

# MORE information

# Technical data CR series

Specifications	CR-4iA	CR-7iA	CR-7iA/L	CR-14iA/L	CR-15iA	CR-35iB
Type: articulated	•	•	•	•	•	•
Controlled axes	6	6	6	6	6	6
Max. load capacity at wrist [kg]	4	7	7	14	15	35/50
Reach [mm] <sup>*2)</sup>	550	717	911	911 <sup>*1)</sup>	1,441	1,831
Repeatability [mm] <sup>*3)</sup>	±0.01	±0.01	±0.01	±0.01	±0.02	±0.03
Mass [kg] <sup>*3)</sup>	48	53	55	55	255	375
Installation: floor   upside down   wall <sup>*4)</sup>	•   •   •	•   •   •	•   •   •	•   •   •	•   •   •	•   -   -
Motion range						
J1 axis rotation [°]	340	340	340	340	340	370
J2 axis rotation [°]	150	166	166	166	180	215
J3 axis rotation [°]	354	373	383	383	312	338
J4 axis wrist rotation [°]	380	380	380	380	380	400
J5 axis wrist swing [°]	200	240	240	240	280	280
J6 axis wrist rotation [°]	720	720	720	720	900	900
Max. speed [mm / s] <sup>*5)</sup>	1,000 <sup>*6)</sup>	1,000 <sup>*6)</sup>	1,000 <sup>*6)</sup>	500 <sup>*5)</sup>	800 / 1,500 <sup>*7)</sup>	750 <sup>*6)</sup>
Allowable load moment at wrist						
J4 axis [Nm]	8.86	16.6	16.6	31.0	26.0	110
J5 axis [Nm]	8.86	16.6	16.6	31.0	26.0	110
J6 axis [Nm]	4.9	9.4	9.4	13.4	11.0	60.0
Allowable load inertia at wrist						
J4 axis [kgm <sup>2</sup> ]	0.20	0.47	0.47	0.66	0.90	4.00
J5 axis [kgm <sup>2</sup> ]	0.20	0.47	0.47	0.66	0.90	4.00
J6 axis [kgm <sup>2</sup> ]	0.067	0.15	0.15	0.30	0.30	1.50
Installation environment						
Ambient operating temperature [°C]	0–45	0–45	0–45	0–45	0–45	0–45
Protection						
Body standard/optional	IP67	IP67	IP67	IP67	IP54	IP54
Wrist & J3 arm standard/optional	IP67	IP67	IP67	IP67	IP67	IP67

• standard

<sup>\*1)</sup> 911mm (load capacity < 12 kg) - 820 mm (load capacity ≥ 12 kg)

<sup>\*2)</sup> Reach specification is with respect to J5 axis center

<sup>\*3)</sup> ISO 9283

<sup>\*4)</sup> In case of the wall mount, the operation space will be restricted according to the payload.

<sup>\*5)</sup> In case of short distance motion, the speed may not reach the maximum value stated.

<sup>\*6)</sup> It is necessary to set a motion speed according to risk assessment of system considering pinching with the surroundings.

<sup>\*7)</sup> If the area is monitored by a safety sensor (located separately).

