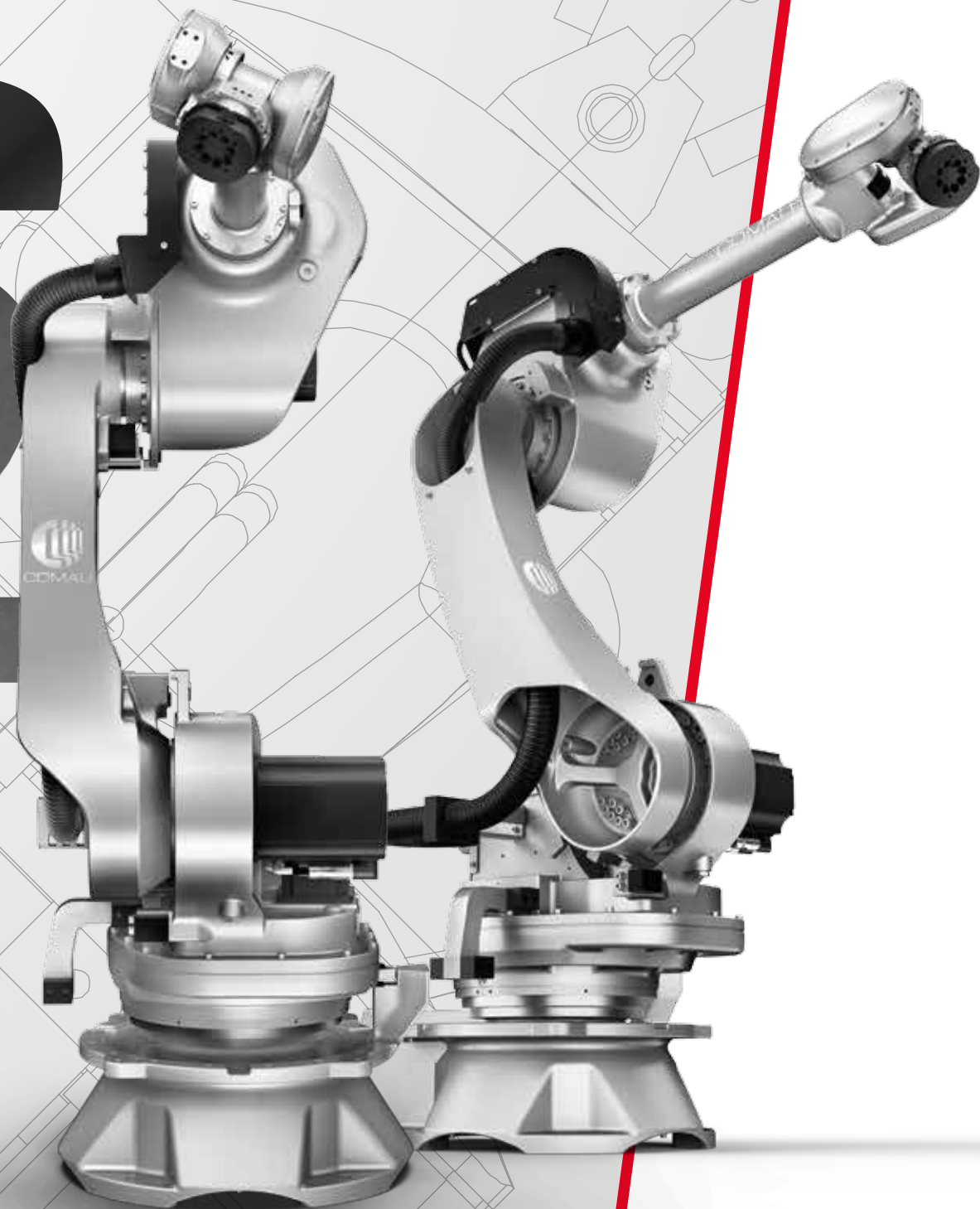


MS

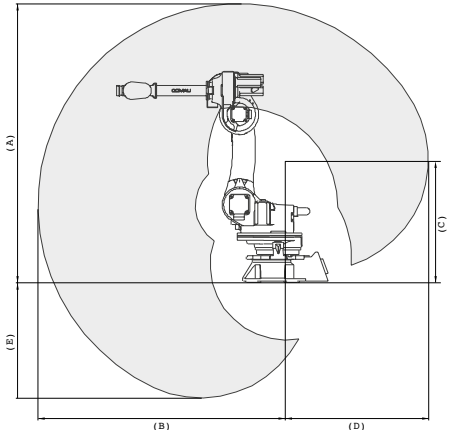
**Robust and versatile
small payload robots**

NS 12 - 1.85

NS 16 - 1.65



TECHNICAL SPECIFICATIONS

Model		NS 12 - 1.85	NS 16 - 1.65	Suggested applications
Number of axes		6	6	• Arc Welding • Assembly • Cosmetic Sealing • Dispensing • Foundry • Handling / Packaging • Laser Welding / Cutting • Machine Tending • Measuring / Testing • Plasma Cutting / Water Jet • Polishing / Deburring • Press Brake Bending • Process Machining • Wood / Glass Machining
Maximum wrist payload		12 kg	16 kg	
Additional load on forearm		10 kg	10 kg	
Maximum horizontal reach		1850 mm	1650 mm	
Torque on axis 4		39 Nm	41 Nm	
Torque on axis 5		39 Nm	41 Nm	
Torque on axis 6		20 Nm	23 Nm	
Stroke (Speed)	Axis 1	+/- 180° (155°/s)	+/- 180° (155°/s)	
	Axis 2	-60° / +155° (155°/s)	-60° / +155° (155°/s)	
	Axis 3	-170° / + 110° (170°/s)	-170° / +110° (170°/s)	
	Axis 4	+/- 2700° (360°/s)	+/- 2700° (360°/s)	
	Axis 5	+/- 120° (350°/s)	+/- 120° (350°/s)	
	Axis 6	+/- 2700° (550°/s)	+/- 2700° (550°/s)	
Repeatability		0.05 mm	0.05 mm	
Tool coupling flange		ISO 9409 - 1 - A63	ISO 9409 - 1 - A63	
Robot weight		335 kg	335 kg	
Protection class		IP65 / IP67 Foundry Version	IP65 / IP67 Foundry Version	
Mounting position		Floor / Ceiling / Sloping (45° max)	Floor / Ceiling / Sloping (45° max)	
Operating Areas	A	2150 mm	1951 mm	
	B	1850 mm	1651 mm	
	C	950 mm	950 mm	
	D	1157 mm	957 mm	
	E	885 mm	685 mm	