THE FACTORY AUTOMATION COMPANY

FANUC

Robots

Product overview

MANUFACTURED EFFICIENCY

FROM THE SMALLEST TO THE STRONGEST

100% FANUC

FANUC offers the widest range of robots in the world to cover the needs of diverse applications and industries. They are a key standard component – totally flexible with application-specific options, straightforward integration, and the colour of choice for demanding automation solutions.

FANUC is the leading global manufacturer of factory automation, with almost 40 years of experience in the development of robot technology, more than 440,000 robots installed worldwide, and satisfied customers in every corner of the globe.

Your advantages:

- more than 100 different robot models
- load capacity up to 2,300 kg
- reach up to 4,683 mm
- 99.99% reliability
- easy operation
- optimised energy consumption
- life time spare parts availability

We make demanding full automation scenarios very simple:

all of FANUC's robots, CNCs and machines share a common control platform. This means that robots used for loading and unloading can be integrated quickly and easily into your machine concepts. A machine and a robot can be connected to each other easily through a FANUC interface. Screens are provided in the CNC to monitor and control the robot and vice-versa.

We also provide powerful networking solutions to allow connectivity of automated production lines and machining systems.

ONE CONTROL PLATFORM INFINITE OPPORTUNITIES

more than
440,000
robot installations
worldwide

up to
5,000
robot production
capacity per month

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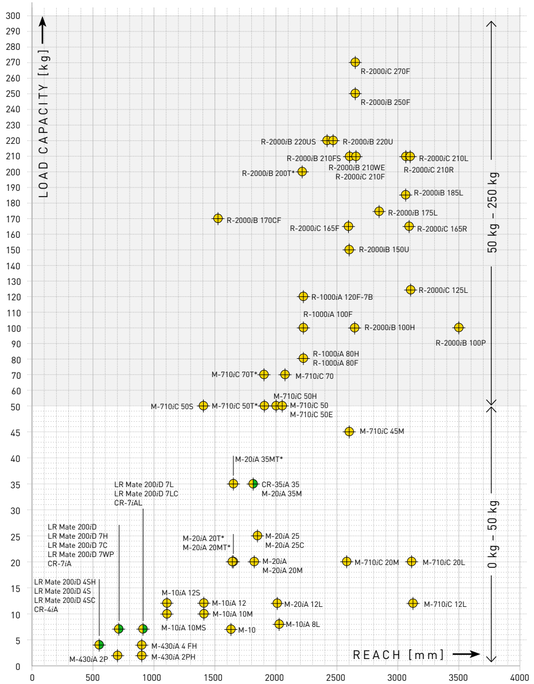
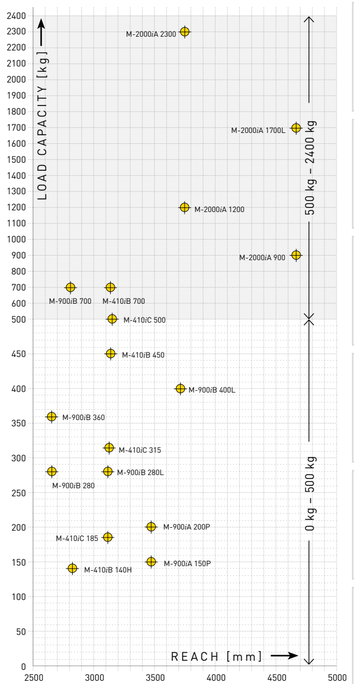
FIND YOUR ARTICULATED ROBOT

LR Mate | M-430 | M-10 | M-20 | M-710 | R-1000 | R-2000 | CR



M-410 | M-900 | M-2000



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*1) depending on rail specification

LR Mate Series

Max. load capacity at wrist: **7 kg**

Max. reach: **911 mm**

LR Mate 200iD

Available robot versions:

LR Mate 200*i*D/4SH	Short arm, 5-axis (2 integrated solenoid valves)
LR Mate 200*i*D/4S	Short arm (2 integrated solenoid valves)
LR Mate 200*i*D/4SC	Short arm, clean room, food grade grease (2 integrated solenoid valves)
LR Mate 200*i*D/7H	5-axis, (3 integrated solenoid valves)
LR Mate 200*i*D/7C	Clean room, food grade grease (3 integrated solenoid valves)
LR Mate 200*i*D/7WP	Wash proof
LR Mate 200*i*D	Standard model (3 integrated solenoid valves)
LR Mate 200*i*D/7L	Long arm (3 integrated solenoid valves)
LR Mate 200*i*D/7LC	Long arm, clean room, food grade grease (3 integrated solenoid valves)

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/kgm²)	J5 Moment/ Inertia (Nm/kgm²)	J6 Moment/ Inertia (Nm/kgm²)	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
				Open air cabinet	Mate cabinet	A-cabinet	B-cabinet																							
LR Mate 200	iD	4SH	R-30iB	o	●	-	-	4	550	5	± 0.02	19	360	230	402	240	720	-	460	460	520	560	1500	-	8.86/0.2	4.0/0.046 (5.5/0.083)	-	0.5	IP67	IP67
LR Mate 200	iD	4S	R-30iB	o	●	-	-	4	550	6	± 0.013**	20	360	230	402	380	240	720	460	460	520	560	560	900	8.86/0.2	8.86/0.2	4.9/0.067	0.5	IP67	IP67
LR Mate 200	iD	4SC	R-30iB	o	●	-	-	4	550	6	± 0.02	20	360	230	402	380	236	720	460	460	520	560	560	900	8.86/0.2	8.86/0.2	4.9/0.067	0.5	IP67	IP67
LR Mate 200	iD	7H	R-30iB	o	●	-	-	7	717	5	± 0.02	24	360	245	420	250	720	-	450	380	520	545	1500	-	16.6/0.47	4.0/0.046 (5.5/0.15)	-	0.5	IP67/ IP69K	IP67/IP69K
LR Mate 200	iD	7C	R-30iB	o	●	-	-	7	717	6	± 0.02	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	IP67
LR Mate 200	iD	7WP	R-30iB	-	●	-	-	7	717	6	± 0.02	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
LR Mate 200	iD		R-30iB	o	●	-	-	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
LR Mate 200	iD	7L	R-30iB	o	●	-	-	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
LR Mate 200	iD	7LC	R-30iB	o	●	-	-	7	911	6	± 0.03	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	IP67

● standard O on request - not available [ ] with hardware and/or software option ** Based on ISO9283

M-430 Series

Max. load capacity at wrist: **4 kg**

Max. reach: **900 mm**

M-430*i*A/4FH

Available robot versions:

M-430*i*A/2P	6-axis
M-430*i*A/2PH	6-axis
M-430*i*A/4FH	5-axis

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/kgm²]	J5 Moment/ Inertia [Nm/kgm²]	J6 Moment/ Inertia [Nm/kgm²]	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
				Open air cabinet	Mate cabinet	A-cabinet	B-cabinet																							
M-430	iA	2P	R-30iB	-	-	●	o	2	700	6	± 0.5	45	360	230	400	380	300	540	300	320	340	300	300	720	3.5/0.032	3.5/0.032	1.5/0.0065	1	IP67	IP67
M-430	iA	2PH	R-30iB	-	-	●	o	2	900	6	± 0.5	57	360	230	383	380	300	540	300	320	320	500	500	1700	3.5/0.032	3.5/0.032	1.5/0.0065	1	IP67	IP67
M-430	iA	4FH	R-30iB	-	-	●	o	4	900	5	± 0.5	55	360	230	383	300	540	-	300	320	320	360	2000	-	3.5/0.064	0 /0.01	-	1	IP67	IP67

● standard o on request - not available [ ] with hardware and/or software option

M-10 Series

Max. load capacity at wrist: **12 kg**

Max. reach: **2028 mm**

M-10*i*A/12

Available robot versions:

M-10*i*A/7L	Long arm, hollow wrist
M-10*i*A/8L	Long arm, hollow wrist
M-10*i*A/10MS	Short arm, high inertia
M-10*i*A/10M	High inertia
M-10*i*A/12	Hollow wrist
M-10*i*A/12S	Short arm, hollow wrist

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/kgm²]	J5 Moment/ Inertia [Nm/kgm²]	J6 Moment/ Inertia [Nm/kgm²]	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
				Open air cabinet	Mate cabinet	A-cabinet	B-cabinet																							
M-10	iA	7L	R-30iB	-	o	●	o	7	1633	6	± 0.08	135	340 [360]	250	447	380	280 [380]	540 [720]	230	225	230	430	430	630	15.7/0.63	10.1/0.38	5.9/0.061	1	IP54 /IP55	IP67
M-10	iA	8L	R-30iB	-	o	●	o	8	2028	6	± 0.04**	150	340 [370]	255	462	400	280 [360]	540 [900]	200	200	210	430	430	630	16.1/0.63	16.1/0.63	5.9/0.061	1	IP54/IP55	IP67
M-10	iA	10MS	R-30iB	-	o	●	o	10	1101	6	± 0.04**	130	340 [360]	250	441	380	280	720	260	280	315	420	420	720	26.0/0.9	26.0/0.9	11.0/0.3	1	IP54 /IP55	IP67
M-10	iA	10M	R-30iB	-	o	●	o	10	1422	6	± 0.04**	130	340 [360]	250	445	400	280	720	225	205	225	420	420	700	26.0/0.9	26.0/0.9	11.0/0.3	1	IP54 /IP55	IP67
M-10	iA	12S	R-30iB	-	o	●	o	12	1098	6	± 0.04**	130	340 [360]	250	340	380	280 [380]	540 [720]	260	280	315	430	430	630	22.0/0.65	22.0/0.65	9.8/0.17	1	IP54 /IP55	IP67
M-10	iA	12	R-30iB	-	o	●	o	12	1420	6	± 0.08	130	340 [360]	250	447	380	280 [380]	540 [720]	230	225	230	430	430	630	22.0/0.65	22.0/0.65	9.8/0.17	1	IP54 /IP55	IP67

● standard o on request - not available [ ] with hardware and/or software option ** Based on ISO9283

M-20 Series

Max. load capacity at wrist: **35 kg**

Max. reach: **2009 mm**

M-20*i*B/25

Available robot versions:

M-20*i*A/12L	Long arm, hollow wrist
M-20*i*A/20T	Top mount, hollow wrist
M-20*i*A	Standard model, hollow wrist
M-20*i*B/25	Standard model (3 integrated solenoid valves)
M-20*i*B/25C	Clean room
M-20*i*A/20M, /35M	High inertia
M-20*i*A/20MT, /35MT	High inertia, Top mount

Robot			Controller									Motion range (°)						Maximum speed (°/s)									Average Power consumption (kW)	Protection	
Series	Version	Type	Version	Cabinet type: Open air cabinet	Mate cabinet	A-cabinet	B-cabinet	Max.load capacity at wrist (kg)	Reach (mm)	Controlled axes	Repeatability (mm)	Mechanical weight (kg)	J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6	J4 Moment/ Inertia (Nm/kgm²)	J5 Moment/ Inertia (Nm/kgm²)	J6 Moment/ Inertia (Nm/kgm²)		Body standard/ optional	Wrist & J3 arm standard/ optional
M-20	*i*A	12L	R-30*i*B	-	o	●	o	12	2009	6	± 0.04**	250	370	260	460.6	400	360	900	200	175	190	430	430	630	22.0/0.65	22.0/0.65	9.8/0.17	1	IP54 /IP55	IP67
M-20	*i*A	20T	R-30*i*B	-	-	●	o	20	1662 *1)	6	± 0.04**	185	*1)	300	586	400	360	900	*1)	175	180	360	360	550	44/1.04	44/1.04	22/0.28	1	IP54	IP67
M-20	*i*A		R-30*i*B	-	o	●	o	20	1811	6	± 0.04**	250	370	260	458	400	360	900	195	175	180	360	360	550	44.0/1.04	44.0/1.04	22.0/0.28	1	IP54 /IP55	IP67
M-20	*i*A	20M	R-30*i*B	-	o	●	o	20	1813	6	± 0.04**	250	370	260	460.6	400	280	900	195	175	180	405	405	615	45.1/2.01	45.1/2.01	30.0/1.01	1	IP54 /IP55	IP67
M-20	*i*A	20MT	R-30*i*B	-	-	●	o	20	1663 *1)	6	± 0.04**	185	*1)	300	586	400	280	900	*1)	175	180	405	405	615	45.1/2.01	45.1/2.01	30.0/1.01	1	IP54	IP67
M-20	*i*B	25	R-30*i*B	-	o	●	o	25	1853	6	± 0.023	210	340 [360]	240	303	400	290	540	205	205	260	415	415	880	51 / 2.2	51 / 2.2	31 / 1.2	1	IP67	IP67
M-20	*i*B	25C	R-30*i*B	-	o	●	o	25	1853	6	± 0.023	210	340 [360]	240	303	400	290	540	205	205	240	415	415	880	51 / 2.2	51 / 2.2	31 / 1.2	1	IP67	IP67
M-20	*i*A	35M	R-30*i*B	-	o	●	o	35	1813	6	± 0.04**	252	370	260	461.0	400	280	900	180	180	200	350	350	400	110/4	110/4	60.0/1.5	1	IP54 /IP55	IP67
M-20	*i*A	35MT	R-30*i*B	-	-	●	o	35	1663 *1)	6	± 0.04**	187	*1)	300	586	400	280	900	*1)	180	200	350	350	400	110/4	110/4	60.0/1.5	1	IP54	IP67

● standard o on request - not available [ ] with hardware and/or software option *1) depending on rail specification ** Based on ISO9283

M-410 Series

Max. load capacity at wrist: **700 kg**

Max. reach: **3143 mm**

M-410*i*C/185

Available robot versions:

M-410*i*B/140H	5-axis
M-410*i*B/450, /700	Hollow wrist
M-410*i*C/185, /315, /500	Hollow wrist

Robot			Controller									Motion range (°)						Maximum speed (°/s)									Average Power consumption (kW)	Protection	
Series	Version	Type	Version	Cabinet type: Open air cabinet	Mate cabinet	A-cabinet	B-cabinet	Max.load capacity at wrist (kg)	Reach (mm)	Controlled axes	Repeatability (mm)	Mechanical weight (kg)	J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6	J4 Moment/ Inertia (Nm/kgm²)	J5 Moment/ Inertia (Nm/kgm²)	J6 Moment/ Inertia (Nm/kgm²)		Body standard/ optional	Wrist & J3 arm standard/ optional
M-410	*i*B	140H	R-30*i*B	-	-	●	o	140	2850	5	± 0.2	1200	360	155	112	20	720	-	140	115	135	135	420	-	147	53	-	3	IP54	IP54
M-410	*i*C	185	R-30*i*B	-	-	●	o	185	3143	4	± 0.5	1600 [1330]	360	144	136	720	-	-	140	140	140	305	-	-	88	-	-	3	IP54	IP54
M-410	*i*C	315	R-30*i*B	-	-	●	o	315	3143	4	± 0.5	1600 [1330]	360	144	136	720	-	-	90	100	110	195	-	-	155	-	-	3	IP54	IP54
M-410	*i*B	450	R-30*i*B	-	-	●	o	450	3130	4	± 0.5	2430	360	145	135	540	-	-	70	70	70	180	-	-	196 [294]	-	-	3	IP54	IP54
M-410	*i*C	500	R-30*i*B	-	-	●	o	500	3143	4	± 0.5	2410 [1910]	370	144	136	720	-	-	85	85	85	200	-	-	250	-	-	3	IP54	IP54
M-410	*i*B	700	R-30*i*B	-	-	●	o	700	3143	4	± 0.5	2700	360	144	136	540	-	-	60	60	60	120	-	-	490	-	-	3	IP54	IP54

● standard o on request - not available [ ] with hardware and/or software option

M-710 Series

Max. load capacity at wrist: **70 kg**

Max. reach: **3123 mm**

M-710*i*C 50

Available robot versions:

M-710*i*C/12L, /20L	Long arm
M-710*i*C/20M, /45M	High inertia
M-710*i*C/50S	Short arm
M-710*i*C/50H	5-axis
M-710*i*C/50, /70	Standard model
M-710*i*C/50E	Offset wrist
M-710*i*C/50T, /70T	Top mount

Robot			Controller									Motion range (°)						Maximum speed (°/s)												Protection	
Series	Version	Type	Version	Cabinet type: Open air cabinet	Mate cabinet	A-cabinet	B-cabinet	Max.load capacity at wrist [kg]	Reach [mm]	Controlled axes	Repeatability [mm]	Mechanical weight [kg]	J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6	J4 Moment/ Inertia [Nm/kgm²]	J5 Moment/ Inertia [Nm/kgm²]	J6 Moment/ Inertia [Nm/kgm²]	Average Power consumption [kW]	Body standard/ optional	Wrist & J3 arm standard/ optional
M-710	*i*C	12L	R-30*i*B	-	o	●	o	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	*i*C	20L	R-30*i*B	-	o	●	o	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
M-710	*i*C	20M	R-30*i*B	-	o	●	o	20	2582	6	± 0.06**	530	360	225	435	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
M-710	*i*C	45M	R-30*i*B	-	o	●	o	45	2606	6	± 0.06**	570	360	225	440	800	250	800	180	180	180	250	250	360	206/28	206/28	127/20	2.5	IP54/IP67	IP67
M-710	*i*C	50S	R-30*i*B	-	o	●	o	50	1359	6	± 0.04**	545	360	169	376	720	250	720	175	175	175	250	250	355	206/28	206/28	127/11	2.5	IP54/IP67	IP67
M-710	*i*C	50T	R-30*i*B	-	o	●	o	50	1900 *1)	6	± 0.07	410	*1)	261	491	720	250	720	*1)	175	175	250	250	355	206/28	206/28	127/11	2.5	IP54/IP67	IP67
M-710	*i*C	50H	R-30*i*B	-	o	●	o	50	2003	5	± 0.15	540	360	225	440	234	720	–	175	175	175	175	720	–	150/6.3	68/2.5	–	2.5	IP54/IP67	IP67
M-710	*i*C	50	R-30*i*B	-	o	●	o	50	2050	6	± 0.04**	560	360	225	440	720	250	720	175	175	175	250	250	355	206/28	206/28	127/11	2.5	IP54/IP67	IP67
M-710	*i*C	50E	R-30*i*B	-	o	●	o	50	2050	6	± 0.07	560	360	225	440	720	380	720	175	175	175	250	240	340	206/28	176/10.8	98/3.3	2.5	IP54/IP67	IP67
M-710	*i*C	70T	R-30*i*B	-	o	●	o	70	1900 *1)	6	± 0.07	410	*1)	261	491	720	250	720	*1)	120	120	225	225	225	294/28	294/28	147/11	2.5	IP54/IP67	IP67
M-710	*i*C	70	R-30*i*B		o	●	o	70	2050	6	± 0.04**	560	360	225	440	720	250	720	160	120	120	225	225	225	294/28	294/28	147/11	2.5	IP54/IP67	IP67

● standard o on request - not available [ ] with hardware and/or software option *1) depending on rail specification ** Based on ISO9283

M-900 Series

Max. load capacity at wrist: **700 kg**

Max. reach: **3704 mm**

M-900*i*B/700

Available robot versions:

M-900*i*A/150P, /200P	Pedestal mount
M-900iB/280	High rigidity model
M-900iB/360, /700	Standard model
M-900*i*B/280L, /400L	Long arm

Robot			Controller									Motion range (°)						Maximum speed (°/s)												Protection	
Series	Version	Type	Version	Cabinet type: Open air cabinet	Mate cabinet	A-cabinet	B-cabinet	Max.load capacity at wrist [kg]	Reach [mm]	Controlled axes	Repeatability [mm]	Mechanical weight [kg]	J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6	J4 Moment/ Inertia [Nm/kgm²]	J5 Moment/ Inertia [Nm/kgm²]	J6 Moment/ Inertia [Nm/kgm²]	Average Power consumption [kW]	Body standard/ optional	Wrist & J3 arm standard/ optional
M-900	*i*A	150P	R-30*i*B	-	-	●	o	150	3507	6	± 0.3	1860	360	180	180	720	250	720	110	95	95	120	120	200	1666/313.6	1666/313.6	715.4/225.4	5	IP54	IP67
M-900	*i*A	200P	R-30*i*B	-	-	-	●	200	3507	6	± 0.3	2670	360	180	180	720	230	720	110	95	95	95	95	165	2200/431.2	2200/431.2	715/392	10	IP54	IP67
M-900	*i*B	280	R-30*i*B	-	-	●	o	280	2655	6	± 0.1**	1700	370	151	224	720	250	720	110	105	100	110	110	180	1960/260 [460]	1960/260 [460]	1050/160 [360]	3	IP54 /IP56	IP67
M-900	*i*B	280L	R-30*i*B	-	-	●	o	280	3103	6	± 0.1**	1600	370	151	224	720	250	720	110	105	100	125	125	205	1700/215 [340]	1700/215 [340]	950/140 [260]	3	IP54 /IP56	IP67
M-900	*i*B	360	R-30*i*B	-	-	●	o	360	2655	6	± 0.1**	1540	370	151	224	720	250	720	110	105	100	110	110	180	1960/260 [460]	1960/260 [460]	1050/160 [360]	3	IP54 /IP56	IP67
M-900	*i*B	400L	R-30*i*B	-	-	-	●	400	3704	6	± 0.1**	3150	360	154	160	720	244	720	80	80	80	100	100	160	3400/1098	3400/1098	1725/444	5	IP54 /IP56	IP67
M-900	*i*B	700	R-30*i*B	-	-	-	●	700	2832	6	± 0.1**	2800	360	154	160	720	244	720	80	80	80	100	100	160	3400/1098	3400/1098	1725/444	5	IP54 /IP56	IP67

● standard o on request - not available [ ] with hardware and/or software option ** Based on ISO9283

M-2000 Series

Max. load capacity at wrist: **2300 kg**

Max. reach: **4683 mm**

M-2000*i*A/1700L

Available robot versions:

M-2000*i*A/900L, /1700L	Long arm
M-2000*i*A/1200, /2300	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	Wrist & J3 arm
				Open air cabinet	Mate cabinet	A-cabinet	B-cabinet																							standard/ optional	standard/ optional
M-2000	iA	900L	R-30*i*B	-	-	●	o		900	4683	6	± 0.27**	9600	330	160	165	720	240	720	45	30	30	50	50	70	14700/2989	14700/2989	4900/2195	8	IP54/IP56	IP67
M-2000	iA	1200	R-30*i*B	-	-	●	o		1200 [1350]	3734	6	± 0.18**	8600	330	160	165	720	240	720	45	30 [25]	30	50	50	70	14700/2989	14700/2989	4900/2195	8	IP54/IP56	IP67
M-2000	iA	1700L	R-30*i*B	-	-	●	o		1700	4683	6	± 0.27**	12500	330	160	165	720	240	720	20	14	14	18	18	40	29400/7500	29400/7500	8820/5500	8	IP54/IP56	IP67
M-2000	iA	2300	R-30*i*B	-	-	●	o		2300	3734	6	± 0.18**	11000	330	160	165	720	240	720	20	14	14	18	18	40	29400/7500	29400/7500	8820/5500	8	IP54/IP56	IP67

● standard O on request - not available [ ] with hardware and/or software option ** Based on ISO9283

R-1000 Series

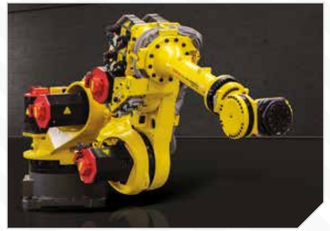
Max. load capacity at wrist: **120 kg**

Max. reach: **2230 mm**

R-1000*i*A

Available robot versions:

R-1000*i*A/80H	5-axis
R-1000*i*A/80F, /100F	Standard model
R-1000*i*A/120F-7B	7-axis



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	E1	J1	J2	J3	J4	J5	J6	E1				Body	Wrist & J3 arm
				Open air cabinet	Mate cabinet	A-cabinet	B-cabinet																								standard/ optional	standard/ optional
R-1000	iA	80H	R-30*i*B	-	o	●	o		80	2230	5	± 0.05**	610	360	245	215	20	720	-	-	185	180	180	180	500	-	-	–/48	–/25	–	2.5	IP54/IP55	IP67
R-1000	iA	80F	R-30*i*B	-	o	●	o		80	2230	6	± 0.05**	620	360	245	360	720	250	720	-	170	140	160	230	230	350	-	380/30	380/30	200/20	2.5	IP54 /IP56	IP67
R-1000	iA	100F	R-30*i*B	-	o	●	o		100	2230	6	± 0.05**	665	360	245	360	720	250	720	-	130	110	120	170	170	250	-	690/57	690/57	260/32	2.5	IP54 /IP56	IP67
R-1000	iA	120F-7B	R-30*i*B	-	o	●	o		120	2230	7	± 0.05**	790	360	200	385	720	250	720	225	130	110	120	170	170	250	130	800/71	800/71	360/38	2.5	IP54 /IP56	IP67

● standard O on request - not available [ ] with hardware and/or software option ** Based on ISO9283

R-2000 Series

Max. load capacity at wrist: **270 kg**

Max. reach: **3500 mm**

R-2000iC/270F

Available robot versions:

R-2000*i*B/100H	5-axis
R-2000*i*B/100P	Pedestal mount
R-2000*i*B/175L, /185L	Long arm
R-2000*i*C/125L, /210L	Long arm
R-2000*i*B/150U, /220U	Upside down mount
R-2000*i*C/165F, /210F, 250F/270F	Standard model
R-2000*i*C/165R, /210R	Rack mount
R-2000*i*B/170CF	Compact
R-2000*i*B/200T	Top mount
R-2000*i*B/210FS	Hollow wrist
R-2000*i*B/210WE	Wash environment
R-2000*i*B/220US	Upside down mount, hollow wrist

Robot			Controller									Motion range [°]						Maximum speed [°/s]									Protection	
Series	Version	Type	Version	Cabinet type: Open air cabinet	Mate cabinet	A-cabinet	B-cabinet	Max.load capacity at wrist [kg]	Reach [mm]	Controlled axes	Repeatability [mm]	Mechanical weight [kg]	J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6	J4 Moment/ Inertia [Nm/kgm²]	J5 Moment/ Inertia [Nm/kgm²]	J6 Moment/ Inertia [Nm/kgm²]	Average Power consumption [kW]	Body standard/ optional	Wrist & J3 arm standard/ optional
R-2000	iB	100H	R-30iB	-	-	●	o	100	2655	5	± 0.2	1150	360	136	362	250	720	-	130	130	130	170	360	-	441/39.2	245/15.7	-	2.5	IP54	IP67
R-2000	iB	100P	R-30iB	-	-	●	o	100	3500	6	± 0.3	1560	360	185	365	720	250	720	110	90	110	120	120	190	980/225.4	980/225.4	706/196	2.5	IP54	IP67
R-2000	iC	125L	R-30iB	-	o	●	o	125	3100	6	± 0.05**	1115	370	136	301	720	250	720	130	115	125	180	180	260	710/72	710/72	355/40	2.5	IP54 /IP56	IP67
R-2000	iB	150U	R-30iB	-	-	●	o	150	2655	6	± 0.2	1070	360	136	362	720	250	720	110	85	110	150	150	220	833/78.4	833/78.4	421/40.2	2.5	IP54 /IP56	IP67
R-2000	iC	165F	R-30iB	-	o	●	o	165	2655	6	± 0.05**	1090	370	136	312	720	250	720	130	115	125	180	180	260	940/120	940/120	490/100	2.5	IP54 /IP56	IP67
R-2000	iC	165R	R-30iB	-	-	●	o	165	3095	6	± 0.05**	1370	370	200	375	720	250	720	115	110	125	180	180	260	940/89	940/89	490/46	2.5	IP54 /IP56	IP67
R-2000	iB	170CF	R-30iB	-	-	●	o	170	1520	6	± 0.15	800	360	190	332	720	250	720	110	110	110	150	150	220	921/78.4	921/78.4	461/40.2	2.5	IP54 /IP56	IP67
R-2000	iB	175L	R-30iB	-	-	●	o	175	2852	6	± 0.3	1260	360	136	356	720	250	720	95	90	95	120	120	190	1225/225.4	1225/225.4	706/196	2.5	IP54 /IP56	IP67
R-2000	iB	185L	R-30iB	-	-	●	o	185	3060	6	± 0.3	1290	360	136	346	720	250	720	95	85	88	120	120	190	1225/225.4	1225/225.4	706/196	2.5	IP54 /IP56	IP67
R-2000	iB	200T	R-30iB	-	-	●	o	200	2208 *1)	6	± 0.3	1100	*1)	245	406	720	250	720	*1)	70	90	110	110	155	1274/117.6	1274/117.6	686/58.8	3	IP54/IP56	IP67
R-2000	iB	210FS	R-30iB	-	-	●	o	210	2605	6	± 0.3	1250	360	136	234	420	250	420	110	90	95	130	130	200	1333/141.1	1333/141.1	706/78.4	2.5	IP54	IP67
R-2000	iC	210F	R-30iB	-	o	●	o	210	2655	6	± 0.05**	1370	370	136	312	720	250	720	120	105	110	140	140	220	1360/225.4	1360/225.4	735/196	2.5	IP54 /IP56	IP67
R-2000	iC	210L	R-30iB	-	-	●	o	210	3100	6	± 0.05**	1350	370	136	301	720	250	720	105	90	85	120	120	200	1700/320	1700/320	900/230	2.5	IP54 /IP56	IP67
R-2000	iB	210WE	R-30iB	-	-	●	o	210	2655	6	± 0.1**	1280	360	136	362	720	250	720	95	90	95	120	120	190	1333/225.4	1333/225.4	706/196	2.5	IP67	IP67
R-2000	iC	210R	R-30iB	-	-	●	o	210	3095	6	± 0.05**	1370	370	200	375	720	250	720	105	100	110	140	140	220	1360/147	1360/147	735/82	2.5	IP54 /IP56	IP67
R-2000	iB	220U	R-30iB	-	-	●	o	220	2443	6	± 0.05**	1160	360	136	234	420	250	420	110	85	95	130	130	200	1333/141.1	1333/141.1	706/78.4	3	IP54	IP67
R-2000	iB	220US	R-30iB	-	-	●	o	220	2470	6	± 0.3	1150	360	136	362	720	250	720	95	85	95	120	120	190	1333/141.1	1333/141.1	706/78.4	3	IP54	IP67
R-2000	iB	250F	R-30iB	-	-	●	o	250	2655	6	± 0.3	1270	360	136	357	720	250	720	95	85	88	120	120	190	1382/225.4	1382/225.4	715/196	2.5	IP54 /IP56	IP67
R-2000	iC	270F	R-30iB	-	-	●	o	270	2655	6	± 0.05**	1320	370	136	312	720	250	720	105	90	85	120	120	200	1730/320	1730/320	900/230	2.5	IP54 /IP56	IP67

● standard o on request - not available ( ) with hardware and/or software option *1) depending on rail specification ** Based on ISO9283

Collaborative Series

Max. load capacity at wrist: **35 kg**

Max. reach: **1813 mm**

CR-35iA

Available robot versions:

CR-35*i*A/35	Standard Model
CR-7*i*A	Standard Model
CR-7*i*A/7L	Long arm
CR-4*i*A	Standard Model

Robot			Controller									Motion range [°]						Maximum speed [°/s]									Protection	
Series	Version	Type	Version	Cabinet type: Open air cabinet	Mate cabinet	A-cabinet	B-cabinet	Max.load capacity at wrist [kg]	Reach [mm]	Controlled axes	Repeatability [mm]	Mechanical weight [kg]	J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6	J4 Moment/ Inertia [Nm/kgm²]	J5 Moment/ Inertia [Nm/kgm²]	J6 Moment/ Inertia [Nm/kgm²]	Average Power consumption [kW]	Body standard/ optional	Wrist & J3 arm standard/ optional
CR-35	iA	35	R-30iB	-	-	●	o	35	1813	6	± 0.04**	990	370	165	258	400	220	900	*7]	*7]	*7]	*7]	*7]	*7]	110/4	110/4	60.0/1.5	1	IP54 /IP55	-
CR-7	iA	7L	R-30iB	-	●	-	-	7	911	6	± 0.018**	55	340	166	383	380	240	720	*10]	*10]	*10]	*10]	*10]	*10]	16.6/0.47	16.6/0.47	9.4/0.15	0.5	IP67	IP67
CR-7	iA	7	R-30iB	-	●	-	-	7	717	6	± 0.018**	53	340	166	373	380	240	720	*10]	*10]	*10]	*10]	*10]	*10]	16.6/0.47	16.6/0.47	9.4/0.15	0.5	IP67	IP67
CR-4	iA	4	R-30iB	-	●	-	-	4	550	6	± 0.013**	48	340	150	354	380	200	720	*10]	*10]	*10]	*10]	*10]	*10]	8.86/02	8.86/02	4.9/0.067	0.5	IP67	IP67

● standard o on request - not available *7] max. cartesian speed 250mm/sec (750mm/sec. when safety monitored) *10] max. cartesian speed 500mm/sec (1000mm/sec when safety monitored) ** Based on ISO9283

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M-1*i*A ..... Page 19

M-2*i*A ..... Page 20

M-3*i*A ..... Page 21

M-1 Series

Max. load capacity at wrist: **1 kg**

Max. reach: **420 mm**

M-1*i*A/0.5A

Available robot versions:

M-1*i*A/1H	3-axis
M-1*i*A/0.5S	4-axis
M-1*i*A/0.5A	6-axis
M-1*i*A/1HL	3-axis, long arm
M-1*i*A/0.5SL	4-axis, long arm
M-1*i*A/0.5AL	6-axis, long arm

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/kgm²)	J5 Moment/ Inertia (Nm/kgm²)	J6 Moment/ Inertia (Nm/kgm²)	Average Power consumption (kW)	Protection	
Series	Version	Type	Version	Cabinet type										J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6					Body	Wrist & J3 arm
				Open air cabinet	Mate cabinet	A-cabinet	B-cabinet																							standard/ optional	standard/ optional
M-1	*i*A	1H	R-30*i*B	●	o	-	-	1	280	3	± 0.2	18 *2)		ø 280 x 100 [*3)		-	-	-		-	-	-	-	-		*4)			0.2	IP20	IP20
M-1	*i*A	0.5S	R-30*i*B	●	o	-	-	0.5 [1]	280	4	± 0.2	20 *2)		ø 280 x 100 [*3)		720	-	-		-	-	-	3000	-		*4)			0.2	IP20	IP20
M-1	*i*A	0.5A	R-30*i*B	●	o	-	-	0.5 [1]	280	6	± 0.2	23 *2)		ø 280 x 100 [*3)		720	300	720		-	-	-	1440	1440	1440	*4)			0.2	IP20	IP20
M-1	*i*A	1HL	R-30*i*B	●	o	-	-	1	420	3	± 0.2	21 *2)		ø 420 x 150 [*3)		-	-	-		-	-	-	-	-	-	*4)			0.2	IP20	IP20
M-1	*i*A	0.5SL	R-30*i*B	●	o	-	-	0.5 [1]	420	4	± 0.2	23 *2)		ø 420 x 150 [*3)		720	-	-		-	-	-	3000	-		*4)			0.2	IP20	IP20
M-1	*i*A	0.5AL	R-30*i*B	●	o	-	-	0.5 [1]	420	6	± 0.2	26 *2)		ø 420 x 150 [*3)		720	300	720		-	-	-	1440	1440	1440	*4)			0.2	IP20	IP20

● standard O on request - not available [ ] with hardware and/or software option *2) with stand *3) ø in mm by height in mm *4) refer to the wrist load diagramm

M-2 Series

Max. load capacity at wrist: **6 kg**

Max. reach: **1130 mm**

M-2iA/3S

Available robot versions:

M-2iA/3S	4-axis, hollow wrist
M-2iA/3SL	4-axis, long arm, hollow wrist
M-2iA/3A	6-axis,
M-2iA/3AL	6-axis, long arm
M-2iA/6H	3-axis, hollow wrist
M-2iA/6HL	3-axis, long arm, hollow wrist

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/kgm²)	J5 Moment/ Inertia (Nm/kgm²)	J6 Moment/ Inertia (Nm/kgm²)	Average Power consumption [kW]	Protection	
				Cabinet type																										Body	Wrist & J3 arm
Series	Version	Type	Version	Open air cabinet	Mate cabinet	A-cabinet	B-cabinet							J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6					standard/ optional	standard/ optional
M-2	iA	3S	R-30iB	●	o	o	-		3	800	4	± 0.1	120	ø 800 x 300 [*3]			720	-	-	-	-	-	3500	-	-	*4)			2.5	IP67 / IP69K	IP69K
M-2	iA	3A	R-30iB	●	o	o	-		3	800	6	± 0.1	140	ø 800 x 300 [*3]			720	300	720	-	-	-	1700	1700	1700	*4)			2.5	IP67 / IP69K	IP69K
M-2	iA	3SL	R-30iB	●	o	o	-		3	1130	4	± 0.1	120	ø 1130 x 400 [*3]			720	-	-	-	-	-	3500	-	-	*4)			2.5	IP67 / IP69K	IP69K
M-2	iA	3AL	R-30iB	●	o	o	-		3	1130	6	± 0.1	140	ø 1130 x 400 [*3]			720	300	720	-	-	-	1700	1700	1700	*4)			2.5	IP67 / IP69K	IP69K
M-2	iA	6H	R-30iB	●	o	o	-		6	800	3	± 0.1	115	ø 800 x 300 [*3]			-	-	-	-	-	-	-	-	-	*4)			2.5	IP67 / IP69K	IP69K
M-2	iA	6HL	R-30iB	●	o	o	-		6	1130	3	± 0.1	115	ø 1130 x 400 [*3]			-	-	-	-	-	-	-	-	-	*4)			2.5	IP67 / IP69K	IP69K

● standard O on request - not available [ ] with hardware and/or software option *3) ø in mm by height in mm *4) refer to the wrist load diagramm

M-3 Series

Max. load capacity at wrist: **12 kg**

Max. reach: **1350 mm**

M-3iA/6S

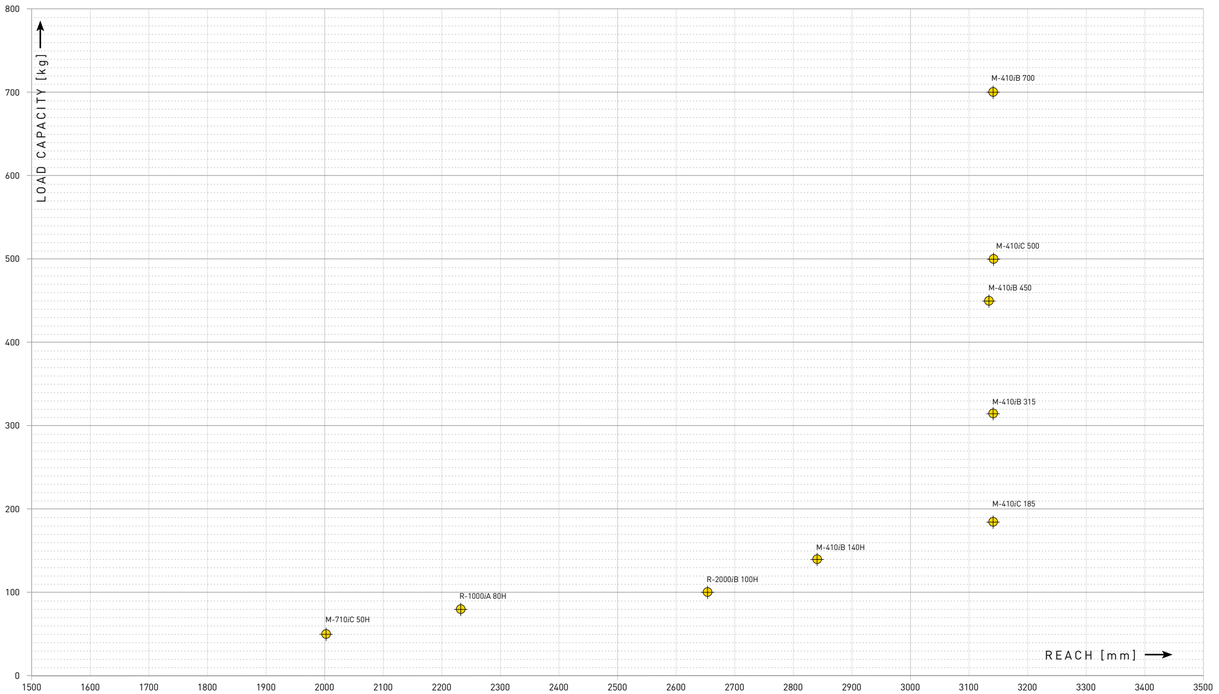
Available robot versions:

M-3iA/6S	4-axis, hollow wrist
M-3iA/6A	6-axis
M-3iA/12H	3-axis, hollow wrist

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/kgm²)	J5 Moment/ Inertia (Nm/kgm²)	J6 Moment/ Inertia (Nm/kgm²)	Average Power consumption [kW]	Protection	
				Cabinet type																										Body	Wrist & J3 arm
Series	Version	Type	Version	Open air cabinet	Mate cabinet	A-cabinet	B-cabinet							J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6					standard/ optional	standard/ optional
M-3	iA	6S	R-30iB	●	o	o	-		6 [8]	1350	4	± 0.1	160	ø 1350 x 500 [*3]			720	-	-	-	-	-	4000	-	-	*4)			2.5	IP67	IP67
M-3	iA	6A	R-30iB	●	o	o	-		6	1350	6	± 0.1	175	ø 1350 x 500 [*3]			720	300	720	-	-	-	4000	2000	2000	*4)			2.5	IP67	IP67
M-3	iA	12H	R-30iB	●	o	o	-		12	1350	3	± 0.1	155	ø 1350 x 500 [*3]			-	-	-	-	-	-	-	-	-	*4)			2.5	IP67	IP67

● standard O on request - not available [ ] with hardware and/or software option *3) ø in mm by height in mm *4) refer to the wrist load diagramm

FIND YOUR PALLETISING ROBOT



Palletising Robots

Available robot versions:

M-710iC/50H	5-axis
R-1000iA/80H	5-axis
R-2000iB/100H	5-axis
M-410iB/140H	5-axis
M-410iB/450, /700	Hollow wrist
M-410iC/185, /315, /500	Hollow wrist

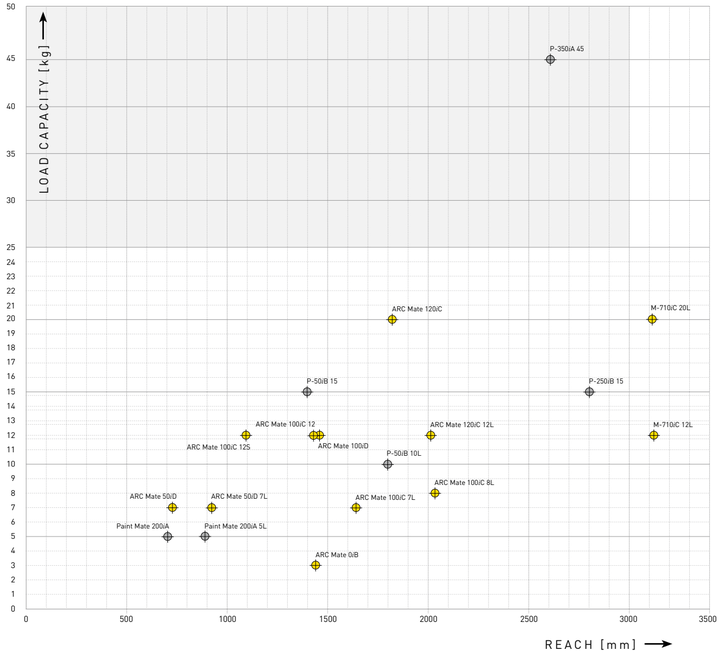
Robot			Controller						Max.load capacity at wrist [kg]	Reach [mm]	Controlled axes	Repeatability [mm]	Mechanical weight [kg]	Motion range [°]						Maximum speed [°/s]						J4 Moment/ Inertia (Nm/kgm²)	J5 Moment/ Inertia (Nm/kgm²)	J6 Moment/ Inertia (Nm/kgm²)	Average Power consumption [kW]	Protection	
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
				Open air cabinet	Mate cabinet	A-cabinet	B-cabinet																								
M-710	iC	50H	R-30iB	-	o	●	o		50	2003	5	± 0.15	540	360	225	440	234	720	-	175	175	175	175	720	-	150/6.3	68/2.5	-	2.5	IP54/IP67	IP67
R-1000	iA	80H	R-30iB	-	o	●	o		80	2230	5	± 0.05**	610	360	245	215	20	720	-	185	180	180	180	500	-	–/48	–/25	-	2.5	IP54 /IP56	IP67
R-2000	iB	100H	R-30iB	-	-	●	o		100	2655	5	± 0.2	1150	360	136	362	250	720	-	130	130	130	170	360	-	441/39.2	245/15.7	-	2.5	IP54	IP67
M-410	iB	140H	R-30iB	-	-	●	o		140	2850	5	± 0.2	1200	360	155	112	20	720	-	140	115	135	135	420	-	147	53	-	3	IP54	IP54
M-410	iC	185	R-30iB	-	-	●	o		185	3143	4	± 0.5	1600[1330]	360	144	136	720	-	-	140	140	140	305	-	-	88	-	-	3	IP54	IP54
M-410	iC	315	R-30iB	-	-	●	o		315	3143	4	± 0.5	1600[1330]	360	144	136	720	-	-	90	100	110	195	-	-	155	-	-	3	IP54	IP54
M-410	iB	450	R-30iB	-	-	●	o		450	3130	4	± 0.5	2430	360	145	135	540	-	-	70	70	70	180	-	-	196 [294]	-	-	3	IP54	IP54
M-410	iC	500	R-30iB	-	-	●	o		500	3143	4	± 0.5	2410[1910]	370	144	136	720	-	-	85	85	85	200	-	-	250	-	-	3	IP54	IP54
M-410	iB	700	R-30iB	-	-	●	o		700	3143	4	± 0.5	2700	360	144	136	540	-	-	60	60	60	120	-	-	490	-	-	3	IP54	IP54

● standard ○ on request - not available [ ] with hardware and/or software option ** Based on ISO9283

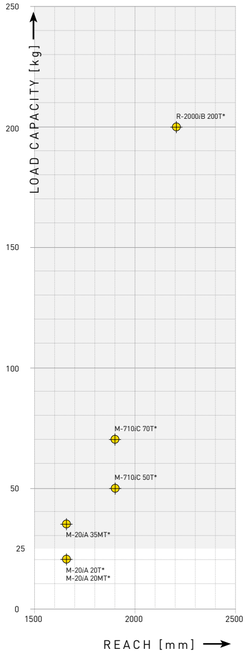
FIND YOUR

ARC WELDING, TOP MOUNT AND PAINT ROBOT

Arc Welding and Paint Robots



Top Mount Robots



Arc Welding Robots . . . Page 25

Top Mount Robots . . . . Page 26

Paint Robots . . . . . Page 27

*1) depending on rail specification

Arc Welding Robots

ARC Mate 0 Series

ARC Mate 120 Series

ARC Mate 50 Series

M-710iC/12L

ARC Mate 100 Series

M-710iC/20L

Available robot versions:

ARC Mate 0iB	Standard model
ARC Mate 50iD	Standard model
ARC Mate 50iD/7L	Long arm
ARC Mate 100iD	Standard model, hollow wrist/arm/base
ARC Mate 100iC/7L	Long arm, hollow wrist/arm
ARC Mate 100iC/8L	Long arm, hollow wrist/arm
ARC Mate 100iC/12S	Short arm, hollow wrist/arm
ARC Mate 100iC/12	Standard model, hollow wrist/arm
ARC Mate 120iC/12L	Long arm, hollow wrist/arm
ARC Mate 120iC	Standard model, hollow wrist/arm
M-710iC/12L	Long arm, hollow wrist/arm
M-710iC/20L	Long arm

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/kgm²)	J5 Moment/ Inertia (Nm/kgm²)	J6 Moment/ Inertia (Nm/kgm²)	Average Power consumption (kW)	Protection	
				Cabinet type																									Body	Wrist & J3 arm
Series	Version	Type	Version	Open air cabinet	Mate cabinet	A-cabinet	B-cabinet						J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6					standard/ optional	standard/ optional
ARC Mate 0	iB		R-30iB	-	●	-	-	3	1437	6	± 0.08	145	360	250	455	380	280	720	225	215	225	425	425	625	8.9/0.28	8.9/0.28	3.0/0.035	1	IP54	IP54
ARC Mate 50	iD		R-30iB	-	●	-	-	7	717	6	± 0.02	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	R-30iB	-	●	-	-	7	911	6	± 0.03	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		R-30iB Plus	-	o	●	o	12	1441	6	± 0.04	145	340 [370]	235	450	380	380	900	260	240	260	430	450	720	26.0/0.90	26.0/0.90	11.0/0.30	1	IP54	IP67
ARC Mate 100	iC	7L	R-30iB	-	o	●	o	3 [7]	1633	6	± 0.08	135	340 [360]	250	447	380	280 [380]	540 [720]	230	225	230	430	430	630	7.7[22.0]/0.24[0.65]	7.7[22.0]/0.24[0.65]	0.2[9.8]/0.002[10.17]	1	IP54	IP54
ARC Mate 100	iC	8L	R-30iB	-	o	●	o	3 [8]	2028	6	± 0.08	150	340 [370]	255	462	400	280 [360]	540 [900]	200	200	210	430	430	630	7.7[22.0]/0.24[0.65]	7.7[22.0]/0.24[0.65]	0.2[9.8]/0.002[10.17]	1	IP54	IP54
ARC Mate 100	iC	12S	R-30iB	-	o	●	o	3 [12]	1098	6	± 0.08	130	340 [360]	250	340	380	280 [380]	540 [720]	240	280	315	430	430	630	7.7[22.0]/0.24[0.65]	7.7[22.0]/0.24[0.65]	0.2[9.8]/0.002[10.17]	1	IP54	IP54
ARC Mate 100	iC	12	R-30iB	-	o	●	o	3 [12]	1420	6	± 0.08	130	340 [360]	250	447	380	280 [380]	540 [720]	230	225	230	430	430	630	7.7[22.0]/0.24[0.65]	7.7[22.0]/0.24[0.65]	0.2[9.8]/0.002[10.17]	1	IP54	IP54
ARC Mate 120	iC	12L	R-30iB	-	o	●	o	3 [12]	2009	6	± 0.08	250	370	260	460.6	400	280 [360]	540 [900]	200	175	190	430	430	630	7.7[22.0]/0.24[0.65]	7.7[22.0]/0.24[0.65]	0.2[9.8]/0.002[10.17]	1	IP54	IP54
ARC Mate 120	iC		R-30iB	-	o	●	o	3 [20]	1811	6	± 0.04**	250	370	260	458	400	280 [360]	540 [900]	195	175	180	360	360	550	7.7[44]/0.24[1.04]	7.7[44]/0.24[1.04]	0.22[22]/0.002[10.28]	1	IP54	IP54
M-710	iC	12L	R-30iB	-	o	●	o	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	R-30iB	-	o	●	o	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

● standard o on request - not available [ ] with hardware and/or software option ** Based on ISO9283

Top Mount Robots

M-20*i*A/20T
M-20*i*A/20MT
M-20*i*A/35MT

M-710*i*C/50T
M-710*i*C/70T

R-2000*i*B/200T

Available robot versions:

M-20*i*A/20T	Top mount
M-20*i*A/20MT	Top mount
M-20*i*A/35MT	Top mount
M-710*i*C/50T	Top mount
M-710*i*C/70T	Top mount
R-2000*i*B/200T	Top mount

Robot			Controller									Motion range [°]						Maximum speed [°/s]									Protection	
Series	Version	Type	Version	Cabinet type: Open air cabinet	Mate cabinet	A-cabinet	B-cabinet	Max.load capacity at wrist [kg]	Reach [mm]	Controlled axes	Repeatability [mm]	Mechanical weight [kg]	J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6	J4 Moment/ Inertia [Nm/kgm²]	J5 Moment/ Inertia [Nm/kgm²]	J6 Moment/ Inertia [Nm/kgm²]	Average Power consumption [kW]	Body standard/ optional	Wrist & J3 arm standard/ optional
M-20	*i*A	20T	R-30*i*B	-	-	●	o	20	1662 *1)	6	± 0.04**	185	*1)	300	586	400	360	900	*1)	175	180	360	360	550	44/1.04	44/1.04	22/0.28	1	IP54	IP67
M-20	*i*A	20MT	R-30*i*B	-	-	●	o	20	1663 *1)	6	± 0.04**	185	*1)	300	586	400	280	900	*1)	175	180	405	405	615	45.1/2.01	45.1/2.01	30.0/1.01	1	IP54	IP67
M-20	*i*A	35MT	R-30*i*B	-	-	●	o	35	1663 *1)	6	± 0.04**	187	*1)	300	586	400	280	900	*1)	180	200	350	350	400	110/4	110/4	60.0/1.5	1	IP54	IP67
M-710	*i*C	50T	R-30*i*B	-	o	●	o	50	1900 *1)	6	± 0.07	410	*1)	261	491	720	250	720	*1)	175	175	250	250	355	206/28	206/28	127/11	2.5	IP54/IP67	IP67
M-710	*i*C	70T	R-30*i*B	-	o	●	o	70	1900 *1)	6	± 0.07	410	*1)	261	491	720	250	720	*1)	120	120	225	225	225	294/28	294/28	147/11	2.5	IP54/IP67	IP67
R-2000	*i*B	200T	R-30*i*B	-	-	●	o	200	2208 *1)	6	± 0.3	1100	*1)	245	406	720	250	720	*1)	70	90	110	110	155	1274/117.6	1274/117.6	686/58.8	3	IP54/IP56	IP67

● standard o on request - not available [ ] with hardware and/or software option *1) depending on rail specification ** Based on ISO9283

Paint Robots

Paint Mate 200 Series

P-50 Series

P-250 Series

P-350 Series

Available robot versions:

Paint Mate 200*i*A	Standard model
Paint Mate 200*i*A/5L	Long arm
P-50*i*B/10L	Long arm
P-50*i*B/15	Standard model
P-250*i*B/15	Standard model
P-350*i*A/45	Standard model

Robot			Controller									Motion range [°]						Maximum speed [°/s]									Protection	
Series	Version	Type	Version	Cabinet type: Open air cabinet	Mate cabinet	A-cabinet	B-cabinet	Max.load capacity at wrist [kg]	Reach [mm]	Controlled axes	Repeatability [mm]	Mechanical weight [kg]	J1	J2	J3	J4	J5	J6	J1	J2	J3	J4	J5	J6	J4 Moment/ Inertia [Nm/kgm²]	J5 Moment/ Inertia [Nm/kgm²]	J6 Moment/ Inertia [Nm/kgm²]	Average Power consumption [kW]	Body standard/ optional	Wrist & J3 arm standard/ optional
Paint Mate 200	*i*A		R-30*i*B	-	●	-	-	5	704	6	± 0.02	35	340	200	388	380	240	720	350	350	400	450	450	720	11.9/0.3	11.9/0.3	6.7/0.1	0.5	*5]	
Paint Mate 200	*i*A	5L	R-30*i*B	-	●	-	-	5	892	6	± 0.03	37	340	230	373	380	240	720	270	270	270	450	450	720	11.9/0.3	11.9/0.3	6.7/0.1	0.5	*5]	
P-50	*i*B	10L	R-30*i*B	-	●	-	-	10	1800	6	± 0.2	331	320	240	404	1080	1080	1080	140	140	160	375	430	545	43.35/1.954	36.86/1.413	4.90/0.025	0.8	*5]	
P-50	*i*B	15	R-30*i*B	-	●	-	-	15	1400	6	± 0.2	323	320	240	404	1080	1080	1080	140	140	160	375	430	545	65.02/2.931	55.29/2.119	7.36/0.038	0.8	*5]	
P-250	*i*B	15	R-30*i*B	-	-	●	-	15	2800	6	± 0.2	530	320	280	330	1080	1080	1080	160	160	160	375	430	545	65.4/2.999	55.3/2.158	7.4/0.073	3.5	*5]	
P-350	*i*B	45	R-30*i*B	-	-	●	-	45	2606	6	± 0.1	590	360	225	440	800	250	800	180	180	180	250	250	250	206 / 28	206 / 28	127 / 20	2.5	*5]	

● standard o on request - not available [ ] with hardware and/or software option *5] ATEX certified Cat. II Group 2G and 2D

Controller R-30*i*B

The R-30*i*B controller is the FANUC standard for smarter productivity.

A new generation of advanced technology and enhanced integrated FANUC hard- and more than 250 software functions are key for the robot performance in terms of cycle-time, speed, accuracy and safety. Increased user-friendliness, minimum energy consumption and highest productivity maximises the overall functionality, reliability and operability. Different cabinet variants are available in order to provide a flexible and a cost effective solution.

Your advantages:

- space saving by compact and stackable design
- easy operation with smart *i*Pendant Touch
- flexible connections by broad range of fieldbus & safety bus
- ready for intelligent functions as *i*Rvision, force, interference check etc.
- flexible integration via 3 Ethernet ports
- easy system diagnosis via included *i*RDiagnostics function
- separate PMC processor for maximum robot PLC performance
- energy saving by optimised energy efficiency and energy regeneration

*i*Pendant Touch

The lightweight and ergonomically designed FANUC *i*Pendant Touch with its intuitive graphic user interface provides user-friendly programming for both programmers and on-site operators.

Your advantages:

- comfortable operation by touch screen and graphical *i*Pendant Editor
- time saving direct access of 2 additional axis using new jog keys
- easy customisation of user defined HTML screens
- direct switch between motion groups using new key
- make the invisible visible using 4D graphics to visualise tool and frame settings, safety zones and robot path
- more information provided using multi-window display
- easy setup/modification of *i*RVision via *i*Pendant
- USB connection for memory stick, mouse or USB-Cam

ORIGINAL FANUC SMART ACCESSORIES AND FUNCTIONS

INTELLIGENCE

iRVision
Unique integrated FANUC "plug & play" visual detection system (2D,2½D, 3D, 3D-Laser, 3D-Map) – improved flexibility for picking random stationary products. Also support in simulation SW ROBOGUIDE.

iRPickTool (Visual line tracking)
Part queue management, completely integrated in robot controller to support line tracking on moving conveyors. Combination of integrated FANUC iRVision with iRPickTool, for higher flexibility when picking random products on a moving conveyor.

iRCalibration suite
iRCalibration provide different service functions, by using of iRVision functionality, to simplify robot mastering, remastering, UFrame and UTool setting, Frame shifting and coordinated pair setting (precise and easy setup of coordinated robots and/or positioners).

Force Sensors
Integrated FANUC force sensor provides „touch sense" for highly sensitive force control to realize assembly, deburring, polishing and many other applications.

3D Area Sensor
Unique integrated 3D high speed vision detection system for bin picking of random products and depalletsing.

Intelligence functions
dedicated functions with keen instructions, interfaces, screens and exclusive features to simplify and standardise the programming, setup and operation of your robot.

MOTION

Integrated auxiliary axes
Fully integrated standardized and comprehensive auxiliary axis packages – up to 72 axes, for easy usage in external axis solutions (robot rail unit, custom-made manipulator, ...)

Multi-arm
For complex or coordinated multiple robot movements controlled by a single controller

Positioners
A wide range of FANUC integrated positioners – the ideal solution for coordinated motion and manipulating work pieces.

Learning Vibration Control
Cycle time improvement by the optimisation of path motion using a dedicated accelerometer sensor to suppress tool vibrations during robot motions.

Motion functions
dedicated functions with keen instructions, interfaces, screens and exclusive features to simplify and standardise the programming, setup and operation of your robot.

Hand Guidance
(only available for CR-35iA collaborative robot)
The hand guidance accessory enables the robot to be positioned by pushing the handle mounted on the robot wrist. It can be used to pick up and carry a workpiece and teach robot programs easily.

SAFETY

Motion safety
Dual Check Safety (DCS) for reliable checking of position and robot speed in predefined three-dimensional zones – higher safety for operators, machines and periphery

Collision guard
High Sensitive Collision Detection (HSCD) for minimal damages in the event of a collision and optimised cycle time and energy consumption after using payload identification

Safety functions
dedicated functions with keen instructions, interfaces, screens and exclusive features to simplify and standardise the programming, setup and operation of your robot. Easy to connect via safety bus function (DeviceNet Safety, EtherNet/IP Safety, PROFINET Safety).

INTERFACES

Digital I/O
Easy handshake setup using digital input and output interface communication between robot and other periphery

Field bus
Faster handshake setup using a wide variety of fieldbus standards (Profibus, Modbus, Devicenet, Profinet, Ethernet ...)

Interface functions
dedicated functions with keen instructions, interfaces, screens and exclusive features to simplify and standardise the programming, setup and operation of your robot.

COMFORT

iPendant Touch
A color, internet-ready iPendant Touch for even easier and faster programming using pictogram functions plus cost savings by using the touchscreen for custom HMI applications

ROBOGUIDE
Simulation software for offline programming, easy setup of robot cell's and feasibility studies with huge library of simulation tools.

Application functions
dedicated functions with keen instructions, interfaces, screens and exclusive features to simplify and standardise the programming, setup and operation of your robot.

ASK YOUR LOCAL **FANUC** OFFICE!

FANUC ROBOGUIDE INTELLIGENT 3D ROBOT SIMULATION

FANUC ROBOGUIDE is a PC software that simulates both the robot's motion and application commands, significantly reducing the time it takes to create new motion paths. To ensure minimal impact on production, cells can be designed, tested and modified entirely offline. 3D models can be imported to be able to achieve a realistic feel to the real world. The software's extensive CAD library also allows users to select and modify parts and dimensions as required. Designed to be intuitive and extremely easy to use, ROBOGUIDE requires very little, if any, training. It is also available with dedicated tools for specific applications.

Evaluate cells and cycle times

To ensure optimal cell design, ROBOGUIDE allows you to model cells and select the most suitable robot for your application and setup. With an internal virtual controller cycle times can be calculated and validated both quickly and accurately.

Pre-programming saves you time

ROBOGUIDE allows you to pre-program robots prior to installation in a cell as well as view and confirm robot trajectories and Dual Check Safety (DCS) parameters before downloading the programs to the real robot.

Set up and test complex systems

ROBOGUIDE's templates make setting up auxiliary axes, positioners and multigroup machines easy. These can then be tested for functionality to confirm cycle times, duty and power.

ROBOT CELL SIMULATION **WITHOUT DOWNTIME**

Fast and cost-efficient troubleshooting

Loading an All of Above or image Backup into ROBOGUIDE makes reproducing and solving errors easy.

Full process verification functionality

The robot simulator contains a full package of process verification tools including motion, execution and cycle time validation as well as collision detection.

Improvement without downtime

Enhancing and debugging can take place with production running with zero risk of downtime.

Dedicated robot simulation tools for motion applications

ROBOGUIDE is also available with a number of application-specific software tools. Whether it's deburring, handling, paint spraying, palletising or welding, every single motion-planning tool has been designed to improve productivity by eliminating the risk of error and reducing setup and cycle times.

Automatic deburring with ChamferingPRO

Step-by-step navigator lets you generate and simulate deburring programs automatically. To generate the deburring paths, just click the lines to be deburred on the 3D CAD data.

HandlingPRO

Simulate and test material handling processes and conduct feasibility studies for robotic applications without the physical need and expense of a prototype work cell setup.

PaintPRO

Graphical offl ine programming solution that simplifi es robotic path teach and paint process development. It contains special functionality for setting up paint gun displacement, spray size, overlap, paint pattern, paint speed and gun trigger timing.

PalletPRO

Can be used to completely build, debug and test a palletizing application offl ine. The data created in PalletPRO can then be down-loaded to a real robot controller containing the PalletTool software.

WeldPRO

Simulate a robotic arc welding process in the 3-D world. Driven exclusively by a FANUC Virtual Robot Controller, WeldPRO is empowered with the most accurate program teaching tools and cycle time information available in any simulation package.

***i*RPickPRO**

FANUC's latest plug-in to the ROBOGUIDE off-line programming tool, allows users to simulate high speed pick and place applications. *i*RPickPRO can then be downloaded to a real robot controller containing the *i*RPickPRO software.

OUR STRENGHT: SERVICE AND SUPPORT

Parts

- worldwide distribution network
- life-time parts coverage
- 24/7 parts dispatch
- online availability check
- consignment stock
- stock pooling
- customised parts services

Training

- worldwide network of training centres
- professional FANUC instructors
- latest training equipment
- customised training programs
- on-site training

Service

- predictive
- preventive
- corrective
- extended warranties
- 24-hour hotline support remote services
- retrofit and refurbishment

WHEREVER YOU NEED US: WE ARE THERE

With the largest global network of local subsidiaries in all continents, we are always there to meet your needs when you need us. Fast and efficient – 24/7. So you always have a local contact that speaks your language.

FANUC Academy

We help you get the most potential out of your automation by optimising the skills of your employees. Certified FANUC instructors train them in our fully equipped professional training centers, or at your own premises, using standard training modules as well as customised training packages to meet your specific needs.

Let's optimise your productivity.

ROBOT SERIES	LR MATE 200									M-430			M-10					
Type	4SH	4S	4SC	7H	7C	7WP	-	7L	7LC	2P	2PH	4FH	7L	8L	10MS	10M	12S	12
Version	*iD*									*iA*			*iA*					
CONTROLLER: Controller Version	R-30*iB*									R-30*iB*			R-30*iB*					
CONTROLLER: Open Air Cabinet	o	o	o	o	o	-	o	o	o	-	-	-	-	-	-	-	-	-
CONTROLLER: Mate Cabinet	●	●	●	●	●	●	●	●	●	-	-	-	o	o	o	o	o	o
CONTROLLER: A-Cabinet	-	-	-	-	-	-	-	-	-	●	●	●	●	●	●	●	●	●
CONTROLLER: B-Cabinet	-	-	-	-	-	-	-	-	-	o	o	o	o	o	o	o	o	o
Max Load Capacity at wrist [kg]	4	4	4	7	7	7	7	7	7	2	2	4	7	8	10	10	12	12
Reach [mm]	550	550	550	717	717	717	717	911	911	700	900	900	1633	2028	1101	1422	1098	1420
Controlled axes	5	6	6	5	6	6	6	6	6	6	6	5	6	6	6	6	6	6
Repeatability [mm]	± 0.02	± 0.013**	± 0.02	± 0.02	± 0.02	± 0.02	± 0.018**	± 0.018**	± 0.03	± 0.05	± 0.05	± 0.05	± 0.08	± 0.04**	± 0.04**	± 0.04**	± 0.04**	± 0.08
Mechanical weight [kg]	19	20	20	24	25	25	25	27	27	45	57	55	135	150	130	130	130	130
MOTION RANGE [°]: J1	360	360	360	360	360	360	360	360	360	360	360	360	340[360]	340[360]	340[370]	340[360]	340[360]	340[360]
MOTION RANGE [°]: J2	230	230	230	245	245	245	245	245	245	230	230	230	250	255	250	250	250	250
MOTION RANGE [°]: J3	402	402	402	420	420	420	420	430	430	400	383	383	447	462	441	445	340	447
MOTION RANGE [°]: J4	240	380	380	250	380	380	380	380	380	380	380	300	380	400	380	400	380	380
MOTION RANGE [°]: J5	720	240	236	720	250	250	250	250	250	300	300	540	280[380]	280[360]	280	280	280[380]	280[380]
MOTION RANGE [°]: J6	-	720	720	-	720	720	720	720	720	540	540	-	540[720]	540[900]	720	720	540[720]	540[720]
MOTION RANGE [°]: E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAXIMUM SPEED [°/S]: J1	460	460	460	450	450	450	450	370	370	300	300	300	230	200	260	225	260	230
MAXIMUM SPEED [°/S]: J2	460	460	460	380	380	380	380	310	310	320	320	320	225	200	280	205	280	225
MAXIMUM SPEED [°/S]: J3	520	520	520	520	520	520	520	410	410	340	320	320	230	210	315	225	315	230
MAXIMUM SPEED [°/S]: J4	560	560	560	545	550	550	550	550	550	300	500	360	430	430	420	420	430	430
MAXIMUM SPEED [°/S]: J5	1500	560	560	1500	545	545	545	545	545	300	500	2000	430	430	420	420	430	430
MAXIMUM SPEED [°/S]: J6	-	900	900	-	1000	1000	1000	1000	1000	720	1700	-	630	630	720	700	630	630
MAXIMUM SPEED [°/S]: E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
J4 Moment/Inertia [Nm/kgm²]	8.86/02	8.86/02	8.86/02	16.6/0.47	16.6/0.47	16.6/0.47	16.6/0.47	16.6/0.47	16.6/0.47	3.5/0.032	3.5/0.032	3.5/0.064	15.7/0.63	16.1/0.63	26.0/0.9	26.0/0.9	22.0/0.65	22.0/0.65
J5 Moment/Inertia [Nm/kgm²]	4.0/0.046 (5.5/0.083)	8.86/02	8.86/02	4.0/0.046 (5.5/0.15)	16.6/0.47	16.6/0.47	16.6/0.47	16.6/0.47	16.6/0.47	3.5/0.032	3.5/0.032	0/0.01	10.1/0.38	16.1/0.63	26.0/0.9	26.0/0.9	22.0/0.65	22.0/0.65
J6 Moment/Inertia [Nm/kgm²]	-	4.9/0.067	4.9/0.067	-	9.4/0.15	9.4/0.15	9.4/0.15	9.4/0.15	9.4/0.15	1.5/0.0065	1.5/0.0065	-	5.9/0.061	5.9/0.061	11.0/0.3	11.0/0.3	9.8/0.17	9.8/0.17
Average power consumption [Kw]	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	1	1	1	1	1	1	1	1
PROTECTION: Body Standard/optional	IP67	IP67	IP67	IP67/IP69K	IP67	IP67/IP69K	IP67/IP69K	IP67/IP69K	IP67	IP67	IP67	IP67	IP54/IP55	IP54/IP55	IP54/IP55	IP54/IP55	IP54/IP55	IP54/IP55
PROTECTION: Wirst and J3 Arm Standard/optional	IP67	IP67	IP67	IP67/IP69K	IP67	IP67/IP69K	IP67/IP69K	IP67/IP69K	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67

● standard o on request - not available [ ] with hardware and/or software option ** Based on ISO9283

ROBOT SERIES	M-20									M-710										
Type	12L	20T		20M	20MT	25	25C	35M	35MT	12L	20L	20M	45M	50S	50T	50H	50	50E	70T	70
Version	*iA*					*iB*		*iA*		*iC*										
CONTROLLER: Controller Version	R-30*iB*									R-30*iB*										
CONTROLLER: Open Air Cabinet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CONTROLLER: Mate Cabinet	o	-	o	o	-	o	o	o	-	o	o	o	o	o	o	o	o	o	o	o
CONTROLLER: A-Cabinet	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
CONTROLLER: B-Cabinet	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Max Load Capacity at wrist [kg]	12	20	20	20	20	25	25	35	35	12	20	20	45	50	50	50	50	50	70	70
Reach [mm]	2009	1662 *1)	1811	1813	1663 *1)	1853	1853	1813	1663 *1)	3123	3110	2582	2606	1359	1900 *1)	2003	2050	2050	1900 *1)	2050
Controlled axes	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6	6
Repeatability [mm]	± 0.04**	± 0.04**	± 0.04**	± 0.04**	± 0.04**	± 0.023	± 0.023	± 0.04**	± 0.04**	± 0.09**	± 0.11**	± 0.06**	± 0.06**	± 0.04**	± 0.07	± 0.15	± 0.04**	± 0.07	± 0.07	± 0.04**
Mechanical weight [kg]	250	185	250	250	185	210	210	252	187	540	540	530	570	545	410	540	560	560	410	560
MOTION RANGE [°]: J1	370	*1)	370	370	*1)	340 [360]	340 [360]	370	*1)	360	360	360	360	360	*1)	360	360	360	*1)	360
MOTION RANGE [°]: J2	260	300	260	260	300	240	240	260	300	225	225	225	225	169	261	225	225	225	261	225
MOTION RANGE [°]: J3	460,6	586	458	460,6	586	303	303	461,0	586	434	432	435	440	376	491	440	440	440	491	440
MOTION RANGE [°]: J4	400	400	400	400	400	400	400	400	400	400	400	400	800	720	720	234	720	720	720	720
MOTION RANGE [°]: J5	360	360	360	280	280	290	290	280	280	380	280	280	250	250	250	720	250	380	250	250
MOTION RANGE [°]: J6	900	900	900	900	900	540	540	900	900	720	900	900	800	720	720	-	720	720	720	720
MOTION RANGE [°]: E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAXIMUM SPEED [°/S]: J1	200	*1)	195	195	*1)	205	205	180	*1)	180	175	175	180	175	*1)	175	175	175	*1)	160
MAXIMUM SPEED [°/S]: J2	175	175	175	175	175	205	205	180	180	180	175	175	180	175	175	175	175	175	120	120
MAXIMUM SPEED [°/S]: J3	190	180	180	180	180	260	260	200	200	180	180	180	180	175	175	175	175	175	120	120
MAXIMUM SPEED [°/S]: J4	430	360	360	405	405	415	415	350	350	400	350	350	250	250	250	175	250	250	225	225
MAXIMUM SPEED [°/S]: J5	430	360	360	405	405	415	415	350	350	430	360	360	250	250	250	720	250	240	225	225
MAXIMUM SPEED [°/S]: J6	630	550	550	615	615	880	880	400	400	630	600	600	360	355	355	-	355	340	225	225
MAXIMUM SPEED [°/S]: E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
J4 Moment/Inertia [Nm/kgm²]	22.0/0.65	44/1.04	44.0/1.04	45.1/2.01	45.1/2.01	51/2.2	51/2.2	110/4	110/4	22.0/0.65	39.2/0.88	39.2/0.88	206/28	206/28	206/28	150/6.3	206/28	206/28	294/28	294/28
J5 Moment/Inertia [Nm/kgm²]	22.0/0.65	44/1.04	44.0/1.04	45.1/2.01	45.1/2.01	51/2.2	51/2.2	110/4	110/4	22.0/0.65	39.2/0.88	39.2/0.88	206/28	206/28	206/28	68/2.5	206/28	176/10.8	294/28	294/28
J6 Moment/Inertia [Nm/kgm²]	9.8/0.17	22/0.28	22.0/0.28	30.0/1.01	30.0/1.01	31/1.2	31/1.2	60.0/1.5	60.0/1.5	9.8/0.17	19.6/0.25	19.6/0.25	127/20	127/11	127/11	-	127/11	98/3.3	147/11	147/11
Average power consumption [Kw]	1	1	1	1	1	1	1	1	1	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
PROTECTION: Body Standard/optional	IP54/IP55	IP54	IP54/IP55	IP54/IP55	IP54	IP67	IP67	IP54/IP55	IP54	IP54/IP67	IP54/IP67	IP54/IP67	IP54/IP67	IP54/IP67	IP54/IP67	IP54/IP67	IP54/IP67	IP54/IP67	IP54/IP67	IP54/IP67
PROTECTION: Wirst and J3 Arm Standard/optional	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67

● standard o on request - not available *1) depending on rail specification ** Based on ISO9283

ROBOT SERIES

R-1000 / R-2000

		R-1000				R-2000							
Type		80H	80F	100F	120F-7B	100H	100P	125L	150U	165F	165R	170CF	175L
Version		iA	iA	iA	iA	iB	iB	iC	iB	iC	iC	iB	iB
CONTROLLER	Controller Version	R-30iB				R-30iB							
	Open Air Cabinet	-	-	-	-	-	-	-	-	-	-	-	-
	Mate Cabinet	o	o	o	o	-	-	o	-	o	-	-	-
	A-Cabinet	●	●	●	●	●	●	●	●	●	●	●	●
	B-Cabinet	o	o	o	o	o	o	o	o	o	o	o	o
Max Load Capacity at wrist (kg)		80	80	100	120	100	100	125	150	165	165	170	175
Reach (mm)		2230	2230	2230	2230	2655	3500	3100	2655	2655	3095	1520	2852
Controlled axes		5	6	6	7	5	6	6	6	6	6	6	6
Repeatability (mm)		± 0.05**	± 0.05**	± 0.05**	± 0.05**	± 0.2	± 0.3	± 0.05**	± 0.2	± 0.05**	± 0.05**	± 0.15	± 0.3
Mechanical weight (kg)		610	620	665	790	1150	1560	1115	1070	1090	1370	800	1260
MOTION RANGE [°]	J1	360	360	360	360	360	360	370	360	370	370	360	360
	J2	245	245	245	200	136	185	136	136	136	200	190	136
	J3	215	360	360	385	362	365	301	362	312	375	332	356
	J4	20	720	720	720	250	720	720	720	720	720	720	720
	J5	720	250	250	250	720	250	250	250	250	250	250	250
	J6	-	720	720	720	-	720	720	720	720	720	720	720
	E1	-	-	-	225	-	-	-	-	-	-	-	-
MAXIMUM SPEED [°/S]	J1	185	170	130	130	130	110	130	110	130	115	110	95
	J2	180	140	110	110	130	90	115	85	115	110	110	90
	J3	180	160	120	120	130	110	125	110	125	125	110	95
	J4	180	230	170	170	170	120	180	150	180	180	150	120
	J5	500	230	170	170	360	120	180	150	180	180	150	120
	J6	-	350	250	250	-	190	260	220	260	260	220	190
	E1	-	-	-	130	-	-	-	-	-	-	-	-
J4 Moment/Inertia (Nm/kgm²)		-/48	380/30	690/57	800/71	441/39.2	980/225.4	710/72	833/78.4	940/120	940/89	921/78.4	1225/225.4
J5 Moment/Inertia (Nm/kgm²)		-/25	380/30	690/57	800/71	245/15.7	980/225.4	710/72	833/78.4	940/120	940/89	921/78.4	1225/225.4
J6 Moment/Inertia (Nm/kgm²)		-	200/20	260/32	360/38	-	706/196	355/40	421/40.2	490/100	490/46	461/40.2	706/196
Average power consumption (Kw)		2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
PROTECTION	Body Standard/optional	IP54 /IP56	IP54 /IP56	IP54 /IP56	IP54 /IP56	IP54	IP54	IP54 /IP56	IP54 /IP56	IP54 /IP56	IP54 /IP56	IP54 /IP56	IP54 /IP56
	Wirst and J3 Arm Standard/optional	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67

● standard O on request - not available ** Based on ISO9283

ROBOT SERIES

R-2000

		R-2000										
Type		185L	200T	210FS	210F	210L	210WE	210R	220U	220US	250F	270F
Version		iB	iB	iB	iC	iC	iB	iC	iB	iB	iB	iC
CONTROLLER	Controller Version	R-30iB										
	Open Air Cabinet	-	-	-	-	-	-	-	-	-	-	-
	Mate Cabinet	-	-	-	o	-	-	-	-	-	-	-
	A-Cabinet	●	●	●	●	●	●	●	●	●	●	●
	B-Cabinet	o	o	o	o	o	o	o	o	o	o	o
Max Load Capacity at wrist (kg)		185	200	210	210	210	210	210	220	220	250	270
Reach (mm)		3060	2208*1)	2605	2655	3100	2655	3095	2470	2443	2655	2655
Controlled axes		6	6	6	6	6	6	6	6	6	6	6
Repeatability (mm)		± 0.3	± 0.3	± 0.3	± 0.05**	± 0.05**	± 0.1**	± 0.05**	± 0.05**	± 0.3	± 0.3	± 0.05**
Mechanical weight (kg)		1290	1100	1250	1370	1350	1280	1370	1150	1160	1270	1320
MOTION RANGE [°]	J1	360	*1)	360	370	370	360	370	360	360	360	370
	J2	136	245	136	136	136	136	200	136	136	136	136
	J3	346	406	234	312	301	362	375	362	234	357	312
	J4	720	720	420	720	720	720	720	720	420	720	720
	J5	250	250	250	250	250	250	250	250	250	250	250
	J6	720	720	420	720	720	720	720	720	420	720	720
	E1	-	-	-	-	-	-	-	-	-	-	-
MAXIMUM SPEED [°/S]	J1	95	*1)	110	120	105	95	105	95	110	95	105
	J2	85	70	90	105	90	90	100	85	85	85	90
	J3	88	90	95	110	85	95	110	95	95	88	85
	J4	120	110	130	140	120	120	140	120	130	120	120
	J5	120	110	130	140	120	120	140	120	130	120	120
	J6	190	155	200	220	200	190	220	190	200	190	200
	E1	-	-	-	-	-	-	-	-	-	-	-
J4 Moment/Inertia (Nm/kgm²)		1225/225.4	1274/117.6	1333/141.1	1360/225.4	1700/320	1333/225.4	1360/147	1333/141.1	1333/141.1	1382/225.4	1730/320
J5 Moment/Inertia (Nm/kgm²)		1225/225.4	1274/117.6	1333/141.1	1360/225.4	1700/320	1333/225.4	1360/147	1333/141.1	1333/141.1	1382/225.4	1730/320
J6 Moment/Inertia (Nm/kgm²)		706/196	686/58.8	706/78.4	735/196	900/230	706/196	735/82	706/78.4	706/78.4	715/196	900/230
Average power consumption (Kw)		2.5	3	2.5	2.5	2.5	2.5	2.5	3	3	2.5	2.5
PROTECTION	Body Standard/optional	IP54 /IP56	IP54/IP56	IP54	IP54/IP56	IP54/IP56	IP67	IP54/IP56	IP54	IP54	IP54/IP56	IP54/IP56
	Wirst and J3 Arm Standard/optional	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67

● standard O on request - not available *1) depending on rail specification ** Based on ISO9283

ROBOT SERIES	M-410						M-900							M-2000			
Type	140H	185	315	450	500	700	150P	200P	280	280L	360	400L	700	900L	1200	1700L	2300
Version	iB	iC		iB	iC	iB	iA	iA	iB	iB	iB	iB	iB	iA	iA	iA	iA
CONTROLLER – Controller Version	R-30iB						R-30iB							R-30iB			
CONTROLLER – Open Air Cabinet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CONTROLLER – Mate Cabinet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CONTROLLER – A-Cabinet	●	●	●	●	●	●	●	-	●	●	●	-	-	●	●	●	●
CONTROLLER – B-Cabinet	○	○	○	○	○	○	○	●	○	○	○	●	●	○	○	○	○
Max Load Capacity at wrist (kg)	140	185	315	450	500	700	150	200	280	280	360	400	700	900	1200(1350)	1700	2300
Reach (mm)	2850	3143	3143	3130	3143	3143	3507	3507	2655	3103	2655	3704	2832	4683	3734	4683	3734
Controlled axes	5	4	4	4	4	4	6	6	6	6	6	6	6	6	6	6	6
Repeatability (mm)	± 0.02	± 0.05	± 0.05	± 0.05	± 0.05	± 0.05	± 0.3	± 0.3	± 0.1**	± 0.1**	± 0.1**	± 0.1**	± 0.1**	± 0.27**	± 0.18**	± 0.27**	± 0.18**
Mechanical weight (kg)	1200	1600 (1330)	1600 (1330)	2430	2410 (1910)	2700	1860	2670	1700	1600	1540	3150	2800	9600	8600	12500	11000
MOTION RANGE [°] – J1	360	360	360	360	370	360	360	360	370	370	370	360	360	330	330	330	330
MOTION RANGE [°] – J2	155	144	144	145	144	144	180	180	151	151	151	154	154	160	160	160	160
MOTION RANGE [°] – J3	112	136	136	135	136	136	180	180	224	224	224	160	160	165	165	165	165
MOTION RANGE [°] – J4	20	720	720	540	720	540	720	720	720	720	720	720	720	720	720	720	720
MOTION RANGE [°] – J5	720	-	-	-	-	-	250	230	250	250	250	244	244	240	240	240	240
MOTION RANGE [°] – J6	-	-	-	-	-	-	720	720	720	720	720	720	720	720	720	720	720
MOTION RANGE [°] – E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAXIMUM SPEED [°/S] – J1	140	140	90	70	85	60	110	110	110	110	110	80	80	45	45	20	20
MAXIMUM SPEED [°/S] – J2	115	140	100	70	85	60	95	95	105	105	105	80	80	30	30 (25)	14	14
MAXIMUM SPEED [°/S] – J3	135	140	110	70	85	60	95	95	100	100	100	80	80	30	30	14	14
MAXIMUM SPEED [°/S] – J4	135	305	195	180	200	120	120	95	110	125	110	100	100	50	50	18	18
MAXIMUM SPEED [°/S] – J5	420	-	-	-	-	-	120	95	110	125	110	100	100	50	50	18	18
MAXIMUM SPEED [°/S] – J6	-	-	-	-	-	-	200	165	180	205	180	160	160	70	70	40	40
MAXIMUM SPEED [°/S] – E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
J4 Moment/Inertia (Nm/kgm²)	147	88	155	196 (294)	250	490	1666/313.6	2200/431.2	1960/260(460)	1700/215(340)	1960/260(460)	3400/1098	3400/1098	14700/2989	14700/2989	29400/7500	29400/7500
J5 Moment/Inertia (Nm/kgm²)	53	-	-	-	-	-	1666/313.6	2200/431.2	1960/260(460)	1700/215 (340)	1960/260(460)	3400/1098	3400/1098	14700/2989	14700/2989	29400/7500	29400/7500
J6 Moment/Inertia (Nm/kgm²)	-	-	-	-	-	-	715.4/225.4	715/392	1050/160(360)	950/140 (260)	1050/160(360)	1725/444	1725/444	4900/2195	4900/2195	8820/5500	8820/5500
Average power consumption (Kw)	3	3	3	3	3	3	5	10	3	3	3	5	5	8	8	8	8
PROTECTION – Body Standard/optional	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54/IP56	IP54/IP56	IP54/IP56	IP54/IP56	IP54/IP56	IP54 /IP56	IP54 /IP56	IP54 /IP56	IP54 /IP56
PROTECTION – Wirst and J3 Arm Standard/optional	IP54	IP54	IP54	IP54	IP54	IP54	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67

● standard ○ on request - not available [ ] with hardware and/or software option *1) depending on rail specification ** Based on ISO9283

ROBOT SERIES	COLLABORATIVE				M-1						M-2						M-3		
Type	35	7L	7	4	1H	0.5S	0.5A	1HL	0.55L	0.5AL	3S	3A	3SL	3AL	6H	6HL	6S	6A	12H
Version	iA	iA	iA	iA	iA	iA	iA	iA	iA	iA	iA	iA	iA	iA	iA	iA	iA	iA	iA
CONTROLLER – Controller Version	R-30iB				R-30iB						R-30iB						R-30iB		
CONTROLLER – Open Air Cabinet	-	-	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
CONTROLLER – Mate Cabinet	-	●	●	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
CONTROLLER – A-Cabinet	●	-	-	-	-	-	-	-	-	-	○	○	○	○	○	○	○	○	○
CONTROLLER – B-Cabinet	○	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Max Load Capacity at wrist (kg)	35	7	7	4	1	0.5 [1]	0.5 [1]	1	0.5 [1]	0.5 [1]	3	3	3	3	6	6	6(8)	6	12
Reach (mm)	1813	911	717	550	280	280	280	420	420	420	800	800	1130	1130	800	1130	1350	1350	1350
Controlled axes	6	6	6	6	3	4	6	3	4	6	4	6	4	6	3	3	4	6	3
Repeatability (mm)	± 0.04**	± 0.018**	± 0.018**	± 0.013**	± 0.02	± 0.02	± 0.02	± 0.03	± 0.03	± 0.03	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1	± 0.1
Mechanical weight (kg)	990	55	53	48	18 [*2]	20 [*2]	23 [*2]	21 [*2]	23 [*2]	26 [*2]	120	140	120	140	115	115	160	175	155
MOTION RANGE [°] – J1	370	340	340	340	ø 280x100 [*3]	ø 280x100 [*3]	ø 280x100 [*3]	ø 420x150 [*3]	ø 420x150 [*3]	ø 420x150 [*3]	ø 800x300 [*3]	ø 800x300 [*3]	ø 1130x400 [*3]	ø 1130x400 [*3]	ø 800x300 [*3]	ø 1130x400 [*3]	ø 1350x500 [*3]	ø 1350x500 [*3]	ø 1350x500 [*3]
MOTION RANGE [°] – J2	165	166	166	150															
MOTION RANGE [°] – J3	258	383	373	354															
MOTION RANGE [°] – J4	400	380	380	380	-	720	720	-	720	720	720	720	720	720	-	-	720	720	-
MOTION RANGE [°] – J5	220	240	240	200	-	-	300	-	-	300	-	300	-	300	-	-	-	300	-
MOTION RANGE [°] – J6	900	720	720	720	-	-	720	-	-	720	-	720	-	720	-	-	-	720	-
MOTION RANGE [°] – E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAXIMUM SPEED [°/S] – J1	*7]	*10]	*10]	*10]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAXIMUM SPEED [°/S] – J2	*7]	*10]	*10]	*10]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAXIMUM SPEED [°/S] – J3	*7]	*10]	*10]	*10]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAXIMUM SPEED [°/S] – J4	*7]	*10]	*10]	*10]	-	3000	1440	-	3000	1440	3500	1700	3500	1700	-	-	4000	4000	-
MAXIMUM SPEED [°/S] – J5	*7]	*10]	*10]	*10]	-	-	1440	-	-	1440	-	1700	-	1700	-	-	-	2000	-
MAXIMUM SPEED [°/S] – J6	*7]	*10]	*10]	*10]	-	-	1440	-	-	1440	-	1700	-	1700	-	-	-	2000	-
MAXIMUM SPEED [°/S] – E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
J4 Moment/Inertia (Nm/kgm²)	110/4	16.6/0.47	16.6/0.47	8.86/02	*4)						*4)						*4)		
J5 Moment/Inertia (Nm/kgm²)	110/4	16.6/0.47	16.6/0.47	8.86/02	*4)						*4)						*4)		
J6 Moment/Inertia (Nm/kgm²)	60.0/1.5	9.4/0.15	9.4/0.15	4.9/0.067	*4)						*4)						*4)		
Average power consumption (Kw)	1	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
PROTECTION – Body Standard/optional	IP54/IP55	IP67	IP67	IP67	IP20	IP20	IP20	IP20	IP20	IP20	IP67 / IP69K	IP67 / IP69K	IP67 / IP69K	IP67 / IP69K	IP67 / IP69K	IP67 / IP69K	IP67	IP67	IP67
PROTECTION – Wirst and J3 Arm Standard/optional	-	IP67	IP67	IP67	IP20	IP20	IP20	IP20	IP20	IP20	IP69K	IP69K	IP69K	IP69K	IP69K	IP69K	IP67	IP67	IP67

● standard ○ on request - not available [ ] with hardware and/or software option *2] with stand *3] Ø in mm by height in mm *4] refer to the wrist load diagramm *7] max. cartesian speed 250mm/sec [750mm/sec when safety monitored] *10] max. cartesian speed 500mm/sec [1000mm/sec when safety monitored]
** Based on ISO9283

PALLETISING / ARC WELDING

ROBOT SERIES		M-710	R-1000	R-2000	M-410						ARCMATE 0	ARC MATE 50		ARC MATE 100					ARC MATE 120		M-710	
Type		50H	80H	100H	140H	185	315	450	500	700	-	-	7L	7L	8L	12S	12		12L	-	12L	20L
Version		iC	iA	iB	iB	iC	iC	iB	iC	iB	iB	iD	iD	iC	iC	iC	iC	iD	iC	iC	iC	iC
CONTROLLER	Controller Version	R-30iB									R-30iB							R-30iB Plus	R-30iB			
	Open Air Cabinet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Mate Cabinet	o	o	-	-	-	-	-	-	-	●	●	●	o	o	o	o	o	o	o	o	o
	A-Cabinet	●	●	●	●	●	●	●	●	●	-	-	-	●	●	●	●	●	●	●	●	●
	B-Cabinet	o	o	o	o	o	o	o	o	o	-	-	-	o	o	o	o	o	o	o	o	o
Max Load Capacity at wrist (kg)		50	80	100	140	185	315	450	500	700	3	7	7	3 [7]	3 [8]	3 [12]	3 [12]	12	3 [12]	3 [20]	12	20
Reach (mm)		2003	2230	2655	2850	3143	3143	3130	3143	3143	1437	717	911	1633	2028	1098	1420	1441	2009	1811	3123	3110
Controlled axes		5	5	5	5	4	4	4	4	4	6	6	6	6	6	6	6	6	6	6	6	6
Repeatability (mm)		± 0.15	± 0.05**	± 0.2	± 0.2	± 0.5	± 0.5	± 0.5	± 0.5	± 0.5	± 0.08	± 0.04	± 0.03	± 0.08	± 0.08	± 0.08	± 0.08	± 0.04	± 0.08	± 0.04**	± 0.15	± 0.15
Mechanical weight (kg)		540	610	1150	1200	1600 *8 (1330 *9)	1600 *8 (1330 *9)	2430	2410 *8 (1910 *9)	2700	145	25	27	135	150	130	130	145	250	250	540	540
MOTION RANGE [°]	J1	360	360	360	360	360	360	360	370	360	360	360	360	340[360]	340[370]	340[360]	340[360]	340[370]	370	370	360	360
	J2	225	245	136	155	144	144	145	144	144	250	245	245	250	255	250	250	235	260	260	225	225
	J3	440	215	362	112	136	136	135	136	136	455	420	430	447	462	340	447	450	460.6	458	434	432
	J4	234	20	250	20	720	720	540	720	540	380	380	380	380	400	380	380	380	400	400	400	400
	J5	720	720	720	720	-	-	-	-	-	280	250	250	280[380]	280[360]	280[380]	280[380]	380	280[360]	280[360]	380	280
	J6	-	-	-	-	-	-	-	-	-	720	720	720	540[720]	540[900]	540[720]	540[720]	900	540[900]	540[900]	720	900
	E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAXIMUM SPEED [°/S]	J1	175	185	130	140	140	90	70	85	60	225	450	370	230	200	260	230	260	200	195	180	175
	J2	175	180	130	115	140	100	70	85	60	215	380	310	225	200	280	225	240	175	175	180	175
	J3	175	180	130	135	140	110	70	85	60	225	520	410	230	210	315	230	260	190	180	180	180
	J4	175	180	170	135	305	195	180	200	120	425	550	550	430	430	430	430	430	430	360	400	350
	J5	720	500	360	420	-	-	-	-	-	425	545	545	430	430	430	430	450	430	360	430	360
	J6	-	-	-	-	-	-	-	-	-	625	1000	1000	630	630	630	630	720	630	550	630	600
	E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
J4 Moment/Inertia (Nm/kgm²)		150/6.3	-/48	441/39.2	147	88	155	196[294]	250	490	8.9/0.28	16.6/0.47	16.6/0.47	7.7[22.0]/ 0.24[0.65]	7.7[22.0]/ 0.24[0.65]	7.7[22.0]/ 0.24[0.65]	7.7[22.0]/ 0.24[0.65]	26.0/0.90	7.7[22.0]/ 0.24[0.65]	7.7[44]/ 0.24[1.04]	22.0/0.65	39.2/0.88
J5 Moment/Inertia (Nm/kgm²)		68/2.5	-/25	245/15.7	53	-	-	-	-	-	8.9/0.28	16.6/0.47	16.6/0.47	7.7[22.0]/ 0.24[0.65]	7.7[22.0]/ 0.24[0.65]	7.7[22.0]/ 0.24[0.65]	7.7[22.0]/ 0.24[0.65]	26.0/0.90	7.7[22.0]/ 0.24[0.65]	7.7[44]/ 0.24[1.04]	22.0/0.65	39.2/0.88
J6 Moment/Inertia (Nm/kgm²)		-	-	-	-	-	-	-	-	-	3.0/0.035	9.4/0.15	9.4/0.15	0.2[9.8]/ 0.0027[0.17]	0.2[9.8]/ 0.0027[0.17]	0.2[9.8]/ 0.0027[0.17]	0.2[9.8]/ 0.0027[0.17]	11.0/0.30	0.2[9.8]/ 0.0027[0.17]	0.22[22]/ 0.0027[0.28]	9.8/0.17	19.6/0.25
Average power consumption (Kw)		2.5	2.5	2.5	3	3	3	3	3	3	1	0.5	0.5	1	1	1	1	1	1	1	2.5	2.5
PROTECTION	Body Standard/optional	IP54/IP67	IP54/IP67	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP67/ IP69K	IP67/ IP69K	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54/IP67	IP54/IP67
	Wirst and J3 Arm Standard/optional	IP67	IP67	IP67	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP67/ IP69K	IP67/ IP69K	IP54	IP54	IP54	IP54	IP67	IP54	IP54	IP67	IP67

TOP MOUNT / PAINT

ROBOT SERIES		M-20			M-710		R-2000	PAINT MATE 200		P-50		P-250	P-350
Type		20T	20MT	35MT	50T	70T	200T	-	5L	10L	15	15	45
Version		iA	iA	iA	iC	iC	iB	iA	iA	iB	iB	iB	iB
CONTROLLER	Controller Version	R-30iB						R-30iB					
	Open Air Cabinet	-	-	-	-	-	-	-	-	-	-	-	-
	Mate Cabinet	-	-	-	o	o	-	●	●	●	●	-	-
	A-Cabinet	●	●	●	●	●	●	-	-	-	-	●	●
	B-Cabinet	o	o	o	o	o	o	-	-	-	-	-	-
Max Load Capacity at wrist (kg)		20	20	35	50	70	200	5	5	10	15	15	45
Reach (mm)		1662 *1)	1663 *1)	1663 *1)	1900 *1)	1900 *1)	2208 *1)	704	892	1800	1400	2800	2606
Controlled axes		6	6	6	6	6	6	6	6	6	6	6	6
Repeatability (mm)		± 0.04**	± 0.04**	± 0.04**	± 0.07	± 0.07	± 0.3	± 0.02	± 0.03	± 0.2	± 0.2	± 0.2	± 0.1
Mechanical weight (kg)		185	185	187	410	410	1100	35	37	331	323	530	590
MOTION RANGE [°]	J1	*1]	*1]	*1]	*1]	*1]	*1]	340	340	320	320	320	360
	J2	300	300	300	261	261	245	200	230	240	240	280	225
	J3	586	586	586	491	491	406	388	373	404	404	330	440
	J4	400	400	400	720	720	720	380	380	1080	1080	1080	800
	J5	360	280	280	250	250	250	240	240	1080	1080	1080	250
	J6	900	900	900	720	720	720	720	720	1080	1080	1080	800
	E1	-	-	-	-	-	-	-	-	-	-	-	-
MAXIMUM SPEED [°/S]	J1	*1]	*1]	*1]	*1]	*1]	*1]	350	270	140	140	160	180
	J2	175	175	180	175	120	70	350	270	140	140	160	180
	J3	180	180	200	175	120	90	400	270	160	160	160	180
	J4	360	405	350	250	225	110	450	450	375	375	375	250
	J5	360	405	350	250	225	110	450	450	430	430	430	250
	J6	550	615	400	355	225	155	720	720	545	545	545	250
	E1	-	-	-	-	-	-	-	-	-	-	-	-
J4 Moment/Inertia (Nm/kgm²)		44/1.04	45.1/2.01	110/4	206/28	294/28	1274/117.6	11.9/0.3	11.9/0.3	43.35/1.954	65.02/2.931	65.4/2.999	206 / 28
J5 Moment/Inertia (Nm/kgm²)		44/1.04	45.1/2.01	110/4	206/28	294/28	1274/117.6	11.9/0.3	11.9/0.3	36.86/1.413	55.29/2.119	55.3/2.158	206 / 28
J6 Moment/Inertia (Nm/kgm²)		22/0.28	30.0/1.01	60.0/1.5	127/11	147/11	686/58.8	6.7/0.1	6.7/0.1	4.90/0.025	7.36/0.038	7.4/0.073	127 / 20
Average power consumption (Kw)		1	1	1	2.5	2.5	3	0.5	0.5	0.8	0.8	3.5	2.5
PROTECTION	Body Standard/optional	IP54	IP54	IP54	IP54 /IP67	IP54 /IP67	IP54 /IP56	*5]	*5]	*5]	*5]	*5]	*5]
	Wirst and J3 Arm Standard/optional	IP67	IP67	IP67	IP67	IP67	IP67	*5]	*5]	*5]	*5]	*5]	*5]

● standard o on request - not available [ ] with hardware and/or software option *8] Pedestal type (with controller) *9] Compact base type (without controller) ** Based on ISO9283

● standard o on request - not available [ ] with hardware and/or software option *1] depending on rail specification *5] ATEX certifi ed Cat. II Group 2G and 2D ** Based on ISO9283

**MANUFACTURED EFFICIENCY:
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