

THE FACTORY AUTOMATION COMPANY

FANUC

Robots

Product overview



SCARA Robots



Max. load capacity
at wrist: **20 kg**



Max. reach:
1100 mm



SR-3iA

Available robot versions:

SR-3iA	Standard model
SR-3iA/C	Clean Room, Food grade lubricant
SR-3iA/U	Upside down
SR-3iA/H	3-axis
SR-6iA	Standard model
SR-6iA/C	Clean Room, Food grade lubricant
SR-6iA/H	3-axis
SR-12iA	Standard model, Dry Room
SR-20iA	Standard model, Dry Room



Robot			Controller						Max. load capacity at wrist (kg)	Reach (mm)	Controlled axes	Repeatability (mm) **				Mechanical weight (kg)	Motion range [°]				Maximum speed (°/s)				J4 Moment/ Inertia (Nm/ kgm ²)	Maximum pushdown force (N)	Average power consumption (kW)	Protection	
Series	Version	Type	Version		Cabinet type							J1	J2	J3	J4		J1	J2	J3	J4	J1	J2	J3	J4				Body standard/ optional	Wrist & J3 arm standard/ optional
SR-3	iA		●	●	-	-	-	-	3	400	4	±0.01	±0.01	±0.01	±0.004°	19	284	290	200 mm ^{*16}	1400	720	780	1800 mm/s	3000	--/0.06	150	0.25	IP20	IP20
SR-3	iA	C	●	●	-	-	-	-	3	400	4	±0.01	±0.01	±0.01	±0.004°	21	284	290	200 mm ^{*16}	1400	720	780	1800 mm/s	3000	--/0.06	150	0.25	IP54	IP54
SR-3	iA	U	●	●	-	-	-	-	3	350	4	±0.01	±0.01	±0.01	±0.004°	27	450	450	140	1440	610	840	1500 mm/s	3000	--/0.06	150	0.25	IP20	IP20
SR-3	iA	H	●	●	-	-	-	-	3	400	3	±0.01	±0.01	±0.01		17	284	290	200 mm ^{*16}	-	720	780	1800 mm/s	-	-	150	0.25	IP20	IP20
SR-6	iA		●	●	-	-	-	-	6	650	4	±0.01	±0.01	±0.01	±0.004°	30	296	300	210 mm ^{*16}	1400	440	700	2000 mm/s	2500	--/0.12	200	0.35	IP20	IP20
SR-6	iA	C	●	●	-	-	-	-	6	650	4	±0.01	±0.01	±0.01	±0.004°	32	296	300	210 mm ^{*16}	1400	440	700	2000 mm/s	2500	--/0.12	200	0.35	IP54	IP54
SR-6	iA	H	●	●	-	-	-	-	6	650	3	±0.01	±0.01	±0.01		28	296	300	210 mm ^{*16}	-	440	700	2000 mm/s	-	-	200	0.35	IP20	IP20
SR-12	iA		●	●	-	-	-	-	12	900	4	±0.015	±0.015	±0.01	±0.005°	53	290	290	450 mm optional 300 mm	1400	440	510	2800 mm/s	2500	--/0.30	250	0.45	IP20 / IP65	IP20 / IP65
SR-20	iA		●	●	-	-	-	-	20	1100	4	±0.02	±0.02	±0.01	±0.005°	64	290	290	450 mm optional 300 mm	1700	400	500	2800 mm/s	1700	--/0.45	250	0.45	IP20 / IP65	IP20 / IP65

● standard ○ on request - not available [] with hardware and/or software option *16) z axis



SR

PALLETISING

M-710

R-1000

M-410

ROBOT SERIES

Version			iA								iC	iA	iC	iB	iC			iB	
Type			3	3C	3U	3H	6	6C	6H	12	20	50H	80H	110	140H	185	315	500	700
CONTROLLER	Controller Version	R-30iB Plus	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Compact		●	●	●	●	●	●	●	●	-	-	-	-	-	-	-	-	-
	Open Air Cabinet		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mate Cabinet		-	-	-	-	-	-	-	-	○	○	-	-	-	-	-	-	-
	A-Cabinet		-	-	-	-	-	-	-	-	●	●	●	●	●	●	●	●	●
	B-Cabinet		-	-	-	-	-	-	-	-	○	○	○	○	○	○	○	○	○
Max Load Capacity at wrist (kg)			3	3	3	3	6	6	6	12	20	50	80	110	140	185	315	500	700
Reach (mm)			400	400	350	400	650	650	650	900	1100	2003	2230	2403	2850	3143	3143	3143	3143
Controlled axes			4	4	4	3	4	4	3	4	4	5	5	4	5	4	4	4	4
Repeatability (mm)			± 0.01 [J1, J2] ± 0.01 [J3] ± 0.004° [J4]**	± 0.01 [J1, J2] ± 0.01 [J3] ± 0.004° [J4]**	± 0.01 [J1, J2] ± 0.01 [J3] ± 0.004° [J4]**	± 0.01 [J1, J2] ± 0.01 [J3] ± 0.01 [J3]**	± 0.01 [J1, J2] ± 0.01 [J3] ± 0.004° [J4]**	± 0.01 [J1, J2] ± 0.01 [J3] ± 0.004° [J4]**	± 0.01 [J1, J2] ± 0.01 [J3] ± 0.01 [J3]**	± 0.01 [J1, J2] ± 0.01 [J3] ± 0.01 [J3]**	± 0.15	± 0.03**	± 0.2	± 0.2	± 0.5	± 0.5	± 0.5	± 0.5	± 0.5
Mechanical weight (kg)			19	21	27	17	30	32	28	53	64	540	610	1030	1200	1600 (1330) ^{*4,5}	1600 (1330) ^{*4,5}	2410 (1910) ^{*4,5}	2700
MOTION RANGE (°)	J1		284	284	450	284	296	296	296	290	290	360	360	370	360	360	360	370	360
	J2		290	290	450	290	300	300	300	290	290	225	245	125	155	144	144	144	144
	J3		200 mm ^{*16}	200 mm ^{*16}	140 mm	200 mm ^{*16}	210 mm ^{*16}	210 mm ^{*16}	210 mm ^{*16}	450 mm optional 300 mm	450 mm optional 300 mm	440	215	140	112	136	136	136	136
	J4		1440	1440	1440	-	1440	1440	-	1440	1440	234	20	720	20	720	720	720	540
	J5		-	-	-	-	-	-	-	-	-	720	720	-	720	-	-	-	-
	J6		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAXIMUM SPEED (°/S)	J1		720	720	610	720	440	440	440	440	440	175	185	145	140	140	90	85	60
	J2		780	780	840	780	700	700	700	510	500	175	180	130	115	140	100	85	60
	J3		1800 mm/sec	1800 mm/sec	1500 mm/sec	1800 mm/sec	2000 mm/sec	2000 mm/sec	2000 mm/sec	2800 mm/sec	2800 mm/sec	175	180	140	135	140	110	85	60
	J4		3000	3000	3000	-	2500	2500	-	2500	1700	175	180	420	135	305	195	200	120
	J5		-	-	-	-	-	-	-	-	-	720	500	-	420	-	-	-	-
	J6		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
J1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
J4 Moment/Inertia (Nm/kgm²)			--/0.06	--/0.06	--/0.06	-	--/0.12	--/0.12	-	--/0.30	--/0.45	150/6.3	-/48	53	147	88	155	250	490
J5 Moment/Inertia (Nm/kgm²)			-	-	-	-	-	-	-	-	-	68/2.5	-/25	-	53	-	-	-	-
J6 Moment/Inertia (Nm/kgm²)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Average power consumption [Kw]			0.25	0.25	0.25	0.25	0.35	0.35	0.35	0.45	0.45	2.5	2.5	1	3	3	3	3	3
PROTECTION	Body Standard/optional		IP20	IP54	IP20	IP20	IP20	IP54	IP20	IP20 / IP65	IP20 / IP65	IP54/IP67	IP54/IP67	IP54	IP54	IP54	IP54	IP54	IP54
	Wrist and J3 Arm Standard/optional		IP20	IP54	IP20	IP20	IP20	IP54	IP20	IP20 / IP65	IP20 / IP65	IP67	IP67	IP67	IP54	IP54	IP54	IP54	IP54