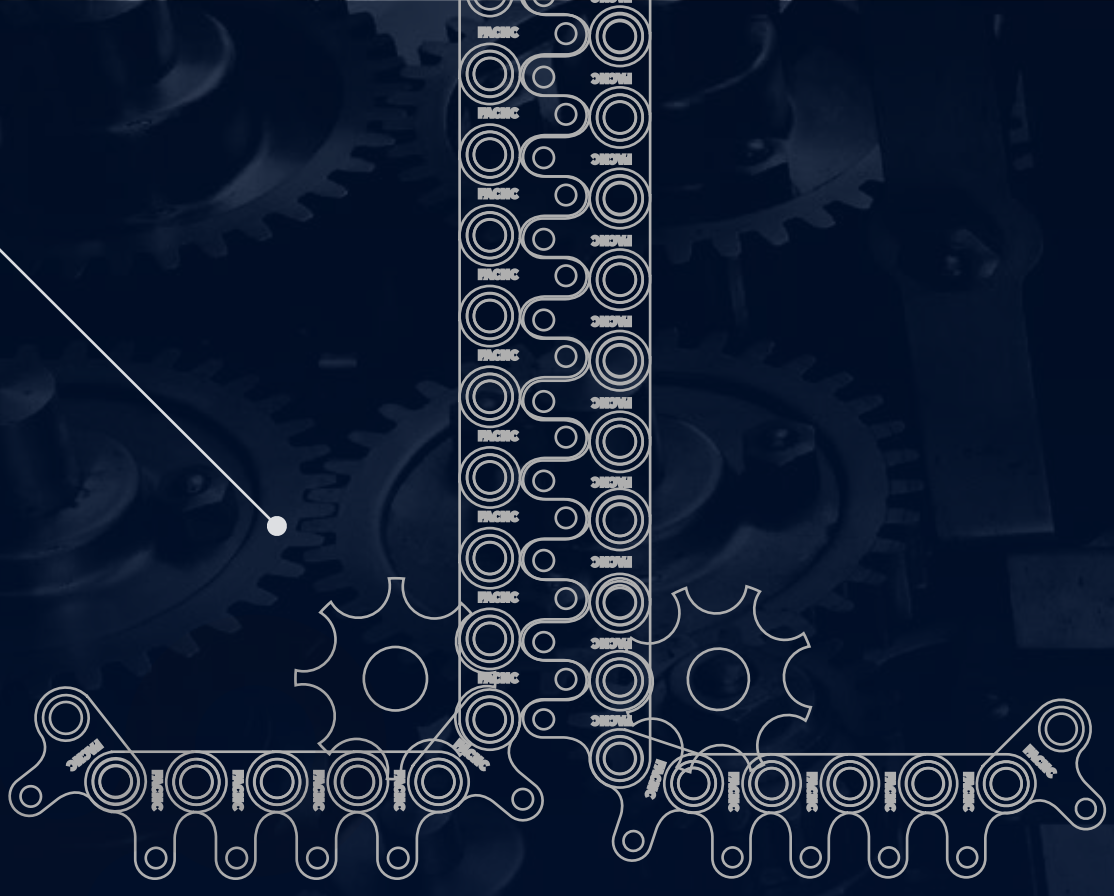


L POS chain Actuator

Meshing chain (Zipper type rigid chain)

product catalog

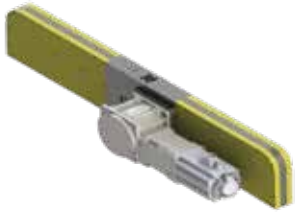
FACNC

Korean Control Technology

Rigid Chain actuators & Zipper chain Actuators

Meshing chain (Zipper type rigid chain)

Product Features



LW Type(A)

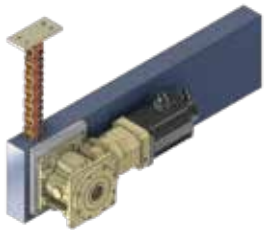
Zipper chain Actuators

LW Type(B)

Zipper chain Actuators

L Type(A)

Link rigid chain Actuators



L Type(B)

Link rigid chain Actuators

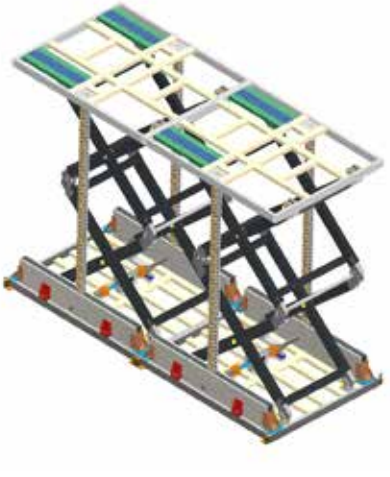
L Type(C)

Link rigid chain Actuators

Rigid Chain actuators & Zipper chain Actuators

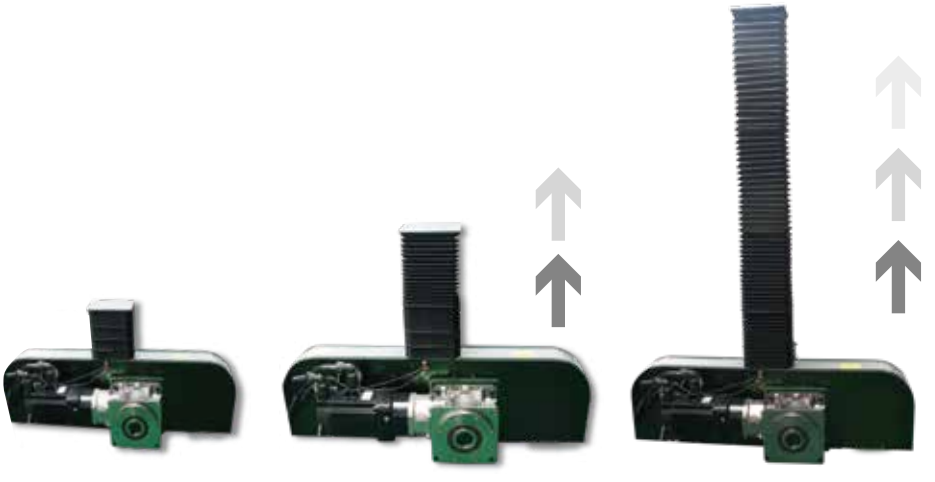
Meshing chain (Zipper type rigid chain)

iterative accuracy measurement (0.01mm)



Product Features

- lifting to lift heavy objects
- Robot arm using length change
- Actuators that push or pull objects, such as hydraulic cylinders



Advantages of L POS

x3

More than 3 times the lifting speed compared to hydraulic lifts

x2

By contacting the roller surface, a laminated structure of logs is possible. It is characterized by excellent bonding strength.

The precision is very good and you can use the Mini Actuator.

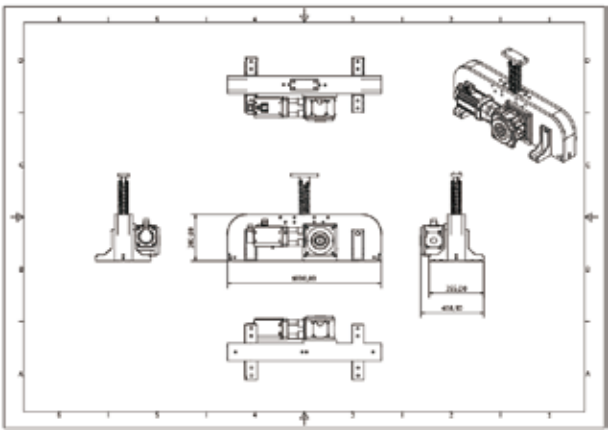
Ultra-light and easy to manufacture

Zippered chain unit with truss structure

Can be manufactured at low cost

Rigid Chain actuators & Zipper chain Actuators

Meshing chain (Zipper type rigid chain)

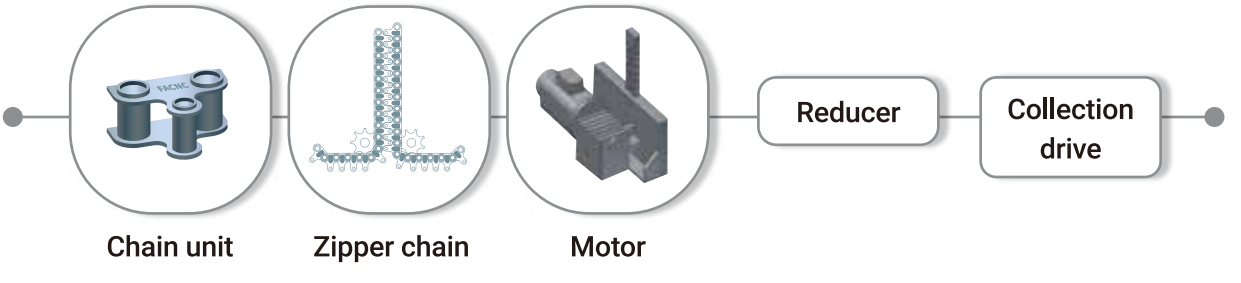


What is Zipper Chain/Rigid Chain Actuator?

This is a zipper chain-based industrial linear conveying device that combines zipper-type chains to form a rigid rod-shaped member, and is a linear motion transmission device capable of position control by motion control. It consists of [Chain Unit], [Zipper Chain], and [Actuator with Zipper Chain]. It is a system that pushes or pulls an object that replaces hydraulic and pneumatic cylinders and realizes strong upward thrust.

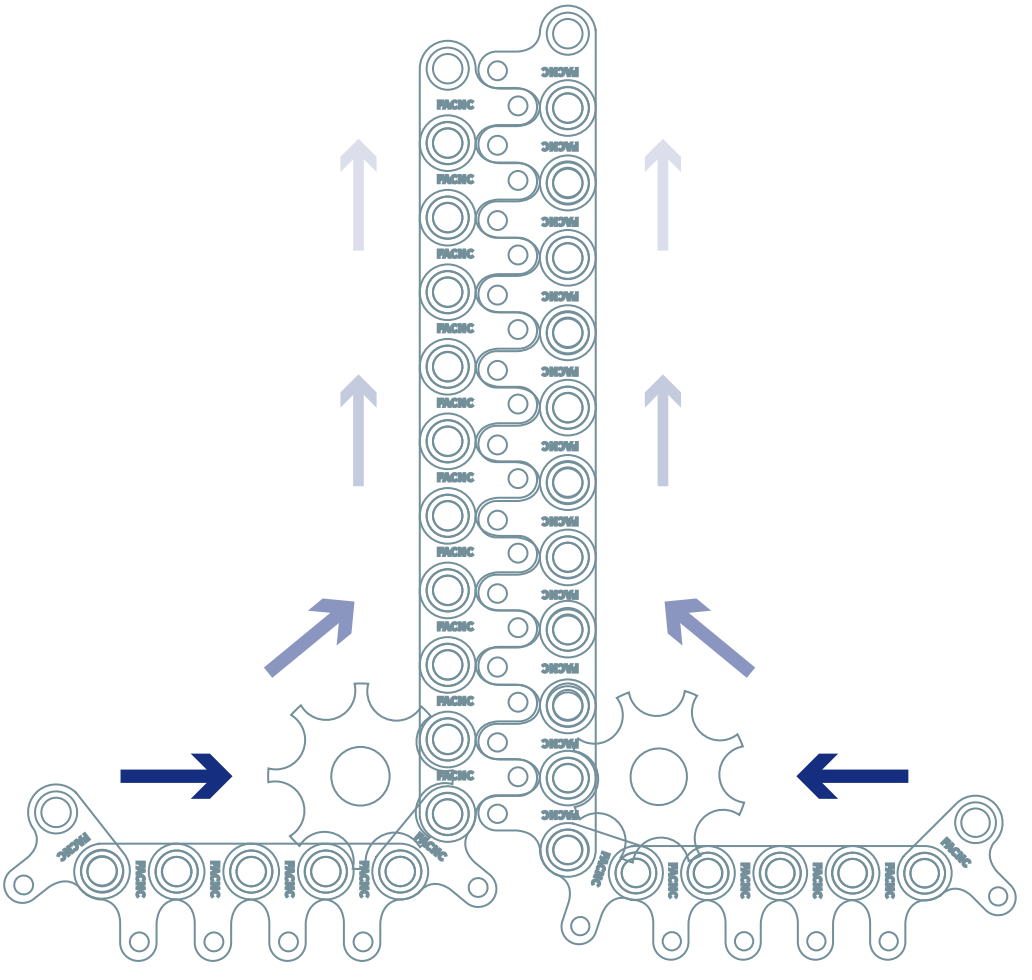
Zipper chain technology is a very demanding precision technology. Korea Control Technology (http://facnc.co.kr) applied for a zipper chain patent for the first time in Korea and was awarded a commendation from the Commissioner of the Korean Intellectual Property Office at the 2016 Korea Invention Patent Competition.

L pos chain actuator module configuration



Rigid Chain actuators & Zipper chain Actuators

Meshing chain (Zipper type rigid chain)



Rigid Chain/ zipper Chain Actuator Applications

Currently used linear transport devices include hydraulic pressure, screws, chains, gears, and belts, and linear motion transmission devices using these are used in various ways throughout the industry. Among them, hydraulic and pneumatic devices are used as a representative transport device, but rigid chains (RIGID, ZIPPER) have been developed and commercialized to improve the problem of push/pull devices using commercially available hydraulic devices.

Zipper Chain Actuator Specifications

LW-TYPE

LW-80-15-4.6-08-1500

Contents	specification
Actuator weight	within 120 kg
Chain effective length	1200mm
Chain stroke	1500mm
Case material	Aluminum,MC nylon
Chain material	Alloy steel, iron 45C
Chain max load	380KN
Actuator operating load	250kg
Reduction ratio	30:1/60:1
Servo motor specifications	220v3 phase/1.5Kw/2000RPM

This is the standard model.
Custom-made is possible according to specifications.

https://www.facnc.co.kr

L pos Chain Actuator Specifications

all-in-one Zipper Chain -AW

all-in-one
Zipper Chain(AW)

Zipper chain - LW

Link Zipper
chain(LW)

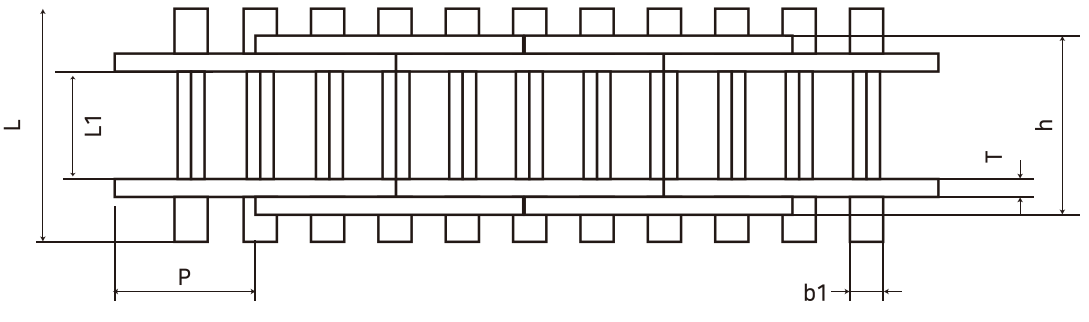
Rigid Link chain -L

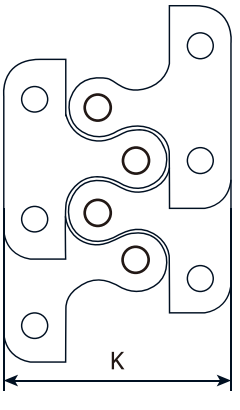
igid Link
hain(L)

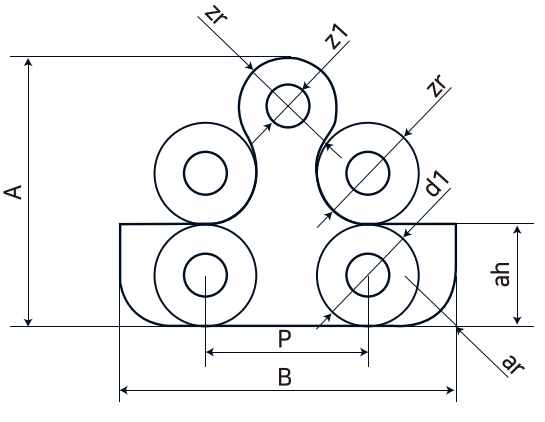
LW - RN - L1 - T - b1

(Rigid chain type) (Roller Chain No) (chain thickness) (Link thickness) (pin diameter)

ex)LW-80-15-4.6-08







Zipper Chain Actuator Specifications

L pos Zipper chain Chain test report

Lpos Zipper chain standard	pin diameter(Ø)	Link thickness (mm)	tensile load (kN)	compressive load(kN) Based on specimen 300mm	working load (kN)
LW40	4	2	35.9	83.1	2.5
LW50	5	2			
LW60	6	2			
LW80	8	4.5	142.3	381.4	10
LW100	11	4.5/9			
LW120	12	4.5/9			30
LW140	14	4.5/9			
LW160	15	4.5/9	332	1422.2	50
LW180	18	9			

Rigid Chain Type | Rigid Chain No | Pich | Width Btween | Rollor Dia metar | Pin Dia metar

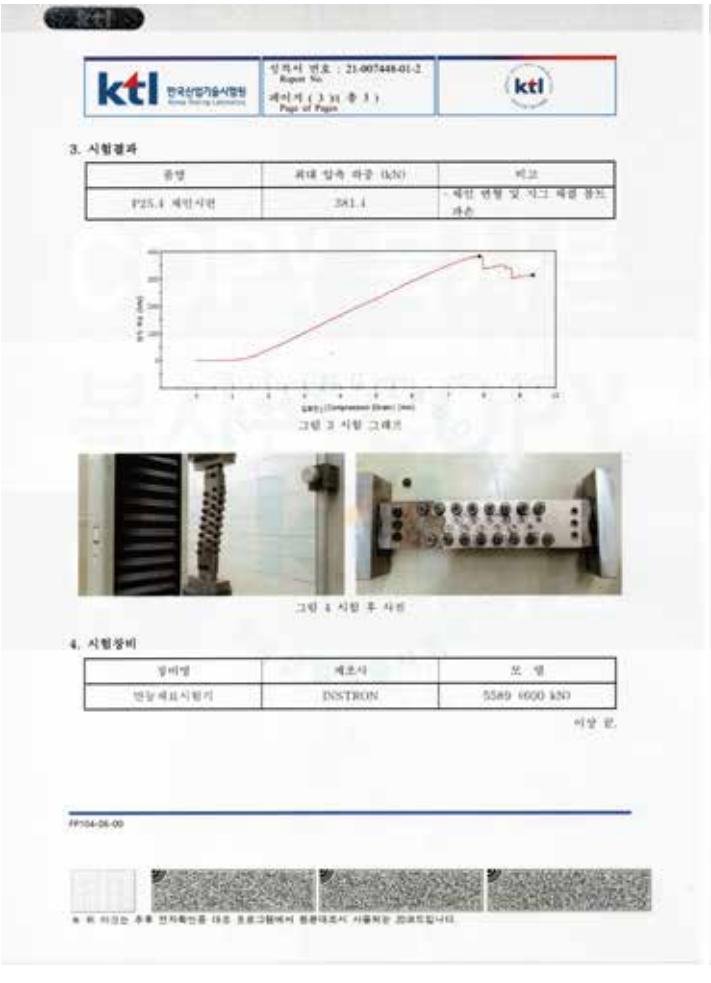
		P (mm)	d1 (mm)	b1 (mm)	d2 (mm)	L1 (mm)	L (mm)	T	working load (kN)	Compressive breaking load (kN)	Tensile breaking load (kN)
LW	*1S	4.7625	2.48	2.38	1.62	6.10	6.90	1.0	order specification	4.0	2.0
LW	*2S	6.350	3.30	3.18	2.31	7.90	8.40	1.0	order specification	9	4.5
LW	*3S	9.525	5.08	4.77	3.58	12.40	13.17	2.0	order specification	21.0	10.5
LW	41	12.700	7.77	6.25	3.58	13.75	15	2.0	order specification	25.2	12.6
LW	40	12.700	7.95	7.85	3.96	16.60	15	2.0	order specification	35	17.5
LW	50	15.875	10.16	9.40	5.08	20.70	15	3.0	order specification	58.8	29.4
LW	60	19.050	11.91	12.57	5.94	25.90	15	4.5	order specification	83	41.5
LW	80	25.400	15.88	15.75	7.92	32.70	15	4.5	5	381.4	142.3
LW	100	31.750	19.05	18.90	9.53	40.40	25	4.5	order specification	400	160
LW	120	38.100	22.23	25.22	11.10	50.30	35	4.5	order specification	420	180
LW	140	44.450	25.40	26.22	12.70	54.40	40	9.0	order specification	600	220
LW	160	50.800	28.58	31.55	14.27	64.80	48	9.0	50	1422.2	322
LW	180	57.150	36.71	35.48	17.46	72.80	72.80	15	order specification	1422.2	322
LW	200	63.500	39.68	37.85	19.85	80.30	80.30	15	order specification	1422.2	322
LW	240	76.200	47.63	47.35	23.81	95.50	90.50	15	order specification	1422.2	400

https://www.facnc.co.k

This is the standard model.
Custom-made is possible according to specifications.

Zipper type link chain

Meshing chain
(Zipper type rigid chain)



3. 시험결과

품명	최대 인장 하중 (kN)	비고
P25.4 체인시편	381.4	- 체인 변형 및 지그 체결 불도 하중

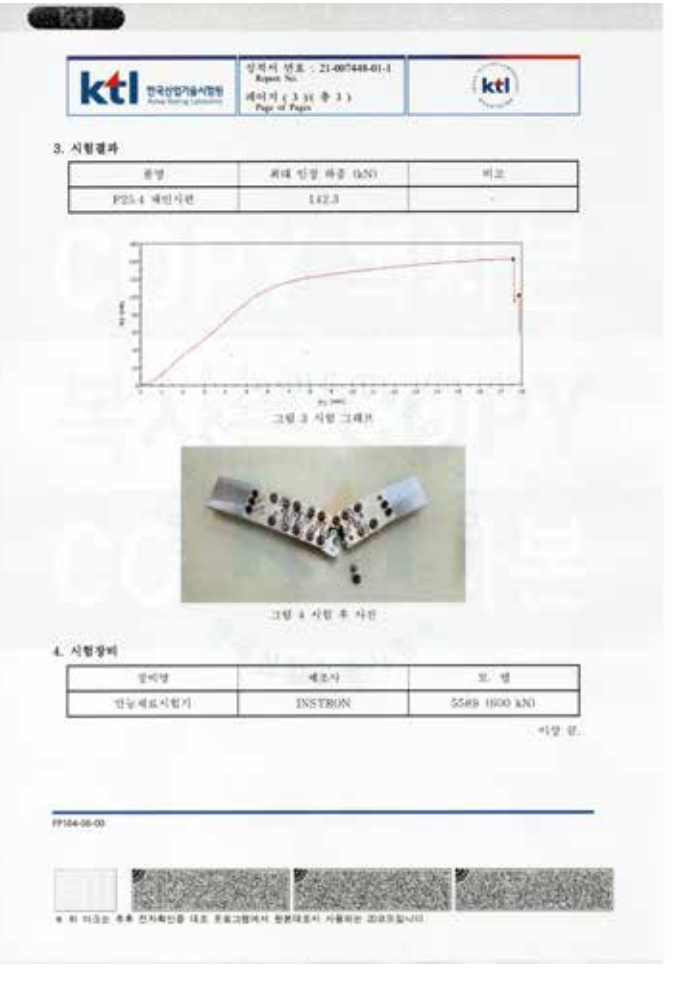
그림 3 시험 그래프

그림 4 시험 후 사진

4. 시험장비

장비명	제조사	모 델
만능재료시험기	INSTRON	5589 600 kN

이상 끝.



3. 시험결과

품명	최대 인장 하중 (kN)	비고
P25.4 체인시편	142.3	-

그림 3 시험 그래프

그림 4 시험 후 사진

4. 시험장비

장비명	제조사	모 델
만능재료시험기	INSTRON	5589 600 kN

이상 끝.

Zipper type link chain

Meshing chain
(Zipper type rigid chain)

TEST REPORT

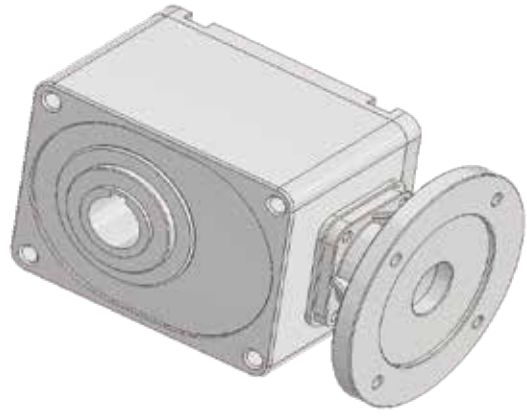
KTR 한국화학융합시험연구원장

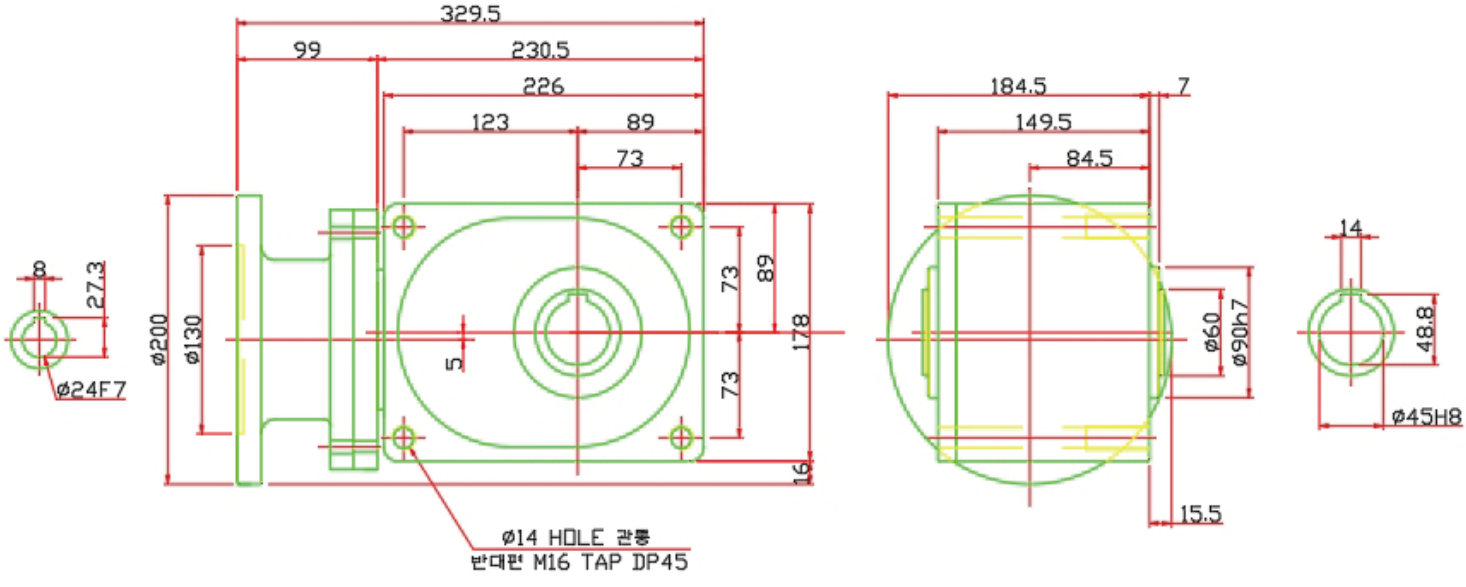
TEST REPORT

KTR 한국화학융합시험연구원장

HYPOID GEARED reducer

Meshing chain
(Zipper type rigid chain)



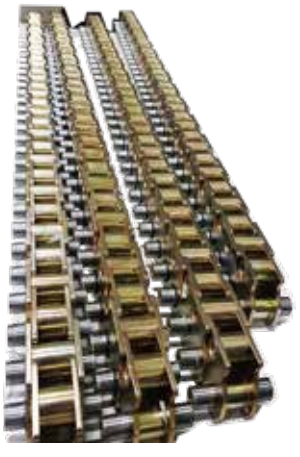


Model part number		Motor capacity(kW)	ratio	Steps	output shaft rpm(r/min)60Hz	output torque 60Hz/1800r/min		Output shaft allowable load(O.H.L)	
						N.m	kgf.m	N	Kgf
MW020	60	0.2	59.00	2	30	54.9	5.6	2009	205
	100	0.2	98.33	3	18	88.2	9	2548	260
	200	0.2	196.67		9	169	17.2	3332	340
MW040	60	0.4	59.00	3	30	106	10..8	3038	310
	100	0.4	98.33		18	176	18	3920	400
	200	0.4	196.67		9	312	31.8	4410	450
MW075	60	0.75	59.00	3	30	198	20.2	4508	460
	100	0.75	98.33		18	330	33.7	6272	640
	160	0.75	157.33		11.3	517	52.8	6272	640
	200	0.75	196.67		9	621	63.4	6272	640
MW150	30	1.5	30.66	2	60	208	21.2	4508	460
	40	1.5	40.88	3	45	264	26.9	5292	540
	50	1.5	51.11		36	330	33.7	6076	620

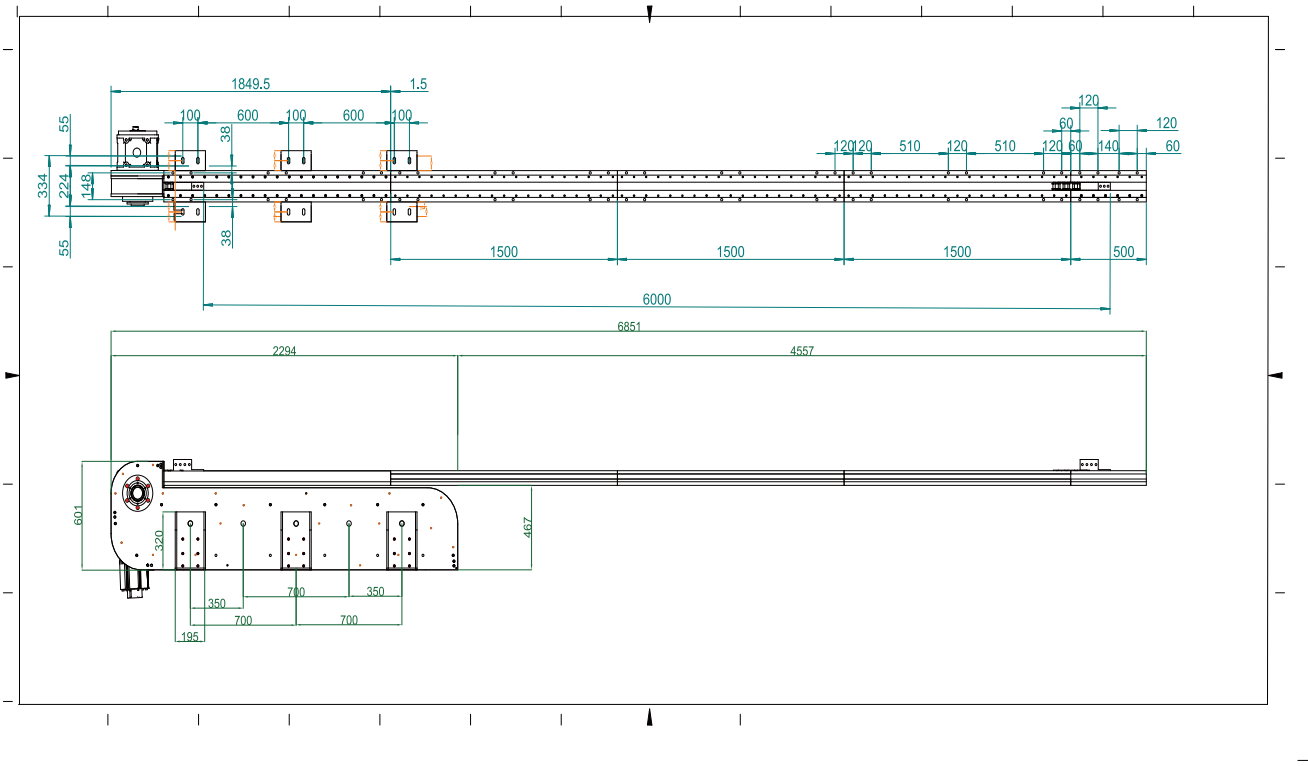
L-120-40-4.5-15

Zipper type link chain

Meshing chain
(Zipper type rigid chain)

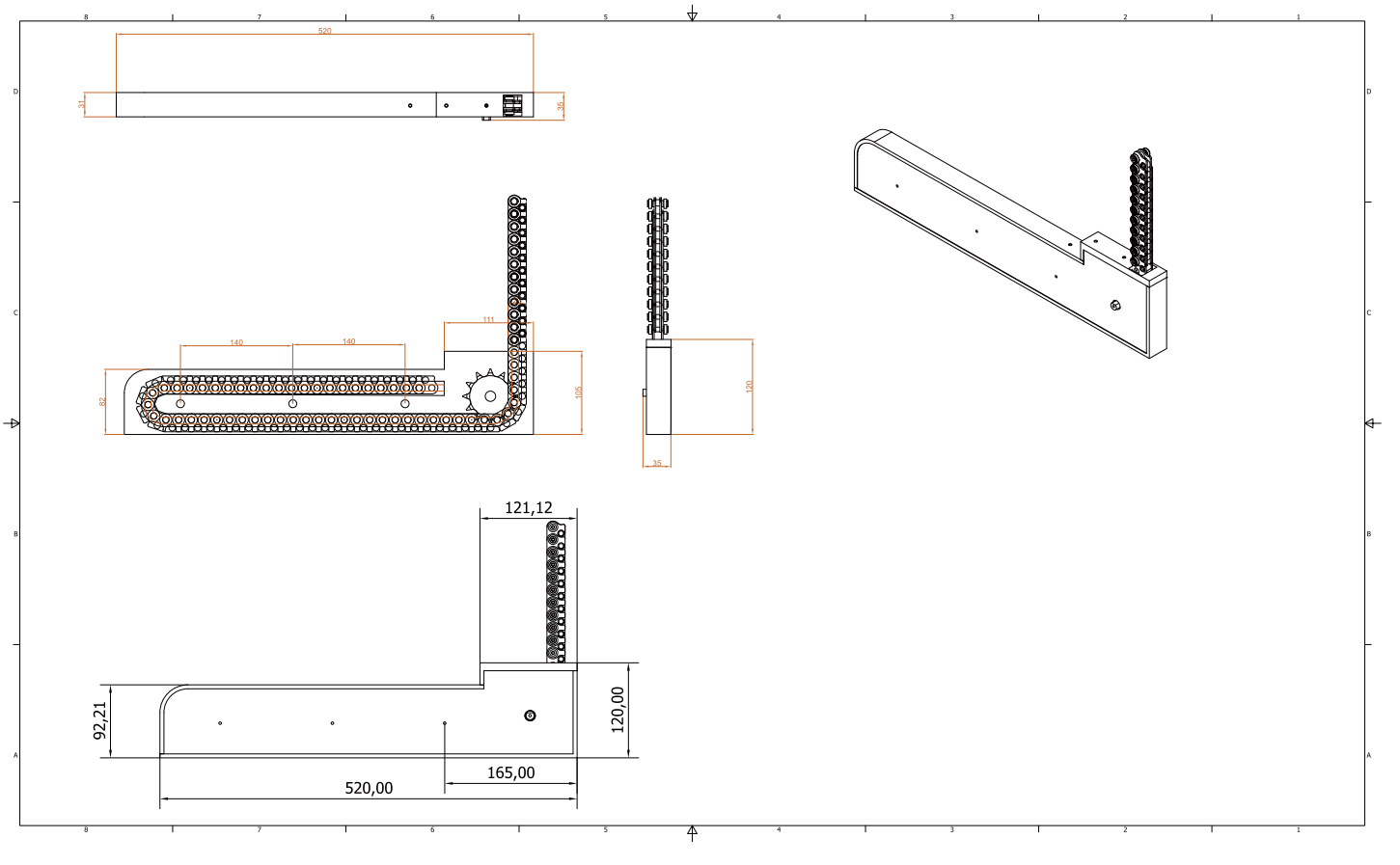


Rigid chain



Rigid chain actuators

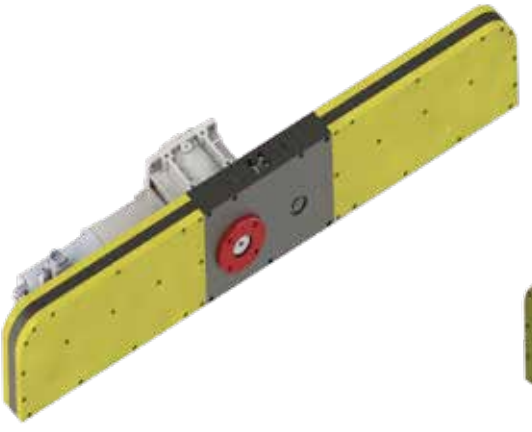
L-50-5-2-08

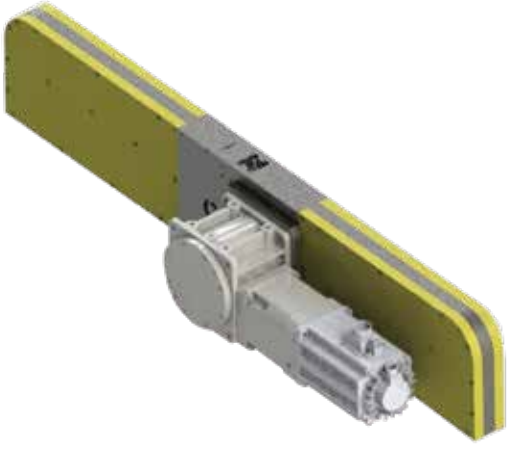


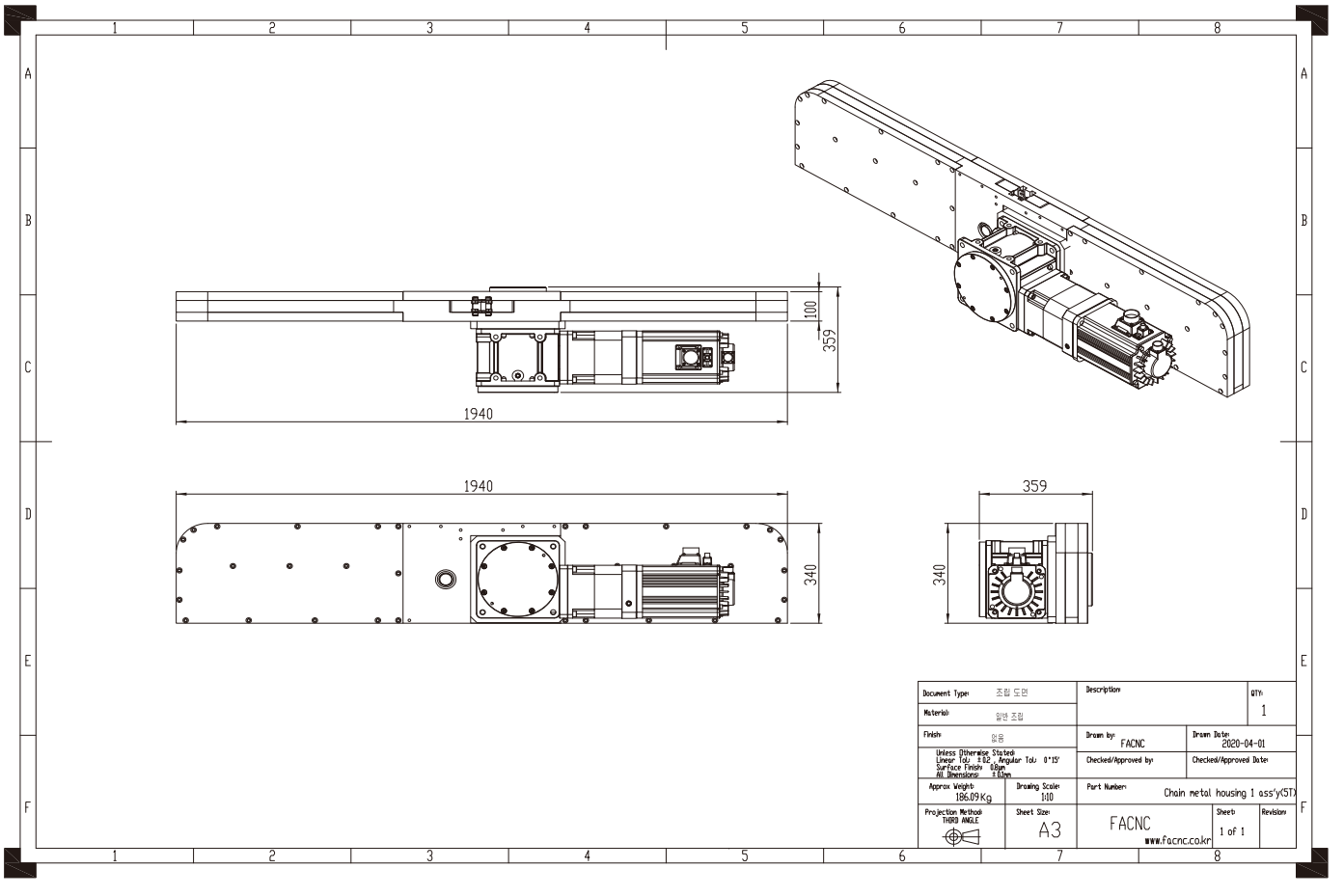
This is the standard model.
Custom-made is possible according to specifications.

Rigid chain actuators

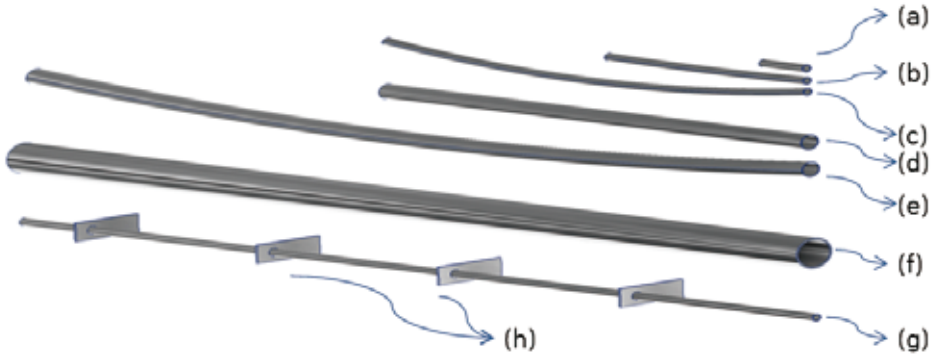
Meshing chain
(Zipper type rigid chain)



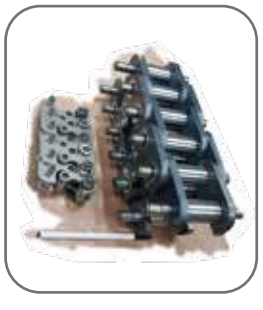




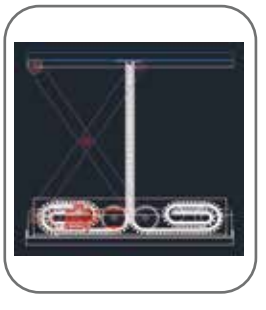
Relationship between chain thickness and chain bending



Let's take a pipe as an example.
There are 7 types of pipes.
(a) has no bending, but (b) is slightly curved and (c) has bending. In a zipper chain, this bending is c alled buckling.
If you want to have no left side with the length of (c), you can use a thicker material as shown in (d).
Similarly, if you want to use the length of (e), you can use the capacity of (f).
If you want to use the material of (a) for the length of (f), you must design a support like (h) that hol ds the joints in the middle.





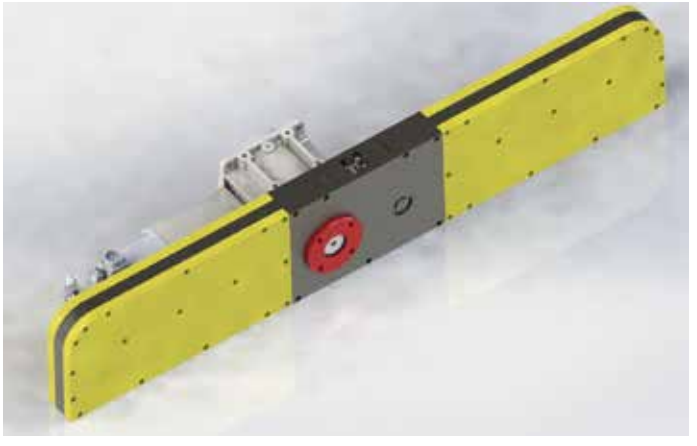


Zipper Chain Nominal Specification

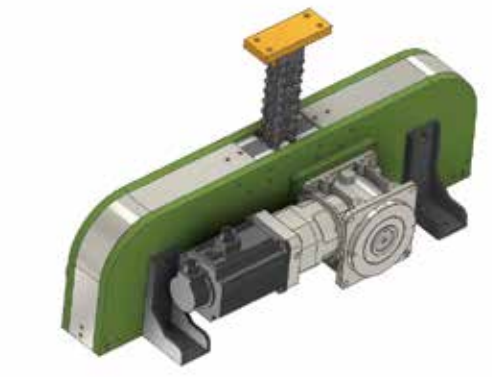
	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	6	7	8	9	10	11	12	15	20	25	30
40																					
50																					
60																					
70																					
80																					
90																					
100																					
120																					
140																					
160																					
180																					
200																					

Zipper chain Actuator

Meshing chain
(Zipper type rigid chain)



LW-80-1500-300-1500



LW-80-1000-300-1200

Zipper Chain Actuator Manufacturing Period

Chain and actuator design	1 week	2week	3 week	4 week	5 week
Material preparation					
processing					
Assembly					
Test run					
Shipping					

■ Inquiry/Production/Consultation Inquiry

Service center 031-508-9981

Fax : 082-031-508-9982

Email: a53409353@gmail.com

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FACNC

Korean Control Technology

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TEL: 082-315089981 FAX:082-315089982
MP 0821053409353
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HP: 010-5340-9353

Korea Control Technology was founded on August 16, 1996 with the aim of developing CNC peripheral components and deals with advanced industrial equipment using CNC systems such as CNC mechatronics, CNC automation, and CNC application equipment.

Based on the know-how accumulated in all parts of CNC such as machinery, electricity, electronics, oil and air pressure, Korea Control Technology is developing and developing a high-quality high-performance CNC 3D model processing machine.

I would like to express my sincere appreciation to all the companies that have always loved Korea control technology with the same trust, and I will always strive to become a company that practices the best service with the best expertise for our customers.

CNC System

Based on CNC's know-how accumulated in all areas such as machinery, electricity, electronics, and hydraulic pressure, we manufacture and develop a four-axis CNC3D model processing machine that is a high-quality high-performance CNC equipment.

Design and manufacture CNC application equipment

Smart Lift Development Using Zipper Chains

Based on the know-how unique to Korea's control technology Production and development of 4-axis CNC 3D model processing machine

Programmerable Rotary Servo Index
3-AXIS CNC LATHE AND FOUR-AXIS MOLDING CNC MILLING
special CNC equipment manufacturing
CNC internal and external mirror grinder
AC/DC SERVO PCB WAVEFORM DIAGNOSTIC MACHINE

Korean Control Technology

FACNC

Mechatronics
company

We practice the best service with
proven professional technology.

IISO 9001 certification
Venture company certification