

THE FACTORY AUTOMATION COMPANY

FANUC

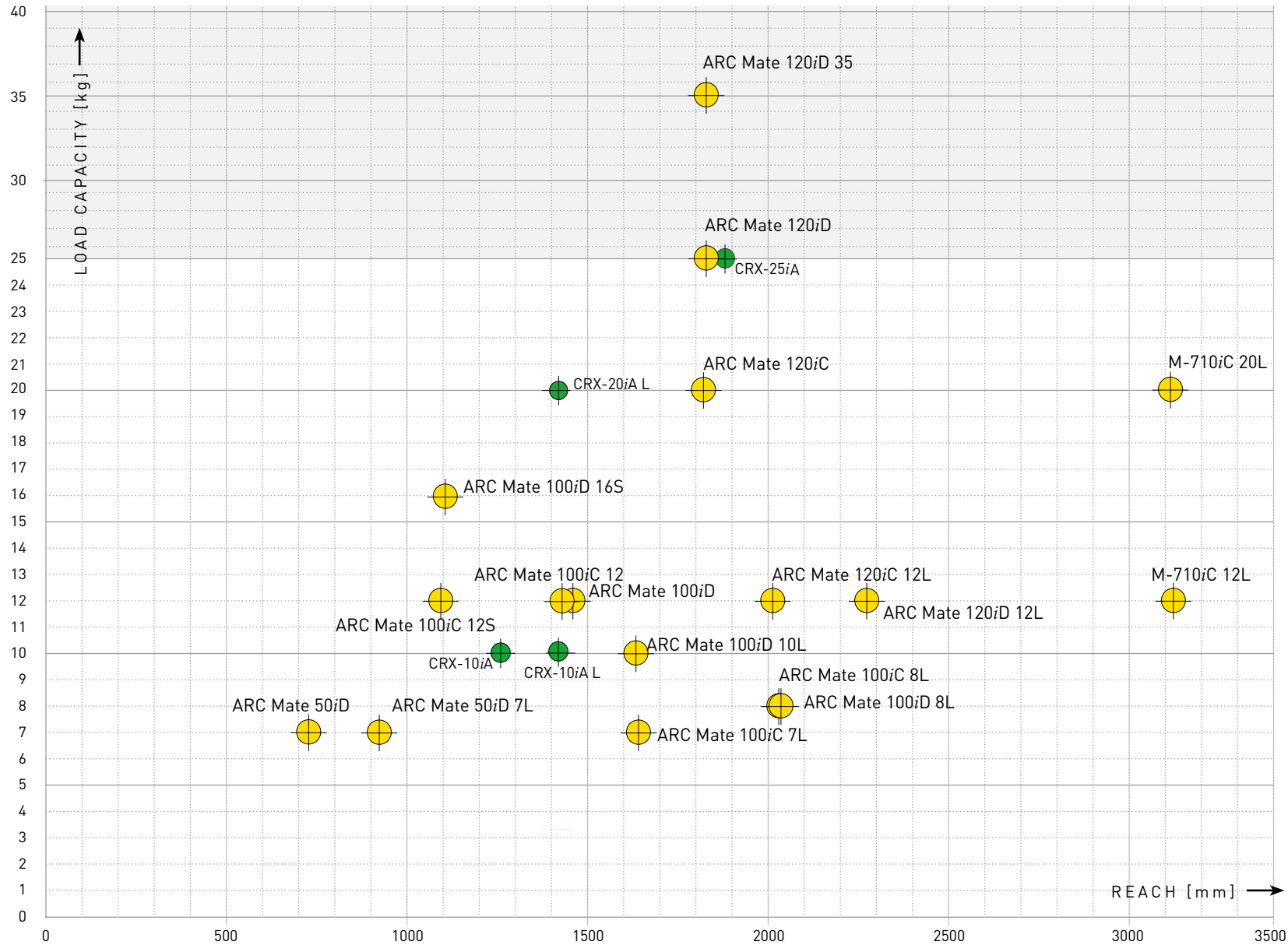
Robots

Product overview



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ARC WELDING ROBOT



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Arc Welding Robots



ARC Mate 50 Series



ARC Mate 100 Series



ARC Mate 120 Series

Available robot versions:

ARC Mate 50iD	Standard model
ARC Mate 50iD/7L	Standard model
ARC Mate 100iD	Standard model
ARC Mate 100iD/8L, /10L	Standard model
ARC Mate 100iD/16S	Standard model
ARC Mate 120iD	Standard model
ARC Mate 120iD/12L	Standard model
ARC Mate 120iD/35	Standard model



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)	J5 Moment/ Inertia (Nm/kgm ²)	J6 Moment/ Inertia (Nm/kgm ²)	Average Power consumption (kW)	Protection	
Series	Version	Type	Version	Cabinet type										J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6					Body standard/ optional	Wrist & J3 arm standard/ optional
				R-30iB Plus	Compact cabinet	Open air cabinet	Mate cabinet	A-cabinet																							
ARC Mate 50	iD		●	-	-	●	-	-	7	717	6	± 0.018**	25	360	245	420	380	250	720	450	380	520	550	545	1000	16.6/0.47	16.6/0.47	9.4/0.15	0.5	IP67/IP69K	IP67/IP69K
ARC Mate 50	iD	7L	●	-	-	●	-	-	7	911	6	± 0.018**	27	360	245	430	380	250	720	370	310	410	550	545	1000	16.6/0.47	16.6/0.47	9.4/0.15	0.5	IP67/IP69K	IP67/IP69K
ARC Mate 100	iD	8L	●	-	-	○	●	○	8	2032	6	± 0.03**	180	340 (370)	235	455	380	280 (360) ^{*21}	540 (900) ^{*21}	210	210	220	430	450	720	16.1/0.63	16.1/0.63	5.9/0.061	1	IP54	IP67
ARC Mate 100	iD	10L	●	-	-	○	●	○	10	1636	6	± 0.03**	150	340 (370)	235	455	380	280 (360) ^{*21}	540 (900) ^{*21}	260	240	260	430	450	720	22.0/0.65	22.0/0.65	9.8/0.17	1	IP54	IP67
ARC Mate 100	iD	16S	●	-	-	○	○	○	16	1103	6	± 0.02**	140	340 (370)	235	455	380	280 (360) ^{*21}	540 (900) ^{*21}	290	270	270	430	450	730	26.0/0.90	26.0/0.90	11.0/0.30	1	IP54	IP67
ARC Mate 100	iD		●	-	-	○	●	○	12	1441	6	± 0.02**	145	340 (370)	235	455	380	280 (360) ^{*21}	540 (900) ^{*21}	260	240	260	430	450	720	26.0/0.90	26.0/0.90	11.0/0.30	1	IP54	IP67
ARC Mate 120	iD	12L	●	-	-	○	●	○	12	2272	6	± 0.03**	250	340 (370)	260	458	400	280 (360) ^{*21}	540 (900) ^{*21}	210	210	265	420	450	720	22.0/0.65	22.0/0.65	9.8/0.17	1	IP54	IP67
ARC Mate 120	iD	35	●	-	-	○	○	○	35	1831	6	± 0.03**	250	340 (370)	260	458	400	280 (360) ^{*21}	540 (900) ^{*21}	180	180	200	350	350	400	110.0/4.0	110.0/4.0	60.0/1.5	1	IP54	IP67
ARC Mate 120	iD		●	-	-	○	●	○	25	1831	6	± 0.02**	250	340 (370)	260	458	400	280 (360) ^{*21}	540 (900) ^{*21}	210	210	265	420	420	720	52.0/2.4	52.0/2.4	32.0/1.2	1	IP54	IP67

● standard ○ on request - not available [] with hardware and/or software option *21) Extended range for external cable type ** Based on ISO9283

Arc Welding Robots

M-710iC/12L



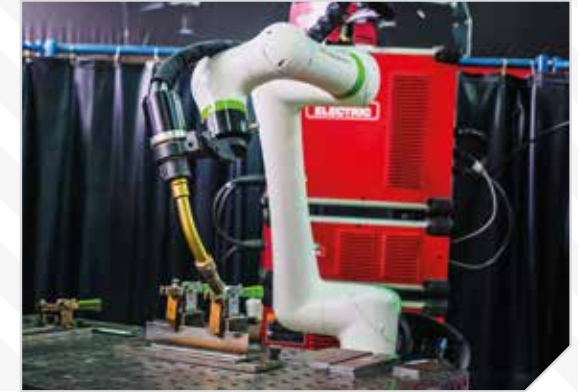
CRX-10iA/L

M-710iC/20L



Available robot versions:

M-710iC/12L	Hollow wrist
M-710iC/20L	Standard model
CRX-10iA	Standard model
CRX-10iA/L	Standard model
CRX-20iA/L	Standard model
CRX-25iA	Standard model



Robot			Controller							Max.load capacity at wrist (kg)	Reach (mm)	Controlled axes	Repeatability (mm)	Mechanical weight (kg)	Motion range [°]						Maximum speed [°/s]						Maximum linear speed (mm/s)	J4 Moment/ Inertia (Nm/kgm ²)	J5 Moment/ Inertia (Nm/kgm ²)	J6 Moment/ Inertia (Nm/kgm ²)	Average Power consumption (kW)	Protection	
Series	Version	Type	Version	Cabinet type					J1						J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6	Body standard/ optional						Wrist & J3 arm standard/ optional	
				R-30iB Plus	Mimi Plus	Compact cabinet	Open air cabinet	Mate cabinet																									A-cabinet
M-710	iC	12L	●	-	-	-	○	●	○	12	3123	6	± 0.09**	540	360	225	434	400	380	720	180	180	180	400	430	630	-	22.0/0.65	22.0/0.65	9.8/0.17	2.5	IP54/IP67	IP67
M-710	iC	20L	●	-	-	-	○	●	○	20	3110	6	± 0.11**	540	360	225	432	400	280	900	175	175	180	350	360	600	-	39.2/0.88	39.2/0.88	19.6/0.25	2.5	IP54/IP67	IP67
CRX-10	iA		●	●	-	-	-	-	-	10	1249	6	± 0.04**	40	380	360	570	380	360	450	120	120	180	180	180	1000 ^[*11]	34.8 / 1.28	26.0 / 0.90	11.0 / 0.30	0.5	IP67	IP67	
CRX-10	iA	L	●	●	-	-	-	-	-	10	1418	6	± 0.04**	40	360	360	540	380	360	450	120	120	180	180	180	1000 ^[*11]	34.8 / 1.28	26.0 / 0.90	11.0 / 0.30	0.5	IP67	IP67	
CRX-20	iA	L	●	●	-	-	-	-	-	20	1418	6	± 0.04**	41	360	360	540	380	360	450	80	80	120	112	90	112	1000	70.0/4.00	64.0/4.00	30.0/2.00	0.4	IP67	IP67
CRX-25	iA		●	●	-	-	-	-	-	25/30 ^[*20]	1889	6	± 0.05**	135	360	360	540	380	360	450	80	80	120	180	180	1000 ^[*11]	100.0/4.70	74.0/4.00	32.0/2.00		IP67	IP67	

● standard ○ on request - not available [] with hardware and/or software option *20) Software update *11) 2000 mm/s in high speed mode ** Based on ISO9283



ROBOT SERIES

ARC WELDING

ARC MATE 50

ARC MATE 100

ARC MATE 120

PAINT

PAINT MATE 200

P-40

P-50

P-250

P-350

P-1000

P-20

Opener

P-20

P-35



Version			iD							iA		iB	iB	iA	iA	iB	iB	iA		
Type			-	7L	8L	10L	16S	-	12L	35	-	5L		10L	15	45		*22	*23	
CONTROLLER	Controller Version	R-30iB Plus	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Compact		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Open Air Cabinet		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Mate Cabinet		•	•	○	○	○	○	○	○	○	•	•	•	-	-	-	-	-	
	A-Cabinet		-	-	•	•	○	•	•	○	•	-	-	-	•	•	•	•	•	
	B-Cabinet		-	-	○	○	○	○	○	○	○	-	-	-	-	-	-	-	-	
Max Load Capacity at wrist (kg)			7	7	8	10	16	12	12	35	3 [25]	5	5	10	15	45	15	27-36	27-36	20
Reach (mm)			717	911	2032	1636	1103	1441	2272	1831	1831	892	1300	1800	2800	2606	2896	1125	1475	4318
Controlled axes			6	6	6	6	6	6	6	6	6	6	6	6	6	7	3	3	3	5
Repeatability (mm)			± 0.018**	± 0.018**	± 0.03**	± 0.03**	± 0.02**	± 0.02**	± 0.03**	± 0.03**	± 0.02**	± 0.03	± 0.2	± 0.2	± 0.2	± 0.1	± 0.08**			± 0.08**
Mechanical weight (kg)			25	27	180	150	140	145	250	250	250	37	110	364	530	590	584	190	200	716
MOTION RANGE (°)	J1		360	360	340 [370]	340 [370]	340 [370]	340 [370]	340 [370]	340 [370]	340 [370]	340	360	320	320	360	220	350	350	220
	J2		245	245	235	235	235	235	260	260	260	230	255	240	280	225	150	280	300	370
	J3		420	430	455	455	455	455	458	458	458	373	423	404	330	440	240	*24	*24	590
	J4		380	380	380	380	380	380	400	400	400	380	380	1080	1080	800	145			270
	J5		250	250	280 [360] *21	280 [360] *21	280 [360] *21	280 [360] *21	280 [360] *21	280 [360] *21	280 [360] *21	240	240	1080	1080	250	1440			360
	J6		720	720	540 [900] *21	540 [900] *21	540 [900] *21	540 [900] *21	540 [900] *21	540 [900] *21	540 [900] *21	720	720	1080	1080	800	1440			-
	J7		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1440			-
MAXIMUM SPEED (°/S)	J1		450	370	210	260	290	260	210	180	210	270	220	140	160	180	125	50	50	75
	J2		380	310	210	240	270	240	210	180	210	270	190	140	160	180	125	50	50	100
	J3		520	410	220	260	270	260	265	200	265	270	240	160	160	180	120	300	300	100
	J4		550	550	430	430	430	430	420	350	420	450	450	375	375	250	120			50
	J5		545	545	450	450	450	450	450	350	420	450	450	430	430	250	200			50
	J6		1000	1000	720	720	730	720	720	400	720	720	720	720	545	545	300	200		-
	J7		-	-	-	-	-	-	-	-	-	-	-	-	-	-	200			-
J4 Moment/Inertia (Nm/kgm²)			16.6/0.47	16.6/0.47	16.1/0.63	22.0/0.65	26.0/0.90	26.0/0.90	22.0/0.65	110.0/4.0	52.0/2.4	11.9/0.3	11.9/0.3	43.35/1.954	65/3	206/28				
J5 Moment/Inertia (Nm/kgm²)			16.6/0.47	16.6/0.47	16.1/0.63	22.0/0.65	26.0/0.90	26.0/0.90	22.0/0.65	110.0/4.0	52.0/2.4	11.9/0.3	11.9/0.3	36.86/1.413	55/2.1	206/28	65/3.0			
J6 Moment/Inertia (Nm/kgm²)			9.4/0.15	9.4/0.15	5.9/0.061	9.8/0.17	11.0/0.30	11.0/0.30	9.8/0.17	60.0/1.5	32.0/1.2	6.7/0.1	6.7/0.1	4.90/0.025	11.5/0.35	127/20	55/2.1			
J7 Moment/Inertia (Nm/kgm²)																	11.5/0.35			
Average power consumption [Kw]			0.5	0.5	1	1	1	1	1	1	1	0.5	0.8	0.8	3.5	3.5	3.5	3.5	3.5	3.5
PROTECTION	Body Standard/optional		IP67/IP69K	IP67/IP69K	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	*15]	*15]	*15]	*15]	*15]	*15]	*15]	*15]
	Wrist and J3 Arm Standard/optional		IP67/IP69K	IP67/IP69K	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	*15]	*15]	*15]	*15]	*15]	*15]	*15]	*15]

• standard ○ on request - not available [] with hardware and/or software option *15] ATEX certified Cat. II Group 2G and 2D *21] Extended range for external cable type *22] 550 mm inner link arm *23] 900 mm inner link arm *24] Linear axis 385 mm ** Based on ISO9283