

## Linear Servo 적용의 취출로봇- 고속 / 고정밀

The new standard of Linear servo robot-Higher speed, Higher accuracy

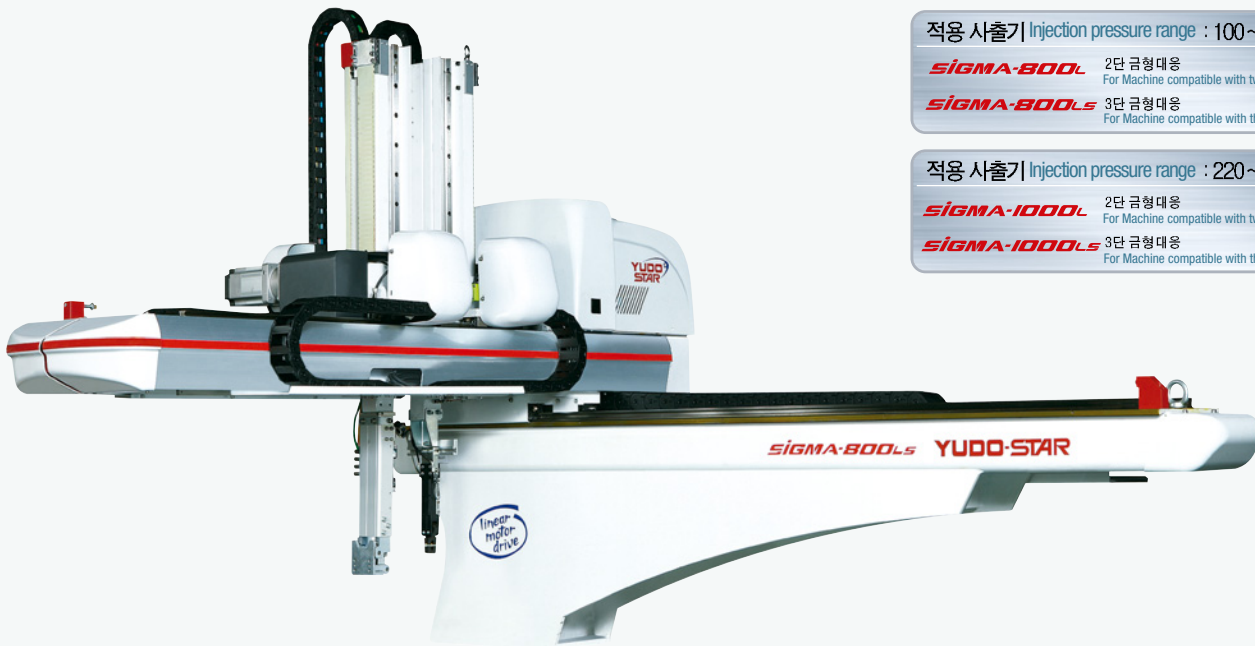
**SIGMA-L Series**취출 Time  
Dry Cycle (Take-out)

0.95 sec

전공정 Time  
Dry Cycle (All)

4.4 sec

표기된 Dry cycle은 당사 측정 기준임. Above dry cycle time is based on YUDO measurement (SIGMA-800L)



적용 사출기 Injection pressure range : 100~220 tbn

**SIGMA-800L** 2단 금형대응  
For Machine compatible with two-plate molds**SIGMA-800LS** 3단 금형대응  
For Machine compatible with three-plate molds

적용 사출기 Injection pressure range : 220~350 tbn

**SIGMA-1000L** 2단 금형대응  
For Machine compatible with two-plate molds**SIGMA-1000LS** 3단 금형대응  
For Machine compatible with three-plate molds

## 공통 사양 | Common Specifications

전 원 Power source	사용압력 Air pressure	구동 방식 Driving method			Posture	반복정밀도(mm) Repeatability	컨트롤러 Controller
		Vertical	Crosswise	Traverse			
AC220V ± 10%, 50/60Hz	0.5MPa(5kgf/cm <sup>2</sup> )	AC servo	Linear Motor		Air cylinder 90°fixed	±0.01	YUCON-400

## 일반 사양 | General Specification

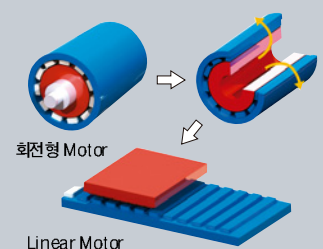
MODEL	Stroke(mm)			공기 소모량(N / Cycle) Air consumption	전원설비용량(kVA) Max. power consumption	가반 중량 (kg) Max. Payload	Dry cycle(sec)	
	Vertical	Crosswise	Traverse				Take-out	All
<b>SIGMA-800L</b>	800	130~670	1400	29	3.4	5	1.0	4.4
<b>SIGMA-800LS</b>	(P): 800 (R): 850	(P): 280~670 (R): 135~645		30	4.6		1.0	5.3
<b>SIGMA-1000L</b>	1000	110~880	1600	29	3.4	5	1.1	5.5
<b>SIGMA-1000LS</b>	(P): 1000 (R): 1050	(P): 260~770 (R): 280~770		30	4.6		1.1	6.3

(P): 제품측 (Product side) (R): 런너측 (Runner side) \* Dry-cycle 측정은 당사 규정에 준함. All timer set is based on 0 ejector time.

## Linear Motor

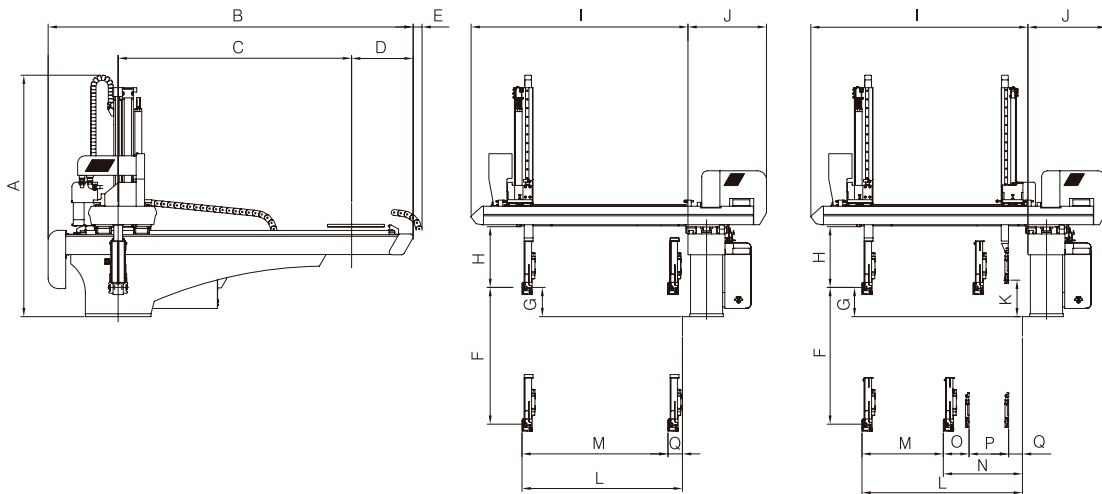
- 직선운동에 의한 고속동작 가능  
High Speed: Only the bus voltage and the speed of the control electronics limit the maximum speed.
- Backlash가 없는 정밀 위치 제어  
Zero Backlash: Without mechanical transmission components, there is no backlash Deadman Switches with 3 shifts

- 구조가 간단하고 마찰 운동부 없이 반영구적인 수명  
Maintenance free operation: Because linear motors have no contact between the two moving bodies, therefore, they have long and virtually maintenance free life.
- 구동소음의 감소  
Low Noise: Because of no friction between moving parts, there are almost no ways that noise can be produced.





## 외형 치수 | Outer Dimensions



Model	외형치수(mm) Outer dimension																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
<b>SIGMA-800L</b>	1347	2124	1400	362	-	800	200	358	1090	517	-	800	520	280	140	520	140
<b>SIGMA-800LS</b>	1347	2124	1400	362	-	800	200	358	1090	517	250	800	520	280	140	520	140
<b>SIGMA-1000L</b>	1447	2324	1600	362	-	1000	200	358	1090	517	-	800	520	280	140	520	140
<b>SIGMA-1000LS</b>	1447	2324	1600	362	-	1000	200	358	1090	517	250	800	520	280	140	520	140



### YUCON-400 Pendant

- Pendant 를 사용한 간편하고 정밀한 Stroke 제어  
Accurate positioning control by Pendant
- 최대 99Point의 낙하 위치의 조정이 가능하여  
2차 자동화의연계가 용이  
99 different releasing point available which make it easy for following process
- 안전성 향상 - 3단 동작 스위치 적용  
Secured operation by 3 steps Dead-man switch.
- Alarm 이력 기능  
Alarm history function
- 최대 50개의 금형 메모리 기능  
memory for 50 different molds available
- 다국어 지원 컬러 터치 스크린 펜던트 (5.7")  
(기본 : 한글/영어)  
English/Korean display available in Color LCD touch screen panel

## 표준 기능 | Standard Functions

■ 제품취출 Mode Product extracting mode	■ 고정축취출 Extracting from fixed mold	■ 주행 전진시 Sprue처리 기능 Sprue placement during moving on traverse	■ 이형제 분사 장치(기구별도) Spray for easy take-out (part optional)
■ Runner 취출Mode Runner extracting mode	■ 주행도중자세 제어 Posture control during moving on traverse	■ 주행 복귀시 Sprue처리 기능 Sprue placement during returning on traverse	■ 제품 형내 낙하 Product release within mold
■ 취출측 전진대기 Advanced positioning at product extract side	■ 주행 대기 Delayed traverse	■ LS4-Bar 제품감지장치(기구별도) Sensing product confirmation LS4-bar (part optional)	
■ Ejector 연동 Linked movement with the ejector of I.M.M	■ 취출측 전진 자세 제어 Posture control at product extract side	■ 척내 제품 확인 회로 Product confirmation in chuck	
■ 제품 낙하 위치 선택 Packing mode	■ 낙하측 하강 Descent at release side	■ 진공 흡착 확인 Vacuum confirmation	