-4:2013+A1:2017, IEC62321-5:2013, IEC 62321-7-1:2015, IEC 62321-7-2:2017, IEC 62321-12:2023, IEC 62321-6:2015 and IEC62321-8:2017 , analyzed by ICP-OES,UV-Vis and GC-MS.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101
中国·山东·青岛市崂山区株洲路143号通标中心 邮编: 266101

t (86-532) 68999888 www.sgsgroup.com.cn
t (86-532) 68999888 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

Verification Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	A1	TAO25-0117937-0001.C001	Black/white plastic(label)
SN2	A2	TAO25-0117937-0001.C002	White plastic
SN3	A3	TAO25-0117937-0001.C003	Silvery metal
SN4	A4	TAO25-0117937-0001.C004	Silvery metal
SN5	A5	TAO25-0117937-0001.C005	Silvery metal
SN6	A6	TAO25-0117937-0001.C006	Copper-colored metal
SN7	A7	TAO25-0117937-0001.C007	Silvery metal
SN8	A8	TAO25-0117937-0001.C008	Black solid
SN9	A9	TAO25-0117937-0001.C009	White rubber
SN10	A10	TAO25-0117937-0001.C010	Black metal
SN11	A11	TAO25-0117937-0001.C011	White plastic
SN12	A12	TAO25-0117937-0001.C012	Yellow plastic(adhesive tape)
SN13	A13	TAO25-0117937-0001.C013	Silvery metal
SN14	A14	TAO25-0117937-0001.C014	Silvery metal
SN15	A15	TAO25-0117937-0001.C015	Silvery metal
SN16	A16	TAO25-0117937-0001.C016	Silvery metal
SN17	A17	TAO25-0117937-0001.C017	Silvery metal
SN18	A18	TAO25-0117937-0001.C018	Yellow plastic
SN19	A19	TAO25-0117937-0001.C019	White plastic
SN20	A20	TAO25-0117937-0001.C020	White plastic
SN21	A21	TAO25-0117937-0001.C021	White adhesive
SN22	A22	TAO25-0117937-0001.C022	White plastic
SN23	A23	TAO25-0117937-0001.C023	Green PCB
SN24	A24	TAO25-0117937-0001.C024	White plastic
SN25	A25	TAO25-0117937-0001.C025	Green plastic(jacket)
SN26	A26	TAO25-0117937-0001.C026	Blue plastic(jacket)
SN27	A27	TAO25-0117937-0001.C027	Black plastic(jacket)
SN28	A28	TAO25-0117937-0001.C028	Red plastic(jacket)
SN29	B1	TAO25-0117937-0002.C001	Silvery metal
SN30	B2	TAO25-0117937-0002.C002	Silvery metal
SN31	B3	TAO25-0117937-0002.C003	Silvery metal
SN32	B4	TAO25-0117937-0002.C004	White plastic
SN33	B5	TAO25-0117937-0002.C005	Silvery metal
SN34	C1	TAO25-0117937-0003.C001	Silvery metal

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com



Verification Result(s):

In accordance with the result of material risk assessment, the following disjointed parts in the submitted sample have been verified. (Unless otherwise specified, the unit is mg/kg).

Test Item(s)	A1	A2	A3	A4	A5	A6	A7	A8
Pb	BL							
Hg	BL							
Cd	BL							
Cr(VI)▼	BL	BL	ND	BL	BL	BL	BL	ND
PBB	BL	BL	---	---	---	---	---	BL
PBDE	BL	BL	---	---	---	---	---	BL
DEHP	BL	BL	---	---	---	---	---	BL
BBP	BL	BL	---	---	---	---	---	BL
DBP	BL	BL	---	---	---	---	---	BL
DIBP	BL	BL	---	---	---	---	---	BL
Conclusion	PASS							

Test Item(s)	A9	A10	A11	A12	A13	A14	A15	A16
Pb	BL							
Hg	BL							
Cd	BL							
Cr(VI)▼	BL	ND	BL	BL	BL	ND	ND	BL
PBB	BL	---	ND	BL	---	---	---	---
PBDE	BL	---	ND	BL	---	---	---	---
DEHP	BL	---	ND	BL	---	---	---	---
BBP	BL	---	ND	BL	---	---	---	---
DBP	BL	---	ND	BL	---	---	---	---
DIBP	BL	---	ND	BL	---	---	---	---
Conclusion	PASS							

Test Item(s)	A17	A18	A19	A20	A21	A22	A23	A24
Pb	BL							
Hg	BL							
Cd	BL							
Cr(VI)▼	ND	BL						
PBB	---	BL	ND	BL	BL	BL	ND	BL
PBDE	---	BL	ND	BL	BL	BL	ND	BL
DEHP	---	BL	ND	BL	BL	BL	ND	BL
BBP	---	BL	ND	BL	BL	BL	ND	BL
DBP	---	BL	ND	BL	BL	BL	ND	BL
DIBP	---	BL	ND	BL	BL	BL	ND	BL
Conclusion	PASS							

Test Item(s)	A25	A26	A27	A28	B1	B2	B3	B4
Pb	BL	BL	BL	BL	BL	BL	BL	BL
Hg	BL	BL	BL	BL	BL	BL	BL	BL
Cd	BL	BL	BL	BL	BL	BL	BL	BL
Cr(VI)▼	BL	BL	BL	BL	ND	ND	BL	BL

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com



SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101
中国·山东·青岛市崂山区株洲路143号通标中心

t (86-532) 68999888 www.sgsgroup.com.cn
t (86-532) 68999888 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

Test Item(s)	A25	A26	A27	A28	B1	B2	B3	B4
PBB	BL	BL	BL	BL	---	---	---	ND
PBDE	BL	BL	BL	BL	---	---	---	ND
DEHP	BL	BL	BL	BL	---	---	---	ND
BBP	BL	BL	BL	BL	---	---	---	ND
DBP	BL	BL	BL	BL	---	---	---	ND
DIBP	BL	BL	BL	BL	---	---	---	ND
Conclusion	PASS							

Test Item(s)	B5	C1
Pb	BL	BL
Hg	BL	BL
Cd	BL	BL
Cr(VI)▼	ND	ND
PBB	---	---
PBDE	---	---
DEHP	---	---
BBP	---	---
DBP	---	---
DIBP	---	---
Conclusion	PASS	PASS

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com



SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101
中国·山东·青岛市崂山区株洲路143号通标中心 邮编: 266101

t (86-532) 68999888 www.sgsgroup.com.cn
t (86-532) 68999888 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

Notes:

(1) Interpretation of screening results by X-ray fluorescence spectrometry (XRF):
 (a) Screening limits in mg/kg for regulated elements in various matrices according to IEC 62321-3-1:2013 Annex A as below table.

Element	Polymers	Metals	Composite Materials
Cd	BL≤(70-3σ)<X<(130+3σ)≤OL	BL≤(70-3σ)<X<(130+3σ)≤OL	LOD<X<(150+3σ)≤OL
Pb	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(500-3σ)<X<(1500+3σ)≤OL
Hg	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(500-3σ)<X<(1500+3σ)≤OL
Br	BL ≤ (300-3σ)< X	Not applicable	BL ≤ (250-3σ)< X
Cr	BL ≤ (700-3σ)< X	BL ≤ (700-3σ)< X	BL ≤ (500-3σ)< X

(b) If the maximum allowed level restricts PBB/PBDE and Cr(VI) rather than Br and Cr, the exceptions are the XRF determinations of Br and Cr. If the quantitative results for the elements Br and/or Cr are higher than the limit (for Br calculated based on the stoichiometry of Br in the most common congeners of PBB/PBDE), the sample is "inconclusive".
 (c) Results are obtained by EDXRF for primary screening, LOD = Limit of Detection, BL = Below Limit, OL= Over Limit, IN (The symbol X marks the region)=Inconclusive, where further investigation is necessary, and further chemical testing by ICP-OES (for Cd, Pb, Hg), UV-Vis (for Cr(VI)) and GC-MS (for PBB/PBDE) are recommended to be performed.
 (d) The EDXRF screening test for elements – The reading may be different to the actual content in the sample be of non-uniformity composition.

(2) Screening results of Phthalates (PHTH) below the limits are shown as "BL". Further chemical testing by GC-MS is to be performed if the results exceed limits.

Test Items	CAS No.
Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7
Butyl benzyl phthalate (BBP)	85-68-7
Dibutyl phthalate (DBP)	84-74-2
Diisobutyl phthalate (DIBP)	84-69-5

(3) Interpretation of results by chemical tests:

(a) mg/kg = 0.0001%, MDL=Method detection Limit, ND = Not Detected (<MDL), --- = Not Applicable.
 (b) Unit and MDL in wet chemical test

Test Items	Pb	Hg	Cd	DEHP	BBP	DBP	DIBP
Unit	mg/kg						
MDL	10	10	10	100	100	100	100

The MDL for single compound of PBB and PBDE is 100 mg/kg,
 MDL of Cr(VI) for polymer, composite and leather sample is 10 mg/kg.
 MDL of Cr(VI) for metal sample is 0.10 $\mu\text{g}/\text{cm}^2$.

(c) ▼ =Metal sample

- The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 $\mu\text{g}/\text{cm}^2$. The sample coating is considered to contain Cr(VI).
- The sample is negative for Cr(VI) if Cr(VI) is ND (concentration less than 0.10 $\mu\text{g}/\text{cm}^2$). The coating is considered a non-Cr(VI) based coating
- The result between 0.10 $\mu\text{g}/\text{cm}^2$ and 0.13 $\mu\text{g}/\text{cm}^2$ is considered to be inconclusive-unavoidable coating variations may influence the determination

Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com



SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101
 中国·山东·青岛市崂山区株洲路143号通标中心 邮编: 266101

t (86-532) 68999888 www.sgsgroup.com.cn
 t (86-532) 68999888 sgs.china@sgs.com

- (4) Restricted substances and maximum concentration values tolerated by weight in homogeneous materials under RoHS Directive: Cd: 0.01%, Pb/Hg/Cr(VI)/PBB/PBDE/DEHP/BBP/DBP/DIBP: 0.1%. The limit is quoted from RoHS Directive (EU) 2015/863.
- (5) IEC 62321 series is equivalent to EN 62321 series.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule ($w=0$) stated in ILAC-G8:09/2019.

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

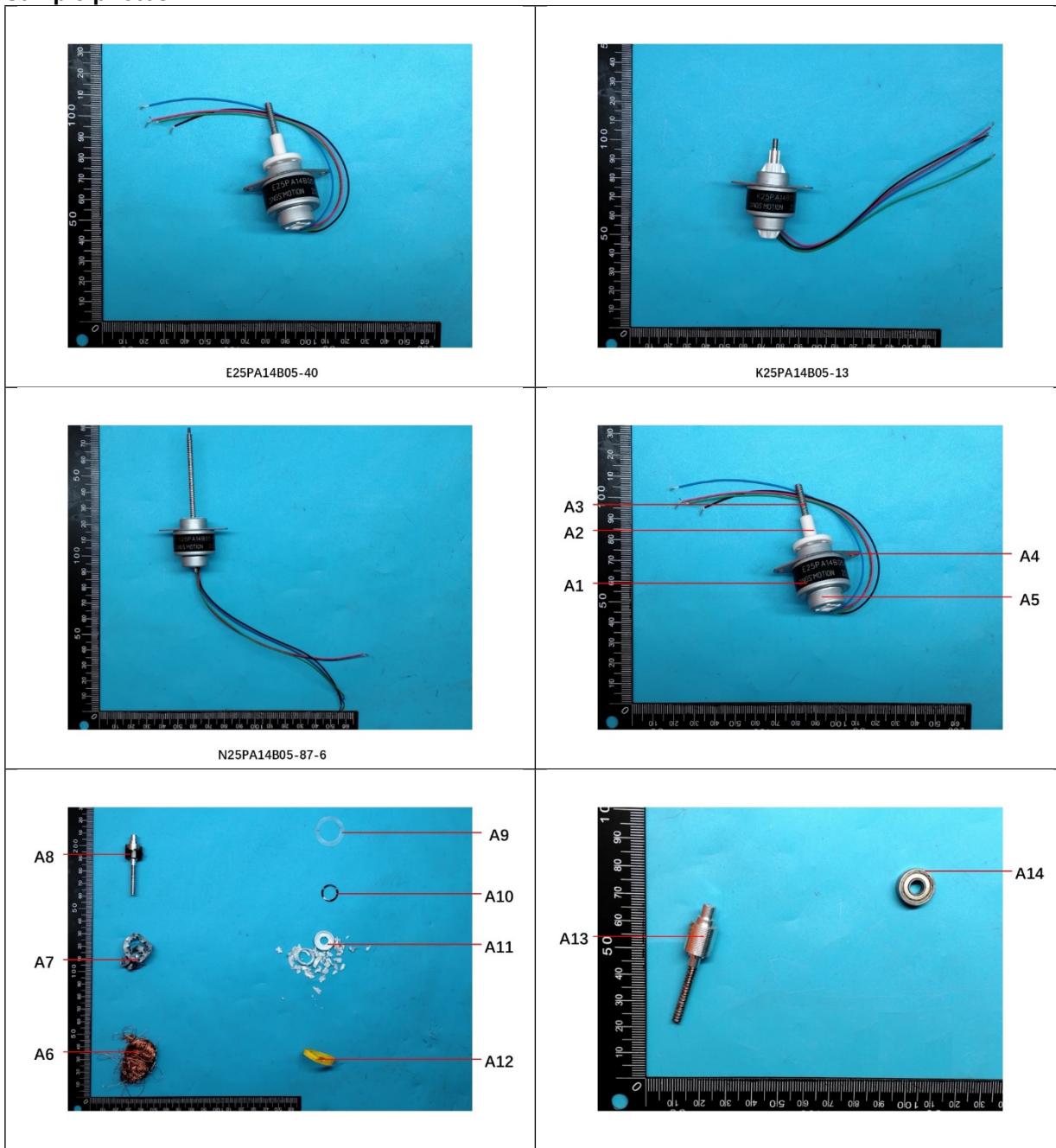


SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101
中国·山东·青岛市崂山区株洲路143号通标中心 邮编: 266101

t (86-532) 68999888 www.sgsgroup.com.cn
t (86-532) 68999888 sgs.china@sgs.com

Member of the SGS Group (SGS SA)

Sample photos:



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

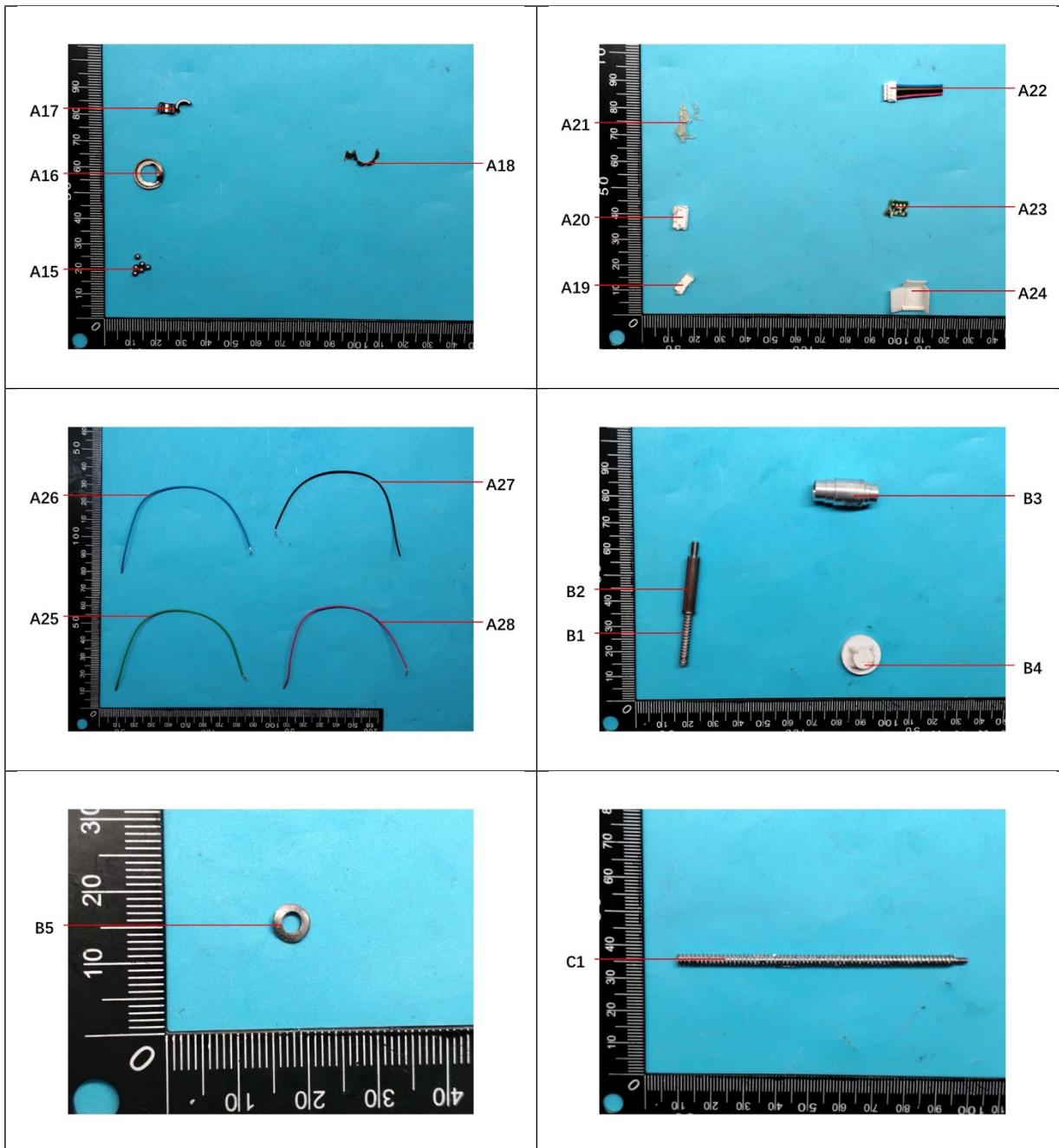
Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com



SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101
中国·山东·青岛市崂山区株洲路143号通标中心 邮编: 266101

t (86-532) 68999888 www.sgsgroup.com.cn
t (86-532) 68999888 sgs.china@sgs.com

Member of the SGS Group (SGS SA)



SGS authenticate the photo on original report only
 *** End of Report ***



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN_Doccheck@sgs.com

SGS-CSTC Inspection & Testing Services (Qingdao) Co., Ltd.

SGS Center, No.143, Zhuzhou Road, Laoshan District, Qingdao, Shandong, China 266101
 中国·山东·青岛市崂山区株洲路143号通标中心 邮编: 266101

t (86-532) 68999888 www.sgsgroup.com.cn
 t (86-532) 68999888 sgs.china@sgs.com

Member of the SGS Group (SGS SA)