

Company Introduction and Product Specifications

With the goal of "The best device",
we will serve our customers with the
"Best quality".



1. Company Introduction
 - 1-1. Salutations
 - 1-2. Company Overview
 - 1-3. Company History
2. Management Policy
3. Business Objective
4. Product Introduction
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6. Precautions & Instructions
7. Key Clients
8. Patents
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1-1. Salutations

iFLEX, a company that is prepared for customer satisfaction

Customer orientation

Customer satisfaction

Along the entire customer journey for automation components,
we will be in the right place to serve you all.

We kindly ask for your continuous attention and encouragement.

Sincerely

- All employees at iFLEX -

1-2. Company Overview

Company	IFLEX Co., Ltd.
Established in	March, 2017, incorporated as a split-up from JK Co., Ltd. (founded in 2007)
CEO	Park Sung-Kyu
Nominal capital	500 million KRW
No. of employees	8
Key business activities	Selling of automation components, manufacturing of stages, development and manufacturing of semiconductor equipment components
Business sectors	STAGE, ROBOT, GEARED, PICKER, P&P MODULE, ETC.
Headquarters	Suite 616 & 617, LI Center Bldg., 50 Hogupo-ro, Namdong-gu, Incheon TEL 032-213-5630~2 FAX 032-213-5633 Website: www.iflexkorea.co.kr

1-3. Company History

2007: Established (by the name of JK Automation Co.)

2008: Started to deal with Oriental Motor's products; agency contract with TPC Mechatronics; agency contract with SMC; scaled up sales team (Team 1/2/3)

2009: Moved to expanded H/Q (at Namdong Industrial Complex, Incheon); agency contract with LPK; annual revenues exceeding 2 bil KRW

2010: Agency contract with ATG; developed & manufactured stages; obtained ISO9001 certification; achieved annual revenues of 3 bil KRW

2011: Moved to expanded H/Q (at Bucheon Techno Park); achieved annual revenues of 5 bil KRW; incorporated by the name of JK Co., Ltd.

2012: Achieved annual revenues of 7 bil KRW; agency contract with WEINTEK (EasyView)

2013: Certified as Venture Company; R&D Center accredited; registered incorporation by the name of JK Co., Ltd.

2014: Agency contract with Mitsubishi Electric Automation Korea; agency contract with FASTECH

2016: Established a local corporate in Hanoi, Vietnam

2017: Automation Dept. of JK Co., Ltd. Separated.

Established iFLEX Co., Ltd.; developed air motor picker and air picker; began to develop linear picker

2019: Successfully developed linear motor picker in October

2020: Built mass production line for linear motor picker

2021: Developed rotary linear motor picker; successfully developed LZT-1212 high-performance and high-precision product

2-1. Management Policy

IFLEX is a company that puts customer satisfaction as its first priority. With its goal for “The best device”, it will deliver great customer service with best quality.

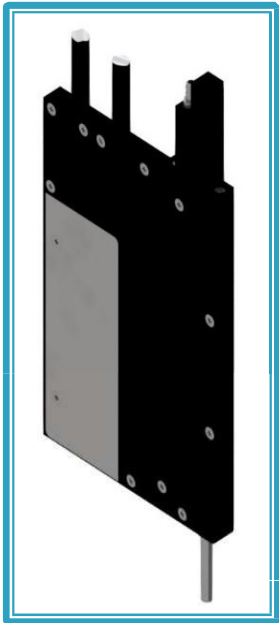
- Quality management innovation via design excellence, manufacturing accuracy & stringent quality inspection
- Price fairness via cost reduction
- Customer satisfaction via quicker delivery



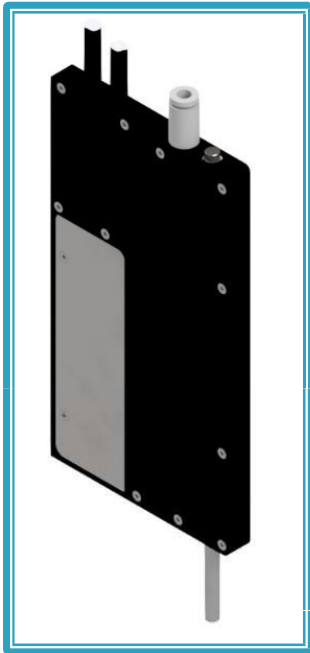
3-1. Business Objective

The ultimate business objective of iFLEX is to afford customers to utilize the space within the manufacturing facility and boost their productivity benefiting from process optimization and flow-time reduction by providing ultra-small, ultra-thin & ultra-high-speed linear picker motors used in a wide range of systems typically applicable for semiconductor manufacturing, mobile phone, SMT, OLED and pick & place module units of various inspection equipment.

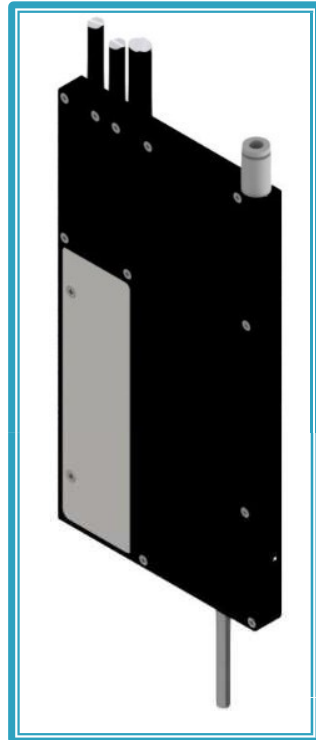
4-1. Product Line & Models



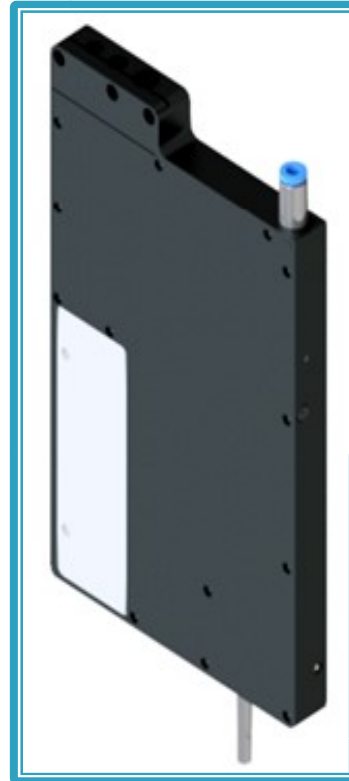
LZ-0610



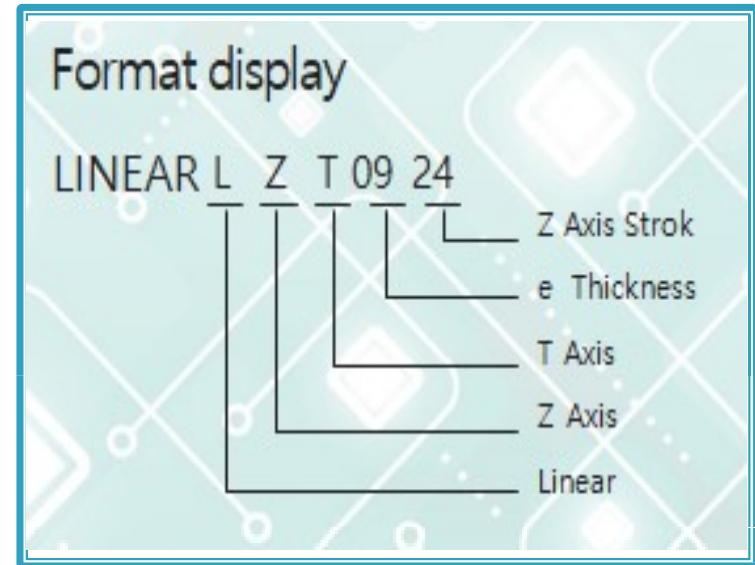
LZ-0812



LZT-0924

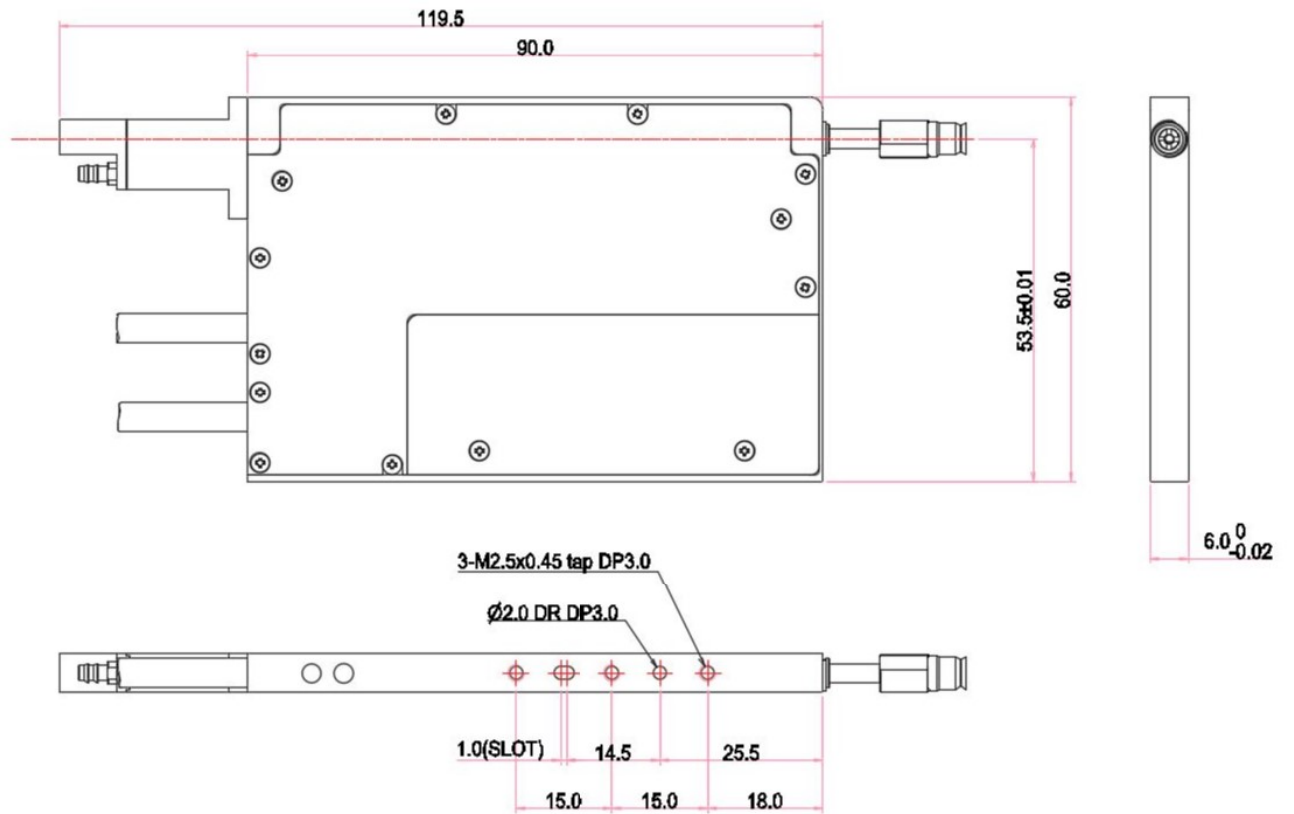
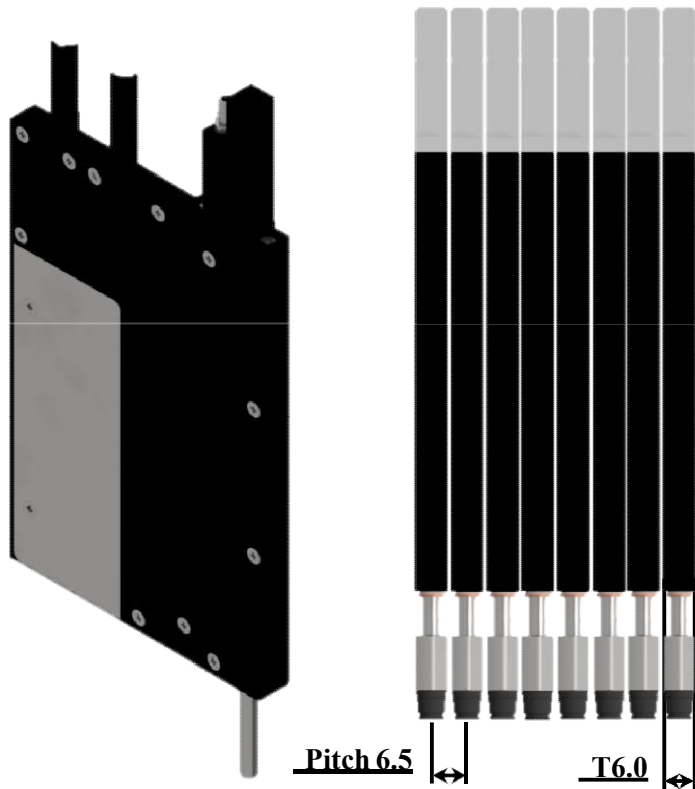


LZT-1212



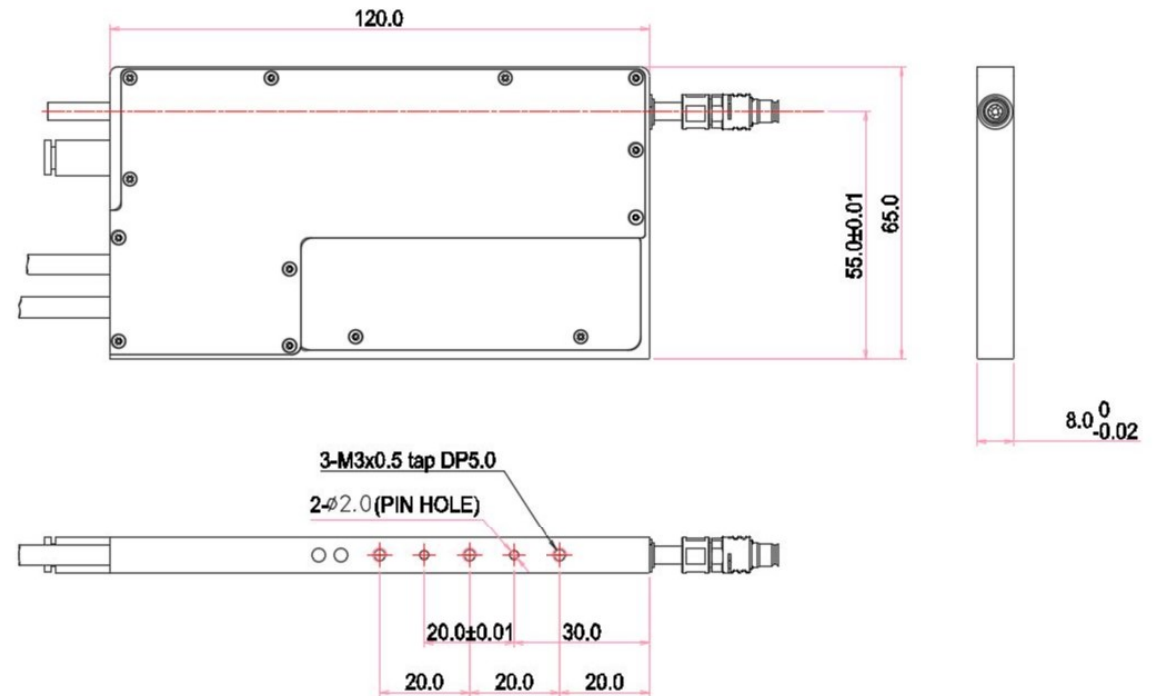
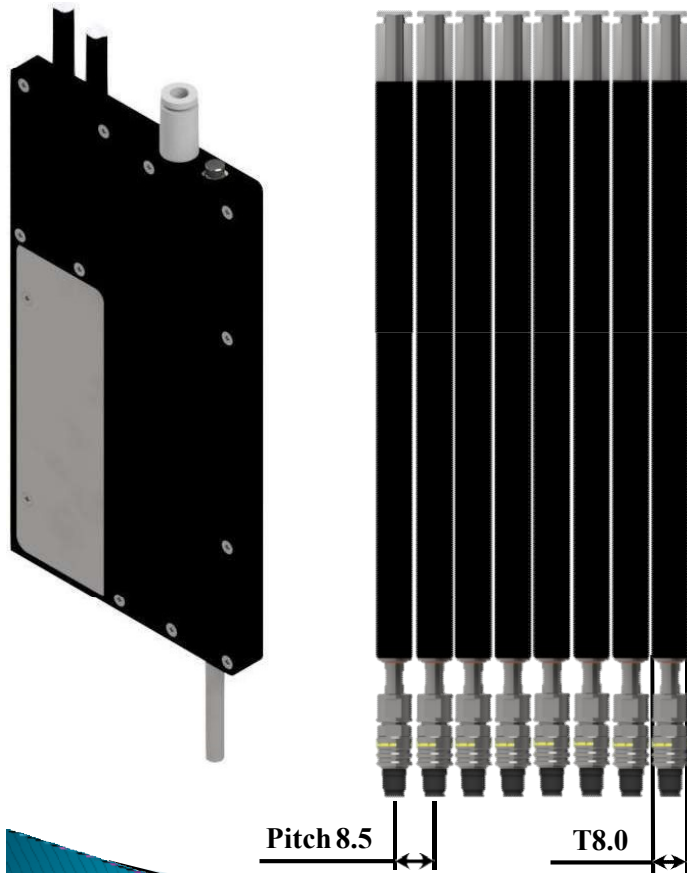
4-2-1 Specifications

LINEAR PICKER LZ-0610



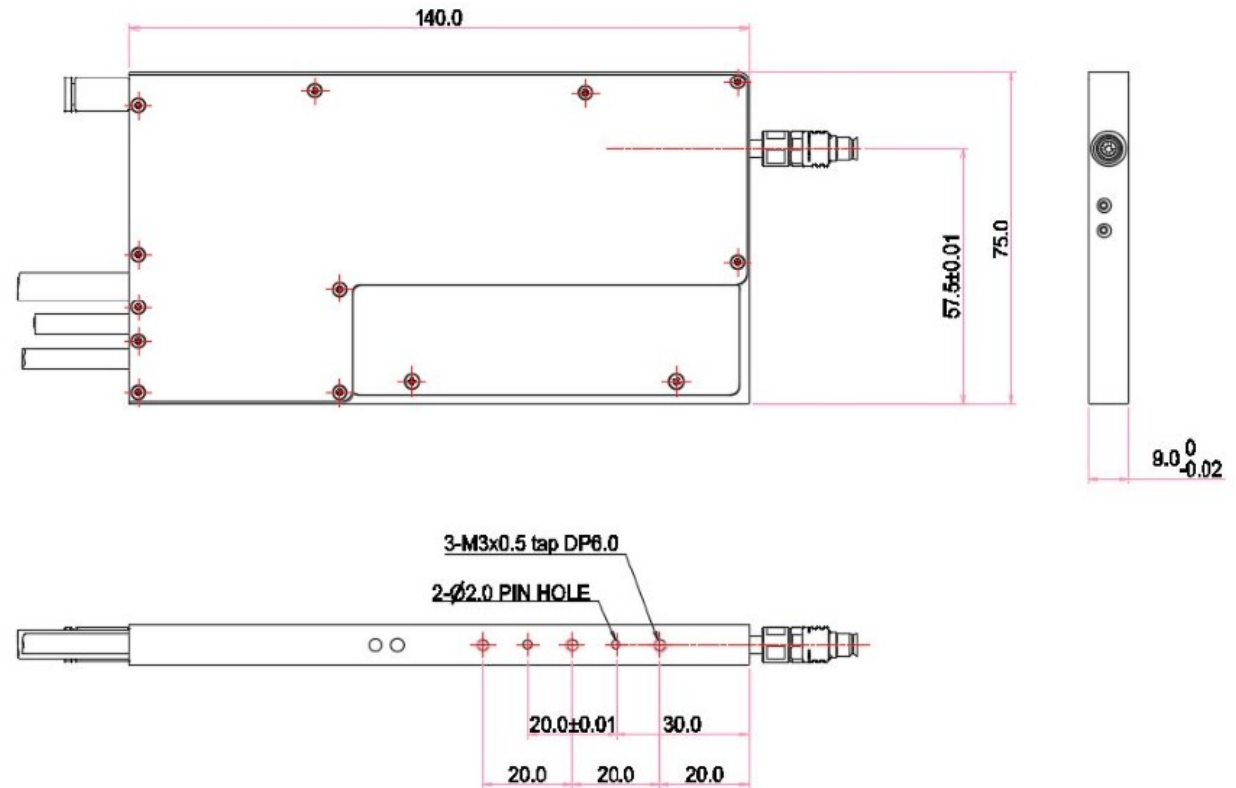
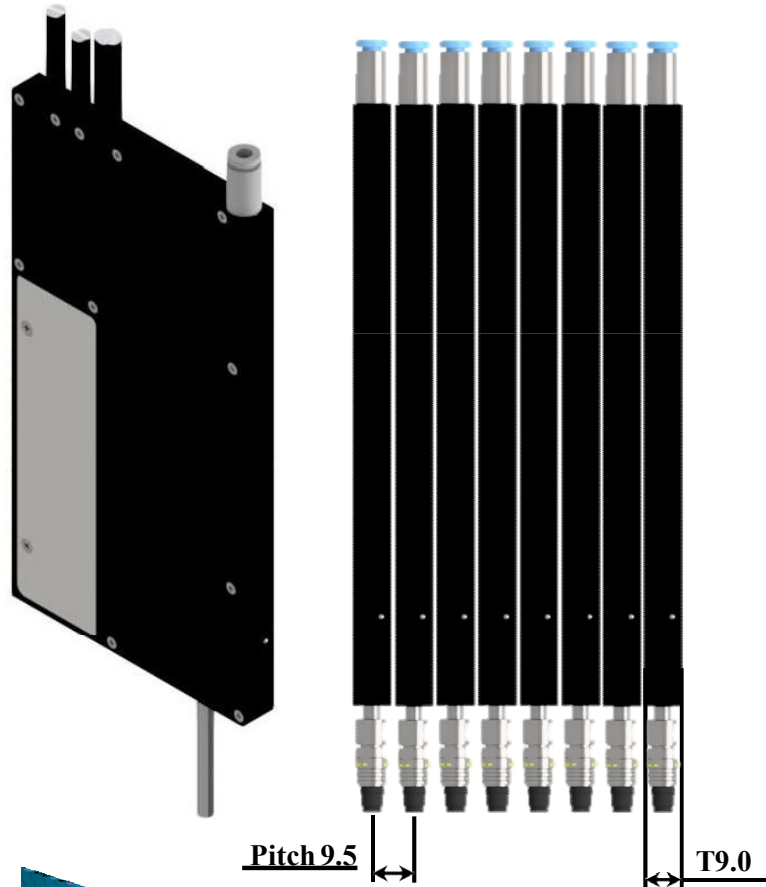
4-2-2 Specifications

LINEAR PICKER LZ-0812



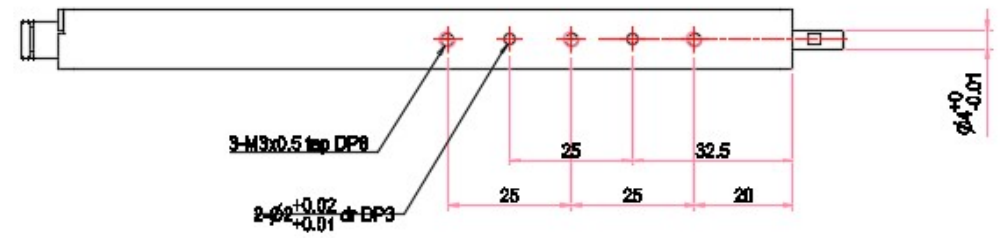
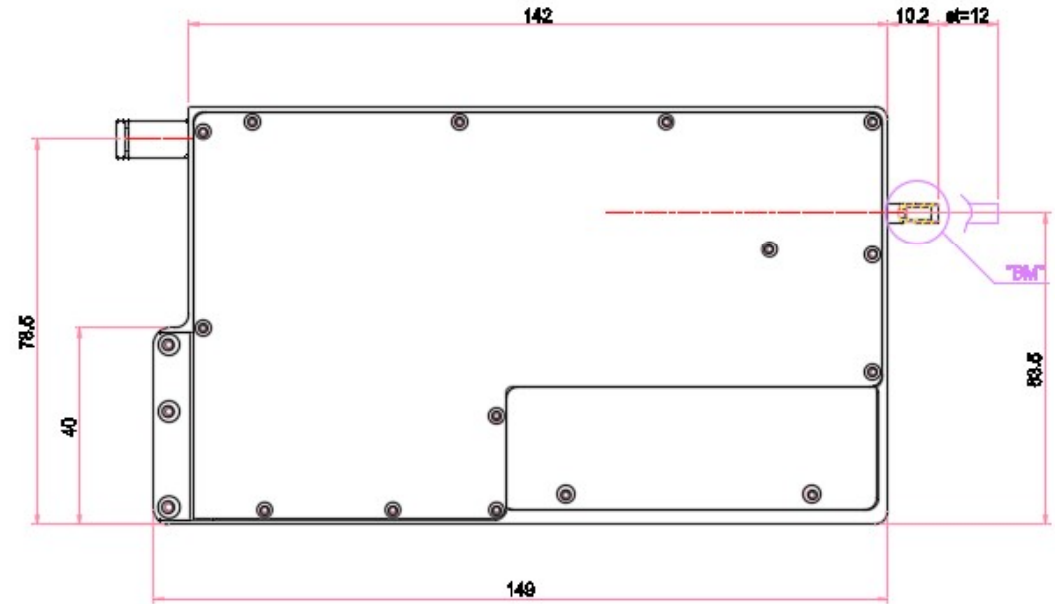
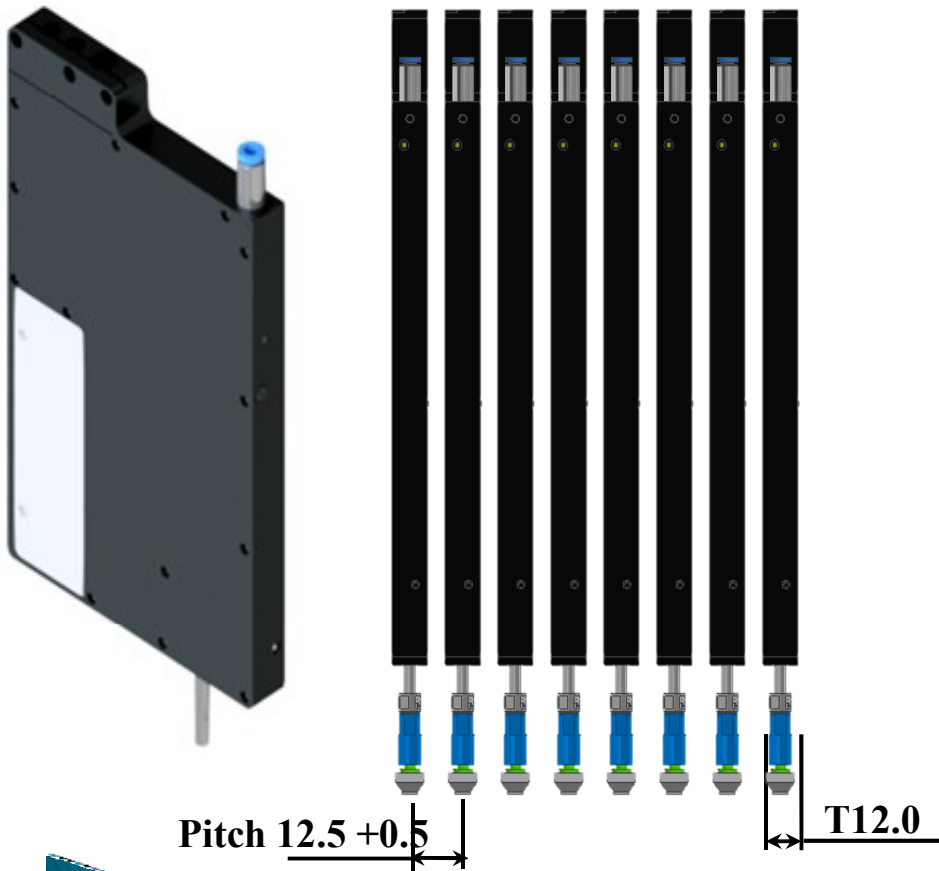
4-2-4 Specifications

LINEAR PICKER LZT-0924



4-2-5 Specifications

LINEAR PICKER LZT-1212

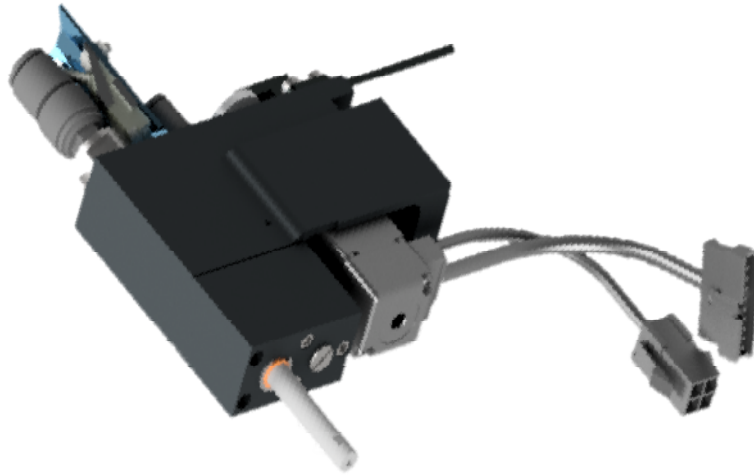


5. Product Specifications

Patent Certificate No. 10-1932512

Axis	Parameter	Unit	LZ-0610	LZ-0812	LZT-0924	LZT-1212	Description
Z-axis	Stroke	mm	10	12	24	12	
	Instantaneous Max Thrust	N	4	4	4	2.5	Stall current drawn within 1 sec with peak current of 1A
	Continuous Rated thrust	N	1	1	1	1.6	
	Max Acceleration	G	8	8	8	6	Rated Acceleration : 5G
	Max Speed	mm/s	600	600	600	600	
	Resolution	um	1	1	1	1	COUNT 0.25um
	Repeat Position Accuracy	μm	±5	±5	±5	±5	
	Min Force Control	gf	45	45	45	45	Controllable in an increment of 5gf up to 300gf max
	Shake Tolerance	X,Y,°	± 0.03	± 0.03	± 0.03	± 0.03	
	Working Voltage	V	DC24	DC24	DC24	DC24	Customizable to user requirement
Rated Current	A	0.3	0.3	0.4	0.4	Never use in excess of rated currents	
T-axis	Stroke	deg			360	360	Continuous rotation possible
	Resolution	deg			0.0029	0.0055	LZT-0912(360/122336) , LZT-1212(360/65536)
	Rated Speed	deg/sec			480	480	
	Acceleration	rev/s ²			125	125	
	Instantaneous Max Torque	mNm			164	164	4 times the rated torque
	Continuous Max Torque	mNm			41	41	
	Repeat Position Accuracy	°			±0.05	±0.05	
	Working Voltage	V			DC24	DC24	
	Instantaneous Max Current	A			0.3	0.3	
Continuous Rated Current	A			0.13	0.13		
	Weight		115g	185g	320g	380g	
F e a t u r e s	<ol style="list-style-type: none"> 1. Installable in parallel with shaft-end pitch of min 0.5 mm 2. Totally enclosed type 3. Heat generation minimized even under long-term use. 4. Recommended pressure for use: 3.0bar ~ 5.0bar 5. Ambient operating temperature range: 0° ~ 60°C 	R e m a r k s	<ol style="list-style-type: none"> 1. Operating voltage range must be strictly complied with. 2. Any malfunction arising from use deviating from rated currents is subject to repair with charge. 3. A one-year warranty period applies; however, warranty service will be charged if a failure is judged to be attributable to the user. Standard motor operating life is in accordance with the manufacturer's specifications. 4. The free-repair warranty will be void if sealed label is broken or damaged. 				

AIR MOTOR PICKER AZT-2010

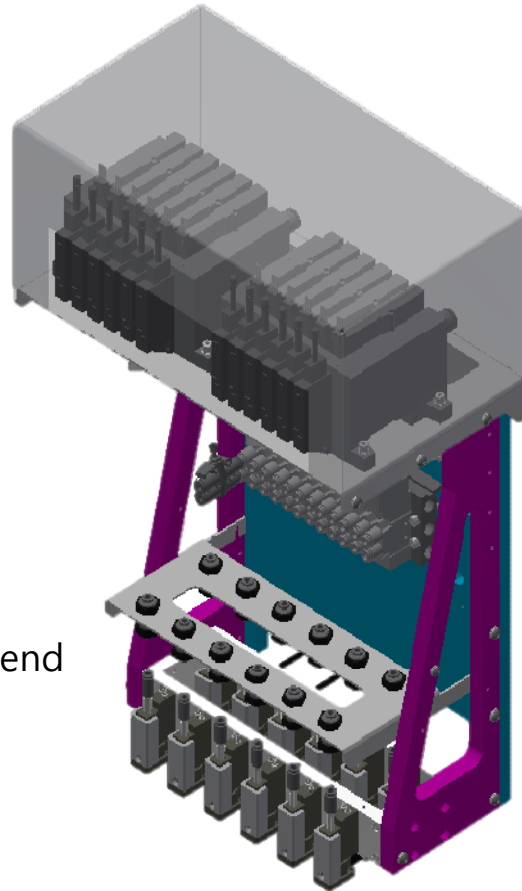
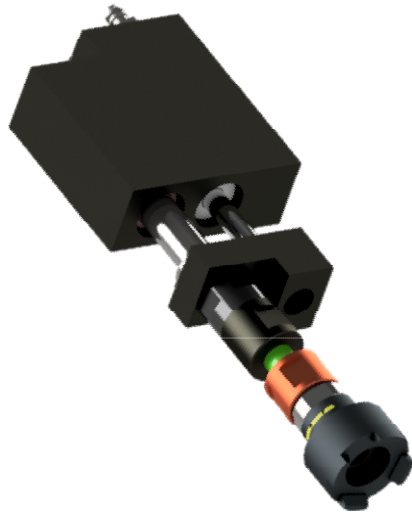


Thickness	20 mm
Stroke	10 mm
Cylinder buffer	3 mm
Cylinder dia.	Ø8.0
Buffer impact force	200 g
Swing angle (90°)	±0.03
Repeated positional precision	±0.1 mm

Features

- Installable in parallel with shaft-end pitch of 20.5 mm
- Theta resolution: 0.02° (customizable to user demand)
- Min operating pressure: 0.2Mpa
- Max operating pressure: 0.6Mpa
- Competitive prices
- Easy to use

AIR PICKER AZ-0810

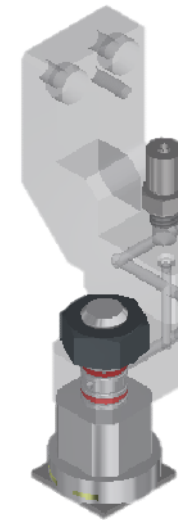


Features

- Installable in parallel with shaft-end pitch of 8.5 mm
- Min operating pressure: 0.2Mpa
- Max operating pressure: 0.6Mpa
- Competitive prices
- Easy to use

Thickness	8 mm
Stroke	10 mm
Cylinder buffer	2 mm
Cylinder dia.	Ø6.0
Buffer impact force	200 g
Swing angle	±0.03
Repeated positional precision	±0.1mm

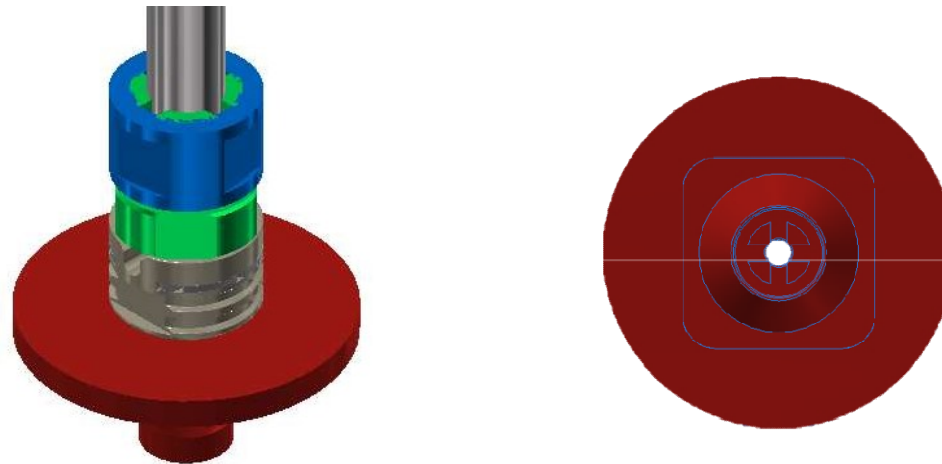
AMGNET COLLET



Features

- Magnet employed allows ATC (Auto Tool Changer)
- Floating mount built-in
- Selectable between buffer type and fixed type

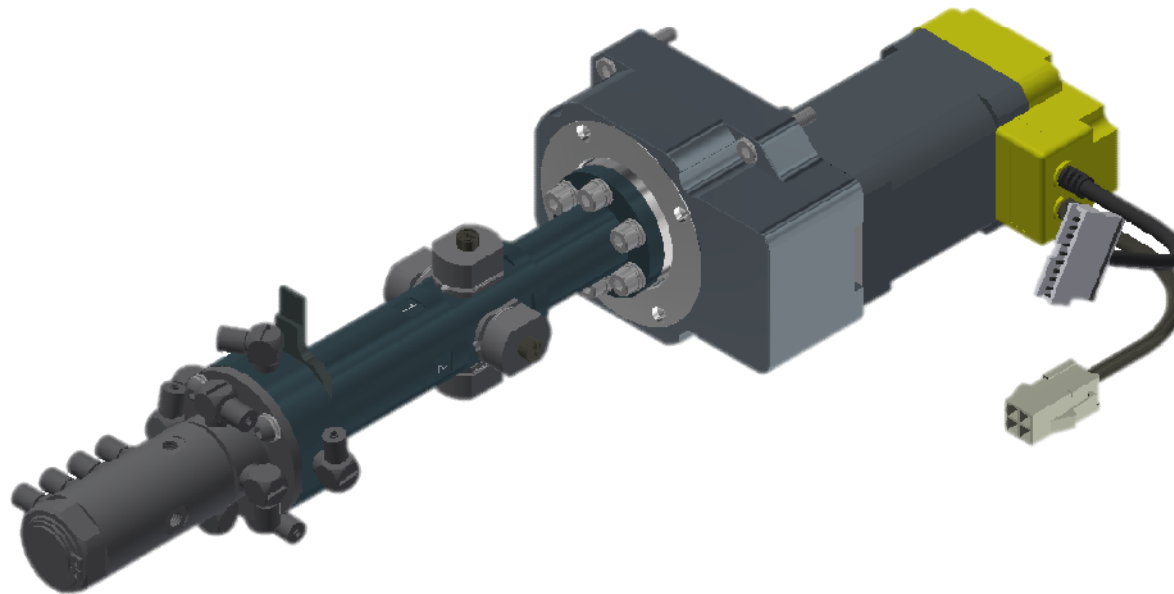
FLOATING MOUNT



Features

- Picker employed
- Floating mount built-in
- Selectable between buffer type and fixed type

FLIPPER MODULE



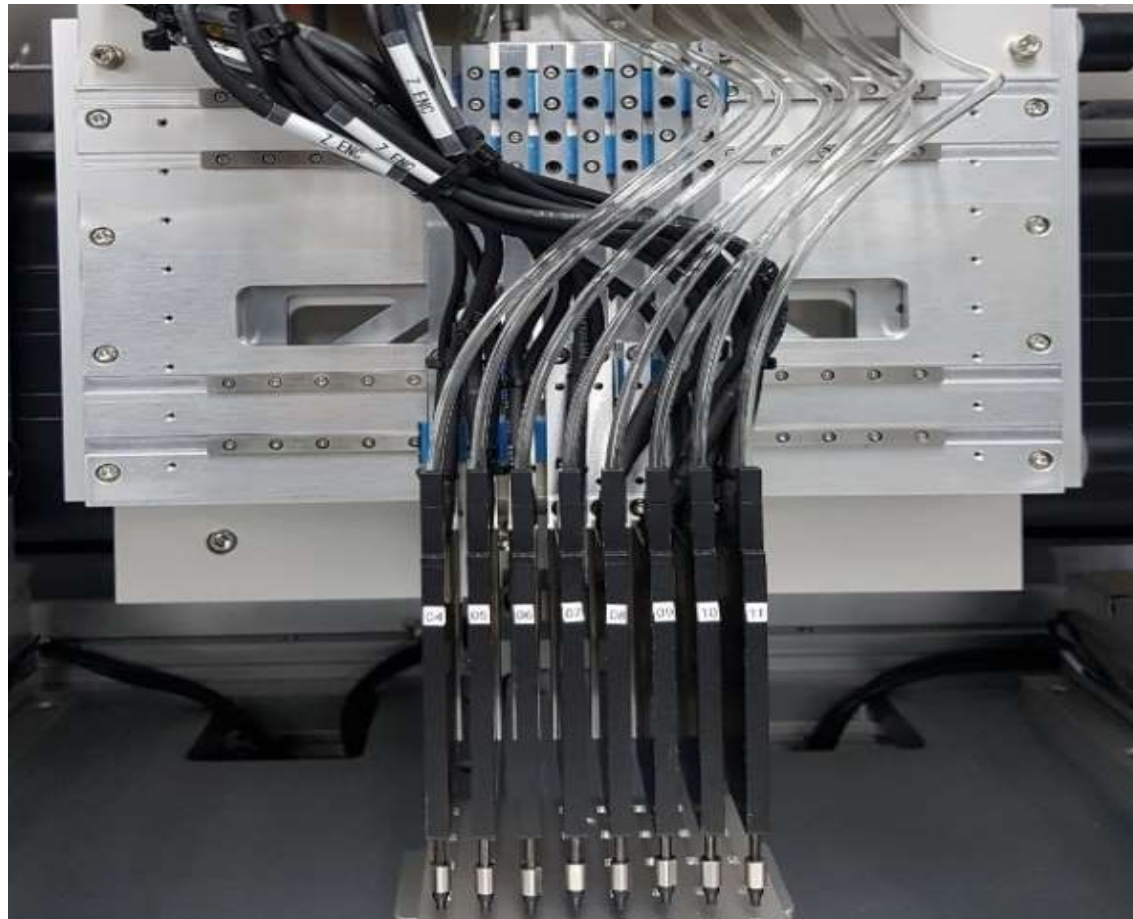
Features

- Can rotate up to 360 degrees
- Pneumatic circuit configuration customizable
- Permissible RPM: 350rpm

PICK & PLACE MODULE

Features

- P&P module developed
- P&P module assembled



4-3. Precautions for Handling

[Handling]

1. Do not dismantle individual parts; otherwise, it may cause functional loss.
2. Do not drop or tap the product. This may cause damage or breakage. If subjected to impact, it could lead to functional deterioration though not visible externally.
3. Be careful for preventing foreign matters from entering the device. There is a risk of damage.
4. Do not forcibly insert any position-determining part (e.g. pin, key, etc.) into the product. It may cause indentation, which in turn causes functional loss.

[Storage]

Store linear picker products upright in a package like when they were delivered, in an indoor location away from high/low temperature and high humidity.

Key Clients

- MPS: Tier-1 vendor of LG Innotek
- SEMES: Tier-1 vendor of Samsung Electronics
- N.P.S
- HIMS
- AP SYS
- DARAM Technology
- PhilOptics: Tier-1 vendor of Samsung Electronics
- C-On Tech
- Koses (KTI)

- DSNT: Tier-1 vendor of LG Display
- MTM: Tier-1 vendor of Samsung Electronics
- STI: Tier-1 vendor of Samsung Electronics
- Fortix: Tier-1 vendor of Samsung & LG
- Sejong Pharmatech & other 120 firms
- H.P.K
- Osung LST
- Sanner
- isMedia

8. Patents

Patent Certificate No. 10-1932512

특허증
CERTIFICATE OF PATENT



특허 Patent Number	제 10-1932512 호
출원번호 Application Number	제 10-2018-0017509 호
출원일 Filing Date	2018년 02월 13일
등록일 Registration Date	2018년 12월 19일

발명의 명칭 Title of the Invention
픽업 장치

특허권자 Patentee
주식회사 아이플렉스(120111-*****)
인천광역시 남동구 호구포로 50, 616호, 617호(고잔동, 엘아이지식산업센터)

발명자 Inventor
박성규(780719-*****)
인천광역시 연수구 송도문화로28번길 81, 107동 4004호(송도동, 더샵그린스퀘어)

위의 발명은 「특허법」에 따라 특허등록원부에 등록되었음을 증명합니다.
This is to certify that, in accordance with the Patent Act, a patent for the invention has been registered at the Korean Intellectual Property Office.

2018년 12월 19일



QR코드로 현재기준
등록사항을 확인하세요

특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE

박원주



특허청
Korean Intellectual
Property Office

특허증
CERTIFICATE OF PATENT



특허 Patent Number	제 10-2042268 호
출원번호 Application Number	제 10-2018-0031693 호
출원일 Filing Date	2018년 03월 19일
등록일 Registration Date	2019년 11월 01일

발명의 명칭 Title of the Invention
픽커 유닛

특허권자 Patentee
주식회사 아이플렉스(120111-*****)
인천광역시 남동구 호구포로 50, 616호, 617호(고잔동, 엘아이지식산업센터)

발명자 Inventor
박성규(780719-*****)
인천광역시 연수구 송도문화로28번길 81, 107동 4004호(송도동, 더샵그린스퀘어)

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This is to certify that, in accordance with the Patent Act, a patent for the invention has been registered at the Korean Intellectual Property Office.

2019년 11월 01일



QR코드로 현재기준
등록사항을 확인하세요

특허청장
COMMISSIONER,
KOREAN INTELLECTUAL PROPERTY OFFICE

박원주



특허청
Korean Intellectual
Property Office



EU Declaration of Conformity

ATTESTATION

According to
with European Directives


For the following

Product : Linear Motor Picker
 Model Name : LZ-0610
 Variant Model Name : LZ-0812

Applicant : IFLEX Co., LTD
 Address : 616-617/6F, 50, Hogupo-ro, Namdong-gu, Incheon, Republic of Korea

Manufactured at : IFLEX Co., LTD
 Address : 616-617/6F, 50, Hogupo-ro, Namdong-gu, Incheon, Republic of Korea

The submitted sample of the above equipment has been tested for CE marking according to following European Directive and standards:
 - Electromagnetic Compatibility Directive 2014/30/EU



The referred test report(s) show that the product complies with standard(s) recognized as giving presumption of compliance with the essential requirements in the specified European Directive. This verification does not imply assessment of the production of the product. The CE marking may be affixed if all relevant and effective European Directives with CE are applicable.

The standards relevant for the evaluation of EMC requirements are as follows:
 Test Standards : EN IEC 61000-6-4:2019
 : EN IEC 61000-6-2:2019

Date of issue: 2021-06-14

IFLEX Co., LTD

616-617/6F, 50, Hogupo-ro, Namdong-gu,
Incheon, Republic of Korea

(Name and signature of authorized person)

verify No.253580372308



TEST REPORT

KCTL Inc. 65, Sinwon-ro, Yeonglong-gu, Suwon-si, Gyeonggi-do, 16677, Korea Tel: 82-31-285-0894 Fax: 82-505-299-8311 www.kctl.co.kr	Report No.: KR21-SEC0143 Page (1) of (42)	
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1. Client
 - Name : IFLEX Co., LTD
 - Address : 616-617/6F, 50, Hogupo-ro, Namdong-gu, Incheon, Republic of Korea
 - Date of Receipt : 2021-05-06
2. Use of Report : EU-Type Examination
3. Name of Product / Model : Linear Motor Picker / LZ-0610
4. Manufacturer / Country of Origin : IFLEX Co., LTD / Korea
5. Date of Test : 2021-06-10 to 2021-06-12
6. Location of Test : Permanent Testing Lab On Site Testing
 (Address: 65, Sinwon-ro, Yeonglong-gu, Suwon-si, Gyeonggi-do, 16677, Korea)
7. Test method used : EN IEC 61000-6-4:2019
 EN IEC 61000-6-2:2019
8. Test Result : Refer to the test result in the test report

Affirmation	Tested by  Name : Junggil Ryu (Signature)	Technical Manager  Name : Gunsu Park (Signature)
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2021-06-14

KCTL Inc.

As a test result of the sample which was submitted from the client, this report does not guarantee the whole product quality. This test report should not be used and copied without a written agreement by KCTL Inc.

KCTL-TIT004-005/4
KP21-02851

EU Declaration of Conformity

ATTESTATION

According to

with European Directives

For the following

Product : Rotary Linear Motor Picker
 Model Name : LZT-1212


Applicant

: IFLEX Co., LTD
 Address : 616-617/6F, 50, Hogupo-ro, Namdong-gu, Incheon, Republic of Korea

Manufactured at

: IFLEX Co., LTD
 Address : 616-617/6F, 50, Hogupo-ro, Namdong-gu, Incheon, Republic of Korea

The submitted sample of the above equipment has been tested for CE marking according to following European Directive and standards:
 - Electromagnetic Compatibility Directive 2014/30/EU



The referred test report(s) show that the product complies with standard(s) recognized as giving presumption of compliance with the essential requirements in the specified European Directive. This verification does not imply assessment of the production of the product. The CE marking may be affixed if all relevant and effective European Directives with CE are applicable.

The standards relevant for the evaluation of EMC requirements are as follows:
Test Standards : EN IEC 61000-6-4:2019
 EN IEC 61000-6-2:2019

Date of issue: 2021-06-14

IFLEX Co., LTD
 616-617/6F, 50, Hogupo-ro, Namdong-gu, Incheon, Republic of Korea

 (Name and signature of authorized person)

verify No.682017326051



TEST REPORT

KCTL Inc. 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea Tel: 82-31-285-0894 Fax: 82-505-299-8311 www.kctl.co.kr	Report No.: KR21-SEC0144 Page (1) of (42)	
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1. Client
 - Name : IFLEX Co., LTD
 - Address : 616-617/6F, 50, Hogupo-ro, Namdong-gu, Incheon, Republic of Korea
 - Date of Receipt : 2021-05-06
2. Use of Report : EU-Type Examination
3. Name of Product / Model : Rotary Linear Motor Picker / LZT-1212
4. Manufacturer / Country of Origin : IFLEX Co., LTD / Korea
5. Date of Test : 2021-06-10 to 2021-06-12
6. Location of Test : Permanent Testing Lab On Site Testing
 (Address: 65, Sinwon-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea)
7. Test method used : EN IEC 61000-6-4:2019
 EN IEC 61000-6-2:2019
8. Test Result : Refer to the test result in the test report

Affirmation	Tested by  Name : Junggil Ryu (Signature)	Technical Manager  Name : Gunsu Park (Signature)
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2021-06-14

KCTL Inc.

As a test result of the sample which was submitted from the client, this report does not guarantee the whole product quality. This test report should not be used and copied without a written agreement by KCTL Inc.

KCTL-TIT004-005/4 KP21-02852

EU Declaration of Conformity

ATTESTATION

According to

with European Directives


For the following

Product : Rotary Linear Motor Picker
Model Name : LZT-0924

Applicant : IFLEX Co., LTD
Address : 616-617/6F, 50, Hogupo-ro, Namdong-gu, Incheon, Republic of Korea

Manufactured at : IFLEX Co., LTD
Address : 616-617/6F, 50, Hogupo-ro, Namdong-gu, Incheon, Republic of Korea

The submitted sample of the above equipment has been tested for CE marking according to following European Directive and standards:
 - Electromagnetic Compatibility Directive 2014/30/EU



The referred test report(s) show that the product complies with standard(s) recognized as giving presumption of compliance with the essential requirements in the specified European Directive. This verification does not imply assessment of the production of the product. The CE marking may be affixed if all relevant and effective European Directives with CE are applicable.

The standards relevant for the evaluation of EMC requirements are as follows:
Test Standards : EN IEC 61800-3:2018, Category C3

Date of issue: 2022-03-30

IFLEX Co., LTD
 616-617/6F, 50, Hogupo-ro, Namdong-gu, Incheon, Republic of Korea

 (Name and signature of authorized person)

verify No.616340103292



TEST REPORT

KCTL Inc. 28 Mosan-gil, Jeongnam-myeon, Hwaseong-si, Gyeonggi-do, Korea TEL: 82 31 286 6881 FAX: 82 31 8059 1154 www.kctl.co.kr	Report No.: KR22-HEC0019 Page (1) of (33)	 KCTL
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1. Client

• Name : IFLEX Co., LTD
 • Address : 616-617/6F, 50, Hogupo-ro, Namdong-gu, Incheon, Republic of Korea

• Date of Receipt : 2022-03-03

2. Use of Report : -

3. Name of Product / Model : Rotary Linear Motor Picker / LZT-0924

4. Manufacturer / Country of Origin : IFLEX Co., LTD / Korea

5. Date of Test : 2022-03-28

6. Location of Test : Permanent Testing Lab On Site Testing
 (Address: 28 Mosan-gil, Jeongnam-myeon, Hwaseong-si, Gyeonggi-do, Korea)

7. Test method used : EN IEC 61800-3:2018, Category C3

8. Test Result : Refer to the test result in the test report

	Tested by Name : Hyosung Kim (Signature)	Technical Manager Name : Byungyeon Kim (Signature)
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2022-03-30

KCTL Inc.

As a test result of the sample which was submitted from the client, this report does not guarantee the whole product quality. This test report should not be used and copied without a written agreement by KCTL Inc.

KCTL-TIT004-005/5
KP22-01269

Business Locations



Suite No. 616/617, LI Knowledge Industry Center, 50 Hogupo-ro, Namdong-gu, Incheon



3rd Floor, A Long Building, Lot A2 CN8, Tu Liem Industrial Zone. Phuong Canh Ward, Nam Tu Liem District Hanoi City Vietnam.

Thank you very much.