

Spot welding robot with built-in cables

SRA100HS/SRA100HB



Cable built into the hollow arm

Welding cables and hoses packed tightly inside arms with hollow construction

- Avoids interference with surrounding equipment through the displacement of cables
- Improved reliability and safety of cable performance through wrist operations
- The embedded welding cables in the arm make the off-line programming easier

Compact body

- Minimized robot height so it can be used in multilevel arrangements

SRA100HS SRA100HB

Robot specifications

Item	Specifications	
	SRA100HS-01	SRA100HB-01
Robot model	SRA100HS-01	SRA100HB-01
Structure	Articulated	
Number of axes	6	
Drive system	AC servo system	
Max. operating envelope	J1	$\pm 3.14\text{rad}(\pm 180^\circ)$
	J2	$-2.09\sim+1.05\text{rad}(-120\sim+60^\circ)$ $-2.09\sim+1.05\text{rad}(-120\sim+60^\circ)$
	J3	$-2.18\sim+1.57\text{rad}(-125\sim+90^\circ)$ $-2.64\sim+1.57\text{rad}(-151\sim+90^\circ)$
	J4	$\pm 3.66\text{rad}(\pm 210^\circ)$
	J5	$\pm 2.18\text{rad}(\pm 125^\circ)$
	J6	$\pm 3.66\text{rad}(\pm 210^\circ)$
Max. velocity	J1	2.37rad/s(136°/s)
	J2	2.00rad/s(115°/s)
	J3	2.79rad/s(160°/s)
	J4	3.66rad/s(210°/s) 3.93rad/s(225°/s)
	J5	3.05rad/s(175°/s)
	J6	5.41rad/s(310°/s) 5.50rad/s(315°/s)
Payload	Wrist	100kg
	Forearm*1	20kg
Allowable static load torque for wrist	J4	830N·m 650N·m
	J5	830N·m 650N·m
	J6	441N·m 315N·m
Allowable moment of inertia for wrist*2	J4	85kg·m ²
	J5	85kg·m ²
	J6	45kg·m ²
Position repeatability*3	$\pm 0.1\text{mm}$	
Installation	Floor	
Ambient conditions	Ambient temperature: 0~45°C*4 Ambient humidity: 20~85%RH (without condensation) Vibration: Not more than 0.5G (4.9 m/s ²)	
Noise level*5	79.6dB	
Robot mass	690kg	750kg

1 [rad] = 180/π [°], 1 [N·m] = 1/9.8 [kgf·m]

*1: This value changes by placement and load conditions of a wrist.

*2: The Allowable moment of inertia of a wrist changes with load conditions of a wrist.

*3: This value conforms to "JIS B 8432".

*4: Permitted height is not higher than 1,000m above sea level. If used in higher place, permitted temperature is affected by height.

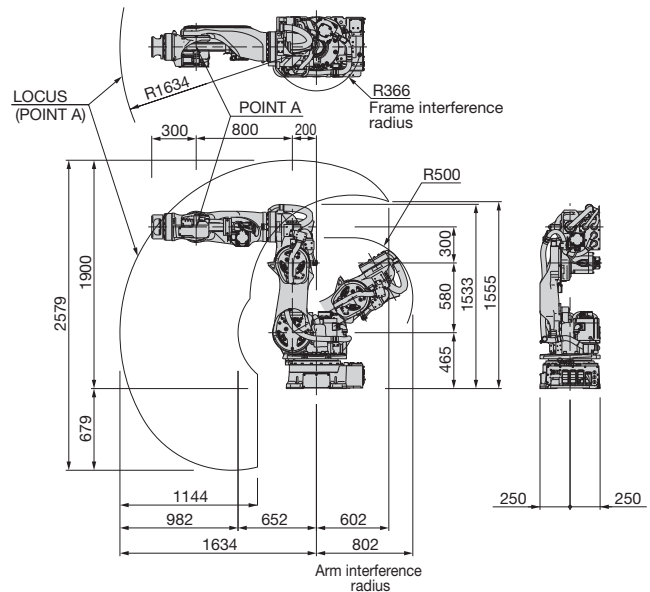
*5: A-weighted equivalent sound level measured according to JIS Z 8737-1 (ISO 11201). (while operating at maximum speed with rated load)

● The specifications are subject to changes without notice.

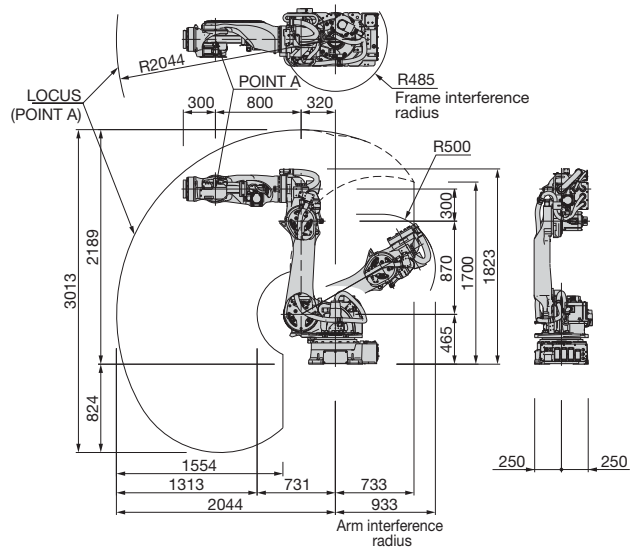
● In case that an end user uses this product for military purpose or production of weapon, this product may be liable for the subject of export restriction stipulated in the Foreign Exchange and Foreign Trade Act. Please go through careful investigation and necessary formalities for export.

Exterior dimensions and operating envelope

SRA100HS-01



SRA100HB-01



NACHI-FUJIKOSHI CORP.

Tokyo Head Office

Shiodome Sumitomo Bldg. 17F 1-9-2 Higashi-shinbashi, Minato-ku, Tokyo 105-0021, JAPAN

Tel: +81-(0)3-5568-5245 Fax: +81-(0)3-5568-5236

Toyama Head Office

1-1-1 Fujikoshi-Honmachi, Toyama 930-8511, JAPAN

Tel: +81-(0)76-423-5111 Fax: +81-(0)76-493-5211

NACHI ROBOTIC SYSTEMS INC.

42775 West 9 Mile Road Novi, Michigan, 48375, U.S.A.

Tel: +1-248-305-6545 Fax: +1-248-305-6542

URL: <http://www.nachirobotics.com/>

E-mail: marketing@nachirobotics.com

NACHI BRASIL LTDA.

Avenida João XXIII, No.2330, Jardim São Pedro, Mogi das Cruzes, S.P., CEP 08830-000, BRASIL

Tel: +55-11-4793-8813

URL: <http://www.nachi.com.br/>

NACHI EUROPE GmbH

Bischofstrasse 99, 47809, Krefeld, GERMANY

Tel: +49-(0)2151-65046-0 Fax: +49-(0)2151-65046-90

URL: <http://www.nachirobotics.eu/>

NACHI TECHNOLOGY (THAILAND) CO., LTD.

BANGKOK SALES OFFICE

Unit 23/109(A), Fl.24th Sorachai Bldg., Sukhumvit 63

Road(Ekamai), Klongtonnua, Wattana, Bangkok

10110, THAILAND

Tel: +66-2-714-0008 Fax: +66-2-714-0740

PT.NACHI INDONESIA

TEMPO PAVILION I, 7FL JL. HR Rasuna Said Kav. 10-11

Seliabudi Jakarta Selatan DKI Jakarta -12950, INDONESIA

Tel: +62-021-527-2841 Fax: +62-021-527-3029

NACHI KG TECHNOLOGY INDIA PVT.

GURGAON HEAD OFFICE

Unit No.207, 2nd Floor, Sewa Corporate Park, MG

Road, Iffco Chowk, Gurgaon 122001, Haryana, INDIA

Tel: +91-(0)12-4450-2900 Fax: +91-(0)12-4450-9210

CATALOG NO.

R7206E-I