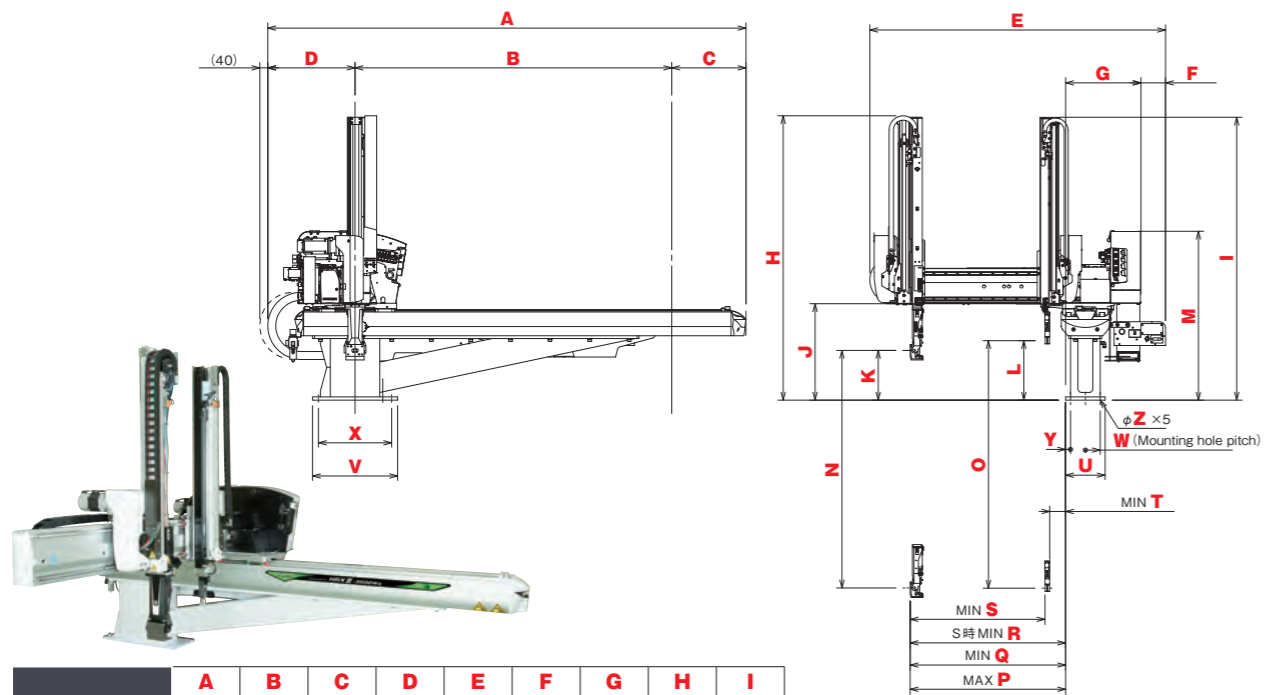


**NEW** **HRXIII-a** Series  
SERVO TECHNOLOGY



	A	B	C	D	E	F	G	H	I
HRXIII-350GWa	2576	1800	335	441	1800	124	381	1499	1499
HRXIII-550GWa	2761	2000	320	441	2020	100	386	1612	1604

	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
HRXIII-350GWa	557	300	350	923	1200	1250	1075	227	120	123	80	200	530	75	470	25	18
HRXIII-550GWa	603	200	250	966	1400	1450	1300	237	112	121	97	200	530	150	470	25	18

※Main and sub arm's minimum reach is when the gripper is settled closest to main arm  
 ※Each measurement is subject to change without notice.

MODEL		HRXIII-350SWa	HRXIII-350GWa	HRXIII-550SWa	HRXIII-550GWa
Main Arm Stroke (mm)		1200		1400	
Sub Arm Stroke (mm)		1250		1450	
Main Kick Stroke (mm)		955 (120~1075)	848 (227~1075)	1188 (112~1300)	1058 (277~1335)
Sub Kick Stroke (mm)		848 (80~928)		1058 (97~1155)	
Traverse Stroke (mm)		1800 [2000]		2000 [2600]	
Main Arm Home Position (mm)		300		200	
Main Arm Maximum Reach (mm)		1075		1300	
Sub Arm Minimum Reach (mm)		80		97	
Wrist Unit (°)		90		90	
Wrist Torque (Nm)		35.2		35.2	
Maximum Payload (kg)		12 (including EOAT)		12 (including EOAT)	
Weight (kg)		291	314	354	376
H x W x D (mm)		2576 x 1800 x 1499		2716 x 2020 x 1612	
Working Air Pressure (MPa)		0.5			
Air Consumption ※ (ℓ/cyc[ANR])		1.86	1.88	1.86	1.88
Control Method		Digital AC servo motor (3/5 axes)			
Power Supply (V)		3-phase/Single Phase AC200V-240V ± 10% (50Hz/60Hz)			
Maximum Power Consumption (W)		1700	2300	1700	2300
Power Equipment Capacity (VA)		3000	4000	3300	4700
Maximum Current Consumption (A)		8.50	11.50	9.50	13.50

※ The additional 46 ℓ/min [ANR] per circuit will be consumed when using a vacuum ejector. [ ] = Option



Manufacturer: **HARMO** CO., LTD. ISO9001 CERTIFIED  
 INTERNATIONAL MARKETING DEPT.  
 4124-1 MINAMI-MINOWA KAMIINA-GUN NAGANO-PREF.399-4595 JAPAN  
 TEL.+81-265-73-8820, FAX.+81-265-73-8964

<http://www.harmo-net.co.jp>

# Great value to shorten the mold changing time and improve productivity.

## Features

- The standardly equipped air cushioning reduces 70% of impact! Reducing stress against the wrist unit shortens the required cycle time.
- The retainers on the linear guides reduces the noise and provides longer periodical lubrication intervals.
- Improved maximum payload performance (Model:350 10kg to 12kg) More choices of EOAT applications such as insert/multiple placement, which were not able to mount before.
- The aluminum frame is redesigned based on its 3D structure analysis data.
- Reducing the time required to set the temperature or preventing a human-error, by HAL-NET (OPTION)



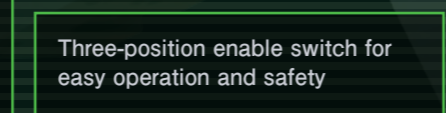
**Lightweight, compact yet full of features**



The built in memory and an external USB memory stick can store the mold memory data (up to 500).



Hand strap to prevent unexpected drop



Three-position enable switch for easy operation and safety



**5.7 inch touch panel with quick response!**

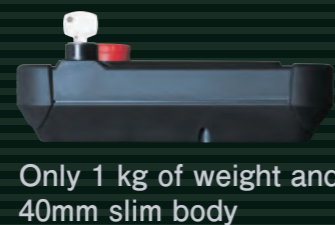


Lightweight, compact and fits in one hand!



Corner protectors (shown by ★)  
The corner protectors protect the pendant from the impact.

Key selector switches (OFF/MANUAL/AUTO) to easily protect / manage the data



Only 1 kg of weight and 40mm slim body

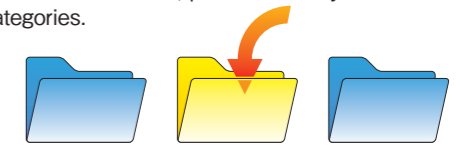
## Off line programming

- Additional specifications such as special operations and outputs after introducing robots are available without stopping workflow.
- Operational check of created program with 3D can be done on the computer



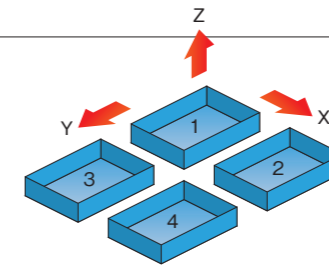
## Group Management

- The mold memories are manageable by grouping them into customers, products or any desired categories.



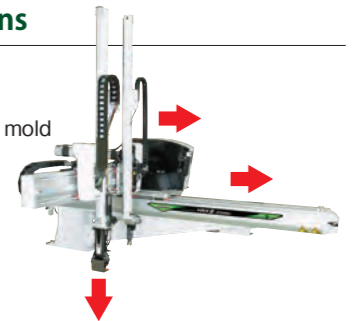
## Free Palletizing

- Freely set up to 256 part release points.



## Home Positions

- 1st entry
- outside mold
- horizontal above mold
- backward (all standard)



## HAL-NET(HARMO ALL-AROUND LINK - NET)

(OPTION)

- Communicating with the HARMO F series auxiliary equipment.
- The auxiliary equipment is remotely operable with the touch panel of the robot.

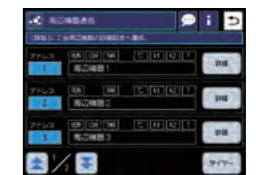
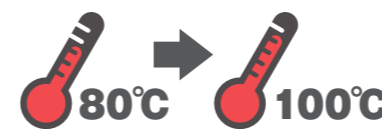


## Data Link System

(OPTION)

Compatible with Data Link System such as batch setting and batch monitoring of peripheral devices. Contributes to shorten the mold changing time.

- Automatic setup by selecting the mold data on the robot
- Start all peripheral devices at once with the robot
- Monitor the data on all peripheral devices



## Languages

- Standard 8 languages (Japanese, English, Chinese, Korean, Spanish, Indonesian, Vietnamese and Turkish)
- Other European languages are available.

## Production Management

- Production monitoring and management settings are available to set the robot action at the end of the operations, such as stopping the automatic operation at the end of the production.

- A lot of IOs (up to 56)
- The maintenance messages alerts the time for the maintenance.
- The error logs helps to identify the cause of the troubles.

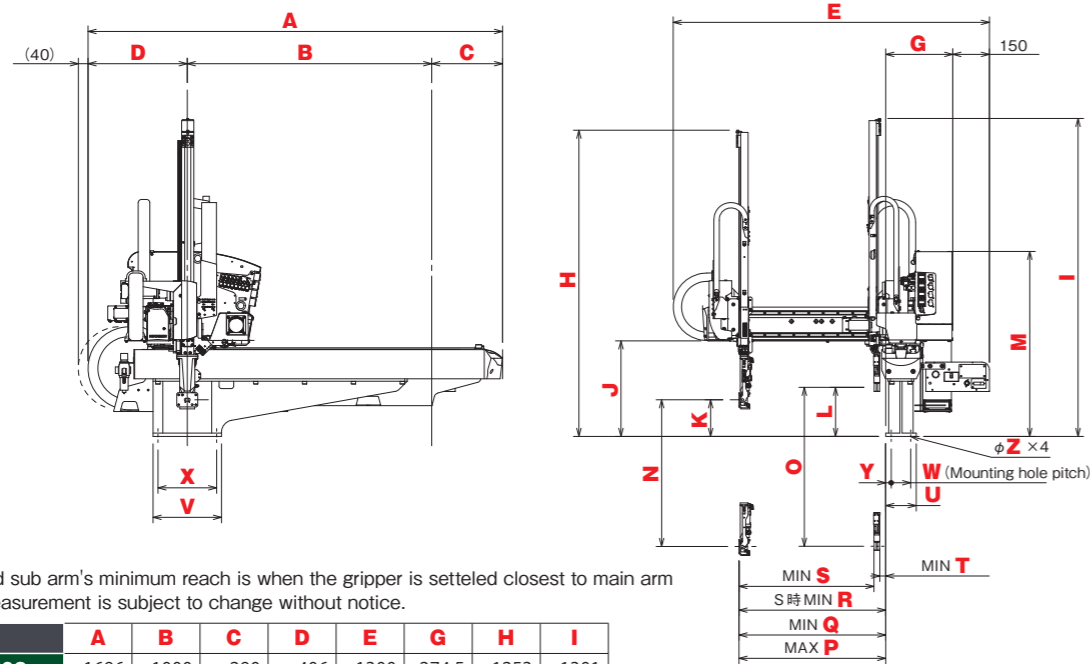
# HRXIII-150GWa

Series Name IMM  
Tonnage (t) Controller Type  
a : HRS-1400a

S : 3-Axis Single Arm  
G : 5-Axis Single Arm  
SW : 3-Axis Telescopic Arm  
GW : 5-Axis Telescopic Arm



## HRXIII-50/80Sa·Ga



※Main and sub arm's minimum reach is when the gripper is setted closest to main arm  
※Each measurement is subject to change without notice.

	A	B	C	D	E	G	H	I
HRXIII-50Ga	1696	1000	290	406	1300	274.5	1253	1301
HRXIII-80Ga	1936	1200	330	406	1300	274.5	1403	1461

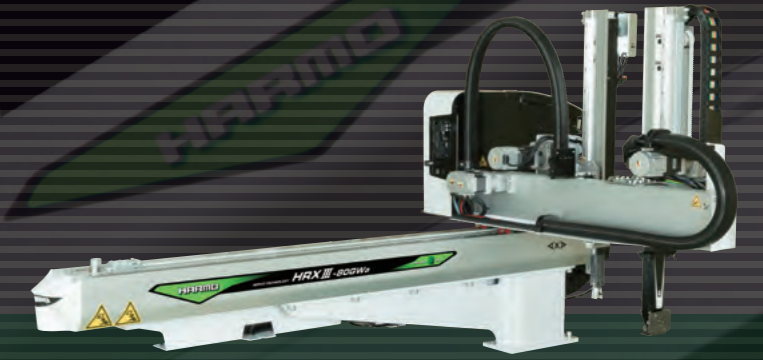
  

	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
HRXIII-50Ga	391	150	200	757	600	650	600	133.5	90.5	85.5	24	125	280	80	240	22.5	14
HRXIII-80Ga	391	150	200	757	750	800	600	133.5	90.5	85.5	24	125	280	80	240	22.5	14

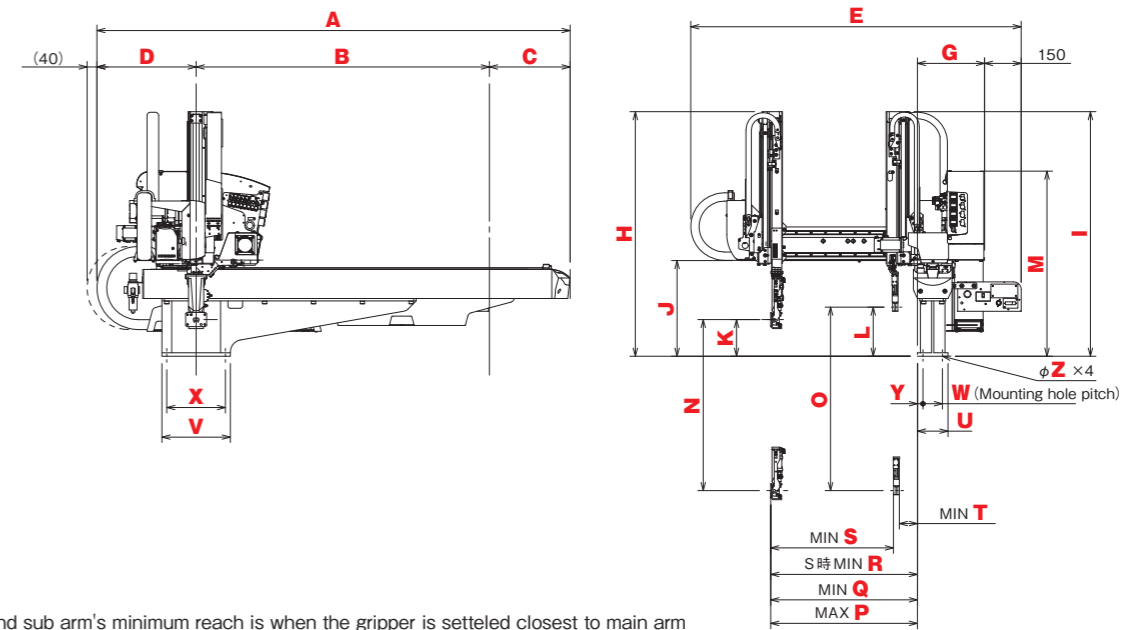
MODEL	HRXIII-50Sa	HRXIII-50Ga	HRXIII-80Sa	HRXIII-80Ga
Main Arm Stroke (mm)	600 [750]		750	
Sub Arm Stroke (mm)	—		650 [800]	800
Main Kick Stroke (mm)	510 (90 ~ 600)	466.5 (133.5 ~ 600)	510 (90 ~ 600)	466.5 (133.5 ~ 600)
Sub Kick Stroke (mm)	—		466.5 (24 ~ 490.5)	466.5 (24 ~ 490.5)
Traverse Stroke (mm)	1000 [1200] [1600]		1200 [1600]	
Main Arm Home Position (mm)	150		150	
Main Arm Maximum Reach (mm)	600		600	
Sub Arm Minimum Reach (mm)	—		24	24
Wrist Unit (°)	90		90	
Wrist Torque (Nm)	8			
Maximum Payload (kg)	3 (including EOAT)			
Weight (kg)	143	160	149	167
H x W x D (mm)	1696 x 1300 x 1253	1696 x 1300 x 1301	1936 x 1300 x 1403	1936 x 1300 x 1461
Working Air Pressure (MPa)	0.5			
Air Consumption ※ (ℓ/cyc[ANR])	0.62	0.64	0.62	0.64
Control Method	Digital AC servo motor (3/5 axes)			
Power Supply (V)	3-phase/Single Phase AC200V-240V ± 10% (50Hz/60Hz)			
Maximum Power Consumption (W)	1000	1600	1000	1600
Power Equipment Capacity (VA)	2400	3400	2400	3400
Maximum Current Consumption (A)	6.75	9.75	6.75	9.75

※ The additional 46ℓ/min [ANR] per circuit will be consumed when using a vacuum ejector. [ ] =Option

## HRXIII-80SWa·GWa



※ The photo is for the non-operator side release.



※Main and sub arm's minimum reach is when the gripper is setted closest to main arm  
※Each measurement is subject to change without notice.

	A	B	C	D	E	G	H	I
HRXIII-80GWa	1936	1200	330	406	1358	274.5	1001	1001

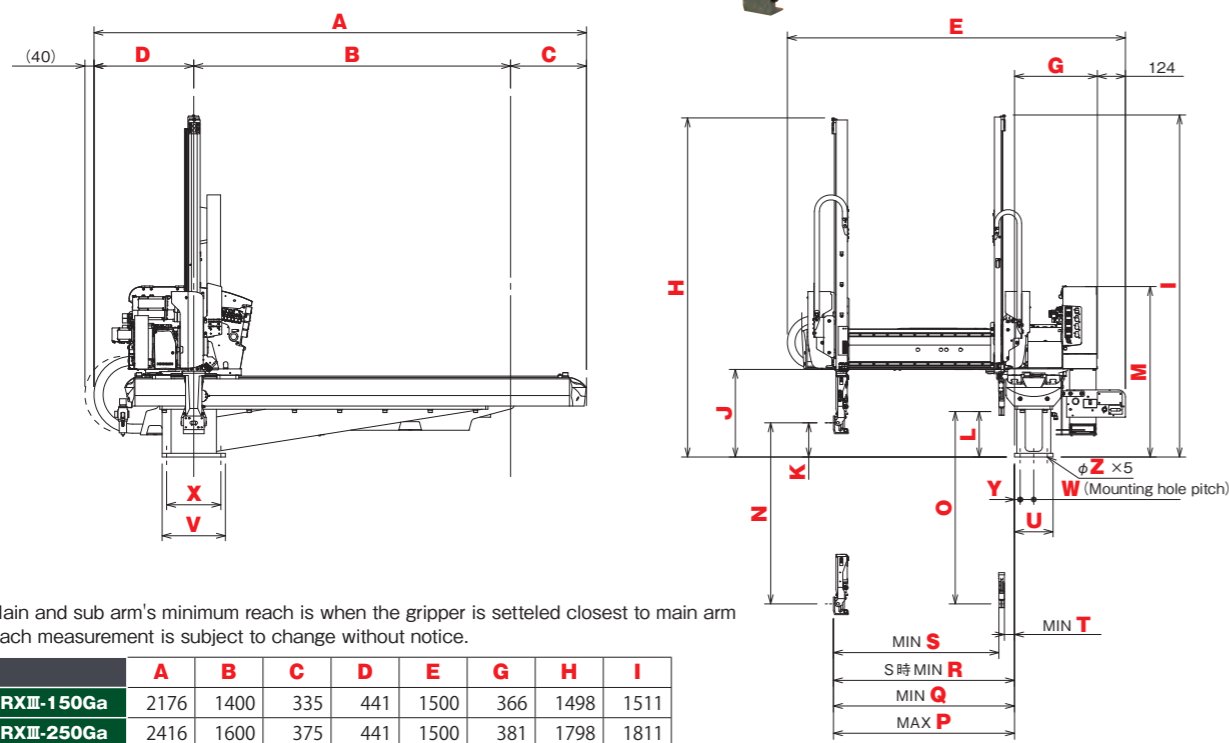
	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
HRXIII-80GWa	391	150	200	757	750	800	600	205	98	102	79	125	280	80	240	22.5	14

MODEL	HRXIII-80SWa	HRXIII-80GWa
Main Arm Stroke (mm)	750	
Sub Arm Stroke (mm)	800	
Main Kick Stroke (mm)	502 (98 ~ 600)	395 (205 ~ 600)
Sub Kick Stroke (mm)	395 (79 ~ 474)	
Traverse Stroke (mm)	1200 [1600]	
Main Arm Home Position (mm)	150	
Main Arm Maximum Reach (mm)	600	
Sub Arm Minimum Reach (mm)	79	
Wrist Unit (°)	90	
Wrist Torque (Nm)	8	
Maximum Payload (kg)	3 (including EOAT)	
Weight (kg)	151	171
H x W x D (mm)	1936 x 1358 x 1001	
Working Air Pressure (MPa)	0.5	
Air Consumption ※ (ℓ/cyc[ANR])	0.62	0.64
Control Method	Digital AC servo motor (3/5 axes)	
Power Supply (V)	3-phase/Single Phase AC200V-240V ± 10% (50Hz/60Hz)	
Maximum Power Consumption (W)	1000	1600
Power Equipment Capacity (VA)	2400	3400
Maximum Current Consumption (A)	6.75	9.75

※ The additional 46ℓ/min [ANR] per circuit will be consumed when using a vacuum ejector. [ ] =Option



## HRX III-150/250Sa·Ga



※Main and sub arm's minimum reach is when the gripper is setted closest to main arm  
 ※Each measurement is subject to change without notice.

	A	B	C	D	E	G	H	I
HRX III-150Ga	2176	1400	335	441	1500	366	1498	1511
HRX III-250Ga	2416	1600	375	441	1500	381	1798	1811

	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
HRX III-150Ga	387	150	200	753	800	850	800	190	122	121	45	170	280	60	240	25	14
HRX III-250Ga	487	250	300	853	1000	1050	785	175	107	121	30	200	430	75	370	25	18

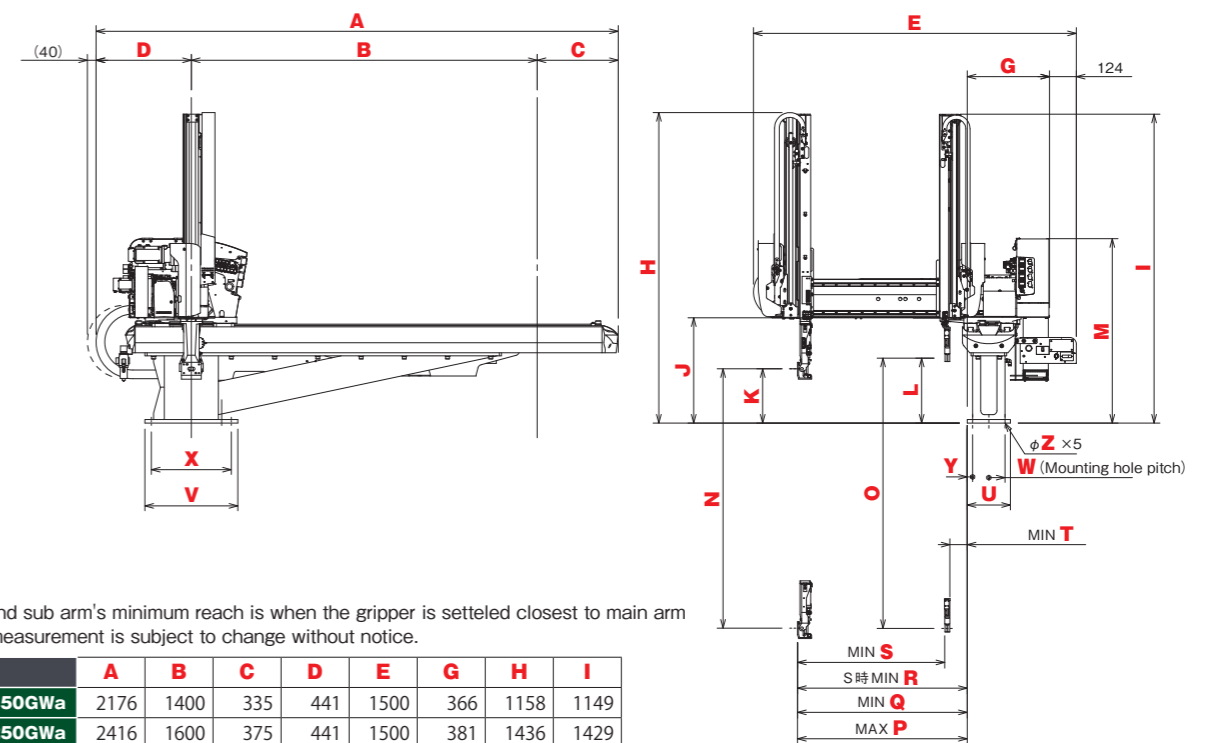
MODEL	HRX III-150Sa	HRX III-150Ga	HRX III-250Sa	HRX III-250Ga
Main Arm Stroke (mm)	800 [900] [1000]			1000
Sub Arm Stroke (mm)	—	850 [950] [1050]	—	1050
Main Kick Stroke (mm)	678 (122 ~ 800)	610 (190 ~ 800)	678 (107 ~ 785)	610 (175 ~ 785)
Sub Kick Stroke (mm)	—	610 (45 ~ 655)	—	610 (30 ~ 640)
Traverse Stroke (mm)	1400 [1600] [1800] [2000]		1600 [1800] [2000]	
Main Arm Home Position (mm)	150		250	
Main Arm Maximum Reach (mm)	800		785	
Sub Arm Minimum Reach (mm)	—	45	—	30
Wrist Unit (°)	90			90
Wrist Torque (Nm)	22.7			
Maximum Payload (kg)	5 (including EOAT)			
Weight (kg)	218	237	251	261
H x W x D (mm)	2176 × 1500 × 1498	2176 × 1500 × 1511	2416 × 1500 × 1798	2416 × 1500 × 1811
Working Air Pressure (MPa)	0.5			
Air Consumption ※ (ℓ/cyc[ANR])	1.15	1.17	1.15	1.17
Control Method	Digital AC servo motor (3/5 axes)			
Power Supply (V)	3-phase/Single Phase AC200V-240V ± 10% (50Hz/60Hz)			
Maximum Power Consumption (W)	1000	1600	1000	1600
Power Equipment Capacity (VA)	3000	4000	3000	4000
Maximum Current Consumption (A)	8.50	11.50	8.50	11.50

※ The additional 46ℓ/min [ANR] per circuit will be consumed when using a vacuum ejector.

[ ] =Option



## HRX III-150/250SWa·GWa



※Main and sub arm's minimum reach is when the gripper is setted closest to main arm  
 ※Each measurement is subject to change without notice.

	A	B	C	D	E	G	H	I
HRX III-150Gwa	2176	1400	335	441	1500	366	1158	1149
HRX III-250Gwa	2416	1600	375	441	1500	381	1436	1429

	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
HRX III-150Gwa	387	150	200	753	900	950	800	251	144	132	95	170	280	60	240	25	14
HRX III-250Gwa	487	250	300	853	1200	1250	785	232	125	128	80	200	430	75	370	25	18

MODEL	HRX III-150SWa	HRX III-150Gwa	HRX III-250SWa	HRX III-250Gwa
Main Arm Stroke (mm)	900		1200	
Sub Arm Stroke (mm)	—	950	—	1250
Main Kick Stroke (mm)	656 (144 ~ 800)	549 (251 ~ 800)	660 (125 ~ 785)	553 (232 ~ 785)
Sub Kick Stroke (mm)	—	549 (95 ~ 644)	—	553 (80 ~ 633)
Traverse Stroke (mm)	1400 [1600] [1800] [2000]		1600 [1800] [2000]	
Main Arm Home Position (mm)	150		250	
Main Arm Maximum Reach (mm)	800		785	
Sub Arm Minimum Reach (mm)	—	95	—	80
Wrist Unit (°)	90			90
Wrist Torque (Nm)	22.7			
Maximum Payload (kg)	5 (including EOAT)			
Weight (kg)	224	245	261	284
H x W x D (mm)	2176 × 1500 × 1158		2416 × 1500 × 1436	
Working Air Pressure (MPa)	0.5			
Air Consumption ※ (ℓ/cyc[ANR])	1.15	1.17	1.15	1.17
Control Method	Digital AC servo motor (3/5 axes)			
Power Supply (V)	3-phase/Single Phase AC200V-240V ± 10% (50Hz/60Hz)			
Maximum Power Consumption (W)	1000	1600	1350	1950
Power Equipment Capacity (VA)	3000	4000	3000	4000
Maximum Current Consumption (A)	8.50	11.50	8.50	11.50

※ The additional 46ℓ/min [ANR] per circuit will be consumed when using a vacuum ejector.

[ ] =Option