

NJ

**Robust mechanics and the
best-in-class payload / reach ratio**

NJ 370 - 2.7

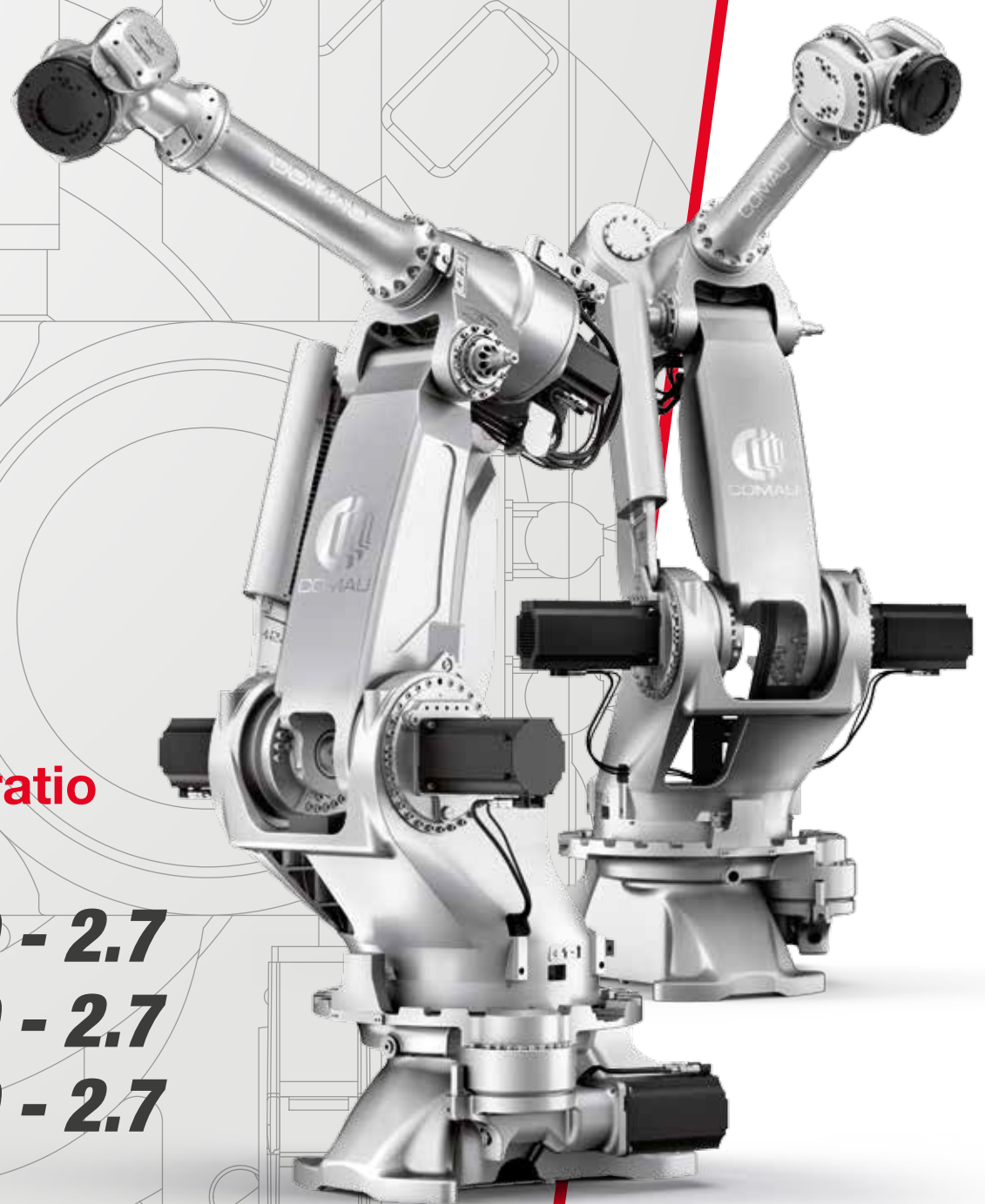
NJ 370 - 3.0

NJ 420 - 3.0

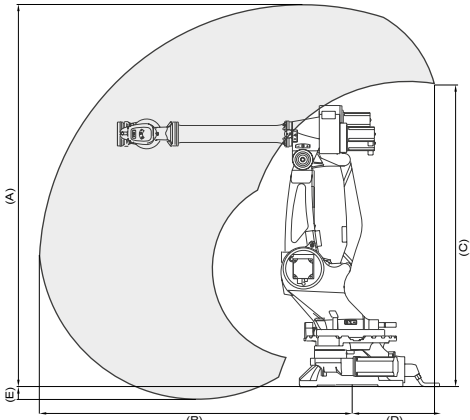
NJ 450 - 2.7

NJ 500 - 2.7

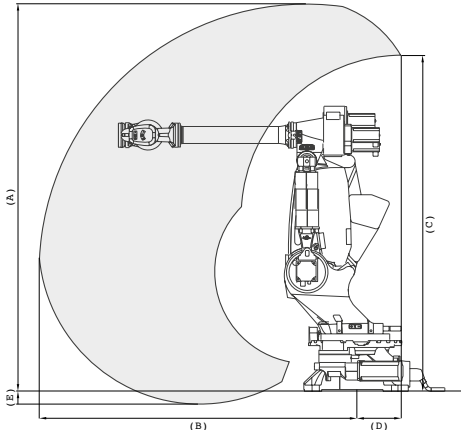
NJ 650 - 2.7



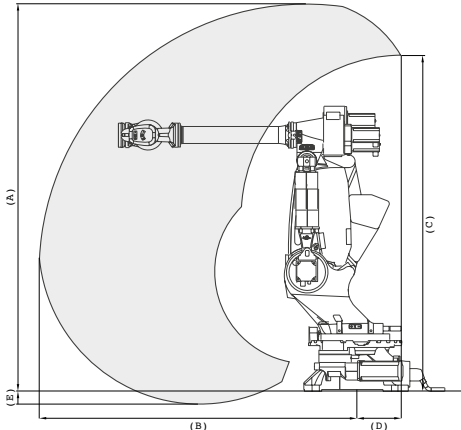
TECHNICAL SPECIFICATIONS

Model		NJ 370 - 2.7	NJ 370 - 3.0	Suggested applications
Number of axes		6	6	• Assembly • Foundry • Handling / Packaging • Machine Tending • Measuring / Testing • Plasma Cutting / Water Jet • Polishing / Deburring • Press Brake Bending • Process Machining • Spot Welding • Wood / Glass Machining
Maximum wrist payload		370 kg	370 kg	
Additional load on forearm		50 kg	50 kg	
Maximum horizontal reach		2703 mm	2997 mm	
Torque on axis 4		2109 Nm	2109 Nm	
Torque on axis 5		2109 Nm	2109 Nm	
Torque on axis 6		1177 Nm	1569 Nm	
Stroke (Speed)	Axis 1	+/- 180° (85°/s)	+/- 180° (85°/s)	
	Axis 2	+75° / - 60° (85°/s)	+75° / - 60° (85°/s)	
	Axis 3	-10° / - 231° (85°/s)	-10° / - 231° (85°/s)	
	Axis 4	+/- 2700° (90°/s)	+/- 2700° (90°/s)	
	Axis 5	+/- 125° (90°/s)	+/- 125° (90°/s)	
	Axis 6	+/- 2700° (120°/s)	+/- 2700° (120°/s)	
Repeatability		0.15 mm	0.15 mm	
Tool coupling flange		ISO 9409 - 1 - 200 - 6 - M12	ISO 9409 - 1 - 200 - 6 - M12	
Robot weight		2100 kg	2450 kg	
Protection class		IP65 / IP67 Foundry Version	IP65 / IP67 Foundry Version	
Mounting position		Floor	Floor	
Operating Areas	A	3680 mm	3680 mm	
	B	2997 mm	2997 mm	
	C	3195 mm	3195 mm	
	D	433 mm	433 mm	
	E	-118 mm	-118 mm	

TECHNICAL SPECIFICATIONS

Model		NJ 420 - 3.0	NJ 450 - 2.7	Suggested applications
Number of axes		6	6	• Assembly • Foundry • Handling / Packaging • Machine Tending • Measuring / Testing • Plasma Cutting / Water Jet • Polishing / Deburring • Press Brake Bending • Process Machining • Spot Welding • Wood / Glass Machining
Maximum wrist payload		420 kg	450 kg	
Additional load on forearm		50 kg	50 kg	
Maximum horizontal reach		2997 mm	2703 mm	
Torque on axis 4		2550 Nm	2550 Nm	
Torque on axis 5		2550 Nm	2550 Nm	
Torque on axis 6		1569 Nm	1569 Nm	
Stroke (Speed)	Axis 1	+/- 180° (85°/s)	+/- 180° (85°/s)	
	Axis 2	+75° / -60° (85°/s)	+75° / -60° (85°/s)	
	Axis 3	-10° / -231° (85°/s)	-10° / -231° (85°/s)	
	Axis 4	+/- 2700° (90°/s)	+/- 2700° (90°/s)	
	Axis 5	+/- 125° (90°/s)	+/- 125° (90°/s)	
	Axis 6	+/- 2700° (120°/s)	+/- 2700° (120°/s)	
Repeatability		0.15 mm	0.15 mm	
Tool coupling flange		ISO 9409 - 1 - 200 - 6 - M12	ISO 9409 - 1 - 200 - 6 - M12	
Robot weight		2450 kg	2400 kg	
Protection class		IP65 / IP67 Foundry Version	IP65 / IP67 Foundry Version	
Mounting position		Floor	Floor	
Operating Areas	A	3680 mm	3292 mm	
	B	2997 mm	2703 mm	
	C	3195 mm	2895 mm	
	D	433 mm	486 mm	
	E	-118 mm	181 mm	

TECHNICAL SPECIFICATIONS

Model		NJ 500 - 2.7	NJ 650 - 2.7	Suggested applications
Number of axes		6	6	• Assembly • Foundry • Handling / Packaging • Machine Tending • Measuring / Testing • Plasma Cutting / Water Jet • Polishing / Deburring • Press Brake Bending • Process Machining • Spot Welding • Wood / Glass Machining
Maximum wrist payload		500 kg	650 kg	
Additional load on forearm		50 kg	50 kg	
Maximum horizontal reach		2703 mm	2703 mm	
Torque on axis 4		2550 Nm	3060 Nm	
Torque on axis 5		2550 Nm	3060 Nm	
Torque on axis 6		1569 Nm	1766 Nm	
Stroke (Speed)	Axis 1	+/- 180° (85°/s)	+/- 180° (75°/s)	
	Axis 2	+75° / -60° (85°/s)	-60° / +75° (75 °/s)	
	Axis 3	-10° / -231° (85°/s)	-231° / -10° (75 °/s)	
	Axis 4	+/- 2700° (90°/s)	+/- 2700° (90 °/s)	
	Axis 5	+/- 125° (90°/s)	+/- 125° (90°/s)	
	Axis 6	+/- 2700° (120°/s)	+/- 2700° (120°/s)	
Repeatability		0.15 mm	0.15 mm	
Tool coupling flange		ISO 9409 - 1 - 200 - 6 - M12	ISO 9409 - 1 - 200 - 6 - M12	
Robot weight		2400 kg	2450 kg	
Protection class		IP65 / IP67 Foundry Version	IP44 / IP65 Wrist	
Mounting position		Floor	Floor	
Operating Areas	A	3392 mm	3392 mm	
	B	2703 mm	2703 mm	
	C	2895 mm	2895 mm	
	D	486 mm	486 mm	
	E	181 mm	181 mm	